Before Palmerston North City Council

Under the Resource Management Act 1991

In the matter of a proposed plan change to rezone

land at 611 Rangitikei Line to establish the Whiskey Creek Residential Area

STATEMENT OF EVIDENCE OF ANDREW BURNS IN SUPPORT OF FLYGERS INVESTMENT GROUP LIMITED (URBAN DESIGN) 18 MAY 2022

Counsel Acting M J Slyfield Stout Street Chambers

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INTRODUCTION

1. My full name is Andrew Davies Burns.

Qualifications and Experience

- 2. My qualifications are MA Urban Design (dist); Dip. Urban Design; BArch; BBSc. I am a full member of the Royal Town Planning Institute (MRTPI) and a Fellow of the Royal Society of Arts.
- I have 28 years experience in architecture, planning, urban design and academia. I am a director at McIndoe Urban Ltd, a specialist urban design practice based in Wellington. I have held that post since 2013. I am co-Chair of Kāinga Ora's Wellington Design Review Panel, and an External Examiner and guest lecturer for the School of Architecture, Victoria University of Wellington. I was a Built Environment Expert for Design Council CABE (UK) and a design panel member for LB Newham and also for Royal Borough of Windsor and Maidenhead. I was a director of Matrix Partnership Ltd, an urban design practice in London (2003-2013) and seconded urban design director to Arup (South Africa, 2012). Prior to these roles, I worked as an urban designer for Urban Initiatives Ltd (London) and DEGW plc (London) from 1997 to 2003.
- 4. I held part-time lectureships at Masters level in urban design at Oxford University's Department for Continuing Education, Kellogg College (August 2010 March 2013, MSc course in Sustainable Urban Development) and Oxford Brookes University's Joint Centre for Urban Design (August 2006 March 2013, MA course in Urban Design), and the Bartlett School of Planning, at University College London (2004 2006).
- 5. I have had extensive experience in planning for growth and large scale masterplanning. In Palmerston North I am leading residential masterplans and district plan changes for Aokautere and Kākātangiata; in Auckland masterplanning of Auranga and Providence Point (Drury) and Onehunga Wharf; in Wellington Shelly Bay Masterplan and Petone and Hutt Central Spatial Plans. Internationally, in South Africa, I was project director for the Capital City of Tshwane (Pretoria) Masterlpan; I directed numerous urban design studies and residential masterplans in the UK; and led a 300Ha housing development in the Middle East (Damascus Hills, Syria).

6. Other relevant experience includes design review of residential developments on behalf of Wellington City Council, Auckland City Council, and Palmerston North City Council. I co-authored housing quality assessment criteria for the Ministry of Housing and Urban Development (Oct 2018); was lead author of the residential chapters of the Auckland Design Manual; lead designer to NZIA Stage B3 for a multi-unit housing development for Kāinga Ora in Lower Hutt; and, masterplan lead for Kāinga Ora's medium density Arlington site in Wellington.

Involvement in Proposed Plan Change

- 7. I was part of the multi-disciplinary team that included Local Landscape Architecture Collective; Harriet Fraser Transportation Planning; Resonant; Thomas Planning; Mitch Hydro and Acousafe Consulting & Engineering that produced the masterplan for Whiskey Creek. My involvement included urban design inputs through all phases of the masterplanning that began in mid-2020 including:
 - the analysis that underpins the masterplan;
 - development of principles, masterplanning options, and multicriteria assessment of options;
 - stakeholder consultation; and,
 - masterplan development and refinement.

Code of Conduct

8. I have read the Code of Conduct for expert witnesses in the Environment Court Practice Note 2014 and I have complied with it when preparing this evidence. Other than when I state that I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of Evidence

9. This evidence provides a brief overview of the master-planning approach from an urban design perspective before focusing on the urban design related issues raised by submitters and by the s42A report. I do not repeat the analysis that informed the masterplanning nor describe the masterplan itself as that document is part of the notified information (Appendix 3 – Urban

Design and Landscape Report). Where a submitter has raised a matter within my area of expertise that I have not addressed in this statement of evidence this is not to be taken as acceptance of the matters raised.

EXECUTIVE SUMMARY

- 10. The masterplan that underpins the Structure Plan and Plan Change has been developed in response to: a) analysis of local and contextual conditions; b) design principles; c) urban design best practice; and d) stakeholder feedback.
- 11. The spatial layout of streets and blocks is optimally configured to deliver a permeable, fine grain block pattern. The proposed collector road provides local and strategic connections into the surrounding area with an attractive 'reserve edge' streetscape experience.
- 12. Extension of areas zoned Residential connect with existing housing in close proximity to employment and access, contributes to the city's housing growth and utilises available land in an efficient manner.
- 13. Extension of Residential zoning is contingent upon providing a walkable fine grain block structure with variation in lot size; quality streetscapes fronted by development; attractive open green spaces and walkways that extend the city's recreational network and enhance waterways and water management; access to new commercial amenities.
- 14. Extension of Residential zoning requires mitigating effects on the amenity values of neighbours. I support the specific design features and controls on maximum height and rear boundary setback and lot alignment that allow for larger lots in this location.
- 15. Medium density housing is provided for to optimise high-value reserve edges and create appropriate relationships to open space and the new city edge.
- 16. Celebrating the design of a new northern city edge is integrated into the masterplan and Structure Plan, including visual and physical connections onto the new flood plain and Whiskey Creek reserve.
 - 17. I support the proposed Plan Change and Structure Plan from an urban design perspective that facilitates the rezoning of land for residential and recreational purposes.

MASTERPLANNING APPROACH

- 18. The masterplanning process for Whiskey Creek (previously known as Flygers
 Line) began with the establishment of a multi-disciplinary team to ensure a
 robust understanding of constraints. A thorough site and context analysis was
 prepared by this wider consultant team addressing the following topics:
 - Access and movement / connections
 - City wide context and strategic growth
 - Cultural significance
 - District Plan context
 - Urban structure, views and site interface
 - Land Use including Schools and reserves, employment, local services and amenities
 - Open Space network
 - Stormwater, flood risk
 - Vegetation and Ecology
 - Acoustic constraints
 - Services Infrastructure
 - Geotech and Natural Hazards
 - Easements
 - 19. The Whiskey Creek Plan Change area collectively includes four properties (611 Rangitikei Line; 165-243 Flygers Line; 609 Rangitikei Line; and 127 Benmore Ave). The relevant context for the site includes the immediate surrounds and the wider extent of the northern portion of Palmerston North including the Mangaone Stream corridor, the Whiskey Creek corridor, the Flygers Line Floodway, Manawatū Drainage Scheme and wider Taonui Basin spillways, floodways and floodable area. This wider context includes its servicing infrastructure, roading that connects with the Site and provision of local services, facilities and employment (Figures 1, 2).
- 20. Regular expert and stakeholder consultations were held throughout the masterplanning process to inform and test concepts. Workshops sessions were held with PNCC Council Officers as well as various regulatory stakeholders including Waka Kotahi NZTA, Horizons Regional Council and First Gas Ltd. Consultation with local residents of the Cloverlea neighbourhood

took place in February 2021 (drop-in sessions) and a Cultural Impact Report was commissioned from Rangitāne o Manawatū.





Figures 1, 2: Site context analysis

- 21. Design principles were developed at an early stage following site analysis. This stage of work included understanding the landowners' Development Brief and broad planning and design intentions (e.g. addressing creek revitalisation and flooding, integrating with Meadowbrook and Benmore Ave). In my opinion, this first stage of analysis provided a robust base for subsequent masterplanning.
- 22. Three broad development scenarios were identified in relation to different zoning outcomes. Scenario One tested an 'Operative District Plan' development; Scenario Two presented a 'Rural Residential' outcome; and Scenario Three explored a conventional suburban residential proposal. These

scenarios were assessed against a multi-criteria framework. The preferred scenario was then developed in terms of masterplan options. Three options were prepared: Option One Business as usual / Hybrid Geometry; Option Two Landscape-led Approach; and, Option Three Neighbourhood Network. These options were again assessed against a multi-criteria framework and a preferred Masterplan followed (Figure 3) consistent with that evaluation process.



Figure 3: The Masterplan

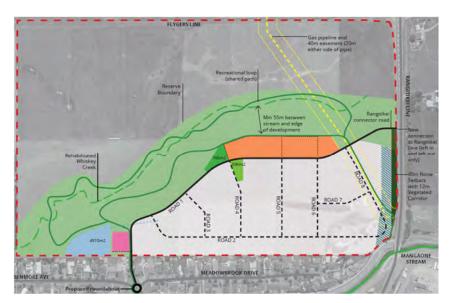


Figure 4: The proposed Structure Plan informed by the Masterplan.

MASTERPLAN DESCRIPTION

- 23. The masterplan (Figure 3) aims to deliver an extension to the Cloverlea neighbourhood, providing a range of housing types and residential living environments that can help meet current and ongoing housing demand for Palmerston North.
- 24. The plan focuses on reconciling all relevant cultural, social, environmental and economic drivers to provide a coordinated, well-serviced and high amenity development. The plan will contribute to the well-being of its residents and offer new open space amenities to the wider community. In order to achieve this the masterplan developed six key Design Strategies as follows:
 - External Linkages: Two new gateway connections with the surrounding street network with Benmore Ave facilitating extension of existing residential areas. Rangitikei Line left-in left-out provides excellent strategic access.
 - Street Hierarchy: Provision of a new collector road along the open space edge provides residents with an experience of the revitalised Whiskey
 Creek area. Local streets feed into the collector and a laneway identifies the medium density area with a frontage onto the reserve.
 - c. Off-Road Trails: A network of new off-road pedestrian and cycle trails run through the proposed reserve. These connect into surrounding streets and link with Mangaone Stream trails resulting in valuable recreational circuits for the city.
 - d. Block Pattern: Small blocks are proposed that create a walkable, permeable neighbourhood. These blocks all present frontages to the street and generally avoid rear lots. Mainly north-south block alignments allow east-west lots orientated for sun.
 - e. Open Spaces: An 'absolute edge' is created by the floodplain and proposed reserve to the north, limiting further expansion. The reserve offers regenerating riparian planting integrated with recreational trails. Playable park spaces are keyed into the block layout and compliment the reserve.
 - f. Lot Type & Density: A mixture of conventional suburban lots suitable for detached dwellings are proposed across the majority of the plan. On the

edge of Whiskey Creek reserve medium density housing is envisaged located to optimise high quality aspect and amenity and to create an attractive and notable front door to the city. The southern boundary interface with existing dwellings presents matched lot boundaries and suppressed building height.

- Diagrams are developed under each of these strategies and explain the planning and design approach for the masterplan and the subsequent Structure Plan. Further description is provided in the Urban Design and Landscape report, including key features of the proposed Structure Plan (Figure 4).
- 26. I am confident that the Masterplan and Structure Plan provide for a well-serviced, high amenity outcome consistent with contemporary urban design best practice.

RESPONSE TO SUBMISSIONS

Access to sunlight and sun shading

- 27. Various submissions on sunlight / shading impacts of the proposed plan addressed in turn below.
- 28. Submitters SO1 and SO2 live at 23B Meadowbrook Drive and oppose the plan change. They are concerned that their property will be shaded by future development (fencing and houses) as allowed for under the Structure Plan. They note their house is 1.1m from the rear boundary. They request that no high fencing occurs and a height restriction is applied to any building that might block their sunlight.
- 29. A number of other submissions raise similar concerns around sunlight shading (SO3 / 15a Meadowbrook; SO7 / 5 Meadowbrook; SO11 / 21 Meadowbrook; SO13 / 125 Benmore; SO15 / 1 Meadowbrook; SO20 / 25 Meadowbrook; SO22 / 39 Meadowbrook; and, SO26 / 3a Meadowbrook).
- 30. I recommend that these submissions be rejected for the reasons below.

 However, I recommend an additional rear boundary control be considered to further enhance sunlight amenity for submitters (para 31 below).
 - a. I accept that the proposed plan will fundamentally change the rear boundary condition for existing dwellings from a rural zone to a residential

zone. However, I note that: a) District Plan residential performance standards will apply that are considered to provide acceptable amenity for residential zones elsewhere across the city: b) that even more restrictive controls have been applied with the proposed 5m height limit in this area that will further mitigate sunlight shading; and c) considerable care has been taken to align proposed lot boundaries with existing property boundaries wherever practical.

- b. To clarify sunlight shading effects on existing properties, I have tested a range of outcomes using 3D SketchUp modelling as follows (**Appendix A**):
 - i. Scenario 1: Dwellings indicated in realistic 'most likely' positions on proposed lots that are fully compliant with the Operative DP controls and with the proposed 5m height control. This positions dwellings towards the front of their sites (onto Road 2) and well away from the common rear boundary.
 - ii. Scenario 2: Dwellings indicated in 'worst case' positions on proposed lots (i.e. set far back from Road 2 and close to the common boundary) that are fully compliant with the Operative DP controls and with the proposed 5m height control.
 - iii. Scenario 3: Shading generated by a rural zone compliant 25m tall tree belt set back 5m from the common boundary.
- c. Under Scenario 3, I considered the likely shading outcomes under the current rural zone generated by a permitted 25m tall tree line / shelterbelt set 5m back from the common boundary. At mid-winter such a tree structure would shade all properties from around 9am throughout the day. At the autumnal equinox shading would occur from around 11am for the rest of the day. In comparison the proposed plan (residential zoning) would provide considerably more sun both at mid-winter and the Autumnal Equinox to existing properties.
- d. Proposed lot boundaries align with those of 7 to 31 Meadowbrook Drive and Submitters will experience a single dwelling over the rear boundary. This reduces the presence of built form and associated shading effects. For 33-49 Meadowbrook Drive the proposed lot layout varies across the boundary due to variable alignment and variable width of existing properties (widths range from 3m up to 45m). It has not been possible to

efficiently and sensibly align proposed lot boundaries with these neighbours. However, on reviewing shading for property 39 Meadowbrook Drive (Submitter SO22) I observe that any shade on this property is only generated by a single proposed dwelling. The three existing properties at 1, 3a and 5 Meadowbrook Drive will collectively experience two proposed dwellings over the boundary. Due to proposed lot orientation these two dwellings will present longer side elevations towards existing neighbours but will be limited to single storey (5m max height) and a compliant 1.8m tall permitted fence will generate outcomes anticipated by the District Plan.

- e. For the majority of proposed back-to-back lots that are oriented longitudinally with existing properties boundaries (7 49 Meadowbrook Drive) we can observe that under the most likely and realistic Scenario 01, any shading generated by proposed dwellings at mid-winter does not extend onto existing neighbours until 2pm with more extensive shade occurring from 3pm 4pm. At the Autumnal Equinox, any shade generated by proposed dwellings does not begin to extend onto existing neighbours until 5pm. This high level of sunlight access is consistent with DP Assessment Criteria where new buildings provide 'reasonable' levels of amenity for adjacent properties and I consider shading outcomes to be acceptable.
- f. I have also tested shading from a permitted 1.8m fence along the common boundary and I provide some examples below (Figures 5, 6). I have not had access to data on all the various fence heights that currently exist and have therefore modelled a permitted 1.8m outcome throughout. Testing indicated that at mid-winter, 2pm, shading from proposed dwellings does not extend beyond shading from the fence (Figure 6 below), but shading does begin to increase from 3pm. I therefore note that sun shading from proposed dwellings causes no additional shade for the majority of the day at mid-winter (8am to around 3pm) and is acceptable. At the equinox. shading from proposed dwellings has little or no increase beyond permitted fence shading.

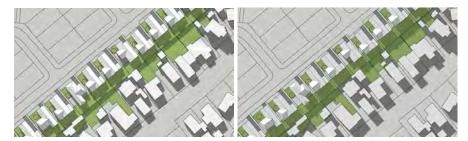


Figure 5: Sun shading, mid-winter (2pm, 3pm) with fencing (Appendix A)



Figure 6: Sun shading, equinox (2pm, 3pm) with fencing (Appendix A)

31. I note the s42A report agrees that the proposed 5m max height of any new dwelling units adjoining properties along Meadowbrook Drive "will be sufficient to mitigate potential loss of sunlight and visual amenity". If it is helpful to the Commissioner, I consider that a further control could be applied to the Plan Change provisions - I recommend increasing the rear yard setback from 1.5m to a min 3m setback for any future dwellings that share a common boundary with Meadowbrook Drive that would provide enhanced mitigation of any adverse amenity effects over and above current DP separation distance controls.

Provision of a road and open space along the rear of existing Meadowbrook Drive properties

- 32. Submitters SO1 and SO2 live at 23B Meadowbrook Drive and oppose the plan change. They request a road is located along the common boundary with a 15m-20m green belt and that part of the site immediately behind their property is made a reserve. Similar matters are raised by Submitters SO3, SO11 and SO15.
- 33. I recommend that these submissions be rejected for the following reasons:
 - a. Locating a road and green belt along the private rear boundary of properties does not align with masterplanning or urban design best practice. Infact the literature (including PNCC residential Assessment

Criteria e.g. R10.6.3.3, 3, a) argues against such outcomes for reasons of safety / security through lack of overlooking, absence of activated frontages and the need to design open spaces with high levels of amenity). Best practice argues that 'back-to-back' conditions are created across the boundary of residential properties, allowing dwelling fronts to address streets. Locating a street or open space along the rear boundary of existing dwellings would result in a 'front-to-back' condition i.e. the backs/rear of dwellings facing the front of other dwellings opposite. Such an outcome is considered poor urban design practice and would not be acceptable.

b. I note the s42A report agrees that the inclusion of a green strip of open space along the rear boundary of Meadowbrook Drive properties "would not be consistent with good practice from an urban design perspective", and "will not be an effective use of space, would be difficult to maintain".

Effects on privacy

- Submitters SO1, SO2, and SO26 oppose the plan change. They submit that they will experience adverse privacy effects.
- 35. I recommend that these submissions be rejected for the following reasons:
 - a. The proposed plan sets out a more restrictive 5m height control compared to the Operative DP 9m height limit. A 5m height control will limit any proposed dwellings to a single storey. As such any views from proposed dwellings out and towards the existing properties will be fully screened by 1.8m fencing. I do not consider there to be privacy effects for neighbours.

Loss of view

- 36. Multiple Submitters (SO1, SO2, SO3, SO7, SO11 and SO13) oppose the proposed plan on the basis that it will result in a loss of view to the north. SO11 specifically refers to long distance views towards Mt Ruapehu, the setting sun and rural vistas.
- 37. I recommend that these submissions be rejected for the following reasons:
 - a. I am generally in agreement that the loss of northern views for neighbours should be regarded as being an adverse change on those who have until now enjoyed them. However, these views are onto / across private land

- and do not enjoy specific protection within the District Plan. I regard the amenity that the northern views provide neighbours as a largely 'borrowed' or 'interim' amenity rather than a fundamental 'owned' amenity value that they are entitled to.
- b. I have also considered what views might be reasonably expected to be lost to neighbours based on development or landscape structures that meets the Plan's current provisions on the site. A permitted outcome could see a 25m tall and dense tree line set 5m back from the boundary into the site, effectively removing all northern views for the neighbours as of right. The District Plan rural zone expressly permits plantation forestry subject to a boundary set back of 5 m from any property boundary. The landowner could plant a tree crop that would block views. I note that for residents at the northeastern end of Meadowbrook Drive there exists a tall shelter belt of evergreen trees some 100m from their properties that would block distant views (Figure 7) however this is not the case to the southwest.



Figure 7: Existing shelter belt of trees to the northeast

- c. The proposed plan will restrict height to a maximum of 5m and align lot boundaries at 7-31 Meadowbrook Drive), and I have already suggested a deeper rear (3m) setback could be considered. My considerations of likely / realistic future dwelling positions are that new houses will locate towards the front of lots towards Road 2, thereby achieving deeper rear yards. The combined effect of the lower 5m height control and setback and aligned lot boundaries will improve the amenity of neighbours relative to current DP performance standards and in the context of the subject land being re-zoned for housing, I consider these outcomes acceptable.
- 38. Lastly, I have also considered any wider positive effects from the proposed development of the land. Of particular significance is the proposed flood

plain / Whiskey Creek reserve that will enhance city-wide amenity, recreation and habitat values. I would also note the provision of new local facilities near the connection with Benmore Ave that will offer walkable shopping for local residents. These factors must be considered in any analysis of amenity values.

SECTION 42A REPORT

- 39. I have read those parts of the section42A report relevant to my area of expertise and note the report includes the following suggested amendments to Policy 2.8:
- 40. 2.8 To ensure that subdivision in the Whiskey Creek Residential Area gives effect to has regard for the following design principles which have been incorporated into the Structure Plan (Map 7A.3):
- 41. I note the change in emphasis from "has regard for" to "gives effect to" and am comfortable that this provides more certainty that the carefully developed principles of the masterplan will be achieved in any future development.
- 42. I have reviewed the full set of s42A amendments for policy 2.8 and would make the general observation that improvements could be made to provide grammatical consistency. Policy 2.8 states "...give effect to the following principles..." but not all subsequent text reads as a 'principle' and in some cases uses counter terminology such as 'have regard to'. For example, the fourth and fifth bullets under 'Stormwater and flooding' read:
 - Design of the stormwater detention pond shall have regard to visual amenity and ecological benefits whist achieving hydraulic neutrality.
 - The feasibility of supplementing flows within Whiskey Creek with stormwater discharges is explored.
- 43. I recommend these are adjusted as follows:
 - Design of the stormwater detention pond <u>integrates</u> shall have regard to visual amenity and ecological benefits whist achieving hydraulic neutrality.
 - The feasibility of Stormwater discharges supplementing flows within

 Whiskey Creek. with stormwater discharges is

Streets and linkages

- <u>To provide safe</u> vehicle access is provided to Benmore Avenue/ <u>Meadowbrook Drive intersection</u> and a left in/ left out access to Rangitikei Line.
- All streets shall interconnect with no cul-de-sacs.
- The cycle and pedestrian links shown on the Structure Plan are provided.
- Street design and planting shall be in accordance with the Council
 Engineering standards for appropriate road hierarchy. adopt the

 structure plan street cross-sections Local and Local Collector Roads.
- 44. I have read the evidence of Harriet Fraser that relates to these issues and provisions and concur with her that " the suggested amendments to the first bullet point provide increased certainty around the safe performance of a future intersection connecting with Benmore Avenue and Meadowbrook Drive".
- 45. I do not comment on the changes to the final bullet point as that is beyond my area of expertise. However, I have read Ms Fraser's evidence and note her position that bespoke cross-sections included in the application are appropriate and align well with the provisions of NZS4404:2010 Land Development and Subdivision Infrastructure. Further that Local and Collector Roads will have a minimum width of 15.5m in accordance with Council's Engineering Standards.

Subdivision design and integration

- For lots adjoining existing Meadowbrook Drive properties:
 - The subdivision design shall maximise alignment with existing lot boundaries for Nos. 7 to 31 Meadowbrook Drive.
 - o A 1 storey height standard shall apply.
- A positive city edge is achieved by ensuring all lots adjoining the reserve enable dwellings fronting the reserve.
- Layout of the multi-unit housing area will achieve active frontages to road 1 and the flood plain reserve.
- The extent to which lots enabling dwellings fronting streets is maximised.

- The street and block layout provides for a fine grain walkable block structure <u>and a predominant north-south street alignment as shown on the Structure Plan (Map7A.3).</u>
- The location, dimensions and size of lots shall provide for a mix of conventional suburban lots, multi-unit residential development, open space, recreation and commercial activities that is generally consistent with mix of housing density and uses shown on the Structure Plan (Map 7A.3).
- 46. I agree with the proposed change to the third bullet. This will provide certainty that any future dwellings enabled under the Plan Change will achieve quality urban design outcomes along the 'Road 1' street edge and onto the flood plain reserve. I consider it critical that new dwellings create positive, engaging (active) frontages onto streets and public open spaces to enhance place identity, legibility, attractiveness and safety.
- I disagree with the amendments to the fifth bullet. The plan does not provide a "predominant north-south street alignment". Streets are generally aligned in a regular grid-like pattern that is informed by the wider city grid, with inflections as local streets meet Road 1. I recommend this bullet is amended as follows:
 - The street and block layout provides for a fine grain walkable block structure and a generally orthogonal predominant north-south street alignment as shown on the Structure Plan (Map7A.3).
- 48. The last (sixth) bullet seeks to ensure that a variation in development type occurs supporting a mixed demographic and offering choice to the market. I agree with this intention but recommend re-wording as follows:
 - The location, dimensions and size of lots shall provide for A mix of block and lot sizes provide for conventional suburban housing, multi-unit residential development, open space, recreation and commercial activities that is generally consistent with mix of housing density and uses shown on the Structure Plan (Map 7A.3).

Typology and density

 Multi-Unit Housing is provided for enabled in the location shown on the Structure Plan, allowing for development up to 11m in height while ensuring reasonable sunlight access to adjacent properties is maintained.

- Commercial activities are enabled in accordance with the Structure Plan (Map 7A.3) near the Benmore Ave connection that provide:
 - o A positive relationship to the reserve and attenuation area
 - o Amenities and services for the local neighbourhood
 - o An active frontage at the street edge.
- 49. With respect to the first bullet, I am comfortable with the use of either "provided for" or "enabled" as appropriate terminology. Both seem to carry the same weight.
- Terminology within the second bullet should be consistent with the first bullet vis-à-vis "gives effect to". The location of the commercial activity has been carefully considered to be accessible to existing housing areas as well as proposed development, to front the collector 'Road 1', to avoid common boundaries with proposed housing and to provide an outlook over the reserve. As such I would prefer the provision to include a reference to the Benmore Ave connection, as follows:
 - Commercial activities are provided for enabled near the Benmore Ave connection and in accordance with the Structure Plan (Map 7A.3) near the Benmore Ave connection that provide:
 - o A positive relationship to the reserve and attenuation area
 - o Amenities and services accessible to-for the local neighbourhood
 - o An active frontage at the street edge

CONCLUSIONS

As set out in the Urban Design and Landscape report and in this evidence, I remain of the view that the Whiskey Creek Plan Change and Structure Plan develops the land for residential and recreational activities in an appropriate manner. The site will be well-connected into its context with both local and strategic links. A mix of housing and commercial activity is proposed including a range in lots sizes and multi-unit outcomes that support housing diversity and choice. An attractive northern city edge is created that integrates open space reserve, public access and development. Specific controls and design features are proposed to address the relationship with existing properties and mitigate any adverse effects on their amenity.

Form an urban design perspective, I am comfortable that the site can be rezoned to a combination of Residential Zone and Recreational Zone and developed for residential and recreational purposes that achieve quality urban design outcomes.

Andrew Burns

18 May 2022

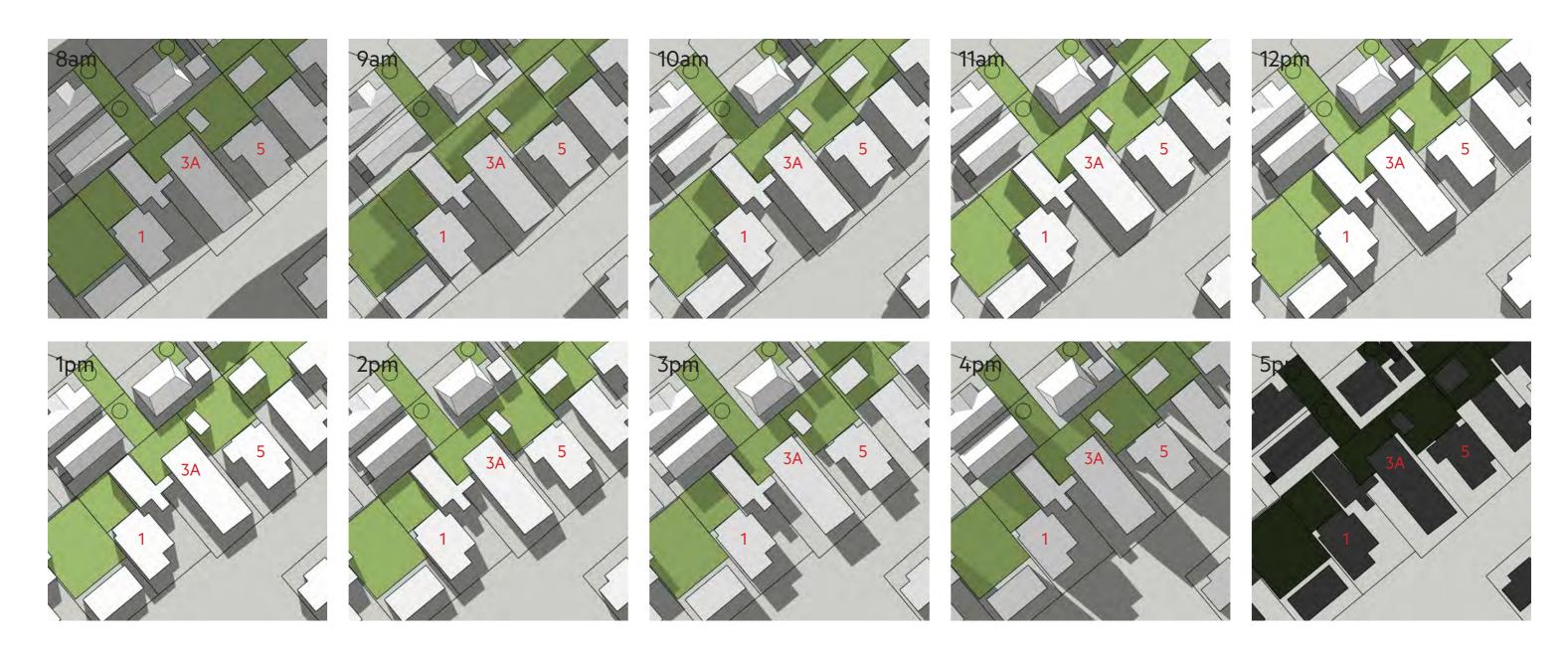
APPENDIX A: SUNLIGHT SHADING STUDIES:

SCENARIO 01

SCENARIO 02

SCENARIO 03

SHADING STUDIES EXAMPLES WITH FENCING



1 Meadowbrook Drive3A Meadowbrook Drive5 Meadowbrook Drive

Shading Study 01 Winter Solstice



15A Meadowbrook Drive21 Meadowbrook Drive

Shading Study 01 Winter Solstice



25 Meadowbrook Drive23B Meadowbrook Drive

Shading Study 01 Autumnal Equinox



3A Meadowbrook Drive

5 Meadowbrook Drive

McIndoe **Urban** 16.05.2022

Shading Study 01 Autumnal Equinox



McIndoe **Urban** 16.05.2022

Shading Study 01 Autumnal Equinox





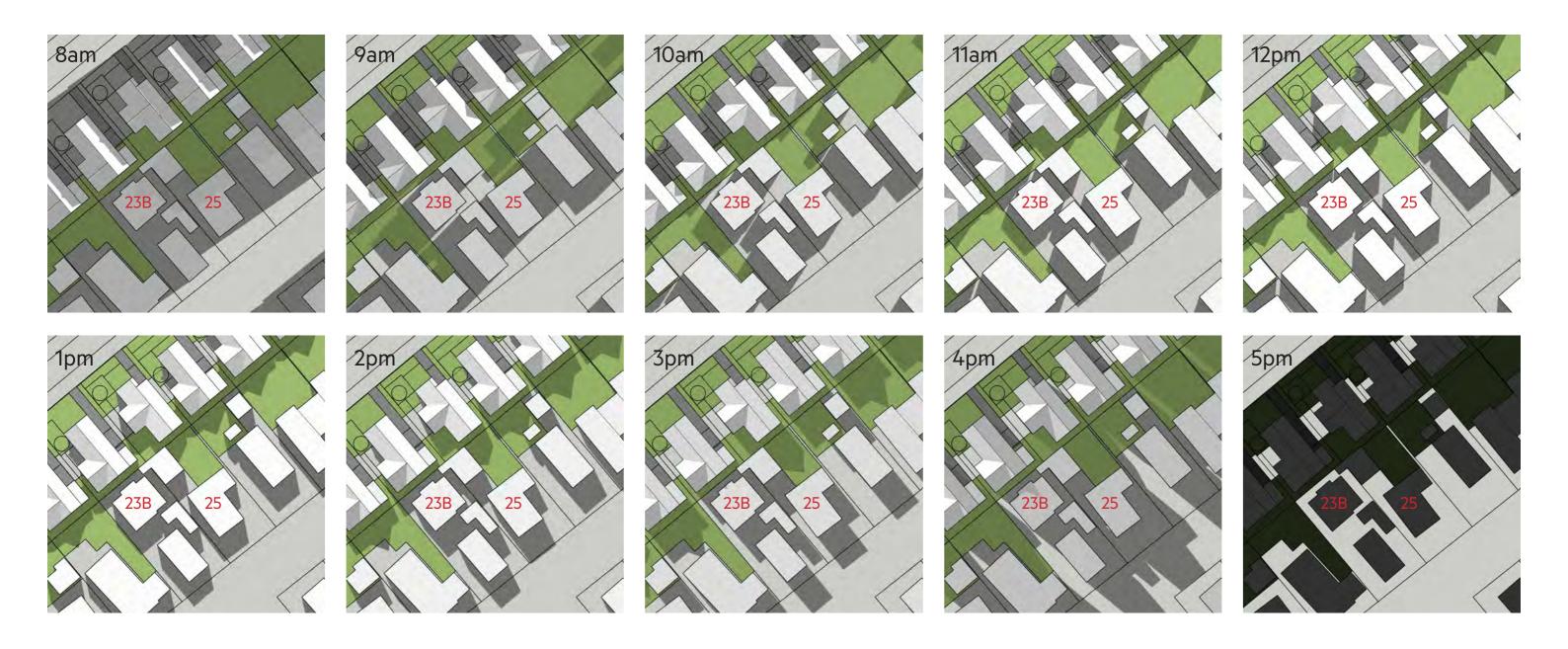
1 Meadowbrook Drive3A Meadowbrook Drive5 Meadowbrook Drive

Shading Study 02 Winter Solstice



15A Meadowbrook Drive21 Meadowbrook Drive

Shading Study 02 Winter Solstice



25 Meadowbrook Drive23B Meadowbrook Drive

Shading Study 02 Autumnal Equinox



3A Meadowbrook Drive

5 Meadowbrook Drive

McIndoe **Urban** 16.05.2022

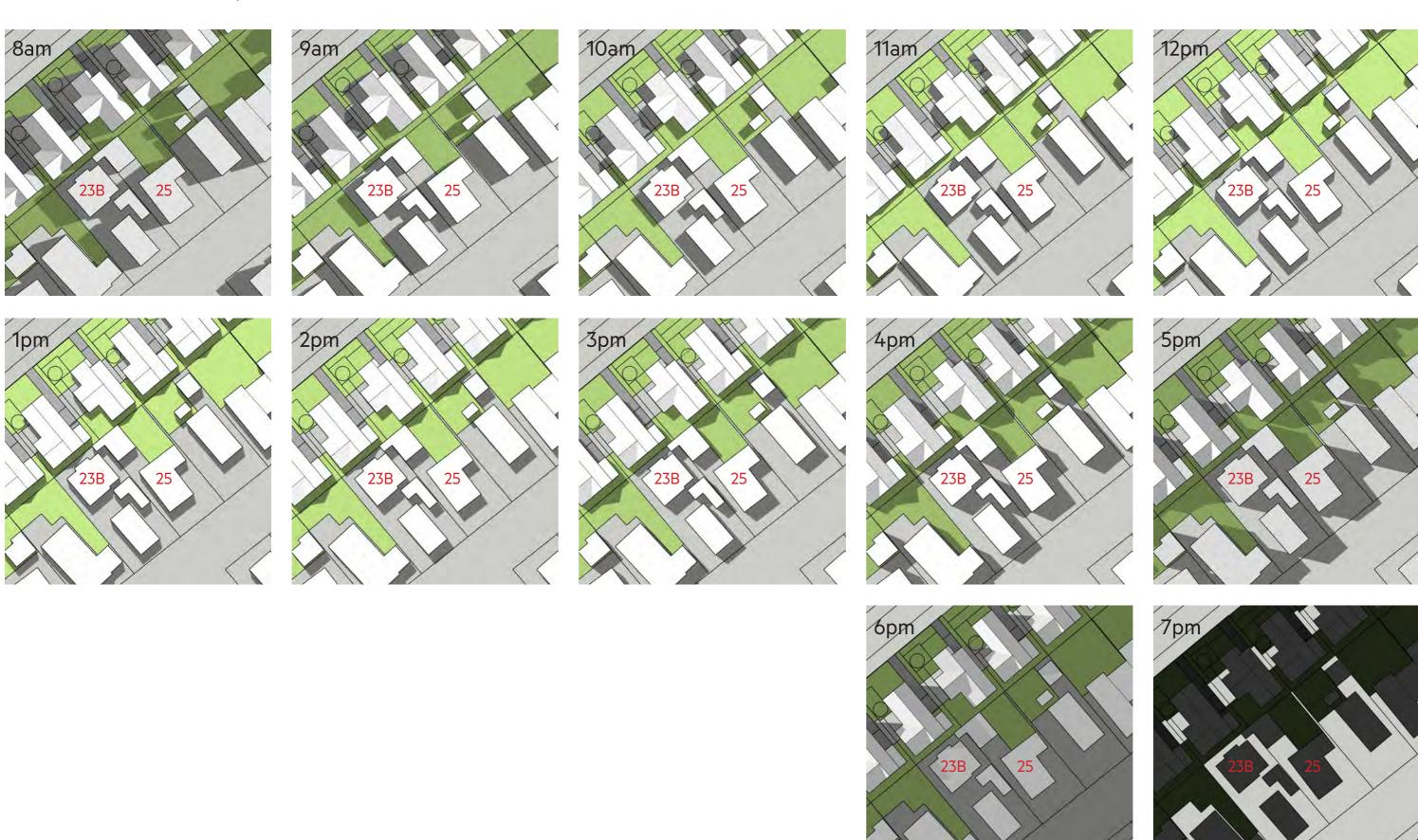
Shading Study 02 Autumnal Equinox



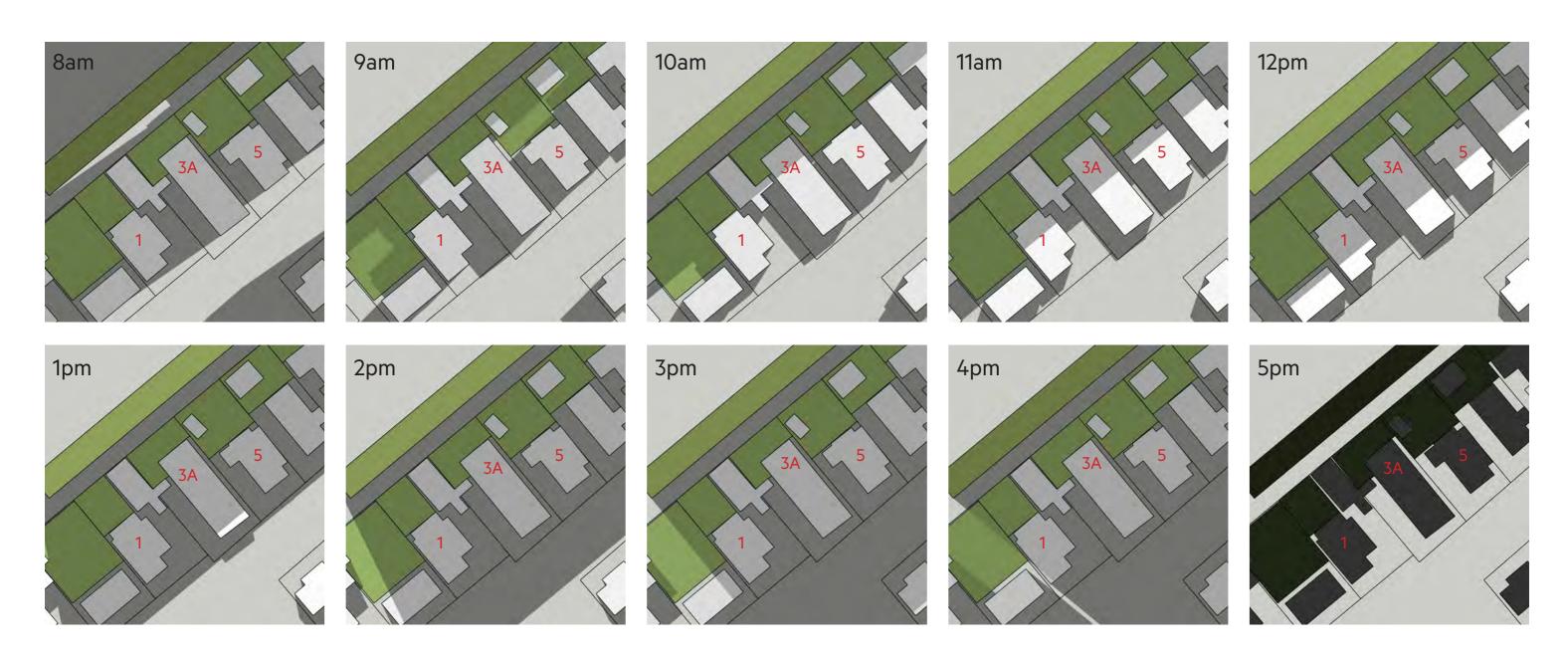
15A Meadowbrook Drive 21 Meadowbrook Drive

McIndoe **Urban** 16.05.2022

Shading Study 02 Autumnal Equinox



25 Meadowbrook Drive 23B Meadowbrook Drive Winter Solstice



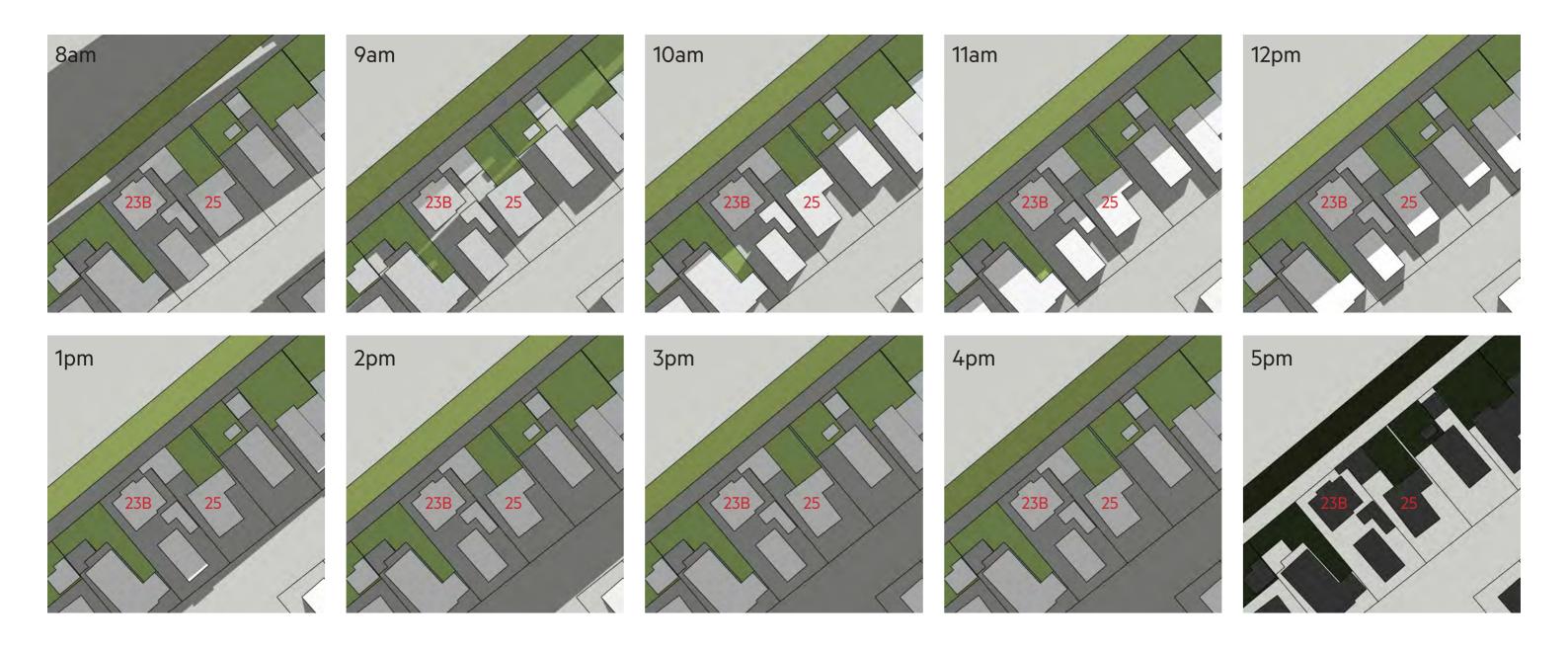
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Shading Study 03 Winter Solstice



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Shading Study 03 Winter Solstice



25 Meadowbrook Drive23B Meadowbrook Drive

Shading Study 03 Autumnal Equinox



3A Meadowbrook Drive

5 Meadowbrook Drive

McIndoe **Urban** 16.05.2022

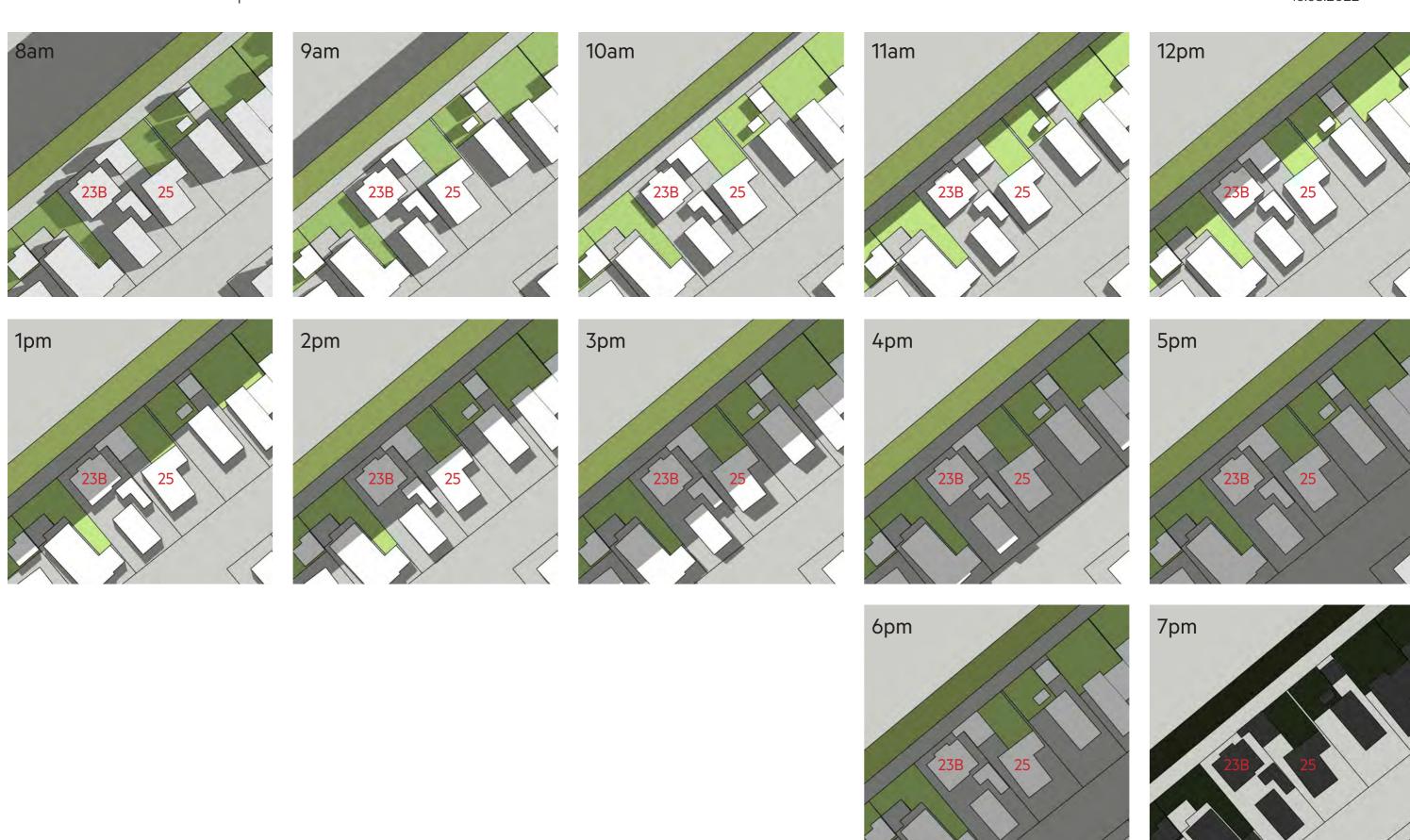
Shading Study 03 Autumnal Equinox



15A Meadowbrook Drive 21 Meadowbrook Drive

McIndoe **Urban** 16.05.2022

Shading Study 03 Autumnal Equinox



Shading including a 1.8m tall fence Mid-winter, 2pm



Shading including a 1.8m tall fence Mid-winter, 3pm



Shading including a 1.8m tall fence Equinox, 2pm



Shading including a 1.8m tall fence Equinox, 3pm



Shading including a 1.8m tall fence Mid-winter, 1pm



Shading including a 1.8m tall fence Equinox, 1pm

