Appendix 8

Council Urban Design Report

SPECIALIST ADVICE - ASSESSMENT FOR RESOURCE CONSENT APPLICATION

PART 1: INTERNAL REFERRAL INFORMATION			
Comments due by:	2 APRIL 2021	**Processing Planner:**	Mark Batchelor - CKL
Consent number:	SP/0179/20		
Address:	1881 CAMBRIDGE ROAD, CAMBRIDGE		
Applicant:	3Ms of Cambridge Limited Partnership		
Agent:	Abbie Fowler – Mitchell Daysh		
Allocated to:	Matt Riley – Barker & Associates		
Date of site visit:	February 2021		

Assessment undertaken by Urban Designer:-

Name: Matt Riley

Signed: 

Date: 22 April 2021

1. PURPOSE OF THIS REPORT

This report provides an urban design assessment of the 3Ms of Cambridge GP Limited ('3Ms') application for 242 residential lots and associated lots for public assets. The application site is within a Deferred Residential zone in the C2 Growth Cell, which is subject to a Structure Plan in the Waipa District Plan. In assessing the proposal, I have reviewed the following documents:

- Assessment of Environmental Effects ('AEE'), Mitchell Daysh, December 2020;
- Integrated Transportation Assessment ('ITA'), Stantec, December 2020;
- Urban Design Statement, Chow Hill, December 2020;
- Scheme Plan (Appendix F of AEE), Cogswell Surveys, December 2020;
- Response to further information request letter, Mitchell Daysh, 26 March 2021;
- Response to further information request letter, Lachlan Muldowney, 26 March 2021; and
- 'Addendum to application' letter, Mitchell Daysh, 10 March 2021, including updated '3Ms Development Layout' and 'Structure Plan Integration Drawings.'

I have also reviewed relevant chapters of the Waipa District Plan, including:

- Section 14 – Deferred Zone;
- Section 15 – Infrastructure, Hazards, Development and Subdivision;
- Section 16 – Transportation; and
- Appendix S19 – Cambridge C1 and C2/C3 Structure Plans.

Additionally, I have reviewed submissions received on the application.

I undertook a visit to the site in February 2021.

The AEE sets out all required consents for the application. I understand that, overall, the proposal is for a non-complying activity. Consent is also required for infringement of a number of subdivision and transportation rules.

I note that there may be areas of overlap in terms of the assessment of public open space amenity within the proposed subdivision in my report and the specialist report on reserves that is being provided by Waipa District Council Senior Reserves Planner Anna McElrea. My report addresses open space amenity insofar as it is relevant to an urban design assessment, namely: access to open space, interfaces between open space and adjoining lots, safety, and the integration of open space, walking and cycling networks.

I am aware that the lodged application does not include an area of active recreation reserve large enough to accommodate sports fields, and in this regard the proposed subdivision departs from the Appendix S19 Structure Plan. My report does not comment on the effects of this, in terms of the quantum or need for sportsfields in the District, as this is outside my area of expertise.

My report is structured to: provide an overview of the site; a summary of the proposal and the relevant District Plan sections; a summary of submission issues; methodology overview; urban design assessment; review of submissions; concluding comments; and recommended conditions.

2. THE SITE

The application site, which has an area of approximately 40 hectares, is located to the west of the existing Cambridge urban area, directly to the north of Cambridge Road and to the west of existing housing on Kelly Street. The site is predominantly in pasture, with few buildings on it.

Surrounding sites are also zoned Deferred Residential and are largely undeveloped. This is with the exception of the Te Awa Lifecare retirement village, on the south side of Cambridge Road.

3. APPENDIX S19 STRUCTURE PLAN

The C1 and C2/C3 Structure Plan within Appendix S19 to the District Plan applies to land outside the existing urban area of Cambridge, to the west of the Town Green Belt and north of the Waikato River.

The Structure Plan sets out a broad arrangement of land uses and roading, cycling and walking networks. The C2 Growth Cell is at the centre of the Structure Plan, with the application site being relatively centrally positioned within that Growth Cell. Key features of the Structure Plan that are shown on or directly adjoining the application site are:

- A collector road that extends north from a roundabout intersection with Cambridge Road;
- An east-west collector road;
- An indicative local road network and cycling and walking connections;
- A stormwater swale system of reserves, including a reserve adjoining the north-south collector road and east-west reserves;
- An indicative location for a school;
- A large active recreation reserve;
- Predominant residential land use; and
- A local centre.

4. SUMMARY OF THE PROPOSAL

The proposal is for subdivision into primarily residential lots, with a number of lots intended for public assets, such as reserves. The scheme plan shows the subdivision is planned in two stages. Stage 1 covers the majority of the site. Stage 2 wraps around the western and northern ends of the site.

The application seeks consent for subdivision only and not for future land uses that may occur on lots. However, 'Figure 7 – 3Ms Proposed Layout' in the AEE[1], various supporting expert reports, and the scheme plan, are annotated to indicate what the intended future land use of each lot is. Future probable land uses are also referred to throughout the AEE. Lots proposed for use other than residential include the following:

- Lot 310 is an approximately 4 hectare lot at the north-east corner of the site, intended for a school.
- Lot 502 is an approximately 2.3 hectare lot to the south of the school site proposed to be vested with Council as a stormwater reserve.
- Lot 501 is a 5151m^2 lot towards the centre of the site, proposed to be vested with Council as a recreation reserve, with the lot intended to be developed as a playground.
- Lot 301 is a 3294m^2 lot, adjoining the recreation reserve to the west, proposed as a future Local Centre.[2]
- Lots 503 and 505 are approximately 1.3 hectare and 1 hectare lots, proposed to also be vested with Council as stormwater reserves, directly to the south of the Local Centre and recreation reserve lots.

Lots intended for future residential uses are broken down into further categories:

- Lot 300 is an approximately 8.6 hectare superlot at the south-east corner of the site, which the AEE refers to as being expected to be developed as a retirement village.[3]
- There are 186 'General residential' lots, with a total area of approximately 10.5 hectares. These range in size from approximately 400m^2 to over 800m^2, with an average of 508m^2.[4]
- Lot 306 is an approximately 1.4 hectare superlot at the northern end of the site, shown as a 'General residential' lot.
- There are 56 'Compact residential' lots, with a total area of 1.8 hectares. These range in size from 284m^2 to 402m^2.
- There are two 'High density' housing superlots (Lots 303 and 304), with respective areas of 1892m^2 and 1980m^2. These are directly to the south of the stormwater reserve Lots 503 and 505.
- There is a 5373m^2 'Terraced Residential' housing superlot (Lot 307) directly to the west of the Lot 502 stormwater reserve.

Local roads run both north-west and east-west through the site. At the northern end of the site is an east-west collector road. The ITA shows shared cyclist and pedestrian paths along proposed roads within the site, with connections through the proposed recreation and stormwater reserve lots, indicating future links to a wider cycling and walking network outside the site.[5]

5. AREAS OF DIFFERENCE FROM THE STRUCTURE PLAN

The key differences in the proposed 3Ms subdivision layout from the Appendix S19 Structure Plan are:

[1] Page 32 of the AEE.
[2] Lot 301 is referred to on the scheme plan as a Neighbourhood Centre. This differs from its description in the Appendix S19 Structure Plan as a Local Centre. It described as a Local Centre in the AEE.
[3] Page 47 of the AEE.
[4] Table 4 Subdivision Metrics at page 43 of the AEE.
[5] 'Transport Network – Walking and Cycling Network' Plan 17001-C-0207, Appendix B of the ITA.

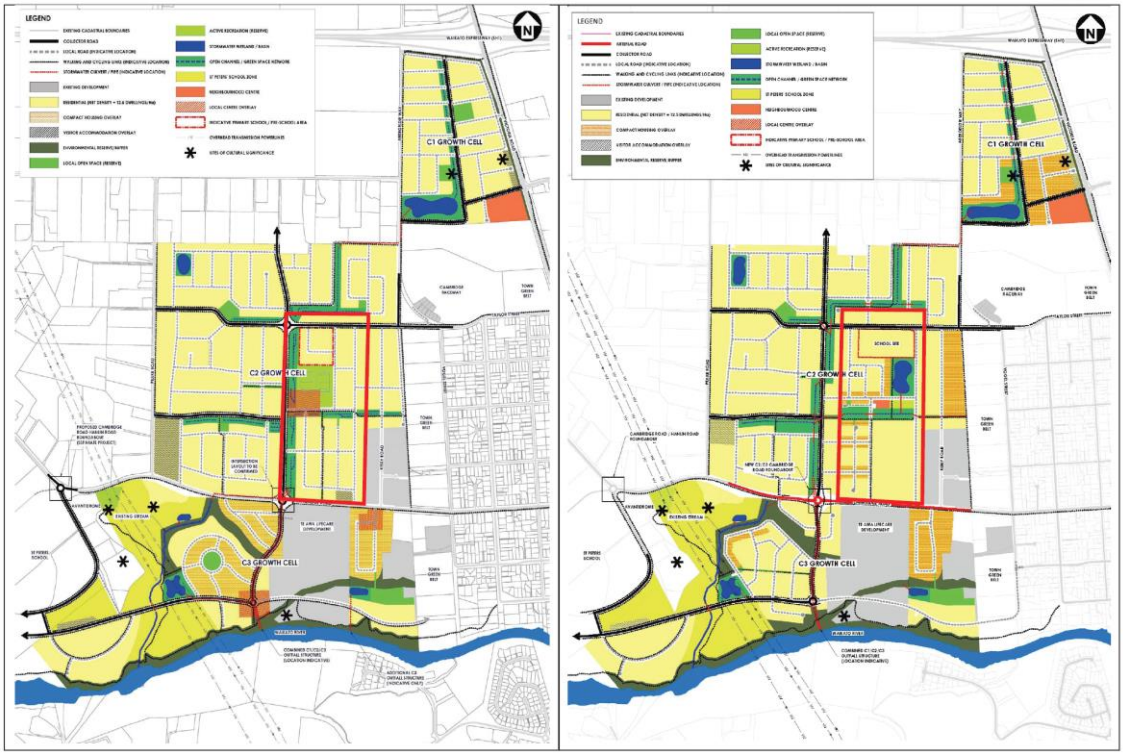
- The north-south collector road and the adjoining north-south stormwater reserve are not on the 3Ms site;
- The active recreation reserve is significantly smaller and is moved away from the north-south collector road further east into the site;
- The school and Neighbourhood Centre are moved away from the north-south collector road further east into the site; and
- The 3Ms application proposes Lots intended for future Compact housing, whereas the Structure Plan shows no Compact housing or other intensified residential lots within that part of the Plan which applies to the site.

As part of the lodgement documents, the applicant has produced 'Structure Plan Integration Plans'.[6] These place the proposed layout for which subdivision consent is sought within the context of the wider C2 Growth Cell and represent the applicant's view as to how the 'outcomes of the C1 and C2/C3 Structure Plan can be achieved within the 3Ms 'standalone option''.[7]

The Integration Plans:

- Move the north-south collector road away from the application site, further to the west;
- Retain the north-south stormwater reserve but also move it further west away from the application site; and
- Change the alignment of the north-south collector reserve from being fully on the east side of the collector road, to switching to the west side of the collector road for the southern two-thirds of its length.

Figure 34 from the AEE, reproduced below, usefully shows the Appendix S19 Structure Plan (below left) against the 3Ms 'Integration Plan' (below right).



[6] Appendix A of the McCaffrey Engineering Report, which is at Appendix D of the AEE.
[7] Executive summary at page 5 of the AEE.

6. RELEVANT DISTRICT PLAN SECTIONS

Those parts of the District Plan that I consider to be of most relevance to an urban design assessment are:

- Appendix S19 as a whole;
- Section 15 objectives and policies; and
- Section 15 rules.

Appendix S19

Appendix S19 sets out the overall vision for the Structure Plan which applies to the C1 and C2/C3 Growth Cells (S19.2.2) and a series of goals and objectives (S19.2.3). The goals and objectives are under the heading of Character; Connected Streets; Neighbourhood and Local Centres; Public Open Space; Walking and Cycling Connections; and Housing choice. These are supported by what are effectively a number of guidelines for development (S19.3 – S19.7).

Section 15 objectives and policies

Section 15 of the District Plan covers subdivision activity. In the Introduction to the chapter, the importance of 'planned and integrated development and subdivision' is emphasised and how, in key locations, this 'is to be achieved through the use of structure plans.'[8]

Objectives and policies in Section 15 of most relevance to an urban design assessment of the application also refer to the importance of integration, with reference to the site and surrounding areas, particularly in Structure Plan areas:

Objective - Integrated development: site design and layout
15.3.1 To achieve integrated development within the District, that contributes to creating sustainable communities and enhances key elements of character and amenity.
Policy - Understanding the constraints and opportunities of a site by undertaking a site and surrounding area analysis
15.3.1.1 Development and subdivision should integrate with and acknowledge the constraints and opportunities of the site and surrounding area.

Objective - Structure planning
15.3.15 To achieve integrated development within structure plan areas.
Policy - Structure planning
15.3.15.1 To enable development and subdivision within approved structure plan areas where the development and subdivision is integrated with the development pattern and infrastructure requirements specified in an approved structure plan.

Section 15 rules

There are a number of rules within Section 15, some of which are infringed, that are of relevance to an urban design assessment. These (in summarised form) are:

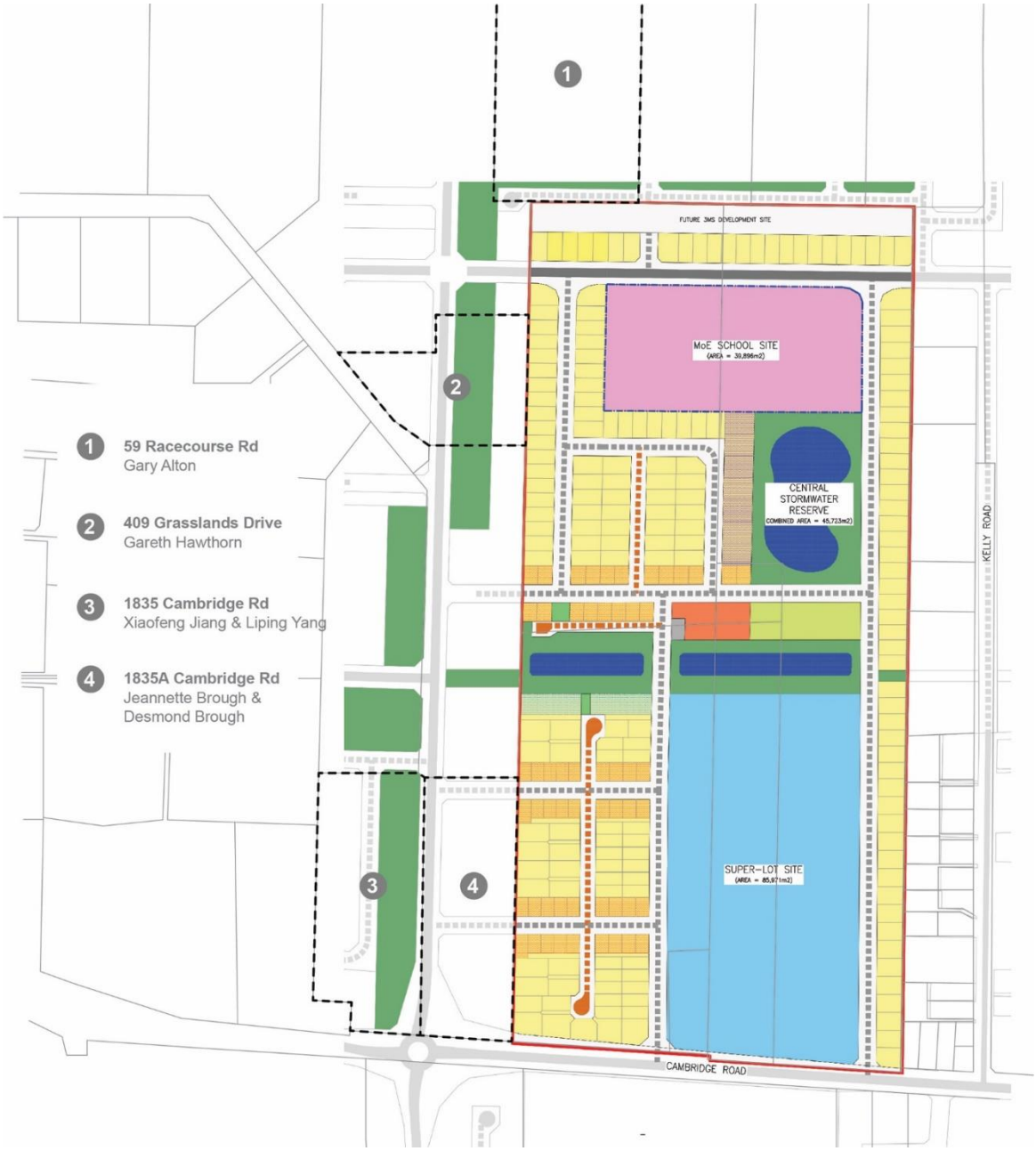
- 15.4.2.1(ac): The minimum net lot area for residential subdivision in the C1 and C2/C3 Structure Plan areas is 500m^2;
- 15.4.2.1(ad): The minimum net lot area for Comprehensive Residential Subdivision in the C1 and C2/C3 Structure Plan areas is 400m^2, with an average between 500m^2 and 800m^2;

[8] Paragraph 15.1.2 of Section 15.

- 15.4.2.3: Residential lots shall have a minimum frontage of 20m;
- 15.4.2.7: New residential lots, other than corner lots, shall have frontage to only one road or street;
- 15.4.2.63: No more than 15% of lots in a greenfield subdivision shall be rear lots;
- 15.4.2.68: Reserves shall be directly linked to footpaths from the surrounding development and fronted on two sides by roads; and
- 15.4.2.69: All development and subdivision within an area subject to an approved structure plan shall be designed in general accordance with the requirements of that structure plan.

7. SUMMARY OF SUBMISSIONS

Four submissions were received on the proposal. The location of the submitters' properties is shown below. The map overlays existing cadastral boundaries over the 3Ms' proposed subdivision layout, together with key elements from the 3Ms Integration Plan – being the repositioned north-south collector road and north-south swale.



Matters raised in those submissions include:

Gary Alton (59 Racecourse Road)
The 3Ms proposal to move the collector road and stormwater reserve to the west outside its land will require co-ordination between a number of different landowners in order to achieve delivery of this infrastructure. Those land owners may not be intending to develop their land in the short to medium term and this will not help with the orderly and efficient development of the C2 Growth Cell.

Gareth Hawthorn (409 Grasslands Drive)
The 3Ms proposal to move the collector road and stormwater reserve to the west outside its land will require infrastructure to be delivered by a number of different landowners. This will lead to a lack of certainty about the timing or co-ordination of delivery of these infrastructure services.
The 3Ms proposal is not in accordance with the C2/C3 Structure Plan as it moves the north-south collector road and stormwater reserve from the 3Ms land to land to the west.

Xiaofeng Jiang and Liping Yang (1835 Cambridge Road)
The 3Ms proposal will result in adverse amenity effects on the urban block structure of the wider C2 Growth Cell. Reasons for this include (but are not limited to): reduced connectivity through the introduction of cul-de-sacs and the east-west stormwater reserves to the west of the application site, which limits north-south connectivity; the resulting block structure imposed upon land to the west of the 3Ms site is not optimised for development in terms of dimension or orientation (for sun or relative to roads and public reserves); and overall the combination of these matters, together with the land ownership pattern, severely undermines the ability to achieve the stated outcomes of the Structure Plan to the west of the 3Ms site.

Jeannette Brough and Desmond Brough (1835A Cambridge Road)
Uncertainty about the land requirements resulting from 3Ms' proposed repositioning of the north-south collector road and stormwater reserve will affect the Brough's development aspirations and will result in most or all of their land being required for infrastructure at an unspecified time.

Submissions issues might be summarised as follows:

- **Issue 1:** The 3Ms proposal will result in sub-optimal block structures for land to the west.
- **Issue 2:** The 3Ms proposal to move the north-south collector road and stormwater reserve risks certainty of delivery from these infrastructure features, given that co-ordination will be required with a greater number of land owners.
- **Issue 3:** The 3Ms proposal will affect existing development aspirations of landowners to the west.

In my view, Issue 1 is of direct relevance to an urban design review and is factored into my methodology and assessment. Issue 2 is of broader relevance to urban design practice, but I consider it to be more a question of the process for implementation of Structure Plan outcomes, rather than a core urban design matter. I assess this issue separately in my report in an overview section on the submissions (section 10). Issue 3 is not of direct relevance to an urban design assessment and is therefore not considered further.

8. METHODOLOGY FOR ASSESSMENT

In determining a methodology for assessment, reviewing the proposal directly against each goal, objective and guideline in Appendix S19, followed by Section 15 objectives, policies and rules, was a potential option. However, many of these provisions are repetitive and overlap. A direct assessment against each provision raises the potential for lack of coherence and an overall integrated view.

With that in mind, and noting the overall non-complying activity status of the application, which allows a broad-ranging assessment of effects, I have synthesised all relevant provisions – which I refer to at section 6 – into a list of themes. This method has also allowed, thematically, the incorporation of general good urban design practice into the assessment.

The themes are:

1. *Legibility and character:* The subdivision should enable the establishment of a legible urban form that is easy to navigate through (positive wayfinding) and contributes to the character of the neighbourhood;
2. *Connectivity and permeability:* The movement network should be well-connected, permeable, and prioritise safe walking and cycling routes;
3. *Community focal point and access to amenities:* The proposed subdivision should have access to amenities, including a future centre and public open space, that is easily accessible and will act as a community focal point;
4. *Housing choice and diversity:* The subdivision should provide housing choice and diversity;
5. *Positive streetscape outcomes and good on-site amenity:* The size, shape and frontage characteristics of lots should enable positive streetscape outcomes and good on-site amenity; and
6. *Integration with adjoining land:* The subdivision layout should enable adjoining land to develop in a manner that achieves good urban form and contributes to Structure Plan outcomes.

In assessing the proposal, I have been cognisant of the following statement in Appendix S19:[9]

'The Structure Plans provide a broad framework within which landowners and developers can prepare development proposals in a flexible manner while maintaining an integrated approach to development.'

I understand this to mean that adherence to every aspect of the spatial arrangement of land uses, amenities and infrastructure elements shown on the Structure Plan diagrams is not required. Rather, the diagrams, together with the S19 provisions, provide – as stated – a broad framework for development, with departures from the framework being acceptable, subject to demonstration that the overall outcomes of S19 can be achieved, particularly the overarching goal of integrated development.

9. URBAN DESIGN ASSESSMENT

9.1 Legibility and character

The subdivision should enable the establishment of a legible urban form that is easy to navigate through (positive wayfinding) and contributes to the future character of the neighbourhood

- In urban design terms, 'legibility' refers to how easily the urban structure of an area enables a person to understand how to move through it, both to key destinations, such as centres, schools and parks, and to surrounding areas. Legibility is underpinned by the street and block pattern of an area, and successively added to by the arrangement of land uses on those blocks and, finally, by the appearance of buildings. In assessing the legibility of a proposed subdivision, it is the proposed street and block pattern and the arrangement of future land uses that is relevant. Typically, a subdivision that has a

[9] S19.1.2

legible street and block pattern and arrangement of land uses is one that has a strong foundation for the establishment of future character, as building development occurs.

- The C2 Growth Cell part of the S19 Structure Plan has, in my view, a very legible street and block structure and arrangement of land uses that would form a strong foundation for the establishment of future character and sense of place of the wider neighbourhood. This is achieved by the strong visual hierarchy of movement routes through the area. This takes the form of the north-south collector road which moves through the C2 Growth Cell, the visual width of which is augmented by the stormwater reserve which adjoins the full length of the eastern side of the road, intersecting with east-west roads and directly adjoining east-west stormwater reserves. This creates a strong 'cross' of movement. This is added to by the positioning of a sizeable area of active recreation reserve and a Local Centre towards the intersection of the north-south and east-west stormwater reserves and roads.

- The 3Ms application differs from the Structure Plan in that the Local Centre and the active recreation reserve are moved to the east, away from the collector road, with the active recreation reserve being much smaller in size than the reserve shown on the Structure Plan. Additionally (although I am unclear for what reason, given it is outside the 3Ms' application site) the north-south stormwater reserve is shown on the applicant's Integration Plans to switch halfway along its length to the western side of the north-south collector road. Furthermore, the east-west aligned stormwater reserve, as it enters the site, is not adjoined by a road. In my view, these differences result in a potential wider Growth Cell urban structure (dependent, in part, on how adjoining land owners develop their sites) that does not have the clear street and block visual hierarchy as shown in the Structure Plan.

- At a 'neighbourhood' level, when looking at the proposed subdivision itself, legibility benefits from the use of a basic grid pattern of roads, enabling clear sightlines along streets and reasonably direct movement paths to destinations. Furthermore, while to the detriment of wider Growth Cell legibility, the Local Centre and co-located active recreation reserve (albeit one of significantly smaller size than that shown in the Structure Plan) and stormwater reserves (which have the potential to be developed as multi-functional open spaces) are well placed in a visible location within the subdivision itself.

- In summary, when looked at in isolation, the proposed subdivision has a somewhat 'inward looking' view, with good legibility and potential future character established at the subdivision level, but with wider Growth Cell legibility and character not as strong as that shown on the Structure Plan due to the easterly movement of the Local Centre and active recreation reserve and changes to the alignment and positioning of the stormwater reserve network.

- If this application were to be approved, moving forward, I consider that the success of wider Growth Cell legibility will be dependent on Council working with relevant land owners to achieve a strong north-south combined collector road and stormwater reserve corridor to the west of the 3Ms site.

9.2 Connectivity and permeability

The movement network should be well-connected, permeable, and prioritise safe walking and cycling routes

- The roading pattern uses a grid layout, which assists in clear sightlines along streets and more direct movement paths to destinations.

- Permeability through the site is, overall, reasonable, particularly towards the south-west corner. The 8.6 hectare Lot 300, intended by the applicant as a future retirement village, reduces permeability in the south-east corner of the site, creating a block of approximately 213m by 278m. This is well in

excess of the 200m by 80m walkable blocks general guideline in Appendix S19.[10] While less permeable, I consider that the major movement route here is north-south to and from the Local Centre. Additional connections through Lot 300 would only marginally improve this.

- The lodged proposal had an open space walking and cycling connection between Kelly Road and the site, via proposed Lot 500. This is on a rational alignment with the east-west stormwater reserve Lots 503 and 505. The Structure Plan shows a full road connection, in addition to a cycle and walking connection, further to the north linking to Kelly Road. From a permeability perspective, this additional full connection is desirable in order to achieve reasonable connectivity for all transport modes from the site through to the east. I note that a change has been made to the proposed layout in the 'addendum' version of the proposal which now shows a road connection through to Kelly Road. I support this change due to the full connectivity it offers.

- Three cul-de-sacs (Roads 13, 14 and 18) are proposed. This reduces the level of connectivity (as is raised in the submission of Xiaofeng Jian and Liping Yang – 1835 Cambridge Road), although is mitigated to a degree by the pedestrian and cycle connection proposed from the northern end of Road 14 through to the Lot 505 stormwater reserve. I furthermore note that the three proposed cul-de-sacs, although in a different position, are only one more in number than the two shown in the Structure Plan on the site.

- In a s92 query (question 33), I asked if the applicant would consider a pedestrian/cycle connection from the cul-de-sac head of Road 13 south through to Cambridge Road. The applicant's response was that a pedestrian/cyclist connection is not proposed, as the connections provided from Cambridge Road by Roads 10 and 11 further to the east are considered sufficient.[11] I accept this argument. A pedestrian/cycle connection from the top of Road 13 to Cambridge Road would have provided further route choice north through the site, but I do not consider it essential. Pedestrians and cyclists are most likely to be moving between Cambridge Road and the Local Centre proposed within the site. Connections along Roads 10 and 11 provide adequately for this purpose.

- The ITA shows a well-connected pedestrian and cyclist network, both internal to the site and to the surrounding area, with roads that have wide shared paths.[12] Pedestrian priority crossings are shown where pedestrian/cyclist paths move east-west across Roads 10 and 11 and north-south between the active recreation reserve Lot 501 and the stormwater reserve Lot 502. I support these priority crossings and consider that these should be captured by detailed design of these roads.

- Overall, I consider that pedestrian and cyclist movement along proposed streets would be safe, with lots aligned to face directly towards streets.

- The pedestrian and cyclist network is shown to also extend through the stormwater reserve Lots 502, 503 and 505 and the active recreation reserve Lot 501. These reserve lots are adjoined, in part, by proposed residential lots or the proposed Local Centre Lot 301. The reserve lots are largely adjoined by residential lots on their southern side (for reserve Lots 503 and 505) or western side (for reserve Lot 502). Future residential development would look north or east over the reserves, both being orientations which encourage higher amounts of glazing in building elevations, hence having the benefit of likely good levels of overlooking of the reserves.

[10] S19.5.3.3(c)(i)
[11] Page 3 of the 26 March 2021 Mitchell Daysh S92 Response letter.
[12] 'Walking and Cycling Network Plan' 17001-C-0207 at Appendix B and street cross sections at Appendix C of the ITA.

- It will be important, however, to ensure that, at land use consent stage, any development of these lots has fencing of a height and/or permeability that facilitates this overlooking of the reserves. This should be adequately managed by Residential zone rule 2.4.2.21 (at such time as the Deferred Residential zoning of the site is uplifted). This rule requires a maximum 1.2m high fence for sites within the C1 and C2/C3 Structure Plan areas adjoining a road, public walkway or reserve

- At s92 stage, I queried with the applicant team the 72m length of the southern boundary of the Local Centre Lot 301 adjoining stormwater reserve Lot 503. I noted that that the likely design response of a future building on the Local Centre Lot would be to place back of house services to the rear of the site, and that a resulting 'blank wall' would not be a positive interface for the reserve along the long common boundary between the two lots, with potential safety effects for movement through the reserve.

- Having considered the matter further, however, I consider that while a future building on the Local Centre Lot may indeed present a less active frontage to stormwater reserve Lot 503, in the round, the outcome is likely to be acceptable. This is because development of the C2 Growth Cell Local Centre is a restricted discretionary activity under Rule 2.4.1.3(h), with discretion restricted to Council on a number of design related matters, including: building location, bulk and design; visual and amenity effects; and impacts on surrounding open space amenity and pedestrian safety. This gives Council wide discretion, in my view, to ensure a future building on the Local Centre Lot has an acceptable interface to the stormwater reserve.

- Nonetheless, to appropriately signal the importance of this outcome, I recommend that a consent notice be placed on the Local Centre Lot requiring any building development on the Lot to attractively screen any building servicing areas adjoining stormwater reserve Lot 503 and to have the southern elevation composed of windows comprising no less than 20% in area of that elevation, unless otherwise addressed by a resource consent.

9.3 Community focal point and access to amenities

The proposed subdivision should have access to amenities, including a future centre and public open space, that is easily accessible and will act as a community focal point

- The subdivision locates the proposed Local Centre Lot 301 and active recreation Lot 501 adjoining east-west Local Road 20 towards the centre of the subdivision. These are adjoined by stormwater reserves 502, 503 and 505, which concept plans submitted with the application show the potential to develop in manner such that they visually integrate with the active recreation Lot 501 (the latter being proposed as a playground by the applicant).

- This co-location of facilities is positive in terms of creating a community focal point. The location of these open space and centre amenities further east than shown on the Structure Plan, however, may result in more of an 'inward' focus compared with the Structure Plan – with the facilities possibly becoming associated with residents in the immediate subdivision rather than the wider 'C2 Growth Cell' community.

- The eastward position of the Local Centre reduces access to the services of the centre for future residents in the C2 Growth Cell, west of the north-south collector road. Most of these residents will be outside a 5 minute (400m walk) of the centre (a high level of convenience), but will be within a 10 minute walk (a moderate level of convenience), the latter being the outcome sought by Appendix S19.[13]

[13] S19.3.3.3(a)

- Overall, I consider that the subdivision layout, with its positioning of a Local Centre and co-located reserve spaces towards the centre of the site, is likely to result in a positive community focal point for more immediate residents. Access to these services is not as convenient for future residents towards the west side of the C2 Growth Cell, due to their increased distance from the Centre and its local road positioning within the subdivision reducing its wider legibility to the surrounding area. However, it remains within the 10 minute walking distance of the majority of C2 Growth Cell residents recommended by Appendix S19.

9.4 Housing choice and diversity

The subdivision should provide housing choice and diversity

- The District Plan provides for intensified housing through 'Compact housing.' This is defined to mean *"a housing development in which the design of buildings, their layout and relationship to one another has been planned in a comprehensive manner to achieve compatibility between all buildings on a site or sites. This can include Papakāinga housing, terraces, duplexes, apartments and town houses."* [14]

- The Structure Plan shows no Compact housing within the C2 Growth Cell, with it being limited to the C3 Growth Cell. The 3Ms subdivision layout, however, proposes superlots for what it describes as 'Terraced housing' (Lot 307) and 'High density housing' (Lots 303 and 304), and also a number of 'Compact housing' Lots.

- Noting that an overall goal of the Structure Plan is to provide for housing diversity through intensified forms of housing which is close to amenities, I support the potential future development of intensified housing, particularly on superlots 303, 304 and 307. These Lots directly adjoin reserves, with their orientation relative to the reserves enabling positive overlooking of the open spaces. They are also immediately proximate to the Local Centre. I consider these outcomes consistent with those for 'Compact housing' envisaged by the Structure Plan[15], which I understand is the term the District Plan uses to describe all forms of intensified housing, including terraces and 'high density housing.[16]

- The proposed Lots within the 3Ms application described as 'Compact housing' Lots are much smaller, than superlots 303, 304 and 307, at around 315m^2. They are located on both sides of Roads 12, 15 and 20. My understanding is that, via future land use consent applications, consent may be sought for a single dwelling on each of these Lots, possibly in the form of a terraced/attached housing typology, as shown in Appendix 2 of the Urban Design Statement.[17]

- The proposed 'Compact housing' Lots on Road 20 are are directly proximate to the Local Centre and reserves. The Compact housing Lots on Roads 12 and 15 are further from these amenities, and therefore less consistent with Structure Plan expectations around amenity access.[18] Nonetheless, however, the size of these lots is at the lower end of intensified housing and would, in my view, commonly be called 'medium density' housing. Overall, I consider that positioning of Lots of these sizes on Roads 12 and 15 is not inappropriate in terms of convenience of access to amenities.

[14] Definitions Section of the District Plan.
[15] S19.3.2.4 *The proposed Structure Plans allow for compact housing development within close proximity to active recreation, local open space, local and neighbourhood centres, schools and Cambridge Road.*
[16] Refer to the definition of 'Compact housing' within the Definitions section of the District Plan.
[17] Refer to the 'Compact Residential Module 1' and 'Compact Residential Module 2' plans in Appendix 2 of the Urban Design Statement.
[18] See footnote 15 above.

9.5 Positive streetscape outcomes and good on-site amenity

The size, shape and frontage characteristics of lots should enable positive streetscape outcomes and good on-site amenity

- There are a range of proposed Lot sizes, shapes, orientations and frontage widths. Lots generally have frontages of a width less than the 20m specified in rule 15.4.2.3. The minimum net lot and average lot area also infringes District Plan requirements. In my view, the size of proposed Lots and the resulting width of Lot street frontages is sufficient to enable houses that directly address the street and Lots with front yards of a good depth and width that could accommodate landscaping, contributing to street amenity.

- There are a reasonable number of Lots with a north-south orientation, which are on the south side of a road – for example, along Roads 12 and 15. Future designs for housing on these Lots is likely to place the outdoor living area on the northern side, adjoining the road. This may result in pressure for higher or less visually permeable fencing than the 1.2m maximum permitted fence height for Lots in the Structure Plan area where they adjoin roads, public walkways or reserves.[19] Indeed, the possibility of consent being required for infringement of the Structure Plan fencing rule is referred to in the AEE.[20] This has the potential for adverse streetscape effects.

- Having considered this issue, I am of the view that – if it emerges – it can be appropriately addressed at the land use application stage. On balance, when considering the number of lots concerned, while this has the potential for some adverse streetscape effect, I do not consider the level of effect to be significant, noting that Council will be able to assess the effects through a resource consent process. At that time, should consent be required for a rule infringement, Council will have the discretion to approve or decline the infringement based on the specific effects of the application.

- 3Ms' 'Compact housing' Lots 84-87 and 175-178 have frontages to two roads: Road 18 on their southern side and Road 20 on their northern side. Lots with two road frontage, except where a corner lot, require consent.[21] As a subdivision layout, I consider this form not to be ideal and something that should be avoided, as it forces a house lot to 'activate' two street frontages. Future houses on these Lots will place their 'rear' (ie: garaging) along the Road 18 frontage. This creates the potential for a poor interface to the stormwater reserve Lot 505 to the south. The Lots in question, however, have widths of 15.5m to Road 18. This gives sufficient width for accommodation of potential habitable rooms facing out to Road 18 and room for landscaping, in addition to garaging. Potential adverse streetscape effects in terms of lack of actively addressing Road 18 and the reserve are mitigated, to an extent, by the 'High density housing' Lots 303 and 304, on the south side of the reserve, which have an orientation that facilitates future intensified housing on these lots to directly and strongly interface with the reserve. Overall, I consider the effects of the infringement to be acceptable.

- In terms of enabling good on-site amenity for future houses, Lots are of a size and shape that will, in my view, allow for well-sized outdoor living areas and front yard depths that comply with Residential zone minimums. Furthermore, while as noted above, there are some north-south oriented lots, the majority are of an east-west orientation, optimising the number of Lots that have a good level of access to sunlight in their outdoor living areas.

[19] Rule 2.4.2.21.
[20] Page 115 of the AEE.
[21] Rule 15.4.2.7

- I assume future housing development on the 'Terraced housing' and 'High density housing' superlots will require resource consent.[22] This process will allow consideration of a number of design and on-site amenity related matters, including the quality of outdoor space and access to sunlight.

- I am unclear whether any future resource consent would be needed for a single dwelling on each of the 3Ms labelled 'Compact housing' lots. I assume not, given that the Residential zone permits one dwelling per site.[23] There would therefore not be the ability to consider the overall design of these houses.[24] If, however, land use consent was sought on these Lots for the 'Compact Residential' Module 1 and 2 terraced housing models shown in the Urban Design Statement, then consent would be needed, at a minimum, for infringement of the Residential zone minimum required 2m setback from internal site boundaries, in order to enable a 'party wall'. This would allow the assessment of whether *'the development will affect the perception of spaciousness on and between sites when viewed from the street'*[25], and so enable Council to 'push back' if it was concerned about the overall neighbourhood character effects of terraced housing along Roads 12, 15 and 20.

- I note that I have some difficulty in the labelling by the applicant of the Lots it has called 'Compact housing' Lots. If consent is approved for this application, it may be prudent to relabel these Lots under some other title. I make the following points and summary observations:

  - I have no issue with the size of the proposed 'Compact housing' Lots, subject to them, indeed, being developed at a future stage to accommodate a single dwelling per site. I consider that, while smaller than 'standard' Lots, the location of the Lots provides reasonable to good access to amenities. (Confusion on this matter has arisen because, on my review of how the term 'Compact housing' is used in the District Plan, it suggests it enables multi-unit development - ie: more than one dwelling - on a single site).

  - In terms of future housing forms the 'Compact housing' Lots might accommodate, in my view, the Lots are of a size that is capable of containing a fully detached single houses – one that might be smaller than on a 'standard' Lot, but nonetheless, fully detached. If developed as such, again, while smaller than the standard Lots within the subdivision, in my view, they have sufficient area to achieve a sense of spaciousness around houses, such that they would result in little change in character of the subdivision.

  - The applicant has provided information suggesting that, by way of future land use applications, consent might be sought for these Lots to be developed as terraced houses, in the form of one terraced dwelling per Lot. (I note that terraced houses is a style of housing referred to within the District Plan definition of 'Compact housing').

  - There is some potential risk that the labelling of the Lots as 'Compact housing' and the provision of indicative development plans for terraced housing for these Lots might, if this subdivision application is approved, be taken as a form of acceptance of the appropriateness, in urban design terms, of this form of housing on these Lots.

  - I note that I have not undertaken a thorough assessment of the potential neighbourhood character effects of the 'Compact housing' lots being developed in the style of the indicative terraced houses shown in the lodgement documents. The applicant has stressed through our engagement with

[22] On the assumption that these superlots will be classed as 'Compact housing' in terms of Rule 2.4.1.3(b), and therefore require restricted discretionary consent against the listed matters of discretion in that rule.
[23] Rule 2.4.1.1(b)
[24] Unlike is provided for, for 'qualifying' Compact housing developments under Rule 2.4.1.3(b).
[25] Assessment criterion 21.1.2.7(e).

them that the current application is for subdivision only and not for land use consent. I agree that the appropriateness or not of terraced houses on 3Ms' 'Compact housing' Lots, in neighbourhood character terms, can be fully assessed at future land use application stage, if applications for that form of housing to be lodged.

- Overall, I consider the likely consenting paths for future land use applications for the 3Ms identified 'Compact housing', 'Terraced housing' and 'High density' housing Lots gives Council sufficient control to manage on-site amenity and streetscape outcomes for these Lots. I support the size and location of the 'Compact housing' Lots, in terms of their access to amenities, if developed for a single dwelling per Lot. Single detached dwellings could be developed on these Lots with little effect on neighbourhood character. The appropriateness, or not, of these Lots being developed as terraced houses can be satisfactorily assessed at the time of a future land use application, if such an application were to be lodged.

9.6 Integration with adjoining land

The subdivision layout should enable adjoining land to develop in a manner that achieves good urban form and contributes to Structure Plan outcomes

- A particular area of focus in reviewing the application has been whether the 3Ms proposed subdivision layout will enable adjoining land directly to the west, between the site and the future north-south collector road, to develop in a manner that achieves good urban design outcomes. This concern surfaced because of the relatively narrow east-west dimensions of this adjoining land and what appeared to be a prima facie difficulty of developing it without significant use of JOALs or rear lots. I note this concern has been raised as a specific issue in the submission of Xiaofeng Jiang and Liping Yang (1835 Cambridge Road).

- In a s92 request (question 34), I raised this matter with the applicant team and requested they provide indicative layout options for this land to demonstrate how the 3Ms proposed layout would enable the adjoining land to the west to develop in an appropriate manner. This information has not been provided by the applicant. I have therefore undertaken my own testing, which is attached at Appendix 1. This testing is indicative only, and not intended to represent an ideal layout, or one that has been assessed for ultimate consentability.

- The testing sought to avoid rear lots, long JOALs, and single lot depth blocks. It shows that, in my view, a lot layout that achieves acceptable urban design outcomes is achievable within the spatial constraints set by the north-south collector road to the west, the 3Ms site to the east, and including the 3Ms suggested repositioning and re-alignment of stormwater reserves outside of their site. While I have not undertaken rigorous option testing, it appears to me that these constraints do quite significantly reduce the overall flexibility and range of development options open to land owners to the west.

- I furthermore note that the concept shown at Appendix 1 is not ideal in an urban design sense, with compromises being necessary to achieve a rational layout. The concept has extensive use of cul-de-sacs - although the heads of all but one of the cul-de-sacs is opened up with a walking and cycling link, achieving good permeability and connectivity. Additionally width constraints mean that fitting in a north-south access road for these land parcels in addition to lots with road (rather than JOAL frontages) means that lots are of a generally smaller size, averaging from the high 300m^2 range to the low 400m^2 range.[26]

[26] Refer to Appendix 1, which includes representative lot sizes in this option testing example.

- Superlot 306, at the northern end of the development has no road that will service the majority of the superlot within the site itself. This is instead shown to be fully within the adjoining site to the north – with the 3Ms Integration Plan showing a local road along the length of the northern boundary of the application site, fully within the adjoining site, to which is adjacent a stormwater reserve, on the northern side of which is another local road. I make the observation that this is a lot of infrastructure (reserves and roading) to accommodate on the adjoining sites to the north. The Integration Plan relies on the superlot 306 being fully served by a road on adjoining land to the north. This differs from the Structure Plan, which has housing in the same area being served by the east-west collector road to the south. The ability to adequately access potential future Lots within superlot 306 will therefore rely on a road being delivered along the full northern length of the superlot on adjoining land. In my experience, it is unusual to see future potential lots proposed to be accessed via roads the delivery of which must be achieved fully on adjoining land. I raise this as a potential risk going forward.

10. REVIEW OF SUBMISSIONS

10.1 Issue 1: The 3Ms proposal will result in sub-optimal block structures for land to the west

- The submission from Xiaofeng Jiang and Liping Yang (1835 Cambridge Road) raises the concern that the 3Ms proposal will result in sub-optimal block structures for land to the west – particularly in terms of the dimension and orientation of resulting lots in regard to the sun or relative to roads or open space, and that this undermines the ability of landowners to achieve the outcomes of the Structure Plan.

- Based on my testing and analysis, I consider that the 3Ms proposal will place significant restrictions on the flexibility of land owners to the west to develop their land in a manner that achieves Structure Plan outcomes – including good access to the sun for lots and positive relationships to roads and open space. My testing suggests that acceptable options are available. However, as noted, they are likely to be constrained, lacking flexibility and – while acceptable – not in accordance with urban design best practice, due to sub-optimal features such as use of cul-de-sacs.

10.2 Issue 2: The 3Ms proposal to move the north-south collector road and stormwater reserve risks certainty of delivery from these infrastructure features, given that co-ordination will be required with a greater number of land owners

- Broader urban design practice, in terms of subdivision layout, has a rational link to land ownership and existing subdivision patterns. Good practice is to consider the location of proposed key structuring features such as major roads and open space corridors in terms of land ownership and existing subdivision. Typically, proposed structuring features that pass over a greater number of land ownership parcels are more difficult to have constructed than those which pass over fewer land ownership parcels.

- This issue, however, is where urban design practice crosses over to the area of land development, construction and implementation of subdivision layouts. The issue raised by submitters is ultimately – as noted by Mr Gary Alton – one of co-ordination, being a 'real world' challenge of how these key features can be realised when they are dependent on co-ordination between several land owners.

- The north-south collector road running through Growth Cell C2 and the adjoining stormwater reserve are key structuring elements of the Structure Plan. Their move away from the 3Ms land further to the west is not, in my view, fundamentally flawed from an urban design perspective. It does, however, create practical 'real world' issues of ensuring their delivery across a greater number of land owners.

11. CONCLUDING COMMENTS

- The proposal achieves good internal legibility, setting a good foundation for potential future character at the subdivision level. Legibility of the future urban area of the wider C2 Growth Cell will be dependent on delivery of a stormwater reserve system aligning with and reinforcing the north-south collector road.
- The proposed Local Centre and adjoining reduced size active recreation reserve have reduced visual legibility and presence to the wider C2 Growth Cell compared to the Structure Plan, due to being positioned away from the north-south collector road, further east on a local road. Nonetheless, their placement is, in my view, sufficient to form a local community focus and remains within a ten minute walk of future residents in the western half of Growth Cell 2 (consistent with Structure Plan guidance on centre location).
- The road network achieves a reasonable level of permeability. This is reduced in the south-east corner of the site due to the large size of superlot 300. However, this is not to a degree that I consider raises a fundamental concern, as additional connections through the site would not markedly improve access to and from the surrounding area to the 'destination' of the Local Centre and co-located open spaces.
- The proposal achieves a good level of walking and cycling connectivity, both within the site and to adjoining areas, with shared paths being wide and well overlooked. Residential zone fencing rule 2.4.2.21, which requires a maximum 1.2m high fence adjoining roads, and reserves, should ensure passive surveillance over footpaths and cycle routes where they pass along streets and through open spaces.
- The design of any future Local Centre building will be subject to a resource consent process, enabling Council to manage any potential adverse effects of a southerly interface between the Local Centre Lot and stormwater reserve Lot 503.
- The introduction of Lots for Compact housing / intensified housing will positively provide for housing choice in locations generally with a good level of access to amenities.
- The application documents suggest that the 3Ms identified 'Compact housing' Lots may be the subject of future land use applications for terraced housing on those Lots. In my view, as noted above, the size of these Lots does not generally raise a concern in terms of access to amenities for smaller lot housing. The size of these Lots is fully capable of accommodating single dwelling detached housing that positively addresses the street. The appropriateness (or not) of terraced housing on these Lots can be assessed through future land use applications.
- If this application is approved, consideration might be given to relabelling the 3Ms identified 'Compact housing' Lots under another title, in order to avoid confusion that the subdivision consent gives a form of preliminary approval for terraced housing on those Lots.
- Overall, the size, shape, orientation and street boundary widths of Lots are such that future development of housing on the Lots would, in my view, contribute to positive streetscape outcomes.
- The layout of the 3Ms site presents significant challenges to future development of adjoining land to the west in a manner that achieves reasonable urban design outcomes and a spatial layout that retains a key feature of the operative Structure Plan: a continuous swale aligned and adjoined with the future north-south collector road. The 3Ms proposal moves the swale off its site further to the west. Testing shows that delivering both the urban legibility that would derive from an adjoining collector road and swale and good urban form on the land that it adjoins it, within the constraints that the 3Ms layout sets up, is difficult but possible. However, it will constrain development options for land owners to the west and will require active engagement and communication between Council and those land owners to ensure any future subdivision applications achieves acceptable urban design outcomes consistent with the Structure Plan.

- Superlot 306, at the northern end of the 3Ms site, relies completely for road access for future lots that would be subdivided from the superlot on a road being delivered along the northern boundary of the site on adjoining land. 3Ms may wish to comment as to whether they have engaged with those adjoining land owners in order to gauge the viability of achieving a road on their land.

In conclusion, I consider that the proposal is generally consistent with the urban design related outcomes expected for urban development in the C2 Growth Cell and for subdivision in District Plan Section 15 and is acceptable from an urban design perspective. I do, however, have significant reservations about the 3Ms proposal's effect on adjoining land to the west, noting the constraints it places on development options for that land. My degree of concern on this particular matter is such that my overall support for the proposal is only and very marginally on the side of support. I would encourage the applicant to provide at the hearing information requested at s92 stage that robustly demonstrates development options for adjoining land to the west of the 3Ms site that are consistent with expected Structure Plan outcomes and good urban design practice.

As an implementation matter, I also note heightened risks of the Structure Plan's north-south collector and adjoining stormwater reserve moving further west, due to the degree of co-ordination that will likely be required between an increased number of land owners to deliver these infrastructure elements.

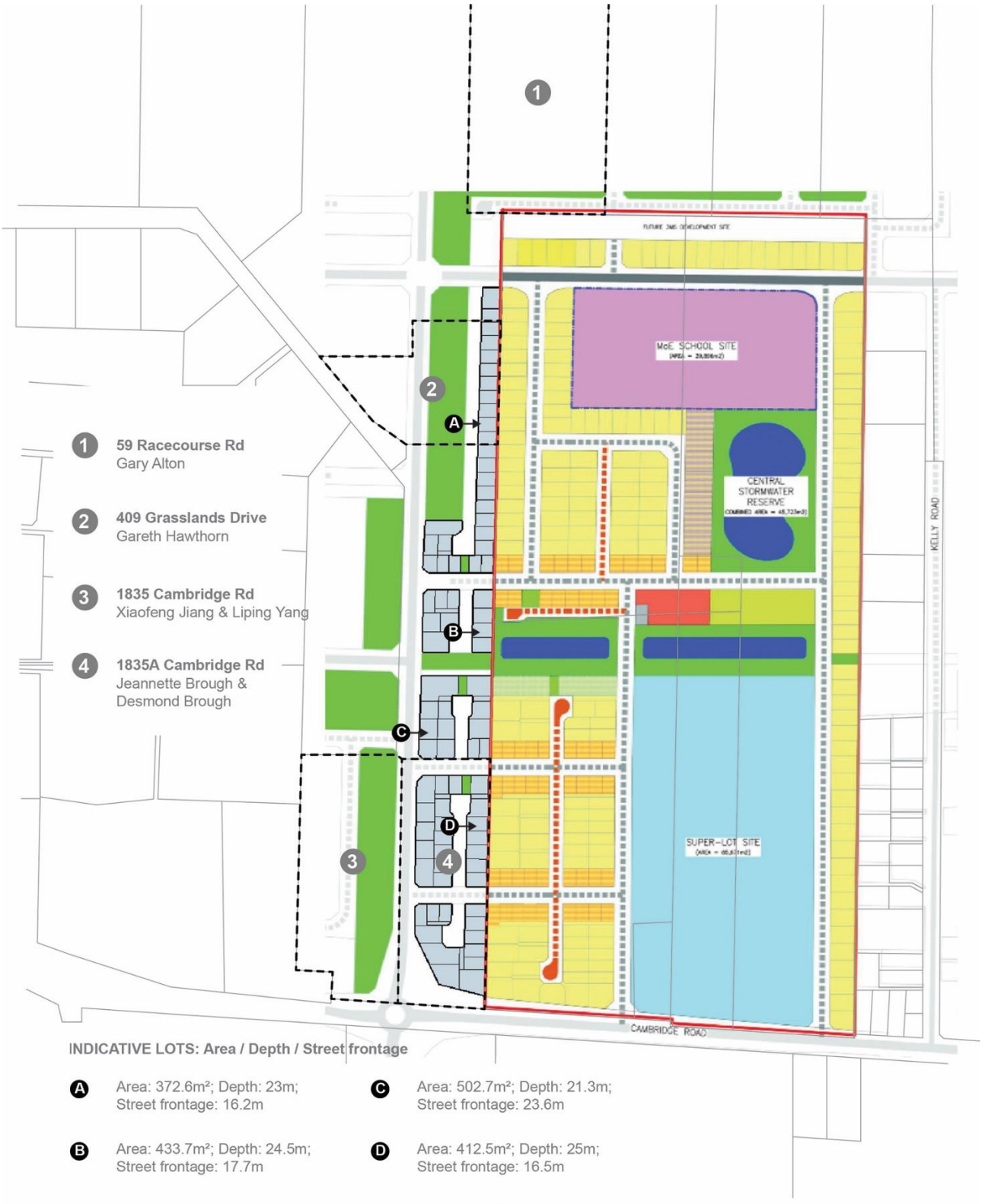
12. RECOMMENDED CONDITIONS

Should consent be approved for the project, I recommend that:

- It be subject to a condition that the Council be satisfied it can achieve a north south stormwater reserve and collector road network serving the balance of the C2 growth cell prior to the land within the application site shown occupied by these routes being developed.
- A consent notice be placed on the Local Centre Lot 301 requiring any building development on the Lot to attractively screen any building servicing areas adjoining stormwater reserve Lot 503 and to have the southern elevation composed of windows comprising no less than 20% in area of that elevation, unless otherwise addressed by a resource consent.

I note the traffic plans show priority walking/cycling crossings across some roads within the site, for example across Road 20 between the active recreation and stormwater reserves. I would support any condition of consent considered necessary in terms of the submission of plans detailing the delivery of these priority crossings.

Appendix 1: Testing of conceptual subdivision layout on land adjoining application site to the west



Note: Plan not to scale