

HOUSING AND DEVELOPMENT IN NILLUMBIK - CLIMATE CHANGE IMPLICATIONS

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CONTENTS OF THIS TALK

- 1. An update on Nillumbik Shire Council's Draft Housing Strategy 2024 and the State Government's housing target for Nillumbik (with a brief mention of what the strategy says about climate change and environmental sustainability)**
- 2. Examples of proposed or existing developments in Eltham with reference to:**

- medium density housing with virtually no garden space
- McMansions that fill up most of the site they are built on; and
- the current trend for colour schemes that include black or dark grey

and resulting implications for:

- creation of urban heat islands
- loss of tree canopy and natural habitat; and
- exacerbating the effects of climate change and reducing comfort levels for the occupants of those developments

AND

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3. The Council's Urban Tree Canopy strategy

4. Questions & discussion

1. Nillumbik Shire Council's Draft Housing Strategy 2024 - an update and what does it say about climate change and environmental sustainability?

- Latest version of this strategy dated April 2024
- It's on the Council's website
- Council put it on hold until the State Government released its final housing targets as part of the development of a new '*Plan for Victoria*'
- **Final targets** - initially expected in late 2024, then in April 2025 (when the State Government releases the *Plan for Victoria*) *BUT*
- Targets on the Engage Victoria Website now state –
Additional number of homes to 2051 - +6,500
- (Compare the number of existing homes in 2023 - 22,700)

1. Nillumbik Shire Council's Draft Housing Strategy 2024 - an update and what does it say about climate change and environmental sustainability?

- Nillumbik's initial target released by the State Government in June 2024 - 12,000 new homes
- All Victorian Councils could make a submission on this plan and the targets by 30 August 2024
- Nillumbik did this - submission entitled '*Plan for Victoria and Housing Targets Submission*' on the same Council webpage
- Nillumbik argues for only 5,540 new dwellings by 2051

1. Nillumbik Shire Council's Draft Housing Strategy 2024 - an update and what does it say about climate change and environmental sustainability?

- **Did anyone here read the housing strategy?** - 143 pages and no executive summary
- **What is the Housing Strategy about and what will it do?**
 - see Section 1 of the strategy
 - It '*aims to balance growth and change by pinpointing areas for housing growth and those where minimal changes are preferred*'
 - It strives to maintain Nillumbik's distinctive neighbourhood character (which is set out in Council's adopted Neighbourhood Character Strategy); and
 - It '*seeks to weigh the environmental costs and benefits of new housing in line with Council's adopted Climate Action Plan*'
- **Why was it required?** - '*State planning policy requires Councils to plan to accommodate the projected population growth over at least a 15-year period and provide clear direction on locations where growth should occur*'
- Final version of the strategy will be incorporated into the Nillumbik Planning Scheme by way of an amendment to the scheme

1. Nillumbik Shire Council's Draft Housing Strategy 2024 - an update and what does it say about climate change and environmental sustainability?

- What did the strategy say about climate change and associated issues?
 - 11 references to 'climate change'; and
 - 27 references to ESD (Ecological Sustainable Design)
- You may want to look at:
 - ***Priority area 6: Innovative and sustainable housing design*** - whole section devoted to "*Climate change and ESD*" on page 75; and
 - *The ESD Roadmap* on page 76

2. Examples of proposed or existing developments in Eltham

- Medium density housing with virtually no garden space**

Eltham Major Activity Centre (Eltham MAC)

- 22 Luck St
- 33 Arthur St
- 22 Arthur St & 25 Dudley St
- 31 Dudley St
- 28 Arthur St
- Canopy

The Urban Heat Island Effect in the Eltham MAC

ELTHAM MAC

Schedule 1 to Clause 37.08
Activity Centre Zone (**ACZ1**)
Nillumbik Planning Scheme

Precinct 1 – commercial core

Precinct 2 – Residential
Interface/Medium Density
Housing



Precinct 1 Commercial Core

Precinct 2 Residential Interface/
Medium Density Housing

Precinct 3 Transport Hub

Precinct 4 Town Centre

Precinct 5 Town Park

Precinct 6 Not Included Within Activity Centre Zone

Precinct 7 Sporting Oval

Precinct 8 Not Included Within Activity Centre Zone

Precinct 9 Pitt Street Parkland

Precinct 10 Not Included Within Activity Centre Zone

Precinct 11 Office / Recreation / Employment

Precinct 12 Peripheral Sales

Precinct 13 Sherbourne Road / Bolton Street

Precinct 14 Medium Density Housing

Precinct 15 Industrial Core

Activity Centre Boundary

Precinct Boundary

Land Included in Precincts

Existing Open Space

Areas Excluded from Activity Centre Zone

Train Station

Existing Train Route

Bus Route

Key Development Site in Precincts

Main Road Network

Circulatory Road

Potential New Boulevard Treatment

Enhanced Connections

Potential Vehicle and Pedestrian Connections

Green Corridor

Entry / Gateways

Focal Point

View Lines

Focus for Updated Transport Node

22 Luck St, Eltham

Adjoins the car park next to Dan Murphy's

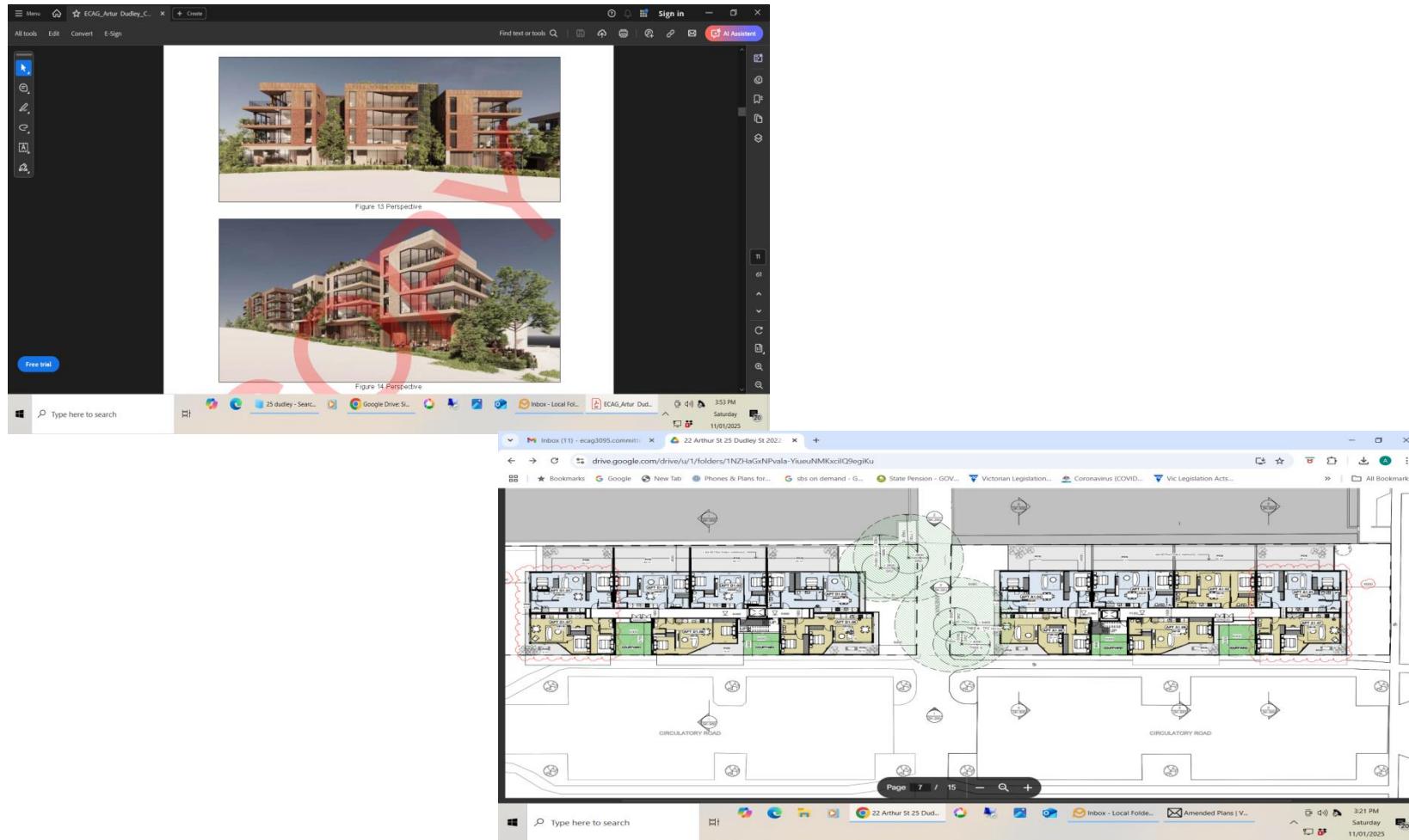


33 Arthur St, Eltham



22 Arthur St & 25 Dudley St, Eltham

(proposed & approved by VCAT) – 40 apartments, mainly 2 bedroom plus 1 x 3 bedroom apartment in each building on top floor & rooftop terrace in each of the 2 buildings – level 1 layout bottom right



22 Arthur St & 25 Dudley St, Eltham (cont.d)

Figure 2 - Elevation to east side - Circulatory Road.



Figure 3 - Elevation to west side, abutting existing commercial buildings.



Figure 4 - Frontage to Dudley Street (to left) and Arthur Street (to east) - note ground level is different at north and south-as evident in figures 2 and 3.



21 To Arthur Street, the building has an overall height of 16.22 to 18.10

Free trial

Type here to search

25 dudley - Searc... Google Drive: Si... Inbox - Local Fol... VICTORIAN CIVIL ... 3:35 PM Saturday 11/01/2025

12 36 1 C 20

31 Dudley St (opposite the proposed development at 22 Arthur St & 25 Dudley St)



28 Arthur St (next to the units at 31 Dudley St)



Canopy (between Arthur & Pryor Sts, Eltham)



URBAN HEAT ISLANDS

- Is the Eltham MAC an urban heat island?
- My experiment on 11 January 2024 -
 - I parked in the Coles car park next to Dudley St at around 3pm
 - When I returned at 3:30pm the car's temperature gauge showed 39C
 - By the time I neared home in the Woodridge Estate with its large canopy trees about 10 minutes later, temperature had dropped to 34C
 - According to Weatherzone the outside temperature at Viewbank at 3:30pm was 25.8C

36 Shalbury Ave,

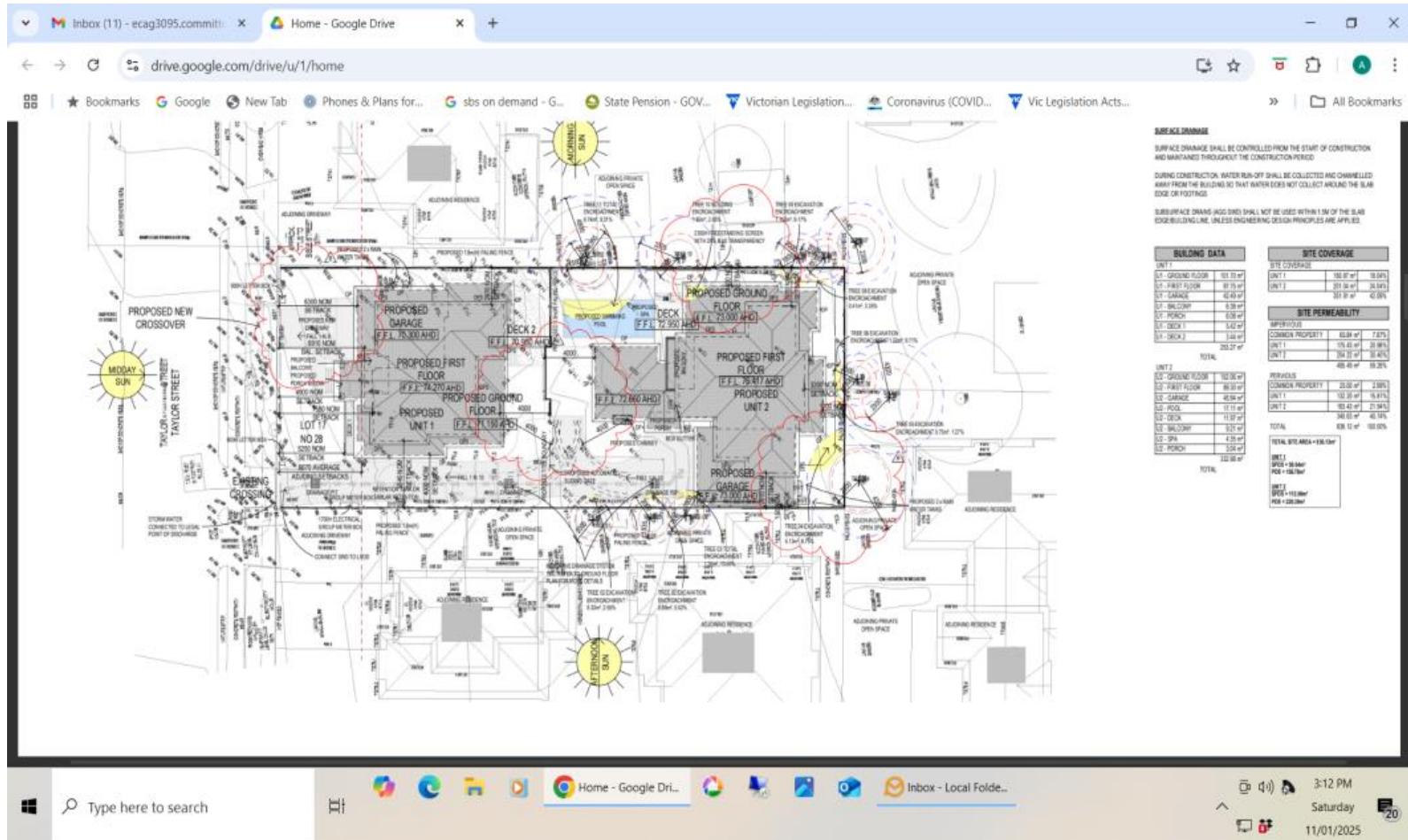
Eltham (off Beard St)

Outside the Eltham MAC

4 Medium Density
Townhouses – virtually no
landscaping



28 Taylor St, Eltham (within ACZ1 – 2 proposed dwellings - McMansions)



28 Taylor St, Eltham (cont.d) – landscape plan

Inbox (11) - ecag3095.committee Search results - Google Drive +

drive.google.com/drive/u/1/search?q=28%20Taylor

Bookmarks Google New Tab Phones & Plans for... sbs on demand - G... State Pension - GOV... Victorian Legislation... Coronavirus (COVID... Vic Legislation Acts...

All Bookmarks

Planting Schedule

Botanical Name	Common Name	Quantity	Size*
Groundcovers, tussocks, small to medium shrubs (Supply in 150mm pots or larger advanced size pots as indicated, eg (300mm))			
Acleris hololeuca	Flannel Flower	8	0.4x0.4
Aconitum 'Hedgehog'	Lily of the Valley	2	0.3x0.3
Angophora hispida 'Bush Peat'	Native Kangaroo Paw	4	0.5x0.4
Chionanthus reticulatus	Mexican Orange Blossom	2	1.2x0.8 (trained)
Correa 'Orange Popsicle'	Orange and White Cereus	24	0.3x0.3
Diospyros 'Silver Falls'	Diospyros	10	0.1x0.8
Drimys winteri 'River Street'	Evergreen	8	0.4x0.4
Grevillea alpina	Grevillea	8	0.3x0.3
Hydrangea quercifolia	Cat Leaf Hydrangea	10	0.6x0.5
Lomatia silaifolia	Lomatia	10	0.6x0.5
Leptospermum 'Starry Night'	Tea tree	8	2.5x0.8 (trained)
Manuka	Manuka	2	2.5x0.8 (trained)
Rapanea 'Snow Master'	Rapanea	8	20x3
Stringybark and Native Wattle	Stringybark	8	3.0x0.8
Watsonia 'Lilac'	Native Bluebell	12	0.2x0.8
Wattle	Deer Native Rosemary	8	0.6x1
Climbing/Trailing Plants (Supply in 150mm pots)			
Clematis microphylla	Small Leaf Clematis	6	
Pandorea pandorana	Wring Vine	1	
Feature trees, shade trees, large shrubs (Supply in 200mm pots or at advanced size 1.5m high** or larger indicated height, eg (2m))			
Acer palmatum 'Dissectum'	Twiggy Bonsai Maple	1	1.0m
Acacia mearnsii	Blackwood	2	1.0m
Aldouinia littoralis	Black Sheoak	2	1.0m
Banksia	Long Leaf Box	2	2.0m
Eucalyptus gunnii	Velvet Leaf Boxwood Bush	2	1.0m
Ficus	Upright Ligustrum	1	1.0m
Osmanthus fragrans	Variegated Ligustrum	1	1.0m
EUCALYPTUS RADIATA	Wattle	1	2.5-3m
*height x width average at maturity estimated for this location or maintained by trimming			
**height x width average at maturity estimated for this location or maintained by trimming			

Black or dark grey colour schemes – dark roofs increase summer temperatures inside homes

40 Shalbury Ave, Eltham
(off Beard St)



118 Bible St, Eltham



DARK ROOFS INCREASING TEMPERATURES INSIDE THE HOME

- ABC News webpage dated 30 April 2024 'Dark roofs make homes 10 degrees warmer, Sweltering Cities project finds'
 - In Western Sydney homes with dark roofs can be 10C warmer on a hot summer day
 - Cooling a home with a dark roof could cost \$700 more p.a.
 - One roof cavity under a black roof was 49.8C when the maximum outdoor temperature was 36.6C
 - Why choose a dark roof?
 - A roof with black tiles was \$15,000 cheaper than a lighter roof
 - Some think black is a 'more modern' look!
 - NSW effectively banned black roofs in almost all areas from October 2023
- **But in Victoria -**
- *The Victorian government is set to mandate light-coloured roofs for new homes (per article in The Daily Declaration dated 8 April 2024).*
- Has it done this? What about repainting or replacing existing roofs?

DARK ROOFS INCREASING TEMPERATURES INSIDE THE HOME

- An article from Henley Homes dated 15 January 2024 says a dark roof:
 - *is advantageous in the cooler climate, as a dark roof absorbs and retains heat, contributing to overall thermal performance*
- Is this just an excuse by developers so they can get higher energy efficiency ratings at less cost?
- The CSIRO favours banning black roofs because they contribute to the urban heat island effect
- Article in *The Age* dated 13 February 2025 entitled '*How your suburb's lack of trees could be affecting our health*'
 - included some very interesting infra red imaging of new subdivisions with mainly dark roofs that shows the difference in temperatures black roofs make

DARK ROOFS INCREASING TEMPERATURES INSIDE THE HOME

- **What is happening in Eltham?**
- ECAG frequently sees planning permit applications for buildings with a dark colour scheme
- This is despite Nillumbik's Planning scheme generally referring to 'muted' and 'earthen' tones for new buildings
- Also, Nillumbik's *Neighbourhood Character Strategy November 2023* introduces a definition of 'Muted colour palette' that refers to 'earthen and bush tones, particularly greens, browns and greys'

LOSS OF TREE CANOPY AND NATURAL HABITAT

- Generally speaking, a planning permit is required to remove, lop or prune trees and native vegetation - in particular any 'substantial tree'
- DEFINITION OF A SUBSTANTIAL TREE:
 - *vegetation that has a trunk circumference greater than 0.5m at one metre above ground level, and/or a height greater than 6 metres*

LOSS OF TREE CANOPY AND NATURAL HABITAT

- **What is happening in Eltham?**
- ECAG has seen many instances where-
 - all trees have been removed prior to applying for a planning permit to develop a site or
 - the applicant seeks permission to remove all or most of the existing trees and other vegetation
 - e.g. *1343 Main Rd, Eltham* – 65 trees to be removed (of which only 28 require a permit) in order to construct 10 double storey dwellings
- **Where do the birds, animals, reptiles and insects move to?**

Proposed or existing developments in Eltham – climate change implications

- **CONCLUSIONS**
 - Eltham already suffers from the urban heat island effect
 - developments that remove vegetation and cover most of the site with impervious surfaces and buildings are causing loss of tree canopy and natural habitat; and
 - developments with little landscaping, few or no canopy trees and dark coloured building materials (especially black roofs) are exacerbating the effects of climate change and reducing comfort levels for their occupants

3. The Council's Urban Tree Canopy Strategy

- **DRAFT URBAN TREE CANOPY STRATEGY 2024 – 2040**
- Only 29 pages
- On Council's website (read the vision on page 1)
- Goals and associated targets:
 - *Goal 1 - That Nillumbik's urban canopy is protected and enhanced*
 - *Goal 2 - That the Nillumbik community value and care for our urban canopy*
 - *Goal 3 - That a healthy urban canopy supports the wellbeing of the Nillumbik community*

3. The Council's Urban Tree Canopy Strategy

- **What is the current situation?**
- Average tree canopy coverage in Nillumbik's suburbs and townships is 39 %; and
- Is the second highest in all of Melbourne
- Per Table 2 on page 5:
 - Highest: North Warrandyte 64%
 - Lowest: Plenty 20%
 - Eltham: 40%
 - North Eltham: 44%

3. The Council's Urban Tree Canopy Strategy

- Part 4 sets out **Threats to Nillumbik's Urban Canopy** that include the following challenges:
 - Climate Change - Extreme weather
 - Bushfire threat
 - Age and diversity of our tree population
 - Urban development / housing
 - Public infrastructure and utilities
 - Community perceptions about trees

3. The Council's Urban Tree Canopy Strategy

- **What can we do?**
 - Don't remove trees on your land
 - Apply via Council website for a tree on your nature strip (see article of 10 December 2024 on the Council website *Street tree program branches out*) BUT applications for 2025 planting year closed on 31 January 2024
 - Lobby your Councillors for tree planting on Council land (parks and reserves) - especially in the Eltham MAC

QUESTIONS & DISCUSSION