









Contents

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Project Information

Discipline	Representation
Client	Urban Property Group
Architect	COX Architecture
Planner	Ethos Urban
Landscape Architect	Environmental Partnership
Civil	Enscape Studio
ESD	E-Lab
Building Services	IGS
Access	Access Link Consulting
Waste	Elephants Foot
Traffic	Ason Group

Document Register

ISSUE	AMENDMENT	DATE	CHECKED
А	DRAFT	22/09/2023	MB
В	DRAFT	08/12/2023	MB
С	DRAFT	13/12/2023	MB
D	FOR ISSUE TO COUNCIL	31/01/2023	RJ

Edmondson Park Sites 1-3





Response to DEP 4.1 Context

4.1 ContextWaste Collection

DEP Comment

"The Panel requires the applicant to judiciously review the bin collection and fire truck access requirements. The Panel acknowledges that the current width of the laneways is governed by Council's servicing requirement of garbage trucks, however, the Panel recommends creating a consolidated space towards the ends of terraced blocks for bin pickup, as was demonstrated in the drawings for DA-1090/2022.

The Panel also encourage councils internal waste servicing team to consider the approach of consolidating bin storage.

The Panel emphasizes that additional space for sustainable landscape works can be achieved by decoupling the bins and the fire truck movement with the laneways. This would also alleviate the separation and privacy issues between bedrooms across the laneways, whereby additional canopy coverage can help achieve screening (see image below for reference – centralised collection points marked in red circles). These collections points should be screened to preserve visual amenity along the street."

Response

Centralising the waste collection as suggested by the DEP may allow a scenario where the the vehicular path along the rear lane-ways can be narrowed to become a one way street and introduce increased greening to this space.

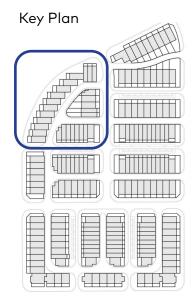
However as demonstrated on the following pages, this suggested outcome will result in the creation of decentralised waste collection spaces that require residents to travel significant distances over steep laneways for home owners to manage their waste.

This option is not considered an efficient, convenient or accessible outcome for good waste management practice and is not in alignment with Council preference for waste collection services. The diagrams on the following pages further demonstrate this further.

The following responds the the following council RFI:

- 3) Design Excellence Panel
- (a) Consolidation of waste storage and dedication of a collection point.

Figure 4.11 provides a graphic scenario where Bin Storage / collection points are provided at the end of each laneway (as suggested by the DEP). This suggestion can create up to 64 meter of travel in the portion shown in Figure 4.1.1. It is important to note that the lanes accessing the Bin Storage / Collection points are sloped. The fall ratio ranges between 1:17 to 1:24, which required homeowners to carry waste up and downhill.



Legend

General Waste Bin

Recycling Waste Bin

Approximate Bin Transfer Route

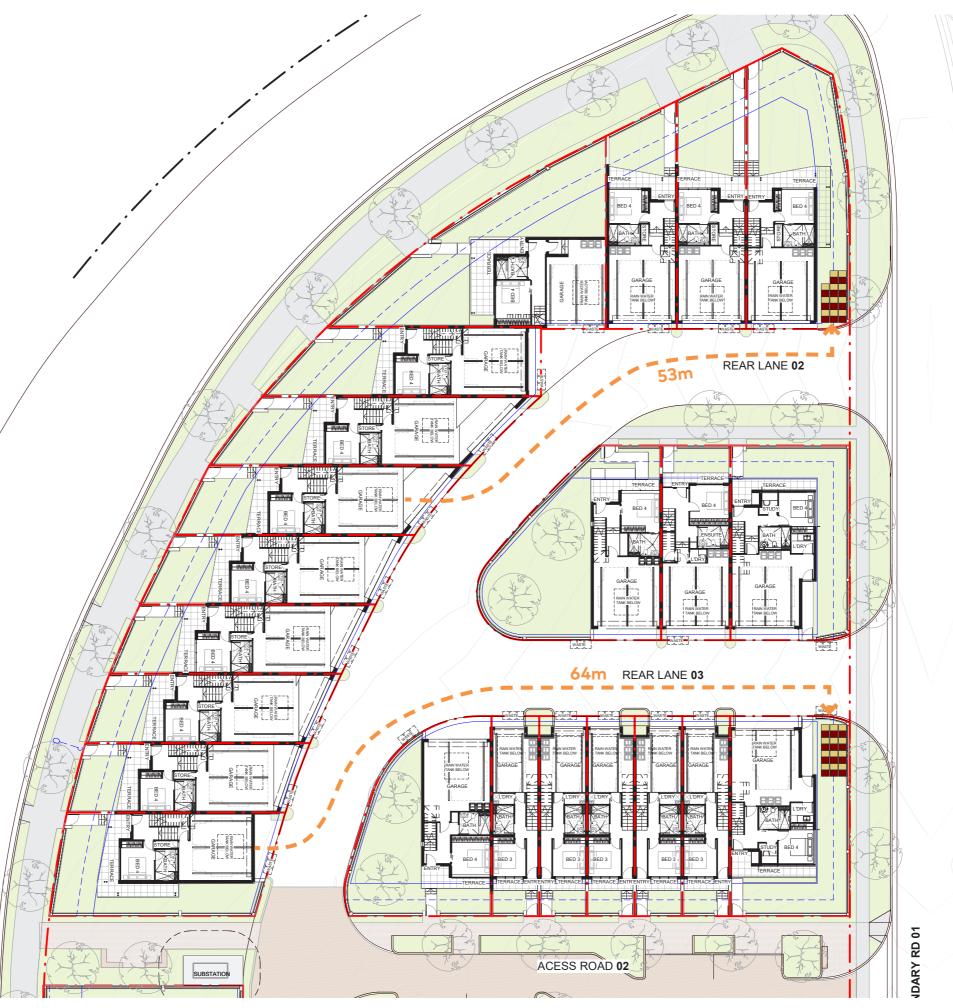
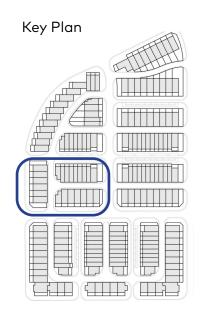


Figure 4.1.2 provides a graphic scenario where Bin Storage / collection points would be located up to 74 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls ranging between 1:18 to 1:24.



BEZENTIN RIDGE RD.

Legend

General Waste Bin

Recycling Waste Bin

Approximate Bin Transfer Route

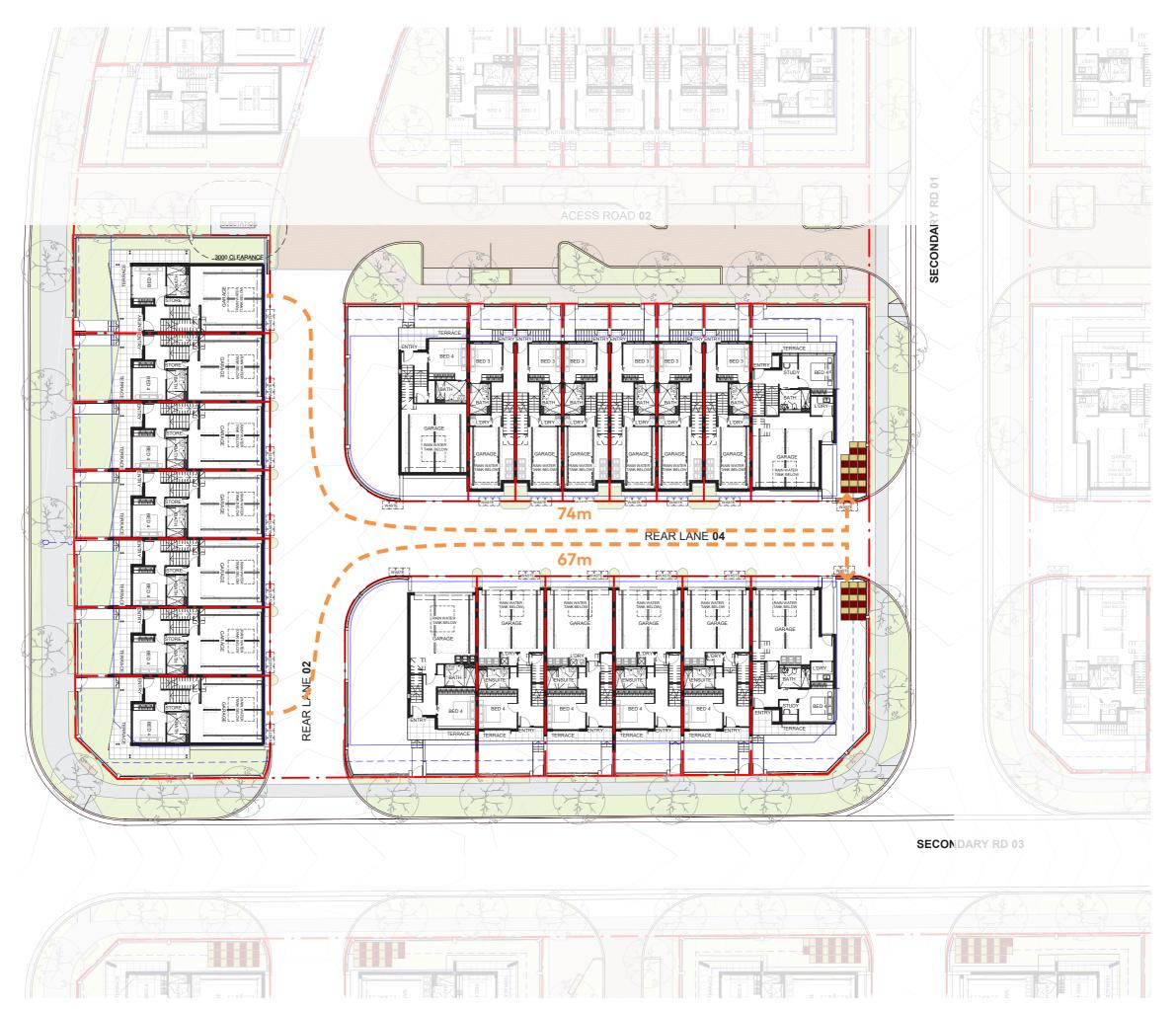
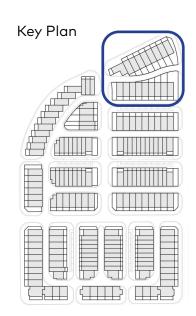


Fig 4.1.2

Figure 4.1.3 provides a graphic scenario where Bin Storage / collection points would be located up-to 60 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls ranging between 1:13 to 1:15.



Legend

General Waste Bin

Recycling Waste Bin

Approximate Bin Transfer Route



Fig 4.1.3

Figure 4.1.4 provides a graphic scenario where Bin Storage / collection points would be located up to 60 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls up to 1:12.

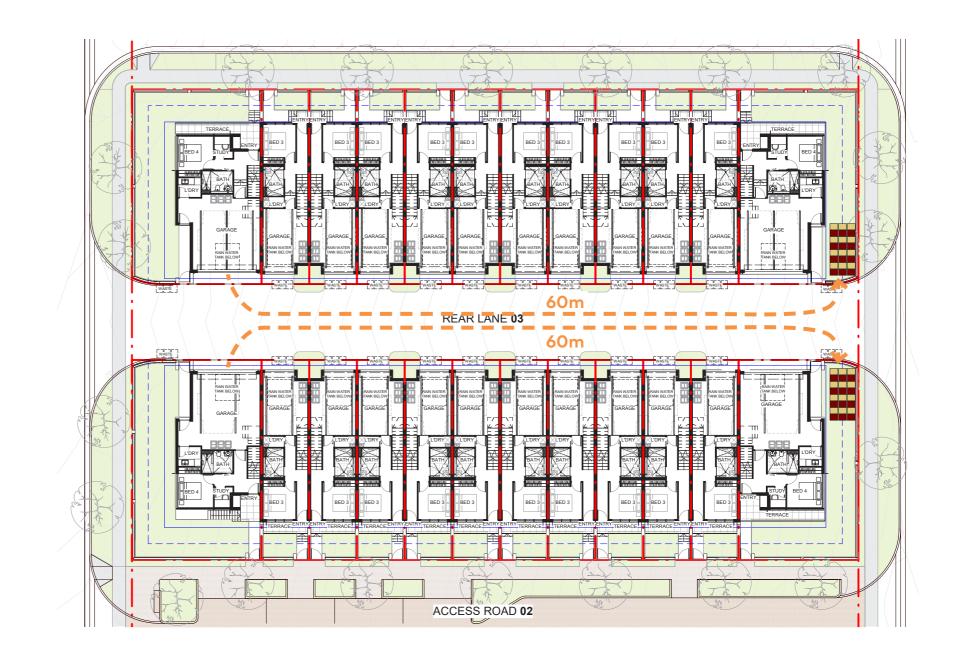
Key Plan

Legend

General Waste Bin

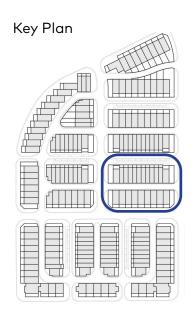
Recycling Waste Bin

Approximate Bin Transfer Route



10 Edmondson Park Sites 1-3 Fig 4.1.4

Figure 4.1.5 provides a graphic scenario where Bin Storage / collection points would be located up to 60 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls ranging between 1:13 to 1:17.



Legend

General Waste Bin

Recycling Waste Bin

Approximate Bin Transfer Route

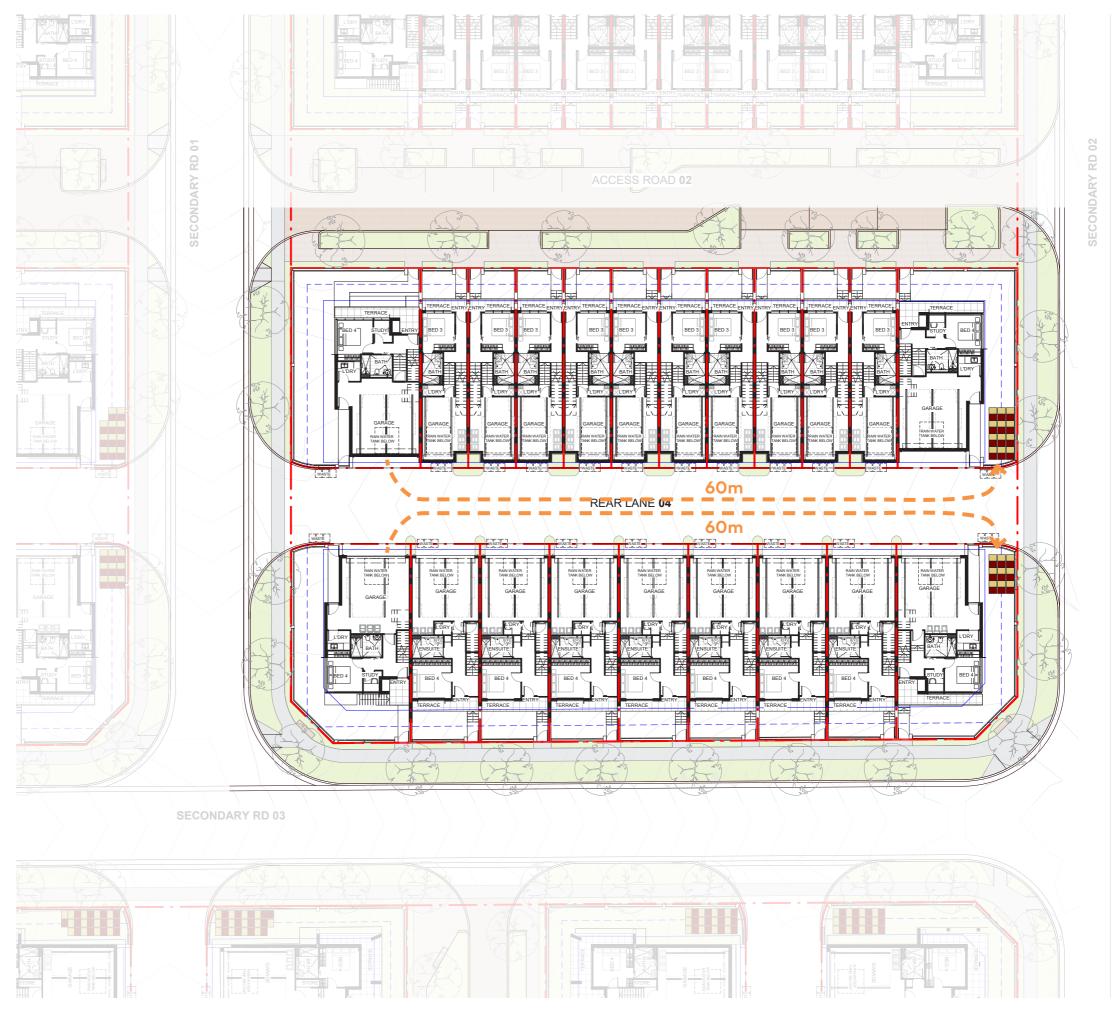
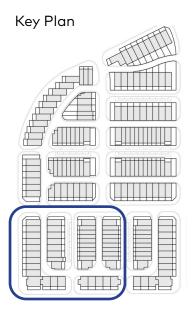


Fig 4.1.5

Figure 4.1.6 provides a graphic scenario Bin Storage / collection points would be located up to 75 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls ranging between 1:18 to 1:29.

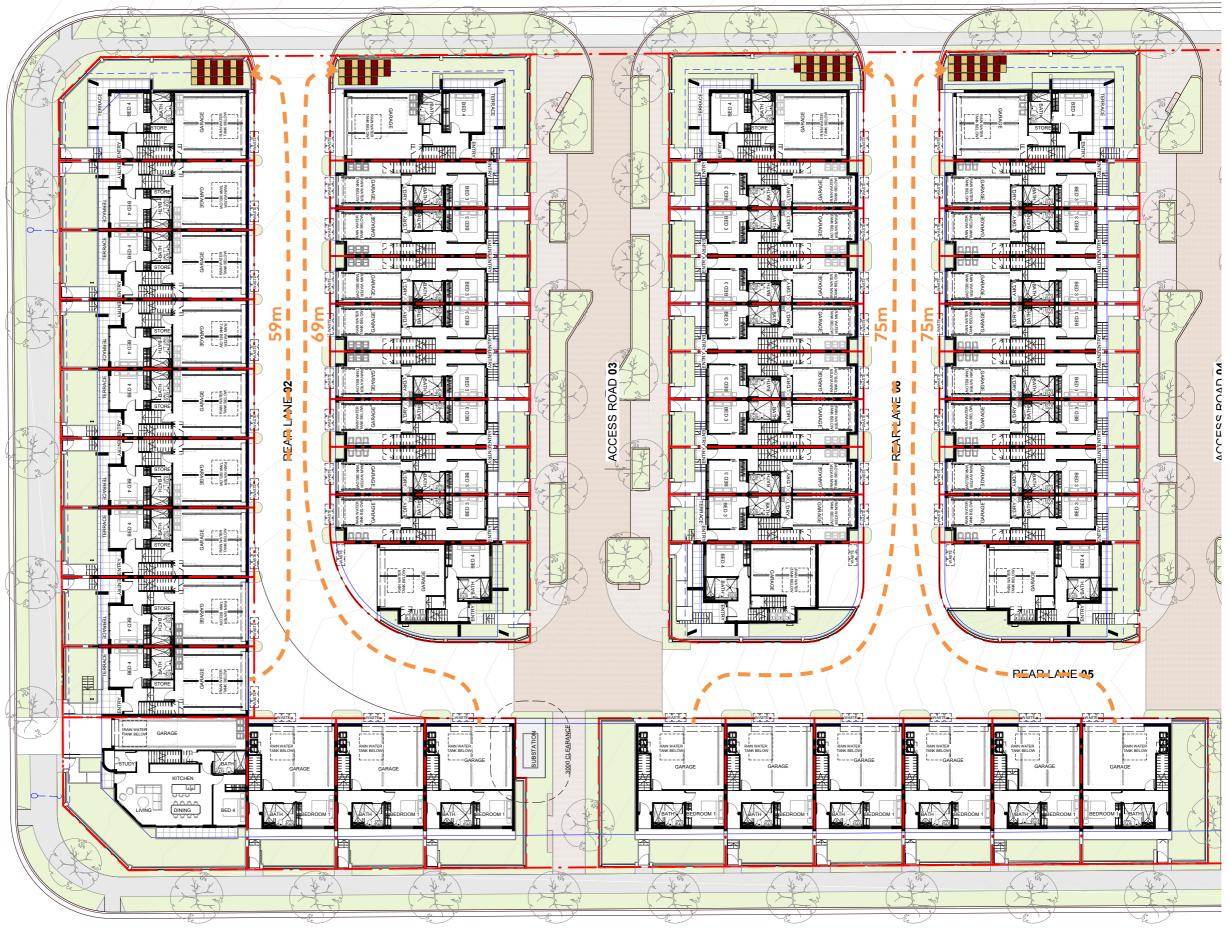


Legend

General Waste Bin

Recycling Waste Bin

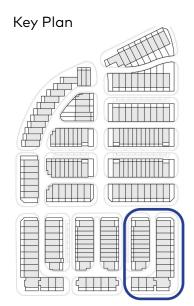
Approximate Bin Transfer Route



BUCHAN AVE.

12 Edmondson Park Sites 1-3 Fig 4.1.6

Figure 4.1.7 provides a graphic scenario where Bin Storage / collection points would be located up to 69 meters from the dwellings. The lanes accessing the Bin Storage / Collection points are sloped with falls ranging between 1:13 to 1:21.



Legend

General Waste Bin

Recycling Waste Bin

Approximate Bin Transfer Route

ACCESS ROAD 04 SECONDARY RD 02 REAR LANE 07 REAR LANE 05 BUCHAN AVE.

Fig 4.1.7

13

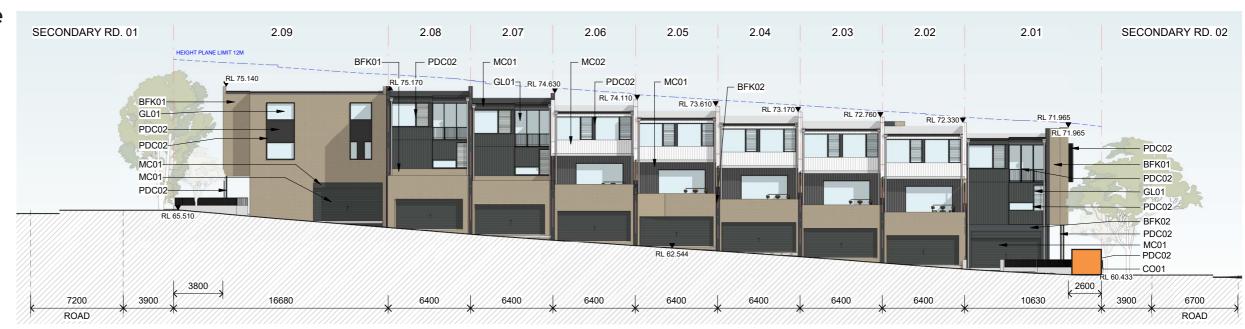
Edmondson Park Sites 1-3

COX

Centralised Waste Collection Lane Gradiant

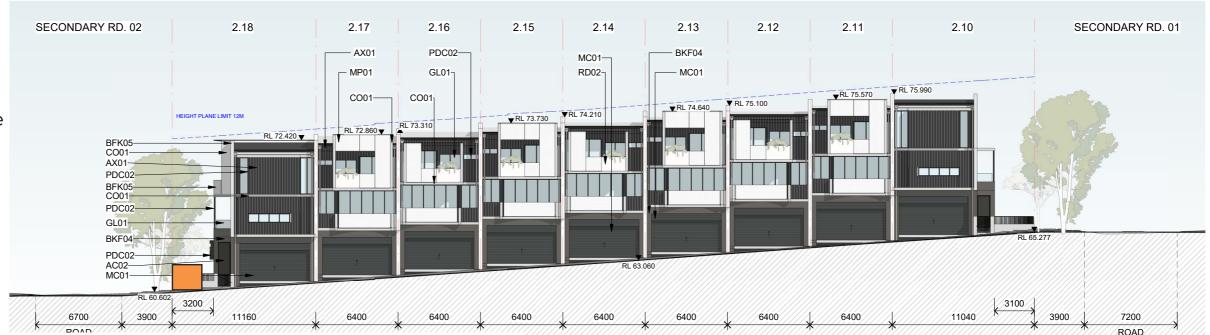
5m Drop across lane

1:14 gradiant



SITE 02 - REAR LANE 01 - SOUTHERN ELEVATION

Fig 4.1.10



4.65m drop across lane

1:18 gradiant

Legend:

Combined Bin Location

SITE 2 - REAR LANE 01 - NORTH ELEVATION

Fig 4.1.11

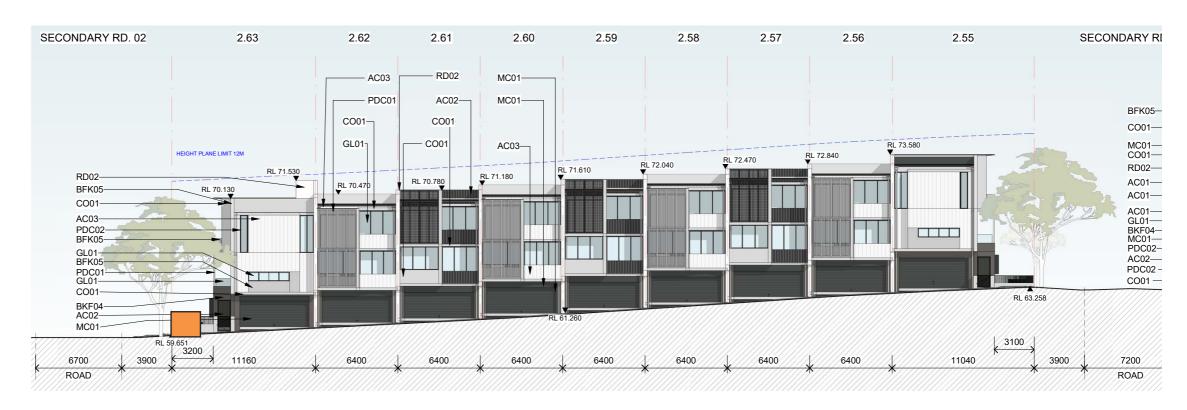
Centralised Waste Collection Lane Gradiant

2.1m Drop across lane1:23 gradiant



SITE 1-2 - REAR LANE 04 - SOUTHERN ELEVATION

Fig 4.1.12



3.6m Drop across lane1:18 gradiant

Legend:

Combined Bin Location

SITE 1-2 - REAR LANE 04 - NORTH ELEVATION

Fig 4.1.13

Centralised Waste Collection Lane Gradiant

2.1m Drop across lane1:26 gradiant

2.7m Drop across lane1:20 gradiant

Legend:

Combined Bin Location



SITE 3 - REAR LANE 06 - EASTERN ELEVATION Fig 4.1.14



SITE 3 - REAR LANE 06 - WESTERN ELEVATION Fig 4.1.15

4.1 ContextAccess Roads

DEP Comment

"The Panel requires the applicant to extend / align the width of Access Road 02, 03 and 04 across to Bezentin Ridge Road and Buchan Ave with the terraced blocks (see image below - marked in blue). This would achieve a wider visual connection across the two streets and can be used as communal spaces / pocket parks as part of the development. The Panel acknowledges that the applicant raised issues with stormwater drainage in these areas and the widening of these connections, however that was not fully understood from the explanation given in the meeting, and it was questioned how substations could be located in areas affected by overland flow."



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Response

In alignment with this suggestion, the Terraces adjacent to Buchan Ave pedestrian links have been revised to increase the width of the community title landscaped area.

The width of these spaces have been increased from 6.75m to 8.4m, as shown in Figures 4.1.19 to 4.1.29 on the following pages which demonstrates these increase in widths.

It is noted that the pedestrian links approved and built into the recently completed Ed Square terraces are is approximately 4.95m wide.

The pedestrian link to Bezentin Ridge Road has remained the same and is unrevised.

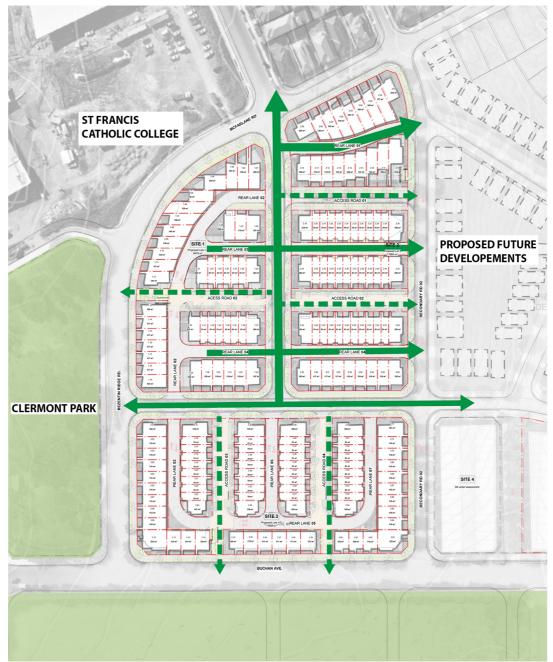






Fig 4.1.18 - This image shows the recently completed pedestrian links at Ed Square by Frasers Property.



Access Roads

Response

Buchan Ave Pedestrian Links demonstrating the changes to the proposal - an increase of 1.65m from 6.75m to 8.4m.

Key Plan

18

Ground Floor

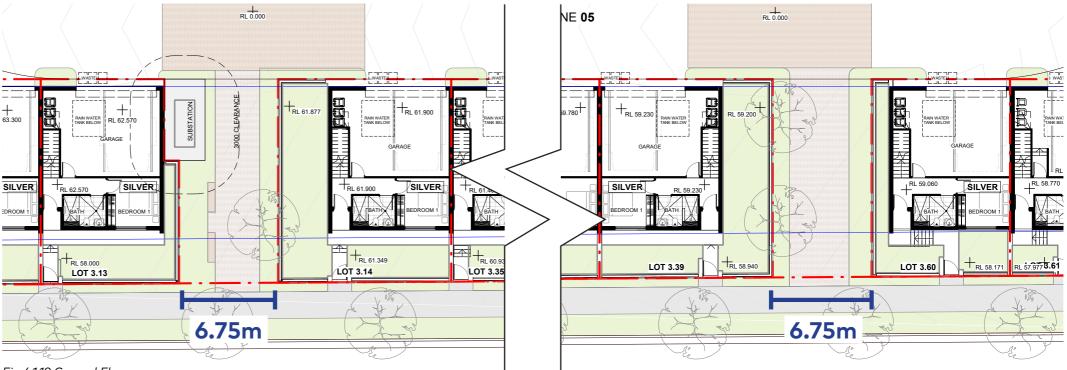


Fig 4.1.19 Ground Floor Previous Pedestrian Link Buchan Ave

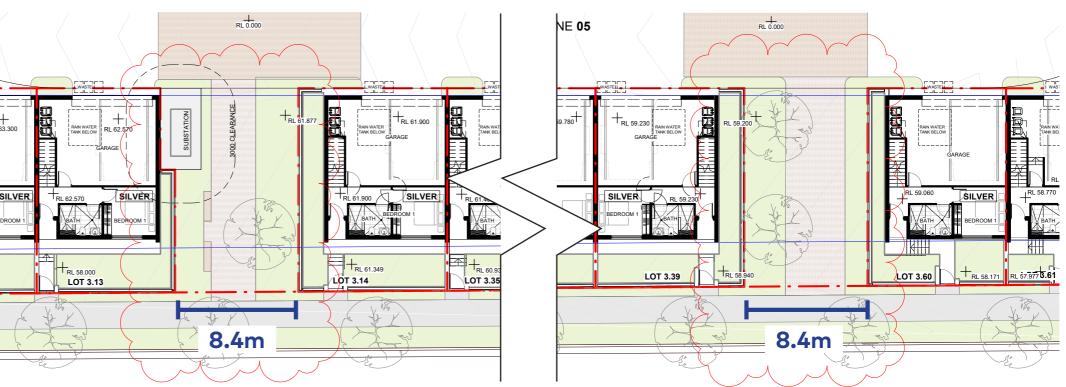


Fig 4.1.20 Ground Floor Amended Pedestrian Link Buchan Ave

Access Roads

Response

Buchan Ave Pedestrian Links demonstrating the changes to the proposal - an increase of 1.65m from 6.75m to 8.4m.

Key Plan

Level 1

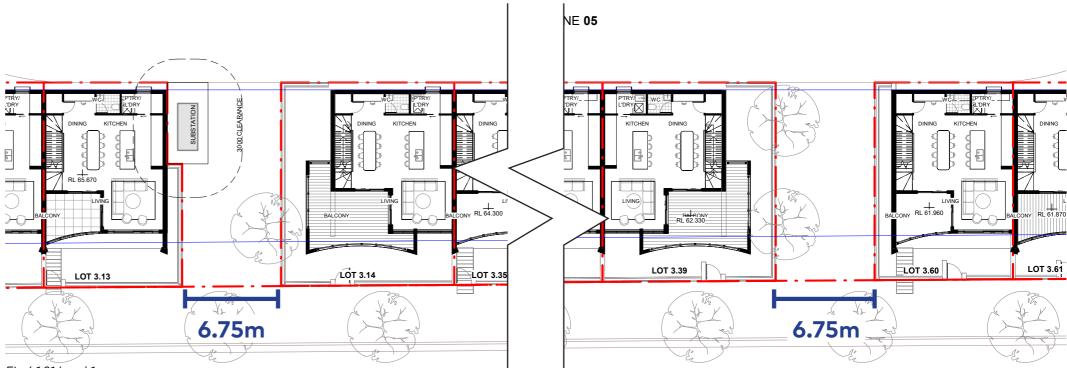


Fig 4.1.21 Level 1
Previous Pedestrian Link Buchan Ave

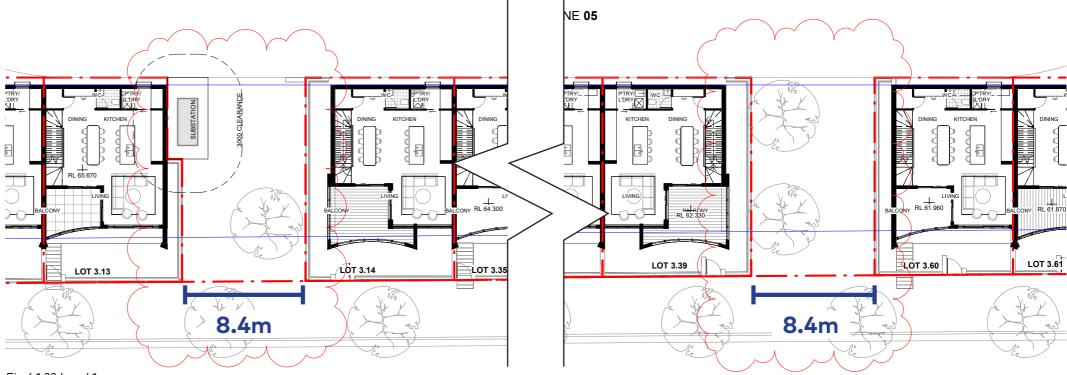


Fig 4.1.22 Level 1 Amended Pedestrian Link Buchan Ave

Access Roads

Response

Buchan Ave Pedestrian Links demonstrating the changes to the proposal - an increase of 1.65m from 6.75m to 8.4m.

Key Plan

Level 2

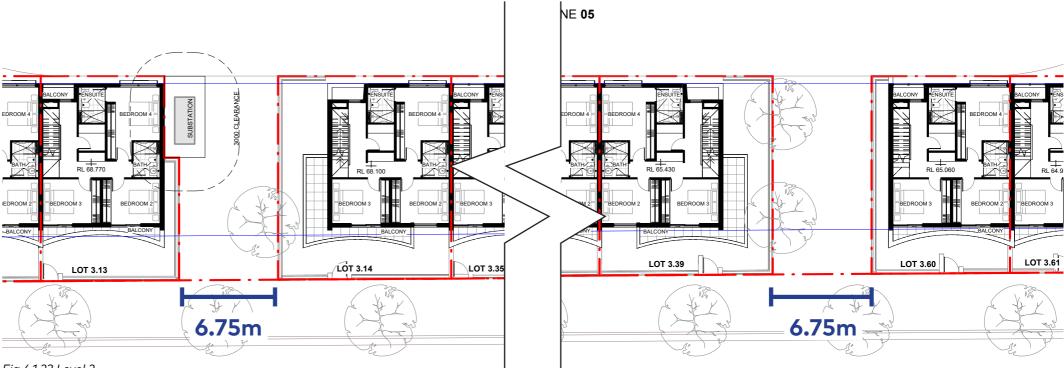


Fig 4.1.23 Level 2 Previous Pedestrian Link Buchan Ave

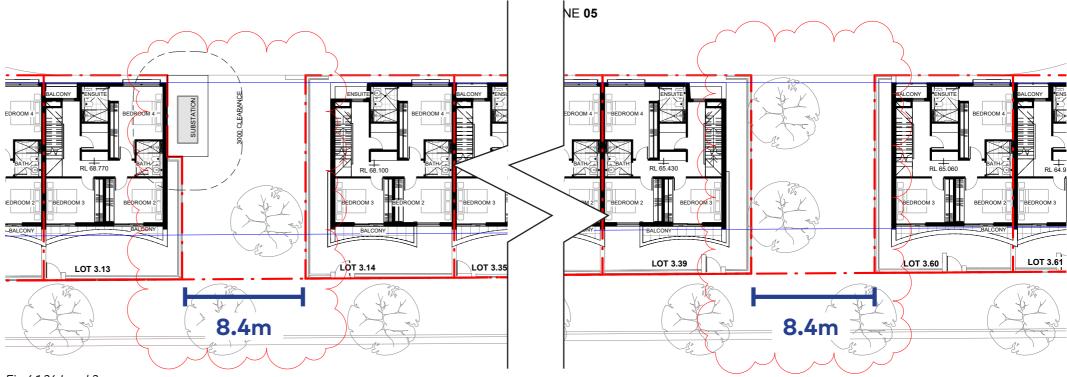
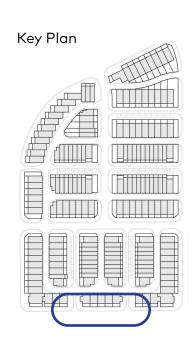


Fig 4.1.24 Level 2 Amended Pedestrian Link Buchan Ave

Access Roads

Response

Buchan Ave Pedestrian Links demonstrating the changes to the proposal.



22

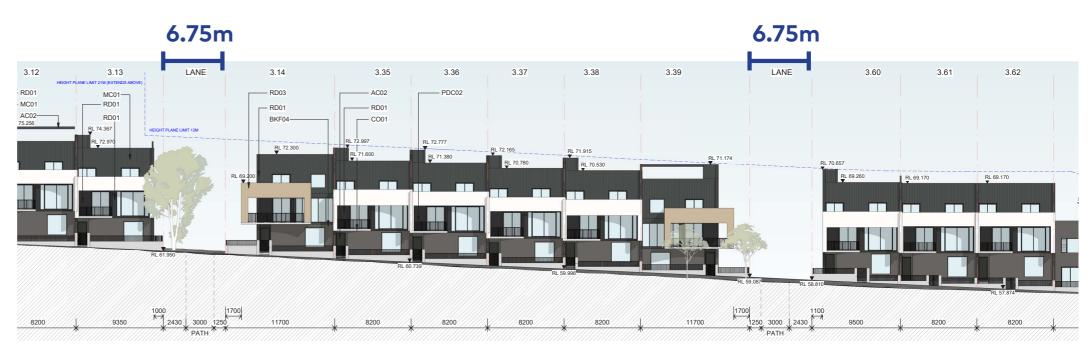


Fig 4.1.28 Buchan Ave Elevation
Previous Pedestrian Link Buchan Ave

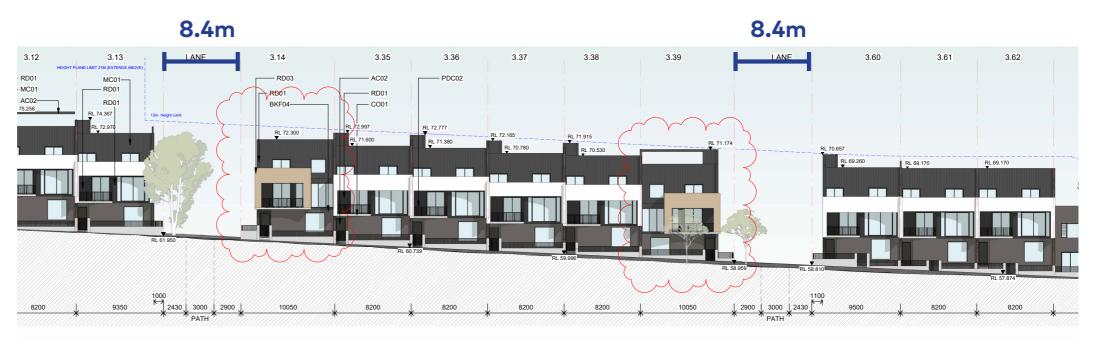


Fig 4.1.29 Buchan Ave Elevation Amended Pedestrian Link Buchan Ave



Response to DEP

4.2 Built Form and Scale

4.2 Built Form + ScaleVertical Circulation

DEP Comment

24

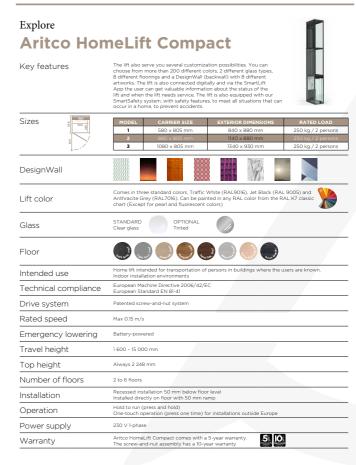
"The Panel recommends the applicant to consider future provision of vertical circulation for these terraces. Provide a future location to install lifts within these terraces to enable ageing in place."

Response

Aritco HomeLift Compact by Costal Lifts has been identified as a possible product to be retrofitted into the terraces due to its minimal footprint and ability to travel between three or more floors.

On the coming pages, Terrace types K and O have been identified as easily modified layout to provide lift access in the future if needed.





PASE 39

Fig 4.2.0

Future Lift Study Terrace Type K

Lot Type: 6.4m Wide Lot Number: 5x Terraces

Beds: 4 Storeys: 3

Facade Variations: 1x



Fig 4.2.1

Fig 4.2.2



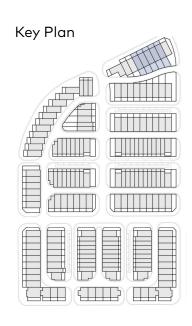


ကိ

ROOF PLAN SCALE 1:200

Fig 4.2.4

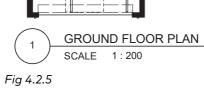
Current Proposal



Legend

Small Residential Lift (800mm x 1050mm)







LÍVING

DINING

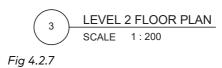
KITCHEN

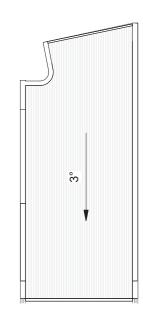
LEVEL 1 FLOOR PLAN

SCALE 1:200









ROOF PLAN SCALE 1:200

Fig 4.2.8

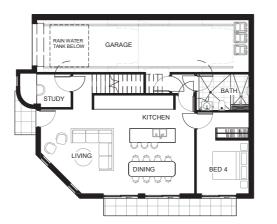
COX Future provision of Lift Edmondson Park Sites 1-3

Future Lift Study Terrace Type O

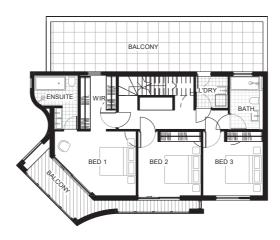
Lot Type: Corner Lot Number:2x Terraces Beds: 4

Facade Variations: 1x

Storeys: 2







2 LEVEL 1 FLOOR PLAN
SCALE 1:200

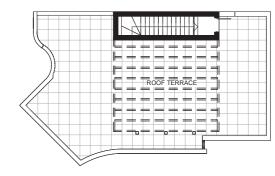
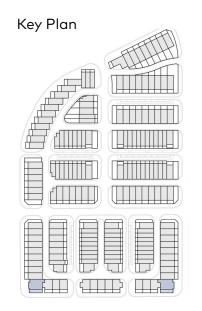




Fig 4.2.9 Current Proposal

Fig 4.2.10

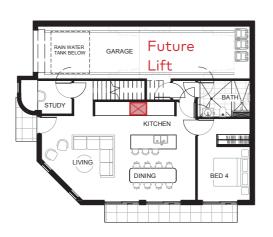
Fig 4.2.11



Legend

26

Small Residential Lift (800mm x 1050mm)



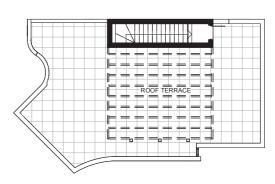
1 GROUND FLOOR PLAN
SCALE 1:200

Fig 4.2.12 Future provision of Lift



2 LEVEL 1 FLOOR PLAN
SCALE 1:200

Fig 4.2.13



3 LEVEL 2 SCALE 1:200

Fig 4.2.15

4.2 Built Form + ScaleMinimum Internal Dimension

DEP Comment

The Panel requires the applicant to ensure that the internal dimension for the terraces (i.e., clear distance between inner face of two parti-walls) are a minimum 4m wide.

Response

The proposal consists of internal terraces spaced at 8.2m, 6.4m and 4.4m, and corner terraces generally 6.4m and wider. Taking into account a typical party wall thickness of 300mm, all terraces will have over 4m minimum dimensions.

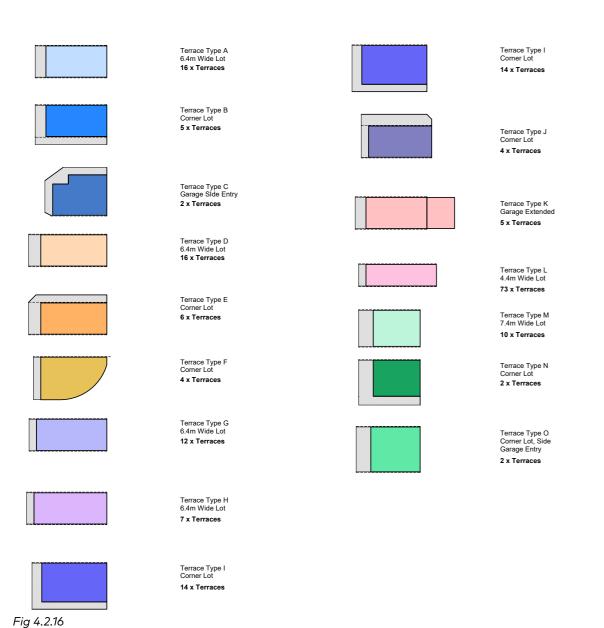




Fig 4.2.17

4.2 Built Form + Scale Signage

DEP Comment

28

The Panel requires the applicant to prepare a detailed signage and wayfinding strategy for the site.

Response

The Proponent agrees to preparing a detailed wayfinding and signage strategy for the precinct and will provide this to Liverpool City Council for endorsement as part of a condition of consent. The signage and wayfinding strategy will consider Council's Naming Convention Policy for street naming and numbering as well as the provisions for signage and safety in the Edmondson Park South DCP 2012.



Response to DEP

4.3 Density

4.3 Density Site Density

DEP Comment

"Whilst the Panel accepts the density, it notes that the project would benefit if a few terraces were removed as noted above."

Response

The proposed development provides a total of 178 dwellings across 15 different townhouse design typologies which all range in differing design treatments to provide 3-bed and 4-bedroom housing offerings. Under the Concept Plan, the site is located within a catchment yield that has an overall target yield of 570 dwellings. As Sites 1-3 comprises only a part of the area within this yield catchment, the density has applied proportionally and is proposed in a manner that responds to its unique location between the Town Centre (which is characterised by more compact RFB living typologies) and the existing land to the north which comprises single detached dwelling houses.

Overall, this DA seeks approval for 178 dwellings in a typology that is well-suited to its location in an area that benefits from high quality access to transport, schools, public open space and walking distance shops and services. The density as proposed is considered sensible to providing much needed housing that is able to contribute to the 379,000 dwellings required to be provided under the current State Government 2024-2029 housing targets

Albeit the slight variance to the Concept Plan spatial layout of the site, the proposal is generally consistent with all relevant Statement of Commitments made in relation for future development on this land. It will continue to provide a superior built form outcome in terms of housing product type that is appropriate for its location and demand for housing types that can cater to growing family demographics. The site is suitable for its proposed density and is able to leverage from the surrounding educational establishments, quality open space, key transport services and town centre offerings.



Fig 4.3.0

4.3 DensitySite Density

31

The proposed is comprised of 15 main terrace types, which are repeated across the 178 dwellings. The terrace typologies range in width, length, height, corner definition and facade design.

Within each of these typologies are up to 6 different facade variations.

The proposed 178 dwellings offer variety in massing, modulation, facade approach and amenity.

The following pages outline the different terrace typologies:



KEY



Terrace Type A 6.4m Wide Lot 16 x Terraces



Terrace Type B Corner Lot 5 x Terraces



Terrace Type C Garage Side Entr



Terrace Type D 6.4m Wide Lot 16 x Terraces



Terrace Type Corner Lot



Terrace Type F Corner Lot 4 x Terraces



Terrace Type G 6.4m Wide Lot 12 x Terraces



Terrace Type H 6.4m Wide Lot 7 x Terraces



Terrace Type I Corner Lot 14 x Terraces



Terrace Type J Corner Lot 4 x Terraces



Terrace Type K Garage Extended 5 x Terraces



Terrace Type L 4.4m Wide Lot 73 x Terraces



Terrace Type M 7.4m Wide Lot 10 x Terraces



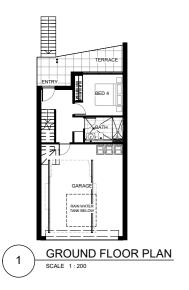
Terrace Type N Corner Lot 2 x Terraces



Terrace Type O Corner Lot, Side Garage Entry 2 x Terraces

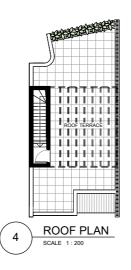
TOTAL TERRACES: 178

4.3 DensitySite Density









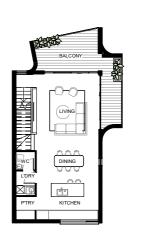
Terrace Layout Type A

Lot Type: 6.4m wide Number: 16 x Terraces Beds: 4 Storeys: 3 Facade Variations: 3x





32



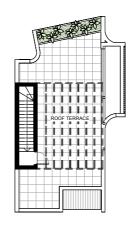
2 LEVEL 1 FLOOR PLAN

SCALE 1:200



4 LEVEL 2 FLOOR PLAN

SCALE 1:200



ROOF PLAN
SCALE 1:200

Terrace Layout Type B

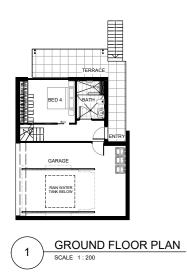
Lot Type: Corner Lot Number: 5x Terraces

Beds: 4 Storeys: 3

Facade Variations: 1x

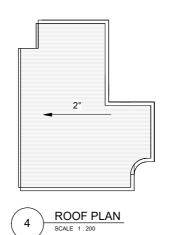
4.3 Density

Site Density



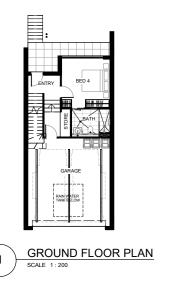






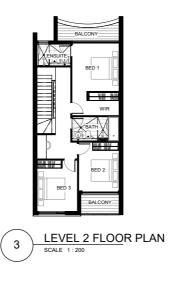
Terrace Layout Type C

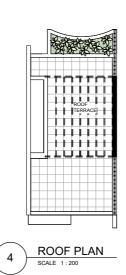
Lot Type: Corner Number: 2x Terraces Beds: 4 Storeys: 3 Facade Variations: 1x



33







Terrace Layout Type D

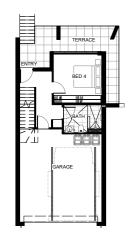
Lot Type: 6.4m Wide Lot Number: 16

Beds: 4 Storeys: 3

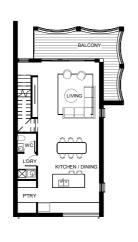
Facade Variations: 4x

4.3 Density

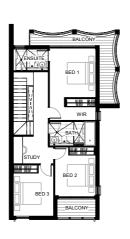
Site Density



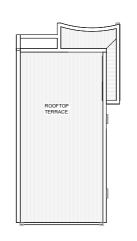
GROUND FLOOR PLAN
SCALE 1:200













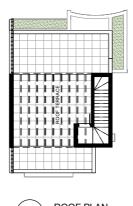
Terrace Layout Type E

Lot Type: Corner Lot Number: 6x Terraces Beds: 3 Storeys: 3 Facade Variations: 2x









Lot Type: Corner Lot

Number: 4x Terraces Beds: 4 Storeys: 3

Facade Variations: 1x

Terrace Layout Type F

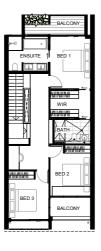
4.3 Density Site Density



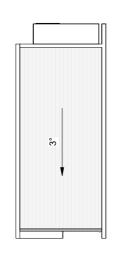












ROOF PLAN SCALE 1:200

Terrace Layout Type G

Lot Type: 6.4m Wide Terrace Number: 12x Terraces Beds: 4 Storeys: 3 Facade Variations: 4x



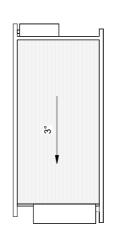




LEVEL 1 FLOOR PLAN



LEVEL 2 FLOOR PLAN



ROOF PLAN

Terrace Layout Type H

Lot Type: 6.4m Wide Terrace Number: 7x Terraces Beds: 4

Storeys: 3

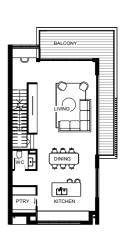
Facade Variations: 2x

4.3 Density

Site Density



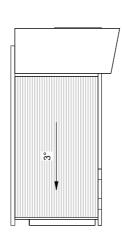




SCALE 1:200



LEVEL 2 FLOOR PLAN
SCALE 1:200



ROOF PLAN SCALE 1:200

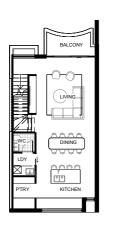
Terrace Layout Type I

Lot Type: Corner Lot Number: 14x Terraces Beds: 4 Storeys: 3 Facade Variations: 4x





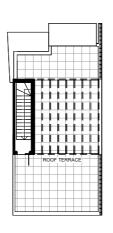
36



LEVEL 1 FLOOR PLAN



LEVEL 2 FLOOR PLAN



ROOF PLAN

Terrace Layout Type J

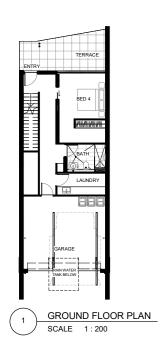
Lot Type: Corner Lot Number: 4x Terraces

Beds: 4 Storeys: 3

Facade Variations: 2x

4.3 Density

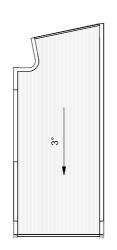
Site Density







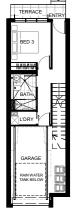




4 ROOF PLAN
SCALE 1:200

Terrace Layout Type K

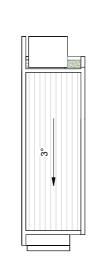
Lot Type: 6.4m Wide Lot Number: 5x Terraces Beds: 4 Storeys: 3 Facade Variations: 1x











ROOF PLAN

SCALE 1:200

Terrace Layout Type L

Lot Type: 4.4m Wide Lot Number: 73x Terraces Beds: 3

Storeys: 3

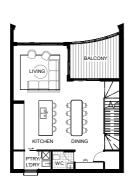
Facade Variations: 8x

4.3 Density

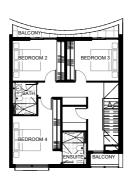
Site Density



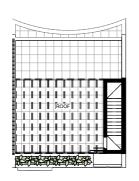




2 LEVEL 1 FLOOR PLAN
SCALE 1:200



3 LEVEL 2 FLOOR PLAN
SCALE 1:200



4 ROOF PLAN
SCALE 1:200

Terrace Layout Type M

Lot Type: Number: 10x Terraces Beds: 4 Storeys: 3 Facade Variations: 2x





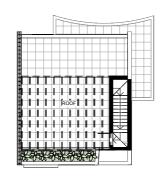
38



2 LEVEL 1 FLOOR PLAN
SCALE 1:200



3 LEVEL 2 FLOOR PLAN
SCALE 1:200



4 ROOF PLAN
SCALE 1:200

Terrace Layout Type N

Lot Type: Corner Lot Number: 2x Terraces

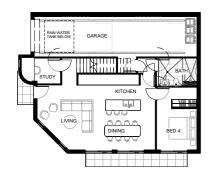
Beds: 4 Storeys: 3

Facade Variations: 2x

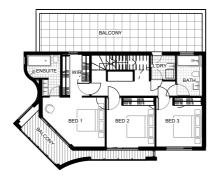
4.3 Density

39

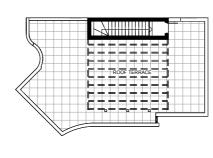
Site Density











3 LEVEL 2 SCALE 1:200

Terrace Layout Type O

Lot Type: Corner Lot Number:2x Terraces Beds: 4 Storeys: 2 Facade Variations: 1x



Response to DEP 4.4 Sustainability

4.4 SustainabilitySustainability Initiatives

DEP Comment

"The Panel requires the applicant to consider WSUD initiatives as part of the proposal.

The Panel recommends the applicant to consider additional sustainability initiatives (e.g., Photovoltaic (PV) panels, ceiling fans for habitable areas, double glazing for windows facing the street, etc.). The applicant should provide PV Panels for all terraces.

The Panel recommends the applicant to explore the possibility of incorporating a community battery site."

Response

The proposed landscape design is centred around a biophilic design approach that has underpinned the landscape scheme for the site using the recommendations of Commonwealth Scientific and Industrial Research Organisation (CSIRO) Soils for Landscape Development handbook. In this regard, the 3,710sqm worth of contiguous planting zones next to tree pits as well as an additional 3,684.5sqm deep soil zones are able to absorb water flow across the site (refer to Figure 4.4.0).

This is compounded with the proposed stormwater design which has been designed in response to the site specific requirements for the subject land in the Water Cycle Management Plan (2010) prepared

by J.Wyndham Prince for the broader Edmondson Park release Area, as well as the applicable Site 1-3 requirements identified by the Edmondson Park Town Centre North - Superlot Civil Engineering, Services and Infrastructure Report prepared by IDC in June 2021.

The proposal exceeds the BASIX targets for water, energy and thermal comfort and provides sustainability initiatives in lieu of PV panels (which are unable to be provided due to the height limit as applied across the site).

A community battery will not be provided as it will encourage further usage of private vehicle trip generation in an area that benefits from walkable proximity to the Edmondson Park Town Centre amenities including retail and access to transport. The site has a unique opportunity to assist in the activation of the Town Centre as it exemplifies a true transit orientated development that has leverage to strengthen the local activity centre and reduce car dependency for everyday activities.



Figure 2.20 Deep & contigious soil plan

Fig 4.4.0 Deep Soil Calculation by Landscape Architect



Response to DEP 4.5 Landscape

4.5 LandscapeCanopy Coverage

DEP Comment

"The Panel notes that the proposed laneways are devoid of important canopy tree cover with the current configuration. The Panel recommends exploring alternative configurations such as having one -way streets to achieve more space for viable landscape / canopy tree cover opportunities.

The Panel estimate that at least 50% of the roads/laneways in this DA have no tree canopy cover, this is unacceptable in a new development proposal.

Consider a consolidated area for bin pickup to resolve the extent of landscape works being provided within the laneways. A central collection point in a community title arrangement would be an exemplar and create an overall better impression when combined with tree planting in the lanes. Consider locating the bins along the major streets for terraces (as marked in the sketch above).

The Panel requires the applicant to create a heat map of this project to understand the effect of urban heat island that will be witnessed by this development.

The Panel reiterates that tree canopy planting in the lanes will ameliorate the privacy issues within the laneways.

43

The Panel note that the proposed street trees in the central North – South internal street should have a greater street tree canopy potentially achieved by clustering more trees in the verge zones.

The Panel notes that a greater soil volume (i.e., a contiguous extent of soil that links together under roads or across pavements) would be required to achieve a good level of tree growth and canopy cover within the precinct. The Panel suggests the applicant to explore technological solutions that may be required to achieve 40% canopy cover target.

Response

Alternatives to address this comment were explored however it was found that either the conversion of laneways to one-way streets or introducing additional landscaping to these laneways resulted in an outcome that would prove a dis-benefit to the overall amenity offering of the development area.

By converting laneways to one-way streets, it reduces the performance standard of the laneways to operate as service roads and inherently eliminates domain for service vehicles to operate. This means that waste collection services will need to revert to the Access Roads and Main streets which is reduces the quality of amenity to these streetscapes.

Additionally, the proposed built forms result in a typology offering that adopts less privatised open space opportunities and allows for a landscaping scheme that guarantee's deep soil planting opportunities in publicly accessible pockets of the precinct, rather than within confined spaces between garages and houses (as envisioned in the Concept Plan). The landscaping scheme will be protected by the community title arrangement which will ensure its upkeep and management so that tree canopy coverage and deep soil areas are well maintained and able to thrive.

This is a strategised approach to provide a high quality outcome that that reduces the risk of privatising tree canopy coverage and allows a level of certainty that the public domain will benefit from a greater landscaping opportunities rather than left to the individual household to determine and maintain.

The result of this design move means that a more successful 'mews experience' between built forms and enhanced pedestrian experience are able to benefit from concentrating canopy coverage within the streetscape. It also allows for an environment where canopy is able to thrive as the streetscape is not at risk of being overshadowed by high density residential flat buildings.

The Figures 4.5.3 to 4.5.5 on the following pages demonstrate the opportunities to fulfill this vision to concentrate and protect greening opportunities outside the boundaries of private terraces.

4.5 Landscape

A landscaped buffer has been designed to the end of the dwellings to provide a green aspect when viewed from the secondary roads. Relocating the bin storage to these areas will dramatically reduce this greening.

Line of sight from vehicles exiting and entering the garages is paramount to the safety of the laneways. Vegetation has been specifically designed to allow for this visibility.

Relocating the bin storage and collection to the front of the terraces will substantially take away from the landscaped and deep soil area at the front of the properties.

The current design provides for service vehicles (garbage and fire) to access the terraces via the wider rear laneways. Reducing the width of the laneways will require these vehicles to service the terraces from the access roads. These would become wider two way roads. To allow for this, the carparking spaces will need to be removed. The vegetation zones may also be impacted.

The current design of the secondary roads has been specifically designed to prioritise pedestrian use and slow moving traffic and maximise tree coverage and vegetation.

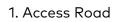


Fig 4.5.1

4.5 Landscape

Response

Artists impressions of an access road and rear laneway are shown below.





2. Laneway



Key Plan

Fig 4.5.2



Response to DEP 4.6 Amenity

4.6 Amenity Rooftop Shade

DEP Comment

"The Panel recommends the applicant to provide adequate shade and amenity for the nominated terraces as part of the existing roof top level. Provide a pergola / trellis with seating, power points and access to water for the rooftops. The Panel recommends the applicant to provision these rooftop elements as part of a community title easement to discourage alterations in future."

Response

Rooftop trellises are provided to the proposal. Planterboxes were previously removed in response to pre-DA DEP comments which raised concern regarding individual household maintenance and upkeep.

Community title arrangement is proposed across the site as per Subdivision DA-386/2021.

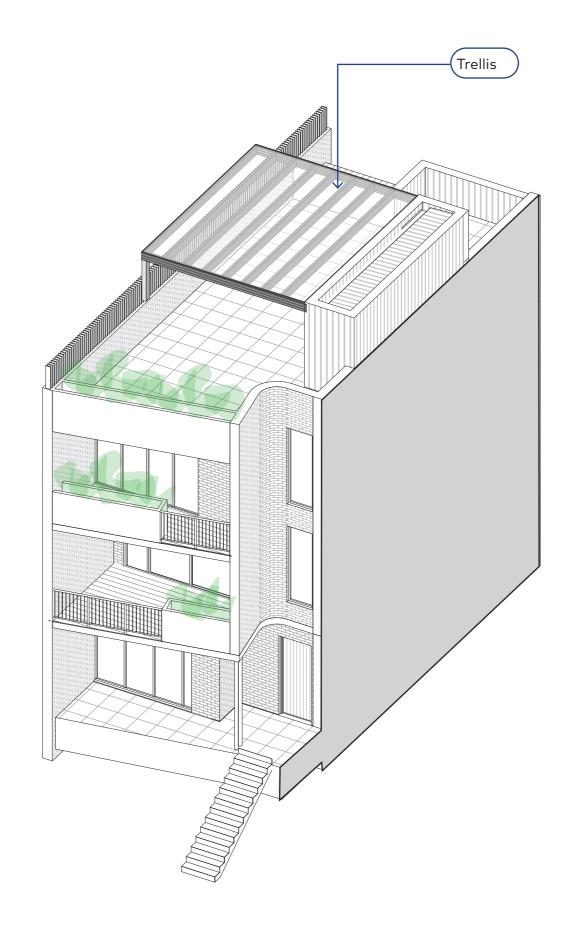


Fig 4.6.0 - 3D Image - Roof Top Terrace



Response to DEP 4.7 Safety

4.7 Safety

DEP Comment

49

The Panel requires the applicant to consider CPTED principles throughout the design of the precinct. Demonstrate all the safety and Townhouse entries (including rear lane security provisions being considered as part of the development.

Response

Surveillance:

access) each address the streetscape, with habitable rooms and circulation spaces overlooking the public domain in this regard, providing a high degree of natural surveillance. Private open space areas are allowed for within the front setback areas of each townhouse where outdoor leisure and play can be facilitated, providing further opportunities for activation which will in turn provide overlooking of the streetscape and towards other properties.

Access Control:

The townhouse typologies include front setback fences that are gated and provide a clear delineation of private and public space Access to rear garages will be controlled by electronic security devices and systems linked to specific individual townhouses on a unique ownership arrangement. The road network and internal pedestrianised places are spatially laid out in a manner that controls the safe flow of movement of vehicles and persons throughout the site. The streetscape network pattern has been designed in a manner that avoids convoluted pathways or bends that can result in confusion or wandering. A wayfinding and signage strategy will be prepared and adopted for this development.

Territorial Reinforcement

The townhouse typologies include front setback fences that are gated and provide a clear delineation of private and public space. lots, a Strata committee will be formed Access to rear garages will be controlled by electronic security devices and systems linked to specific individual townhouses on a unique ownership arrangement. The road network and internal pedestrianised places are spatially laid out in a manner that controls the safe flow of movement of vehicles and persons throughout the site. The streetscape network pattern has been designed in a manner that avoids convoluted pathways or bends that can result in confusion or wandering. A wayfinding and signage strategy will be prepared and adopted for this development.

Access Control:

The streetscape is likely to be lit via public domain lighting. Adequate lighting, combined with the presence of formal and informal guardians on site will enable the perception of high visibility at the streetscape and may assist in minimising any potential association with antisocial behaviour. As with territorial reinforcement, occupants of the building are expected to maintain the property including any private open space maintenance, contributing to the perception that the townhouses will be cared for and may assist in minimising opportunities for crime.

As the site has an active subdivision DA for community title arrangement over the to manage residents and community on site where matters concerning the upkeep and management of the precinct will be discussed.



4.8 Housing Diversity and Social Interaction

4.8 Housing Diversity and Social Interaction

DEP Comment

51

The Panel commends the applicant for the housing diversity (i.e., 3, 4 & 5-bedroom housing options) being provided as part of the development.

The Panel notes that there are a lot of 3-storey terrace houses which may not suit ageing people or people with restricted mobility. The Panel recommends safeguarding space for the potential inclusion of chair lifts or vertical lifts in future.

Response

Each terrace typology is able to be retrofitted with chairlifts in a future context, should the individual needs to owners or occupiers require it.

A vertical lifting study has been conducted in response to Item 4.2 which demonstrates that the safeguarding of locations for spring lifted vertical lifting devices are able to be accommodated in particular Terrace Typologies. Vertical lifting devices are not proposed as part of this DA.

Future Lift Study Terrace Type K

Lot Type: 6.4m Wide Lot Number: 5x Terraces

Beds: 4 Storeys: 3

Facade Variations: 1x



Fig 4.8.0

Fig 4.8.4

Future provision of Lift

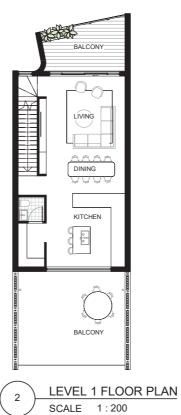
Current Proposal





Key Plan

Small Residential Lift (800mm x 1050mm)



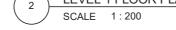
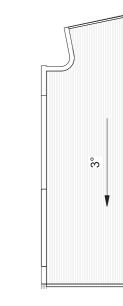


Fig 4.8.1



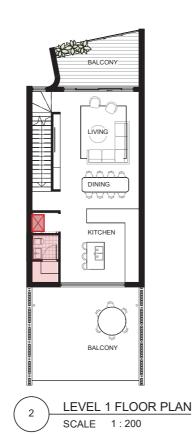
Fig 4.8.2





ROOF PLAN SCALE 1:200



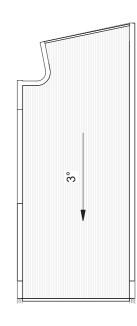












ROOF PLAN SCALE 1:200 Fig 4.8.7

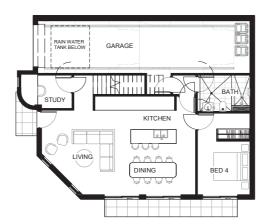
COX

Future Lift Study Terrace Type O

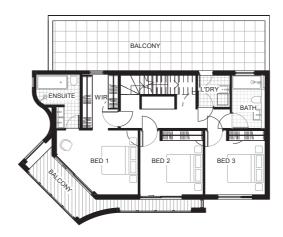
Lot Type: Corner Lot Number:2x Terraces Beds: 4

Facade Variations: 1x

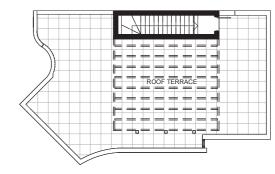
Storeys: 2









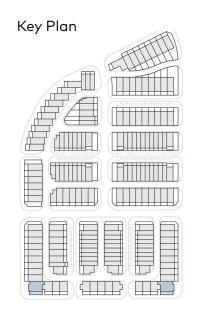


3 LEVEL 2 SCALE 1:200

Fig 4.8.8 Current Proposal

Fig 4.8.9

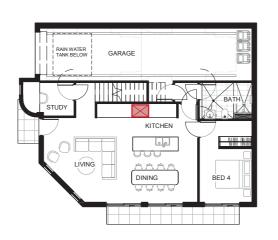
Fig 4.8.10



Legend

53

Small Residential Lift (800mm x 1050mm)



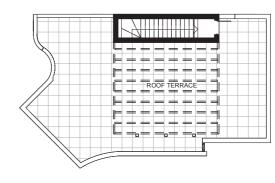
GROUND FLOOR PLAN
SCALE 1:200

Fig 4.8.11
Future provision of Lift



2 LEVEL 1 FLOOR PLAN
SCALE 1:200

Fig 4.8.12



3 LEVEL 2 SCALE 1:200

Fig 4.8.13



4.9 Aesthetics

4.9 Aesthetics

DEP Comment

55

The Panel requires the applicant to identify the location of AC condensers for the terraces and ensure that they are screened.

Response

AC condensers can be placed either out of sight on the rooftops, or behind solid balcony elements. Balconies have been designed with this in mind to avoid being able to see AC condensers from the street.

