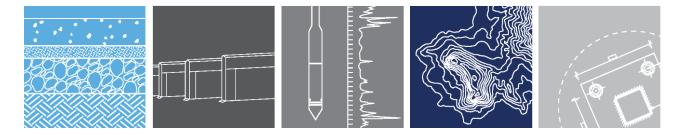
Engineering Sustainability Designing Resilience





Development proposal

Tauroa Street, Raumanga, Whanāgrei

Project Number: Date created: Created by: Local Council: Legal Description: Total Area: 7630-015 22 February 2023 Finn Potter Whangārei District Council Lot 2 DP 352547 16.345ha

Engineering Sustainability Designing Resilience

Tauroa Street Location

Bus Stops

Four bus stops are located within 150m of Tauroa Street

State Highway 1

Less than 750 metres and 900 metres to Bunnings and shopping centre.

Hospital

3km via road

Supermarkets

500 metres from Proposed new supermarket off SH1

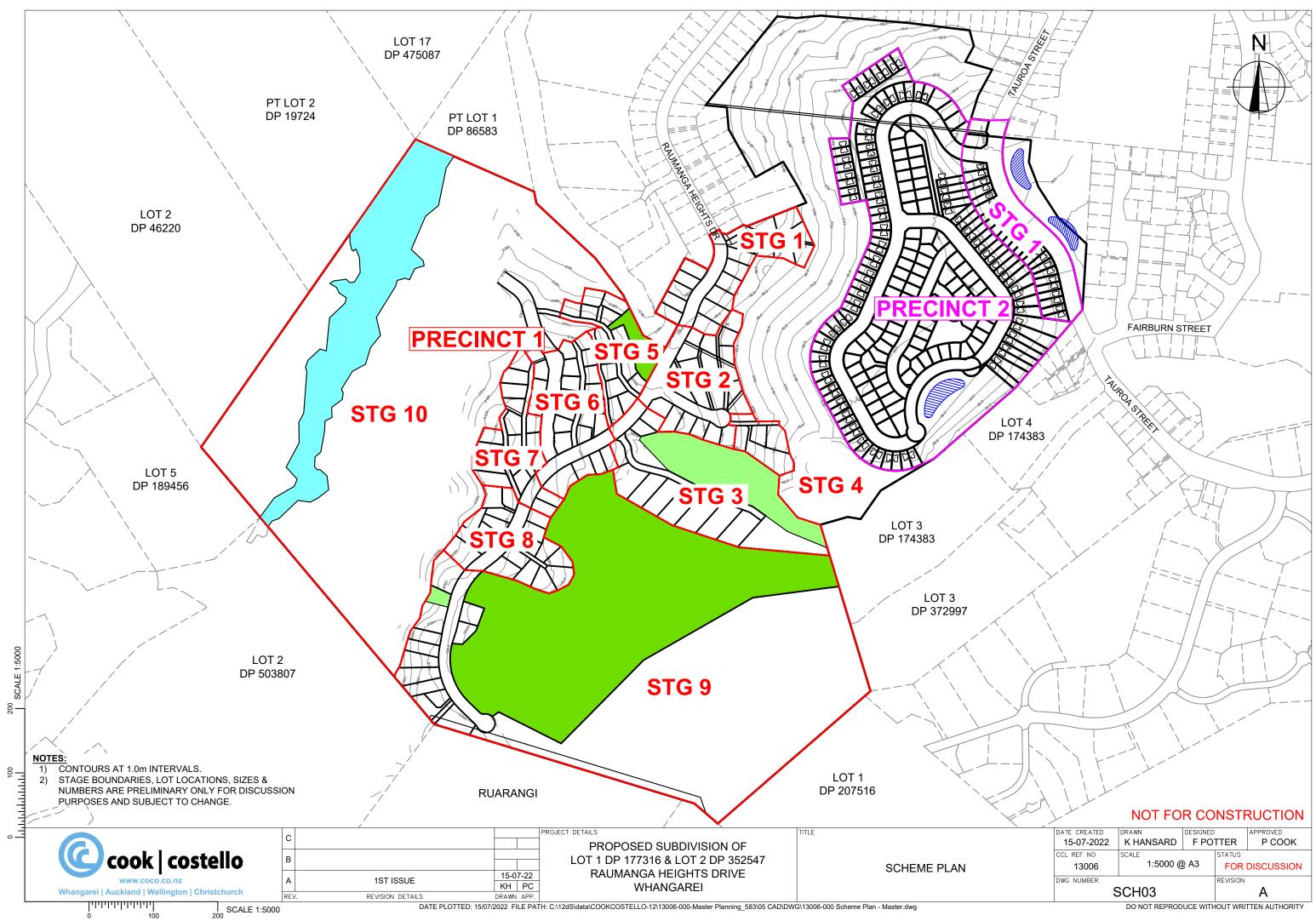
4 kilometres from the existing PAK'nSAVE

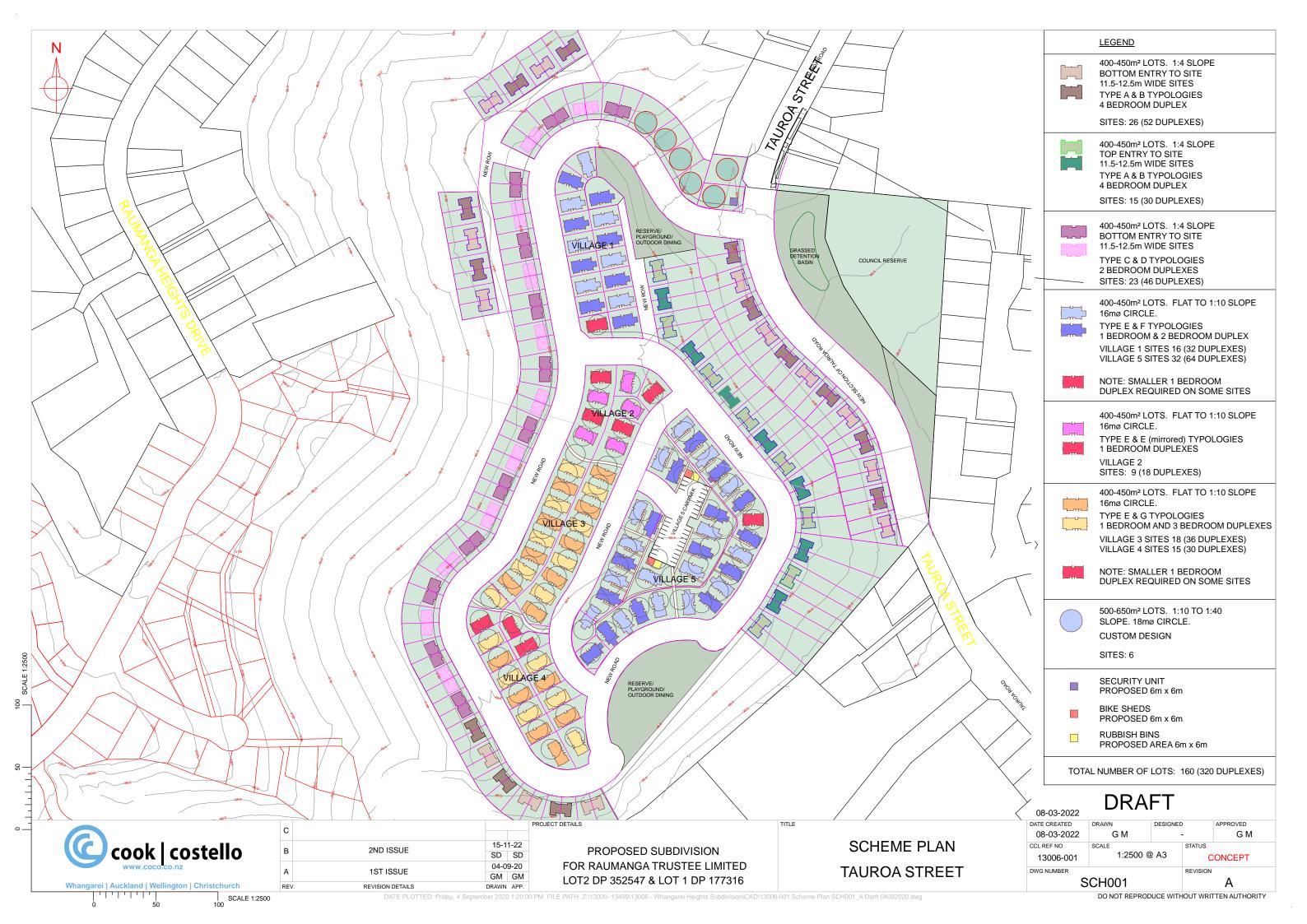
			WHANGAREI	
	AVENUES			
			PAK'nS	AVE Whangarei
		Whangārei		
		MORNINGSIDE		
Wor	ODHILL		Whangarei 😡	
RAHORA				
Hangarei Hospital				
Whangarei Hospital				
Whangarei Hospital				
Rau				
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RAUMANGA				
🕞 Bus Stop 🕞 Bus Stop				
🙃 Development Site				
	l Large Superma			
Bus Stop				
Bus Stop				

cook | costello

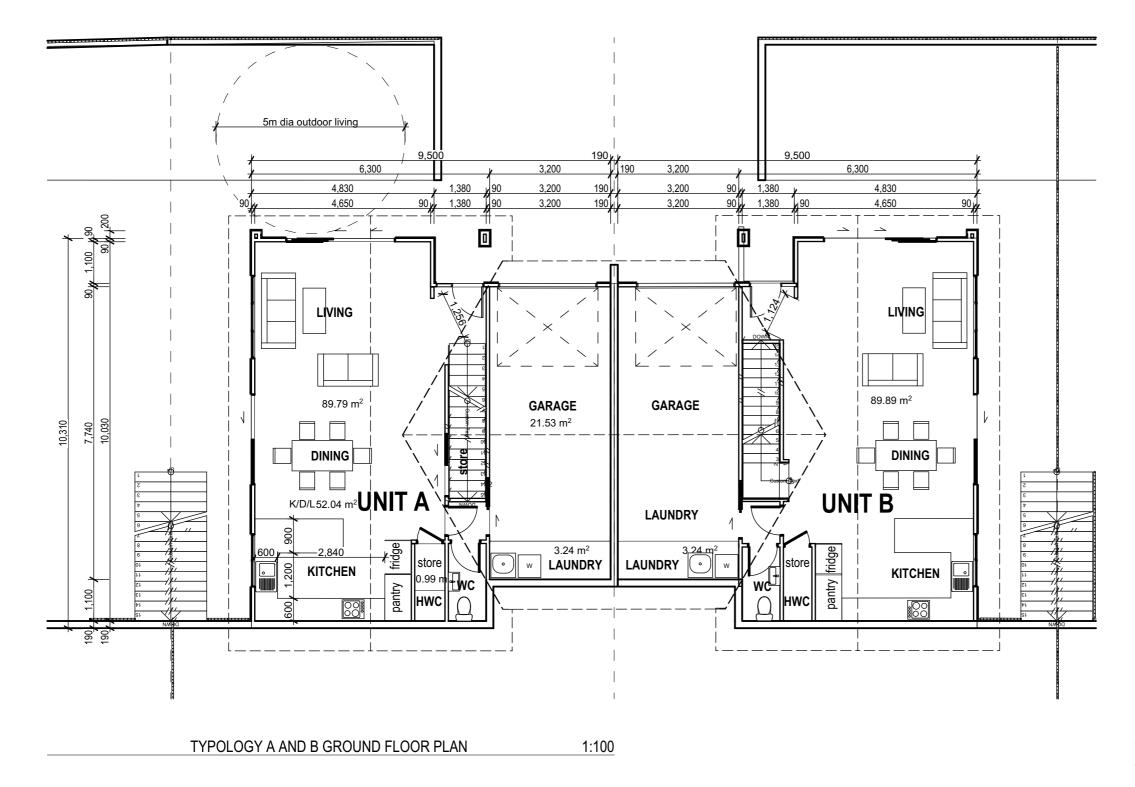
GEOTECHNICAL | STRUCTURAL | LAND DEVELOPMENT | GEOPHYSICS













DISCLAIMER

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LEGEND - Thermal Performance Requirements to 2022 codes

Construction	NZBC Zone 1 (mins)	Construction element R values
Roof	R6.6	tbc
Walls	R2.0	tbc
Slab	R1.5	tbc
Windows	R0.37	tbc

HOMESTAR COMPLIANCE:

Note: For compliance of Homestar (version 5) the dwelling must be calculated using a energy and carbon calculator to establish minimum thermal requirements. The calculation provides an estimate of the space heating demand for the home assuming a heating temperature of 20°C 24/7.

Mandatory Minimums for 6 Homestar rating:

HC1 - The main living area must have an adequately sized heating system.

HC3 - All doors between conditioned space and garage must be fully sealed.

HC3 - All combustion appliances must be room sealed. HC4 - Windows must be thermally broken.

HC4 - All junctions between external walls, floors and roofs must be demonstrated to meet the minimum fRsi factors for the respective climate zone

HC4 -Ground vapour barrier must be installed to the ground below all suspended floors.

EF3: Maximum water consumption of 165 litres per person

per day EF4 - Maximum delivered electricity (kWh/m2/year) associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants

HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located

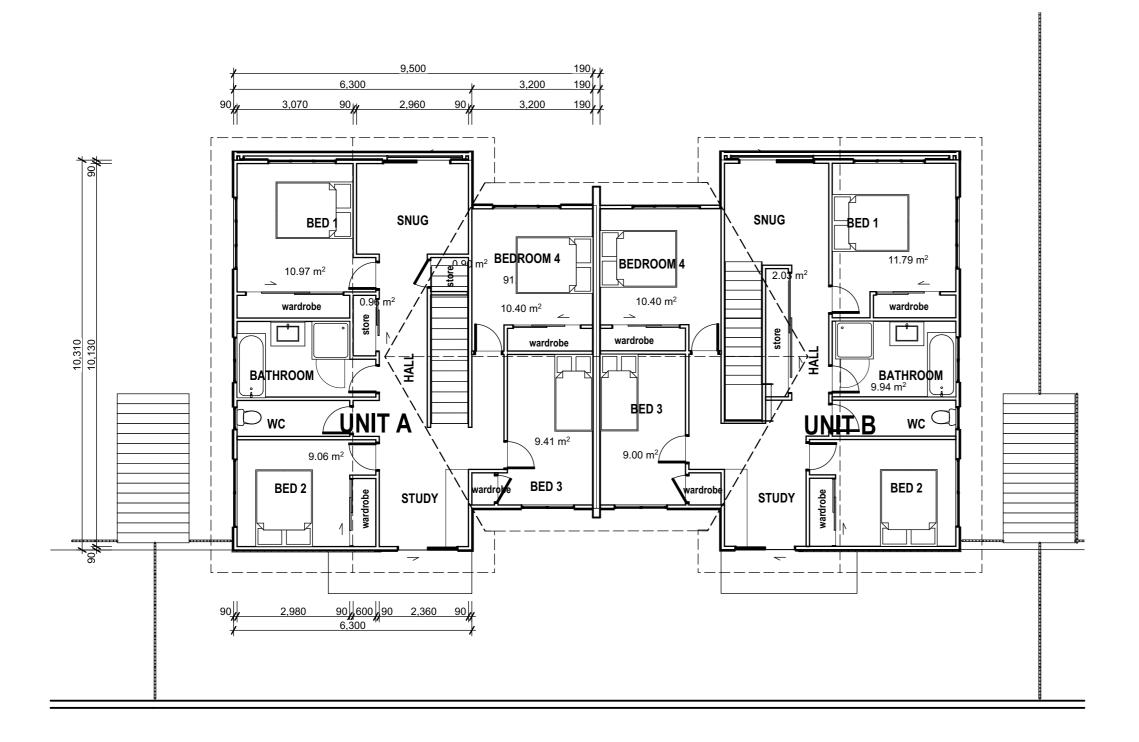
HC2: The home must be demonstrated to not exceed 25°C for more than 7% of the year or show compliance with CIBSE TM29

HC3: Continuous extract ventilation meeting the requirements must be installed as a minimum

TYPOLOGY A AND B GROUND FLOOR AREA 4 Bedroom Units with single Garage: 90.0 m2

	DRAWN:	CCL REF. No.	DATE ISSUED:
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FIRST FLOOR PLAN

RevID Transmittal Set Name

1:100



Date	PROJECT	
	DETAILS	DEVELOPMENT PROPOSAL
		FOR RAUMANGA TRUST
		WHANGAREI HEIGHTS

TYPOLOGY A AND B FIRST FLOOR PLAN

DATE PLOTTED: 16/11/2022 FILE PATH: Z:\13000- 13499\13006 - Whangarei Heights Subdivision\13006-001 Raumanga Trust new client name\Architecture\02 - Concept Design _ RC\ArchiCAD\13006

TITLE

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HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located

HC2: The home must be demonstrated to not exceed 25°C for more than 7% of the year or show compliance with CIBSE TM29

HC3: Continuous extract ventilation meeting the requirements must be installed as a minimum

TYPOLOGY A AND B FIRST FLOOR AREA 4 Bedroom Units with single Garage:

92.0 m2

TOTAL FLOOR AREA:

182.0 m2

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EAST PERSPECTIVE



NORTH/EAST PERSPECTIVE



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SOUTH PERSPECTIVE



PLAN



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LOGY A AND B PERSPECTIVES

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WEST PERSPECTIVE



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- DISCLAIMER

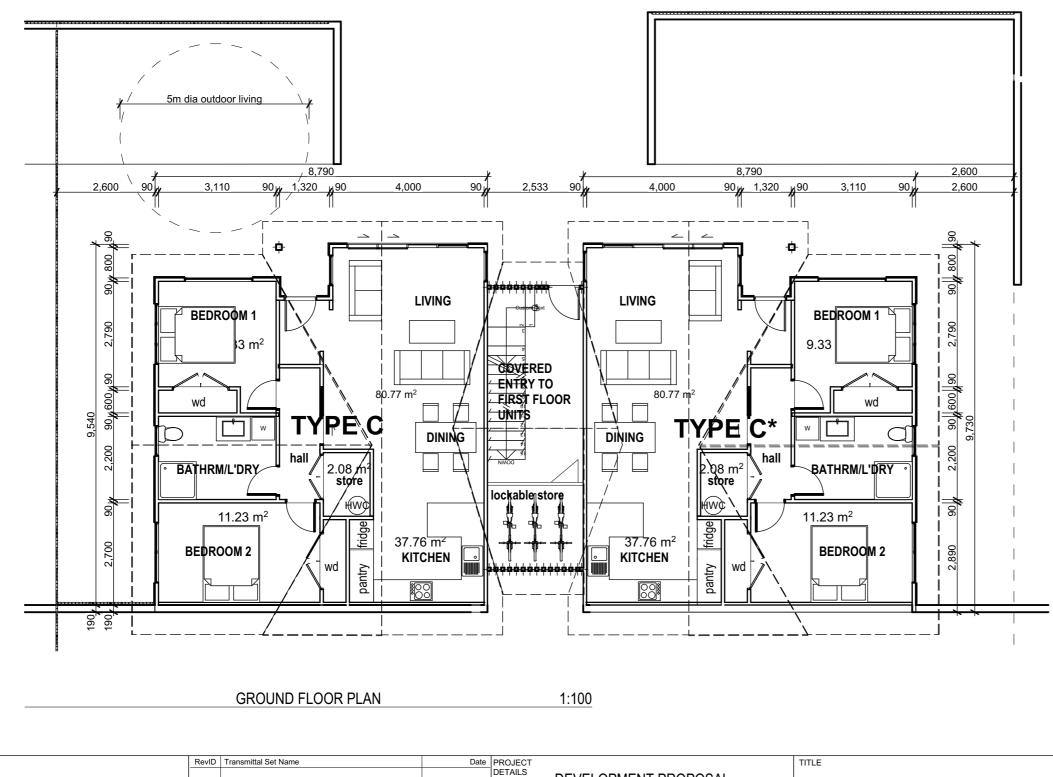
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DEVELOPMENT PROPOSAL

FOR RAUMANGA TRUST WHANGAREI HEIGHTS

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LEGEND - Ther	mal Performa	nce Requirements to 2022				
codes						
Construction	NZBC	Construction element				
	Zone 1	R values				
	(mins)					
Roof	R6.6	tbc				
Walls	R2.0	tbc				
Slab	R1.5	tbc				
Windows	R0.37	tbc				
HOMESTAR CO	OMPLIANCE:					
Note: For compl	iance of Home	estar (version 5) the dwelling				
must be calculat	ed using a en	ergy and carbon calculator to				
		quirements. The calculation				
		pace heating demand for the				
home assuming	a heating ter	mperature of 20°C 24/7.				
Mandatory Minin	nums for 6 Ho	mestar rating.				
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HC3 - All combustion appliances must be room sealed.						
HC4 - Windows	must be thern	nally broken.				
		xternal walls, floors and roofs				
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the respective cl		nust be installed to the ground				
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/ered electricity (kvvn/m2/year associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants

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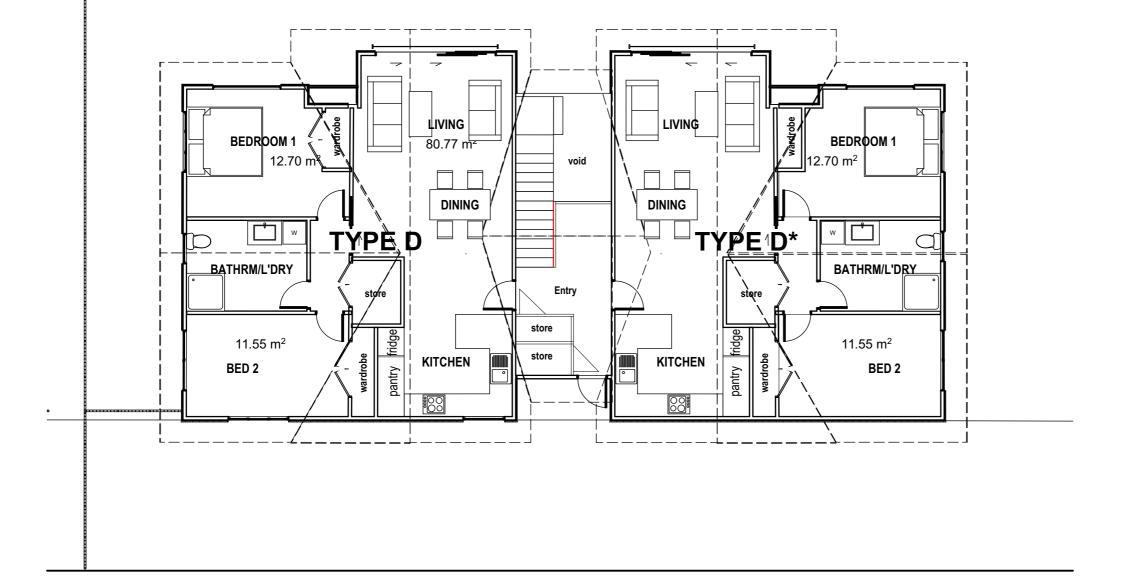
LIFEMARK COMPLIANCE: The ground floor units are designed to be easily adapted to comply wiht lifemark/universal design.

TYPOLOGY C and C mirrored GROUND FLOOR AREA 2 BEDROOM UNITS: each 80.8 m2 * indicates mirrored

TITLE	DRAWN: SD	CCL REF. No. 13006-004	DATE ISSUED: 16/11/2022
TYPOLOGY C AND C* GROUND FLOOR PLAN	REVIEWED: SD	SCALE: 1:100@ A3	DWG No:
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SECOND FLOOR PLAN





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LEGEND - Thermal Performance Requirements to 2022 codes

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LIFEMARK COMPLIANCE: The ground floor units are designed to be easily adapted to comply wiht lifemark/universal design.

TYPOLOGY D and D mirrored GROUND FLOOR AREA 2 BEDROOM UNITS: each 80.8 m2 * indicates mirrored

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4 x 2 BED UNIT PERSPECTIVE

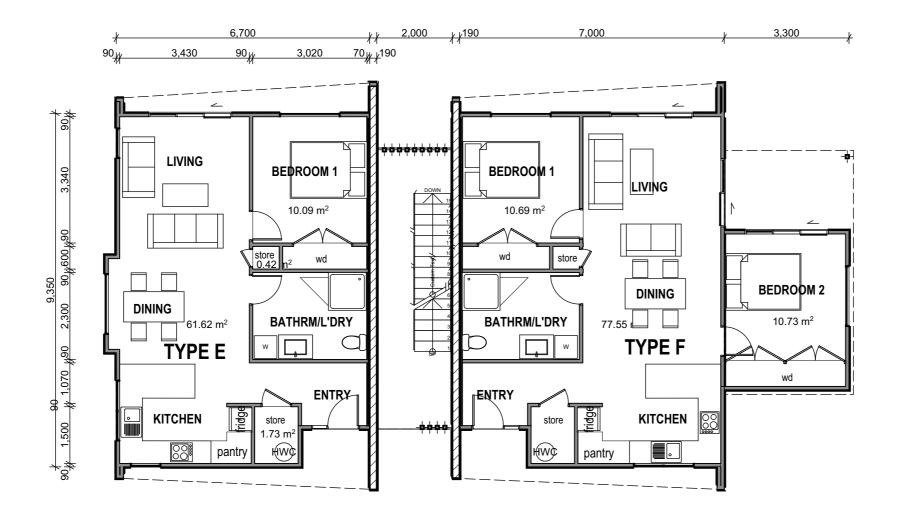


Date PROJECT DETAILS RevID Transmittal Set Name TITLE DEVELOPMENT PROPOSAL **TYPOLOGIES C AND D PERSPECTIVES** FOR RAUMANGA TRUST WHANGAREI HEIGHTS

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GROUND FLOOR 1:100



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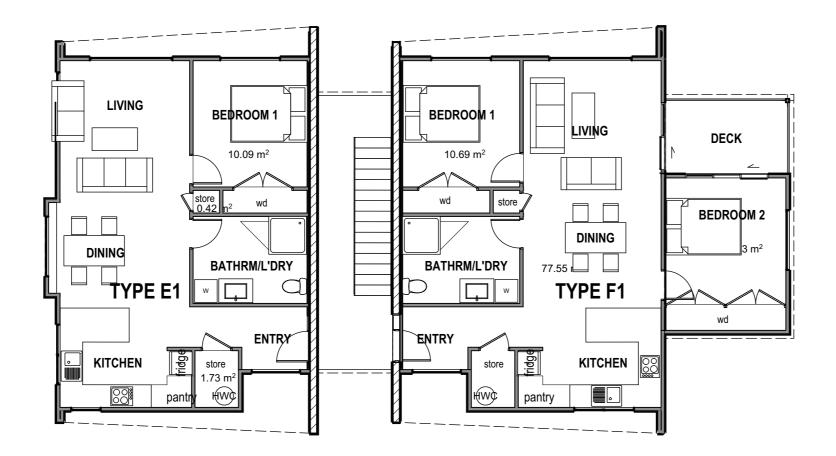
Construction NZBC Zone 1 (mins) Construction element R values Roof R6.6 tbc Walls R2.0 tbc Slab R1.5 tbc Windows R0.37 tbc HOMESTAR COMPLIANCE: Note: For compliance of Homestar (version 5) the dwelling must be calculated using a energy and carbon calculator to establish minimum thermal requirements. The calculation provides an estimate of the space heating demand for the home assuming a heating temperature of 20°C 24/7. Mandatory Minimums for 6 Homestar rating: HC1 - The main living area must have an adequately sized heating system. HC3 - All combustion appliances must be room sealed. HC4 - Windows must be thermally broken. HC4 - All junctions between external walls, floors and roofs must be demonstrated to meet the minimum fRsi factors for the respective climate zone HC4 - Ground vapour barrier must be installed to the ground below all suspended floors. EF3: Maximum delivered electricity (kWh/m2/year) associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located HC2: The home must be demonstrated	property of Cool LEGEND - Therr codes		nce Requirements to 2022			
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	HC3: Continuous extract ventilation meeting the requirements					

TYPOLOGY E GROUND FLOOR AREA 1 Bedroom Unit: 61.6 m²

TYPOLOGY F GROUND FLOOR AREA 2 Bedroom Unit: 77

77.6m²

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,		nce Requirements to 2022		
Construction	NZBC Zone 1 (mins)	Construction element R values		
Roof Walls Slab	R6.6 R2.0 R1.5	tbc tbc tbc		
Windows	R0.37	tbc		
HOMESTAR CO				
Note: For compliance of Homestar (version 5) the dwelling must be calculated using a energy and carbon calculator to establish minimum thermal requirements. The calculation provides an estimate of the space heating demand for the home assuming a heating temperature of 20°C 24/7.				
Mandatory Minimums for 6 Homestar rating: HC1 - The main living area must have an adequately sized heating system. HC3 - All doors between conditioned space and garage must				
be fully sealed. HC3 - All combustion appliances must be room sealed. HC4 - Windows must be thermally broken. HC4 - All junctions between external walls, floors and roofs must be demonstrated to meet the minimum fRsi factors for				
the respective climate zone HC4 -Ground vapour barrier must be installed to the ground below all suspended floors. EF3: Maximum water consumption of 165 litres per person				
per day EF4 - Maximum delivered electricity (kWh/m2/year) associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants				
HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located				
HC2: The home must be demonstrated to not exceed 25°C for more than 7% of the year or show compliance with CIBSE TM29				
HC3: Continuous must be installed		lation meeting the requirements m		

TYPOLOGY E1 FIRST FLOOR AREA 1 Bedroom Unit: 61.6m² (Design similiar to Typology E with expection of Entry)

TYPOLOGY F2 FIRST FLOOR AREA

2 Bedroom Unit:

77.6m² (Design similiar to Typology F with expection of Entry)

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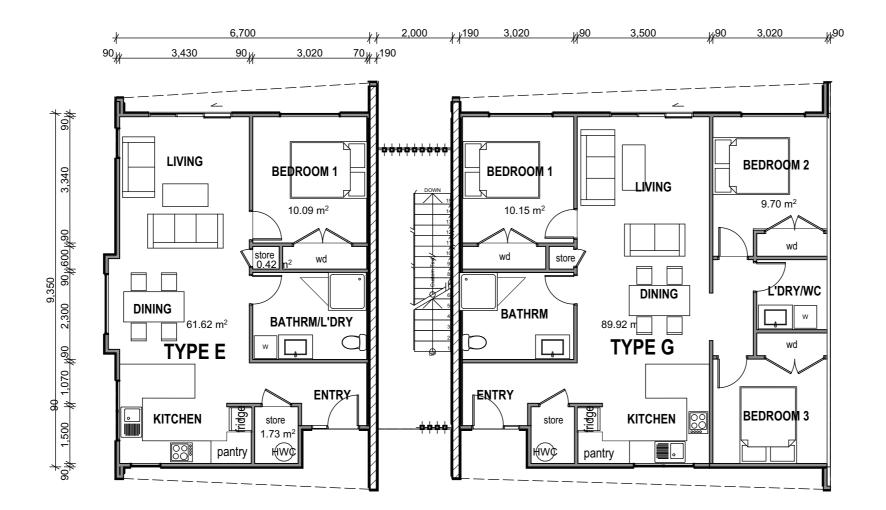
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				WHANGAREI HEIGHTS	

TYPOLOGIES E, E1, F, F1 PERSPECTIVES

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GROUND FLOOR 1:100



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DISCLAIMER

- 1. Written dimensions take precedence.
- 2. These drawings shall be read in conjunction with relevant consultants, drawings and specifications.
- 3. Construction practice shall be in accordance with NZS 3604 and the NZ Building Code.
- The Contractor shall check and verify all dimensions on site. Any discrepancy shall be referred to Architectural Office of Cook Costello.
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LEGEND - Thermal Performance Requirements to 2022 codes

Construction	NZBC Zone 1 (mins)	Construction element R values
Roof	R6.6	tbc
Walls	R2.0	tbc
Slab	R1.5	tbc
Windows	R0.37	tbc

HOMESTAR COMPLIANCE:

Note: For compliance of Homestar (version 5) the dwelling must be calculated using a energy and carbon calculator to establish minimum thermal requirements. The calculation provides an estimate of the space heating demand for the home assuming a heating temperature of 20°C 24/7.

Mandatory Minimums for 6 Homestar rating:

HC1 - The main living area must have an adequately sized heating system.

HC3 - All doors between conditioned space and garage must be fully sealed.

HC3 - All combustion appliances must be room sealed.

HC4 - Windows must be thermally broken.

HC4 - All junctions between external walls, floors and roofs must be demonstrated to meet the minimum fRsi factors for the respective climate zone

HC4 -Ground vapour barrier must be installed to the ground below all suspended floors.

EF3: Maximum water consumption of 165 litres per person

per day EF4 - Maximum delivered electricity (kWh/m2/year) associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants

HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located

HC2: The home must be demonstrated to not exceed 25°C for more than 7% of the year or show compliance with CIBSE TM29

HC3: Continuous extract ventilation meeting the requirements must be installed as a minimum

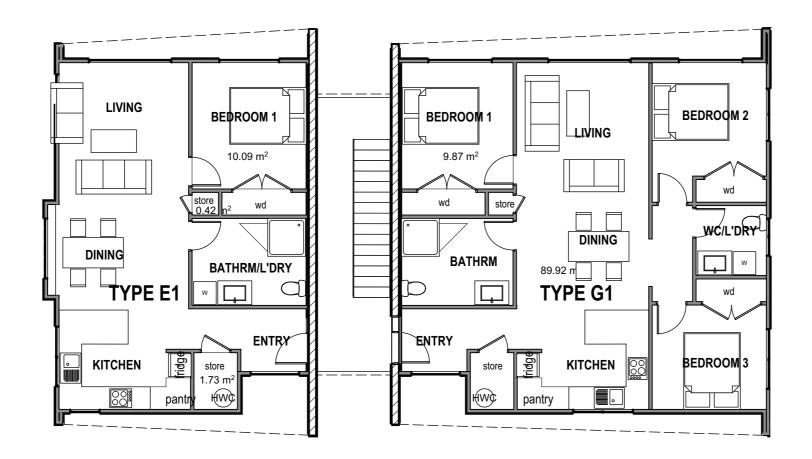
LIFEMARK COMPLIANCE: These units are designed to be easily adapted to comply with lifemark/universal design.

TYPOLOGY E GROUND FLOOR AREA 1 Bedroom Unit: 61.6 m²

TYPOLOGY G GROUND FLOOR AREA 3 Bedroom Unit: 90.0m²

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FIRST FLOOR

1:100



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 property of Cook Costello. DISCLAIMER Written dimensions take precedence. These drawings shall be read in conjunction with relevant consultants, drawings and specifications. Construction practice shall be in accordance with NZS 3604 and the NZ Building Code. The Contractor shall check and verify all dimensions on site. Any discrepancy shall be referred to Architectural Office of Cook Costello. These drawings and design are copyright and remain the property of Cook Costello. LEGEND - Thermal Performance Requirements to 2022 						
codes Construction	NZBC Zone 1	Construction element R values				
Roof Walls Slab Windows	(mins) R6.6 R2.0 R1.5 R0.37	tbc tbc tbc tbc				
HOMESTAR CO	OMPLIANCE:					
Note: For compliance of Homestar (version 5) the dwelling must be calculated using a energy and carbon calculator to establish minimum thermal requirements. The calculation provides an estimate of the space heating demand for the home assuming a heating temperature of 20°C 24/7. Mandatory Minimums for 6 Homestar rating: HC1 - The main living area must have an adequately sized heating system. HC3 - All doors between conditioned space and garage must be fully sealed. HC3 - All combustion appliances must be room sealed. HC4 - Windows must be thermally broken. HC4 - All junctions between external walls, floors and roofs						
must be demonstrated to meet the minimum fRsi factors for the respective climate zone HC4 -Ground vapour barrier must be installed to the ground below all suspended floors. EF3: Maximum water consumption of 165 litres per person						
per day EF4 - Maximum delivered electricity (kWh/m2/year) associated with operation energy (excluding appliances) based on the climate zone in which the home is located EF4: Maximum 4 kg.CO2-e/m2 onsite greenhouse gas emissions associated with space heating, hot water and refrigerants HC1: Maximum predicted demand for space heating (kWh/m2/year) based on the climate zone in which the home is located HC2: The home must be demonstrated to not exceed 25°C for						
more than 7% of the year or show compliance with CIBSE TM29						

HC3: Continuous extract ventilation meeting the requirements must be installed as a minimum

TYPOLOGY E1 FIRST FLOOR AREA1 Bedroom Unit:61.6m²(Design similiar to Typology E with exception of Entry)

TYPOLOGY G1 FIRST FLOOR AREA

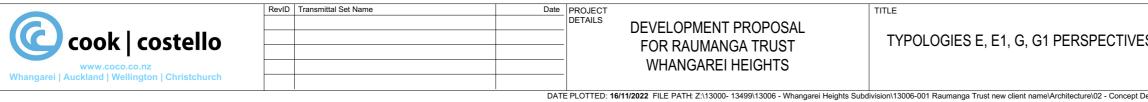
3 Bedroom Unit:

90.0m²

(Design similiar to Typology G with exception of Entry)

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