2022

THE LEGISLATIVE ASSEMBLY FOR THE

AUSTRALIAN CAPITAL TERRITORY

Variation to the Territory Plan 369 - Living Infrastructure in Residential Zones

Presented by
Mick Gentleman MLA
Minister for Planning and Land Management
May 2022

Australian Capital Territory

Planning and Development (Plan Variation 369) Approval 2022

Notifiable instrument NI2022-

made under the

Planning and Development Act 2007, s 76 (Minister's powers in relation to draft plan variations)

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1 Name of instrument

This instrument is the *Planning and Development (Plan Variation 369) Approval 2022*.

2 Approval of draft plan variation

(1) I approve under section 76 (2) (a) of the *Planning and Development Act 2007* the plan variation 369 to the Territory Plan.

(2) In this section:

plan variation 369 to the Territory Plan means the plan variation in the schedule.

Mick Gentleman MLA
Minister for Planning and Land Management
2/5/2022

ACT Government
Environment, Planning and Sustainable Development

Schedule (See section 2(2))

Planning and Development Act 2007

Variation to the Territory Plan 369

Living Infrastructure in Residential Zones

Final variation prepared under s76 of the
Planning and Development Act 2007

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1. EXPLANATORY STATEMENT

1.1 Background

EPSDD investigated the policy principles, strategies and mechanisms for establishing living infrastructure requirements as part of the ACT Planning Strategy 2018.

The purpose of this project was to provide advice and recommendations on mechanisms for establishing living infrastructure requirements as part of urban intensification in future urban renewal and greenfield development areas in the ACT.

As Canberra becomes a more compact city with greater intensively developed urban areas, the need for making living infrastructure an integral part of the city's form and function increases.

With a growing population it will be necessary to ensure that future development provides a good balance between urban intensification and living infrastructure to create a healthier, more liveable and sustainable urban environment, as well as to help adapt and mitigate the effects of climate change.

The project investigated the balance between living infrastructure and residential development at the block, street and suburb level to understand requirements for living infrastructure on both public and private land including tree canopy, permeable surface areas, building site coverage and planting areas.

Variation 369 to the Territory Plan (V369) incorporated changes made as a result of the recommendations of this project for the improvement of living infrastructure in residential areas in the ACT.

V369 makes changes to all residential zones (RZ1 to RZ5) that will contribute towards the targets for tree canopy cover and permeable surfaces in urban areas, as outlined in Canberra's Living Infrastructure Plan: Cooling the City (2019).

1.2 Summary of the Proposal

Variation 369 changes to make sure standards for soft landscaping area in all residential areas (RZ1 to RZ5) are met.

The variation responds to Direction 3.3 of the ACT Planning Strategy 2018, which seeks to "*Integrate living infrastructure and sustainable design to make Canberra a resilient city within the landscape*". Action 3.3.1 is to:

> "*Support the implementation of a living infrastructure plan for the ACT through the review of planning policy and planning mechanisms to support the maintenance and enhancement of the urban forest in precinct, estate and district level planning processes, and relevant development and design guidelines*."

V369 responds to Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045. V369 will assist in working towards achieving these targets for urban areas by making changes related to site coverage and planting area requirements on private land in all residential zones (RZ1 to RZ5). The new provisions will not apply to blocks approved under an estate development plan after 1 January 2020.

1.3 The National Capital Plan

The *Australian Capital Territory (Planning and Land Management) Act 1988* established the National Capital Authority (NCA) with two of its functions being to prepare and administer a National Capital Plan (NCP) and to keep the NCP under constant review and to propose amendments to it when necessary.

The NCP, which was published in the Commonwealth Gazette on 21 January 1990 is required to ensure that Canberra and the Territory are planned and developed in accordance with their national significance. The Planning and Land Management Act 1988 also required that the Territory Plan is not inconsistent with the NCP.

In accordance with section 10 of the *Australian Capital Territory (Planning and Land Management*) *Act 1988*, the NCP defines the planning principles and policies for Canberra and the Territory, for giving effect to the object of the NCP and sets out the general policies to be implemented throughout the Territory, including the range and nature of permitted land uses.

It also sets out the detailed conditions of planning, design and development for areas that have special significance to the National Capital known as designated areas and identifies special requirements for the development of some other areas.

1.4 Changes to the Territory Plan

Detailed changes to the Territory Plan are noted in section 2 of this document.

1.5 Consultation on the Draft Variation

Draft Variation 369 (DV369) was released for public comment between 13 December 2019 until 28 February 2020 and a consultation notice under section 63 of the *Planning and Development Act 2007* was published on the ACT Legislation Register on 13 December 2019 and on the ACT Government public notices website. The public consultation period was formally extended twice, the first time until 3 April 2020 and the second time until 8 May 2020. Notices were published on the Legislation Register and ACT Government public notice website advising of the extensions.

A total of 82 written submissions were received. These included 53 submissions from individuals, 13 submissions from industry professionals (including architects, building designers and estate developers), 12 submissions from community councils and organisations, 4 submissions from specialist interest and environmental groups, and 1 submission from a political party.

Most submissions expressed support for the aim of DV369 to increase tree coverage and permeability, but a number of those submissions also raised concerns about the changes not going far enough, how the provisions were going to work in reality and how the trees were going to be located and maintained on residential blocks, financial incentives for compliance, monitoring of compliance and enforcement of non-compliance penalties or removal of trees after approval. Some submissions from industry professionals raised concerns about lack of equity in provisions and limitations imposed on development.

The following key issues were raised:

Issue	**Number of submissions**
15% coverage is too low and should be increased to 30% canopy target or more	45
Concerns with proposed Rules and Criteria in the SDHDC	34
Concerns with proposed Rules and Criteria in the MUHDC	28
Tree coverage should be increased more broadly including new	26

estates, public places and spaces and commercial areas	
Concerns about retention, maintenance and upkeep of trees	19
Definitions need further clarification	16
Other ways to reduce urban heat island effect and increase living infrastructure	15
Concerns about monitoring, compliance and enforcement	14
Appropriate species selection (pollinators, resilience, etc)	14
Incentives for increasing / maintaining living infrastructure	12
Changes will severely restrict development and increase costs to homeowners	10
Consideration of green architecture options	10
Education and awareness provided to community and industry	6
Ongoing evaluation of effectiveness of changes needed	4
Overlapping of tree canopies – how will it be dealt with?	3
Further work needed to determine whether the proposed changes can work in reality and to better refine provisions	3
Ginninderry and Denman Prospect - specific comments	3
Public dialogue on the DV	3

The above issues were considered and are detailed in a report on consultation, which is available at **www.act.gov.au/recommendedvariations**. Changes to DV369 were informed by the issues raised. The outcomes of consultation were considered by the Minister responsible for planning prior to approval of this variation.

1.6 Revisions to the Draft Variation Recommended to the Minister

A ministerial direction was issued to make amendments to DV369 to clarify the requirements of the provisions. These are detailed in the following section 1.7.

1.7 Ministerial Direction

A ministerial direction was issued under section 76 (2) (b) (iv) of the *Planning and Development Act 2007*.

The ministerial direction states that DV369 be revised *to amend the Single Dwelling Housing Development Code in the following ways:*

- *Amend the proposed provisions to state that they do not apply to blocks approved under an estate development plan after 1 January 2020 and renumber the provisions accordingly*
- *Amend R39 to reflect changes made to private open space for blocks less than 360m^2 through Technical Amendment TA2020-11*
- *Adjust the definition of deep soil zone to include the word 'adequate' before 'dimension', to be consistent with the definition in the Multi-Unit Housing Development Code*
- *Amend rules and criteria where relevant to refer to 'all of the following' to clarify that a proposal needs to demonstrate compliance with all the requirements in the relevant rules and criteria*

The direction also states that DV369 be revised *to amend the Multi Unit Housing Development Code in the following ways:*

- *Amend the proposed provisions to state that they do not apply to blocks approved under an estate development plan after 1 January 2020 and renumber the provisions accordingly*
- *Remove reference to "Not less than 20% of the total site area is planting area" in Rule R39D of the Multi Unit Housing Development Code, as this requirement is dealt with in Rule R39B*
- *Amend rules and criteria where relevant to refer to 'all of the following' to clarify that a proposal needs to demonstrate compliance with all the requirements in the relevant rules and criteria*

The variation has been amended to comply with the directed revisions.

2. VARIATION

2.1 Variation to the Territory Plan

2.1.1 Variation to the Single Dwelling Housing Development Code

1. Introduction; Definitions

Substitute

Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Deep soil zone: an area of soil within a *development* that is unimpeded by *buildings* or *structures* above and below ground, and which has adequate dimensions to allow for the growth of healthy trees. Deep soil zones exclude *basements*, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

2. Introduction; Acronyms

Omit

ACTPLAACT Planning and Land Authority

EDDACT Economic Development Directorate

EPAACT Environment Protection Authority

ESAEmergency Services Authority

ESDDACT Environment and Sustainable Development Directorate

NCANational Capital Authority

NCCNational Construction Code

P&D ActPlanning and Development Act 2007

TAMSACT Territory and Municipal Services Directorate

Insert

EPA	ACT Environment Protection Authority
TCCS	Transport Canberra and City Services Directorate

3. Element 5: Amenity; Item 5.2 Private Open Space

Substitute

5.2 Private open space	
R38 For *large blocks* approved under an *estate development plan* on or after 1 January 2020, *private open space* complies with all of the following: a) has a minimum area equal to 60% of the block area, less 50m^2 b) has a minimum dimension of 6m for an area not less than 10% of the block c) at least 50% of the minimum area specified in a) is *planting area*. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C38 *Private open space* provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following: a) limits site coverage of buildings and vehicle parking and manoeuvring areas b) provides space for planting c) facilitates on-site infiltration of stormwater run-off d) provides outdoor areas that are readily accessible by residents for a range of uses and activities e) provides space for service functions such as clothes drying and domestic storage.

Insert

R38A For *large blocks* approved under an *estate development plan* before 1 January 2020, private *open space* complies with all of the following: f) has a minimum area equal to 60% of the block area g) has a minimum dimension of 6m for an area not less than 10% of the block h) at least 30% of the block area is *planting area*, with a minimum dimension of 2.5m. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C38A To reduce urban heat island effects, retain water and maintain ecosystem services, and to provide residential amenity on the subject site and protect residential amenity of adjoining sites, *private open space* achieves all of the following: a) limits *site coverage* of buildings and vehicle parking and manoeuvring areas b) facilitates on-site infiltration of stormwater run-off c) provides substantial outdoor areas that are readily accessible by residents for a range of uses and activities d) provides space for service functions such as clothes drying and domestic storage e) provides *planting area*s that demonstrates: i) establishment of landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas ii) enhancement of living infrastructure through water-sensitive urban design

	and providing adequate areas for deep soil zones for ground water recharge, canopy trees and vegetation.

Substitute

R39 For *mid-sized blocks* approved under an *estate development plan* on or after 1 January 2020, *private open space* complies with all of the following: a) a minimum area is not less than 40% of the block area, less 50m^2 b) a minimum dimension as follows: i) blocks that are identified in a precinct code as an alternative boundary setback block – 4m for an area not less than 20% of the block area ii) blocks less than 360m^2 – 5m for an area not less than 10% of the block iii) in all other cases - 6m for an area not less than 10% of the block area c) at least 50% of the minimum area specified in a) is *planting area*. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C39 *Private open space* provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following: a) limits site coverage of buildings and vehicle parking and manoeuvring areas b) provides space for planting c) facilitates on-site infiltration of stormwater run-off d) provides outdoor areas that are readily accessible by residents for a range of uses and activities e) provides space for service functions such as clothes drying and domestic storage.

Insert

R39A For *mid-sized blocks* approved under an *estate development plan* before 1 January 2020, *private open space* complies with all of the following: d) a minimum area is not less than 40% of the block area e) a minimum dimension as follows: i) blocks that are identified in a precinct code as an alternative boundary setback block – 4m for an area not less than 20% of the block area ii) blocks less than 360m^2 – 5m for an area not less than 10% of the block iii) in all other cases - 6m for an area not less than 10% of the block area f) at least 20% of the block area is *planting area*, with a minimum dimension of 2.5m. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C39A To reduce urban heat island effects, retain water and maintain ecosystem services, and to provide residential amenity on the subject site and protect residential amenity of adjoining sites, *private open space* achieves all of the following: a) limits *site coverage* of buildings and vehicle parking and manoeuvring areas b) facilitates on-site infiltration of stormwater run-off c) provides substantial outdoor areas that are readily accessible by residents for a range of uses and activities d) provides space for service functions such as clothes drying and domestic storage e) provides *planting area*s that demonstrates: i) establishment of landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living area ii) enhancement of living infrastructure through water-sensitive urban design and providing adequate areas for deep soil zones for ground water recharge, canopy trees and vegetation.

Substitute

R40 For *compact blocks* approved under an *estate development plan* on or after 1 January 2020, *private open space* complies with all of the following: a) a minimum area is not less than 20% of the block area b) at least 50% of the minimum area specified in a) is *planting area.* **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C40 *Private open space* provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following: a) limits site coverage of buildings and vehicle parking and manoeuvring areas b) provides space for planting c) facilitates on-site infiltration of stormwater run-off d) provides outdoor areas that are readily accessible by residents for a range of uses and activities e) provides space for service functions such as clothes drying and domestic storage.

Insert

R40A For *compact blocks* approved under an *estate development plan* before 1 January 2020, *private open space* complies with the following: c) a minimum area is not less than 30% of the block area d) at least 15% of the *block* area is *planting area* with a minimum dimension of 2.5m. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	C40A To reduce urban heat island effects, retain water and maintain ecosystem services, and to provide residential amenity on the subject site and protect residential amenity of adjoining sites, *private open space* achieves all of the following: a) limits *site coverage* of buildings and vehicle parking and manoeuvring areas b) facilitates on-site infiltration of stormwater run-off c) provides substantial outdoor areas that are readily accessible by residents for a range of uses and activities d) provides space for service functions such as clothes drying and domestic storage e) provides *planting area*s that demonstrates: i) establishment of landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas ii) enhancement of living infrastructure through water-sensitive urban design and providing adequate areas for deep soil zones for ground water recharge, canopy trees and vegetation

Insert

5.2A Site coverage and tree planting	
R40A This rule applies to *blocks* approved under an *estate development plan* before 1 January 2020. *Site coverage* is a maximum of: a) for *large blocks*: 40% of the *block* area b) for *mid-sized blocks*: 60% of the *block* area c) for *compact blocks*: 70% of the *block* area.	C40A *Site coverage* and vehicle parking and manoeuvring areas is limited to: a) maximise outdoor areas that are readily accessible by residents for a range of uses and activities b) provide adequate space for service functions such as clothes drying and domestic storage c) provide adequate *planting area* on the site.
R40B This rule applies to *blocks* approved under an *estate development plan* before 1 January 2020. *Development* provides a minimum level of tree	C40B Tree planting provided in the development ensures: a) Planting or retention of suitably sized

planting in *deep soil zones*, with associated planting requirements as described in table 7a, consistent with the following: a) for *compact blocks*, at least one small tree b) for *mid-sized blocks*, at least two small trees c) for *large blocks* less than or equal to 800m^2, one small tree and one medium tree d) for *large blocks* more than 800m^2, at least: i) one medium tree and one large tree, and ii) one additional large tree or two additional medium trees for each additional 800m^2 block area. Note: Existing canopy trees being retained as part of development may be considered to meet these requirements.	canopy trees in *deep soil zones*, including adequate dimensions for *deep soil zones* to support healthy canopy tree growth, and provide adequate room for canopy trees b) planting canopy trees of semi-advanced stock and reasonable heights at maturity.

Insert

Table 7a: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small Tree	5-8m	4m	3m	45**	18m^3
Medium Tree	8-12m	6m	5m	75**	42m^3
Large Tree	>12m	8m	7m	75**	85m^3

Notes:

For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. It does not include any plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register.

*Minimum pot size refers to the container size of new trees prior to planting.

**The maximum pot size for small, medium and large *eucalyptus sp*. trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

4. Element 7: Services; Item 7.1 Construction waste management – all zones, Rule R48

Substitute

TCCS for TAMS.

2.1.2 Variation to the Multi-Unit Housing Development Code

5. Introduction; Definitions

Substitute

*"*Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Deep soil zone: an area of soil within a *development* that is unimpeded by *buildings* or *structures* above and below ground, and which has adequate dimensions to allow for the growth of healthy trees. Deep soil zones exclude *basements*, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

6. Introduction; Acronyms

Omit

ACTPLA	ACT Planning and Land Authority
EDD	ACT Economic Development Directorate
EPA	ACT Environment Protection Authority
ESA	Emergency Services Authority
ESDD	ACT Environment and Sustainable Development Directorate
NCA	National Capital Authority
NCC	National Construction Code
P&D Act	Planning and Development Act 2007
TAMS	Territory and Municipal Services

Insert

ACTPLA	ACT planning and land authority
EPA	ACT Environment Protection Authority
TCCS	Transport Canberra and City Services Directorate

7. Element 4: Site design; Item 4.2 Site open space – RZ1 and RZ2

Substitute

4.2 Site open space – RZ1 and RZ2 zones	
R38 This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* on or after 1 January 2020. Not less than 40% of the total site area is allocated to one or more of the following: a) *communal open space* with a minimum dimension of 2.5m; and/or b) *private open space* that complies with all of the following: i) a minimum dimension of 2.5m; and ii) is associated with dwellings at the *lower floor level.* Not less than 20% of the total site area is *planting area*	C38 Open space on the site achieves all of the following: a) sufficient space for the recreation and relaxation of residents b) sufficient space for planting, particularly trees with deep root systems, to accommodate on-site infiltration of stormwater run-off c) provision of outdoor areas that are readily accessible by residents for a range of uses and activities. One or more of the following matters may be considered when determining compliance with this criterion: i) whether the total area of *upper floor level private open space* contributes to the function of other open space on the site ii) whether any adjoining or adjacent public open space is readily available for the use of residents.

Insert

R38A This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Not less than 40% of the total site area is allocated to one or more of the following:	C38A To reduce urban heat island effects, retain water and maintain ecosystem services, open space on the site achieves all of the following: d) adequate space for the recreation

c) *communal open space* with a minimum dimension of 2.5m; and/or d) *private open space* that complies with the following: i) a minimum dimension of 2.5m; and ii) is associated with dwellings at the *lower floor level.*	and relaxation of residents e) adequate space for planting, particularly trees with deep root systems, to accommodate on-site infiltration of stormwater run-off f) outdoor areas that are readily accessible by residents for a range of uses and activities. One or more of the following matters may be considered when determining compliance with this criterion: i) whether the total area of *upper floor level private open space* contributes to the function of other open space on the site ii) whether any adjoining or adjacent public open space is readily available for the use of residents.
R38B This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. *Site coverage* is a maximum of 40% of the *block* area.	C38B To reduce urban heat island effects, retain water and maintain ecosystem services, *development* complies with all of the following: a) limits *site coverage* and vehicle parking and manoeuvring areas b) provides outdoor areas that are readily accessible by residents for a range of uses and activities c) provides space for service functions such as clothes drying and domestic storage.
R38C This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. *Planting area* is a minimum of 35% of the block area. The minimum dimension of any area included in the *planting area* calculation is 2.5 metres.	C38C Planting area provided in the development achieves all of the following: a) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas b) enhance living infrastructure through water-sensitive urban design, providing deep soil zone areas for ground water recharge, canopy trees and vegetation c) infiltration of stormwater run-off and allow a greater ability to plant.

R38D This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Existing and new trees on the block are to provide at least 15% canopy cover to the block at maturity. Trees are to be planted in *deep soil zones*.	This is a mandatory rule. There is no applicable criterion.
There is no applicable rule.	C38E This criterion applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. *Planting area* provided in the development achieves all of the following: a) Planting of suitably sized plants in *deep soil zones*, including adequate dimensions for *deep soil zones* to support healthy canopy tree growth, and provide adequate room for canopy trees b) *deep soil zones* should allow subsoil drainage to support groundwater infiltration c) planting of canopy trees with semi-advanced stock and suitable heights at maturity d) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas.
R38F This rule applies to all development in RZ1 and RZ2 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Development provides a minimum level of tree planting, with associated planting requirements as described in table A7a, consistent with the following: a) for large blocks less than or equal to 800m2, at least one small tree and one medium tree b) for large blocks more than 800m2, at least: i) one medium tree and one large tree, and ii) one additional large tree or two additional medium trees for each additional 800m2 block area. Note: Existing canopy trees being retained as part of development may be considered to meet	C38F Tree planting in the development ensures: a) planting or retention of suitably sized canopy trees in deep soil zones, including adequate dimensions for deep soil zones to support healthy tree growth, and provide adequate room for canopy trees b) planting canopy trees of semi-advanced stock and reasonable heights at maturity.

these requirements.	

Insert

Table A7a: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small Tree	5-8m	4m	3m	45**	18m^3
Medium Tree	8-12m	6m	5m	75**	42m^3
Large Tree	>12m	8m	7m	75**	85m^3

Notes:

For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. It does not include any plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register.

*Minimum pot size refers to the container size of new trees prior to planting.

**The maximum pot size for small, medium and large *eucalyptus sp*. trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

8. Element 4: Site design; Item 4.3 Site open space – RZ3, RZ4, RZ5 and commercial zones

Substitute

4.3 Site open space – commercial zones	
R39 This rule applies to: a) all development in commercial zones b) all development in RZ3, RZ4 and RZ5 zones on *blocks* approved under an *estate development plan* on or after 1 January 2020. Not less than 20% of the total site area is allocated to the following: a) for developments with fewer than 20 *dwellings*, none of which are *apartments*, one or more of the following:	C39 Open space on the site achieves all of the following: c) sufficient useable space for a range of recreational activities for residents to support active living d) sufficient space for planting, particularly trees with deep root systems e) a contribution to on-site infiltration of stormwater run-off f) reasonable accessibility that is

i) *communal open space* that complies with the following: a) a minimum dimension of 2.5m b) is directly accessible from common entries and pathways; and/or ii) *private open space* that complies with the following: a) a minimum dimension of 2.5m; and b) is associated with *dwellings* at the *lower floor level*; and/or b) in all other cases, *communal open space* that complies with the following: i) a minimum dimension of 2.5m; and ii) is directly accessible from common entries and pathways. Not less than 10% of the total site area is *planting area*.	designed to be inclusive for all residents g) reasonable connectivity for pedestrians and cyclists to key local destinations and community uses. One or more of the following matters may be considered when determining compliance with this criterion: i) whether the total area of *upper floor level private open space* contributes to the function of other open space on the site; and/or ii) whether any adjoining or adjacent public open space is readily available for the use of residents.

Insert

5.2 Site open space – RZ3, RZ4 and RZ5 zones	
R39A This rule applies to all development in RZ3, RZ4 and RZ5 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Site coverage is a maximum of 45% of the block area.	C39A To reduce urban heat island effects, retain water and maintain ecosystem services, development complies with all of the following: a) limits site coverage of buildings and vehicle parking and manoeuvring areas b) provides outdoor areas that are readily accessible by residents for a range of uses and activities c) provides space for service functions such as clothes drying and domestic storage.
R39B This rule applies to all development in RZ3, RZ4 and RZ5 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Planting area is a minimum of 25% of the block area. The minimum dimension of any area included in the planting area calculation is 2.5 metres.	C39B Planting area provided in the development achieves all of the following: a) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas b) enhance living infrastructure through water-sensitive urban design, providing areas for deep soil zones for ground water recharge, large canopy trees and vegetation c) if the minimum required planting area can't

	be provided on site, an equivalent area should be achieved through planting on structures.
R39C This rule applies to all development in RZ3, RZ4 and RZ5 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Existing and new trees on the block are to provide at least 20% canopy cover of the block at maturity. Trees are to be planted in *deep soil zones* in communal areas. Note: for the purposes of this rule deep soil zones are areas of natural or structured soil medium with a minimum unobstructed depth of 1.2m, minimum surface area of 64m^2 and minimum volume of 85m^3.	C39C Planting area provided in the development achieves all of the following: a) planting in *deep soil zones*, including minimum dimensions for deep soil zones, to support healthy tree growth, and provide adequate room for canopy trees b) planting of canopy trees with appropriate species and with a semi-advanced stock and minimum heights at maturity c) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas d) if the minimum required canopy trees cannot be provided on site, an equivalent area should be achieved through planting on structures.
R39D This rule applies to all development in RZ3, RZ4 and RZ5 zones on *blocks* approved under an *estate development plan* before 1 January 2020. Not less than 20% of the total site area is allocated to the following: a) for developments with fewer than 20 dwellings, none of which are apartments, one or more of the following: i) communal open space that complies with the following: a) a minimum dimension of 2.5m b) is directly accessible from common entries and pathways; and/or ii) private open space that complies with the following: a) a minimum dimension of 2.5m b) is associated with dwellings at the lower floor level b) in all other cases, communal open space that complies with the following: i) a minimum dimension of 2.5m ii) is directly accessible from common entries and pathways.	C39D To reduce urban heat island effects, retain water and maintain ecosystem services, open space on the site achieves all of the following: a) adequate useable space for a range of recreational activities for residents to support active living b) a contribution to on-site infiltration of stormwater run-off c) reasonable accessibility that is designed to be inclusive for all residents d) utilise planting on structures where planting area, canopy trees cannot be achieved on site e) reasonable connectivity for pedestrians and cyclists to key local destinations and community uses f) if the minimum required planting area can't be provided on site, an equivalent area should be achieved through planting on structures. One or more of the following matters may be considered when determining compliance with this criterion: i) whether the total area of upper floor level private open space contributes to

	the function of other open space on the site; and/or ii) whether any adjoining or adjacent public open space is readily available for the use of residents.

Substitute

There is no applicable rule.	C40 This criterion applies to all development on *blocks* approved under an *estate development plan* on or after 1 January 2020. Landscape and site design achieves all of the following: a) planting of trees of semi-mature stock b) planting of trees with a minimum mature height of 4m c) a contribution to energy efficiency by providing substantial shade in summer, especially to west-facing windows and open car-parking areas, and admitting winter sunlight to outdoor and indoor living areas, especially to the north d) reasonable residential amenity e) reasonable visibility along paths and driveways f) visual interest in pavement materials and finishes g) species with appropriate growth habits and mature height in relation to site conditions

Insert

R40A This rule applies to all development on *blocks* approved under an *estate development plan* before 1 January 2020. Development provides a minimum level of tree planting, with associated planting requirements as described in table A7b, consistent with the following: a) for large blocks less than or equal to 800m2, one small tree and one medium tree b) for large blocks more than 800m2:	C40A Tree planting provided in the development ensures: h) planting in deep soil zones, including minimum dimensions for deep soil zones, to support healthy canopy tree growth, and provide adequate room for canopy trees i) planting of canopy trees with appropriate species and with a semi-advanced stock and minimum heights at maturity j) landscaping to provide substantial shade in summer and admit winter sunlight to

i) one medium tree and one large tree, and ii) one additional large tree or two additional medium trees for each additional 800m2 block area.	outdoor and indoor living areas.
There is no applicable rule.	C40B This criterion applies to all development on *blocks* approved under an *estate development plan* before 1 January 2020. Where one or more existing canopy trees located within the subject block are to be retained as part of development to count towards canopy tree coverage requirements as described elsewhere in this code, development applications are supported by a report prepared by a suitably qualified person demonstrating how the development complies with all of the following: a) shows the tree(s) are in good health and likely to actively grow at the completion of works b) details how the tree(s) will be suitably protected during construction works c) provides adequate deep soil area to ensure the tree(s) will remain viable d) confirms that the tree(s) to be retained are sited appropriately and will not detrimentally impact the development in the future.

Insert

Table A7b*: Tree sizes and associated planting requirements

Tree size	Mature height	Minimum canopy diameter	Minimum soil depth (deep soil zone)	Minimum soil surface area dimension	Minimum pot size (litres)	Minimum soil volume
Small Tree	5-8m	4m	0.8m	3m	45**	$18m^3$
Medium Tree	8-12m	6m	1m	5m	75**	$42m^3$
Large Tree	>12m	8m	1.2m	7m	75**	$85m^3$
	Notes:					

	For the purposes of this table, a tree is defined as a woody perennial plant suitable for the Canberra climate. It does not include any plant described in schedule 1 of the Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1) or any subsequent declaration made under section 7 of the Pest Plants and Animals Act 2005, unless the tree is included on the ACT tree register. *This table applies to new trees only, not existing trees that are to be retained as part of the development. ** The maximum pot size for small, medium and large *eucalyptus sp*. trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk caliper of 3cm.

9. Element 12: Waste management; Rules 98 and 99

Substitute

TCCS for TAMS at rules R98 and R99

10. Element 13: Utilities

Substitute

TCCS for TAMS at rule R101

2.1.3 Variation to Definitions

11. Definitions, Part B Definitions of terms

Substitute

Planting area means an area of land within a *block* that is available for landscape planting and that is not covered by *buildings*, *structures*, vehicle parking and manoeuvring areas or any other form of impermeable element that impacts permeability of the ground surface (i.e. terraces, pergolas, patios, decks or pools).

Substitute

Site coverage means the proportion of actual *site* covered by *buildings*, including roofed terraces, pergolas, patios, decks and balconies but excluding any part of awnings, eaves and the like.

Interpretation service

ENGLISH	If you need interpreting help, telephone:
ARABIC	إذا احتجت لمساعدة في الترجمة الشفوية ، إتصل برقم الهاتف :
CHINESE	如果你需要传译员的帮助，请打电话：
CROATIAN	Ako trebate pomoć tumača telefonirajte:
GREEK	Αν χρειάζεστε διερμηνέα τηλεφωνήσετε στο
ITALIAN	Se avete bisogno di un interprete, telefonate al numero:
MALTESE	Jekk għandek bżonn l-għajnuna t'interpretu, ċempel:
PERSIAN	اگر به ترجمه شفاهی احتیاج دارید به این شماره تلفن کنید:
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TURKISH	Tercümana ihtiyacınız varsa lütfen telefon ediniz:
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LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON PLANNING, TRANSPORT AND CITY SERVICES
Jo Clay MLA (Chair), Suzanne Orr MLA (Deputy), Mark Parton MLA

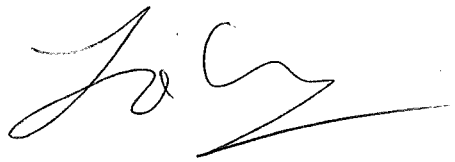
Mr Mick Gentleman MLA
Minister for Planning and Land Management
Legislative Assembly for the ACT

Dear Mr Gentleman,

Thank you for your letter of 29 October 2021 in which you referred Draft Plan Variation 369 entitled *Living Infrastructure in Residential Zones* to the Committee under Section 73(2) of the *Planning and Development Act 2007* for its consideration.

The Committee met on 18 November 2021 and agreed not to inquire and report on the Draft Plan Variation. The Committee noted that there is considerable community interest in this draft variation, in particular in matters relating to implementation. The Committee agreed that will conduct an inquiry 12-18 months after DV369 has been implemented to review how it is working on the ground.

Yours sincerely,



Jo Clay MLA
Chair

19 November 2021

ACT Government
Environment, Planning and Sustainable Development

Planning and Development Act 2007

REPORT ON CONSULTATION

Draft Variation to the Territory Plan 369

Living Infrastructure in Residential Zones

October 2021

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1. INTRODUCTION

This consultation report was prepared in accordance with section 69 of the *Planning and Development Act 2007*.

The report describes the consultation undertaken on the draft variation with the public, the National Capital Authority (NCA), the Conservator of Flora and Fauna, the Environment Protection Authority (EPA) and the ACT Heritage Council and responds to the issues raised.

2. COMMENTS FROM THE PUBLIC

2.1 Details

The draft variation was released for public comment on 13 December 2019. The final closing date for comments was 8 May 2020. The draft variation released for public consultation is at ***Appendix 1***.

A total of 82 written submissions were received. These included 53 submissions from individuals, 13 submissions from industry professionals (including architects, building designers and estate developers), 12 submissions from community councils and organisations, 4 submissions from specialist interest and environmental groups, and 1 submission from a political party. All submissions are included at ***Appendix 2*** to this report.

Most submissions expressed support for the aim of DV369 to increase tree coverage and permeability, but a number of those submissions also raised concerns about the changes not going far enough, how the provisions were going to work in reality and how the trees were going to be located and maintained on residential blocks, financial incentives for compliance, monitoring of compliance and enforcement of non-compliance penalties or removal of trees after approval. Some submissions from industry practitioners raised concerns about the lack of equity in provisions and the resulting limitations imposed on development.

The following key issues were raised:

Issue	**Number of submissions**
15% coverage is too low and should be increased to 30% canopy target or more	45
Concerns with proposed Rules and Criteria in the SDHDC	34
Concerns with proposed Rules and Criteria in the MUHDC	28
Tree coverage should be increased more broadly including new estates, public places and spaces and commercial areas	26
Concerns about retention, maintenance and upkeep of trees	19
Definitions need further clarification	16
Other ways to reduce urban heat island effect and increase living infrastructure	15

Concerns about monitoring, compliance and enforcement	14
Appropriate species selection (pollinators, resilience, etc)	14
Incentives for increasing / maintaining living infrastructure	12
Changes will severely restrict development and increase costs	10
Consideration of green architecture options	10
Education and awareness provided to community and industry	6
Other matters	6
Comments on Living Infrastructure Plan 2019	5
Ongoing evaluation of effectiveness of changes needed	4
Overlapping of tree canopies – how will it be dealt with?	3
Further work needed to determine whether the proposed changes can work in reality and to better refine provisions	3
Ginninderry and Denman Prospect - specific comments	3
Public dialogue on the DV	3

Comments from the NCA, Conservator of Flora and Fauna, EPA and the ACT Heritage Council were received and assessed prior to release of the draft variation and were included in the draft variation which was released for public consultation at ***Appendix 1***.

Copies of submissions received from the public are provided in ***Appendix 2***.

2.2 Issues and responses

The key issues raised are summarised below, and responses provided.

2.2.1 Support for the draft variation

The main reasons for support were:

- Changes are an important step in implementing the Living Infrastructure Plan (LIP).
- Changes will benefit residential areas in terms of sustainability and attractiveness.
- Changes will result in a reduction in the growth of greenhouse gas emissions from residential areas by improving the microclimate, reduce heat island effect and reduce dependence on artificial heating and cooling.
- Changes will reduce polluted runoff into waterways.
- Changes will improve urban biodiversity.

  Response

  Support is noted. Other matters raised during consultation are discussed below.

2.2.2 15% canopy cover too low - should be increased to 30% or more

- DV369 is not consistent with the 30% tree canopy cover target in the Living Infrastructure Plan (LIP). Percentage of canopy cover and area for soft landscaping should be increased in the draft variation to 30%. There are examples in Canberra where 40% planting area and canopy cover has been achieved, such as in Forrest and Kingston.

- For all residential blocks all that is needed to achieve the 30% goal are: a mandatory site coverage percentage, which can vary through RZ1-5 range, a mandatory 30% planting area for all blocks; and another percentage for private open space, which can vary through RZ1-5 range. POS would include things like swimming pools, patios, drive strips.

  Response

  Noted. This draft variation is the first step in strengthening canopy cover requirements on private land to contribute toward the overall objective of achieving the 30% target coverage across the urban area by 2045.

  A staged increase in coverage requirements gives the community and industry time to accommodate to the changes for residential blocks. The 30% coverage is also intended to be calculated including both public lands and privately leased blocks.

  The tree canopy provisions in the Multi Unit Housing Development Code for new multi-unit development in the RZ3-RZ5 zones has been amended to increase the requirement for canopy cover on a block at maturity from 15% to 20%. This is in response to comments received during consultation regarding increasing the percentage requirement for tree canopy coverage.

  Criteria in the Multi-Unit Housing Development Code have also been amended to apply to the RZ3-RZ5 zones, where if the minimum required planting area cannot be provided on site, an equivalent area should be achieved through planting on structures (this provision only applied to the RZ5 zone in the consultation version of DV369).

  The RZ1 and RZ2 zones have stricter plot ratio and site coverage rules for multi-unit development (meaning more resultant green space) but are more likely to have site constraints due to the smaller size of blocks (such as easements for powerlines and underground services) that would impact the location of trees. As RZ1 zoned blocks are predominantly for single residential development (with limited ability for multi-unit development) and RZ2 zones are not found in new estates, changes to Rule R38C would not be applicable to most multi-unit developments.

  The draft ACT Urban Forest Strategy 2020-2045 is also proposing actions to meet the 30% target including increased compliance and monitoring, increase tree planting; and incentives for the community to keep and maintain trees.

  https://yoursay.act.gov.au/trees-act/urban-forest-strategy

  The current urban forest canopy covers around 21% of the urban area in 2020. Canopy cover varies from suburb to suburb with some older

established suburbs having close to 40% canopy cover while some newer suburbs have below 10%. The aim is to increase the total canopy cover across the city to 30% by 2045.

The controls in the development codes in the Territory Plan will be reviewed, adjusted and updated on an ongoing basis to monitor effectiveness and where changes can be made to improve the workability and outcomes of the provisions.

The private open space requirements proposed in DV369 includes things like swimming pools, patios, drive strips.

2.2.3 Tree coverage should be increased more broadly across Canberra

- DV is limited in its scope by only addressing the private domain in isolation of the public domain.

  Response

  Noted. The DV is focussed on tree canopy cover at ground level in residential areas only.

- Principal opportunity for managing and maintaining tree coverage for Canberra suburbs is in the public realm. Open space network and streets, including front setbacks. Focus should be on those areas, not mandating excessive controls on private blocks.

  Response

  Noted. The Urban Forest Strategy deals with tree coverage in the public realm.

  The Urban Forest Strategy 2020-2045 sets out the ACT Government's vision for a resilient and sustainable urban forest that supports a liveable city and contributes to the wellbeing of the community in a changing climate. The Strategy has been developed alongside the ACT Planning Strategy 2018, ACT Climate Change Strategy 2019-2025 and the Living Infrastructure Plan. This Strategy is currently in draft for community and stakeholder consultation. The finalised Strategy will include an implementation and evaluation plan to ensure that the actions are being taken and assess the results. Reporting against each action will be required every five years over the life of the 25 year Strategy.

  https://yoursay.act.gov.au/trees-act/urban-forest-strategy

  Minimum front boundary setbacks can have a significant impact on opportunities to plant trees on public land especially in commercial zones where buildings frequently extend to the block boundary.

- In certain contexts, it will be appropriate to deliberately offset on-site canopy cover with increased public domain canopy cover in the adjacent or nearby public domain. Such an approach should form part of a strategic approach to achieving canopy cover at the precinct or neighbourhood level and through estate development plans.

Response

A key mechanism to achieve the ACT Government's living infrastructure targets is to strengthen planning policy and statutory mechanisms to incorporate climate change adaptation considerations and resilience criteria into urban planning and design processes. This includes support for the maintenance and enhancement of the urban forest at precinct, estate and district levels, and for the integration of a wide range of appropriate living infrastructure components in new estates and redevelopment planning and design processes. The ACT Planning System Review and Reform Project will also be considering changes to the Estate Development Code for assessing estate development plans.

- Inadequate car parking provision is forcing removal of street trees and planting for car parking.

  Response

  The Urban Forest Strategy recognises that often trees on public land, particularly street trees, suffer damage from cars being parked over their roots and inadequate protections from construction damage. The *Public Unleased Land Act 2013* will also be reviewed to make sure that public trees are appropriately valued and protected, with particular consideration given to requiring financial bonds against trees and requirements for fencing trees to protect them from construction damage.

  https://yoursay.act.gov.au/trees-act/urban-forest-strategy

  The TAMS Reference Document 4 (Landscape Management and Protection Plans (LMPP) Requirements for the Protection of Public Landscape Assets Adjacent to Development Works Issue 2 Revision 2) mandates that protective temporary fencing be installed along the drip-line of public trees adjacent to construction activities unless otherwise approved by TCCS (Transport Canberra and City Services).

- Changes should be made to the Estate Development Code consistent with the Living Infrastructure Plan and have explicit 30% tree canopy target on public land.

  Response

  The ACT Planning System Review and Reform project will be considering changes to the Estate Development Code.

- No rules for dwellings in commercial zones.

  Response

  The Multi-Unit Housing Development Code does include requirements for open space provision for residential development in commercial zones – see Rule R39 of the Multi-Unit Housing Development Code:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

  Further work will be undertaken to determine appropriate provisions to apply to non-residential zones (including commercial zones) in relation to

meeting the targets in the Living Infrastructure Plan. Any changes recommended will be subject to a future variation to the Territory Plan.

- If a large proportion of development in the city is multi-unit development, then the overall tree coverage will decline noticeably.

  Response

  Where 30% canopy cover cannot be easily achieved through tree and vegetation plantings, alternative area-specific solutions will be used based on assessment of microclimate and built environment conditions. In assessing the most effective and appropriate living infrastructure options, the focus will be on achieving the suite of benefits, city cooling plus environmental services, equivalent to the 30% target.

2.2.4 Concerns about monitoring, compliance and enforcement

- Should not be prescriptive about what people can plant. Most important issue is that 30% planting area is maintained.

  Response

  Noted. See section 2.2.7 regarding species selection.

- 30% planting area can be easily checked, to obtain a certificate of occupancy and when sale/transfer takes place this can be checked again.

  Response

  Tree provision will be a condition of approval as part of the landscape plan where a development application is required for merit track proposals once the provisions come into effect. Non-compliance with the conditions of development approval can result in compliance action and penalties. Other measures are being explored to make sure that trees are retained where development is exempt from development approval. A review of the *Tree Protection Act 2005* is currently being undertaken: https://www.yoursay.act.gov.au/trees-act/review-tree-protection-act-2005

- DV369 creates the situation that unapproved structures such as decks, verandahs, carports, shade sails and the like will be erected post-approval to achieve a similar outcome pre-DV369.

  Response

  Noted. However, where proposed additional structures are not exempt development, the requirement will still be to comply with the rules in the relevant development code/s.

- Achieving 30% permeable surfaces in urban areas by 2045 needs to be monitored and enforced. There needs to be more stringent and enforceable compliance, regulation and standards. Environmental and social benefits will outweigh financial costs.

Response

Noted. Additional compliance, monitoring and enforcement measures are being considered. The *Tree Protection Act 2005* is also currently being reviewed to determine ways to strengthen tree retention and protection.

2.2.5 Concerns about retention, maintenance and upkeep of trees

- Need better protection of existing mature trees and enforcement of penalties for tree damaging activities.

  Response

  Noted. The *Tree Protection Act 2005* is currently being reviewed.

- Need to increase education and awareness about benefits of vegetation.

  Response

  Noted. A proposed action in the Urban Forest Strategy is to develop community education material to convey the benefits of trees.

- Tree felling on new estates should be discouraged.

  Response

  A proposed action in the Urban Forest Strategy is to collaborate with EPSDD and other land development authorities on changes to the planning system that will properly provide for protection of existing trees and the establishment of new trees when planning infrastructure in new suburbs and in urban densification areas.

- Tree roots need to be protected during development.

  Response

  A Tree Management Plan is submitted through the development application process to protect regulated trees (trees located within the block), a LMPP is submitted to protect trees located on public land.

- There should be 35% canopy coverage to account for plant mortality rate.

  Response

  The Urban Forest Strategy includes an action to progressively map suburbs at risk of losing canopy due to ageing trees to inform a planned removal and replanting program.

- If works do not require a DA or building approval are there mechanisms which effectively prevent healthy trees from being removed and concreted over?

  Response

  Additional compliance, monitoring and enforcement measures are being considered. The *Tree Protection Act 2005* is currently being reviewed to determine ways to strengthen tree retention and protection.

- Where tree removal proposed – proponent must justify removal.

  Response

  Noted. Unnecessary tree removal is strongly discouraged during the planning and design phases of development.

- Any existing trees removed to allow construction must be replaced with a tree of similar canopy cover.

  Response

  Noted.

  The review of the Tree Protection Act is seeking to introduce a tree offset program to replace trees removed due to development or issues they are causing at a residence.

- If percentage canopy cover before construction exceeds 15% then the proposal must achieve a canopy cover at least equal to pre-existing canopy cover.

  Response

  Noted. It is strongly encouraged to retain trees on a development site where possible, especially trees in good health.

- All allocated tree planting space should include space for expansion to mature shape and root growth.

  Response

  The proposed provisions make allowance for tree growth and maturation.

- Green space and tree cover within suburbs should not be diminished in any way through DV369 or related DVs.

  Response

  Noted. This is not the intention of DV369 or related DVs.

- Offsetting as a substitute for on-site greening and canopy not acceptable.

  Response

  Noted, however in cases where it is not possible to provide on-site canopy cover and permeable surfaces, offsetting is an appropriate mechanism for still achieving equivalent cooling and shading outcomes.

  To achieve local shading and cooling outcomes the offset mechanism should include requirements for on-block living infrastructure designed to offer an equivalent benefit to trees alongside whether space is available for nearby public tree plantings.

  The review of the Tree Protection Act is also seeking to introduce a tree offset program to replace trees removed due to development or issues they are causing at a residence.

- If the minimum required planting area or canopy trees cannot be provided on site, the developer can pay the Government to plant and water for 5 years an equivalent area.

  Response

  The following information is provided on the 'Review of the *Tree Protection Act 2005'* webpage:

  "Offsets are used to compensate for loss and would mean that when a tree (that meets a certain set of criteria) is removed, it needs to be replaced with another tree or trees, or other equivalent living infrastructure. Offsets work on a 'no net loss principle' and can be implemented in a variety of ways. The ACT could consider a system whereby when a tree is removed, a replacement tree or similar living infrastructure is planted on the same block, or instead an amount could be paid into an offset fund which would be used to plant trees on public land. A combination of approaches may be necessary to ensure offsets achieve a no net loss result in the short to medium term. It is important to take into account the time it will take for offset plantings to grow and predicted mortality rates of new trees. An effective compliance framework would also be required to ensure replacement plantings are achieved and retained."
  (https://yoursay.act.gov.au/trees-act/review-tree-protection-act-2005)

- Investigate incentives for retention of trees on private land (LIP)

  Response

  One of the actions in the Urban Forest Strategy is to investigate incentives for retention of trees on private land.

2.2.6 Incentives for maintaining /increasing canopy cover and permeability

- Rate reduction for landowners complying with requirements for permeability and planting, caring and maintaining canopy trees and shrubs. Can be done as part of annual land valuation for rates determination.

  Response

  One of the actions in the Urban Forest Strategy is to investigate incentives for retention of trees on private land.

- Make free tree seedlings more easily available under the Plant Issue Scheme.

  Response

  Noted.

  The Plant Issue scheme is currently only available to residents who have signed a land purchase agreement within the last two years.

- Preference be given to trees that are planted in deep soil zones contiguous with neighbouring and adjoining deep soil zones to create a mosaic that allows

root systems and micro-organisms to find water, sun and nutrients in order to flourish.

Response

Noted and agreed.

Efforts should be made at the block planning, design and development stages to avoid isolated deep soil zones. Locating deep soil zones at the front of the block will also allow private trees to utilise the verge space (and vice versa for street trees) and promote connectivity needed for healthy soil ecosystems.

However, it may be difficult to mandate exactly where on a block trees should be planted as there are other factors that need to be taken into consideration regarding the preferences and needs of individual homeowners regarding the private use of their block and the location of existing infrastructure.

2.2.7 Selection of appropriate species

- Need clarification about Government's aim with respect to types and size of trees contemplated in DV. Criteria describes a tree canopy that provides substantial shade in summer while admitting winter sunlight, implying a deciduous tree, but tables make reference to Eucalyptus trees.

  Response

  The reference to Eucalypt species in the tables is provided should a Eucalypt species tree be selected, as they have different minimum pot size requirements to other species. The wording in the tables have been adjusted to clarify that Eucalypt species are not mandatory but that they have specific requirements, if selected.

- Table 7a should include reference to other plantings and also link to the Municipal Infrastructure Standards 25 (MIS 25) document prepared by Transport Canberra and Municipal Services (TCCS) April 2019 titled *Plant Species for Urban Landscape Projects.*

  Response

  Noted.

  The MIS 25 document is for tree planting on public land not privately leased land but the lists of possible species may be useful to inform property owners of some of the tree species that may be appropriate for their block.

  One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land.

- At least 50% of living infrastructure should be planted with pollinator friendly trees, shrubs and groundcover plants for year-round flowering.

Response

Noted.

One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land.

MIS25 provides information on the flowering times, nectar/pollen/fruit resources and forager type for each of the listed plant species. This information is given careful consideration when selecting tree species for planting in public spaces.

- ACT for Bees requests that its recommendations be embedded into government policy for future management of Canberra's green spaces.

  Response

  Noted.

  The request has been referred to the relevant area within the ACT Government that is responsible for planting and maintenance of Canberra's green spaces.

- There should be a requirement to plant a percentage of native species, preferably plants that are endemic and known to attract native fauna.

  Response

  Noted.

  One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land.

- References to Eucalypts not supported. Eucalypts do not provide shade in summer and sun in winter. Not suitable for planting in suburban gardens, should not overhang dwellings. Might expose Territory to litigation for encouraging planting Eucalypts in unsuitable locations. Better to leave choice of tree to landowner.

  Response

  Noted. Choice of tree is at the discretion of the landowner.

  Eucalypt species are not mandatory. The note in the tables has been amended to clarify that they have specific minimum pot size requirements, if selected.

- Some of tree species not compatible with bushfire planning eg. box gum species.

  Response

  Noted.

  One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land.

- Plantings should be chosen carefully to support pollinators (bees, butterflies, birds, etc) and for resilience.

  Response

  Noted.

  One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land. Another action in the Urban Forest Strategy is to publish and regularly review a list of climate resilient trees.

- Should not be so prescriptive over what residents can plant; most important issue is that 30% of planting area is maintained. Leave choice of tree to block owner.

  Response

  Noted.

  Choice of tree is at the discretion of the lessee, but does not include any plant described in schedule 1 of the *Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1)* or any subsequent declaration made under section 7 of the *Pest Plants and Animals Act 2005*, unless the tree is included on the ACT tree register.

- Provide a rule for tree species suitable for planting in residential areas, based on suitability to Canberra's climate, and provide habitat and shade.

  Response

  The choice of tree is at the discretion of the lessee, however one of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land. Another action of the Urban Forest Strategy is to publish and regularly review a list of climate resilient trees.

- Canopy tree definition should point to list of trees that would be suitable. If not addressed in DV then it could perhaps be considered in information provided to developers and the public.

  Response

  Noted.

  One of the actions in the Urban Forest Strategy is to promote the preferred species planting guide to assist the community in understanding what trees to plant on leased land.

2.2.8 Restrictions on development and increased costs to homeowners

- The site coverage limitations will mean a two-storey house will need to be built to get the same size home currently that is single storey – increases costs, reduces accessibility, and may create less tree canopy.

  Response

  The changes are expected to result in a better outcome on blocks in terms of provision of sufficient space for tree planting and permeable open space.

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- DV369 reduces the built form achievable on a mid-sized block, resulting in larger blocks being required to build a reasonable 3-4 bedroom home.

  Response

  The changes are expected to result in a better outcome on blocks in terms of provision of adequate space for tree planting and permeable open space.

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Changes have the potential to result in poor built form outcomes and limit architectural variety and innovation.

  Response

  The changes are expected to result in a better outcome on blocks in terms of provision of sufficient space for tree planting and permeable open space.

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Cumulative impacts: solar envelope introduced in Variation 306 restricts upper floor GFA; DV369 restricts lower floor GFA. A holistic planning policy that accounts for solar access including block open space should be further considered.

Response

Noted.

Further work will be done to consider how changes can be made to the Estate Development Code and residential development codes to consider further the solar envelope provisions and block orientation matters.

- Housing choice and affordable housing products will be seriously compromised by proposed changes in DV369.

  Response

  The changes are expected to result in a better outcome on blocks in terms of provision of sufficient space for tree planting and permeable open space.

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Front loaded compact blocks severely impacted by DV369.

  Response

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- It will be very difficult to have a secondary dwelling on a block.

  Response

  Previous modelling has demonstrated that a secondary dwelling could still be accommodated on a block over 500m^2 under the proposed provisions.

- Changes will result in increased land take for a greenfields estate and increases in road pavement.

  Response

  Further work will be done to consider how changes can be made to the Estate Development Code regarding the size of blocks, width of roads and shared paths etc. The ACT Planning System Review and Reform project will be considering changes to the Estate Development Code.

- The DV will have a significant devaluing effect on land values.

  Response

  Devaluing of land values is not anticipated to occur.

- DV369 should not apply to DAs lodged 3 months after commencement.

  Response

  Consideration will be given to an appropriate commencement date for the variation, taking into consideration development proposals (including exempt development) in the pipeline.

- The requirement for supervision of tree and landscape planting by a qualified person through construction is excessive and expensive.

  Response

  The proposed provisions in the Single Dwelling Housing Development Code have been written so that a home owner is able to source and locate the required trees on a block without requiring a landscape expert to assist with the process. Multi-unit developments are required to have a landscape plan as part of the development application process, and landscaping must be consistent with the approved landscape plan. This is an existing requirement – it has not been introduced as part of the proposed changes in DV369.

- Provision for 15% canopy could severely reduce potential yields, particularly in the case of townhouse developments.

  Response

  The site coverage provisions are intended to control the extent of development on the block and to make sure room is available for tree planting.

  A reduction in yield may occur, but the outcomes will decrease the occurrence of over-development on blocks and provide better amenity and liveability for residents of townhouses.

- Will have a negative commercial impact on the housing industry.

  Response

  A reduction in yield may occur, but the outcomes will decrease the occurrence of over-development on blocks and provide better amenity and liveability for residents across a range of housing typologies.

- Rather than placing more burden on designers, builders and home owners, the government is encouraged to reduce the regulatory burden and support the economy and job creation.

  Response

  The comments on supporting the economy and job creation are noted, however they are beyond the scope of this draft variation.

- Has a regulatory impact statement been done for the proposed variation?

  Response

  A regulatory impact statement will be done if there are any consequential changes made to the *Planning and Development Regulation 2008.* A draft variation does not require a regulatory impact statement as there are other mechanisms (such as background supporting documentation) and legislative requirements in place in respect to changes to the Territory Plan.

2.2.9 Concerns with proposed rules and criteria in the single dwelling and multi-unit residential development codes

- DV document is too complex – needs to be redrafted and simplified to focus on planting areas and site coverage, and so that goals can be easily achieved, and compliance easily monitored.

  Response

  Provisions have been drafted in such a way to make sure that all aspects of site coverage, open space, canopy trees and planting areas are considered when a development proposal is prepared. The Planning System Review and Reform Project is reviewing the way the development codes are written and applied.

- DV only adds to complexities of the Territory Plan whilst not addressing developmental pressures which continue to negatively impact neighbourhood character.

  Response

  Noted. However, this draft variation is specifically focussed on increasing tree canopy cover and planting area on privately leased residential blocks. The intention is not to add to complexities, but to be a first step in increasing canopy cover and permeable spaces to reduce the urban heat island effect.

- Introduction of minimum of 2.5m for planting areas is excessive. Ignores validity of small strip gardens in courtyards and light wells or along boundaries as being valid contributors to the permeability of a site.

  Response

  The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation.

  There is still opportunity for small strip gardens etc to be provided on a block where confined spaces are located, however this would not be classified as planting area.

- 2.5m dimension is not large enough to accommodate root systems of adequately sized trees without potentially causing damage to paths, driveways, or building foundations

Response

The 2.5m refers to the minimum dimension for planting areas to help promote successful landscaping for the growing plants, grasses and trees. The tables in the codes referring to tree sizes stipulate minimum soil surface area dimensions for trees to provide adequate growing space for trees, notably a minimum dimension of 3m for small trees, a minimum dimension of 5m for medium trees, and a minimum dimension of 7m for large trees.

- Every rule should be mandatory; criteria weak and ineffectual in achieving targets and supporting the intent of the rule (and underlying objectives for the zone and its desired character); criteria should have quantitative limits on what is acceptable

  Response

  Noted. Qualitative criteria mean that a non-complying application can be assessed on its merits and to provide justification for a design solution that can still achieve a high quality outcome.

  Criteria have been strengthened in the revised recommended draft variation so that a qualitative design response for the provision of private open space on standard blocks effectively achieves and demonstrates a reduction of urban heat island effects, stormwater retention, and maintenance of ecosystem services, as well as providing residential amenity on the subject site and protecting the residential amenity of adjoining sites.

- Planting area should be defined as a percentage of block area and not of private open space.

  Response

  Planting area has been changed to be a percentage of block area.

- Specifying minimum pot sizes is counter-productive – may encourage monoculture of tree type, inappropriate tree types.

  Response

  Minimum pot size specifications have been recommended by TCCS Urban Treescapes. The pot sizes are considered appropriate for sourcing preferred tree species and make planting the trees achievable. The choice of tree is at the discretion of the lessee.

- No reference is made in the table to canopy size/spread, only to height. Crucial to know how the mature grown canopy size and 2 metre protection zone provisions, currently applicable to existing trees on blocks, will be dealt with in the case of new tree planting

  Response

  Minimum mature canopy dimensions for various sizes of trees are proposed to be added to the tables relating to tree sizes in the recommended draft variation.

https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

Existing trees are taken into consideration in the provisions.

2.2.10 Concerns with proposed Rules and Criteria in the Single Dwelling Housing Development Code (SDHDC)

- Simpler and more equitable to just have one percentage specified as planting area in SDHDC – i.e. 30%. As target might be difficult to achieve on compact blocks, may be simpler and fairer to exempt compact blocks from proposed targets.

  Response

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for compact blocks in response to concerns about site coverage and private open space. However, changes have not been made to the requirement for the provision of trees on a block.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Site cover, planting area, canopy cover should be same for RZ1, RZ2, RZ3.

  Response

  Site coverage, planting area and canopy cover are based on residential block sizes for development that is subject to the Single Dwelling Housing Development Code, not based on the residential zone.

- East-west mid-sized blocks particularly affected by solar envelope restricts upper floor gross floor area (GFA) and DV369 restricts lower floor GFA.

  Response

  Noted. The Estate Development Code will be reviewed as part of the ACT Planning System Review and Reform project and matters of block orientation will be further considered.

- How is 30% canopy cover and 30% permeable surfaces related? How were these percentages selected?

  Response

  Permeable surfaces are to provide sufficient space for tree planting area to correspondingly support the tree canopy cover target.

- No amount of tree canopy cover is specified.

  Response

  Tree canopy cover on blocks which accommodate single dwellings has been based on tree size at maturity and number of trees depending on the size of the block. Planting area (in which trees and other vegetation is to be located on a block) is defined as a percentage of private open space on a block.

- Need to extend and strengthen the canopy cover rule to be more effective.

  Response

  Noted. This draft variation is the first step in the process of extending and strengthening canopy cover requirements.

- Need to add the definition of a large canopy tree: one capable of achieving a crown diameter of a minimum of 12 metres and mandate that large canopy trees must be planted on large (1 tree) and very large (2 trees) blocks – will result in canopy cover closer to 30% target.

  Response

  Noted. Rule R38E requires large trees on large blocks.

  Minimum mature canopy dimensions for various sizes of trees have been added to the tables relating to tree sizes in the recommended draft variation: https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Better to break up large groups of small single house blocks and provide them with substantial planted areas in public open space, roadways etc.

  Response

  Noted. The Estate Development Code will be reviewed as part of the ACT Planning System Review and Reform project, and the provision of substantial planted areas in public open space will be further considered.

- Size of soil surface area seems excessive – could exceed minimum dimension for private open space.

  Response

  Soil surface area size is not expected to exceed minimum dimension of private open space as soil surface area correlates with tree size. Tree size (small, medium, large) is determined by the size of the block, and the extent of private open space required for the particular block size.

- What if blocks do not have sufficient soil depth capable of deep rooted trees?

  Response

  This is not anticipated to occur, as there are parts of Canberra with rocky subterranean profiles that still support extensive mature tree canopy cover. Basements are excluded from deep soil zones, which would be the main limiting factor contributing to insufficient soil depth for deep rooted trees.

- Does not seem to be any control over car parking on grassed areas which can be detrimental to the roots of some trees.

  Response

  Noted. Car parking on grassed areas is difficult to control on private land.

- Changes introduce a new perverse incentive to over-produce rear-loaded compact blocks. Rules for both types of compacts blocks need to be adjusted to have balanced requirements for site coverage, open space and planting area.

  Response

  Noted. Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for compact blocks. It is proposed that rear loading and front loading blocks will have the same provisions.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- DV does not clarify whether developers can meet requirements for tree planting by planting trees under powerline or over sewer easements.

  Response

  The planting of trees on a residential block is still required to take into consideration any existing infrastructure, such as powerlines and sewer easements. Planting trees over / under easements is not advised as it can lead to costly repairs being required to subterranean infrastructure if the roots damage pipes, and it is a requirement for home-owners to make sure that tree branches do not interfere with overhead power lines.

- There should be a rule to limit parking and vehicle manoeuvring space; limit redevelopment of RZ2 blocks to two dwellings and prohibit block consolidation.

  Response

  Noted. However, draft variation is not considering these matters.

- Do the changes apply only to new developments or if an existing house with a large block of land wants a secondary residence or pool will they come under new regulations or regulations that existed when they bought the house?

  Response

  Any proposed development will be subject to the new provisions once the variation takes effect.

- Good landscaping plans needed to ensure vegetation such as trees are placed on blocks in such a way that they do not reduce access to sunlight/ natural light, especially in winter, to new and neighbouring properties.

  Response

  Noted and agreed.

- The terms ‘block’ and ‘site’ used interchangeably – confusing.

  Response

  ‘Block’ and ‘Site’ mean different things. *‘Site’* does not include access driveways or right-of-way easements, whereas ‘block’ includes everything on a parcel of land.

- Canopy cover calculations need to include existing trees on block

  Response

  Proposed Rule R40B of the Single Dwelling Housing Development Code contains a note that provides for existing canopy trees being retained as part of development being considered to meet the requirements for tree planting.

- Deep soil zone allocation insufficient; should apply to 100% of the planting area; will allow for poor outcomes to continue such as excessive basement excavations; ramps)

  Response

  Noted. The deep soil zones that are required be provided are to be adequate for the planting and healthy growth of a tree that will be able to reach maturity unimpeded by impervious surfaces or underground restrictions.

2.2.11 Concerns with proposed Rules and Criteria in the Multi-Unit Housing Development Code (MUHDC)

- Variable percentage requirement for planting areas across residential zones will be hard to implement and enforce.

  Response

  Variable percentage requirements are necessary due to the different multi-unit residential development typologies found in different residential zones.

- RZ3, RZ4, RZ5 – site open space is 20%, but planting area 25% - confusing.

  Response

  The definition of ‘site’ in the Territory Plan excludes the area of any access driveway or right-of-way within a block; whereas the definition of ‘block’ includes the entire parcel of land. Site open space calculations exclude driveways, etc, whereas block calculations are based on the entire block size. Therefore there is a need to explain the way the percentages are calculated differently.

- DA requirements for landscape plans – must demonstrate that the design and materials choices will achieve at least 30% canopy and 30% permeability.

  Response

Noted. DA requirements for landscape plans is being further considered by the ACT Planning System Review and Reform project.

- Concern that having tree planting requirements in addition to canopy cover requirements for multi-unit developments may end up being counterproductive. Eg. if two large canopy trees are required to achieve the required canopy cover but the tree planting rule instead requires planting one small and one medium canopy tree which one will be implemented? Better to have one canopy cover rule with simple, clear 30% requirement than having both a canopy cover rule and a tree planting rule that conflicts with it.

  Response

  Noted.

  Rule R39C has been changed in the recommended draft variation to increase the requirement for canopy cover on the block at maturity from 15% to 20% for multi-unit development in RZ3 to RZ5 zones.

  The provision of 20% cover is applicable to multi-unit sites in the RZ3-5 zones. Any proposed development is required to provide a minimum level of tree planting based on tree size and number to demonstrate achievement of the 20% cover.

  The provisions for single blocks was for the size and number of trees rather than a percentage as it was considered difficult to equate a percentage on a small block.

- DV does not clarify whether developers can meet requirements for tree planting by planting trees under powerlines or over sewer easements.

  Response

  Planting trees over / under easements is not advised as it can lead to costly repairs being required to subterranean infrastructure if the roots damage pipes, and it is a requirement for home-owners to make sure that tree branches do not interfere with overhead power lines.

- Why are only advanced trees specified in DV? Impracticable and not cost-effective.

  Response

  Guidelines taken from other jurisdictions informed the requirement for advanced trees to be provided.

- Criteria C38B should require mandatory planting area of minimum 30% of block area

  Response

  The criterion is designed to allow a qualitative response where the minimum 35% planting area in R38B cannot be met, whilst demonstrating that sufficient living infrastructure and soft landscaping solutions can be provided on the block.

- Criteria C38D and C40A have no rule associated with them. Should be recast as rules

  Response

  Stand-alone criteria are utilised where it is not necessary or essential to have definitive quantitative measures to achieve a desired outcome, and/or where qualitative outcomes are preferred to allow for flexibility in design solutions.

- Criteria give no guidance to ACAT or other legal bodies as to what was intended

  Response

  Criteria provide qualitative guidance to achieve an appropriate design response that could be reasonably considered and interpreted in a legal context.

- R39A – 45% site coverage in commercial zones will prevent options for aged living on ground level. Current commercial zones currently have higher plot ratios which enable the option of more development on ground. This will no longer be the case.

  Response

  The site coverage rule has an associated criterion if the rule of 45% site coverage cannot be met, or where a better design outcome can be demonstrated by addressing the criterion.

- Why cannot Element 4 be incorporated into point 5 (MUHDC)? R39D (Element 5) is a duplication of R39 (Element 4)

  Response

  Rule R39D has been amended to make it clear that it refers to RZ3-RZ5 zones.

- Note in Rule R39C: Minimum surface area of $64m^2$ and minimum volume of $85m^3$ in one location could be excessive on smaller blocks, particularly if required to be on one single planted area. Better if min area and volume could be split over the block.

  Response

  The note in this rule applies to communal areas on RZ3, RZ4 and RZ5 zoned blocks where multi-unit development is proposed. These are the minimum dimensions expected to achieve the intended canopy cover of 15% on these blocks.

- DV369 needs to be expanded to encourage multi-unit developers to group trees together in a shared common green space to create valuable greenspace for residents that also enhances survival rate of newly planted trees and builds urban microclimates. (eg City Edge apartments in O'Connor)

  Response

Noted. The intent of specifying trees with minimum heights and canopy width dimensions is to encourage trees that provide sufficient height and canopy cover for shading and cooling purposes.

2.2.12 Clarification / revision of definitions

Site coverage:

- Site coverage should be the only control.

  Response

  Noted. However other controls are needed to make sure sufficient planting area and tree canopy cover is provided for on a block.

- Balconies, terraces, patios, decks, pergolas, pools, tennis courts should not be counted as site coverage.

  Response

  These elements have been included in site coverage, to limit the amount of hard impervious surfaces on residential blocks.

- Not clear whether basements and associated driveway ramps are included in the calculations for site coverage.

  Response

  Basements and driveways are excluded site coverage calculations but also cannot be located in deep soil zones.

- Site coverage should include eaves and awnings as they block the rain from the ground and are difficult to grow things under. Make site coverage 50% not 40% but include eaves in definition would allow for 600mm eaves around the perimeter of the house.

  Response

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Site coverage should not include permeable paving, permeable driveways, and decks and pergolas if they are permeable and can be shown to have minimal impact on water ingress.

  Response

  DV369 focusses on site coverage and planting areas. Permeable areas are to provide for living infrastructure. Permeable structures such as driveways and decks would not contribute to permeable space for living infrastructure.

- A better distinction needs to be made between permeable area and planting area as they are doing two different things.

  Response

  Planting area within the deep soil zone is a subset of permeable area.

- There does not seem to be any control over car parking on grassed areas which can be detrimental to roots of some trees (definitions only mention car parking as being part of impermeable areas).

  Response

  Noted. Difficult to control on a private block without becoming overly prescriptive.

Plot Ratio

- Plot ratio control is unnecessary and should be removed. There are already controls for height, setback, solar access - these should be mandatory.

  Response

  Noted. Changes to plot ratio were not included in DV369 but may be considered at a later date once the new site coverage provisions take effect.

Other definitions:

- The terms ‘tree canopy cover’, ‘permeable surface’, ‘water infiltration’, ‘landscape quality’, ‘green roofs’, ‘green walls’ and ‘deep root planting area’ are not defined. These terms should be defined.

  Response

  Planting area, canopy tree and deep soil zone are all defined. It is not considered necessary to define other elements at this stage.

- Canopy tree definition should allow for a 6 metre minimum crown cover to allow for planting in more restricted areas such as small yard spaces. 8m could result in poor positioning of trees.

  Response

  It is proposed to remove the definition of canopy tree and include the minimum dimensions for canopy cover for small, medium and large trees to the tables in the residential development codes which specify tree sizes, heights and soil requirements.

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- Deep soil zone should be allowed over basement structures and on podium and roof areas – especially in RZ5 and commercial zones.

  Response

  Noted. Green infrastructure on buildings will be further explored as actions arising from the implementation of the Living Infrastructure Plan are progressed.

- *Planting area* should not exclude terraces, pergolas, patios and decks if they have a permeable ground surface. This should be made clear to avoid confusion in the assessment stage of development applications.

  Response

  Not agreed. Will not be able to use these elements for planting, even if considered a permeable surface. It also removes the difficulty in determining the circumstances in which these elements may or may not have permeable ground surface, the gap between decking materials etc. The criterion will enable this aspect to be taken into consideration where appropriate.

- *Planting area* should not be read in conjunction with or interpreted as forming part of the requirement of canopy cover. Canopy cover should and must in some cases overlap buildings, roads and parking area. This would be desirable in providing shade in summer and reduce heat island effect.

  Response

  Noted, it is expected that in some cases tree canopies with overlap buildings, roads, driveways, footpaths and parking areas.

- Basements and swimming pools directly impact permeability of the ground surface. Some basements exceed footprint of dwelling at ground level. DV definition changes do not appear to address this problem.

  Response

  The 'deep soil zone' defines an area of soil within a development that is unimpeded by buildings or structures above and below ground, and which has adequate dimensions to allow for the growth of healthy trees. Deep soil zones exclude basements, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

- Proposed definitions need to be amended to clearly stipulate Private Open Space and planting areas to exclude basement garages.

  Response

  Deep soil zones exclude structures below ground such as basements and are to be located within the area of private open space.

- 'Dwelling' should be included in Territory Plan definitions, instead of having to refer to the *Planning and Development Regulation* for the definition.

  Response

Noted. The ACT Planning System Review and Reform project will be reviewing the definitions in the Territory Plan.

2.2.13 Concern about overlapping of tree canopies

How will overlapping of tree canopies be dealt with?

- Does the mature tree canopy need to be clear of neighbouring boundaries? Can mature tree canopies overlap buildings, courtyards, roads and parking spaces?
- If your neighbour's tree is overhanging your block can it count towards your canopy coverage?
- Not clear if there is some allowance for tree canopies to overlap in the case where two or more trees are required

  Response

  Tree canopy cover in DV369 is focussed on canopy cover on an individual block basis. Overlapping canopy cover from neighbouring blocks, open space, roads, etc is not counted for the purposes of fulfilling the requirements of the provisions in DV369 for individual blocks.

2.2.14 Green architecture considerations

- The Government should encourage green walls and green roofs and other planting such as indoor planting in addition to planting trees especially in multi-unit complexes.
- On small blocks where a garage is built as a separate structure the code should require that the garage roof is green – ie. planted with appropriate mosses, grasses etc.
- Singapore – multi-storey buildings have rooftop gardens or gardens along the side of buildings.
- Green walls and green roofs and roof garden options will be financially preferable alternative to providing planting area and tree planting at ground level for some developments.
- DV not clear how proposed changes would deal with green wall, green roof and roof garden options and proposals as a financially preferable alternative to providing planting area and tree planting at ground level for some developments.
- Green walls, roof-top gardens and potted trees should be encouraged but are not substitutes for ground-level, longer lasting tree cover.

Response

DV369 deals primarily with tree canopy cover at ground level in residential areas. Living infrastructure on buildings will be further expanded as work progresses on the Government's range of strategies to increase the greening of the urban areas.

Ground level tree cover is preferable, however they may be instances where living infrastructure on buildings is the only option for providing greening and cooling solutions.

Comparison with other cities is difficult as Canberra has a different climate with low rainfall and large extremes in temperatures. Rainwater capture provides some water for landscapes, but is it far outweighed by the evaporation rates, particularly for rooftop gardens and other raised landscapes with limited soil volumes.

The Government is investigating green walls and roofs for development in commercial zones.

2.2.15 Ongoing evaluation of effectiveness of changes needed

- 30% canopy cover is too complex to monitor easily at block scale, but regular monitoring can be maintained at a district scale using LiDAR (light detection and ranging) technology (2015 survey).

  Response

  Noted.

  Implementing this target is action 4.22 in the ACT Climate Change Strategy 2019–25 and reporting on implementation progress will be part of the monitoring, evaluation, reporting and improvement undertaken for the Strategy.

- Government should ask CSIRO to repeat its study 'Mapping urban surface heat in Canberra' well before the deadline of 30% canopy cover by 2045 to see whether the cooling benefit of this target is likely to be achieved.

  Response

  Noted.

  The finalised Urban Forest Strategy will include an implementation and evaluation plan to ensure that actions are being taken and the results being assessed. Reporting against each action will be required every five years over the life of the 25 year Strategy.

2.2.16 Public dialogue on the DV

- ACT Government / EPSDD did not offer extensions of submission deadlines due to unprecedented conditions in Canberra, nor provide and widely advertise public information and Q&A sessions.

- Concerns re limited stakeholder engagement prior to release of DV.

- Well prepared and well illustrated public information sessions are required to support and enable public comment on the DV.

  Response

  Draft variation 369 was made available for public comment from 13 December 2019 until 28 February 2020 and a consultation notice under section 63 of the Planning and Development Act 2007 was published on the ACT Legislation Register on 13 December 2019 and on the ACT Government public notices website. The public consultation period was formally extended twice, the first time until 3 April 2020 and the second time until 8 May 2020. Notices were published on the Legislation Register and ACT Government public notice website advising of the extensions.

  Information sessions were available to groups on request. A presentation was given at the ISCCC meeting and an information session for industry groups was arranged however was cancelled due to the COVID-19 lockdown requirements at the time.

  Information sessions explaining the change will be held with industry practitioners before the changes take effect in the Territory Plan.

2.2.17 Further work needed to determine whether the proposed changes can work in reality and to better refine provisions

- Need to redraft variation and release only once necessary policy considerations have been fully undertaken and plausible strategies developed to overcome obvious difficulties.

  Response

  Changes have been made to the proposed provisions in DV369 in response to concerns raised during public consultation.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- DV should be withdrawn, substantially revised and re-notified with Tait Network report and data on existing tree canopy cover for every suburb in the ACT and realistic projections of tree canopy on all developed and likely developable land in the urban area as background publicly available.

  Response

  The Tait Network report has now been made available on the EPSDD Disclosure log at:

  https://www.environment.act.gov.au/about-us/access-government-information/disclosure-log/disclosure-logs/epsdd-2154878

- Review of Territory Plan must consider the solar envelope provisions in tandem with the aims of the Living Infrastructure Plan to optimise on-site built form massing and private open space.

  Response

  Noted.

- There should be some case studies done or trialling on a new suburb to see if the concept can work and be viable.

  Response

  Noted.

- Evaluation of changes needs to be undertaken to see if and where it is being effective, so that incremental improvements can be made if required.

  Response

  Territory Plan provisions are monitored on a continuing basis. Any policy changes are made via full variation to the Territory Plan and minor modifications/clarifications can be made via technical amendment if required.

- Further workshops and consultation needed with EPSDD to better refine rules, definitions and criteria.

  Response

  Further consultation will be held on the ACT Planning System Review and Reform Project.

- Government should provide a triple bottom line evaluation of economic, social and environmental aspects of this proposal to demonstrate to the general public its benefits.

  Response

  Previous work done for the ACT Planning Strategy, the ACT Climate Change Strategy, and the Living Infrastructure Plan took these matters into consideration. These policy initiatives have informed the changes proposed in DV369.

- Need further analysis of impacts of requirements for the size and number of trees on a block for a range of blocks sizes and configurations including mid-sized blocks of east-west orientation and compact blocks.

  Response:

  The size and number of trees on a block for a range of block sizes as proposed in DV369 is considered to be appropriate for this step in the process. Further analysis will be done as the provisions are reviewed in order to meet the projected canopy cover and permeability targets. The review of the Estate Development Code will consider the orientation of blocks.

- In light of the impact of increasing climate change – need an expert, independent and transparent view of the effects of urban intensification and renewal rather than another attempt at tinkering at the edges.

  Response

  The ACT Planning Strategy, the ACT Climate Change Strategy and the Living Infrastructure Plan have considered the urban heat island effect and measures to mitigate the impacts of it on urban intensification and renewal.

2.2.18 Ginninderry specific comments

- Implementation of DV369 would require an additional 40ha of developable land to provide the same product and accommodate the same number of dwellings

- DV369 needs to be considered within the context of a master-planned greenfield development where environmental considerations (large conservation corridor) have influenced the configuration of the developable area.

- The first Ginninderry neighbourhood will have 20% tree cover at maturity, similar to inner Canberra suburbs.

- DV369 should include a grandfathering clause to avoid the need for costly redesign

- R40 of SDHDC will seriously compromise delivery of Flexi-living homes, delivered on 75-115m2 blocks – larger block would be required under DV369

- Inequity in outcomes for rear vs front loaded blocks:
  - DV369 results in rear loading delivering 11% less landscape area
  - DV369 results in similar hard paved area
  - DV369 results in rear loading delivering 15% more site coverage

  Response

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

  Further work will be done on the review of the Estate Development Code as part of the ACT Planning System Review and Reform Project.

2.2.19 Denman Prospect specific comments

- Advantages for soft landscaping in front yards rather than rear yards:
    - Adds to neighbourhood aesthetic and enriches the streetscape
    - Easily monitored for compliance
    - Utilises land in front setback which cannot be built no and therefore does not diminish the amount of useable space on the block
    - Creates shading closer to roads, pathways – mitigates heat island effect
- DV369 turns advantages for soft landscaping in front yards into disadvantages as DV369 requires landscaping in back yards to meet provisions.

    Response

    The proposed provisions do not mandate tree planting in back yards only. They can be provided anywhere suitable on the block where sufficient space is provided.

- Introduction of DV369 will make impossible to deliver the predominantly four bedroom housing product on blocks smaller than 450sqm. Blocks would need to be larger than 500sqm to deliver same product. The outcome would be reduced densities and contributing to urban sprawl.

    Response

    Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for mid-sized and compact blocks in response to concerns about site coverage and private open space.

    See the recommended draft variation for the changes:

    https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

2.2.20 Other ways to reduce urban heat island effect and increase living infrastructure

- Plant more trees near roads and other hard impermeable surfaces.

    Response

    Increasing tree canopy cover on public land is being considered by the Urban Forest Strategy project. The Strategy continues the ACT Government's commitment to the 30% canopy cover target.

    https://yoursay.act.gov.au/trees-act/urban-forest-strategy

- Trees should be provided and maintained in areas of high population vulnerability (older than 65 or younger than 4), and high behavioural exposure (where people move and gather).

Response

Noted.

- Change current drainage – divert water from stormwater drains to creek lines. Happening in new suburbs, can be done in old suburbs at fraction of cost of large-scale wetlands being built in a few locations.

  Response

  Noted.

- Use of appropriate materials or colours for roofs, driveways and paved areas

  Response

  Noted.

- A statement of the accumulative effects of Canberra's heat banks

  Response

  Noted.

- Integration with the living infrastructure across all of Canberra

  Response

  Noted. The LIP recognises the importance of maintaining sufficient quantities of the right types of living infrastructure in and throughout the city as being essential to maintain the natural ecosystems and the biodiversity they support.

- Modelling to show benefits of increasing living infrastructure and effects of not increasing living infrastructure

  Response

  Noted. Extensive work was done in the preparation of the LIP to demonstrate the benefits of increasing living infrastructure.

- Include understorey to enhance connectivity

  Response

  Noted.

- Landscape should be incorporated into all building Energy Ratings with extra stars awarded for tree planting that will mitigate heat island effect

  Response

  Noted.

- Options need to be considered for permeable paving and driveways which will assist with reducing runoff and reducing the heat island effect

  Response

  Noted.

- High density development is needed with stringent green space controls to reduce heat island effect

  Response

  Noted.

- Reward people with light roofs by allowing them to stick with current rules regarding planting and site coverage. Has big impact on reducing urban heat islands

  Response

  Noted.

- Make paving, hard surfaces (such as non-pervious on-site parking) and covered areas non-exempt in planning regulation where they decrease the amount of permeable ground by a certain amount

  Response

  Noted.

- Medium and higher density housing projects should be required to return space to the public realm for community gardens.

  Response

  Noted.

- Recommendation made for the promotion of the urban forest concept – everyone needs to play their part and that care of trees is expected behaviour by all citizens.

  Response

  Noted. Actions in the Urban Forest Strategy under Community Involvement propose expanding and supporting community / volunteer programs to encompass a wider range of contributions to maintenance of the urban forest and developing community education material to convey the benefits of trees.

- Where target is not possible, solutions exceeding 30% can be placed adjacent to compensate, for example: increase tree cover surrounding sports ovals; streets and road reserves to create continuous networks of living infrastructure; high density urban and industrial development where most of land taken up by building footprint, can have green infrastructure and surrounding streetscapes should compensate.

  Response

  Increasing tree canopy cover on public land is being considered by the Urban Forest Strategy project. The Strategy continues the ACT Government's commitment to the 30% canopy cover target.

  https://yoursay.act.gov.au/trees-act/urban-forest-strategy

- Consider reducing onsite parking requirements for dual occupancies to reduce hard paved surfaces and provide greater areas for soft landscaping.

  Response

  This suggestion can be considered further during the review of the Territory Plan by the Planning System Review and Reform Project.

- Negative impacts of urban heat islands should be explicitly recognised in the DA process and Territory Plan.

  Response

  Noted. New policy proposals for development (such as proposals for rezoning to allow higher order development) are required to demonstrate that there is no net gain of urban heat as measured on the 2017 urban heat map.

- Government can reduce mown areas - make them treed, no mow areas would support aims of the plan and cost less, with less mowing.

  Response

  Mowing regimes are not part of the scope of this draft variation.

2.2.21 Other matters

Wording:

- Concerns that the Fact Sheet and Explanatory Statement employ language that is misleading.

  Response

  This is not the intention of the wording in these documents.

- The phrase ‘not less than XY%’ should be re-written ‘at least XY%’ The codes use the convention ‘not more than XY’ consistently.

  Response

  Noted. The wording has been adjusted to refer to ‘not less than XY’.

- Table 2 in Fact Sheet does not provide block areas for mid-sized and compact blocks but does for large blocks.

  Response

  Noted.

Education and awareness:

- Who will provide guidance to developers and new homeowners about suitable, meaningful plants that will contribute to emissions reduction, provide shade and shelter for humans and animals?

Response

Actions in the Urban Forest Strategy include promoting the preferred species planting guide to assist the community in understanding what trees to plant on leased land and publishing and regularly reviewing a list of climate resilient trees.

- Educational materials developed that outline benefits of building with good orientation, passive heating/cooling and smaller carbon footprint, including use of appropriate species for tree shading and vegetation.

  Response

  Noted. The Government has developed a number of initiatives providing advice on these matters, with more work being done in this space.

- Tree Registers for significant trees need to be made better known to the community so residents can monitor the health and safety of these trees.

  Response

  Noted. One of the actions proposed in the Urban Forest Strategy is to maintain and promote the Tree Protection Register under the Tree Protection Act.

Heritage:

- Reid Housing Precinct and other similar heritage precincts in Canberra should retain and strengthen mandatory 40% for site coverage and planting areas.

  Response

  Noted.

- Red Hill Precinct has specific requirements which apply to the long-term care and maintenance of trees on residential blocks. Provides practical guide for homeowners.

  Response

  Noted.

Other suggested changes to Territory Plan:

- Amend Rule R4 of SDHDC to allow basements below a two-storey element in RZ1 zone so that the new open space requirements can be met.

  Response

  Noted. Beyond the scope of DV369.

- Remove Rule R9 relating to site permeability from the Waterways: Water Sensitive Urban Design General Code as requirements are now in the Multi-Unit Housing Development Code.

  Response

Provisions in the MUHDC only relate to residential development, whereas R9 in the WSUD General Code applies to all forms of development (commercial, industrial, etc).

- Reinstate requirement for a DA including consultation with neighbours, for 'knockdown rebuilds'.

  Response

  Noted. Beyond the scope of DV369.

- Changes to the Territory Plan need to be explicitly integrated with other environmental policies including those to maintain the urban forest.

  Response

  The DV is one part of a range of strategies initiative by the Government to achieve the desired outcome, including review of the Tree Protection Act, the Urban Forest Strategy, the ACT Planning Strategy, ACT Climate Change Strategy, and the Living Infrastructure Plan.

- Government needs to prioritise the review of the planning system and Territory Plan to ensure an overarching comprehensive approach to the updating of planning controls.

  Response

  Noted. The ACT Planning System Review and Reform project is a Government priority.

- 30% canopy cover and permeability also needs to be introduced into the City and Gateway DV368.

  Response

  The provisions have not been included in DV368. The provisions proposed through DV369 will apply to residential blocks (i.e. RZ3 and RZ4) along the City and Gateway corridor.

Urban Forest Strategy

- The Government should develop and publish an implementation plan and provide adequate and continuing funding to allow the realistic achievement of the 30% canopy target, either as part of, or in addition to, the Urban Forest Strategy.

  Response

  The Urban Forest Strategy includes an implementation and evaluation plan to ensure that the actions are being taken and assess the results. Reporting against each action will be required every five years over the life of the 25 year Strategy.

Other matters

- A pollinator corridor should be implemented without delay, to maximise biodiversity and reap economic benefits. Legislation should require developers to plant specific species that maintain the health of our pollinators, birds and small mammals when developing new suburbs.

  Response

  Noted.

  Renewal of the urban forest provides an opportunity to enhance a diversity of habitat and resources for insects, bees and wildlife through considering flowering times and nectar/pollen/fruit and forage characteristics of different tree species. This approach can be expanded for use by residents and developers as they undertake plantings on private land and detailed information has been introduced into the MIS 25 document (see Urban Forest Strategy at https://www.yoursay.act.gov.au/trees-act/urban-forest-strategy).

2.2.22 Comments on Living Infrastructure Plan 2019 (LIP)

- Action 2 of LIP states that where 30% canopy cover cannot be easily achieved through tree and vegetation plantings, alternative locality-specific solutions will be used based on assessment of microclimate and built environment conditions. DV369 does not deal with this issue.

  Response:

  DV369 is one part of the response to the LIP.

- Actions 3 & 4 of the LIP call for a Microclimate Assessment Guide and Program for significant developments. DV369 does not deal with this.

  Response:

  DV369 is one part of the response to the LIP.

- Action 5 of LIP calls for a Climate-wise Landscape Guide for development. DV369 does not appear to deal with this requirement.

  Response

  DV369 is one part of the response to the LIP.

- Action 6 of LIP requires multi-dwelling, mixed use and commercial development applications to have landscape plans that demonstrate how surface treatments and tree canopy targets will be met. DV369 silent on this requirement.

  Response

  The ACT Planning System Review and Reform project will consider this action further.

- DV369 does not appear to deal with 'equivalents' that LIP mentions (targets can be met by 'equivalents'*).*

  Response:

  Noted. The draft variation focusses on tree canopy cover at ground level.

- What steps is the Government taking to meet its share of the target? Need committed funding and regular reviews to be successful.

  Response

  The Urban Forest Strategy will include an implementation and evaluation plan to make sure that the actions are being taken and assess the results. Reporting against each action will be required every five years over the life of the 25-year Strategy.

- The draft variation does not appear to be developed in cohesion with other aspects of the LIP. Will likely result in piecemeal response. Need better government coordination across city services, climate change and planning portfolios.

  Response

  The DV is one part of a range of strategic initiatives by the Government to achieve the projected outcome, including review of the Tree Protection Act, the Urban Forest Strategy, the ACT Planning Strategy, ACT Climate Change Strategy, and the Living Infrastructure Plan.

- LIP would be complemented by a requirement that all new buildings and roof replacements use high-albedo (radiation-reflecting) materials.

  Response

  Noted.

2.2.23 Tait Network – Living Infrastructure Study – Planning and Design for Living Infrastructure as part of Residential Intensification in a Changing Climate (prepared for EPSDD 2018)

- Tait Network considers that the intent of the report has been misinterpreted through DV369.

  Response

  The Tait Network study was one of a suite of guidelines and documents that was used to develop the specific provisions proposed in DV369. It was not the only defining source of information or input into the provisions. The Explanatory Statement and fact sheet released during public consultation are considered to provide sufficient background to the proposed changes in DV369.

- Study recommended a site coverage control to replace plot ratio and private open space; planting area was proposed as a percentage of block and not as a percentage of private open space

  Response

  Planting area has been defined as a percentage of block area.

- Compact blocks will not be able to deliver a quality built outcome as a result of the available building footprint under DV369 provisions

  Response

  Changes have been made to the proposed provisions in the Single Dwelling Housing Development Code for compact blocks. It is proposed that rear loading and front loading blocks will have the same provisions.

  See the recommended draft variation for the changes:

  https://www.planning.act.gov.au/planning-our-city/territory_plan/recommended_final_variations

- For larger blocks to meet DV369 provisions will require 2 storey configurations, impacting accessibility standards and universal design intent, increase cost of delivery and force merit track compliance

  Response

  There has been no change to the provisions for large blocks as there is considered to be sufficient space on large blocks to achieve the intent of DV369 provisions.

- Site coverage control in the study included planting area and tree planting requirements together as a rule for each block size, to remain consistent with the typical presentation of controls

  Response

  The provisions have been prepared in a way to make sure that the provisions can be easily interpreted and limit the possibility of misunderstandings with the different intent required of different provisions.

- Study recommended introducing a rating tool for criteria to reduce instances of non-compliant development where the criteria and rule do not enforce the same outcomes. Rating tool would provide a rigorous and impartial method for developments to meet the requirements of the DA process while still ensuring quality living infrastructure outcomes

  Response

  The ACT Planning System Review and Reform Project is considering the structure of Territory Plan. The Project aims to deliver a clear, easy to use planning system that encourages improved spatial and built outcomes across the ACT. Part of this will be considering the manner in which developments are assessed to encourage and promote quality living infrastructure outcomes.

- Study identified that the biggest impact on increasing canopy cover and permeable surfaces is at the street scape and suburb scale. Look forward to these additional recommendations being adopted into the estate development phase and Municipal Infrastructure Standards.

  Response

  The ACT Planning System Review and Reform Project will be considering changes to the Estate Development Code for assessing estate development plans. The Urban Forest Strategy is considering canopy cover in the public realm.

3. COMPLIANCE WITH THE PLANNING AND DEVELOPMENT ACT 2007

3.1 Release for Public Comment (section 63)

Draft variation 369 was made available for public comment from 13 December 2019 until 28 February 2020 and a consultation notice under section 63 of the *Planning and Development Act 2007* was published on the ACT Legislation Register on 13 December 2019 and on the ACT Government public notices website. The public consultation period was formally extended twice, the first time until 3 April 2020 and the second time until 8 May 2020. Notices were published on the Legislation Register and ACT Government public notice website advising of the extensions. The draft variation released for public consultation is at ***Appendix 1***.

3.2 Mandatory agencies (section 61 (b))

The comments from the NCA, the Conservator of Flora and Fauna, EPA, and the ACT Heritage Council were received and assessed prior to release of the draft variation for public comment. The comments from these agencies are detailed in full, along with responses in the public consultation version of the draft variation at ***Appendix 1.***

3.3 Notice of Submission to the Minister (section 70)

In accordance with section 70 of the *Planning and Development Act 2007*, a public availability notice will be placed on the ACT Legislation Register stating that the draft variation has been submitted to the Minister and that the documents are available for public inspection. A public notice will also be placed on the ACT Government website.

4. APPENDICES

Appendix 1 – Draft Variation 369 public consultation version

Appendix 2 – Copies of public comments received on Draft Variation 369

APPENDIX 1
Draft Variation 369 public consultation version

APPENDIX 2
Copies of public comments received on Draft Variation 369

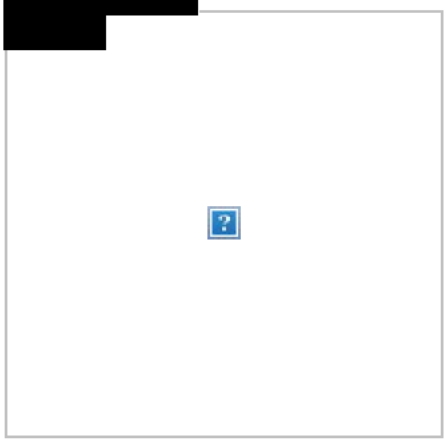
From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Monday, 20 January 2020 9:12:34 AM
Attachments: image002.jpg

To whom it may concern,
With reference to the changes to make sure standards for soft landscaping area in all residential areas are of a decent quality, I would like to suggest clarity around a potential overlay with the single dwelling housing code.
Rule 4 of the single dwelling housing code states:
In RZ1, on standard blocks, basement car parking is not permitted where located directly below any 2 storey element of a single dwelling house
Increasingly, clients are option for a basement and this rule is clearly an impediment to the landscaped area. Can you please either:

a. Remove the criteria from Rule 4 as being mandatory and instead link it to the ability to show the 30% landscape as per DV369
   or
b. Allow a basement under a 2 storey element of a house.

There is absolutely no aesthetic reason for a basement being prohibited so this rule needs to change in order to facilitate the objectives of DV369.
Regards,

[redacted]



From: [redacted]
To: Terrplan
Cc: [redacted]
Subject: DV369: comments
Date: Saturday, 25 January 2020 11:10:37 AM

Dear Sir/Madam

We are pleased that steps are being taken to limit the degree to which developers and homeowners are allowed to strip our neighbourhoods of tree cover in order to cram in more dual occupancy and enlarge further monster homes.

This is crucial to keeping our neighbourhoods and city liveable. Tree cover shades us and limits the effects of (indeed, through carbon capture, reverses) climate change. It slows water runoff, preventing flooding, reducing the need for water treatment and keeping our waterways clean.

Even developers must realise more trees mean a higher average house value, not to mention a more pleasant life for us all. Including wildlife, which should matter just as much.

We believe the Draft Variation should be amended so as to improve our chances of achieving the 30% canopy cover and 30% surface permeability targets.

-
    - The currently proposed canopy cover requirement for multi-unit developments (RZ1-RZ5) is only 15%. This is less than the current canopy in many suburbs.
    - The planting area for single dwellings should be 30% for all block types, including mid-sized and rear-loading compact blocks.
- The proposed changes to site coverage and open space are welcome and important steps in implementing the Living Infrastructure Plan.

- The Draft Variation should also include changes to the Estate Development Code to introduce 30% tree canopy cover targets for new suburbs.
- The Draft Variation should also amend the City and Gateway Draft Variation 368 to include 30% canopy cover targets. This would make sure that any new apartment developments on Northbourne Avenue which are approved after this territory plan is approved include large trees.

Thank you for your consideration.

Sincerely,

[redacted]
Hughes

From: [redacted]
To: Terrplan
Subject: [Possible SPAM] Draft Variation #369 Comment
Date: Wednesday, 29 January 2020 2:39:31 PM
Importance: Low

To whom it may concern,

I am writing to express my concerns regarding Draft Territory Plan Variation #369.

My partner and I have just moved to this city. One of the things that attracts me to Canberra most of all is it's lush, tree-filled bushland surrounding it's living areas, and the government's commitment to a clean and sustainable city. The commitment by Shane Rattenbury and The Greens to make Canberra 100% renewable is a huge step in the right direction for a city that clearly cares about it's environment and it's people. In a country and culture where denial of human-induced climate change is fuelled by the very federal government itself, this kind of can-do idealism is sorely needed.

This is why variations to the plan that might see the plan to create 30% tree canopy cover and surface permeability by 2045 slashed nearly in half is of very great concern to myself, and I'm sure to many other residents of Canberra who care about this city for the same reasons that I do.

I fully support the plan by The Greens. Not only will it help mitigate the impacts of climate change and provide much needed habitation for our wildlife (especially now that millions of hectares of bushland have been destroyed in unprecedented bushfires), but it will create a higher standard of living for all Canberrans. Several studies have shown that interacting with plants can dramatically reduce stress and mental illness (see the bottom of this email for links to several good examples of peer-reviewed studies on this matter). As someone who has lived with depression and anxiety, I feel that I can personally, ethnographically account for this and I would not condone a city that would leave it's residents' health and wellbeing impacted for the sake of monetary gain for the few. Beyond the effects on the individual, think of the reduced impact on our already overworked health care and psychiatric systems, and the reduced associated costs, if we considered peoples' mental wellbeing from the outset.

I have so far been impressed by what Canberra has to offer as a city, and would seriously consider buying property and settling here long-term. However, I will *not* give my money to any new development that does not take nature into consideration when planning urban spaces. I hope that you will take into account the ordinary, everyday people you serve, and not the few wealthy individuals who seek to gain from this variation, and that you will reconsider raising the canopy amount back to 30% as originally intended.

Warm regards,
[redacted]

https://ore.exeter.ac.uk/repository/bitstream/handle/10871/17340/Manuscript%20LUP%20revision%20for%20deposit.pdf?sequence=1&isAllowed=y

https://books.google.com.au/books?hl=en&lr=&id=_Q8g9GTEkAsC&oi=fnd&pg=PR3&dq=urban+trees+mental+health&ots=EZMwSjyH7_&sig=c2jB2b0Mwwwbb1spQdsCe0xfTlE&redir_esc=y#v=onepage&q=urban%20trees%20mental%20health&f=false

https://stg-

wedocs.unep.org/bitstream/handle/20.500.11822/19446/Natural_outdoor_environments_and_mental_and_ph.pdf?sequence=1&isAllowed=y

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Wednesday, 29 January 2020 3:43:53 PM

I believe it is important to apply canopy cover percentages to all residential areas, not just those being planned. There needs to be an enforcement mechanism covering the whole urban area, including street trees. The current policy of removing all existing street trees in the vicinity of a redevelopment, even if the redevelopment is not going ahead, is creating climate hot-spots that we cannot afford.

Sincerely,

[redacted]
Reid ACT 2612
[redacted]

From: [redacted]
To: Terrplan
Subject: Comments on DV369
Date: Thursday, 30 January 2020 9:17:04 PM

In response to proposed changes to R39B, R39C and R39D, the required % coverage of canopy trees is less than the 30% target outlined in the ACT Living infrastructure plan.

Given the importance of canopy cover and the fact that the ACT Living instracture plan specifies a target of 30% cover, this is a retrograde and unacceptably low value in the proposed variation.

The % canopy cover should be 30% for R39B, R39C and R39D.

Regards,
[redacted]

--

[redacted]
Evolution Ecology and Genetics
Research School of Biology
[redacted]

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Saturday, 1 February 2020 2:52:06 PM

To whom it concerns

I write concerning the proposed changes to DV369 Living Infrastructure.

At 30 per cent, this target is not very high and the target year is too far out. We should not require 25 years to achieve this. It should be increased to at least 35 per cent by 2035.

Also, for new R38C buildings perhaps the variation should discuss roof top planting and providing for other planting like indoor spaces - thereby increasing the requirement to a higher level but also providing options.

Thank you for the opportunity to contribute.

[redacted]

[redacted]
DOWNER ACT 2602

Response to the Draft Variation 369- Living Infrastructure in Residential Zones

"*Integrate living infrastructure and sustainable design to make Canberra a resilient city within the landscape*".

"*Support the implementation of a living infrastructure plan for the ACT through the review of planning policy and planning mechanisms to support the maintenance and enhancement of the urban forest in precinct, estate and district level planning processes, and relevant development and design guidelines*."

Thank you for the opportunity to comment on the Draft Variation369.

In general I support the implementation of a living infrastructure plan for the ACT but am concerned that it does not go far enough especially in relation to multi unit developments.

I am concerned that in Canberra the increasing temperatures and changing climate will only increase further due to the current rate of multi unit developments which do not include adequate space for trees and permeable surfaces. Some innovative actions which could increase the green space should be included in these developments. These could be the use of "green walls" and roof gardens in addition to planting of trees and grass areas around and within the complexes. Having at least 30% green space included in these developments will assist in limiting the rise in local heat.

Trees also provide habitat for a wide range of animals and birds. Some trees are veritable "apartment blocks" with multiple species using the various hollows in the trees. It takes more than 50 years for trees to be large enough and old enough to develop suitable nesting hollows, be they for Gang gang cockatoos, microbats or sugar gliders. The presence of this fauna in our suburbs enhances our lives. The canopy of the trees also enhances our lives by providing cool areas of respite.

In areas such as the Woden Town Centre the large numbers of multi unit developments, often very high, means that the percentage of green space and trees is extremely low. More tree canopy is needed to reduce the "heat island effect" and to assist in improving the amenity of the area.

I am also concerned that many knock down /rebuilds and new housing developments appear to take the majority of the block and the little area left not covered by a building is covered by hardstand concrete or paving. Often this hard stand is dark paving which also increases the local heat. There is now "scaffolding" available which can support a driveway of grass by protecting the roots. Other uses can be grids to support permeable "paving" solutions. These will both assist with reducing runoff, allowing return of water to the ground and reduce the "heat island" effect.

There seems to be no consideration given to ensuring that there is enough room left for planting trees to add to the lungs of the city and also to reduce the heat island effect of all the hard surfaces. People can still have their MacMansions. They should just be compelled to leave at least 30% of the block for large trees. Instead of sprawling over most of the block the houses could be two storeys thus leaving a larger area for trees.

For many “knock downs” there seems to be little regard for trees on the block, even those nominated by the owner to be retained. I have witnessed builders remove some of these trees. Also builders seem to pay little regard to trees on adjoining blocks and the need to retain their roots undisturbed. There appears to be little understanding that roots don’t just run vertically but are often widespread and allowance needs to be made for their spread at least as wide as the canopy of the tree. Disturbance of roots by a bob cat results in the tree struggling and then dying, including those which are over 50 years old.

Increasing the “green cover” will also improve the air quality. Retaining existing trees instead of clear felling in new areas of development will help retain top soil and soil moisture and also give a head start to a new urban forest as new trees take time to grow.

The mandating of at least 30% green cover and 30% permeable surfaces **for all blocks**, **including those for multi unit developments** is needed to minimise the rise in temperature, reduce runoff and also to improve the amenity for all Canberrans and visitors.

[redacted]
Hughes, ACT 2605.

From: [redacted]
To: Terrplan
Subject: Increase the amount of tree canopy
Date: Tuesday, 4 February 2020 12:46:06 PM
Attachments: image003.jpg

To the ACT Government;
At a time of urgent climate action and given the recent and continuing bushfire disaster it is important to remain a leader in renewable energy and natural city cooling effects.
To this end tree canopy must be increased and encouraged to reach the 30% target put forward by the greens. Our recent temp spikes in January may just be the start and with the Labor government ticking off high density approvals through the tram corridor and broadly across ACT – think Gungahlin. We must provide a buffer angainst these concrete heat blocks.
I urge you to consider the target as a minimum and keep the ACT as a leader on environmental issues such as this
Many thanks

[redacted]
Teacher
CIT Wellbeing
CIT Health Community and Science
Canberra Institute of Technology
[redacted]**, Bruce, Canberra | GPO 826, Canberra 2617**
Connect with CIT on: cit.edu.au | Facebook | Instagram | Twitter | YouTube | LinkedIn

In the spirit of reconciliation, we acknowledge that we are on Ngunnawal land.
Please consider the environment before printing this email.

From: [redacted]
To: Terrplan
Subject: Draft Variation to the Territory Plan No 369
Date: Wednesday, 5 February 2020 9:43:12 AM

The proposed Living Infrastructure on Residential Zones covered by the draft variation No 369 is an excellent, long overdue initiative to ensure the Canberra residential environment is sustainable and attractive.

This variation will:
a. result in a reduction in the growth of greenhouse gas emissions from residential areas by improving the microclimate thereby reducing the dependence on artificial cooling and heating;
b. reduce polluted runoff into the Canberra waterways; and
C. improve urban biodiversity.

The Government might also wish to examine in conjunction with this variation, scope to vary rates based on improved value and dwelling size. This would provide financial incentives complementary to this initiative as well as reversing the current regressive nature of rates.

Yours sincerely,
[redacted]
NARRABUNDAH ACT 2604

From: [redacted]
To: Terrplan
Cc: [redacted]
Subject: Trees
Date: Thursday, 6 February 2020 4:42:45 PM

Dear Committee Members
The very essence of Canberra is the vegetation, particularly the trees. It is the issue that marks this city apart from all others. It is the essential ingredient to our quality of life and our attractiveness to visitors.
The quest to have 30% canopy cover for ALL of Canberra is essential. Not only for the reasons above but also for sustainability through temperature reduction.
This target must apply to all of Canberra. A casual observer would notice that new suburbs struggle to have any trees at all. This is unacceptable.

What is the situation about roof tops ? Should a green vegetation roof coverage be traded in lieu of trees? and what is the roof is covered with solar panels ?

For survival of these trees a minimum permeability level must be set.

Canberra has in some aspects of addressing climate change, moved ahead of other Australian cities. But we could and should be the innovators, leading the way towards a sustainable future.

Kind regards
[redacted]

[redacted] Farrer ACT 2607

Submission

Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones

[redacted], Hackett ACT 2602
Phone: [redacted]

8th February 2020

Terms of Reference

1) **Cooling our City**
2) **Increasing Surface Permeability**
3) **The Value of Trees and the 'Bush Capital'**
4) **Multi-unit Developments and Estate Suburbs**
5) **Strong Regulatory Mechanisms**

1) Cooling our City

The recent catastrophic weather conditions have made apparent the appalling ramifications of rising temperatures in Australia. Once temperatures are in the mid 30's to 40's degrees, people move inside with air conditioning, which adds to a city's electricity burden. Urban planning should be future-proofing our cities against rising temperatures, more severe droughts, storms and floods and other severe weather events, like the recent hail, hazardous air quality and powerful winds. If possible, this should be done in a way that makes us more sustainable, less energy greedy. Forming a partnership with nature's resources is the way forward.

Canberra's residential homes are some of the largest in the world. In 2017 the average house size in Canberra was over 240 sq m compared to 200 sq m in U.S., 76 sq m in Britain, 45 sq m in Hong Kong, but Canberra residences still only housed on average 2.6 people. Over the past 60 years, Australian homes have more than doubled in size and the average floor area per person rocketed from 30 sq m to 87 sq m, yet the number of people living in these houses almost halved. Bigger houses do not mean higher density and rarely co-exist with healthy tree cover and plant growth, let alone permeable ground.

Double garages with their capacious driveways and entertainment pads around the house require huge areas of concrete. Luxurious indoor living areas result in dramatically reduced garden areas. The landscaping fashion for gravel, a line of token low-care plants and artificial grass have become regular features in the new suburbs and are inexorably creeping into the older suburbs. The desirable 'ideal' home that brings a high price in re-sale is a largely vacant structure rising out of a concrete heat-sink which is also hopeless in absorbing water. No matter how thoroughly insulated these homes are or how many solar cells they have on their roofs, or how many green stars they get, Canberra ends up a hotter, more flood-prone city, with the environmental and spiritual loss of green living plants.

Multi-storey apartment blocks even more arrogantly ignore the public domain. Far too many of the featureless monoliths being built now in Canberra evince no civic generosity. Far too many 'public spaces' are dismal lifeless wind-tunnels, built to comply with inadequate regulations rather than to serve the city and its inhabitants.

We urgently need planning regulations to encourage more shade, and better climate protection not only for the interior of houses and apartments but for the civic space and the entire city.

2) Increasing Surface Permeabiity

Planning regulations should also require extensive areas of permeable ground in any redevelopment or new development together with substantial areas of green growing space and plantings of canopy cover.

We all know that plants and trees have their inherent difficulties: growing plants is difficult in droughts, keeping grass green all but impossible, and trees can be dangerous with falling branches. Trees and gardens need work and maintenance and water. We also must know by now that we ignore human dependence on nature at our peril. Canopy trees produce oxygen, help clean the air, provide shade, lower temperatures, stabilise the earth. Green growth holds moisture, slows down the speed of water runoff, cools the environment. Permeable and thoughtfully-shaped ground slows the runoff of water, holds moisture.

Where is the smart thinking to protect against flood damage in Canberra? Why isn't the ground in local parks re-shaped to slow and retain water flow? Why aren't median strips and other planting areas being shaped to maintain moisture at tree roots, for example using swales? These are some straightforward changes that could be made to slow down water movement and at the same time help maintain moisture for street and park trees.

Present planning regulations are woefully inadequate in all these areas and the Territory Planning Variations currently under consideration have so many gaps. What of multi-unit developments and new estates?

3) The Value of Trees and the 'Bush Capital'

The 2017 ACT Housing Discussion Paper stated that more than half the respondents rated 'visual attractiveness' as one of the most important aspects of where they live. Planning regulations should assess building applications against local communities' interpretations of such deeply significant yet imprecise concepts as 'bush capital', 'character of streetscape', 'visual attractiveness'. If these are not key values, why then are our major institutions like The War Memorial and Parliament House surrounded by rich green lawns and a wealth of trees? A drive around the embassy suburb provides a delightful image of lush growth and verdant lawns. Why are these values restricted to the wealthy and the powerful? Our civic spaces should be well maintained, shady and inviting. Large-scale developments should be required to provide and maintain generous civic spaces. Suburbs should be protected against heat by canopy street trees and each residential block, even dual occupied, should be required to plan for green areas, permeable areas and enough depth of earth and root room to plant sizeable shade trees.

There is so much new knowledge about the complexity of trees. We know that trees support habitat, create micro environments, have methods of communicating, work as carbon sinks, emit oxygen and clean our air. Yet drought and budgetary restrictions and a growing city have seen street trees in decline, often not being replaced, and high-rise developments lacking tree plantings or even any green growth. The work being done in Singapore and other cities incorporating trees into high-density developments has provided evidence for the environmental advantages and the increase in inhabitants' happiness with their surrounds. We can learn from these examples and better them. For example, in Singapore the planting of trees on upper levels of multi-storey buildings can certainly increase attractiveness, but issues of earth depth and structural strength can limit the size of such trees. Preferably the plan of the site enables trees to be planted at ground level and given enough room to develop efficient shade canopies.

We no longer have any alternatives to learning to live with and promote co-habitation with nature. With the huge majority of the world's population now living in cities, it is within cities that this shift in priorities needs to be realised.

4) Multi-Unit Developments and Estate Suburbs

Canberra has complex and specific problems regarding housing. It has one of the fastest ageing populations in Australia. By 2017 Canberra was Australia's fastest growing city; from 280,000 in 1991 to 400,000 in 2016. There is limited land to expand and the specific needs of the population should be considered when promoting certain forms of housing.

If Canberra is the fastest-growing city in Australia, planning needs to be even more focused around new developments and more dense developments if any future proofing is to be effective. It would be helpful if the current mantra about high density as a solution for housing shortages and city spread was accompanied by stringent regulations to ensure that higher density retains green space, encourages a cool climate, utilises lasting quality of construction, and encourages a lifestyle that is aesthetically pleasing and progressive, not just for the inhabitants but for the public and the city.

5) Strong Regulatory Mechanisms

Rather than lessen regulations, we need more regulations, and far more stringent certification standards. Even if this slows down building timetables, perhaps this is a plus. Perhaps we should all be moving slower and thinking more intelligently about what we are doing to our environment. For example, if the current regulation that 20% of the ground needs to be permeable, but there is no requirement for one stick of greenery, the traditional garden can be replaced with mulch or gravel. This impacts the streetscape and the city's climate.

While the planning requirements suggest that the new building be in character with the existing streetscape but there is no system for overseeing this and no legislative requirement, this is a vacuous statement.

Environmental concerns should be fore-fronted considering Canberra's high ecological footprint per person. In 2011-12 Canberra's ecological footprint was 8.9 global hectares per person which was 3 and a half times the global per person average. While energy efficiency is measured by the energy used per square metre, larger houses come out looking more efficient as energy use increases at a slower rate than house size. Energy embodied in building materials is not accounted for and neither is water consumption. Building regulations need to be based on the best science. The ACT Government claims progressive environmental and sustainability goals but the true environmental costs of buildings should be acknowledged.

Conclusion

The Greens' proposed changes to the Variations to the Territory Plan seem just a first step in what needs to happen if Canberra is to remain a humane and attractive city. There should be even more stringent and enforceable regulations covering temperature reduction, water run-off and tree canopy based on the most progressive cities around the world. The budgetary expense incurred now will be paid back manifold by the liveability of our city in a world of worsening environmental conditions.

From: [redacted]
To: Terrplan
Subject: Living Infrastructure canopy and hard surfacing targets
Date: Saturday, 8 February 2020 2:27:23 PM

The proposed reduction of tree cover from 30 to 15% for multi unit dwelling is simply unintelligent in our rapid climate changing world. Developer and others influencing this
proposal are not acting in the interests of the city and community as a whole, but are simply profit driven. The heavily hard surfaced environment they are currently inflicting on Canberra in order to make quick maximised profits will hurt future generations. There is no need for reducing the amount of canopy and permeable surface. Intelligent architects can work around mature trees and provide ample room for excellent green amenity spaces. Building up instead of out is a simple solution that enables increased green space whilst enabling developers to profit.There are multiple examples around the world of high density housing surrounded by well designed green spaces. Why is this so difficult to achieve in Canberra? The ACT government should be demanding a lot more of developers in terms of social and environmental benefits - not actively eroding development standards. Our living infrastructure is the cheapest and most beneficial tool we have for climate regulation. Please do not erode these standards to cater to short term interests of rank profiteers - people who we can barely call citizens. Thank you. [redacted].

From: [redacted]
To: Terrplan
Subject: Draft Variation 369 to the Territory Plan
Date: Sunday, 9 February 2020 10:17:48 PM

I recently reviewed the draft Variation 369 to the Territory Plan in relation to achieving 30% tree canopy coverage and permeable surfaces.

I am in wholehearted support of increased tree and plant coverage across the ACT.

Having recently traveled to Singapore, I was impressed with the plant life there. Wherever there was a spare space, they put a plant there. If there was room for one plant, they world put three. Each multistorey building was required to integrate some form of greenery into its design, leading to some spectacular looking buildings with rooftop gardens or gardens along the side of the buildings. As the bush capital, we should embrace a similar approach using (preferably native) plants suited to our climate, including as part of new building developments and in suburban areas.

The benefits of increased numbers of plants is well known. It increases happiness and productivity and reduces stress. It reduces the temperature in summer and used properly keeps it warmer in winter; this is off particular importance when considering the urban heat island effect. It encourages water retention and improves the air we breathe.

Given the clear benefits, there is no justification to reduce any of the proposed targets for tree coverage to 15%, particularly for multistorey buildings. These are the areas we need it the most.

Please don't reduce the targets. In fact, consider increasing them or bringing forward the target date.

Many thanks and kind regards,
[redacted]

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From: [redacted]
To: Terrplan
Subject: Draft Territory Plan Variation 369 - Living Infrastructure in Residential Zones - comments
Date: Tuesday, 11 February 2020 2:47:06 PM

The concrete jungle-like developments in Molonglo have highlighted the pressing need for more living infrastructure such as trees in new developments.

There should be much more planting of hundreds of thousands of new trees in Canberra as part of a new 30% tree canopy cover target. In addition, existing trees in established suburbs are under threat from lazy enforcement of the no-parking on nature strips laws. Parking on the root zones of trees damages those trees. The ACT Government is negligent in allowing the widespread illegal parking on nature strips on the root zones of trees.

A 30 % tree canopy target will help us adapt to climate change and make our city cooler and more liveable while adding to property values for home owners.

Unfortunately the ACT Government's *Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones* does not live up to the targets laid out in their own Climate Change Strategy and Living Infrastructure Plan.

For some development types, such as multi-unit developments, the tree canopy requirement is as low as 15%. This is too low.

The events of this summer have helped show there is no time for complacency on climate change.

We must act, and act now, to ensure our city is as liveable as possible through this climate emergency.
The ACT Government's lack of effective action to date by allowing a decline in ACT tree canopy cover over its time in government shows it is not serious about the issue. The ACT Government's *Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones* demonstrates it is not serious about the issue for the future.
Regards
[redacted] Curtin

From: [redacted]
To: Terrplan
Subject: DV 369
Date: Wednesday, 12 February 2020 9:34:04 PM

I attended the ISCCC consultation session yesterday evening.
I would like to compliment the officers for the quality of their presentations.
I generally support the proposals but make the following comments arising out of the discussion:
-the planting area requirement should be expressed as a percentage of the block size rather than a percentage of private open space.
-the ACT government should work closely with the National Capital Authority and should encourage adoption of similar requirements in areas controlled by the National Capital Authority

[redacted]
Forrest ACT 2603

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Monday, 17 February 2020 10:27:26 AM

Herewith my comments about the draft variation 369:

I have lived in [redacted], Curtin, for nearly 30 years. Established about 1964, it is a street of 27 houses. I would therefore expect 27 street trees. I find 21 instead. Two are in front of my neighbours' house because they planted their own eucalypt after their claret ash became diseased and was removed. After a year or two of badgering, the ACT Government finally planted another claret ash were the sick tree had stood previously. (Great planning, tree experts in the ACT Government! Are there any?)

Trees are the lungs of a city. Twenty-seven trees would be minimal for my street, but more than one quarter have disappeared during my time and have not been replaced. Why not? Why did it get so long to have the replacement claret ash planted in the wrong place?

It seems to me that the ACT Administration has priorities other than urban cooling and pollution mitigation, when tree planting and maintenance ought to be a much easier strategy than the endless failed attempts to get more residents onto public transport.

Thirty per cent tree plantings plus 30 per cent permeable surface ought to be the minimum for a liveable urban area, as Canberra was once. Maintenance is just as important as preparation and planting. Incentives can be developed to keep ratepayers looking after their trees and permeable areas: we used to have garden competitions; how about rate reductions where street trees are clearly being well looked after?

If DV369's requirement of only 15 per cent tree cover around apartments becomes planning law, it must be matched by 45 per cent permeable surfaces in the immediate vicinity of apartment blocks. Urban slums of the past taught everyone that when people are crammed together, their need for open space and fresh air becomes even greater than for those in our urban sprawl. Everyone but our current planners, perhaps? Thirty per cent of surfaces being permeable is a bare minimum for human health, especially as the climate overall warms.

[redacted]
Curtin 2605

[redacted]

From: [redacted]
To: Terrplan
Subject: Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones.
Date: Thursday, 20 February 2020 8:38:36 PM

In December 2019 the Government released Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones. This Draft Variation increases the requirements for canopy cover and planting areas (permeable surfaces).

I do not think this variation goes far enough. I feel it is sufficient to meet our 30% canopy and permeability targets, and it needs to be stronger.

Regards

[redacted]
Hughes ACT 2605

Griffith/Narrabundah Community Association Inc.

PO Box 4127, Manuka ACT 2603

Website: www.gnca.org.au **Email: info@gnca.org.au**

https://www.facebook.com/TheGNC **abn:26503486416**

EPDCustomerservices@act.gov.au

Comments on DV 369 Living Infrastructure in Residential Zones

The GNCA has a membership of over 300 people and we are pleased to have the opportunity to comment on DV 369 Living Infrastructure in Residential Zones.

Background

The GNCA welcomes the government's proposal to introduce legislation to the Territory Plan that addresses the tree canopies and planting areas in our residential areas.

In a recent survey of the South Canberra District, carried out by the Inner South Canberra Community Council, respondents listed Streetscape (street trees, vegetation, gardens, width of streets), Open space (parks, ovals, bushland for recreation), Character (well planned, peaceful, safe, community feeling) and Environment (reserves, trees, vegetation, wildlife, flora and fauna) as the top four characteristics in terms of value.
As the climate continues to warm and become drier, these characteristics will become even more valuable as we must adapt building standards and landscapes to mitigate the unsavoury effects of climate change.
Too often, under the current rules, buildings in residential zones comply with the planning rules and the whole block is covered by impervious layers, usually tiles or concrete. If this trend continues more of our residential areas will become undesirable heat islands (see Figures 1&2).

Against this background the government set goals in Canberra's Living Infrastructure Plan, "**to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045**". The GNCA strongly supports these goals and encourages the government to legislate appropriately so that they can be achieved.

The GNCA contends that the current text of the draft variation can be improved by simplifying the content. We also recommend that, after the text has been strengthened, the government should move swiftly to make it law.

Against this background we pose three questions and propose some changes to draft variation to make it more effective and easier to understand.

Three questions and a comment

1. It would be useful to know why 30% selected as the goal for the canopy cover and 30% permeable surfaces? Why not 35 percent or 40%?
2. How are the two areas related and how will the changes in permeable area be monitored?

In relation to monitoring the canopy cover, we understand that a 2015 LIDAR survey was used to estimate this parameter.

3. Is it planned to repeat this survey at regular intervals or are there other methods that can be used to estimate this parameter?

If the 30% canopy cover requirement is confirmed, it should be straight forward to calculate what percentage of the residential blocks should be covered by planting areas to achieve this goal. These calculations should be used to set the planting area requirements. Until this calculation has been completed, we recommend that a 40% deep planting area be applied to all residential blocks in all the residential zones RZ1-RZ5. This is because the current canopy cover was, according to Minister Steel's statement in November 2018, "around 20 percent across the city" We have a lot of catching-up to make to reach the 2015 target.

Proposed changes we are recommending

The main purpose of the variation is **"to make sure standards for soft landscaping area in all residential areas (RZ1 to RZ5) are met."** Consequently, the rules for site coverage and planting areas should be mandatory. They must specify the percentage of the block to be covered in each residential zone. It is confusing and unnecessary to define "planting area" in terms of Private Open Space as is proposed in new rules R38, R39 and R 40.

Variation 369 should focus on the canopy cover and the soft planting areas.

The Criteria are well crafted and should remain because they articulate very well, the reasons for the Rules.

R1 Planting Area Rules should be mandatory and specify the percentage of the block to be covered by soft landscaping for each zone

We propose 40% soft landscape coverage for each residential zone. This simplifies the planning process. People living in high-rise apartments should have access to appropriate green space at ground level, rather than walking out on to concrete as soon as they exit the building. There are some examples for example in a CZ5 zone in Kingston (see Figure 3) where adequate planting areas have been incorporated into the design of apartment complexes and where the planting area is more than 40% of the block.

We are comfortable with the definitions of Site Coverage and Planting Area in the current draft.

R2 The current mandatory Plot Ratio Rule should be removed

This rule is not working, and its policy purpose is opaque. Buildings can comply with the rule and the whole block can be covered by impervious material (see Figure 2).

R3 There must be mandatory rules for Site Coverage, Set-Backs, Heights, Planting Areas and Solar Access

These rules should be sufficient to maintain the basic character of the residential zones.

There are some minor changes that should be made, for example the phrase "Not less than XY%"; should be re-written "At least XY%" to be consistent and make the words clearer. There are several examples in the document requiring this change to be made. These should be easy to deal with.

For your consideration

[redacted]

21 February 2020

Fig 1. A heat island in Ngunnawal, where there is hardly any room for trees.

Fig. 2. A Mr Fluffy Block in Griffith, which has impervious cover over ~90% of the block.

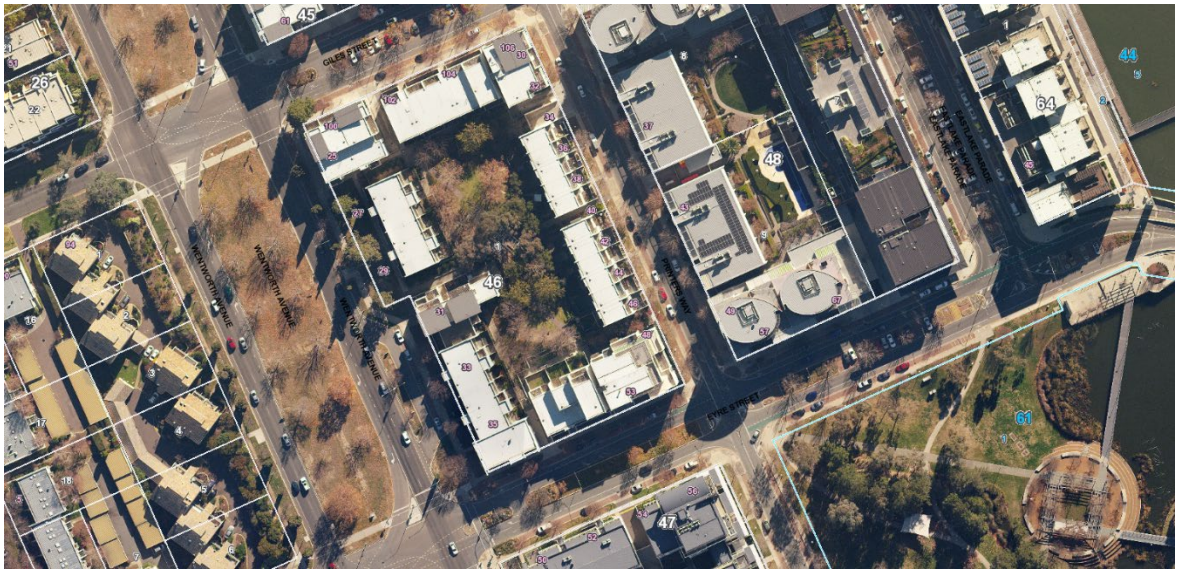

Fig. 3.Section 46 Kingston has over 40% of the block dedicated to planting areas.

Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones

I wish to comment on this proposed variation.

I see this proposal as a step in the right direction. While the tree canopy target of 30 % by 2045 is a worthy one , unless specific requirements underpinning it are put in place , the target will remain basically an empty one; something for politicians to hide behind.

Government proposals to plant tress, again while worthy in itself, simply will not compensate for developments, and redevelopments, that reduce or do not increase the canopy cover to enable the 30% target to be reached.

Also, it should not be up to governments, and ultimately ratepayers, to compensate for the actions of developers; each development should contribute towards the target.

I generally support the specifics of the Variation; tightening the definitions, requiring planting areas; requiring tree plantings.

However, I do not support the requirement that, for RZ1-5 developments the canopy requirement is only 15% (R38C,R39C). Each development, in itself, should contribute to the 30% target; developments should not freeload on the efforts of others. The 15% requirement will lead to a situation where the 30% overall target is impossible to reach.

In summary, each development/redevelopment should have the requirement of a minimum 30% canopy cover.

Two other points. Given that not all plantings will reach maturity, the minimum requirements should take this into

account. A minimum requirement of say 35% for all developments would recognize that some wastage will occur.

Finally, ensuring compliance with these requirements will be crucial; both in terms of the block proportion requirements, and also the plantings required. If the requirements are simply ignored, or, for example, trees are planted, then removed after certification, then the Variation will have little practical effect.

Comments to DV369-[redacted] – Green House Architects.

I am pro trees and want more in the urban landscape and agree with the intent of the proposal however I can see these rule changes problematic and we are perhaps barking up the wrong tree.

I propose four alternatives which I think might produce better results and ask that they be explored before committing to DV369.

1. **Reward people for having regulated trees on their block as opposed to preventing their removal:-** Having a regulated tree on your block although nice and benefiting the community often comes at personal expense. The main cost is lost development opportunities, arborist expenses, leaf clearing, loss of sunlight, and root damage to drains, paving and structures. Currently the Tree Protection Act tries to maintain tree cover through punitive actions for Tree Damaging Activity. Policing this is very hard and probably very expensive and in my view not working. A perverse outcome of the current tree Protection ACT could actually be less big trees. Because people don't want to have the burden of a regulated tree when they decide to renovate or sell in 20 years they won't risk letting trees grow up to be enjoyed in the meantime. An alternative to the Tree Protection Act could be to provide a scheme where homeowners were rewarded by a reduction in their rates for every significant tree. The benefit of the tree is also for the community so the cost should be partly carried by the community.
2. **Reward people with light roofs by allowing them to stick with the current rules in regards to planting and site coverage:-** I understand part of the reason of having trees is to create a cooler urban environment. A cheaper way of doing this is reward people for having light roofs. The difference between a light and dark roof has a negligible impact on an energy rating for a new house. It does however have a very big impact on Urban Heat Islands.
3. **Regulate hard surfaces:-**Make paving, hard surfaces and covered areas non exempt in planning regulation when they decrease the amount of permeable ground by a certain amount. An allowance could be made if there was significant onsite stormwater retention that was used for deep watering of plants. And then the key is to police it!
4. **Change current carparking rules:-**
    - Formalised parking could be allowed on the verge under street trees. These areas could be established with water permeable, root protecting hardstand. Currently a lot of parking already goes unpoliced on verges resulting in compression of soil and tree roots. This could be formalised and designed for so it doesn't damage trees. The idea is to take parking off the block to allow more space for trees on the block.
    - Rules could be changed to encourage parking in front of the dwelling. Currently parking is encouraged behind the building line which creates just another impermeable swathe of roadway.

Are tighter planning constraints justified if more trees can't be guaranteed?

The proposed rules will either:

- force a lot more applications through the merit track and lead to a lot more arguments of what is reasonable or not, **OR**
- result in poor planning outcomes as people do whatever they can do so they can use the code track.

These extra planning constraints might be justified if more trees were guaranteed. However there appears to be no mechanisms to realise or maintain the intent. It will become a planning exercise of good intent that costs a lot to the community without any benefit. It wouldn't be the first time this has happened. i.e. separation of greywater from blackwater and mandating of rainwater tanks. The intent was good but the way it has been implemented is meaning a lot of added cost for very little gain.

Currently there appears to be very little policing of Tree Damaging Activities to Regulated Trees judging by the number that are "accidently" dying or being cut down, and there is no regulation saying that you can't put extensive hard surfaces in after the event. The proposal allows for the space for planting but there is no mechanism to ensure it is planted out as intended or that the planting is cared for and maintained. Planter boxes, green roofs and vertical roofs are typically high maintenance and if allowed there needs to be a mechanism to ensure they fulfil their purpose. If not they will be something that is heavily used by the developer to pass planning and then neglected by the occupant.

The Planning Authorities response to NCA's comment was that: "mechanisms to ensure soft landscaping outcomes are not diminished over time can be considered as part of the ACT Planning Review". These mechanisms should be established before or simultaneously to changing these rules, not after. There is no point in having a more stringent, costly regulation if there is no way of ensuring its intended outcome.

Forcing houses to go two storey.

The current R38 in SHDC would allow a dwelling of 145m2, a secondary dwelling of 85m2, a shared garage of 40m2 and a driveway of 20m2 to be built on one level of a 600m2 block. This would achieve a plot ratio of 0.45. It could include some additional hard paved area and/or deck.

Taking off 50m2 at R38, and the introduction of *maximum site coverage*, would force this scenario into a two storey solution if you want to comply with the rules.

Building on one level has a number of benefits:

- Better for accessibility
- More energy efficient in Canberra due to slab on ground.
- Lower cost
- More efficient use of space as less wasted circulation with stairwells.
- Possibility of more tree canopy on site as trees can overhang the roof.
- Less issues with overshadowing the neighbours.
- By their nature secondary dwellings are often added to the backyard to complement an existing house. This will become very difficult.

Perverse outcomes.

More two storey dwellings might have the perverse outcome of creating less tree canopy . A look at established Canberra suburbs on Google Earth shows a lot of single storey houses with tree canopy up to and over their roofs. However there are far fewer two storey houses with tree canopies over or close to their roofs. This might be because a lot of large trees can accommodate a single storey house under their canopy but not two a two storey house. Looking out a lower storey window to a trunk 6m away is a lot different to looking out an upper storey window with the foliage up against the glass. The result is the canopy tends to be cut back for upper storeys. This possible perverse outcome should be investigated more closely to ensure the changes to the code doesn't result in less tree canopy.

Definitions.

Site coverage definition wording needs clarifying.

- Site coverage should include eaves, and awnings and the like as they block the rain from the ground and are difficult to grow things under. If you have very big eaves and awnings you may comply with the rules but not the criteria. The site coverage percentages will have to be adjusted down accordingly so as not to further restrict the site. i.e. to allow for 600mm wide eaves but not 2m wide eaves. Making site coverage 50% not 40% but including eaves in the definition would allow for 600mm eaves around the perimeter of the house.
- Site coverage shouldn't include permeable decks and permeable paving. Tree roots are likely to survive well under these and the ground under a deck is likely to be more permeable than the sunbaked clay of a lawn. They should be limited to their extent as there will still need to be some area for planting.

I think a better distinction needs to be drawn between *permeable area* and *planting area as they are doing two different things.* The way it is written one could argue that something is permeable and then cover the whole site with it even though it won't allow any room for actual planting.

Specifying minimum pot sizes may have the following effect:

- Encourage a monoculture of tree type and possibly inappropriate tree types. Developers will likely buy the cheapest 2.5m tree they can and let the future owner deal with the consequences.
- Fastest growing trees will likely be the cheapest and they will not necessarily be the best for the site in the long run. They may lead to trees that are inappropriately big and a cost to maintain.

Appropriate species.

If we are in the process of changing tree legislation it would be good to have strict rules on species that are appropriate or not depending on their location. I don't think it is good to have large growing Eucalypts planted where they are going to block winter sun to the house or neighbours house. It goes against other elements of the territory plan.

From: [redacted]
To: EPD, Customer Services; Terrplan
Cc: GNCA
Subject: DV369 Living Infrastructure in Residential Zones
Date: Friday, 21 February 2020 1:29:18 PM

Good afternoon,

I am writing to express my support for the draft variation to require a minimum area of canopy cover and permeable surface area in Canberra's suburbs.

30% is a very modest minimum. Where residential blocks do not currently reach 30% permeable area, I would happily support laws that aimed to reverse the situation.

Yours sincerely,

[redacted]

[redacted]

[redacted]
Kingston ACT 2604

[redacted]
Griffith ACT 2603
[redacted]

From: [redacted]
To: Terrplan
Subject: FW: Draft Variation re tree canopy
Date: Friday, 21 February 2020 1:49:56 PM
Attachments: image001.png

Please see below.
Kind Regards

[redacted]

Access Canberra | ACT Government
16 Challis Street, Dickson | GPO Box 158 Canberra ACT 2601
cid:image005.png@01D5E7E2.8CB6E800

Access Canberra is an ACT Government service that brings together customer and regulatory services, including the former Environment and Planning Directorates Customer Services Team. Access Canberra has been set up to make it easier for business, community organisations and individuals to work with ACT Government and deliver a more seamless experience.

From: [redacted]
Sent: Friday, 21 February 2020 1:37 PM
To: EPD, Customer Services <EPDCustomerServices@act.gov.au>
Subject: Draft Variation re tree canopy

I write to support the 30% coverage for tree canopy and endorse the GNCA submission.
-[redacted]
Narrabundah 2604
--

[redacted]

From:	[redacted]
To:	Terrplan
Subject:	FW: Draft Variation to the Territory Plan: 369 Living Infrastructure in Residential Zones [SEC=UNCLASSIFIED]
Date:	Monday, 24 February 2020 8:45:34 AM

Hi,
I'm a home owner in Griffith, ACT. I'm writing regarding the proposed goal “to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045”. I strongly support these goals and encourages the government to legislate appropriately so that they can be achieved.
Best wishes,
[redacted]

From: [redacted]
To: Terrplan
Subject: DV 369 [SEC=UNCLASSIFIED]
Date: Monday, 24 February 2020 8:45:59 AM

Comments on DV 369 Living Infrastructure in Residential Zones

I am a member of the Griffith Narrabundah Community Association and endorse the comments they made on DV 369 on 21 February 2020.

I have lived in Canberra (on and off) for fifty-seven years. I live on the Narrabundah/Red Hill border where re-developments occupy the entire building envelope. For example: 159 La Perouse St and 4 Finniss Crescent.

I watch in wonder and dismay as trees and homes are removed under a "scorched earth" policy. This summer has showed us the folly of such an approach. We can no longer "fiddle while Rome (literally) burns."

I am very grateful that a small area of grass has been grown on the dust and weed bowl that purports to be "Voyager Park". Even this small amount of green has made a difference to the local environment. If the tree canopy in the park were improved it would be even better.

[redacted]

From: [redacted]
To: Terrplan
Cc: LE COUTEUR; RATTENBURY; BARR Reception; [redacted]
Subject: Re: Submission re Draft Territory Plan Variation 369
Date: Thursday, 19 March 2020 6:14:32 PM

I should like to add two points to my earlier submission on this matter;
1. if Woden is deemed by the current ACT Administration to be destined to be a concrete heat spot, surely the tree canopies of the surrounding suburbs should be protected and enhanced so as to mitigate the environmental impact. This would appear self-evident, but the same Administration proposes to bulldoze a particularly elegant stand of eucalypts beside the scout hut on the Hughes/Garran border in order to pour more concrete. This is unconscionable - and should should not be allowed under any responsible Territory Plan. Coming across, unexpectedly, the croquet lawn on Commonwealth Avenue and the scout hut/eucalypts in Hughes are part off the few remaining, distinctive charms of Canberra.
2. I recently learned that Mr Andrew Barr declared the Burley Griffin plan for Canberra (to which many Canberrans/ electors are attached) "dead, buried":
- when did he obtain an electoral mandate for this?
- why did the purple-wrap on the light rail construction proclaim that a light rail was part of Burley Griffin's plan for Canberra?

[redacted]

On Mon, 24 Feb 2020 at 17:16, [redacted] wrote:

> The degradation of Canberra's unique urban-rural environment under the current Labor-Greens government has to stop - to preserve Canberra's way of life and its wildlife, and to defend and promote Canberra's degraded tree canopy.
>
> The relentless pouring of concrete without accompanying provision for the protection and planting of trees will create new climate heat spots at a time when climate change urgently requires that they be reduced.
>
> Woden Town Centre is a prime, sad example.
>
> As noted by another correspondent, we should learn from Singapore where lack of space necessitates dense high-rise development - but done with concern for architectural distinction and the incorporation of generous green spaces. (I expect, also, that there is more than one provider.)
>
> To see whole sections of Northbourne Avenue purple-wrapped or fenced off for "future urban renewal" would be a joke if it were not so sad.
>
> I recently visited Chicago - another city on a lake, where older buildings are re-purposed, not torn down, and the CBD's greenery puts Canberra's sadly deteriorated Civic to shame.
>
> The Chef Minister said a year or so ago that he wanted - previously unique (my edit) - Canberra to look like "every other city". It appears he may have had East Berlin in mind, rather than Singapore or Chicago.
>
> [redacted]
> Hughes

24 February 2020

From: [redacted]
To: Terrplan
Cc: LE COUTEUR; RATTENBURY; BARR Reception; [redacted]
Subject: Submission re Draft Territory Plan Variation 369
Date: Monday, 24 February 2020 5:16:42 PM

The degradation of Canberra's unique urban-rural environment under the current Labor-Greens government has to stop - to preserve Canberra's way of life and its wildlife, and to defend and promote Canberra's degraded tree canopy.

The relentless pouring of concrete without accompanying provision for the protection and planting of trees will create new climate heat spots at a time when climate change urgently requires that they be reduced.

Woden Town Centre is a prime, sad example.

As noted by another correspondent, we should learn from Singapore where lack of space necessitates dense high-rise development - but done with concern for architectural distinction and the incorporation of generous green spaces. (I expect, also, that there is more than one provider.)

To see whole sections of Northbourne Avenue purple-wrapped or fenced off for "future urban renewal" would be a joke if it were not so sad.

I recently visited Chicago - another city on a lake, where older buildings are re-purposed, not torn down, and the CBD's greenery puts Canberra's sadly deteriorated Civic to shame.

The Chef Minister said a year or so ago that he wanted - previously unique (my edit) - Canberra to look like "every other city". It appears he may have had East Berlin in mind, rather than Singapore or Chicago.

[redacted]
Hughes

24 February 2020

From: [redacted]
To: Terrplan
Subject: FW: Endorsement [SEC=UNCLASSIFIED]
Date: Monday, 24 February 2020 3:20:17 PM

FYI

From: [redacted]
Sent: Monday, 24 February 2020 2:49 PM
To: EPD, Customer Services <EPDCustomerServices@act.gov.au>; GNCA <info@gnca.org.au>
Subject: Endorsement

I would like to endorse the proposals of GNCA on DV369 Living Infrastructure in Resident Zones
Particularly in my area within 200 metres of the Griffith shops single residential house are being bulldozed and
Replaced with multi-storied places without any vegetation coverage.
Cement seems to be the grass of today!!!
I also would also like to comment on the lack of maintence on existing trees. In my knowledge street trees planted in the fifty's are being removed rather than pruning of any dead or diseased wood.
A particular case in point is opposite my property. Three mature Pin Oaks, part of a mile long street of those planted seventy years ago were demolished without due notice.
I now look out at the Baptist care ugly building rather than mature trees.
The Pin Oaks have been replaced but have never been maintained and would have died except for the watering by neighbours and myself. The same applies to the replacement trees in the lane next to me.
I do hope that the authority will note the proposals put to it by MY GNCA
Sincerely, ([redacted].
Sent from Mail for Windows 10

From: [redacted]
To: Terrplan
Subject: FW: Draft Variation to the Territory Plan: 369 Living Infrastructure in Residential Zones [SEC=UNCLASSIFIED]
Date: Tuesday, 25 February 2020 4:06:37 PM

-----Original Message-----
From: [redacted]
Sent: Tuesday, 25 February 2020 3:51 PM
To: EPD, Customer Services <EPDCustomerServices@act.gov.au>
Cc: GNCA <info@gnca.org.au>
Subject: Draft Variation to the Territory Plan: 369 Living Infrastructure in Residential Zones

Good afternoon.
After such a hot and stressful summer in the Nations Capital the thought of a higher canopy cover is very appealing.All research indicates that our climate will only get warmer so walking on a warm day under green shading trees is just so pleasurable.Walking a dog through parks with grass and shrubs is wonderful for both parties.We have normally wonderful clear air,which encourages people outdoors and this a benefit to society as a whole.Take away green spaces and you end up with an environment that is hot and soulless.
With the increased high rise development in Canberra,thick shading trees are few around these developments.I feel that the lovely green vista over Canberra is being lost as more concrete,metal and glass rises up from the ground,so sadly imitating the cities of Sydney and Melbourne.
I attended the Press Club address delivered by Kevin McCloud yesterday and he stated Canberra was a favourite city of his,due mainly to its location amongst " the bush".He acknowledged this does comes with problems as we have recently experienced,but with forward planning,problems can be minimised.
Please increase our tree canopy and green spaces so we can continue to be proud of this country's capital.

Regards [redacted]
[redacted], Griffith ACT 2603

Sent from [redacted]

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Tuesday, 25 February 2020 5:54:22 PM

Dear Territory Planner
Thank you for the opportunity to comment on the Draft Variation.
I support the proposed changes to the Territory Plan at 2.2.2 of the Draft Variation aimed at increasing tree canopy coverage to 30 percent by 2045. This 2019/20 summer has demonstrated how uncomfortable urban heat islands are and how the loss or absence of trees and soft landscaping contributes to over-heating of our city and suburbs. Time is running out on being able to manage our climate, and I am concerned that 2045 may prove too late a date to achieve this goal.

My questions and comments are:
1. Household insurance policies provide disincentives to keep tall trees on residential blocks. On the other hand, residents who maintain and care for tall trees contribute to reducing the effects of heating, the green landscape of suburbs, and biodiversity.
2. It is easy to plant trees but difficult to maintain them. Consideration needs to be given, not just to requiring trees in site design, but to protecting and maintaining them during and after construction commences; retaining and maintaining existing, healthy trees on public housing redevelopment sites in the suburbs; finding ways that owners and renters can work out water bill expenses so that trees get watered during droughts, instead of being left to die - further diminishing the amenities for renters.
3. If works do not require a DA or building approval, are there mechanisms which effectively prevent healthy trees or plantings from being removed and concreted over?
4. Smaller houses in established areas are being replaced by housing that has maximum block coverage. I agree with comments by Ms Shannon Battison, President of The Australian Institute of Architects, ACT Chapter that as a society we have to "break the habit of building houses purely so that they meet maximum coverage rather than what the house needs to be in order to be a good place to live...."trees add so much back to your street and climate".
5. Requiring street level commercial leasing for residential apartment buildings often results in street plantings being removed or deteriorating as commercial spaces remain empty or commercial tenants remove trees so their businesses are more visible. This is not only a Canberra planning problem. In Brisbane ground floor apartments with street gardens, and buildings with internal courtyards with disability and aged living designed, ground floor apartments opening onto courtyards (as in Paris) are being considered as an alternative to empty or boarded up shop fronts and neglected streetscapes.
5. What additional actions/incentives can be taken to encourage residents to plant and maintain trees and soft landscape if the benefits of cooling, amenity, energy cost reductions, improved mental health are not enough to get us to 30 percent?

[redacted]
Canberra Resident

T

From: [redacted]
To: Terrplan
Subject: Planning and Development (Draft Variation No369) Consultation Notice 2019
Date: Wednesday, 26 February 2020 9:32:08 AM

I would like to comment on Planning and Development (Draft Variation No369) Consultation Notice 2019.
In terms of planting, pollinator health and maximising diversity should be a priority.
In terms of residential land use, a high percentage of each individual block should have a mandatory percentage for sustainable, low water gardens, rather than being covered with hard surfaces.

[redacted]

Territory Plan Section of EPSDD
terrplan@act.gov.au

Kingston and Barton Residents Group
[redacted]
President
PO Box 4138
Kingston ACT 2604
kingstonandbarton@gmail.com

To whom it may concern

TERRITORY PLAN DRAFT VARIATION NO. 369 (DV369)

This submission is by the Kingston and Barton Residents Group (KBRG), which is a community association representing the residents of these Inner South Canberra suburbs. The KBRG is committed to enhancing the social, residential, environmental, cultural and economic qualities of the area to ensure the highest standards of liveability.

SUMMARY COMMENTS:

Overall the DV appears unnecessarily complex, confusing and it would probably be very difficult to monitor and enforce compliance. There are many apparent inconsistencies. Existing codes also need to be rationalised and simplified.

KBRG notes the expressed intention of DV369 (1.1 Summary of the Proposal):

> **"DV 369 responds to Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) AND 30% permeable surfaces in urban areas by 2045."**

Broadly the response of DV 369 is very weak. For example, the words '**or equivalent**' create an element of uncertainty in the Living Infrastructure Plan and need to be defined or at least its intent explained. This is not referred to in DV 369 except for a reference to "an equivalent area" in RZ5 zones, but is this why DV 369 has not tried to **achieve 30% tree canopy cover**?

It is also not clear whether the **'30% permeable surfaces'** referred to in Action 2 of the Plan is meant to include the **30% tree canopy cover** or to be additional to it. The wording of 1.1 above implies permeable surface is in addition to canopy cover as it uses the word 'AND' (rather than OR). In any event DV 369 falls short of meeting even one of these measures let alone both.

Notwithstanding this expressed intention of DV 369, **NO** amount of **tree canopy cover** is specified in the Single Dwellings Code. It is referred to (but not defined) as CANOPY COVER in new rule R39C in the Multi-Unit Code and even then it is only set at **15%** of block area. The proposed Rules in totality seem to fall a long way short of the **30% tree canopy cover** objective (see Detailed Comments below). **No explanation** is given for any of the proposed Rules, in particular why they do not make a meaningful attempt to achieve the **30% tree canopy cover** objective.

Action 2 of the Plan also says "*where 30% canopy cover cannot be easily achieved through tree and vegetation plantings, alternative **locality-specific solutions will be used based on assessment of microclimate and built environment conditions.***" DV 369 ignores this part of Action 2 of the Plan, which we submit is very pertinent to multi-unit redevelopment projects in places like Kingston, e.g.

the Kingston Arts Precinct. Since the proposed tree canopy cover provisions of DV 369 are so weak and tree canopy cover in the Kingston Foreshore area in particular is so poorly provided for it is very important that this work is carried out. (Actions 3 and 4 of the Plan also call for a ***Microclimate Assessment Guide and Program*** for significant developments**.)**

We doubt that the sort of proposed Rules as set out in the Codes are likely to achieve even their apparently modest aims, e.g. the elaborate Rules requiring minimum numbers of 'canopy trees' deliver relatively tiny numbers of such trees and how is it going to be guaranteed they will be retained anyway once all the approvals are signed off and a house or units are sold? Extending and strengthening the [TREE] CANOPY COVER rule would likely be more effective.

It is probably also unlikely that smaller house blocks will ever contribute much towards the **30% tree canopy cover and 30% permeable surface objective**, e.g. the proposed SITE COVERAGE rule allows up to **70% building area** on 'rear-loading' Compact blocks with NO requirement for PLANTING AREA. KBRG submits it would be better to break up large groups of small single house blocks and provide them with substantial planted areas in public open space, roadways etc. to allow protection of existing trees and the planting and maintenance of groves of new trees. If minimum **30% tree canopy cover** cannot be provided (or even required) on larger single house blocks and multi-unit blocks the shortfall will also have to be met in public open space and roadways planting. In new areas this needs to be designed in at the land subdivision stage rather than relying on (inadequate and impractible) controls on subsequent block development.

The **Estate Development Code**, currently bereft of tree canopy cover provisions (except for R25: Street trees to shade 30% of footpaths!) therefore **needs to be urgently amended** to include appropriate tree canopy cover provisions for subdivision design. While this might impact on the yield of new subdivisions it is a small price to pay for improving Canberra's Living Infrastructure and reducing heat banks that contribute to the warming of our city. The protection of existing trees and ensuring significant new plantings in existing areas also becomes a higher priority.

KBRG notes that the current Plot Ratio controls are NOT replaced under DV 369, Private Open Space (or Site Open Space) and Planting Area controls are retained with generally increased requirements (except for 'rear-loading Compact blocks – see below) and new controls are added for Site Coverage, numbers of Canopy Trees and Canopy Cover (Multi-Unit Code only). This all adds unnecessary further complexity to the already enormously cumbersome Codes. If new controls are required they can and should be instead of existing ones. The Codes desperately need rationalisation and simplification.

DETAILED COMMENTS ON PROPOSED CODE PROVISIONS:
(See attached table summarising the DV 369 Amended and New Code Rules.)

The current PLOT RATIO control (not amended or replaced by DV 369) we contend is useless in providing high quality sustainable residential development outcomes and should be scrapped. It provides a lazy and crude 'developers' guide' to what they expect to achieve on a block irrespective of all the other controls.

The PRIVATE OPEN SPACE or SITE OPEN SPACE (for multi-unit developments) controls are complex and also do not seem to have been very effective. To require only **20%** of a block to be SITE OPEN SPACE in the RZ3, 4 & 5 zones is never going to get anywhere near the **30% tree canopy cover** objective. Oddly, the minimum PLANTING AREA for those same zones has been increased to **25%** of the block, more than the SITE OPEN SPACE. The new SITE COVERAGE Rule for those zones is **45%,** so **55%** of the block would be unbuilt on, apparently leaving plenty of space for planting. In the case of

single house blocks the minimum PRIVATE OPEN SPACE is the obverse of the maximum SITE COVERAGE, so it is unnecessary to have both types of controls.

The Single Dwellings Code also contains Rules for percentage of PLANTING AREA related to the PRIVATE OPEN SPACE and the size of block and, in the case of *compact blocks*, whether they are *front loading* or *rear loading*. For *front loading blocks* at least **30% of the *block* area** (probably a misprint) is required to be PLANTING AREA but there is **no** PLANTING AREA required for *rear loading blocks. Mid-sized blocks* only require **25% of the *block* area** to be PLANTING AREA, whereas it's **30%** for *large blocks.* This is of course not necessarily the same as '**canopy cover**' or '**deep soil zones**', which may or may not be included in PLANTING AREA. The (amended) definition of PLANTING AREA says it is an area "available for landscape planting", which is not helpful. We propose that the PLANTING AREA controls add nothing but complexity and confusion and should be scrapped, in favour of clarified, strengthened and extended [TREE] CANOPY COVER controls including *deep soil zones* (see below).

The CANOPY TREE requirements for different numbers and sizes of trees for different sized blocks are ridiculously complex for very little gain and should be scrapped. Table 7a contains various detailed requirements for the different sized trees, including: "Minimum soil surface area dimension", expressed in metres, whatever that is supposed to mean. Both Codes have very cumbersome specifications of numbers of 'small', 'medium' and 'large' canopy trees, dependent on the size of the block, for no obvious advantage and considerable added complexity. There is no canopy dimension specified for each size of tree, so the overall canopy cover is anyone's guess, but probably a lot less than the 30% target. We note the new definition "***Canopy tree**: …*capable of achieving a crown diameter of a minimum of 8 metres,…" but how does this account for 'small', 'medium' and 'large' canopy trees?

The [TREE] CANOPY COVER controls proposed for the Multi-Unit Code look more promising, but need to be clarified, strengthened and extended to the Single Dwelling Code. The new Rules R38C and R39C in the Multi Unit Code state: "Existing and new trees on the block are to provide at least **15% 'canopy cover'** of the block at maturity. Trees are to be planted in **deep soil zones**…"
This seems clear (although there is slightly different wording in the two provisions) but why is it **15%** canopy cover, not **30%**? No analysis or explanation is presented in DV369. There is also an obscure Note to Rule R39C (but not R38C) stating in part that *deep soil zones* are to have minimum surface area of 64 m2 – is this per tree, or total? How does this relate to 'canopy cover'? Presumably the (unstated) intention is that the whole [TREE] CANOPY COVER area is to be *deep soil zone*. There is no minimum **canopy cover** proposed for the Single Dwellings Code. This should be rectified and it should be **30%**, at least for *large blocks*. If this is not considered feasible for smaller blocks, there should still be a specific [TREE] CANOPY COVER rule stated.

Yours sincerely

Vice President, Kingston and Barton Residents Group Inc.

26 February 2020

DV 369 – RETAINED, AMENDED AND NEW CODE RULES

RULES	DV 369 SINGLE DWELLING CODE	DV 369 MULTI UNIT CODE	
		RZ1, RZ2	**RZ3, RZ4, RZ5**
PLOT RATIO (maximum % of block) (CURRENT RULES UNCHANGED)	Large blocks - **50%**	RZ1 Dual Occs.– variable by size (formula) RZ2 Dual Occs.- 1 dwelling at rear - **35%** Otherwise - **50%**	RZ3 – **65%** RZ4 – **80%** RZ5 – not specified
PRIVATE OPEN SPACE (minimum % of block) (ALL INCREASED)	Large blocks – **60%** Mid-sized – **50%** Compact – **50%** except rear loading - **30%**	**Not specified**	**Not specified**
SITE OPEN SPACE (min. % of block)	**Not specified**	**40%** of **total site area** (UNCHANGED)	**20%** (UNCHANGED)
PLANTING AREA (minimum %)	**50%** of **POS** except Compact front-loading – **30%** & rear-loading – **0%** (REDUCED)	**35%** of **block** (INCREASED)	**25%** of **block** (INCREASED)
SITE COVERAGE (max. % of block) (ALL NEW RULES)	Large blocks - **40%** Mid-sized - **50%** Compact – **50%** except rear loading – **70%**	**40%**	**45%**
CANOPY TREES (min. number) (ALL NEW RULES)	Large blocks -1 small + 1 medium (+> 800 m2) Mid-sized – 2 small Compact – 1 small	Large blocks <800m2 – 1 small + 1 medium >800m2 – 1 medium + 1 large ++ Mid & Compact - NIL	SAME AS SD CODE
CANOPY COVER* (min. % of block) (NEW RULES)	NIL	**15%** at tree maturity, to be planted in deep soil zones	**15%** at tree maturity, to be planted in deep soil zones

DEFINITIONS: [*CANOPY COVER **NOT** DEFINED]

CANOPY TREE: [NEW]….capable of achieving a crown diameter of at least 8 metres when mature…

DEEP SOIL ZONE: [NEW] an area of soil within a development that is unimpeded by buildings or structures above and below ground, and which has adequate dimensions to allow for the growth of healthy trees. Deep soil zones exclude basements, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

PRIVATE OPEN SPACE [CURRENT CODE] means an outdoor area within a block usable for outdoor living activities, and may include balconies, terraces or decks but does not include any area required to be provided for the parking of motor vehicles and any common driveways and common vehicle manoeuvring areas. Up to 25% of any part of private open space may be roofed over, except that a balcony may be entirely roofed over.

PLANTING AREA [AMENDED PROVISION] means an area of land within a block that is available for landscape planting and that is not covered by buildings, vehicle parking and manoeuvring areas or any other form of element that impacts permeability of the ground surface, ie. terraces, pergolas, patios, decks or pools.

SITE COVERAGE [AMENDED PROVISION] means the proportion of the actual site covered by buildings, including roofed terraces, pergolas, patios, decks and balconies but excluding any part of awnings, eaves and the like.

From: Able Arts
To: Terrplan
Subject: draft plan 369
Date: Thursday, 27 February 2020 4:23:07 PM

I am writing to express my support for legislation that would require developers to plant specific plants that maintain the health of our pollinators, birds. and small mammals.when developing new suburbs.
In order to mjaximise biodiversity and reap the economic benefits that flow from pollinator services such as,insect control.and food production,a pollinator corridor should be implemented without delay.
I would also like to see legislative controls put on the sale of poisons ,and pesticides... as their negative impact on bees and other insect populations is well documented.

[redacted]
Gungahalin,ACT

dna architects

Dowse Norwood & Associates Architects
PTY.LTD.

Territory Plan Section of the Environment, Planning and Sustainable Development Directorate (EPSDD)
PO Box 158
Canberra, ACT 2601

terrplan@act.gov.au

Draft Variation to the Territory Plan No 369

Living Infrastructure in Residential Design December 2019

General Comments

Canberra as a city in the bush is important to retain but that has to be balanced against reduction in urban sprawl and increased densification. The principal opportunity for managing and maintaining the canopy coverage for Canberra suburbs is in the public realm. The open space network and streets including the front setbacks. The focus of this strategy should be on those areas and away from mandating excessive controls within each site.

It appears that this proposal is intended to make the community live in smaller houses and push the cost of achieving the 30% canopy policy onto the public in their private homes.

The outcome of what is proposed will undoubtedly be to push buyers to look to larger blocks to fit the size home that they want. It will increase urban sprawl to cope with this. It will impact negatively on affordability and accessibility. A far greater portion of homes will be multi-level to compensate which is more costly and less accessible.

The introduction of maximum site coverage should be balanced by the deletion of Plot Ratio controls. Bulk and scale of a building on a block will now have to be kept down regardless, controlled by the building envelope, setbacks and site coverage. It will allow for more innovative housing types and for people to achieve a more desirable home while still achieving large areas of open planting on a site.

The site coverage rules will make it much harder to build a practical single storey dwelling on most blocks. Multi storey housing is considerably more expensive, impacting on affordability. It is less accessible. It has more impact on neighbours.

The size of the soil surface area seems excessive. For a large tree it needs 49m2 x 1.7m deep. This could exceed the minimum dimension available for Private open Space. The area of soil available on neighbouring blocks needs to be considered as trees planted close to a boundary will have canopy and root systems outside of the development block.

There should be some case studies done or trialling on a new suburb to see if the concept can work and be viable. Future purchasers of sites will need to be made aware of the potential loss of yield from their sites as compared to sites developed before these rules. Land will effectively be devalued.

There needs to be greater awareness of these requirements for people purchasing land as they will no longer be able to achieve the same outcomes they currently can. The government has a duty to clearly disclose this impact to purchasers.

If a neighbour's canopy is overhanging your block can it count towards your canopy coverage?

Decks and Pergolas etc should not be included in site coverage if they are permeable and can be shown to have minimal impact on water ingress. Preventing the construction of these elements will lead to them being delayed until after initial construction where they can be built as exempt structures.

Pools to many owners are desirable and add much value to their amenity and lifestyle. They actively contribute to the private open space of a block and its varied activities. Including them in Site Coverage will prohibit them on most blocks. They should be made exempt from Site coverage calculations.

Tennis courts are only doable on the largest blocks. They are multi-function spaces that are highly adaptable. Including them in site coverage will eliminate them from almost all developments in our suburbs. This is not an acceptable outcome.

The requirement for supervision of tree and landscape planting by a qualified person through construction is excessive and expensive.

Ignoring planting areas that are less than 2.5m in width rules out large areas of blocks that are valid vegetation and water infiltration areas. This will likely push developments further off the boundary to 2.5m instead of 1.5m sacrificing usable space in the primary zone in order to make the calculation work. Percentage of coverage should be the only control. 2.5m should be deleted.

Landscaping and planting on residential blocks is often completed well after occupancy and is out of the control of the designer and the Certifier. Does the designer have to nominate the species and position of a tree or just indicate an area that could be a tree, or will these trees now become part of the BA that is signed off by the Certifier? What is to stop the trees from being removed immediately after occupancy?

T 02 6230 4688
Unit 10, 14 Lonsdale St Braddon ACT | PO Box 5087 Braddon ACT 2612
Primary Nominee G Dowse 966 | ABN 43 097 309 325

Single Dwelling Housing Code

5.2 Private Open Space

R38 c) The introduction of a minimum of 2.5m for planting areas is excessive. It ignores the validity of small strip gardens in courtyards and light wells or along boundaries as being valid contributors to the permeability of a site.

C38 a) Vehicle parking and manoeuvring areas are often very valid contributors to usable open space as is required by "c". These areas double up as play areas for a vast range of outdoor family activities and sports for the individual house and the neighbourhood.

R39 Same comment.

C39 Same comment

R40 Same comment.

C40 Same comment

5.2A Site Coverage and tree planting

R40A a) The loss of 10% site coverage on all blocks over 500m2 has a significant impact on all blocks at the lower end of this size range. These are popular blocks for single storey development required for a wide range of the population who are not suited to multi storey living. The site coverage now also includes a wider range of structures further reducing the size of a single storey house that can be built on a block.

This will have broader implications on affordability and accessibility. It will push purchasers to larger, more expensive blocks to build the size house they want. This will increase urban sprawl rather than density. It will increase the size of blocks required for the elderly and disabled requiring accessible single storey housing.

C40A a) Vehicle parking and manoeuvring areas are often very valid contributors to usable open space as is required by "b". These areas double up as play areas for a vast range of outdoor family activities and sports for the individual house and the neighbourhood.

R40B Can the front setback be included in the deep root zone? In most cases this will be the most appropriate location for large trees. Rear zones require many varied uses not always compatible with large trees.

One obvious outcome of this rule will be the planting of trees in the rear corners of blocks. The undesirable result will be four trees clustered on adjoining blocks

in the corner within an easement, competing for space and light. As these trees grow, they will have to be cut down to keep them out of power lines or drains and to enable growth of the other trees.

Often on redevelopment sites, there are existing large canopy trees overhanging from adjoining sites. Can these trees be included in the requirements for tree planting? Adding additional trees may prevent reasonable development of a site. Growing another large tree under the canopy of these trees as it is the only space available due to tree protection zones is most likely undesirable or prohibitive.

Multi-Unit Housing Code

4.2 Site Open Space RZ1 & RZ2

R38 The introduction of a minimum of 2.5m for planting areas is excessive. It ignores the validity of small strip gardens in courtyards and light wells or along boundaries as being valid contributors to the permeability of a site.

4.2 Site Open Space RZ1 & RZ2

R38A The loss of 10% site coverage on all blocks in RZ1 and RZ2 has a significant impact. Decreasing the area available will effectively decrease the yield and make the land component per unit more expensive, making the units less affordable. It is already very hard and expensive to do single storey units for the elderly. This will make it even harder as the land component of the sale price will be prohibitive.

The site coverage now also includes a wider range of structures further reducing the yield.

R38B The introduction of a minimum of 2.5m for planting areas is excessive. It ignores the validity of small strip gardens in courtyards and light wells or along boundaries as being valid contributors to the permeability of a site.

R38C 15% canopy coverage needs further clarification. Large trees when planted will often extend over the boundary. Can this extended area be included in the calculation?

This would equate to roughly half the planting area being covered by canopy which will impact on usable space for outdoor activities and function al areas that may well return a better result uncovered.

One obvious outcome of this rule will be the planting of trees in the rear corners of blocks. The undesirable result will be four trees clustered on adjoining blocks in the corner within an easement, competing for space and light. As these trees grow, they will have to be cut down to keep them out of power lines or drains and to enable growth of the other trees.

Often on redevelopment sites, there are existing large canopy trees overhanging from adjoining sites. Can these trees be included in the

requirements for tree planting? Adding additional trees may prevent reasonable development of a site. Growing another large tree under the canopy of these trees as it is the only space available due to tree protection zones is most likely undesirable or prohibitive.

5.2 Site Open Space

R39A 45% site coverage in commercial zones will prevent options for aged living on ground. Current commercial zones currently have higher Plot Ratios which enable the option of more development on ground. This will no longer be the case.

R39B The introduction of a minimum of 2.5m for planting areas is excessive. It ignores the validity of small strip gardens in courtyards and light wells or along boundaries as being valid contributors to the permeability of a site.

R39C 15% canopy coverage needs further clarification. Large trees when planted will often extend over the boundary. Can this extended area be included in the calculation?

C40A Existing trees on neighbouring blocks that impact a development may already have detrimental impact on a development. This clause would suggest that if they are detrimental, they cannot be counted in the canopy area and would require additional planting outside of this tree protection area, further reducing the developable area of the site.

Definitions

Site Coverage Site coverage should not include open pergolas. These are usually shading devices that do not impede infiltration of water. The same goes for timber and raised decks that allow water to penetrate the soil below. Exclusion of these elements will result in them being added later as exempt elements and not being considered in the context of the full application. They are elements that add significant amenity to occupiers and should not be discouraged in any way.

T 02 6230 4688
Unit 10, 14 Lonsdale St Braddon ACT | PO Box 5087 Braddon ACT 2612
Primary Nominee G Dowse 966 | ABN 43 097 309 325

Caroline Le Couteur MLA
ACT Greens Member for Murrumbidgee

28 February 2020

ACT Greens submission to EPSDD consultation process on DV369 (Living Infrastructure in Residential Zones) and DV368 (City and Gateway South)

INTRODUCTION

Thank you for the opportunity to make a submission on Draft Variation 369 (Living Infrastructure in Residential Zones) and Draft Variation 368 (City and Gateway South). Please note that I am writing in my capacity as an ACT Greens MLA, and not as Chair of the Assembly's Planning and Urban Renewal Standing Committee.

This submission focuses primarily on DV369 (Living Infrastructure in Residential Zones) and makes several recommendations. It also includes comments and recommendations on the living infrastructure provisions of DV368 (City and Gateway South), which should also be amended to support living infrastructure and the 30% canopy target.

The ACT Greens are committed to increasing the amount of 'living infrastructure' - that is, trees, shrubs, green rooves and water bodies - in Canberra's urban environment. This infrastructure improves amenity, supports natural ecosystems, and is also a critical adaptation response to climate change.

Canberra's climate is warming and the shade and other cooling properties provided by living infrastructure are necessary to keep Canberra cool and liveable into the future.

The Greens support the 30% tree canopy target that the Government committed to in its 2019 Living Infrastructure Plan. This target requires significant measures to ensure it is effectively implemented.

The detail of DV369 will be important in achieving the 30% target, as it sets out requirements for tree planting and permeable space on private blocks.

We emphasise the critical point that in its current form, DV369 is not consistent with the 30% canopy target. It needs to be improved - as outlined below - to embed the conditions required for the Government to achieve its 30% canopy promise. As an example, DV369 only includes a canopy cover requirement of 15% for multi-unit developments in the RZ1 to RZ5 Zones. This is clearly not adequate to achieve 30% canopy cover. 15% is even less than the current canopy in many suburbs and if such a low requirement is retained, many residential areas will see canopy cover reduce over time.

The ultimate goals for living infrastructure for both Variations should be:

- Delivering the canopy cover and permeability targets in the ACT Government's Living Infrastructure Plan
- Substantially improving the design of development so that it is more acceptable to local communities and has lower environmental impact

AUSTRALIAN CAPITAL TERRITORY LEGISLATIVE ASSEMBLY
London Circuit, Canberra ACT 2601, Australia GPO Box 1020, Canberra ACT 2601, Australia
Phone +61 2 6205 1941 **Email** lecouteur@parliament.act.gov.au

@carolinelec carolinelecouter

- Ensuring a strong supply of affordable, environmentally sustainable housing while the above are delivered.

EXISTING PROBLEMS

It is worth briefly considering the problems with existing development in residential zones.

House-for-house redevelopment in existing suburbs

Currently, this type of redevelopment almost always replaces one modest house with one very-large house that covers a high proportion of the block. This fails against all three goals outlined above. It leaves no room for trees and permeability. It represents a huge change to the existing character and built form and removes most green space, which creates conflict with neighbours. It also sees the replacement of somewhat affordable older homes with very expensive new ones.

The Territory Plan is a key driver of these outcomes because:

- Having a plot ratio but no site coverage encourages large single storey dwellings
- The plot ratio rule is flouted through construction of large, semi-enclosed 'alfresco' areas that are not included in the plot ratio calculation but do build over a lot of land
- The private open space requirements are largely met in very narrow setbacks, paved areas and large, semi-enclosed 'alfresco' areas which are not permeable or suitable for tree planting.

Frequently, the useable open space left over following house-for-house redevelopment is less than that included with 2-3 storey apartment and terrace developments in the Inner North redevelopment area.

New suburbs

These fail all three goals even more spectacularly because additional to the above issues:

- Due to perverse incentives in the planning rules, the majority of new blocks are 'mid-sized' or 'compact'. These have no plot ratio control and weaker open space and planting area rules
- Older suburbs usually have wide street reservations with substantial verges and tree canopy which help to offset losses of trees and green space caused by redevelopment. New suburbs in contrast are not providing adequate verges and tree canopy.

Low-rise multi-unit redevelopment (RZ1 and RZ2)

This form of redevelopment is also failing against all three goals.

The planning rules are failing to deliver affordable housing. There is limited redevelopment of this sort occurring, and what is being built are generally large, expensive dwellings rather than affordable smaller homes. Further, from the perspective of living infrastructure, environmental impact and acceptability to neighbours, development is frequently hugely over-built, suffering from:

- Not enough open space or room for trees
- High conflict with neighbours
- Low permeability

Again, the useable open space left over following this type of redevelopment is less than that included with 2-3 storey apartment and terrace developments in the Inner North redevelopment area.

Medium-rise multi-unit redevelopment (RZ3, RZ4 and RZ5)

Development occurring in these zones is very different between the following areas, and they need to be considered separately:

- The Inner North redevelopment area (RZ3 and RZ4)
- Greenfield areas, particularly the Molonglo Valley (RZ4 and RZ5)[1]

Inner North redevelopment area (RZ3 and RZ4)

In this area, these zones have been generally (with some notable exceptions) been meeting all three goals reasonably well. This has included:

- Better open space and tree planting outcomes than most other zones, though far too many mature trees are being removed
- Relatively low conflict with neighbours, compared to other development types
- Delivery of relatively-affordable housing, though mainly for small households such as people in their 20s and older singles and couples. Recently, there has been a shift to large townhouses and terraces, which are much less affordable but do provide housing diversity.

However, this area is not indicative of how well the zones' standard rules are working. Rather, the Inner North has benefitted from requirements for 'deep root zones' at the rear of most blocks in the Inner North Precinct Code. (This will be discussed further later in the context of Draft Variation 368 City and Gateway South).

Greenfields areas, e.g. Molonglo Valley (primarily RZ4 and RZ5)

A clearer indicator of how these zones work by themselves are the greenfield sites in the Molonglo Valley. While these sites are providing relatively affordable housing, they are suffering from:

- Inadequate open space and permeability
- Inadequate tree canopy and not enough room for future tree planting
- A great deal of community agitation, mostly around building height and density

FEEDBACK ON DV369 (LIVING INFRASTRUCTURE IN RESIDENTIAL ZONES)

Against this background, DV369 provides important and very welcome changes in a number of areas. In particular, the ACT Greens strongly support the following proposed changes:

- New Site Coverage rules
- Strengthened Open Space requirements
- Strengthened Planting Area requirements, include the new stronger definition
- The proposal to introduce canopy cover and deep soil zone requirements – though I believe these do not go far enough
- The substantial strengthening of rules for 'mid-sized' blocks, which will address the problem of these blocks being overproduced in new suburbs with resulting lack of trees and open space.

These changes will help to improve development against all three goals.

There are however a number of areas where the proposal needs to be strengthened or clarified. The following sections address these.

[1] Other locations such as Bruce/Fern Hill and Franklin have these zones but there is very little development occurring at this point in their lifecycle

30% canopy cover target

In September 2019, the ACT Government released the Living Infrastructure Plan, which committed to a 30% tree canopy cover target for 2045. The Plan sets out the steps that will be taken to get to the targets, including making changes to planning requirements.

However, Draft Variation 369 only includes a canopy cover requirement of 15% for multi-unit developments in the RZ1 to RZ5 Zones. This is clearly not adequate to achieve 30% canopy cover. Worse, 15% is less than the current canopy in many suburbs and if such a low requirement is retained, many residential areas will see canopy cover reduce over time.

The Criteria with the canopy cover requirements also does not make strong reference to a quantity of tree planting or outcomes of tree planting around mitigation of the heat island effect. This makes the canopy cover actually delivered very open to further reductions below 15%. The Criteria needs to be strengthened to directly reference mitigation of the heat island effect not just on the block, but also contributing to broader targets for the whole neighbourhood.

RECOMMENDATION: Increase the canopy cover requirement for multi-unit developments to 30% and strengthen the associated Criteria

Additional comments on proposed tree canopy cover requirements

I also have concerns that having tree planting requirements in addition to canopy cover requirements for multi-unit developments may end up being counterproductive. For example, if two large-canopy trees are required to achieve the required canopy cover but the tree planting rule instead requires planting one small-canopy tree and one medium-canopy tree, which one will be implemented? It would be better to have one canopy cover rule with a simple, clear 30% requirement than having both a canopy cover rule and a tree planting rule that conflicts with it.

RECOMMENDATION: Consider whether a tree planting requirement is necessary in addition to a 30% canopy cover requirement, and if not, remove the tree planting requirement to avoid conflict between them that results in less tree canopy.

I note that for multi-unit development in the RZ3 to RZ5 Zones, proposed Rule R39C states that “trees are to be planted in…communal areas”. These zones are frequently used to build terrace-style housing, which provides private open space rather than communal open space. This type of housing is useful for housing diversity in Canberra and I am concerned that the Rule as written may discourage this sort of housing.

RECOMMENDATION: Consider whether the requirement for trees to be in communal open space for multi-unit development in the RZ3 to RZ5 Zones is compatible with terrace-style housing

30% permeability target

The Living Infrastructure Plan also committed to a 30% permeability target. The proposed planning requirement most closely related to permeability is the Planting Area, as this excludes buildings, pools, driveways and other impermeable surfaces. Draft Variation 369 includes several development types with a Planting Area requirement of less than 30%. These development types will not be able to achieve the Living Infrastructure Plan’s target. Further, Planting Area may potentially include shallow planter beds over a concrete slab, which may not have the same living infrastructure benefits as a deep soil zone which allows rainwater to naturally infiltrate into the water table.

Ideally, a permeability-specific planning requirement that requires 30% permeability would be introduced. This would have the advantage of taking into account the permeability benefits of permeable paving, and would also discount planting areas which do not provide permeability. If this is not possible, at a minimum Planting Area should be lifted to 30% for all development types.

RECOMMENDATION: An alternative method of ensuring the 30% permeability target is met should be included, or at a minimum the Planting Area should be raised to 30% for all development types.

Additional comment on Planting Area

The proposed rules for RZ1 and RZ2 Zones require multi-unit developments to have a Planting Area of 35% but house-for-house redevelopment (Single Dwelling Housing Development Code) only needs a Planting Area of 30%. Both house-for-house redevelopment and multi-unit development types can have a large impact on neighbourhood character and the environment – however house-for-house redevelopment only caters for one household rather than several and is less likely to provide affordable housing. There is no obvious reason to put in place weaker requirements to house-for-house redevelopment.

RECOMMENDATION: Harmonise the Planting Area requirements for the RZ1 and RZ2 Zones between the Single Dwelling Housing Development Code and the Multi Unit Housing Development Code.

Estate Development Code

While the changes will make a substantial difference to new suburbs, with more trees and more open space on blocks, they only fix half of the problem. New suburbs are also lacking tree canopy on streets, and in some cases also in open space. The key problem is that, once space for streets, ovals, driveways, paths, play equipment and seating, clearances for underground utilities and clearances for streetlights are taken into account, there is inadequate room left for large-canopy trees. Instead, tree planting is often consists of widely-spaced small-canopy trees which will never achieve the 30% canopy cover target in the Living Infrastructure Plan. Fixing this problem will require a change to Estate Development Code.

RECOMMENDATION: The Variation should be expanded to include changes to the Estate Development Code to introduce 30% tree canopy cover targets for public land on new residential estates.

Compact blocks

While the changes address the current perverse incentives to over-produce mid-sized blocks, they introduce a new perverse incentive to over-produce rear-loaded compact blocks.

The proposed rules for front-loading compact lots are quite strong, given design is already heavily constrained by the small lot size. For example, Planting Area is proposed to be 30%, but only 25% for the larger mid-sized Blocks. Conversely, the rules for rear-loading compact blocks are problematically weak. Planting Area is zero[2] and the allowed Site Coverage is very high.

Unless fixed, all compact blocks produced will be rear-loading and new suburbs will be left with substantial areas with very with little open space and tree canopy.

RECOMMENDATION: The rules for both types of ‘compact blocks’ need to be adjusted to have balanced requirements for Site Coverage, Open Space and Planting Area.

[2] This gap may be an error in proposed R20 (c), which only refers to (a), not (a) and (b)). If so, this should be fixed.

Easements

On many blocks, the most obvious place to plant trees without impacting on a site's development potential is at the rear. However, in re-development areas this is often also the location of sewer, drainage and electricity easements. The Variation doesn't currently clarify whether developers can meet the requirements by planting trees under a powerline or over a sewer.

RECOMMENDATION: Clarify whether trees and canopy cover can be located in easements.

Green architecture options

Given the density of RZ4 and RZ5 sites, green wall, green roof and roof garden options will be a financially preferable alternative to providing Planting Area and tree planting at ground level for some developments. Developers will therefore push for these to be allowed.

However, aside from mentions of planting on structures in two Criteria, it is not clear how the proposed changes would deal with green wall, green roof and roof garden proposals. As well as not providing clear guidance for DA assessment officers and developers, this approach does not address the critical issue of whether these are effective forms of living infrastructure.

For example:

- Does a green wall count as Planting Area? If so, what does that mean for overall permeability, given a green wall provides vertical greenery not horizontal permeable surface? Or is a green wall more akin to tree canopy, and therefore should count as tree canopy?
- Does low vegetation on a green roof count as tree canopy, given it is the same distance off the ground as a tree canopy and has the potential to help reduce the heat island affect?

Ideally, clear rules and criteria would be provided to clarify these issues.

RECOMMENDATION: The Variation should clarify whether green wall, green roof or roof garden options count towards the Panting Area and/or Canopy Cover requirements, after consideration of how they contribute towards reducing the heat island effect and increasing water infiltration to the soil.

FEEDBACK ON DV368 (CITY AND GATEWAY SOUTH)

As discussed above, the Inner North Precinct Code has (generally) been leading to superior development outcomes on green space and tree canopy than the base rules for the RZ3 and RZ4 Zones which apply in other areas like the Molonglo Valley. This is largely due to the requirement to provide a 'deep root zone' area at the rear of most blocks and criteria (e.g. C9) which refer to large-canopy trees.

I am concerned that the proposed change in DV368 to replace these with a "25% Planting Area with 7% Deep Soil Zone" rule will lead to less tree canopy in future development, because reference to large-canopy trees has been removed and there would no longer be any pressure on developers to plant any trees until DV369 Living Infrastructure is in place. It is not safe to assume that DV369 will be in place ahead of or at the same time as DV368.

I am also concerned that there are no green-space or tree canopy requirements for the Mixed Use Zone sites fronting Northbourne Avenue, aside from a "7% Deep Soil Zone" rule which requires no planting or tree canopy. Instead, the gateway to the city – some of Canberra's largest and highest-profile redevelopment sites – will only have to provide an inadequate 10% Planting Area and zero canopy cover. This is inconsistent with the ACT Government's Living Infrastructure Plan.

RECOMMENDATION: DV368 is expanded to include requirements for 30% canopy cover and 30% permeability for the whole City and Gateway (South) area.

Yours sincerely

Caroline Le Couteur MLA

ACT Greens Member for Murrumbidgee

ACT Greens Planning Spokesperson

From: [redacted]
To: Terrplan
Subject: Fwd: Submission on DV369 Living Infrastructure in Residential Zones [SEC=UNCLASSIFIED]
Date: Friday, 28 February 2020 3:57:24 PM

Hi I made a submission this morning regarding DV369. That email had an error please delete and replace with this one.

To whom it may concern

DV369 should not progress in its current form

I note the text in section 2.3 Reasons for the proposed draft variation

The draft variation is also consistent with the objectives of Canberra's Living Infrastructure Plan: Cooling the City.

The draft variation responds to Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30%

tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045. DV369 will assist in contributing to achieving these targets on private land in residential zones

However, I note the following issues in the draft variation which will have to be amended:

1. Section 3.1.1 the draft variation to the single dwelling code: there is no actual rule proposed that requires compliance with the 30% objective set out in the *Canberra's Living Infrastructure Plan: Cooling the City.*

As there is no rule requiring 30% canopy cover, the draft variation does not achieve the objective of the stated reason at s2.3. Please include a rule requiring 30% tree canopy cover to ensure the draft variation is consistent with 30% canopy cover

2. Section 3.1.2 the draft variation to the Multi Unit housing code

As there is no rule requiring 30% canopy cover, the draft variation does not achieve the objective of the stated reason at s2.3. Please include a rule requiring 30% tree canopy cover to ensure the draft variation is consistent with 30% canopy cover

3. Section 3.1.2, R38C states: *Existing and new trees on the block are to provide at least 15% canopy cover to the block at maturity. Trees are to be planted in deep soil zones*

Any proposed rule that only requires 15% canopy cover is inconsistent with the 30% set out in the Canberra's Living Infrastructure Plan: Cooling the City and is also inconsistent with the draft variations own statement of reasons at section 2.3. Please amend rule R38C to require 30% tree canopy cover to ensure the draft variation is consistent with 30% canopy cover objective stated in s2.3

4. Section 3.1.2, R39C states: *This rule applies to RZ3, RZ4 and RZ5. Existing and new trees on the block are to provide at least 15% canopy cover of the block at maturity. Trees are to be planted in deep soil zones in communal areas*

Any proposed rule that only requires 15% canopy cover is inconsistent with the 30% canopy cover objective set out in the Canberra's Living Infrastructure Plan: Cooling the

City and is also inconsistent with the draft variations own statement of reasons at section 2.3. Please amend rule R39C to require 30% tree canopy cover to ensure the draft variation is consistent with 30% canopy cover objective stated in s2.3

5. Section 3.1.2, C40A states: Where one or more existing trees located within the subject block are to be retained as part of development to count towards tree coverage requirements as *described elsewhere in this code, development applications are supported by a report prepared by a suitably qualified person demonstrating how the development complies with the following:*

a) shows the tree(s) are in good health and likely to actively grow at the completion of works

b) details how the tree(s) will be suitably protected during construction works

c) provides adequate deep soil area to ensure the tree(s) will remain viable

d) confirms that the tree(s) to be retained are sited appropriately and will not detrimentally impact the development in the future.

This proposed criteria conflicts with the 30% canopy cover objective set out in the Canberra's Living Infrastructure Plan: Cooling the City. In particular criteria C40A d) will allow existing trees to be cleared if there is a risk the development will be detrimentally impacted. This criteria cannot be included as it will support arguments for canopy loss rather than achieving the objective of 30% canopy cover. There must be an additional criteria that requires canopy cover of retained and provided large trees will achieve at least 30% canopy cover of the block at maturity.

Yours sincerely

[redacted]

[redacted]

Comments Draft Variation 369 – [redacted] – Phillips and Associates Architects

1. Ensure tree canopy in our suburbs provides shade to not only to residential gardens but shade to suburban streets in summer.

2. Provide adequate open space around dwellings to reduce the boundary to boundary development for single residential and dual occupancy development which is reducing the tree canopy on side boundaries and introducing more and more hard paving in the narrow spaces left between dwellings where establishing soft landscaping is difficult.

3. The landscape character of early suburbs is lost with the reduction in the tree canopy – maintain and increase the area of open space required around dwellings for soft landscaping for all size blocks and provide adequate space for soft landscaping in all new suburbs. Provide greater percentage of site coverage for soft landscaping than set out in the draft variation.

4. Consider reducing requirements for onsite parking for dual occupancy to reduce hard paved surfaces on residential blocks and provide greater areas for soft landscaping.

5. Provide a reduction of rates for maintaining significant or registered trees in suburban gardens – which is ongoing and costly to residents to keep the remnant forest trees safe for residents living with the trees and incurs high ongoing maintenance costs.

6. Require medium density and higher density housing projects to contribute to the public realm with an increased area of tree canopy, soft landscaping and communal gardens for recreation and growing food for residents. Eg Acton precinct development. Consider incorporation of more landscaped open space and outdoor recreational space in all higher density developments and increase percentage area for soft landscaping proposed in draft variation.

7. Maintain opportunities for biodiversity in planting to all areas of our city residential landscaping.

Submission: DV369 Living infrastructure in Residential Zones

Draft Variation 369 which proposes changes to ensure standards for soft landscaping are met, is indeed welcome.

However, the attempted explanations in the draft are confusing in the extreme, as in **Table 2 Current and proposed changes to Single dwelling housing development code**, where currents requirements describe a large block as "up to 800m2" and, directly underneath, large blocks are described as "over 800m2", while mid-size blocks have no set definition at all.

Recommendation 1: ***Create a simple definition of each block size and give a percentage of the block that must remain permeable green space*** which excludes non-permeable spaces such as patios, pools and decks.

The notion of "private open space" is confusing and unnecessary, and should be dropped altogether. When we see that currently a planting area of 50% would, at first glance, appear to be quite favourable to tree cover, when defined as 50% of "private open space", the favourable is reduced to a mere 50% of 60%, which seems to equate to 30% of the block available for substantial tree cover.

Pots containing flowers or even trees on decks and patios do not provide the cooling value of large trees. It is easy to see how current builds in the city have resulted in enormous dwellings that reach virtually to the boundary and create vast expanses of heat islands.

Ambiguities and complexities all too easily result in flouting of the true intention of the initial legislation.

Now that the climate situation is so dire, the rules need to be very clear and enforceable. Citizens lose faith in government when they hear excellent goals, but witness these goals undermined by very poor results on the ground.

Protect existing trees at the point of application:

A short walk around any suburb of Canberra will highlight the alarming increase in non-permeable surfaces: massive two storey homes built right to the boundaries, double garages giving rise to ever bigger driveways, concreted court yards and even plastic lawn replacing real lawn. New trees, if they have been planted at all, are small to medium species that will

never provide the large canopy trees that are being removed to make way for the afore-mentioned development.

Unless development rules prioritise the protection of existing tree cover, then Canberra will lose its "green" reputation and become like any over-built capital city in Australia.

Recommendation 2: ***Development applications that would result in the removal of mature canopy trees should not be approved in the first instance.***

Architects are more than capable of designing pleasing dwellings which incorporate existing trees. Added cost should not be a consideration when whole community amenity is at stake. Spurious political justifications for obscenely over-built blocks such as "owners want more indoor space" and "owners want to avoid water bills made necessary by trees and gardens" should never be heard in a capital city that purports to value living infrastructure and sustainability.

Oversight and consequences:

If current planning laws stipulate developments that must include an exact percentage of green open space/permeable surfaces, and only complying applications gain approval, then building activity that clearly flouts these laws must face consequences. The only really effective consequence is forced demolition.

As the situation currently stands, builds that illegally block solar access to neighbours and views or result in the destruction of significant trees, face no financial consequences. Fear of consequences should be real so that we no longer hear builders tell their clients, "Don't worry about that tree- we'll just give it a bit of a knock and then…"

Recommendation 3: ***Demolish builds that have violated their approval terms.***

Yes, there will be an outcry after the first couple of demolitions, but word will spread quickly and compliance will increase rapidly. The outcry from enraged citizens who have witnessed flouting of the laws over many years will cease.

Tree cover for multi-unit developments:

A 15% mandated tree canopy cover for multi-unit developments is grossly inadequate. The initial 30% requirement needs to be maintained.

Multi-unit developments offer developers a rich opportunity to build many dwellings on a single piece of land. That land should be left with enough open space to provide for the recreational and cooling needs of the people who live there (and the people who make passing use of that part of the city). This should be a clear and inviolable condition of any planning approval.

Large canopy trees will flourish in a larger planting where they are not struggling against rapidly rising temperatures resulting from climate change. The city as a whole needs solid tree cover to encourage higher rainfall, as well as to reduce ambient temperatures. Given that Canberra is losing something like 3000 trees a year due also to the extended drought and excessively high temperatures, large group plantings need to be mandated. How could a planting area of a minimum dimension of 2.5m provide space for a large canopy tree, let alone a cluster that would be much more likely to flourish?

The privileging of built space over substantial tree cover is evident again.

Set-backs from the street also need to be increased as many apartment blocks being constructed now leave very little space for large and closely spaced street trees which would make active travel, especially walking, a pleasant experience. Development rules need to be much more closely in tune with the over-arching focus of the ACT's excellent climate change and sustainability legislation.

Roof gardens and bio or green walls are no substitute for large canopy trees and could reasonably be seen as the next flouting mechanism for developers: establish the roof garden and leave it to the strata committee which may or may not relish the task or the cost of maintaining it. There could also be a conflict between owners wanting to situate solar panels on the roof area in order to create a micro electricity grid for the whole building.

Large trees at ground level present a clear asset that can be monitored and supported. Gardens and shrubs that promote habitat for bees and wildlife are also important at ground level, but not the expense of large canopy trees.

Recommendation 4: ***Maintain the initial proposed 30% tree canopy cover for multi-unit developments. Anything less will result in the creation of intolerable heat islands.***

The city has already allowed far too many such heat islands where temperatures in summer are close to unbearable.

Monitoring and supporting the existing green cover:

The ACT government is to be commended for its plan to increase tree cover by 17,000 extra trees, but if existing trees, especially mature street trees and trees in parks, are not protected, then it looks like a flawed plan.

Newly planted trees, as well as highly stressed mature trees on public land, need to be watered and monitored. Residents and community groups can be encouraged to help take care of such trees.

Illegal parking under street trees also needs to have consequences such as hefty fines for repeat offending. Multiple cars parked directly under stressed trees severely compact the soil so that even when it rains, the tree gains little moisture.

Recommendation 5: ***Avoid tree planting contracts which do not stipulate water and monitoring of new plantings and create effective financial incentives for tree survival to a stipulated age e.g.5 years.***

This could mean fencing off of plantings to avoid vandalism.

Fine parking on the verge under street tree canopy at a separate, higher rate than other parking offences.

[redacted] Narrabundah, ACT 2604)

Friends of
Hawker Village
Caring for our Suburbs
Hawker-Page-Scullin-Weetangera

P.O. Box 4082
HAWKER ACT 2614
secretary@friendsofhawkervillage.com
Phone: 0435 534 998

Territory Plan Section,
EPSDD,
GPO Box 158,
Canberra, ACT 2601

By email: terrplan@act.gov.au

DRAFT VARIATION TO THE TERRITORY PLAN NO 369
LIVING INFRASTRUCTURE IN RESIDENTIAL ZONES

This Draft Variation is a welcome step towards protecting and enhancing the environment in which we live. Friends of Hawker Village (FoHV) are very supportive of initiatives to 'soften' landscaping, especially in residential areas. The importance of tree canopy cover to the liveability and sustainability of Canberra cannot be overstated. FoHV have seen that re-developments (Mr Fluffy blocks in RZ1 and RZ2 zones and multi-unit development in RZ2) have led to blocks with large areas of concrete and other hard surfaces which cannot accommodate trees and other vegetation to enhance the character and liveability of our long-established suburbs. Such developments increase the heat island effect as they preclude shade trees. The fragmented nature of open space on these blocks often discourages any plantings, including grass, resulting in loss of surface permeability.

Rules and Criteria

Our main issue with this Draft Variation is that the Criteria associated with Rules in the Codes are often too subjective to support the intent of the rule (e.g. words like 'sufficient', adequate', substantial' and 'reasonable'). In many cases, FoHV believe criteria should be removed so that what is required in a Development Application is absolutely unambiguous. In this context, we note the comment by the National Capital Authority, in DV 369 at *2.6 Consultation with Government Agencies*, that "meeting the rule however does not necessarily mean that the intent of the criteria will be achieved, given the rule is based purely on quantitative dimensions". This indicates how important it is, in some instances, that there be an accompanying explanation within the rule to explain its purpose. At the very least, Criteria should be read and assessed in conjunction with the Rules, and vice versa, in all instances.

Long-term effectiveness

FoHV share the concerns of the National Capital Authority with regard to ensuring that the intended outcomes are not diminished over time. We are aware of situations where required landscaping is necessary to obtain Development Application approval and Certificate of Occupancy but changes are made later to reduce the requirements for 'gardening' or water expense, or plantings are just left to die. An example is located at 1 Petterd St, Page (Block 12 Section 37) in an RZ2 area where approval was granted for a wire fence at the front of the property adjacent to the public footpath as long as it was concealed by hedging plants. All these plants have now died and the wire fence is prominent in an environment where front fences are prohibited. New plants have been installed but there is no guarantee they will survive into the future, especially since future residents are not necessarily aware of the requirement to maintain such vegetation. As long-term monitoring is not feasible, the only solution we can see to this situation is to cease providing this excuse for failing to meet standard planning requirements.

Car parking

FoHV notes that private open space plus site coverage total 100% of the block. This means that driveways, paths and car parking areas are included in private open space. The only reference to these is in the definitions of 'deep-soil zone' and 'planting area', and in C38A and C39A. There does not seem to be any control over car parking on grassed areas which can be detrimental to the roots of some trees. FoHV suggest that a Rule is required to limit parking and vehicle manoeuvring space. This is a serious concern as prescribing minimum-sized planting areas is a means to limiting on-site parking and vehicle manoeuvring space (usually concrete).

The recent announcement re enforcing penalties for parking on nature strips is most welcome, along with the "rescue package" for the city's urban trees, which includes increasing the number that are hand-watered. Minimising parking on nature strips does, however, exacerbate the parking problem in many areas, especially given many Canberrans' reluctance to park on the road at the kerbside. It is not only trees that suffer when vehicles park half on the road and half off, thus, damaging kerbside footpaths.

RZ1 and RZ2

The changes to R38 & C38 are generally supported. R38A, R38B and R38E are steps in the right direction but the criteria, potentially, will undermine the rules. Rule 38A is a way of ensuring that the footprint of buildings in RZ1 and RZ2 zones is appropriately limited. This Rule should not have any criteria associated with it as any appropriate development will meet this requirement. Rule 38B provides a welcomed minimum planting area of 35% of the block. Again, we believe there should be no criteria associated with this Rule.

The very low requirement for only one dimension to be 2.5 metres has long been a concern to us. We have seen multi-unit developments approved where much of the open space comprises narrow strips of planting area alongside boundaries or adjacent to driveways, parking areas etc. They make a positive contribution to the individual developments but narrow strips of plantings

do not achieve the type of planting areas which contribute to the character of long-established suburbs. There needs to be two dimensions prescribed – say minimum 5m x 2.5m in order to make a positive contribution to the environment generally.

We are concerned that a 2.5m dimension cited in several Rules is not large enough to accommodate the root system of adequately-sized trees without potentially causing damage to paths, driveways or building foundations. This gives a negative impression of trees to many people who then avoid planting trees on their property.

FoHV cannot identify a provision in R38 or C38 that will limit vehicle parking and manoeuvring areas. Concrete driveways to provide access to garages and parking spaces have always been problematic, in our experience. There is a tension between the desire for on-site parking to eliminate regular street parking and the large areas of concrete. This issue usually occurs as a result of several small units being located on blocks that were created for single dwelling homes. The obvious and likely effective way to 'limit' driveways and parking areas is to limit redevelopment of RZ2 blocks to two dwellings and to remove the provision to permit block consolidation.

FoHV note that new suburban developments have such small blocks that canopy cover is non-existent. Street trees are small and purely decoration. Planting areas on blocks are so small as to be ineffective and often paved over time. These residents are entitled to benefit from the cooling effect of trees and the wildlife that is attracted by them.

RZ3 - RZ5

Our experience and concerns have mainly related to RZ1 and RZ2 developments; however, we believe that site coverage in all zones should be mandated and have no associated criteria and that there need to be provisions which limit concreted areas. Again, we believe that the minimum dimension of 2.5m does not meet expectations in Rule 39B, 39C and 39D; C40 should be incorporated into R40 with the sentiments of C40 included as requirements.

In regard to C39B, FoHV are concerned that plantings on buildings will suffer from problems related to inadequate water-proofing of buildings. Inevitably, such vegetation will suffer the same fate as described above, where plants decline and are not replaced. Without continual monitoring, the effectiveness of such provisions is nil.

FoHV suggests that Rule 40 should be expanded to include:

d) provides on-site infiltration of stormwater run-off.

Site coverage should be mandated in Rule 40A and there should be no applicable criteria – words such as 'adequate' are too subjective and likely to be interpreted in different ways by developers, assessors and local residents. These are generous maximum levels for site coverage which should easily be met by any appropriate design proposal. Further, Rule 40B sets a minimum level of tree planting in *deep soil zones.* Anything less than that minimum level is inappropriate, therefore, we suggest that C40B should be removed.

Conclusion

The experience of FoHV, over many years, is that developers endeavour, and feel entitled, to fit as many dwellings onto a block as the maximum prescribed, regardless of block characteristics. The development industry will inevitably resist the proposed changes because of the reduced area available for building. This is particularly so in established areas where the original subdivision of land created blocks for single dwellings which do not easily accommodate additional dwellings. It is unfortunate that the effect of new rules and criteria for renewal areas was not considered in the light of climate change and the need for maintaining our tree cover at the beginning. No doubt developer interests overrode any such considerations at the time.

We trust that the situation will be remedied effectively now.

[redacted]

Convenor
Friends of Hawker Village Incorporated

28 February 2020

Downer Community Association

Email: downerassociation@gmail.com

Environment, Planning and Sustainable Development Director (EPSDD)

Territory Plan Section

Via email: terrplan@act.gov.au

Planning and Development Draft Variation No 368, Draft Variation 369 and proposal for a Downer Precinct Plan

The Downer Community Association (DCA) writes in response to the invitation for written comments about the abovementioned draft variations during the consultation period. It also writes to propose a dedicated Precinct Plan for Downer, and seeks engagement and dedicated resources from the EPSDD for that purpose.

Draft Variation 369 (DV369)

Consistent with the recently endorsed Downer 'Vision Statement' (copy attached, including the embedded 'Report back to the Community' presentation), the DCA is not supportive of activity which seeks to diminish any green space or which does not prioritise maintenance and enhancement of its leafy green canopy.

Throughout DV369, there are several references to possible exemptions being granted on the following basis: *One or more of the following matters may be considered when determining compliance with this criterion: i) whether the total area of upper floor level private open space contributes to the function of other open space on the site; and or ii) whether any adjoining or adjacent public open space is readily available for the use of residents.*

This seems to suggest that reduced green space on a site is acceptable, if there is other green space nearby. The DCA does not support the reduction of any green space within a garden suburb such as Downer. It also seems to suggest that if there is an alternative space available on the site, then this may be 'counted towards' consideration of a green space. This is not supported by the DCA either, noting that such spaces may not be generally available to the public to enjoy.

Urban intensification, such as that proposed in the *City and Gateway Urban Design Framework 2018* (the Gateway Framework) together with the *2018 ACT Planning Strategy*, should ensure no loss of tree canopy or tree 'targeting'. We therefore do not agree that the tree canopy or tree 'target' for multi-unit developments be cut back to 15 per cent (from 30 per cent).

As a general proposition, DV369 appears to be contrary to the ACT Government's publicly stated support for enhanced green spaces, and in particular, those aspects of the *2018 ACT Planning Strategy* which espouses 'sustainable and resilient' urban planning to "protecting our parks and reserves for both for our community and our biodiversity', in addition to ensuring Canberra is 'livable' through 'open and public spaces'.

Draft Variation 368 (DV368) and proposed future state 'Downer Precinct Plan'

The DCA notes that DV368 does not directly encompass the area of Downer, however, wishes to note and support some of the important precedents that it might establish (if enacted), in particular precedents around two-storey height limits and density in key locations; design quality and architecture; landscape and open spaces; building setbacks, separation and length; transport, movement and parking; heritage qualities; livability, amenities and community facilities; and sustainable development and design.

Further, the DCA wishes to advocate for a 'de-coupling' from the areas located by Yowani and Kamberra Wine Company (west side of Northbourne Ave) in any future City and Gateway Northbourne Avenue Corridor Precinct Code ***north*** of Antill/Mouat Streets. The recent outcomes of the Gateway review has already abandoned the notion of 'symmetry' embodied in the earlier version of the plan. The considerations pertinent for a precinct code for an established, residential, leafy suburb of Downer (and by extension, the suburb of Watson) are vastly different from what are essentially brownfield sites at Yowani and Kamberra Wines.

The DCA would like to engage productively and proactively with EPSDD on a Downer Precinct Map and Code in its development phase, not after the event in its consultation phase. Of note in this regard is the recent Downer survey, which noted that there was support for greater development of Yowani and Kamberra Wine Company sites, ***if*** it meant less intensification for the suburb of Downer. We would be happy to take you through the more detailed findings of the 'Downer by Design' survey results, which you may find useful in your consultations and consideration with the Downer community going forward. We would also propose a phased approach for a Downer precinct plan, with focus initially on the Gateway corridor, with Blacket, Atherton and Banfield Streets being the initial focus.

The DCA anticipates having a more detailed version of its proposed Downer Precinct Code finalized ahead of the 2020 ACT election, and gives notice that it intends to seek an audience with EPSDD to discuss the possibility of a targeted Downer Precinct Code. The relevant contact for this correspondence is DCA member, [redacted] who may be reached via the DCA email address, downerassociation@gmail.com.

Yours sincerely

[redacted]

Downer Community Association

[redacted]

Convener

28 February 2020

Attachments:

1. Downer vision statement – February 2020
2. Downer by Design – report back to the community presentation

Comments on Draft Plan Variation No 369 – Living Infrastructure in Residential Zones

Submission by [redacted], Curtin
email [redacted]

1. Overall comments

A tree canopy cover of at least 30% in urban areas is an essential component of preparing Canberra for a warming climate. This Draft Variation to the Territory Plan is welcome because the aim is to ensure that there is adequate tree canopy cover.

A target of at least 30% permeable surfaces in urban areas is also an essential component of maintaining healthy trees and other vegetation and mitigating storm-water run-off.

The introduction of requirements for site coverage, planting area and a minimum level of tree planting are welcome. However, changes to this draft variation (DV369) are needed because in its current form it will not result in an increase in tree canopy cover from the existing level of ca.20%.

The requirements in DV369 would result in tree canopy cover of between 12.5% and 20% on most single dwelling housing residential blocks (see Table 1). This is well short of the 30% target.

The proposed changes to the Multi Unit Housing Development Code only mandate a tree canopy cover of 15% (see e.g. R38C and R39C). This is also well short of the 30% target.

The current draft must be amended to increase the resulting tree canopy cover.

Single Dwelling Housing Development Code

One way to improve the proposed changes to the Single Dwelling Housing Development Code is to add the definition of a large canopy tree: one capable of achieving a crown diameter of a minimum of 12 metres and mandate that at large canopy trees must be planted on large block and very large blocks (those >500m^2 in size) – see Table 2.

Table 1 Tree canopy cover based on current draft

Block size	Required number of canopy trees	Size of canopy (number of trees x 50m^2)	Tree canopy cover as percentage of block size
compact <250m^2)	1	50m^2	20% +
mid-size 250 - 500m^2	2	100m^2	40% - 20%
large 500 - 800m^2	2	100m^2	20% - 12.5%
very large >800m^2	2	100m^2	<12.5%

Define a **large canopy tree** as one capable of achieving a crown diameter of a minimum of 12 metres and mandate that at least 1 large canopy tree must be planted on a large block (500 - 800m^2) and at least 2 large canopy trees must be planted on a very large block (>800m^2) results in tree canopy cover much closer to the target of 30%.

Table 2 Tree canopy cover based on a definition of a large canopy tree

Block size	Required number of canopy trees	Size of canopy	Tree canopy cover as percentage of block size
large 500 - 800m^2	2 with at least 1 large canopy tree	163m^2	32.5% - 28%
very large >800m^2	2 large canopy trees	226m^2	<28%

Multi Unit Housing Development Code

The tree canopy cover requirement in R38C and R39C must be increased to 25%. This is approximately the same level as existing cover in Canberra's urban area (21%) and will ensure that tree canopy cover will not decrease.

C39B, C39C and C39D include a provision that

> *in RZ5 only, if the minimum required planting area or canopy trees can't be provided on site, an equivalent area should be achieved through planting on structures*

An additional possibility is to include the provision that if the minimum required planting area or canopy trees can't be provided on site, the developer can pay the ACT Government to plant and water for 5 years an equivalent area.

Comments on Draft Plan Variation No 369 – Living Infrastructure in Residential Zones

Submission by [redacted], Curtin
email: [redacted]

1. Overall comments

A tree canopy cover of at least 30% in urban areas is an essential component of preparing Canberra for a warming climate. This Draft Variation to the Territory Plan is welcome because the aim is to ensure that there is adequate tree canopy cover.

A target of at least 30% permeable surfaces in urban areas is also an essential component of maintaining healthy trees and other vegetation and mitigating storm-water run-off.

The introduction of requirements for site coverage, planting area and a minimum level of tree planting are welcome. However, changes to this draft variation (DV369) are needed because in its current form it will not result in an increase in tree canopy cover from the existing level of ca.20%.

The requirements in DV369 would result in tree canopy cover of between 12.5% and 20% on most single dwelling housing residential blocks[1]. This is well short of the 30% target.

The proposed changes to the Multi Unit Housing Development Code only mandate a tree canopy cover of 15% (see e.g. R38C and R39C). This is also well short of the 30% target.

The current draft must be amended to increase the resulting tree canopy cover.

2. Single Dwelling Housing Development Code

One way to improve the proposed changes to the Single Dwelling Housing Development Code is to add the definition of a large canopy tree: one capable of achieving a crown diameter of a minimum of 12 metres and mandate that at large canopy trees must be planted on large block and very large blocks (those >500m^2 in size).

Mandating that at least 1 large canopy tree must be planted on a large block (500 - 800m^2) and at least 2 large canopy trees must be planted on a very large block (>800m^2) results in tree canopy cover much closer to the target of 30%.

3. Multi Unit Housing Development Code

The tree canopy cover requirement in R38C and R39C must be increased to 25%. This is approximately the same level as existing cover in Canberra's urban area (21%) and will ensure that tree canopy cover will not decrease.

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[1] In DV369 a canopy tree is defined as one capable of achieving a crown diameter of a minimum of 12 metres. The canopy cover of such a tree is 50m^2

C39B, C39C and C39D include a provision that

> *in RZ5 only, if the minimum required planting area or canopy trees can't be provided on site, an equivalent area should be achieved through planting on structures*

An additional possibility is to include the provision that if the minimum required planting area or canopy trees can't be provided on site, the developer can pay the ACT Government to plant and water for 5 years an equivalent area.

From: [redacted]
To: Terrplan
Subject: Comments on Planning and Development (Draft Variation No 369) Consultation Notice 2019 Notifiable Instrument NI2019-807
Date: Friday, 28 February 2020 3:59:37 PM

Territory Plan Section of the Environment,
Planning and Sustainable Development Directorate

Territory Plan Section of the Development Directorate (Environment, Planning and Sustainable

Comments on Planning and Development (Draft Variation No 369) Consultation Notice 2019 Notifiable Instrument NI2019-807

Dear Sir/Madam

I would like to commend the author(s) of this thoughtful and forward thinking amendment. My only criticism is that the timeframe for the implementation of Action 2 of Canberra's Living Infrastructure Plan has not been brought forward in this proposed variation.

Given the extreme weather we have just experienced this summer I think it would be remiss (and possibly negligent) to not expedite and revise the existing implementation date of 2045. This legislation needs to be enforced ASAP (or preferably 20 years ago) to minimise the impact of extreme weather effects, which are predicted to occur much more frequently in the future.

Yours sincerely

[redacted]
Narrabundah 2604

E: [redacted]

Submission on DV369 – Living Infrastructure in Residential Zones

I Introduction

II Comment-general

III Comment- specific

I. Introduction

I provide this submission on DV369 for your consideration.

I stress that I have been unable to spend the time I would have wished and needed in addressing the DV – for reasons set out in the second attachment (my submission on DV368 – which like DV369 was also released just before Christmas and with the same 28 February deadline).

This deadline for both DVs is unrealistic, given the unprecedented circumstances thousands of Canberrans have endured and are still dealing with in time-consuming ways, since well before Christmas.

It also poses considerable risks to the ACT Government which could be questioned over any claim that its consultations on DVs 368 and 369 were appropriate to the unique and highly impactful conditions prevailing over most of the 'consultation' period.

This highly compromised DV 'consultation' period also raises questions about the legitimacy of the government's conclusions, and decisions that will be made and pursued in the future.

Given these risks I, like others I know, are surprised and disappointed that the ACT Government and EPSDD did not:

1. offer extensions of DV369 and 369 submission deadlines, say until the end of March or mid-April 2020
2. provide and widely advertise public information and Q&A sessions to enable interested members of the public to learn more about both DVs, what they and do not cover, and how they fit in with broader frameworks, plans and liveability policies, and how the requirements will be monitored and enforced. Such sessions should now be offered for mid-March.

If such sessions were offered by EPSDD in past weeks, they were not widely advertised eg through local community associations. If they had been planned, they may well have been cancelled because of fire and smoke hazard alerts.

This scenario only further emphasises the need for an extension of the deadlines and provision of information sessions in March which many would hope can now be arranged and promoted.

Surely Canberra's hazardous smoke levels over recent weeks and local fires at "Watch and Act" level, together with States of Alert and Emergency, leading to warnings to "start taking action now to protect you and your family" , and "remain indoors where possible and use P2 and N95 masks... outdoors", are sufficient reasons to extend such deadlines.

II. Comment – General

1. The content and approach adopted for DV369 is no longer fit for purpose in the light of the repeated record-breaking heat and the consequences endured over the summer of 2019-20. It should be reviewed, revised and reissued:
    a. the aims, actions and deadlines set down in Canberra's Living Infrastructure Plan (30% tree canopy cover and 30% permeable surfaces in urban areas by 2045), should be addressed , not as 'top end' targets, but the minimum to be achieved and proven to exist over time
    b. more ambitious coverage opportunities should be identified and encouraged across all suburbs and zoning categories, and such aims included in the Territory Plan – this is in addition to replacement of current dead and dying trees, and the backlog of replacing trees that have died or been removed in the past decade or so.

2. Green space and tree cover within suburbs should not be diminished in any way through DV369 or related DVs.

3. The focus needs to be on the delivery of green and tree cover at ground level for the immediate benefit of residents, those nearby, and the increasing numbers of 'active travellers' who are criss-crossing the suburbs.

    'Living green walls', roof-top 'gardens' and potted trees are not substitutes for ground-level, longer lasting tree cover:

- they do not provide canopy cover, nor opportunities for respite from heat or shade from direct sun
- they involve too many risks concerning longevity, maintenance and replacement (and who would ensure that small potted trees in apartment complex courtyards are provided continuously for 2-3 decades)?

4. Any plan variation needs to consider and reflect scientific advice about the climate change mitigation benefits of trees and other vegetation for permeable surface use because much of the sparse and 'decorative' low hedges and grasses used for modern landscaping and space infill are considered useless for counteracting emissions impacts and do not provide people with a shade canopy and coolness.

5. DV369 needs to address far more precisely the responsibility for the health and maintenance of trees on private blocks to minimise losses over decades to come. 'Compliance' surely does not end at the handing over of keys for a new apartment block or house.

6. A less piecemeal approach is needed to address urgent green space and tree needs across urban areas. Presentation of DV369 requires:
    a. supplementary context, information and advice about how public space abutting or adjacent to residential blocks or elsewhere in a suburb (old or new) will receive much improved tree cover and permeable surfacing
    b. information about how green space and tree cover development is occurring across Canberra, using the collection and analysis of meaningful data: ie "17,000 trees will be planted" is not a sufficient measure of accountability for DV369 nor any subsequent DV concerning public land.

III. <u>Comment – specific</u>

1. The pages of 'Element' descriptions in the DV369 documentation, the zone abbreviations, and the application of figures across columns are clear evidence that well prepared and well-illustrated public information sessions are required to support and enable public comment on the DV. These need to cover the full range of, say, canopy cover settings across all types of residential sites and in relation to the meaning and impact of 'planting areas', 'permeability' and 'soft planting' or 'soft landscaping outcomes'.

2. It is very concerning that the DV lacks the context of an overall coherent approach, including compliance, education, incentives, etc to back up even merely the requirements that are laid out in the DV that is restricted to residential zones.
   We are simply advised in an indeterminate way that "*Mechanisms to ensure soft landscaping outcomes are not diminished over time can be considered as part of the ACT Planning Review*" (p.8)
   a. what happens on and in new development sites between now and then, to ensure positive long-term greening and treeing as opposed to the mass of hard horizontal surfacing that is the norm in complexes' plans as 'plazas', 'courtyards', and the like?
   b. how will the ACT Planning Review ensure that, for example, pot size requirements will be adhered to over a 20-30-year period on an apartment site or house block? The same question applies to permeable surfacing that was included at construction time.
   c. who will provide guidance to developers and new homeowners about suitable, meaningful plants that will contribute to emissions reduction, provide shade and shelter for humans and a range of local birds and insects?
   d. unfortunately, it is hard to have much faith in the 'deliverability' of DV369 in its current form.

3. The (minimum?) 15% canopy requirement for multi-unit sites (see p.18) is unacceptable. It is essentially suggesting "the more people, the less greenery required", and gives priority to vertical and horizontal heat-trapping surfaces. It is deleterious to the longer-term needs and benefits expected for residents and those living in surrounding suburban areas
   a. the size, scale and materials of unit complexes already contribute more to urban heating especially in their immediate environment
   b. developers and buyers need to learn and accept that real change and improvement is needed at the planning stage to secure much improved canopy cover across our suburbs as well as within particular sites, and help reduce hot, baking surfaces and heat traps
   c. otherwise, the long-term costs of <u>not</u> doing so will be far greater for everybody, as urban intensification proceeds as planned in new and existing residential areas.

4. DV369 canopy cover percentages across different zones should be increased: *prevention* is possible now, *cure* in 20 years' time is not.

5. "Offsetting", that is, counting the greening of alternative spaces outside the site as a substitute for on-site greening and canopy is unacceptable too

    a. it is inequitable in its impact, not only on apartment site residents, but also suburban neighbours – particular streets or areas could easily lose their actual and potential tree cover, greening and cooling opportunities, with negative and impossible to reverse impacts on the physical and visual amenity as well as the value of adjacent properties and the health of all residents as temperatures continue to rise

    b. "In principle as well as in practice, there is substantial academic opinion that offsetting is problematic, and either provides a neutralising effect only with strict rules and compliance or is unlikely to achieve this effect at all"[1]

    c. to work effectively it requires considerable resource commitment to inspect, monitor and ensure continuing adherence

    d. the ACT Government has already shown that it has had difficulty in ensuring building quality standards are met, and for years has also not resourced much needed action to ensure that cars and trucks do not park under public trees on streets and verges and other areas. An ABC article[2] yesterday highlighted the significant damage being done to public trees because of inadequate action by the ACT government and residents over many years to safeguard new and mature trees.

6. Already real estate advertisements are making much of a home or unit's appeal by highlighting proximity to 'leafy' streets, parks and reserves, as well as the availability of shared shady areas within an upcoming development site. Such residential and surrounding environments are becoming more desirable, valued, and valuable, given climate change impacts. Action needs to be taken to increase cooling impacts generally across suburbs, especially since many existing and new homes seek to maximise the use of passive cooling and other owners will not be able to afford increasing costs of artificial cooling in years to come.

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[1] *Reforming native vegetation offset rules in Victoria,* Environment Defenders Office, p. 11 www.edovic.org.au

[2] *Canberra drivers are killing the City's trees,* ABC News, online article 27/2/20

7. Green walls, potted trees and roof-top gardens should be encouraged for a range of reasons, but not accepted in the Plan as substitutes for on-ground tree cover, permeable surfacing or tree cover in residential or public spaces,
    a. there are few good and successful examples of green walls in Australia, probably for reasons linked to climate, poor maintenance and owners and unit bodies avoiding responsibility and on-going costs.
    b. Milan has a magnificent example of a vast, well maintained green wall covering the side of a very large high-rise building, but it is in an area where there are few trees provided at ground level for public protection and aesthetic appeal. Such walls would help carbon dioxide reduction overall, but provide no external areas of respite 'on the ground' or cooling benefits to the public large. It is these latter attributes which need to prioritised for greening provisions across our urban areas.

Quick, easy, tick-the-box 'solutions' to DV369 requirements, at the time of construction of apartment complexes, new houses on now smaller blocks or larger new houses on older blocks, must be avoided if the ACT's Climate Strategy and Living Infrastructure Plan are to be regarded as valuable and meaningful guides to a more liveable future and lead to real accountability, evidence and reporting on progress being made.

>>>><<<<<

O Z T A L
A R C H I T E C T S

ARCHITECTURE | PLANNING | INTERIORS

28/2/2020

Delegate of the planning and land authority
Environment Planning and Sustainable Development Directorate
GPO Box 1908
Canberra ACT 2601

By email: terrplan@act.gov.au

RE: Planning and Development (Draft Variation No 369) Consultation Notice 2019

We are an architectural company that has been based in Canberra since 1985 and has completed a prolific amount of work in the residential field both multi-unit and single dwelling housing. We have extensive experience in working with Territory codes and their implementation.

We wish to make the following comments (in red below) in relation to the above draft variation:

GENERAL

The draft variation, states in the document released for consultation,

" ….proposes changes to the Territory Plan to improve standards for soft landscaping for new development in all residential zones"

After considering the proposed changes and modelling their effect on design and sitting of both single residential block development and Multi-Unit block development, it is our view firm view that the proposed changes will severally restrict development. The provisions within the proposed new Rules and Criteria cast great uncertainty in the way the proposed changes will be interpreted and implemented by assessing officers.

The provision with respect to single blocks will undermine the potential development of the block and jeopardize good design and siting outcomes, particularly compact and mid-sized blocks.

The provision with respect to multi-unit blocks will undermine the potential development of the block and servilely reduce potential yields, particularly in the case of townhouse developments. Based on our studies, up to 30% reduction in yield can be expected. This will need to be acknowledged by land developers in applying their maximum allowable number of units on a block.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

The government and private land developers will also need to accept lower revenue return from the sale of multi-unit blocks. The answer to maximizing yield is not to build apartments as this is not always the viable option, particularly in an area and market which calls for a townhouse product.

We offer the following comments (in red bellow) and concerns in relation to specific provisions:

3.1.1 Variation to the Single Dwelling Housing Development Code

1. Introduction; Definitions

ITEM 1 ***Proposed Substitute:***

"Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Canopy tree: a woody perennial plant suitable for the Canberra climate, with one or more bare trunks, capable of achieving a crown diameter of a minimum of 8 metres, and main supporting branches generally at least 1.8m above the finished ground level. Does not include any plant described in schedule 1 of the *Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1)* or any subsequent declaration made under section 7 of the *Pest Plants and Animals Act 2005*.

COMMENT

The definition should allow for a 6 metre a minimum crown cover to allow for planting in more restricted areas such as small yard spaces associated with small blocks. At 8 meters, the trees crown could be as large or larger than the POS of compact blocks. It would force and result in poor positioning of trees particually if required to be clear of neigbouring boundaries and building facades. This issue and the treatment of tree planting with respect to neighbouring boundaries and buildings on the site is further dealt with under item 4 below, particularly in relation to how the tree location and future mature canopy and 2M protection zone will be dealt with in relation to neighbouring boundaries and buildings.

ITEM 2 ***Proposed Substitute:***

"Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Deep soil zone: an area of soil within a *development* that is unimpeded by *buildings* or *structures* above and below ground, and which has dimensions to allow for the growth of healthy trees. Deep soil zones exclude *basements*, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

COMMENT

There must be provision for allowing deep soil zone over basement structures and on podium and roof areas where the planting is contained within structured planter beds capable of supporting the growth of shrubs and small trees. This is particularly relevant in higher density zones such as RZ5 and Commercial zones.

ITEM 3 ***Proposed Insert:***

5.2A Site coverage and tree planting	
R40A *Site coverage* is a maximum of: a) for *large blocks*: 40% of the *block* area b) for *mid-sized blocks*: 50% of the *block* area c) for *compact blocks* that are *front loading blocks*: 50% of the *block* area d) for *compact blocks* that are *rear loading blocks*: 70% of the *block* area.	C40A *Site coverage* and vehicle parking and manoeuvring areas is limited to: a) maximise outdoor areas that are readily accessible by residents for a range of uses and activities b) provide adequate space for service functions such as clothes drying and domestic storage c) provide adequate *planting area* on the site.
R40B *Development* provides a minimum level of tree planting in *deep soil zones*, with associated planting requirements as described in table 7a, consistent with the following: a) for *compact blocks*, at least one small *canopy tree* b) for *mid-sized blocks*, at least two small *canopy trees* c) for *large blocks* less than or equal to 800m^2, one small *canopy tree* and one medium *canopy tree* d) for *large blocks* more than 800m^2, at least: i) one medium *canopy tree* and one large *canopy tree*, and ii) one additional large *canopy tree* or two additional medium *canopy trees* for each additional 800m^2 block area. Note: Existing *canopy trees* being retained as part of development may be considered to meet these requirements.	C40B Tree planting provided in the development ensures: a) Planting or retention of suitably sized canopy trees in *deep soil zones*, including adequate dimensions for *deep soil zones* to support healthy *canopy tree* growth, and provide adequate room for *canopy trees* b) planting *canopy trees* of semi-advanced stock and reasonable heights at maturity.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: (02)6 2573488

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: (02)6 2573488

Email: oztal@oztal.com.au

Oztal Architects P/L ACN 008530541

COMMENT

R40B

There is no question that existing canopy trees being retained as part of development should be counted toward meeting the requirements.

ITEM 4 *Proposed Insert:*

Table 7a: Tree sizes and associated minimum soil volumes and area requirements

Tree size	Mature height	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small Tree	5-8m	3m	45**	$18m^3$
Medium Tree	8-12m	5m	75**	$42m^3$
Large Tree	>12m	7m	75**	$85m^3$

Notes:

*Minimum pot size refers to the container size of new trees prior to planting.

**The maximum pot size for small, medium and large *eucalyptus sp*. trees is 45 litres, with maximum height at planting of 2.5m and maximum trunk calliper of 3cm.

We note that no reference is made in the Table to Canopy size. The only reference is in the definition of Canopy tree, which specifies a crown diameter of a minimum of 8 metres, It is crucial to know how the mature grown canopy size and 2 mtere protection zone provisions, currently applicable to existing trees on blocks, will be dealt with in the case of new tree planting. For example, if the design and siting of development must be clear of future mature canopy plus the 2 metre protection zone, this would severely restrict the development zone on blocks, particularly compact and mid-sized blocks. If the tree mature grown canopy also had to be clear of neighbouring boundaries, it would further restrict and force positioning of trees well into the block and developable area. This would impact and jeopardize good design and siting.

It is also not clear if there is some allowance for tree canopies to overlap in the case where two or more trees are required. If the tree canopies could not overlap this would add further constraints and be totally impracticable.

We suggest that there should be some provision for the future mature grown canopy of a tree to overlap buildings, adjoining boundaries and other tree canopies.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

2. Introduction; Definitions

ITEM 5 *Proposed Substitute:*

Substitute

"Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Canopy tree: a woody perennial plant suitable for the Canberra climate, with one or more bare trunks, capable of achieving a crown diameter of a minimum of 8 metres, and main supporting branches generally at least 1.8m above the finished ground level. Does not include any plant described in schedule 1 of the *Pest Plants and Animals (Pest Plants) Declaration 2015 (No 1)* or any subsequent declaration made under section 7 of the *Pest Plants and Animals Act 2005*.

COMMENT

As for our comment in relation to Single Dwelling Housing Development Code, we strongly believe the minimum crown cover should be reduced to 6 metres, to allow for planting in more restricted areas such as small yard spaces on small blocks. At 8 meters the trees crown would be as large or larger than most POS.

ITEM 6 *Proposed Substitute:*

"Defined terms, references to legislation and other documents are italicised.

Definitions of terms used in this code are listed in part 13 of the Territory Plan or, for terms applicable only to this code, are associated with the respective rule or listed below.

Deep soil zone: an area of soil within a *development* that is unimpeded by *buildings* or *structures* above and below ground, and which has dimensions to allow for the growth of healthy trees. Deep soil zones exclude *basements*, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

COMMENT

As for our comment in relation to Single Dwelling Housing Development Code, there must be provision for allowing deep soil zone over basement structures and on podium and roof areas where the planting is contained within structured planter beds capable of supporting the growth of shrubs and small trees. This is particularly relevant in higher density zones such as RZ5 and Commercial zones.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

3. Element 4: Site design; Item 4.2 Site open space – RZ1 and RZ2

ITEM 7 ***Proposed Substitute:***

Substitute

R38C Existing and new trees on the block are to provide at least 15% canopy cover to the block at maturity. Trees are to be planted in *deep soil zones*.	This is a mandatory rule. There is no applicable criterion.

COMMENT

As noted above in in relation to Single Dwelling Housing Development Code, it is crucial to know how the mature grown canopy size and 2 metre protection zone provisions, currently applicable to existing trees on blocks, will be dealt with in the case of new tree planting to achieving the 15% canopy cover. How will it affect the design and sitting of buildings and their POS. For example, will the design and siting of buildings and their courtyards need to be clear of future mature canopy plus the 2 metre protection zone? Also does the tree mature grown canopy need to be clear of neighbouring boundaries? Can the mature tree canopies overlap buildings, courtyards, roadway and parking spaces? This would be desirable in providing shade in summer and reduce thermal heat sink effect. If not, it would restrict and force positioning of trees well into the block and developable area. Subject to how the provision will be interpreted and implemented, it would severely restrict the development zone on Multi-Unit blocks. The provision with respect to achieving the 15% canopy could servilely reduce potential yields, particularly in the case of townhouse developments. Based on our studies, this could be up to 30% reduction in yield.

As for our comment in relation to Single Dwelling Housing Development Code, there must be provision for allowing deep soil zone over basement structures and on podium and roof areas where the planting is contained within structured planter beds capable of supporting the growth of shrubs and small trees.

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

4. Element 4: Site design; Item 4.3 Site open space – RZ3, RZ4, RZ5 and commercial zones

ITEM 8 ***Proposed Substitute:***

Substitute

R39C This rule applies to RZ3, RZ4 and RZ5. Existing and new trees on the block are to provide at least 15% canopy cover of the block at maturity. Trees are to be planted in deep soil zones in *communal areas*. Note: for the purposes of this rule deep soil zones are areas of natural or structured soil medium with a minimum unobstructed depth of 1.2m, minimum surface area of 64m^2 and minimum volume of 85m^3.	C39C Planting area provided in the development achieves the following: c) planting in deep soil zones, including minimum dimensions for deep soil zones, to support healthy tree growth, and provide adequate room for trees d) planting of trees with appropriate species and with a semi-advanced stock and minimum heights at maturity e) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas f) in RZ5 only, if the minimum required planting area or canopy trees cannot be provided on site, an equivalent area should be achieved through planting on structures.

COMMENT

The minimum surface area of 64m2 and minimum volume of 85m3 in one location could excessive on smaller blocks, particularly if required to be in the one single planted area. This would be better stated if the minimum area and volume could be split over the block

1.1.2 Variation to the Definitions

5. Definitions, Part 13.1 Definitions, Part B Definitions of terms

ITEM 9 ***Proposed Substitute:***

Substitute

Planting area means an area of land within a *block* that is available for landscape planting and that is not covered by *buildings*, *structures*, vehicle parking and manoeuvring areas or any other form of impermeable element that impacts permeability of the ground surface (i.e. terraces, pergolas, patios, decks or pools).

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

COMMENT

The planting area should not exclude terraces, pergolas, patios and decks if they have a permeable ground surface. This should be made clear to avoid confusion in the assessment stage of development applications.

Also planting area should not be read in conjunction with or interpreted as forming part of the requirement of Canopy cover. Ie Canopy cover should and must in some cases overlap buildings, roads and parking areas. This would be desirable in providing shade in summer and reduce thermal heat sink effect.

ITEM 10 *Proposed Substitute:*

Substitute

Site coverage means the proportion of actual *site* covered by *buildings*, including roofed terraces, pergolas, patios, decks and balconies but excluding any part of awnings, eaves and the like.

COMMENT

By including roofed terraces, pergolas, patios, decks and balconies in site cove and jeopardizes good design outcomes and amenity for residences. It adds unreasonable constraint of building, particularly single storey housing. It potentially will have the effect of minimizing or removing all those elements from building design. We would strongly suggest and advocate that some of these areas should be excluded from site cover calculations. This could be, say 50% of the minimum required POS area. This measure would promote and allow these elements while controlling the extent of the element to be excluded from site cover calculations.

I trust the comments will be taken into consideration in finalising the draft variation. If you wish to contact me and/or discuss our submission do not hesitate to contact me.

Yours Faithfully
Oztal Architects Pty Ltd

[redacted]
Director

Directors
Dominic Maiuto Registration No: ACT 706
Nick Pelle Registration No: ACT 923 NSW 5628
Frank Parisi

CANBERRA
First Floor, Dickson Square
Dickson Shops ACT 2602
Phone: **(02)6 2573488**

Mailing address
GPO Box 2170
Canberra City 2601

SYDNEY
Suite 2, 245 Pacific Hwy
North Sydney NSW 2060
Phone: **(02)6 2573488**

Oztal Architects P/L ACN 008530541

Email: oztal@oztal.com.au

From: [redacted]
To: Terrplan
Subject: Submission on Draft Territory Plan Variation 369 - Living Infrastructure in Residential Zones
Date: Friday, 28 February 2020 11:13:13 PM

Dear Territory Plan team,

Thank you for the opportunity to provide a submission on this Draft Territory Plan Variation.

I am very concerned about the low level of mandatory tree canopy cover and surface permeability provided for urban development by this Draft Territory Plan Variation.

It is vital that the Territory Plan requirements are consistent with the Government's own *Canberra's Living Infrastructure Plan* of September 2019, which sets a benchmark of 30 per cent tree canopy cover or equivalent and 30 per cent surface permeability in urban areas.

I was horrified to read through the variation and see a figure of only 15 per cent set out for canopy cover in R38C, which moreover appears to refer only to existing residential development. The requirements for planting area, to ensure surface permeability, also appear seriously inadequate for existing residential development.

It is not clear to me from this document what is proposed for new residential development and what changes to the Territory Plan the Government is proposing to meet its commitment to achieve 30 per cent tree canopy cover or equivalent or 30 per cent surface permeability in all urban areas, not just existing residential areas but new residential developments and all other urban areas as well.

With climate change and recent record hot weather, it would be the height of irresponsibility to reduce the level of tree cover we have now in our existing suburbs, and even more so to allow new residential or other development without adequate provision for climate-moderating tree canopy and surface planting. Already, research shows that Canberra's newer suburbs are significantly hotter than older, leafier suburbs, necessitating expensive and wasteful use of electricity or other fuel for temperature control, instead of the natural climate moderation provided by trees and greenery. When much needed rain arrives, larger percentages of hard surfacing (built area, concrete, paving etc) in the newer suburbs lead to poor water retention and greater run-off, exacerbating erosion, flash flooding and pollution of our waterways.

With the unprecendented loss of forest and grassland throughout eastern Australia in this summer's bushfires, it is more critical than every before that we protect the trees and green spaces that we already have, and commit to replanting and to planting even more. We need these trees not only for our own quality of life, but to keep our country and our planet safe and habitable.

We need to ensure the 30 per cent tree canopy cover and 30 per cent surface permeability benchmarks are legislated not just for us, but for other creatures as well. Canberra's urban trees and green spaces have always supported surprisingly rich and diverse wildlife, and in the current drought and following the bushfires, it seems that new and uncommon species are finding refuge here as well. To give just one example, Superb Parrots, which are vulnerable in New South Wales, were once virtually unknown in the ACT, but are now increasingly common where I live in Hughes, and can be seen feeding young in and around the suburb. We need to keep and expand our tree canopy and to keep green, leafy spaces for birds, insects and small animals to make their homes. Many species already rely on our urban green spaces to survive and more are likely to do so as they lose their former habitats to land clearing and climate change.

I look forward to hearing more about the Government's changes to legislation and regulatory frameworks to support its commitments to our living infrastructure.

Yours sincerely,

[redacted]
Hughes ACT 2605
[redacted]

From: [redacted]
To: Terrplan
Subject: Draft Variation 360
Date: Monday, 2 March 2020 2:42:57 PM

Thanks you for the opportunity to comment on this matter.
We support the proposed variation.
The variation needs to be read in conjunction with Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045.

DV369 will assist in working towards achieving these targets for urban areas by making changes related to site coverage and planting area requirements on private land in all residential zones (RZ1 to RZ5).

We wonder what modelling has been done on what 30% tree cover means in practice. Is it possible to achieve a 30% tree cover in a suburb where individual blocks are only required to achieve a 15% tree cover?

A significant proportion of the urban land area is given over to roads which are impermeable and hold no trees. (We were unable to find an estimate for the proportion of urban land area that is roads.) Clearly planting elsewhere needs to make up for the absence of trees on roads, as well as on residential areas developed earlier with less than the 15% prescribed by this variation.

It seems to us that a much aggressive planting policy is required if Canberra is to have any hope of achieving the 30% target. With this in mind, we suggest that the 15% figure used in the draft variation needs to be increased.

Reliance on criteria

The draft variation is far to reliant on criteria rather than mandatory rules. We have read many development applications and consistently notice that vaguely worded criteria are used consistently by applicant developers to avoid meeting the relevant rule.

The rules for permeable surface, tree cover and private open space should be made **mandatory** rules.

Maintenance

There is nothing in the draft variation concerning maintenance and replacement of trees. It is all very well to plant appropriate trees at the time of development, but unless these trees are watered and maintained, the desired canopy cover will not be achieved. What happens if a tree does not thrive or dies or is killed.
We suggest that this draft variation needs to impose an obligation on the subsequent owner of the building to look after the plantings and replace if necessary.

Existing Vegetation

To have any hope of achieving the Living Infrastructure Plan's 30% target we need much stronger measures to reduce the number of existing trees being removed .

- All efforts must be made to avoid removing any established trees for construction purposes. Where it is proposed to remove a tree, the proponent be required to justify that removal.
- Any existing trees that are removed to allow building construction must be replaced with a tree of similar canopy cover.
- If the percentage canopy cover before construction exceeds 15% then the proposal must achieve a canopy cover at least equal to the pre-existing canopy

cover.

[redacted]
Mobile: [redacted]
Email: [redacted]

Australian Institute of Architects

2A Mugga Way
Red Hill ACT 2603
PO Box 3373 Manuka 2603
T +612 6208 2100
act@architecture.com.au
architecture.com.au

3 March 2020

Territory Plan Section
Environment, Planning and Sustainable Development Directorate
terrplan@act.gov.au

Dear Sir/Madam

Draft Variation 369 Living Infrastructure in Residential Zones

The ACT Chapter of the Australian Institute of Architects, (The Chapter) appreciates the opportunity to comment on the Draft Variation 369 Living Infrastructure in Residential Zones.

We are in support of initiatives which increase tree canopy in our suburbs not only to provide shade to residential gardens but also to shade suburban streets in summer, maintain and increase the area of open space required around dwellings for soft landscaping for all size blocks, provide adequate space for soft landscaping in all new suburbs, and increase surface permeability which together will ensure our city is better positioned for the future in times of challenging climate conditions.

We note that the Government released *Canberra's Living Infrastructure Plan: Cooling the City* in 2019 which sets as a key goal of this plan to adopt and progress towards targets by 2045 that provide Canberra's urban footprint with the equivalent benefits of a 30% tree canopy cover and 30% permeable surfaces.

Our comments focus around the following areas:

1. Tree canopy cover for development in residential zones
2. Expanding site coverage requirements for development in residential zones
3. Strengthening planting area and canopy cover requirements for development in residential zones.

The Draft Variation does not go far enough as a 15% tree canopy cover is considered too low for effective impact on the creation of tree canopy in residential areas. The variation only includes a 15% canopy cover requirement for residential multi-unit infill (RZ1 to RZ5).

Sites for trees need to include deep soil for root growth and expansion over decades. Space is also needed to ensure the canopy may spread to a mature shape. All allocated tree planting space should be calculated around mature trees in the order of 6 to 8 metres in diameter. This creates a very restrictive development of residential sites for developers who create most of the building stock. Fifteen per cent of 400m2 block with 50% plot ratio would produce some 60m2 or space for 2 trees provided planning of the home allowed for this free area required for a mature tree. Thirty per cent would dramatically improve the free space allowance for mature trees.

However, tree species and selection and care is not ensured with ownership of residential sites until a tree reaches the status of regulated tree. Regulating the requirement for tree planting space on

residential sites creates the potential for long term canopy but does not guarantee the creation of more canopy.

The draft variation does not cover the streets and public areas of new suburbs. The variation needs to be broadened to include the use and creation of verge, easement and public urban space to create a continuous and managed canopy. We need to ensure that newer suburbs have room for large street trees such as those in place in older suburbs.

The draft variation does not include mixed use zone areas and this needs to be considered.

Our recommendations include:

- Consider incentives for homeowners caring for regulated trees and planting and creating increased tree canopy.
- Regulate the amount of hard impervious heat sink surfaces in residential development.
- Maintain opportunity for biodiversity in planting.
- Provide effective open space around or between dwelling elements to ensure space for effective tree canopy.
- Reduce non pervious onsite parking.
- Require medium density projects to return space to the public realm for community gardens.

We would be pleased to discuss the draft variation further. Please contact me on [redacted]

Yours sincerely

[redacted]

ACT Executive Director

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Sunday, 15 March 2020 6:36:06 PM

I am writing to provide input to DV369 Living Infrastructure in Residential Zones.

My specific concern with current regulations is that the virtual razing of all existing vegetation, including established trees from development sites, is permitted unfettered, with the exception of so-called “protected” trees. It really riles me that developers will always take the expedient approach, and what’s more, they’re allowed to get away with it, most often to the detriment of our community. You only need to look at pretty well any building site in Canberra to see that all vegetation has been razed from the site. This applies equally to small residential redevelopments such as knock-down, rebuilds with a greater number of residences, as well as the larger developments such as the plethora of apartment building currently being constructed across the city. I appreciate that development proposals will usually include landscaping that may see the planting of a number of saplings but it is many years before the benefits, if any, of these plantings can be realised.

I would like to see the regulations amended to put the onus on developers to make a case for the removal of every single established tree on a site, not just those trees that are currently protected. The criteria for such should give precedence to sound environmental considerations rather than development expediency.

[redacted]
[redacted], Kaleen ACT 2617

From: [redacted]
To: Terrplan
Subject: Draft Variation to Territory Plan No 369
Date: Monday, 30 March 2020 9:53:58 AM
Attachments: image005.jpg
image006.jpg

Territory Planning Section
Environment, Planning and Sustainable Development Directorate

28th March 2020

Draft Variation to the Territory Plan No. 369

The ACT Monaro Riverina Branch of the Australian Garden History Society has welcomed the Living Infrastructure Plan which aims to achieve 30% tree canopy cover and 30% permeable surfaces in urban areas. This is a very positive step in continuing to maintain and enhance the urban forest for which Canberra has become internationally renowned.

It appears however that there is some discrepancy between the ideals suggested by the Living Infrastructure Plan and the proposed rules of draft variation No 369. Both rules 38C and 39C for residential zones 1 – 5 state *'Existing and new trees on the block are to provide at least 15% canopy cover to the block at maturity.'*

If the aim of the Living Infrastructure Plan is to achieve the 30% canopy cover, these rules need to be modified in order to reflect that higher canopy goal. It would appear that multi-unit developments would be exempt from providing acceptable green infrastructure. Already in the city we have seen the loss of green space and trees as the older more spaced public housing estates have been replaced by much higher density buildings without areas of green open space.

Canberra's earlier housing estates were founded on the Garden City principle of creating healthy working and living environments for urban residents. Changes in desired building density and climate concerns have dictated re-thinking in urban planning but hopefully will not lose the basic tenet of a healthy environment for urban workers. This is reflected in the Introduction of Canberra's Living Infrastructure Information Paper.

'*As the city becomes more densely populated and the impacts of a warming climate become more apparent, the environmental services and highly valued amenity provided by living infrastructure will play a more essential role in maintaining our city's liveability.*'

We urge that the above rules be amended so that the target of 30% canopy cover is consistent across all residential zones.

[redacted]
Chair
ACT Monaro Riverina Branch
Australian Garden History Society
[redacted]

Australian Institute of Landscape Architects

To
Environment, Planning and Sustainable Development Directorate
ACT Government
terrplan@act.gov.au

Dear Sir/ Madam

Submission regarding Draft Variation 369 – Living Infrastructure in Residential Zones

Firstly AILA wishes to congratulate the ACT Government on this important initiative as you are providing an exemplar response to the challenges of climate change, urban development and liveability of cities. Your approach is aligned with the vision and strategies of AILA and if there is anything more we can do to support this initiative please don't hesitate to contact us through our Chapter President.

We have provided technical response below for your detailed consideration and thank you again for the opportunity to comment.

Our national capital's landscapes, the legacy from over 100 years of endeavour, is at real risk from the impacts of climate change. The loss of landscape quality will negatively affect our sense of belonging and physical health, plus the ACT's economic prosperity, particularly our attraction as a tourist and education destination. AILA ACT strongly endorses measures to actively steward our urban and peri-urban environments to conserve the 'green and leafy' bush capital characteristics.

Consequently, AILA ACT supports the policy to increase living infrastructure in Canberra, and the target of 30% canopy cover and permeable surfaces across all land uses irrespective of tenure is a critical first step, in transforming the built environment as we transition to a more intensely developed small city that is fit for purpose and resilient.

Together these targets are essential to combat urban heat, increase biodiversity and help mitigate the severity of droughts and flash flooding. Achieving these targets will be difficult and amendment to instruments like the Territory Plan are only one of the necessary actions. Attitudes towards trees on private land vary greatly and increasing education and awareness about the benefits of vegetation, particularly trees, is an essential adjunct to regulation, along with enforcement of penalties for tree damaging activities (being considered under the Tree Protection Act Review). AILA ACT recommend the promotion of the urban forest concept, making it clear across the community that everyone has to play their part and that care of trees is expected behaviour by all citizens.

Along with DV 369 changes to private land, AILA ACT expect that there will be commensurate changes to the DA requirements for landscape plans, to demonstrate that the design and

materials choices will achieve at least 30% canopy cover (at 20 years growth) and 30% permeability. Most importantly, AILA ACT expect the development codes, such as for estate development, will be changed to ensure the targets are met or exceeded on all public land. To this we note, research on this subject indicates continuous networks of green infrastructure (greenbelts, river/creek corridors, well treed streets) provide the most effective cooling effect and highest benefit from the neighbourhood to city scale.

It is likely that not all land everywhere in Canberra can achieve the 30% tree canopy and or permeable surface targets, this is understood to be an average measured over a given area. Where this target is not possible, solutions exceeding 30% can be placed adjacent to compensate. For example on a playing field the majority of the area will be "treeless", however the surrounding spaces could have much greater percentage canopy cover. Streets and road reserves provide opportunity in creating continuous networks of living infrastructure and as potential corridors with canopy cover well in excess of 30% if designed and managed appropriately.

Similarly, in high density urban and industrial development the majority of land may be taken by building footprint, however the design and treatment of roofs, walls, podiums and surrounding streetscapes could and should compensate (for both targets).

AILA ACT suggest it is important to allow for innovative and creative designs, and the rules and criteria should avoid prescribing solutions, such as disallowing decking (different forms of decking are essential on roof tops to allow percolation and capture of rain water). However, AILA ACT suggest it is likely that developments choosing the criteria pathway will be more expensive to design, construct and maintain. AILA ACT suggest that evaluation of this regulatory change be undertaken, to see if and where it is being effective, so that incremental improvements can be made if required. Urban heat is a known problem in parts of Canberra already with health and social consequences. As heatwaves become more frequent and extreme, assessments such as microclimate monitoring need to become a mainstream part of harm and risk reduction by the city.

In regard to urban densification and the changing nature of older inner suburbs, there are currently well established on block living infrastructure assets. The retention of existing living infrastructure must be more appropriately valued when considering redevelopment within existing suburbs to retain the valued Garden City character.

AILA ACT suggest incentive for increasing living infrastructure coverage are an effective tool for increasing coverage. Internationally there are proven examples of increased on-block (private lease land) living infrastructure through incentives. Incentives utilised around the world include additional building height (Singapore), stormwater fee discounts (Portland, Reading, Toledo, Orem, Charlotte), Density bonuses, increased floor areas (Portland), faster approvals (Chicago), financial incentives (New York, Hong Kong, San Francisco, Tokyo, Basel, Stuttgart, Toronto, Sydney, Brisbane). If explored incentives must be well defined in scope.

Australian Institute of Landscape Architects

In summary, AILA ACT make the following key recommendations:

1. **DV 369 rules should apply at all times other than in exceptional circumstances, only then should criteria be considered rather than rules.**

2. **AILA ACT request further workshops and consultation with EPSDD to better refine rules, definitions and criteria.**

   As currently written, AILA ACT consider the DV369 criteria are weak and would be ineffectual in achieving the key qualities of the two targets. The qualities to be achieved by other types of vegetation, equivalent to what a 30% canopy cover would provide are:
   i. microclimate amelioration (shade, shelter, cooling, stormwater slowing and glare reduction)
   ii. habitat for wildlife (animals and insects)
   iii. amenity (beauty, seasonal change, sense of place, wayfinding, views, vistas).

   The intent of the 30% permeable surfaces target is for rainfall to soak into the ground. Types of surface solutions for equivalence, are to:
   i. replenish ground water (for use by vegetation)
   ii. avoid runoff (stormwater and flash flooding)
   iii. reduce expanses of materials that increase urban heat (e.g. high thermal mass).

3. **Landscape designs submitted to EPSDD for approval that demonstrate the application of DV369 rules must be completed by a suitably qualified person.**
   A suitably qualified person should be clearly defined as an AILA Registered Landscape Architect.

4. **Assessment of applications to EPSDD that demonstrate the application of DV369 rules must be completed by, or consulted with, a suitably qualified person.**
   A list of suitably qualified persons to include an AILA Registered Landscape Architect.

In conclusion, AILA ACT commend this DV369 and are keen to see it improved to enable the effective and widespread application of living infrastructure. Therefore, our members would be pleased to contribute to working groups or discussions to advance the development of this Variation, particularly revision of the criteria. Please contact me on 0423 329 023.

Yours sincerely

[redacted]
AILA ACT President
April 2020

tait network
SHAPING BETTER CITIES

DV369 Living Infrastructure in Residential Zones
Tait Network response to public circulation

ACT Government
Environment, Planning and Sustainable Development

Schedule

Planning and Development Act 2007

Draft
Variation to the
Territory Plan
No 369

Living Infrastructure in Residential Zones

December 2019

Draft variation for public circulation prepared
under s60 of the *Planning and Development Act 2007*

Authorised by the ACT Parliamentary Counsel—also accessible at www.legislation.act.gov.au

SUITE 1, LEVEL 4
10 HOBART PLACE
GPO BOX 808
CANBERRA ACT 2601
02 6253 0222
hello@taitnetwork.com
www.taitnetwork.com

Report Information

Reference	DV369 Response to public circulation
Prepared by	Tait Network

Revision History

Revision Number	Revision Date	Details	Authorised
A	03.04.2020	Consultation Period_Comments	[redacted]

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1.0 Tait Network Response

Tait Network prepared the investigative study *Planning and Design for Living Infrastructure as part of Residential Intensification in a Changing Climate* (Living Infrastructure Report) for the Environment Planning and Sustainable Development Directorate (EPDSS) in 2018.

Tait Network considers that the intent of the Living Infrastructure Report has been misinterpreted through DV369. The misrepresentation of recommendations results in restrictive, unintended consequences for the built form.

Tait Network was commissioned to complete background research to map the current canopy coverage and permeability across six study areas. The analysis of this work led to a series of recommendations on how to improve canopy coverage and increase permeable surfaces at the suburb, street and block scale. Whilst we acknowledge the strong environmental intentions of DV369, the outcomes as currently written have misaligned the balanced enquiry presented in the Living Infrastructure Report and will heavily impact opportunities to provide quality housing outcomes, with notable impacts on affordable housing aspirations.

We feel strongly that DV369 undoes the intention of the Living Infrastructure Report and misapplies the concepts suggested. The following sections identify key issues in the application of DV369.

1.1 Site Coverage Control

The application of the Site Coverage Control recommended in the Living Infrastructure Report has been misinterpreted through DV369.

The report recommended a Site Coverage Control to replace Plot Ratio and Private Open Space, Planting Area was proposed as a % of block and not as a % of Private Open Space (see excerpt below).

SINGLE DWELLING HOUSING DEVELOPMENT CODE CONTROLS

RULE 38 LARGE BLOCKS

Site Coverage: maximum 40% of block area

Planting Area: minimum 30% of block area

The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation

Trees on block: minimum of two canopy trees with mature height of greater than or equal to five metres. Trees to be planted within deep soil zones.

CRITERIA 38

Use of Rating Tool to achieve minimum standard score (to be determined through design of rating tool system)

RULE 39 MEDIUM BLOCKS

Site Coverage: maximum 50% of block area

Planting Area: minimum 25% of block area

The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation

Trees on block: minimum of two canopy trees with mature height of greater than or equal to five metres. Trees to be planted within deep soil zones.

CRITERIA 39

Use of Rating Tool to achieve minimum standard score (to be determined through design of rating tool system)

RULE 40 COMPACT BLOCKS

Site Coverage for rear loading blocks: maximum 70% of block area

Site Coverage for front loading blocks: maximum 50% of block area

Planting Area: minimum 20% of block area

The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation

Trees on block: minimum of one canopy tree with mature height of greater than or equal to five metres. Trees to be planted within deep soil zones.

CRITERIA 40

Use of Rating Tool to achieve minimum standard score (to be determined through design of rating tool system)

MULTI UNIT HOUSING DEVELOPMENT CODE CONTROLS

RULE 38 RZ1 AND RZ2

Site Coverage: maximum 40% of block area

Planting Area: minimum 35% of block area

The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation. All trees to be planted within deep soil zones.

CRITERIA 38

Use of Rating Tool to achieve minimum standard score (to be determined through design of rating tool system)

RULE 39 RZ3, RZ4, RZ5 AND COMMERCIAL ZONE

Site Coverage: maximum 45% of block area

Planting Area: minimum 25% of block area

The minimum dimension of any area included in the planting area calculation is 2.5m to support larger vegetation. All trees to be planted within deep soil zones.

CRITERIA 39

Use of Rating Tool to achieve minimum standard score (to be determined through design of rating tool system)

What did the Living Infrastructure Report Propose:

Plot Ratio Revision

The current Territory Plan utilises different controlling mechanisms to restrict housing footprint, such as Private Open Space and Plot Ratio. The affective variable differs between dwelling type and block size. The following Site Cover mechanism attempts to simplify and streamline, while strengthening, the approach so that at each instance it is the Site Coverage control that mitigates the building footprint. Initial modeling has shown plot ratio to be made irrelevant with the creation of a strong Site Coverage control, therefore, consider removing plot ratio in the Single Dwelling Housing Code.

SDHDC Site Coverage and Planting Area Controls

To streamline the controlling entity on building footprint and to enhance space available to planting for developments under the Single Dwelling Housing Development Code replace section 5.2 Private Open Space with Site Coverage and Planting Area controls as presented in Rule 38, 39, 40, shown on page 43.

MUHDC Site Coverage and Planting Area Controls

To streamline the controlling entity on building footprint and to enhance space available to planting for developments under the Multi Unit Housing Development Code replace section 4.2 and 4.3 Site Open Space with Living Infrastructure Controls presented in newly proposed Rule 38, 39, shown on page 43.

- Relocate content pertaining to amenity, current content R38 a), b) and R39 a), b) to Element 6 *Amenity*

What are the implications:

Modeling of DV369 against compact block sizes identifies that the conflict between Site Coverage and Private Open Space results in a reduced possible building footprint that is more restrictive that what was modeled in the Living Infrastructure Report.

While the proposed Site Coverage control did reduce the possible building footprint to ensure more opportunity for planting area and permeable surface, the proposed percentages were balanced to ensure sufficient space to deliver a quality dwelling.

The consequent available building footprint through DV369 is considered insufficient to deliver a quality built outcome. As a result compact blocks will not be able to meet the conditions of the Rule, negating efforts to provide affordable housing solutions through compliant development.

Additional modeling of DV369 suggests that for larger blocks to meet the Rule, dwellings would be required to build in 2 storey configurations, impacting accessibility standards and universal design intent, again increasing the cost of delivery and forcing Merit Track compliance.

The Site Coverage control, as written in the Living Infrastructure Report, includes Planting Area and Tree Planting requirements together as a rule for each block size, to remain consistent with the typical presentation of controls. This is to simplify interpretation of the Territory Plan.

1.2 Criteria

The Living Infrastructure Report found that inadequate Criteria conditions were enabling Development Applications through Merit Track that did not meet the intent of the Rule, and in so doing was diluting efforts in the Territory Plan to improve living infrastructure outcomes.

Following background research the Living Infrastructure report proposed to develop a robust Rating Tool system in place of Criteria, to strengthen the power of the Rule as it is intended, and to ensure that where a Merit Track is necessary, Living Infrastructure outcomes are ensured to a greater degree.

What did the Living Infrastructure Report Propose:

Key Finding

The effectiveness of key rules in the Single Dwelling Housing Development Code and the Multi Unit Housing Development Code are currently undermined by associated criteria that can result in compliant development that does not meet the intent or spirit of the rule.

Rating Tool

Introduce a rating tool to replace and strengthen criteria pertaining to Site Coverage rules across the Single Dwelling Housing Development Code and Multi Unit Housing Development Code. The rating tool is to be developed as an exercise of further study. It is anticipated the rating tool be based on examples explored in the literature review process. The rating tool is to be designed to take into consideration pre-existing conditions on block.

Elements to be taken into consideration include, but are not confined to:

- Planting area
- Site coverage
- Water infiltration
- Landscape quality
- Deep root planting area
- Tree canopy
- Green roofs
- Green walls

In the event the development of the rating tool is delayed a strengthened criteria should be implemented in the short term to avoid loop holes that are currently diminishing living infrastructure outcomes. Potential criteria to consider may include:

- Ensures all non-essential hardstand areas are built with permeable materials that allow water filtration that facilitates on-site infiltration of stormwater run-off
- Provide vegetation as the desired permeable surface to support cooling microclimates and improve soil health
- Provide deep soil zones suitable for planting and vegetation growth of deep rooted plants, particularly canopy trees
- Contribute to the dwellings energy efficiency by ameliorating extreme weather, by providing shade in summer, especially to west-facing windows, and admitting winter sunlight to living areas
- Incorporate trees, shrubs and ground covers that are local to the area and will attract local wildlife

What are the implications:

The Living Infrastructure Report recommended introducing a robust rating tool for Criteria to reduce instances of non-compliant development where the Criteria and Rule do not enforce the same outcomes. A Rating Tool would provide a rigorous and impartial method for developments to meet the requirements of the Development Application process while still ensuring quality living infrastructure outcomes.

By maintaining non-quantitative criteria the effectiveness of the Control in achieving greater canopy coverage and permeability is compromised.

1.2.1 Additional Notes

SDHDC R40 c).

While Tait Network encourages a revision of DV369 to replace the following text with a Site Coverage control a typographical error was identified in its drafting:

R40	C40
For *compact blocks*, *private open space* complies with the following: a) for *front loading blocks*, a minimum area is not less than 50% of the block area b) for *rear loading blocks*, a minimum area is not less than 30% of the block area c) at least 30% of the *block* area specified in a) is *planting area* with a minimum dimension of 2.5m. **Note:** Private open space includes principal private open space, as required elsewhere in this element.	*Private open space* provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving the following: a) limits *site coverage* of buildings and vehicle parking and manoeuvring areas b) facilitates on-site infiltration of stormwater run-off c) provides outdoor areas that are readily accessible by residents for a range of uses and activities d) provides space for service functions such as clothes drying and domestic storage e) provides *planting areas* that ensure: i) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas ii) enhance living infrastructure through water-sensitive urban design, providing areas for deep soil zones for ground water recharge, canopy trees and vegetation.

Point c). should read:

R40: For compact blocks, private open space complies with the following:
a).for front loading blocks, a minimum area is not less than 50% of the block area
b). for rear loading blocks, a minimum area is not less than 30% of the block area
c) at least 30% of the minimum area specified in a) and b) is planting area with a minimum dimension of 2.5m.

MUHDC 38C

R38C	
Existing and new trees on the block are to provide at least 15% canopy cover to the block at maturity. Trees are to be planted in *deep soil zones*.	This is a mandatory rule. There is no applicable criterion.
There is no applicable rule.	C38D *Planting area* provided in the development achieves the following: a) Planting of suitably sized plants in *deep soil zones*, including adequate dimensions for *deep soil zones* to support healthy *canopy tree* growth, and provide adequate room for *canopy trees* b) *deep soil zones* should allow subsoil drainage to support groundwater infiltration c) planting of *canopy trees* with semi-advanced stock and suitable heights at maturity d) landscaping to provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas.

It is unclear why R38C as a mandatory rule, nor why it uses the mechanism of canopy cover, which is a departure from the rest of the document that refers to tree planting.

The reference to 15% canopy cover target is not adopted from the Living Infrastructure Report and is unclear from where this figure is derived.

Is there a contradiction with the tree planting requirements as given in R38E, and how does it add to the intended outcome?

R38E	C38E
Development provides a minimum level of tree planting, with associated planting requirements as described in table A7a, consistent with the following: a) for *large blocks* less than or equal to 800m², at least one small *canopy tree* and one medium *canopy tree* b) for *large blocks* more than 800m², at least: i) one medium *canopy tree* and one large *canopy tree*, and ii) one additional large *canopy tree* or two additional medium *canopy trees* for each additional 800m² block area. Note: Existing *canopy trees* being retained as part of development may be considered to meet these requirements.	Tree planting in the development ensures: a) planting or retention of suitably sized *canopy trees* in *deep soil zones*, including adequate dimensions for *deep soil zones* to support healthy tree growth, and provide adequate room for *canopy trees* b) planting *canopy trees* of semi-advanced stock and reasonable heights at maturity.

1.3 Future Amendments

The Living Infrastructure Report identified that the biggest impact on increasing canopy cover and the extent of permeable surfaces is at the street scape and suburb scale, where statutory amendments to these requirements translate to a far greater scale of change. We look forward to these additional recommendations being adopted to the Estate Development Phase and the Municipal Infrastructure Standards.

ACT for Bees

Submission on Draft Variation to Territory Plan DV369 Living Infrastructure in Residential Zones Territory Plan Section, EPSDD

Email: terrplan@act.gov.au

3rd April 2020

ACT for Bees is an organisation dedicated to raising awareness of the importance of bees and pollinators for the health of the environment and food security and has 10 recommendations on the Draft Plan.
Further information on ACT for Bees is included at Attachment 1

ACT for Bees has 10 recommendations that it would like the ACT Government to consider and incorporate where possible into this current review of the Territory Plan. It would also like the ACT Government to embed these recommendations into policy on the future management of Canberra's green spaces and gardens. These green spaces are what make Canberra such a unique city and it would be a shame to lose the biodiversity of plants and animals because of a lack of vision into the future.

Recommendation 1 That the ACT Government include shrubs and groundcovers as well as trees in its consideration of amendments to Living Infrastructure in Residential Zones to provide important food sources for bees, butterflies, birds and small mammals. Table 7a in the draft Territory plan could also include reference to other plantings and also link to the MIS25 document requiring its use for choosing plantings.

Recommendation 2
That the ACT Government ensures that developers plant at least 50% of the Living Infrastructure with pollinator friendly trees, shrubs and groundcover plants for year round flowering. Seeds and plant stock needs to be selected for climate resilience.

Recommendation 3

That the ACT Government supports the development of a gardening guide ACT and Region on planning for year round pollinator friendly plantings.

Recommendation 4

Promote Canberra as a Bee/ Pollinator Friendly City and undertake certification process.

Recommendation 5

The ACT Government ensure plantings are neonicotinoid free and implement Integrated Pest Management in the ACT.

Recommendation 6

That Yarralumla Nursery ensures, in propagating and purchasing plants to be available under the Plant Issue Scheme, that bee friendly (forage) plants with various flowering seasons are available, free of neonicotinoid pesticides and clearly labelled as such for developers and gardeners.

Recommendation 7
The ACT Government supports Community engagement, education and citizen science projects.

Recommendation 8
The ACT Government educate and support developers to use nursery stock that has no neonics and minimal pesticide residue and lead Australia to bring in labelling across nurseries in ACT.

Recommendation 9
The ACT Government allocate funds to oversee developer compliance.

Recommendation 10
The ACT Government encourage green walls and green roofs as an important part to make up for lack of land to plant for pollinators in medium and high density housing.

Summary of the Submission by ACT for Bees

> *'Pollinator populations are changing. Many pollinator populations are in decline and this decline is attributed most severely to a loss in feeding and nesting habitats, pollution, the misuse of chemicals, disease, and changes in climatic patterns are all contributing to shrinking and shifting pollinator populations.*
>
> *'Research on urban insect pollinators is changing views on the biological value and ecological importance of cities. The abundance and diversity of native bee species in urban landscapes that are absent in nearby rural lands evidence the biological value and ecological importance of cities and have implications for biodiversity conservation.* [2]

With the current review of the Territory Plan, the ACT Government has a unique opportunity to get out in front and lead Australia to legislate to ensure plantings in new developments are chosen carefully to support pollinators. The ACT government can establish a cost effective and well-designed policy which can address the need to plant to support pollinators year around and also establish positive actions that builds the resilience of our pollinator populations including bees, butterflies and birds.

In the report, *Inquiry into Nature in our City, Standing Committee on Environment and Transport and City Services February 2020*, [3] the Committee recommends that the ACT Government recommit to the concept of the City in a Landscape requiring the development of a comprehensive City in a Landscape Strategy and the implementation of a wide array of supporting policies. Seven of these recommendations directly support our submission. These include prioritizing biodiversity, pollinator planting guides for gardeners, the benefits of being a bee friendly city, the need for neonicotinoid free plantings, developer liaison and support for green walls and roofs.

There is broad support within ACT Govt for supporting pollinators. ACT MLA's from all parties and ACT senior public servants spoke at the recent *Bees, Butterflies, Birds: Maximising Biodiversity by Supporting Pollinators* event hosted by ACT for Bees and ACT Landcare. Minister Gentleman expressed the importance of pollinators in his opening address, Ms Nicole Lawder, Deputy Opposition Leader spoke of 'Pollinating future changes to protect pollinators' and Ms Caroline Le Couteur ACT Greens addressed 'Poli-nators for Pollination: Policy Shapers' and using the recent changes to planting on street verges to plant for pollinators.

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1. Refer https://e360.yale.edu/features/urban-refuge-how-cities-can-help-rebuild-declining-bee-populations Nov 2017
2. Refer https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.12840
3. https://www.parliament.act.gov.au/ data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf

Proposed Changes to Territory Plan

DV369 proposes to make changes to the Single Dwelling Housing Development Code and Multi Unit Housing Development Code of the Territory Plan, and to amend the definitions in the Territory Plan in relation to site coverage and planting area controls. ACT for Bees applauds the plan to increase the area of a block available for soft landscaping and add a new requirement that development provides a minimum level of tree planting, with associated requirements for canopy trees on compact, mid-sized and large residential blocks.

> *Inquiry into Nature in our City - RECOMMENDATION 8*
> *3.63 The Committee recommends that the ACT Government, preferably as part of the City in a Landscape Strategy, prioritize biodiversity.*[4]

We believe that the Territory plan could go further by implementing Recommendation 8 to include requirements to include understory plantings which provide adequate sources of food available for a wide range of pollinators through all seasons. This can be facilitated through small and practical changes to the draft Territory plan to mandate that specific pollinator friendly plants trees and understory plants are used by developers in new developments across the ACT.

The lack of reference in the draft plan to pollinators and wildlife is disappointing, particularly in view of recent work by the ACT government to include information on appropriate plantings for pollinators and other wildlife in *MIS 25 Edition 1 Revision 0: Plant Species for Urban Landscape Projects, Transport Canberra and City Services* in April 2019.[5]

This *MIS 25* now includes information on which trees and other plants provide nectar and pollen sources, what pollinators they support, and when these food sources are available. This information has made it much easier for developers and other landscapers to select appropriate plantings to support pollinators year round.

As part of making it a requirement for developers to plant for flowering for pollinators throughout the year, a link to the *MIS 25* should be included in the Living Infrastructure in Residential Zones plan. Table 7a in the draft Territory plan could also include reference to other plantings and also link to the *MIS25* document requiring its use for choosing pollinator friendly plantings.

While section 5.2 C38 of the draft variation does refer to 'vegetation', there is no further reference to what this means, nor are there any references to planting other than to provide tree canopy. They focus almost exclusively on tree canopy and permeable surfaces to improve human amenity, and do not appear to recognise the need to plant for wildlife biodiversity and, in particular, pollinators.

Refer 4. https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf
Ref 5. https://www.cityservices.act.gov.au/__data/assets/pdf_file/0004/1378543/MIS25-Plant-Species-for-Urban-Landscape-Projects.pdf

Recommendation 1 That the ACT Government include shrubs and groundcovers as well as trees in its consideration of amendments to Living Infrastructure in Residential Zones to provide important food sources for bees, butterflies, birds and small mammals. Table 7a in the draft Territory plan could also include reference to other plantings and also link to the MIS25 document requiring its use for choosing plantings.

Research is showing that cities can support pollinators if plantings are appropriate and this is already being successfully implemented in countries like the UK and the USA.

> *Dr Rebecca Tonietto, a biologist at the University of Michigan-Flint, is co-author of a recent essay in Conservation Biology that points to research on urban bees as evidence that humans can share high-density habitat with other species. "Surrounded by increasingly less hospitable rural and suburban landscapes," she and her colleagues write, the city "can become a refuge" for the bee species and other insects that are suffering significant declines.* [6]

Effective planting for pollinators includes different canopy layers in the landscape incorporating trees, shrubs, and different-sized perennial plants. Dense shrubs and group plantings provide protection from severe weather, from predators and from wind tunnels created in urban areas. Appropriate plants are needed by butterflies during their caterpillar stage of development. [7]

> *Beyond providing a nutritious supply of fruits, vegetables and nuts to the world's population, pollinators help maintain native plant communities, which provide a variety of other ecosystem services, such as: Carbon sequestration, Water filtration, Erosion control, Soil health, Urban heat island reduction.*[8.]

Animal pollinators help to sustain bird populations by supplying them with adult and larval insects full of nutritious proteins and fats. Pollinators also provide an essential reproductive service to the plants upon which songbirds forage, allowing those plants to produce seeds, nuts, fruits, and berries for songbirds and other wildlife.[9]

The footprint of dwellings relative to the block size in current developments in the ACT has increased, leaving less area for planting. The Draft Variation to the Living Infrastructure plan has a focus on planting for climate change but to be an effective policy, and particularly to plan for year round flowering, at least 50% of the Living Infrastructure must include pollinator friendly trees, shrubs and groundcovers. The plan must therefore include seed and plant stock selections for climate resilience for pollinators to be effective over future decades. Adapt NSW [10] has a range of tools to assist in this regard.

Refer 6 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0185809
Ref 7 https://pollinatorlink.files.wordpress.com/2016/10/pollinator-link-flyer.pdf
Ref 8 https://landscapeforlife.o{Citation}rg/pollinators/
Ref 9 https://www.pollinator.org/pollinator.org/assets/generalFiles/NAPPC-Song-Birds-Fact-Sheet_170624_114950.pdf
Ref 10 https://climatechange.environment.nsw.gov.au/Adapting-to-climate-change/Green-Cover

Assessing designs for sustainability can be a complex process and there are organisations that support this.

In addition, SITES [11] is used by landscape architects, designers, engineers, planners, ecologists, architects, developers, policy-makers and others to align land development and management with innovative sustainable design. SITES offers a comprehensive rating system designed to distinguish sustainable landscapes, measure their performance and elevate their value. SITES certification is for development projects located on sites with or without buildings—ranging from national parks to corporate campuses, streetscapes to homes, and more.

Recommendation 2
That the ACT Government ensure that developers plant at least 50% of the Living Infrastructure with pollinator friendly trees, shrubs and groundcover plants for year round flowering. Seeds and plant stock needs to be selected for climate resilience.

Guide for Developers, Landscapers and Gardeners

Effective support of pollinators requires a wide range of plantings including small shrubs. The shrub plantings in median strips and on the tram way are very effective. A flock of finches was recently seen in the tramway plantings near Downer. The ACT Government could, as suggested in the Inquiry into Nature in our City, provide practical advice to support planting for pollinators.

> *Inquiry into Nature in our City - RECOMMENDATION 51*
> *7.92 The Committee recommends that the ACT Government develop a guide for gardeners to support the bee friendly city, in particular, looking at pollination corridors.* [12]

There are other relevant international and national examples.

> See for example, the Million Pollinator Garden Challenge [13] launched in 2015, the Pollinator Partnership in Canada, and the Pollinator Gardening movement in the UK.[14]

Ref 11 http://www.sustainablesites.org/
http://www.sustainablesites.org/sites/default/files/legal/SITES_OnePager_FINAL%5B2%5D.pdf
Ref 12 https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf
Ref 13 http://millionpollinatorgardens.org/about/
Ref 14 https://e360.yale.edu/features/urban-refuge-how-cities-can-help-rebuild-declining-bee-populations

Urban gardens can contribute to climate mitigation and adaptation through a range of provisioning, regulating and cultural ecosystem services as multifunctional nature-based solutions in a city. They also provide important habitat for wildlife and genetic diversity.[15]

The Brisbane based Pollinator Link® [16] project is a not-for-profit social enterprise creating wildlife corridors for urban spaces. The aim of the project is to create innovative and sustainable urban wildlife corridors within an environment of rapidly growing population, busy lifestyles and a culture of "quick fix". It engages the wider community in bringing birds, butterflies and bees to their gardens thus creating a network of wildlife corridors.[17] It has excellent guides for planting resources and links to a Qld app GroNATIVE [18] encourages the use and enjoyment of native plants in our urban and rural areas while helping to build and support our biodiversity. It could easily be adapted to the ACT and NSW regions.

Powerful pollinators. Encouraging insect pollinators in farm landscapes. NSW central slopes, Murray-Riverina and North East Victoria is a reference document created for farmers and could be an excellent cross referencing resource for the ACT Government and developers to support pollinator friendly planting. It has a level of detail greater than that in the ACT MIS 25 planting guide. It was recently created by the Wheen Bee Foundation and Sustainable Farms ANU and as yet is not on the web.

Recommendation 3

That the ACT Government support the development of a gardening guide ACT and Region on planning for year round pollinators friendly plantings.

Ref 15 https://link.springer.com/chapter/10.1007/978-3-319-56091-5_14
Ref 16 https://pollinatorlink.files.wordpress.com/2016/10/pollinator-link-flyer.pdf
Ref 17 https://pollinatorlink.org/about/
Ref 18 https://www.natura-pacific.com/gronative-app/

A Bee/ Pollinator Friendly City

The creation of a Bee Friendly city is the aim of ACT for Bees. It is also consistent with the recommendation of the *Inquiry into Nature in our City*.

Inquiry into Nature in our City - RECOMMENDATION 50

7.91 The Committee recommends that the ACT Government commit to being a bee friendly city.[19]

Recommendation 4

Promote Canberra as a Bee/ Pollinator Friendly City and undertake certification process.

Another critical element to the development of a Bee Friendly City is the phasing out of neonicotinoid pesticides, consistent with the recommendations of the *Inquiry into Nature in our City*.

Inquiry into Nature in our City - RECOMMENDATION 52

7.93 The Committee recommends that the ACT Government phase out the use of harmful pesticides and chemicals distributed or used within the ACT by government and non-government bodies as well as members of the public.[22]

"Neonicotinoid insecticides are now the most widely used class of insecticides in the world. While they were initially introduced as less harmful than older insecticides, research has now shown their devastating ecological impacts. Neonicotinoids are very toxic to pollinators, beneficial insects, and aquatic invertebrates. Their widespread use, combined with their water solubility, means that they are now often found in water and soil samples throughout the country." [23]

The ACT Government must be congratulated on reducing the use of neonicotinoid (neonics) insecticides in the landscape. The issue still remains whether the plants supplied to the Government have been treated with these systemic, persistent insecticides. The effects on bees have been well documented. It is entirely possible for plants, particularly natives to be neonic free. Home Depot in the U.S. committed in 2015 to taking neonics out of its plants and 98% of their plants are now neonic free. Any plants treated with neonics are labelled. [24] Other organisations in the US have also committed to phasing out neonicotinoid pesticides.[1]

Ref 19 https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf
Ref 20 https://actforbees.org/what-we-are-doing/
Ref 21 https://www.beecityusa.org/
Ref 22 https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf
Ref 23 https://www.xerces.org/pesticides/understanding-neonicotinoids
Ref 24 https://www.snopes.com/fact-check/home-depot-bee-pesticides/.

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1 https://www.centerforfoodsafety.org/press-releases/3843/lowes-agrees-to-phase-out-bee-toxic-neonicotinoid-insecticides

Boulder, Colorado has adopted a detailed resolution [25] based on Xerces recommendations that details the research that justifies protecting and the actions needed to protect pollinators by restricting the use of neonics.
The Xerces Society for Invertebrate Conservation [26] has reported on the toxic effects of neonics on invertebrates in the natural environment and has many supporting resources. The report, *Xerces Model Policy to Protect Pollinators from Harmful Pesticide Exposures*, identifies these critical issues:

- *Creating diverse native pollinator habitat throughout the area*
- *Eliminating the use of neonicotinoid insecticides and other highly toxic, systemic insecticides*
- *Restricting the purchase and use of products that contain neonicotinoids and seeds or plants that have been treated with neonicotinoids*
- *Implementing integrated pest management on municipal property that relies on non-chemical options first*
- *Avoiding cosmetic pesticide applications*
- *Engaging residents through education about pollinators.*

Recommendation 5

The ACT Government ensure plantings are neonicotinoid free and implement Integrated Pest Management in the ACT.

Recommendation 6
That Yarralumla Nursery ensures, in propagating and purchasing plants to be available under the Plant Issue Scheme, that bee friendly (forage) plants with various flowering seasons are available,free of neonicotinoid pesticides and clearly labelled as such for developers and gardeners.

Community Building and community education

The ACT government has a valued focus on community building. The engagement of the community in supporting the Living Infrastructure plan can be done through a stakeholder consultative mechanism for new developments. Ginninderry has an effective Bush on the Boundary framework. The community can also become involved in large corridor plantings in coordination with new developers and TCCS. The recently launched Adopt a Park Landcare Initiative could be the basis of this type of collaboration.

The capacity of citizen science to contribute to data collection as part of a larger project can be seen in the effective Waterwatch [27] and Frogwatch Programs [28.] The Australian Wild Pollinator Count [29] (12-19/4/20 and 8-15/11/20) notes that Australia has lots of wild pollinator insects that are often overlooked and that besides the European Honey Bee many native insects also contribute to pollination in crops and gardens all around the country.

Ref 25 https://www-static.bouldercolorado.gov/docs/resolution-concerning-use-neonicontinoid-pesticides-boulder-1-201504101408.pdf
Ref 26 https://www.xerces.org/pesticides/understanding-neonicotinoids
Ref 27 http://www.act.waterwatch.org.au/
Ref 28 http://ginninderralandcare.org.au/frogwatch/

Australian Pollinator Week [30] acknowledges our important and unique insect pollinators during our southern spring (November). It is a designated week when communities, businesses and organisations can come together to raise awareness of the importance of pollinators and support their needs

The Pollinator Monitoring and Research Partnership (PMRP) [31] aims to establish how insect pollinator populations are changing across Great Britain. They have established two new large-scale surveys that utilise citizen science.

Recommendation 7
The ACT government supports Community engagement, education and citizen science projects.

Developer education and compliance.

Inquiry into Nature in our City - RECOMMENDATION 18
4.24 The Committee recommends that the ACT Government consider ways developers can be encouraged to undertake landscaping beyond the minimum requirements.[32]

To support effective pollinator plantings efforts could be made to educate and support developers to use nursery stock that has no neonics and minimal pesticide residue.

The other issue is how do blocks in some of the new suburbs eg Coombs, Wright comply? How is the government planning to ensure they meet the requirement of, for example, at least 50% of the minimum area is planting area on a mid-size block?

Recommendation 8
The ACT Government educate and support developers to use nursery stock that has no neonics and minimal pesticide residue and lead Australia to bring in labelling across nurseries in ACT.

Recommendation 9
The ACT Government allocate funds to oversee developer compliance.

Ref 29 https://wildpollinatorcount.com/
Ref 30 https://www.australianpollinatorweek.org.au/about/
Ref 31 https://www.ceh.ac.uk/our-science/projects/pollinator-monitoring
Ref 32-34 https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf

Increase in high density housing in the ACT

Inquiry into Nature in our City - RECOMMENDATION

4.63 The Committee recommends that the ACT Government consider how green infrastructure could be implemented in high rise developments. [33]

Inquiry into Nature in our City - RECOMMENDATION

4.64 The Committee recommends that the ACT Government consider current impediments to establishing balcony, courtyard or roof gardens. [34]

With the increase in high density housing and a trend towards urban infill, the percentage required on blocks for plantings becomes more problematic as the actual land being allocated for green spaces in these areas is decreasing. With the trend to smaller and smaller blocks and urban infill, how are these changes to the Territory Plan consistent with Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045.

All of these factors mean a requirement for green walls and green roofs become more important to make up for the lack of land to plant. If these were to be included as one of the requirements for development, and included appropriate plantings for pollinators eg: indigenous plantings, this would go a long way to increasing green spaces and pollinator plantings in multi-story, high density sites. The plantings around the Nishi building with vegetable gardens and plantings for pollinators as well as the green walls are a great example of what could be done, especially in multi-development areas like the Kingston foreshore.

Recommendation 10
The ACT Government encourage green walls and green roofs as an important part to make up for lack of land to plant for pollinators in medium and high density housing.

Summary

These simple no regrets actions will help to strategically create corridors of pollinator friendly plantings across the ACT. Becoming a 'Bee Friendly' territory is about making our bee and pollinator populations more resilient to existing and emerging threats such as exposure to pesticides, a lower number of forage plants in the new suburbs (due to smaller block sizes), biosecurity threats including the Varroa mite, and the emerging problem of the European Wasp that predates on bees and plunders hives.

Broadening and enriching bee foraging areas as part of the creation of a corridor of bee friendly plants across the ACT through use of Government's existing policies, in tandem with other initiatives like pesticide control and European Wasp control efforts, will facilitate the preservation of a robust ACT bee and pollinator populations. These affirmative actions will not only facilitate the survival of plant pollinators and other insects which are keystone species for our ecosystems, but will also help preserve and improve the social amenity, economic development, biodiversity and climate resilience across the whole community.

_____

Ref 32-34 https://www.parliament.act.gov.au/__data/assets/pdf_file/0005/1480091/9th-ETCS-10-Inquiry-into-Nature-in-Our-City.pdf

The update to planting guide is a good start, and this review of DV369 of the Territory plan provides an opportunity to further embed some of those principles into the Territory plan by mandating need for planting to include both flowering trees year round, and understory plants that provide pollen and nectar as well as attractive flowering plants for the population to enjoy.

ACT for Bees has 10 recommendations that it would like the ACT Government to consider and incorporate where possible into this current review of the Territory Plan. It would also like the ACT Government to embed these recommendations into policy on the future management of Canberra's green spaces and gardens. These green spaces are what make Canberra such a unique city and it would be a shame to lose the biodiversity of plants and animals because of a lack of vision into the future.

Recommendation 1 That the ACT Government include shrubs and groundcovers as well as trees in its consideration of amendments to Living Infrastructure in Residential Zones to provide important food sources for bees, butterflies, birds and small mammals. Table 7a in the draft Territory plan could also include reference to other plantings and also link to the MIS25 document requiring its use for choosing plantings.

Recommendation 2
That the ACT Government ensure that developers plant at least 50% of the Living Infrastructure with pollinator friendly trees, shrubs and groundcover plants for year round flowering. Seeds and plant stock needs to be selected for climate resilience

Recommendation 3

The ACT Government support the development of a gardening guide ACT and Region on planning for year round pollinators friendly plantings

Recommendation 4

Promote Canberra as a Bee/ Pollinator Friendly City and undertake certification process.

Recommendation 5

The ACT Government ensure plantings are neonicotinoid free and implement Integrated Pest Management in the ACT.

Recommendation 6

That Yarramluma Nursery ensures, in propagating and purchasing plants to be available under the Plant Issue Scheme, that bee friendly (forage) plants with various flowering seasons are available, free of neonicotinoid pesticides and clearly labelled as such for developers and gardeners.

Recommendation 7
The ACT Government supports Community engagement, education and citizen science projects.

Recommendation 8
The ACT Government educate and support developers to use nursery stock that has no neonics and minimal pesticide residue – lead Australia to bring in labelling across nurseries in ACT.

Recommendation 9
The ACT Government allocate funds to oversee developer compliance.

Recommendation 10
The ACT Government encourage green walls and green roofs as an important part to make up for lack of land to plant for pollinators in medium and high density housing

ACT for Bees is an organisation dedicated to raising awareness of the importance of bees and pollinators for the health of the environment and food security.

As a part of our Vision for ACT for Bees we are working towards the ACT becoming a 'Bee and Pollinator Friendly' Territory by 2020, where government, education, business and community practices and behaviours support and encourage healthy bees.

- *Raise awareness with the ACT and regional community and key stakeholders about the importance of healthy bees and pollinators and bee-friendly practices that enhance agricultural and honey productivity, food sustainability / security and public and environmental health.*
- *Promote pollinator-friendly plant propagation, gardening and environmental practices in home gardening, farming, workspaces, public recreation parks, gardens, open spaces and beekeeping.*
- *Develop curriculum materials and resources for schools and other educational organisations about the importance of bees and bee-friendly practices.*
- *Promote the importance of pollinators and pollinator-friendly practices in the wider Australian and Global community.*

We have been involved in a broad range of community projects including:

- Collaborating with the Ginninderry Development in West Belconnen to develop pollinator corridors within the development.
- Successfully lobbied the Australian Capital Territory (ACT) Government to adopt ACT for Bees additions in their Landscape Planting list. The list now includes flowering times, nectar/pollen/seed resources and species of forager (bees, butterflies, birds and habitat for small animals) and used by all ACT Government agencies and land developers.
- We have recently teamed up with Landcare ACT and Friends of Australian National Botanic Gardens to run a ½ day event ' Bees, Butterflies, Birds: Maximising biodiversity by supporting pollinators.' We were very pleased with the broad support from all sides of ACT Government for bees and pollinators.
- Been actively involved in organising and presenting at World Bee Day celebrations in May 20th in 2018 and 2019 and on the steering committee for 2020.

- *In 2016 we teamed up with Cool Australia to create the 'Love Food? Love Bees!' Year 5/6 curriculum which explores the importance of bees for much of our food, threats to bees and ways students can take bee friendly action in their community. This has been very successful and reached over 55,000 Australian students within a year of its release.*
- *In 2018 we focused on the Australian curriculum aligned 'Love Food? Love Bees!' Food Security and Sustainable Agriculture -Years 9 & 10 curriculum with Cool Australia which focuses on the importance of sustainable agriculture for healthy and productive soils which in turn support healthy plants, pollinator health and the overall health of the ecosystem. We were very pleased with the reach of this online curriculum.*

From: [redacted]
To: Terrplan
Subject: Draft Variation 369
Date: Friday, 3 April 2020 7:44:07 PM

To whom it may concern.

I am writing to raise my concerns and input below to Draft Variation 369

Site Coverage: balconeys, terraces, patios, decks, perogla should not be counted in the site coverage. To count these in the site coverage will create poor planning outcomes. Developers will simply drop these elements form there design to keep the dwelling yields and the size of the dwellings on a multi unit site. Example: Inner North Precinct Code R7 [no building or design element forward of the building line]. This rule along with other rules in the code encouraged developer not have to have eaves or elements on the building.

Canopy Cover: How does this apply. Does canopy cover that goes over the neighbour fence, parts of the house, roads count, it should, as it would provide shade over thermal masses. Can areas of canopies overlapping be counted twice.

5.2 Site open space-RZ3, RZ4 and RZ5: Rule 39C should be changed to allow the 15% canopy tree cover to be planted in the POS of townhouses. Rule 39C it its current form would make townhouse development in green field areas economically impossible at todays land prices. Modelling DV369 on mutlt-unit sites for townhouses shows up to a 30% deduction in dwelling yields. This means a 30% reduction in land prices. The current market is saturated with units and requires no more encouragement in the outer green field areas.

DV 369 will have a significant devaluation on land values. The changing of site coverage rules for compact and midsize blocks will mean you have to build a 2 storey home to get the same size home currently that is single storey. Compact and midsize blocks in some cases have only a 10m frontage. Whitlam stage 1 is about to be sold and Whitlam stage 2 is under DA yet the compact blocks and mid size blocks have/ are being designed on the current rules. Multi-unit sites will/have dwelling yields based on the current rules that may not be achievable under DV369

Any enactment of draft variation [DZ] 369 should not apply to DA's that has being lodged prior. DV 369 should not apply to DA's lodged 3 months after the enactment. Any DA's lodged prior and refused by ACTPLA but seek a reconsideration should be exempt from DV 369.

Thanks,

[redacted]

Dear Sir/Madam

Please find below some brief points regarding the Draft Variation 369 Living Infrastructure consultation.

The long period of drought and prolonged stretch of above average temperatures last summer, coupled with the smoke from the unprecedented bushfires, has brought into stark focus the need to cool the city and mitigate the urban heat island effect. With climate change, these conditions will only get worse and measures need to be taken now if there is going to be benefit seen sooner rather than when it is too late.

- I broadly support the changes outlined in the Draft Variation, particularly the much needed increase in the tree canopy cover. However, I would bring this in line with the NCA proposal to increase the canopy cover to 40% rather than the 30% suggested in the DV.

- While it sounds simplistic, it would be better to take stronger steps to retain the mature trees we already have, rather than count on trees being planted in the next few years to ameliorate the problem that is getting worse with each passing year. It is already predicted that 2020 will be the hottest year ever recorded. Tube stock trees cannot replace already mature trees. Some of the trees that have been cut down are over 200 years old. These simply cannot be replaced by replanting.

- This DV must be considered in conjunction with building requirements. Currently developers remove all trees from blocks, particularly knock down rebuilds, to maximise profits. Why is this approved? It also seems that it is easier to gain permission to cut down trees than it is to retain them. Architects and planners need to see mature trees as an addition to a development project rather than a mere obstruction, and come up with designs that work with the trees.

- While I am aware that many trees are in natural decline in the ACT and need to be replaced, mitigation of the heat island effect needs to be addressed before 2045. Again, more value should be placed on retaining the current, healthy mature trees.

- As well as the push to increase the tree cover for heat mitigation purposes, the importance of mature trees to biodiversity and species numbers cannot be overemphasised. The role of urban parks is important in this, along with suburban gardens. With increased urban infill has come a decrease in biodiversity as buildings increasingly fill whole suburban blocks. The effort to decrease the ratio of hard to permeable surfaces is a start to this. Along with this should be a requirement to plant a percentage of natives in development landscaping, preferably plants that are endemic or are known to attract birds, bees and bats.

- The current fast tracking of infrastructure projects to keep Canberra working through the COVID-19 pandemic is a good opportunity to increase the program of tree planting in the ACT.

- Attention should also be given to the maintenance of street trees and new plantings. The 2019-2020 summer saw street trees start to die, something that I have not seen happen before, even in other droughts. I understand that homeowners are responsible for the maintenance of the nature strips in front of their houses, but I believe many are

unaware of this, thinking it falls to the government. Consideration needs to be given to firstly alerting residents of their responsibility to maintain “their” street tree, and secondly maybe providing them some incentive to do so.

- With the proliferation of apartments containing commercial leasing on the ground floor, there are cases of street trees and plantings being removed to either allow possible clients to better see the businesses or to increase the parking available. Thought should be given to sensibly assess the number of parking places required for a development, including commercial and visitor parking. Currently the allowed minimum parking spaces for developments seems to be inadequate.

- As was found during the consultation for the Living Infrastructure inquiry, Canberrans want a greener, more environmentally pleasing city. There is a way to have development and trees with some thinking “outside the box”. However there currently seems to be a disconnect between what the people want and what developers want. DV369 is a welcome first stage to address this disconnect.

- Lastly is a question of how this is to be implemented. To date it seems that the living infrastructure has taken something of a backseat to development. Its importance to the liveability of the city is not in question. How will that importance be elevated to meet the challenges that are to come?

[redacted]
Canberra Resident

From: [redacted]
To: Terrplan
Subject: Comments on DV 369
Date: Monday, 4 May 2020 11:43:21 AM

I appreciate the opportunity to comment on DV 369.

1. The objective to **'achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045**' is strongly supported and I commend the government for adopting these goals.
2. DV369 is a complex document. It must be simplified so that the goals can be easily achieved and so that compliance can be easily monitored.

I recommend the following actions.

a. For all residential blocks all that is needed to achieve the 30% goal are: A mandatory Site-Coverage (as defined in DV369) percentage, which can vary through the RZ1-RZ5 range); a 30% planting area which is mandatory for **ALL** residential blocks; and another percentage for Private Open Space, which can vary through RZ1-RZ5. The POS would include things like swimming pools, patios and drive strips.
b. Plot Ratio should be abandoned. It does not work and is unnecessary. There are already specifications for height, setbacks and solar access. These should be mandatory.
c. We should not be so prescriptive in what residents can plant in their planting areas. The most important issue is that 30% of planting area is maintained. This should be easy to realise. There are sites in Kingston in RZ5 where 40% planting area and canopy cover has been achieved.
d. The 30% planting area can easily be checked, to obtain a certificate of occupancy and whenever a sale/change-of-ownership takes place this parameter can be checked again.
e. The 30% tree canopy cover is too complex to monitor easily at the block scale, but **a regular monitoring program must be maintained** on a District scale using the similar techniques to those used in the 2015 survey.

Keep it simple and Go for It!!!

Regards

[redacted]
[redacted]
Griffith ACT 2603
Australia
Tel: [redacted]
[redacted]

Nullius in verba

From: [redacted]
To: Terrplan
Subject: Comments on DV369
Date: Monday, 4 May 2020 1:40:14 PM

I strongly support the proposed 30% tree canopy cover and 30% permeable ground surfaces in urban areas because the proposal will have financial benefits for ratepayers of the ACT through a reduction in the amount of energy used to heat and cool buildings; a proven reduction in the frequency of resealing roads and therefore reduced costs, and having access to green areas has been shown to be of benefit in the treatment of mental health, reducing the demand on Health Services. It will also support the ACT Governments aim of 100% renewable energy by reducing the demand to a level that may assist it to achieve this target in the future.
Canberra needs to maintain the green cover if it is to continue to market itself as the "bush capital" and offer a unique aspect not found in other cities.

[redacted]
[redacted]
Gilmore ACT.

DV369 Living Infrastructure in Residential Zones

Draft Variation 369 proposes changes to make sure standards for soft landscaping area in all residential areas (RZ1 to RZ5) are met.

RECEIVED
- 5 MAY 2020
BY:

I support:

1. The ***definition of Open Plan Space which would exclude impermeable items such as swimming pools, terraces, pergolas*** as these cannot be used for any plantings of canopy trees & shrubs.

2. The ***target of 30 % canopy coverage overall for the ACT urban area.***
   This would align us with progressive council/state areas such as Perth in Western Australia among others.

3. The concept of gaining a ***rate reduction*** for those land owners who are supporting the whole community by planting, caring & maintaining canopy trees & shrubs.
   Any development/rebuild that does not provide & care for canopy trees & shrubs should meet their community & environmental responsibilities by paying proportionally more in the way of rates.

   Why should new developments get away with "heat sinks", while the responsible land owners like me are pulling their weight in supporting solar passive principles with the added advantages of energy savings, bird nesting/attracting habitats & a greener environment, which assists with good mental health.
   These green areas have proven to be of tremendous benefits during this trying Covid19 situation.

4. It is noted that if a land owner reduces the tree/bush canopy on their land that the ***rate reduction could be reduced,*** if the individual land is modified significantly, by way of annual inspections which can be done offsite & in a non-intrusive manner.

4. Continued
Similarly the ***rate reduction could be increased,*** if the canopy cover is improved for the benefit of the community/environment.

This could be done as part of the ***annual land valuation for rates determination*** & would not be onerous or expensive.

I commend the ACT Government for this initiative in good community & environmental spirit & in assisting Canberra in staying the great "***bush capital***" which we can be proud of.

[redacted] citizen of Macquarie, ACT.

5/5/20

[redacted]

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Tuesday, 5 May 2020 2:46:22 PM

Hello

I strongly support the intention of the plan.
However it seems to me that there are many things the ACT government can do itself:
- reduce mown areas; along the roads there are many unmown areas, and then, for no apparent reason, mown and tree free areas. These do not provide shade, have poorer water absorption and do not provide habitat. Making them treed, no mow areas, would support the aims of the plan and cost less, with less mowing.
- plant more trees near roads [already covered in the previous point, but easy to do and worth emphasising.
- change current drainage. There are areas near my place where water could be diverted from stormwater drains to creek lines, where much of it would be absorbed. The sort of thing that is happening in new suburbs could be happening, in places, in old suburbs, at a fraction of the cost of the big-scale wetlands being built in a few locations. It will take a change in practice.

Regards

[redacted]

[redacted] Belconnen 2617.

Landcare ACT

"Many hands...one voice"

Submission regarding Territory Plan Draft Variation 369

Dear Sir/ Madam,

The Landcare ACT (LACT) welcomes this opportunity to comment on this Variation as part of implementing the Territory's Living Infrastructure policy.

LACT is peak body for landcare in the ACT region. Our organisation helps support, promote and represent over 60 community groups who help look after urban parklands, countryside, nature reserves and waterways. LACT is a not-for-profit organisation with a skill-based Board of Directors, supported by member representatives on the Members Council. The foundation members of LACT are the ACT region's three catchment groups (Ginninderra Catchment Group, Molonglo Conservation Group and Southern ACT Catchment Group), the ACT Rural Landholders Association and the Buru-Ngunawal Aboriginal Corporation. As part of the National Landcare Network (NLN), LACT contributes to national environmental policy and planning.

LACT has a strong interest in tree canapy cover, permeable surfaces and soft landscaping in residential areas generally and strongly endorses measures to actively steward our urban and peri-urban environments to conserve the 'green and leafy' bush capital characteristics. Our national capital's landscapes, the legacy from over 100 years of endeavour, is at real risk from the impacts of climate change. The loss of landscape quality will negatively affect our sense of belonging and physical health, plus the ACT's economic prosperity, particularly our attraction as a tourist and education destination. Active stewardship is required and landcarers have a role to play in this.

Consequently, LACT supports the policy to increase living infrastructure in Canberra. We consider that the target of 30% canopy cover and permeable surfaces across all land uses, irrespective of tenure, is a critical first step, in transforming the built environment as we transition to a more intensely developed small city that is fit for purpose and resilient.

Together these targets are essential to combat urban heat, increase biodiversity and help mitigate the severity of droughts and flash flooding. Achieving these targets will be difficult and amendment to instruments like the Territory Plan are only one of the necessary actions.

Attitudes towards trees on private land vary greatly and increasing education and awareness about the benefits of vegetation, particularly trees, is an essential adjunct to regulation, along with enforcement of penalties for tree damaging activities (being considered under the Tree Protection Act Review). LACT and our member organisations have demonstrated success in community environmental education and awareness raising and could play a role in this.

Along with changes to private land from DV 369, LACT expect that there will be commensurate changes to the DA requirements for landscape plans, to demonstrate that the design and materials choices will achieve at least 30% canopy cover (at 20 years growth) and 30% permeability. Most importantly, LACT expect the development codes, such as for estate development, will be changed to ensure the targets are met or exceeded on all public land.

LACT understand not all land everywhere in Canberra can achieve the tree canopy and or permeable surface targets, 30% is an average. However, to compensate where this is not possible, solutions exceeding 30% may be done nearby. For example on a playing field the majority of the area will be "treeless", however the surrounding spaces could have much greater percentage canopy cover. Similarly, in high density urban and industrial development the majority of land may be taken by building footprint, however the design and treatment of roofs, walls, podiums and surrounding pavements and streets could and should compensate (for both targets).

LACT suggest that the DV 369 rules should apply at all times other than in exceptional circumstances, only then should criteria be considered rather than rules. Further as currently written, LACT consider the DV369 criteria are weak and would be ineffectual in achieving the key qualities of the two targets.

The qualities to be achieved by other types of vegetation, equivalent to what a 30% canopy cover would provide are:

1. microclimate amelioration (shade, shelter, cooling, stormwater slowing and glare reduction)
2. habitat for wildlife (animals and insects)
3. amenity (beauty, seasonal change, sense of place, wayfinding, views and vistas).

The intent of the 30% permeable surfaces target is for rainfall to soak into the ground. Types of surface solutions for equivalence are to:

1. replenish ground water (for use by vegetation)
2. avoid runoff (stormwater and flash flooding)
3. reduce expanses of materials that increase urban heat (e.g. high thermal mass).

LACT suggest it is important to allow for innovative and creative designs, and the rules and criteria should avoid prescribing solutions, such as disallowing decking (different forms of decking are essential on roof tops to allow percolation and capture of rain water).

Landcarers volunteer their time and expertise because they are passionate about caring for nature in the city. Our members are keen to see the quality of the landscape improved through widespread application of living infrastructure. Many members are also highly skilled in citizen science and contribute towards improved data collection in the ACT through Waterwatch, Frogwatch and various other citizen science projects.

There is a role for LACT in community education and awareness raising regarding this Variation and particularly the need for increased canopy cover. Further, our members are potentially able to assist in measuring the effectiveness of outcomes from this Variation (citizen science). If you are interested in either of these propositions, please contact me on [redacted]

Yours sincerely,

[redacted]

CEO
Landcare ACT
27/03/2020

[redacted]

[redacted]

Territory Plan Section,
EPSDD,
Terrplan@act.gov.au
GPO Box 158,
Canberra, ACT 2601

DRAFT VARIATION 369 - LIVING INFRASTRUCTURE IN RESIDENTIAL ZONES

Thank you for the opportunity to comment on Draft Variation 369 (DV 369).

The Draft Variation responds to Direction 3.3 of the ACT Planning Strategy 2018, which seeks to "*Integrate living infrastructure and sustainable design to make Canberra a resilient city within the landscape*". To achieve this, "DV 369 responds to Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045."

DV369 is to be welcomed as a step in the right direction, but the Draft Variation could be improved and strengthened by a number of relatively minor changes.

SUMMARY OF THE SUBMISSION

A fuller discussion and derivation of likely costs etc is given in the submission proper following the Summary.

THE MAGNITUDE OF THE CHALLENGE

The Government wishes to increase tree canopy cover from its current level (about 21%) to 30% between now and 2045. This will require the planting of about 660,000 trees, about half of which will be on public land. The Government will need to plant more than 13,000 trees a year for 25 years. While the Government has committed to planting 17,000 trees between 2019 and 2023 as an interim step while it develops its Urban Forest Strategy, this will be inadequate in meeting the target. Meeting the Government's share of the target will cost about $100m over the 25 year period.

To encourage private owners to commit resources to meeting the Government's canopy cover target the Government needs to demonstrate that it takes the target seriously. As part of or in in addition to the Urban Forest Strategy the Government needs to develop and publish an Implementation Plan, with appropriate sub-targets set for every 5 years. The Plan should provide for some method of monitoring developments to allow comparison of the actual situation with

the relevant sub target. The Government also needs to commit to providing the necessary funding over the target period.

Recommendation 1: The Government develop and publish an Implementation Plan and provide adequate and continuing funding to allow the realistic achievement of the 30% canopy cover target, either as part of, or in addition to, the Urban Forest Strategy.

PRIVATE SECTOR

It is not clear if DV 3699 will apply to single dwelling redevelopment on existing blocks because of "Existing Use" rules. It is also not entirely clear whether the Government has the power to intervene in gardening choices, even on new blocks. Consequently, a policy of rewarding compliance rather than penalizing noncompliance seems desirable. One step the Government could take would be to make free tree seedlings more easily available under the Plant Issue Scheme.

Recommendation 2: The Government should review the Plant Issue Scheme with the aim of making free tree seedlings more easily available to all Canberra leaseholders.

Enforcement issues

A major issue is how any trees planted to comply with the Draft Variation are retained over subsequent years. EPSDD has suggested that this can be dealt with later. This is an inadequate and unconvincing response. A reduction in rates for those properties that meet the canopy cover and permeability targets would seem to be the easiest approach.

Recommendation 3: The Government reward those who comply with the tree cover rules by providing a discount to their rates in recognition of the benefits provided to the public by growing wide spreading trees.

WHY THE 30% TARGET?

It is not clear why the 30% target was selected. Public support for the target could be expected to increase if the Government could explain the thinking behind a target of 30% (as against, for instance, a target of 40%).

Recommendation 4: EPSDD explain why the optimal figure for canopy cover was 30% and engage in a discussion of the underlying issues with interested members of the public.

MAKE THE PROPOSED RULES MANDATORY

Almost all the new rules introduced by the DV are modified by criteria. While criteria give an insight into what the drafters hoped to achieve with the rule, they undermine compliance in that they make their associated rules legally unenforceable. (as it is almost impossible to demonstrate

in ACAT or in court that a development does not comply with a criterion expressed in subjective qualitative terms). How would EPSDD convince the ACAT that a development only provided "insubstantial" shade, or that a "Planting area" would not achieve "infiltration of stormwater run-off and allow a greater ability to plant"?

The easiest solution would appear to be to make the rules mandatory. If the criteria are seen to have value they can be rewritten and incorporated into the rules. An alternative would be to amend the criteria with quantitative limits on what is acceptable.

Recommendation 5: The rules proposed by the DV be made mandatory, and if desired the criteria rewritten to permit their incorporation into the rules. Alternatively, quantitative limits on the qualitative values specified in the criteria be introduced to restrict the possible misinterpretation of criteria.

ABOLISH THE PLOT RATIO RULES

The DV introduces a new development control, "Site Coverage". This offers the opportunity to abolish the Plot Ratio rules, which are complex and difficult to follow, and the policy objectives of which are unknown. The Plot Ratio rules do not appear to be achieving anything of positive significance.

Recommendation 6: The Plot Ratio rules be abolished.

SIMPLIFY THE DRAFTING OF THE RULES

Some of the proposed new rules define "planting area" in terms of Private open Space. This is confusing and unnecessary. The rules should be redrafted to define planting area simply as a percentage of block area.

Recommendation 7: Rules R38, R39 and R40 of the Single Dwelling housing Development Code (SDHDC) be redrafted to specify the planting area directly as a percentage of the block area.

REFERENCES TO EUCALYPTS IN THE TREE PLANTING TABLES

Both Table 7a and Table A7a refer to small, medium, and large *eucalyptus sp*. Trees. At worst this could be taken as a requirement, and at best a suggestion, that eucalypts should be planted. This would not be a good idea. Eucalypts do not provide shade in summer and sun in winter, an objective of the DV. Eucalypts are not suitable for planting in anything but the largest of domestic gardens, and should not overhang dwellings. Any suggestion that the DV had encouraged the planting of eucalypts in unsuitable sites might, at some stage, expose the Territory to litigation. It is probably best to refrain from naming any tree species, irrespective of the drafters' preferences, and leave the choice of tree to the block owner.

It is not clear why the Tables specify pot size.

Recommendation 8: Tables 7a and A7a be redrafted to remove column 3 (Minimum pot size (litres)), column 4 (Minimum soil volume) and the reference to eucalypts ("The maximum pot size for small, medium and large *eucalyptus sp*. trees is 45 litres, with maximum height at planting of 2.5m and maximum trunk calliper of 3cm.") and avoid anything in the redrafted version that could be interpreted as suggesting the planting of any particular tree species.

Spelling "caliper" with a double l (ie "calliper") is currently regarded as somewhat idiosyncratic.

OTHER ISSUES

Should the same rules apply to all blocks regardless of size, and all residential (RZ1 to RZ5) zonings?

The DV proposes amending the Single Dwelling Housing Development Code (SDHDC) to require differing planting areas for large, mid-sized, front loading compact, and rear loading compact blocks. By contrast the amendments to the Multi Unit Housing Development Code (MUHDC) the new rules require a minimum planting area of 35% of the block and a minimum tree canopy cover of 15%, applicable to all residential zonings (ie RZ1 to RZ5).

It would be simpler and more equitable to just have one percentage specified as the required planting area in the changes to the SDHDC. 30%, the overall target, would be appropriate. This target might be difficult to achieve with compact blocks and it might be simpler and fairer just to exempt compact blocks from the proposed targets.

Recommendation 9: A common percentage target (probably 30%) be applied to both large and mid-sized blocks, and exclude compact blocks from the targets.

For a large block in RZ1 (hence subject to the SDHDC) the minimum planting area is 30%, but for a redevelopment of a similar block in RZ1 or RZ2 subject to the MUHDC the minimum planting area is 35%, and for RZ3, RZ4 and RZ5 the minimum planting area is 25%. This is confusing and makes the Territory Plan opaque and needlessly complex. While a case can be made for different rules to apply to developments in RZ4 and RZ5, site cover, planting area and canopy cover and any other related requirements should be the same for RZ1, RZ2 and RZ3.

Recommendation 10: Site cover, planting area, canopy cover and any other related requirements should be the same for RZ1, RZ2 and RZ3.

Should the same rules apply to non-residential zonings?

A reasonable number of dwellings are located in non-residential zones. The DV introduces no rules to extend the canopy cover target to Commercial Zones. However, it appears that there is no insuperable barrier to the application of tree cover and permeability rules to Commercial Zones.

Recommendation 11: R39D in the Multi Unit Housing Development Code (MUHDC) be redrafted and expanded to apply the full suite of planting area, canopy cover and other related requirements, suitably adjusted, to Commercial Zones.

DEFINITIONS

The terms *Tree canopy cover; permeable surface; water infiltration; landscape quality; green roofs*; *green walls* and *deep root planting area* are not defined. These terms should be defined.

Recommendation 12: The currently undefined terms *tree canopy cover; permeable surface; water infiltration; landscape quality; green roofs*; *green walls;* and *deep root planting area* be defined.

CRITERIA WITHOUT RELATED RULES

Proposed new Criteria C38D and C40A of the MUHDC are not associated with any rule. It is not clear how this will work, and it would be better to recast these Criteria as Rules.

Recommendation 13: Criteria C38D and C40A in the MUHDC be redrafted as Rules.

SUBMISSION ON DRAFT VARIATION 369

THE MAGNITUDE OF THE CHALLENGE

The Government has indicated that it intends to increase Tree Canopy Cover over the whole of the ACT from its current level of 21% to 30% over the 25 years between 2020 and 2045. This is a major challenge, and it is not clear that the Government has fully recognized the implications of this to date. I am indebted to Mr. Colin Walters for bringing the question of the size of the challenge to my attention.

Increasing the Tree Canopy Cover from 21% to 30% requires raising the number of trees by a factor of 1.43 (30/21), other things being equal. In other words, the number of trees in Canberra will have to be increased by 43%. There are estimated to be about 770,000 trees on public land in Canberra (Canberra's Living lnfrastructure Plan: Cooling the City" p15), and a similar number on leased (ie private) land (Review of the Tree Protection Act 2005 p7). If correct these estimates indicate that Canberra Urban Forest has about 1,540,000 trees (say 1.5 million trees). To achieve the target there will need to be an increase of 331,100 trees, both on public land and on private land, for an increase of 662,200 trees in total. Assuming this task is addressed at a uniform rate over the next 25 years, some 13,244 trees would need to be planted each and every year on public land and, on private land, for a total of 26,488 trees per year.

330,000 trees to be planted over 25 years, or 13,250 trees a year, is a large number of trees. At a cost of $300 per tree to plant and water it until the tree can survive without special care, this will cost the Government about $4m per year ($3,973,200), and private owners a similar amount (although in this case most of the costs will not be in money but in time and trouble). The cost over the 25 year period would be of the order of $100m, a large amount but one which should be relatively easily accommodated by a well-off jurisdiction over a long period. However, it is not clear that the Government has budgeted for these costs.

DV 369 appears to have been introduced to ensure that private property owners' plant and maintain the wide spreading trees (umbraceous trees) required to meet the private sector's share of the 30% canopy cover target. Will it be sufficient to ensure that private landowners' plant an additional 330,000 suitable trees over the next 25 years?

The Review of the Tree Protection Act 2005 indicated that the Government has decided, as an interim step, to plant a total of 17,000 trees over the period 2019 to 2023, the Urban Forest Strategy is developed. The strategy is apparently due for completion by mid 2020. Planting 17,000 trees over four years at a uniform rate requires planting 4,250 trees per year, which as calculated above is about 9,000 (8,994) trees less than the required planting of 13,244 trees a year to meet the Tree Canopy Cover target. In the absence of a clear program in the Urban Forest Strategy to plant the necessary number of trees, the target will not be achieved.

It would seem optimistic to assume that private owners will meet their share of the target unless the Government is clearly seen to be working realistically towards achieving its share of the target. If the Government is perceived as failing to meet its obligation to meet a target that it has set for itself, it runs the risk of public cynicism and an indifference to meeting the Government's published tree canopy cover target.

To counter this risk the Government needs to develop and publish an Implementation Plan, with appropriate sub-targets set for every 5 years. The Plan should provide for some method of monitoring developments to allow comparison of the actual situation with the relevant sub-target. In addition, the Government needs to commit to providing the necessary funding over the target period. An underfunded target is an unachievable target. This Implementation Plan would seem to logically form part of the foreshadowed Urban Forest Strategy, but could stand on its own if that were the Government's preference.

Recommendation 1: The Government develop and publish an Implementation Plan and provide adequate and continuing funding to allow the realistic achievement of the 30% canopy cover target, either as part of or in addition to the Urban Forest Strategy.

PRIVATE SECTOR

How might the Government best encourage the private sector to put in the effort to meet the sector's share of the target? DV369 can be seen as an attempt to highlight the problem and encourage leaseholders to plant umbraceous trees on new blocks. It is not however clear to what extent the DV would apply to single dwelling redevelopments on existing blocks, because of the "Existing Use" rules. ("Existing Use" rules are rules that ensure that an existing use of a property can continue to operate even though the current zoning has changed and may prohibit this type of use. These rights are explicitly preserved under s164 of the Planning and Development Act 2007.) The Government's power to impose DV369 on existing leases may well be tested in ACAT and in the courts. It could even be argued that the Government's legislative powers to directly intervene in gardening choices on private blocks, even on new leased blocks, is not clear. Given this legal uncertainty, an approach that tries to persuade people to adopt the target, rather than seeking to compel compliance, appears preferable.

Making trees freely available could be expected to encourage private owners to plant more trees. Consequently, the Government should review the (Free) Plant Issue Scheme with the aim of making free trees more available to leaseholders than under the current rules, where plants must be planted within two years of release of a newly developed block. The costs would be relatively low, and the chance of trees being illicitly diverted to other ends than beautifying Canberra appears remote.

Recommendation 2: The Government should review the Plant Issue Scheme with the aim of making free tree seedlingss more easily available to all Canberra leaseholders.

Enforcement Issues

The NCA's comments on the DV raised the question "*How can EPSDD ensure that the intended soft landscaping outcomes are not diminished over time? For example, do mechanisms exist to prevent a subsequent lessee of a property from removing trees or paving over planting area, if these works do not require either DA or building approval?"*

EPSDD's response was that "Mechanisms to ensure soft landscaping outcomes are not diminished over time can be considered as part of the ACT Planning Review." This is neither an appropriate nor adequate response. The Planning Review will deal with a very wide range of planning issues and there is a real possibility that this particular matter could get lost or overlooked, or not dealt with as part of some side deal with developers to sweeten acceptance of some other restrictions on their current activities. If EPSDD is serious about this target some attention needs to be given as to how compliance with the targets over the longer term can be encouraged.

A reduction in rates for those properties that meet the canopy cover and permeability targets would seem to be the easiest approach. The magnitude of the reduction would need to be considered, but would probably be less than the real benefit the city gains from umbraceous trees on private blocks.

Some properties would receive no concession, while other would receive a significant reduction, but that is the nature of incentives. These would be unpersuasive if everyone received the same incentive. Objections that this approach is somehow "unfair" should consequently be dismissed.

Recommendation 3: The Government reward those who comply with the tree cover rules by providing a discount to their rates in recognition of the benefits provided to the public by growing wide spreading trees.

WHY THE 30% TARGET?

The 30% Tree Canopy Cover and Permeable Surface targets flow from Action 2 in "Canberra's Living Infrastructure Plan: Cooling the City (2019)", but the discussion of the need for these targets in the Strategy does not canvas the pro and cons of various realistic canopy cover/permeability targets, but simply opts for 30% (beyond the statement on p.19 that "Recognising the important role of shade from trees, some cities around Australia have adopted canopy cover targets, generally in the range of 30–40%."). A fuller discussion of the targets at "Why the 30% tree canopy cover target for Canberra?" at p.21 ff in the Living Infrastructure Plan merely presents the 30% targets. However, it is recognized that it will not be possible to meet these targets in all areas

> "Where 30% canopy cover cannot be easily achieved through tree and vegetation plantings, alternative locality-specific solutions will be used… Alternative treatments to meet the

equivalence of the tree canopy cover and permeable surfaces targets may include green roofs and walls, wetlands and rain gardens, water features and fountains, watered grass, shrub beds, and climbers on structures."

Whether the DV appropriately provides for these alternatives is an arguable point.

Why this figure of 30% was chosen (rather than (say) 25% or 40%) is not at all clear. It is noted that the City of Melbourne, which is considerably denser and more built up than Canberra, has a Public realm canopy cover of 40%. It is also notable that the target is below the 40% requirement imposed by NCA in the Forrest Deakin Residential Precinct. One would not like to think that the ACT Government believes that the residents of ordinary Canberra suburbs are not as deserving as those in Forrest or Deakin. If 30% is the figure for the ACT as a whole, then the targets for new property developments will need to be considerably higher than the 30% Territory wide average, as there will be many areas where the canopy cover and permeability are below this figure, and where it would be unrealistic (or at least too expensive) to bring them up to the target.

Some discussion of the issues and explanation of why 30% was the optimal figure for the target would help build public support for these targets and make them more secure. While not all members of the public are interested in these issues, many are concerned about climate change and how our city can best deal with it, and would welcome the chance to understand the Government's thinking on this issue.

Recommendation 4: EPSDD explain why the optimal figure for canopy cover is 30% and engage in a discussion of the underlying issues with interested members of the public.

MAKE THE PROPOSED RULES MANDATORY

The DV introduces a number of amended or new rules, modified by criteria. This offers little hope that the new rules will be complied with if developers find them in any way inconvenient. The approach adopted in the Territory Plan of having quantitative Rules modified or explained by qualitative Criteria makes most rules with associated criteria difficult or impossible to enforce if legally challenged. Even if EPSDD felt that a proposal did not comply, it would be hard to demonstrate that this refusal was reasonable if taken to the ACAT. For example, how would EPSDD be able to demonstrate that a development only provided "insubstantial" shade and hence failed to comply with C38, C39 or C40 in the SDHDC? And almost any "Planting area" would achieve "infiltration of stormwater run-off and allow a greater ability to plant", and thus comply with C38B of the MUHDC while in no way meeting the requirements of R38B which specifies a minimum planting area of 35%.

If it is intended that the new targets be taken seriously, then the rules must be made mandatory. In the absence of such a move the new rules become entirely voluntary and would impose an unfair burden on those developers which chose to comply with them.

It is arguable that the Criteria are well thought out and make it clear what a rule is trying to achieve. If (or where) this is the case, then appropriate elements of a Criterion could be incorporated into the associated Rule. Alternatively, quantitative limits could be inserted into a Criterion so that there are reasonable limits imposed on how the currently entirely qualitative values in the criteria are to be interpreted. For example, in relation to C38B above, the Criterion would work quite well if its last provision was something along the lines of "Notwithstanding anything else in this Criterion a proposal shall not be deemed to be compliant with this Rule or Criterion unless the planting area is a minimum of at least 30% of the block area. This is a mandatory requirement."

EPSDD might object that Criteria, unlike rules, have always been expressed in qualitative terms, and that EPSDD officers have a good feel for what is regarded as acceptable under the criteria. This might well be the vase, but it is irrelevant, as it is ACAT which, if there is any dispute, determines whether a proposal complies with the planning rules. As criteria modify their associated rules, but are not themselves modified by the associated rules, the criteria give no guidance at all to ACAT or other legal bodies as to what was intended. EPSDD might feel that a developer's proposed treatment was not "reasonable", or "sufficient", or the like, but the developer's lawyers would no doubt assert that what was proposed met such a qualitative test. This turns it into a lottery at best. Some reform of ACAT and the way it approaches planning issues would clearly be desirable, but in the absence of such a development some changes in the way the Territory Plan is drafted can provided a fairly easy fix.

Recommendation 5: The proposed rules be made mandatory, and if desired the criteria rewritten to permit their incorporation into the rules. Alternatively, quantitative limits on the qualitative values specified in the criteria be introduced to restrict the misinterpretation of criteria.

ABOLISH THE PLOT RATIO RULES

The DV introduces a new development control, "Site Coverage". This is to be welcomed, but good governance suggests that serious effort be made to identify and remove any older restrictions whose functions are now made unnecessary by this new control.

An obvious target would be the Plot Ratio Rules. These only apply to large blocks (ie those equal to or over 500m^2 in area). It is not clear what policy objectives the plot ratio rules are supposed to achieve, and this makes it difficult to determine how successful the plot ratio rules have been, or how they could be tweaked to improve their effectiveness. While apparently simple, the rules are complex because of a number of issues in relation to what is to be included in the area of a building, including for example arcane rules in relation to car parking areas, and under what circumstances a balcony should or should not be included in the gross floor area. It seems possible from some recent dwelling approvals that some staff members within EPSDD may not be fully on top of all the subtleties of the plot ratio rules.

Recommendation 6: The Plot Ratio rules be abolished

SIMPLIFY THE DRAFTING OF THE RULES

The new rules R38, R39 and R40 in the SDHDC define "Planting Area" in terms of Private Open Space. This is confusing and unnecessary. It is also bad drafting as it leaves Planting Area possibly exposed to unintended consequences if some element of the rules or criteria relating to Private Open Space are subsequently amended for other reasons. These rules should be redrafted to specify the planting area as simply and solely a percentage of the block area.

Recommendation 7: Rules R38, R39 and R40 of the SDHDC should be redrafted to specify the planting area directly as a percentage of the block area.

REFERENCES TO EUCALYPTS IN THE TREE PLANTING TABLES

The DV proposes to dictate the size of tree(s) that must be planted on a privately owned block. This appears to be a new departure in planning regulation, at least in the ACT. "Existing Use" rules would seem to preclude the application of the new rules to single dwelling redevelopment on existing blocks. Compliance with the targets on such blocks would seem to be entirely voluntary. Presumably the provision in the Tree Planting Tables will be enforced on new blocks by making compliance with them part of the lease conditions. However, the Government's powers to directly intervene in gardening choices on new leased blocks is not clear. It seems likely that the application of the DV to both existing and new blocks will eventually be tested in ACAT and the courts.

Both Table 7a and Table A7a state that "The maximum pot size for small, medium and large *eucalyptus sp*. trees is 45 litres…" This is a cause for some concerns:

The trees which householders are required, or at least encouraged, to plant are to be those that will "provide substantial shade in summer and admit winter sunlight to outdoor and indoor living areas" (C40(e)(i) in the SDHDC, C38B(b) in the MUHDC). Eucalypts are not effective at providing summer shade and winter sun. A deciduous tree would achieve these objectives much more effectively.

Eucalypts are not suitable for planting in anything but the largest of domestic gardens. Certainly, such trees should not be planted in position where their branches might eventually overhang a house. The reference to *eucalyptus* might be taken as an encouragement, if not an instruction, to plant a eucalypt in an unsuitable position, and consequently expose the ACT Government to potential legal action, were some unfortunate consequence to eventuate. There is no need to mention any species of tree in this table and consequently it would be better to be safe and remove any reference to *eucalyptus*.

In general terms it is probably best to refrain from naming any species and leave it to the leaseholder to decide what species of tree or trees that they wish to plant to comply with the requirements of the tree cover target. While the drafters of the DV may have their own personal views about which trees are to be preferred, a wide range of plantings would meet what is required. Consequently imposition (or even publication) of the drafters' personal preferences is not warranted. A blind faith, or lack of such faith, in the superiority of any tree that grew in Australia before European settlement is as much a political choice as ones' voting preference, and consequently parading one's choice in a document like this is clearly inappropriate.

Both tables make reference to pots of various sizes. It is not clear why the size of pot a plant comes in needs to be specified in the territory plan, or how such pot size requirements would be policed and enforced. Perhaps someone got carried away? It would be preferable if all reference to pot sizes were removed from the DV.

Recommendation 8: Redraft Tables 7a and A7a to remove column 3 (Minimum pot size (litres)), column 4 (Minimum soil volume) and the reference to eucalypts ("The maximum pot size for small, medium and large *eucalyptus sp*. trees is 45 litres, with maximum height at planting of 2.5m and maximum trunk calliper of 3cm.") and avoid anything in the redrafted version that could be interpreted as suggesting any particular species be planted.

In conclusion, spelling "caliper" with a double l (ie "calliper") is currently regarded as somewhat idiosyncratic.

OTHER ISSUES

Some groups have raised a number of issues relating to the application of the new rules.

Should the same rules apply to all blocks regardless of size?

The DV proposes differing planting area requirements for large, mid-sized, front loading compact and rear loading compact blocks in the proposed amendments to the Single Dwelling Housing Development Code (SDHDC). In the amendments to the Multi Unit Housing Development Code (MUHDC) by contrast the new rules appear to relate equally to blocks of all sizes.

It has been suggested that it would be simpler and fairer to just have one percentage specified as the required planting area in the changes to the SDHDC. 30% would seem appropriate. One could argue that this would be difficult to achieve with compact blocks.

It might be simpler and fairer just to omit compact blocks from the proposed targets. This would not be losing much planting area, because at a maximum this is 37.5 m^2 per block for front loading compact blocks and 25 m^2 for rear loading compact blocks.

Recommendation 9: Apply a common percentage target (probably 30%) to both large and mid-sized blocks, and exclude compact blocks from the targets.

Should the same rules apply to all residential zonings RZ1 to RZ5?

The proposed new rules will apply different rules to different Zonings. For example for a large block in RZ1 the minimum planting area is 30%, but for a similar block in RZ1 or RZ2, where it is intended to build more than one dwelling, and hence subject to the MUHDC, the minimum planting area is 35% and for RZ3, RZ4 and RZ5 the minimum planting area is 25%.

These and similar apparently pointless differences in the treatment of possibly identically sized blocks are confusing to the public, and may lead to a perception that the Territory Plan is opaque and needlessly complex. While a case can be made for different rules to apply to developments in RZ4 and RZ5, site cover, planting area and canopy cover and any other related requirements should be the same for RZ1, RZ2 and RZ3.

Recommendation 10: Site cover, planting area, canopy cover and any other related requirements should be the same for RZ1, RZ2 and RZ3.

Should the same rules also apply to non-residential zonings?

In its comments on the proposed DV the NCA posed the question that "*A reasonable number of dwellings are delivered in non-residential zones. Is there capacity for the proposed provisions concerning soft landscaping to be applied in these circumstances?"*

The EPSDD response was "DV369 is intended to introduce soft planting area for residential zones only. Soft planting area can be considered for residential developments in non-residential land use zones as part of the ACT Planning Review." This response appears to ignore Rule R39D of the MUHDC which applies to Commercial Zones, and which imposes a requirement that "Not less than 10% of the total site area is planting area". However, there appear to be no Rules at this stage which extend canopy cover rules to Commercial Zones. But the existence of R39D implies that there is no insuperable barrier to the application of tree cover and permeability rules to Commercial Zones, it's just a matter of EPSDD getting around to it.

Recommendation 11: R39D in the MUHDC be redrafted and expanded to apply the full suite of planting area, canopy cover and other related requirements, suitably adjusted, to Commercial Zones

DEFINITIONS

The DV provides definitions for *Canopy tree*; and *Deep soil zone; Planting area;* and *Site coverage*. There do not appear to be definitions for: *Tree canopy cover; permeable surface; water infiltration; landscape quality; green roofs*; and *green walls*. It might be desirable to define at least some of these terms.

The term *deep root planting area* is not defined. If this means the same as *deep soil zone* (already defined) it might be desirable to replace it with the latter term. If this is not the case this term should be defined.

Recommendation 12: The currently undefined terms *tree canopy cover; permeable surface; water infiltration; landscape quality; green roofs; green walls;* and *deep root planting area* be defined.

CRITERIA WITHOUT RELATED RULES

The DV introduces 2 new Criteria in the MUHDC: C38D, which identifies the objective the planting area provisions are expected to achieve; and C40A dealing with the conditions under which an existing tree can be counted towards the Tree Coverage requirements. Neither of these are associated with any rule. It is not clear how criteria without associated rules will work, and it might be better to recast these Criteria as Rules.

Recommendation 13: Criteria C38D and C40A in the MUHDC be redrafted as Rules.

Thank you again for the opportunity to comment on Draft Variation 369.

Yours faithfully

[redacted]

5 May 2020

EXISTING

DV369

LEGEND

AREA REQUIREMENT

	EXISTING CODE			DV 369			NET + / -
	AREA (m^2)	PERCENTAGE		AREA (m^2)	PERCENTAGE		
PUBLIC OPEN SPACE	2570	18.23%		2213	15.7%		- 357.24
ROAD RESERVE	4056	28.78%		4056	28.78%		0
PRIVATE REALM	7384	52.39%		7741	54.92%		+ 357.24
OTHER	84	0.59%		84	0.59%		0
TOTAL AREA	14094			14094			

	EXISTING CODE				DV 369				NET + / -	
	SIZE WxL	AREA (m^2)	NUMBER	PERCENTAGE	SIZE WxL	AREA (m^2)	NUMBER	PERCENTAGE	AREA (m^2)	NUMBER
TYPE 1 - 175.7m^2 GFA	9.5 x 12	114	3	6.98%	14 x 12	168	2	5.26%	+ 54	- 1
TYPE 2 - 268.7m^2 gfa	7.1 x 28	198	2	4.65%	13.9 x 28	389	1	2.63%	+ 191	- 1
TYPE 3 - 198m^2 GFA	5 x 28	140	7	16.28%	7.7 x 28	215	7	18.42%	+ 75	0
TYPE 4 - 256m^2 GFA	7 x 28	215	3	6.98%	0	0	0	0	0	- 3
TYPE 5 - 304m^2 GFA	12.5 x 28	349	5	11.63%	12.5 x 28	349	5	13.16%	0	0
TYPE 6 - 268m^2 GFA	7 x 26	182	4	9.3%	7 x 29.6	207	4	10.53%	+ 25	0
TYPE 7 - 248.8m^2 GFA	6 x 26	156	4	9.3%	6 x 29.6	177	4	10.53%	+ 21	0
TYPE 8 - 178.6m^2 GFA	4.5 x 26	117	8	18.6%	4.5 x 29.6	133	8	21.1%	+ 16	0
TYPE 9 - 183.4m^2 GFA	8.3 x 15	124	7	16.28%	8.3 x 15.79	131	7	18.42%	+ 7	0
TOTALS			43				38			- 5

KEY MAP

SITE LOCATION

PROJECT
Ginninderry Neighbourhood 1
Stage 1 Sections 17, 19, 20

DRAWING TITLE
DV369 Yield Testing

REVISION
00 xxxxxx JS xx

KEY PLAN

DRAWN JS **CHECKED** BR

DATE
17-03-20

SCALE
NTS

NOTES
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Use figured dimensions - do not scale from drawings. Dimensions are in metres unless noted otherwise.

0 50 100 200 300 400 500 600 700

CLIENT
Ginninderry Review Projects

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STATUS DRAFT **REV.** 00 **DRAWING NO.** **A3 (landscape)**

Tait Network

Ginninderry

Urban Heat Island Effect

A comparison of two subdivision sites

What is an Urban Heat Island?

Where urban areas become warmer than their surroundings or rural areas.

This is due to two factors:

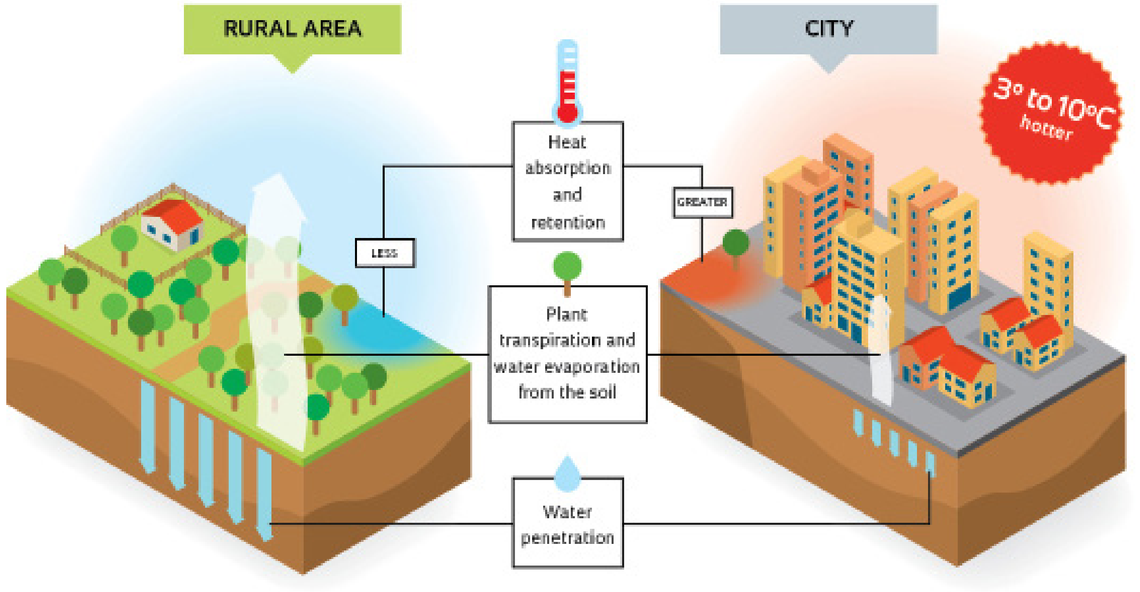
- The presence of the built form on natural surfaces and;
- The use of certain materials in the built environment.

Urban Heat Islands create a bubble of warmer air above urban environments, *created when pavements, roads and buildings absorb the sun's heat and radiate it back.*

This occurs as the energy is transferred from an urban surface to the atmosphere through the evaporation of water.

The primary causes of Urban Heat Islands are:

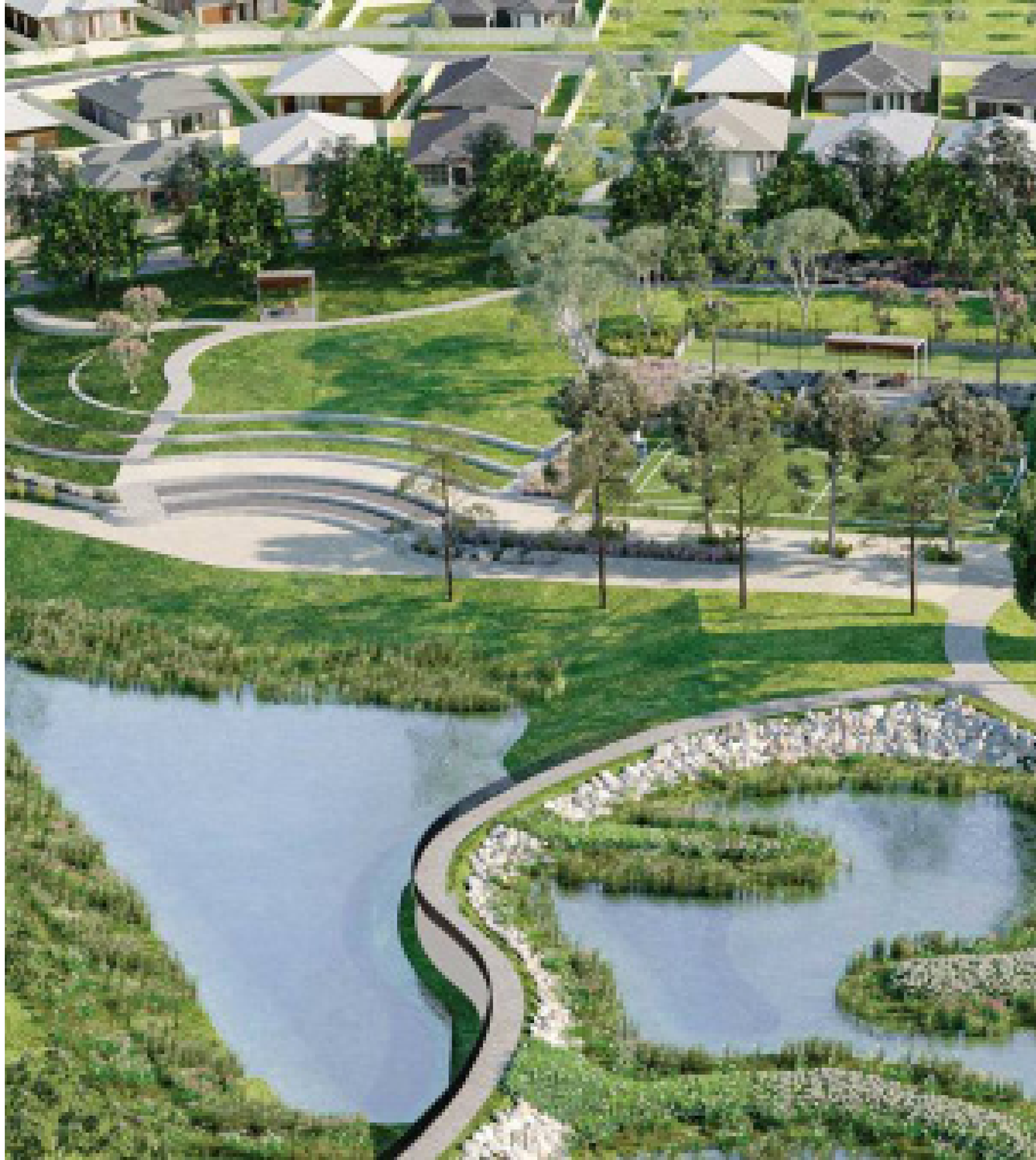
- Reduced surface evapotranspiration capacity due to less green area;
- Heat storage effect of construction materials such as concrete and asphalt;
- Heat stagnation due to densely packed buildings;
- Heat release resulting from energy consumption in urban areas.



What can we do to mitigate Urban Heat Island impacts?

There are a range of strategies to mitigate Urban Heat Islands.

1. Limiting the amount of paved surface areas and shading/ using light coloured materials where paved surfaces are required;
2. Tree shade canopy on and around buildings and street networks;
3. Presence of water bodies or features absorb heat away from the built form;
4. Orienting street layouts within sun and wind paths;
5. Installing reflective roof tiles, light colour metal and cool membranes to cool roofs (‘Green roofs’).



Key measures to mitigate Urban Heat Island at Ginninderry

The table below identifies measures applicable to mitigating Urban Heat Island in Ginninderry.
The highlighted sections indicate the measures investigated within this scope.

Criteria	How does it reduce UHI?	How can this be measured?
Height/width ratio of built form	Building height and street width affect wind paths which can allow air to pass through urban areas.	Diverse building height ratios
Orientation of street network	Sun movement and wind paths can be enhanced or reduced.	Rate of sunlight and wind through a site
Reflectivity	Lighter building materials and surfaces reflect radiation and heat.	Albedo level of materials
Conductivity	Conductive materials allow heat to pass through and release quicker affecting the temperature of a building.	Percentage of conductive materials within buildings
Plot coverage	Percentage of building coverage within its land plot affects the evaporation of a site.	Percentage of built form on site
Shadow	Provision of trees and shade structures reduce temperatures in the public realm and filter heat onto buildings.	Number of trees along streets and public spaces. Number of trees per block.
Vegetation	Green infrastructure within public spaces allows for higher rates of evapotranspiration, shade and cooling.	Percentage of vegetation cover

What are the climatic conditions for Ginninderry?

The Australian Building Codes Board classifies climate zones across the country to nominate energy efficiency construction provisions accordingly.

Canberra is nominated as - Climate zone 7 - cool temperate. The features of this climate zone are described as;

‘low humidity, high diurnal range, four distinct seasons, summer and winter exceed human comfort range, variable spring and autumn conditions, cold to very cold winters with majority of rainfall, hot dry summers.’

What are the climatic conditions for Ginninderry?

The effects of Urban Heat Islands most negatively impact during the hotter months between November and March. A CSIRO study showed that the UHIE causes temperature differences upto 10°C between parts of Canberra on hot days.

The effects of Urban Heat Islands are commiserate with the density of a place. For example, a more built up urban environment will generate more heat as it has limited permeable ground surfaces and provides fewer opportunities for the heat to escape.

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	20.5	20.2	17.7	13.2	9.2	6.5	5.5	7	9.6	12.7	15.7	18.6
Min. Temperature (°C)	12.9	13	10.8	6.5	3.3	1	-0.1	1	3.3	6.2	8.5	11
Max. Temperature (°C)	28.1	27.4	24.7	19.9	15.2	12	11.2	13	16	19.3	22.9	26.2
Avg. Temperature (°F)	68.9	68.4	63.9	55.8	48.6	43.7	41.9	44.6	49.3	54.9	60.3	65.5
Min. Temperature (°F)	55.2	55.4	51.4	43.7	37.9	33.8	31.8	33.8	37.9	43.2	47.3	51.8
Max. Temperature (°F)	82.6	81.3	76.5	67.8	59.4	53.6	52.2	55.4	60.8	66.7	73.2	79.2
Precipitation / Rainfall (mm)	63	51	55	50	47	38	51	49	61	64	61	48

Source: climate data.org

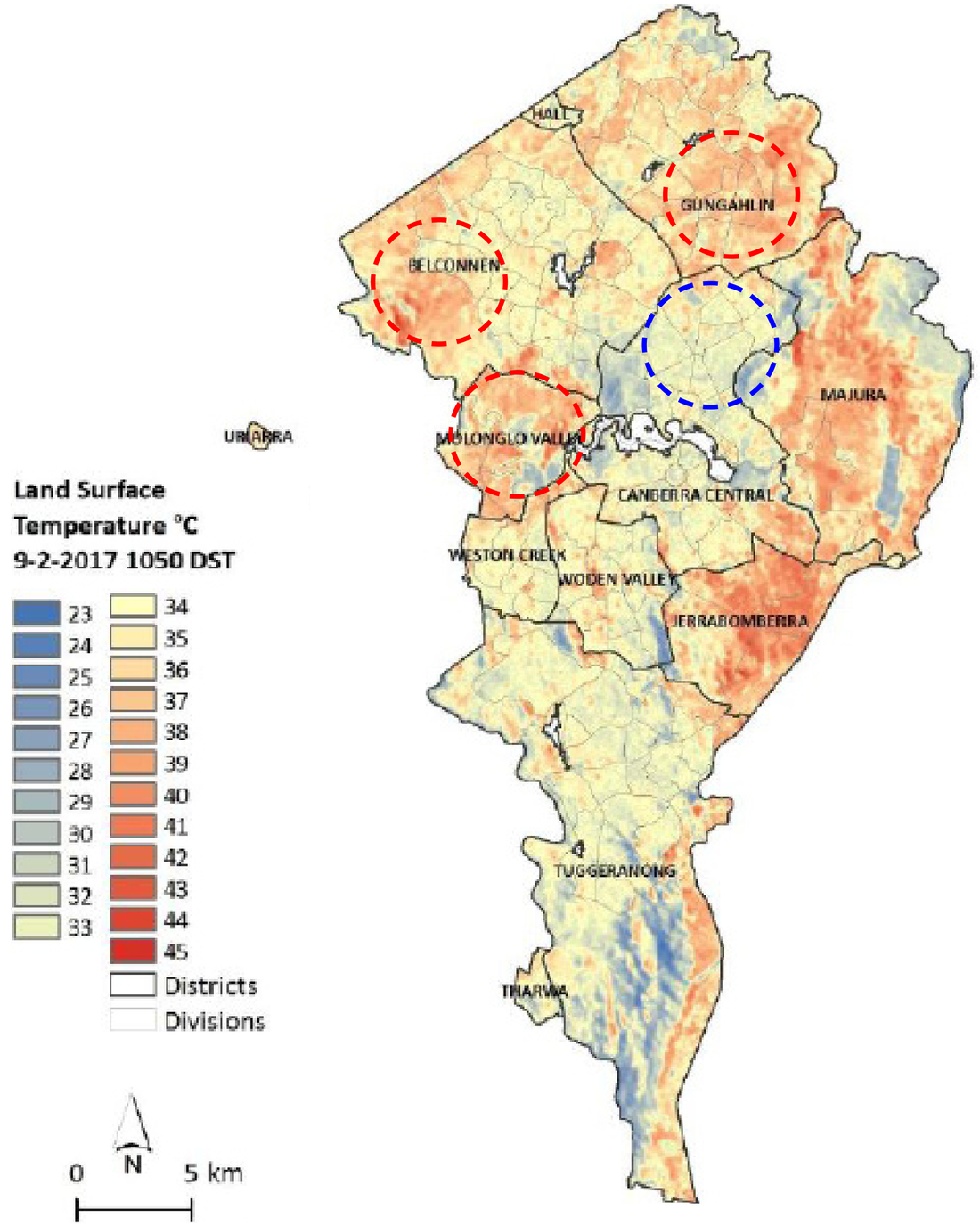
Urban Surface Heat in Canberra (CSIRO)

The 2017 CSIRO study *Mapping Surface Urban Heat in Canberra* found that in built-up areas, the surface urban heat island at night was around 8°C warmer in summer than in surrounding rural areas.

Suburbs with lower tree canopy cover experience a greater urban heat island effect.

When analysing residential built up areas:

- The hottest recorded temperatures were in Page, Wright and Franklin due to less tree canopy cover and more impervious surface cover.
- The cooler built up areas of Turner and Dickson have more tree canopy cover and more permeable surface cover.



Urban Surface Heat in Canberra (CSIRO)

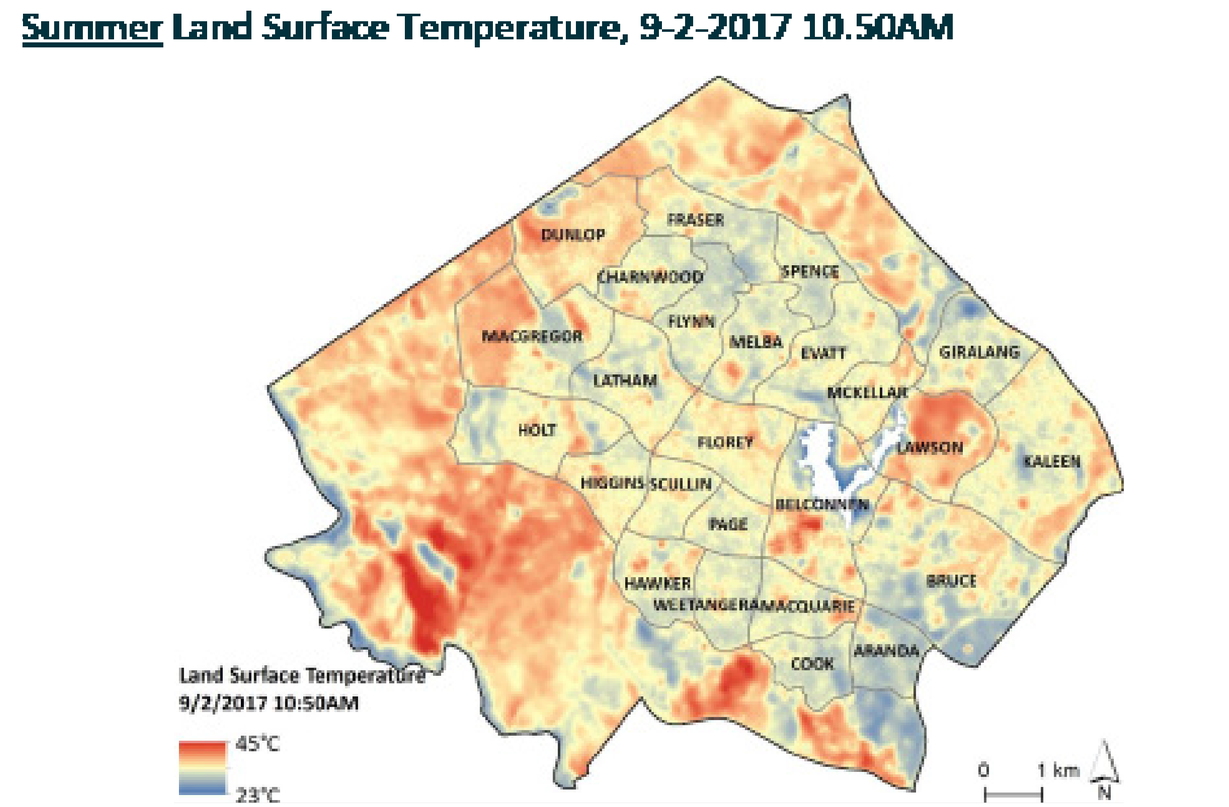


Figure S1: Land surface temperatures for 9 February 2017 (10.50 AM EST) derived using Landsat 8 thermal data

Approaches

What we have been asked to do?

The objective of this piece of work is to provide datasets on living infrastructure in N1 and N2.

To deliver on this, we propose the following methodology:

- Review N1 to identify its performance under agreed key measures of canopy coverage and permeable surfaces;
- The datasets will be drawn from CAD bases;
- The results will form a benchmark for N2;
- Review the developing N2 design and report on performance against benchmark measures;
- Prepare reporting for inclusion in N2 planning documents.

Ginninderry as a pilot project for comprehensive measurement of UHIE

The vision for Ginninderry is to create a sustainable community of international significance in the capital region.

It is registered as a Green Star Community – A Pilot project through the Green Building Council of Australia.

Opportunity to partner with research bodies to developed a tool for the study of UHIE in Canberra such as:

- UNSW Microclimate and Urban Heat Island Mitigation Tool. A 3D visualisation tool which examines climate and urban environments through a range of scenario analysis against Green Star Communities Criteria;
- CSIRO Urban Heat Island Effect study of Braddon. Determines materials used in buildings, tree canopies and open spaces then analyses tempreature through heat mapping.

Investigation

We have:

- Completed Desktop research to build a basic understanding of the science behind Urban Heat Islands;
- Considered how Urban Heat Island effect may impact Ginninderry community;
- Undertaken a review of measurement tools that are available;
- Developed a methodology based on the analysis and findings of the Living Infrastructure study undertaken for ACT Government. This methodology enables us to contectualise N1 with existing suburbs.

For comparison with the Living Infrastrucutre Report we have:

- Analysed and collated datasets on Living Infrastructure relevant to mitigating urban heat island effect;
- Drawn data for N1 from CAD bases to generate similar data sets;
- Reviewed and compared N1 datasets with existing analysis;
- Analysed CSIRO's heat mapping of surface temperatures.

These results will form a benchmark for N2 where we will be able to assess the developing N2 design and report the performance against these measures.

Living Infrastructure Study Application

Tait Network conducted a comparative study of Living Infrastructure across six target suburbs. It focused on green infrastructure/ canopy coverage (trees, gardens, parks and reserves) and blue infrastructure/ permeability (lakes, wetlands and waterways).

The report found that Urban Heat Island has a significant impact on areas lacking in tree canopy cover, recognising the importance of canopy cover in the street scape and open space.

Tait Network provided recommendations at the block, street and suburb scale to stregthen and improve the statutory provision of Living Infrastrucure, including considerations for greater permeable and planting areas on block.

Planning and Design for Living Infrastructure as part of Residential Intensification in a Changing Climate

N1 in perspective

These datasets have been extracted from the Living Infrastructure report and compared against the data available from CAD files for N1.

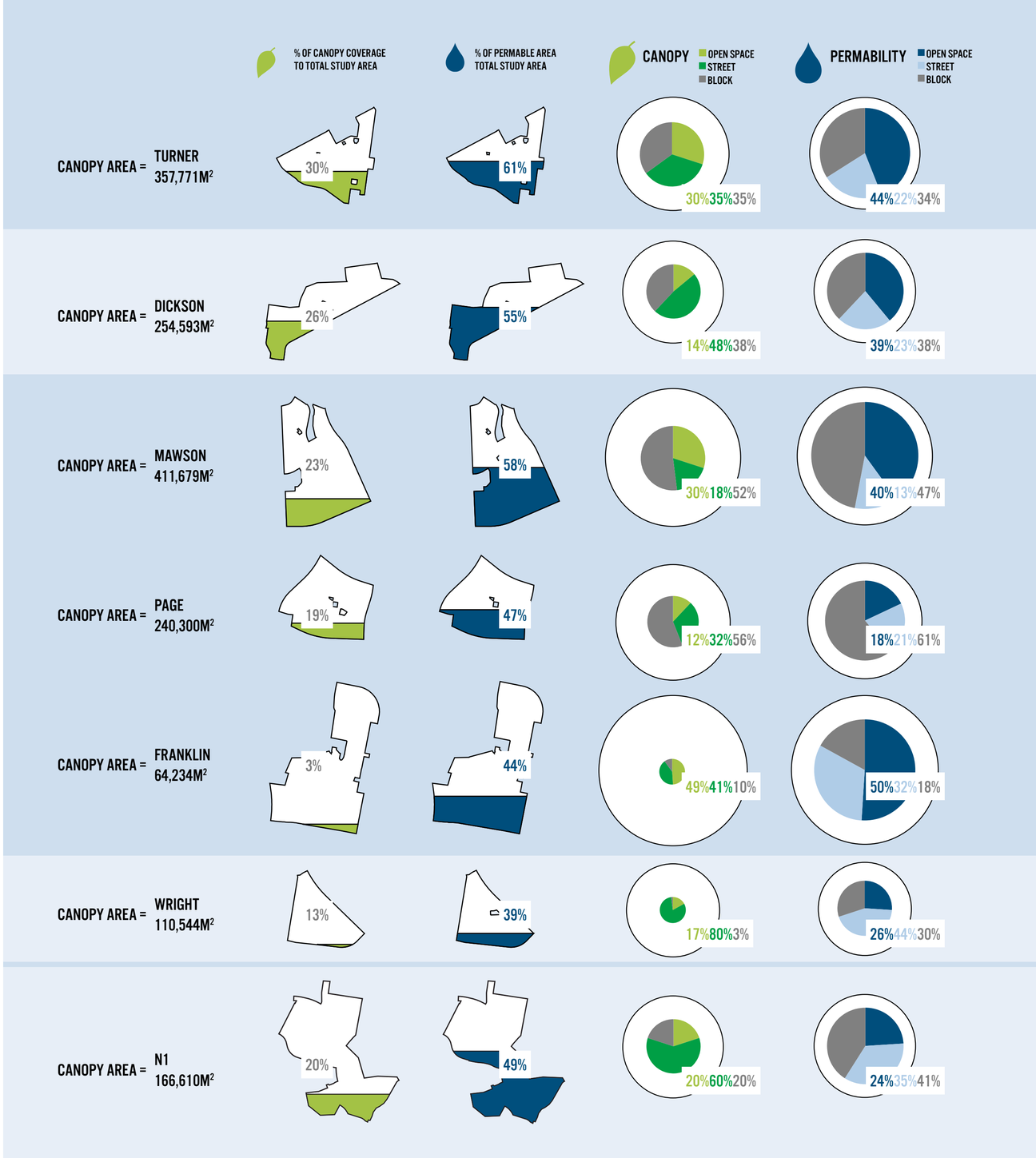
Study suburbs are broken into **open space, street and block** areas to contextualise the suburbs by size and land use allocation.

	STUDY AREA (M^2)	% OF OPEN SPACE AREA (INCLUDING NUZ3)	% OF STREET AREA TO STUDY AREA	% OF BLOCK AREA TO STUDY AREA
TURNER	1,179,933	27%	31%	42%
DICKSON	994,092	22%	28%	50%
MAWSON	1,818,248	23%	19%	57%
PAGE	1,272,425	8%	25%	66%
FRANKLIN	2,116,698	32%	34%	34%
WRIGHT	834,248	10%	43%	47%
N1	850,648	14%	42%	45%

Comparison of datasets

Suburbs with a higher tree canopy cover are generally cooler. *Older subrubs tend to have more mature trees which affects the amount of tree canopy coverage within the neighborhood. Generally it takes 5-10 years for trees to fully mature.*

- Canopy data for N1 was adopted from the Landscape Masterplan CAD file that assumes tree maturity.
- On block permeability was determined by creating a typical building footprint for Large, Medium and Compact blocks, adapted from selected typolgies in the Building Envelope Plans for N1 Stage 1.



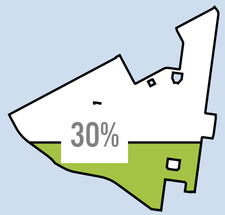
% OF CANOPY COVERAGE TO TOTAL STUDY AREA

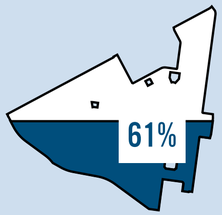
% OF PERMABLE AREA TOTAL STUDY AREA

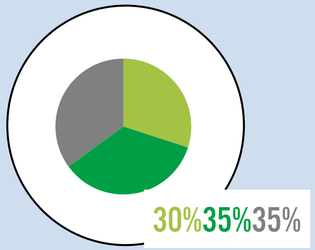
CANOPY
- OPEN SPACE
- STREET
- BLOCK

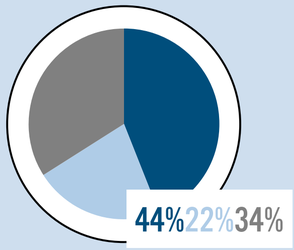
PERMABILITY
- OPEN SPACE
- STREET
- BLOCK

CANOPY AREA = TURNER 357,771M²

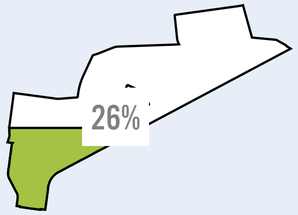


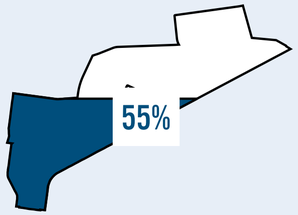


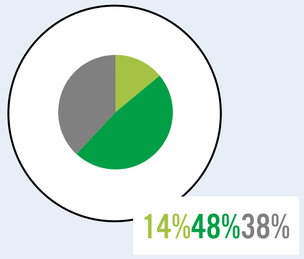


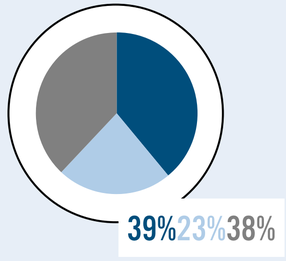


CANOPY AREA = DICKSON 254,593M²

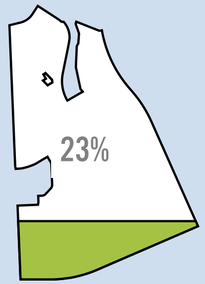


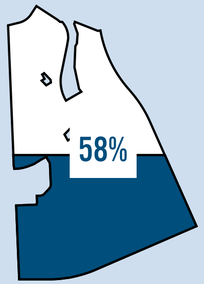


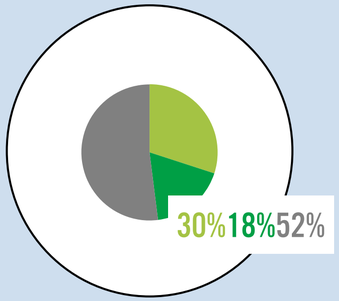


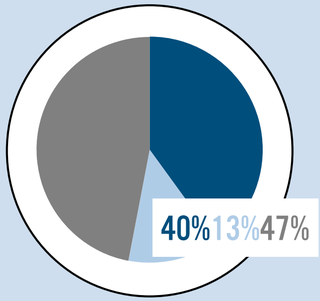


CANOPY AREA = MAWSON 411,679M²

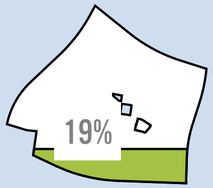


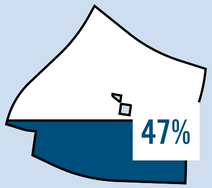


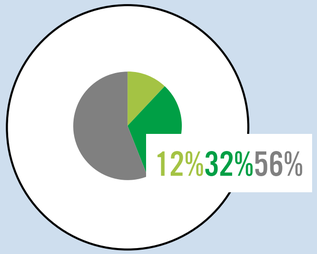


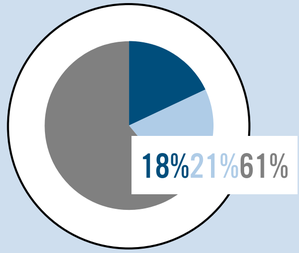


CANOPY AREA = PAGE 240,300M²

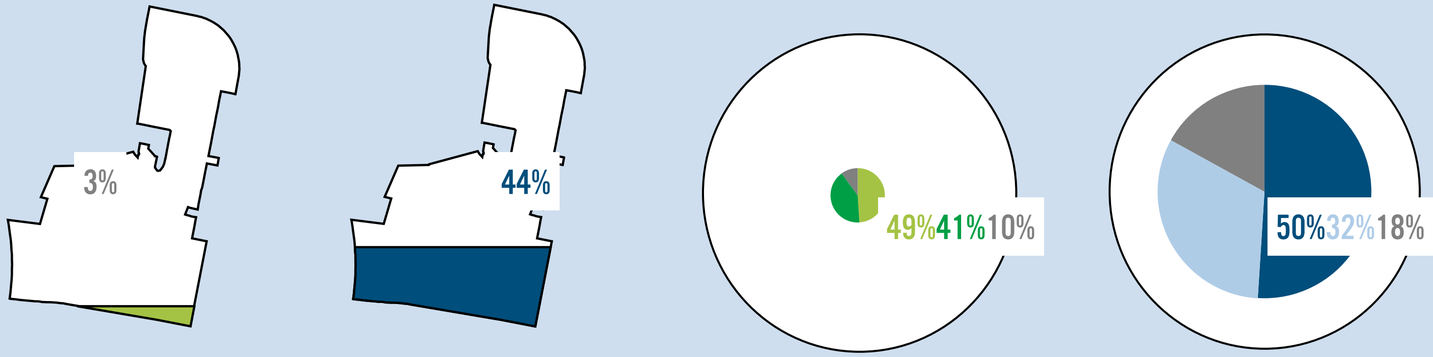




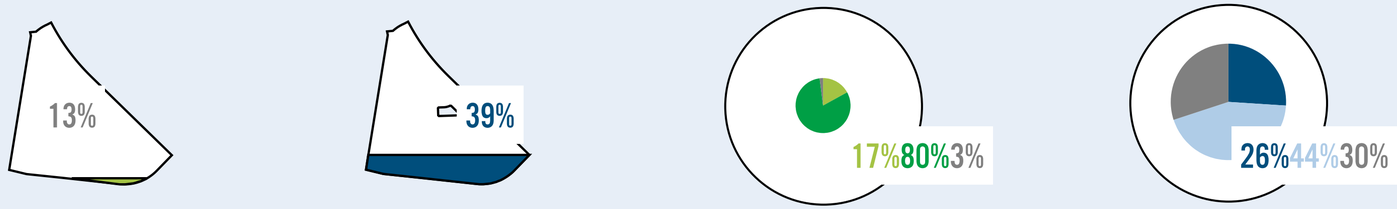




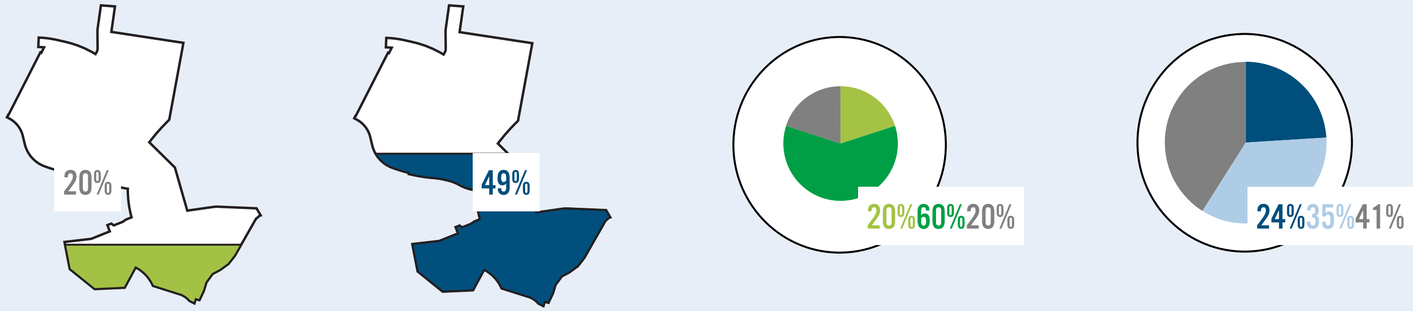
CANOPY AREA = FRANKLIN
64,234M²



CANOPY AREA = WRIGHT
110,544M²



CANOPY AREA = N1
166,610M²



Living Infrastructure Rules

The benchmark suburbs can apply certain rules within the study and seek to ensure maximum canopy cover and water filtration capacity is provided in the controllable assets of street reserve and open space.

R60
No more than 30% of the finished street verge surface is impervious.

EDC Additional Rule
A minimum of 30% of development boundary is zoned PRZ1 or NUZ3 for developments 20ha or greater.

R28
A minimum 40% canopy cover (within a suburb) is to be provided in the public realm. This rule applies to all public spaces except for the following:
i) street verges
ii) street medians
iii) access ways
iv) pedestrian lanes

Street tree controls seek to maximise shade by asserting a minimum street tree coverage through revision of EDP Table 2A.

Amendment to Estate Development Code – Table 2A

FACILITY TYPE	REAR LANE	SHARED USE ACCESS STREET 'WOONERF' STYLE	ACCESS STREET A	ACCESS STREET B	MINOR COLLECTOR	MAJOR COLLECTOR
Minimum Street Tree Requirement	No trees required and not to be planted unless sufficient space is provided	>40% street trees to be provided	40% street trees to be provided	40% street trees to be provided	25% street trees to be provided	30% street trees to be provided

Variation No 369

The Draft Variation to the Territory Plan No 369 proposes on block controls including maximum site coverage, minium planting area and minimum tree planting.

R40

Site coverage is a maximum of:

a) for large blocks: 40% of the block area

b) for mid-sized blocks: 50% of the block area

c) for compact blocks that are front loading blocks: 50% of the block area

d) for comact blocks that are rear loading blocks: 70% of the block area

R40B

Development provides a minimum level of tree planting in deep soil zones

a) for compact blocks, at least one small canopy tree

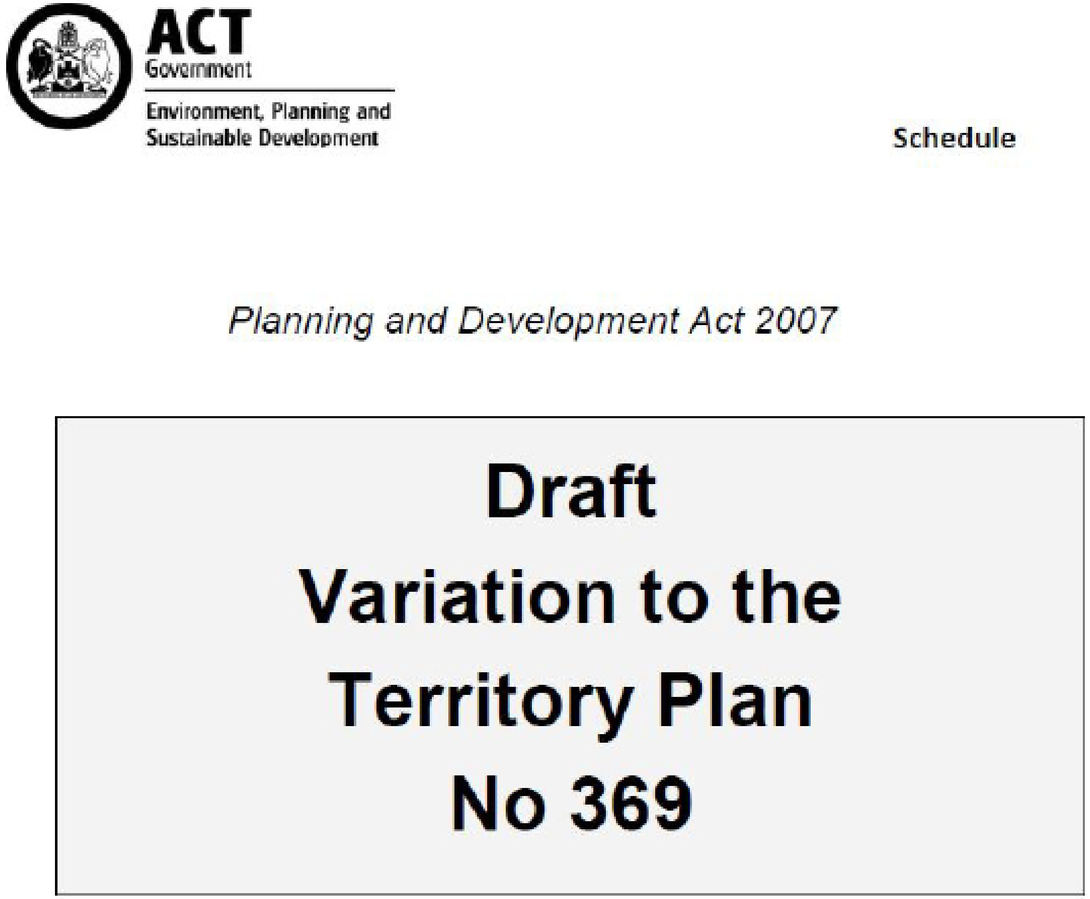
b) for mid-sized blocks, at least two small canopy trees

c) for large blocks less than or equal to 800m2, one small canopy tree and one medium canopy tree

d) for large blocks more than 800m2, at least:

i) one medium canopy tree and one large canopy tree, and

ii) one additional large canopy tree or two additional medium canopy trees for each additional 800m2 block area.

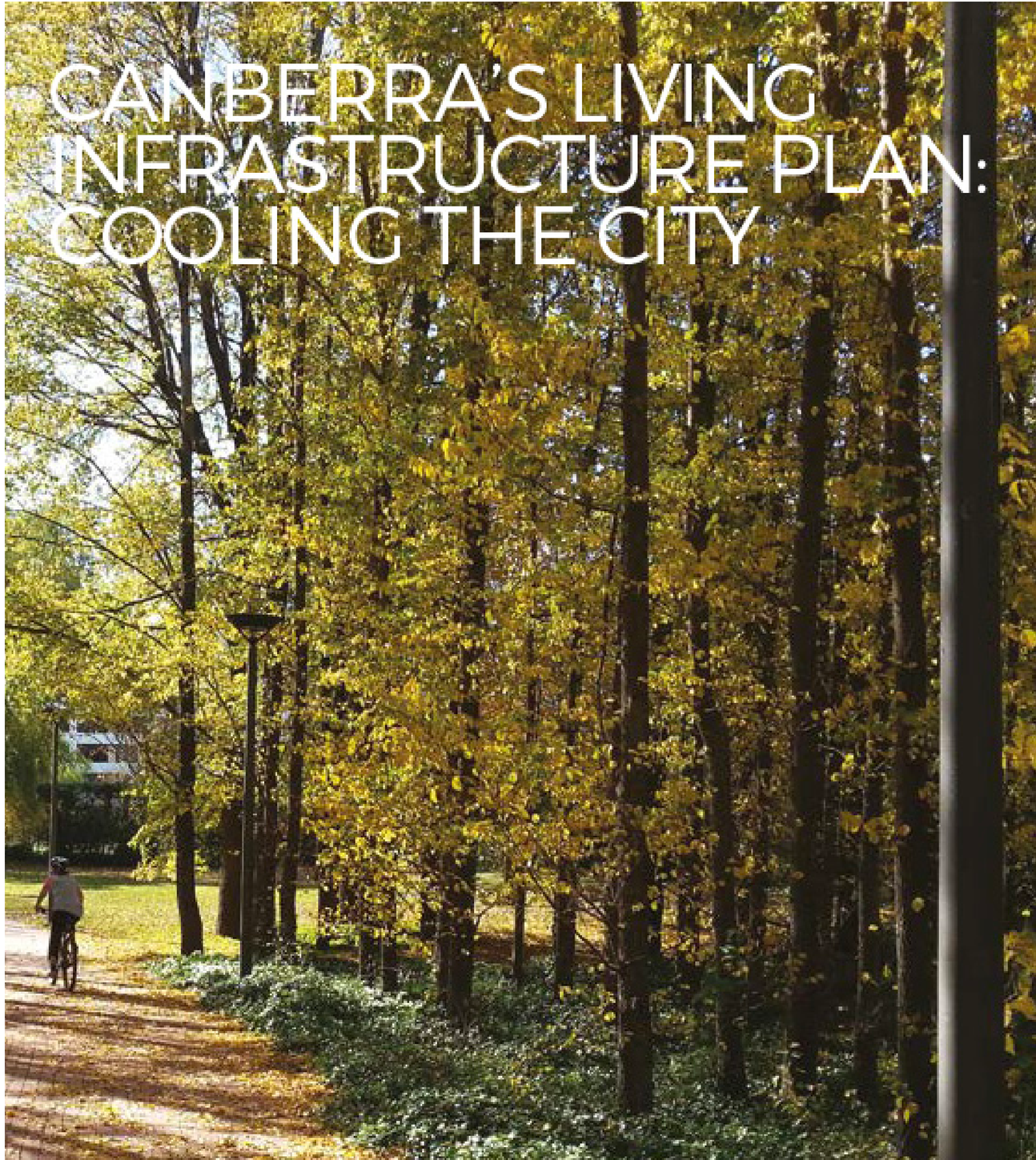


Canberra's Living Infrastrucure Plan: Cool ing the City, 2019

The Plan adopts key targets for canopy cover and permeable surfaces.

Action 2: Living Infrastrucure Targets
Achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in Canberra's urban footprint by 2045.

"These living infrastructure measures will need to be complemented by the use of climate-wise design and heat reflective materials in built infrastrucure to reduce heat absorbtion capacity."



Thank you

Tait Network

HELLO@TAITNETWORK.COM
02 6253 0222
TAITNETWORK.COM
SUITE 1, LEVEL 2, 10 HOBART PLACE
GPO BOX 808 CANBERRA ACT 2601

DV369 Discussion Paper

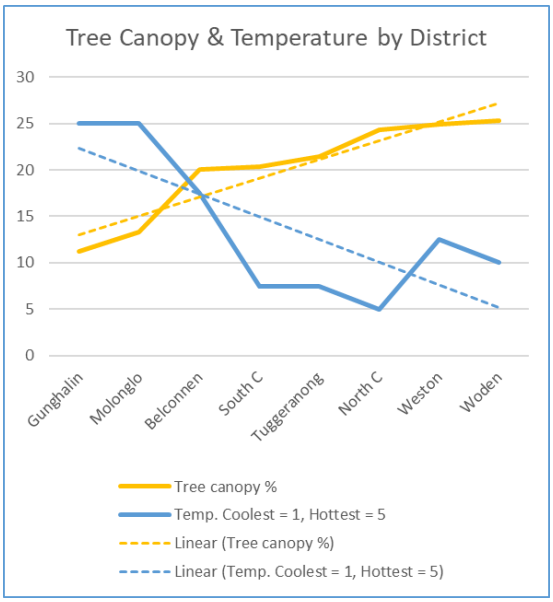
Prepared by A T Adams Consulting for Riverview Projects (ACT) Pty Ltd , May 2020.

Canberra District tree cover and temperature

The *Canberra Living Infrastructure Plan*[1], presents information in the form of a figure from a CSIRO study conducted in 2017[2], *Mapping surface urban heat in Canberra*. From this figure it is apparent that some urban areas of Canberra are noticeably hotter than others. From a visual inspection of the Figure an arbitrary heat scale ranging from 5 (coolest) to 25 (hottest) has been estimated for this paper for each Canberra district.

The ACT Planning Strategy 2018[3] provides data on the tree canopy for each district, expressed as a percentage. The two data sets are compared in the table below, and the chart illustrates the relationship between the two:

District	Tree canopy, % cover	Temperature: Coolest = 5, Hottest = 25
Gungahlin	11.2	25
Molonglo	13.3	25
Belconnen	20	17.5
South C	20.3	7.5
Tuggeranong	21.4	7.5
North C	24.3	5
Weston	24.9	12.5
Woden	25.3	10



From the graph above It seems to be apparent that there is a positive relationship between tree canopy cover and temperature. This supports the generally accepted assumption that the "leafy inner suburbs" of Canberra are consistently cooler than newer areas. However, a closer examination of the data suggests that this may want re-examination as the relationship is not consistent. North Canberra, Woden and Weston all have high and relatively equal tree coverage, ranging between 24.3 and 25.3%, but Woden and Weston are both noticeably hotter than North Canberra. Similarly, Belconnen and South Canberra have very similar levels of tree coverage (about 20%) but Belconnen is noticeably hotter than South Canberra. Gungahlin and Molonglo both apparently illustrate the principle that low tree coverage results in higher temperatures, but (given the results in other districts) this may be simply due to the fact that the newness of these districts has not allowed enough time for trees to mature.

[1] Canberra's Living Infrastructure Plan: Cooling the City, ACT Government, 2019, page 13
[2] Mapping surface urban heat in Canberra, J Meyers et al, CSIRO, 6 December 2017.
[3] ACT Planning Strategy 2018, ACT Government 2018, PP 94 - 97

What tree coverage is necessary to achieve a "cool" environment

The Canberra Living Infrastructure Plan has proposed the adoption of a blanket 30% canopy cover and this goal is now being translated into policy instruments such as Draft variation 369. The above approach suggests that such a blanket approach may not achieve the desired outcome because higher percentage coverage does not automatically seem to lead to reduced temperatures.

Perhaps more significantly is the fact that the Inner South Canberra District is rated as being "cool" in the Living Infrastructure Report whilst having a tree coverage of 20.3%. This district is generally acknowledged as being an exemplar environment in terms of tree coverage and resultant environmental outcomes and if this is achievable with a coverage of 20.3% it is unclear why a higher coverage level is necessary.

The first Ginninderry neighbourhood, which totals about 1200 residential blocks, has been calculated[4] as having a 20% tree cover (at maturity). From the discussion above this seems to be an adequate cover to achieve best practice cooling outcomes (when landscaping is mature) similar to inner south Canberra.

Planning design approaches, Historical and Recent.

Subdivision estate planning in Canberra has been a continuous process since the 1950's, and has evolved considerably during that period. Planning outcomes have generally been reflective of best practice approaches elsewhere in Australia. Early planning from the 1950's to the 1980's assumed a relatively homogeneous demand for housing typified by large blocks in suburban settings – the "quarter acre block". This approach did indeed reflect a relatively homogeneous demographic with new house buyers' populations dominated by traditional family units. The classical suburban subdivision style consumed large land areas to accommodate relatively few people at low densities; this in turn was enabled by two significant factors:

The supply of land was effectively infinite and consequently costs were low. Government land sale prices in Canberra in that period were commonly set at construction cost plus a small margin with supply consistently meeting or exceeding demand.

Environmental values were not recognised. In Canberra in particular, species and ecological communities associated with temperate woodlands, which typically existed on large areas of land otherwise eminently suitable for housing, were not recognised until the 1990's. For example, Yellow Box–Blakely's Red Gum Grassy Woodland was declared an endangered ecological community in the ACT in 1997.

Heritage values, which in some cases had dramatic impacts on the availability of land for subdivision, were not recognised, for example the "Lanyon Bowl" which protects the view from Lanyon Homestead was listed on the heritage register in the 1990's and preclude development of a large area of land previously intended to be the southern extremity of Tuggeranong.

In the 21st century the land development scenario has dramatically changed, housing prices have been steadily increasing since about the year 2000, and it is instructive to note that the price inflation has been in the land component rather than the house construction cost component of a house and land package. Put simply, housing land in Canberra is now a scarce commodity. The historical development of Gungahlin illustrates the situation.

[4] Tait network, Powerpoint Feb 2020.

Gungahlin Development history

The first resident moved into Gungahlin (Palmerston) in 1993. This followed a planning process undertaken by the National Capital Development Commission (NCDC) which led to a "policy plan" for Gungahlin as shown in Figure 1 below and subsequently incorporated in the initial National Capital Plan, approved in 1990 shortly after the commencement of self Government in 1988. Gungahlin planning by the NCDC was relatively unconstrained by broadacre environmental and heritage constraints and it is apparent from the plan that the area of land proposed for residential use (shown orange) was maximised. This area (i.e. Gungahlin) was to accommodate 86,000 people. The progressive implementation of environmental protection and heritage legislation over the 1990's and 2000's substantial areas of residential land were rezoned for non-urban (largely conservation) use.[5] Visual inspection of the plans suggests that about a third of the area originally proposed for residential use was lost. On the face of it this should have meant a reduction in population potential from the originally planned 84,000 to two thirds of that number, about 55,000.

In fact the opposite has occurred. In 2017 Gungahlin accommodated 85,422 people and is projected to grow to 100,000 by 2041.[6] The is effectively double the density originally envisaged by the NCDC.

The change is made possible by a different approach to subdivision planning. Older style planning where 600 – 800m^2 blocks were the most common sizes is now replaced by a more intensive and compact planning style where 200 – 600m^2 blocks are the norm. at the same time private house footprints have been getting bigger, to the extent that Australian houses are the second largest, in terms of floorspace, in the world.[7] These factors have combined to result in larger built forms on smaller blocks – the trade-off benefit however has been vastly increased public open space, in the form of nature reserve land.

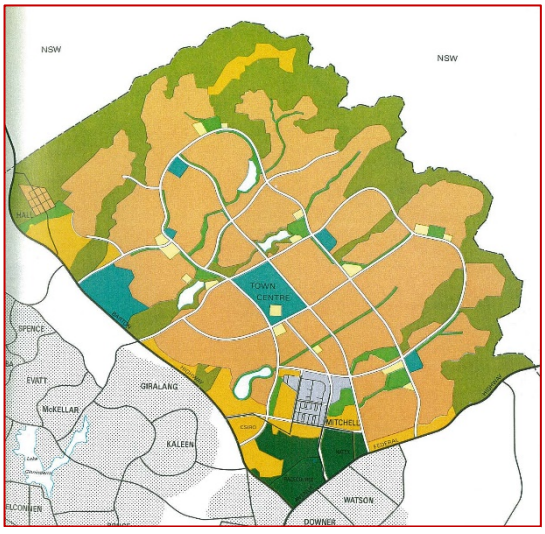


Figure 1: Gungahlin plan at 1993

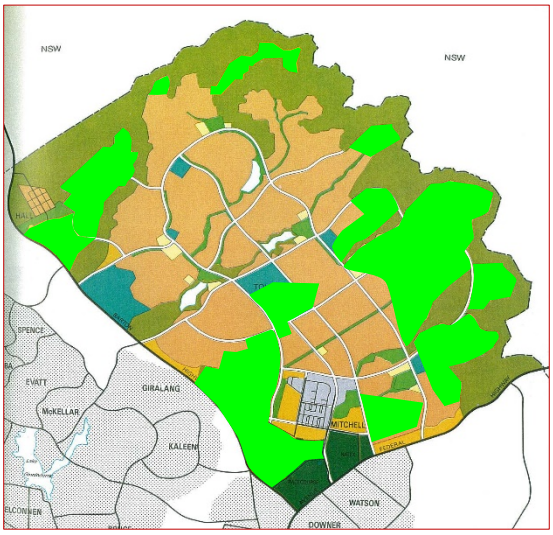


Figure 2: Gungahlin plan at 2019

[5] Note that this paper is not arguing that the introduction of environmental and heritage controls was not important and necessary, it was and continues to be so. There are however consequences in reduced land availability for residential use.

[6] ACT Planning Strategy 2018.

[7] The most recent available data (commissioned by CommSec and conducted by the ABS) in 2016 shows the average size of a new-build free-standing home in Australia is 231m2. This represents a decline since house sizes peaked in 2009 at 247m2 and gradually fell to 241m2 in 2013. It also signals that we're continuing to move away from the McMansion era. This most recent decline in floorplan size has seen Australia drop to second place behind America, which has now taken over the title as the country building the biggest houses which average 249m2 - https://www.homestolove.com.au/house-sizes-how-does-australia-compare-3047

In simple terms the thirty year period up to 2019 has seen a replacement of private with pubic open space; a trade-off of back yards for nature reserves.

Constraints on land availability, and the resultant need to accommodate more people on shrinking land areas has forced this shift in design style.

This happens, fortunately, to have coincided with a major socio-economic shift in the Australian population and in the style of housing that people are demanding. When the NCDC was planning Gungahlin a homogeneous house purchaser model – the anglo-european family with children – was assumed. This has changed dramatically. Single and two person only households are now the majority and a multi-cultural population requires a multiplicity of approaches to house design style. Back yards, for example, are simply not wanted by some demographic and ethnic groups.

Sustainable Master planning at Ginninderry

The lessons from Gungahlin, and similar experiences elsewhere in Australia have been learned and applied in the Ginninderry master planning process. Rather than seek to develop virtually all the site, (as initially happened at Gungahlin) with progressive excisions by a process of attrition as environmental values are progressively identified and protected, the master plan process researched all known environmental values as a first step. This led to the very early definition of the conservation corridor, which occupied about one third of the total site and which was precluded from development from the start. It should be recognised that, in the absence of environmental and cultural values, a large portion of the conservation corridor would be eminently developable. Any analysis of overall planning, amenity and housing outcomes at Ginninderry must necessarily take the conservation corridor as being an integral part of the whole Ginninderry site.

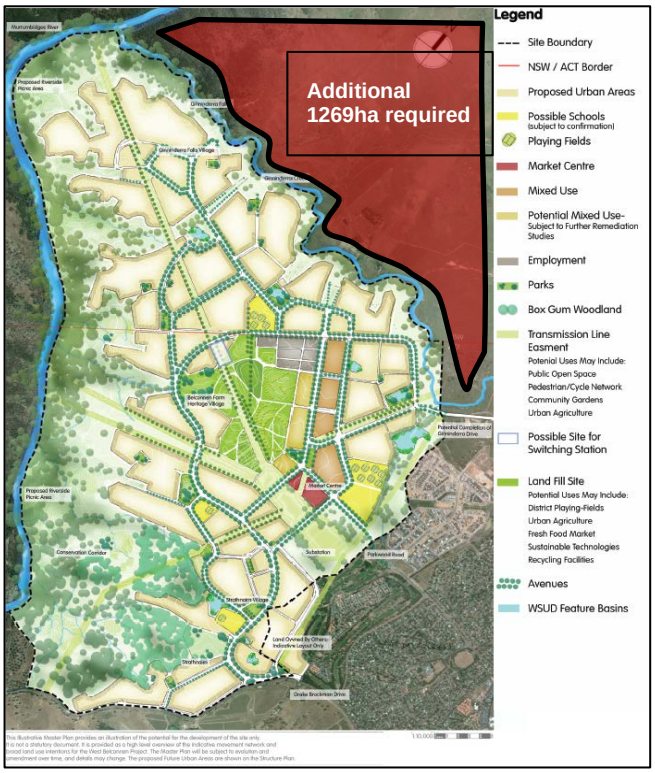


Figure3: land take for average block size of 725m^2

The alternative outcome is illustrated in Figure 3. Ginninderry has been planned on an average notional block size per dwelling of 400m^2. If this were to be increased to a block size that was normal thirty years ago, say 725m^2 (which would allow the great majority blocks to have large back yards) then an additional 1269 ha. of land would be required.

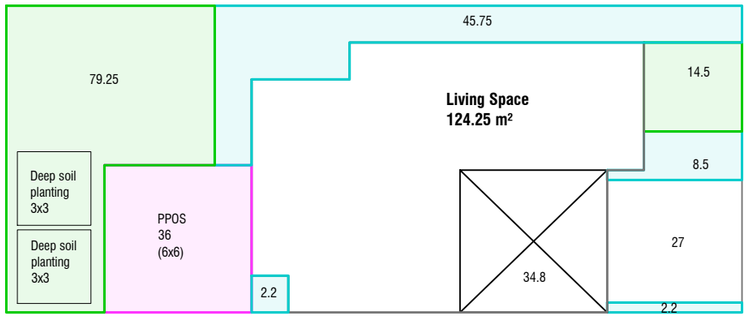
Tree canopy coverage at Ginninderry

The above analysis shows that planning approaches in different districts of Canberra have evolved over time and that the planning principles that have been applied at Ginninderry are very different to those that would have been applied in older areas. This must be borne in mind when comparing older areas with Ginninderry.

S noted earlier in this paper, Ginninderry is achieving approximately a 20% tree cover, which is equivalent to the "gold standard" inner Canberra suburbs. To achieve this whilst applying modern suburban planning principles to achieve much higher densities than would previously have been possible, and at the same time creating a very large conservation reserve must be rated as an exemplary outcome.

The need for DV369 which will not improve on this position and which will, as discussed elsewhere in this submission, frustrate it, is questioned.

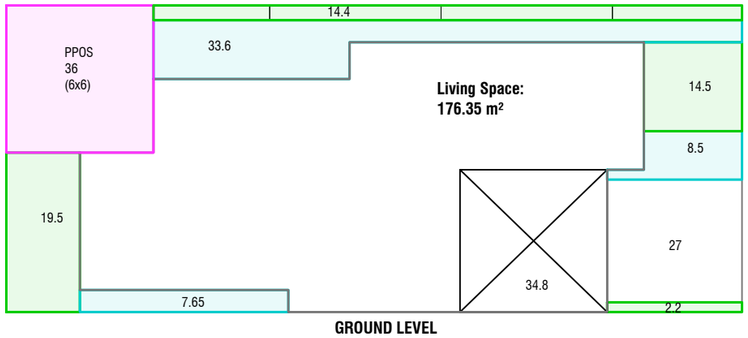
DV 369



GROUND LEVEL

UPPER LEVEL

EXISTING CODE



GROUND LEVEL

UPPER LEVEL

LEGEND

INDICATIVE SITE COVERAGE

SOLAR ENVELOPE SETBACK

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 375m²		*EXISTING CODE*		*DV 369*	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	100m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	187.5m²
m²	PLANTING AREA	Min 50% of the POS	50m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	93.75m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

		EXISTING CODE		*DV 369*	
		AREA (m²)	%	AREA (m²)	%
POS	PPOS	36	9.6%	36	9.6%
	PLANTING AREA	50.6	13.49%	93.75	25%
	OTHERS	49.75	13.26%	58.65	15.64%
	TOTAL	136.3	36.35%	188.4	50.24%
GFA	GROUND LIVING SPACE	176.35	47.03%	124.25	33.13%
	UPPER LIVING SPACE	53.53	14.28%	53.53	14.28%
	GARAGE	34.8	9.28%	34.8	9.28%
	TOTAL	264.68	70.58%	212.58	XX%
DRIVEWAY		27.5	7.3%	27.5	7.3%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 375m2 W-E (12.5X30)

DRAWN **CHECKED**
BR

DATE
27-02-20

SCALE
1:250 @A3

0 1 2 3 4 5 10 15

NOTES
Copyright and property of PlaceLogic - may be used only for the stated project and issue status, and in accordance with terms of engagement for which it was commissioned.
To be read in conjunction with all relevant contracts, specifications, reports, drawings and development approval conditions - obtain any outstanding statutory approvals prior to commencement of works.
Use figured dimensions - do not scale from drawings. Dimensions are in metres unless noted otherwise.

CLIENT
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PREPARED BY
PLACE LOGIC
Urban Design | Landscape Architecture
www.placelogic.com.au
ABN 25 619 179 743

STATUS
DRAFT

REV. **DRAWING NO.**
DRAFT

CURRENT COMPACT BLOCK
Front loaded as built at Ginninderry

TYPICAL FLEXI ALTO 2
Affordable housing

AREA SCHEDULE

Block Area = 114.0m2
RZ3 Urban Residential

Site Coverage 66/114 = 57%

carspace = 16.5m2
PPOS = 16.0m2
utility area = 14.0m2

Block Open space achieved = 48.0m2 or 43%

Ground fl = 43.5m2
first fl = 60.5m2
Garage = 22.5m2

GFA = 126.5m2

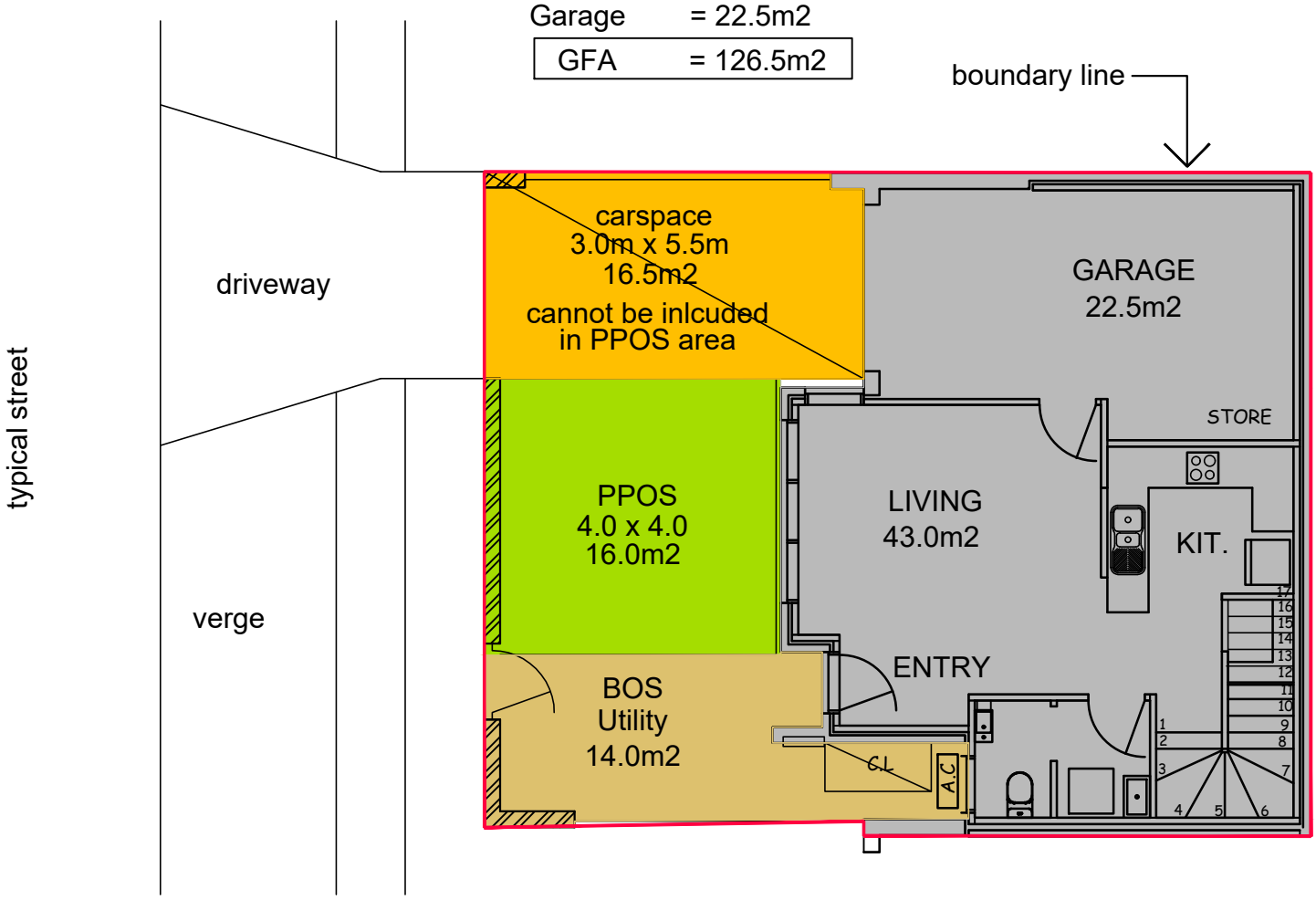

Figure 1.

Proposed Amendment impacts to
COMPACT BLOCK
Front loaded

TYPICAL FLEXI ALTO 2
no longer a useable typology

AREA SCHEDULE

Block Area = 114.0m2
RZ3 Urban Residential

Site Coverage 40/114 = 35%

carspace = 16.5m2 or 15%
cannot be included in PPOS

PPOS Required 50% = 57m2 increased + 27m2

Ground fl	= 17.5m2	reduced -25.5m2
first fl	= 40.0m2	reduced -20.0m2
Garage	= 22.5m2	
GFA	= 80.0m2	reduced -45.5m2

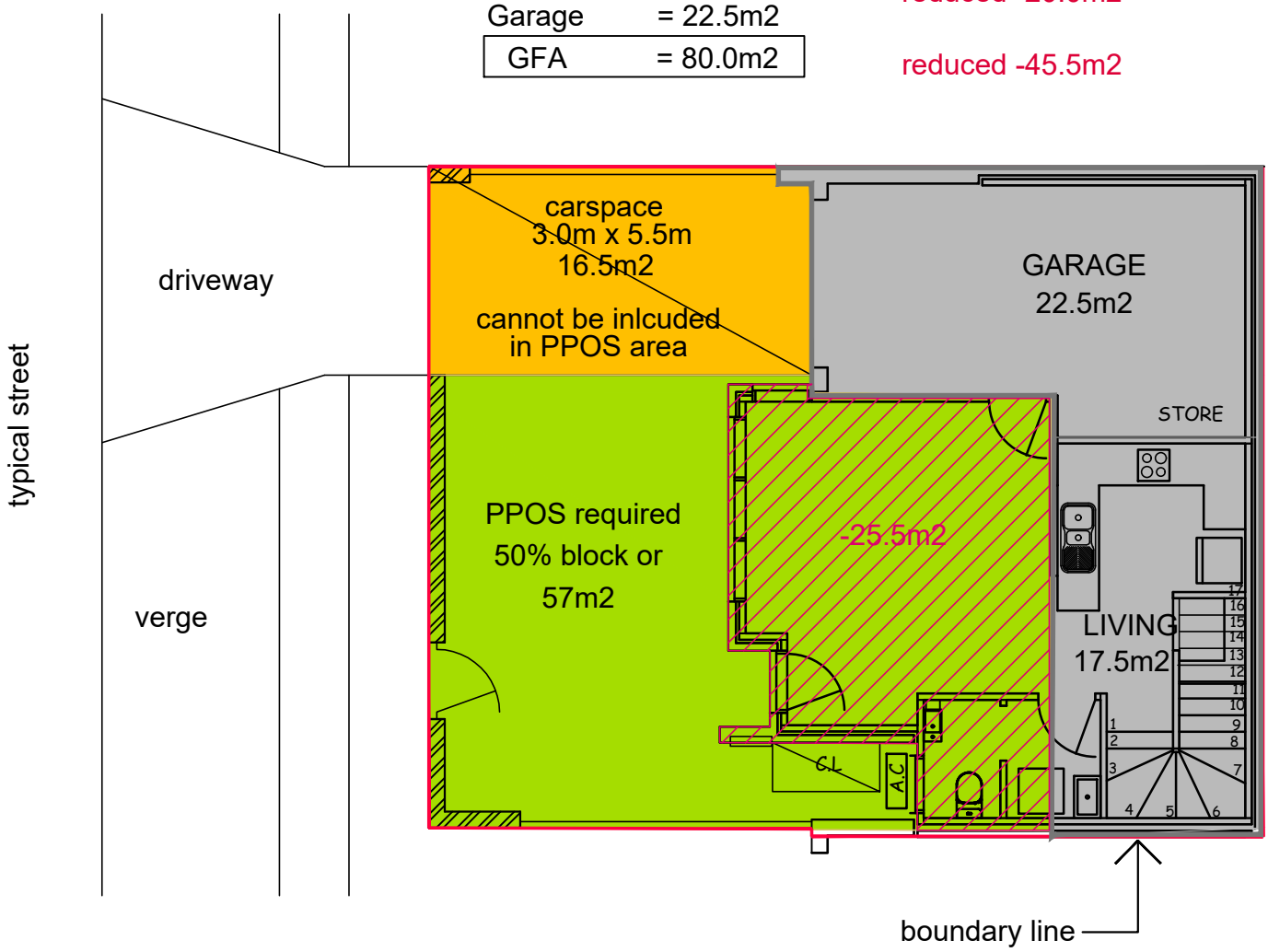

Figure 3.

Ginninderry example			
	Existing code	DV369	Differ
	Area	Area	#
Public open space	2570	2213	- 357
Road reserve	4056	4056	-
Private land	7384	7741	357
Other (substation etc)	84	84	-
Total land in test area (m²)	**14094**	**14094**	
Yield Analysis			
Dwelling yield	43	38	- 5.0
Gross land per dwelling (m²)	327.8	370.9	43.1
Land per 1000 dwellings (m²)	327,767.4	370,894.7	43,127.3
Road area per dwelling (m²)	94.3	106.7	12.4
Road area per 1000 dwellings (m²)	94,325.6	106,736.8	12,411.3
Public open space per dw (m²)	59.8	58.2	- 1.5
Public open space per 1000 dw (m²)	59,767.4	58,236.8	- 1,530.6
Average block size (m²)	171.7	203.7	32.0
Average $/m² for compact lot	$ 1,000	$ 1,000	-
Average block price	$ 171,721	$ 203,711	########

Rear vs Front loaded - DV369 rules applied compact blocks			
	Front loading		Rear lo
	Area	%	Area
Landscape area	2679	42%	1944
Hard paved	1815	29%	1600
Building coverage	1850	29%	2800
Total land in test area (m²)	**6344**		**6344**

ence	Commentary
%	
-2.5%	less public open space is delivered
2.5%	more privatisation of land
-11.6%	Efficiency is reduced as fewer dwellings are delivered on the same land
13.2%	Total englobo land take increases by 43m² per block Additional 4.3 hectares of Greenfield land is required to deliver 1000 dwellings
13.2%	An additional 12.4m² of road reserve is required per block Additional 12.4 hectares of road is required to deliver 1,000 dwellings
-2.6%	Public open space is reduced by 1530m² for 1,000 dwellings
18.6%	Average block size increases by 32m² to deliver equivalent homes
18.6%	Average block price increases by c.$32,000

oading	
%	
31%	DV369 results in rear loading delivering 11% less landscape area
25%	DV369 results in similar hard paved area
44%	DV369 results in rear loading delivering 15% more site coverage

Ginninderry

The Link
90 Stockdill Drive
(adjacent to Strathnairn
Arts Association)
Holt ACT 2615

PO Box 484
Kippax ACT 2615
P 02 6255 1158
F 02 6239 6004
ginninderry.com

06 May 2020

[redacted]
Environment, Planning and Sustainable
Development Directorate
16 Challis Street, Dickson ACT

Email: [redacted]

RE: Draft Variation No 369 (Living Infrastructure in Residential Zones)

Dear [redacted]

Please accept this submission in response to Draft Variation 369 (DV369). This submission has been written by Riverview Projects (ACT) Pty Ltd (Riverview) in its capacity as Development Manager for the Ginninderry Joint Venture.

Riverview understands that DV369 is a response to the ACT Planning Strategy, 2018 and the ACT Government's 'Canberra's Living Infrastructure Plan: Cooling the City' (Living Infrastructure) policy direction, released in 2019. Ginninderry is supportive of the ACT Government's forward-thinking approach in providing a policy that addresses Canberra's changing climate and focuses on the wellbeing of the city, its green infrastructure and its people into the future.

The Living Infrastructure paper provides for 'tree canopy targets' in the public realm and on private blocks; it aims for 30% of Canberra's urban environment to be covered by a tree canopy or a tree canopy equivalent.

While Riverview is supportive of the intent in promoting on-block soft-landscaping in residential zones, the practical impact of DV369 has been carefully considered in this letter. We ask EPSDD to consider the enclose information, including detailed analysis which has informed the comments and recommendations.

We ask for your consideration of the following matters –

- Ginninderry is a master-planned Greenfields development planned at an estate level
- Built form outcomes on large blocks and mid blocks
- DV rules for compact blocks applied to Ginninderry terrace-built form, including affordability
- Grandfather clause for approved subdivision blocks
- Secondary residence/ secondary dwelling
- DV369 applied to the Multi-Unit Housing Development Code
- Functional landscaping outcomes

Ginninderry is a master-planned Greenfields development - planned at an estate level

Ginninderry is a 30-40-year master-planned community located in West Belconnen. The Ginninderry project is a unique public/private partnership with a local family run company (Riverview Developments) and the ACT Government. What sets Ginninderry apart from other greenfield developments in Canberra is not only the length of the development timeframe but also its aspiration to build a resilient community for the future.

The structure of the Ginninderry Joint Venture provides for a team of professionals that are responsible for the urban design, civil construction, delivery and compliance of the Ginninderry Development Requirements. These requirements, along with oversight of road maintenance, presentable verges, front landscape and built form design – are all above and beyond the standard greenfield delivery practice within Australia.

The Ginninderry team includes a community development liaison officer and design team which are contactable by future residents, developers and builders through multiple touchpoints in the development process. The Ginninderry team provides support and assistance through the design process to post-occupancy, to ensure best practice and outcomes for the development are achieved. The Ginninderry project has reached an exciting milestone as the first suburb, Strathnairn has received its first residents in February 2020.

Environmental studies at Ginninderry have considered matters of national significance in accord with the (Commonwealth) Environment Protection and Biodiversity Conservation Act 1999, and ACT and NSW planning and environmental legislation. These rigorous environmental studies have resulted in the establishment of a Conservation Corridor of a total area of 596ha (by project completion. The Conservation Corridor equates to 37% of the site area. When allowance is made for the landfill site (107ha or 7% of the site) which will be largely open space, some 913 ha or 56% of the site will be developed, with a further 11% or 100ha of the proposed urban area of 913ha being set aside as open space.

The Conservation Corridor is in addition to the open space network provided within each estate development plan at the suburban level. On completion, the Conservation corridor will provide Ginninderry's residents and visitors a unique opportunity to access nature through an extensive tracks and trails network, river access, visitor centre and ultimately public access to Ginninderra Falls.

Ginninderry has taken part in an extensive research project with the Australian National University and Singapore National Parks Board to ensure that estate plans were/are designed around the existing remnant trees on site with a target of 80% for retention of remnant or "paddock" trees for each estate development planning phase at Ginninderry. This has led to the retention of 78% of all trees within Estate Development Plan 1, and 92% of all trees within Estate Development Plan 2 of Strathnairn. Elsewhere in Canberra 'Business as usual practice' would be 25-50% tree retention at an estate level.

The research project also aims to explore alternative maintenance treatments for the remnant trees retained within Ginninderry's urban areas. Massed shrub plantings and restoration to native grasses and wildflowers will be trialled alongside the 'old Canberra mow' (simple grass seeding under remnant trees). This research project will analyse these treatments to assess their upfront cost implications, tree health and longevity, maintenance requirements and their habitat qualities for animals (including birds, pollinators and reptiles).

The Ginninderry project is delivering, a master-planned greenfield development across three new suburbs in West Belconnen and one in New South Wales. Ginninderry is driven by a triple bottom line approach to development; environmentally, socially and economically. This triple bottom line approach is at the heart of all decision-making for the project. This ideology is demonstrated through the research committee, community groups and reports on and for the Ginninderry project, to ensure best practice.

Best practice at Ginninderry includes going above and beyond standard planning and design parameters. It includes challenging current 'business as usual practice' to obtain better outcomes for the estate, future residents and planning for a resilient community.

With the above context in mind, and having reviewed DV369, we provide comments below identifying the direct impacts this proposed policy would have on the Ginninderry development.

Estate level planning

To understand the estate-level implications of DV369, Place Logic were engaged by Riverview to analyse a sample area of the Estate Development Plan 1, Strathnairn which has been recently completed. The block analysis is provided in Appendix A – DV369 Yield Testing plan.

The purpose of this analysis was to compare the amount of block area required under the DV369 rules to provide for the same built form outcome on each block.

This analysis considered the impact of DV369 in two ways;

1. Impact on public open space
2. Impact on developable area and density

The analysis finds that the block area required to meet the DV369 provisions increased from 52.4% to 54.9% of the test site area of 14,094m². This increase in block size, meant that the public open space would be reduced from 18.2% to 15.7%, of the total area. Consequently, to achieve the same built form on this site under the DV369 rules, a reduction in open space of about 2.5% of the total area or approximately 350m² is lost to private blocks. This is a significant reduction in public amenity.

Not only is the amount of public amenity reduced, but the number of housing blocks in the sample site (43) would be reduced to 38 blocks to provide for the same on-block built-form. This is a reduction of five blocks over a small sample size.

The implementation of DV369 would require larger block sizes, reducing the blocks available which would inevitably increase the cost of the land as cost is directly related to block size, impacting on affordability.

The increased block size to allow for the same built form that is allowable under the current Territory Plan, would see the increase of Canberra's built form footprint at an estate level. If extrapolated to the whole-of-project scale, then the impact of DV369 would include a requirement for an additional 40 ha of developable land - either as an extension of the Ginninderry project site or elsewhere - to accommodate the same number of dwellings.

Ginninderry block design is developed at the estate level, including block typology and location in relation to amenities, including open space, and services throughout the suburb. The increased private land take that would be caused by the DV369 rules will either reduce amenity and benefit to those living within the suburb by reducing open space provisions or increase total land take at the macro estate level.

Being a master-planned greenfield project this has allowed for a holistic consideration of and management in the following site constraints and opportunities with regard to –

- Remnant trees
- Conservation Corridor
- Landfill site
- Open space
- Streetscape

Tait Network has undertaken an analysis of Neighbourhood 1 of Ginninderry to understand the Urban Heat Island Effect, (Appendix B). The open space and streetscape provide for a combined total of 20% canopy cover over Neighbourhood 1 (Urban Heat Island Effect, p12).

The analysis compares Neighbourhood 1 of Ginninderry with other established Canberra suburbs. Ginninderry provides for comparable tree canopy cover to Mawson (at 23%) and Dickson (at 26%) and much greater tree canopy cover than other new greenfield developments such as Wright (13%) and Franklin (3%).

Ginninderry Neighbourhood 1 estate development planning provides for an efficient, compact suburban design with 60% of the suburb's tree canopy cover in the street. This compares with 48% for the established suburb of Dickson (Urban Heat Island Effect, p13). This high allocation is sensible given that the largest areas of non-permeable surfaces within residential areas are street systems.

The Tait analysis demonstrates that the Heat Island outcomes at Ginninderry compare favourably to traditional inner suburbs of Canberra that are seen as exemplars of good urban forest design. This analysis supports Ginninderry's vision of best practice, through sound subdivision and meaningful tree canopy cover within the public realm and not relying on individual blocks to provide for canopy cover.

The above analysis does not include any part of the adjacent, 596ha Ginninderry conservation corridor which, if divided equally between the projected 11,500 blocks to be developed over the 40-year lifetime of Ginninderry, would be the equivalent to an additional 500m^2 of open space per residential block.

Much of this is woodland, under the proposed management arrangements with the Ginninderry Conservation Trust, this will be improved and expanded. This "canopy cover" whilst not within the future urban footprint, is in place as a direct result of the urbanisation of the site and must be taken into account in any reckoning of the overall tree cover outcomes for an estate such as Ginninderry. In the absence of the Ginninderry project, it would remain as degraded and degrading farmland.

Having regard to the above, we ask that the Territory Plan team considers DV369 within the context of a master-planned greenfield development, like Ginninderry where the environmental considerations have influenced the configuration of the developable area. This perspective is further considered in the DV369 Discussion Paper, (Appendix C). There is a clear distinction between master-planned greenfield and infill development, and we believe that DV369 should be reconsidered in this light. There is an opportunity for a more considered policy direction that would apply the Living Infrastructure principles within the Estate Development Code of the *Territory Plan* for a master-planned greenfield development.

Built form outcome for large blocks (Single Dwelling Housing Development Code)

Rule 38 (DV) pertains to large blocks and the associated private open space requirement. On review of the existing rule in the Territory Plan and the outcome of the proposed site coverage of built form to private open space, Ginninderry is not opposed to this rule. A reasonable built form outcome is achievable when Rule 38 (DV) is applied. The additional 50m² and minimum dimension of 2.5m to planting area provides the opportunity for additional planting on the block, noting however that substantial planting is generally already possible on large blocks.

Built form outcome for mid-sized blocks (Single Dwelling Housing Development Code)

Place Logic has been commissioned by Canberra Airport Group to analyse the impact on the mid-sized blocks at Denman Prospect. Ginninderry has a range of mid-sized block, with similar dimensions as analysed for Denman Prospect. 375m² mid-sized block with east-west orientation has been included in Appendix D (shared with permission of Canberra Airport Group). When solar access controls are overlayed, the total buildable area on the second floor is 53m². Building a second floor to a 375m² block is not practice in consideration of additional build costs and buildability.

The below matters have been considered practical built form of a 375m² to the ground floor -

- The current Territory plan allows for 176m² of liveable area to be built
- Rule 39 (DV) reduces the liveable area to 124m²
- Effectively reducing the opportunity for proponents to build a 3-4 bedroom home to a tight 3-bedroom home
- Increasing the cost of land as proponents will be required to buy a larger block of land to build a reasonable built form
- At an estate level this will mean increasing the block sizes to meet the needs of proponents reducing the density at an estate level

While private open space is substantially increased on mid-sized blocks as a result of Rule 39 (DV), we ask the Planning Authority to consider this planning policy holistically – not only with consideration to the estate planning as discussed above but also within the context of affordability and objectives for Canberra, as a compact city.

Affordable Housing - DV rules for compact blocks & Ginninderry terrace built form (Single Dwelling Housing Development Code)

Affordability is one of the key drivers at Ginninderry and is being delivered in ways that exceed Government policy requirements and provisions for affordable housing elsewhere in Canberra:

- 20% of housing will meet the Ginninderry Joint Venture affordability criterion, exceeding the mandatory 15%
- Ginninderry's affordable housing products (marketed as 'Flexi-living homes series') are delivered as separate titled homes, rather than apartments or other unit titled configurations.
- Additional criteria for home purchasers are required to ensure that the homes are offered to the right people –purchasers must have a gross household income of under $120,000 must live in the property for 3 years and must not own another property.

The innovative and popular Flexi-living homes will be seriously compromised by R40 (DV), to the extent that they will be unable to be approved.

With affordability being one key driver at Ginninderry, delivering more than the standard 1-bedroom apartment to meet the relevant ACT Government policy requirements, Ginninderry's Flexi-living homes are 2-3 bedroom architecturally designed homes delivered on 75m² - 115m² blocks. These have been approved as part of the Stage 1 and Stage 2 estate planning process, in the suburb of Strathnairn and are either completed, under construction or due to begin construction. Some are now occupied and provide highly satisfactory housing solutions to their owners. Applying DV369private open space provision on a compact block with a Flexi-living home housing development, the built form that is currently being delivered on these blocks could not be approved by the Planning Authority.

The impact of Rule 40 (DV) has been applied to an existing Flexi-living design (Alto 2 - Block 16 Section 20 Strathnairn) in Appendix E. The Alto 2, is a separately titled terrace with a block area of 114m² and a gross floor area of 126.5 m² (definition of GFA includes garage). Rule 40 (DV) requires 50% open space for front-loading compact blocks. This would result in a reduction of living space on the ground floor down to 17.5m² (currently 43.5m²). This is obviously untenable.

To meet the same built form outcome of the Alto 2 under R40 (DV), a block area of 151m² (up from 114m²) would be required. The Alto 2 house and land package (turn-key ready) was sold in 2019 for $447,340. Applying the additional land required of 37m² at $950 per metre, the additional cost to the total house and land package is $482,490. Applying and additional $35,150 to the flexi house and land package is not feasible for first home buyers.

Rule 40 (DV) applied to rear loading compact development impacts on the Flexi-living product to a lesser extent, however the same principals as above apply, a larger block area is required to accommodate the same built form product.

DV369 requires different levels of private open space for front and rear-loaded compact blocks, in both cases these blocks should provide for the same amenity. The difference in the private open space requirements seems unexplained. Place Logic's analysis of the Flexi-living Product including front loading and rear loading blocks in Appendix F.[1]

Grandfather clause for subdivision blocks within approved Estate Developments

It is understood that DV369 does not have interim effect. As stated above the current Flexi-living built form is un-approvable if the DV369 was in effect. The servicing, road network and block design have already been designed and approved, through the estate development process with civil works currently underway for several terrace packs. A development application has not yet been submitted or approved for the next 4 flexi terrace packs. If Rule 40 (DV) was uplifted into the Territory Plan today, Ginninderry would have 75m² - 115m² individual blocks that would provide for a built form outcome that the Planning Authority could not approve.

If DV369 was to proceed to final approval in its current form, it should include a "grandfather clause" to avoid the need for costly redesign and reconstruction of blocks that already have DA approval.

[1] **Please note for the purpose of assessing DV369 it is assumed that a 'rear lane' as referred to in Rule 40 (DV) pertains to a compact block, where the garage fronts onto a laneway. There is no definition of a "rear lane" in the Territory Plan, Planning and Development Act 2007 or Planning and Development Regulations 2008.*

Secondary residence/ second dwelling onsite

Analysis of Ginninderry blocks that are less than 500m² that allow for a second dwelling has been assessed under DV369. This analysis was considered under the Multi-Unit Housing Development Code as '*secondary residence'* can only be assessed under the Single Dwelling Housing Development Code with a minimum 500m² block area. DV369 applied to Ginninderry blocks tested, provided for a reasonable built form when overlayed with Ginninderry specific site controls.

However, the scope of this analysis means that a standard mid-sized block (251m - 500m²) has not been considered in applying the current Territory plan provisions to a *secondary residence* on a mid-sized block. We encourage further analysis to determine if a *secondary residence* can be accommodated on a mid-sized block.

Multi-Unit Housing Development Code

Riverview has not analysed or commissioned built form analysis in applying DV369 to multi-unit sites. As Ginninderry is an estate development in its early stages we have to date only sought approval for one, relatively low density, multi-unit block. Consequently, the above analysis has been confined to the Single Dwelling Housing Development Code. We understand from industry discussions that similar issues may also exist with the application of the proposed DV369 rules to multi-unit sites and we encourage your careful consideration of submissions that we understand will be made by others on this topic.

DV354 - Water Sensitive Urban Design General Code came into effective on 21 February 2020. R9 of the Water Sensitive Urban Design General Code stipulate site permeable of 20% for sites greater than 2000m² or increased impervious area of 100m² to existing urban areas.

DV369 introduces R39A, R39B, R39C and R40 which relation to maximum site coverage and tree canopy cover. DV369 stipulates site coverage and planning requirements across four separate rules including; the size number of trees on a block without context to each block and its site constraints. R39 stipulates the percentage of tree canopy cover at 15%. The opportunity in this DV369 is in providing clarity via removal of site permeability stated in DV354 (now in effect) considered within the Multi-Unit Housing Development Code.

Landscaping

It is understood as a drafting error in Rule 40 c) of the Single Dwelling Housing Development Code as indicated in the figure below. Ginninderry does not support the current wording of R40 c) as this would eventuate to 100% of private open space for rear loading compact blocks to be planted leaving no ability for driveways or access paths to the house.

Table 1: DV369 R40

R40

For compact blocks, private open space complies with the following:

a) for front loading blocks, a minimum area is not less than 50% of the block area
b) for rear loading blocks, a minimum area is not less than 30% of the block area
c) at least 30% of the ~~block~~ minimum area specified in a) and b) is planting area with a minimum dimension of 2.5m.

Note: *Private open space includes principal private open space, as required elsewhere in this element.*

The landscape plan for a development is approved either via a private certifier (single dwelling house – exempt development) or approval via a merit track Development application by the Planning Authority.

Once certification/ stamped plans are received how will the landscape requirements be achieved under DV369, i.e. What is the compliance mechanism? DV369 creates a risk that unapproved structures such decks, verandas, carports, shade sails and the like will be erected post-approval to achieve a similar outcome as would have been possible pre DV369. As demonstrated in new suburbs around Canberra, landscaping has not been undertaken in the front yard or the verge.

Summary

As detailed in this submission, Ginninderry is supportive of the 2019 'Living Infrastructure' paper and the subsequent intent of DV369. Ginninderry is founded on a triple-bottom-line approach to development with environmental values at the heart of the project.

- This submission has considered the impact of DV369 at an estate level and found that, if implemented, DV369 will have substantial impacts on housing affordability and public amenity or land-take or both – particularly when applied to smaller blocks.

- Further analysis that considers DV369 in the context of a master-planned greenfield development is recommended. This should take into account overall urban amenity, housing affordability and open space provisions. Additional implications of increased land take on broader compact city objectives.

  The analysis of Urban Heat Island Effects at Appendix B concludes that Neighbourhood 1, Strathnairn achieves a combined open space and streetscape total of 20% canopy cover which is comparable to Canberra traditional "leafy inner suburbs". It is therefore questionable whether further improvements in canopy cover, given the costs that will be incurred in land take and affordability will outweigh the disbenefits.
- Policy mandating tree canopy cover on individual blocks does not guarantee increased canopy cover, as there is no mechanism following certification or the issue of stamped plans to ensure that an approved landscaping plan is carried out.

  The discussion paper at Appendix C takes a broader perspective and queries the increased from 20% tree canopy cover across Canberra to a policy position of 30% tree canopy cover when there is not an apparent positive relationship between tree canopy cover and temperature. It also highlights the changing nature of urban design at the broad strategic level and illustrates the increasing proportions of site areas that are given over to conservation uses, balancing reductions in private open space resulting from smaller block sizes.

- This submission has thoroughly considered DV369 in analysing mid-sized and compact blocks. We recommend that further consideration is required as to how DV369 is applied to north-south and east-west oriented blocks, including the dimensions of these mid-sized block. DV369 reduces the built form achievable on the mid-sized block, resulting in larger blocks to build a reasonable 3-4 bedroom home. A holistic planning policy that accounts for solar access including block open space should be further considered.

- Ginninderry's Flexi-living homes, which provide for high-quality 2-3 bedroom affordable dwellings on single titled blocks would not be possible if DV369 is implemented.

- If DV369 were implemented current compact Flexi-living homes in the Ginninderry estate, yet to be designed could not be approved under DV369.

- Further analysis is required to understand the implications to a secondary residence on a mid-sized block under the Single Dwelling Housing Development and standard planning controls.

The project team has consulted with other industry groups and professionals in the preparation of this submission. In consideration of the far-reaching effects of such a plan variation, Ginninderry would support industry workshops before the release of a draft variation of such magnitude. We look forward to EPSDD starting a dialogue on this draft variation and future draft variation before the public submission period so that we as industry might be able to assist in testing planning policy.

We invite you and your team to a site visit to view the Ginninderry Flexi-living Homes and the built form outcomes that have been achieved.

Please don't hesitate in contacting [redacted], Project Planning Manager on [redacted] to further discuss matters raised in this submission.

We look forward to your consideration of the above.

Yours sincerely,

[redacted]

Project Planning Manager

Appendix A – DV369 Yield Testing plan

Appendix B – Ginninderry Urban Heat Island Effect

Appendix C - DV369 Discussion Paper

Appendix D - Mid 375m² 12.5x30 EW

Appendix E – Block 16 Section 20 compact

Appendix F – Ginninderry block calculations

From: [redacted]
To: Terrplan
Subject: DV369 Living Infrastructure in Residential Zones
Date: Thursday, 7 May 2020 1:37:22 PM

My comments on DV369 Living Infrastructure in Residential Zones are as follows:

In general, I support the proposal to increase the tree cover around the city. Preparing Canberra to better deal with the hotter climate that we are obviously going to experience is a very good thing. Some of the new suburbs in Molonglo and Gungahlin look like Tel Aviv - lots of ugly boxes squashed together, with hardly any trees. How are you going to fix that?

Having said that, I am also really disappointed with the planting on Northbourne Ave. It is messy and why anyone would select Mannifera gums is beyond me. Why not some lovely deciduous trees that would look fantastic in the autumn, as well as providing summer shade and winter sun, and many of which are surprisingly drought-proof?

Ensuring compliance, and ongoing monitoring, with any new arrangement will be a significant challenge, especially for multi-unit developments.

While I support increasing tree cover, especially in the newer suburban streets, and especially through the use of deciduous trees, I would also note that there are lots of scrappy bits of land throughout Canberra which serve no particular purpose other than increasing the costs of mowing and increasing bushfire risks. We can't just keep building suburbs further and further out. Densification can be a good thing, provided it is done well.

We are already supposed to have a star-rating scheme to encourage the construction of dwellings which are more environmentally efficient, particularly in terms of maximising winter sun and minimising summer sun, yet again this seems to fail massively, especially in the multi-unit developments. One of the problems seems to be that the star-rating is applied to the whole development even when some of the dwellings get almost no sun at all (or only western sun).

A further issue, while not so related to climate preparedness, relates to the provision of town houses around Canberra. New single level townhouses are almost impossible to find, and almost all new developments are double storey and squashed onto their sites, and mostly cheap and ugly construction (eg around Lake Tuggeranong) and with totally inadequate parking. Some of them look like the slums of the future. For many retirees, like myself, there is no point in downsizing when that is all that is on offer.

I would be happy to discuss any of these matters further.

[redacted]

[redacted] Fadden 2904

Denman Prospect

Level 4, Plaza Offices - West
21 Terminal Avenue, Canberra Airport
ACT 2609

Ref: 20200507 Denman Prospect Response on DV 369

7 May 2020

ACT Planning and Land Authority
Territory Plan Section, EPSDD
GPO Box 158
CANBERRA ACT 2601

Dear Sir / Madam,

Draft Variation No 369
Living Infrastructure in Residential Zones

Thank you for the opportunity to comment on the Draft Variation to the Territory Plan No. 369 'Living Infrastructure in Residential Zones'.

The draft variation seeks to ensure standards for soft landscaping in all residential areas are met. This is an objective that Capital Estate Developments (the developer of Denman Prospect) supports, however, we consider that the implementation of the draft variation in its current form will not be effective in achieving its main objective, while simultaneously forcing inferior outcomes where good outcomes are currently being delivered by home owners, architects, builders and developers.

The draft variation does not prohibit the high quality soft landscaping outcomes currently being delivered at Denman Prospect, but instead creates additional obligations which add little to no value to the current high quality outcomes being delivered at Denman Prospect.

Our submission in response to the draft variation consists of four parts:

1. Summary of current measures already in place in Denman Prospect to deliver high quality soft landscaping outcomes that are over and above the requirements of the Territory Plan and commentary on how these front yard solutions are more beneficial than rear yard solutions
2. Impact that the draft variation will have on block sizes which in turn impacts housing choice, housing affordability and urban sprawl
3. Inconsistencies between the draft variation and bushfire mitigation policies
4. Lessons from other jurisdictions

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1. Denman Prospect Current Measures – Front Yard vs Rear Yard Solutions

Since 2015, Capital Estate Developments has established Building and Siting Guidelines for each block sold and these guidelines are administered through a combination of bonds and rebates. The guidelines require block owners to design and construct certain elements of their house and garden to meet requirements that are not contained in the Territory Plan.

Of the 4 landscape objectives contained in the Denman Prospect Building and Siting Guidelines, two objectives are relevant to the objective of DV369:

- *To minimise the area of hardstand (e.g. concrete and paving) and maximise the amount of soft landscape (e.g. garden beds, turf and permeable surfaces).*
- *To provide opportunities for the planting of shade trees and screening plants.*

These objectives are then assessed against a list of requirements. The hard landscaping requirements in the Denman Prospect Building and Siting Guidelines include:

- *The maximum width for pathways is 1000mm*
- *The use of gravel or crushed granite is restricted to pathways and no plain concrete is permitted*
- *Planter box details incorporated into the front of the dwelling or as part of the letterbox are encouraged to help incorporate landscaping level changes, however they are not to be a dominating element. They must complement the style and choice of materials used within the dwelling's form and be constructed of either stone pitch or rendered masonry. Planter boxes are not to be incorporated in place of retaining walls.*

Soft landscaping requirements in the Denman Prospect Building and Siting Guidelines include the following:

- *Two (2) trees are required to be planted within the front garden if the frontage of the Block is greater than 15m.*
- *One (1) tree is required to be planted within the front garden if the frontage of the Block is less than 15m.*
- *All required trees planted in the front garden are to be of a minimum height of 2.5m at the time of planting, with adequate deep root zone suitable to sustain the selected tree.*
- *High quality trees must be preserved on Blocks for shade and amenity.*
- *The use of any type of artificial grass or synthetic turf will not be permitted.*
- *Brightly coloured/dyed wood mulches, or pebbles will not be permitted; river stones with an approximate diameter of 50mm will be considered acceptable for mulched areas.*
- *Extensive areas of pebbles or gravel used as mulch is not permitted.*

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In comparing the approach at Denman Prospect to the approach proposed by DV369, the approach at Denman Prospect focuses on the front yard landscape, which has the following advantages over rear yard landscaping:

1. adds to the neighbourhood aesthetic and enriches the streetscape
2. is easily monitored for compliance
3. utilises land in the front setback which cannot be built upon, therefore, does not diminish the amount of useable space on the block
4. creates shading closer to the roads, which are the greatest source of heat island effect
5. assists the cooling of the pedestrian pathways in the road verge at a human-scale, which in turn encourages active living and active travel.

Conversely, under the draft variation, the five advantages listed above are lost and become disadvantages. Specifically, the draft variation:

1. Does not add to the neighbourhood aesthetic and enriches the streetscape
2. is not easily monitored for compliance
3. utilises land in the back yard which can currently be built upon, therefore, diminishing the amount of useable space on the block
4. creates shading away from the roads, which are the greatest source of heat island effect
5. does not assist the cooling of the pedestrian pathways in the road verge at a human-scale and consequently does not encourage active living and active travel.

2. Block Sizes, Housing Choice, Housing Affordability and Urban Sprawl

We have undertaken analysis to assess the impact that the draft variation will have on the buildable area of four standard block types used at Denman Prospect.

The following table compares the Gross Floor Area (GFA) possible on the ground floor of the four standard block types and also nominates the functional size of the dwelling that can be constructed within that GFA.

Block Dimensions	Existing GFA Lower Floor Level (m^2)	Housing Type Possible	DV369 GFA Lower Floor Level (m^2)	Housing Type Possible
12.5 x 30	175	4BR en-suite	124	2BR / not applicable
14.1 x 30	212	4BR family + breakout	147	2BR / not applicable
15 x 30	232	4BR family + breakout	161	4BR en-suite
18 x 30	301	4BR family + breakout	206	4BR family + breakout

It is important to note that over 90% of homes built on single residential blocks in Denman Prospect are four bedroom homes, with three bedroom homes making up less than 10% of built product. Introduction of the draft variation in its current form would make it impossible to

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deliver the market's preferred housing types on blocks that are smaller than 450 m^2 (ie. 15 x 30). Furthermore, to enable the market's preferred housing types to be constructed, the majority of blocks in new estates would need to be larger than 500 m^2.

This outcome would reduce densities in new estates and consequently contribute to urban sprawl, which is inconsistent with Strategic Direction 1 of the ACT Planning Strategy (2018) - a 'Compact and Efficient City'.

The increase in the number of larger blocks (and therefore decrease in the number of smaller blocks) generated by the draft variation, will also limit housing choice and will negatively impact on housing affordability as a larger block will need to be purchased by the home owner to build any given housing type that can be constructed under current rules.

While it is difficult to predict the needs of home buyers in the future, the likely increase in working from home arrangements is likely to create a demand for more home office space to be designed into new homes, which is likely to increase demand for the larger (ie. four bedroom) house designs in the near future.

If the draft variation is implemented in its current form, consideration will need to be given to whether the draft variation applies to blocks on estate development plans that have been prepared or approved prior to implementation of the draft variation. This is because the blocks on those estate development plans have been designed to cater for housing able to be built under the current rules and a significant proportion of the blocks designed on those estate development plans may no longer be viable for housing types under the proposed draft variation that suit the needs of the home owner.

3. Inconsistencies with Bushfire Mitigation Policies

Considering the January 2003 bushfire and the recent 2019/2020 bushfire season, planning for bushfire mitigation is an emerging issue for planners and the wider property industry.

The draft variation raises two concerns with respect to bushfire planning:

- Some of the tree species recommended for planting are not compatible with bushfire planning. For example, box gum species are very flammable, prone to explode when ignited and drop large amounts of litter, which acts as tinder
- Providing additional bushfire fuel in the rear yard creates a problem for firefighting crews and vehicles, as the bushfire fuel is not as accessible compared to having a concentration of landscaping in the front yard.

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4. Lessons from Other Jurisdictions

We are aware of some work that has been done in Victoria and Queensland with regards to managing the heat island effect.

4.1 Victoria

In Victoria, Monash University and the Department of Industry, Innovation and Science prepared a paper titled '*Trees for a Cool City: Guidelines for optimised tree placement*.' This paper concluded:

> *To help meet canopy cover targets, trees should be placed strategically throughout the landscape to ensure that they deliver the largest cooling and thermal comfort benefits possible. To achieve this, tree retention, maintenance and planting should occur in areas of:*
>
> - *High urban temperatures or hotspots where there is a large amount of impervious surface;*
> - *High population vulnerability (e.g. high proportion of older (>65 years) or very young (<4 years) persons); and*
> - *High behavioural exposure, where people move and gather, such as public transport corridors, schools and public spaces*

4.2 Queensland

We are also aware of some research by Stockland in Queensland that has modelled a reduction in heat island effects by up to 62% by implementing policies on appropriate materials or colours for roofs, driveways and paved areas.

4.3 Commentary

The Victorian research supports the Denman Prospect approach of providing additional shading closer to the source of heat island, while the Queensland research highlights that there are options to deal with heat island that go beyond additional shade from soft landscape.

5. Conclusion

The aspiration of DV 369 to adopt standards for soft landscaping in all residential areas to aid ameliorating the heat island effect is supported.

We are delivering on this aspiration with our Denman Prospect Building and Siting Guidelines, consistent with the ACT Planning Strategy 2018, without the adverse impacts created by DV 369 constraints on home development and without the creation of a less compact suburb. Our

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guidelines facilitate economic land sized blocks fit for purpose for current home development trends while supplying ample soft landscape positioned in the available and practical location of the building front setback area. This location enhances both the streetscape of Denman Prospect now and in the future and provides the greatest suburb and human active living cooling benefit as it is integrated into a larger area co-joined with the road verge landscape.

This submission provides many reasons on why the focus for soft landscaping should be in front yards rather than rear yards.

We recommend that Draft Variation 369 does not proceed in its current form.

Yours sincerely

[redacted]

Director - Project Delivery
Capital Estate Developments

[redacted]

Chief Executive Officer
Capital Property Group

1 May 2020

Territory Plan Unit
Environment, Planning and Sustainable Development Directorate
Dame Pattie Menzies House
16 Challis Street
Dickson ACT 2609

Via email: terrplan@act.gov.au

RE Planning and Development (Draft Variation No 369) Consultation Notice 2019

Dear Territory Plan Unit,

Thank you for the opportunity to provide feedback in relation to Draft Variation 369.

Place Logic has been engaged by Capital Estate Developments to assess the impact of the proposed controls on outcomes with specific reference to housing products proposed at Denman Prospect. Based on these studies we provide analysis and a summary of relevant points to consider in the ongoing contemplation of this legislation.

We note that the timing of these proposed changes is not ideal given that we cannot currently consult on this matter to develop the optimal solution. Further time and scope for a wider, considered review must be accommodated ensuring that the best possible solution to the issue is implemented.

We have tested the proposed controls as they apply to single dwelling blocks and multi-unit sites at Denman Prospect. We have also tested the controls at the estate level. Our findings are summarised as follows:

- The possible range of compact blocks is reduced, impacting housing choice.
- Certain (compliant) mid-size blocks become less capable of accommodating a home size that is proportionate to block size.
- The proposed controls increase land take for a Greenfield estate by up to 12%.
- The proposed controls would result in c.12% increase in road pavement.
- The proposed controls, in combination with solar envelope controls, significantly reduce development potential of existing blocks and create an undesirable built form.

Compact Blocks

- See Attachment A for a table and diagrams of GFA achievable on each block type tested.
- Front loaded compact blocks are severely impacted by DV369. They are no longer viable due to the restriction on the ground floor development potential. Refer to the plans provided for testing of the possible floor plate showing:
    - A front-loaded compact block can accommodate 61m² of living space on the ground floor.
- Rear loaded compact blocks are impacted, however the impact is not critical and rear loaded products remain able to deliver viable floor space.

Mid-Size Blocks

- A 14 x 30m (420m²) block is compliant with the Estate Development Code (EDC) block compliance tables. Under DV369 provisions it can no longer accommodate a typical single level 4-bedroom double garage home due to the reduced maximum ground floor plate of c.165m² living space.
- A 12.5m x 30m (375m²) compliant block can only accommodate a total of 124m² of living space on the ground floor under DV369. This is insufficient floor space for a 3-bedroom home.

Large Blocks

- Large blocks are subject to the existing provision limiting plot ratio to 50%.
- The proposed provisions do not significantly impact large blocks.

Cumulative impacts

The combination of existing solar access provisions (implemented in Territory Plan Variation 306) with DV369 changes results in sub-optimal outcomes, particularly on east-west oriented, mid-sized blocks in relation to:

- Solar envelope: restricts upper floor GFA.
- DV369 proposed controls: restrict lower floor GFA.

The cumulative impact of these controls is:

- A block of 14 x 30m (420m²) is capable of accommodating a single storey home of c.147m² maximum ground floor living GFA.
- A 4-bedroom home is typically c.165m², meaning a 420m² block (on any orientation) is now incapable of accommodating a single storey 4-bedroom/double garage home.

Solar access provisions further impact GFA potential:

- On an east-west oriented 14x30m block, the upper floor maximum envelope is limited to c.72m².
- It is necessary to build a 2-storey home to accommodate a 4-bedroom product of c.165m² minimum on a 420m² block.

Assessment at the Estate Level

The proposed provisions severely impact the feasibility of front-loaded compact blocks due to the 50% open space requirement as outlined above. Rear-loaded compact blocks are subject to a lesser open space requirement of 30% open space, enabling these blocks to remain feasible. While it is assumed the increased open space requirement targets the additional driveway required on a front-loaded block, it is clear the actual outcome has not been tested to determine an appropriate outcome.

A study of DV369 outcomes for a section of front-loaded vs a section of rear-loaded compact blocks has been undertaken (see **Attachment B**). The study measures maximum permissible site coverage (building, driveway, road, rear lane and footpath) and required open space across a typical section of each typology. The typical section tested is a 60m x 100m section, from road centrelines.

The study reveals the following:

	Open space (includes verge)		Site coverage	
Front-loaded	42.2%	2,679m2	57.8%	3,665m2
Rear-loaded	30.7%	1,944m2	69.3%	4,400m2

Notes:

1. Both tested outcomes provide 20 blocks
2. Front-loaded compact blocks would be implemented in a mix of block typologies, not a full section as depicted in the test

Front-loaded compact blocks are required to provide 11.5% more open space compared to rear-loaded blocks. This requirement should be reconsidered to come into line with the 30.7% required for rear-loaded blocks, enabling feasible development of front-loaded blocks.

Recommendations

- A more wholistic Territory Plan review should consider controls that work together to deliver a desirable outcome. The proposed legislation is piecemeal and has detrimental impacts on housing choice, affordability and architectural response. These impacts undermine the positive intent.
- The Territory Plan review must consider the solar envelope provisions in tandem with the aims of the Living Infrastructure Policy to optimise on-site built form massing and POS.
- The legislation must ensure the most desirable home size can be accommodated on appropriate blocks.
- A more sophisticated and contemporary approach should be considered as better ways to address the Living Infrastructure aims without impeding the desired size of residential dwellings, for example the following measures could be considered:
    - Implementing green facades/roofs
    - Controls based on heat absorption performance of roof/driveway/paving materials
    - Concentration of shading in front yards (ie. closer to roads and other heat sources) rather than rear yards
    - Consideration of additional site coverage allowance based on shading from large trees and vegetation
- Educational materials that outline good passive design should be created for people building a home that outlines the benefits of building with good orientation and passive heating/cooling to improve neighbourhood amenity/reduce bills/have a smaller carbon footprint. This includes use of appropriate shading and vegetation.

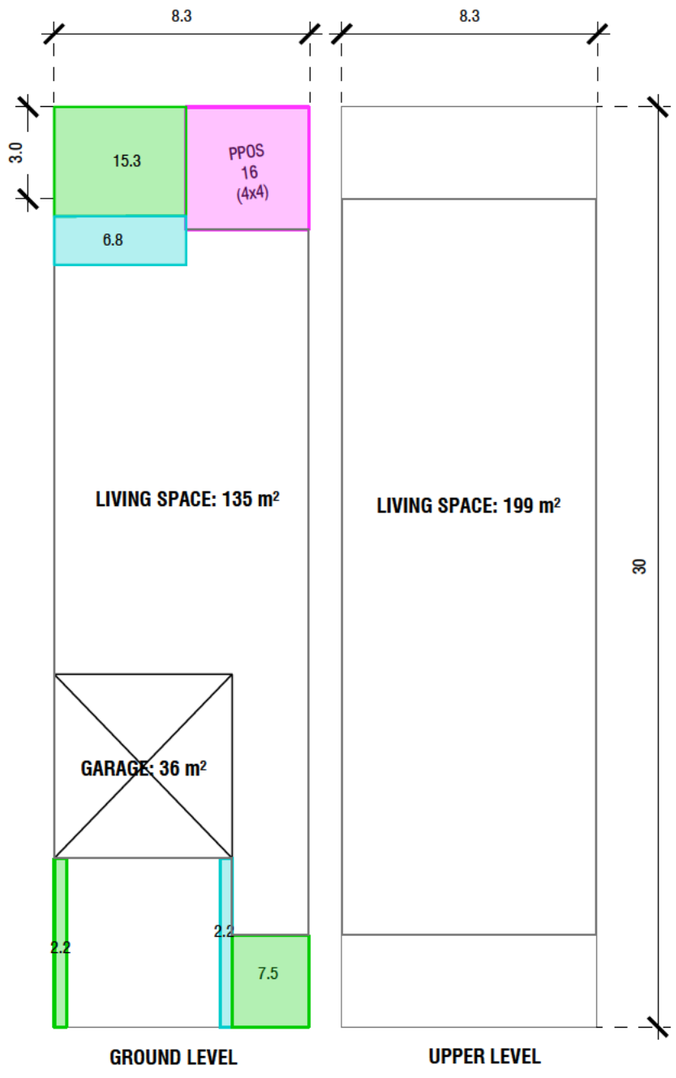
We look forward to the opportunity to assist in the further development and improvement of the proposed provisions.

Kind regards,

[redacted]

Director | Place Logic

BLOCK SIZE 249m²: 8.3 X 30 m



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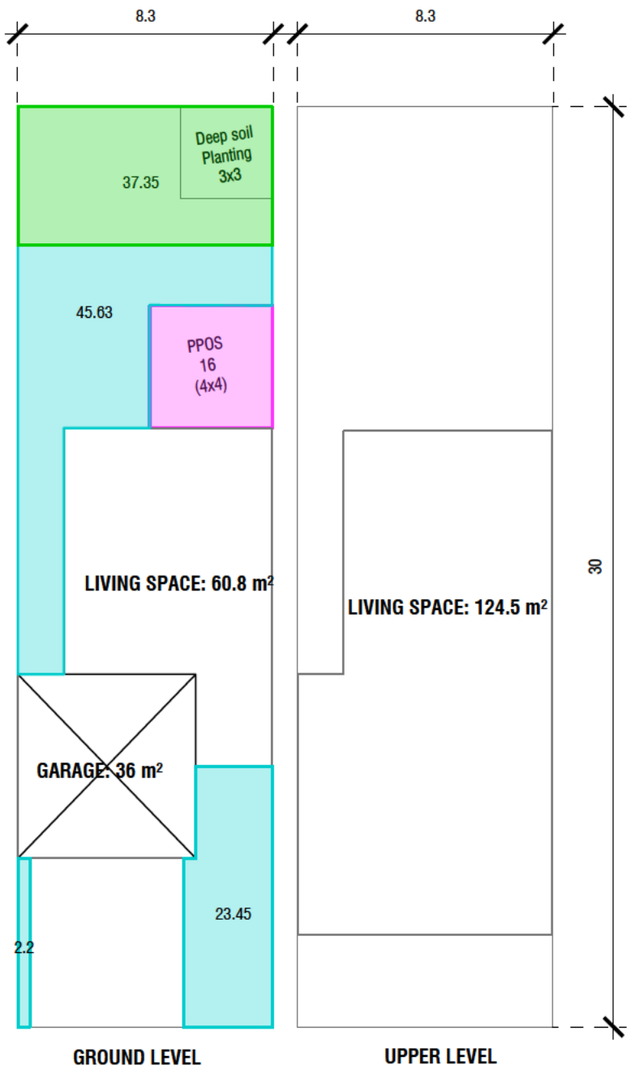

DV 369

LEGEND

INDICATIVE SITE COVERAGE

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR COMPACT BLOCK + FRONT LOADING

BLOCK SIZE: 249m²		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 20% of the Block Area	49.8m²	Min 50% of the Block Area	124.5m²
m²	PLANTING AREA	Min 50% of the Min. POS	24.9m²	Min 30% of the POS (Min 2.5m) Incl Min 1 Small Canopy Tree (Min soil surface area: 3m)	37.35m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Min Area: 16 m² Min Dim: 4m	16m²	Min Area: 16 m² Min Dim: 4m	16m²
m²	OTHERS	Not Specified		Not Specified	

		EXISTING CODE		DV 369	
		AREA (m²)	%	AREA (m²)	%
POS	PPOS	16	6.4%	16	6.4%
	PLANTING AREA	25	10%	37.35	15%
	OTHERS	9	3.6%	71.8	28.8%
	TOTAL	50	20.1%	124.63	50.6%
GFA	GROUND LEVEL (INCL GARAGE)	171	68.7%	96.8	38.8%
	UPPER LEVEL	199	79.9%	124.5	50%
	TOTAL	370		221.3	
DRIVEWAY		27.5	11%	27.5	11%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT NORTH

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: COMPACT BLOCK 8.3X30 FRONT LOADING

LOCATION PLAN

DRAWN JS CHECKED BR

DATE
11-03-20

SCALE
1:200 @A3

NOTES
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Use figured dimensions - do not scale from drawings. Dimensions are in metres unless noted otherwise.

CLIENT
CAPITAL ESTATE DEVELOPMENTS

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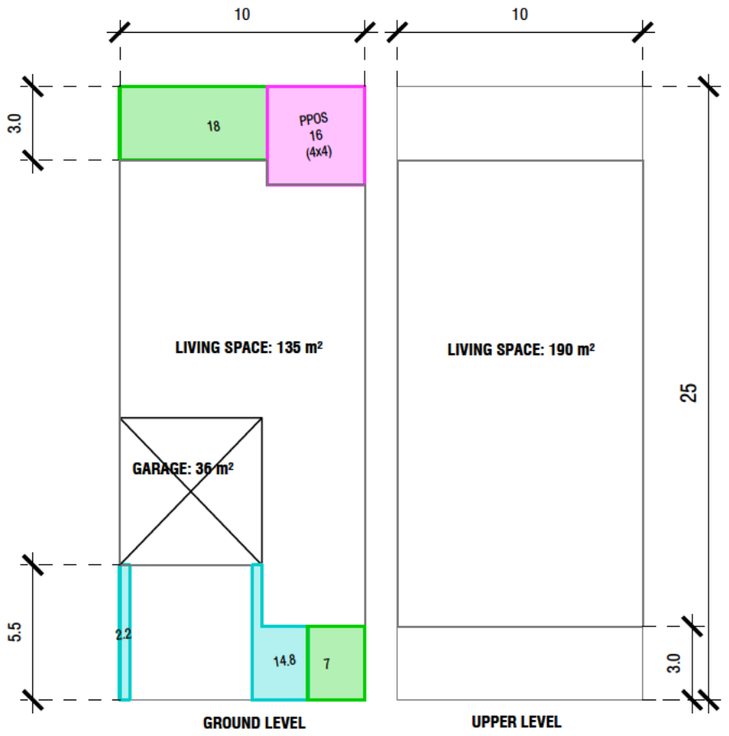
Urban Design | Landscape Architecture
www.placelogic.com.au
ABN 25 619 179 743

STATUS
DRAFT

REV. DRAWING NO.
DRAFT

BLOCK SIZE 250m²: 10.0 X 25 m



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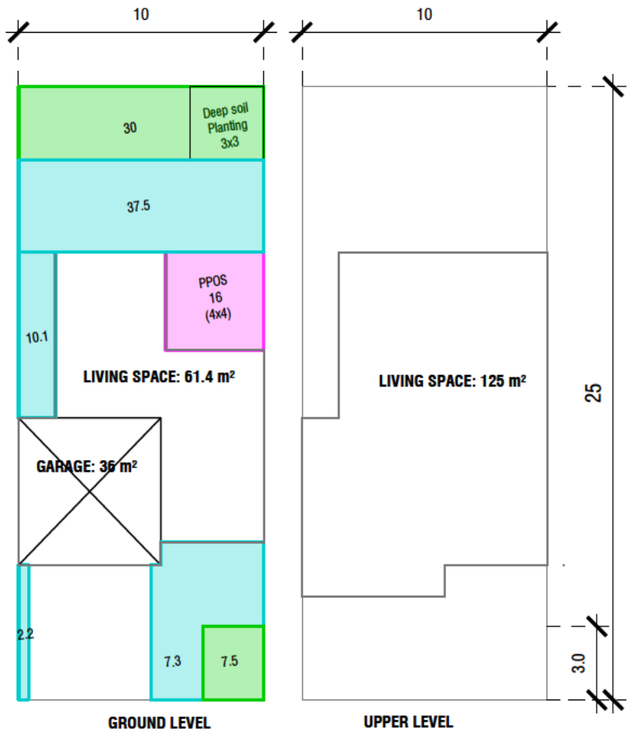

DV 369

LEGEND

INDICATIVE SITE COVERAGE

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR COMPACT BLOCK + FRONT LOADING

BLOCK SIZE: 250m²		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 20% of the Block Area	50m²	Min 50% of the Block Area	125m²
m²	PLANTING AREA	Min 50% of the Min. POS	25m²	Min 30% of the POS (Min 2.5m) Incl Min 1 Small Canopy Tree (Min soil surface area: 3m)	37.5m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Min Area: 16 m² Min Dim: 4m	16m²	Min Area: 16 m² Min Dim: 4m	16m²
m²	OTHERS	Not Specified		Not Specified	

		EXISTING CODE		DV 369	
		AREA (m²)	%	AREA (m²)	%
POS	PPOS	16	6.4%	16	6.4%
	PLANTING AREA	25	10%	37.5	15%
	OTHERS	17	8%	71.6	28.6%
	TOTAL	58	23.2%	125.1	50%
GFA	GROUND LEVEL (INCL GARAGE)	171	68.4%	97.4	39.0%
	UPPER LEVEL	190	76.0%	125	50.0%
	TOTAL	351		222.4	
OTHERS - DRIVEWAY		27.5	11%	27.5	11%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT NORTH

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: COMPACT BLOCK 10X25 FRONT LOADING

LOCATION PLAN

DRAWN CHECKED
JS BR

DATE
11-03-20

SCALE
1:250 @A3

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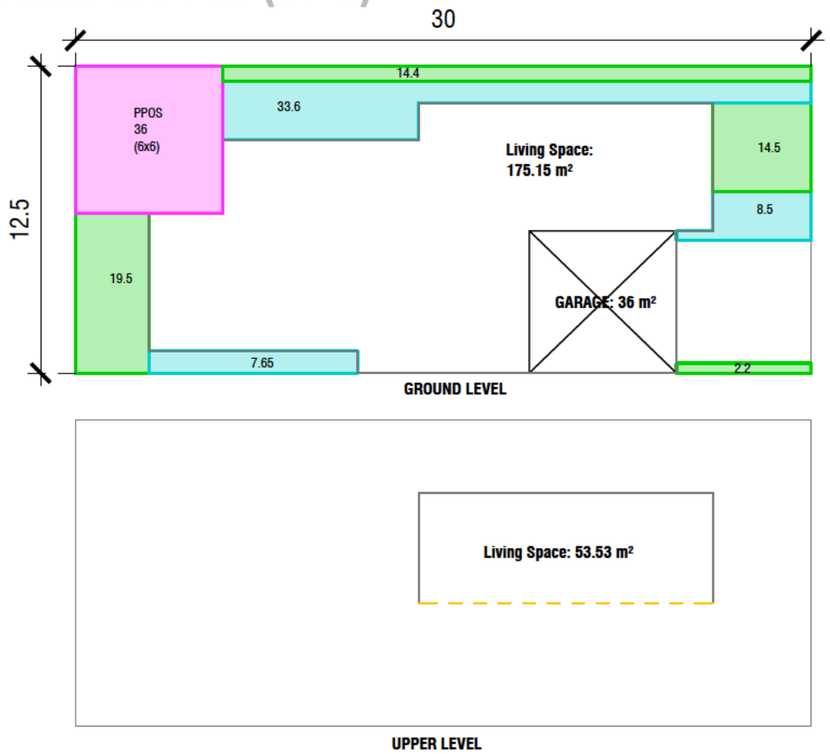
STATUS
DRAFT

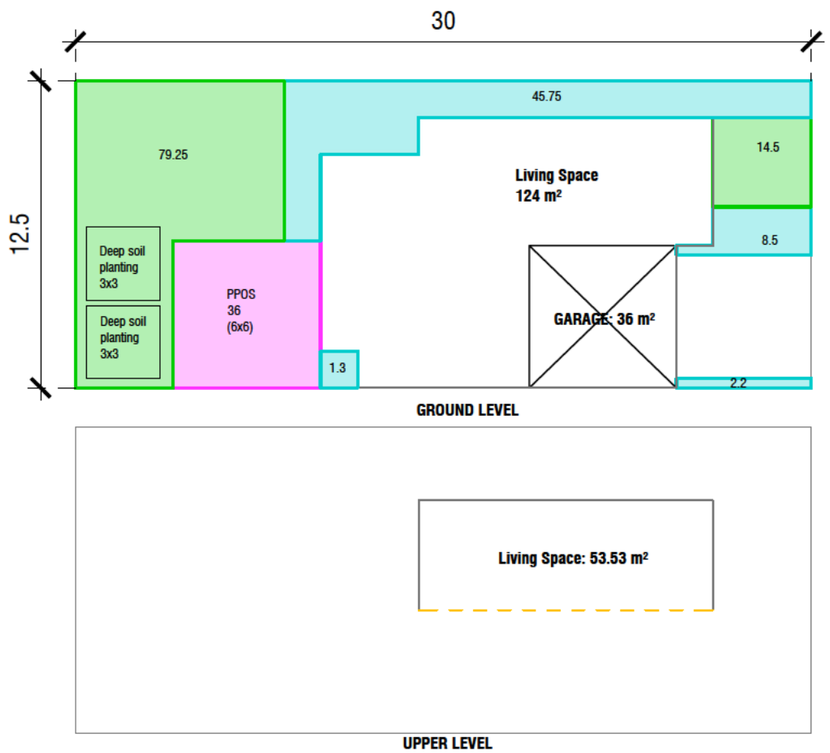
REV. DRAWING NO.
DRAFT

BLOCK SIZE 375m²: 12.5 X 30 m (W-E)

EXISTING CODE



DV 369



LEGEND

INDICATIVE SITE COVERAGE

SOLAR ENVELOPE SETBACK

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 375m²		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	100m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	187.5m²
m²	PLANTING AREA	Min 50% of the POS	50m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	93.75m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 375m²		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	9.6%	36	9.6%
	PLANTING AREA	50.6	13.5%	93.75	25%
	OTHERS	49.75	13.3%	57.75	15.4%
	TOTAL	136.35	36.4%	187.5	50%
GFA	GROUND LIVING SPACE	175.15	46.7%	124	33.1%
	UPPER LIVING SPACE	53.53	14.3%	53.53	14.3%
	GARAGE	36	9.6%	36	9.6%
	TOTAL (EXCL GARAGE)	228.68		176.58	
DRIVEWAY		27.5	7.3%	27.5	7.3%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 375m2 W-E (12.5X30)

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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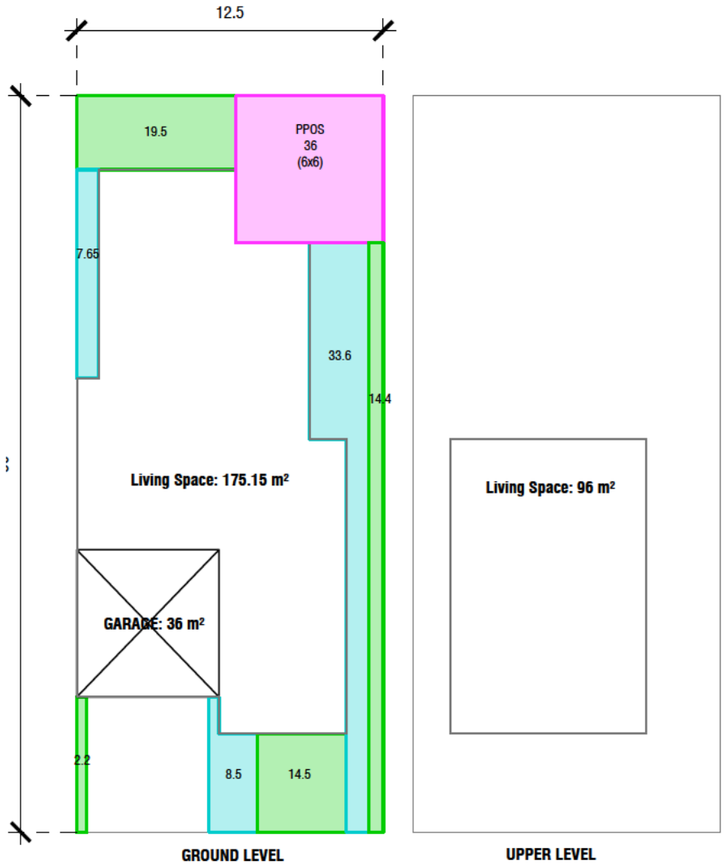
STATUS
DRAFT

REV. DRAWING NO.
DRAFT

BLOCK SIZE 375m²: 12.5 X 30 m (N-S)



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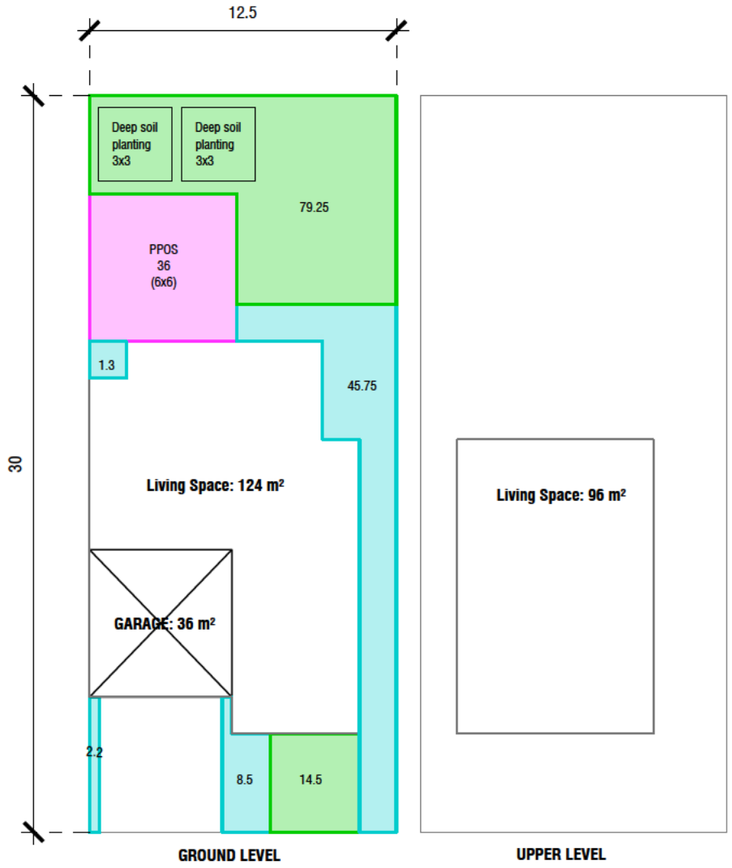

DV 369

LEGEND

INDICATIVE SITE COVERAGE

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 375m²		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
TOTAL POS		Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	100m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	187.5m²
m²	PLANTING AREA	Min 50% of the POS	50m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	93.75m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 375m²		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	9.6%	36	9.6%
	PLANTING AREA	50.6	13.5%	93.75	25%
	OTHERS	49.75	13.3%	57.75	15.4%
	TOTAL	136.35	36.4%	187.5	50.0%
GFA	GROUND LIVING SPACE	175.15	46.7%	124	33.1%
	UPPER LIVING SPACE	96	25.6%	96	25.6%
	GARAGE	36	9.6%	36	9.6%
	TOTAL (EXCL GARAGE)	271.15		220	
DRIVEWAY		27.5	7.3%	27.5	7.3%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 375m2 (12.5X30)

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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STATUS
DRAFT

REV. DRAWING NO.
DRAFT

BLOCK SIZE 423m²: 14.1 X 30 m (W-E)

LEGEND

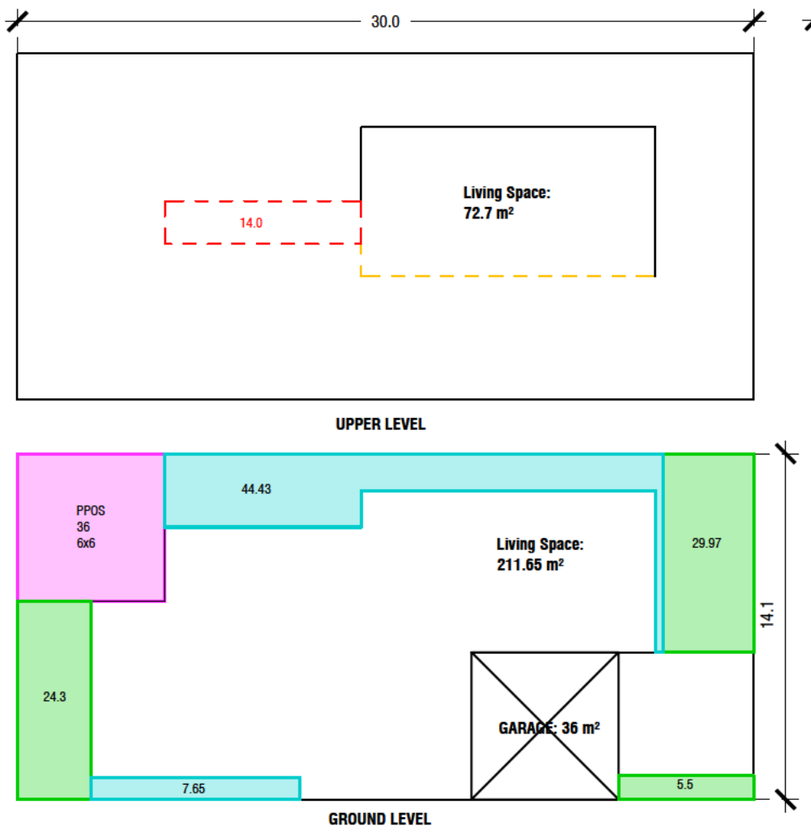
INDICATIVE SITE COVERAGE

SOLAR ENVELOPE SETBACK

GARAGE LOCATION

NOT BUILDABLE UPPER FLOOR LIVING SPACE

BLOCK SIZE: 423m² E-W		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	119.2m² 42.3m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	211.5m² 42.3m²
m²	PLANTING AREA	Min 50% of the POS	59.6m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	105.75m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	



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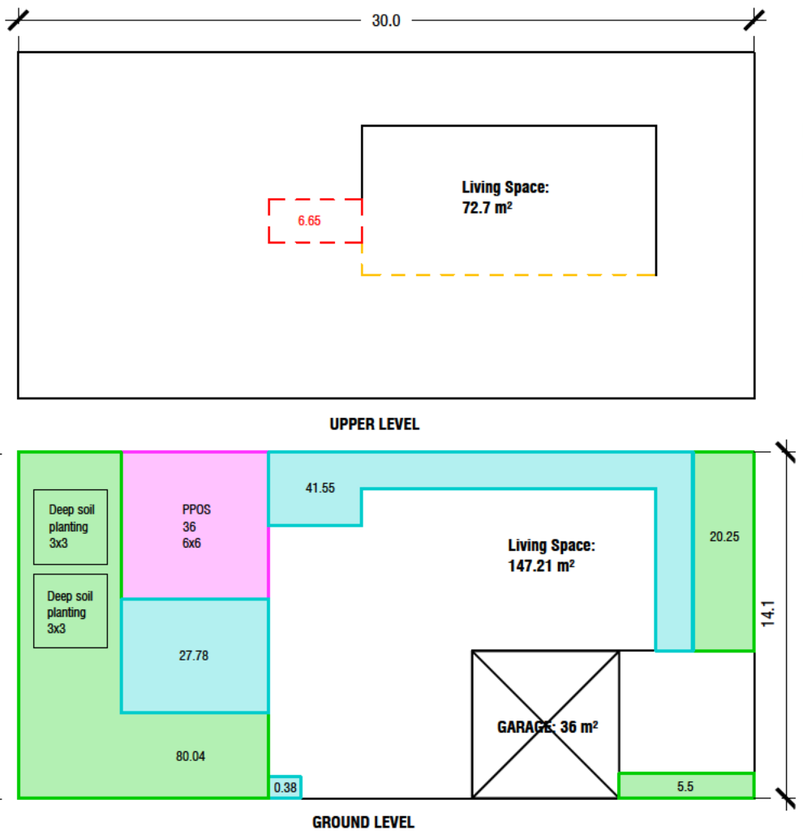

DV 369

BLOCK SIZE: 423m² E-W		EXISTING CODE		DV 369	
		AREA (m²)	%	AREA (m²)	%
POS	PPOS	36	8.51%	36	8.5%
	PLANTING AREA	59.77	14.1%	105.79	25.0%
	OTHERS	52.08	12.3%	69.71	16.5%
	TOTAL	147.85	35.0%	211.5	50.0%
GFA	GROUND LIVING SPACE	211.65	50.0%	147.21	34.8%
	UPPER LIVING SPACE	72.7	17.2%	72.7	17.2%
	GARAGE	36	8.5%	36	8.5%
	TOTAL (EXCL GARAGE)	284.35		219.91	
DRIVEWAY		27.5	6.5%	27.5	6.5%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST BE BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 423m2 (14.1X30) E-W B2S

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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STATUS
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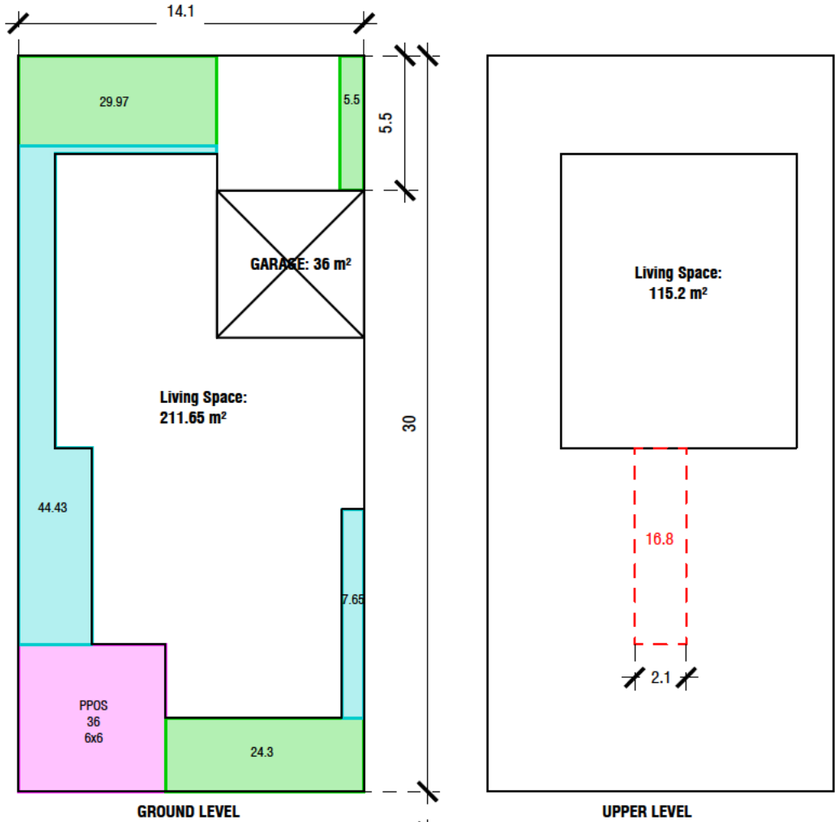
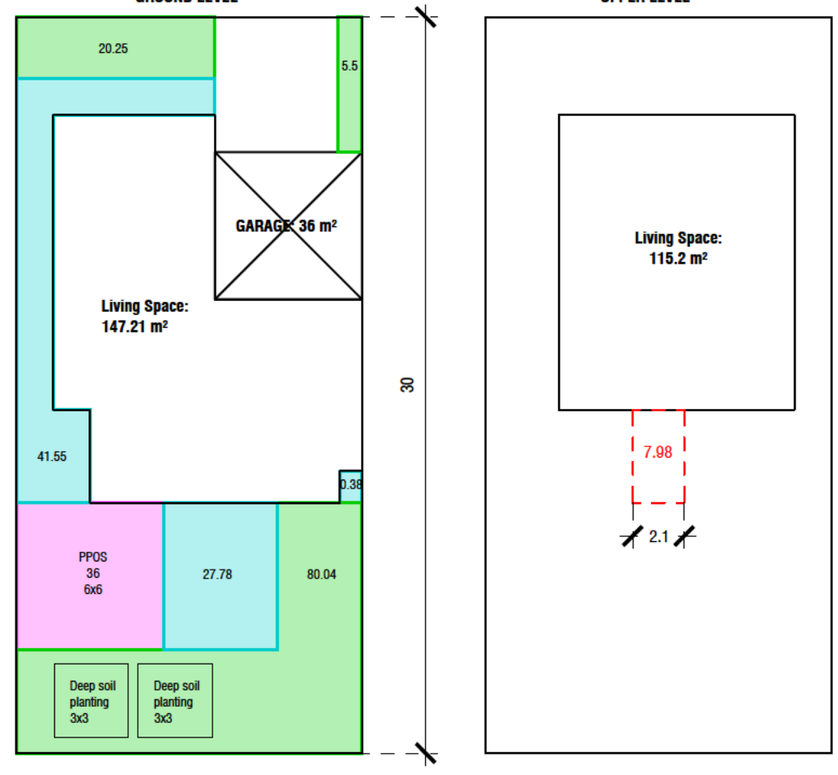
REV. DRAWING NO.
DRAFT

BLOCK SIZE 423m²:
14.1 X 30 m (N-S)

EXISTING CODE



DV 369



LEGEND

- INDICATIVE SITE COVERAGE
- GARAGE LOCATION
- NOT BUILDABLE UPPER FLOOR LIVING SPACE

BLOCK SIZE: 423m² N-S		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
TOTAL POS		Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	119.2m² 42.3m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	211.5m² 42.3m²
m²	PLANTING AREA	Min 50% of the POS	59.6m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	105.75m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

		EXISTING CODE		DV 369	
		AREA (m²)	%OF SITE	AREA (m²)	%OF SITE
POS	PPOS	36	8.5%	36	8.5%
	PLANTING AREA	59.77	14.1%	105.79	25.0%
	OTHERS	52.08	12.3%	69.71	16.5%
	TOTAL	147.85	35.0%	211.5	50%
GFA	GROUND LIVING SPACE	211.65	50.0%	147.21	34.8%
	UPPER LIVING SPACE	115.2	27.2%	115.2	27.2%
	GARAGE	36	8.5%	36	8.5%
	TOTAL (EXCL GARAGE)	326.85		262.41	
DRIVEWAY		27.5	6.5%	27.5	6.5%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST BE BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 423m2 (14.1X30) NS

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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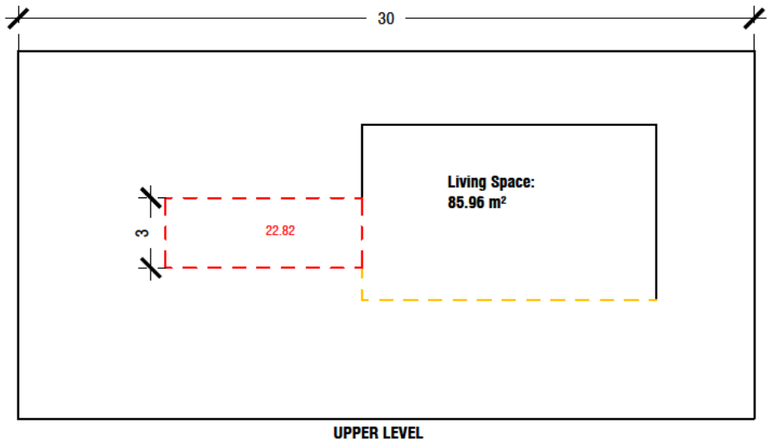
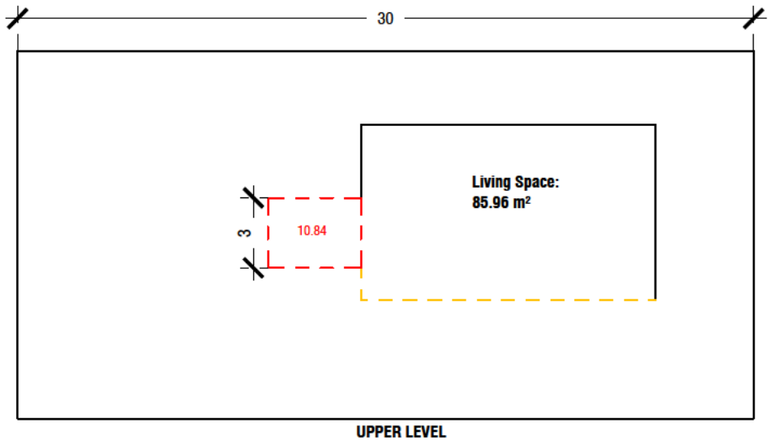
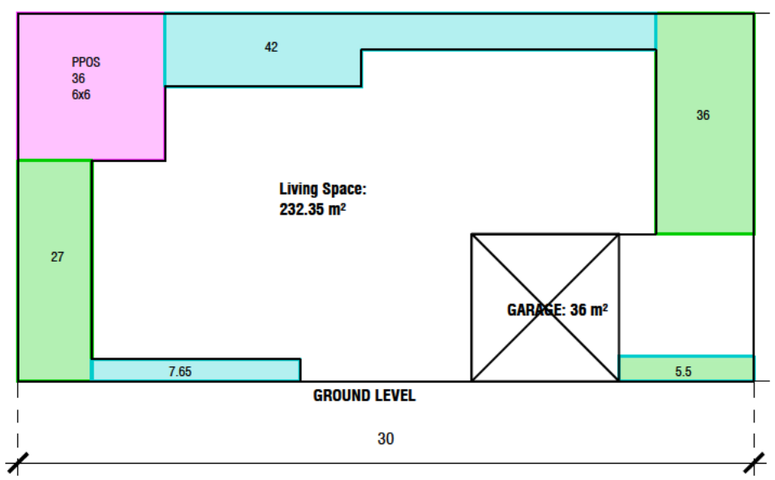
BLOCK SIZE 450m²: 15 X 30 m (W-E)







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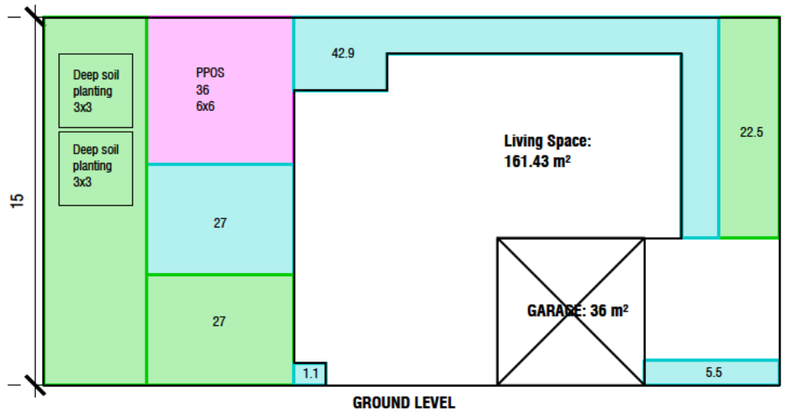

DV 369

LEGEND

INDICATIVE SITE COVERAGE

NOT BUILDABLE UPPER FLOOR LIVING SPACE

GARAGE LOCATION

SOLAR ENVELOPE SETBACK

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 450m² E-W (B2S)		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
TOTAL POS		Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	130m² 45m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	255m² 45m²
m²	PLANTING AREA	Min 50% of the POS	65m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	112.5m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 450m² E-W		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	8%	36	8%
	PLANTING AREA	68.5	15.2%	112.5	25%
	OTHERS	49.65	11.0%	76.5	17%
	TOTAL	154.15	34.3%	225	50%
GFA	GROUND LIVING SPACE	232.35	51.6%	161.43	35.9%
	UPPER LIVING SPACE	85.96	19.1%	85.96	19.1%
	GARAGE	36	8%	36	8%
	TOTAL	318.31		247.39	
DRIVEWAY		27.5	6.1%	27.5	6.1%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST BE BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 450m2 (15X30) W-E

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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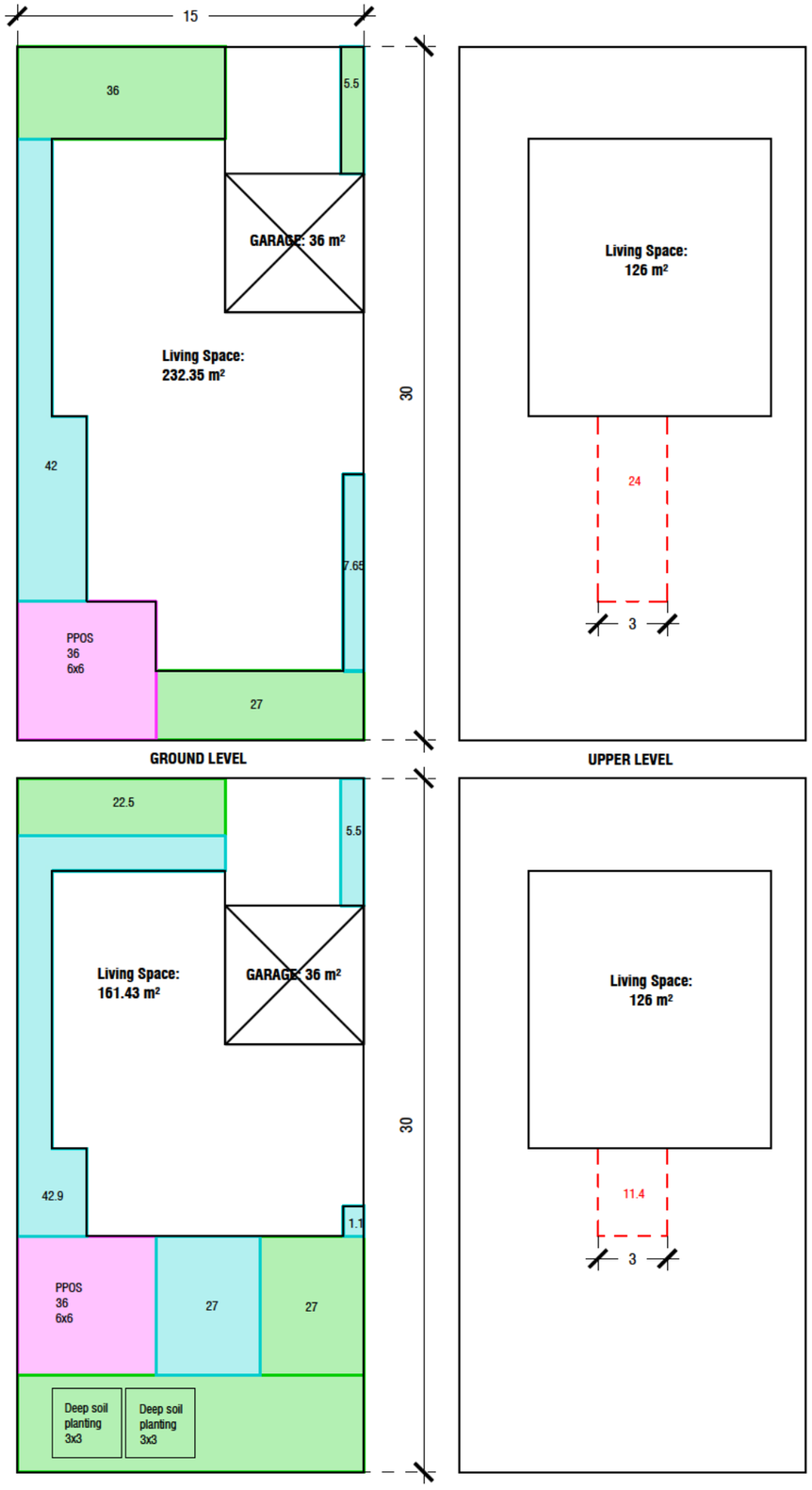
STATUS
DRAFT

REV. DRAWING NO.
DRAFT

BLOCK SIZE 450m²: 15 X 30 m (N-S)

EXISTING CODE



DV 369

LEGEND

- INDICATIVE SITE COVERAGE
- NOT BUILDABLE UPPER FLOOR LIVING SPACE
- GARAGE LOCATION
- SOLAR ENVELOPE SETBACK

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 450m² N-S		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	130m² 45m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	255m² 45m²
m²	PLANTING AREA	Min 50% of the POS	65m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	112.5m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 450m² N-S		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	8%	36	8%
	PLANTING AREA	68.5	15.2%	112.5	25%
	OTHERS	49.65	11.0%	76.5	17%
	TOTAL	154.15	34.3%	225	50%
GFA	GROUND LIVING SPACE	232.35	51.6%	161.43	35.9%
	UPPER LIVING SPACE	126	28%	126	28%
	GARAGE	36	8%	36	8%
	TOTAL (EXCL GARAGE)	358.35		287.43	
DRIVEWAY		27.5	6.1%	27.5	6.1%

NON COMPLIANT WITH DV 369

PROJECT: DENMAN PROSPECT

REVISION: A DV 369 TEST BE BR

DRAWING TITLE: DV 369 TEST: MID SIZE BLOCK 450m2 (15X30) NS

DRAWN AK CHECKED BR

DATE: 12-03-20

SCALE: 1:250 @A3

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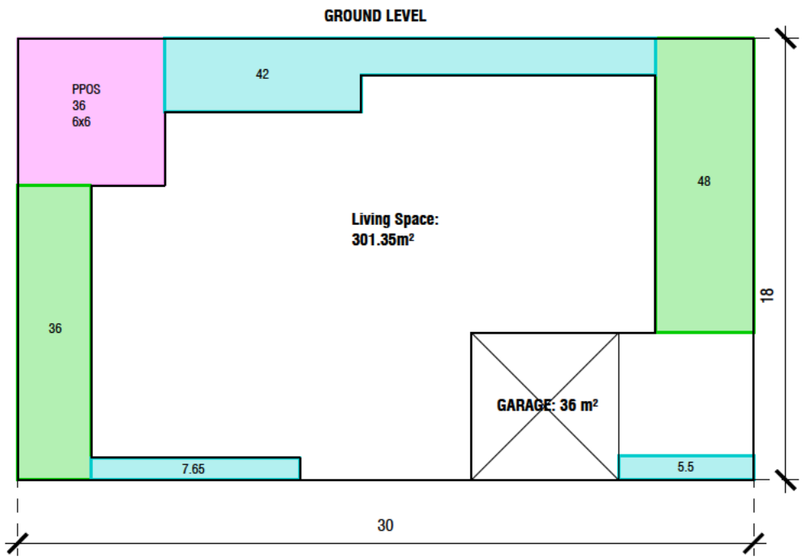
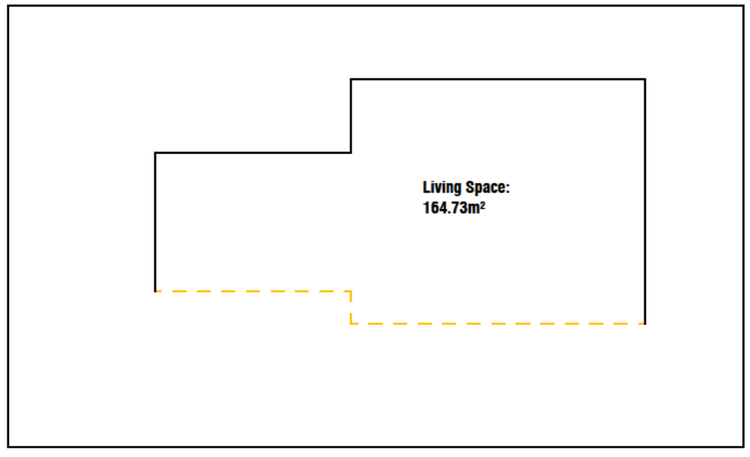
STATUS: DRAFT

REV. DRAWING NO.: DRAFT

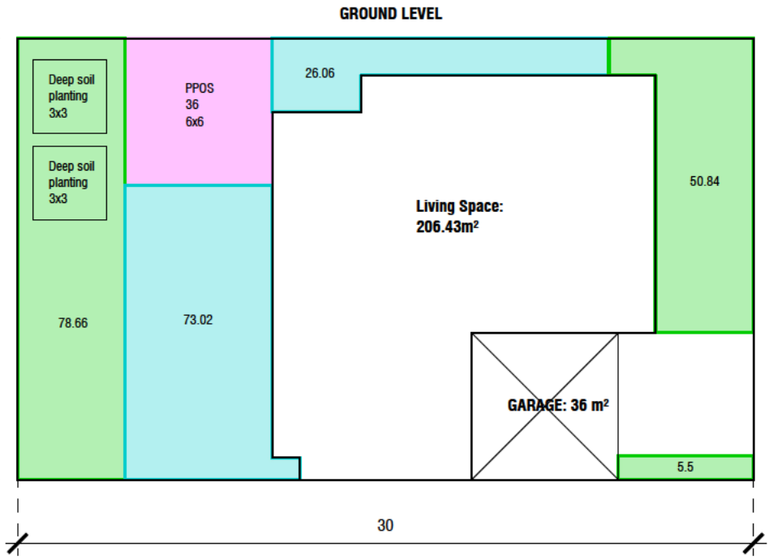
BLOCK SIZE 540m²: 18 X 30 m (W-E)

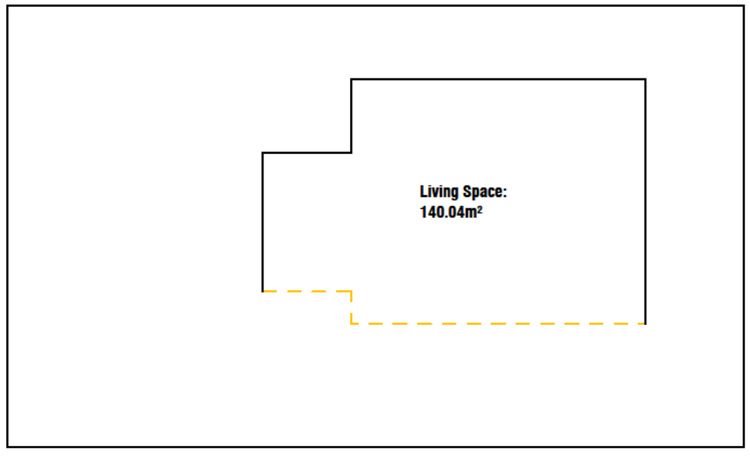
EXISTING CODE





DV 369





LEGEND

INDICATIVE SITE COVERAGE

SOLAR ENVELOPE SETBACK

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 540m² E-W B2S	EXISTING CODE		DV 369	
	REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	166m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	270m²
m² PLANTING AREA	Min 50% of the POS	83m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	135m²
m² PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m² OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 540m² W-E		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	6.7%	36	6.7%
	PLANTING AREA	84	15.6%	135	25%
	OTHERS	55.15	10.2%	99	18.3%
	TOTAL	175.15	32.4%	270	50%
GFA	GROUND LIVING SPACE	301.35	55.8%	206.43	38.2%
	UPPER LIVING SPACE	164.73	30.5%	140.04	25.9%
	GARAGE	36	6.7%	36	6.7%
	TOTAL (EXCL GARAGE)	466.08		346.47	
DRIVEWAY		27.5	5.09%	27.5	5.09%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST BE BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 540m2 W-E (18X30)

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

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0 1 2 3 4 5 10 15

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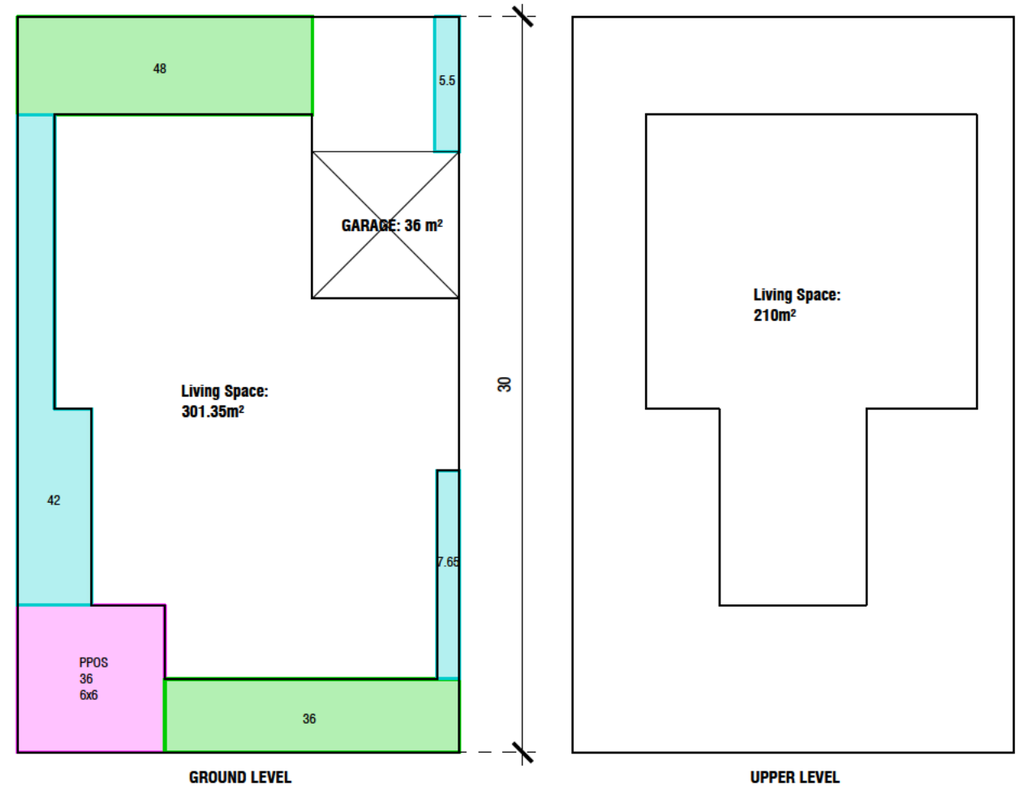
STATUS
DRAFT

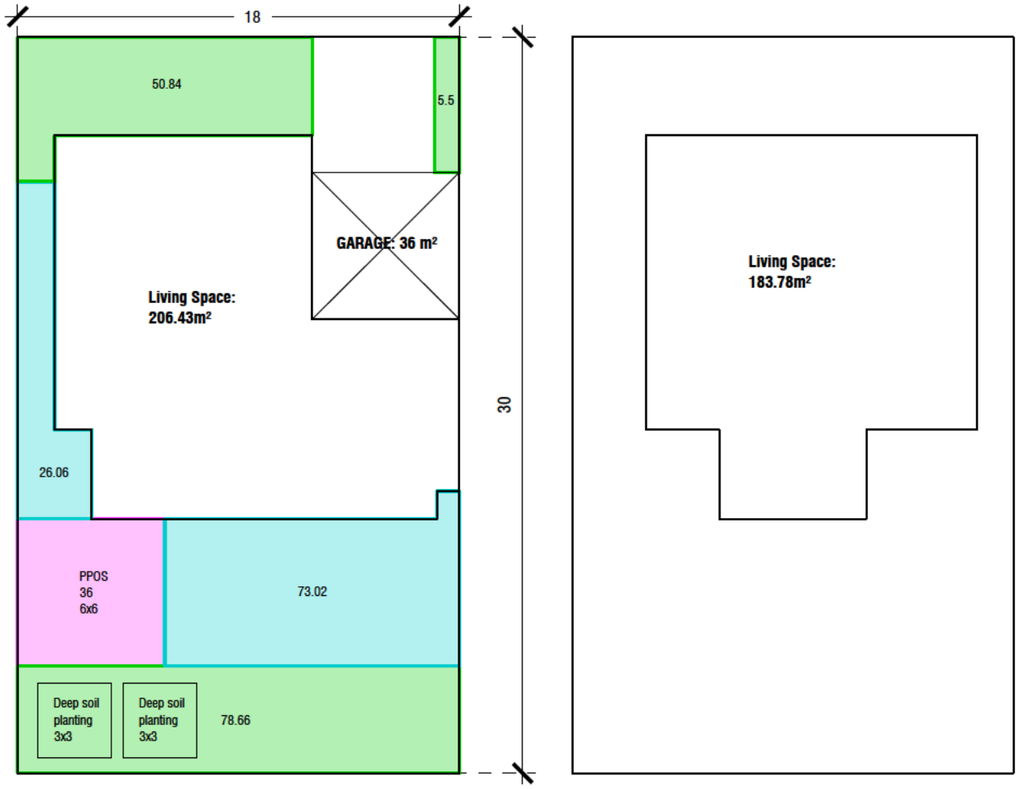
REV. DRAWING NO.
DRAFT

BLOCK SIZE 540m²: 18 X 30 m (N-S)

EXISTING CODE



DV 369



LEGEND

INDICATIVE SITE COVERAGE

GARAGE LOCATION

PRIVATE OPEN SPACE AREA REQUIREMENT FOR MID BLOCK

BLOCK SIZE: 540m² N-S		EXISTING CODE		DV 369	
		REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
	TOTAL POS	Min 40% of the Block Area (less 50m²) Min Dim: 6m Min 10% of Block	166m²	Min 50% of the Block Area Min Dim: 6m Min 10% of Block	270m²
m²	PLANTING AREA	Min 50% of the POS	83m²	Min 50% of the POS (Min 2.5m) Incl Min 2 Small Canopy Tree (Min soil surface area: 3m²)	135m²
m²	PRINCIPAL PRIVATE OPEN SPACE	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²	Dwelling size over 105m² Min Area: 36 m² Min Dim: 6m	36m²
m²	OTHERS	Not Specified		Not Specified	

BLOCK SIZE: 540m² N-S		EXISTING CODE		DV 369	
		AREA (m²)	% OF SITE	AREA (m²)	% OF SITE
POS	PPOS	36	6.7%	36	6.7%
	PLANTING AREA	84	15.6%	135	25%
	OTHERS	55.15	10.2%	99	18.3%
	TOTAL	175.15	32.4%	270	50%
GFA	GROUND LIVING SPACE	301.35	55.8%	206.43	38.2%
	UPPER LIVING SPACE	210	38.9%	183.78	34.0%
	GARAGE	36	6.7%	36	6.7%
	TOTAL (EXCL GARAGE)	511.35		390.21	
DRIVEWAY		27.5	5.09%	27.5	5.09%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: MID SIZE BLOCK 540m2 NS (18X30)

DRAWN AK CHECKED BR

DATE
12-03-20

SCALE
1:250 @A3

0 1 2 3 4 5 10 15

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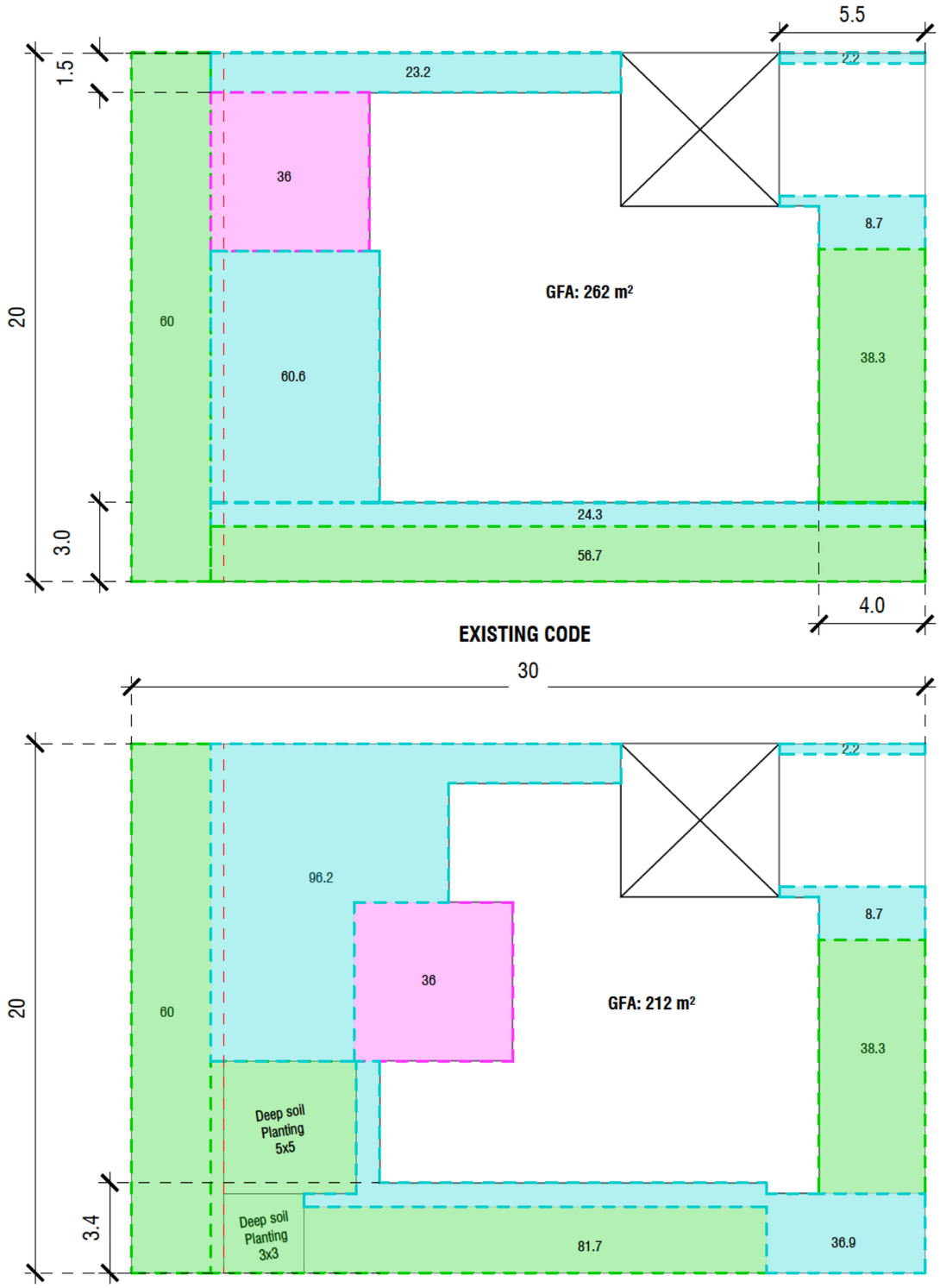

LEGEND

INDICATIVE SITE COVERAGE

GARAGE LOCATION

EASEMENT

PRIVATE OPEN SPACE AREA REQUIREMENT FOR LARGE BLOCK

BLOCK SIZE: 600m² (20x30)	EXISTING CODE		DV 369	
	REQUIREMENT	MIN. AREA	REQUIREMENT	MIN. AREA
TOTAL POS	Min 60% of the Block Area, less 50m² Min dim of 6m for an area no less than 10% of the block	310m²	Min 60% of the Block Area Min dim of 6m for an area no less than 10% of the block	360m²
m² PLANTING AREA	Min 50% of the min POS	155m²	Min 50% of the min POS (Min 2.5m) Incl Min 1 Small Canopy Tree (Min soil surface area dim: 3m), 1 Mid Canopy Tree (Min soil surface area dim: 5m)	180m²
m² PRINCIPAL PRIVATE OPEN SPACE	Min Area: 32 m² Min Dim: 6m	36m²	Min Area: 32 m² Min Dim: 6m	36m²
m² OTHERS	Not Specified		Not Specified	

		EXISTING CODE		DV 369	
		AREA (m²)	%	AREA (m²)	%
POS	PPOS	36	6.0%	36	6.0%
	PLANTING AREA	155	25.8%	180	30%
	OTHERS	119	19.8%	144	24%
	TOTAL	310	51.6%	360	60%
GFA (INCL GARAGE)		262	43.6%	212	35.3%
DRIVEWAY		27.5	4.5%	27.5	4.5%

NON COMPLIANT WITH DV 369

PROJECT
DENMAN PROSPECT

REVISION
A DV 369 TEST AK BR

DRAWING TITLE
DV 369 TEST: LARGE BLOCK 600m2 (20X30)

DRAWN AK CHECKED BR
DATE 25-02-20
SCALE 1:200 @A3

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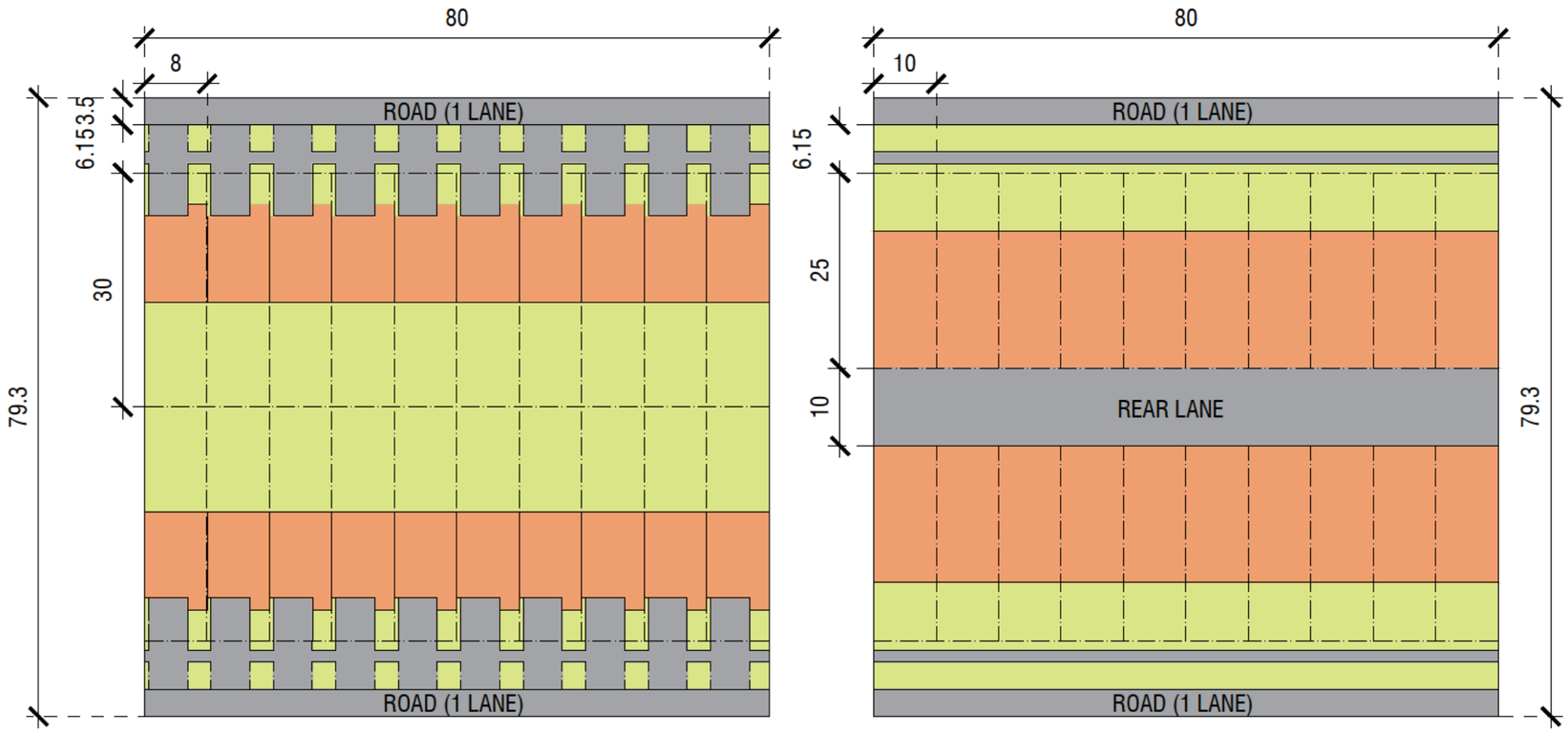
STATUS
DRAFT

REV. DRAWING NO.
DRAFT



PRIVATE OPEN SPACE AREA REQUIREMENT FOR COMPACT BLOCK + FRONT LOADING

BLOCK SIZE: <250m²	FRONT LOADING (20 - 8X30)		REAR LOADING (20 - 8X25)	
	AREA (m²)	%	AREA (m²)	%
SOFT SURFACE	2679	42.2%	1944	30.7%
HARD SURFACE	1815	28.6%	1600	25.2%
BUILDING	1850	29.2%	2800	44.1%
TOTAL	6344	100%	6344	100%

PROJECT
DENMAN PROSPECT NORTH

REVISION

A	DV 369 TEST		AK	BR
B	DV 369 TEST		BR	BR

DRAWING TITLE
DV 369 TEST: COMPACT BLOCK SURFACE PROPORTION TEST

DRAWN BR **CHECKED** BR

DATE
01-05-20

SCALE
1:750 @A3

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STATUS
DESIGN REVIEW

REV. FINAL

DRAWING NO.

REID RESIDENTS' ASSOCIATION INC.
AO 1247 info@reid.northcanberra.org.au

TO: Territory Plan Section of the Environment, Planning and Sustainable Development Directorate (EPSDD)
terrplan@act.gov.au

RE: Reid Residents' Association Submission to EPSDD consultation process on DV369 (Living Infrastructure in Residential Zones)

Thank you for the opportunity to make a submission on Draft Variation 369 Living Infrastructure in Residential Zones RZ1 To RZ5 (DV 369).

The Reid Residents' Association (RRA) endorses the intention of DV369 'to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045. The draft variation will assist in working towards achieving these targets for urban areas by making changes related to site coverage and planting area requirements on private land in all residential zones (RZ1 to RZ5).'

The RRA endorses the following:

- the principles outlined in this Draft Variation
- new Site Coverage rules
- strengthened Open Space requirements
- strengthened Planting Area requirements
- introducing canopy cover and deep soil zone requirements

It is to be noted, however, there appears to be a number of lost opportunities to maximise the effects of DV369 and thus it fails to complement the intention of the 'ACT Climate Change Strategy 2019–2015' and 'Canberra's Living Infrastructure Plan'.

- www.environment.act.gov.au/__data/assets/pdf_file/0003/1414641/ACT-Climate-Change-Strategy-2019-2025.pdf/_recache
- www.environment.act.gov.au/__data/assets/pdf_file/0005/1413770/Canberras-Living-Infrastructure-Plan.pdf

It would add credibility to DV369 if introductory statements were made, or appendices attached to address these issues.

Other possibilities would be to strengthen rules and incorporate specific details in criteria. However, criteria should exist to augment rules so that loopholes cannot be exploited.

The perceived intent of DV369 would be strengthened if the following were included:

- Careful selection of tree species for resilience.
- Include understorey to enhance connectivity.
- Integration with the living infrastructure across all of Canberra.
- A statement of the accumulative effects of Canberra's heat banks.

- Modelling (including assumptions) information that shows the projected effects of increasing living urban infrastructure.
    - Projected effects of **not** increasing living urban infrastructure should also be made plain.
    - Modelling should be related to both the benefits and deficits of climate resilience, economic prosperity, energy costs and the amenities of nature, health and well-being.
- Education of the Canberra community, including those involved in the multi-unit building industry, requires urgent attention.

The concerns we raise are as follows:

1. THE TREES

Insufficient consideration is given to the various scientific disciplines to ensure survival and longevity of the various forms of living infrastructure.

i. The setting of the tree canopy at 30% should be strengthened and justified scientifically. It may need to be increased.
ii. Trees are clumped into 'small', 'medium' and 'large' without recognition of species requirements. This is far too generic. Different tree species require different soil types, depth and water requirements. This needs to be addressed in greater detail.
iii. Connectivity should be incorporated into this DV as an overarching goal. Trees benefit from not only appropriate soil biome but also pollinators across a wide range of vertebrates and invertebrates. Such corridors for improving connectivity should be mapped, incorporated into planning and implemented.
iv. There is the necessity to incorporate Tree Sensitive Urban Design (TSUD).
v. Water is required for the success of living infrastructure, large and small. How is this to be managed?
vi. Compaction of soil is rampant throughout Canberra with parking on verges and/or the loss of parking areas in new developments.

2. SPECIFIC PRECINCTS

The CSIRO report: 'The Mapping Surface Urban Heat in Canberra' provides an excellent and salutary reference for establishing a basis for ways forward as it shows quite graphically and literally Canberra's 'hot' and 'cool' suburbs/areas

> 'Residential areas, such as Reid (below), that have shady parks, significant tree canopy cover and irrigated gardens are cooler in summer. Verges that are wide enough to accommodate large shade trees provide extensive cooling benefits' (p. 28). www.environment.act.gov.au/__data/assets/pdf_file/0005/1170968/CSIRO-Mapping-Surface-Urban-Heat-In-Canberra.pdf

Further, as a sub-set of the suburb of Reid, the Reid Housing Precinct (RHP), has its own mandatory requirements, as do various other heritage precincts in the ACT. These must be maintained as per the various Heritage Entries which for RHP is Entry 20023 ACT Heritage Register, *Heritage Act 2007*.

REID HOUSING PRECINCT (RHP**)**

The RHP site coverage of built development must not exceed 27% and the planting area is 40%. These proportions must be maintained.

Mandatory Requirements for RHP include:

- Site coverage of built development (including the area of any dwelling, garage, carport, outbuilding or other roofed area but excluding driveways and unroofed paved areas) on a residential block **shall not exceed 27.5% of the area of the block**.
- **Not less than 40% of the area of a residential block shall be retained as planting area.** Planting area means an area of land within a block that is not covered by buildings, vehicle parking and manoeuvring areas of any other form of impermeable surface and that is available for landscape planting.
  www.environment.act.gov.au/__data/assets/pdf_file/0010/148474/462.pdf

The RRA most certainly does not accept that RHP now drops to 30% canopy cover and that the site coverage expands beyond 27% as we move towards 2045. The RRA wishes to maintain the benefits of foresight in the provision of wide streetscapes, the current sight coverage ratios and the benefits of the coolness afforded by these elements as cited in the afore mentioned CSIRO report.

This raises the issue of ageing wide-canopied trees and the urgent need to address an appropriate succession plan. Considering the age of Reid's streetscapes, it should be noted that the majority of the species comprising these plantings have survived our worst droughts: 1911–16, 1918–20, 1939–45, 1958–68, 1982–83, 1996 to mid-2010 and 2016–19. See:

- www.abs.gov.au/AUSSTATS/abs@.nsf/lookup/1301.0Feature%20Article151988
- www.bom.gov.au/climate/updates/articles/a010-southern-rainfall-decline.html
- www.bom.gov.au/climate/current/statements/scs70.pdf

We recommend that RHP and other similar heritage precincts in Canberra retain, and have strengthened, their mandatory site coverage for built development and planting areas of no less than 40%. These are integral to the heritage values of these respective heritage precincts.

Further, achieving 30% permeable surfaces in urban areas by 2045 is problematic as this measure needs to be monitored and enforced. From extensive experience of what has occurred in Reid there has been an incremental increase in impermeable surfaces with driveway extensions, impermeable paving, swimming pools and sheds. The mandated requirements have not been enforced and this makes a mockery of legislation and governance.

Future multi-unit building within Reid along Ainslie Ave should be included in the proposed 30% canopy coverage and, ideally, with planting areas aligned with RHP. This would help to reduce the serious heat island of Civic and would be more in keeping with the rest of Reid's character and the suburb's recognised cooler environment. Statements made in the media from some developers appear to demonstrate that they have little, or indeed, no regard for living infrastructure and see the perfect, most profitable way for housing people comprises entirely concrete, tar, glass and aluminium with token vegetation, often English Ivy, an invasive species. Trees are rarely included.

3. CONSISTENCY – CANBERRA AS A TOTALITY

Clear evidence from CSIRO's 'Mapping Surface Urban Heat in Canberra' depicts the necessity to apply at least 30% canopy to rectify what appears to be poor planning and/or lack of compliance and enforcement of planning rules. This is patently manifest in Figure 4. *Land surface temperature for the urban Districts and Villages of the ACT on 9 February 2017. The image was derived from Landsat 8 thermal remote sensing imagery at 10.50 AM DST*, p. 21. www.environment.act.gov.au/__data/assets/pdf_file/0005/1170968/CSIRO-Mapping-Surface-Urban-Heat-In-Canberra.pdf

These hot spots, many comprising Low-rise Multi-unit developments (RZ1 and RZ2) and High-rise Multi Unit Housing developments (RZ3, RZ4 and RZ5) undoubtedly contribute to the overall total heat generated by Canberra. The discomfort for residents of cooling these suburbs – extremely disappointing to see so many new suburbs in this category – contributes to high energy costs and, of course, to climate change.

It appears illogical to require a canopy cover of 15% for multi-unit developments in any RZ1 to RZ5 zones – these multi-unit buildings and their very bulk unfortunately retain heat very efficiently. Residents in high-rise buildings should be afforded the same amenity & respect that single unit residents in RZ1 have. Surely there cannot be an intention to diminish the livability of these apartments. The Government should be looking at the long-term impact of carbon emissions from the necessity of running air-conditioners in what will become hotbox apartments.

Implementation of the variables 30%, 20% and 15% across RZ1 to RZ5 zones will be a serious administrative challenge. It is already difficult to have enforcement of the current rules and criteria, particularly in heritage-listed areas when even clearly articulated mandatory requirements are either ignored or not enforced consistently. What is set out in DV369 will add further complexity to the planning system, its administration, its implementation and enforcement.

4. COMMUNITY EDUCATION

In his paper on developing more sustainable practices for planting street trees in Australian cities, Ely (2010) details ecosystem services delivered by urban trees, see Table 10 (p. 40, Ely, M E 2010 *Integrating Trees into the Design of the City: Expert Opinions on Developing More Sustainable Practices for Planting Street Trees in Australian Cities*. https://digital.library.adelaide.edu.au/dspace/bitstream/2440/65557/8/02whole.pdf

This is a useful education tool, and doubtless there are many others, that could be used in raising community awareness of the benefits of tree planting.

The table presents the following ecosystem services:

Global climate modification

- Carbon sequestration and storage
- Avoided CO2 emissions
- Building energy savings

Local climate modification

- Temperature reduction
- Shading
    - Buildings

    - Urban surfaces
- Evapo-transpiration
- Wind speed modification

Air quality improvement

- Pollutant removal
    - Absorb gaseous pollutantsO3, NO2
    - Intercept particulate matter PM10
    - Reduce air temperatures O3
    - Release O2
- Avoided pollutant emissions

Water cycle modification

- Flood reduction
    - Canopy interception and storage
    - Increased soil infiltration (roots)
    - Increased soil water holding capacity-ET
- Improved water quality
    - Biofiltration

Soil improvements

- Soil stabilization
- Waste decomposition
- Nutrient cycling

Biodiversity

- Habitat
- Corridors

Human health and well-being

- Physical
- Social, psychological

It would be entirely possible to estimate the value of these services as they apply to RZ1–5 zones in Canberra and develop a series of fines based on these values as, noncompliance, in reality, costs the citizenry/residents of Canberra and is an impost on government coffers.

It is a very serious concern that there appears to be so little regard within the apartment construction industry for the science of climate change, social impact of rising energy costs, loss of the well-recognised amenity and aesthetics of Canberra, and health and wellbeing of residents. The main driver is short-term profit; however, the Government must consider the long-term impact of energy consumption and loss of amenity.

To change the building and apartment construction industry's attitude to trees we recommend that landscape be incorporated in building Energy Ratings (from single dwelling to various iterations of high rise) with extra stars awarded for appropriate tree plantings that will assist mitigating the ever-increasing summer hear. The ACT could lead the nation on this.

Further, practices of clear felling virtually existing every tree on land subjected to new housing estates should be discouraged. Those undertaking such commercial activities should

be charged the real ecosystem service value for the removal of any such trees and associated vegetation.

We would be pleased to provide further information on our concerns if required.

[redacted]
President
Reid Residents' Association
[redacted]
info@reid.northcanberra.org.au
8 May 2020

TUGGERANONG
COMMUNITY COUNCIL

Territory Plan Section of EPSDD
terrplan@act.gov.au
GPO Box 158,
Canberra, ACT 2601

To whom it may concern

TERRITORY PLAN DRAFT VARIATION NO. 369 (DV369)

This is the Tuggeranong Community Council's response to the Draft Territory Plan Variation No 369 Living Infrastructure Plan: Cooling the City.

We are pleased to see that the ACT Government has recognised that the we need to *'increase the green space and tree canopy coverage in the residential areas to help the city cope with climate change and be more liveable and comfortable'*. We agree that new residential developments should have *'more trees, planting areas and soft landscaping than is currently required*'. We think this is critical particularly when you consider the increasing temperatures over the last few years and the devastating effects this has had on our environment.

We commented in our response to the Inquiry into Nature in our City in June 2018 that: *There is a growing concern that pressures on development will lead to encroachment on our urban open spaces as well as rural and natural areas. ….. The benefit of having a lake, large blocks and significant surrounding green spaces, leads to greater biodiversity of the area which will be very important for our local wildlife as the climate changes. Such areas reduce the effects of climate change lowering the temperature in the area, thus reducing the heat island effect leading to a healthier environment for all of us.*

There appears to be no landscape policy for urban Canberra and no real Natural Resources plan to prevent urban sprawl. There is insufficient priority given to recognising the benefits of nature especially in some newer and redeveloping urban areas. New developments seem to want to maximize returns for developers with little consideration for integrating the natural environment with optimal urban development …. current planning policy seems to be leading to small plots with large houses on them, leaving little green space as the building take up most of the land, giving little room for vegetation and possible canopy trees that might help reduce the heat island effect in summer. On any building block, there should be a good plot ratio say 35%, so there is plenty of room put aside for planting – trees, shrubs lawn, vegetable garden … this would reduce the heat island effect and reduce storm water run-off.

Therefore, we welcome the improvement to a tree canopy cover of 30% and 30% permeable surfaces by 2045.
However:

- We feel it would be useful for the government to present a triple bottom line evaluation of economic, social and environmental aspects of this proposal to demonstrate to the general public its benefits.

TUGGERANONG
COMMUNITY COUNCIL

- The draft should be simplified with clearer definitions of planting areas - 'planting minimums' is complex and not easy to follow. Would it be better to have planting area as a percentage of the total block size rather than as a percentage of private open space.

- Is the overall 30% figure sufficient to combat the heat island effect or should it be 35% or 40% as per NCA specification.

- Does it meet the needs of the Living Infrastructure plan?

- It is not clear how the targets will be met in public areas, including streets and public areas of new developments eg are the verges in new areas wide enough so that there will be enough space for utilities (water, electricity) as well as planting trees.

- Does this only apply to new developments eg if an existing house, with a large block of land wants to add a Granny Flat or a pool, will they come under the new regulations or the regulations that existed when they bought the house.

- What if blocks do not have sufficient soil depth capable of deep-rooted trees. This is a fallacy with a number of sites (such as around hilltops) only having a minimal (100mm) topsoil coverage before hitting hard clay or granite rock. Often developers have to "resurface sites and that is on top of areas cut into rock. While some trees maybe able to crack clay and rock, a lot do not.

Thank you for the opportunity to respond to DV369. I hope you will take our comments into consideration and would be happy to respond to any redrafts.

Yours sincerely

[redacted]

President
Tuggeranong Community Council
8th May 2020.

From: [redacted]
To: Terrplan
Subject: submission regarding proposed Territory Plan variation DV369 (NI2019-807)
Date: Friday, 8 May 2020 11:39:56 AM

Dear Sir/Madam

Thank you for the opportunity to comment on the proposed variation to the ACT Territory Plan DV369.

Provided that the social (public and private) benefits can be shown to exceed the social costs, the proposed variation to the Territory Plan would be warranted. At face value, the reduction in existing Rules and exceptions made to them in Criteria, as well as the increased cooling effect of more trees in summer, would seem to offer net social benefits in reduced resource costs, provided that additional administrative costs are not increased significantly. However, a more rigorous social cost-benefit analysis would be required to confirm that no better alternative approaches exist to achieve the ACT Government's objectives.

The purpose of this submission is to urge consideration of the use of a market-oriented mechanism, rather than sole reliance on administrative enforcement, to achieve the Government's goals. The main reason for this is to reduce the costs of implementing the changes envisaged in DV369.

Monitoring and enforcement through administrative means requires the employment of staff, and the cost of doing so is subject to budgetary pressures that are likely to reduce the efficacy of the approach over time.

While it does not offer a perfect solution, the use of financial incentives that complement and reinforce changes to required planting areas and the maintenance of canopy trees, can reduce future budgetary costs while increasing the effectiveness of the proposed changes. One means of doing so is to offer a reduction in rates to residents who declare that they maintain legislated planting areas and trees. A sliding scale could be one feature, with perhaps a 5 per cent annual reduction in rates for maintenance of the specified planting area, and a further 5 per cent reduction for maintaining suitable canopy trees. Random audits, perhaps using drone technology, could ensure compliance and avoidance of fraudulent claims.

The proposed draft variation appears to assume that only full-sized canopy trees can generate a cooling effect. If rate reductions were limited solely to full crowns, residents with smaller blocks could be disadvantaged, and the potential cooling effect would not be fully realised. Consideration should therefore be given to including a provision for pollarding or coppicing of large trees like sycamores that are planted on the northern or western side of a property and shade built infrastructure.

An alternative mechanism might be to require sellers of residential properties to certify to buyers that their property complies with the provisions of the Territory Plan. However, this approach would increase resource costs imposed on sellers, real estate agents and the Government, because of the need to guarantee the veracity of sellers' certifications.

I would be happy to discuss the above proposal.

Your sincerely,

[redacted]

****
[redacted]
Associate Professor
Research School of Finance, Actuarial Studies and Statistics
ANU College of Business and Economics
[redacted]

Inner South Canberra Community Council

info@isccc.org.au

Territory Plan Section,
EPSDD,
Terrplan@act.gov.au
GPO Box 158,
Canberra, ACT 2601

DRAFT VARIATION 369 - LIVING INFRASTRUCTURE IN RESIDENTIAL ZONES

Summary
The Inner South Canberra Community Council (ISCCC) welcomes the opportunity to comment on Draft Variation 369 (DV 369) to the Territory Plan.

The ISCCC is pleased that the ACT Government has adopted "Canberra's Living Infrastructure Plan: Cooling the City" with 15 'Actions' aiming, inter alia, "to conserve and enhance Canberra's biodiversity and landscape function, quality of life and sustainability..."

The ISCCC believes that DV 369 as it currently stands is a step in the right direction but needs to be redrafted to simplify it and provide a framework for implementing other important actions in the Living Infrastructure Plan. This would help ensure the protection and enhancement of vegetation in existing and newly developing areas.

In summary, the ISCCC:

- Calls for DV369 to be redrafted to simplify it – including by defining the planting area as a percentage of the total block size instead of as a percentage of private open space.

- Calls for DV369 be redrafted to incorporate other requirements referred to in the Living Infrastructure Plan such as landscape plans.

- Supports expansion of the definition of 'planting area' to clarify that elements that impact permeability of the ground (i.e. terraces, pergolas, patios or decks) are not considered to be planting area.

- With respect to the space occupied by a new dwelling, supports expansion of the definition of 'site coverage' to clarify that elements that impact permeability of the ground (i.e. terraces, pergolas, patios, decks or balconies) are considered to be site coverage.

- Supports the reinforcement of criteria for planting area, site coverage, water infiltration, landscape quality, deep root planting area, and tree canopy, but questions whether mandating a particular number and size of trees on residential blocks will achieve the 30 percent canopy objectives without a clear strategy for ensuring compliance.

- Considers that a possible way of ensuring compliance with the 30 percent planting area may be to require certification at the time of the grant of the certificate of occupancy and perhaps at the time of future resale of the property.

- Calls for reinstatement of the requirement for a Development Application, including consultation with neighbours, in the case of "knockdowns and rebuilds."

- Proposes amendment of the Estate Development Code to include tree canopy provisions, as it is important that this requirement be embedded at the subdivision stage of new estate development.

- To complement the DV369 requirements, proposes that the ACT Government investigate possible incentives for the planting of living green infrastructure on existing and future buildings, and for the planting of trees on permeable surfaces on private open space generally in the ACT.

Background

The ISCCC endorses the comments made in the various submissions from community groups within the Inner South area, in particular that additional controls by DV 369 to respond to Action 2 of the ACT Government's Living Infrastructure Plan have increased the volume and complexity of controls in the Residential Codes, rather than rationalising and simplifying them to make them easier to comprehend and apply by applicants, assessors and interested members of the community.

In addition, the ISCCC's online survey of 555 inner south residents in 2019/20 found that 85 percent want to have a say on what is built next door or nearby, 64 percent would like to have a say about the amount of green space on a neighbouring block, and about 50 percent would like a say on the number of trees on a nearby block. In other words, a far larger percentage want to have a say about the amount of green space but are less prescriptive about the type and number of trees or other vegetation on a block.

The issues they are most interested in being consulted about with respect to neighbouring redevelopments are those that will have an impact on their access to sunlight/natural light (83%), building height (75%), and zoning changes (70%). This means that good landscaping plans will be needed to ensure that vegetation such as trees are placed on blocks in such a way that they do not reduce access to sunlight/natural light, especially in winter, to both the dwelling being constructed and neighbouring properties. However, we note that:

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- While Action 5 of the Living Infrastructure Plan calls for a Climate-wise Landscape Guide for development, DV 369 does not appear to deal with this requirement.
- While Action 6 of the Living Infrastructure Plan requires "multi-dwelling, mixed use and commercial development applications (DA) to have landscape plans that demonstrate how surface treatments and tree canopy targets will be met," DV 369 is silent on this requirement.

DV 369 aims to 'respond' to Action 2 of the Plan: "Achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in Canberra's urban footprint by 2045."

The targets, and other associated issues, raise several questions of concern to the ISCCC:

1. Action 2 says "some cities around Australia have adopted canopy cover targets, generally in the range of 30-40%." For example, both Greater Sydney[1] and the City of Melbourne[2] have adopted canopy targets of 40 percent. While we understand the ACT Government has already decided on the 30 percent target, and that achieving that target will be a major challenge (as acknowledged in our point 9 below), we need to ensure the target is reviewed over time in the light of evidence about what canopy cover will be sufficient to address the heat island effect as Canberra faces an ever-increasing number of 40 plus degree days in summer. The Government's own Living Infrastructure Plan advised that:

> "Canberra had only reached 40°C nine times in total in the first 94 years of observations from 1913 to 2006 (and did not reach 40°C at all between 1973 and 1998). In the 12 years from 2007 to February 2019, there have been 16, and the January 2019 heatwave was the first recorded period of more than 4 consecutive days over 40°C." [3]

2. The canopy cover target can apparently be met by 'equivalent' measures, including "green roofs and walls, wetlands and rain gardens, water features and fountains, watered grass, shrub beds, and climbers on structures." The ISCCC questions whether these devices are truly 'equivalents' to tree canopy cover and in any event DV 369 does not appear to deal with these 'equivalents.

3. Under Action 2 the Plan states: "where 30% canopy cover cannot be easily achieved through tree and vegetation plantings, alternative locality-specific solutions will be used based on assessment of microclimate and built environment conditions." DV 369 does not appear to deal with this issue.

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[1] https://www.greater.sydney/central-city-district-plan/sustainability/city-its-landscape/increasing-urban-tree-canopy-cover-and

[2] https://www.melbourne.vic.gov.au/SiteCollectionDocuments/urban-forest-strategy.pdf

[3] https://www.environment.act.gov.au/__data/assets/pdf_file/0005/1413770/Canberras-Living-Infrastructure-Plan.pdf, p.12, accessed 6 May 2020

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5. Actions 3 & 4 of the Plan call for a Microclimate Assessment Guide and Program for significant developments. DV 369 does not appear to deal with this matter.

6. Action 5 of the Plan calls for a Climate-wise Landscape Guide for development. DV 369 does not appear to deal with this requirement.

7. Action 6 of the Plan requires "multi-dwelling, mixed use and commercial development applications (DA) to have landscape plans that demonstrate how surface treatments and tree canopy targets will be met". DV 369 is silent on this requirement.

8. Action 15 of the Plan is to "investigate ways to encourage and incentivise living infrastructure on existing and future buildings in Canberra". This issue of identifying appropriate incentives is relevant to the planting of trees on permeable surfaces across private open space generally. What is the ACT Government doing about this?

9. What steps is the Government taking to meet its share of the target? The ISCCC notes that the Government will need to plant 330,000 trees on public land to meet the target. The ISCCC looks forward to participating in community engagement about development of the Urban Forest Strategy, which we understand will address this issue (Action 9 in the Living Infrastructure Plan). In the absence of firm committed funding and a realistic public plan with provision for regular reviews of progress then the Government will almost certainly fall behind in achieving its share of the target it has set itself, and this will undermine the rationale for DV369 and make it unenforceable.

[DV369 has been introduced to ensure that private leaseholders assist in increasing Canberra's tree canopy cover from the existing 21% to 30% by 2045. Canberra's urban forest is estimated to currently consist of about 1.54m trees. Increasing the canopy cover to the (rather low) target will therefore require the planting and nurture of a further 660,000 trees, about half of which will have to be grown on privately leased land.]

10. It is not clear to the ISCCC that attempts to compel property owners to grow trees is the best or most effective way to encourage increased tree planting in Canberra. More consideration of the basic strategic approach to meeting the tree canopy targets would have been desirable before the development of a plethora of complicated, highly specific, new Rules and Criteria. The ISCCC urges EPSDD management to step back and think more deeply about what it wants to do, and how it wants to achieve its objectives, before requiring staff to prepare regulation that it cannot see any way of enforcing.

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11. Even if the approach embodied in DV369 is correct, the ISCCC has some doubts about the applicability of the Variation. This has two limbs, firstly can private leaseholders be compelled to plant particular types of trees, and can leaseholders be compelled to maintain such trees for years until maturity. The ISCCC notes that EPSDD has deferred resolution of this latter issue to the ACT Planning Review, suggesting that it has no idea how the Variation might be enforced.

In relation to the ability to compel the planting of particular trees, some have argued that "Existing Use" rules mean that the new provision cannot be enforced on single dwelling redevelopments on existing blocks. Others have expressed doubts that the Government can specify the type or size of tree to be planted on private blocks. Either of these objections if correct would undermine the effectiveness of the Variation.

In light of these concerns, the ISCCC urges that DV369 be redrafted and simplified to focus on planting areas and site coverage. Any redrafted Variation should only be released after the necessary policy considerations have been fully undertaken, and plausible strategies to overcome obvious difficulties have been developed.

Thank you again for the opportunity to comment on DV369.

[redacted]

[redacted]
Chairperson, ISCCC
8 May 2020

PO Box 3310, Manuka ACT | www.isccc.org.au | info@isccc.org.au

From:	[redacted]
To:	Terrplan
Subject:	DV369 comments about Tree Registers, pot sizes and planting in residential development in commercial zones
Date:	Friday, 8 May 2020 1:34:42 PM

To Whom It May Concern at EPSDD

I would like to make some comments about Draft Variation 369, in particular about the use and effectiveness of the Tree Registers, about the changes to site coverage and planting area requirements on residential blocks in commercial zones, and about the minimum tree pot sizes. I would also like to raise some procedural issues, particularly concerning the timing of planting trees on new blocks.

Tree Registers

I would like the Tree Registers for significant trees to be made better known to the Canberra community, so that residents can monitor the health and safety of these trees. We have lost too many special trees through malice and ignorance.

Residential Site Coverage for Multi Units in Commercial Zones

The current Multi-Unit Development Code prescribes 40% of RZ1 and RZ2 blocks as open space and 20% of these open spaces to be planting areas. Under DV369 this is proposed to have the same 40% open space provision, with a new provision that only 40% of a block can be covered by non-permeable surfaces and 35% of the block is to be planting areas. Why is there no mention of non-permeable driveways in the Variation? Many people do not think of them as being part of their house but they do cover part of the block with an impermeable surface.

The provisions for residential sites in commercial zones are proposed to be left unchanged, with no increase in the paltry 10% planting area. As an example, the townhouses “Vaile” built on the former service station site zoned CZ5 on Fullagar Crescent in Higgins have only 24 square metres as their private open space and only half of this space is garden. Almost all the communal open space is the driveway which has no passive surveillance from the ground floors of the townhouses. This is for dwellings which have three or four bedrooms, so I think families can be expected to live there. It is a very unsatisfactory development for children to live in. There are many similar service station sites in Canberra waiting to be developed. I think that the same requirements for open space and gardens for residential developments in residential zones should be applied to residential developments in commercial zones, as commercial areas can be very ill supplied with green public open spaces.

Minimum tree pot sizes

Why are only advanced trees specified in DV369? Smaller trees cost far less, and often outstrip the growth of older trees. For example, a tree sold by Bunnings in a 45 litre pot can cost around $229, weigh 40 Kg, have a height of up to 2 metres and a spread of up 1 metre. A tree sold in a 75 litre pot can cost around $285, weigh 60 Kg, have a height of up to 2.5 metres and a spread of over 1 metre. Many people cannot afford trees of these sizes, cannot fit them into their car and cannot manoeuvre them into the ground by themselves. Unnecessary expense, in my opinion, especially when smaller trees might do better in the long term.

I urge the Territory to bring back a government tree issue, or at least to provide free horticultural advice on the best spot for a tree to be planted which will provide solar shading, the best variety to be planted which will stay out of sewers and stormwater pipes, and the best variety which will do well in local frost hollows and difficult soils.

Details of the proposed Variation

New block sizes in Canberra average less than 500 square metres according to Allhomes, so why does DV369 divide new blocks into large blocks over 800 square metres and mid-sized under 800 square metres? Surely 500 square metres should be the division.

I assume that the site coverage and location of trees will form part of the Building Approval process as a proposed landscape plan but will appropriately sized trees have to be in the ground so that they can be part of the certification for a new dwelling? If not, (and many people are not ready to plant out their garden as soon as they move in), how much longer after the certificate of occupancy is issued will residents have to plant their trees? Who will check? Are these trees to be part of a covenant on the block to ensure that the trees remain?

Why do small, medium and large trees have only their mature height specified, and not their spread? How can a resident relate the expected height of their chosen trees to the prescribed 15% canopy cover of their block under DV369? For example, pencil pines might grow to be tall enough but they will add very little to the canopy cover.

The terms “block” and “site” seem to be used interchangeably in DV369 and I find this confusing.

How will the environmental effect of DV369 be monitored? I urge the Government to ask CSIRO to repeat its study “Mapping urban surface heat in Canberra” well before the deadline of 30% tree canopy cover by 2045 to see whether the cooling benefit of this target is likely to be achieved.

Please acknowledge receipt of this email

[redacted]
[redacted] Higgins ACT 2615
[redacted]
[redacted]

Submission re Draft Variation 369 to the Living Infrastructure Plan in Residential Zones

MAY 2020

TO: Territory Plan Section, EPSDD, terrplan@act.gov.au

The **Conservation Council ACT Region** is the peak non-government environment organisation for the Canberra region. We have been the community's voice for the environment in the Canberra region since 1979.Our mission is to achieve an ecologically sustainable and zero net carbon society through advocacy, education, research and engagement with community, the private sector and with government.

We represent more than 40 member groups who in turn represent over 20,000 supporters. We harness the collective expertise and experience of our member groups and networks. We work collaboratively with Government, business and the community to achieve the highest quality environment for Canberra and its region.

The Conservation Council campaigns on:

- **Climate Change** – a regional, national and global challenge
- **Biodiversity**– protecting our unique ecological communities in the Bush Capital
- **Water** – smart use of a scarce resource
- **Transport** – connecting people and places
- **Waste** – being efficient through closed-loop systems
- **Planning** – the right things in the right places
- **Governance** – for a smarter, sustainable Canberra

For further inquiries regarding this submission please contact:

[redacted]
Executive Director, Conservation Council ACT Region
PH: [redacted]
Email: director@conservationcouncil.org.au

Introduction

The Conservation Council welcomes the opportunity to comment on the *Draft Territory Plan Variation 369 – Living Infrastructure in Residential Zones*. This submission will explore the proposed changes which respond to both Direction 3.3 of the ACT Planning Strategy 2018 and Action 2 of Canberra's Living Infrastructure Plan: Cooling the City (2019).

Urban tree cover is crucial to ensure the sustainability and vitality of the city in the future. The incorporation of living infrastructure in urban landscapes provides an array of benefits such as shade in summer months and a reduction in the urban heat island effect, and the consequential reduction in energy costs for cooling in residences and commercial buildings. Trees play an important role in improving the look and feel of Canberra's suburbs, making them enjoyable places to relax and connect with others in the community. A healthy tree canopy specifically supports active transport, an important consideration in the context of the increasing temperatures we are facing as a result of the changing climate. Furthermore, urban trees play an important role in providing habitat for biodiversity and building connectivity for species across the urban landscape. This includes various pollinators, which are crucial to protecting biodiversity. Moreover, trees have the capacity to draw down carbon from the atmosphere, reducing the impact of greenhouse emissions on global climate. They play an important role in reducing the risks associated with a changing climate, both now and into the future.

The Conservation Council strongly supports enhancing living infrastructure across the city and better tree protection within the ACT. As such, we welcome the commitments detailed within Canberra's Living Infrastructure Plan (2019), which set a city-wide target of 30% tree canopy and 30% permeable surfaces by the year 2045. The current tree canopy across the city is estimated to be 21%, though currently some suburbs have much higher tree canopy coverage than others. A CSIRO report on Canberra's heat island effect showed that newer suburbs with less public planting space such as Bonner were noticeably hotter than other suburbs such as Reid, which has significantly larger tree cover, shady parks and irrigated gardens.

The delivery of the targets outlined in the Living Infrastructure Plan require a strategic response across the public and private space in the urban domain. While residential areas do provide opportunities to increase tree canopy and permeable surfaces, this will depend on the size of the blocks being considered. It is going to be challenging to plant trees that will effectively contribute to the canopy on very small urban blocks. Consideration will need to be given to increasing the public urban open space available to facilitate plantings on streets, something that will require additional space on nature strips in new suburbs.

DV369 does not appear to be developed in cohesion with other aspects of the Living Infrastructure Plan. Without a comprehensive overarching strategy, there is a risk that the strategy for building living infrastructure across the city will occur in a piecemeal way. However, the Conservation Council acknowledges that this should not be a reason not to make positive changes that will improve outcomes on new residential blocks. Nevertheless, consideration should be given to revisiting this work in light of a wider urban tree strategy

further down the track. It is clear that there is more work to be done across a range of different mechanisms, and across the directorate areas of City Services, Climate Change and Sustainability, and Planning.

To support the 30% canopy target, new residential developments must have planting requirements that are both ambitious and regulated. The Conservation Council acknowledges that positive aspects of the Draft Variation show improvement to the green infrastructure requirements for new residential developments. This includes the introduction of tree planting zones, the expansion of definitions to cover key terms (canopy tree and deep soil zones), an increase in planting targets across a range of different development types in both the Single-Dwelling and Multi-Unit Housing development codes, and the incorporation of guidelines to consider water infiltration, deep root planting, tree canopy and landscape quality.

The Conservation Council has detailed below improvements which could be incorporated into DV369 to strengthen living infrastructure outcomes in new residential developments.

Integration of DV369 with the implementation of the Living Infrastructure Plan

DV369 largely focuses on the development criteria for private and residential spaces. Consequently, DV369 does not consider how the living infrastructure targets are being met in the public sphere, including the streets and public areas of new developments. The Conservation Council understands that work will be undertaken to implement the Living Infrastructure Plan in the Estate Development Code. However, it is important that DV369 is strongly connected with changes to the Estate Development Code to ensure that private open space and the associated planting minimums are closely aligned with planting space and planting requirements in public areas. It is also important that both DV369 and the Estate Development Code document planting requirements that are consistent with the Living Infrastructure Plan (2019) and will allow for the achievement of the 2045 targets.

Furthermore, tree planting zones do not equate to tree canopy coverage. The largest tree planting zone proposed in DV369 is 30% of the total block size (large blocks), however the tree canopy under such provisions is unlikely to be 30%. In general terms, the Conservation Council is concerned that while DV369 increases planting minimum requirements and soft landscaping areas, it won't facilitate the private realm significantly contributing to the 30% canopy target, and that resulting tree canopy will be of a much lower amount in these areas. This will put pressure on other areas within the ACT to compensate.

Recommendations

1. Ensure that planting targets and soft landscaping requirements across the Estate Development Code and DV369 reflect the Living Infrastructure Plan to ensure that tree canopy consistently expands across private and public spaces to 30% by 2045.
2. Reassess minimum planting requirements based on calculations of how the 30% canopy cover will be proportioned across the ACT, taking into consideration the infrastructure and land available for planting.

Ease of understanding of DV369

The expression of planting minimums is complex and easy to misinterpret. For example, in Section 3.1.1., R39 states that mid-size blocks must have private open space that represents a minimum area of 50% of the total block area. It then states that at least 50% of the private open space must be planting area, making the total planting area for the block equal to 25%. Different percentage values are also used with reference to “site coverage’ that mirror the percentages for private open space. Consideration could be given as to how to communicate these requirements in a way that is more easily understood.

Recommendation

3. Reassess the way that the percentage requirements for site coverage, private open space and planting zones are expressed in DV369 to ensure they are more easily understood.

Lack of Mandatory Rules for Tree Canopy Targets

The DV369 provides criteria and rules which are used by developers to ensure they are meeting the requirements for new residential blocks. However, rules and criteria are not mandatory unless stated and the model allows for one to be supplemented by the other when in many cases, they do not reflect similar standards. Following this format, the DV369 incorporated only one mandatory rule across both codes (R38C in the Multi-Unit Housing Development Code). This provides space for new developments to fall short of the guidelines for residential blocks and undermine the minimum tree planting requirements necessary to ensure we meet the 30% living infrastructure targets. If this format is to remain, the criteria and rule model needs to be amended to ensure both reflect similar requirements and deliver a similar outcome.

Recommendation

4. Strengthen the criteria of the DV369 so that they more similarly reflect the rules. Being that either the criteria or rule can be used, both need to reflect similar guidelines to achieve the intended outcome.

Opportunity to Influence Species Selection

Definitions provide no clarification of what types of trees will be suitable in new development areas as we experience the effects of a changing climate. Trees being planted in new residential areas should be suitable for the Canberra climate, capable of withstanding hot and dry conditions and able to provide ecological benefits such as habitat for wildlife and benefits to pollinators. The Urban Forest Tree Research conducted by the ANU would be useful as guidance, or alternatively could be integrated into DV369.

Recommendation

5. Provide a rule for tree species suitable for planting in residential areas. Species must be determined based on their suitability to Canberra’s climate, their ability to withstand prolonged hot and dry conditions and their ability to provide habitat and adequate shade.

Plant Grouping to Promote Survival

Whilst DV369's proposed changes are a move in the right direction, further consideration should be given to how planning law could improve the quality of tree canopy. Green infrastructure will struggle in an increasingly severe climate, and trees in isolation will be more at risk of dying. Large canopy trees may benefit from being planted in groups to create a microclimate which is conducive to their ongoing wellbeing. Developers of multi-unit developments should be encouraged to maximise urban cooling opportunities by combining plantings areas and creating useful greenspace for residents. A good example of this (albeit using existing trees) is the City Edge apartments in O'Connor where residents have access to a shared common area which actively contributes to urban cooling. Consequently, the DV369 needs to provide greater consideration of the landscaping requirements necessary for canopy trees and ensure that these requirements can be adequately enforced to ensure the long-term health of planted trees.

Recommendation

6. Consider how DV369 could be expanded to encourage multi-unit developers to group trees together in a shared common green space to create valuable greenspace for residents that also enhances the survival rate of newly planted trees, and builds urban microclimates.

Definition of a Canopy Tree

A canopy tree is defined as being capable of an 8 metre diameter crown, yet small canopy trees only reach a mature height of 5-8 metres. It is questionable if a small "canopy tree" would ever be capable of delivering an 8 metre diameter crown. For clarity about species that would be able to deliver such outcomes, the definition of a canopy tree could point to a list of trees that would be suitable. If this is not addressed within the DV, then it could perhaps be considered in information provided to developers and the public.

Recommendation

7. Clarify canopy tree definition with regards to the height of small canopy trees and the potential for meeting definition of a "canopy tree' and provide public information as to the particular species that would meet the "canopy tree" definition.

Compact and Large Blocks

For both compact block types, the planting area is set to 30% of the total block. However, private open space and site coverage for front loading and rear loading blocks differs, with private open space on front loading compact blocks 20% larger than rear loading compact blocks. It is unclear why these are inconsistent. There is also inconsistency when compared to larger blocks, as blocks up to 800m2 have a minimum requirement of 30% of total block when factored into private open space. Compact blocks should not carry a higher load for planting area than larger blocks. Instead, they should be consistent with the amount of space they facilitate.

Recommendation

8. Reassess planting area on compact and large blocks, and create more consistent requirements for front and rear-loading compact blocks.

Large Block Tree Planting Gradients

Rule 40B in Section 3.1.1. and Rule 38E in Section 3.1.2 outline the minimum requirements for tree planting on large residential blocks. For block areas which exceed 800m2, only 1 additional large tree or 2 medium canopy trees are required per extra 800m2 of block area. Consequently, we are concerned that the gradient for planting requirements on large blocks is too large and does not reflect the available private open space of the block. Minimum planting requirements for blocks over 800m2 should be amended so that tree planting requirements gradually increase with increases in block size, instead of only per extra 800m2 of block.

Recommendation

9. Amend the gradient of planting minimums on large blocks in Rule 40B in Section 3.1.1. and Rule 38E in Section 3.1.2 so that tree requirements increase more gradually as block size increases.

Inconsistent Existing Tree Requirements

Clause C40A of Section 3.1.2. details the requirements for retaining existing trees on new residential blocks. This is important as canopy cover calculations also consider the percentage of cover provided by existing trees on a block. However, a similar clause is not reflected in the Single-Dwelling Housing Development Code (Section 3.1.1.). Consequently, the Conservation Council would like this to be expanded across both sections to ensure consistency across the plan.

Recommendation

10. Add the same existing tree requirements as detailed in the Multi-Unit Housing Development Code (Section 3.1.2, C40A) to the Single-Dwelling Housing Development Code (Section 3.1.1.).

Error in Rule 40 in Section 3.1.1. for Compact Blocks

Two different block types are listed (i.e. front and rear loading blocks) in this rule, however planting area as determined in section c refers only to front loading blocks (section a). This needs to be amended so that planting area minimums are relevant to both front and rear loading blocks (sections a and b).

Recommendation

11. Amend Rule 40 in Section 3.1.1. of DV369 to clarify that planting minimums are relevant to both front and rear loading blocks.

Canopy Coverage in RZ3, RZ4 and RZ5 Zones

Although 15% tree canopy cover to RZ3, RZ4 and R75 residential blocks was ascertained as sufficient by an EPSDD study, we are concerned that this may not be sufficient living infrastructure in these zones. This minimum reflects one-fifth of the zone space and does not reflect the 30% tree canopy targets as outlined in the Living Infrastructure Plan: Cooling the City (2019). Therefore, we recommend that the DV369 allocates a more ambitious canopy coverage percentage to RZ3, RZ4 and RZ5 zones to ensure we meet the 2045 canopy cover targets.

Recommendation

12. Increase tree canopy coverage in RZ3, RZ4 and RZ5 zones to reflect the 30% targets outlined in the Living Infrastructure Plan: Cooling the City 2019.

Debates

WEEKLY HANSARD

Legislative Assembly for the ACT

NINTH ASSEMBLY

14 FEBRUARY 2019

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Thursday, 14 February 2019

MADAM SPEAKER (Ms J Burch) took the chair at 10 am, made a formal recognition that the Assembly was meeting on the lands of the traditional custodians, and asked members to stand in silence and pray or reflect on their responsibilities to the people of the Australian Capital Territory.

Mr Shane Madden
Motion of condolence

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (10.01): I move:

> That this Assembly expresses its deep regret at the death of Mr Shane Madden, who served in a number of important roles within the ACT legal system, including 13 years as a Magistrate in the ACT Magistrates Court, and tenders its profound sympathy to his family, friends and colleagues in their bereavement.

This Assembly expresses its deep regret at the death of Mr Shane Godfrey Madden. Before his passing on 23 November 2018 at the age of 73, Mr Madden had a distinguished legal career. He served in a number of important roles within our legal system, including, as I have mentioned, the Magistrates Court for 13 years.

He served as a magistrate from 1996 until his retirement in July 2009. During this time, Mr Madden was the first magistrate for the ACT Children's Court and he regularly presided over the Ngambra Circle Sentencing Court. He was known in the legal profession as a decent and fair-minded magistrate who showed compassion and respect for Aboriginal and Torres Strait Islander offenders and their elders.

Prior to moving to the bench, Mr Madden worked in the senior leadership team of the ACT Director of Public Prosecutions, including through its formation in 1991. He also served as acting president of the former ACT tenancy tribunal and as a member of the former ACT credit tribunal.

Madam Speaker, in 1997 Mr Madden worked tirelessly as the coroner on the inquest into the death of Katie Bender, resulting from the demolition of the Royal Canberra Hospital on Acton Peninsula. As part of that inquest, he presided over 118 days of sitting and produced a 657-page report that identified the systemic failures. The report led to important changes to government work safety policies and procedures.

In addition to his contributions to the legal profession, which are considerable, Mr Madden was also an active member of the local community. He was a life member of the ACT Brumbies, and refereed more than 300 rugby games for ACT Rugby between 1987 and 2006—refereed no doubt as fairly and impartially as he served on the bench. And refereeing any rugby match, Madam Speaker, given the complexity of the rules in that sport, is no mean feat. He served as chairman of the Brumbies disciplinary committee from 1999 to 2009. He had a deep passion for the sport of rugby, to which he contributed so much.

This morning we extend our deepest sympathy to Mr Madden's wife, Katie, to his sons, David, Peter and Phillip, and to their extended families.

MR COE (Yerrabi—Leader of the Opposition) (10.04): I too rise to express condolences on behalf the opposition at the passing of former magistrate Mr Shane Madden—a passionate advocate for the sporting community, for youth, for Indigenous communities and for the city at large. He served this city with distinction and we are all very grateful.

Mr Madden distinguished himself in the legal community, prior to his appointment to the Magistrates Court, when he worked for the Commonwealth Director of Public Prosecutions. He was later part of the senior leadership team of the ACT Director of Public Prosecutions when it was formed in 1991 under Ken Crispin QC.

In December of 1996 he crossed to the other side of the courtroom and served as a magistrate until he retired in July 2009 after nearly 13 years of dedicated service as part of the judiciary. During his time on the bench, Mr Madden continued to be a very prominent and notable figure, leading the coronial inquest into the Royal Canberra Hospital implosion in 1997; acting as the first Children's Court magistrate from December 1999 through to February 2002; and as the inaugural Ngambra circle sentencing magistrate. At his retirement in 2009, then Attorney-General Simon Corbell said of him:

> Magistrate Madden proved himself to be a just, wise and well-respected judicial officer who is esteemed by both other legal professionals and those who appeared before him in the courts. He will be admired for his many years of ongoing service to the ACT court system.

Mr Madden was also a passionate rugby fan, with the ACT Brumbies bestowing on him life membership in 2008. He was a level 1 certified referee and coach with the Rugby Union, officiating at more than 300 games in ACT senior competitions, in addition to schoolboys', juniors' and women's tournaments. I understand that he is the second most capped referee in ACT rugby history.

He also lent his judicial services to the ACT Rugby Union judiciary from 1987 through to 2009, serving as a member, and later chairman, while also chairing the Brumbies disciplinary committee from December of 1999 through to 2009.

In 1982 Mr Madden was awarded life membership of Canberra City District Cricket Club, a forerunner to North Canberra Gungahlin Cricket Club. This life membership was in recognition of his long service to the club, including as president, and he was also chairman of Cricket ACT. Mr Madden organised an anniversary match for the city club in 1980, at which many notable Canberra cricketers played, including Denis Axelby, who is well known to us here in the Assembly.

In 1985 Mr Madden took Cricket ACT to new levels when he was successful in lobbying for the ACT to be incorporated in the Prudential national country cricket championships in Adelaide. This was a major step forward for Cricket ACT. As with

rugby, his service to cricket was extensive as an administrator, a representative team manager, a player and more.

There have been many tributes from those who knew Mr Madden personally, those who knew him professionally, and those who knew him, of course, through sporting interests. All described him as a great mentor. They described his passion as a supporter, and also his empathy and his astuteness as a judge.

Mr Madden was a compassionate man of service through and through. He contributed greatly to the legal fraternity, the sporting community in Canberra and more. I wish to pass on the opposition's condolences to his wife of 47 years, Katie; his children, David, Peter and Phillip; his daughters-in-law, Andrea, Nicole and Amy; grandchildren, Kahlea, Isabelle, Jacinta, Raphael, Jessica, Elianna, Stephanie, Alexander, William and Georgina. By all accounts he was an honourable public servant, a strong community advocate and a cherished family man. He was a great citizen.

MR RATTENBURY (Kurrajong) (10.09): I join with my colleagues, on behalf of the ACT Greens, to express my condolences at the death of former magistrate Shane Madden. Mr Madden died of a heart attack in November last year, aged 73. As has been noted, he served as a magistrate from December 1996 until retirement in July 2009. He was the ACT's first Children's Court magistrate in 1999, and also the inaugural circle sentencing magistrate.

As a magistrate, he has been described by the Law Society as:

> … a thoroughly decent, fair minded Magistrate who showed compassion and respect for Aboriginal offenders and their elders, and who was patient with and welcoming of younger practitioners.

I am sure many nervous young practitioners were very grateful for that generosity in their time.

One of Magistrate Madden's most important tasks as a magistrate was being the coroner on duty when the implosion of the Royal Canberra Hospital killed schoolgirl Katie Bender on 13 July 1997. Mr Madden had only been months into his job as a magistrate. The inquest into the 12-year-old's death lasted 118 days, and it is reported to have had a lasting impact on Mr Madden.

Prior to his appointment as a magistrate in December 1996, Mr Madden worked at the Director of Public Prosecutions office, when it was still a part of the commonwealth DPP. Mr Madden was a part of the senior leadership team when the ACT DPP was formed under the first director, Ken Crispin QC, in 1991. He has been described by the ACT Bar Association president Steve Whybrow as "a fine trial advocate whose dark emerald robes and pinstripe pants were a defining sartorial feature".

Outside the law, as has been noted, Mr Madden's passion was rugby union. Well known in Canberra's rugby union community, Mr Madden was made a life member of the ACT Brumbies in 2008. He officiated as an ACT Rugby referee in more than

300 games, from the years 1987 to 2006, in the lower grades of the ACT senior competitions as well as at schoolboys', women's and juniors' tournaments.

He was a level 1 certified referee coach with the Australian Rugby Union and was a member, and later chairman, of the ACT Rugby Union judiciary from 1987 until 2009. He was also chairman of the Brumbies disciplinary committee from 1999 to 2009. By any measure, this list is an outstanding contribution to Rugby in the ACT and reflects an extraordinary voluntary contribution, the sort of contribution that makes these sports tick.

The Canberra community has been extremely lucky to have benefited from Mr Madden's years of service. On behalf of the ACT Greens, I convey my thoughts and sympathies to his widow, Katie, to his children and to his grandchildren.

Question resolved in the affirmative, members standing in their places.

Matter of public importance
Ruling by Speaker

MADAM SPEAKER: Before we move to ministerial statements and I call Ms Stephen-Smith, I have a statement to make. Members, this morning I considered 12 matters of public importance that had been lodged with me for today's MPI. One of the MPIs was from Ms Lee. It was about the importance of safety in and around ACT schools.

Members will be aware that yesterday we debated a motion moved by Ms Lee, which was listed on the daily program as "Safety in school zones". *House of Representatives Practice*, seventh edition, which we are linked to through standing order 275, states at page 595:

> Under the same motion rule the Speaker has the discretion to disallow any motion or amendment which he or she considers is the same in substance as any question already resolved in the same session. The same principle may be applied to a proposed matter of public importance which has substantially the same wording as a motion previously agreed to.

Accordingly, I rule that the MPI submitted by Ms Lee is out of order and is not included in the ballot for today's program. I recognise that circumstances may change over a period of time, but the motion was just yesterday and the MPI is today. Hence, I have ruled it out of order.

Reconciliation Day
Ministerial statement

MS STEPHEN-SMITH (Kurrajong—Minister for Aboriginal and Torres Strait Islander Affairs, Minister for Disability, Minister for Children, Youth and Families, Minister for Employment and Workplace Safety, Minister for Government Services and Procurement, Minister for Urban Renewal) (10.14): Last year the ACT made history by holding Australia's first Reconciliation Day public holiday, on

28 May 2018. The success of the events in the lead-up to and on the day was due in large part to the important work done by the ACT Reconciliation Day Council. As part of the council's evaluation for Reconciliation Day 2018, it recommended that I make a statement to this place about the success of the inaugural event.

I am thrilled to see one member of the council in the chamber today. I recognise the commitment and hard work of all council members in helping to deliver last year's event and their enthusiasm for an even bigger and better Reconciliation Day 2019. In particular, I acknowledge the council co-chairs, Dr Chris Bourke and Ms Genevieve Jacobs, who is here with us today, who did such a fantastic job of emceeing the Reconciliation in the Park event.

As members know, when the government tabled the Holidays (Reconciliation Day) Amendment Bill in August 2017 I stated that we need to write a better Australian story. This story needs to reach into more than 60,000 years of this country's history and culture and to be honest about the impact of colonisation and past policies and practices.

Yesterday was the anniversary of the national apology to the stolen generations. In response to the apology, Dr Tom Calma, a member of the ACT Reconciliation Day Council, said:

> Through one direct act, Parliament has acknowledged the existence and the impacts of past policies and practices of forcibly removing Indigenous children from their families. And by doing so, has paid respect to the Stolen Generations. For their suffering and their loss. For their resilience. And ultimately, for their dignity.

The apology was a significant event in acknowledging the wrongs of the past and an important marker in our reconciliation journey. The establishment of the ACT's Reconciliation Day public holiday is a small part of that better national story, something all Canberrans can be proud of.

Reconciliation in the Park enabled our community to have a conversation about reconciliation, for people to continue their journey of understanding our shared history. Again I pay tribute to Dr Bourke's foresight as the person who started the process of establishing Reconciliation Day, in understanding that the creation of a public holiday would give us both a reason and an opportunity to have a wider conversation about the true history of our region and nation.

The Reconciliation Day Council was established to ensure that the Reconciliation Day holiday was an inclusive and meaningful occasion and an opportunity to showcase Aboriginal and Torres Strait Islander culture to the broader community. On 28 May 2018 the council delivered just that. The Reconciliation Day Council provided the strategic overview and management of the event and acted as community ambassadors, leading the conversation about the importance of a reconciled Australia.

Council members were identified as prominent members of our community and selected for their leadership, far-reaching networks and ability to bring people

together. Today I formally congratulate and offer my thanks to the members of the council for their efforts in successfully delivering the very first event on such an important day, the nation's only Reconciliation Day public holiday.

I am told that over 8,000 Canberrans from a diverse range of ages and backgrounds attended Reconciliation in the Park. The event offered a range of activities and opportunities throughout the day to learn about and experience Aboriginal and Torres Strait Islander cultures.

The richness of Aboriginal and Torres Strait Islander cultures was on display at the event, including bush tucker stalls demonstrating how the land was used in a sustainable way, basket weaving, and interactive dance as a way of experiencing culture. Attendees also had the opportunity to talk directly with members of the United Ngunnawal Elders Council to learn about the true history of our region. I am told that country and the importance of connection with country was a regular topic of conversation.

From all accounts from those who attended, including the Aboriginal and Torres Strait Islander community, it was an event where the whole community could come together to share and learn from each other. This was our aim—to ensure that the day was not just seen as a public holiday without meaning.

Reconciliation Day was also supported by the introduction of the Reconciliation Day grants program, which made $50,000 available to the community to conduct, coordinate or participate in reconciliation events in the lead-up to and on Reconciliation Day. I am pleased to say the ACT government awarded grants in excess of this amount to 19 local community organisations to progress reconciliation initiatives. The grants were able to support events like the Tuggeranong Netball Association's reconciliation round and the Woodlands and Wetlands Trust bush tucker and boomerangs program.

Earlier this month applications opened for the 2019 Reconciliation Day grants program. This is a great way for community organisations, individuals and educational institutions to get involved in Reconciliation Day. It is important for Reconciliation Day to reach all parts of Canberra, and I encourage members to let their communities know of the opportunities available.

Now that the solid foundation exists to support future reconciliation events, the ACT government is formalising the governance arrangements of the council, to build on the momentum and goodwill demonstrated in 2018. I am happy to announce that the ACT government will retain the current co-chairs, members and ambassadors for the 2019 event. This arrangement will allow the council to continue its work in achieving the vision it has set for creating a family friendly, safe, non-judgemental space for the broader community to continue a conversation about our shared history.

Governance arrangements include retaining current members of the council who wish to continue for the 2019 event and appointing half of those members until 31 August 2019 and half until 31 August 2020, ensuring that we keep knowledge and experience; filling any vacancies for 2019 in consultation with the council, the office

for Aboriginal and Torres Strait Islander Affairs and the Aboriginal and Torres Strait Islander Elected Body; formalising the membership, criteria, terms and process for appointments to vacant member positions in the future; confirming that members are appointed to the council as individuals, in their capacity as leaders in the community, and that the council will remain voluntary and not remunerated; and setting the current co-chairs' term to 31 August 2020.

The new arrangements will commence this year's event, to ensure that all Canberrans have ample opportunity to participate in this significant initiative. The Reconciliation Day Council will also become the ACT Reconciliation Council, recognising the year-round role these leaders in our community now have in championing reconciliation.

The council is in the early planning stage for the 2019 event and is considering improvements in areas of promotion, sponsorship and capturing community feedback; opportunities to coordinate events across the ACT, including with relevant national institutions such as the Australian Institute of Aboriginal and Torres Strait Islander Studies; and increasing opportunities to experience culture through traditional foods and yarning circles.

Reconciliation Day 2019 is not that far away; I am looking forward to May and the work to get there. It is vital that Reconciliation Day reach more Canberrans each year so that we are not just talking to those who are already committed to writing a better story for our nation. Reconciliation is everyone's business. I again thank the reconciliation council for all they have done so far.

I present the following paper:

> Reconciliation Day: Bringing the Community Together—Ministerial statement, 14 February 2019.

I move:

> That the Assembly take note of the paper:

Question resolved in the affirmative.

Ministerial delegation to New Zealand
Ministerial statement

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (10.23): I am pleased to report to the Assembly this morning on a delegation I led to our sister city of Wellington, New Zealand, in November last year. This mission further developed Canberra's key capability markets and promoted our city as a trade and investment destination. It also continued to deliver and strengthen the outcomes through the Canberra-Wellington sister city agreement, whilst also celebrating the successes and outcomes achieved to date.

New Zealand is one of the top five priority countries in the ACT government's international engagement strategy and it is also a priority market in the ACT government's broader economic development strategies. We have cultivated and strengthened our relationship with the New Zealand capital across many fronts.

The November delegation was my fourth mission to Wellington as Chief Minister and my fifth in five years with my trade minister responsibilities. These visits, along with a number of other ministerial and business delegations led by my colleagues and the Canberra Business Chamber, demonstrate our strong commitment to the relationship.

It is now more than two years since our cities began our sister city relationship, and in cooperation with the Wellington City Council and the ACT's Office of International Engagement a progress report on the relationship was launched as part of this visit. Much has been achieved in the two short years since the two capitals formed a lasting connection as sister cities. The cities have many similarities, from our population size to our quality of life, to our focus on innovation and to the strength of the public sector in our economies.

We continue to collaborate and share knowledge, crossing both public and private sectors. The stated commitment to pursue partnerships in tourism and events and mutual exchange in smart city technologies and innovation is particularly important to Canberra, as these correspond with our key capability areas.

The report highlights the many successes of our relationship to date. From screen development and innovative start-ups to growing the partnerships between our zoos, cultural institutions and businesses, the sister city relationship is enabling new activity and opportunities for both our cities.

The two-year report on the Canberra and Wellington sister city agreement was launched jointly by Mr Justin Lester, the Mayor of Wellington, and me and highlights the many successes the strong relationship has created. Last year's mission continued our work in fostering relations, collaborating and idea-sharing between the world's two cool little capitals.

In September 2018 Canberra's National Zoo and Aquarium signed a memorandum of understanding with the Wellington Zoo. In October 2018, during the Mayor of Wellington's delegation to Canberra, the National Arboretum Canberra and the Wellington Botanic Garden also signed an MOU. Both MOUs will lead to closer cooperation between the organisations, including in the areas of operations, management, sustainability and promotional activities, with benefits not just to the organisations themselves but also to Canberra and Wellington more broadly.

I had the opportunity to visit Wellington Botanic Garden whilst in the city and to discuss the work that has been undertaken to date and the further work that will occur to deliver on the MOU. I also had the opportunity to visit the Wellington Zoo—which is, coincidentally, run by an Australian—to learn about the animal conservation work being undertaken there. Wellington Zoo is also the world's first carboNZero certified zoo, aiming to reduce the environmental impact of the organisation.

Since the signing of the MOU there have already been information exchanges on staff management and sustainability. The National Zoo and Aquarium here in Canberra has also advised that there are potential upcoming staff exchanges, one being that the Wellington Zoo giraffe keeper is coming to Canberra, the other being that the National Zoo's green team is going to Wellington to receive firsthand advice on sustainability.

Whilst in Wellington I also took the opportunity to meet with Air New Zealand to provide them with an update and an overview of the ACT government's commitment to direct flights between Canberra and New Zealand and why these can be commercially viable, and to provide insights into Canberra's key tourism and economic drivers that demonstrate this opportunity. I also had a positive meeting with Wellington International Airport to seek their partnership in the reintroduction of direct flights from Wellington to Canberra.

In the last six months of the Singapore Airlines service between our two cities there was a 20 per cent growth, with strong outbound demand from the Canberra region and inbound demand from New Zealand residents. For Canberra the total number of international overnight visitors increased by nearly 16 per cent during the period that flights operated for the year ending March 2018.

There is no doubt that in the past three years Canberra's aviation landscape has evolved significantly. We now have 14 direct international services per week that connect Canberra to the world and have ambitions to grow this even further. The ACT government strongly values this opportunity to pursue the reintroduction of trans-Tasman flights, as does Canberra Airport, and we continue to work with airlines on this opportunity. Most recently I raised this with both Qantas and Virgin in meetings I held with them in Sydney at the end of last month.

Wellington City Council has proposed an integrated transport and urban development solution for Wellington. As part of this, I am sure members will be interested to know, Wellington are proposing to develop a light rail project of their own. At the invitation of the Mayor of Wellington, I delivered a presentation to Wellington City Council on our city's light rail project and discussed our vision and experience in delivering the first stage of this city-transforming project for Canberra.

The council was keen to look to Canberra's experience of both developing a large infrastructure project in a busy urban environment as well as creating integrated transport networks that give people a genuine alternative to using their cars, whilst providing better livability through urban design and planning. Of particular interest to our Wellington colleagues was how the Canberra Metro project was developed and rolled out and how community consultation was undertaken.

Canberra has a growing knowledge economy, and space and spatial industries are an important component of this growth. Whilst in Wellington, I met with the head of the New Zealand Space Agency. The New Zealand Space Agency was established in 2016 and, similarly to the recently established Australian Space Agency, it is based

within their Ministry of Business, Innovation and Employment, which is the New Zealand government's economic growth and innovation agency. Core responsibilities of the New Zealand Space Agency are space policy, regulation and business development relating to the use of space from New Zealand.

The purpose of the meeting was to find out more about the establishment of the New Zealand Space Agency, the capability of New Zealand's industry, its future plans and opportunities for collaboration between our two space industries, in particular between New Zealand's universities and UNSW Canberra's space area and ANU InSpace.

As members are aware, around a quarter of all jobs in the Australian space industry are already in Canberra. We are home to the next generation of researchers, engineers and scientists that will support the future growth of our nation's industry. Central to Canberra's space industry development is the ecosystem of innovative and commercial participants across a broad spectrum of roles: industry, education institutions, the research community and government.

The University of New South Wales Canberra and the Australian National University are the most active higher education research institutions in space-related disciplines in Australia. Together, these two institutions provide Australia's only—I repeat "Australia's only"—end-to-end capability for the design, build and testing of Australia's next generation of satellites.

Our New Zealand colleagues indicated a strong interest in working with Canberra's space industry. I do note that the New Zealand government made the wise decision to locate their space agency in their national capital. It is curious that our current caretaker government has determined to locate the space agency away from Canberra. However, we will continue to work on developing the space sector for our economy, and we can but hope that the folly of the decision made by the current government will be overturned in the future and the Australian Space Agency will be located in the national capital.

It is our continued ambition to make Canberra the world's most livable and inclusive city, and it is with this aim in mind that I established the position of Minister for Social Inclusion and Equality—I have taken that portfolio—to drive the government's ambition for an inclusive city for all Canberrans.

The New Zealand government are well advanced in their policy development in these areas, with Prime Minister Jacinda Ardern supporting an ambitious program of social inclusion, with a particular focus on addressing poverty in her country. During the meeting with the New Zealand treasurer, the Minister of Finance, the Hon Grant Robertson, I had the opportunity to receive a briefing on the measures that are being undertaken to deliver on this agenda and potential solutions the New Zealand government is pursuing. It is very useful for the ACT to learn from the success of other jurisdictions and bring back to Canberra work that we can undertake for the betterment of our entire community.

During the visit I also had the opportunity to meet with the Wellington City arts and events team to discuss the Canberra-Wellington Indigenous artist exchange pilot program. We are working together with Wellington City Council to strengthen cultural connections, including developing programs that support opportunities for Indigenous people from both countries. The Indigenous artist exchange will support a Canberra-based Aboriginal artist, Dean Cross, to go to Wellington for six weeks during May and June this year, and for a Maori artist from the Wellington region to spend six weeks in Canberra during June and July this year.

The Wellington artist will be hosted by Gorman House, the cross-art form residency hub in our CBD, and the Canberra artist will be accommodated at the Bolton Street Sexton's Cottage. I particular commend Minister Ramsay for his support and drive in ensuring this initiative has taken place. International residencies provide a unique opportunity for artists to immerse themselves in a new arts context, market, community and culture. The experience enables artists to articulate their practice within a global context and to build knowledge, networks and partnerships that support future international arts activities. Residencies are important periods for artistic development, a reflection of which may result in new and vibrant bodies of work.

I had the opportunity, and a somewhat rare opportunity, to launch a special beer whilst in Wellington. As part of Canberra Week in Wellington, Canberra's BentSpoke Brewery and Wellington's Fork & Brewer were able to collaborate on a bespoke sister city beer celebrating the cultural ties of our two cities. The beer was aptly named "An Ale of Two Cities". Launched in Canberra in October last year, and then made available in Wellington, a batch of the Ale of Two Cities beer has now been brewed in Wellington.

Both our cities have vibrant, established and growing craft beer scenes. This serves as another ideal partnership to celebrate and strengthen our sister city relationship. We hope that this collaboration will evolve into a city-wide opportunity for established and emerging craft brewers in the Canberra region to engage, develop and exchange brews with their Wellington counterparts.

The short mission was highly successful and fulfilled its objectives to promote opportunities and highlight the successes of the sister city agreement. The ACT government will continue to work on the new relationships formed and the collaboration opportunities established during this mission and the previous missions.

Finally, I would like to acknowledge the considerable support provided to the ACT delegation by the Australian High Commissioner in New Zealand, the Hon Ewen McDonald, and his staff; then Acting High Commissioner for New Zealand, Llewellyn Roberts, and his staff; and also Wellington Mayor Justin Lester and his team for their hospitality and their continued commitment to and partnership in bringing our two sister cities even closer together. I present the following paper:

> Wellington mission—November 2018—Ministerial statement, 14 February 2019.

I move:

> That the Assembly take note of the paper.

Question resolved in the affirmative.

Future of education implementation plan
Ministerial statement

MS BERRY (Ginninderra—Deputy Chief Minister, Minister for Education and Early Childhood Development, Minister for Housing and Suburban Development, Minister for the Prevention of Domestic and Family Violence, Minister for Sport and Recreation and Minister for Women) (10.37): In August 2018 I released the government's future of education strategy, the product of an extensive conversation with children and young people, parents, teachers, school leaders, other educators, experts and community organisations about how education will be delivered to meet the needs of the next generation.

The strategy sets the overarching policy direction and guiding principles for how the government will deliver and improve school education over the coming decade. It provides a road map that will be supported by rolling implementation plans and a continuation of this government's long-term substantial investment in school education.

The strategy is based on four foundations and four principles for implementation. The four foundations are:= to place students at the centre of their learning; to empower teachers, school leaders and other professionals to meet the learning needs of students; to build strong communities for learning; and to strengthen systems to focus on equity with quality.

The strategy was developed through a deep conversation with the ACT community, with some 5,000 individual contributions, half of which were from children and young people. This journey is summarised in a consultation report that I have released alongside the strategy. The strategy is also backed by robust research evidence about what is required to provide every child with a great start in life. The evidence underpinning the government's direction in the future of education strategy is clear and reflected in a wide range of sources, a synopsis of some of which is included in the research report that I released last year. It seems that every week more evidence confirms that the government is on the right path.

As I have said time and again, against the protests of the Liberal opposition, the strategy is unashamedly driven by a belief in educational equity. The ACT government believes that every child deserves a great education and the life chances which flow from it. We believe this because of the power of education to level out all of the things that are going on in the lives of children so that children have the opportunity to reach their potential. This does not happen by accident. It does not happen by ignoring the needs of each individual or ignoring that some children face prejudice from the start.

Educational equity is a key to achieving a fair, more equal society, free from the disadvantage arising from economic, social, cultural or other causes. Late last year the OECD released a report titled *Equity in education: breaking down barriers to social mobility*. Unsurprising to this government, the OECD has found that Australia is not providing equity in school education. As a nation, we are not ensuring that school student outcomes, including academic performance but also social and emotional wellbeing and post-school pathways, are not dependent on a child's socio-economic background. The government and I, as education minister, are tackling this sorry situation head on, and the future of education strategy is guiding this work.

It is relevant, too, that I draw the attention of members to another recent research report published by an Australian think tank, the Centre for Policy Development. Last month they published a discussion paper, *Separating scholars*, that analysed the changing demographic characteristics of schools, in particular social stratification. Its conclusion is troubling. There is an increasing segregation of disadvantage in Australian schools as policy settings allow schools to divide students, families and communities on a socio-economic basis.

I raise these two examples because they provide vital context for the government's approach in its policy decisions in the education and early childhood portfolio. The ACT has not been immune from these problems, but this government is acting to bring about change.

What needs to happen? Andreas Schleicher, the OECD director for education, summarises in the OECD report some key policy lessons from the most equitable school systems: start early, ensuring that all children, but particularly those from disadvantaged backgrounds, can access high quality childhood education and care; have high expectations for all students and usefully monitor their progress; target resources towards students and schools experiencing disadvantage; reduce the concentration of students experiencing disadvantage in schools; develop teachers in their capability to focus on individual student needs and foster diversity; and grow positive school communities that engage families and are considerate of the wellbeing of students.

I encourage members to read this report. It is enlightening. It also has a very familiar focus, one that is echoed in my statements in this place about the government's future of education conversation and in the strategy that resulted.

Since the release of the strategy, the government has been working with the ACT education sector on the implementation plan for its first phase. We have been discussing with government and non-government schools, as well as related agencies like the Board of Senior Secondary Studies and the ACT Teacher Quality Institute, the contribution that they make in the first two years of the strategy.

A robust implementation plan is forming. The plan will continue and build on the initiatives that the government immediately commenced in the 2018 budget; in particular, working on strong relationships with the University of Canberra and more robust teacher coaching and mentoring.

Towards the end of 2018 I launched the UC affiliate schools program, with an initial focus on public schools. This partnership with the university is establishing a robust feedback loop between teaching practice and research. It will grow professional knowledge and support innovative teaching practice. It will do this because teachers are the key to improving student learning outcomes.

Through the program, pre-service teachers at the University of Canberra will be better supported through a greater focus on the practicum. The government will provide scholarships to establish teachers to undertake master's level further study. Action research projects on a small and large scale will allow the profession to interrogate teaching practice and innovate, as well as providing the government with research-informed school and system improvement. The outcomes of these elements will inform professional learning and initial teacher education so that the best teaching practice is propagated with both new and existing educators.

Also last year, in December, I launched the government's empowered learning professionals initiative. At the heart of this program is a focus on training school leaders to improve their approach to mentoring and coaching so that all teachers receive quality feedback on their practice. It is vital that teachers are effectively supported by more expert colleagues, and this program will achieve that. During term 4 of 2018, the first professional learning program in coaching and mentoring was provided to public school leaders, conducted by renowned international expert Professor Helen Timperley from New Zealand. It was very well received and is being followed up with a series of targeted workshops during 2019.

The initiative will also see additional support through the employment of four skilled teachers with expertise in pedagogy, learning difficulties and literacy and numeracy programming, and funding to engage leading national and international experts to work alongside our teachers. There will be more opportunities and time for collaboration and sharing of best practice within and between schools. The government is also training school leaders in data literacy skills so that they can better identify and understand the needs of each student.

While my intention had been to present to members the government's first phase implementation plan during February, the plan will be supported by budget funding and therefore it would be inappropriate for me to release the details before the budget is settled. However, I draw members' attention to some key elements of the strategy that will be prominent in the plan.

Notably, the policy lessons raised by the OECD's director of education are present in these and other decisions of the government in the education portfolio. As I said in releasing the strategy, at its core is an acknowledgement of human diversity among students and a need to personalise education to each child. The government will progress this with a continuing and deepening focus on inclusion. We will also further support student agency through personalised learning that allows each student to tread their own educational pathway, based on their developing interests, knowledge and skills.

The government will continue to invest in teachers and the teaching profession through extension of the initiatives I have already outlined. Also prominent will be a focus on improving the capability of teachers to use data to inform the learning needs of individual children and providing teachers with the right skills and tools to obtain the data that they need through, for example, formative assessment.

It is also important that there is a teaching workforce available to offer the range of high quality learning opportunities that students need and expect. The government will devise a workforce plan that will look, at an industry level, at making sure there are teachers available to meet our needs. The government, in its management of the public system, will also prepare a complementary workforce plan for government schools.

One option being explored in the public system is the sharing of specialist teachers across schools to make sure that all schools have equal access to the skills needed for high quality specialist programs like languages and music. In a similar way, the government's future skills academy is being developed as a hub of expertise and resources that schools across the city can access so that student learning opportunities do not depend on the local school alone. This is emerging as an effective, efficient way of genuinely putting every student at the centre of their learning.

Building on this, and in response to the Assembly resolution about language education, I can inform members that the Education Directorate is scoping a review of language programs in government schools, the outcomes of which will lead to an action plan. As I highlighted in debate on the motion, there are diverse offerings of language education in ACT schools as part of delivering the Australian curriculum. Delivery of language education in a systematic, meaningful way that provides a quality learning opportunity for students relies on a curriculum and on quality teaching delivered by qualified teachers.

Important in this review will be to look at the recruitment and retention of specialist language teachers—the primary challenge for providing language programs—as well as the student language pathways from primary school to college. This will rely on initiatives like the sharing of these teachers across schools and a greater coordination across schools than currently exists in our system of school autonomy, which, members should note, is part of the framework for the operation of government schools, rooted in longstanding law and policy. And through the review the government will consider and engage with the community languages network, which is chaired by the Education Directorate.

There is an opportunity to expand the available languages on offer because of more recently available language curriculums and teaching resources. And, as I have previously raised, I am committed to ensuring that students have the opportunity to learn Indigenous languages of the Aboriginal and Torres Strait Islander nations that first inhabited this region. But it would be naive to suggest that, even after this work, a student will always have access to any language of their choosing. The opposition seem to think that they can deliver that, but it is an empty promise. It is simply impractical to resource the delivery of P-12 programs in every of the more than 40 languages represented in the community languages network.

The future of education strategy also has implications for physical school infrastructure. As members would know from recent budgets, the government is building the new schools that our community needs and is upgrading existing schools to provide modern learning environments. As this investment in public education facilities continues, the government will look at how community school approaches can be integrated from the outset in the design of new facilities. This will allow schools to better integrate the provision of education, health and social services, youth and community development, and community engagement. Schools are community hubs, and the government will be more deliberate in using them in this way. Again, this work has already begun, with the design for the new school in Denman Prospect including an integrated early learning centre.

As members will recall, alongside the strategy, the government has been working on the ACT's first early childhood strategy. This strategy is a vital part of implementing the future of education because of the need for a focused effort on setting up every child for success A clear direction is forming that recognises the universal need and individuality of every child, the need to better value educators in the early childhood sector, and the opportunity to better leverage the resources that are expanded in this sector. I am proud that the ACT led Australia in committing to work towards universal, free early childhood education for three-year-old children. Since my announcement of this commitment, I have been pleased to see the federal Labor opposition deciding that it will partner with states and territories in this area if it takes government.

Last year, the Assembly asked that I report back on measures aimed at lifting academic performance in schools. What is required is pretty clear. What is required is what the government is doing. We are setting each child up for success through more equitable access to early learning. We are investing in teachers and the teaching profession. We are making sure that systems providing the machinery for our schools focus on equity, because a child's educational opportunity should not depend on their background or family circumstances. We are allocating resources, significant amounts of public money, on an equitable basis.

There are numerous specific initiatives underway that will support academic achievements in ACT schools. For example, the Education Directorate's early years literacy initiative, which began in 2017 with the support of Tasmanian expert Christine Topfer, has been focusing on developing essential foundation skills in literacy among students in preschool to year 2. It is doing this by entrenching evidence-informed best practice and empowering teachers and school leaders with the capability to deliver high quality teaching. By the end of this year, 49 schools will be directly involved, with all schools being able to access the associated professional learning.

The government's empowerment of learning professionals is foundational, and our commitment is clear. Our commitment to equity, to every child having the opportunity to have their individual learning needs met at school, is foundational and clear. The government's future education strategy will give the ACT's children and young people the very best chance at a bright future. I look forward to telling

members more about what we are doing and what we have achieved over the coming years.

Madam Speaker, I present the following paper:

> Future of education—Implementation update—Ministerial statement, 14 February 2019.

I move:

> That the Assembly take note of the paper.

Debate (on motion by **Mr Wall**) adjourned to a later hour.

Housing ACT—total facilities manager
Ministerial statement

MS BERRY (Ginninderra—Deputy Chief Minister, Minister for Education and Early Childhood Development, Minister for Housing and Suburban Development, Minister for the Prevention of Domestic and Family Violence, Minister for Sport and Recreation and Minister for Women) (10.54): On 18 January 2019 the ACT Auditor-General tabled the performance audit into Housing ACT's total facilities management procurement. I am happy to inform the Assembly that the overall conclusion from the audit was very positive about Housing ACT's procurement process. The Auditor-General noted that the procurement was effectively planned and managed, with sound administrative arrangements in place for a procurement that was complex, high value and high risk.

When I initiated the process of procuring this major contract, I emphasised the need for an outcome that does the best by tenants, workers, local businesses and the community, with a real focus on social outcomes and value for money. I believe this contract is achieving those things and that this Auditor-General's report gives us a solid endorsement of the way the procurement was run.

The objective of the audit was to provide an independent opinion to this Assembly on the effectiveness of Housing ACT's procurement process. The audit assessed the procurement against three criteria: that the procurement was conducted in accordance with the ACT government's procurement legislation and processes; that Housing ACT's procurement process promoted the achievement of value for money; and that effective arrangements were in place for integrity and probity.

The findings in relation to each of these criteria were very positive, with the Auditor-General making one recommendation that the government should review and revise probity information to provide more detailed guidance and clarity to directorates undertaking procurement activities. Noting that the government has yet to formally respond to the recommendation, I can advise the Assembly that Procurement ACT has taken this recommendation on board.

The positive findings of this report and the success of the procurement process overall are a result of concerted effort by the government to respond to the 2016 performance

audit into the administration of this major contract. The oversight and performance measures in the contract have improved to ensure that we meet those recommendations and get a better outcome for the many people who interact with this contract and the services it provides.

I would like to thank Housing ACT's procurement project team for undertaking this complex, high-value and high-risk procurement. The procurement process included considerable consultation and involved a range of groups, including public housing tenants, UnionsACT, United Voice, subcontractors and the community sector. The work being done under this contract is very important to the community and public housing tenants. The tradies and subcontractors are out every day fixing broken windows, changing locks and helping to maintain tenants' homes.

Throughout the process I wanted everyone to have an opportunity to have a say and really deliver the best outcome. Right from the start, tenants and prospective contractors were brought together to talk through each other's expectations, which I am told is a new approach to how things are normally done. Tenants made it clear how they would like to be treated in their home, and under the new contract workers and subcontractors are treated fairly to ensure they are engaged correctly and paid in a more timely manner. Housing ACT sought a model of service delivery from tenderers that provided value for money, innovation and flexibility and that would assist Housing ACT to achieve its social outcomes and fulfil its social landlord responsibilities.

Programmed Facility Management Pty Ltd, the successful tenderer, commenced services on 1 November 2018. Programmed proposed the best service model to be delivered in a manner that achieves the key objective and the key service principles of achieving efficiency and value for money, providing best customer experience with a very good approach to responding to tenants' needs and expectations, promoting social outcomes, and continuously improving quality and innovation.

Since the commencement of services on 1 November 2018, Programmed Facility Management have been working closely with Housing ACT to ensure a seamless transition with minimal disruption to tenants. As part of their tenant employment program, they have recruited two trainees for the customer service and administration centres, sourced from Housing ACT tenants and the disability cohort. Two apprentices from the social cohort groups have been successful in obtaining full-time employment in the multi-trades and plumbing fields.

Programmed Facility Management has also established partnerships with Spark Ginninderry to develop and implement training programs for job readiness for social cohort candidates; Programmed Skilled Workforce, to provide employment opportunities for Indigenous jobseekers; the Alexander Maconochie Centre and Bimberi Youth Detention Centre, who are currently considering and designing training opportunities for people nearing release; and Indigenous organisations, to discuss employment opportunities in the trade industry.

A lot of time and effort has gone into the delivery of this contract, and it is great to have this report to show that the approach taken for procurement was the right one.

The contract has been operating since November, and I have already heard positive feedback from tenants about their interactions with staff and responsiveness to maintenance issues.

I also attended the opening of Programmed's Canberra office and smoking ceremony in December last year. It was great to meet with the staff that are delivering on the social outcomes and employment targets in the contract. I look forward to the continued relationship between tenants, Programmed and the ACT government in delivering these vital services to our public housing tenants. I present the following paper:

> Housing ACT'S procurement of a Total Facilities Manager—Outcome of the ACT Auditor-General's performance audit—Ministerial statement, 14 February 2019.

I move:

> That the Assembly take note of the paper.

MR PARTON (Brindabella) (11.00): This side of the chamber welcomes the minister's assurances that the procurement process was conducted efficiently, and that it will achieve a positive result for public housing tenants in this space. Often the words of the minister are not supported by the feedback that we get on the ground, in our email inboxes and in various other forms of engagement.

The conclusion of a new contract for facilities maintenance services is certainly a timely event. The new contract was supposed to be in place by mid-2017, but the previous contract had to be extended to 30 June 2018 and beyond, thus prolonging the agony and the uncertainty for the previous contractor, subcontractors and public housing residents alike.

Judging by correspondence that we received, the experiences of many public housing residents during and prior to the transition period were not positive. I look forward to seeing a better service for public housing tenants, and hope that the instances of serious neglect over long periods of time will abate. I will also be interested in how effectively services are delivered, including things like the enforcement of tenant-responsible maintenance and the timely rectification of derelict public housing properties.

In conclusion, the Auditor-General has delivered good news for public housing residents, and I look forward to a better outcome for them. In the meantime, we will certainly be taking a very close interest in how the new service is performing.

Question resolved in the affirmative.

Revenue Legislation Amendment Bill 2019

Mr Barr, pursuant to notice, presented the bill, its explanatory statement and a Human Rights Act compatibility statement.

Title read by Clerk.

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (11.02): I move:

> That this bill be agreed to in principle.

I am pleased to introduce the Revenue Legislation Amendment Bill 2019. I do so because the government is committed to continued improvements and the effective operation of the territory's tax laws. Tax revenue pays for important infrastructure and services right across the ACT, which benefits all residents. It is important that our tax laws are fair, effective and in line with community expectations.

This bill introduces amendments to protect territory revenue and preserve the integrity of the revenue collection system in the territory, and it addresses a range of minor technical and administrative matters related to tax law.

The amendments in this bill to the Taxation Administration Act 1999 will expand on existing debt recovery powers to enable more timely notification of outstanding tax debts. This will assist taxpayers and financiers to better manage financial risks and debt payment. It will also provide greater flexibility and effectiveness to existing debt recovery powers.

The bill provides the ACT Revenue Office with the ability to inform parties who have an interest in the property of a defaulting taxpayer, such as mortgagees or credit providers, of the amount of an outstanding tax debt and the existence of a statutory first charge. This will promote transparency and allow tax debts to be on a level playing field with private debts.

The bill also provides for the recovery of tax debts from mortgagee banks, similar to tax arrangements in New South Wales, Queensland and Victorian legislation. Provision is also made for tax debts to be registered as a first charge on land owned by a debtor. This will facilitate the recovery of unpaid tax debts from future sales proceeds or from the mortgagee of that land. These provisions include appropriate safeguards to ensure engagement with the tax debtor, to promote transparency of actions over clear time frames and to address the potential for substantial hardship to some affected parties.

The bill also proposes a further range of technical and minor amendments to other aspects of the ACT tax system. Under changes to the Taxation Administration Act 1999, it will be made clear that a 25 per cent penalty tax rate will be applied as the base default rate. This amendment will align the ACT with other jurisdictions.

Also, the requirement to give taxpayers 14 days to pay penalty tax would be removed. The period for payment would be that stated in a notice of assessment. This would be consistent with the provisions of other jurisdictions, such as Victoria, South Australia and Tasmania. A general remission power for interest and penalty taxes is also

provided, consistent across tax lines, again to align with New South Wales and Victoria.

The bill includes amendments for a limited exemption from land tax for private properties rented through a community housing provider. This is in line with the ACT housing strategy to incentivise private landlords to supply affordable rentals through a registered community housing provider. Under the arrangements in the bill, the minister may determine criteria that apply to participants in this scheme. This will provide for rents at less than 75 per cent of market rates and make properties more accessible to tenants in the bottom two income quintiles. References in the land rent and planning and development acts will also be updated for certain taxes, to recognise them as recoverable.

The bill also includes an amendment to an existing duty exemption which would extend the exemption to University of Canberra declared land subleases. This change addresses earlier omissions from amendments in 2015. The bill will insert a clear basis in the Duties Act for homebuyer assistance schemes. The Betting Operations Tax Act 2018 will be amended to exclude bets placed under the Pool Betting Act 1964 to address a previous omission in drafting and correct incorrect references to section numbers.

The ability to apply for a rates, land tax and other charges certificate will be restricted to certain persons—the owner, the purchaser or mortgagee of a parcel of land. This will better protect the privacy of property owners. The Taxation Administration Act will be amended to enable the disclosure of information in situations where there is a serious threat to life, health or safety, similar to provisions in the Information Privacy Act 2014. The bill also contains other minor amendments to address wording and description matters in various pieces of tax legislation.

Through this bill we are continuing to ensure that our tax system is fit for purpose. The Revenue Legislation Amendment Bill promotes the integrity and operation of tax laws in the ACT and supports the functioning of government to the benefit of all Canberrans. I commend the bill to the Assembly.

Debate (on motion by **Mr Coe**) adjourned to the next sitting.

Fuel Pricing—Select Committee
Appointment

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (11.08): I move:

> That:
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> (1) a select committee be established to inquire into and report on fuel prices in the ACT, including:
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> (a) fuel price methodology and key determinants;
>
> (b) characteristics of the ACT fuel market, including historical changes;

(c) the impact of fuel prices on the ACT community;

(d) reasons for significant pricing discrepancies within the ACT and when compared to other Australian communities and capital cities;

(e) consideration of best practice approaches and initiatives in other jurisdictions which have a meaningful impact on reducing fuel prices; and

(f) regulatory and legislative solutions and barriers, particularly around competition and retail margin;

(2) the select committee shall consist of the following:

(a) one Member to be nominated by the Government;

(b) two Members to be nominated by the Opposition; and

(c) the Chair shall be the Government Member;

(3) the select committee is to report by the last sitting day in June 2019;

(4) the foregoing provisions of this resolution, so far as they are inconsistent with the standing orders, have effect notwithstanding anything contained in the standing orders; and

(5) nominations for membership of the committee be notified in writing to the Speaker within two hours following conclusion of the debate on the matter.

Canberrans have been paying too much for petrol for too long. It is easy to find references in this place and in the media to the inexplicably high prices Canberrans have paid for petrol, stretching back many decades. I know I speak for many when I want an answer to the question: why is it that some retailers in Canberra can sell petrol at around $1.20 a litre but the bulk appear to be 20 to 25 cents a litre more expensive? For a standard tank that translates to well over $10 additional that Canberrans are paying each and every time they fill up.

This means that over the course of a year Canberra families are paying hundreds of dollars more than the equivalent New South Wales family each and every year, and without any compelling reason why. I do not think that is acceptable and I am sure colleagues agree. To date, there have been no credible grounds put forward for why our residents pay more every time they go to the bowser. Even New South Wales residents living in more remote parts of the south-east of the state have cheaper fuel.

I have written to the ACCC on this issue on multiple occasions as Chief Minister and as Treasurer. I have travelled to Sydney and personally met with the chairman of the ACCC to urge it to use its investigative powers to undertake a deep-dive analysis on why the fuel market is failing consumers in the ACT.

The ACCC were given ministerial powers in 2014 to investigate fuel markets where there were concerns about fuel prices. Despite the obvious concerns regarding fuel prices in the ACT, we were overlooked for such an ACCC inquiry. Instead they focused on areas like Armidale, Launceston and Cairns. Members might want to contemplate which federal seats those cities reside within.

With the continued lack of interest and advice from the ACCC in relation to petrol prices in this region, we have had to use our own investigative capacity to take a

closer look at these issues and provide a clearer picture of why Canberra drivers pay so much more for fuel.

The select committee inquiry I am asking the Assembly to establish today will be tasked with looking at fuel price methodology, at the characteristics of our fuel market, the impact of fuel prices on the community, reasons for significant pricing disparities between Canberra and other capital cities, and the pricing disparity with surrounding New South Wales local government areas.

The committee will be asked to examine best practice approaches and initiatives that other jurisdictions have put in place that may have a meaningful impact on reducing fuel prices. It will have the power to request the attendance of retailers and wholesalers to explain how their prices are set and why these differ so markedly from petrol stations just across the border in New South Wales.

Throughout the public debate on fuel prices in our city, the voices of these large retailers in the past have been absent and continue to be absent. It is time for these powerful companies to come forward into the public arena to justify their fuel prices. I anticipate that the inquiry will draw out what factors are at play in the Canberra fuel market, and I hope the result of this work will see recommended actions that the ACT can take to heighten competition and drive down prices.

It is also worth hearing from those petrol retailers who are taking competition up to the main players and selling fuel at very competitive prices within the ACT. We know those operators exist—many Canberrans use them on the eastern part of our city, in Fyshwick and around Majura and the airport precinct.

Separately, I have also commissioned a detailed analysis from the Independent Competition and Regulatory Commission on fuel price factors and market competition, in parallel to this proposed Assembly committee inquiry. The ICRC's work is to give us a sense of what an appropriate retail margin would be in our city, factoring in the cost of transportation of fuel from larger depots—for example, from Sydney, Newcastle and Wollongong—into our market.

There is a legitimate price cost associated with the transport of fuel to Canberra; I think we all accept that. But what we find hard to believe is that this cost would be 20 or more cents a litre, especially when prices in towns surrounding Canberra, like Gunning and Cooma, are so much lower when transport costs would be similar.

The select committee is proposed to provide its final report to the Assembly by the middle of the year. The ICRC analysis is expected to take a similar time frame to complete, allowing the government to consider both reports in developing a response that will benefit Canberra motorists. This is not the first time that this issue has come before this place. I remember back in the 1990s it was a policy approach to seek to release sites to the market for independent operators.

Mrs Dunne: That really worked!

MR BARR: For a short period that injected some competition. But, as the interjection from Mrs Dunne indicated, that did not prove to be a long-term panacea. This is not an easy issue; there is no quick fix. I do not think anyone is proposing that there is a quick fix, but I think there is benefit in shining a light on the practices of certain retailers in this city and making them publicly account for the gouging they are undertaking on Canberra motorists.

It is also fair that we take further action so that consumers see in the advertised price, on the display boards for petrol stations, the true price and not the shopper docket discounted price. I am pleased the legislation Minister Rattenbury will be bringing forward will do just that. We need to reduce misleading price signage at petrol stations. There certainly have been attempts by retailers to lure people in with headline prices that most consumers do not actually receive.

We reach this point because the ACCC, for whatever reason—the cynics amongst us will observe which markets benefited from their deep-dive activities, and the fact that they were all marginal coalition seats tells you something—has not investigated the situation in Canberra. I have been to Sydney; I have met with the head of the ACCC. I have been pursuing this issue for many years now. We have limited powers, but we should investigate the full range of options available to us. In saying that, I understand, as does everyone in this place, that there is no one single, magic, simple solution to this issue. If there had been it would have been implemented by successive governments over many years throughout the history of self-government and, indeed, prior to self-government.

What we are seeking to do is to hold to account those who are gouging Canberra motorists and to get some factual information in relation to retail price margins that may inform a more dramatic government intervention in the future. I do not rule that out. I suspect that, of all of the options available to us, price watch schemes may have some impact, but they are not going to provide a 20-cent-a-litre reduction in fuel prices. The schemes already exist; people know where the cheap fuel is in Canberra. We need to recognise that those schemes have limited effect.

It may well be that the only way to get a territory-wide reduction in the outrageous fuel prices is for a direct government intervention to set a maximum retail margin in this territory. But before taking such dramatic action it is important that this Assembly committee undertake that work and that the ICRC provide that information to the government.

I am pleased the ACCC has also indicated willingness to cooperate and provide information to us. It would be a dramatic step for the government to seek to intervene to set a maximum retail price margin, but it is a step I am willing to take if nothing else will work, and the evidence suggests that that will be a lasting solution to this problem of price gouging in this city.

That is not a step that the government should take lightly, and that is why we have this process before us today. I hope the attention that the next six months will focus on the outrageous price gouging of some national retailers in our market will see them

respond with lower prices. I commend those operators in the territory who are doing the right thing and pricing their fuel in a competitive way.

One thing Canberrans can do in the short term is to support those outlets. I am pleased that they are taking further steps to expand their capacity and reduce the amount of time it takes for those who utilise those particular outlets. Costco deserve great credit here for what they have already done and what they are proposing to do. I have been pleased to engage with them on those questions.

I look forward to a robust committee inquiry process. This appears to be an issue where we have agreement across this chamber. We may disagree on the best approach to get a lasting solution, and it may be that a combination of measures might achieve the outcomes we are seeking for Canberra motorists. But today I commend the select committee process to the Assembly.

I also indicate the government's willingness over the next six months, through the work of the ICRC, to take a serious look at a very, very significant market intervention as part of the suite of options available to the government. I note that that is not something we would undertake lightly, and we want to see the results of this select committee and the ICRC's work and the input of the ACCC before reaching a final conclusion on this matter. I commend the motion to the Assembly.

MR COE (Yerrabi—Leader of the Opposition) (11.21): The opposition welcome this motion put forward by Mr Barr today and we look forward to participating fully in this inquiry. We also welcome his new-found interest in the issue of fuel pricing in the territory. This has been going on for a very long time. Why is it that today, not last year, not two years ago, not three years ago—why is it that today—we have this inquiry before us? What has changed in the last period? The Canberra Liberals joined others in putting pressure on the government and, indeed, on many others to try to get some downward pressure on petrol prices in the territory.

There are some practical things that the ACT government could do, like having a 24-hour cap on petrol prices. That is something that the government could do. That is something that the WA government has been doing for a couple of decades, and it is worth a trial. And that was what the Canberra Liberals called for. We called for a trial of 24-hour capping.

It does not stack up that petrol prices should be what they are in the territory. How is it that petrol in Boorowa is 20c a litre cheaper than here? How is it that in Bowral it is sometimes 30c a litre cheaper than here? Canberrans are being gouged and we have been gouged for a long, long time.

I certainly hope that this select committee is able to look into this in some depth. I do agree with the Chief Minister that it is not easy. There are not simple solutions. But there are some options that are worth exploring.

I note that the Chief Minister and his government are now looking to change the board advertising of petrol prices. We look forward to seeing that legislation. What impact that actually has on petrol prices remains to be seen. I expect very little impact,

especially when all the petrol prices in Canberra, or at least in regions, seem to be very, very similar. It does not stack up that the same trucks delivering the same fuel to different locations in Canberra should cause the disparity that they have. Whilst the rates and land tax regime is responsible for much hardship in the business sector in the ACT, even the extortionate rates and land tax regime cannot be responsible for the petrol price gouge that we have in the ACT.

There is a lot of work that needs to be done. I do not think that we have a good market operating here. There is so much regulation. There is regulation and legislation at every single step of this process, whether you are talking about the importation of oil, the refining process, the transportation process, getting licences or having approvals to open a petrol station. The list goes on and on and on. This is already an extremely regulated market.

Anybody who says that this is an unfair market intervention has to really reflect on this: is this even a market? It is so heavily regulated and so restricted that it is barely a market at present. You cannot just open up a new petrol station easily. You cannot just bring new petrol into the country or new oil into the country easily. The restrictions on new operators mean that this is not a market that is operating well and it is certainly not a market that is operating freely. Critics say this is an unreasonable market interference, but I think this requires a far more detailed analysis than just those glib lines.

We are pleased to participate in this inquiry. We hope that the ACCC and also the ACT government are forthcoming with information that will inform the inquiry. Hopefully, it will lead to some practical steps that we as a legislature can take to put down the pressure on petrol prices in Canberra.

MR RATTENBURY (Kurrajong) (11.26): The ACT Greens will be happy to support this appointment of a committee today. The Chief Minister has outlined his rationale in bringing this forward, and we agree with those comments. I think this issue has come back onto the public radar because people have just had the annual holiday experience of leaving Canberra, going to other places and realising that petrol is significantly cheaper in other places, for no apparent reason.

Both Ms Le Couteur and I, who were away at various places over the summer holidays, had this conversation when we got back. We were struck by the differences. And I think it does point to the fact that there is some sort of Canberra factor going on here. I think we have all known it for a long time, but it is that annual trip away somewhere that a lot of people go through that brings this back to the fore and reminds us that some Canberra factor is being applied. And, frankly, I do think some petrol outlets in the ACT are gouging their customers. They are taking a profit because they think they can and I think they are taking an unreasonable profit there.

Having this committee look at this range of issues I think is very worth while. There is clearly, as has been touched on, not an easy solution. I think if there had been it would have been implemented by now. Given that the measures that have been taken have not had the effect that we would all desire, I think it is time to think about what further steps can be taken.

Certainly in addition to this inquiry—and the Chief Minister has flagged this—under various pieces of legislation there are powers available to the government to consider regulating prices. Those powers sit within an act for which I am responsible, and that is where I have had discussions with the Chief Minister.

The referral to the ICRC to undertake a study of the petrol market in the ACT and provide quite technical and detailed advice will complement the work of the committee. And that will give us a basis on which we might consider the use of those legislative powers. I think that they are there and are available to us. They were powers that were put in place a long time ago and we need to reflect on the modern petrol market as it exists and whether those laws are still suitable.

But, given the experience we are having, there may well be a role for government to intervene in a way that would perhaps not be considered normal these days. This might be a piece of legislation for another time. We could have a very modern application. And we will consider that as we go along.

Mr Coe touched on the issue of fuel boards. I will not speak to that, as we are about to debate the legislation and hopefully pass it this morning. I will make some further remarks when we get to that debate—at the rate the clock is going, possibly this afternoon. But we will come back to that matter later.

Ms Le Couteur and I, in discussions, have been reflecting on the fact that of course there is a challenge around the greenhouse gas emissions that result from the use of petrol in motor vehicles. I think that one of the solutions in the medium term will be a greater uptake of electric vehicles. Those who own them currently talk about the fact that they can power their car extremely cheaply using electricity.

The challenge at the moment is that there are not many vehicles available in Australia and the ones that are available are quite expensive. This is not an immediate solution for most Canberra households. But certainly, with new vehicles arriving in Australia in just the last few months at much lower price points, this in the medium term is going to be something that will not only address significant environmental issues but also provide households with options where they can assess their own transport needs and think about what the better option is for them. I think there will be some medium-term solutions there as well. But, for the purposes of today, we are pleased to support the establishment of this inquiry.

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (11.30), in reply: I thank members for their support of this reference. I think it is an important piece of work and something that hundreds of thousands of Canberrans will have an abiding interest in.

It is, of course, par for the course in this place that people will seek to say someone has only done something in response to something else. I would simply draw to members' attention the various news articles going back to 2014—in fact, seven days after I became Chief Minister. It was one of the first issues that I raised at that point in time. So it has been a consistent campaign we have been pursuing.

At that time the then federal Minister for Small Business, Bruce Billson—remember him—issued a new direction under the Competition and Consumer Act which gave the ACCC a range of new powers. And it was just the week before Christmas in 2014 that I wrote to the ACCC Chairman, Rod Sims, expressing our desire that the Canberra market be one to be investigated.

This has been a long-term issue. It is something that many, many people have been concerned about for some time. There are, as members have indicated, a range of complex factors. The select committee will have a task in front of it to work through those issues. But I would encourage committee members across the political divide to ask the tough questions of the retailers. Do not be afraid to pursue them.

I think the example that was set by the Senate and a Senate committee in pursuing the banks that then led, finally, after 26 votes against, to the establishing of a royal commission by the federal Liberal government is a good example. The proof there was the power of a parliamentary committee to call witnesses and to demand answers. And that led to the royal commission and is hopefully going to lead to significant change in the Australian banking industry.

I do not think there is going to be a royal commission into fuel prices in the ACT, but this select committee can shine a light on these issues and demand answers from the retailers. I encourage whoever nominates for this committee to be robust in their questioning of the retailers.

I should respond to a couple of other observations that the Leader of the Opposition made. He should be aware that, because of the nature of the territory's planning and zoning system, a retail site for the selling of petrol is in fact one of the lowest value uses of a piece of land. And under our system I think he will find that rates are, in fact, lower for that land than for other commercial purposes.

Given that most, but not all, of the petrol retailers in the ACT are not part of large corporate chains—they are either franchises or otherwise—they do not fall into our payroll tax net. But they would in New South Wales, and they would here if we had their payroll tax system. It would seem that the retailers here have lower statutory charges from the territory government, as opposed to what would be paid across the border in New South Wales. So that is not a factor in higher retail prices in the territory.

I should also take the opportunity to correct some misinformation that has been circulating in the public that the ACT charges any sort of fuel tax or excise tax. States and territories are constitutionally barred from charging any excise taxes. All fuel taxes in this nation are levied by the federal government. There is no differential between states and territories in terms of fuel taxes charged. They are collected by the Australian government. That furphy that has been circulating around the community, that somehow it is ACT government taxes and charges that are contributing to higher fuel prices, is simply not the case. I think it is important that that is put on the public record today.

I also acknowledge the comments made by Minister Rattenbury that an enduring and long-term solution to this issue will be the transition of the private vehicle fleet in our territory over time to electric or hydrogen fuel cell-powered vehicles. Not only will that be good in terms of reducing greenhouse gas emissions and helping the territory achieve our 2045 goals around zero carbon emissions; it will also be a more cost-effective way to operate our transport fleet.

But that is not going to happen in the next 12 months. It will probably happen over the next 12 to 20 years, as the manufacture of internal combustion engines winds up. I understand that in Europe they will not be made anymore from around the mid-2020s, and I suspect the rest of the world will follow pretty quickly as the price of electric vehicles continues to fall. In the intervening period it is important that we do what we can to put downward pressure on fuel prices.

The government is also pursuing reforms that will put downward pressure on CTP prices to reduce the overall costs for motorists in our city as we make a transition to a fairer CTP scheme and we make a transition to a more environmentally sustainable and more cost-effective way of running our transport fleet in this city.

I commend this motion to the Assembly and thank members in advance for their rigorous participation in the select committee process.

Question resolved in the affirmative.

Administration and Procedure—Standing Committee
Proposed reference

MS LEE (Kurrajong) (11.37): I move:

> That this Assembly:
>
> (1) notes that:
>
> (a) government school visits by MLAs serve a valuable purpose in increasing an MLA's knowledge of the ACT school system and developing an appreciation of the talent and enthusiasm of students and teachers in ACT schools;
>
> (b) recent publicity has highlighted the difficult arrangements that surround MLAs accepting invitations from government schools to attend activities and events at their school;
>
> (c) this has created embarrassment and frustration for government schools and MLAs alike;
>
> (d) no such restrictions are applied by independent and Catholic schools for visits by interested parliamentarians, at the Territory or at the Federal level;
>
> (e) there is not a current written, publicly available policy for government schools to follow or for Parents and Citizens Associations to refer to when inviting MLAs to their school; and
>
> (f) that such restrictions are not common in other jurisdictions; and

(2) calls on the Standing Committee on Administration and Procedure to:

(a) examine whether the protocols in place around the permissions for MLAs to visit or attend school events constitute an impediment to the Members performing their function as MLAs and in complying with the Code of Conduct for all Members of the Legislative Assembly; and

(b) report back to the ACT Legislative Assembly on these protocols by the last sitting day in May 2019.

We have 88 government schools in the ACT, with a student enrolment of roughly 48,000 and over 5,000 teachers and support staff. The Education Directorate has a budget of $5 billion over four years and our second largest expenditure after health. A significant number of all our constituents in every one of our electorates has a connection with a school—as a parent, grandparent, teacher, volunteer, ancillary worker or even as alumni.

On that basis alone it is more than unreasonable that MLAs, at least on this side of the chamber, have had considerable difficulty in gaining access to events, visits and information gathering at our 88 government schools. I say "at least on this side of the chamber" because, other than a recent incident between two members of the Labor Party, I am not certain whether Labor MLAs have had much more luck than us in being granted a golden pass for a school visit.

As shadow education minister I am frequently and regularly invited to attend non-government schools—to the opening of a new building, to learn about plans for growth, to attend a concert or an awards ceremony, or simply to become more familiar with a particular school. Since taking on this portfolio I have submitted requests for school visits, as is the practice, to the education minister's office, and on many occasions the school I have asked to visit is not the one that I am offered. Anecdotally, the minister's office have said that they believe there are schools they want to highlight. The obvious corollary to that must be that there are schools they are not keen for us to see.

For my own part, I have never sought to make political publicity out of any school visit. I have never, and I am not aware of any Liberal MLA who has, sought to introduce political material into any school, whether government or non-government, at any time. I have followed every single direction given by the ministers and the directorate about these visits, including being accompanied by at least one directorate staff member at all times, not taking any photographs, and taking the directions so seriously that I have not even followed up with so much as a thankyou card or sent any government school principals and their teachers a "happy World Teachers' Day" card. It does make for some very awkward conversations when principals and teachers welcome me so warmly and ask me to visit at any time and I have to explain that we are not allowed to.

As my motion says, government school visits by MLAs serve a valuable purpose in increasing an MLA's knowledge of the ACT school system and developing an appreciation of the talent and enthusiasm of students and teachers in ACT schools. Any restrictions, whether or not intended to thwart the ability to increase knowledge

of our government school system, are counterproductive. If we only have access to non-government schools, it stands to reason that it is those schools that we end up understanding and getting to know better.

I have received criticism from the AEU and the minister for only highlighting the good work done by non-government schools, but there is a failure to acknowledge the significant challenges that we have had in accessing government schools. I have spoken very warmly in this chamber and congratulated the principals and staff at the government schools that I have had a chance to visit.

Frequently, the minister has suggested that those of us on this side of the chamber ought to reasonably know something or other when we ask questions about a specific process, policy or practice or an occurrence in schools. But with limited opportunity to talk to teachers or to talk to students who attend government schools, how are we to understand the culture, the strengths and the ins and outs of any particular government school? Seeking briefings on certain activities or matters relating to schools is often met with "that is a privacy issue" or "that is too general a topic" or some other deflection.

I was not in the Assembly when previous education ministers and shadow education ministers had the portfolio, but I am told that it was a lot more open and requests were a lot more graciously managed. In fact, I came across some old files from Mr Doszpot's time as shadow education minister earlier this week. I could not help but note that requests sent to the then education minister, now the Chief Minister, Andrew Barr, were replied to in a friendly and cooperative manner, and visits were facilitated in a very timely way. Sadly, that has not always been my experience under the current arrangements.

I say this notwithstanding that visits to government schools that I have had the chance to visit have all, without doubt, been wonderful experiences. I take the opportunity to thank the minister, her staff and the directorate staff who have made those visits warm and welcoming.

When we find out that something has happened in schools and we raise it in this chamber, the minister is quick to jump down our throats and reprimand us, saying that we do not know what is going on. Yet there is an attempt by her office to restrict the very way that we can, in the best way, find out what is going on. This is not the case in other jurisdictions. In New South Wales, for example, the protocol states:

> Local Members take an active interest in schools within their electorates, which includes visits. Local Members, whether in Government or Opposition, should be warmly welcomed at schools within their electorates. All arrangements should be made between the principal and the Local Member's office.

Madam Speaker, my motion is not unreasonable. It is mindful of the professional relationship that must be adhered to. It seeks an assessment from a source other than the minister as to what protocols may be appropriate. The admin and procedure committee comprises members from all parties. My motion seeks nothing more than for that committee to consider whether the current protocols are unfairly impeding

MLAs from carrying out their duties and to clarify the protocols so that there is no risk of MLAs inadvertently breaching the code of conduct.

I note that there have been a couple of amendments circulated; I will address some of those comments in my closing speech. I commend my motion to the Assembly.

MS BERRY (Ginninderra—Deputy Chief Minister, Minister for Education and Early Childhood Development, Minister for Housing and Suburban Development, Minister for the Prevention of Domestic and Family Violence, Minister for Sport and Recreation and Minister for Women) (11.44): The government has proposed an amendment to Ms Lee's motion, which I have circulated, and I now move that amendment:

> Omit all text after "That this Assembly", substitute:
>
> "(1) notes that:
>
> (a) ACT government schools often host community events outside of business hours that are available to members of the community and where Members of the Legislative Assembly are welcome;
>
> (b) during business hours, government schools are focused on teaching, learning and related activities; and
>
> (c) the Minister for Education and Early Childhood Development has approved business hours visits to government schools for members of all political parties, where appropriate;
>
> (2) further notes that:
>
> (a) government schools are required to operate apolitically and electoral engagement by a politician is an inappropriate activity in a government school;
>
> (b) the education minister is responsible for the effective operation of government schools;
>
> (c) for many years a protocol available on the Education Directorate website has provided guidance on government school visits by dignitaries;
>
> (d) the Minister for Education and Early Childhood Development has consistently applied this protocol;
>
> (e) the Code of Conduct for Members of the Legislative Assembly requires members to 'uphold the separation of powers' and 'recognise the unique position of impartiality and the obligations of public service officials' within a framework of constitutionalism inherited from the Commonwealth of Australia;
>
> (f) government schools are staffed by public servants who are part of an apolitical public service that assists the Executive and serves the community on behalf of the Executive; and
>
> (g) public servants are responsible to the Executive through the ordinary lines of accountability; and
>
> (3) calls on all Members of the Legislative Assembly to work with the protocol and Minister for Education and Early Childhood Development regarding any government school visits.".

These amendments are necessary to correct factual errors in the motion. They deal with the pretty silly and extremely selfish position that has been put out by the opposition. I will go through some of those arguments but, in a nutshell, it is not about any of us. It is not about you, Ms Lee; it is not about anyone on this side of the chamber. It is about the 49,000 students and 3,700 teachers who have a right to teach and learn in environments without being required to stop everything and host a local MLA whenever it suits.

Those people are entitled to have visits to their schools managed in a responsible way, and that is the job I have been doing since taking the education portfolio. If that seems a bit harsh, well, I am sorry, but this motion proves why it is required. It is troubling that this motion is all about what MLAs can get out of involving themselves in school communities. It does not consider why schools exist, and the implications of what Ms Lee is suggesting for students in the school. Ms Lee seems to suggest that it is reasonable that schools should be available for politicians to wander through for electoral purposes at their own convenience. I am afraid this is not okay.

Yes, on appropriate terms school visits are a welcome part of learning, and in that context I approve them. The directorate sent along officers on the visits Ms Lee has been on to support with advice and information that might not be available at the school level. The DLO in my office is always timely with arranging school visits. Sometimes there are diary clashes and arrangements that do not work and visits can take a little more time to organise.

For the record, neither I nor my office has ever told the Education Directorate to uninvite anyone from any school visit. The reporting of the *Canberra Times* on that was not correct. The policy in place performs a very necessary function in making sure schools are not taken advantage of or politicised. On this issue the opposition record is unfortunately concerning. Take their display of how they tried to beat up a crisis and panic over asbestos at Harrison School. Would it have been right for them or anyone to be wandering through the school at that point? Take the kinds of statements Ms Lee has been making about public school teachers and their union as the government worked with the union to address occupational violence. Take this week's tactics in relation to Theodore. Should any of us be there right now?

Beyond these examples, there are very important matters of principle at play. Most importantly, the government school system exists to provide education-related services to children and young people. It is there to serve the interests of students. In doing this, the government school system fulfils its purpose. That purpose is there for all members to read in the Education Act enacted by this Assembly, in section 18, and it is the minister who is responsible for the effective operation of government schools.

This is a pretty simple part of the system of constitutional government that exists in the ACT. The executive, the ministers of this place, are responsible under the self-government act for government administration. Under the self-government act, that includes the delivery of education. The education minister is responsible for the administration of the government school system and its schools.

As to the role of the Standing Committee on Administration and Procedure, I am not sure it has any. Government schools are required to operate apolitically and, in general, community or electoral engagement by a politician is an inappropriate activity in a government school. Government schools are host to a diversity of families, families who hold a range of political, religious and philosophical opinions and who come from a range of backgrounds and circumstances. Government schools are free and open to everyone and, therefore, the effective operation of government schools requires equity, universality, and non-discrimination.

Beyond this, government schools are staffed by public servants employed under and bound by the Public Sector Management Act. Public school teachers are part of our apolitical public service that assists the executive and serves the community on behalf of the executive. They are responsible to the executive through their principal, who is in turn responsible to executives in the education directorate and ultimately to me as education minister.

So we get to the matter of the school visit protocol. Quite simply, the education minister is the person who needs to make sure that the participation of MLAs in government schools does not detract from their effective operation. Proper administration of government schools is the minister's responsibility. There are a number of reasons that might mean it is inappropriate for an MLA to just show up at a school. In the ACT in multi-member electorates that could mean 25 members showing up to a school.

Opposition members interjecting—

MS BERRY: Madam Speaker, a point of order.

MADAM SPEAKER: The interjections; members, please let the minister continue.

MS BERRY: Thank you, Madam Speaker. It could be that there has been a critical incident that is in the process of being managed at a school. Maybe, sadly, a death in a school community has occurred or even something as innocuous as a period assessment might be underway. These reasons equally apply across both government and non-government schools. In non-government schools the system or school manager makes decisions about when and in what context a visit by a dignitary is appropriate.

The motion as proposed reflects on the different situations and rules that apply in other states and territories. Unsurprisingly, this is because the ACT context is different. Those states and territories, except for Tasmania, do not have the multi-member electorates I was referring to in such a small geographic area as that which exists in the ACT. I ask members to think practically about this.

We also would not be having this debate if we were talking about access to other government facilities. Consider for a moment if MLAs could invite themselves whenever they liked to an emergency services facility, police station, hospital, mental health facility, prison or any other government office block.

Ms Lee makes an argument that somehow all MLAs have an integral need for knowledge of the ACT school system and an appreciation of the talent and enthusiasm of students and teachers in ACT schools that cannot be obtained without free access to government schools. It is a hollow argument, and I do not believe it has any support in the code of conduct for MLAs.

How is it that Ms Lee's expectations would fit with clause 3, requiring members to uphold the separation of powers? What about the requirement in clause 18 that in all their dealings with members of the ACT public service MLAs should recognise the unique position of impartiality and the obligations of public service officials?

These expectations protect the public service and its officers because they serve the government of the day by implementing its policies and responding to its agenda. It would place public servants in a compromising position to be available for interrogation by any MLA, because government school staff, as public servants, are appropriately responsible through the channels I have explained.

None of my remarks on this motion mean that government schools are not appropriately available to MLAs with a legitimate cause to engage with these schools. It is a matter of ensuring that this happens on the basis of a fair policy that is consistently applied. For many years a protocol available on the Education Directorate website has provided guidance on government school visits by dignitaries. On this point Ms Lee's motion is simply incorrect. The protocol pre-dates me, although it was refreshed and reissued early in my time as minister.

I circulated this policy to all members again this week in response to recent media. I have consistently applied this protocol, irrespective of political party, as is clear in recent media reports. I have applied the protocol to members of the government, including you, Madam Speaker. But I have also applied it to members of the opposition such as Mr Coe and Mr Milligan, who directly approached government school principals in Yerrabi, and Mrs Kikkert, who sought my agreement to visit Ginninderra schools as a local member, despite schoolchildren not being electors.

In consistently applying the protocol I have maintained the integrity of government schools, and I will continue to do so. In no way does the protocol prevent the accountability of the government to the parliament or unduly impede parliamentarians from accessing the information necessary to fulfil their functions. There are many mechanisms through which ministers are subject to scrutiny and responsible to parliament, and information is available to all parliamentarians. The mechanisms apply to all government schools and, where appropriate, I have not stood in the way of members engaging directly with government schools.

It being 45 minutes after the commencement of Assembly business, the debate was interrupted in accordance with standing order 77. Ordered that the time allotted to Assembly business be extended by 30 minutes.

MS BERRY: I have agreed on occasion for MLAs of all parties to participate in educational activities in government schools. In fact, Ms Kikkert and I attended one at

Canberra High School last year. The shadow education minister has visited government schools as part of her portfolio responsibilities. Members of the government, typically ministers or members representing ministers, from time to time visit schools as a legitimate part of their responsibility for promoting government policy, programs or financial investment.

Outside of school hours ACT government schools often host community events where members of the Legislative Assembly are of course welcome. But during business hours or at school events government schools are focused on teaching, learning and related activities. In these circumstances I am responsible, and in these circumstances it is important that members respect the proper administration of government schools. The alternative to the protocol is that school principals, as public servants, find themselves in the awkward position of being asked to accommodate politicians according to their whim. The government will oppose Ms Lee's motion and support the amendment I have moved.

MR RATTENBURY (Kurrajong) (11.56): I move:

> Omit all text after (1), substitute:
>
> "notes that:
>
> (a) school visits by MLAs serve a valuable purpose in increasing an MLA's knowledge of the ACT school system and developing an appreciation of the talent and enthusiasm of students and teachers in ACT schools;
>
> (b) government schools are staffed by public servants, who are part of an apolitical public service that assists the Executive and serves the community on behalf of the Executive; and
>
> (c) the Minister for Education has approved business hours visits to government schools for members of all political parties;
>
> (2) further notes that:
>
> (a) the protocol for MLA/MP/Senator and other dignitary visits to Canberra public schools is available on the Education Directorate website; and
>
> (b) the protocol does not apply to independent and Catholic schools who have their own processes for organising visits by interested parliamentarians; and
>
> (3) calls on the Standing Committee on Administration and Procedure to:
>
> (a) examine whether the protocols in place around the permissions for MLAs to visit or attend school events constitute an impediment to the Members performing their function as MLAs and in complying with the Code of Conduct for all Members of the Legislative Assembly; and
>
> (b) report back to the ACT Legislative Assembly on these protocols by the last sitting day in May 2019.".

Members will see that my amendment has some text from both Ms Lee's motion and some of Ms Berry's points in her amendment. I think it reflects what I saw to be the key points of this motion.

It is quite clear that our schools and, for that matter, a range of other facilities cannot be a free-for-all; people cannot just turn up whenever they wish. I do not think that is what is being discussed today, but there clearly need to be protocols. It is right that there is an approval system and the like, and I do not have a sense that anybody disagrees with that.

I note that in Ms Lee's original motion there was reference to independent and Catholic schools. I imagine they probably have protocols in place as well. I suspect they might differ a bit because, by their nature, they are independent schools. But each of these places, for obvious reasons of safety—knowing where people are and having vulnerable people in schools, as young students can be—needs to have a system.

I noted Ms Berry's email earlier this week after the original motion came out. Ms Lee noted there is no current written publicly available policy. I understand that there is. I have read it this week. It seems reasonably straightforward, but that is not to prejudge the inquiry that is going to take place. We will support a referral to the admin and procedure committee.

This is not a controversial thing; this is an opportunity for members to express concerns, if there are any, and for a group represented by all parties to look at this and work through any glitches that might be in the system. My amendment supports the referral to the admin and procedure committee. The committee can hear from MLAs who might be concerned about the current protocol.

Ms Berry is right that there is a time and a place for visits as well. If there is an incident going on at a school it is probably not the best moment to invite people for a visit, but that does not mean that two weeks later there might not be an opportunity for someone to have a chat to the principal and have a conversation about what happened and their take on it.

It is right that members of the Assembly should be able to go, but I do not think members should be going there all the time. As with my portfolios covering the jail and mental health units, members are free to visit those places but they need to be cognisant of the various privacy, security and like issues that float around them. I commend my amendment to the Assembly.

Debate interrupted in accordance with standing order 74 and the resumption of the debate made an order of the day for a later hour.

Fuel Pricing—Select Committee
Membership

MADAM SPEAKER: I have been notified in writing of the membership of the select committee. For the information of members, the membership is Ms Cheyne, Mr Parton and Mr Wall.

MR BARR (Kurrajong—Chief Minister, Treasurer, Minister for Social Inclusion and Equality, Minister for Tourism and Special Events and Minister for Trade, Industry and Investment) (11.59): I move:

> That the Members so nominated be appointed as members of the Select Committee on Fuel Pricing.

I commend members for their enthusiasm for this inquiry and look forward to seeing the results of their hard work.

Question resolved in the affirmative.

Sitting suspended from 12.00 to 2.00 pm.

Questions without notice

Schools—bullying

MR COE: I have a question for the Minister for Education and Early Childhood Development. Minister, have you visited the Tuggeranong primary school mentioned in the *Canberra Times* on 11 February since the events came to light?

MS BERRY: No, I have not. Given the circumstances that have been described in the *Canberra Times*, the director-general and directorate officials have visited the school or are at the school supporting the school principal and school staff as well as the families that have been involved in the issues. There has been a meeting this week with the community at that school—last night. I had a member of my office attend that meeting. The people who attended that meeting were aware that there was a member of my office at that meeting, given that we were sitting here in the Assembly. I expect to visit the school sometime soon, but I have left it up to the director-general, who is the manager of schools in the ACT, to get things in place before I get out to the school and talk with the school community.

MR COE: Minister, did you visit or did you direct the head of your agency to visit the school this week and did you also direct her to visit the school when you first became aware of these issues last year?

MS BERRY: I did not direct the director-general to visit the school. She visited the school because she is the manager of public schools in the ACT. Directorate officials have been at the school since last year and the beginning of this year.

MS LEE: Minister, will you agree to a joint visit with me, and perhaps even Mr Rattenbury, to the school—as you say, when you are going to visit—given the Assembly's unified concern about these issues?

MS BERRY: I will take that question on notice.

Public housing—Stuart flats

MS LE COUTEUR: My question is to the minister for housing and relates to the planned sale of the Stuart flats, advertised for 20 March 2019. Minister, how much social and affordable housing will the government require the developer to provide on this site?

MS BERRY: There have been no decisions made by the government about changes to housing on that site. There are no plans at this stage to have any housing other than private housing on that site.

MS LE COUTEUR: Minister, how is this consistent with the affordable housing strategy announced last year which committed, I thought, to 15 per cent of public and affordable housing in both greenfield and infield development?

MS BERRY: That is part of the new affordable housing plan. These particular housing dwellings are part of the existing, and soon to be completed, renewal program.

Schools—bullying

MS LEE: My question is to the Minister for Education and Early Childhood Development. At the Tuggeranong school that has been in the media recently it has been reported that a child has been choked into unconsciousness on the playground, another student cornered in a toilet and swung around by a broken arm and at least one child hospitalised with concussion. Minister, what are you doing to stop this happening tomorrow and into the future and how will parents be able to know that their children going to this school are safe?

MS BERRY: As I have described in the Assembly this week the ACT government takes issues of violence in schools very seriously and is implementing programs around positive behaviours for learning. This is a very successful program that is rolled out across New South Wales schools. It is about creating an environment with the whole school community. It is not about addressing just single issues at a time but making sure that school communities can have positive and safe environments for all children and the staff who work there as well as the families that attend those schools.

It is important to note that the positive behaviours for learning program has only just started being implemented at Theodore school. The families involved in the individual issues raised in the *Canberra Times* are being supported by the directorate, and it is addressing the issue to make sure those students are supported as well.

As I said, last night the community met with the Education Directorate to understand very clearly what was happening at that school at Theodore, what the directorate was doing around making sure the community there is well informed about processes in place now and how they and their teachers can be informed and supported through this journey.

MS LEE: Minister, what counselling or additional training has been provided to the teaching staff to ensure that there is adequate supervision and management of these students, and did the positive behaviours for learning program start after you became aware of the issues, not before?

MS BERRY: Yes. This was not one of the initial schools that had the positive behaviours for learning program implemented. There are around 51 schools out of the 88 public schools in the ACT that are implementing the positive behaviours for

learning program. It started last year at Theodore primary but it has only just started and schools are just starting to implement and bed this down within their school communities.

MR PARTON: Minister, how many students from this primary school have been suspended due to violent behaviour and for how long?

MS BERRY: I will take that question on notice.

Schools—bullying

MR WALL: My question is also to the Minister for Education and Early Childhood Development. Minister, how many students have taken sick days at the Tuggeranong primary school in the past six months due to injury and bullying occurring at the school?

MS BERRY: I will take that question on notice, too.

MR WALL: Minister, what measures are in place to ensure that those students are kept up to date with their studies as a result of absences that may have occurred as a result of bullying or injuries occurring at the school?

MS BERRY: I cannot respond in relation to specific families but, generally, the school will work with the families with work that can be completed whilst students might not be attending school in the classroom. That is a regular occurrence that would happen within our schools. As I said, I will have to take the detail of the question on the actual number on notice.

MS LEE: Minister, how many parents at the school have asked for their children to be withdrawn?

MS BERRY: I will take that question on notice.

National Multicultural Festival—preparation

MS CODY: My question is to the Minister for Multicultural Affairs. Minister, how will the National Multicultural Festival promote inclusiveness in the ACT?

MR STEEL I am incredibly proud that we live in such an inclusive city, home to our country's largest celebration of cultural diversity at the multicultural festival. The festival is one of Canberra's most popular and well attended events. It brings people together from all walks of life to promote social cohesion, connection and inclusivity.

The festival provides a platform for people to showcase and share the traditions of their cultures and to connect with other people over a meal or a drink or by enjoying a cultural performance together. We are expecting tens of thousands people to come through the city during the event, sampling food from over 140 stalls, experiencing the Latin quarter, the Pacific Islander showcase, the European village, the China village, the US showcase, the Celtic tattoo, the Greek Glendi, the belly dance

showcase, India in the city and many more. This will allow attendees to experience the rich cultures and diversity of our neighbours and our friends.

The festival will also have an additional 145 embassy and information stalls. Across six stages there will be 150 performances from a range of different multicultural groups, which will further promote the diversity of our city to the world.

Madam Speaker, because of the importance of this festival to building inclusion in our city, the ACT government has committed an additional $1.968 million to secure the future of the National Multicultural Festival over the next three years, including its 25th anniversary in 2021. The funding will also be used to continue the incremental improvements that have been made to the festival's operations in recent years.

The Multicultural Festival is only one way that we celebrate our multicultural communities throughout the year, but it is one of the most significant symbols of our inclusive city that welcomes people of culturally and linguistically diverse backgrounds from around the world. I am very much looking forward to the event kicking off tomorrow.

MS CODY: Minister, what will be the highlights of this year's Multicultural Festival?

MR STEEL: I thank Ms Cody for her supplementary. This year's Multicultural Festival has an incredibly exciting line-up of performances. We have invested a lot in entertainment infrastructure, for the enjoyment of all those attending this year.

We are very lucky this year to have our headline act of iconic Indigenous Australian singer Christine Anu on Friday night. I have to say that as a big Eurovision fan, I am particularly looking forward to seeing Isaiah Firebrace on Saturday night, who represented Australia at the 2017 Eurovision song contest. This year there will be six stages and 150 acts, featuring 2,000 performers in the city, demonstrating the amazing range of talent we are lucky enough to have in our multicultural community in the city and across Australia, as well as international performers.

Of course, food is at the heart of the festival. This year there will be 140 stalls providing food and drink from around the world. From paella to gozleme to French crepes, there will be something for everybody. I am also looking forward to celebrity chef Mark Olive hosting cooking demonstrations on Saturday, using native ingredients and herbs, and supporting the use of Indigenous food by new generations.

For me, the highlight of the Multicultural Festival is our multicultural communities, who have been there from the beginning. This is a proudly community-based festival, because it is the community groups who organise the food stalls and performances with countless volunteers across the three days, and who use this as an opportunity to support their cultural activities throughout the year.

MS ORR: Minister, what changes will there be for this year's Multicultural Festival?

MR STEEL: I thank Ms Orr for her supplementary question. Every festival has something different to offer, every year. This year the festival is starting earlier than

usual with some stalls starting from 12 o'clock, enabling people working in the city to share in the festival cuisine throughout their work day.

This year the festival also includes a languages showcase, demonstrating languages from around the world in poetry and in song. This has been organised by the ACT Bilingual Education Alliance and Mother Tongue—

Opposition members interjecting—

Ms Orr: On a point of order, Madam Speaker, I would like to be able to hear the answer to my question.

MADAM SPEAKER: Members, your interjections and private conversations—

Mr Coe: You can email it to them.

MADAM SPEAKER: Mr Coe—please. Your conversations do make it difficult to be heard sometimes. Minister—

Mrs Jones: Come on, Mr Steel.

MADAM SPEAKER: Mrs Jones, he does not need encouragement from you.

Members interjecting—

Mr Gentleman: On a point of order, Madam Speaker, you have given the opposition plenty of time to remain quiet while ministers give their answers in this place. You have given them some instruction. They still tend to interject, even during a conversation you are having with them.

Mr Coe: What's your point of order, Mick?

Mr Hanson: Is he critiquing the Speaker?

Mr Wall: I don't think that was a point of order.

MADAM SPEAKER: Mr Coe, Mr Hanson, Mr Wall, indeed all those on my left, allow the minister to continue.

MR STEEL: Our languages showcase is being supported by the ACT Bilingual Education Alliance and Mother Tongue Multilingual Poetry. Acts will include Brazilian poetry and songs from Mestiça.

At each festival we review our policies and procedures. Last year we had feedback from the independent Spring Green review and the community. We have made some changes to this year's Multicultural Festival regarding the sale of alcohol. We have been very clear that at this year's festival we are supporting our multicultural groups and our local producers to showcase the food and beverages that contribute to the cultural life of our city and the world.

Community groups will be permitted to sell alcoholic beverages that have a cultural significance to their community, consistent with the purpose of the festival. Commercial stallholders are restricted to locally brewed or produced beverages. These new terms and conditions have been in place since August last year and have been clearly communicated to applicants wishing to hold stalls at this year's festival. With more stalls selling alcohol than last year, the community can expect to experience beverages from around the world, as well as local brews. *(Time expired.)*

Education—Margaret Hendry School

MR MILLIGAN: My question is to the Minister for Education and Early Childhood Development. The new Margaret Hendry School in Taylor has opened and has adopted a new model of education involving no classrooms and no year levels. Minister, will there be provision for students in the Margaret Hendry priority enrolment area whose parents do not support the style of learning at the school to transfer to others?

MS BERRY: There are priority enrolment areas for the Margaret Hendry School and this type of learning that the Margaret Hendry School was able to talk about in the *Canberra Times* upon opening its doors this year is the kind of learning that I have been hearing about from teachers and school leaders during my conversations on developing the future of education strategy about making sure that there is evidence-based, research-informed education, education that is led by students and students having student agency about the kinds of choices they make with their education, ensuring that personalised learning can occur.

Ms Lee: Madam Speaker, on a point of order.

MADAM SPEAKER: Minister, resume your seat. Ms Lee.

Ms Lee: Thank you, Madam Speaker. Mr Milligan's question was specifically and quite pointedly: will there be a provision for parents of students in the priority enrolment area that she is speaking of who do not support the style of learning be able to transfer their children to other schools?

MADAM SPEAKER: You have a minute remaining in your answer. You may go to that point.

MS BERRY: Thank you, Madam Speaker. If they are unhappy with the way the school is providing education for their children then their first point of contact should be with the school.

MR MILLIGAN: Minister, what ability is there for parents outside the Margaret Hendry School area who do support that style of education to enrol at that school?

MS BERRY: As I was alluding to in my response to Ms Lee's questions, this is the kind of education that I have been hearing school professionals and students say they want to see across the ACT school community. You will see it already in other

schools across the ACT. Of course, there are some issues around older schools having different kinds of infrastructure in place.

I am pretty interested in education in the ACT. I think it is pretty important, Madam Speaker. That is why I listen to the professionals in the sector, hear about what they know, and then work with them to implement education that will be of benefit to every child.

MS LEE: Minister, will you be rolling out the style of teaching taught at Margaret Hendry School to other ACT government schools?

MS BERRY: As I was saying, it already exists in different ways across the ACT. At Alfred Deakin High School, for example, students are able to describe the kinds of things they are passionate about. Part of their weekly rostering for activity is about engaging in something they are passionate about, whether that is photography or some kind of art or some other passion they might have or some other pursuit they are interested in. This kind of personal learning is something our teachers and school leaders want to be able to engage their students on.

Mr Hanson interjecting—

MADAM SPEAKER: Mr Hanson, please.

MS BERRY: When I talk to young people and students and children at schools about this they say this is exactly the kind of education they want. They want to have education that is absolutely targeted at the way they learn and the things that interest them.

Education—occupational violence

MISS C BURCH: My question is to the Minister for Education and Early Childhood Development. In 2017-18, 75 per cent of all occupational violence incidents reported across the ACT public service occurred in the Education Directorate. Minister, why do members of the Education Directorate make up 75 per cent of reported violence incidents?

MS BERRY: As I spoke about in this place yesterday, the ACT government has been working very closely with schools, the school community and the Education Union about implementing a program to address violence in schools. This is a complex issue. In ACT government schools we invite and welcome any student, regardless of their background, regardless of things that might be going on in their lives that might cause behaviour in schools that can sometimes lead to occupational violence. That is the issue when you have human beings in a human service setting.

We are working very closely and very carefully to make sure that workplaces such as schools, government schools in the ACT, are safe workplaces. But it is a complex issue, and it needs to be addressed very carefully, as I said. That is why we have implemented the prevention of workplace violence program in schools, and we are

working closely with the AEU and their members to make sure that schools are safe places for everyone.

MISS C BURCH: Minister, what duty of care do you owe to staff who are working in these conditions?

MS BERRY: I have taken pretty much immediate action. I think I have made that clear in this place.

MS LEE: Minister, have you given your directorate a target for reduced violence in ACT schools to be achieved by 30 June 2020? If so, what is the measure of that target; if not, why not?

MS BERRY: No, because as I have discussed in this place time and time again, workplace violence, particularly in a school setting, is a complex issue. We are at the start of addressing the issue in the ACT, the first in the country to do so. We will work very closely with the union and its members to make sure that we get there. It will mean, as I said, that there will be further and increased reporting as we encourage teachers and school staff to report issues in their schools so they can be properly addressed.

Mental health—performance

MRS DUNNE: My question is to the Minister for Mental Health. Over the past couple of weeks, we have seen some alarming statistics about failures in the mental health system. I seek leave to table two graphics, one from today's *Canberra Times* online showing patients languishing waiting for mental health treatment and the other a page from the ROGS report.

Leave granted.

MRS DUNNE: I table the following papers:

> Canberra—Slipping standards—Infogram—Copy of graph.
>
> Mental health outcomes of consumers of State and Territory governments' specialised mental health services, 2016-17—Copy of graphs.

Minister, why, under your watch, have mental health figures in the emergency department, over-capacity in the adult mental health unit and mental health outcomes for patients and workplace safety for hospital staff deteriorated so dramatically?

MR RATTENBURY: It is true that we have seen an increase in demand for mental health services, particularly in the emergency department but right across the system. As I have said in this place before, one of the positives in the mental health space at the moment is that the breaking down of the stigma around mental health is seeing more people seek treatment or identifying as someone who needs help. This is a positive thing, but it presents a real challenge to the service system. The service system needs to adapt to cope with that increased demand and that changing

community expectation. One of my very clear agendas in this space is that we need to do that.

The figures that Mrs Dunne has cited, particularly the ones of waiting times in the emergency department, are familiar to me; I provided them to her in response to a question on notice. We are working on a number of options at the moment; as Mrs Dunne well knows, under the rules of question time I am not allowed to announce government policy, but I will look forward to sharing those details with the Assembly at the right time.

MRS DUNNE: Minister, in relation to declining wait times, the head of the emergency medicine council, Dr Judkins, said that this was the result of years of neglect. What have you done to turn around the years of neglect?

MR RATTENBURY: We have done a number of things. I have actually met with Dr Judkins and had a detailed discussion about the view of the Australasian College for Emergency Medicine, ACEM, on some of the ideas about how we can address this. They have put forward some very constructive suggestions, and I welcome that.

In response to their invitation, we sent a number of senior ACT officials to the summit that they convened in Victoria on how to address these issues, and those ideas are being worked on. Personally, I have in a recent overseas trip looked at what some other jurisdictions are doing to deal with these issues.

One of my views is that the emergency department is not always the best place for a person with a mental health crisis. I actually think that there are better ways that we can deal with people. That is some of the work that we are investigating at the moment. We are also undertaking renewed modelling on capacity issues and I expect that work to come back in due course.

MRS JONES: Minister, why is the new adult community mental health service model of care introduced in June 2018 and referred to in the same *Canberra Times* story apparently not working?

MR RATTENBURY: I refute completely the basis of Mrs Jones's assertion. The new model of care has been rolled out after various trial periods. It is a transition; you have to do it carefully. The feedback I have had so far is very positive: staff feel like they have more time to spend with clients and the waiting lists have reduced. Overall so far I have had only positive feedback on that.

Of course, it is only six to seven months old. There will undoubtedly be some tweaking and adjustment, but our staff are very committed to this model of care. They see it as a positive development for both their workload and stress levels and also the outcomes for their patients. I feel very optimistic that this model of care will make a valuable difference to the mental health consumers of Canberra.

ACT Fire & Rescue—equipment

MRS JONES: My question is to the Minister for Police and Emergency Services. Minister, I refer to a *Canberra Times* article of 27 January this year which stated that

when the ACT's only Bronto went to Sydney for maintenance on 5 January a replacement appliance did not arrive until 11 days later. ACT Fire & Rescue chief, Mark Brown, is quoted as saying that this work was pre-planned and arrangements were made for a loan Bronto from the Melbourne fire brigade. Minister, if these works were pre-planned why did it take 11 days to get the replacement appliance?

MR GENTLEMAN: I thank Mrs Jones for her question. The Bronto has been a difficult piece of machinery to work with. It has certainly had some failings and we are trying our best to maintain it as we go into the future to provide a new aerial appliance which of course is in the order and construction stream. But it has come up with a number of problems.

In the meantime we have tried as best as possible to source aerial appliances from either Melbourne or New South Wales to ensure that we can support our firefighters in doing their fantastic job in the ACT should the machine not be roadworthy or break down. We have seen it again break down recently. As much as possible we try to get another appliance in place or we have extra crews to do that sort of work.

MRS JONES: Minister, is the Bronto, at this moment, available for immediate response? If not, why is that, and what replacement appliance has been provided for this useless piece of kit?

MR GENTLEMAN: From the brief to me today, it has broken down again. There is a small issue with an electrical fault that is being worked on as we speak. As Mrs Jones has outlined, it is an older machine. We are trying for a replacement as soon as we can. Indeed we may need to look for another one, in order to have a secondary appliance.

MR WALL: Minister, on what date will a second aerial pumper be delivered and operational in the ACT, and will that then ensure that we have two operational aerial appliances in the territory?

MR GENTLEMAN: On most occasions we do have replacement vehicles. There is a vehicle to replace the Bronto when it has maintenance. When it has unfortunate breakdowns like we have seen we order a vehicle from either Victoria or New South Wales as soon as we can.

The new appliance has a two-year construction period. That has been well outlined in this place and in our budget estimates hearings. It is a long gestation to order the vehicle, have it built and on the road. In this situation we are looking to see whether we can look at another one in the not-too-distant future.

Environment—healthy waterways project

MS ORR: My question is to the Minister for the Environment and Heritage. Minister, what steps is the government taking to help make Canberra's waterways better?

MR GENTLEMAN: I thank Ms Orr for the question. I will pose this to the Assembly: as you drink your glass of water today, or have a cup of tea, think about

the molecules in that glass that humans have consumed for their entire history. Think about that for a minute: there is the same amount of water on Earth now as when our planet was formed. And, for a watery planet, there is not a lot of usable water. Nearly 97 per cent of the world's water is salty—

Opposition members interjecting—

Ms Orr: A point of order.

MADAM SPEAKER: Resume your seat. I think I know what the point of order will be.

Members interjecting—

MADAM SPEAKER: Members, please! The minister is on his feet. We know the rules on interjections. Minister, we will endeavour to hear you in silence.

MR GENTLEMAN: Thank you, Madam Speaker. Another two per cent is locked up in ice caps and glaciers. That leaves just one per cent for all of humanity's needs: agricultural, residential, manufacturing, community, recreational and personal. Of course, water is all around us here in Canberra: our beautiful lakes, the ancient Cotter, Molonglo and Murrumbidgee rivers, tributary creeks, suburban wetlands and ponds. Our waterways also support a diverse range of plants and animals and offer refuge for some threatened species.

The water in Canberra's suburban creeks, wetlands and ponds is mostly stormwater and run-off from residential blocks, streets, retail, industrial and agricultural areas. The water eventually makes its way into our lakes and rivers, largely untreated. The ACT healthy waterways project is a joint initiative of the Australian and ACT governments to improve the quality of stormwater that flows into our lakes and waterways and downstream past our borders into the Murrumbidgee River system and the Murray-Darling Basin.

Mr Coe interjecting—

MR GENTLEMAN: I know that Mr Coe thinks that healthy waterways is a funny topic; he interjects with laughter across the chamber. But it is a very serious topic. We have seen the degradation of our waterways and we have seen large fish kills because we have not been looking after our waterways. *(Time expired.)*

MS ORR: Minister, why is that investment important, and can you provide an update on projects in Evatt and other parts of Yerrabi?

Mr Hanson: Excellent.

MR GENTLEMAN: As Mr Hanson said, that is an excellent supplementary question from Ms Orr, showing that being a local member does not mean being opposed to the environment, an example those opposite should well learn from.

The government is improving water quality through the healthy waterways project. This involves construction of water quality infrastructure, like wetlands, ponds and rain gardens, at a total of 20 sites across the urban areas of the ACT, including the catchments of Lake Tuggeranong, Ginninderra, Yarralumla and Jerrabomberra Creek and including the project in Evatt in the member's electorate of Yerrabi.

Construction is underway on 19 of the 20 sites, with five completed and in the final stage of operational acceptance by Transport Canberra and City Services, who will own and maintain the finished assets. Civil construction will soon finish on another nine sites, with five due to finish by the end of autumn.

The ACT healthy waterways project is on time and on budget. The resulting assets will not only play a vital role in improving the health of our waterways but also provide recreational spaces for Canberra residents to enjoy. Water in the urban landscape is also known to counter the urban heat island and reduce ambient temperatures, which is important as climate change brings hotter and longer summers.

MR PETTERSSON: Minister, why is it important to support healthy waterways?

MR GENTLEMAN: I thank Mr Pettersson for his interest in the environment. It is very important that we protect the ACT's waterways and we are doing this through the healthy waterways projects. We have protected our Namadgi wetlands through the listing of high country bogs and associated fens on the ACT threatened ecological communities list and we are doing it through the important role we have on the Murray-Darling Basin water ministers council. Unlike some in this place, we do not regard this work—to quote from a very interesting speech from yesterday—as preaching to either the federal or state governments.

In recent months we have seen two damning independent reports into the management of the Murray-Darling Basin.

Opposition members interjecting—

MADAM SPEAKER: Members, please! Mr Coe, Mr Hanson, Mr Wall, Mrs Jones, can you just keep it down a tad. Minister.

MR GENTLEMAN: Thank you, Madam Speaker. Canberrans are rightly concerned about what has been happening in the basin and they want action, and we are acting. The environment does not know jurisdictional boundaries; it is our collective responsibility to act.

If you follow the logic that Ms Lee put forward yesterday there would be no environmental protection under the Canberra Liberals and no action on climate change. As this Assembly progresses it is becoming very clear that Ms Lee is the shadow minister against the environment.

Light rail—contractors

MR HANSON: My question is to the Chief Minister. Chief Minister, on talkback radio on Friday, 14 September last year you were asked about whether you were

aware that one of the major trucking companies involved in the light rail project is owned and operated by an outlaw motorcycle gang. You at the time refused to answer that call. So I will ask: is that claim true? Is one of the companies involved in the light rail project owned or operated by or connected to an outlaw motorcycle gang?

MR BARR: I do not believe so, no.

MR HANSON: Minister, what steps have you taken to ensure that no supplier, contractor or participant on the light project has any links to outlaw motorcycle gangs, given the allegation that was made to you on the radio?

MR BARR: Yes, following that allegation there was certainly a degree of interest, and I believe media interest at the time, and that has not demonstrated or developed any basis for that claim.

MISS C BURCH: Chief Minister, what steps have been taken to ensure that no supplier, contractor or participant in any government contract has any links to outlaw motorcycle gangs?

MR BARR: The recent reforms to procurement ensure that only those who operate with the highest ethical standards are able to conduct business with the ACT government. I would observe that it was those opposite who sought to oppose this particular reform, but if those opposite are so concerned about this matter—that anyone who might ride a motorcycle cannot be on the government payroll, if that is the direction that we are going in—perhaps the shadow Attorney-General, the interjector in chief on that side of the chamber, might want to reflect upon his position.

In all seriousness, random allegations that are made on talkback radio—

Opposition members interjecting—

MR BARR: Random allegations that are made on talkback radio, often through anonymous sources, SMSs, tweets and the like, which appear to be the new—

Mr Parton: What are you saying about talkback radio?

MR BARR: It is such a fine form of broadcasting, isn't it, Mr Parton? It brings out the best in the broadcaster and in the community! It is never designed to inflame or to be provocative! It is not about facts; it is mostly about entertainment.

Arts—Kingston arts precinct

MR PARTON: My question is to the Minister for Arts and Community Events. Minister, what progress has been made on the plan to develop the Kingston arts precinct since the tender was issued in February 2017?

MS STEPHEN-SMITH: I will take this as Minister for Urban Renewal as the Kingston arts precinct sits within the urban renewal portfolio. As we know, the Kingston arts precinct forms part of stage 5 of the Kingston foreshore estate project

and the land sales stage 5 was released to the market in October 2015 in accordance with the indicative land release program for that year.

The site was released as a single parcel of land with a unique opportunity to put forward an innovative design response that celebrates the history of the site. The development will deliver new arts facilities, an outdoor space, public areas, commercial spaces, residential dwellings and over 500 public car parks.

In February 2017 Geocon Group Pty Ltd was announced as the preferred tenderer but the preferred tenderer does not mean that the developer has won the tender or that information can be publicly released, due to the remaining interests of the other participating tenderer. Successful negotiation of the obligations between the preferred tenderer and the territory will result in an execution of all contracts, assuming that it goes ahead, which would then give the developer rights to develop the land in accordance with the tender submission and commence community engagement and the statutory approval process.

Since the announcement of the preferred tenderer in February 2017 the Suburban Land Agency was created and continued the post-tender process from 1 July 2017. The SLA and artsACT during 2018 undertook further review of the likely capital and operational costs for the future territory assets in order to progress the realisation of the Kingston arts precinct. Negotiations with the preferred tenderer commenced in October 2018. After cabinet considered the recommendations from the SLA both Geocon and SLA and artsACT are currently working in good faith to finalise the necessary obligations by the end of March 2019.

In December 2018 all participating arts organisations were provided with an opportunity to meet with the design team and see the elements of the tender *(Time expired.)*

MR PARTON: Minister, can you give further explanation as to why the project has stalled?

MS STEPHEN-SMITH: I would not agree with the premise of the question that the project has stalled. But I would say that the creation of the Suburban Land Agency and the City Renewal Authority, arising from the land development agency being abolished, did result in a re-examination of this process. The Suburban Land Agency board, quite rightly, wanted to apprise itself of the current arrangements at that time and have a good look at the process that was underway.

As I was saying, after the cabinet consideration, negotiations commenced in October 2018 and in December all participating arts organisations were provided with an opportunity to meet Geocon's design team, Fender Katsalidis and Oculus, and see elements of the tender submissions and the design team's vision for the project.

Design information that was provided to arts organisations at that time does remain the intellectual property of Geocon's design team and forms part of their commercial offer provided to the territory in response to the tender requirements. For those

reasons, the arts organisations understand the need for confidentiality. In this regard, agreements were executed with those organisations in relation to that matter.

I also know that the Suburban Land Agency met the Kingston and Barton Residents' Association in November to discuss the progress of the project. It will continue to meet with the residents groups and, of course, work closely with artsACT as the project continues.

MRS DUNNE: Minister, have any of the participating arts organisations expressed doubts about their continued participation in the project, and what is the future for these arts organisations given that they have been on tenterhooks for quite some time?

MR RAMSAY: Madam Speaker, I will take that question. The arts organisations are continuing to be consulted as part of the project. As my ministerial colleague Ms Stephen-Smith has indicated, they are working in good faith as part of that. We are very confident that they will be supportive of the ongoing work on the project.

Aboriginals and Torres Strait Islanders—procurement policy

MR PETTERSSON: My question is to the Minister for Government Services and Procurement. Minister, you recently announced public consultation on the Aboriginal and Torres Strait Islander procurement policy. What is the government aiming to achieve with this policy?

MS STEPHEN-SMITH: I thank Mr Pettersson for his question and his ongoing interest in procurement policy, particularly the Aboriginal and Torres Strait Islander procurement policy.

The Aboriginal and Torres Strait Islander procurement policy is yet another demonstration of the ACT government's commitment to supporting the economic, social and cultural wellbeing of Aboriginal and Torres Strait Islander people in the ACT. The policy aims to support Aboriginal and Torres Strait Islander owned and controlled enterprises to compete for ACT government work by removing barriers to their participation in government procurement and recognising the positive outcomes that can be delivered to communities through our expenditure on government goods and services.

The policy ensures that territory entities can identify suitable opportunities for Aboriginal and Torres Strait Islander enterprises and organisations in their procurement requirements, and allows territory entities to single-select organisations to tender for contracts valued under $200,000.

The policy would provide for a range of mechanisms in order to deliver on these aims to open up procurement to Aboriginal and Torres Strait Islander businesses and organisations. This includes the certification of an enterprise's Aboriginal and Torres Strait Islander ownership, which would be completed by certifying authorities. The organisation is then listed on the territory's Aboriginal and Torres Strait Islander supplier list. That would provide opportunities for exemptions to the tender process in

certain circumstances, as I have explained, and also enable us to improve our reporting and review mechanisms.

These mechanisms will ensure that the aims of the policy are being achieved, with realistic targets for performance with a view to increasing these aims as the policy matures, and with a very clear understanding of some of the pitfalls that have been identified by other governments when they have implemented Aboriginal and Torres Strait Islander procurement policies. We have certainly been learning the lessons from other jurisdictions.

MR PETTERSSON: Minister, what consultation has the government undertaken to date on the Aboriginal and Torres Strait Islander procurement policy?

MS STEPHEN-SMITH: I thank Mr Pettersson for the supplementary question. One of the key aspects of any discussion or policy concerning Aboriginal and Torres Strait Islander peoples is, of course, the principle of self-determination. It is an important part of the development of any Aboriginal and Torres Strait Islander policy, and that includes the Aboriginal and Torres Strait Islander procurement policy.

The initial development of the policy was informed by close consultation, including valuable input from the Chair of the Aboriginal and Torres Strait Islander Elected Body, Katrina Fanning. In the latter part of 2018 ACT government officials invited a number of key stakeholders to one-one-one consultations to provide feedback on what was then the draft policy.

Written submissions were also invited from a number of important organisations, including the Aboriginal and Torres Strait Islander Elected Body, Supply Nation, Canberra Indigenous Business Network, Indigenous Business Australia, Canberra Business Chamber, and Winnunga Nimmityjah Aboriginal Health and Community Services. The feedback sessions were incredibly useful, and many of the organisations have indicated an interest to continue discussions as the policy continues to be developed during the course of public consultations and as we implement the policy into the future.

Public consultations on the Aboriginal and Torres Strait Islander procurement policy are now open on your say. This consultation was launched on 31 January. A workshop will be held with interested parties tomorrow, and the consultation closes on 17 February. I look forward to the outcomes of that public consultation, which will help to inform and shape the policy further. The policy will be finalised as soon as possible after that.

MS CHEYNE: Minister, what else is the government doing to support Aboriginal and Torres Strait Islander owned and controlled enterprises in the ACT?

MS STEPHEN-SMITH: I thank Ms Cheyne for the supplementary question. At the 2016 election ACT Labor recognised the importance of encouraging more Aboriginal and Torres Strait Islander controlled enterprises and organisations in the ACT. In the 2017-18 budget we committed $100,000 over four years to deliver the new and emerging Aboriginal and Torres Strait Islander organisation support program.

The NEO support program, as it is now known, offers direct financial support to culturally specific and appropriate services for ACT Aboriginal and Torres Strait Islander community organisations. The program aims to: facilitate community-controlled leadership to develop culturally appropriate social services; embed culture; harness existing community capacity and develop new emerging leaders; implement good governance; establish trusting partnerships; and build and/or use a community development approach in service delivery.

The program is a demonstration of the government's commitment to self-determination. We know that self-determination is critical in advancing equitable outcomes for Aboriginal and Torres Strait Islander Canberrans. The NEO support program is also a key initiative supporting the ACT Aboriginal and Torres Strait Islander agreement 2015-18.

The NEO program underwent a review after the first round was unsuccessful and it was redesigned and reopened to applications fairly recently. This program in its redesign will absolutely support key focus areas of the agreement, including employment and economic independence, connecting the community, cultural identity, and education and leadership.

The most recent NEO grants round closed recently under the new guidelines. I am looking forward to learning about how it went and how it can be further improved, and to continuing to work with Aboriginal and Torres Strait Islander businesses and community organisations to build a stronger community in the ACT.

Arts—event funding

MRS KIKKERT: My question is to the Minister for the Arts and Cultural Events. Minister, in your answer to question on notice 2113 you said that from the 2019 ACT events fund, a total allocation of $274,963 has been made in the main round. Allocations have been made to events in Kurrajong, Murrumbidgee, Yerrabi and even events located in New South Wales. Minister, the total allocation for events in Brindabella and Ginninderra is zero dollars. How many applications for events based in Brindabella and Ginninderra were received for the government's event fund for 2019?

MR RAMSAY: I will take that question on notice.

MRS KIKKERT: Minister why did not one event in Brindabella or Ginninderra receive any funding from the government's events fund for 2019?

MR RAMSAY: The process for the assessment of the events fund is on the quality of the applications themselves. The assessments were made purely on the basis of the quality of the events. I will continue to look into further ways of considering it in the future and whether there may be a curated approach and closer attention to geographic distribution.

MS LAWDER: Minister, what options are available for event organisers who missed out on this main round of funding to put on popular community events in Brindabella and/or Ginninderra this year?

MR RAMSAY: Event organisers can always put on events. One of the great things about the initiatives that take place across the community is that they do not necessarily rely on government funding. One of the things that I encourage people to do is to look not only to government funding. With respect to the great significance and impact of the arts on community and cultural events, we know that they can be sourced and engaged with in different ways. Organisations, individuals, artists, community events and community organisers are looking at a broad range of ways for not only funding but other forms of support.

Government—ex gratia payment

MS LAWDER: My question is to the Chief Minister. Justice Verity McWilliam in the ACT Supreme Court found in September last year that the Chief Minister had been given incorrect advice in refusing an ex gratia payment to Jack Hartigan for lifelong injuries he suffered when only six years of age in a vicious dog attack in Canberra in 2010. She ordered the Chief Minister to reconsider his decision. Chief Minister, how is it that you made an unlawful decision based on incorrect advice in the first place, and from whom was that advice received?

MR BARR: Any administrative ruling is subject to judicial review under our legislative arrangements. I think the source of the advice to me, as was very well canvassed as we debated it extensively in this chamber, was the ACT treasury.

MS LAWDER: Chief Minister, have you reconsidered your unlawful decision not to make an ex gratia payment to Jack Hartigan? If so, what is that decision?

MR BARR: The premise of the question is incorrect; it was not unlawful to make a decision not to grant an ex gratia payment. It cannot be allowed to stand that it is unlawful for the Treasurer to refuse an ex gratia payment. That, I presume, is not what Ms Lawder is seeking to imply in her question. I would hope not, but the wording of the question could lead one to believe that it is unlawful for the Treasurer to refuse to make such a payment.

In relation to the matter, treasury have responded to the advice and determination of the court in relation to having a clearer set of guidelines for determination of these matters. Contact has been made with the family and the family's lawyers as to whether they wish to provide any further information so I can make a decision. The latest advice a couple of weeks ago was that were yet to provide any further information. I will give them that courtesy. I am not Peter Dutton; I will not remake a decision 30 seconds after a court has made a different determination. I will give the family time to provide, through their lawyers, further information and will make the decision in due course.

MR HANSON: As part of that correspondence, Chief Minister, have you apologised to the Hartigan family, specifically Jack Hartigan, for the additional concern that I am sure he is feeling as a result of the court action and decisions?

MR BARR: I did not bring on the court action. I have acted at all times in accordance with the advice given to me and have sought to make a decision based upon all of the evidence available to me, including previous court determinations. I understand that this is a complex matter. This is a matter that is intensely personal for the family concerned.

But the point I have made is that political pressure, parliamentary pressure and media pressure cannot be the determining factor in whether an act of grace payment is made. It simply cannot. We cannot allow a situation where your success or otherwise in achieving a payment from government is based on your media campaign. That is a situation I could not, and no-one in my position could, allow to stand. The decisions must be made on the facts of the case and made in accordance with the Financial Management Act.

I will not be bullied or blackmailed into making a decision on this under political or media pressure. It is simply unreasonable and we cannot allow that sort of precedent in relation to decision-making on these matters. It simply cannot be that if you mount a media campaign or get a bunch of politicians on your side that that is the pathway to a payment. It cannot be that way. Anyone in my position, any future treasurer, would understand the importance of that. That is fundamental. It is not written into the act that if you get a campaign going you get a payment. *(Time expired.)*

Government—screen arts funding

MS CHEYNE: My question is to the Minister for the Arts and Cultural Events. Can the minister please update the Assembly on the outcome of the ACT government's 2019 screen arts funding round?

MR RAMSAY: I thank Ms Cheyne for her question and for her clear, demonstrated interest in the arts in Canberra.

I am pleased to advise the Assembly that six ACT filmmakers, screen artists and game developers have been successful in securing funding for their projects through the 2019 screen arts fund. The people who are funded in this year's round are Claudia Cooney, to work with an experienced screenwriter to draft a pilot episode script for a political drama series called *Monsoon Season*; Christian Doran, to develop a web series called *Mirrors*, which will further build on his already considerable achievements as a film producer and production manager, including as a line producer on the local feature film *The Furies*, which I was privileged to visit the set of last year in Bywong; Zayaan Jappie, to develop a short documentary on professional boxer Bianca Elmir, a young Canberra Muslim woman boxer; Marisa Martin, to produce a high quality short film, *Violet Daze*, that will serve as a proof of concept for a future horror feature film, working with an experienced industry writer and director; Meg Donnelly, for production of a short film called *The Sacred*, to develop her skills as a

screenwriter and director; and the Shy Kids Club, a husband and wife games development team, for the development of their first big commercial game called *With Friends Like These*, which encourages cooperation and communication between players.

I would like to take the opportunity to congratulate all of the funding recipients and thank them for the contribution that they make to our thriving screen industry here in the ACT.

MS CHEYNE: Minister, what have been some of the big success stories coming out of previous screen arts funding rounds?

MR RAMSAY: There have indeed been some great success stories. A number of the screen artists who have previously been awarded funding through this grants program have gone on to do great things and are fantastic creative and economic ambassadors for Canberra.

I am sure you will all be aware of the 2016 film *Joe Cinque's Consolation*. The writer, producer and director, Sotiris Dounoukos, was funded by the ACT screen arts fund and the screen investment fund for initial development of this project, which subsequently premiered at the Melbourne International Film Festival, featured at the Toronto International Film Festival and was released throughout Australia to great acclaim.

Local writing and direction duo, Paul Bissett and Catherine Prosser, have previously been funded for development of their children's feature film *Hoop*, which this week made the short list for the very prestigious Monte Miller awards through the Australian Writers' Guild. Universal Pictures is interested in making *Hoop*, which would shoot in Canberra.

Award winning Canberra writer and director, Vanessa Gazy, was funded by the screen arts fund for her short film *Highway*, which has been made an official selection at over 15 film festivals to date and is now to be made into a feature by Goalpost Pictures, of *The Sapphires* fame, and will shoot in the Monaro region. Vanessa is now being represented by William Morris in the US.

Clearly, the screen arts fund provides important early career support to some truly inspired and inspiring screen artists who are now achieving great success on the world stage and promoting our capital as a creative and vibrant city.

MS CODY: Minister, in what other ways does the ACT support the screen industry here?

MR RAMSAY: I thank Ms Cody for the supplementary question. Screen Canberra receives funding from the government to support the development of screen and digital artists, to invest in local feature film productions and to attract film productions to the ACT.

Members will know that in this year's budget the Chief Minister announced the establishment of the $5 million CBR screen fund, which is administered by Screen Canberra. It is investing in commercial screen productions undertaken in Canberra to help build the growth and sustainability of our local film industry by attracting more major projects.

The fund partners on the development, production and marketing of high quality feature films, television series and other screen projects from local, interstate or international practitioners that have significant Canberra elements and benefit, and are capable of reaching local and international audiences and delivering commercial success. A minimum of 20 per cent of the fund is reserved for emerging local screen content providers.

It is great to see that this environment of government support for our screen industry is seeing Canberra build a reputation nationally as a location of choice for high-end TV dramas such as *The Code* and *Secret City*, and feature films such as *Joe Cinque's Consolation* and *The Furies.* Ease of access, ease of approvals for use of land, clear light under filming conditions, relatively light traffic and our proactive film office have made Canberra indeed a great place to film.

Mr Barr: I ask that all further questions be placed on the notice paper.

Supplementary answers to questions without notice

Government—ex gratia payment

MR BARR: Ms Lawder asked me a question in relation to the Hartigan case. I have been advised that Master Hartigan's lawyers have asked for an extension until 1 March to provide further information. That extension request has been granted.

Public housing—thermal performance

MS BERRY: During yesterday's question time Mr Parton asked me about how many at-risk public housing tenants were visited during Housing ACT's heatwave response. Housing ACT considers at-risk people to be 80 years of age or over living in single tenancies. During December 2018 and January 2019 Housing ACT made approximately 592 phone calls to talk the people who live in public housing through how to look after themselves in extreme heat. An additional 43 face-to-face visits were conducted by housing managers where additional support was requested or where Housing ACT could not contact the tenant or family members by phone.

ACT Fire & Rescue—equipment

MR GENTLEMAN: In regard to the question on the Bronto earlier, I can advise that public safety was not compromised as a result of no aerial appliance being available in the ACT in January. ACT Fire & Rescue's ability to respond to fires where the aerial appliance would normally be utilised did not change. Other appliances could have been utilised to manage these incidents.

Personal explanations

MS LEE (Kurrajong) (3.05): Under standing order 46, I wish to make a personal explanation.

MADAM SPEAKER: Ms Lee.

MS LEE: Yesterday during the debate on my motion on safer school zones, I used the words "reduced speed zones around 10,000 New South Wales schools". I wanted to clarify, just in case there was a misunderstanding, that that is 10,000 school zones, not 10,000 New South Wales schools.

MRS KIKKERT (Ginninderra) (3.05): Under standing order 46, I also wish to make a personal explanation.

MADAM SPEAKER: Mrs Kikkert.

MRS KIKKERT: As part of the explanation, I seek leave to table a document.

MADAM SPEAKER: Is leave granted?

Mr Rattenbury: Madam Speaker, can we have an explanation of what the document is, please?

MRS KIKKERT: The document is a motion that I tabled yesterday, with footnotes. I will explain.

Leave granted.

MRS KIKKERT: Thank you. I present the following paper:

> Middle childhood—Services and programs—Copy of notice of motion with annotated references—Mrs Kikkert.

Yesterday, in addressing the motion that I moved relating to children in the middle years, Minister Stephen-Smith stated:

> … some of the factual information presented has been taken out of context, and some of it does not reflect Australian data.

I have tabled a fully referenced copy of my motion from yesterday, which shows that, in every instance, quotes, statistics and other data have all come from Australian sources. Moreover, a quick look over these references will show that, in all cases but one, the information taken from these Australian research projects, studies and submissions originate from Australian-based research conducted within the Australian population. The sole exception was one statement regarding the emergence of mental health issues in middle childhood, which was taken from an American dataset that the

authors of the relevant document clearly understand to have full application in an Australian context.

I remain confident that none of this factual information has been taken out of context. Tabling this fully referenced version of my motion will make it easy for anyone who wishes to examine this claim to do so.

MADAM SPEAKER: I remind members that standing order 46 does not provide for debating points; it is just to make a personal explanation.

Papers

Mr Gentleman presented the following papers:

City Renewal Authority and Suburban Land Agency Act, pursuant to subsection 13(2)—City Renewal Authority—Land acquisitions quarterly report—1 October to 31 December 2018, dated 2 January 2019.

Annual Reports (Government Agencies) Act, pursuant to section 13—Annual Report 2017-2018—Chief Minister, Treasury and Economic Development Directorate—Corrigendum.

Financial Management Act, pursuant to section 26—Consolidated Financial Report—Financial quarter ending 31 December 2018.

Annual Reports (Government Agencies) Act, pursuant to section 13—Annual Report 2017-2018—Education Directorate—Corrigenda, dated February 2019.

City Renewal Authority and Suburban Land Agency Act, pursuant to subsection 43(2)—Suburban Land Agency—Land acquisitions quarterly report—1 October to 31 December 2018.

Freedom of Information Act, pursuant to section 39—Copy of notice provided to the Ombudsman—Canberra Health Services—Freedom of Information request—Decision not made in time, dated 14 December 2018.

Lower Cotter Catchment Restoration Evaluation—The Heroic and the Dammed, dated December 2018.

Planning and Development Act, pursuant to subsection 242(2)—Statement of leases granted for the period 1 October to 31 December 2018 dated February 2019.

Climate Change and Greenhouse Gas Reduction Act, pursuant to subsection 12(4)—Annual report by independent entity—ACT Greenhouse Gas Inventory 2017-18, dated 21 November 2018, prepared by Dr Hugh Saddler.

Heavy Vehicle National Law as applied by the law of States and Territories—Heavy Vehicle (Mass, Dimension and Loading) National Amendment Regulation 2018 (2018 No 554), together with an explanatory statement.

Aboriginal and Torres Strait Islander Elected Body Act, pursuant to subsection 10B(3)—ACT Aboriginal and Torres Strait Islander Elected Body—Report on the outcomes of the ATSIEB Hearings 2018—Eighth Report to the ACT Government.

Loose Fill Asbestos Insulation Eradication Scheme—Implementation—Report—1 July to 31 December 2018.

> Annual Reports (Government Agencies) Act, pursuant to section 13—Annual Report 2017-2018—Chief Minister, Treasury and Economic Development Directorate—ACT Government Procurement Board—Corrigendum.

ACT greenhouse gas inventory 2017-18

MR GENTLEMAN (Brindabella—Minister for the Environment and Heritage, Minister for Planning and Land Management, Minister for Police and Emergency Services and Minister assisting the Chief Minister on Advanced Technology and Space Industries) (3.07): Pursuant to standing order 211, I move:

> That the Assembly take note of the following paper:
>
> Climate Change and Greenhouse Gas Reduction Act, pursuant to subsection 12(4)—Annual report by independent entity—ACT Greenhouse Gas Inventory 2017-18.

MR RATTENBURY (Kurrajong—Minister for Climate Change and Sustainability, Minister for Corrections and Justice Health, Minister for Justice, Consumer Affairs and Road Safety and Minister for Mental Health) (3.08): I am pleased that the ACT government's greenhouse gas inventory for the 2017-18 reporting period has been tabled. The annual greenhouse gas inventory provides a comprehensive picture of the territory's emissions. It identifies the sectors responsible for greenhouse gas emissions, which assists us to tackle these sources in pursuit of our legislated target of net zero emissions by 2045 at the latest.

I am pleased to inform the Assembly that for the 2017-18 period greenhouse gas emissions in the territory have reduced by a further 14 per cent. This demonstrates a further decoupling of our emissions from both population and economic growth. The current greenhouse gas inventory estimates emissions from the territory in the 2017-18 period as 3,367.5 kilotonnes of carbon dioxide equivalent. This is the largest reduction we have had in recent years. It reflects a number of changes, including the role of our growing share of renewable electricity. Per capita emissions fell from 9.64 to 8.09 tonnes per person. We continue to be well below our per capita emissions from 1990 levels, which peaked at 11.45 tonnes of carbon emissions per capita.

The defining achievement in this reduction of emissions comes from our renewable energy policy. In the 2017-18 year renewable electricity generation grew from 30 to 49 per cent. This year electricity emissions fell by 27 per cent. This was as a result of a large increase in the volume of electricity acquired by the ACT government from contracted renewable generators. Two of the largest windfarm contracts from our award winning reverse auction process, Ararat and Hornsdale 1, started in the later part of 2016-17 and were in place for the whole of 2017-18.

At this point electricity remains the largest single source of emissions in the ACT, accounting for 44 per cent of emissions. With a move to 100 per cent renewable electricity, the pathway to zero emissions will need to focus on the remaining sectors, especially transport, gas, waste and land use. These sectors are likely to be more challenging and will require greater involvement from the community.

By 2020 the transport sector will be the ACT's largest producer of greenhouse gas emissions, accounting for approximately 62 per cent of overall emissions. The latest greenhouse gas inventory shows that, in the past year, transport emissions have continued their upward trend. The increase was 26 kilotonnes carbon dioxide equivalent, or 2.3 per cent, and is similar to the previous year. Transport emissions currently account for 34 per cent of total ACT emissions.

With the majority of transport emissions coming from private car travel, cars will soon become Canberra's single biggest producer of greenhouse gas emissions. It is essential that we improve the movement of people around our city, especially by increasing public transport and active travel, and reducing reliance on private car travel.

As stage 1 of the light rail commences operation in early 2019, it will provide a high quality public transport option in a busy and growing part of Canberra, and it will soon do so using 100 per cent renewable electricity. The electrification of all transport, including private cars and the public bus fleet, will also play an important part in reducing transport emissions in the future.

The ACT government continues to work towards increasing the uptake of electric vehicles and e-bikes through our transition to zero emissions vehicles action plan. Work continues on transitioning to a zero emission government vehicle fleet, installing new charging infrastructure and providing incentives for consumers to purchase zero emission vehicles. And ACT government public servants now have the ability to salary sacrifice an e-bike.

By 2020 gas is expected to account for 21 per cent of the ACT's total emissions. The latest inventory report reveals that emissions from natural gas decreased by four per cent on the previous year. This comes after a large increase in gas usage in the 2016-17 reporting period.

Residential customers account for well over half of total consumption. This highlights the need to make efforts to reduce gas usage across the territory, but especially in the residential sector. There are good opportunities for this such as, for example, through the expanded use of highly efficient electrical appliances as an alternative to gas appliances. To this end the ACT government, through the energy efficiency improvement scheme, is providing rebates of up to $2,500 to replace gas heating and hot-water systems with more efficient electric systems.

The waste sector produces emissions through wastewater treatment and the release of landfill gas. Any organic material disposed of in landfill, such as garden waste or food waste, results in greenhouse gas emissions due to their breakdown in an oxygen-free environment. Waste emissions currently account for two per cent of the ACT's greenhouse gas inventory but, by 2020, after the removal of electricity emissions, they are expected to account for about six per cent of our total emissions. Emissions from solid waste disposal in 2017-18 were 31 per cent lower than in 2016-17. The reduction was caused by a 26 per cent increase in the volume of landfill gas captured and burnt at the Mugga Lane and Belconnen landfill gas generators. To reduce greenhouse gas emissions in the future, we will need to explore ways to divert

organic waste from landfill and to explore treatment options such as composting and anaerobic digestion.

Industry emissions in the greenhouse gas inventory entirely comprise synthetic gases used in refrigerants and are taken from the national greenhouse and energy reporting system. Emissions have increased significantly as a result of an upward revision of estimates of synthetic gas emissions in the ACT contained in the national greenhouse gas inventory. Estimated emissions from this source accounted for eight per cent of total emissions. These emissions are attributed proportionately to the ACT from an aggregate New South Wales supply and, whilst they may not truly reflect emissions from this source in the ACT, it is the most reputable estimate that can be provided.

Finally, emissions from both land use change and agriculture are small and have shown little change year on year. Through the 2017-18 period land use change constituted a net sink, essentially meaning that land clearing activities in the ACT are less than revegetation efforts.

The ACT released a "living infrastructure" information paper in early 2018 that highlighted the importance of trees, open spaces with grass, and ponds in adapting to climate change. Some living infrastructure can operate as a carbon sink, and helps the city to adapt to the extremes of climate change by providing shade or other cooling effects.

Before concluding I want to note that the ACT is a leader just through its ability to provide an inventory for the most recent financial year. The Australian government inventory, and all other state inventories, are still compiled two years in arrears. This is a testament to our commitment for accurate and timely reporting and monitoring towards our greenhouse gas emission reduction targets.

By doing this we are ensuring greater transparency and accountability in emissions reporting, and we will have a substantially better understanding of the immediate effects of our mitigation actions and progress. This latest inventory is also compiled using best practice methodology.

As we approach our interim target date of 2020, the government continues to seek out new ways to achieve our long-term goals. I will soon be releasing the ACT climate change strategy and action plan 2019-25, and the ACT living infrastructure plan. These will include new actions to continue us on our path towards zero emissions. This inventory shows we have come a long way, but we still have a long way to go. I commend the report to the Assembly.

Question resolved in the affirmative.

Aboriginal and Torres Strait Islander Elected Body 2018

MR GENTLEMAN (Brindabella—Minister for the Environment and Heritage, Minister for Planning and Land Management, Minister for Police and Emergency Services and Minister assisting the Chief Minister on Advanced Technology and Space Industries) (3.16): Pursuant to standing order 211, I move:

That the Assembly take note of the following paper:

Aboriginal and Torres Strait Islander Elected Body Act, pursuant to subsection 10B(3)—ACT Aboriginal and Torres Strait Islander Elected Body—Report on the outcomes of the ATSIEB Hearings 2018—Eighth Report to the ACT Government.

MS STEPHEN-SMITH (Kurrajong—Minister for Aboriginal and Torres Strait Islander Affairs, Minister for Disability, Minister for Children, Youth and Families, Minister for Employment and Workplace Safety, Minister for Government Services and Procurement, Minister for Urban Renewal) (3.16): I am pleased that the Manager of Government Business tabled today the ACT Aboriginal and Torres Strait Islander Elected Body report on the outcomes of its hearings for 2018. I welcome this report, the eighth report prepared by the elected body.

The elected body was established in 2008 under the Aboriginal and Torres Strait Islander Elected Body Act 2008 to provide Aboriginal and Torres Strait Islander people living in the ACT with a democratically elected voice. An important part of this role is the opportunity for elected body members to ask questions of officers from ACT government directorates and agencies in formal hearings. These are modelled on the estimates processes of the ACT Legislative Assembly and the commonwealth Senate.

The elected body hearings have proved to be a successful method of interaction between the government and the community. The hearings result in a body of advice that informs improvements to service delivery and policy development, leading to better outcomes for Aboriginal and Torres Strait Islander people. As the elected body chair says in the report:

> What we are looking for is tangible and measurable outcomes supported by evidence-based solutions which in turn change the day-to-day lives of Aboriginal and Torres Strait Islander people for the better.

I echo the comments made by the chair that, in order to achieve better outcomes for Aboriginal and Torres Strait Islander Canberrans, it is critical that relevant programs, services, policies, and reforms be designed and implemented in genuine partnership with Aboriginal and Torres Strait Islander people and their representative bodies and organisations. The elected body public hearings are an opportunity to explore better ways to co-design and build on successful programs that are delivering tangible incomes in the community.

The report contains seven whole-of-government recommendations and 24 recommendations for specific directorates. The ACT government is considering these recommendations as it continues to demonstrate its commitment to achieving equitable outcomes and opportunities and building an empowered, resilient, and sustainable future for all Aboriginal and Torres Strait Islander people in the ACT.

The 2018-19 budget, for example, committed to more support for family group conferencing for Aboriginal and Torres Strait Islander families at risk of involvement

with child protection; funding for a dedicated Aboriginal and Torres Strait Islander arts officer to strengthen engagement with local Canberra artists; reopening Boomanulla Oval; and more culturally appropriate homes for older Aboriginal and Torres Strait Islander Canberrans.

Most recently, Winnunga Nimmityjah Aboriginal Health and Community Services started delivering health services in the Alexander Maconochie Centre in what I understand is an Australian-first partnership between corrections and an Aboriginal community controlled health service.

ACT government agencies' annual reports now have a dedicated section reporting on Aboriginal and Torres Strait Islander programs, policies, and initiatives. These sections provide the community with far greater clarity on the many ways this government is working to address and overcome disadvantage for Aboriginal and Torres Strait Islander people.

It is also important to recognise that many Aboriginal and Torres Strait Islander Canberrans are doing well and achieving as professionals, entrepreneurs, artists, tradies and leaders in their own communities and more broadly. We have a strong and resilient Aboriginal and Torres Strait Islander community.

The government is determined to build on those strengths and to work with Aboriginal and Torres Strait Islander people to pursue equitable outcomes for all. This requires a concerted and sustained effort, harnessing our resources, and for all of us to remain focused on a long-term, generational commitment that takes advantage of the considerable expertise that exists within both government and the community across the ACT.

The Office of Aboriginal and Torres Strait Islander Affairs will coordinate a whole-of-government response to the 31 recommendations in the report. The government response will be prepared and tabled in accordance with the provisions of the ACT Aboriginal and Torres Strait Islander Elected Body Act 2008.

Madam Assistant Speaker, 2019 will be a busy year in Aboriginal and Torres Strait Islander affairs. The finalisation of a new ACT Aboriginal and Torres Strait Islander agreement will build on our achievements, learning lessons from the previous agreement and seeking to address gaps in our services, policies and programs to deliver the goal of strong families and connected communities. We are also continuing to work with the commonwealth on refreshing the closing the gap agenda, in addition to the continued delivery of services to support Aboriginal and Torres Strait Islander people living in the ACT.

This year will see Canberra as the focus city for national NAIDOC Week celebrations. This year's theme, "Voice. Treaty. Truth.", will no doubt stir debate as much as last year's theme, "Because of her, we can!", stirred hearts.

The Aboriginal and Torres Strait Islander people of the ACT have a voice in the elected body. I thank each and every one of its members for their ongoing commitment to their community. I look forward to continuing the government's

positive partnership with the elected body as we seek to address the needs of Aboriginal and Torres Strait Islander Canberrans.

I commend the report to the Assembly.

Question resolved in the affirmative.

Lower Cotter catchment restoration evaluation

MR RAMSAY (Ginninderra—Attorney-General, Minister for the Arts and Cultural Events, Minister for Building Quality Improvement, Minister for Business and Regulatory Services and Minister for Seniors and Veterans) (3.22): On behalf of Mr Gentleman, pursuant to standing order 211, I move:

> That the Assembly take note of the following paper:
>
> Lower Cotter Catchment Restoration Evaluation—The Heroic and the Dammed.

Question resolved in the affirmative.

Harm minimisation and reduction
Discussion of matter of public importance

MADAM ASSISTANT SPEAKER (Ms Orr): Madam Speaker has received letters from Ms Cheyne, Ms Cody, Mr Coe, Mrs Dunne, Mrs Kikkert, Ms Le Couteur, Mr Milligan, Ms Orr, Mr Parton, Mr Pettersson and Mr Wall proposing that matters of public importance be submitted to the Assembly. In accordance with standing order 79, Madam Speaker has determined that the matter proposed by Mr Pettersson be submitted to the Assembly, namely:

> The importance of harm minimisation and harm reduction initiatives in the ACT.

MR PETTERSSON (Yerrabi) (3.23): What are the chances that I, as someone who never gets the MPI, finally get this one, of all of them? I have always been a strong advocate for harm minimisation measures. I will seize every opportunity to talk about them because, quite simply, they save lives.

As a city committed to restorative justice and evidence-based public policy, we should be focused on harm minimisation strategies. To act effectively we must respond to facts and develop policy that is realistic, measured and proportional to the risks at hand. Far too often debate is dominated by ideological battle lines. The essence of harm minimisation is trust. We trust the individual to make choices that are best for them. They can only do this by having all of the information right there in front of them. It is called an informed choice or, as I like to call it, common sense.

This government encouraged informed choice at Groovin the Moo last year in the form of pill testing. Pill testing does not encourage people to take drugs. People who are using drugs come to learn about the substances they are using through pill testing. They learn about the ingredients that could be in them, like paint or lead. They are

told that, even if the drug is pure, there are risks that can have negative impacts on the person and that it is dangerous. But ultimately we leave the decision to take that drug up to the individual, because we know that just saying no does not work.

The Canberra Liberals do not want people making informed choices. They think they can tell you, "Just say no," and that you will obey. That clearly has not worked. This attitude even costs lives. Every time we send sniffer dogs to festivals and scare people into ingesting all of their drugs at once, we cause harm. Every time we refuse to test pills and we miss a batch laced with dangerous chemicals, we cause harm. Those opposite refuse to help young people because they are more concerned with moralising on drug use. They know their policies do not work. They know that the status quo does not work. But they know how they feel about people who use drugs, and that is what drives them.

Those opposite are happy to stick their heads in the sand, like their New South Wales counterparts. We are seeing their approach across the border, where music festivals are being shuttered due to the obstruction of hard-right conservatives. Make no mistake: if the Canberra Liberals get into power we will see the same thing happen here, if we have not already.

Far too often politicians put their political standing ahead of good policy. We see this all the time with our public response to hard drug use. We must not shame or condemn those who use these substances; we must help them. We put up false barriers to accessing treatments because we are too worried about being seen as kind to these people. These people deserve to be treated poorly in the eyes of many for their apparent moral failures. How wrong they are.

As a community we are responsible for deciding which substances are legal and illegal. The distinction between legal and illegal drugs is often based not on harm but on outdated prejudices and stigma. Cannabis is just one of these substances. It is 46 times less dangerous than alcohol and 90 times less dangerous than tobacco. It is so commonplace that one in three of us have used it, with one in 10 of us having used it in the past year. We criminalise this substance and throw people in jail for possessing even tiny amounts of it. It is madness. That is why I think we need to legalise cannabis.

Community sentiment has shifted, with 54 per cent of Canberrans supporting the legalisation of the personal use of cannabis. Our community does not want to lock up predominantly young people for holding the tiny bit of pot that they so often get punished for. They do not think throwing the addicted in jail is good rehab. And they do not want to support the black market and criminal gangs. The Canberra community believes that it is time we took a stand and joined the progressive parts of the world in legalising this substance.

We have seen the conservative approach to drugs around the world as well. The war on drugs in the United States, for example, has been a massive failure. With an opioid crisis gripping America, we have seen big pharmaceutical companies complicit in pushing addictive substances to patients. We have seen the human misery of the drug trade in Mexico, the major supplier of the United States black market, where

100,000 people have died in gang-related violence. We have seen in the Philippines police literally shoot drug consumers on the street for possessing drugs. Nothing these conservative approaches have ever done has ever dented the demand for these drugs. No bullets or walls can stop demand. Quite simply, only education can do that.

One of the world's leading countries in harm minimisation is Portugal, which took the brave step of decriminalising all drugs in 2001. Portugal's policy rests on three pillars: one, that there is no such thing as a soft or hard drug, only healthy and unhealthy relationships with drugs; two, that an individual's unhealthy relationship with drugs often conceals frayed relationships with loved ones, with the world around them and with themselves; and three, that the eradication of all drugs is an impossible goal. I think that is pretty accurate and I think it is something we need here in the ACT. We need to pursue policies like Portugal's. I am sick and tired of our outdated drug laws. They were often made by moralising politicians more concerned with looking tough on crime than helping people.

Drug consumers do not get better through interacting with the criminal justice system. What madness would lead someone to think that it possibly could? We need drastic changes in our drug laws. I think we should look very closely at the lessons learnt from Portugal. You cannot in any way disagree with the results of decriminalisation in Portugal. Incarceration rates dropped. Drug-related deaths dropped. HIV rates dropped. We could do a lot worse than to follow their lead. At the end of the day we need to be comfortable with our choices, whether that choice is to inform young people of the dangers of drugs, empower them to make informed choices, or quite simply throw a hissy fit and expect them to ignore it.

I cannot imagine why anyone would think young people will listen to a paternalistic government telling them what to do. If you are not willing to build a culture of trust with these young people, they are not going to listen to your advice, no matter how well intended it is.

Visitors

MADAM ASSISTANT SPEAKER: I acknowledge that we have a group of school students aged 10 to 14 years visiting us from China. I welcome them to the Assembly and hope they enjoy today's discussion.

Harm minimisation and reduction
Discussion of matter of public importance

MR RATTENBURY (Kurrajong) (3.30): The Greens welcome the debate today on this matter of public importance. We know that the law and order approach to drug use is not working and that people are dying because of this. We need to take a different approach based on evidence that prioritises keeping people safe, alive and healthy rather than punishing them.

Harm reduction is a key pillar of the national drug strategy. It is about reducing the adverse health, social and economic consequences of the use of drugs for the users, their families and the wider community. It is important to recognise that while illicit

and licit drug use, including alcohol and tobacco, can have a wide range of poor health outcomes, much of the harm related to drug and alcohol use results from the interface with the criminal justice system.

In their recent report, independent think tank Australia 21 noted that the shame, stigma and marginalisation that goes hand in hand with prohibition drug policies stops many families from speaking out or seeking help. They also noted that once people are in the criminal system, continued misuse of drugs and alcohol will, for many, lead to repeated incarceration. Cumulative trauma and institutionalisation impacts dramatically on an individual's ability to gain control over their drug use and to rebuild their lives.

The Greens believe that the problems associated with drug use are best addressed within a health and social framework and that imprisonment for the personal use of illicit drugs is an inappropriate and harmful response. That is why we have led the debate on key issues like pill testing and why we support efforts to legalise possession and use of small amounts of cannabis. These are both significant steps in a long journey of drug law reform that I hope will ultimately see personal drug use treated as a health issue rather than as a criminal issue.

We have had many debates in this place about the benefits of pill testing. The results of last year's pilot backed up what the evidence from overseas had already shown. Pill testing provides an opportunity for young people to engage with health professionals to get advice about their drug use and it can save, and has saved, lives.

Results from the 2018 Canberra pill testing trial showed that six in 10 of those who had their pills tested said that they were surprised by the results of testing. Four in 10 of those who had their pills tested said that they would change their behaviour after finding out what was really in their pills. And three in four of those who brought drugs for testing received alcohol and other drug counselling from the medical professionals on site.

As an attendee at Groovin the Moo in 2018, I was personally able to witness how the trial operated, including seeing potentially fatal substances being identified. From this experience, I know that pill testing makes festivals safer for those who attend, allowing them to have a great day and to come home safe.

On another issue, we will soon debate the question of legalising cannabis possession. I imagine that we will have quite some discussions on that topic going forward. The reality is that many people in Canberra choose to use cannabis right now, despite its illicit status. My focus, both as Minister for Mental Health and as a member of this place, is to reduce the harm that comes from cannabis use by encouraging people to seek support.

We know that people with drug and alcohol problems can wait up to 18 years before they seek treatment because we stigmatise and criminalise people who use drugs. This drives them into the shadows and away from help. Whether a person needs help for a mental health condition, an addiction or a range of other complex social issues that can be associated with drug use, we need to do more to break down stigma and

encourage people to come forward. Removing the criminal offence for possession of cannabis is part of that process.

Of course, as we break down stigma and encourage people to seek help, we will need to make sure our health and drug treatment systems are able to cope with greater demand. This is not an either or question. Alongside drug law reform to keep people out of the criminal justice system, we must also continue to invest in high quality drug and alcohol education and treatment supports.

We also need to keep having conversations with our community about drug use to alert people to the risks, give them evidence-based advice and help them to make informed decisions. To date, across Australia our approach to drug policy has been to just say no, and it is simply not working. Making drug possession illegal and trying to arrest our way out of this problem has failed and it is time for a new approach.

This requires a shift away from the disproportionate focus on law enforcement. In 2009-10, the latest figures that I have been able to find, the drug policy modelling program estimated Australian government spending on illicit drug programs to be around $1.7 billion, with around 64 per cent spent on law enforcement, 22 per cent on treatment, 9.7 per cent on prevention and just 2.2 per cent on harm reduction.

Of course, we also need to recognise that much of the harm that comes from drug and alcohol use is a result of the misuse of legal substances. We know that tobacco continues to cause more ill health and premature death than any other drug. Alcohol-related hospital separations are higher than those related to illicit drugs.

The Australian Institute of Health and Welfare estimated that in 2011, 18,762 deaths were attributable to tobacco, 6,570 were attributable to alcohol and 1,926 were attributable to illicit drugs. Alcohol use was responsible for 5.1 per cent of the total burden of disease and injury in Australia in 2011. In comparison, illicit drug use contributed to 1.8 per cent of the total burden of disease and injury at that time.

It is important that we do not draw an arbitrary line between licit and illicit substances, because they all have the potential to cause harm. As these statistics show, often greater harm comes from those that are legally available. The concept of harm minimisation rests on the assumption that we cannot stop people from using illicit substances or from misusing licit substances. It recognises that while people continue to use drugs, some will continue to experience harm.

Our first priority should be to minimise that harm in any way we can. The Greens will always support an evidence-based approach to drug policy. We call on governments and political parties across Australia to listen to the experts and to move away from the dangerous rhetoric that is continuing to cause significant harm. It is time for a new way to think about these things in Australia. I think what we all agree on is that we want to minimise the harm that comes from drug use. The trick now is to try to have a more sensible discussion on how we make that happen.

MR HANSON (Murrumbidgee) (3.38): I start where Mr Rattenbury left off. Yes, I think that minimising the harm to people through the effects of illicit drugs is the

intent. But it is clear that there are a very different set of approaches that are being considered here that have been proposed by the Greens and the Labor Party as opposed to Liberal Party.

I turn to some of the rhetoric that we heard from Mr Pettersson about people moralising and trying to create a bit of a wedge issue. I just make the point that the Canberra Liberals' position on cannabis is the same as was the Labor Party's position until a matter of weeks ago. Our position on pill testing is the same position that the Labor Party had up until 12 months ago.

As we have heard from the health minister, and we have heard intimated by others, the suggestion that somehow what the Canberra Liberals are proposing is akin to what happens in the Philippines is playing fast and loose, is creating fearmongering, is creating the very scare campaign that we are being accused of. I think that if we are going to have a sensible debate about drug use and about how we can keep people safe, we need to make sure that we do not hear that ridiculous nonsense sort of rhetoric coming from the other side.

The reality is that any effective drug strategy needs to address three elements: supply, demand and harm minimisation. If you play with one of those, if you affect one of those, then you have the potential to affect the other two. If you go after demand, what does that do potentially to harm minimisation and so on? You have to consider the consequence of the approach that you are taking.

I do not support Mr Rattenbury's and the Greens' agenda to legalise drugs. I was just looking at the ABS statistics. The highest death rate from drugs in Australia is now from prescription drugs. He talked about the harm from alcohol, cigarettes and tobacco; that the genie is out of the bottle. Do we want to take the genie out of the bottle on a range of these drugs when the evidence shows that simply legalising them does not reduce the harm and the death rates when you consider that it is prescription drugs now that are causing so much of the harm?

I think we have to be careful when we are sending this message—be it a scare campaign against what might be happening or otherwise—that illicit drugs are fun and safe and that we should all be taking them. I refer to something that should give us caution. It is from Mr Rattenbury's Facebook page. He has a poster saying, "Welcome to the party! Just legalise it," and a picture of marijuana.

I think when you have a Greens logo saying, "Welcome to the party," is that meaning that smoking drugs is all a big party? Or is that an attempt to get people who use drugs to be attracted to the Greens party because of their liberalised drug policy? I think we have to be very careful, as Mr Pettersson was warning and was creating a fear campaign to an extent, that the policies that we adopt are based on harm minimisation, not on vote maximisation. I seek leave to table that snapshot of the poster from Mr Rattenbury's Facebook page.

Leave granted.

MR HANSON: I table the following paper:

> Welcome to the party! Just legalise it, prepared by The Greens.

I ask the question: when it comes to things like harm minimisation—take the issue of cannabis—what is the greater harm? Is it a fine that someone might get as part of the deterrence to try to reduce demand for the consumption of cannabis or is it schizophrenia? That is sadly the case. I think there is much evidence out there from the experts. I quote from the Australian Institute of Health and Welfare:

> Ongoing and regular use of cannabis is associated with a number of negative long-term effects. Regular users of cannabis can become dependent and commonly reported symptoms of withdrawal include anxiety, sleep difficulties, appetite disturbance and depression

The 2016 national drugs strategy household survey found a significant increase in the proportion of past month and past 12-month cannabis users that reported mental illness and "high to very high levels of psychological distress." The AMA found that cannabis can cause a fivefold increase in users developing psychosis and that maternal and paternal use can lead to similar risks for unborn children.

A recent study by Duke Health in the US found that THC can alter the genetic structure of a user's sperm. That is why in its position statement on cannabis use, the AMA supports the current approach and states that the personal recreational use of cannabis should be prohibited. Psychosis does not sound much like a party to me. That is what Mr Rattenbury is pushing out there.

There is significant evidence and serious academic research online. I will seek leave in a moment to table a piece of academic research from a decade ago, from *World psychiatry*, the official journal of the World Psychiatric Association. I refer to an academic paper titled "Cannabis use and the risk of developing a psychotic disorder."

I do not have time to go through it in detail now but I will table it because it refers to numerous other studies, one study including over 50,000 people as a longitudinal study and the results from that. When people out there say, "There is no link between cannabis and mental illness," that is not true. There is evidence. There is longstanding researched evidence that there is a causal link. I seek leave to table that research.

Leave granted.

MR HANSON: I table the following paper:

> Cannabis use and the risk of developing a psychotic disorder—Copy of article from World Psychiatry—Official Journal of the World Psychiatric Association.

I will move to the issue of pill testing. Some statistics were provided on what happened at the trial in Canberra. One figure that struck me was that when people had their pill tested and it showed that it was pure, they kept that tablet. Often the tablets that people discarded were those that did not have drugs in them or did not have many drugs in them. But when they found, "Yes, it has a high quantity of MDMA," up to 97 per cent of people went away and took that tablet.

The problem with that is that people are then going away and taking potentially a high quantity of drugs and that it is the MDMA that is killing people in many cases. I refer back to Anna Woods, the 15-year-old who died about 20 years ago. That is why her father is opposed to pill testing. Even if your pill is tested, we see that 97 per cent of people are off taking those pills with a high purity of MDMA, and it is killing them.

As Andrew Leibie, the toxicologist said, statements by politicians that pill testing would help "keep people safe" were potentially misleading and that pill testing "is based on the false assumption that if you do know what you are taking, it is safe—something that is absolutely untrue. MDMA is not a safe drug."

The state Health Commander of Ambulance Victoria said about drug testing, "It is a poison. You can test a poison all you like; it remains a poison." One of Australia's leading toxicologists, Dr John Lewis, has said, "It will not work and it is fraught with dangers." The *Internal Medicine Journal* said in November 2016, "Pill testing at best gave an artificial 'shine of safety'".

The problem is that when you have pill testing with 97 per cent of people taking high purity pills, and the government and police sanctioning this, you send a very dangerous message. Indeed, after Groovin the Moo in Canberra the ABC went to Bendigo and spoke to some young people at the Bendigo festival. What did these young people say? I will quote what they said: "The fact that they can test it and make sure that you are going to be safe is definitely a good thing."

Another festival goer said, "It could make you want to take more drugs. It would definitely give you peace of mind." And that is the problem. Pill testing is out there giving young people peace of mind, in their own words. They are saying that it will make you want to take more drugs. In their words, they are saying that it is safe and that that is a good thing, when it is not, because what we know is that 97 per cent of people at Groovin the Moo with high purity drugs took them anyway. What we know is that MDMA in many cases is what has been killing young people, not what it has been mixed with.

We have looked at the evidence. We have listened to the experts. We have looked at the advice. We have looked at the research. We have done our homework. Let us make sure when we move forward that people are not out there trying to take advantage of a situation when we want to keep people safe and are not using this as some sort of quasi-political campaign to attract people by saying, "Let's join the party."

MS CODY (Murrumbidgee) (3.48): I would like to thank Mr Pettersson for bringing this MPI forward and for his work as a champion of harm minimisation. Whilst Mr Pettersson's current proposal for drug law reform is getting headlines across Australia and the world, and his growing legion of fans are producing the dankest memes, it is important that other areas of harm minimisation are highlighted in this debate.

Today I would like to highlight the importance of harm minimisation in health policy, especially sexual health. Today, being Valentine's Day, is the most important day of the year to be discussing the importance of harm minimisation for sexual health. It is also one of the most pleasurable days to be speaking about sexual health, as it is National Condom Day, a day when it is encouraged that everyone should be able to buy condoms as freely as they would buy a rose.

This year's theme is "consent is hot". SHFPACT have done up special condom packs for that. Madam Assistant Speaker, I seek leave to table a document.

Leave granted.

MS CODY: Thank you. I present the following object:

National Condom Day 2019—Box.

Whilst I have previously avoided discussing what I think is sexy in this chamber, today is the day that changes.

Members interjecting—

MADAM ASSISTANT SPEAKER: Members, please! Members, a little bit of quiet so Ms Cody can finish.

MS CODY: Consent is sexy. Safe sex is sexy. Condoms and dams, used correctly, are sexy. Being comfortable and open about sexuality is sexy. What is not sexy is prudishness. What is not sexy is the use of fear of the unknown in an attempt to prevent people expressing their sexuality and therefore exposing them to risk. A "just say no" approach to sexual education often leads to unwanted pregnancy and sexually transmitted infections. What is not sexy is harassment, coercion or rape.

In the past year this chamber has faced some complex debates about the law of consent. I would not want to disrespect the important contributions of Ms Le Couteur or anyone else, but this afternoon I will focus on consent between the sheets rather than in the courtroom.

This morning I was reviewing some excellent material from Sexual Health and Family Planning ACT which identified five points as part of their national condom campaign. Point 1 says that consent should always be explicit. That means asking to bonk somebody, not just rubbing your hand up their spine, expecting it. Point 2 says that you can always change your mind. That means that if you want it out, it is out. Point 3 says that it is good to check in with each other. It is not just condoms and skills that make sex better; it is cooperation. Good sex is a team sport. Point 4 says that it is okay to slow things down or stop. It does not matter how excited your bed buddy is, you have the right to slow things down, take a break or stop. Point 5 says that drink and drugs affect consent. If people are drunk or wasted on drugs, they are not able to consent. They also might be a bit of a bum shag. Consent is hot, and safe sex keeps it that way.

Harm minimisation does not stop at prevention. The ACT government takes harm minimisation much further for those who have gone too far and caught something. HIV counselling and support services are provided via the AIDS Action Council of the ACT and Capital Health Network. Our nurse-led walk-in centres provide free chlamydia testing. Hepatitis ACT provides resources to minimise the impact of hepatitis C and B in our community. SHFPACT provide testing, treatment, contraceptive advice and free condoms as well as education programs for those living with a disability. They also provide free STI tests for concession card holders, youth and students.

In the last financial year the ACT government funded the distribution of nearly 22,000 condoms. That is an awful lot of condoms that were used in a harm minimisation way to help protect against sexually transmitted infections, HIV and unwanted and unplanned pregnancies.

Not every child is raised in a household where sexuality and sexual health are discussed openly and honestly. I am proud to support a government and health minister who step up where prudish parents fail. The principles of harm minimisation say that that is the right thing to do. We need to keep getting the message out.

The ACT government does that through its support of a range of sexual health and education programs, but we can also do it here by taking leadership and saying no to prudishness, giving a message that you should put it on before you get it on, a message that should cover all members.

Safe, consensual sex is a great thing that I hope everyone in Canberra gets to enjoy. May your action always be protected and your union have no scabs.

MR RAMSAY (Ginninderra—Attorney-General, Minister for the Arts and Cultural Events, Minister for Building Quality Improvement, Minister for Business and Regulatory Services and Minister for Seniors and Veterans) (3.55): I thank Mr Pettersson for bringing the issue of harm minimisation before the Assembly today. Harm minimisation and harm reduction are important matters which at their core represent this government's focus on helping people; in particular, vulnerable people.

Whenever we consider a new policy, a new system or a new law, the tangible impact on people's lives must be considered in focus. A commitment to harm minimisation means that in my role as Attorney-General I am singularly focused on making sure that our legal system supports rehabilitation and the restoration of the losses to people, families and our community that come from addiction. If there is a way that our laws and our systems in government can reduce harm, we must and we will pursue it. Our approach to the laws around drug, alcohol and gambling harm shows that we are getting right down to business.

It is clear that there is no one simple answer to the problem that we face from the harm that comes from drug and alcohol use. However, we can say definitively—and this government accepts—that a prohibitionist policy has not worked, does not work and will not work.

Criminal laws hold people responsible for their wrongdoing. Charging and convicting a person of a crime is one of the most stern and concrete ways that our community will express its disapproval of that person's behaviour. The criminal justice system certainly plays an important role in upholding our values and addressing the wrongs that are committed against the victims of crime. But expressing our values is not all that we seek to achieve in criminal justice, and this government is firmly committed to a justice system that is restorative and rehabilitative.

When it comes to people who face the courts primarily as a result of addiction, it is important to focus on the evidence that we have about their behaviour. The evidence is overwhelming that treating addiction as an issue of right and wrong is not only ineffective, but simply does not stack up with what we know about the biology and the psychology of drug use.

The ACT government is working hard to ensure that our policies reflect the latest and the strongest evidence. Other members here today have spoken about the evidence-based approach to drug and alcohol abuse, and to sexual health. That same commitment to turning evidence into action is part of my approach with the courts.

The evidence is strong that if we provide the right support services to people with drug and alcohol problems at the right point in their contact with the judicial system, we can address these dependencies and in turn we can build more resilient people, families and communities. That is why this government has made the establishment of the drug and alcohol court one of its top priorities. This is an example of therapeutic justice, which prioritises the treatment of the causes of crime and the prevention of recidivism.

The Minister for Health and Wellbeing and I had the privilege of joining Judge Roger Dive in the Parramatta Drug Court last month to witness firsthand what a harm minimisation focus is able to achieve. We saw that, through building relationships and surrounding vulnerable people with support, new beginnings are possible and the root causes of offending can be addressed. I would like to place on record our appreciation to Judge Dive and to all of the officers and the people involved at Parramatta for their generosity to us on that day.

Here in the ACT, the development of a drug and alcohol court has been focused on relationships. Corrective Services, the Director of Public Prosecutions, Legal Aid ACT and ACT Policing will all have a role to play. I would like to make particular mention of Chief Justice Murrell and Justice Burns for their strong support in the process.

Also in my portfolio, harm minimisation is extended to more than just laws about crime. This government has taken action to ensure that our laws help minimise gambling harm and to support the responsible consumption of alcohol. For example, changes to licensing fees for liquor sales in 2017 are funding the development of a new campaign to support responsible drinking.

Consistently over this term, we have worked with the community and with clubs to implement a more robust gambling harm prevention set of rules. That has included boosting funding for the problem gambling assistance fund to 0.75 per cent of gross gaming machine revenue. In line with the Gambling and Racing Commission's adoption of a public health approach to harm minimisation, that fund will soon be renamed the gambling harm prevention and mitigation fund. Over this term, we have restricted cash withdrawals from EFTPOS machines at clubs. And after a series of round tables with experts, with club industry representatives and with voices from across the community, we are redrafting our gambling code of practice to provide even stronger protection.

Across our laws and across our services, this government has, time and again, demonstrated its commitment to preventing and minimising harm. Our approach to drugs, to alcohol and to other sources of harm will always focus on evidence rather than ideology. And evidence about how we can make life better for individuals, families, friends and our whole community will continue to guide our actions. We approached this term determined to ensure that people, especially the most vulnerable people in our community, get the support they need. We have delivered, and we will keep delivering on our commitment to make Canberra safer, stronger, and more connected. Again, I thank Mr Pettersson for bringing this important matter to the Assembly today.

MR RATTENBURY (Kurrajong): I seek leave under standing order 46 to make a personal explanation.

MADAM ASSISTANT SPEAKER (Ms Cody): Do you claim to have been misrepresented?

MR RATTENBURY: Yes.

MADAM ASSISTANT SPEAKER: Please proceed.

MR RATTENBURY: During the matter of public importance, Mr Hanson produced a graphic from my Facebook page. He subsequently tabled it in this place and he proffered a number of interpretations of the words in it. I want to assure Mr Hanson, and all members of the Assembly, that none of the interpretations Mr Hanson suggested is, in fact, the intent of the said Facebook square. It is actually reflective of the change in the Labor Party's position, which Mr Hanson himself identified in his remarks.

In both 2004 and 2014, the Greens brought forward legislation in a similar vein to Mr Pettersson's and—

Members interjecting—

MR RATTENBURY: This is an explanation. Just bear with me.

MADAM ASSISTANT SPEAKER: I believe Mr Rattenbury is getting to the point.

MR RATTENBURY: In 2004 and 2014 the Greens brought forward legislation which the Labor Party did not support. They have now changed their position. There is a well-known expression "Welcome to the party," which is "Thanks for getting on board with the same position."

Mr Hanson interjecting—

MR RATTENBURY: Your serial rudeness does you no service, Mr Hanson. I always have hope that Mr Hanson will become a decent person one day, but I continue to be disappointed.

Discussion concluded.

Administration and Procedure—Standing Committee
Proposed reference

Debate resumed.

MRS DUNNE (Ginninderra) (4.04): I wanted to speak to Ms Lee's very important motion today because I have noticed a change in attitude over my time here to members of the Legislative Assembly's access to government schools. But, before I do, I just cannot go past some of the comments made by Minister Berry this morning. The one that really stood out to me reminded me of—I think probably most of us are too young to remember—an absolutely unbelievably excruciating train wreck of an interview between Joh Bjelke-Petersen and Richard Carleton where Richard Carleton asked Mr Bjelke-Petersen over and over again, "Mr Premier, what do you understand by separation of powers?" I do not think even in his wildest flight of fancy even Joh Bjelke-Petersen would have thought the issue of keeping duly elected members of parliament out of government-funded schools was an issue of separation of powers.

I think today we have seen a member of parliament describe her own ignorance in relation to the issue of separation of powers. This woman is a minister responsible for the education of people in the ACT and she ended up saying that members of parliament could not go to government schools because it was an issue of separation of power. Ms Berry needs to apologise to the people who have actually died or fought for the maintenance of the separation of powers and parliamentary justice across the world because she has just let them down, as she has let down the people of the ACT by her policies and approaches to letting members of this parliament have access to schools.

I have been around here for a long time. I was the shadow minister for education for a brief time but I also worked with members across the board in relation to educational matters. For instance, when Mr Doszpot was the shadow minister for education, successive ministers for education were courteous enough to let him and other members of the opposition visit schools, at appropriate times when the matter was organised appropriately with the school, with an official from the minister's office or from the directorate.

There have been occasions when I have discussed this with colleagues recently. Last year I did not have an opportunity to attend a couple of the prize-givings by schools in my electorate—ones where I have routinely for 16 years been invited to attend and to give out prizes. But last year the opportunity to give out prizes was not available to members. That means that there was a change of policy in this place. It must go to the minister's office. Suddenly this invite by schools who had been routinely inviting members of parliament of all stripes—federal and ACT, Greens, Labor, Liberal who were all given opportunities to hand out prizes—has gone.

There is something going on, and it seems to me that Minister Berry wants to close up schools from scrutiny. And the straw man that she drew up today about this being an act of selfishness by Ms Lee demanding unfettered access to ACT schools is absolutely risible. If Minister Berry even had the courtesy to listen for a couple of minutes to what Ms Lee said, it would be clear that she was not asking for unfettered access; she was asking for polite and reasonable access because this is being denied to her and to other members of this Assembly in what is supposed to be an open and democratic society.

I commend Ms Lee for bringing the motion, for the measured tone in which she brought the motion, and I condemn Ms Berry for her overreach and her highhandedness in response to this motion and overall her highhandedness in response to the reasonable request for access to government schools.

MS LEE (Kurrajong) (4.09): I thank Mrs Dunne and Minister Rattenbury for their support today in my quest to get a clearer, more equitable, efficient and more transparent process for MLA school visits. Mr Rattenbury, as former education minister, and Mrs Dunne, as former shadow education minister, will be well aware of the importance of school visits. And I am sure they also know how much MLAs and others appreciate and respect the opportunity to be invited to a school.

As for Minister Berry's contribution, where do I start? Clearly her approach was to take this genuine Assembly business debate and turn it into a personal attack on me, my intelligence and my integrity, that I apparently have no idea what schools are for. Of course I know what schools are for and what their role and value are to our community. The real concern is whether the minister knows. Her desperate need for control demonstrates she is clearly unwilling to show us.

Who has made it all about the other MLAs than her just now? What fantasy, to suggest all 25 MLAs—and that includes the Chief Minister, so I assume that she has put him on notice too—would storm any single school at any hour of the day, unannounced, and start interrogating staff and students! Where does she get this stuff from? If she wants to talk about legal issues—let us say that I do not know about her—I have more respect for everyone sitting in this chamber that they would and could not fathom doing anything like the made-up, hypothetical, alarming situations that she speaks of.

Her amendment is just another complete rewrite, as is the usual practice, replacing every single paragraph outlining the issues with a self-serving pat on the back. She

ignores the fact that, whether she likes it or not, there are some concerns and some confusion about the existence of these protocols, whether they are widely publicly available, whether they are appropriate and whether they inadvertently may cause confusion, risking MLAs not being able to carry out their duties properly or, worse, to inadvertently breach the code of conduct.

Anyone would think that she is the first education minister to have ever had the portfolio. As I said in my earlier speech, I am aware of previous ministers who are far more gracious, far more considerate of the role of an MLA, and who value the role of local members and their need to accept community invitations at schools. The minister's contribution does nothing more than demonstrate her ever-increasing level of incompetence in handling the education portfolio. It is clearly beyond her. She is out of her depth; so she resorts to personal innuendo and attack. Of course it is becoming a feature of some other MLAs on that side as well.

Clearly and as usual, the minister—

Members interjecting—

Mr Hanson: Madam Deputy Speaker, on a point of order, I cannot hear Ms Lee's speech because of the interjections from those opposite, and I would ask you to remind them of standing orders with regard to interjecting.

MADAM DEPUTY SPEAKER: Thank you, Mr Hanson, but I will remind members—

Mr Hanson interjecting—

MADAM DEPUTY SPEAKER: Mr Hanson, you just took a point of order about being unruly. I will remind members that constant interjection is unruly, and it is very difficult to hear Ms Lee. Not everybody's voice travels as far as Mr Hanson's or Mr Barr's.

MS LEE: Clearly, and as usual, the minister did not read the motion and did not listen to what I said. She gets up with her prepared scripts, and sometimes I have to wonder whether she actually understands what she is reading.

Where I have put a genuine call for the Assembly's tri-partisan committee to review the existing protocols, talked about how valuable visits to our schools are and thanked her for facilitating the visits that I have had the opportunity to have, she responds with made-up, hysterical diatribe, personal attacks and some ridiculous notion that allowing an MLA to visit a school will lead to a breakdown of the separation of powers.

In fact, it was in part a consequence of the appalling disrespect shown to the Speaker by the minister. It was also as a consequence of schools being left in the dark at a very busy time of the year, waiting to find out the minister's decision on attending, not attending or sending somebody else. It is extremely rude and lacks common courtesy to not advise.

It is surely more than a mere coincidence, then, that on Monday afternoon, just a short time after this motion was discussed at the admin and procedure committee, an email came around from Minister Berry reminding us all that we must not trespass on school grounds. Apparently one of the first tasks that the minister did when taking up the portfolio, along with sorting out school violence, safe places, overcrowding, any other issues that we have subsequently brought to the attention of the Assembly, was to ask her directorate to refresh the existing protocol for public school visits. And apparently the protocol is publicly available. It is not so publicly available, however, that all schools are aware of it. And the Speaker was also apparently unfamiliar with it.

The minister's email is in part superfluous and in other parts patronising in the extreme. It assumes that schools and school leaders do not know how to manage visitors or that visitors and MLAs do not understand that a school is managing circumstances which may make a visit inappropriate. She goes on to say that she has agreed, at points in time, for MLAs of all parties to participate in additional activities in government schools. How very generous!

I note the email concludes with a comment that the minister is happy to discuss this further during this debate but, as we have just seen, her contributions to this debate have been defensive, full of personal attacks and ridiculous fantasies which show a complete lack of respect to our school leaders and all MLAs in this chamber including the Speaker.

I brought on this matter for discussion because I think it is important that school communities have access to all the elected MLAs in this chamber and not just those that the minister or her office deem to be suitable. It is equally important that MLAs have some access to government schools. I know how valuable my visits have been. And in case she still does not get it, I will repeat: I am not in any way advocating, lobbying for or asking for a free-for-all where MLAs can pop into government schools whenever they please. But just as Minister Berry goes to great pains to say she apparently has faith in the teaching staff and school leaders, she should also extend that faith to managing a simple visit from an MLA.

I brought this motion to the Assembly for discussion because I would not want to see further embarrassment to MLAs in this place or difficulties and confusion for schools who have invited MLAs in good faith to attend an award ceremony or any other event, only to be put in this awkward position to either admit they were not aware of the protocols or—and I note she has denied this but it has been reported—of having to uninvite an MLA.

I cannot begin to understand what the minister is so terrified about in not allowing MLAs to accept invitations to schools that schools have clearly thought about before they extended them. Is she terrified that schools might actually appreciate the interest, understanding and acknowledgement shown by MLAs?

I welcome the amendment by Mr Rattenbury. The Canberra Liberals will be supporting it.

Mr Rattenbury's amendment to **Ms Berry's** proposed amendment agreed to.

Ms Berry's amendment, as amended, agreed to.

Original question, as amended, resolved in the affirmative.

Personal explanation

MS BERRY (Ginninderra—Deputy Chief Minister, Minister for Education and Early Childhood Development, Minister for Housing and Suburban Development, Minister for the Prevention of Domestic and Family Violence, Minister for Sport and Recreation and Minister for Women) (4.17): I seek leave to make a personal explanation under standing order 46.

MADAM DEPUTY SPEAKER: Leave is granted.

MS BERRY: In my speech this morning on the debate around visits to schools I said very clearly that my office and I have never instructed the directorate to uninvite members of this place to visit schools and that information that was provided in the *Canberra Times* article was incorrect. Ms Lee has ignored the statement I made this morning and has again implied that I uninvite members from schools. That is not the case at all.

Madam Deputy Speaker, my office has not had contact from you on visits to schools to give out prizes. If that had been the case I am sure they would have been able to go ahead. I was checking before I came down here, but I have not seen any requests from you to visit schools to give out prizes. I do not think that would have been an issue under the protocols that have been around since before I was the minister.

Future of education implementation plan
Ministerial statement

Debate resumed.

MS LEE (Kurrajong) (4.19): I welcome the minister's commitment to reporting back to the Assembly as required by motions debated and passed last year. To refresh the Assembly's memory, the motions that prompted this statement today were both brought on for debate by the Canberra Liberals. As is the government's usual practice, both motions were amended to avoid any acknowledgement of failings and any real commitment to delivery other than what we see today, that is, to report back to the Assembly. Well, this statement ticks that box; yes, the minister has reported back.

The first motion by me was a lengthy itemisation of evidence that our schools are failing our students. It was a call for the government to acknowledge those failings in ACT schools and commit to change to improve academic standards. But of course the amended motion made no acknowledgement of the fact that the minister had entirely misrepresented the comments of her own commissioned research from Professor Lamb, and he was forced to correct her publicly. She made no acknowledgement that

Professor McIntosh had called out the failings in ACT schools and that serious work needed to be done to better understand what is going wrong in our teaching. The minister completely ignored the evidence from the Auditor-General about the failings in our academic standards. It was just another, "Aren't we great", and "We'll come back in February to remind you how great we are".

There are many quotes about learning from failure but, equally, if you never admit your mistakes you never learn from them. I cannot help but think that this is where the minister sits. The rhetoric in this paper is all well and good. We hear not for the first time and not as any original thought from the minister as the author that we need to place students at the centre of their learning and we need to empower teachers to meet the learning needs of all students. And down the line we go to the standard dot points and the same buzzwords of equity and strong communities.

I have said before and I say again, no-one will argue with the wording and the rhetoric behind these words. But the minister cannot continue to come into this place with speeches and statements prepared for her that provide no hard evidence of improvement in educational outcomes. She said more evidence confirmed that the government is on the right track. Well, minister, I challenge you to read *Hansard* of only this week and listen to the litany of failings in your ability to know what is going on in our schools and your inability to protect and keep our children safe in our schools. Is that the right track you refer to?

Ms Berry: A point of order. Madam Deputy Speaker, standing orders require that comments in this place are to be directed to you and not to me or any other member on the floor.

MADAM DEPUTY SPEAKER: I had not noticed that Ms Lee was not talking to me, but I remind members to direct their comments to the chair.

MS LEE: Thank you, Madam Deputy Speaker. Is that the right track the minister is referring to? Is that the strong community we are building here? We know there are changing demographics in ACT schools. We have a rapidly growing population, and this is evidenced by the significant number of schools that are at capacity. But that is almost the only clear assessment we have of school composition.

We have gifted and talented classes, but the information is not collected centrally so we do not know where those classes are. How do we know where the demand for more or less of them might be? How do we know which schools have students both years ahead of their peers and those years behind their peers if data about students in gifted and talented classes is not kept? Equally, students with complex needs and challenging behaviours are also not identified centrally if they do not also have a disability that triggers an NDIS or individual learning plan.

If the minister is serious about meeting the learning needs of all students surely that must include our talented students as well as our students who are struggling. The minister's approach and belief is that the only relevant factor in a child's learning pathway is where that child lives. Where you live is the only assessment the minister believes is valid and the only thing that matters. We hear somewhere in the statement

that a robust implementation plan is forming. We are more than half way through the term so she would do well to hurry up if she seriously wants families to see the benefits of those plans.

I doubt that, with a workforce of 5,000 teachers and teaching assistants and an enrolment of 48,000 students in 88 government schools, the engagement of four skilled teachers with expertise in pedagogy, learning difficulties and literacy and numeracy programming will make a huge difference, just as pocket coaching programs for school leaders is only a small, slow pathway to improvement.

I note the reference to improving the capability of teachers to use data to inform the learning needs of individual children. If that is at least an acknowledgement that concerns about NAPLAN are in part due to a lack of support for schools to understand and interpret the data that standardised tests like NAPLAN provide, then I look forward to seeing how that increased knowledge will assist schools in addressing the individual needs of students who are struggling.

We then come to the second of the motions to which this statement responds, that of the lack of language pathways. Again it is not a response; it is just another "Watch this space. We have a plan to scope a review of languages that will lead to an action plan."

I remind the minister that the amended motion which passed the Assembly last year specifically called on her to develop an action plan to encourage, improve and support language education in Canberra schools as part of implementing the future of education strategy. That was to be brought back for report in February. The motion did not call for a plan to have an action plan. In the meantime students in the current system trying to work out language pathways from primary through to high school or even college will have given up.

I welcome the acknowledgement that recruitment and retention of specialist language teachers is a challenge. It was after all a point I highlighted in my motion. It is more than timely that the minister's review will look at language pathways because, after all, she has a published a policy on her directorate's website that claims one exists when we know that it does not. At best, it is a pathway that is currently full of cracks and dead ends.

Just to be clear, in the event that the minister tries at any stage to repeat her made up allegation that the Canberra Liberals were proposing to deliver 40 languages across all preschool to year 12 programs, I draw her attention to my motion which called for an audit of current languages. Her mention of empty promises in that context more accurately relates to what she claims is being done under the current ACT education system under her leadership. We know it is not, as do parents of students wanting to pursue a serious study of language who have spoken to us of this serious failure in program delivery.

I note the reference yet again to universal free early childhood education for three-year-olds. When this was first raised I sought a briefing. Frankly it was a complete waste of time. The minister had no detail to offer and admitted that it was an

aspirational goal. So I can only continue to consider this to be a thought bubble. Given that her government cannot even provide spaces for the four-year-olds who want a place in preschool the minister is being deluded at best.

I am not sure that the environment directorate should not be seriously concerned that the minister has wasted so many sheets of paper to tell us nothing. Yes, it meets the Assembly's requirement to report back to the Assembly. Does it tell us anything new? No, it does not. I hope Mr Rattenbury is also as disappointed as I am. Does it provide an increased level of confidence in the competency of this minister? It does not do that either.

Question resolved in the affirmative.

Planning and Urban Renewal—Standing Committee
Statement by chair

MS LE COUTEUR (Murrumbidgee) (4.27): Pursuant to standing order 246A, I wish to make a statement on behalf of the Standing Committee on Planning and Urban Renewal relating to statutory appointments in accordance with continuing resolution 5A. I inform the Assembly that during the period 1 July 2018 to 31 December 2018 the standing committee considered no statutory appointments.

Consumer Protection Legislation Amendment Bill 2018

Debate resumed from 29 November 2018, on motion by **Mr Rattenbury**:

> That this bill be agreed to in principle.

MR HANSON (Murrumbidgee) (4.29): The Canberra Liberals will support this bill, but I will make some comments on its provisions. The bill makes amendments to the Eggs (Labelling and Sale) legislation and the Fair Trading (Fuel Prices) Act. I will address each individually.

The egg-labelling amendments change the current definitions of terms such as free range to make ACT labelling consistent with the commonwealth government's new Australian Consumer Law (Free Range Egg Labelling) Information Standard. However, there seems to be a dispute here between what the ACT minister, Mr Rattenbury, would like to see on the labels and what the new commonwealth standard requires to be shown.

Specifically, the new standard for free range requires a maximum of 10,000 hens per hectare. The minister's view is that free range should only be a maximum of 1,500 hens per hectare. What this has resulted in is that the bill will require that ACT egg labels state, "These are free-range eggs but the ACT government supports a free-range stocking density of 1,500 hens or fewer per hectare." This label must appear regardless of how many chickens there actually were per hectare or what the national standard actually is.

The explanatory statement claims that this will give context for consumers to allow them to make a comparison between the stocking density listed on the carton and the ACT government's preferred maximum stocking density. I think it could equally cause confusion, to be frank, or give a false impression.

What is clear, though, is that the Greens member of the government is being forced to comply to a large extent with the national standard and is pretty cranky about it. All retailers will now have to share and promote this information in the ACT when there is an endeavour to have a national standard. We will not be opposing this today but I do not think that it is necessarily helpful.

The other substantive amendments relate to fuel and the signs that are at the front of service stations. They prevent retailers from displaying a conditional discount on the fuel price board. This amendment I think has more legitimacy, to be frank, than the previous one.

Under the bill, the fuel price board at the petrol station must display the actual price of the fuel as it is being sold at the pump, not as it includes any discounts that may or may not apply to the customer as they approach the station. I filled my car up this morning and was not sure whether I had any Woollies points on my card, so I did not know what price of fuel I would be paying, whether it was the 141c or the 145c per litre, regardless of what was on the board.

The bill also requires that, as the fuel prices change, the changes must be applied to the pumps and the fuel price board in a prescribed order to ensure that the price at the pump is always the same as or lower than the price on the board. As fuel prices are becoming a growing area of concern for Canberrans, laws that promote frank, direct and, most importantly, consistent information on petrol pricing are a worthwhile step forward in helping Canberrans get the best possible deal.

Noting all of the above comments, we will not be opposing this bill.

MS CHEYNE (Ginninderra) (4.33): Many of us are trying our very best to make more informed decisions when it comes to purchasing groceries at the supermarket. We care about what we place in our baskets and our trolleys and we care about the food that ends up on our plates.

If there is one scenario where consumers will often go the extra mile to understand where their produce has come from and how it has been produced, it is in the selection of eggs. Walk down any aisle and you will see various labels on egg cartons, including caged eggs and free-range eggs. But these labels do not quite paint the full picture.

The introduction in April last year of the mandatory Australian Consumer Law (Free Range Egg Labelling) Information Standard 2018 meant that a carton of eggs could be labelled free range if it was produced by hens subject to a maximum stocking density of 10,000 birds per hectare. We do not think that is good enough. The ACT government has long supported a maximum standard of 1,500 hens per hectare.

That is a big difference from 10,000. As you can see, when it comes to animal welfare, we have much higher standards.

Unfortunately, we need to be consistent with the federal legislation and ensure our labelling laws are consistent with the new mandatory commonwealth standard. Although we are unhappy with this federal change, we want to make it clear that our standards are much higher.

Of course I am supporting this bill today. This bill includes an extra provision that paves the way for new signage to better inform Canberra shoppers weighing up their choices.

Under these changes, all retailers selling free-range eggs across Canberra will be required to display a sign that clearly states that the ACT government supports a maximum stocking density of 1,500 hens per hectare. The bill also amends the eggs act to mirror the commonwealth information standard requirement of clearly displaying the stocking density of free-range eggs on packaging. This means that shoppers will be able to easily compare the stocking density that is listed on a carton of eggs with the ACT government's preferred stocking density limit. These are simple changes, but ones that will make it easier for consumers to make an informed decision in line with their own ethical values.

This government is a long-time advocate of more humane stocking densities. We are not the only ones. The CSIRO, CHOICE, and the RSPCA are just a few of the organisations that support a standard of no more than 1,500 hens per hectare when it comes to the production of free-range eggs. Many of my constituents share the same standards. My office has received countless emails from residents concerned about the federal changes to egg labelling, Canberrans who care deeply about the welfare of the hens laying our eggs. Although we would prefer much stricter conditions for the labelling of eggs as free range, we are doing what we can within the federal limitations to uphold our commitment here to animal welfare.

This is a government that cares about the treatment of hens and cares about the consumers who are trying to do the right thing at the checkout and at the dinner table. The Consumer Protection Legislation Amendment Bill 2018 will go some way to improving the information available to consumers purchasing eggs throughout Canberra. I commend the bill to the Assembly.

MR RATTENBURY (Kurrajong—Minister for Climate Change and Sustainability, Minister for Corrections and Justice Health, Minister for Justice, Consumer Affairs and Road Safety and Minister for Mental Health) (4.37), in reply: ACT consumers deserve accurate and clear information to help them make informed decisions when purchasing everyday staple goods.

The Consumer Protection Legislation Amendment Bill was developed in response to our concern that overlapping regulation of free-range eggs and gaps in the regulation of fuel price boards are confusing ACT consumers and are barriers to their making informed decisions when purchasing these items.

Eggs and fuel are common, regular items on the shopping lists of many Canberra households. Repeated purchases of these everyday staples add up to significant costs over time. Our community deserve to know what they are paying for when they go to their local retailer to buy these things.

The bill's provisions relating to fuel price boards will give Canberra drivers confidence that the fuel price advertised outside a service station is the price they will pay at the bowser. By requiring service stations to display the full retail price of fuel on fuel price boards, it means that motorists can no longer be lured into service stations by the display of discounted prices they may not be able to cash in on. Service stations will still be able to advertise discount offers like getting 4c off per litre with a grocery receipt. However, they will not be allowed to display the resulting discounted fuel price on fuel price boards. This means that the board must show the price payable by all consumers before any discount is applied.

I also draw the Assembly's attention to the bill's other improvement for ACT motorists: banning service stations from displaying a lower price on a fuel price board than the price displayed at the corresponding pump. This means that Canberra drivers should never pay more at the pump than the price advertised on the board.

The bill is a win for Canberra households but it has also been drafted with the needs of owners and operators of our service stations in mind. To comply with the bill's changes, select service stations may require new fuel price board signage. In light of these requirements, the bill provides for a delay in commencement of six months before service stations will be required to comply with their new obligations. This will give service station owners enough time to design and install new fuel price board signage.

The bill further supports ACT consumers to make informed choices when purchasing another staple in many Canberra households: free-range eggs. In April 2018, the new Australian Consumer Law (Free Range Egg Labelling) Information Standard took effect across Australia. This standard, introduced by the commonwealth government, sets a mandatory and enforceable national definition of free-range eggs. It also prescribes requirements for their packaging labels and retail display.

The commonwealth information standard permits producers who use maximum stocking densities of 10,000 hens per hectare to label their eggs as free range. This means that eggs produced by hens who have only one square metre of room to themselves can be labelled and sold as free-range.

One square metre per hen is starkly different to the conditions that consumers consider to be free-range. It is also starkly different to the definition of free-range eggs that currently sits on the ACT's statute book and operated in the territory before the commonwealth information standard superseded it last year. The ACT's definition was drafted according to best practice animal welfare standards developed by the CSIRO, including a requirement that producers of free-range eggs adhere to maximum stocking densities of 1,500 birds per hectare.

The ACT government has always disagreed with the maximum 10,000 hens per hectare definition of free-range eggs in the commonwealth information standard. We objected to it at the meeting where it was passed. However, the 10,000 hens per hectare standard has now come into force across Australia. ACT producers and retailers have been complying with the commonwealth information standard since it became law in April 2018. However, as the ACT's inconsistent definition of free-range eggs remains on our statute book, there is potential for community confusion about the applicable definition of free range.

To eliminate this inconsistency, the bill formally aligns the ACT's definition with the commonwealth information standard. ACT law will therefore permit eggs to be labelled and sold as free range if produced by hens subject to a maximum stocking density of up to 10,000 hens per hectare.

Nevertheless, the bill also recognises that many people in our community have a different idea of free range from what the national definition now permits. Canberrans are a caring community and many purchase eggs with the interests of hens in mind. Ms Cheyne has made this point very well. It is important that these consumers, when they purchase eggs labelled free range, are getting what they expect.

The ACT government, along with many consumers and animal welfare bodies, does not agree that hens kept at stocking densities of 10,000 per hectare are actually living in free-range conditions. That is why this bill will provide consumers with free range information through a simple and effective solution: amending the content of signs which retailers display next to free-range eggs.

The new signs will state that the ACT government supports a stocking density of 1,500 birds or fewer per hectare, which is also the maximum stocking standard supported by the CSIRO, RSPCA and consumer advocacy group CHOICE. The context for this is that, under the new rules, all egg producers are also required to put on their labels the stocking density they operate under, so that when consumers come along they will be able to see that on the labels. Many people who have bought eggs recently will see that that information is now available.

The new sign will provide consumers with context that helps them make sense of the different maximum stocking densities that are currently displayed on each carton of free-range eggs. With this information being easily accessible, consumers can make quick, easy and genuinely informed comparisons between brands of free-range eggs at the point of sale. This simple change is important for consumers who care about hens and want to make ethical purchasing decisions at the supermarket.

Canberrans can rightly expect every purchase they make to be a dollar well spent. This is particularly true of staple everyday items like eggs and fuel. The changes contained in this bill will empower consumers to make genuinely informed purchasing choices that suit their budgets, needs and, in the case of free-range eggs, ethical standards. I commend the bill to the Assembly.

Question resolved in the affirmative.

Bill agreed to in principle.

Leave granted to dispense with the detail stage.

Bill agreed to.

Births, Deaths and Marriages Registration Amendment Bill 2018

Debate resumed from 29 November 2018, on motion by **Mr Rattenbury**:

> That this bill be agreed to in principle.

MR HANSON (Murrumbidgee) (4.44): The Canberra Liberals will support this bill. It addresses a very difficult situation. The bill deals with the situation where no heartbeat is detected in a child before 20 weeks of gestation but the child is not delivered until after 20 weeks. Currently, the legislation requires that if a child is born after 20 weeks, the parents must register the birth. If it is not delivered prior to 20 weeks, it cannot be registered, as it is not legally considered a stillbirth. Not only is this an inherently difficult time for parents, it is exacerbated by the inconsistency in current practice where some physicians will record and report the date that the heartbeat was detected to have stopped, and others do not.

The bill therefore allows parents to choose whether or not to register a birth when there was no heartbeat before 20 weeks but delivery after. This recognises that, for some parents, being forced to register adds to their trauma and grief while, for others, being allowed to register is an important recognition of their loss and allows closure.

We note the minister's comments that this applies only to situations where there is no heartbeat before 20 weeks but delivery occurs after 20 weeks, and that it does not affect the requirements in all other stillbirths.

The bill also removes the definition of "stillborn" based solely on body mass. Currently, the legislation uses 400 grams, as it was drafted when gestational age could not be accurately established. Current technology can accurately determine gestational age, so the definition using body mass is considered redundant.

Situations such as these are extremely difficult. It is our duty as legislators to provide the best, most supportive framework possible. In that light the Canberra Liberals believe that this bill is an improvement on the existing laws, and we will support the bill.

MR RATTENBURY (Kurrajong—Minister for Climate Change and Sustainability, Minister for Corrections and Justice Health, Minister for Justice, Consumer Affairs and Road Safety and Minister for Mental Health) (4.46), in reply: The government understands the importance of supporting all families in our community and providing high quality health and community services through pregnancy and parenthood.

The arrival of new Canberrans is always something worth celebrating but we ought not to forget that there are parents for whom birth is a time of sadness and grief, for babies who have died during pregnancy and are stillborn. In other cases birth may be bittersweet where a heartbreaking decision has been made to reduce a multiple pregnancy in accordance with medical advice to give siblings the best possible chance of life.

We all feel great sympathy for these bereaved parents and want to make sure that our government processes are sensitive to their needs rather than adding to their distress. With this bill we are providing greater flexibility in our birth registration process in the ACT to give parents a choice as to whether to register their stillborn babies who have died in utero before 20 weeks gestation but are born after 20 weeks. This will affect only a small group of parents but it is nevertheless an important reform. The choice will help grieving parents by allowing them to decide whether registering the birth would provide desired formal recognition of the child lost or whether this process would compound their grief.

I can only imagine the sadness and difficulty of having to decide to reduce a multiple pregnancy based on medical advice. These instances are rare, but sometimes in a multiple pregnancy it is necessary to let one child go to reduce a life-threatening health risk to the mother or to ensure that other siblings have the highest chance of survival. It is a heartbreaking decision to have to make in those circumstances.

In the case of selective reduction, the reduction may occur early in the pregnancy but the foetus may remain in utero until the birth of siblings, being born after 20 weeks, which is the date when normally a stillborn child is required to be registered. For many parents in this situation the requirement to name and register the baby that has died through selective reduction can be a traumatic reminder of this very difficult decision. Currently, parents in this situation must also include the stillborn child on the birth certificate of siblings as part of the multiple birth. Parents must also include the stillborn child on the birth registration of their subsequent children.

Grief is a very personal journey and there are bereaved parents who would like to recognise and honour the life lost in a formal way through giving the baby a name and keeping a birth certificate. For those parents, formal registration can be a helpful process.

There is no such thing as the correct way to grieve or acknowledge pregnancy loss, and every family will deal with these losses in their own way. For that reason parents should be given a choice to decide whether they want to register a child who is stillborn after 20 weeks but who died in utero before 20 weeks. This bill will give them that choice.

It is important to acknowledge that this bill has a limited scope of operation and applies to the particular situation of a child dying in utero before 20 weeks but being born after 20 weeks. In part this is to ensure that the bill will not affect the overarching purpose of the register of births, deaths and marriages and the important data collection that forms the basis of perinatal death statistics in Australia.

In developing this bill we have considered the human rights of both the birth parent and the non-birth parent. The bill will give the choice to a birth parent of the stillborn child, on the condition that the birth parent must consult with the child's other parent before making a decision. There are exceptions to this consultation requirement, which includes the situation where the birth parent is also a victim of family violence, or where the non-birth parent is not contactable.

To extend the benefits of this bill to as many parents as possible, the bill will operate retrospectively for up to six months from the date of commencement. For a child whose birth took place within that prior six-month period, and whose birth has not already been registered, the birth parent will have a choice in deciding whether or not to register the baby as a stillborn child. This will only apply in the particular circumstances covered by the bill.

The government has listened to the concerns of doctors and families who have personal experience of these issues and we have taken action to improve our processes. While this bill will bring about a small change in the system of birth registration, it allows us to handle the issue in a sensitive and compassionate way which can make a real difference to bereaved families. I commend the bill to the Assembly.

Question resolved in the affirmative.

Bill agreed to in principle.

Leave granted to dispense with the detail stage.

Bill agreed to.

Adjournment

Motion (by **Ms Stephen-Smith**) proposed:

> That the Assembly do now adjourn.

Yerrabi electorate

MS ORR (Yerrabi) (4.51): I rise today to update the Assembly on what has been happening in my electorate of Yerrabi since our last sitting week in November.

As many of us are aware, Taylor has a new school. In fact, Margaret Hendry School is the ACT's newest school, having opened just recently, on 4 February, for children from Taylor, Casey and Moncrieff to start the first term of 2019. The school offers an innovative learning environment built around open learning areas and outdoor spaces. With a progressive design and future-focused, evidence-based approach to education, Margaret Hendry School is already an invaluable addition to the Yerrabi community.

By the same token, in addition to having access to strong educational services, there is a distinct benefit to our communities when they have access to better play spaces with

new playgrounds. Play spaces which include the right balance of quality and accessibility provide for experiences that can be creative and imaginative and encourage children to climb, jump, explore and develop their coordination skills. Indeed, new play areas add to Canberra's extensive playground network and will always enhance children's physical health and wellbeing by providing opportunities for social and motor skill development. To put it simply, play spaces are a crucial investment in the ongoing livability and vibrancy of our local communities.

The reason I raise this in the Assembly today is that construction of Taylor's new park has finished and the space is now open for people to come and use. This new park is an exciting addition to Taylor and will go a long way in encouraging the vitality and livability of the area. You can visit the park on the corner of Sutherland Crescent and Mottram Street and explore its sparkling new facilities, including bike racks, mountaineering ropes, exercising equipment, a climbing net, gardens, drinking fountains, mini-trampolines, picnic tables and slides.

I would also like to take the opportunity to update the Assembly on the fantastic action that businesses in Yerrabi have been taking to help our environment. I have recently reached out to a number of Yerrabi cafes to let them know about the straws suck campaign, and I am pleased to report that several cafes in my electorate are already working independently to reduce their single-use plastics. Some of these businesses are going above and beyond to make a difference, and I am pleased to have received really positive feedback from businesses that have not already taken the pledge. In particular, I would like to congratulate Sunday in Canberra and Blind Dove Cafe for being the most recent Yerrabi businesses to say they will take the straws suck pledge. Both of these fantastic local cafes have made concerted efforts to significantly reduce their use of single-use plastics. This is something to celebrate. I would encourage everyone to check these cafes out for themselves; just remember to take a reusable straw or cup.

Yerrabi was lit up over the Christmas holiday period thanks to the annual Christmas light tour. All across the ACT, people put on a spectacular show of Christmas lights at their homes, some of the most iconic of which, I am proud to report, occurred in Yerrabi. Ngunnawal, Forde, Bonner and Gungahlin all outdid themselves, with people travelling from all over Canberra to have a look at the magical displays. It is also worth noting that in true Christmas spirit, many of these homes took the opportunity to do some fundraising for charity. For example, 32 Elia Ware Crescent in Bonner was voted one of Australia's top spots for Christmas lights; they raised funds for Legacy Australia during the show.

Whether it is government projects or community events and initiatives, Yerrabi is always full of excitement.

On behalf of the Yerrabi community, I would like to express how grateful we are to everyone in the ACT who worked hard over the holiday period. I cannot emphasise enough how much I appreciate the workers in emergency services, hospitality, retail and anyone else who kept the ACT running while the rest of us were lucky enough to take some time to relax with family and friends.

I hope that everyone had an enjoyable holiday break, and I am looking forward to working with the Yerrabi community throughout this year.

Cyberbullying

MRS KIKKERT (Ginninderra) (4.55): Last week, thousands of children across the territory resumed or started school after a summer holiday that probably felt too short for some, too long for others. This is an exciting time for parents and children, but it is not without some anxiety. Kids wonder if they will find friends and fit in. Parents often share in those worries, and also hope that their children will be safe, healthy and happy as they learn.

The spread of technology into book bags and pockets often makes learning easier and more fun, but it can also make it harder to keep kids safe. Bullying, unfortunately, has been around for a long time, but children and young people now face the added danger of cyberbullying. Moreover, the Australian Institute of Family Studies has found that whilst most cyberbullying occurs outside school hours, it often originates at school and involves classmates.

Cyberbullying is defined as harassment or intimidation that takes place online. This can occur using social media, text messaging, email, image sharing and other platforms. It can include sending intentionally hurtful messages, spreading rumours or lies, sharing humiliating or embarrassing images, and sometimes even making threats.

No-one knows for certain, but it has been estimated that one in five Australian children aged eight to 15 may have experienced cyberbullying. The most common time for this to occur is around the transition from primary school to high school, but it can and does occur throughout adolescence and beyond.

The effects of cyberbullying can be devastating. These include lower school attendance and performance; feelings of isolation, fear, and depression; and decreased self-esteem and confidence. In extreme cases, cyberbullying has even led to self-harm, including suicide.

Many parents and other adults can be oblivious to cyberbullying because, unlike what takes place on the oval at recess or after school, this kind of bullying frequently hides behind personal accounts and passwords. It is important, therefore, to recognise the signs and symptoms of cyberbullying and understand some of the strategies for keeping children safe.

The Australian eSafety Commissioner lists the following as signs that a child might be in trouble: being upset after using the internet or their mobile phone; changes in personality, becoming more withdrawn, anxious, sad or angry; appearing more lonely or distressed; showing a decline in their school work; avoiding school or clubs; and becoming secretive about their online activities and mobile phone use.

If parents or other carers see these signs, they should talk with their children. It is also recommended to keep a close eye on online behaviour and to keep kids connected to

supportive friends and other family members. Reassure them that they will not lose access to the internet or their phones just because they have opened up about a problem. Report instances of cyberbullying to the online service provider, and remember that you can ask for content to be removed. Serious cyberbullying can be reported to the eSafety Commissioner via an online complaints form. This website also has a link to the Kids Helpline, which provides online or phone support 24 hours per day. When the issue involves other students, parents should also speak to the school principal.

There are also important steps that parents and carers can take to help keep kids safe in the first place. These include talking with children about cyberbullying before it occurs; establishing guidelines for technology use at home; monitoring usage of the internet and mobile phones without being too controlling; developing a good relationship with a child's school; and building a child's resilience and self-esteem.

In many ways, this is the best of times and the worst of times for our children. The sum of the world's knowledge is at their fingertips, but this means that hurtful words and harmful images can be too. I encourage all parents and carers in the ACT to learn more about cyberbullying and do all the right things they can to help keep their precious children safe. I have confidence that we can do this.

Bosom Buddies ACT

MISS C BURCH (Kurrajong) (5.00): There are many great local charities doing some fantastic work across our city, and today I would like to acknowledge the amazing work of Bosom Buddies ACT. Bosom Buddies is a local charity organisation that seeks to provide support to women who are battling breast cancer. Founded in 1995, the organisation is run by committed volunteers who have either fought breast cancer themselves or have supported others who have. Bosom Buddies' key approach to support is to provide a volunteer "buddy" to women who have recently been diagnosed, and their families, establishing social support networks for these women and ensuring consistent contact with those most affected.

These support networks and buddy partnerships are empowering and invaluable for women facing such a diagnosis. Through nurturing a culture of inclusion between women who are facing shared experiences to fostering hope and personal support, the impact of Bosom Buddies in the ACT is significant.

Another key component of their work is raising community awareness about breast cancer. Early detection is so important, and knowing how to do that, how regularly to check and what to do if you feel something is crucial. Bosom Buddies has fantastic educational material available on its website and also distributes pamphlets and other materials.

Canberra law firm Meyer Vandenberg is hosting a second-hand corporate clothing sale today and tomorrow, with all proceeds from the sale of donated clothing going to Bosom Buddies. Last night I had the privilege of attending the launch and presale event, and I would like to congratulate Kirsty and her team on their huge effort in organising the sale and collecting and sorting the clothing. Capitalising on the recent

Marie Kondo craze, they have rack upon rack of good quality corporate clothing available for men and women, along with shoes, handbags, belts and jewellery, and a significant number of designer pieces.

The sale will continue at the Meyer Vandenberg offices until 6 pm today and again tomorrow between 12 pm and 2 pm, and 4 pm and 6 pm. I highly recommend checking it out and supporting Bosom Buddies to continue their fantastic work in our community.

Neurofibromatosis

MS CHEYNE (Ginninderra) (5.02): Could you stay strong when your stomach is in knots? You know what is happening inside her body but pretend it is okay. She tells you of dreams to work in Banff National Park, and to not eat sugar when she is an adult. You help her research what she needs to learn to follow her dream. You tell her it will all be okay at the next MRI, even if you are not a hundred per cent sure. You listen to the doctor and try to listen to it all. Sometimes you get the good bit, when it is better than you thought; sometimes you get the scary bits, when it is worse than you thought.

Then there are the decisions: to do or not to do. And what if, as a parent, you both do not agree? What if your decision is not the right one? What if it makes it worse? Can you live with that? Would you allow medication to be tested on your son or your daughter?

These are all the thoughts and feelings of Cam Elliott, speaking as the father of Libby Elliott, who I have spoken about in this place before. Libby has neurofibromatosis 2, or NF2—a condition which results in tumours throughout the body. It can be passed through genes or, as in Libby's case, it can occur spontaneously. Libby has tumours on her spinal cord and at the base of her brain. Libby is eight years old.

Without research, families like Libby's cannot get the answers they need, and without funding the research cannot be done. Cam and Libby, as well as Libby's sister, Katy, and mum, Jen, are doing everything they can to raise awareness of this condition. Since 2017 Cam himself has raised more than $84,000 for the Children's Tumour Foundation, going to such feats as carrying 68 kilograms for 10 kilometres and 72 kilograms for six kilometres. I joined him on the latter one last year. He also had his very hairy legs waxed for people's enjoyment, once he raised a certain amount of money.

This Sunday the Cupid's Undie Run will be held at the Southern Cross Yacht Club. For a registration fee of $70, you will get a pair of very smart looking Calvin Klein undies, an "I'm with Cupid" T-shirt, and a whole heap of fun to participate in the run and raise some money for the Children's Tumour Foundation. You can wear the undies on the outside of other garments if you are feeling shy.

If you are not able to make the run, I encourage everyone in the Canberra community to take a moment to donate. It would be great to get Cam to $90,000 raised for NF research by this weekend. I understand that if he hits a target, he will be getting

those legs waxed again. In all seriousness, it will be even greater when one day we have a cure. Put simply, we have got to have the funds to get there.

Waste—green bins

MS STEPHEN-SMITH (Kurrajong—Minister for Aboriginal and Torres Strait Islander Affairs, Minister for Disability, Minister for Children, Youth and Families, Minister for Employment and Workplace Safety, Minister for Government Services and Procurement, Minister for Urban Renewal) (5.06): As we all know, Canberra is a garden city. We are a city of accessible bushland, generous parks and canopied streets with wide green verges and medians. We are also a city of diverse creative private gardens and courtyards surrounding the homes in our suburbs. I do not think I have ever been anywhere in the world where urban greenery is more loved and more diligently cared for.

Of course, I cannot speak of our garden city without acknowledging the incredible work of the Transport Canberra and City Services staff who maintain our public spaces. Our public gardeners often go unthanked, but I hope they know there are few cities where their work would be more valued, and I am sure they are aware that there are few where it would be more scrutinised by the community than here in Canberra.

We likewise cannot overlook the contribution of private gardeners, the everyday Canberrans who curate suburban gardens that frame our streetscapes and provide food and habitat for our native birds, insects and other wildlife. Canberra would not be a garden city if it were not also a gardeners' city.

That is why I am so proud to be part of a government that is delivering on its commitment to roll out green bins across our entire city. I was pleased recently to join my colleague Mr Steel to announce that green bins are now coming to Kurrajong. For a one-time fee of $50 residents of the inner north and inner south can now apply to receive their own green bin. This is achieved by simply visiting the ACT green waste bins website and entering your details, with services to commence on 1 April.

As members would be aware, the governments green bins program allows Canberrans to access free collection of garden waste such as grass clippings, hedge trimmings and fallen leaves and small branches, through a fortnightly kerbside bin collection. In other words, green bins are just like existing red and yellow bins but for the garden.

While on the subject of hedge trimming I take this opportunity to remind constituents in Kurrajong that it is their responsibility to keep their hedges trimmed away from footpaths, something that is raised regularly with me by constituents. Having a green bin will make that job even easier.

Green bins help to prevent green waste from ending up in red bins. We know that Canberrans are very environmentally conscious; we know that Canberrans are very waste conscious. Green bins are just one way this government is giving Canberrans the tools they need to minimise the amount of waste sent to landfill and to help us all work to minimise our collective environmental impact.

Canberra's inner north and inner south are home to some of our oldest private gardens; they are also home to some of our oldest gardeners. We all know that as we get on in years it becomes a little harder to hitch the trailer to the car in order to take a load of garden waste to the tip. Green waste bins will help older gardeners maintain their independence for longer. The government has acknowledged the benefits this brings by waiving the $50 fee for certain pensioners and concession card holders.

Alongside our older suburbs, parts of Kurrajong are undergoing significant change and urban renewal. With the construction of new homes comes the establishment of new gardens. This new generation of homes, plants and gardeners will help maintain and renew our urban greenery into the future.

The green bins program was one of Labor's election commitments and formed part of the platform that was overwhelmingly endorsed by Canberrans at the 2016 election. I take this opportunity to acknowledge the hard work of the Minister for City Services, Mr Steel, and his predecessor, Ms Fitzharris, and thank them for delivering green bins to the residents of my electorate ahead of schedule.

While other members may debate the point, I doubt that the green bin rollout has been more hotly anticipated in any electorate than it has in Kurrajong. I hope our new green bins will become a much-loved tool for this and the next generation of gardeners as they continue Canberra's great tradition of green thumbs and green spaces.

Question resolved in the affirmative.

The Assembly adjourned at 5.11 pm until Tuesday, 19 February 2019, at 10 am.

Answers to questions

Mental health—compensation claims (Question No 1891)

Mrs Dunne asked the Minister for Mental Health, upon notice, on 26 October 2018:

(1) In relation to the Adult Mental Health Unit in (a) 2012, (b) 2013, (c) 2014, (d) 2015, (e) 2016, (f) 2017 and (g) 2018 to the date on which this question is published in the Questions on Notice Paper, (i) how many suicides occurred, (ii) how many assaults on staff occurred, (iii) how many staff or ex-staff made compensation claims, (iv) how many staff or ex-staff received compensation payments, (v) what was the total value of compensation payments made.

(2) In relation to compensation claims made by staff or former staff of the Adult Mental Health Unit but not yet settled, (a) how many are there and (b) What is the total value.

(3) In relation to the Dhulwa mental health unit in each (a) 2016, (b) 2017 and (c) 2018 to the date on which this question is published in the Questions on Notice Paper, (i) how many suicides occurred, (ii) how many assaults on staff occurred, (iii) how many staff or ex-staff made compensation claims, (iv) how many staff or ex-staff received compensation payments and (v) what was the total value of compensation payments made.

(4) In relation to compensation claims made by staff or former staff of the Dhulwa secure mental health unit but not yet settled, (a) how many are there and (b) what is the total value.

Mr Rattenbury: The answer to the member's question is as follows:

(1) (a) to (g) (i)

2012	0
2013	0
2014	0
2015	0
2016	0
2017	0
2018	0

(1) (a) to (g) (ii)

2012	19
2013	30
2014	21
2015	16
2016	36
2017	53
2018	109

As part of work to improve occupational violence prevention strategies, Canberra Health Services have updated procedures and business rules to reflect a more inclusive and consistent approach to the classification of incidents. These business rules have been applied retrospectively to incidents from 1 January 2018. Improved reporting culture and increased awareness of the need to report occupational violence is also a large contributor to the increase in incidents in 2018.

(1) (a) to (g), (iii) to (v)

- Workers' compensation claim data is sourced from the Comcare Customer Information System and provided by Chief Minister, Treasury and Economic Development Directorate, Workplace Safety and Industrial Relation's Data and Analytics Team.
- The Comcare workers' compensation cost structure is limited to the Mental Health, Justice Health and Alcohol and Drug Services Division only. Canberra Health Services cannot provide this workers' compensation data.

Mental Health, Justice Health and Alcohol and Drug Services Division

Injury Year	Number of current or ex-staff who lodged claims for workers' compensation	Number of current or ex-staff with accepted workers' compensation claims	Cost to Date *
2012	6	6	$33,721
2013	11	11	$418,586
2014	9	9	$302,015
2015	5	5	$562,075
2016	7	6	$72,416
2017	5	4	$5,960
2018	8	7	$70,177

* Cost to date is the total of costs incurred on the accepted claims as at 05/11/18.

(2) (a) and (b)

- The Comcare workers' compensation cost structure is limited to the Mental Health, Justice Health and Alcohol and Drug Services Division only. Canberra Health Services cannot provide this workers' compensation data.
- In the Mental Health, Justice Health and Alcohol and Drug Services Division between 2012 and 2018, there are 48 accepted claims for workers' compensation with costs to date of $1.465 million *(cost to date is the total of costs incurred on the accepted claims as at 05/11/18)*.

(3) (a) to (g) (i)

2016	0
2017	0
2018	0

(3) (a) to (g) (ii)

2016	0
2017	26
2018	21

As part of work to improve occupational violence prevention strategies, Canberra Health Services have updated procedures and business rules to reflect a more inclusive and consistent approach to the classification of incidents. These business rules have been applied retrospectively to incidents from 1 January 2018. Improved reporting culture and increased awareness of the need to report occupational violence is also a large contributor to the increase in incidents in 2018.

(3) (a) and (b), (iii) to (v)

Refer to the response at 1(a) to (g), (iii) to (v).

(4) (a) and (b)

Refer to the response at 2 (a) and (b).

Mental health—emergency department data (Question No 1912)

Mrs Dunne asked the Minister for Mental Health, upon notice, on 26 October 2018:

(1) What percentage of people with mental health issues presenting to an emergency department received treatment within clinically appropriate guidelines in (a) 2013-14, (b) 2014-15, (c) 2015-16, (d) 2016-17 and (e) 2017-18.

(2) What was the (a) average, (b) shortest and (c) longest length of time spent in an emergency department by people presenting with mental health issues in the years referred to in part (1).

(3) What percentage of people with mental health issues presenting to an emergency department left the department (a) before receiving treatment, (b) while receiving treatment but before being admitted to a ward and (c) after receiving treatment which resulted in a clinical decision that admission was not required in the years referred to in part (1).

Mr Rattenbury: The answer to the member's question is as follows:

(1) The percentage of people with mental health issues presenting to an emergency department who received treatment within clinically recommended times was (a) 69 per cent in 2013-14, (b) 65 per cent in 2014-15, (c) 58 per cent in 2015-16, (d) 55 per cent in 2016-17, and (e) 40 per cent in 2017-18.

(2) (a) The average time for people with mental health issues who presented and were treated in an emergency department was 425 minutes in 2013-14, 491 minutes in 2014-15, 389 minutes in 2015-16, 327 minutes in 2016-17, and 397 minutes in 2017-18. (b) The shortest time for people with mental health issues who presented and were treated in an emergency department was three minutes in 2013-14, four minutes in 2014-15, six minutes in 2015-16, four minutes in 2016-17, and four minutes in 2017-18. (c) The longest time for people with mental health issues who presented and were treated in an emergency department was 73 hours in 2013-14, 87 hours in 2014-15, 80 hours in 2015-16, 72 hours in 2016-17, and 90 hours in 2017-18.

(3) (a) The percentage of people with mental health issues who left the department before receiving treatment is not possible to quantify as it can only be determined that a patient had a mental health issue after clinical assessment. (b) The percentage of people with mental health issues who left the department while receiving treatment but before being admitted to a ward was two per cent in 2013-14, two percent in 2014-15, two per cent in 2015-16, two percent in 2016-17, and three per cent in 2017-18. (c) The percentage of people with mental health issues who after receiving treatment which resulted in a clinical decision that admission was not required was 65 per cent in 2013-14, 66 per cent in 2014-15, 62 per cent in 2015-16, 55 per cent in 2016-17, and 55 per cent in 2017-18.

Health—consultants (Question No 1913)

Mrs Dunne asked the Minister for Mental Health, upon notice, on 26 October 2018:

(1) How many consultancy reports were commissioned in the health portfolio from 1 January 2018 to the date on which this question was published in the Questions on Notice Paper.

(2) Who was awarded consultancy contracts in the health portfolio from 1 January 2018 to the date on which this question was published in the Questions on Notice Paper.

(3) What was the (a) purpose and (b) value of each consultancy contract.

(4) For each finalised consultancy report, (a) what was the title of the report and (b) was it released publicly; if not, why not.

(5) For each consultancy report not yet finalised, will it be released publicly; if so, when; if not, why not.

Mr Rattenbury: The answer to the member's question is as follows:

(1) As Minister Fitzharris has responsibility for the majority of Health portfolio, please see response to question 1 of Question on Notice 1907.

(2) As Minister Fitzharris has responsibility for the majority of Health portfolio, please see the table at Attachment A of Question on Notice 1907.

(3) See above.

(4) See above.

(5) See above.

(A copy of the attachment is available at the Chamber Support Office).

Hospitals—maintenance (Question No 2015)

Mrs Dunne asked the Minister for Health and Wellbeing, upon notice, on 2 November 2018:

(1) How often have wards been closed due to maintenance issues since 1 January 2018 to date at (a) The Canberra Hospital (TCH), (b) Calvary Public Hospital, (c) Centenary Hospital for Women and Children and (d) University of Canberra Public Hospital.

(2) If wards have been closed, how long was the relevant ward closed and what was the cause of the closure at (a) TCH, (b) Calvary Public Hospital, (c) Centenary Hospital for Women and Children and (d) University of Canberra Public Hospital.

(3) Other than the incidents outlined in parts (1) and (2), have maintenance issues resulted in damage to wards at (a) TCH, (b) Calvary Public Hospital, (c) Centenary Hospital for Women and Children and (d) University of Canberra Public Hospital; if so, (i) what was the extent of the damage caused to wards, (ii) has the problem been fixed yet and (iii) how much did it cost to fix.

Ms Fitzharris: The answer to the member's question is as follows:

	(a) Canberra Hospital	(b) Calvary Public Hospital	(c) Centenary Hospital for Women and Children	(d) University of Canberra Hospital
1.	Nil recorded	Nil recorded	Paediatric Medical Ward	Nil recorded
2.	N/A	N/A	Two rooms closed since 3 August 2018 due to a pin hole leak in pipework. Impacted rooms will be returned to service following remediation in December 2018.	N/A
3.	Nil	Nil	Nil	Nil

Canberra Hospital—plumbing issues (Question No 2017)

Mrs Dunne asked the Minister for Health and Wellbeing, upon notice, on 2 November 2018:

(1) How many plumbing incidents in The Canberra Hospital (TCH) campus have occurred in the period 1 July 2017 to the date this question was published in the Questions on Notice Paper, that resulted in the closure, partial closure or loss of capacity in wards, operating theatres, other clinical spaces or other general spaces.

(2) In relation to each incident referred to in part (1), (a) where did they occur, (b) when did they occur and (c) what impact did they have on the relevant facility.

(3) As at the date on which this question was published in the Questions on Notice Paper, (a) in which wards, operating theatres, other clinical areas, or other general spaces of the TCH campus have problems with dampness, dampness-related mould, water leakage or any other plumbing-related issues been identified and (b) what is the nature of each identified problem.

(4) Which buildings on the TCH campus have the most problems with their plumbing.

(5) What plans does Canberra Health Services have to fix those problems.

(6) Do any wards, theatres, other clinical areas, or other general areas of TCH have problems with insects; if so, what impact does this have on patients and staff.

Ms Fitzharris: The answer to the member's question is as follows:

(1) Two.

(2)
(a) Building 8 and Building 11 (Paediatric Medical Ward).
(b) 6 September 2018 and 3 August 2018.
(c) Partial closure of Building 8 and closure of two rooms in Building 11.

(3)

Building	Dampness	Dampness Related Mould	Water Leak	Plumbing Related Issues	Description	Comment Remediation
Canberra Hospital Building 11		✓	✓	✓	Shower Spindle Leak	• Remediation program in place under UMAHA to rectify identified impacted ensuites • Regular checking of all ensuites
Canberra Hospital Building 12		✓	✓	✓	Theatre corridor works to replace hot water ring main pipework. Theatre 14 Air Handling Unit Filter mould detected during planned maintenance work	• Staged pipework replacement completed through UMAHA Hydraulics in 2017 and 2018. • Developing a revised HVAC design with a view to implementing a new HVAC solution in 2019.
Canberra Hospital Building 1 Wards 6A, 6B, 7A and 7B.				✓	Level 6 and 7 hot and cold water ring main upgrades.	• Level 6 complete in 2018 • Level 7 to occur in 2019.

*All works are coordinated with clinical areas to avoid disruption to hospital services.

(4) See response to Question 3.

(5) See response to Question 3.

(6) There has been a small issue of flies in Building 12 over the past few months. Facilities Management and Infection Prevention and Control have reviewed strategies to minimise this issue and have installed flyscreens behind ventilation grilles to prevent ingress of flies No impact to patient or staff safety has been experienced.

Roads—contracts
(Question No 2025)

Miss C Burch asked the Minister for Roads, upon notice, on 2 November 2018:

What is the total contract value, who is the contractor and what is the expected completion date for the projects of (a) Brisbane Avenue: Rehabilitation of Brisbane Avenue between Bowen Drive to National Circuit and improvements to stormwater sumps, (b) Griffith – Furneaux Street/Manuka Circle: Improvements to the intersection as part of the 2017-18 Blackspot Program, (c) Griffith – Telopea Park/Currie Crescent: Improvements to the intersection as part of the 2017-18 Blackspot Program, (d) Canberra Brickworks access road and Dudley Street upgrade: Construction of an access road into the Canberra Brickworks development precinct and upgrading of Dudley Street in Yarralumla, (e) Gungahlin town centre: Over the next 12 months Gungahlin's town centre and road network will be transformed, (f) Gundaroo Drive stage 1 duplication: Duplication of Gundaroo Drive from Gungahlin Drive to Mirrabei Drive/Anthony Rolfe Avenue, (g) Gundaroo Drive stage 2 duplication: Duplication of Gundaroo Drive from Gungahlin Drive to the Barton Highway, (h) Mirrabei Drive/Gundaroo Drive/Anthony Rolfe Avenue intersection signalisation: Replacement of the existing roundabout with traffic lights including full pedestrian provisions, (i) Gungahlin Place Park: Improvements to central Gungahlin Place median strip, between Efkarpidis Street and Hibberson Street, (j) Horse Park Drive duplication: Duplication of Horse Park Drive between Anthony Rolfe Avenue Katherine Avenue west and between the Federal Highway and Well Station Drive, (k) Ernest Cavanagh Street extension: Extension of Ernest Cavanagh Street between Hinder Street and Manning Clark Crescent, (l) Gordon – Drakeford Drive/Johnson Drive/ Woodcock Drive that intersects: Line marking improvements and intersection approach improvements as part of the 2017-18 Blackspot Program, (m) Greenway – Athllon Drive/ Don Dustan Drive/Scollay Street that intersects: Line marking improvements and intersection approach improvements as part of the 2017-18 Blackspot Program, (n) Monaro Highway – From Angle Crossing Road to Old Cooma Road: Line marking improvements as part of the 2017-18 Blackspot Program and (o) Molonglo 3 Roads and Infrastructure package: This first part of the Molonglo 3 Roads and Infrastructure package.

Mr Steel: The answer to the member's question is as follows:

(a) Brisbane Avenue: Rehabilitation of Brisbane Avenue between Bowen Drive to National Circuit and improvements to stormwater sumps:

- total contract value $2.296 million incl GST;
- completion is expected in mid-2019; and
- the contractor is Cord Civil.

(b) Griffith – Furneaux Street/Manuka Circle: Improvements to the intersection as part of the 2017-18 Blackspot Program

- total contract value $0.489 million incl GST;
- project completed; and
- the contractor is Simeonov.

(c) Griffith – Telopea Park/Currie Crescent: Improvements to the intersection as part of the 2017-18 Blackspot Program,

- total contract value $0.489 million incl GST;
- project completed; and
- the contractor is Simeonov.

Note (b) and (c) the sites were packaged together.

(d) Canberra Brickworks access road and Dudley Street upgrade.

This project is currently in design. The design is being finalised and environmental and planning approvals are being sought from the Commonwealth, NCA and EPSDD. Tenders for construction will be called in 2019.

(e) Gungahlin Town Centre: Over the next 12 months Gungahlin's Town Centre and road network will be transformed.

Understanding this request references the Gungahlin Bus Station and Hibberson Street Shared Zone:

- total contract value $7.273 million incl GST;
- project completed; and
- the contractor is Guidelines.

(f)) Gundaroo Drive stage 1 duplication: Duplication of Gundaroo Drive from Gungahlin Drive to Mirrabei Drive/Anthony Rolfe Avenue:

- total contract value $21.55 million incl GST;
- completion is expected in late 2018; and
- the contractor is Woden Contractors.

(g) Gundaroo Drive stage 2 duplication: Duplication of Gundaroo Drive from Gungahlin Drive to the Barton Highway:

- total contract value $21.92 million incl GST;
- completion is expected in mid-2020; and
- the contractor is Woden Contractors.

(h) Mirrabei Drive/Gundaroo Drive/Anthony Rolfe Avenue intersection signalisation: Replacement of the existing roundabout with traffic lights including full pedestrian provisions,

- total contract value $4.76 million incl GST;
- completion is expected in late 2018; and
- the contractor is Woden Contractors.

Included as a variation to Stage 1 works.

(i) Gungahlin Place Park: Improvements to central Gungahlin Place median strip, between Efkarpidis Street and Hibberson Street:

This project has been designed and documented ready for tender. The project is to be tendered in the New Year, through an open tender process.

- Contractor yet to be appointed.

(j) Horse Park Drive duplication:
Duplication of Horse Park Drive between Anthony Rolfe Avenue Katherine Avenue west:

- total contract value $24.19 million incl GST;
- completion is expected in mid-2019; and
- the contractor is Canberra Contractors.

Duplication of Horse Park Drive between the Federal Highway and Well Station Drive:

- total contract value $12.4 million incl GST;
- completion is expected in late 2018; and
- the contractor is BMD Contractors.

(k) Extension of Ernest Cavanagh Street between Hinder Street and Manning Clark Crescent:

- total contract value $4.3 million incl GST;
- completion is expected in late 2018; and
- the contractor is Dale and Hitchcock Civil Engineering and Landscaping.

(l) Gordon – Drakeford Drive/Johnson Drive/ Woodcock Drive that intersects: Line marking improvements and intersection approach improvements as part of the 2017-18 Blackspot Program:

- total contract value $0.81 million incl GST;
- project completed; and
- the contractor is Capital Lines & Signs.

(m) Greenway – Athllon Drive/ Don Dunstan Drive/Scollay Street that intersects: Line marking improvements and intersection approach improvements as part of the 2017-18 Blackspot Program:

- total contract value $0.61 million incl GST;
- project completed; and
- the contractor is Henness & Locktons.

(n) Monaro Highway – From Angle Crossing Road to Old Cooma Road: Line marking improvements as part of the 2017-18 Blackspot Program:

- total contract value $0.81 million incl GST;
- project completed; and
- the contractor is Capital Lines & Signs.

(o) Molonglo 3 Roads and Infrastructure Stage 3A (first part of the project);

- Total contract value $14.1 million incl GST;
- Completion is expected in early 2019; and
- The contractor is Woden Contractors .

ACT Health—cultural diversity (Question No 2035)

Mrs Kikkert asked the Minister for Health and Wellbeing, upon notice, on 2 November 2018 *(redirected to the Acting Minister for Health and Wellbeing)*:

(1) In relation to the active engagement with service providers and organisations to improve multicultural health services in the ACT, and given that in section 6.7 of Towards Culturally Appropriate and Inclusive Services: A Co-ordinating Framework for ACT Health 2014–2018, one of the key aims was to establish and maintain effective liaison within government and non-government organisations whose services target culturally and linguistically diverse (CALD) populations, what has been the result of liaising, consulting and supporting (a) ACT Government Office of Multicultural Affairs, (b) Companion House and (c) Migrant and Refugee Resettlement Services (MARSS).

(2) What other migrant and refugee health services, excluding Companion House and MARRS, does ACT Health liaise with and support, and what has been the result of such engagement?

(3) Which ACT Health operational areas deal with CALD consumer or community groups, and what has the result of liaising and facilitating the engagement of these operational areas.

(4) What is the current status of the plan to maintain and publish a multicultural health calendar, which includes religious or other cultural days of significance.

Mr Rattenbury: The answer to the member's question is as follows:

(1) The ACT Health Directorate has established a Multicultural Health Reference Group which has resulted in improved communication and collaboration between the Directorate and other organisations providing services and/or support to people from CALD backgrounds or with limited English proficiency. Membership of this Group includes the ACT Government Office of Multicultural Affairs, Companion House and the Migrant and Refugee Resettlement Service.

The ACT Health Directorate is providing additional financial support to Canberrans with a CALD background through a service funding agreement with Companion House to provide primary health care services, including mental health counselling and advocacy, to refugees and migrants who have experienced torture and trauma.

(2) As well as the organisations noted above, Ethnic Disability ACT is a member of the Multicultural Health Reference Group, as are the Health Care Consumers' Association and the Mental Health Consumer's Network. All of these organisations advocate for and promote the health and wellbeing of migrants and refugees residing in the ACT and surrounding areas. In addition, many of the non-government organisations funded by the Directorate provide support and services to residents of the ACT with a CALD background.

(3) Operational areas within Canberra Hospital, Calvary Public Hospital Bruce, University of Canberra Hospital and community health services are the main interface with health consumers, including those from a CALD background. Liaison and engagement with these areas is ongoing and continues to improve access and health literacy amongst CALD consumers.

The Canberra Health Service and ACT Health Directorate's Staff Development Unit makes available diversity training for all staff. This includes various components on cultural competence, cross-cultural communication, and working with interpreters. Information is available to patients/consumers about the availability of interpreter services and Canberra Health Service staff also make people aware of these services. The publication 'Using Health Services in the ACT' strongly promotes the availability of free interpreter services to patients/consumers. This publication, which is available in hard-copy as well as electronically, includes a complementary flyer of key information available in seven languages.

(4) The ACT Health Directorate has not pursued development of a multicultural health calendar as it was found that the Harmony Day calendar of cultural and religious dates is comprehensive. It includes events held in Canberra such as the National Multicultural Festival and the ACT Multicultural Awards. The Harmony Day calendar provides a brief description of each cultural and religious celebration to assist and enhance users experience with the calendar, which can be viewed at https://www.harmony.gov.au/events/calendar/

Health—medical research (Question No 2048)

Mrs Dunne asked the Minister for Medical and Health Research, upon notice, on 30 November 2018:

(1) In relation to the answer to question on notice No 1720, what is the staffing complement for the Office of Research.

(2) What are the position titles and classifications.

(3) Have all the positions in the staffing complement been filled; if not, what is being done to fill them.

(4) In what areas of medical and health research does current staff have expertise.

(5) What is the Office's budget for 2018-19.

(6) Given the budget is funded from existing resources, from which operational areas of ACT Health have budget funds been diverted to fund the Office.

(7) What research projects (a) has the Office worked on and (b) is the Office working on, to the date on which this question was published in the Questions on Notice Paper.

(8) What projects have been identified for the Office's future work.

(9) How are research projects (a) identified, (b) approved and (c) funded.

(10) Will the Office be solely responsible for conducting or coordinating all medical and health research for the ACT Government; if not, (a) why not and (b) where else will medical and health research be undertaken and (c) what is being done to manage research activities to ensure there are no overlaps or duplication of work.

Ms Fitzharris: The answer to the member's question is as follows:

(1) The Office of Research consists of 34.79 FTE across all areas including the Office of Research and the Clinical Trials Unit.

(2) The table below shows positions and titles.

Title	Level
Executive Director – Research	E2.4
Executive Director – Research, Policy and Innovation	E2.4
Deputy Executive Director – Research & Director of Health Analytics Research	E1.2
Executive Assistant	ASO5
Unit Head – Ethics and Governance	SOB
Unit Head – Pre-Clinical Research Support Services and Education	HP6
Manager – Intellectual Property and Contracts	SOB
Clinical Trials Manager	SOC

Title	Level
Ethics Manager	SOC
Ethics and Governance Officer	ASO6
Finance Project Officer Clinical Trials	ASO6
Project Officer	ASO5
Ethics and Governance Administrator	ASO4
Receptionist	ASO3
Admin Officer	ASO2
Animal Facility (AF) Supervisor	HS10
Animal Technicians	HSO6
Laboratory Safety Officer	HP3
Clinical Trials Senior Co-Ordinator	RN3.1
Clinical Trial Nurses	RN2
Clinical Trials Research Officers	RO2
Clinical Co-ordinator	HP4

(3) Not all positions are filled. Recruitment is currently underway for various positions.

(4) The Executive have internationally recognised expertise in Health and Medical research from pre-clinical to translation into practice. The staff working in the Office have management expertise relative to their unit, including PC2 laboratory and animal facility management, ethics and governance, and conference coordination.

(5) The Office's Budget for 2018-2019 Financial Year is $5.31 million.

(6) The Office of Research has been historically funded, with no additional funds currently diverted to the Office of Research.

(7) (a) The Office provides overall support for research across ACT Health and Services. It has had a role in the establishment of the Molecular Screening and Therapeutics (MoST) Trial on rare cancers, and the Australian Genomics Cancer Medical Program. Through the Clinical Trials Unit, the Office of Research has been involved in many collaborative and sponsor-driven clinical trials with various clinical departments. The Office conducted a review of Biobanks in ACT Health and has managed funds for the purchase of equipment for lab-based research, as well as managing an animal facility for pre-clinical research.

(8) The Office of Research has been collaboratively working on the Centre for Innovation in Regional Health Care National Health and Medical Research Council bid with academic partners the Australian National University and University of Canberra, and other stakeholders. The Office has developed an End of Life Care research proposal coordinating efforts across stakeholders in the ACT. This proposal provides one of the foci for the Regional Health Care bid, and represents a proposal funding is sought. The Office has been establishing the Health Analytics Research Centre (HARC) in collaboration with our academic partners focused on health data science, and research methods and analytics in both qualitative and quantitative areas. HARC will enable the conduct of advanced and novel research designs based on efficient and enhanced discovery opportunities.

(9) Previously research projects were funded at the discretion of the Director-General.

(10) At this stage, it is envisaged that the Office of Research will co-ordinate and govern efforts on health and medical research involving ACT Health resources. A partnership model is being developed that will determine responsibilities in the future.

Canberra Hospital—emergency waiting times (Question No 2049)

Mrs Dunne asked the Minister for Health and Wellbeing, upon notice, on 30 November 2018:

(1) In relation to the answer to a question taken on notice on 24 October 2018 relating to The Canberra Hospital, Emergency Waiting Times, Rostered Nurses, if nurses are not rostered to the Emergency Department corridor, how is clinical staffing managed to ensure patients on trolleys in corridors receive timely attention and treatment.

(2) Are staff diverted from other areas of the hospital to attend to patients on trolleys in the Emergency Department corridor; if not, (a) how is staffing allocated to the area and (b) if staff are called in, (i) how much notice are they given and (ii) what is done to ensure called-in staff are not coming in immediately on the back of a completed shift; if so, what is done to backfill the staffing in those other areas.

Ms Fitzharris: The answer to the member's question is as follows:

(1) The Emergency Department operates on a flexible workforce model, which means nurses are allocated to particular areas of the Emergency Department depending on clinical requirements. Staff may be reallocated to corridors if clinically required when necessary in order to ensure the safe provision of services is maintained throughout the Emergency Department.

(2) If the demand within the Emergency Department exceeds the Emergency Department's operational capacity to provide a safe provision of service within current resources, additional staff will be allocated to the Emergency Department. For example, staff could be allocated from the Canberra Hospital's relief Nursing and Midwifery Resource Office, which rosters staff to support areas across CHS as required, within the provisions of the ACT Public Service Nursing and Midwifery Enterprise Agreement 2013 – 2017.

Mental health—awards (Question No 2050)

Mrs Dunne asked the Minister for Mental Health, upon notice, on 30 November 2018:

(1) In relation to the answer to question on notice No 1738, which MLAs were invited to attend the mental health awards in (a) 2013, (b) 2014, (c) 2015 (d) 2017 and (e) 2018.

(2) If only some MLAs were invited, why were not all MLAs invited.

Mr Rattenbury: The answer to the member's question is as follows:

(1) Mental Health Community Coalition (MHCC ACT) advises that for each of the years (a) 2013, (b) 2014 and (c) 2015 the Minister for Health and Wellbeing was formally invited to present the award certificates to award recipients. In the years (d) 2017 and (e) 2018 the Minister for Mental Health was formally invited to present the award certificates to award recipients.

No other formal invitations to attend were issued. The purpose of the formal invitation to the Minister was to perform the function of presenting awards to award recipients.

(2) Please refer to the response to Question 1.

The event has always been free, open to the public and advertised through local media, community networks and on social media. MHCC ACT has not kept a record of attendance for these events and cannot verify if, when, or which other MLAs may have attended.

Schools—instrumental music program (Question No 2051)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) How long has the Instrumental Music Program (IMP) been in operation.

(2) On what basis is a school offered an IMP.

(3) What is the annual cost for the (a) school, (b) student and (c) Education Directorate.

(4) If there is no annual cost for those identified in part (3), who funds the IMP.

(5) How are the fees determined.

(6) What is the intent of the program.

(7) What criteria is used to determine which school(s) is/are offered an opportunity to participate in the IMP.

(8) Is there a maximum number of schools and/or students able to participate in any given year.

(9) From where are the instruments sourced and what financial arrangements apply to their acquisition.

(10) Is an assessment done of the program; if so, (a) what assessment is done, (b) by whom, (c) how often and (d) what measures are used.

Ms Berry: The answer to the member's question is as follows:

(1) The Instrumental Music Program (IMP) began in 1973.

(2) Every ACT public primary school is offered the opportunity annually to be part of the IMP. Further opportunities are also offered to smaller high schools without a school based band program in operation.

(3)

a) The cost for the school depends on the program(s) undertaken by the school.

b) The cost for students is determined by each school. Costs to students depend on the cost of IMP classes, the cost of reeds, oils and other equipment required for instruments, the cost of music stands, and the cost of excursions.

c) The cost to the Directorate is $1.399m, plus costs associated with the use of two vehicles.

(4) As per (3)

(5) The fees are determined by the Instrumental Music Program Principal/Business Manager to ensure there are enough operating funds to maintain and purchase equipment.

(6) The IMP aims to:

- enhance the education of children through their involvement in a quality music program;
- provide a strong motivation for children to continue to engage in music activities;
- develop cooperative learning, social interaction and performance skills;
- develop in children an awareness and appreciation of many musical styles and genres;
- develop instrumental and ensemble skills; and,
- encourage children to strive for excellence.

(7) Each year all primary schools are invited to participate in the program. Schools currently participating are guaranteed continuity of the program. Schools also evaluate their enrolment figures to consider demographics in relation to maintaining the program based on their enrolment numbers.

(8) The maximum number of schools depends on the demand and matching resources to deliver the program. Resource demands can depend based on the program chosen by the school.

(9) The instruments are purchased from local music stores whenever possible. Instruments are funded from the payments made by each school for their access to the program. Instruments are purchased outright.

(10) Information regarding the IMP is placed on the IMP website.

Schools—funding
(Question No 2052)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) What is the process for establishing a budget for each government school and who is involved in the process.

(2) Is each principal required to submit a budget; if so, (a) under what categories can funding be applied for, (b) when must a budget be submitted and to whom, (c) who makes the final determination as to the total funds provided to each school, (d) how are they acquitted and (e) what flexibility does a principal have to reallocate funds within the school budget.

(3) Within each school, is there a budget for provision of separate classes for (a) gifted and talented students, (b) students with physical disabilities, (c) students with intellectual disabilities and (d) students with none of the above but who have identified complex behaviours; if so, what is the formula used to determine annual amounts.

(4) If there is no separate budget allocation for any or all of the categories in part (3), how are these competing needs funded within the general school budget.

Ms Berry: The answer to the member's question is as follows:

(1) The Student Resource Allocation (SRA) was developed to reflect the ACT Government's commitment to implement a student needs-based school funding model for ACT public schools. Individual schools are provided budget through SRA Statements.

Schools receive an SRA Statement twice each year. In September, the projected allocation is provided to schools for the purposes of planning for the following year. In April, the actual allocation is provided following confirmation of student enrolments through the February Census.

Upon receipt of the school's SRA allocation, the principal works in consultation with the business manager, school leaders and the School Board to determine the best allocation of resources according to the projected school enrolments. This includes allocating staff to classes, development and implementation of school programs, and the purchase of resources as needed.

Strategic Finance Branch within the Directorate coordinates with other line areas to collate relevant data to calculate funding for individual schools.

(2) (a-c) There are three key components reflected in each school's SRA Statement as follows:

Core Allocation which includes per student funding, stages of schooling and base funding.

Loading Allocations for students with a low socio-economic status background, students with English as an additional language or dialect and students with disability

Other Allocations relating to Continuum of Educational Support, Aboriginal Torres Strait Islander Support Program (Cultural Integrity), Transition and career support, Preschool, School operational allocation and Other (e.g. new school allowance; additional administration support)

(https://www.education.act.gov.au/school_education/sra-program)

Refer question 1, paragraph (2) in relation to the timing of SRA Statements to schools. For each program allocation, there is an allocation methodology that calculates funding for individual schools.

(d) The School's Board monitors the school budget, and a financial summary is provided in the school's annual school board report.

(e) Schools are provided the flexibility to consider the best use of their total resources to meet the needs of all students, while working to implement the Directorate's strategic goals.

(3) (a) Schools are provided the flexibility to manage resources for gifted and talented students from the Core Allocation. As per the Directorate's Gifted and Talented Students Policy, this includes the provision of developmentally appropriate educational provisions and strategies for all gifted and talented students enrolled at the school. This may include partnerships with external agencies.

(b)-(c) Schools resourcing based on settings and individual student need as identified by the Student-Centred Appraisal of Need (the Appraisal or SCAN). This allocation is provided through Student with Disability loading.

(d) Schools are provided funding through Continuum of Educational Support (CES) for high school (years 7-10) students who are 'at risk' or who have disengaged from their education. The CES allocation takes into consideration a base allocation, student enrolment and the school SFI index.

(4) Schools are provided the flexibility to consider the best use of their total resources to meet the needs of all students.

Schools—students with complex needs (Question No 2053)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) Can the Minister list the number of students, by school, identified as having complex needs and challenging behaviours without an accompanying intellectual deficiency in the (a) 2014, (b) 2015, (c) 2016, (d) 2017 and (e) 2018 calendar years.

(2) Can the Minister provide details of additional funding provided to schools who have students categorised as having complex needs and challenging behaviours for those years and schools listed in part (1).

(3) Are students with complex needs and challenging behaviours but without an intellectual deficiency assigned to a special learning unit or equivalent or enrolled in a mainstream class according to age; if so, can the Minister categorise by the number of students in each school and whether in a unit (or equivalent) or in mainstream classes.

Ms Berry: The answer to the member's question is as follows:

(1) This information is not available as the Education Directorate does not have a dataset that captures the broad definition of students with complex needs and challenging behaviours, as defined by the Expert Panel Report on Students with Complex needs and Challenging Behaviours:

"Any pervasive behaviour, or set of behaviours, regardless of cause (or even without any apparent or identified cause) which disrupts the capacity of the person, or other persons, to learn within the school environment, and which requires targeted or personalised interventions".

As stated in the Expert Panel Report, there is a broad overlap between students falling within this definition and students with a disability or special educational needs, however the two groups are not identical. Other factors such as exposure to trauma, family violence, socio-economic disadvantage and other difficult circumstances may contribute to students presenting with complex needs and challenging behaviours, while causes of challenging behaviour displayed by some students may remain unclear.

(2) Schools are funded to meet the needs of all students. The school leadership determine how to use available resources to provide staffing and the programs and supports required for all students. Schools are able to access further supports through Education Support Office, including Network Student Engagement Teams (NSET)

(3) Only students who meet the ACT Student Disability Criteria for Intellectual Disability and Autism are able to access a small group learning support unit. Students with complex needs and challenging behaviours who do not meet ACT Student Disability Criteria are supported as part of their mainstream peer group with schools making the necessary adjustments and providing access to appropriate interventions.

Schools—preschool enrolments (Question No 2054)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) How many preschool places are there in ACT government schools for the 2019 school year.

(2) What is the total number for each school.

(3) How many applications for preschool enrolment for the 2019 school year have been received.

(4) Of the applications received, how many have been accommodated in their preschool of first choice.

(5) If not accommodated in their preschool of first choice, what alternatives are offered to parents.

(6) If a placement is not available in a local priority enrolment area (PEA) school for preschool, does that jeopardise a placement for a child in the primary school.

(7) Can a parent apply for a placement in a preschool outside their PEA.

Ms Berry: The answer to the member's question is as follows:

(1) There are approximately 4 850 ACT preschool places available with the number of sessions at each preschool ranging from one to nine. Please see Attachment A for more detail.

(2) Please see Attachment A for approximate number of preschool places for each school. This number is based on the physical capacity of the classroom space and the staffing ratios. Under the *Education and Care Services National Law (ACT) Act 2011*, preschool class sizes are set at a maximum of 22 students.

(3) As of 12 December 2019, there were approximately 4 663 applications. This is an estimate due to potential duplicate applications received from parents.

(4) Although enrolments for preschool are received through the Education Directorate electronic enrolment system, applications for preschool enrolment are forwarded directly to schools for consideration. Schools offer preschool places and forward any applications for enrolment that cannot be accommodated to the next preference preschool or preschool with capacity.

(5) Preschool is not a compulsory year of schooling. Where there is excess demand for places from students within the school's PEA, enrolments may be referred to other preschools within the local area that have capacity. This may occur for children who are:

- resident within the PEA
- not resident within the PEA yet have siblings concurrently enrolled at the school
- resident in the shared enrolment zone for the school.

(6) While schools will attempt to accommodate preschool students who reside in the school's PEA, due to the maximum class sizes defined by the *Education and Care Services National Law (ACT) Act 2011* schools may not be able to accommodate all preschool students.

If students are offered a preschool place elsewhere, they are guaranteed a kindergarten place in their PEA school. ACT K-12 students living within the PEA of a school are guaranteed a place at that school regardless of when they apply or what preschool the student attended previously.

(7) Families who live in a suburb outside of the PEA are deemed to be living *Out of Area Enrolment* (OAE) area. They are able to apply for a preschool that is located outside their PEA at any time however they will only be granted a place if there is sufficient capacity within the school to accommodate OAE enrolments. When seeking an OAE school it is important that families provide evidence to support their application when completing the online application form.

(A copy of the attachment is available at the Chamber Support Office).

Schools—suspension guidelines (Question No 2055)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) When did public consultation on the ACT Education Directorate's draft guidelines for Suspension, Transfer or Exclusion of students in ACT schools close.

(2) How many submissions were received and from whom were submissions sought and/or received.

(3) How was the consultation period publicised.

(4) When will the guidelines be finalised.

(5) When will the guidelines be made public.

Ms Berry: The answer to the member's question is as follows:

(1) The consultation closed on 31 August 2018.

(2) Seventeen submissions were received, responses from a range of individuals and peak bodies, refer table 1 and table 2 below.

Table 1

	Submission received from:
1	ACT Council of Parents and Citizens Association (ACT P&C)
2	ACT Health Community Paediatric and Child Health Service
3	ACT Principals Association (ACTPA)
4	Australian Education Union (AEU)
5	Anglicare Youth Education program
6	Child and Adolescent Mental Health Teams
7	Public Advocate and Children & Young People Commissioner
8	EDU Network Student Engagement Teams
9	EDU School Operations
10	Individual (EDU employed)
11	Individual (EDU employed)
12	Individual (community member)
13	Individual (community member)
14	Youth Advisory Council
15	Youth Coalition
16	Aboriginal & Torres Strait Islander Education Consultative Group
17	EDU Deputy Principal

Submissions sought: To ensure a range of stakeholders were aware of the consultation, letters were sent to 38 organisations or individuals.

Table 2

	Submissions sought from
1	Aboriginal & Torres Strait Islander Education Consultative Group
2	Aboriginal & Torres Strait Islander Elected Body
3	ACT Association of Independent Schools (CEO)
4	ACT Association of Independent Schools (Strategic Programs)
5	ACT Council of Parents and Citizens Association (ACT P&C)
6	ACT Health Community Paediatric and Child Health Service
7	ACT Policing
8	ACT Principals Association (ACTPA) (co-chair)
9	ACT Principals Association (ACTPA) (co-chair)
10	Anglicare Youth Education program
11	ANU, Research School of Psychology
12	Association of Parents & Friends of ACT Schools (APFACTS)

	Submissions sought from
13	Australian Education Union (AEU)
14	Barnados
15	Carers ACT
16	Catholic Education Office
17	Child and Adolescent Mental Health Teams
18	Child Youth Protection Services
19	Community Relations and Funding Support team
20	EDU Aboriginal and Torres Strait Islander Education
21	EDU Governance and Legal Liaison
22	EDU Network Student Engagement Teams
23	EDU School Operations
24	EDU All Staff *via Schools Bulletin*
25	Gugan Gulwan Youth Aboriginal Corporation
26	Junction Youth Health Service
27	Marymead
28	Menslink
29	Onelink
30	Principal Specialist School
31	Principal High School
32	Principal Primary School
33	Principal College
34	Public Advocate and Children & Young People Commissioner
35	Winnunga Nimmityjah Aboriginal Health Service
36	Woden Community Services
37	Youth Advisory Council (YAC)
38	Youth Coalition

(3) The consultation was publicised through writing to key stakeholders, peak bodies and relevant areas of Government and the Non-Government sector. The consultation documents were placed on the Education Directorate website. This was advertised to schools through the Schools Bulletin (an electronic notification published weekly). Through the bulletin, schools were provided with a newsletter article which they were able to include in their school newsletter to inform their school community.

(4) It is anticipated the guidelines will be finalised in the first half of 2019.

(5) It is anticipated the guidelines will be made public in the first half of 2019.

Schools—International Baccalaureate (Question No 2056)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) Which ACT government schools offered the International Baccalaureate to students in the academic years of (a) 2016, (b) 2017 and (c) 2018.

(2) How many students, broken down by school, took part in the International Baccalaureate in ACT government schools in the academic years of (a) 2016, (b) 2017 and (c) 2018.

(3) Does the Territory incur any additional cost associated with students participating in the International Baccalaureate; if so, broken down by school, how much was incurred by the Territory in the academic years of (a) 2016, (b) 2017 and (c) 2018.

(4) Is additional teacher training or specialised facilities required for the teaching and assessment of the International Baccalaureate in ACT government schools; if so, broken down by school, (a) how is the additional cost of this training and facilities assessed and (b) what was the total cost incurred by the Territory in the academic years of (i) 2016, (ii) 2017 and (iii) 2018.

Ms Berry: The answer to the member's question is as follows:

(1) The table below shows the ACT government schools who offered the International Baccalaureate (IB) for academic years 2016-2018, and the number of students who took part in the IB.

	2016	**2017**	**2018**
Canberra College	9	8	N/A
Forrest Primary School	525	515	550
Gold Creek School (K – 10)	N/A	N/A	1273
Melba-Copland School	409	421	469
Miles Franklin Primary School	534	570	590
Narrabundah College	110	136	151
North Ainslie Primary School	578	601	644
Red Hill Primary School	710	689	725
Telopea Park School (7-10)	837	856	852

(2) As per (1).

(3) The decision to deliver and fund IB programs is made at the school level and funding is allocated from within school budgets.

(4) All teachers delivering the IB program and the school principal take part in IB training including documentation and assessment procedures. As the decision to deliver IB programs is made at the school level, funding is allocated from within school budgets for any teacher training and resources.

Disability services—grants (Question No 2057)

Ms Lee asked the Minister for Disability, upon notice, on 30 November 2018:

(1) Which disability groups have applied for funding under the Government's National Disability Insurance Scheme (NDIS) Transition Integrated Service Reponses budget allocation.

(2) How much, broken down by group, has been distributed from the Government's NDIS Transition Integrated Service Reponses to assist disability groups organisations falling through the cracks.

(3) Can the Minister provide the criteria used to assess eligibility for these grants.

(4) On what basis, broken down by group, were the unsuccessful applicants denied funding.

Ms Stephen-Smith: The answer to the member's question is as follows:

(1) As outlined in response to Question No 1550 on 16 July 2018, the Integrated Service Response program provides short term support and coordination for people who have high or complex needs. It does not provide funding for disability groups.

(2) As outlined above, the Integrated Service Response program does not provide funding for disability groups.

(3) The Integrated Service Response program is not a grant program. The program is for people with disability with intensive support needs, who need coordination of mainstream services because their wellbeing and stability in the community is threatened by crisis, complexity or changing support needs. The program is for people who are participating in the NDIS or who meet the disability eligibility requirements for the NDIS. Funding for the provision of disability support may also be provided to people who meet the disability criteria for the NDIS but are found ineligible due to Australian residency requirements. The program guidelines are available on the Community Services Directorate's website: https://www.communityservices.act.gov.au/disability_act/integrated-service-response-program.

(4) Whilst the program provides funding for people with disability to purchase emergency supports and services from non-government providers, not all people accepted into the program require funding to purchase emergency supports. Some people require coordination of mainstream services because their wellbeing and stability in the community is threatened by crisis, complexity or the changing nature of their support needs. As of 3 December 2018, five referrals have not been accepted for the program and these people have been provided advice regarding other options that may suit their requirements.

Schools—asbestos (Question No 2058)

Mr Wall asked the Minister for Business and Regulatory Services, upon notice, on 30 November 2018 *(redirected to the Minister for Employment and Workplace Safety)*:

(1) When was WorkSafe ACT first informed of the potential presence of asbestos containing materials (ACM) at Harrison School and who provided this information.

(2) What actions did WorkSafe ACT initiate once they became aware of the potential presence of ACM at Harrison School.

(3) When was WorkSafe ACT notified of the results of the asbestos assessment.

(4) What action did WorkSafe ACT take following the positive identification of ACM at the Harrison School.

(5) What work has been done by WorkSafe ACT to determine the origin of the ACM.

Ms Stephen-Smith: The answer to the member's question is as follows:

(1) WorkSafe ACT was first informed of the potential presence of ACM on 29 August 2018 by the Education Directorate.

(2) WorkSafe ACT liaised with the Education Directorate and Harrison School to ensure appropriate procedures were being followed and that protective measures such as fencing were undertaken. Liaison with the licensed asbestos assessor was also commenced.

(3) Initial results were provided 29 August 2018 with subsequent testing results provided at later dates as further testing was undertaken.

(4) WorkSafe ACT has had extensive liaison with the Education Directorate and Harrison School to ensure school employees, parents and pupils were kept informed of the relevant ACM situation and associated risks. This included discussions surrounding sampling methodology, testing and remediation action with all relevant stakeholders including the Chief Health Officer and a licensed asbestos assessor and removalist.

An investigation into the possible source and identifying any other contaminated areas was also undertaken.

(5) A full investigation was initiated into the possible source of the ACM and whether the material had been provided anywhere else. WorkSafe ACT's investigation is close to finalisation.

Housing—land tax (Question No 2059)

Ms Le Couteur asked the Treasurer, upon notice, on 30 November 2018:

(1) Given that the FAQ on land tax at www.revenue.act.gov.au/land-tax?result_1060955_result_page=6 states that "Properties occupied for nil or nominal rent" are exempt, can the Treasurer provide more information as to what this means in practice.

(2) If the tenant pays only essential outgoings such as rates, water and insurance would that be regarded as "nominal rent".

Mr Barr: The answer to the member's question is as follows:

(1&2) The ACT Revenue Office will take into account the overall arrangement (including all payments or non-payments made by a tenant) in determining whether or not nominal rent is being paid. Ordinarily to be eligible for the nominal rent exemption, the outgoings paid must only cover the cost of rates, repairs, maintenance or insurance. Payments for other expenses, such as the mortgage, will be taken to be rent and land tax will apply. Further information about the land tax exemption where properties are occupied for 'nil or nominal rent', and what this means in practice is available:

a. on the ACT Revenue Office website: http://www.revenue.act.gov.au/land-tax?result_1060955_result_page=5
b. from the ACT Revenue Office Circular: http://www.revenue.act.gov.au/__data/assets/pdf_file/0017/1222226/LTA001.1.pdf

The ACT Revenue Office is also available to assist with questions from the public that may not be covered by these two information sources. ACT residents can submit their questions to the ACT Revenue Office using the online contact form https://www.revenue.act.gov.au/contact-us, by mail or phone.

Children and young people—care and protection (Question No 2060)

Ms Le Couteur asked the Attorney-General, upon notice, on 30 November 2018:

(1) Given that in the past in Victoria and New South Wales (NSW) children and babies had convictions for offences such as "neglect", "being in need of protection" or "being in moral danger" recorded against them. Are there cases of this happening in the ACT either before or after self-government.

(2) Given that in NSW the convictions were often referred to as status offences, prior to self-government in the ACT, were ACT children subject to these NSW laws that enabled status offences to be recorded against them.

(3) Were there any similar Commonwealth laws in place that were applied to children and young people in the ACT.

(4) Were there ever any children or young people in the ACT who were convicted of offences that related to being removed from the care of their families; if so, can the Attorney-General provide any information on their cultural background, specifically if they were Aboriginal and Torres Strait Islander.

Mr Ramsay: The answer to the member's question is as follows:

(1) Former legislation governing care and protection matters allowed for children and young people to have certain care and protection offences recorded against them. Prior to self-government, this approach applied in the ACT.

Under the *Child Welfare Ordinance 1957*, a child or young person could be 'charged with being, a neglected child or an uncontrollable child or young person' (see, for example, Part III, section 12(b)). This reflects a historic view of child protection matters and predates contemporary approaches in which the rights and interests of the child or young person are paramount. This Commonwealth legislation applied to the ACT care and protection context.

The *Child Welfare Ordinance 1957* was repealed by the *Children's Services Act 1986*, which articulated a shift in how child protection offences were understood. Section 139 of the *Children's Services Act 1986* addresses neglect of children and reframes this as an offence against the child or young person by an adult.

The *Children's Services Act 1986* was repealed by the *Children and Young People Act 1999*, which determines that 'children and young people have the right to be protected

from abuse and neglect' (Chapter 2, section 10). This approach is maintained in the current ACT legislation, the *Children and Young People Act 2008*.

As a human rights jurisdiction, the ACT Government's child-centred approach to care and protection is guided by the *Human Rights Act 2004*. Section 11 of the Act deals with the protection of family and children, supporting an understanding that '[e]very child has the right to the protection needed by the child because of being a child'.

This child-centred approach is further supported by international human rights standards, expressed in United Nations agreements including the *Convention on the Rights of the Child* and the *Universal Declaration of Human Rights*. These instruments form the basis for contemporary views on acting in the best interests of the child or young person, and the right to protection of family.

(2) The relevant legislation in NSW was the *Child Welfare Act 1939* (NSW) (now repealed). Until 1957, (when the *Child Welfare Ordinance 1957* commenced) children in the ACT were subject to the NSW Act.

(3) See answer to Question 1 as to the position in the ACT.

(4) It is not feasible to check all of the electronic and manual data to answer this question. (The electronic case management system in ACT Courts and Tribunal does not record cases prior to the 1970s.)

ACT public service—activity-based workplaces (Question No 2061)

Ms Le Couteur asked the Chief Minister, upon notice, on 30 November 2018:

(1) In regard to Autism Spectrum Disorder (ASD) and activity-based working in the public sector, i.e. systems where employees have no fixed desk, but instead use laptops and lockers to relocate to different desks daily based on staffing and workflow, what information has the Chief Minister taken into account on the impact of activity-based working on people on the autism spectrum.

(2) What confidence does the Chief Minister have that ASD staff within relevant agencies are aware of being on the autism spectrum and/or are diagnosed.

Mr Barr: The answer to the member's question is as follows:

(1) The ACT Government is committed to embracing diversity and providing safe and inclusive working environments for all staff.

The ACT Government's approach to supporting neurodiversity requirements of staff, through design considerations and reasonable adjustment processes, has been based on advice from experts and literature reviews.

It has been demonstrated that environmental stimuli pose challenges to individuals on the autism spectrum. I understand that both the Civic and Dickson office blocks have been designed with a high degree of acoustic treatment and that visual stimuli will be reduced through fit-out design. In addition, dedicated quiet spaces are available for all staff to access.

Consultations are occurring through the ACT Public Service Inclusion Practitioners Network, to seek feedback about how best to encourage neurodiverse staff to self identify and engage with the available support.

At an individual level, staff may access workstation assessments to determine what reasonable adjustment – if any – is required to support their transition into a new environment. Whilst it is desirable to approach these processes from a position that seeks to encourage flexible work practices for all staff so that the benefits of flexibility are available to all, the advice of expert and independent qualified practitioners will be paramount in any decision about reasonable adjustments and individual case management.

(2) It would be reasonable to expect that while many staff would be aware of any such diagnosis, that there would be an indeterminate proportion of the workforce that remain undiagnosed.

Alexander Maconochie Centre—dietary options (Question No 2062)

Ms Le Couteur asked the Minister for Corrections and Justice Health, upon notice, on 30 November 2018:

(1) Are people able to continue a nutritious vegetarian diet in (a) Dhulwa Mental Health Unit and (b) the Alexander Maconochie Centre (AMC).

(2) In relation to Dhulwa Mental Health Unit and the AMC, must people have a religious need in order for vegan or vegetarian options to be provided at each meal and are there any conditions for this provision.

Mr Rattenbury: The answer to the member's question is as follows:

1. a) Please refer to the response to Question on Notice 142 from the Health Directorate 2017-18 Annual and Financial Report Hearings.

   b) Yes, there is at least one vegetarian option available to detainees for each meal at the Alexander Maconochie Centre (AMC).

2. In relation to Dhulwa Mental Health Unit, please refer to the response to Question on Notice 142 from the Health Directorate 2017-18 Annual and Financial Report Hearings.

   Detainees at the AMC are able to continue or commence a nutritious vegan diet, provided they submit a dietary request via ACT Health.

   It is not necessary to establish a religious need in order to access vegetarian or vegan diets in the AMC. Religious requirements such as halal meat is available to detainees who advise ACT Corrective Services. Excluding the submission of a dietary request, there are no other conditions.

Hospitals—dietary options (Question No 2063)

Ms Le Couteur asked the Minister for Health and Wellbeing, upon notice, on 30 November 2018:

In relation to institutions where people may not have full dietary options, are people able to continue a nutritious (a) vegetarian and (b) vegan diet in (i) The Canberra Hospital, (ii) the Calvary Public Hospital and (iii) the University Of Canberra Hospital

Ms Fitzharris: The answer to the member's question is as follows:

Refer to the response to Question on Notice 140 from the Health Directorate 2017-18 Annual and Financial Report Hearings.

Justice—witness intermediaries (Question No 2064)

Ms Le Couteur asked the Attorney-General, upon notice, on 30 November 2018:

Has the ACT Government made an in-principle commitment to the use of witness intermediaries for vulnerable victims in the ACT; if so, can the Attorney-General advise when this initiative will be progressed.

Mr Ramsay: The answer to the member's question is as follows:

In June 2018, the ACT Government accepted in-principle the recommendation of the *Royal Commission into Institutional Responses to Child Sexual Abuse* to establish an intermediary scheme for prosecution witnesses with a communication difficulty in child sexual abuse prosecutions.

The ACT Government is undertaking research and scoping work to progress its implementation, as well as continuing to consult on the scheme.

Tourism—dietary options at events (Question No 2065)

Ms Le Couteur asked the Minister for Tourism and Special Events, upon notice, on 30 November 2018:

In relation to sustainable food consumption and Events ACT policy, is it policy to provide (a) vegetarian, (b) vegan and (c) gluten-free food at catered events.

Mr Barr: The answer to the member's question is as follows:

The policy at Events ACT is to ensure a variety of food offerings are available for event attendees and visitors.

Bimberi Youth Justice Centre—dietary options (Question No 2066)

Ms Le Couteur asked the Minister for Children, Youth and Families, upon notice, on 30 November 2018 *(redirected to the Acting Minister for Children, Youth and Families)*:

(1) In relation to institutions where people may not have full dietary options, are children able to continue a nutritious (a) vegetarian and (b) vegan diet in the Bimberi Youth Justice Centre.

(2) Must children have a religious need in order for vegan or vegetarian options to be provided at each meal and are there any conditions for this provision.

Mr Steel: The answer to the member's question is as follows:

(1) Please refer Question (1) (a) and (b) to the response provided to Question on Notice 139 from the Annual Report Hearings.

(2) Please refer Question (2) to the response provided to Question on Notice 139 from the Annual Report Hearings.

Canberra Institute of Technology—cookery courses (Question No 2067)

Ms Le Couteur asked the Minister for Higher Education, upon notice, on 30 November 2018 *(redirected to the Minister for Vocational Education and Skills)*:

(1) In relation to courses on cooking at CIT, certificate or otherwise, do these courses include consideration of the environmental impacts of how the food is grown, transported and prepared.

(2) Do these courses include nutritional information, including about plant based foods.

(3) Does this education include consideration of the impacts on animal welfare of how the food is grown, transported and prepared.

(4) Are all students instructed in preparing vegan and vegetarian meals.

(5) Are there course that focus specifically on vegan and vegetarian meals.

Ms Fitzharris: The answer to the member's question is as follows:

(1) There is a significant amount of consideration given to the food chain including food footprint, paddock to plate concepts, food safety and environmental impact of work practices including compliance with environmental regulations on cooking courses at CIT.

Students also learn the skills and knowledge required to source and use current and emerging information relating to ethical issues (e.g. regenerative farming, sustainable

agriculture and humanely raising of livestock) particularly relevant to the hospitality industry.

Additionally, students have the opportunity to participate on an Endeavour Leadership program where they investigate and experience best practice in food networks in our sister city, Wellington, New Zealand.

(2) Nutrition is part of two of the qualification's core subjects and their performance outcomes. Students learn the skills and knowledge to enable them to prepare food and develop menus that meet the requirement of dietary needs for health, lifestyle, culture or special dietary needs.

CIT Solutions also run a plant based nutrition workshop. This course promotes whole good plant-based diets for health, ethical and environmental reasons.

(3) Refer to response to question 1.

(4) All students are instructed in the preparation of vegan and vegetarian meals. As part of the learning outcomes for the Commercial Cookery qualifications, the student is required to demonstrate knowledge of the characteristics and ingredients of special diets (including vegan and vegetarian meals) that form part of Australian contemporary eating regimes.

Students must also demonstrate the practical skills required to produce a range of vegan and vegetarian dishes.

(5) There are no specific subjects in training packages that CIT work to that are focused specifically on vegan and vegetarian meals however, students have the opportunity to prepare vegan and vegetarian meals across a range of learning activities, embedded into subjects.

Schools—dietary information (Question No 2068)

Ms Le Couteur asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) Do all school students receive education about healthy food and food production in our schools; if so, what is the stage of schooling, for example, primary, high and college.

(2) Does this education include consideration of the environmental impacts of how the food is grown, transported and prepared; if so, what is the stage of schooling, for example, primary, high and college.

(3) Does this education include nutritional information, including about plant based foods; if so, what is the stage of schooling, for example, primary, high and college.

(4) Does this education include consideration of the impacts on animal welfare of how the food is grown, transported and prepared; if so, what is the stage of schooling, for example, primary, high and college.

(5) Are all students who prepare food at school instructed in preparing vegan and vegetarian meals; if so, what is the stage of schooling, for example, primary, high and college.

(6) Are school canteens encouraged to provide plant based foods as part of their menus; if so, what is the stage of schooling, for example, primary, high and college.

Ms Berry: The answer to the member's question is as follows:

The Australian Curriculum provides a framework for all young Australians to understand and value the importance of good nutrition for health and wellbeing. The scope of learning in food and nutrition education is reflected in relevant content from across the Australian Curriculum (K-10). Nutrition and food education are presented in bands of schooling. In Foundation/Kindergarten– year 6, the curriculum content is described as nutrition, health and wellbeing. In Years 7–10, it is described as home economics. College students can also select Board of Senior Secondary Studies (BSSS) accredited courses in food technology.

The Australian Curriculum addresses learning about food and nutrition education in two ways:

- as content descriptions and elaborations as in Health and Physical Education (HPE), Science and Technologies, noting in HPE there is a food and nutrition focus area, and in Design and Technologies it is delivered within a technologies context (food specialisations).
- it is identified in content elaborations in other learning areas, such as Mathematics.

(1) Yes. These topics are included in the Australian Curriculum (K-10), which all ACT public schools are required to teach, assess and report on.

(2) Yes. There are a range of programs that schools can chose to introduce including the Stephanie Alexander Kitchen Garden Program aimed primarily at Preschool to year 6 and the ACT Government's Actsmart Program for all stages of schooling, which focus on Environmental Sustainability. College students can also select BSSS accredited courses in food production which include consideration of the environmental impacts of how the food is grown, transported and prepared.

(3) Yes. Relevant nutrition education about plant based foods is included in the HPE Australian Curriculum Learning Area. High school students have the opportunity to further learn about healthy food and nutrition in specialist food technology classes. College students can also select BSSS accredited courses in food technology.

(4) Yes. Relevant education about the impacts on animal welfare of food production techniques is included in the HPE Australian Curriculum Learning Area across primary and high school stages of schooling. High school students have the opportunity to further learn about healthy food and nutrition in specialist food technology classes. College students may select BSSS accredited sciences that include animal welfare elements.

(5) The inclusion of the preparation of vegan and vegetarian meals as part of student learning is a school based decision.

(6) All ACT public schools are required to adhere to the ACT Public School Food and Drink Policy. This policy promotes a consistent, whole school approach to the

provision and sale of healthy food and drinks in ACT public schools. The policy uses a traffic light system to identify healthy and unhealthy foods. All schools are encouraged to increase green foods on the menu and decrease red and amber foods.

Municipal services—recycling (Question No 2069)

Ms Le Couteur asked the Minister for City Services, upon notice, on 30 November 2018:

(1) Is all the soft plastic that people are collecting and taking to their local supermarkets being used for road base; if not, (a) what percentage of soft plastic that people are collecting and taking to their local supermarkets is being used for road base and (b) what is happening with the remaining soft plastic.

(2) Is there a market in the ACT for recycled soft plastic; if so, (a) which companies are currently purchasing recycled soft plastics and (b) what are these companies doing with the plastic.

(3) Are all the glass bottles that people are putting in their yellow bins being used for road base; if not, (a) what else are the glass bottles that people are putting in their yellow bins being used for and (b) what is the percentage breakdown for the uses of the glass bottles that people are putting in their yellow bins.

(4) Is there a market for recycled glass in the ACT.

(5) Are any of the companies purchasing the glass actually using them to make new bottles/beverage containers.

(6) What proportion of the ACT's second hand glass is only able to be sold as glass fines.

(7) What proportion of these glass fines are being used in road base in the ACT.

(8) Are all the Inkjet cartridges, toner cartridges and toner bottles that people drop off at designated businesses and government outlets being used for road base; if not, (a) what percentage of inkjet cartridges, toner cartridges and toner bottles that people drop off at designated businesses and government outlets are being used for road base and (b) what is the percentage breakdown of inkjet cartridges, toner cartridges and toner bottles that people drop off at designated businesses and government outlets usage.

(9) Who is the ACT's hard plastic and beverage containers being sold to and what are they using the hard plastic and beverage containers for.

(10) What proportion of recycled plastic is being reused by Replas for plastic street furniture or building materials,

(11) Who is the ACT's paper and cardboard being sold to.

(12) Have other uses been considered for all of the mentioned materials in parts (1) to (11).

(13) What processes were involved when deciding the usage of these materials.

(14) How much of the ACT's waste is recycled in Australia.

(15) Is any of the ACT's waste going to recycling markets in China; if so, (a) how much and (b) what is the waste being recycled into.

Mr Steel: The answer to the member's question is as follows:

(1) The management of the soft plastics taken to private entities such as supermarkets is managed under commercial arrangements. TCCS are unable to provide the details of their arrangements.

(2) TCCS are not currently aware of any local businesses reprocessing soft plastics as inputs for product manufacturing in the ACT.

(3) Glass collected through household recycling bins and received at the Hume materials recovery facility (MRF) is being converted to sand products for use in road and construction projects, and not going to bottle-to-bottle markets. Some of the glass recovered through the ACT container deposit scheme (CDS) is currently being used in bottle-to-bottle markets, however there is limited national demand from these markets at this point in time. The ACT government is working with industry to identify alternative uses for recycled glass from kerbside collection and the CDS.

(4) Yes. Glass sand product has already been used in the ACT for applications such as road base, including through various technical tests and trials over the last couple of years.

(5) Yes, glass recovered through the ACT CDS is currently being used in bottle-to-bottle markets, however there is limited national demand from these markets, and alternative uses must be developed for recycled glass collected as part of the kerbside collection process.

(6) All glass collected in household recycling bins and processed by the Hume MRF is currently being converted to sand products. Container deposit schemes in NSW as well as the ACT will continue to supply the limited demand for bottle-to-bottle glass in Sydney, making it even more important to develop sustainable local markets for glass sand from kerbside services.

(7) TCCS do not currently have the detailed breakdown of reuse of the glass fines. TCCS can confirm that the use of glass fines is not limited to road base applications in the ACT, for example the contractor is also currently supplying glass fines to asphalt markets and to a lesser extent into construction products such as non-structural concrete.

(8) The management of the recycled toner cartridges taken to the public drop of locations is managed under commercial arrangements. TCCS are unable to provide the details of these arrangements.

(9) Rigid plastic containers are being sold to re-processors, who convert the existing containers into flakes and pellets that can be used to manufacture a range of new products. PET (soft drink bottles) and HDPE (milk bottles) generally go to Australian

bottle-to-bottle markets. TCCS are currently unaware of any plastics reprocessing businesses operating within the ACT.

(10) The arrangements between Replas and the MRF contractor are commercial in nature, and TCCS are unable to provide this information.

(11) Recycled paper and cardboard from the Hume MRF is currently being sent to the closest facility being the VISY plant in Tumut, NSW.

(12) The ACT Government is continually looking for new and innovative opportunities to work with the recycling industry across Australia. Currently the opportunities are limited by the market demand. The government is focussed on creating opportunities for the market to continually expand its ability to recycle more products.

(13) As the management of the MRF is contracted out, the decision on how to best reuse materials created through the recycling processes are commercial in nature, and therefore TCCS are unable to provide this advice.

(14) TCCS does not collect this information, however based on an understanding of the composition of ACT waste and the operation of recycling markets it is understood the vast majority of ACT waste is processed in Australia.

(15) TCCS does not collect information on the final destination of all recycled materials that leave the Territory. Based on an understanding of the composition of ACT waste and the operation of recycling markets it likely that only a small percentage of the ACT's waste is exported from Australia.

a) In terms of the material processed by the Hume MRF a small proportion of material, less than 5%, is potentially exported to international markets, including Asian markets. This includes mixed plastics, and tin plate material.

b) TCCS is not able to provide this advice.

ACT Ambulance Service—crews (Question No 2070)

Mrs Jones asked the Minister for Police and Emergency Services, upon notice, on 30 November 2018:

(1) Following the review of the ACT Ambulance Service minimum crew level, what changes have been made to this policy.

(2) What are the new crewing standards for each shift, broken down by shift type and day of week.

(3) Of the 30 shifts which fell below the current minimum crew level between 1 July 2018 and 31 October 2018, on what (a) date and (b) shift type, did this occur.

Mr Gentleman: The answer to the member's question is as follows:

(1) The ACT Ambulance Service policy has been revised to better reflect how crewing levels should be applied.

(2) As I stated in my Ministerial Statement, the minimum crewing metric has not commonly been used by ambulance services, including ACTAS. Performance is measured by response times and patient satisfaction. The ACTAS deployment matrix has, however, been reviewed to be more dynamic and flexible document than previous. It details variations in the number and location of ambulance resources, according to known patterns of demand. This will allow a more informed and appropriate crewing model, based on predicted need, rather than just an arbitrary crew number across the whole of the week. This matrix will be reviewed periodically using updated case data, to ensure it aligns with patterns of demand.

(3) The following information can be provided in relation to the 30 shifts which fell below the current minimum crew level between 1 July 2018 and 31 October 2018:

Month	**Shifts Below Stated Minimum Crewing**	**Percentage**
July 2018	12	19%
August 2018	7	11%
September 2018	3	5%
October 2018	8	13%

The 30 shifts below stated minimum crewing for this period consisted of 11 day and 19 night shifts.

Roads—Mount Taylor parking (Question No 2071)

Mrs Jones asked the Minister for Roads, upon notice, on 30 November 2018:

(1) What changes will be made to the entry and exit to the car park at Mount Taylor upon the completion of the car park.

(2) What barriers or signs, if any, will be put in place to ensure that cars do not turn right across double unbroken lines.

(3) Can the Minister provide a copy of the site plans for these works.

Mr Steel: The answer to the member's question is as follows:

(1) The entry and exit to the Mount Taylor parking area opposite Mannheim Street have been formalised and moved approximately 150m away from the intersection. Moving the parking area access and egress away from the Mannheim Street intersection separates the conflict points and so improves safety.

(2) A barrier kerb has been provided to prevent movements other than via the formalised access and egress points.

(3) Yes, see attached.

(A copy of the attachment is available at the Chamber Support Office).

Public housing—renewal program (Question No 2072)

Ms Le Couteur asked the Minister for Housing and Suburban Development, upon notice, on 30 November 2018:

(1) What is the expected total revenue of the Public Housing Renewal Program, including from the sale of former public housing sites.

(2) What is the expected total cost of the program.

(3) What is the expected total cost of the replacement public housing.

(4) What is the expected net cost of the program.

Ms Berry: The answer to the member's question is as follows:

(1) The forecast revenue from the sale of the former public housing multi-unit properties identified under the auspice of the Asset Recycling Initiative is $357.248 million.

(2) The forecast total cost of the public housing renewal program is $541.339 million.

(3) The forecast total cost of the replacement housing delivered through the program is $473.659 million.

(4) The forecast net cost of the program is currently $151.03 million.

Housing—new housing strategy (Question No 2073)

Ms Le Couteur asked the Minister for Housing and Suburban Development, upon notice, on 30 November 2018:

(1) In relation to the outcomes and indicators that will be used to measure the success of the Housing Strategy and given that the Housing Strategy and its accompanying Implementation Plan do not provide detailed outcomes and indicators for the Strategy's measures, can the Minister advise when these will be developed and where they will be published.

(2) What type of review and evaluation processes will be used to measure the success of the Strategy.

Ms Berry: The answer to the member's question is as follows:

(1) The ACT Housing Strategy Implementation Plan provides an outcome or indicator and an indicative timeframe for each of the 74 actions in the ACT Housing Strategy.

(2) The ACT Housing Strategy commits to the implementation plan being monitored, and where required updated, annually. The Strategy also notes that government will report back to the community annually on the strategy and the progress and status of the

actions in the implementation plan. The annual examination process will be undertaken in a coordinated manner across directorates with primary responsibility for the various actions. The success of the actions in the Strategy will be measured by their contribution to meeting the Strategy's goals and objectives.

Health—contraception (Question No 2074)

Ms Le Couteur asked the Minister for Health and Wellbeing, upon notice, on 30 November 2018:

Given that numerous people in the ACT have reported that a form must be filled out with their details, including their contact details as well as whether or not they have taken the emergency contraceptive pill (the pill) before, in order to obtain the pill, however, in other states and territories, the pill can be obtained over the counter without having to give over any personal details, (a) why is this form required and (b) what is the information used for.

Ms Fitzharris: The answer to the member's question is as follows:

a) In the ACT, the emergency contraceptive pill (ECP) is available without a prescription (also known as 'over the counter') from a pharmacy.

ECP products are schedule 3 (pharmacist only) medicines, which require assessment and input by a pharmacist prior to supply to a patient, under the *Medicines, Poisons and Therapeutic Goods Regulation 2008*.

In order to dispense the ECP, pharmacists must obtain information to determine that the ECP is suitable. This information includes questions about sexual history.

Under ACT legislation, there is no requirement for people who are seeking to obtain the ECP to complete any forms.

b) ACT Health understands some pharmacists are using a form to collect this information rather than the pharmacist verbally asking questions to avoid a potentially embarrassing conversation.

Municipal services—tree management (Question No 2075)

Ms Le Couteur asked the Minister for City Services, upon notice, on 30 November 2018:

(1) Given that on page 45 of the Transport Canberra and City Services Directorate Annual Report it says that the Minister has over 768 000 trees to manage, but only planted 1 450 replacement street trees, is the tree stock in existing suburbs declining; if so, by how many a year.

(2) Did Mr Alegria, on 15 November 2018, tell the Standing Committee on Environment and Transport and City Services that "We have spaces available to fill for planting, no

doubt" (Transcript, p 138); if so, (a) does the Government have an estimate of how many spaces are available and (b) what is that estimate.

(3) Did Minister Steel, on 15 November 2018, tell the Standing Committee on Environment and Transport and City Services that "We are currently sitting at around 20 percent canopy across the city, and the better suburbs statement recommended that we should move to 30 percent" (Transcript, p 139); if so, what is the "percent canopy" figure a percentage of, for example, Government-owned urban land.

(4) By what method is the "percent canopy" figure measured, for example, use of light detection and ranging.

(5) How frequently is the "percent canopy" figure measured, for example, one-off basis, annually etc.

(6) Is the "percent canopy" data available geographically, for example, in a geographic information system, or only as an overall estimate for the whole city.

(7) What is the exact figure for the whole urban area for the latest data available.

(8) If the data is easily available, can the Minister also provide a breakdown by suburb and district.

(9) Is the "percent canopy" figure believed to be in decline, stable or growing.

(10) Does the Government have access to data which is or could be used to measure the canopy cover on privately-owned urban land in the ACT; if so, (a) what is that data and (b) does the Government have an estimate of how many additional trees would be required to achieve a 30% target; if so, what is that estimate.

Mr Steel: The answer to the member's question is as follows:

(1) Yes. The rate of decline of public trees is estimated at approximately 3000 trees (mature trees removed and juvenile trees that have either died or are missing) per year based on 2017-18 data. This rate is subject to a range of influences including climate, species and age characteristics.

(2) No current estimates are available. The most recent audit in 2010-2012 identified approximately 22,000 vacant street tree sites to be prioritised for planting and 17,300 dead trees in streets and parks that required removal and replacement.

(3) Yes. The 'around 20%' figure is taken from the LiDAR data that indicates that tree canopy covers 19.18% of all developed land (residential, commercial, urban open space, road reserves).

(4) The "percent canopy" figure was measured using LiDAR (Light Detection and Ranging) remote sensing methods.

(5) The LiDAR was captured as a one-off.

(6) Tree canopy cover data is available for most but not all of the ACT's urban area (the 2015 Lidar coverage did not include all of Canberra).

(7) Based on the limited extent of LiDAR data (limited to most but not all of the ACT's urban area), the average canopy cover percentage across all divisions is 19.18% (land use includes residential, commercial, urban open space and road reserves).

(8) Yes. Please see below table extracted from *ACT's Urban Forest Strategic Guide for the Urban Tree Planting Program June 2016* (Fig.8 Pg. 30).

(9) Data on changes in canopy cover require future data acquisition and analysis via further LiDAR capture.

(10) Yes. (a) The LiDAR data could be used for this purpose. (b) No. The necessary analysis has not been undertaken.

(A copy of the attachment is available at the Chamber Support Office).

Government—carers strategy (Question No 2076)

Ms Le Couteur asked the Minister for Community Services and Facilities, upon notice, on 30 November 2018:

(1) What influence does the Carer's Voice Framework, developed by the panel of carers, have on the Carers Strategy action plan process.

(2) Given that the Framework made a list of seven priorities for "enhanced support services" that carers need, two of these are addressed in the current action plan, why were five of the seven priorities not included in the action plan.

(3) When will each of the other five remaining priorities be considered.

(4) Given that one of the remaining recommended "enhanced supports" is superannuation compensation payment to be provided for carers by government and that this recommendation is an important mechanism for carers to plan for their future wellbeing, after devoting many of their "earning years" to caring, is the Government considering this recommendation; if not, can the Minister provide reasons as to why it is not.

Mr Steel: The answer to the member's question is as follows:

(1) The ACT Government is committed to supporting and recognising the work of carers and acknowledging the difference they make in our community. In 2017, the ACT Government partnered with Carers ACT to develop the *ACT Carers Strategy 2018-2028* (the Strategy). The Strategy was developed through a deliberative democracy process to ensure a strong carer voice guided its direction. The Carers Voice Deliberative Panel (the Panel) engaged 49 carers and other community members to establish a vision for a carer friendly city, the outcomes we want to see for carers, and our shared priorities.

Two documents make up the framework for the Strategy: the *Carers Voice Panel Report* (the Panel Report) and the *Vision, Outcomes and Priorities Statement*, which was based on key elements articulated in the Panel Report.

In 2018, a Taskforce of representatives from government, the community sector and the carer community, including eight members of the Panel, developed the first three-year Action Plan (the Action Plan) under the Strategy. The Action Plan establishes 25 actions that will deliver on the vision, outcomes and priorities for the Strategy. Each of the priorities established by the Panel are reflected in the Action Plan, with actions mapped against the priorities they support.

A priority for the Government in developing the Action Plan was to ensure that the actions closely reflect critical components of the Strategy established by the Panel. This was achieved by:

- ensuring all members of the Taskforce were familiar with the Strategy, which guided their deliberations;
- ensuring strong representation on the Taskforce by carers who were also members of the Panel; and
- engaging democracyCo to facilitate Taskforce workshops, as democracyCo had previously facilitated the Panel and was familiar with the carers who participated, their stories and their priorities.

(2) The Carers Voice Panel brought together people of different ages with diverse caring roles and life circumstances, ensuring that a wide range of relevant issues were considered. Early in the deliberative process, Panel members raised several enhanced support services with potential benefits for carers.

During this discussion, it was noted that some of the suggested services were outside the responsibility of the ACT Government and were therefore not within the agreed scope for the Carers Strategy. However, Panel members agreed that the proposed enhanced support services should be included in the final Panel Report, to provide a wider context and reflect the Panel's discussion. The inclusion of this section in the Panel Report reflects the ACT Government's commitment to an authentic deliberative process underpinned by transparency and trust between participants.

(3) While several of the proposed enhanced support services are directly reflected in a number of actions in the Action Plan, it should be noted that this is the first three-year Action Plan under a Strategy with a ten-year life span.

(4) The Panel discussed superannuation support for carers in deliberations to develop the Strategy. The Panel was advised that superannuation was a Commonwealth government responsibility, and as such was outside scope for the ACT Strategy. The Panel acknowledged this, and discussions with Carers ACT led to the decision that superannuation support would be addressed by Carers ACT in the context of its advocacy work at the national level.

Schools—instrumental music program (Question No 2077)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) How many (a) primary and (b) high schools participate in the Instrumental Music Program.

(2) What selection criteria or other requirements apply for students wishing to participate.

(3) In relation to instrument tuition, (a) who delivers the tuition, (b) what qualifications must they have and (c) what employment conditions apply to them.

(4) Is there insurance cover for loss, damage or theft of musical instruments; if so, who is liable for that cover; if not, what happens in the event of an instrument being lost or damaged.

Ms Berry: The answer to the member's question is as follows:

(1) In 2018 the Instrumental Music Program (IMP) delivered 103 bands/classes across 53 primary schools and six band classes across six high schools.

(2) The selection for band classes in primary schools involves a listening assessment carried out by IMP staff at the start of the year; a review by classroom teachers from year four (where available) on work habits, reading skills, group work skills and home task completion; and, an aural test which is used to make offers of a place to parents/students.

Note, this program supplements and complements existing music programs in schools.

(3) IMP teachers deliver the tuition and hold teaching qualifications, are registered for teaching in the ACT with the Teacher Quality Institute and hold a Working with Vulnerable People card.

(4) The Directorate is self-insured for IMP musical instruments. Parents are asked to sign an asset loan form for each instrument. An extensive asset list is maintained by the IMP and a stocktake of location and condition is performed for assets in every school/class twice a year.

Schools—language teaching (Question No 2078)

Ms Lee asked the Minister for Education and Early Childhood Development, upon notice, on 30 November 2018:

(1) How many teachers employed in ACT government (a) primary schools, (b) high schools and (c) colleges teach a language and on what basis are they employed, ie, full-time, part-time, casual etc.

(2) For each teacher identified in part (1)(a) to (c), what languages do each of them teach.

(3) For each teacher identified in part (1)(a) to (c), how many teach in more than one school.

(4) For each teacher identified in part (1)(a) to (c), what hours per week are they employed.

(5) For each teacher identified in part (1)(a) to (c), how many are employed exclusively to teach language subjects; if none are employed only to teach language, (a) how many hours a week are spend teaching a language and (b) what other subjects to they teach.

(6) What qualifications are required for teaching a language in an ACT government school.

(7) Do all teachers of languages have the appropriate qualifications; if not, how many do not and why not.

(8) For each teacher identified in part (1)(a) to (c), what languages (a) have an appropriately qualified teacher delivering language classes (b) do not have appropriately qualified people teaching them and in how many schools does this apply.

Ms Berry: The answer to the member's question is as follows:

(1) The overall number of languages teachers is recorded in the Directorate's annual Languages Census. The decision on the allocation of teachers to classes and the basis on which they are employed is a school based decision. The Directorate does not collect this data centrally.

	Primary Schools	**P-10 Schools**	**High Schools**	**Colleges**
Number of Languages Teachers	79	48	43	48

(2)

	Primary Schools	**P-10 Schools**	**High Schools**	**Colleges**
Aboriginal and Torres Strait Islander Cultures and Languages	0	0	1	0
AUSLAN	1	0	0	0
Chinese	11	5	3	13
French	15	29	15	7
German	2	1	0	3
Hindi	0	0	0	2
Indonesian	17	7	5	3
Italian	11	0	2	4
Japanese	25	17	15	7
Korean	0	1	0	3
Latin	0	0	0	1
Spanish	6	4	3	5

(3) The number of teachers who teach across more than one school is not recorded centrally by the Directorate, these arrangements are made at a school level and exist on a number of sites.

(4) The number of hours per teacher is determined at a school level, and is not able to be extrapolated from data held by the Directorate. All ACT government schools are required to provide at least one language program in one of eight priority languages (French, German, Italian, Spanish, Indonesian, Japanese, Mandarin, and Korean). Each year, from year three to six, schools are required to provide students with a minimum of 60 minutes per week of languages education. In years seven and eight, schools are required to provide students with a minimum of 150 minutes per week.

(5) The subjects taught by teachers is a school based decision. The Directorate does not collect this data centrally.

(6) All teachers in the ACT schools must be appropriately qualified and registered through the Teacher Quality Institute (TQI).

TQI mandate that teachers have successfully completed:

- A four year primary or secondary teaching double degree.

Planning—Yarralumla brickworks (Question No 2079)

Ms Lee asked the Minister for Planning and Land Management, upon notice, on 30 November 2018 *(redirected to the Minister for Roads)*:

(1) In relation to the Canberra Brickworks development, when will the revised assessment based on new documentation submitted following the consultation process, and advised in a letter to me on 28 November, be completed.

(2) What assessment has been done on traffic patterns, in relation to this development, along Dudley Street.

(3) Who undertook those traffic assessments.

(4) Can the Minister provide the findings and recommendations of the assessment report.

(5) If no assessment has yet been done, when will one be undertaken and why has one not been done.

(6) What assessment has been done on the environmental or heritage significance of the trees planted in the area adjacent to Dudley Street.

(7) What consultation has been held with Transport and City Services officers about bus stops and bus movements along the current Dudley Street route.

(8) What consultation has been held with Transport and City Services officers about bus stops and bus movements along a redesigned or reconfigured Dudley Street.

Mr Steel: The answer to the member's question is as follows:

(1) The assessment of the s211 EIS exemption application for the Dudley Street upgrade and CBP access road project is currently being undertaken by the Environment, Planning and Sustainable Development Directorate. This process is explained on their website: https://www.planning.act.gov.au/topics/design_build/da_assessment/environmental_assessment/exemption_from_requiring_an_eis_s211.

(2) The EIS exemption consideration report will need to include the offset requirements set out in the Commonwealth's EPBC referral decision, which is due by late December 2018.

(3) A traffic and transport impact assessment has been undertaken for the Canberra Brickworks Precinct (CBP) Access Road and Dudley Street Upgrade project.

(4) This assessment was undertaken by AECOM.

(5) The findings and recommendations of the traffic and transport impact assessment were included in section 7.1 of the publicly available Final Preliminary Documentation: https://www.tccs.act.gov.au/roads-paths/current-projects/city-inner-north-and-inner-south/canberra-brickworks

(6) The report has been undertaken, see item 4 above.

(7) A Tree Assessment has been undertaken for the Canberra Brickworks Precinct (CBP) Access Road and Dudley Street Upgrade project.

(8) There are currently no bus routes along Dudley Street. The existing bus stops were used for school services only in the past.

(9) Consultation has occurred with Transport Canberra and City Services as part of the Canberra Brickworks Precinct (CBP) Access Road and Dudley Street Upgrade project in relation to the need for bus stops to be included as part of the upgraded Dudley Street.

Transport—bus station maintenance (Question No 2080)

Miss C Burch asked the Minister for Transport, upon notice, on 30 November 2018:

(1) What were the costs of maintenance during (a) 2014-15, (b) 2015-16, (c) 2016-17, (d) 2017-18 and (e) 2018-19 to date for (i) Gungahlin Bus Station, (ii) Kippax Bus Station, (iii) Westfield (Belconnen) Bus Station, (iv) Belconnen Community Bus Station, (v) City Bus Station, (vi) Woden Bus Station, (vii) Weston Cooleman Court Bus Stop, (viii) Tuggeranong Bus Station and (ix) Erindale Bus Station.

(2) What were the costs of maintenance during (a) 2014-15, (b) 2015-16, (c) 2016-17, (d) 2017-18 and (e) 2018-19 to date for (i) Belconnen and (ii) Tuggeranong Bus Depots.

Ms Fitzharris: The answer to the member's question is as follows:

(1) Due to changes in the coding of maintenance expenditure data, annual costs for maintaining ACT Government owned bus stops and interchanges is unable to be disaggregated prior to the 2016-17 financial year.

Currently maintenance cost data is not collected at the level of individual bus facilities. Below are the annual costs for maintaining, ACT Government owned bus stops and interchanges;

2016-17	**2017-18**	**2018-19 (Nov YTD)**
$74,795	$155,328	$56,687

*Above maintenance costs exclude asset cleaning costs of $452,381 for 2016-17, $314,082 for 2017-18 and $183,075 YTD November 2018-19.

(2) In relation to bus depots, maintenance (excluding capital upgrades) was;

	2014-15	2015-16	2016-17	2017-18	2018-2019 (NOV YTD)
i) Belconnen Depot	527,520	472,545	376,966	319,691	129,526
ii) Tuggeranong Depot	331,974	269,039	229,796	250,148	77,718

Transport—MyWay agents (Question No 2081)

Miss C Burch asked the Minister for Transport, upon notice, on 30 November 2018:

(1) How many MyWay Smartcard Reload Terminals are owned by the Territory.

(2) What is the dollar value of a single MyWay Smartcard Reload Terminal.

(3) What was the value of support services provided by the Territory to MyWay Recharge Agents in (a) 2014-15, (b) 2015-16, (c) 2016-17, (d) 2017-18 and (e) 2018-19 to date.

Ms Fitzharris: The answer to the member's question is as follows:

(1) 42.

(2) The reload terminals can no longer be purchased. However when TCCS last purchased them in 2013 the cost for each terminal was approximately $12,000.00 including ancillary equipment and installation.

(3)

(a)	2014-15	$228,000
(b)	2015-16	$233,000
(c)	2016-17	$239,000
(d)	2017-18	$243,000
(e)	2018-19 NOV YTD	$103,000

Light rail—driver remuneration (Question No 2082)

Miss C Burch asked the Minister for Transport, upon notice, on 30 November 2018:

What was the dollar value of wage, salary and other payments to light rail drivers made in (a) February 2018, (b) March 2018, (c) April 2018, (d) May 2018, (e) June 2018, (f) July 2018, (g) August 2018, (h) September 2018, (i) October 2018 and (j) November 2018 to date.

Ms Fitzharris: The answer to the member's question is as follows:

(1) Canberra Metro Operations employ all light rail drivers and are a private company. The value of wage, salary and other payments to light rail drivers is not disclosed. The ACT Government has made no payments to date for light rail drivers.

Questions without notice taken on notice

ACTION bus service—school services

Ms Fitzharris *(in reply to a question and supplementary questions by Miss C Burch and Mrs Kikkert on Tuesday, 23 October 2018)*:

Transport Canberra and City Services interviewed all officers involved in this incident and are confident all policies and procedures were followed.

For your information operating procedures for all situations regarding school bus services that have been involved in incidents such as bus breakdowns or motor vehicle collisions are as follows:

Bus drivers are required to:

- Notify the Communications Centre (COMCEN) that their school service has broken down/been involved in an incident.
- Confirm that the bus is safe and students can remain on the bus.
- Advise COMCEN of the approximate number of students on board and approximate primary and secondary student numbers.
- Announce to the students that an alternate bus is on route and will collect them to continue their trip.
- Direct the students not to leave the bus unless they notify the driver.

If the bus is not safe for students to remain on board the bus the bus driver should:

- Notify COMCEN immediately.
    - COMCEN will send two teams of Transport Officers to the bus and emergency services if required.
    - One team to specifically assist with student duty of care.
    - The other team will monitor/assist with bus breakdown/emergency issue.
- Advise COMCEN of the approximate number of students on board and approximate primary and secondary student numbers.
- Announce to the students that an alternate bus is on route and will collect them to continue their trip.
- Direct students to relocate to a safe area under the driver's supervision.
- Direct the students not to leave the area unless they notify the driver.

Field Transport Officers (FTO) are required to:

- Once on location FTO's will be responsible for students until they are transferred to a replacement bus or collected by a parent.
- In addition FTO's must:
    - Maintain passenger safety.
    - Identify and confirm student numbers from the bus/buses involved.
    - Collect details of students affected by the incident.
    - Ask students to remain on the bus/or in the area while safe to do so.

- Release students into the care of an identified parent/carer.
  - Notifying COMCEN when this occurs.
- Assist and monitor the transfer of students to replacement services/field vans.
- Notify COMCEN when student transfer is complete.

ACTION bus service—network

Ms Fitzharris *(in reply to a supplementary question by Ms Le Couteur on Tuesday, 23 October 2018)*:

- Transport Canberra has calculated the proportion of Canberrans within walking distance of a bus stop based on:
  - The proportion of dwellings in mesh blocks that are within a 800m radius of a Rapid bus stop or light rail stop (Rapid routes);
  - the proportion of dwellings in mesh blocks that are within a 500m radius of any other bus stop served by local buses (Local routes); and
  - the proportion of dwellings in mesh blocks that are within a 800m radius of a Rapid bus stop or light rail stop OR within a 500m radius of any other bus stop served by local buses (All routes).

- Mesh Blocks are the smallest geographical area defined by the Australian Bureau of Statistics (ABS) and form the building blocks for the larger regions of the Australian Statistical Geography Standard (ASGS).

- This methodology is consistent with historical practices for calculating coverage of bus services in the ACT, as well as for other purposes (such as calculating coverage in new suburbs being developed).

- These radial distances are also consistent with the Estate Development Code.

- Using this consistent methodology, the portion of the Canberra community living within an 800m walking distance of a rapid route will increase from approximately 30% at the establishment of Transport Canberra in July 2016 to approximately 60% in the new network.

Health portfolio—workplace culture

Ms Fitzharris *(in reply to supplementary questions by Mrs Dunne and Mr Wall on Tuesday, 27 November 2018)*:

(1) No.

(2) In 2018 the following three divisions (in ascending order) within Canberra Health Services had the highest number of reported incidents for mental stress:
  i. Mental Health, Justice Health, Alcohol and Drug Services
  ii. Medicine; and
  iii. Surgery and Oral Health.

Health portfolio—staff safety

Mr Rattenbury *(in reply to a supplementary question by Mrs Dunne on Tuesday, 27 November 2018)*:

No. Within the ACT Health Incident Management System – Riskman - there are two classifications which may provide data related to clients or visitors being hit by moving objects:

1. The classification titled "Being hit by moving objects"; and

2. The classification titled "Non-Clinical/Facility – Hazards – Other".

There are not separate registers within these classifications for clients and visitors.

Canberra Hospital—radiology department

Ms Fitzharris *(in reply to supplementary questions by Mrs Dunne and Mr Milligan on Tuesday, 27 November 2018)*:

(1) There were no impacts on clinical care.

(2) The backlog was cleared in a little over a week. This was achieved in part by offering additional hours to radiologists for reporting, and by sending CT scans to the offsite provider for reporting. These practices can be repeated at times of high demand to avoid backlogs in future.

Health portfolio—staff safety

Ms Fitzharris *(in reply to a supplementary question by Ms Lawder on Tuesday, 27 November 2018)*:

Mental & Justice Health, Alcohol & Drug Services, followed by Critical Care and Medicine, had the highest number of reported incidents related to moving objects at Canberra Health Services.

(Source = Staff Incidents on Riskman 01/01/18 – 27/11/18)

Alexander Maconochie Centre—duress alarms

Mr Rattenbury *(in reply to a question and supplementary questions by Mrs Jones and Mrs Dunne on Wednesday, 28 November 2018)*:

(1) Yes. All duress alarms that Canberra Health Services are responsible for, where Justice Health Services provide care, are in good working order. Those locations are:
- Dhulwa Mental Health Unit,
- Extended Care Unit (ECU), and
- City Community Health Centre

The duress alarms and system at the Alexander Maconochie Centre are completely managed by ACT Corrective Services.

In Dhulwa and ECU, the mobile duress alarm devices are allocated and electronically registered to an individual staff member at the commencement of each shift. At the time of registration, each staff member checks that their allocated duress alarm is working prior to entering the clinical floor. The devices operate throughout the units via WiFi enabled systems which are regularly checked and maintained through ACT Health, Digital Solutions.

At the City Community Health Centre, there are 12 fixed duress alarms, with the Justice Health Services allocated space. The duress alarms are tested monthly by building security.

(2) All mobile duress alarms in Dhulwa and ECU are currently accounted for. If any device is lost or broken, they are either repaired or replaced as soon as practicable. If any device is unaccounted for, they can be electronically tracked to the last person to whom the device was allocated.

Animals—off-leash areas

Mr Steel *(in reply to a question and supplementary questions by Ms Lawder and Mr Parton on Wednesday, 28 November 2018)*:

- In accordance with the *Domestic Animals Act 2000*, dogs in public places must be restrained by a leash, unless in a declared exercise area.
- Declared exercise areas are identified on the dog exercise area map on the ACTmapi website.
- Dogs being exercised off-leash in a declared exercise area must remain under the effective control of their keeper/carer.
- The TCCS website is accurate in the information it provides.

ACT Supreme Court—coat of arms

Mr Ramsay *(in reply to a question and supplementary questions by Mr Hanson and Mr Wall on Wednesday, 28 November 2018)*:

1. The issue of the coat of arms has been raised on a number of occasions throughout the planning, design and construction of the building. In April 2018, the Territory Project Team provided a formal brief to me on the use of coat of arms within the Court.

2. I have exchanged no correspondence with the Chief Justice about this matter although I have discussed the issue at meetings with Her Honour. I am not aware of any correspondence between the previous Attorney-General and the Chief Justice in regards to this matter.

Alexander Maconochie Centre—duress alarms

Mr Rattenbury *(in reply to a question and a supplementary question by Mrs Jones on Wednesday, 28 November 2018)*:

ACT Corrective Services (ACTCS) were informed of the specific incident referenced. The incident was a test of the duress alarm and at no time was staff safety compromised.

ACTCS currently have over 70 operational mobile duress units, and these are available for staff at the AMC including Justice Health staff. In the event of a shortfall in mobile duress units, ACTCS does have alternative options. The Government has allocated funding for the procurement of a new Mobile Duress System replacement project due to the fact that the current system is now obsolete, and alarms can no longer be repaired or procured. The current Mobile Duress System is projected for replacement in late 2019.

Calvary Hospital—plumbing

Ms Fitzharris *(in reply to supplementary questions by Mr Coe and Mrs Dunne on Thursday, 29 November 2018)*:

(1) No.

(2) No.

Schools—injuries

Ms Berry *(in reply to a question by Ms Lee on Thursday, 29 November 2018)*:

Staff incident and injury data is stored centrally in the Whole of Government electronic work health and safety incident reporting system and the Directorate has access to the data it needs to ensure it meets the requirements of the Undertaking.

The Directorate operates in accordance with the ***Responding to Student Accident/Incidents: Support, Reporting and Insurance Arrangements Policy***, in relation to student injury reporting and insurance arrangements.

https://www.education.act.gov.au/publications_and_policies/corporate-policies/wellbeing/accidents-and-incidents/responding-to-student-accident-incidents-support-reporting-and-insurance-arrangements-policy

Education—enrolment policy

Ms Berry *(in reply to a question and supplementary questions by Mrs Kikkert and Ms Lee on Thursday, 29 November 2018)*:

In accordance with the ACT Education Act 2004, all children of school age living in the ACT are guaranteed a place at the government school in their neighbourhood;

their neighbourhood being defined by a school's Priority Enrolment Area (PEA). This guarantee applies regardless of when a student applies for enrolment. This guarantee is fundamental to the equity of the government school system, as no child should have to compete for a place in school.

As has been long standing policy, if a school has capacity after enrolling students from its PEA, it may consider offering enrolment to ACT students who live outside the PEA (also known as "out of area" enrolments). Schools should establish an enrolment limit at a level less than 100 percent of capacity utilisation to ensure there is always capacity available for ongoing enrolment from within their PEA, at any time in the year, for example, if a family newly moves to Canberra or into their area. In addition, the Directorate's aim is that over the longer term, a school's capacity utilisation is less than 100 percent so as to enable flexible use of learning spaces to suit curriculum needs.

Due to high demand within their PEAs, both Lyneham High School and Canberra High Schools were required to limit out of area enrolments for year 7 in 2019 with Lyneham High School being limited to a very small number of students into the LEAP program.

The Directorate has a number of exception categories for out of area enrolments which are detailed on the Directorate's website https://www.education.act.gov.au/school_education/enrolling_in_an_act_public_school/parent-guide/accepting-an-offer-of-enrolmenttransfer. They include:

- siblings of concurrently attending (ie in 2019) students
- non-PEA students on clear wellbeing grounds; or
- agreed, capped specialist programs with defined eligibility criteria.

Wellbeing

The elements of student wellbeing include:

1. legal considerations;
2. social and economic vulnerability;
3. mental health including psychological factors; or
4. students that may be considered at risk for other factors.

Specialist programs

The ACT government school system is based on equity. As such, there are a range of "special" programs which are available universally across ACT public schools, such as Tier Two Continuum of Education or (per existing policy) Gifted and Talented programs. These universally available approaches across schools are not considered as 'defined specialist programs'.

A small number of schools deliver defined "specialist" programs agreed with the Education Support Office of the Directorate. For the purposes of the selection of non-PEA enrolments, these programs have an agreed maximum capacity with defined and objective selection processes. These programs have a cap on the maximum number of

students they can accept and, where the cap has not been met by PEA students, non-PEA students can be considered for these places, either according to the objective selection methodology in place, or in strict application date and time order. Clear evidence is required to support selection of non-PEA applicants into these programs. One such program is the French bilingual program at Telopea Park School.

Mental health—duress alarms

Mr Rattenbury *(in reply to a question and a supplementary question by Mr Wall on Thursday, 29 November 2018)*:

(1) All staff in the Adult Mental Health Unit and the Mental Health Short Stay Unit are allocated with personal duress alarms if they are working in clinical areas. These personal alarms are stored in charging racks in staff only areas of both units.

If any devices are lost or broken, they are either repaired or replaced as soon as practicable. If any device is unaccounted for, they can be electronically tracked to the last person to whom the device was allocated.

(2) All devices are allocated and electronically registered to an individual staff member at the commencement of each shift.

At the time of registration, each staff member checks that their allocated duress alarm is working prior to entering the clinical floor. The devices operate throughout the unit via WiFi enabled systems which are regularly checked and maintained through ACT Health, Digital Solutions.

Sport—night-time events

Ms Berry *(in reply to supplementary questions by Mr Milligan and Mr Wall on Thursday, 29 November 2018)*:

The ACT Government is supportive of motorsports in Canberra.

The motorsport activities at the Fairbairn Park Cluster operate under an Environmental Authorisation granted by the Environment Protection Authority (EPA) under the *Environment Protection Act 1997*. The Environmental Authorisation sets out conditions under which motorsports may be run.

The conditions in the Environmental Authorisations are to manage noise from the motorsports so residential areas near the Fairbairn Park Cluster are protected from excessive noise levels. The Environmental Authorisations do not restrict the number of events held, where the noise from a motorsport event does not breach the noise zone standard. Where an event exceeds the noise zone standard, Authorisation holders are able to use a set number of noise credits each year, which allow an increase in the noise standard by 5dB per credit, up to a maximum of 4 credits or 65dB(A).

There is a restriction on the Fairbairn Park Cluster not permitting motorsport events after 5pm. The restrictions were put in place following complaints from The Ridgeway residents in NSW and residents in Oaks Estate.

The EPA permitted the recent trial evening racing event at the National Capital Motorsport Club following noise mitigation works which were aimed at reducing noise to a level which was compliant with the noise zone standard. The noise levels during the trial event were louder than expected and above the noise zone standard. The EPA has had discussions with the National Capital Motorsport Club following the trial and a commitment was made by the National Capital Motorsport Club to work on mitigation measures to further reduce noise from the Speedway.

There are a number of other motorsport events which are held in the ACT and operate under an environmental authorisation. The National Capital Rally is held over four days around June and operates within the conditions of their authorisation which is similar to the National Capital Motorsports authorisation. In the past the EPA has authorised the GMC 400 and one off events. When considering an application for an environmental authorisation or a variation to an existing environmental authorisation the EPA considers the potential for the activity to cause environmental harm, the environmental record of the applicant, any relevant policies and the social and economic benefit that may be derived from the activity. This ensures a considered and balanced outcome which has taken into consideration the environment in which the activity will be held and the need of the Authorisation holder to undertake the activity.

From: [redacted]
To: Terrplan
Subject: Draft variation 369
Date: Friday, 8 May 2020 2:17:23 PM

Territory Plan Section
EPSDD
GPO Box 158
Canberra ACT 2601
Via email to terrplan@act.gov.au

Dear [redacted]

Re: DV369, NI2019-807

Thank you for the opportunity to comment. My elderly parents are both in hospital in the UK in a serious condition so unfortunately the last few weeks have been extremely difficult and I must be brief.

The Summary on page 1 of the Explanatory statement makes the dubious opening claim that DV369 “proposes changes to make sure standards for soft landscaping area in all residential areas (RZ1 to RZ5) are met.” This claim in my opinion is not supported by the construction of the rules, which are undermined by the presence of vague and poorly worded and discretionary criteria that are given equal weight in the *Codes* to the quantitative rules. EPSDD's Annual Report for 2017-18 lists a quote for $80,000 by Tait Network for 'Planning and Design for Living Infrastructure as part of Residential Intensification in a Changing Climate', so there is important background material available that has not been made public that is obliquely referenced on page 4 of the Explanatory statement. I find that disturbing and non-transparent, and having sought repeatedly to access that report and requested at the Environment and Planning Forum that it be made public I am concerned that the Fact Sheet provided and the Explanatory statement employ language that is misleading.

The intent of a rule and the objective that underlies the making of that rule should take precedence, so to assign equal weight to the criteria opens the back door to relaxing the rule and therefore diminishes and makes that rule irrelevant. It has been standard practice in the DA process in the last 10 years to depart from the rules and permit departures on the basis of debatable selective information provided by

the proponent, and consultants hired by the proponent, to facilitate approval. Since 2010 I have repeatedly seen the Codes abused in practice and observed a systemic problem with the construction, which DV369 perpetuates. There are virtually no checks and balances built in to the system, other than to seek a review of the decision to ACAT. Third party review rights in many parts of the ACT have been extinguished, depriving property owners and tenants in the city centre, town centres and many major commercial zones of normal review procedures and independent oversight.

A Climate Change Strategy is either just another set of pretty pictures and forest product that gathers dust on a shelf, or we give it teeth and make it happen. Either the rules in DV369 should be made mandatory, or the relationship between the rules and the criteria should be altered to ensure that there remains a nexus between the quantitative rule and the qualitative description of what criteria should be applied and what to have regard to. In practice, the rules typically contain numeric minima and maxima derived through consultation with industry players and represent the least offensive lowest common denominator. By the time they're exposed to public consultation through a draft variation, they're extremely unlikely to stake out what is desirable, or best practice, so again and again the public is being presented with rules that have already been diluted because there's so little appetite to challenge the status quo.

If we're to adopt and seek to implement a forward thinking Climate Change Strategy and Living Infrastructure Plan, it seems to me we must do better. The community needs the evidence, and they need to see that the planning system is prepared to change its approach and adopt strong rules, that are capable of resisting the pressure to continually water down standards. As the national capital, we have the opportunity and the privilege to lead. DV369 leads us nowhere. It makes promises it cannot fulfil and squanders the opportunity to make a meaningful set of changes to the current standards, which are woeful.

I recommend that

- DV369 be withdrawn, substantially revised and re-notified with the Tait Network report and data on existing tree canopy cover for every suburb in the ACT and realistic projections of tree canopy on all developed and likely developable land in the urban area as background (see pages 339-341 of the attached Hansard dated 14/02/2019)

every rule be made mandatory and no criteria applied unless the status of the rule and its relationship with the criteria is significantly redefined to prevent the rule and its intent (and underlying objectives for the zone and its desired character) being made irrelevant

- percentage canopy cover be introduced as a new rule for all residential development regardless of block size (single dwellings and multi-unit housing)
- 30% canopy cover be consistently applied, with incentives for replacing trees that have died or had to be removed, and for planting trees and shrubs that are drought hardy and landscaping that applies water sensitive urban design principles
- preference be given to trees that are planted in deep soil zones contiguous with neighbouring and adjoining deep soil zones to create a mosaic that allows root systems and micro-organisms to find water, sun and nutrients in order to flourish
- negative impacts of urban heat islands explicitly recognised in the development assessment process and Territory Plan

Kind regards,

[redacted]

Active Planning
PO Box 1000
DICKSON ACT 2602

[redacted]

Deakin Residents Association

A garden Community for the Future

PO Box 9056 Deakin 2600
www.deakinresidents.asn.au

7 May 2020

Territory Plan Section
EPSDDD
GPO Box 138
Canberra ACT 2600

By email to Terrplan@act.gov.au

Draft Variation 369 – Living Infrastructure in Residential Zones

Dear Sir/Madam

The members of the Deakin Residents Association (DRA) value the garden city concept and supports measures that will implement this concept more widely in Canberra. However, the DRA want measures which are clear in their implementation and are readily enforceable. We support the concerns of the Inner South Canberra Community Council (ISCCC) in this regard. Much as we regret any delay in implementing some of DV 369's objectives, we fully support the ISCCC view that more work is needed on this DV before it comes into force.

The 30 per cent tree canopy target is rather modest, but will not be achieved if some of the development approvals we have seen in Deakin continue to undermine its achievement.

Yours sincerely,

[redacted]
Vice President

Submission for the consultation process on DV369 (Living Infrastructure in Residential Zones) and DV368 (City and Gateway South).

Thank you for the opportunity to comment on Draft Variations 369 and 368. I am writing as a rate payer who chose to move to Canberra “The Garden City” and chose to move into a “garden suburb” at considerable extra cost, because this was the environment that we wanted our children to grow up in.

Over the last decade we have witnessed a growing trend for bigger houses and concreted or paved outdoor areas that in many cases now have almost obliterated the green space around dwellings. I am not only concerned about the reduction in green space and coverage, the replacement of beauty with concrete and grey or even black houses, but also the heat island effect that puts our city climate at risk.

On this background I welcome the awareness of these and related issues that the draft proposal indicates. Here is a real opportunity to make progress towards a greener city in the future, that can proudly call itself the “Garden City” that everybody wants to visit or live in.

However, in order to fulfil its promise I believe a number of issues need clarification and strengthening:

1. I understand the Government’s Living Infrastructure Plan (LIP) includes a commitment to 30% tree canopy cover by 2045. The draft variation 369 however, proposes only 15% cover for multi-unit developments,

falling seriously short of the 30% target. This needs to be amended to 30%

2. It is not clear how the draft variation will achieve the 30% permeability target set in the LIP. The draft variation 369 should include an explicit 30% permeability target and explain exactly which areas will be counted, e.g. garden beds and permeable driveways, but not concrete planters.

3. A 30% canopy cover and 30% permeability also needs to be introduced to the City and Gateway (DV368).

4. The suggested changes for “Compact Blocks” need to be reviewed in light of the possibility that they can produce streets with hardly any green in the front and possibly no trees at all.

5. New estates sometimes end up with a tree here and there on their public land. The Estate Development Code should be amended to allow new estates to benefit from an explicit 30% tree canopy target on their public land.

6. The draft variation needs to encourage green roofs. In fact on small blocks where a garage is built as a separate structure, the code should require that the garage roof is “green”, i.e. planted with appropriate mosses, grasses, etc.

7. The draft variation should not only consider individual blocks or developments, but take a broader look at our

suburbs, i.e. a birds-eye view with regard to the planted and natural corridors between different developments and gardens. It is important for our bird and wildlife that green areas link up and create continuous corridors wherever possible, not only on the ground but in the canopies as well.

Yours sincerely,

[redacted]

Inner South

ACT Division Planning Institute of Australia

11 National Circuit
Barton ACT 2600

08 May 2020

DV369 Living Infrastructure
Environment, Planning & Sustainable Development Directorate
PO Box 158
CANBERRA ACT 2601

Email: terrplan@act.gov.au

PIA submission - DV369 Living Infrastructure

The Planning Institute of Australia (PIA) is the national association representing professional town planners throughout Australia and has a total membership of about 5,300, together with over 4,000 other planners who participate in PIA's professional development program. The ACT Division of the Planning Institute of Australia, (PIA ACT) is led by a committee of members who voluntarily help advance the planning profession in the ACT.

This submission is in response to Draft Variation 369 (DV369) Living Infrastructure released by the ACT Government and builds on our previous submission on the draft Living Infrastructure Policy (https://www.planning.org.au/documents/item/10271). PIA ACT strongly supports the primary intent of DV369 to increase tree canopy cover and permeable surfaces in Canberra. However, we have concerns relating to DV369 in its current form including; the intent to meet canopy cover and permeable surface targets through private residential land only, the impact on a range of housing development types in particular compact and mid-size blocks and the limited stakeholder engagement prior to release.

The proposed changes may have the potential to:

- Adversely impact on housing choice and affordability
- Impact on the ability of compact and mid-sized blocks to accommodate viable built form outcomes
- Result in poor built form outcomes and limit architectural variety and innovation.

To address canopy cover and permeable surfaces requires a comprehensive approach which recognises that:

- the public domain of streets and parks and broader open space areas play the major role in the delivery of canopy cover in urban areas

- in new urban areas strategies for delivering canopy cover targets should be delivered at the estate or neighbourhood level through neighbourhood plans and estate development plans (EDPs)

DV 369 is limited in its scope by only addressing the private domain in isolation of the public domain. In certain contexts, it will be appropriate to deliberately offset on-site canopy cover with increased public domain canopy cover in the adjacent or nearby public domain. Such an approach should form part of a strategic approach to achieving canopy cover at the precinct or neighbourhood level and through EDPs.

Housing Affordability (Single Dwelling Housing Development Code)

More affordable housing options are provided in a variety of ways including through the provision of more compact block sizes. However, it appears that some rules within DV369 may inadvertently impact on the ability to provide reasonable built form outcomes on compact and mid-sized blocks. For example, Rule 39 applied to mid-sized blocks does not consider the difference in east-west facing blocks to north-south oriented blocks. Solar controls in the Territory Plan reduce the built form opportunity on east-west facing blocks on the upper floor, leading to an impractical upper floor footprint.

We encourage the Planning Authority to further analyse the impacts of DV369 on a range of block sizes and building configurations including:

- mid-sized blocks of east-west orientation such as mid-sized blocks from 251m² to 500m².

- secondary residence on mid-sized blocks applying all the existing applicable planning controls within the Territory Plan and Rule 39 (DV).

- compact blocks including blocks that are less than 250m².

Plan review process and updates

The Territory Plan continues to have variations applied that create additional layers and do not necessarily achieve the desired outcomes. In some cases, perverse outcomes are inadvertently introduced through this complex layering of over 300 variations since the Territory Plan was enacted.

An example of this is DV354 - Water Sensitive Urban Design (WSUD) General Code which came into effective on 21 February 2020. Rule 9 of the WSUD General Code stipulates site permeability of 20% for sites greater than 2000m² or increased impervious areas of 100m² to existing urban areas.

DV369 now seeks to introduce new rules which relate to maximum site coverage and tree canopy cover and stipulates site coverage and planning requirements across four separate rules (R39A, R39B, R39C and R40). This includes requirements for the size and number of trees on a block without reference to the context of each block and its site constraints.

As such, we strongly encourage the ACT Government to prioritise the review of the planning system and Territory Plan to ensure an overarching comprehensive approach to the updating of planning controls.

Objectives and desired outcomes

DV369 is silent on the Territory Planning zoning objectives, rather it applies private open space requirements to blocks under the Single Dwelling Housing Development Code or site coverage controls to blocks under the Multi-Unit Housing Development. This may reduce the opportunity for increased density in new estates with reduced blocks sizes close to commercial centres (shops and amenity) as larger blocks appear to be required to achieve reasonable built form outcomes.

The existing codes do not provide sufficient clarity or guidance on the types of outcomes being sought. They are esoteric, dense and difficult to navigate. PIA believes a new approach is required. There are better models which are comprehensive, graphic and exemplar rich that provide best practice guidance for medium to high density development density and types. They clearly communicate intended outcomes and design excellence and provide a more discretionary regulatory framework that facilitates design excellence.

Summary

In consideration of the above, we encourage the ACT Government to consider redrafting DV369 after more thoroughly testing the impact of the draft variation on a range of block sizes, orientations and the resultant built form outcomes. We note the ACT Government's commitment to the comprehensive review of the planning system and Territory Plan. This variation highlights the challenges in continuing on with "business as usual" while also updating aspects of planning controls. If you have any queries regarding the matters raised in this submission, please contact me [redacted]

Yours sincerely

[redacted]

[redacted]
President PIA ACT

From: LCA
To: Terrplan
Subject: Submission on Draft Variation to the Territory Plan 369 - Living Infrastructure in Residential Zones
Date: Friday, 8 May 2020 4:15:01 PM

To the Territory Plan Section, EPSDD
I am writing on behalf of the Lyneham Community Association (LCA), a local community group of over 250 members who live in Lyneham and North O'Connor, regarding Draft Variation to the Territory Plan 369 - Living Infrastructure in Residential Zones (the DV).
The LCA supports the intent of the DV to increase the tree cover within the urban footprint of Canberra. The inclusion of trees with the urban footprint is a key feature of the 'bush capital' which gives Canberra its unique environmental quality that we want to protect for future generations. Unfortunately with the redevelopment of older parts of Canberra and increasing building density the number of trees in Canberra has been diminishing.
This situation needs to be reversed. Urban tree cover is crucial to ensure the sustainability and vitality of the city into the future. The incorporation of trees into the built environment provides an array of benefits such as shade in summer and a reduction in the urban heat island effect. Urban trees also play an important role in providing fauna habitat and providing connectivity between parks and bushland within the city. Trees are also a carbon sink and help in reducing the level of greenhouse gases in the atmosphere.
The LCA notes that the DV is meant to support the commitments detailed in the ACT Government's Living Infrastructure Plan which set a city-wide target of 30% tree canopy and 30% permeable surfaces by the year 2045. However the DV does not appear to be developed as part of an integrated approach to implementing the Living Infrastructure Plan and it is unclear from the document the extent to which the DV will help achieve these targets. For example, the DV largely focuses on the development criteria for private residential spaces and does not consider how the living infrastructure targets will be met in the public sphere, including the streets and public spaces between buildings.
The Government needs to explain how this target will be apportioned across the ACT, taking into consideration where land is actually available for planting. Given that other building zones tend to be of a higher density than residential and that roads, other paved infrastructure and sporting fields cannot be planted with trees, we suspect that we will need more than 30% tree cover in residential areas to achieve the ACT target across the overall Canberra urban footprint.
To support the 30% canopy target, new residential developments must have planting requirements that are both ambitious and regulated. While the DV increases minimum planting requirements and soft landscaping areas on residential blocks, overall tree planting requirements are unambitious and inconsistent with the 30% canopy cover target. The inclusion of tree planting areas in residential development is a good initiative but does not equate with the desired tree canopy coverage. The largest tree planting area proposed in the DV is 30% of the total block size (large blocks), however the tree canopy itself may not fully cover the planting area as this is dependent on the size of the tree and the dimensions and configuration of the planting area.
The denser RZ3, RZ4 and RZ5 residential blocks only require a 15% tree canopy cover which does not reflect the 30% tree canopy targets as outlined in the Living Infrastructure Plan. The DV should set more ambitious tree planting zones on these blocks and also consider how the planting areas of adjoining blocks can be

aligned to allow for larger trees that can span across blocks.
In terms of the implementation of this DV, the LCA is concerned that the rules and criteria in the DV are mostly non-mandatory and rely on the subjective assessment by the building certifier of whether new developments meet the tree cover objectives set out in the DV. Unfortunately it seems to be a regular occurrence in Canberra that developments get approved that push or even break the boundaries of the Territory Plan requirements for particular blocks, which can have a negative impact on the surrounding neighbourhood. The development controls in the Territory Plan need to be applied in a consistent and transparent way otherwise what is the point of having these controls?
There is also the unanswered question in the DV of how the government will ensure that the approved tree plantings on specific blocks will be maintained after the new houses are constructed? What is to stop the developer or resident from removing young trees once the final occupancy approvals have been given for the building? Consideration should be given to requiring building certifiers to revisit new houses after at least a year of occupancy to check whether the approved tree plantings are still there and the government amending the tree protection legislation to include a new offence for removing trees planted to meet this new development requirement within a set time from home occupation.
In summary, this DV is a welcome initiative to increase Canberra's tree cover but needs further work to ensure it is contributing as much as possible to achieving the government's 30% tree canopy target and that it will be implemented effectively.
Thank you for providing this opportunity to comment. We are happy to provide any further information you may require.
Regards
[redacted]
Secretary
Lyneham Community Association

Your local voice

weston creek community council

Westoncreek.org.au
info@westoncreek.org.au

PO Box 3701
Weston Creek ACT 2611
Telephone (02) 6288 8975

The Director-General and Chief Planning Executive,
Environment, Planning and Sustainable Directorate,
Dame Pattie Menzies House,
Dickson. ACT. 2602

8 May 2020

terrplan@act.gov.au

Submission on Territory Plan Variation No 369

Thank you for the opportunity for the Weston Creek Community Council to comment on Draft Territory Plan Variation 369 (DV 369).

DV369 responds to Action 2 of Canberra's Living Infrastructure Plan, which seeks to achieve 30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045.

Council welcomes the overall intent to increase the landscape area in any new development in order to implement some of the living infrastructure elements recommended as part of the ACT Planning Strategy 2018 in order to make Canberra a resilient city within the landscape.

This is a simple objective which is intended to amend current provisions for 'planting area' in all residential zones by expanding the definition and clarifying the elements which impact the permeability of the ground. As examples, the terraces and patios would be included in 'site coverage'

However, this straightforward objective is defined with a raft of rules and criteria. Whilst it is appreciated that definitions may equal certainty, they can also create confusion and uncertainty.

Currently the legislation has both rules and criteria. The criteria are subjective and are often allowed to take precedence over rules. The current Draft Variation 369 falls into the same mould.

The interaction of all the rules regarding tree planting, soft landscape areas and site coverage are complex and difficult for the user to interpret. The resultant outcome is more complexity rather than less.

A table was provided indicating the amended and new Code Rules. There are 7 rules applying to the Single Dwelling code and 6 rules applying to the Multi Unit Code and to be added to this are the proposed criteria. This complex mix does not provide certainty for either the community or the developers.

Over the years there has been much discussion about the balance between rigid rules and a completely flexible regime in order to foster innovation. Again, this draft falls between the two stools.

The criteria appear to be stating what the rules should achieve and are therefore an outcome of the rules but should not over-ride them. This may appear to be rigid but ensures that developers should achieve what the criteria states but cannot manipulate them

Perhaps it is time for a set of simple mandatory requirements which could indeed be simplified to a matter of site coverage requirements which would include trees and permeable area.

The Private open space in 5.2 in Rules 38, 39 and 40 are reasonable simple yet the criteria is more complex.

Site coverage and tree plantings at 5.2A just make the mind boggle with the complexity. Who is going to supervise or check on this?

Council asks why Element 4 cannot be incorporated into Point 5.

The requirement for deep soil zones is applauded and would result in the growth of substantial trees with good canopies to contribute to the aim of 30% tree canopy coverage over the ACT as a whole. But again, it is part of a proposed complex set of requirements with perhaps not enough emphasis and therefore is "lost" in the total document.

In the case of multi unit developments proposed changes are not consistent with government's target to achieve 30% permeable surfaces plus 30% tree canopy coverage. The proposed draft variation includes a requirement for 15% canopy cover in multi unit developments in some zones.

Council does not consider this as anyway adequate in view of the government's target of the densification in older suburbs. Council also notes that if a large proportion of development in the city is multi unit development then the overall tree coverage will decline noticeably.

An unfortunate example of deficient tree planting is in the recent development in Molonglo. The suburbs of Coombs and Wright contain many townhouses on small blocks and high-rise developments with inadequate space to plant even one tree. Whilst planting in public areas has partly compensated for the lack of trees on private land, the ultimate equation is a lesser percentage of trees than that found in older suburbs. This results in a diminished city-wide tree cover.

Council and the wider Canberra Community would not like to see this happen again.

There are other issues such as global warming and reduced rainfall which will impact on the total tree cover. Whilst tree planting in the ACT alone cannot have a major influence on these two factors there are other actions which they can control namely the appropriate maintenance of existing trees and parks and in particular the care of newly planted areas.

Summary

We recognize that green areas and, in particular, trees have an important role in Canberra's urban areas. They need to be maintained, retained and incorporated into new developments. Living in Weston Creek we know the benefits that trees bring to our community and look in "horror" at our neighbours in Coombs and Wright as they suffer in the summer months with "no green cooling".

We suggest that simple site coverage rules would be less confusing than the plethora of rules and criteria contained in Draft Variation 369. These site coverage rule percentages could be discussed in the draft variation by defining the planting area as a percentage of the total block size instead of as a percentage of private open space.

Further, to save any argument or debate, we suggest that these site coverage rules should be mandatory.

As always, Council is available to discuss any aspect of this Submission.

[redacted]

[redacted]
Chair
Weston Creek Community Council

From:	[redacted]
To:	Terrplan
Subject:	Submission for the consultation process on DV369 (Living Infrastructure in Residential Zones) and DV368 (City and Gateway South).
Date:	Friday, 8 May 2020 5:01:13 PM

Submission for the consultation process on DV369 (Living Infrastructure in Residential Zones)
and DV368 (City and Gateway South).

Thank you for the opportunity to comment on Draft Variations 369 and 368.

Over the last decade we have witnessed a growing trend for bigger houses and concreted or paved outdoor areas that in many cases now have substantially reduced the green space around dwellings. I am not only concerned about the reduction in green space and coverage, the replacement of beauty with concrete and grey or even black houses, but also the heat island effect that puts our city climate at risk.

On this background I welcome the awareness of these and related issues that the draft proposal indicates. Here is a real opportunity to make progress towards a greener city in the future, that can proudly call itself the “Garden City” that everybody wants to visit or live in.

However, in order to fulfil its promise I believe a number of issues need clarification and strengthening:

1. The LIP would be complemented by a requirement that all new buildings and roof replacements use high-albedo materials.

2. The Government’s Living Infrastructure Plan (LIP) includes a commitment to 30% tree canopy cover by 2045. The draft variation 369 however, proposes only 15% cover for multi-unit developments, falling seriously short of the 30% target. This needs to be amended to 30%

3. It is not clear how the draft variation will achieve the 30% permeability target set in the LIP. The draft variation 369 should include an explicit 30% permeability target and explain exactly which areas will be counted, e.g. garden beds and permeable driveways, but not concrete planters.

4. A 30% canopy cover and 30% permeability also needs to be introduced to the City and Gateway (DV368).

5. The suggested changes for “Compact Blocks” need to be reviewed in light of the possibility that they can produce streets with hardly any green in the front and possibly no trees at all.

6. New estates sometimes end up with a tree here and there on their public land. The Estate Development Code should be amended to allow new estates to benefit from an explicit 30% tree canopy target on their public land.

7. The draft variation needs to encourage green roofs. In fact on small blocks where a garage is built as a separate structure, the code should require that the garage roof is “green”, i.e. planted with appropriate mosses, grasses, etc.

8. The draft variation should not only consider individual blocks or developments, but take a broader look at our suburbs, i.e. a birds-eye view with regard to the planted and natural corridors between different developments and gardens. It is important for our bird and wildlife that green areas link up and create continuous corridors wherever possible, not only on the ground but in the canopies as well.

Yours sincerely,

[redacted]

Pearce

From:	[redacted]
To:	Terrplan
Subject:	Submission for the consultation process on DV369 (Living Infrastructure in Residential Zones) and DV368 (City and Gateway South).
Date:	Friday, 8 May 2020 5:21:50 PM

We wish to comment on Draft Variations 369 and 368. As residents of Weston Creek we wish to point out that the established areas of its suburbs remain a superb and highly liveable environment and example of the Garden City. However the new suburbs of Molonglo and some local infilled areas display the consequences of smaller blocks and/or larger houses – in particular a loss of garden space and tree canopy cover. The longer term effects of their loss have become clearer in our ever-longer summers (resulting in heat regions like those measured in western Sydney) and the current great lockdown phase, which has seen many people rediscovering the pleasures, benefits and mental well-being that gardens provide.

Therefore it is critical that the Government's Living Infrastructure Plan (LIP) with its commitment to a 30% tree canopy cover by 2045 be fully achieved. This 30% target must also apply to multi-unit developments, not the proposed figure of only 15%. Draft variation 369 should also include an explicit 30% permeability target with clear specifications that this includes, e.g. garden beds and permeable planted surfaces, but not concrete driveways and other impermeable surfaces.

Mid-sized and compact blocks should not be exempt from these requirements. Particularly if street and neighbouring reserve tree cover is inadequate, canopy cover in gardens is important. The Estate Development Code needs to include an explicit minimum 30% tree canopy target on their public land. The 30% cover and other provisions and improvements evident in DV369 also need to be applied to DV368.

Finally these changes to the Territory Plan need to be explicitly integrated with other environmental policies including those to maintain the urban forest (perhaps better described as woodland) and in particular the valuable endemic species, - yellow box, Blakely's red gum, apple box and other species in order to maintain this environment for future generations and centuries, and provide landscape connectivity and habitat for birds and other animals. These urban trees are an integral part of the ACT's proud contribution as the largest yellow box / Blakely's red gum woodland landscape still present in the country.

Yours sincerely,

[redacted]

[redacted]

Weston ACT 2611

Territory Plan
Proposed Draft Variation 369

Submission [redacted]

Email: terrplan@act.gov.au

For more than ten years the Territory Plan (TP) has been condemned as an increasingly unwieldy planning instrument, achieving little in the way of acceptable planning outcomes for the National Capital. Unfortunately, Draft Variation (DV) 369 is another proposed incremental change to the TP which adds to the complexity of this planning instrument.

Documentation accompanying DV369 informs the reader that the proposed changes are aimed at making the city "more resilient" in the light of climate change, whilst accommodating population growth within a more compact city.

"***A growing city with a changing climate and increased density needs to be balanced with the integration of the environment, green spaces and trees."***

DV369 appears to be relying on legislating for open space within private residential blocks, in particular, in order to compel owners to plant trees to contribute to the city's tree canopy. The specified 2045 targets for the urban areas of the city are 30% tree canopy cover (or equivalent) and 30% permeable surfaces.

Note: when compared to other eastern state capitals, the 30% targets could be regarded as very modest.* Canberra experiences a greater range of temperatures than these capitals, and, in recent years, the treed landscape has been neglected while being seriously impacted by extreme weather events. At the same time, urban renewal and densification has added to the loss of the city's mature tree canopy in the public and private realms. This tree loss is due to conversion of open spaces to provide opportunities for urban intensification, the increasing overdevelopment of residential blocks, and, the neglect and loss of trees in verges and other public spaces. This erosion of the treed landscape is apparent throughout the city.

In relation to suburban blocks (RZ1 & RZ2), in an attempt to achieve these modest targets, DV369 proposes "more comprehensive provisions" for site coverage and clarification of what constitutes effective planting area.

SITE COVERAGE

Definition in TP:

- Site coverage means the proportion of the actual *site* covered by *dwellings* and all other *buildings*

DV369 proposed definitional change:

- Site coverage means the proportion of actual site covered by buildings, including roofed terraces, pergolas, patios, decks and balconies but excluding any part of awnings, eaves and the like.

* The Nature Conservancy and Resilient Melbourne (2019) *Living Melbourne: Our Metropolitan Urban Forest Technical Report.* The Nature Conservancy and Resilient Melbourne,

PLANTING AREA

Definition in TP:

- Planting area means an area of land within a block that is not covered by buildings, vehicle parking and manoeuvring areas or any other form of impermeable surface and that is available for landscape planting.

DV369 proposed definitional change:

- Planting area means an area of land within a block that is available for landscape planting and that is not covered by buildings, structures, vehicle parking and manoeuvring areas or any other form of impermeable element that impacts permeability of the ground surface (i.e. terraces, pergolas, patios, **decks or pools).**

Note:
1) These definitions include reference to pergolas (possibly a knee jerk reaction to the response by the NCA) which often contribute to landscape planting in open ground. Yet, verandahs which generally impact permeability are not listed.

2) Basements, and swimming pools, are examples of elements that directly impact permeability of the ground surface. Some basement areas now far exceed the footprint of the dwelling at ground level. The proposed definitional changes do not appear to address this problem.

DEEP SOIL ZONE

Definition in TP:

- *not defined*

DV369 proposed definition:

- *Deep soil zone*: an area of soil within a *development* that is unimpeded by *buildings* or *structures* above and below ground, and which has dimensions to allow for the growth of healthy trees. Deep soil zones exclude *basements*, services, swimming pools, tennis courts and impervious surfaces including car parks, driveways, podium and roof areas.

DV369 Element 5 proposes, as follows:

R38
For *large blocks*, *private open space* complies with the following:
a) has a minimum area equal to 60% of the block area
b) has a minimum dimension of 6m for an area not less than 10% of the block
c) at least 50% of the minimum area in a) is *planting area*, with a minimum dimension of 2.5m.

Note: Private open space includes principal private open space, as required elsewhere in this element.

This element provides for differing private open space (POS) requirements depending on the size of the block. And, the accompanying criteria spell out the intended limitations on site coverage of buildings, vehicle parking and manoeuvring areas. Consequently, more TP definitions come into play, as follows**:**

PRIVATE OPEN SPACE

- **Private open space** means an outdoor area within a block useable for outdoor living activities, and may include balconies, terraces or decks but does not include any area required to be provided for the parking of motor vehicles and any common driveways and common vehicle manoeuvring areas. Up to 25 per cent of any part of private open space may be roofed over, except that a balcony may be entirely roofed over.
- **Principal private open space** means private open space that is directly accessible from a habitable room other than a bedroom.

Note:
3) The definition of Private Open Space (POS), which has not been substituted in DV369, **"does not include any area required to be provided for the parking of motor vehicles and any common driveways and common vehicle manoeuvring areas." [**my emphasis**]** However, it is essential that the intent of all these definitions be considered holistically when determining the allowable – expanded - site coverage, and the interplay of private open space, principal private open space, planting area and deep soil zone.

4) DV369 proposed definitional change, for example, could be more explicit, as follows;

- *Site coverage means the proportion of actual site covered by buildings, including roofed terraces, ~~pergolas,~~ patios, decks, pools, balconies, structures, vehicle parking and manoeuvring areas* ***or any other form of impermeable element*** *that impacts permeability of the ground surface (but excluding any part of awnings, eaves and the like).*

- *Planting area means an area of land within a block that is available for landscape planting and that is not covered by buildings, patios, decks, pools, balconies, structures, vehicle parking and manoeuvring areas or* ***any other form of impermeable element*** *that impacts permeability of the ground surface*

The wording of the various relevant definitions must be reviewed and streamlined.

TREE PLANTING

DV369 5.2A proceeds to specify site coverage and tree planting, as follows:

R40
Development provides a minimum level of tree planting, with associated planting requirements as described in table A7b, consistent with the following:
a) for compact blocks, one small canopy tree
b) for mid-sized blocks, two small canopy trees
c) for large blocks less than or equal to 800m2, one small canopy tree and one medium canopy tree
d) for large blocks more than 800m2:
i) one medium canopy tree and one large canopy tree, and
ii) one additional large canopy tree or two additional medium canopy trees for each additional 800m2 block area.

Note: For the purposes of this rule, a canopy tree is a woody perennial plant suitable for the Canberra climate, with one or more bare trunks, and main supporting branches generally at least 1.8m above the finished ground level.

To place tighter controls on site coverage in order to allow for tree planting is a positive step. However, to specify trees (including types, size and numbers) on residential blocks, in RZ1 zones in particular, would appear doomed to failure. Certification would be dependent on a private certifier, whilst compliance measures (given the present state of affairs) would be almost non-existent. Furthermore, there is no guarantee that required plantings would

survive; and, there is no hint of a provision for maintaining the private treed landscape following sale of the property. On the contrary!

It would be far more constructive to simply articulate clear, legislated limitations on the extent of buildings, class 10 structures and all non-permeable surfaces, in each of the zones, in order to safeguard potential, deep rooted planting areas. This coupled with the suggestion that residents be offered an incentive to contribute to tree planting - e.g. possible reinstatement and expansion of the free tree allocation programme – would seem to be a more constructive approach to renewal and strengthening of the treed landscape of our city.

With regard to the long-term care and maintenance of trees on residential blocks, it is instructive to refer to the specific requirements which apply, at least in principle, to certain heritage listed precincts within the older Garden City suburbs. I quote selectively from one entry to the Heritage Register which makes particular reference to mature trees whilst providing practical guidelines for home owners, as follows:

Entry to the Heritage Register 20052: Red Hill Precinct

Specific Requirements

……
To conserve and protect the heritage significance of the place by restricting development to low density on existing blocks to ensure the existing level and quality of landscape remains. ….

b) The overall planning layout of the Precinct is an integral part of its significance and its components, including streets, verges, and the subdivision pattern consisting of large block sizes with a high ratio of landscaped area to built form, shall be conserved.

i) Streetscape and Landscape

……
d) Trees on leased land with a height greater than 3 metres, or a trunk diameter greater than 150mm measured at 1.3 metres or with a projected foliage cover width exceeding 3 metres shall not be removed, lopped or damaged without approval. Approval may be given where the lessee can demonstrate that:

- the tree is causing structural damage to a building or structure;
- the tree is interfering with overhead service cables and the necessary clearances cannot be obtained through pruning;
- the tree is causing damage to underground service pipes which cannot be repaired without removal of the tree;
- the tree is blocking solar access to a dwelling during Winter between the hours of 9am to 3pm and pruning is not sufficient to achieve this;
- the tree is causing an allergic reaction to an occupant of the block and the claim can be supported by certification from a medical practitioner;
- the tree is diseased and beyond remedial treatment or beyond its effective life;
- the tree is structurally weak and there is a potential danger of causing injury to persons or damage to property;
- where the tree is part of a close planting of a number of trees, the removal of the tree will allow the other trees to develop fully; or
- where the relevant authority considers that an approval is in accordance with the heritage significance of this place.

e) The area of paving and other hard surfacing within the block shall be kept to the minimum necessary for proposed recreational activities, pedestrian movement driveways and other trafficable areas. The design and materials of hard surfaced areas should maximise the opportunities for soft landscaping and large trees as well as providing for stormwater infiltration and retention on site. …

DV 369 tries to curtail the overdevelopment of residential and commercial blocks in various zones, whilst legislating an increase in the private contribution to the treed landscape. In the absence of the long overdue Territory Plan Review, this proposed variation, in its present form, will only add to the complexities of the Territory Plan whilst not addressing developmental pressures which continue to negatively impact neighbourhood character.

Meanwhile, the treed landscape in the public realm is largely neglected and in a state of decline. Moves to renew and replace trees in the public realm have begun. However, the projected target of 30% tree canopy by 2045 is far from ambitious. Furthermore, the projected planting figures do not appear to take into account the accelerating loss of the

mature treed landscape due to the prolonged drought and more recent extreme weather events.

Finally, DV369 is well intentioned. However, even if redrafted and clarified, it will fail to protect the Garden City character of the older, established areas of Canberra whose treed landscapes, in the private and public realm, make a significant contribution to the liveability of the city. In light of the impact of increasing climate change surely, what is needed, is an expert, independent and transparent review of the effects of urban intensification & renewal rather than another attempt at tinkering at the edges.

[redacted]

[redacted]

From: Old Narrabundah Community Council Inc
To: Terrplan
Subject: ONCC comments on DV369
Date: Friday, 8 May 2020 11:28:05 PM
Attachments: image001.jpg

Territory Plan Section of the Environment, Planning and Sustainable Development Directorate

Territory Plan Comments DV 369

Dear Sir,

Thank you for the opportunity to comment on the proposed DV369 changes to the Territory Plan.

The proposed increases to the Single Dwelling Code requirements for private open space (POS), planting area and deep soil zones (DSZ) for trees and the Multi-Unit Code requirement for minimum Planting area and deep soil zones for trees represent only a small improvement compared to the existing codes but nevertheless are welcome. However, the overall result is a pathetically low bar for the proportion of land that will be available for new trees.

Private Open Space

In relation to the proposed Single Dwelling Code changes for the minimum POS requirement to be a flat minimum rate of 60% for a large or mid-sized block is a small step in the right direction. For large and mid-sized blocks (ie block bigger than 250sqm) the increase of 50 sqm per block is only a marginal improvement. For very small blocks (250sqm or less) there is a significant increase in the POS requirements from 20% to 50% for a standard front loading block which is a dramatic improvement that may help drive down the unsustainable trend for squeezing oversized houses into very small blocks. However, the problem that remains is the portion of the 60% POS land to be provided for large or medium size deep rooted trees seems to be a negligible amount.

Planting Area and Deep Soil Zone for Trees

A big flaw that is embedded in the new DV 369 proposal is the planting area requirements remain stuck at 50% (of the 60% POS area of large & medium size blocks). This equates to only 30% of a block being left as a dedicated landscape planting area. But then, only a small proportion of that 30% is required to be the new "deep soil zone" (the DSZ area only needs to correspond to the small nominated area of soil for 1 or 2 trees to achieve the fairly arbitrary 15% canopy cover). So while 60% of land being required for POS, and 50% of that being required for planting area might sound generous, there is no requirement for 100% of planting area to be available for trees with related deep soil zones.

The current definition of planting area: "means an area of land within a block that is not

covered by buildings, vehicle parking/manoeuvring areas or any other form of impermeable surfaces and that is available for landscape planting". From the community perspective the definitions for POS do not exclude areas of POS being over basement and the definition of planting areas (where driveways are excluded) do not exclude basements. Building a basement requires the removal of all soils from the area and often the walls and slab will be built back up to finish around ground level. As a rule, there is no opportunity for trees and landscaping to be established or for infiltration of stormwater runoff over a garage slab. The large number of approvals of new houses with ridiculously sized basements that inevitably extend out from the ground floor footprint and under significant proportion of POS and/or planting areas; is evidence that currently ACTPLA has no definitive way to limit the size of garage basements when they extend beyond the dwelling footprint.

The proposed new definition of Planting area is "an area of land within a block that is available for landscape planting and that is not covered by buildings, structures, vehicle parking and manoeuvring areas or any other form of impermeable element that impacts permeability of the ground surfaces (ie terraces, pergolas, patios, decks or pools)." This sounds like it should exclude basements but again it's not clearly stated. We suggest the proposed definitions be amended to clearly stipulate POS and planting areas exclude basement garages.

We welcome the proposed new Deep Soil Zone element which is defined as "an area of soil within a development that is unimpeded by buildings or structures above and below ground, and which has dimensions to allow for the growth of healthy trees. Deep soil zones exclude basements, services, swimming pools, tennis courts, and impervious surfaces including carparks, driveways, podium and roof areas". This is a positive and sensible move. However, the total DSZ area required to be provided as a proportion of the site is negligible. Why is the deep soil zone only apply to a couple of trees and not 100% of the planting area? Setting such a low expectation for the designated area of "deep soil zone" is a questionable limitation and counterproductive in terms of insuring a reasonable amount of natural ground is left undeveloped and available long term for soft landscaping, for infiltration of stormwater runoff and for the tree canopy to get well beyond 15%.

It is interesting, that unlike planting areas, areas of DSZ specifically exclude basements and other impervious surfaces. It's the first element we have seen to be introduced into the Territory Plan that could be used to place reasonable limits on the extent of miscellaneous elements that reduce land available for soft landscaping & planting trees (ie concrete basements etc) and should be strictly controlled just as any other building is. However, the very small area of DSZ required by R40B leaves the door wide open for the various types of poor outcomes (excessive basement excavations, ramps) to continue. Our current guidelines do very little to limit basement garages extending out from under buildings, driveway ramps, manoeuvring areas for vehicles underground and other basement areas called" garage" intended to be converted to habitable areas later. These underground elements represent a growing area of land that has effectively and permanently reduced the availability of natural ground for onsite rainwater retention, soft landscape or tree planting. DV369 does nothing to address this major flaw in the single dwelling code.

Site Coverage

Site Coverage is not a new thing, it's only mentioned in the single dwelling Code in relation to the criteria for private open space but it hasn't had any minimum area requirement attached to it. So giving Site Coverage a much higher profile with a minimum area as a proportion of the site is a good thing. It brings the single dwelling code more in line with Heritage Guidelines where site coverage has an important role keeping the size of the building footprint down to a reasonable portion of the block area. Just as plot ratio is important as a means of keeping the total floor area of building down to a reasonable proportion of the block area. And providing a more detailed definition of what is meant by what is included and not included in calculating site coverage is a good thing.
DV369 states the proposed changes expand the definition of 'Site Coverage' to clarify elements that impact permeability of the ground (ie terraces, pergolas, patio's, decks or balconies) other elements are not considered site coverage (ie awnings, eaves and the like). This definition needs to be expanded to clarify a few things, we would agree that awnings, eaves should not be calculated towards site coverage. Eaves and awnings (say up to 600mm wide) should be exempted from site coverage because they are an important and integral elements of a house for providing shade over windows & doors,help improve energy rating and strategic protection from wind and driven rain. We would agree if a terrace, pergola, patio, deck or balcony is roofed and/or it has an impervious material (ie concrete or tiles) for a floor then it should be included in site coverage. However, we would disagree that all terraces, pergola's, patio's and decks are automatically considered site coverage. We would qualify the above statement by suggesting it would be appropriate for an exemption (similar to the eave, awning elements exemption) for some of the elements in certain circumstances.
A Pergola is generally not roofed. As a rule a pergola is open to the sky and often has a climbing vine or creeper growing over it. If the pergola floor is porous pavers over sand then it is effectively allowing rainwater to permeate through to the ground beneath and feeds any roots of adjacent trees, then it should be exempt from site coverage. Similarly a terrace, patio and deck that is unroofed and has porous paving or decking with gaps that allow rain to permeate to the soil beneath then it should also be exempt from site coverage. Trees and other soft landscaping will be quite happy growing adjacent to these types of elements because the ground receives rainwater. Where a roof over a terrace, pergola, patio, or deck effectively becomes a verandah which is adjacent to a dwelling and is designed for shading summer sun admitting winter sun and protecting certain doorways from wind driven rain then we would suggest 600mm of that verandah is considered an eave so it is partially exempted. A verandah or roofed terrace, pergola, patio, deck etc on a north, east or west facing wall often has a legitimate function of shading the sun but also adds to the site coverage. So to be fair the first 600mm wide section of that roofed element for the full length should be considered an eave, the remainder of the roof area should be added to site coverage.
Garages, carports and other roofed areas such as balconies etc are assumed to be included in site coverage because they are part of a "dwelling" as defined in the Planning & Development Regulations. However, what is not clear is whether basements and associated driveway ramps are included in the calculations for site coverage. We would say they should be included for the area that extends out beyond the footprint of the dwelling

as it effectively extends the building footprint and permanently reduces the opportunity for the built over land to be available for POS or landscaping. And similarly any driveway ramp and associated retaining walls should be included. In relation to the definition of site coverage, the term "building" is included in the 'Territory Plan Definitions', however, 'dwelling' does not. We suggest that it would be helpful for the term “dwelling” to be included in the TP definitions so people don’t have to refer to a copy of the Planning and Development Regulations to check what is meant by the term "dwelling" in the context of site coverage.

The other sort of elements that are not specifically included in the definition of site coverage are swimming pools, tennis courts, driveways and parking or manoeuvring areas (even though they often contribute to the extent of hardstand covering natural ground and which reduces opportunities for tree planting and prevents soil taking up rainwater). Swimming pools and tennis courts provides a legitimate POS outdoor activity and if you’re lucky enough to have a block where the POS requirement allows a pool or tennis court, so be it. Driveways, however, cannot be included in POS in any way, we would suggest, if a driveway is a permanent concrete paved type (which prevents the ground taking up stormwater) it should be included in site coverage. On the other hand, if it’s a gravel, or crushed gravel driveway or its paved with permeable pavers that allow 100% permeability of rainwater to adjacent plants and tree roots then it could be exempted from site coverage calculations.

Conclusion

Making sense of the changes proposed in DV 369 has been difficult and confusing. What is clear is the new requirements for Private Open Space, Site Coverage, Planting Areas and Deep Soil Zones, as they stand, are poorly conceived and badly drafted. We have serious doubts the proposed changes will make a meaningful and sustainable contribution to improving the permeability for stormwater retention and increasing the urban tree canopy of our Garden City suburbs.

[redacted]

Chair

Old Narrabundah Community Council

Serving the Community

PO Box 8 Narrabundah ACT 2604

Email: info@narrabundah.org.au

Web: www.narrabundah.org.au

8th May 2020

Woden Valley Community Council Inc.

Territory Plan Section
EPSDD
GPO Box 158
CANBERRA ACT 2601

Dear Committee members

DV369 Living Infrastructure in <u>Residential Zones</u>

Thank you for the opportunity to provide a submission to this very important draft variation to the Territory Plan.

The ACT Government's proposal to increase the green space and tree canopy coverage in all residential areas to help the city cope with climate change and be more liveable and comfortable is welcome. This proposal responds to:

- Action 2 of Canberra's Living Infrastructure Plan: Cooling the City (2019) which seeks to achieve '30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas by 2045'.
- Direction 3.3 of the ACT Planning Strategy 2018 which seeks to 'integrate living infrastructure and sustainable design to make Canberra a resilient city within the landscape'.

Canberra is becoming a more compact city, with more intense urban development. A balance between urban intensification and living infrastructure creates a healthier, more liveable and sustainable urban environment. This is particularly relevant in the Woden Town Centre where building heights are zoned for 12 to 28 storeys in the centre with little green space identified.

Commercial Zones – multi-unit developments

While the draft variation is titled 'Living Infrastructure in Residential Zones', it also impacts on multi-unit residential homes in commercial zones. There is a lack of consistency in the language, does the proposal for '30% tree canopy cover (or equivalent) and 30% permeable surface' apply to residential zones or urban areas which includes commercial zones.

Unfortunately DV369 does not meet the proposal for '30% tree canopy cover (or equivalent) and 30% permeable surfaces in urban areas' as it only requires 10% planting area and 20% open space for residential developments in commercial areas.

PO Box 280 Woden ACT 2606 president@wvcc.org.au

The ACT Government talks about climate change leading to longer, hotter summers and the need for more urban tree coverage and green spaces to:

- reduce the heat island effect and rain running off into storm water drains; and
- increase natural biodiversity and outdoor recreation in a more pleasant place to be.

They need to ensure that the planning framework for residential developments in commercial areas provides both public spaces and incentives for the private sector to deliver permeable spaces and tree canopy in their developments.

The following table from the Fact Sheet titled 'Territory Plan Changes to Make Canberra Greener' is helpful to navigate this complex draft variation to the Territory Plan.

Table 4: Current and proposed changes to Multi-Unit Housing Development Code

Zone	Site open space	Site coverage (new provision)	Planting area (permeability)	Trees (new criterion) (tree canopy)	Number of trees (see size req. in table above) – (new provision)
Residential in commercial zones	20% of site, min dimension 2.5m	N/A	10% of site area		
RZ1 and RZ2	40% of site, min dimension 2.5m	40% of block	35% of the block, min dimension 2.5m	Existing and new trees to provide at least 15% canopy cover	Blocks less than 800m2 At least one small and one large canopy tree Blocks over 800m2 One medium and one large canopy tree plus one additional large or two additional medium canopy trees for each 800m2
RZ3, RZ4, RZ5	20% of site, min dimension 2.5m (though incorrectly labelled in DV)	45% of block	25% of the block, min dimension 2.5m	Existing and new trees to provide at least 15% canopy cover	

Site coverage - elements that impact permeability of the ground (i.e. terraces, pergolas, patios, decks or balconies) are considered to be site coverage; and to clarify that some elements are not considered to be site coverage (i.e. awnings, eaves and the like).

Planting area - elements that impact permeability of the ground (i.e. terraces, pergolas, patios or decks) are not considered to be planting area

Residential Zones – multi-unit developments

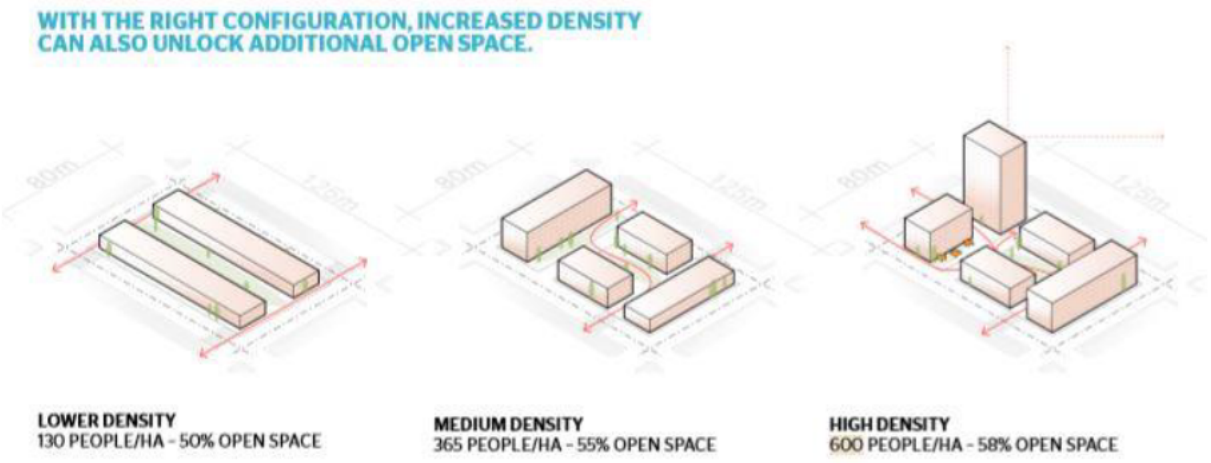
It is confusing and concerning that RZ3 to RZ5 zones require 25% permeability and therefore do not meet the proposed aspiration of 30% permeability.

Similarly, it is concerning that RZ1 to RZ5 zones require 15% tree canopy, not meeting the proposed aspiration of 30% tree canopy.

Committee for Sydney

The Committee for Sydney's 2016 Discussion Paper – Making Great Places, Density Done Well highlights that with the right configuration of buildings, density can unlock additional open space.

- Low density - 130 people per hecatrea with 50% open space
- Medium density - 365 people per hecatrea with 55% open space
- High density - 600 people per hecatrea with 58% open space



Sadly, we are not unlocking enough open space to achieve the ACT Government's objectives contained in Canberra's Living Infrastructure Plan: Cooling the City (2019) and the ACT Planning Strategy 2018.

While the WVCC welcomes development we want it to be done well. The WVCC committee members are available to appear at the public hearings.

Yours sincerely

[redacted]

President
Woden Valley Community Council

8 May 2020

PO Box 280 Woden ACT 2606 president@wvcc.org.au

HOUSING INDUSTRY ASSOCIATION

Environment, Planning and Sustainable Development Directorate

Draft Variation 369

8 May 2020

HOUSING INDUSTRY ASSOCIATION

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Housing Industry Association contact:

[redacted]
Executive Director (ACT & Southern NSW)
Housing Industry Association
28 Collie Street,
FYSHWICK ACT 2609
Phone: (02) 6285 7300
[redacted]

ABOUT THE HOUSING INDUSTRY ASSOCIATION

The Housing Industry Association (HIA) is Australia's only national industry association representing the interests of the residential building industry, including new home builders, renovators, trade contractors, land developers, related building professionals, and suppliers and manufacturers of building products.

As the voice of the industry, HIA represents some 30,000 member businesses throughout Australia.

The residential building industry includes land development, detached home construction, home renovations, low/medium-density housing, high-rise apartment buildings and building product manufacturing.

The association serves the ACT and Southern NSW from the HIA Home Inspirations Centre in Fyshwick, which is a local hub for home building services and advice.

HIA exists to service the businesses it represents, lobby for the best possible business environment for the building industry and to encourage a responsible and quality driven, affordable residential building development industry. HIA's mission is to:

> *"promote policies and provide services which enhance our members' business practices, products and profitability, consistent with the highest standards of professional and commercial conduct."*

The residential building industry is one of Australia's most dynamic, innovative and efficient service industries and is a key driver of the Australian economy. The residential building industry has a wide reach into manufacturing, supply, and retail sectors.

The aggregate residential industry contribution to the Australian economy is over $150 billion per annum, with over one million employees in building and construction, tens of thousands of small businesses, and over 200,000 sub-contractors reliant on the industry for their livelihood.

HIA develops and advocates policy on behalf of members to further advance new home building and renovating, enabling members to provide affordable and appropriate housing to the growing Australian population. New policy is generated through a grassroots process that starts with local and regional committees before progressing to the National Policy Congress.

Policy development is supported by an ongoing process of collecting and analysing data, forecasting, and providing industry data and insights for members, the general public and on a contract basis.

The association operates offices in over 20 other centres around the nation providing a wide range of advocacy, business support including services and products to members, technical and compliance advice, training services, contracts and stationary, industry awards for excellence, and member only discounts on goods and services.

1.0 INTRODUCTION

The Housing Industry Association (HIA) welcomes the opportunity to comment on the *Draft Variation No: 369 Living Infrastructure in Residential Zones*. We have reviewed the documentation placed on public exhibition and provide our comments in the submission as follows.

HIA understands that DV No: 369 will apply to all future urban renewal and greenfield development areas and that the variation will change the Territory Plan's residential development codes – the Single Dwelling Housing Development Code and the Multi-Unit Housing Development Code – and definitions related to site coverage and planting area requirements on private land.

HIA appreciates that the draft variation responds to Direction 3.3 of the ACT Planning Strategy 2018 to integrate living infrastructure and sustainable design to make Canberra a resilient city within the landscape.

However, it appears from many of the measures proposed in the draft that there is a wider, and less transparent, agenda in being pursued. That is to require the Canberra community to build and live in smaller houses and to transfer the financial cost of meeting the 30% canopy aspiration from the ACT Government and onto the public.

It is inevitable that outcomes that would result if the variation is approved would be inconsistent with other government aims such as housing affordability, adaptable housing and economic activity and employment.

As detailed in this response, the size home that can be built will be significantly reduced, thought this is not expanded on in any associated materials with the draft. Such a reduction will have a number of implications for Canberra's, including the following:

- *Increase demand for larger blocks.* Canberrans who need or choose a larger home will be forced to compete for larger blocks, inevitably putting upward pressure on what is already some of the most expensive land in the nation. If the demand for larger blocks is to be met then Greenfield suburbs will need to be larger, newer areas developed, or the yield decreased.

  Due to the high costs of land in the ACT, there is already a division being created between those that can afford a detached home, versus those being compelled to live in multi-residential housing, whether this is their first preference or not.

- *An increase in multi-storey homes.* With such stringent requirements on open space and limits on the size of homes, it can be expected that a far greater portion of dwellings will be multi-level on mid-sized and compact blocks to compensate. A corollary of this is that there will be an increase in the cost of building per square metre for these homes, along with a reduction in the capacity to build homes that are accessible.

  There is also the potential for a detrimental outcome from a streetscape perspective with an increased bulk of the dwelling stock.

There are also a number of operational issues with proposal that the government itself cannot answer.

An obvious example is the requirement being inserted in the *Territory Plan* that a set number of trees must be planted in certain circumstances. Yet there is no answer to fundamental questions as to how this will operate in practice, including such issues as responsibility for compliance, ongoing obligations and intersection with broader landscaping within the block.

There is also the question of the potential impact on the value of land as a result. Future purchasers of sites for development will suffer a loss of yield from their sites as compared to sites developed before these rules, just as individual purchasers will have a product with less choices than before. Is it anticipated that the Suburban Land Agency will incorporate the reduced value of land into future sales?

There needs to be greater awareness of these requirements for people purchasing land as they will no longer be able to achieve the same outcomes they currently can. The government has a duty to clearly disclose this impact to purchasers.

Along with the obvious impingements on the amenity and rights of home-owners, HIA is equally concerned that the commercial implications of the draft variation for the housing industry have been overlooked. In this regard, HIA seeks clarification about whether the EPSDD / Territory Plan Section has prepared a regulatory impact statement for the proposed variation.

The ACT Government's Best Practice Guide for Preparing Regulatory Impact Statements (December 2003), states the following:

> *Given the need for appropriate and effective regulation that meet the needs of government and minimises the costs on business and society, the Government requires that each regulatory proposal be accompanied by a thorough assessment of the risks, costs and benefits to government, business and society associated with the proposal.*

HIA is concerned that the proposed variation will have a negative commercial impact for the housing industry as the proposed site coverage provisions could make development unfeasible, particularly on smaller blocks and this is discussed in more detail below. In addition, the proposed variation is also likely to have a negative impact for society as the commercial impact for builders will impact housing affordability.

The need to take these considerations seriously has never been starker in the light of the current COVID-19 downturn in the industry and the looming broader recession.

It is HIA's recommendation that the Draft Variation be rejected on the basis of being a poorly conceived proposal that will have negative impacts on the built form, housing affordability, liveability and the economy.

2.0 ECONOMIC ENVIRONMENT

Australia appears to have successfully managed the health burden of the COVID-19 pandemic relative to much of the rest of the world, but the full cost of the shock to economic activity is yet to be known. According to many commentators, including the HIA Economics Group, the extent of disruption should not be underestimated.

Policy makers are attempting to orchestrate a recovery that is as close to 'v-shaped' as possible, although economic activity is not expected to return to pre-COVID levels for several years.

Higher levels of unemployment are likely to persist, which will be detrimental for consumer confidence and will contain growth in household consumption. Overseas migration has essentially stopped which will also contribute to a sharp drop in demand for housing. There have already been sharp contractions in leading indicators of residential building activity, and HIA expects the level of residential activity to drop sharply in 2020 and 2021.

In the context, measures that inject uncertainty into the market with restrictions on possible design options available and are ultimately likely to dissuade investment in the home building sector, should be rejected. Rather than placing more burdens on designers, builders and home-owners, the ACT Government is encouraged to reduce regulatory burden and support the economy and job creation.

3.0 SINGLE RESIDENTIAL CODE

3.1. 5.2 PRIVATE OPEN SPACE

3.1.1 Rule 38, 39 & 40

HIA does not support the proposal in DV 369 to increase the private open space requirements for large blocks, mid-sized blocks and compact blocks and to introduce a restrictive site coverage provision.

The result of this is that the area available for the building footprint is restricted, which may limit the building options on some sites, particularly compact blocks, to two-storey houses. This will mean that construction costs will increase, impacting housing affordability, without providing any amenity outcome for the homeowner.

The loss of 10% site coverage on all blocks over 500m2 will have a significant impact on all blocks in the lower section of this size range. Such blocks are popular for single storey development, particularly for sections of the community that are not suited to multi-storey living.

The proposal in R38(c) for a minimum dimension of 2.5m for planting areas is unrealistic and without basis. The permeability of an area is not governed by its width and this creates more restrictions on the design options for a home on already small blocks. This will likely push developments further from the boundary, limiting the design options for owners. The percentage of coverage of the home is a far more appropriate control.

The following example of a mid-sized block shows the consequences of these changes and the restrictions that are placed on home designers.

Mid Sized Block	**Current**	**DV 369**
Private open space	40% less 50m2	50%
Block size	450	450
Private open space	130	225
Site Coverage	n/a	225
Alfresco area 20m²		20
Clothes line pad 5m²		5
Driveway 30m²	30	30
Misc footpaths , porches 20m²		20
Double garage 36m²	36	36
Dwelling size	**254**	**114**

3.1.2 Criteria 38, 39 & 40

Vehicle parking and manoeuvring areas are legitimate contributors to usable open space as is required, and the attempt to 'limit' them is not supported. These are commonly used as play areas and other outdoor activities, while providing the ability for a vehicle to exit 'nose first' is important to many residents, particularly in older demographics.

The criteria describes a tree canopy that provides substantial shade in summer while admitting winter sunlight, implying deciduous trees. However, 5.2A makes reference to eucalyptus trees with respect to the required planting. There appears to be a need for clarification on what the government's aim is with respect to the types and size of trees contemplated in DV369.

3.2 5.2A SITE COVERAGE AND TREE PLANTING

The new definition of 'site coverage' includes more elements that cannot be included in private open space, further reducing the size of a house that can be built on a block.

Decks and pergolas should not be included in site coverage as they are often permeable. Preventing their construction may lead to them being delayed until after initial construction where they can be then built as exempt structures.

The inclusion of pools in the definition of Site Coverage will prohibit them on most blocks. These are a legitimate inclusion with the family home, adding value to the dwelling and providing amenity for families. Again, this appears to be motivated by an ideological agenda rather than the needs or wants of the Canberra community.

It is noted that existing canopy trees can be considered as meeting the requirements of 5.2A. Where these trees extend over boundaries, the draft variation does not clarify which dwelling would get 'credit' for the canopy coverage. If a yard is significantly shade by a neighbour's tree, will they be required to plant another canopy tree within the tree protection zone?

It is also not clear as to where the government considers many of the responsibilities around the trees lie.

Who will formally attest that the trees have been planted? Is this the role of a certifier?

Landscaping and planting on residential blocks is often completed well after occupancy and is out of the control of the designer and the certifier.

Is it the expectation of the government that the designer will nominate the species and position of a tree and these now become part of the Building Approval that is signed off by the certifier?

What are the obligations of the homeowner with respect to the trees after hand over? Is there a caveat on the removal of trees or even a requirements to replant if they die?

4.0 MULTI-UNIT HOUSING CODE

HIA notes that planting area requirements have increased for all residential zones in the Multi-Unit Housing Development Code, and that a new site coverage provision has been introduced. There is also a new requirement for canopy trees to cover at least 15% of the block.

For the reasons outlined above, it would be beneficial to see evidence that the commercial implications of these new and changed provisions have been considered to avoid multi-unit housing projects becoming unviable for the industry.

5.0 CONCLUSION

Draft Variation 369 is not beneficial or desirable to the Canberra community and should not be supported. The parallel agenda to significantly reduce the size of homes that Canberrans can build and enjoy and to discourage Greenfield development and living should equally rejected.

It severely restricts the options available to home owners based on a view of what type of homes people 'should' live in, under the guise of increasing the urban forest. Given the high cost of land in the ACT, buyers should be entitled to live in an appropriate sized home.

The ACT Government must consider alternative means of reaching its targets for canopy cover and reducing the collective temperature of the city. These options could include, to name just a few:

- In Greenfield developments plan for more pocket parks and green strips.
- Invest in more street trees on the verges in new and existing suburbs.
- Invest in non-traditional cool pavement materials and permeable surfaces for low traffic areas such as pathways.
- Consider engineering solutions to reduce the heat island effect such as limitations on roof colours.

It is important that the ACT retains its unique bush character along meeting its obligations to mitigate climate change. However, to encourage building and home ownership, the public open space network and suburban streets should be the focus, rather than mandating excessive controls within individual sites.

These are goals of which the benefit of success are shared by the entire community, and therefore the public realm must accordingly carry the majority of the burden, rather than individual home builders.

To: EPDCustomerServices@act.gov.au

RE: Draft Variation 369
Email: terrplan@act.gov.au

Hi Ben et al,

Some feedback for those involved with the drafting of DV 369. For the purposes of the example set out below, I have focused on a notional single dwelling DA on a large block in an RZ1 area. However, the questions raised and my respective responses will be relevant to all the other block sizes in the single dwelling code and also the other multi-unit code residential zones...

Let's say my notional client is a Greek developer with a block in Mugga Way and she wants to do a speculative knock-down rebuild. The brief, outlined by my client, includes a large two-storey house facing the street with faux marble colonnaded verandah and porte cochere style carport at the front. A 6 car basement garage with a ramped driveway at the side of the house. And in the backyard an in-ground concrete pool, a pergola for the bbq & outdoor eating area and all paved in faux cobblestone stamped concrete. I advise my client that the proposed new rules, require a minimum of 60% of the block area for private open space. And the site coverage is to be limited to 40%. My client, of course, wants me to achieve the maximum permissible site coverage.

The block has an area of 1000sqm. The private open space at 60% means 600 sqm of which 50% must be planting area. The 40% site coverage maximum allows 400 sqm... 40% + 60%… that's 100% of the block covered!

According to the definition of site coverage, the house is included but not the eaves or awnings. The colonnaded verandah, porte cochere/carport and pergola are all roofed areas so are included in site coverage. The basement garage, under the house, doesn't count towards site coverage. The pool, well that doesn't count because it can be part of the private open space area - it just can't be within the 50% planting area. The concrete driveways to the carport and basement ramp, which are just as impervious as any roof, are problematic and may technically be counted as site coverage. And similarly, the swathe of stamped concrete surrounding the pool and pergola in the backyard may also have to be factored in? Or can I count that as private open space?

From my reading of DV 369, its not clear if the driveway (and for that matter, other hardstand such as the concrete pool surround, concrete pergola floor, concrete path to the letterbox, all the way around the house and over to the clothes line) is to be factored in with the various site coverage elements or not. The definition isn't clear on if the concrete ramp down to the basement is included in site coverage. The definition isn't clear on what happens with any part of the basement that might extend beyond the footprint of the house, say under the principle private space or planting areas. The definition isn't clear on if the colonnaded verandah is counted as site coverage. Similarly, if the porte cochere/carport is all counted as site coverage. And, if the pergola isn't roofed then is that still site coverage? So many questions!

Having considered the Explanatory Statement, which sets out the intentions underpinning DV369, the definitions for site coverage and private open space and then having applied first principles to the above questions; this is how I see it:

The Pergola
The pergola, if it is roofed (like the roofed terrace, patio, deck and other similar elements referred to in the definition of site coverage) then of course its included in the site coverage. If the pergola is not roofed (its just a timber framed structure open to the sky and allows a deciduous vine to cover it), but has a concrete or tiled floor (which is just as impervious to rain as any roof and

would prevent stormwater runoff from infiltrating the ground beneath) then yes it should also qualify as site coverage. On the other hand, if the pergola is unroofed (timber frame open to the sky) and has a permeable floor (ie made of rolled crushed granite or porous pavers laid over a bed of no fines blue metal etc), which allows 100% stormwater to infiltrate the soil beneath (and would sustain the roots of any trees planted nearby) then it should not be factored into the site coverage calculations.

The Driveways

If the driveway is made of an impervious type of material such as concrete, (which prevents stormwater runoff from infiltrating the ground beneath), then its similar to the roofed pergola with a concrete floor and should count towards site coverage. On the other hand, if the driveway is made of permeable material (ie gravel, porous pavers etc) and allows 100% stormwater to infiltrate the soil beneath (and the trees planted on either side will happily grow there) then it certainly shouldn't be factored into the site coverage calculations.

The Basement Garage

The basement garage that is confined entirely within the perimeter of the dwelling above, does not add anything to the site coverage. However, anywhere that the basements impervious concrete walls/roof slab extend out beyond the house footprint, it effectively increases the total area of the buildings impervious surface and so should be factored into site coverage. Basements should be excluded from under planting areas entirely. It may be acceptable, in some circumstances, to have a private open space area over a basement slabs but not, I would suggest, under 100% of a principle private open space. A good rule of thumb from a previous single dwelling code was that a minimum 50% of any principle private space should be counted as planting area and exclude basement slabs.

The Verandah

The fact that eaves and awnings are excluded from site coverage acknowledges the important function of eaves around a house. Traditionally eaves and awnings provided protection from sun and rain. But its also acknowledges that eaves don't provide 100% cover from rain (unlike a concrete path up against the house). In other words, the ground directly under an eave still receives plenty of sun and rain so plants and lawns for the most part, can do just fine growing under eaves. More recently, eaves have become important tools in the design of housing for shading windows to help with improving energy efficiency. There is not a lot of protection offered by the standard 450mm wide eave and often it isn't enough to shade windows at all in summer. The width of eaves and awnings can vary depending on the orientation, the time of year the shade is needed and whether its for keeping out high summer sun or admitting low winter sun. My point is that, a wider eave or awning is sometimes necessary and a degree of flexibility is needed in the size and types of eaves and awnings that may be used. An eave 600mm wide could be a suitable standard for the purposes of the site coverage definition. A verandah (fully roofed) of course, contributes to site coverage. However, a verandah can often also be serving the function of a wide eave or awning for sunshading and rain cover. So having 100% of the roof considered as site coverage would be unreasonable. A more reasonable position would be to allow the deduction of the equivalent of a nominal eave width (say 600mm wide) from that verandah edge that would amount to the area of what an exempt eave would be, if the verandah wasn't there. So only the area of roof that extends beyond what a reasonable eave width would be is added to site coverage. Similarly, if I choose to have a bigger roof over a verandah or similar element (like an entry porch, roofed terrace, patio, deck or even a free standing flat roofed carport etc) I should be able to deduct the equivalent of a standard eave from the roof edges from the area of that roof. Just as you would calculate the site coverage for a freestanding garage with a hip roof and eaves all the way round. The garage's site coverage area would be the total roof area less the area of the eaves.

So then back to my notional client. If she insists on the driveways, that cover a significant area of the block, being stamped concrete, I would advise her that because the surface is impervious the driveway would count towards site coverage. And she would need to lose the equivalent area somewhere else (say off the house somewhere) in order to keep the total area of impervious building elements down to below 40%. If she refuses and the plans are lodged with the site coverage area deemed to be exceeding 40%, then the DA is refused. If she's smart and agrees to the permeable pavers and the driveway is not factored in to site coverage, she gets her DA approved and the big house built! I would be confident that in time, she would accept the new perfectly serviceable permeable alternative to concrete. She may even agree that it's sensible and beautiful and grow to appreciate how the permeable surfaces within the site and surrounding urban area is making a big contribution to achieving a healthier and more sustainable urban landscape. And if she doesn't, oh well c'est la vie! The new rules will benefit her grandchildren, the wider community and the environment.

There may be some resistance to this radical new forward thinking strategy, but it's definitely worth pursuing. It would start to apply a very much needed brake on the amount of valuable natural ground being permanently sealed off, with non-porous materials, by an unthinking building industry. And more importantly, it would kick start the long overdue move towards wholesale adoption of more environmentally friendly permeable surfaces for suburban driveways and hardstand. This combination would be a crucial move to putting us on the path we need to be on, if we are going to achieve the communities aspirations for a greener future and the ACT governments ambition of 30% permeable surfaces by 2045. Which at the moment, while business as usual continues, is a fantasy.

Best Regards

[redacted]

[redacted]
Bevanda Architecture
[redacted]