

**APPENDIX H      ENGINEERING SERVICES REPORT**

# New Beith - Precinct B

## Frasers Property Australia

### Engineering Services Report

23-0154.ESR01-V1

August 2025

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### Document Control

23-0154.ESR01-V1

Version	Date	Details	Prepared	Checked	Approved
1	14/08/2025	Original Issue	AW	DC	DC

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# 1. Introduction

Colliers Engineering & Design has been engaged by Frasers Property Australia to prepare this Civil Engineering Services Report to support the development application (DA) submission for a 262 lot residential subdivision at New Beith - Precinct B on land described as Lot 4 on SP332712 & Lot 910 on SP339534 and as shown in **Figure 1** below:



Figure 1: Site Location

This report covers the following civil infrastructure:

- Earthworks
- Sediment and Erosion Control
- Roadworks
- Sewerage Reticulation
- Water Supply
- Stormwater Quality and Quantity
- Utilities

This report will confirm that the proposed development can be adequately serviced and comply with:

- PDA Guideline No. 1 - Residential 30 (May 2015)
- PDA Guideline No. 6 - Street and Movement Network (February 2019)
- PDA Guideline No. 12 - Park Planning and Design (May 2015)
- PDA Guideline No. 13 - Engineering Standards (September 2017)
- PDA Guideline No. 15 - Protection from Flood and Storm Tide Inundation (May 2015)
- PDA Guideline No. 18 - Development Interfaces (May 2015)
- Logan City Council Planning Scheme Policy
- WSAA & SEQ Code
- Australian Standards
- Austroads & Queensland Streets

## 2. Earthworks

The development will consist of civil earthworks in accordance with AS3798-2007. Topsoil is to be stripped from the majority of the development area and used on-site where possible. Any material requiring disposal from site will be disposed of at a Council approved location in a lawful manner with acceptable haul routes to be determined at the time of construction.

The site is situated around Round Mountain which is located adjacent the central western boundary and the site generally falls north, south and east from Round Mountain with slopes up to 25-30% on the site. The site is located north of Flagstone Creek and west of the ARTC rail line.

Existing earthworks constraints over the site include, but are not limited to, existing steep crest lines and Round Mountain and steep natural surface, existing vegetation retention lines, existing waterway and creek lines including Flagstone Creek and external ARTC rail line interfacing to the east.

Precinct B largely grades from north to south to the southern legal point of discharge adjacent in Flagstone Creek.

Earthworks have been designed to minimise cut in rock, while responding to the various road typology constraints including the Mountain Ridge Road rail crossing and stormwater basins for legal points of discharge while maintaining a benched allotment outcome for the proposed residential allotments.

Generally, lots will be provided as flat benched pads with retaining walls minimised as much as is practicable. Where retaining walls are required, these will be designed at a maximum 2.5m height in the rear of property and 2.0m height on any side boundaries. Retaining walls facing public spaces and road reserves will be designed to be a higher amenity finish. There are a few lots that are split level homes to respond to the sites natural topography and these have been selectively located where they will achieve a great aspect view and accessible from the adjoining road network and rear access to green streets where appropriate.

The proposed earthworks, lot grading and retaining walls are outlined in **Appendix A** (Drawings 23-0154-P101 to 23-0154-P108) demonstrating how the steep topography is appropriately addressed through sound engineering practises. Cut fill depth hatching plans are provided in **Appendix A** (Drawings 23-0154-P116 to 23-0154-P119) to demonstrate the cut and fill locations. For any large batters, slope stability will be satisfied through the provision of a geotechnical assessment by a suitably qualified professional.

The bulk earthworks and retaining walls will be formalised through the detailed design at the EDQ Pre-Construction Package submissions phase as necessary.

## 3. Sediment & Erosion Control

Sediment and erosion control will generally comprise of clean and dirty water diversion drains, temporary sediment basin as appropriate, silt fences, early stabilisation of disturbed areas where possible and other control measures as appropriate and/or required to meet Logan City Council requirements.

Detail design of the sediment and erosion control strategy will be submitted at the Operational Works/Building Application phase. The civil works undertaken by the contractor will implement a site management plan to incorporate and achieve compliance with the sediment and erosion control strategy at the time of construction.

## 4. Roadworks

The development is proposed to be accessed via an extension of R034 from the south via a culvert crossing which extends north through the site up to the existing intersection of R034 and Mountain Ridge Road (RI004A) which is being delivered in Precinct A. This section of road infrastructure is noted as R034 & RB002 on the Greater Flagstone DCOP. The roundabout of R034 and Precinct B Entry Road (RI006A) will be provided in accordance with the Endorsed Movement Network IMP in consultation with EDQ. Refer to the Movement Network IMP prepared by SLR Consulting.

The proposed road network will consist of a range of road typologies, from Trunk Connector and Neighbourhood Connector through to Neighbourhood Access Street and Neighbourhood Laneway generally aligning with the EDQ Street and Movement Network Guideline 6. All roads will be designed in accordance with Councils planning scheme, provide access to all dwellings and allow sufficient width for turfed verges which will provide service corridors for sewerage, water, electrical and telecommunications. Typical Roads and Drainage layout plans including typical road cross sections are included in the civil engineering drawings in **Appendix A** (Drawings 23-0154-P109 to 23-0154-P115). There are proposed green streets located within Precinct B which are modified cross section to achieve more landscaping amenity on one of the verges. In these instances services will be located on the opposing verge to encourage more landscaping without impacting on infrastructure.

Road grades have been designed to achieve a safe and coherent network, to respond to the natural topography on the site, and to achieve acceptable grades for various uses across the proposed development.

Road pavement designs will be prepared and provided to EDQ where appropriate and based on CBR results taken throughout the course of construction.

It is anticipated that intersection functional layout designs will be required to be submitted as part of a Compliance Assessment approval condition.

## 5. Sewerage Reticulation

Sewer discharge from the development is proposed to be serviced via external trunk gravity sewer lines along the Flagstone Creek sewer catchment which discharge to sewer pump station FC4 being delivered by Logan Water.

The proposed connection points and internal sewerage reticulation network is outlined in **Appendix A** (Drawings 23-0154-P300 to 23-0154-P304). The internal sewerage reticulation network will be designed in accordance with the SEQ Code to connect to the main trunk sewer lines and will be formalised through detailed design at the Operational Works phase with the future EDQ Compliance Assessment and Pre-Construction Package submissions.

Refer to the Water Supply and Sewer Precinct Network Modelling Assessment prepared by H2One confirming the infrastructure sizing and network capacity to support the proposed development.

## 6. Water Supply

The development will be serviced via a DN250 water main along the extension of R034 from the South. This will create a loop network between Pebble Creek, New Beith and Flagstone City until such time that an additional connection comes into the site via Round Mountain reservoir.

Preliminary Service Advice from Logan Water indicated the following.

1. 100 lots from the proposed Frasers Development (Development Sequence 3) can be serviced:
  1. Up to a service ceiling of **50mAHD** if serviced via the **Mountain Ridge Road Supply option** - assumes DN150 supply extension along Mountain Ridge Road via preceding development sequences.
  2. Up to a service ceiling of **63mAHD** if serviced via the **PEET Supply option**.
2. Ultimately, a service ceiling of 70mAHD is planned from the LLZ nearest the Frasers Development initial stages once the network is fully developed. Source: Logan Water Partnership Task IP0010 *Greater Flagstone PDA Ultimate DMA Layout*.

It is expected that a temporary fee from the existing reservoir to the west of the site will cater for additional supply above 100 lots or alternatively a temporary water booster pump station to service Precinct B until such time that the ultimate connection to Round Mountain Reservoir is provided. This analysis will be undertaken and provided as part of a Water Network Analysis.

The proposed connection points and internal water network is outlined in **Appendix A** (Drawings 23-0154-P300 to 23-0154-P304) and will be formalised, including documentation in accordance with the South East Queensland Water Supply and Sewerage Design and Construction Code (SEQ D&C Code), through detailed design at the Operational Works phase with the future EDQ Compliance Assessment and Pre-Construction Package submissions.

Refer to the Water Supply and Sewer Precinct Network Modelling Assessment prepared by H2One confirming the infrastructure sizing and network capacity to support the proposed development.

## 7. Stormwater Quality & Quantity

The proposed development will achieve no-worsening of the upstream and downstream waterways through the implementation of a stormwater management plan.

Stormwater Quality objectives are met as required by the Logan City Council Planning Scheme Policy and State Planning Policy (SPP). Specifically, the water quality objectives for post development will be satisfied through the implementation of best practise end of line stormwater quality bio-filtration basins. These have been adequately sized to effectively mitigate the pollutant loads generated from the site to the SPP pollutant load reduction targets.

Concept Stormwater Basin layout plans are outlined in **Appendix A** (Drawings 23-0154-P200 to 23-0154-P201).

For further details with respect to stormwater management, please refer to the following reports:

- New Beith Precinct B – Stormwater Quality Management Plan (DesignFlow, April 2025).
- New Beith, Flagstone Creek Flood Study (DesignFlow, March 2025).

## 8. Utilities

The site will be serviced with electrical and telecommunication reticulation with agreements entered into by the relevant service providers. Adequate service corridors will be provided to enable service connection with designs being undertaken in accordance with a suitably qualified electrical consultant at the Operational Works/Building Application phase as necessary.

## 9. Conclusion

This report is accompanied with concept engineering drawings and supporting documentation to demonstrate that the development can be adequately serviced in accordance with Council's standards and guidelines.

We therefore request EDQ approval of the engineering components for the proposed development with reasonable and relevant conditions.

# NEW BEITH - PRECINCT B

## MOUNTAIN RIDGE ROAD, NEW BEITH

### FOR 'FRASERS PROPERTY AUSTRALIA'

#### DRAWING LIST

#### EARTHWORKS, ROADWORKS AND DRAINAGE

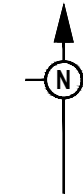
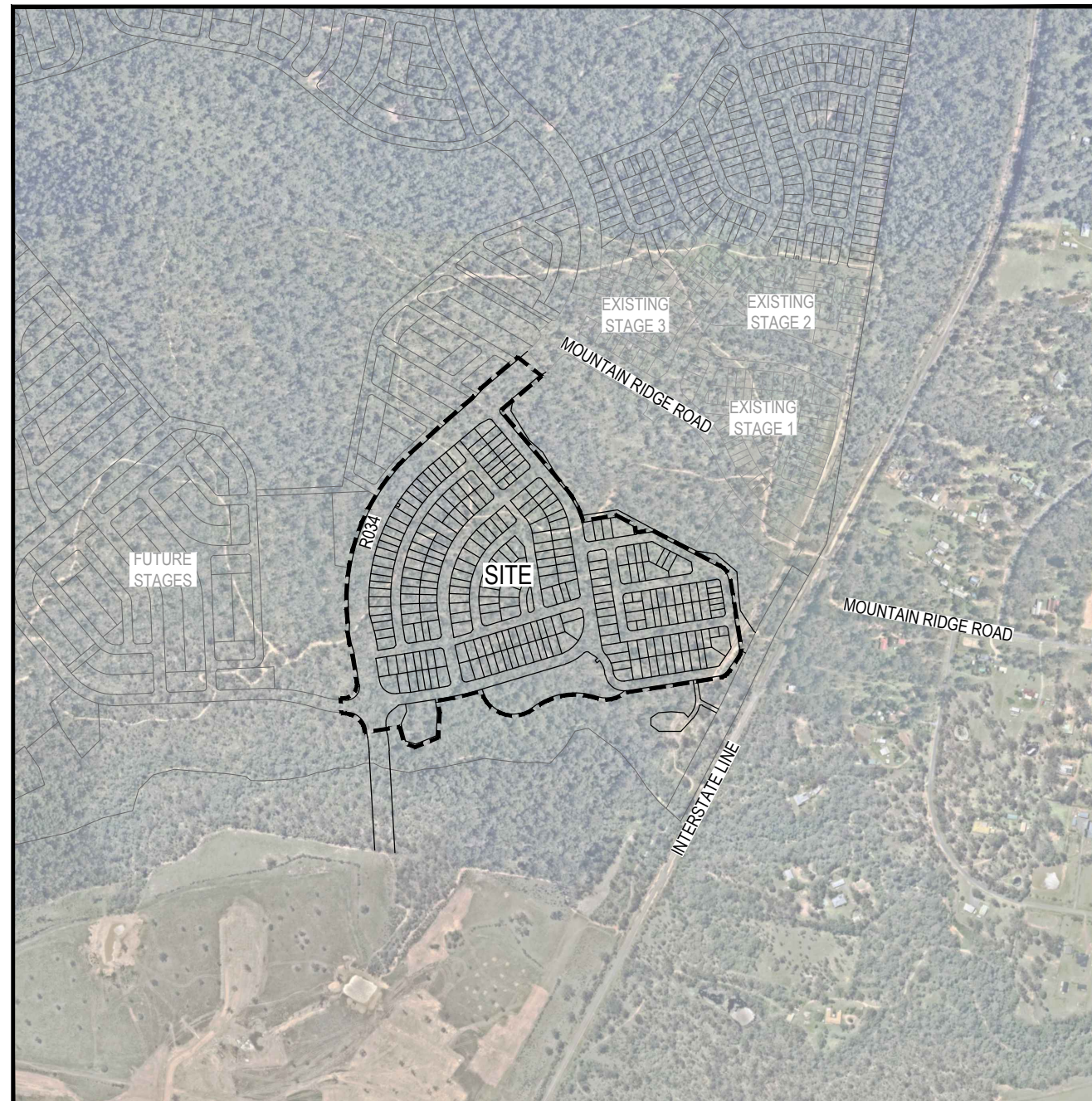
- 23-0154-P100 COVER PLAN
- 23-0154-P101 CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 1 OF 5
- 23-0154-P102 CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 2 OF 5
- 23-0154-P103 CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 3 OF 5
- 23-0154-P104 CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 4 OF 5
- 23-0154-P105 CONCEPT BULK EARTHWORKS LAYOUT PLAN SHEET 5 OF 5
- 23-0154-P106 CONCEPT BULK EARTHWORKS TYPICAL SECTIONS SHEET 1 OF 3
- 23-0154-P107 CONCEPT BULK EARTHWORKS TYPICAL SECTIONS SHEET 2 OF 3
- 23-0154-P108 CONCEPT BULK EARTHWORKS TYPICAL SECTIONS SHEET 3 OF 3
- 23-0154-P109 CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 1 OF 5
- 23-0154-P110 CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2 OF 5
- 23-0154-P111 CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 3 OF 5
- 23-0154-P112 CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 4 OF 5
- 23-0154-P113 CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 5 OF 5
- 23-0154-P114 CONCEPT ROADWORKS AND DRAINAGE TYPICAL ROAD SECTIONS SHEET 1 OF 2
- 23-0154-P115 CONCEPT ROADWORKS AND DRAINAGE TYPICAL ROAD SECTIONS SHEET 2 OF 2
- 23-0154-P116 CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 1 OF 5
- 23-0154-P117 CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 2 OF 5
- 23-0154-P118 CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 3 OF 5
- 23-0154-P119 CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 4 OF 5
- 23-0154-P120 CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 5 OF 5
- 23-0154-P121 CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 1 OF 5
- 23-0154-P122 CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 5
- 23-0154-P123 CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 3 OF 5
- 23-0154-P124 CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 4 OF 5
- 23-0154-P125 CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 5 OF 5

#### STORMWATER QUALITY

- 23-0154-P200 CONCEPT BIO RETENTION LAYOUT PLAN SHEET 1 OF 2
- 23-0154-P201 CONCEPT BIO RETENTION LAYOUT PLAN SHEET 2 OF 2


#### SEWERAGE AND WATER RETICULATION

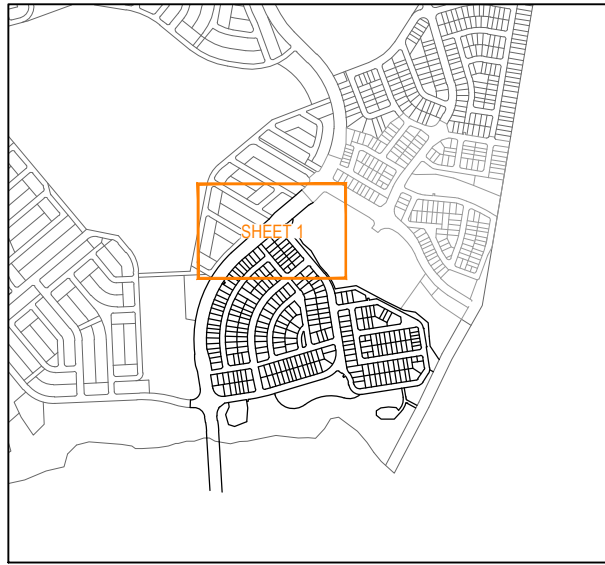
- 23-0154-P300 CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 1 OF 5
- 23-0154-P301 CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 2 OF 5
- 23-0154-P302 CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 3 OF 5
- 23-0154-P303 CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 4 OF 5
- 23-0154-P304 CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 5 OF 5



PROJECT INFORMATION SUMMARY:	
No. OF LOTS =	262
AREA OF SITE =	21.90 ha
RP DESCRIPTION	
LOT 4 ON SP 332712	
LOT 910 ON SP 339534	
LOCAL AUTHORITY: LOGAN CITY COUNCIL	

LOCALITY PLAN  
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SCALE 1:10000 (A3)

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FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD													



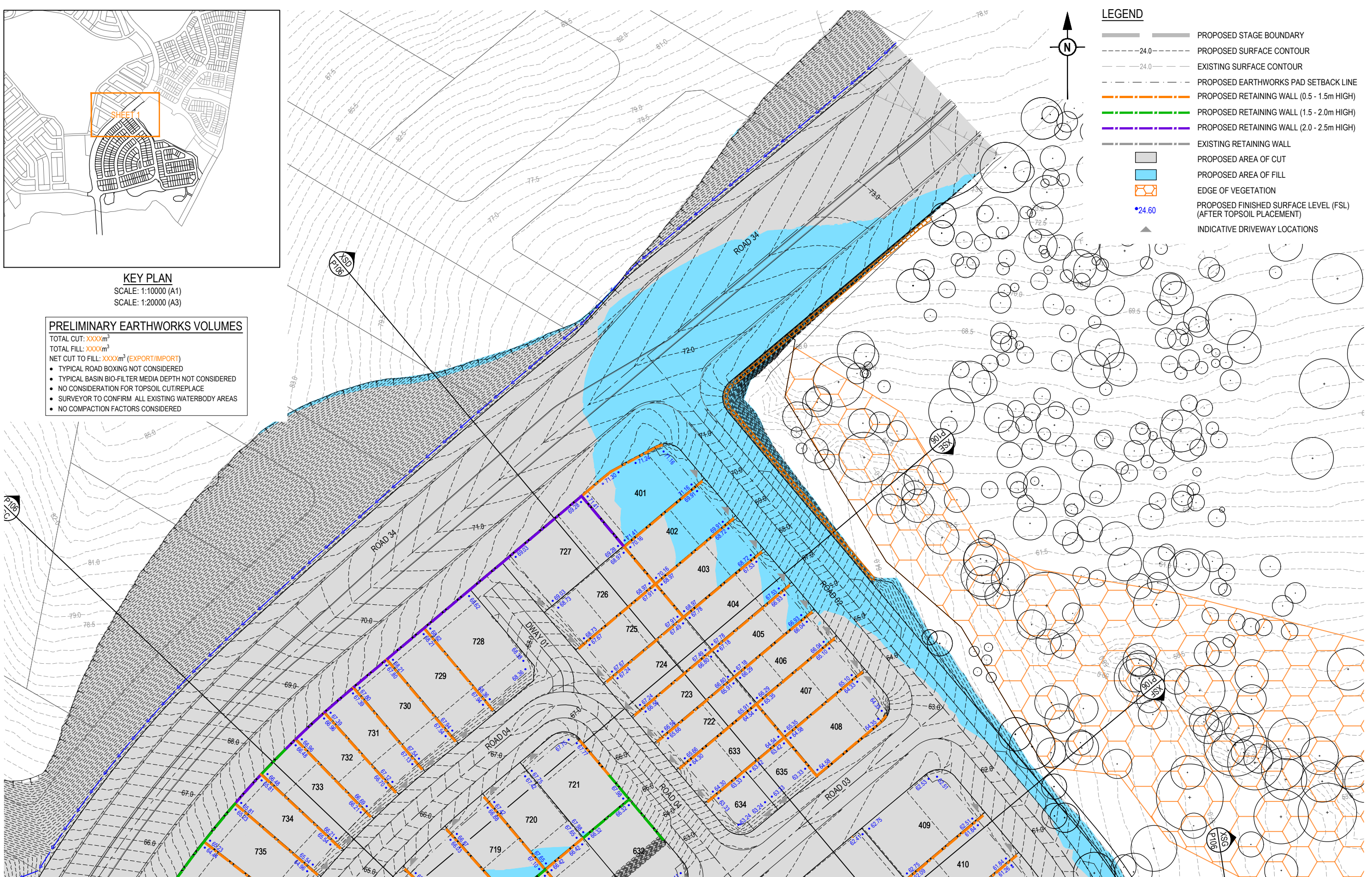
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**PRELIMINARY EARTHWORKS VOLUMES**

- TOTAL CUT: XXXXm<sup>3</sup>  
 TOTAL FILL: XXXXm<sup>3</sup>  
 NET CUT TO FILL: XXXXm<sup>3</sup> (EXPORT/IMPORT)
- TYPICAL ROAD BOXING NOT CONSIDERED
  - TYPICAL BASIN BIO-FILTER MEDIA DEPTH NOT CONSIDERED
  - NO CONSIDERATION FOR TOPSOIL CUT/REPLACE
  - SURVEYOR TO CONFIRM ALL EXISTING WATERBODY AREAS
  - NO COMPACTION FACTORS CONSIDERED

**LEGEND**

- PROPOSED STAGE BOUNDARY
- PROPOSED SURFACE CONTOUR
- EXISTING SURFACE CONTOUR
- PROPOSED EARTHWORKS PAD SETBACK LINE
- PROPOSED RETAINING WALL (0.5 - 1.5m HIGH)
- PROPOSED RETAINING WALL (1.5 - 2.0m HIGH)
- PROPOSED RETAINING WALL (2.0 - 2.5m HIGH)
- EXISTING RETAINING WALL
- PROPOSED AREA OF CUT
- PROPOSED AREA OF FILL
- EDGE OF VEGETATION
- PROPOSED FINISHED SURFACE LEVEL (FSL) (AFTER TOPSOIL PLACEMENT)
- INDICATIVE DRIVEWAY LOCATIONS



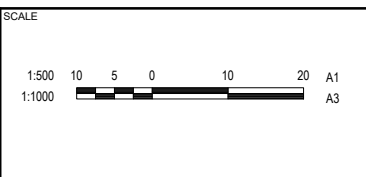
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REFER SHEET 3 FOR CONTINUATION

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DESIGN: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25
FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

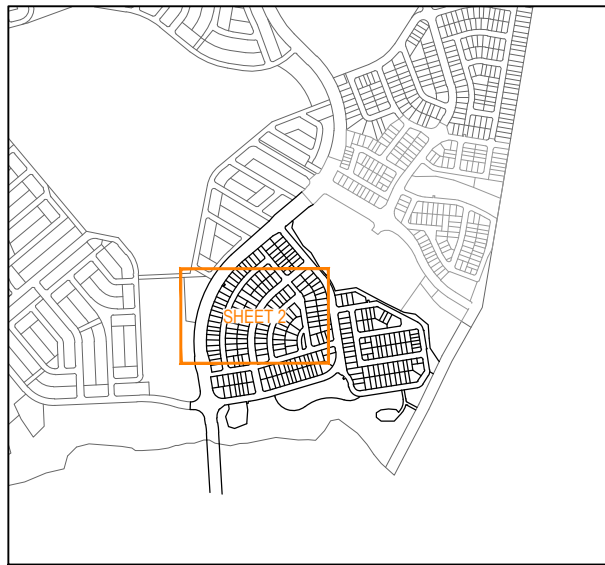
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PROJECT NAME: **NEW BEITH - PRECINCT B**

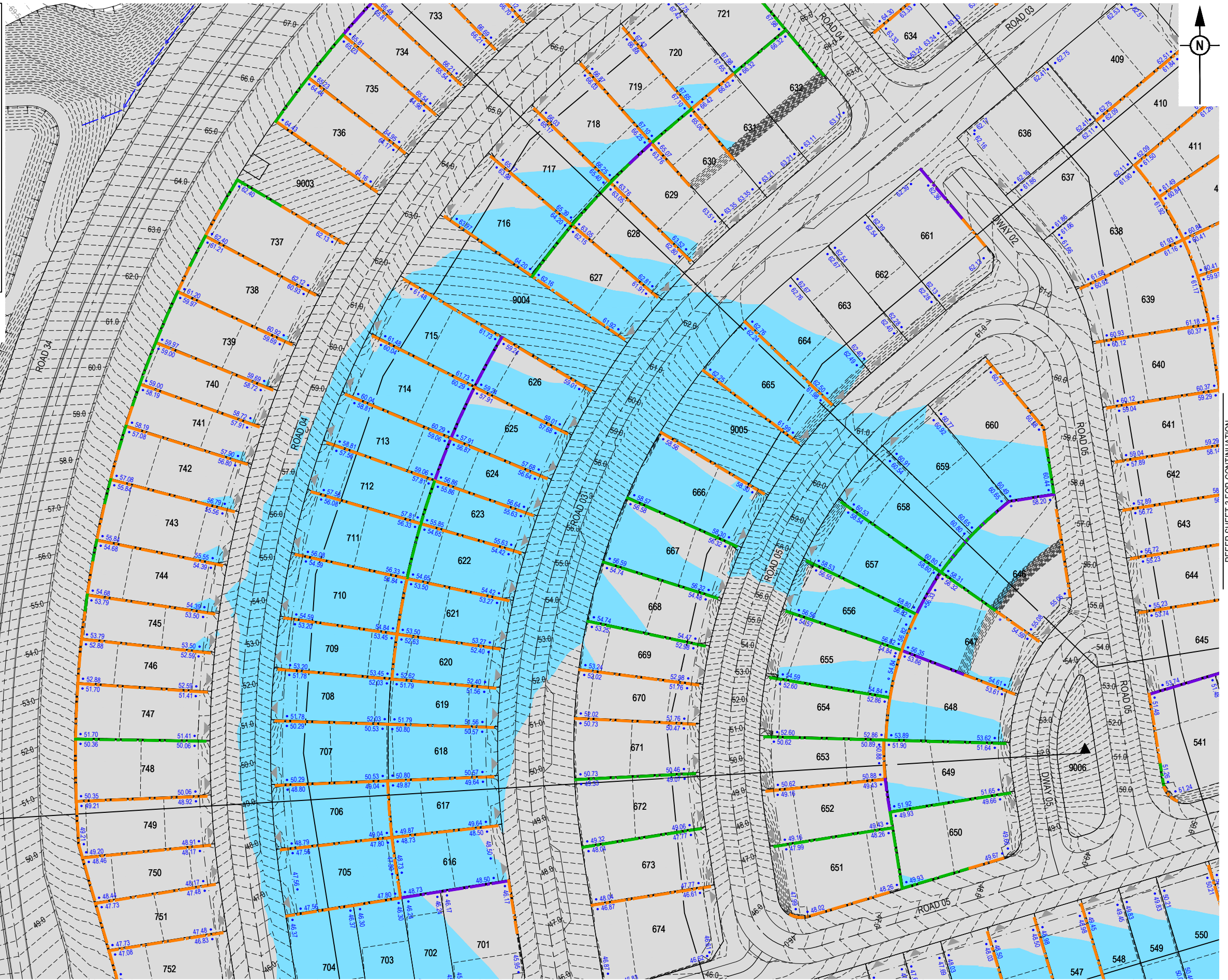
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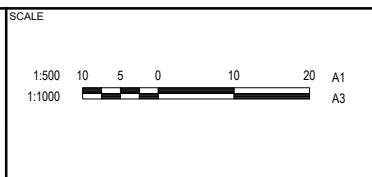
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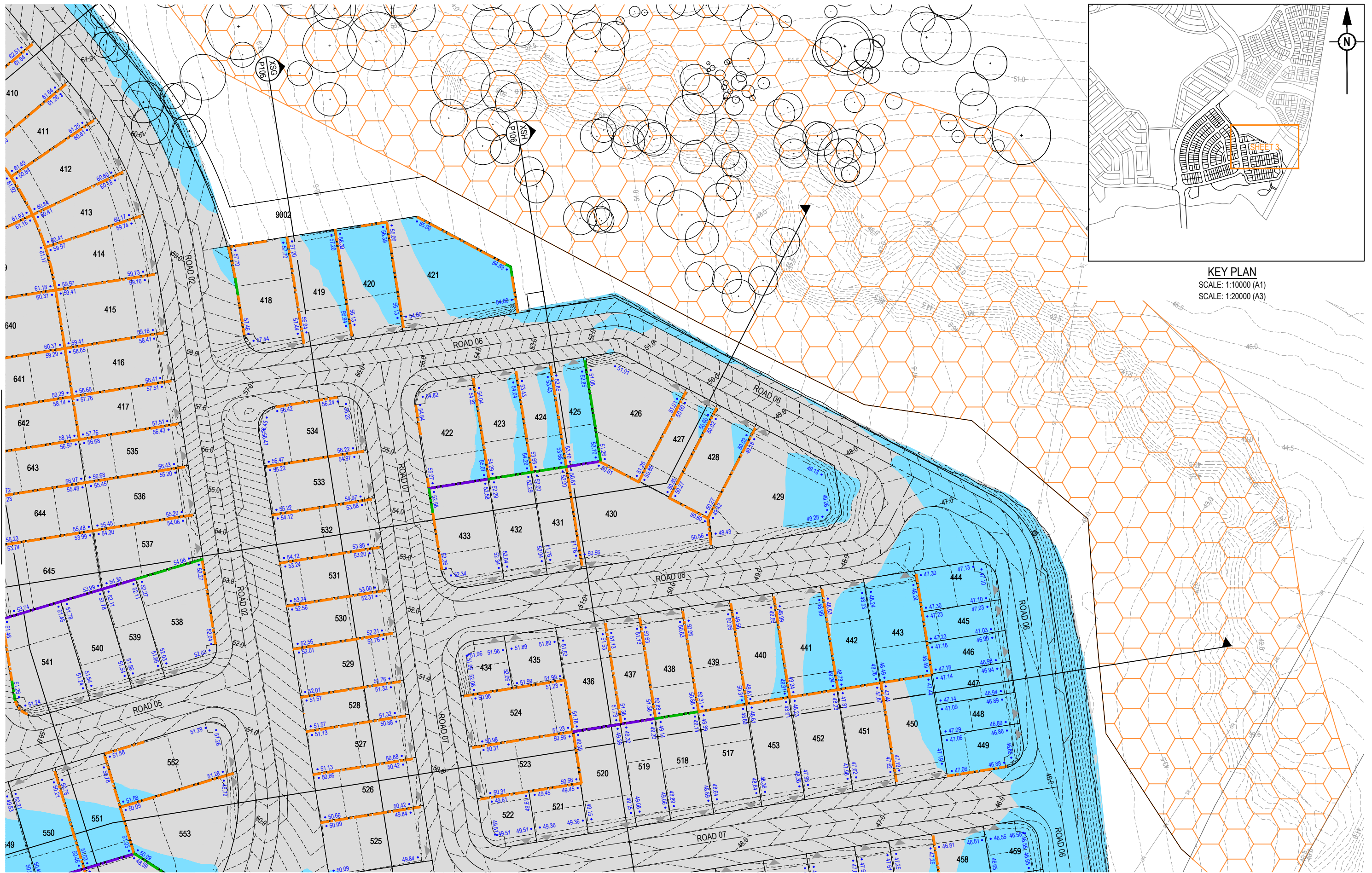


CLIENT	FRASERS PROPERTY AUSTRALIA
ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

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	MOUNTAIN RIDGE ROAD NEW BEITH

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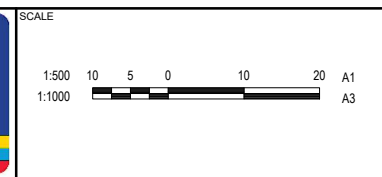


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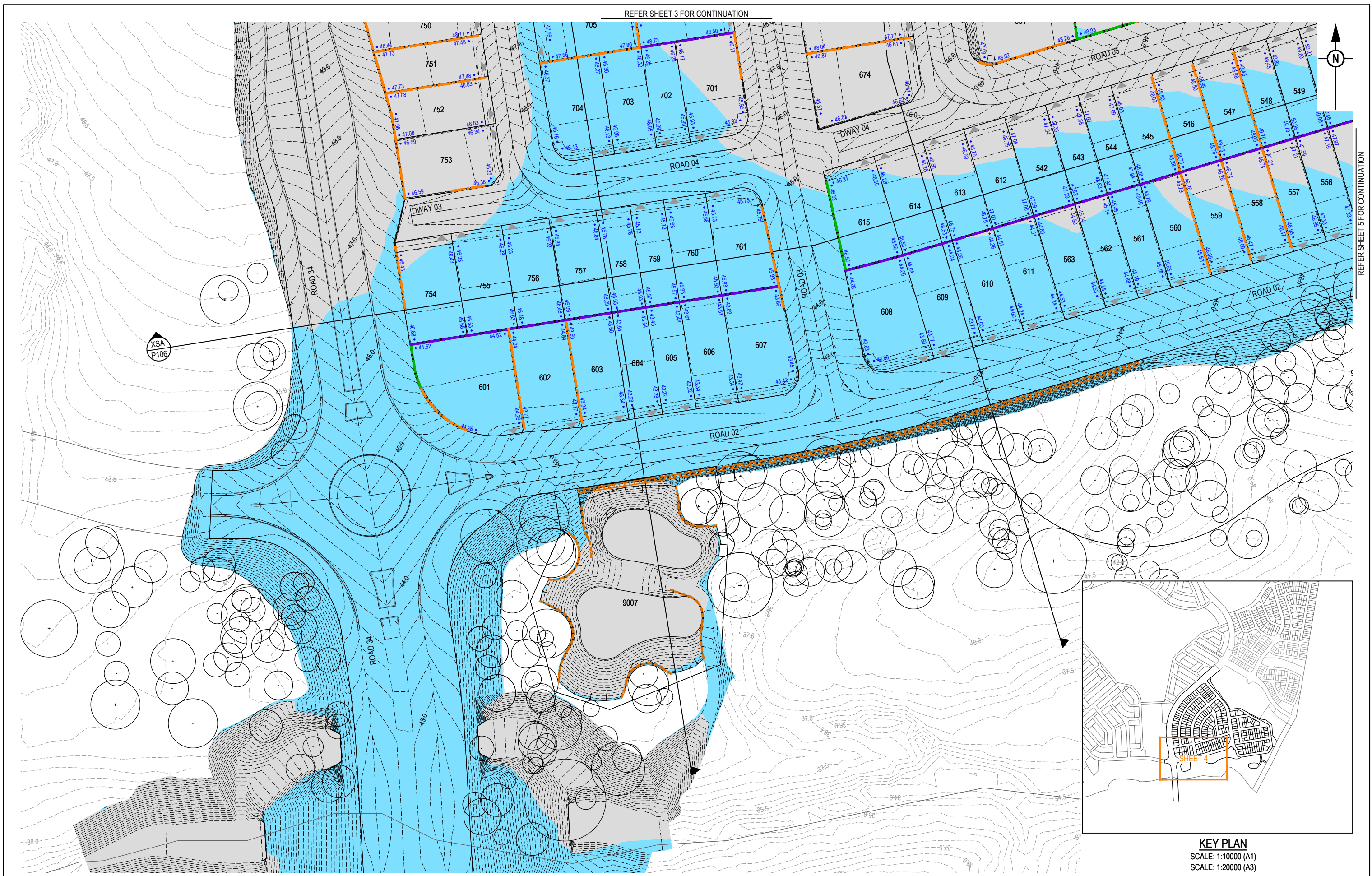
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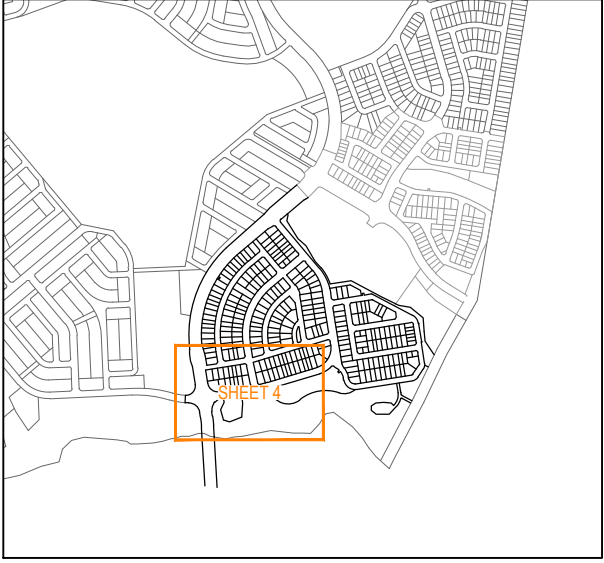
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ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

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MOUNTAIN RIDGE ROAD NEW BEITH	

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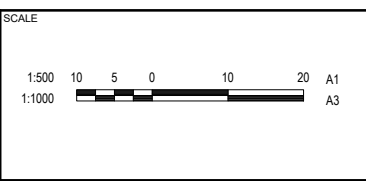
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DESIGN APPROVED <b>DANIEL COLLINS</b>
DATE 14.08.25
RPEQ 18631



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

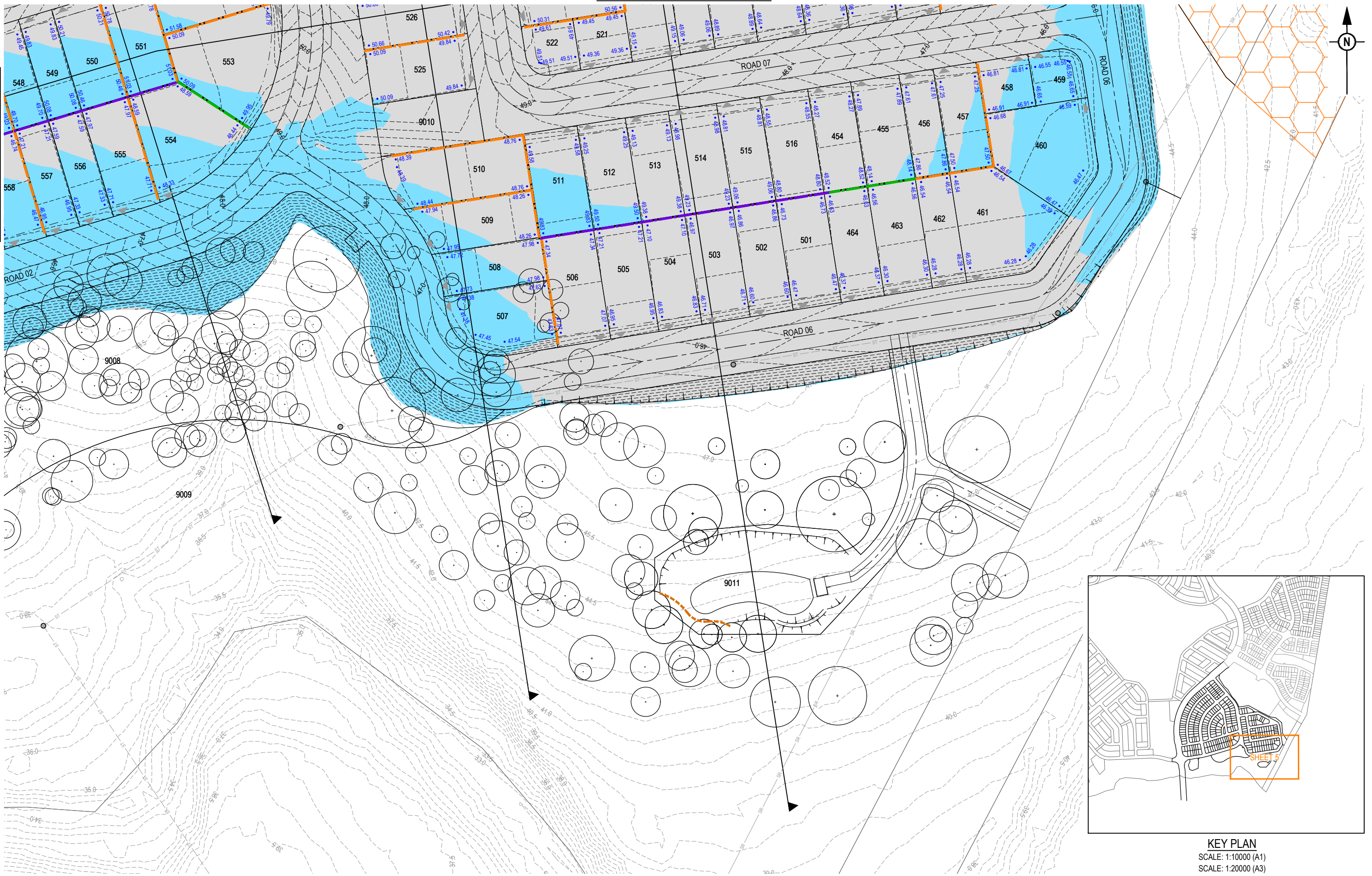
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MOUNTAIN RIDGE ROAD  
NEW BEITH

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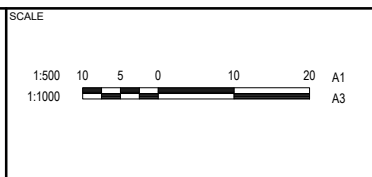
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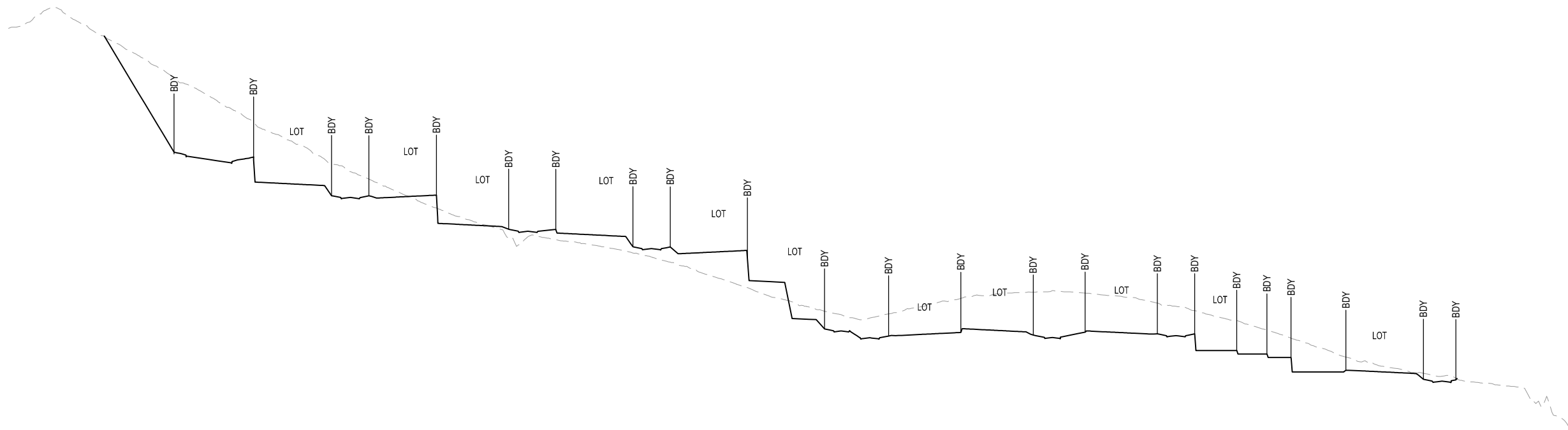
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FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD	



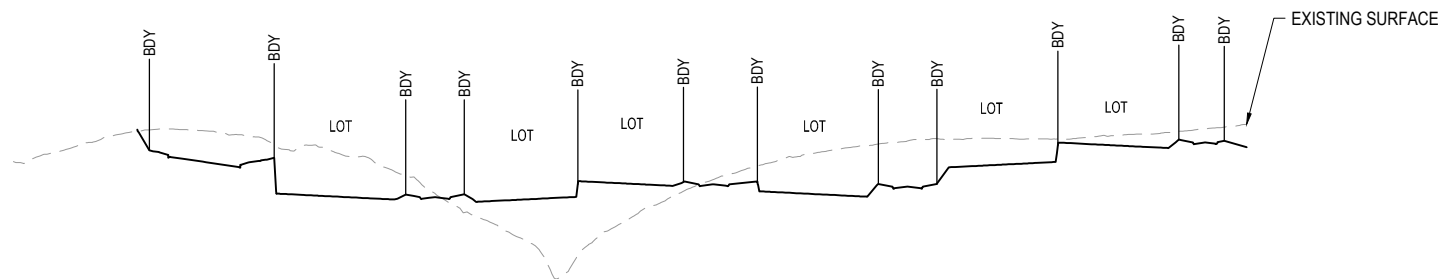
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ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

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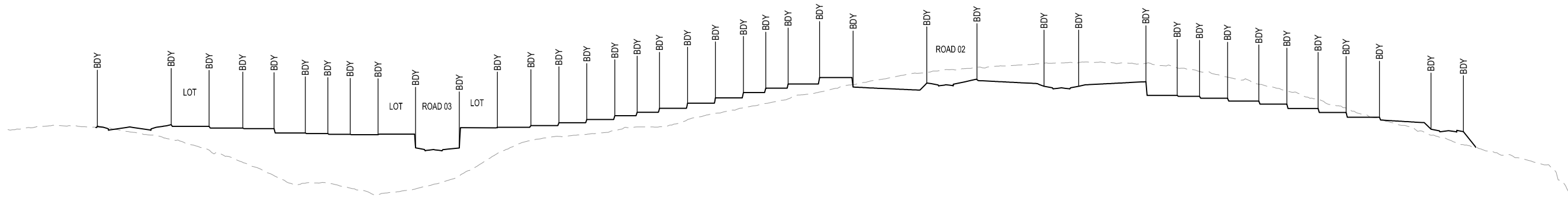
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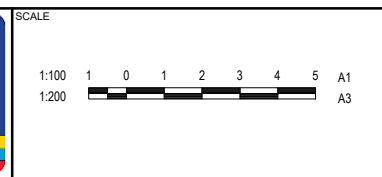
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DRAWN	STATUS
DESIGN	APPROVED
<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>	
DANIEL COLLINS RPEQ 18631 DATE 14.08.25	
<small>FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING &amp; DESIGN PTY LTD</small>	



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

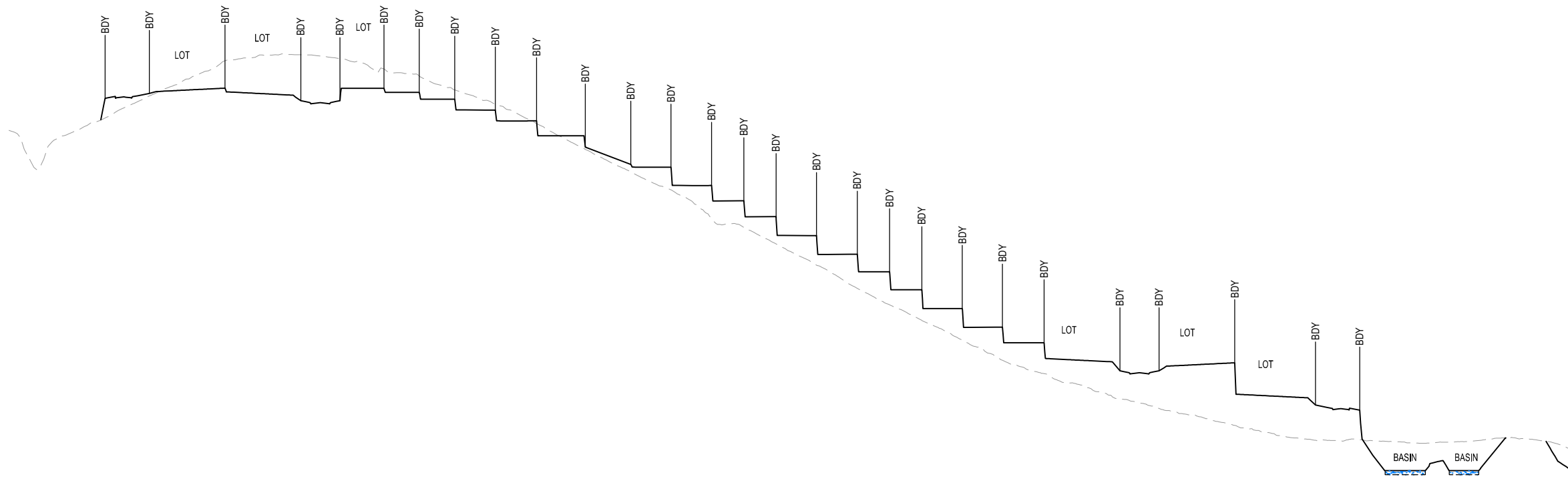
ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

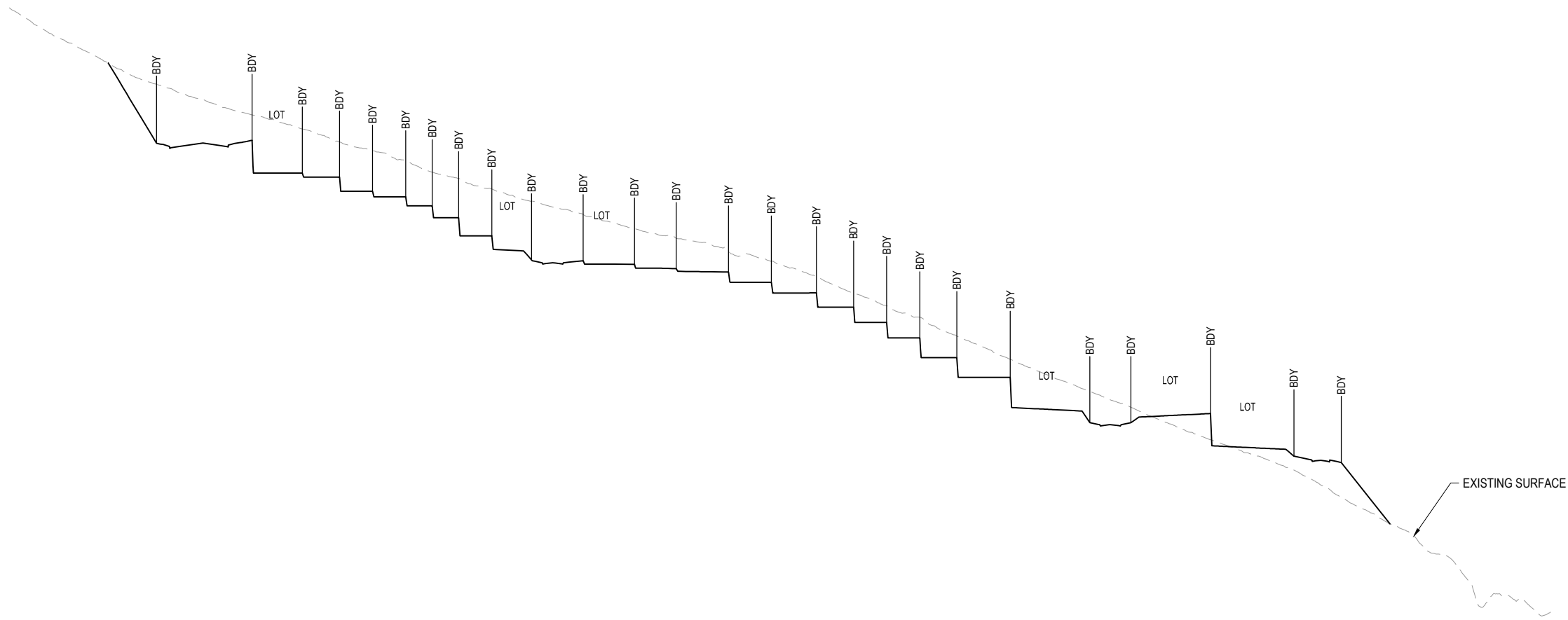
MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE  
**CONCEPT BULK EARTHWORKS  
TYPICAL SECTIONS SHEET 1 OF 3**

PROJECT No. **23-0154**  
DRAWING No. **P106**  
REVISION **A**



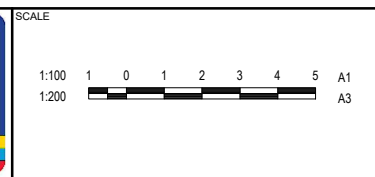
RL35.000  
**SECTION E**  
 SCALE 1:100 (A1)  
 SCALE 1:200 (A3)



RL34.000  
**SECTION D**  
 SCALE 1:100 (A1)  
 SCALE 1:200 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>		
DESIGN	APPROVED DANIEL COLLINS	RPEQ 18631	DATE 14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD			



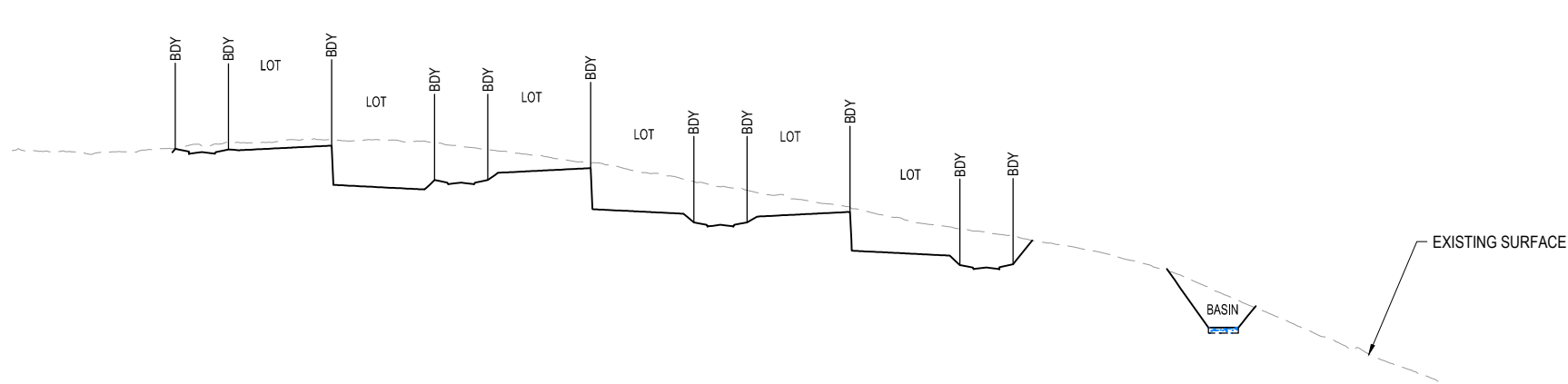
CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
 RPS GROUP  
 (07) 3539 9500

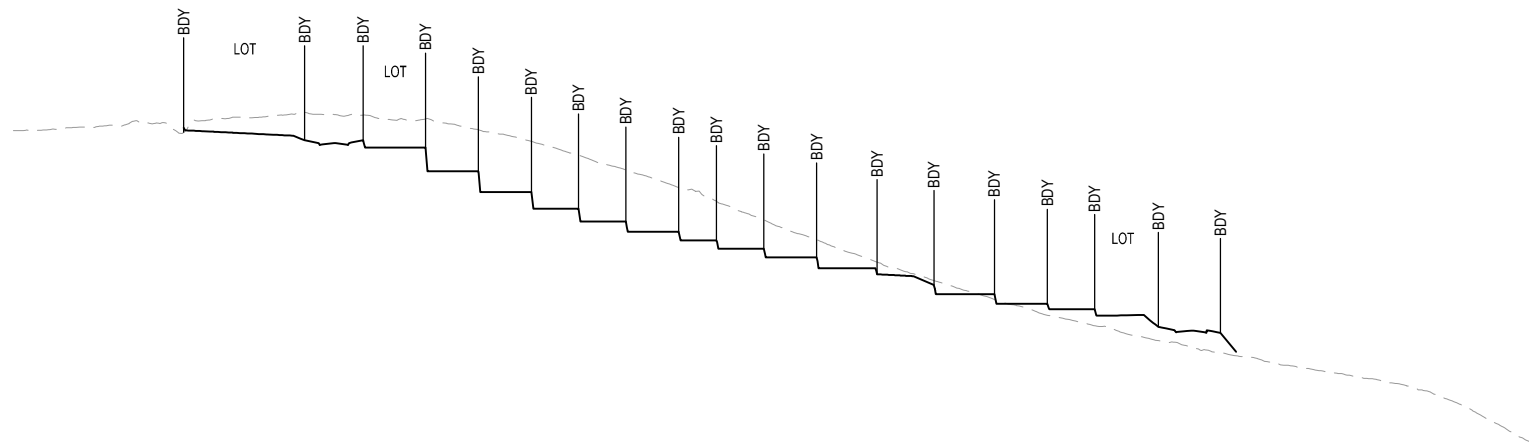
PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
 NEW BEITH

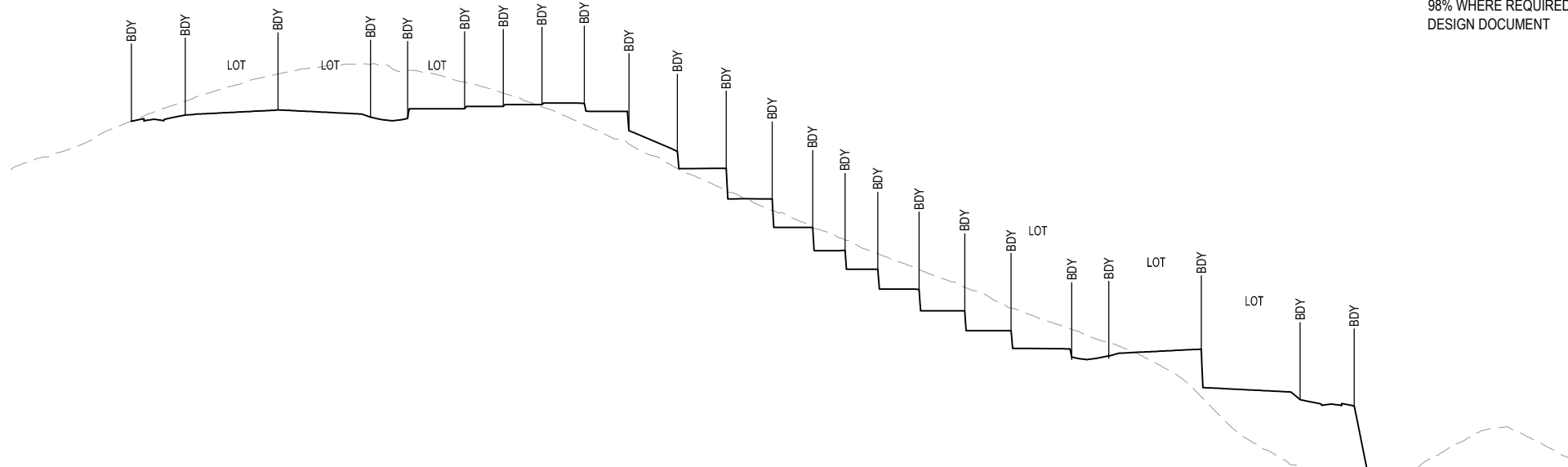
DRAWING TITLE <b>CONCEPT BULK EARTHWORKS TYPICAL SECTIONS SHEET 2 OF 3</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P107</b>	REVISION <b>A</b>



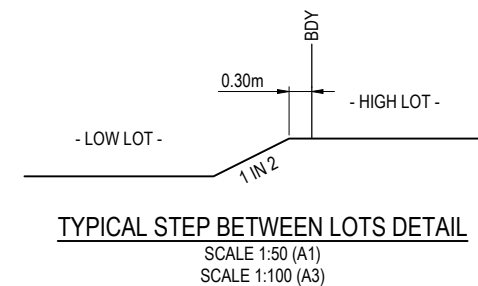
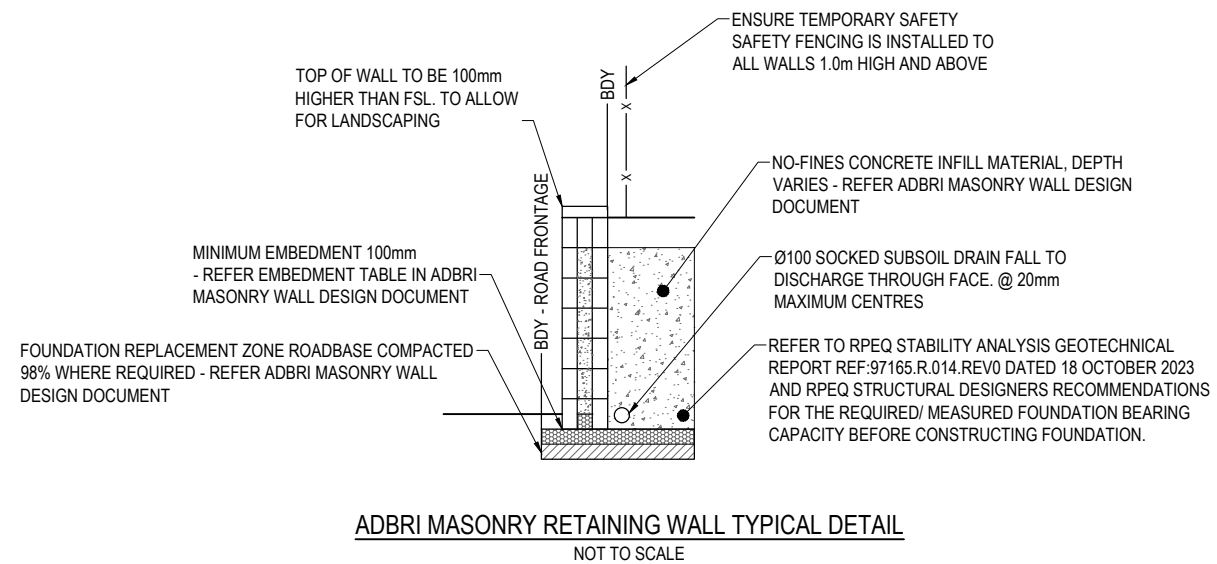
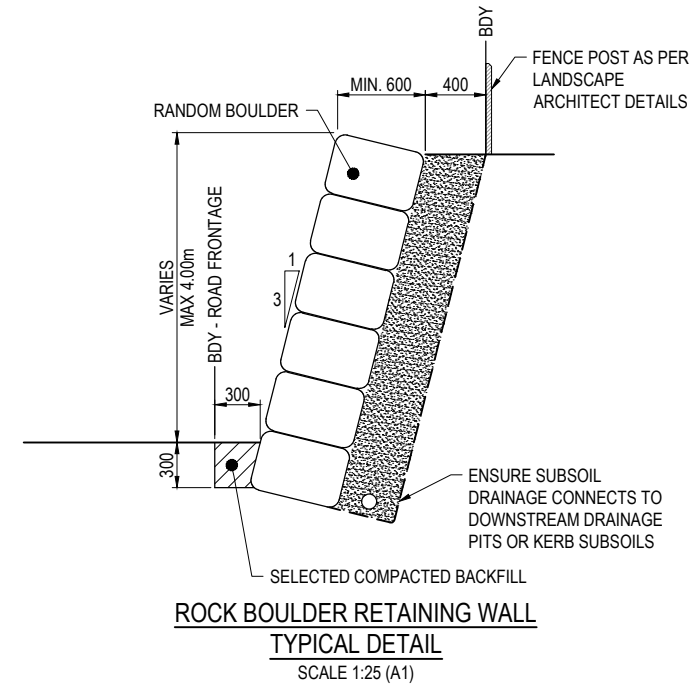
RL37.000  
SECTION H  
SCALE 1:100 (A1)  
SCALE 1:200 (A3)



RL39.000  
SECTION G  
SCALE 1:100 (A1)  
SCALE 1:200 (A3)



RL37.000  
SECTION F  
SCALE 1:100 (A1)  
SCALE 1:200 (A3)



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

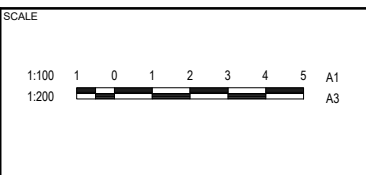
STATUS  
**FOR DEVELOPMENT APPLICATION  
NOT FOR CONSTRUCTION**

DESIGN APPROVED  
DANIEL COLLINS

RPEQ 18631

DATE  
14.08.25

FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

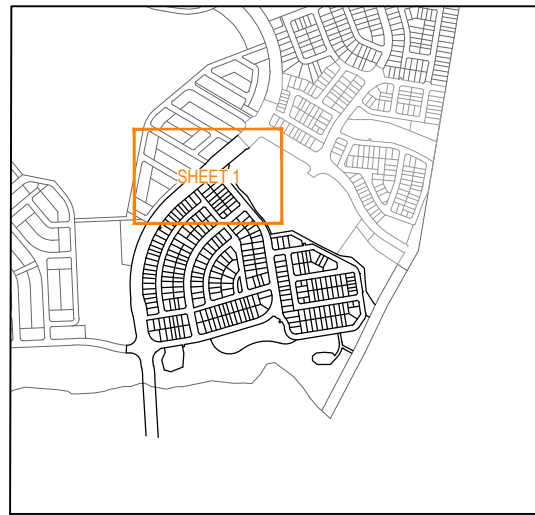
MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE  
**CONCEPT BULK EARTHWORKS  
TYPICAL SECTIONS SHEET 3 OF 3**

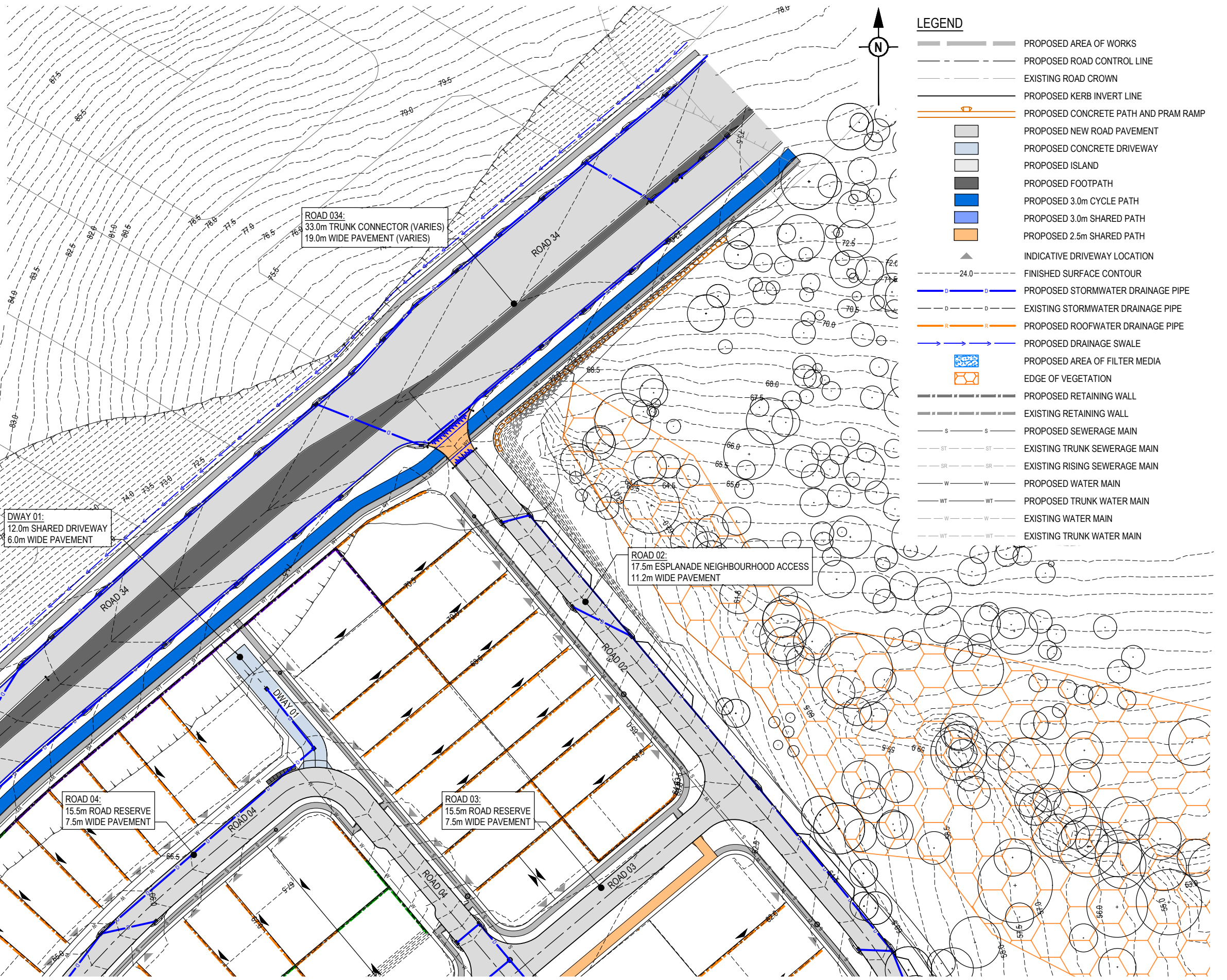
PROJECT No.  
**23-0154**

DRAWING No.  
**P108**

REVISION  
**A**



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)



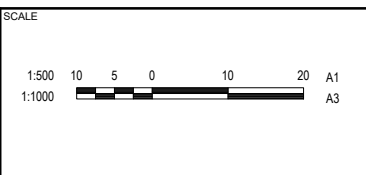
- LEGEND**
- PROPOSED AREA OF WORKS
  - PROPOSED ROAD CONTROL LINE
  - EXISTING ROAD CROWN
  - PROPOSED KERB INVERT LINE
  - PROPOSED CONCRETE PATH AND PRAM RAMP
  - PROPOSED NEW ROAD PAVEMENT
  - PROPOSED CONCRETE DRIVEWAY
  - PROPOSED ISLAND
  - PROPOSED FOOTPATH
  - PROPOSED 3.0m CYCLE PATH
  - PROPOSED 3.0m SHARED PATH
  - PROPOSED 2.5m SHARED PATH
  - ▲ INDICATIVE DRIVEWAY LOCATION
  - 24.0- FINISHED SURFACE CONTOUR
  - PROPOSED STORMWATER DRAINAGE PIPE
  - EXISTING STORMWATER DRAINAGE PIPE
  - PROPOSED ROOFWATER DRAINAGE PIPE
  - PROPOSED DRAINAGE SWALE
  - PROPOSED AREA OF FILTER MEDIA
  - EDGE OF VEGETATION
  - PROPOSED RETAINING WALL
  - EXISTING RETAINING WALL
  - PROPOSED SEWERAGE MAIN
  - EXISTING TRUNK SEWERAGE MAIN
  - EXISTING RISING SEWERAGE MAIN
  - PROPOSED WATER MAIN
  - PROPOSED TRUNK WATER MAIN
  - EXISTING WATER MAIN
  - EXISTING TRUNK WATER MAIN

REFER SHEET 2 FOR CONTINUATION

REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DESIGN APPROVED DANIEL COLLINS
DATE 14.08.25
PROJECT NO. RPEQ 18631



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

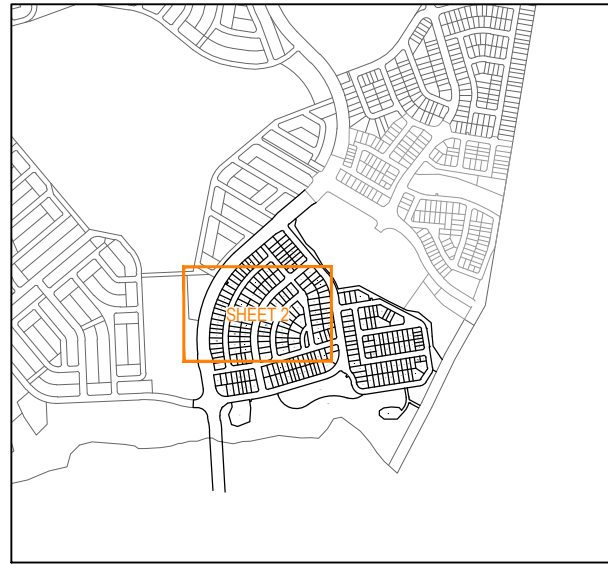
ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE <b>CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 1 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P109</b>	REVISION <b>A</b>

REFER SHEET 1 FOR CONTINUATION



**KEY PLAN**  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

**ROAD 034:**  
33.0m TRUNK CONNECTOR (VARIES)  
19.0m WIDE PAVEMENT (VARIES)

**ROAD 04:**  
15.5m NEIGHBOURHOOD ACCESS  
7.5m WIDE PAVEMENT

**ROAD 03:**  
19.5m GREEN NEIGHBOURHOOD ACCESS  
9.3m WIDE PAVEMENT

**ROAD 05:**  
15.5m NEIGHBOURHOOD ACCESS  
7.5m WIDE PAVEMENT

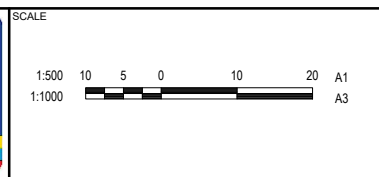
**DWAY 02:**  
12.0m SHARED DRIVEWAY  
6.0m WIDE PAVEMENT

**DWAY 05:**  
12.0m SHARED DRIVEWAY  
6.0m WIDE PAVEMENT

REFER SHEET 4 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DRAWN: DANIEL COLLINS STATUS: APPROVED DESIGN: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25 <small>FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING &amp; DESIGN PTY LTD</small>



CLIENT: **FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: **NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE: **CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 2 OF 5**

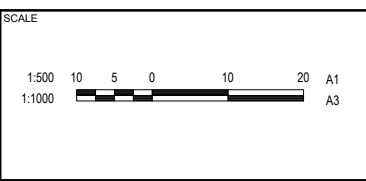
PROJECT No: 23-0154  
DRAWING No: P110  
REVISION: A

REFER SHEET 3 FOR CONTINUATION



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	STATUS	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>	
DESIGN	APPROVED	DANIEL COLLINS	RPEQ 18631
	DATE		14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD			



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE <b>CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 3 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P111</b>	REVISION <b>A</b>

REFER SHEET 5 FOR CONTINUATION

REFER SHEET 2 FOR CONTINUATION

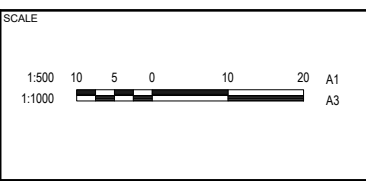


REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
NOT FOR CONSTRUCTION**

DESIGN APPROVED: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25

FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: FRASERS PROPERTY AUSTRALIA

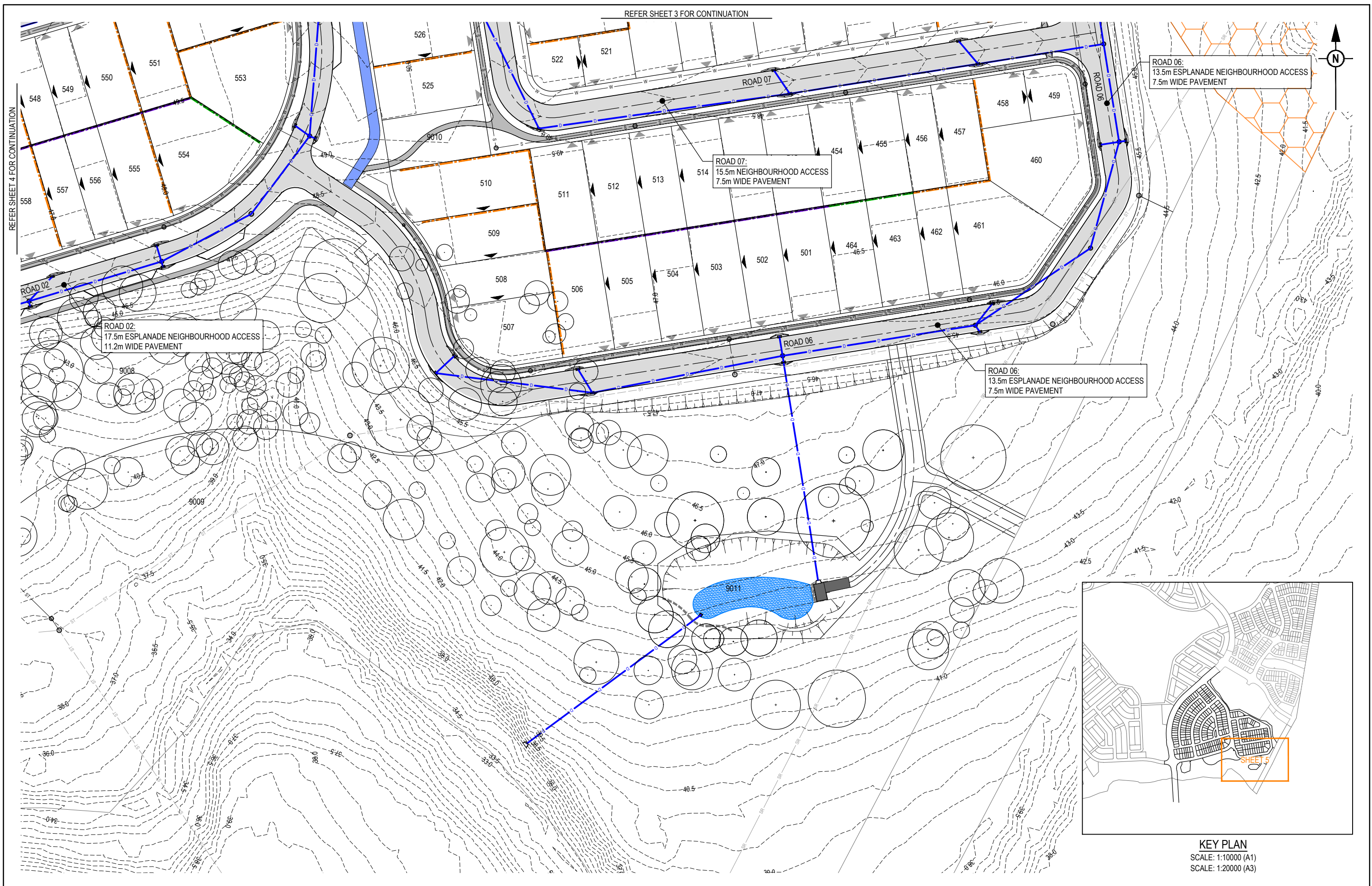
ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: NEW BEITH - PRECINCT B

MOUNTAIN RIDGE ROAD  
NEW BEITH

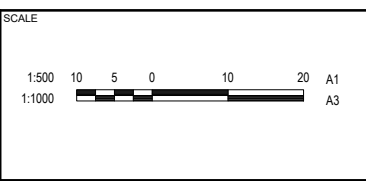
DRAWING TITLE: CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 4 OF 5

PROJECT No: 23-0154  
DRAWING No: P112  
REVISION: A



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

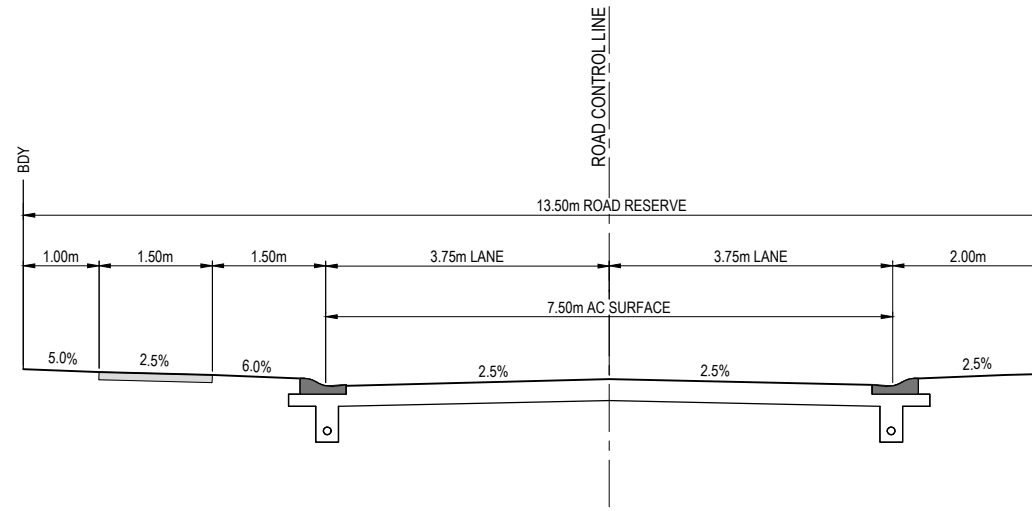
**FOR DEVELOPMENT APPLICATION  
NOT FOR CONSTRUCTION**  
 DESIGN APPROVED: DANIEL COLLINS  
 RPEQ 18631 DATE: 14.08.25  
 FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**  
 ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

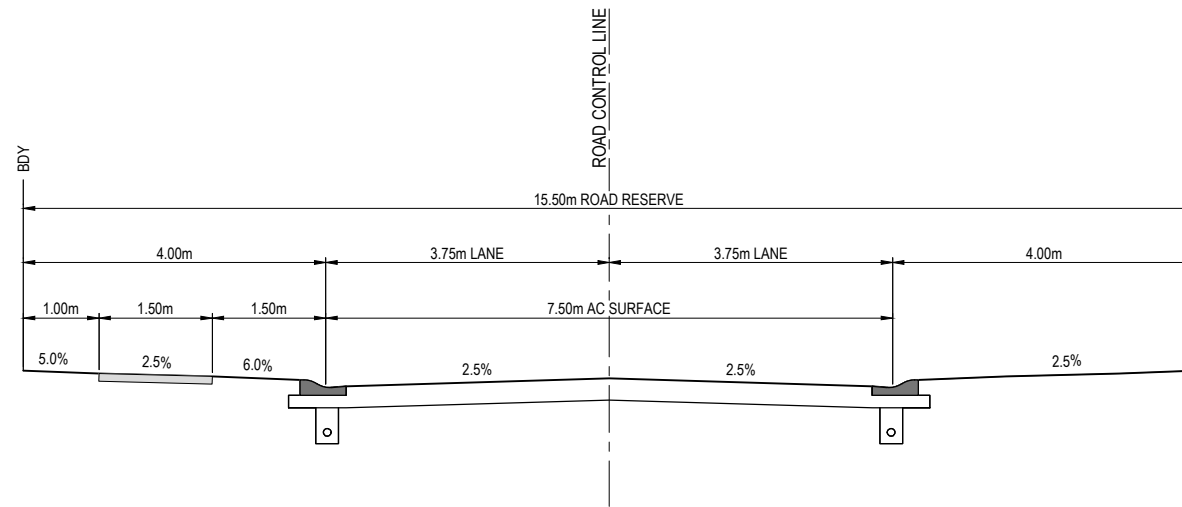
PROJECT NAME: **NEW BEITH - PRECINCT B**  
 MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE: **CONCEPT ROADWORKS AND DRAINAGE LAYOUT PLAN SHEET 5 OF 5**  
 PROJECT No: 23-0154  
 DRAWING No: P113  
 REVISION: A



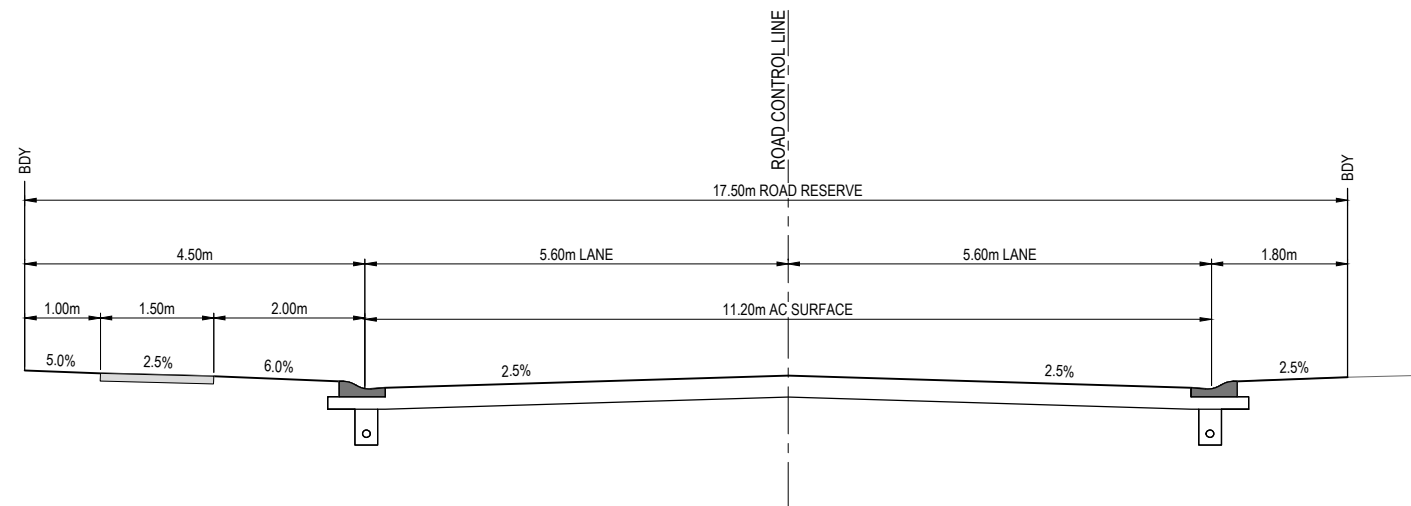
13.5m ROAD RESERVE - ESPLANADE ACCESS - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)



15.50m ROAD RESERVE - NEIGHBOURHOOD ACCESS - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)

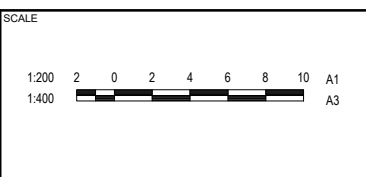


17.50m ROAD RESERVE - ESPLANADE NEIGHBOURHOOD CONNECTOR - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

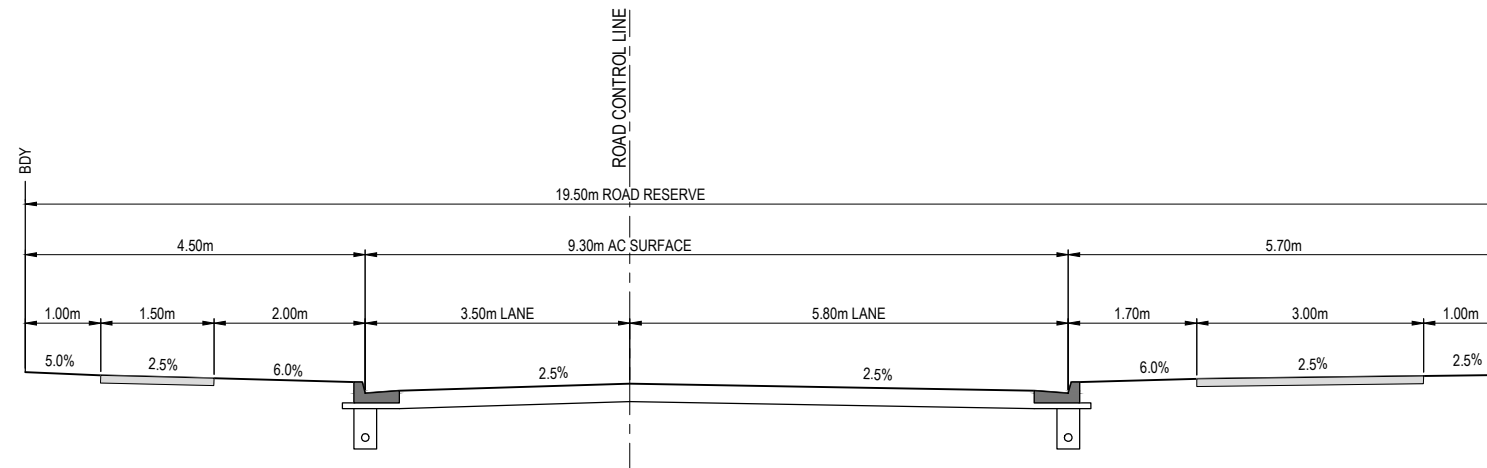
DRAWN	STATUS	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>	
DESIGN	APPROVED	DANIEL COLLINS	RPEQ 18631
	DATE		14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD			



CLIENT	<b>FRASERS PROPERTY AUSTRALIA</b>
ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

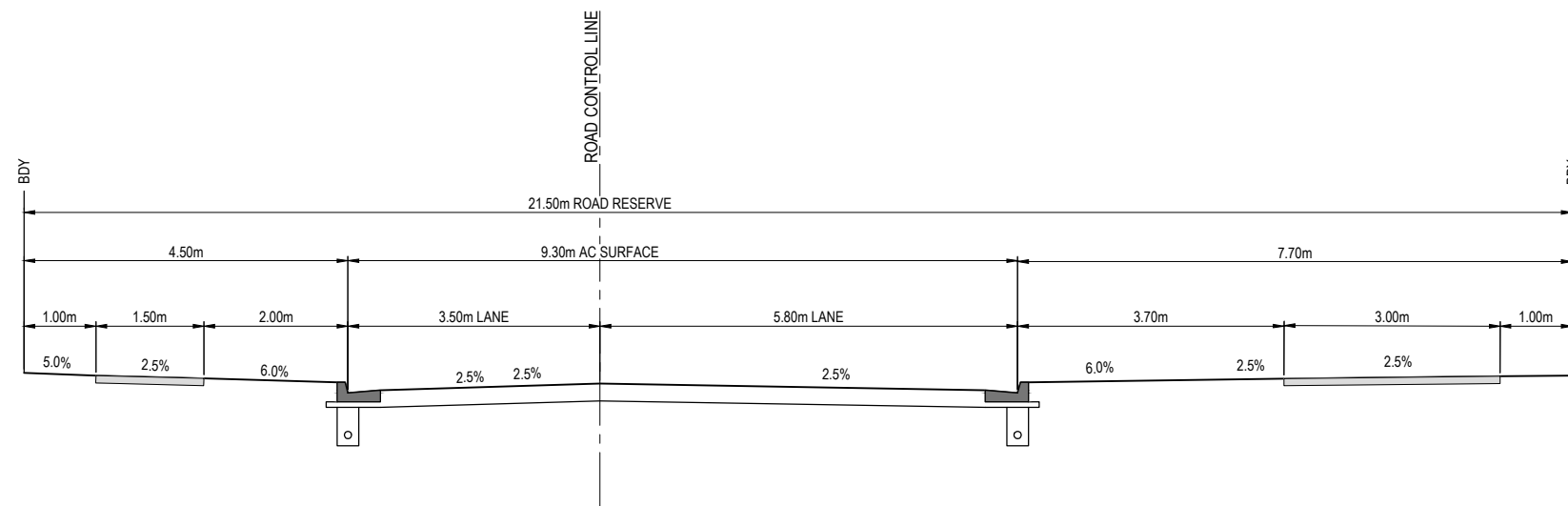
PROJECT NAME	<b>NEW BEITH - PRECINCT B</b>
	MOUNTAIN RIDGE ROAD NEW BEITH

DRAWING TITLE	<b>CONCEPT ROADWORKS AND DRAINAGE TYPICAL ROAD SECTIONS SHEET 1 OF 2</b>		
PROJECT No.	<b>23-0154</b>	DRAWING No.	<b>P114</b>
		REVISION	<b>A</b>



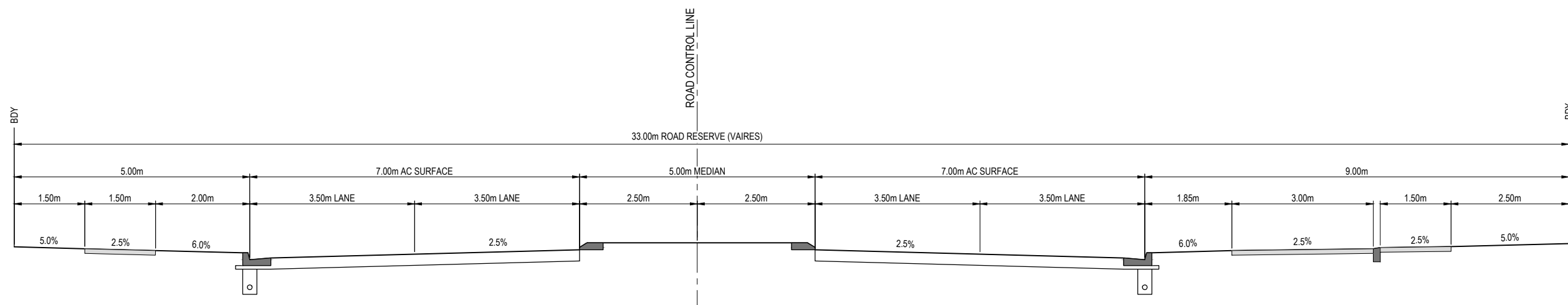
19.50m ROAD RESERVE - NEIGHBOURHOOD ACCESS - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)



21.50m ROAD RESERVE - GREEN NEIGHBOURHOOD CONNECTOR - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)

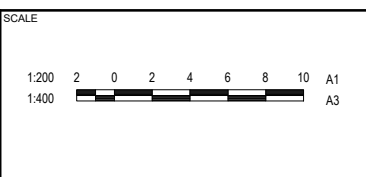


33.00m ROAD RESERVE - ESPLANADE NEIGHBOURHOOD CONNECTOR - TYPICAL SECTION

SCALE: 1:200 (A1)  
SCALE: 1:400 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	STATUS
DESIGN	APPROVED
DANIEL COLLINS	DANIEL COLLINS
RPEQ 18631	DATE
	14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD	



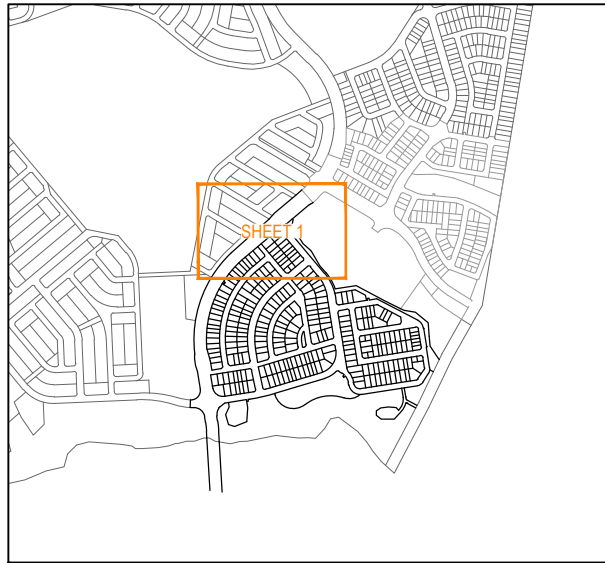
CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

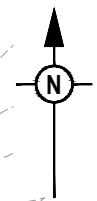
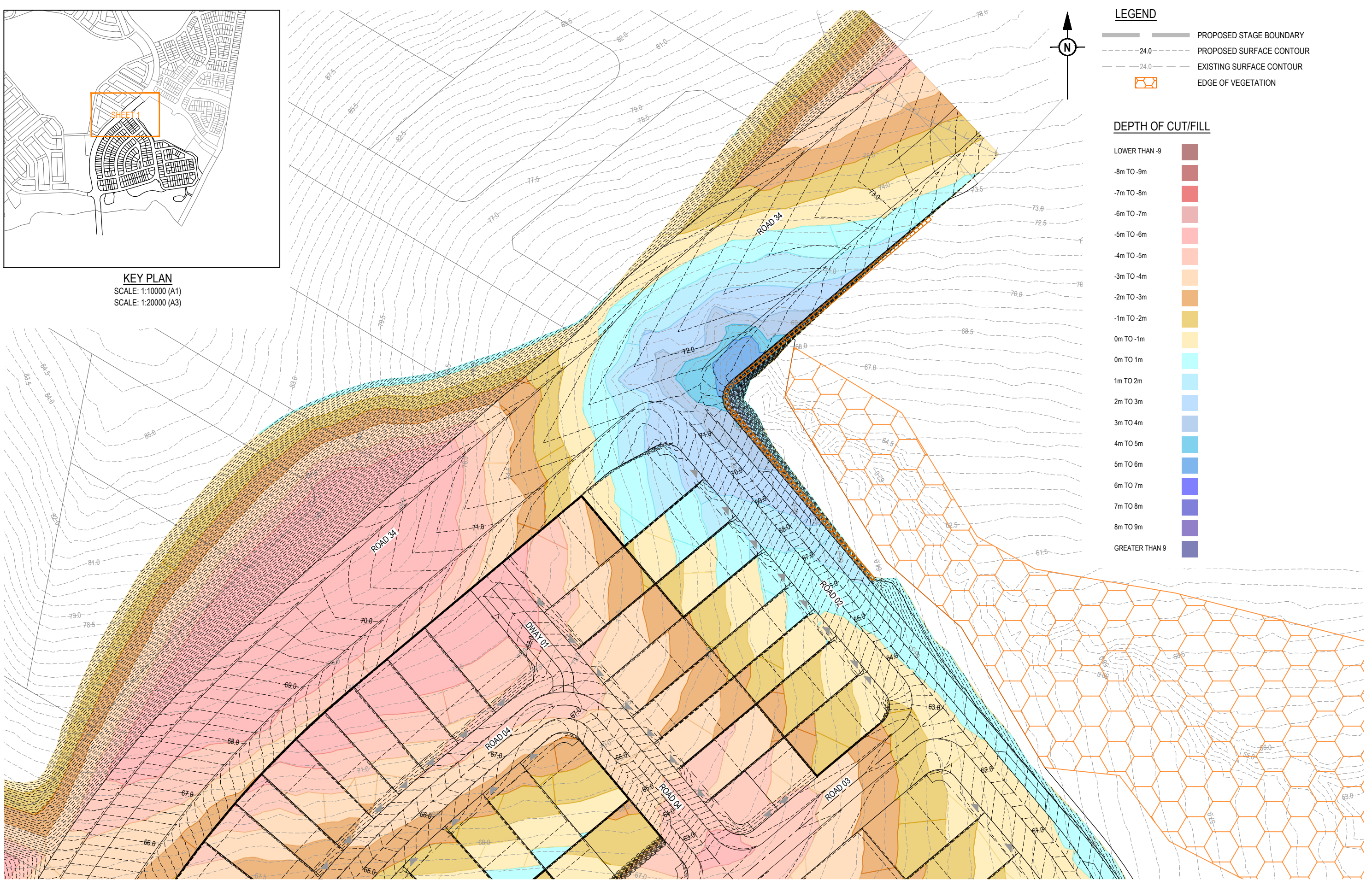
PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE <b>CONCEPT ROADWORKS AND DRAINAGE TYPICAL ROAD SECTIONS SHEET 2 OF 2</b>		
PROJECT No.	DRAWING No.	REVISION
23-0154	P115	A



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)



**LEGEND**

	PROPOSED STAGE BOUNDARY
	PROPOSED SURFACE CONTOUR
	EXISTING SURFACE CONTOUR
	EDGE OF VEGETATION

**DEPTH OF CUT/FILL**

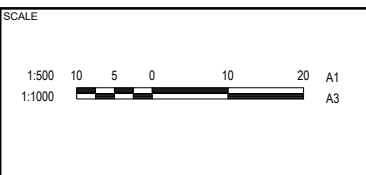
LOWER THAN -9	
-8m TO -9m	
-7m TO -8m	
-6m TO -7m	
-5m TO -6m	
-4m TO -5m	
-3m TO -4m	
-2m TO -3m	
-1m TO -2m	
0m TO -1m	
0m TO 1m	
1m TO 2m	
2m TO 3m	
3m TO 4m	
4m TO 5m	
5m TO 6m	
6m TO 7m	
7m TO 8m	
8m TO 9m	
GREATER THAN 9	

REFER SHEET 2 FOR CONTINUATION

REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	13.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DESIGN APPROVED DANIEL COLLINS
DATE 29.07.25
PROJECT NO. RPEQ 18631



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

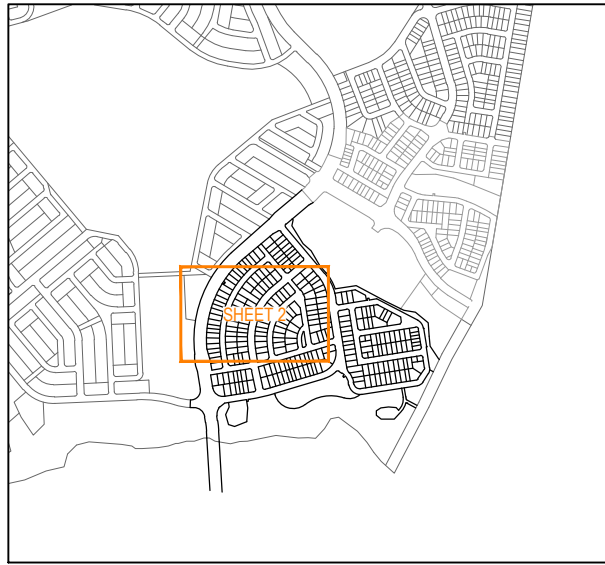
ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

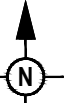
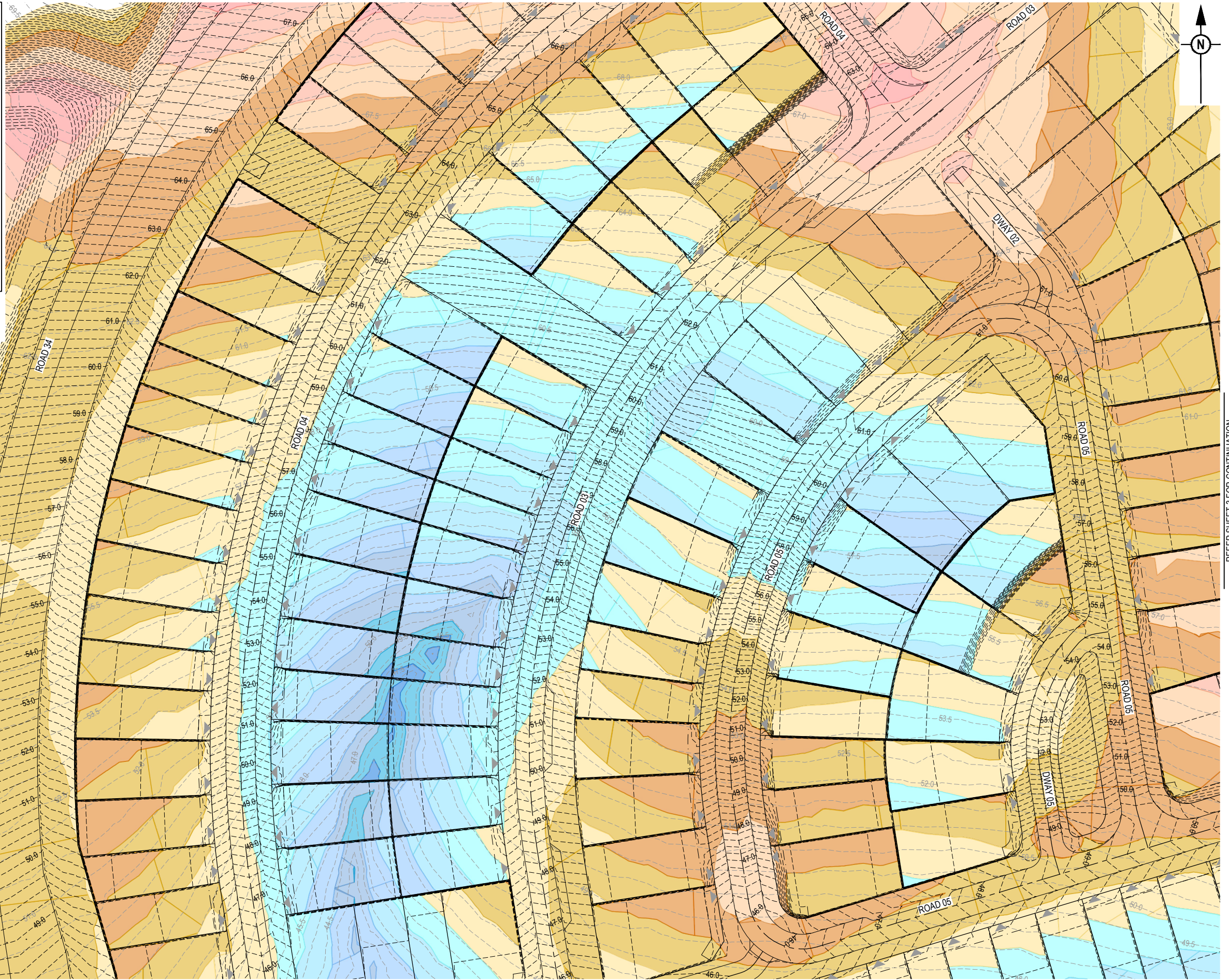
MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE <b>CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 1 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P116</b>	REVISION <b>A</b>

REFER SHEET 1 FOR CONTINUATION



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)



REFER SHEET 4 FOR CONTINUATION

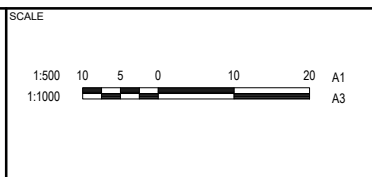
REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	13.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
 NOT FOR CONSTRUCTION**

DESIGN: DANIEL COLLINS  
 RPEQ 18631  
 DATE: 29.07.25

FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

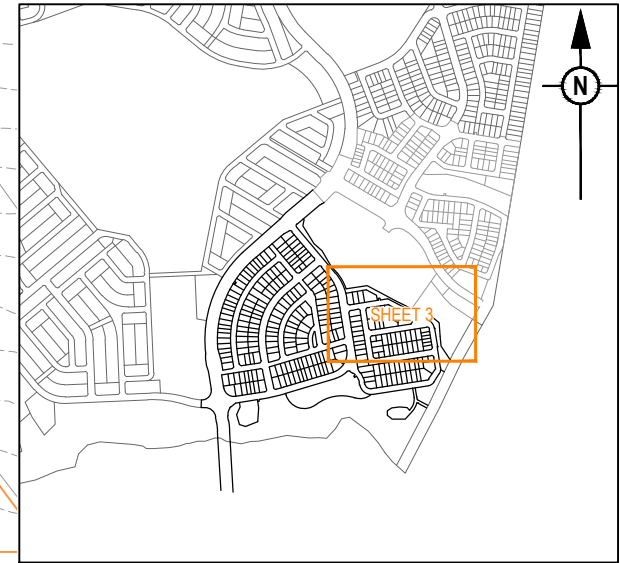
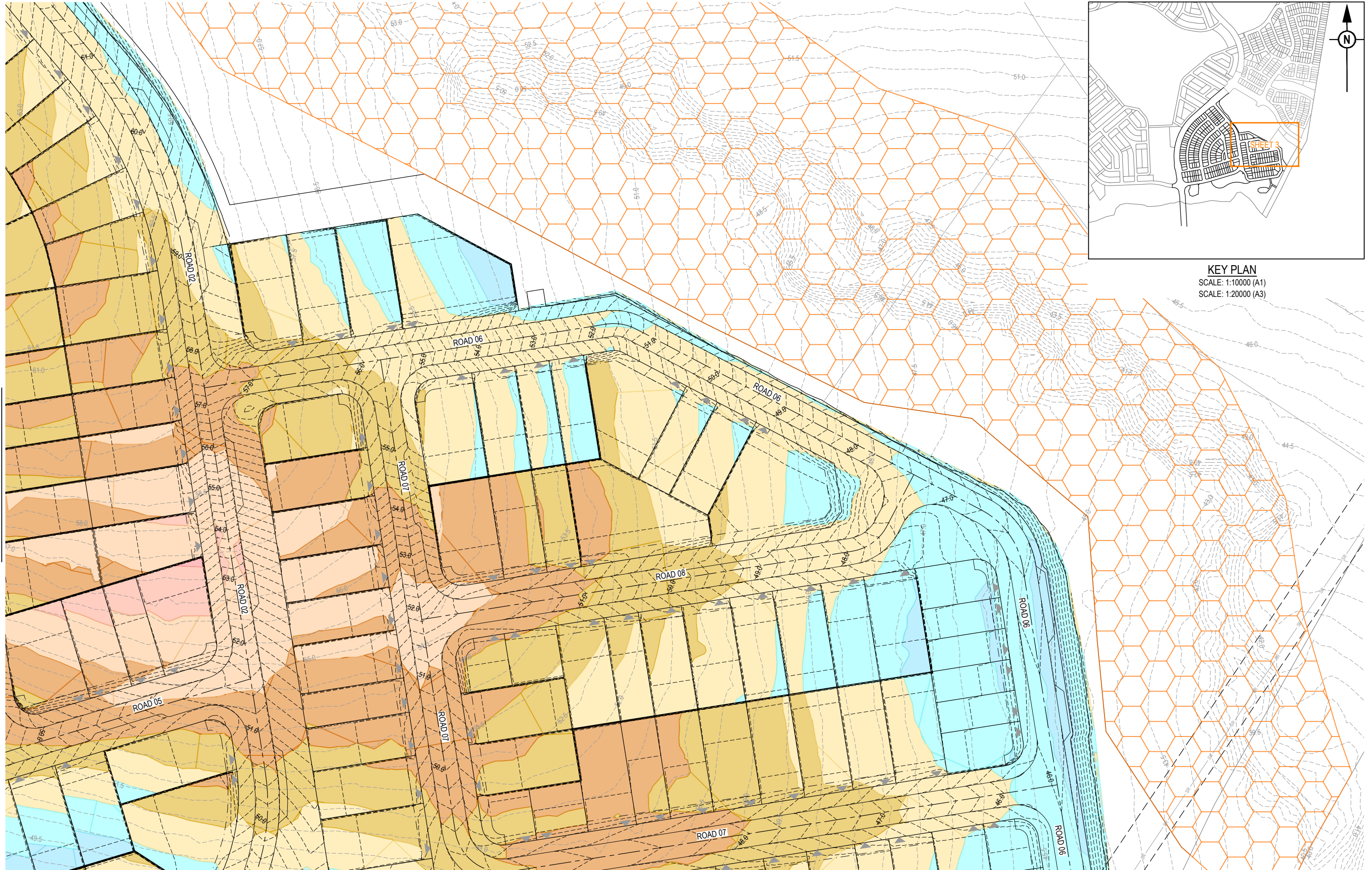
ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: **NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE: **CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 2 OF 5**

PROJECT No: 23-0154  
 DRAWING No: P117  
 REVISION: A



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)

REFER SHEET 2 FOR CONTINUATION

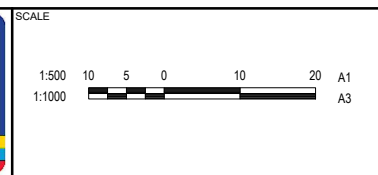
REFER SHEET 5 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	13.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
 NOT FOR CONSTRUCTION**

DESIGN APPROVED  
**DANIEL COLLINS** RPEQ 18631 DATE 29.07.25

FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

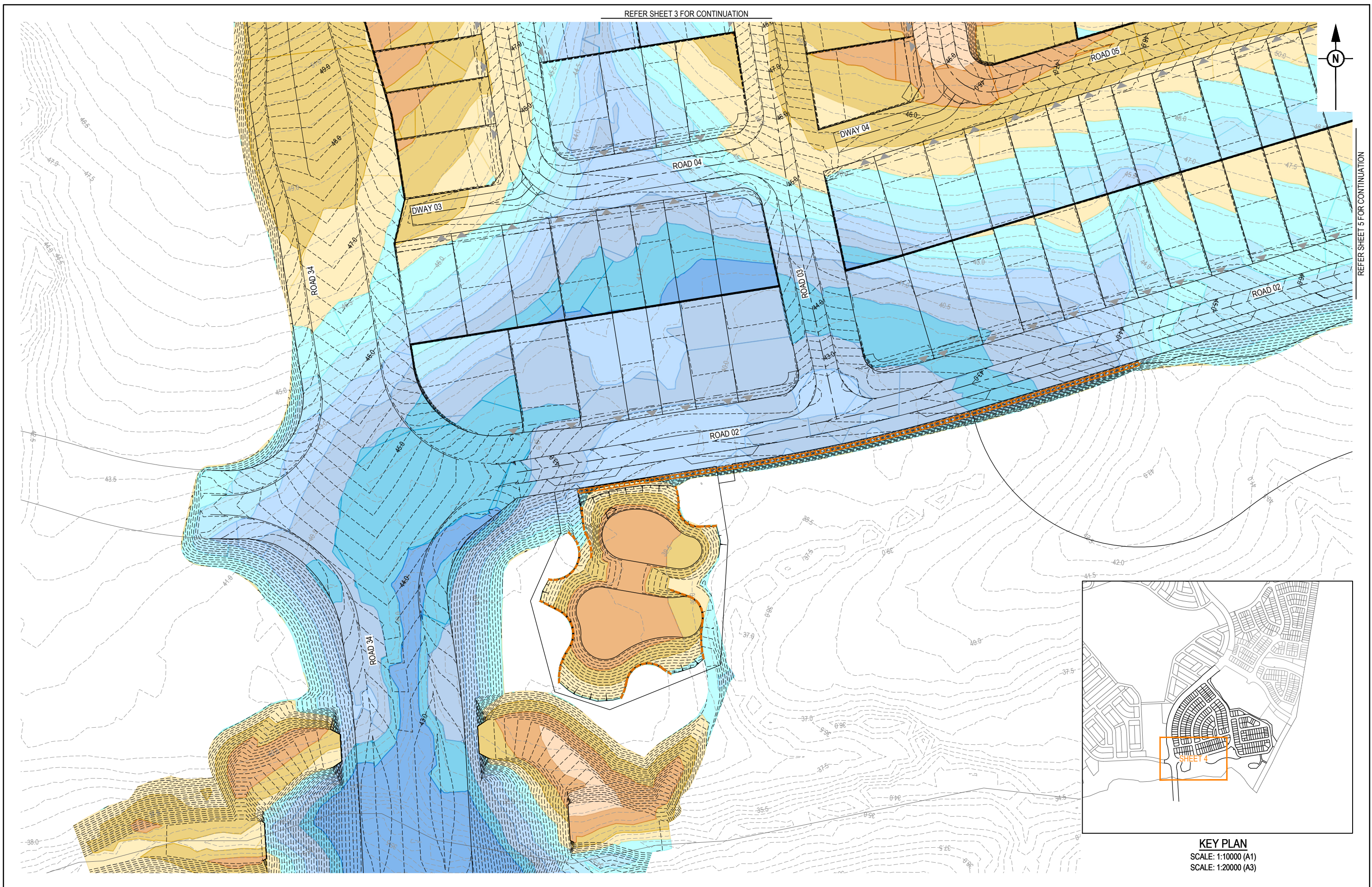
ASSOCIATED CONSULTANT  
 RPS GROUP  
 (07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

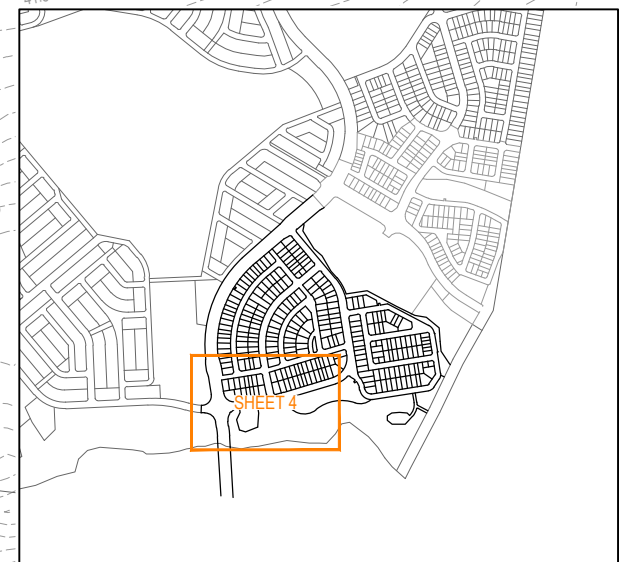
MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE  
**CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 3 OF 5**

PROJECT No. **23-0154** DRAWING No. **P118** REVISION **A**



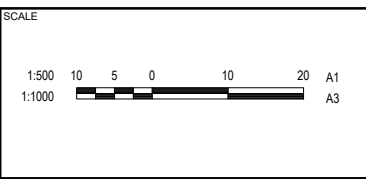
REFER SHEET 5 FOR CONTINUATION



**KEY PLAN**  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	13.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DRAWN: DANIEL COLLINS STATUS: APPROVED DATE: 29.07.25 PROJECT: RPEQ 18631
FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

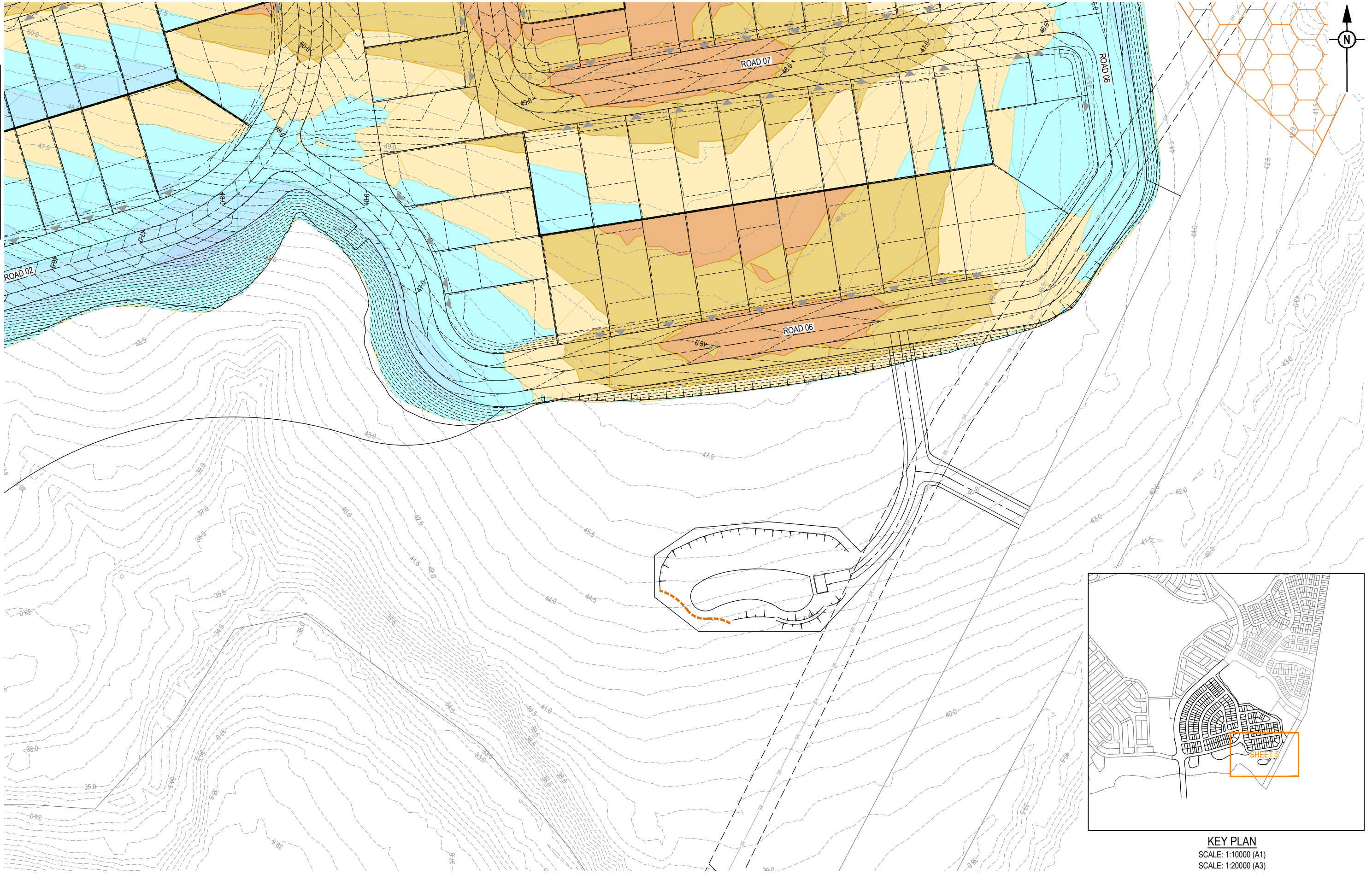
PROJECT NAME: **NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE: <b>CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 4 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P119</b>	REVISION <b>A</b>

REFER SHEET 3 FOR CONTINUATION

REFER SHEET 4 FOR CONTINUATION

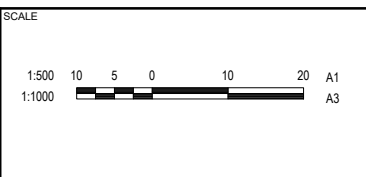


REFER SHEET 3 FOR CONTINUATION

**KEY PLAN**  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	13.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DESIGN APPROVED <b>DANIEL COLLINS</b>
DATE 29.07.25
PROJECT NO. RPEQ 18631
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT <b>FRASERS PROPERTY AUSTRALIA</b>
ASSOCIATED CONSULTANT RPS GROUP (07) 3539 9500

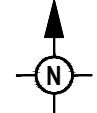
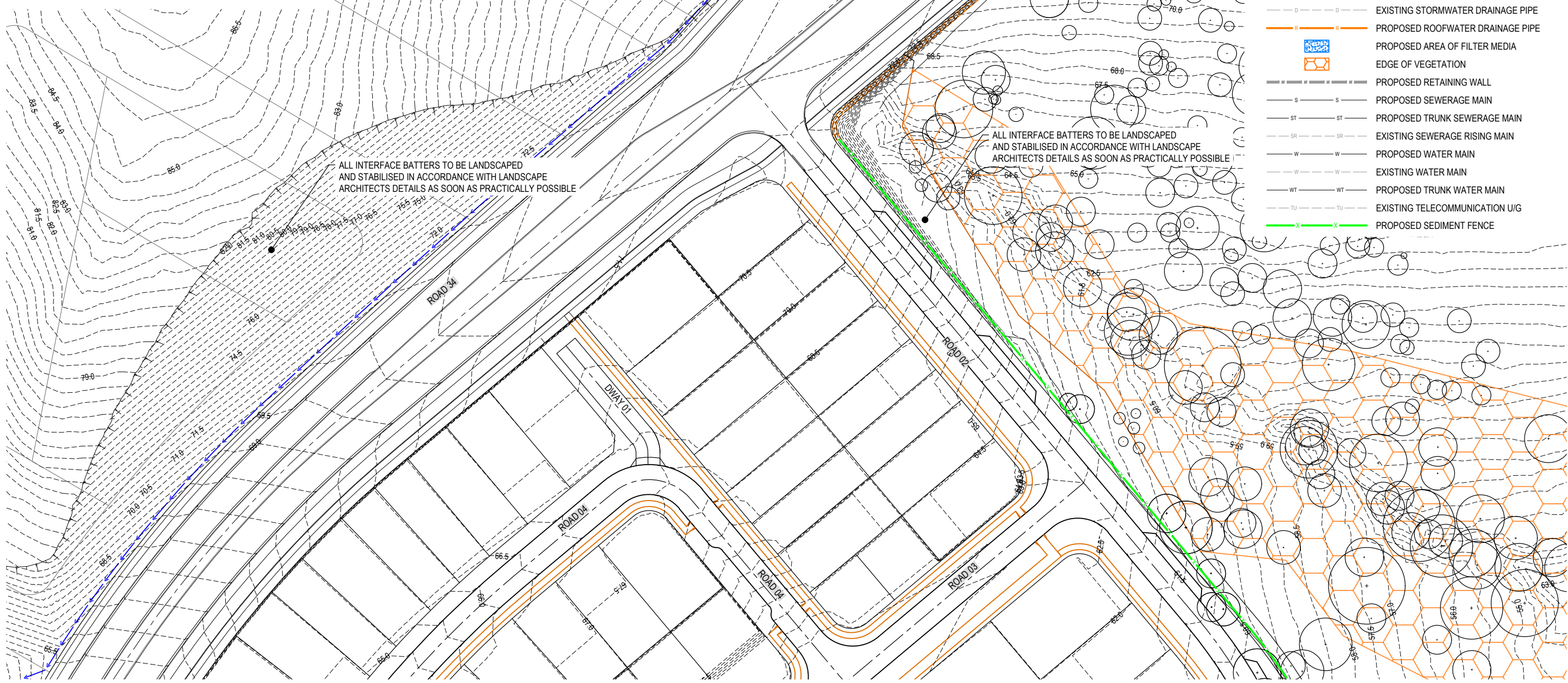
PROJECT NAME <b>NEW BEITH - PRECINCT B</b>
MOUNTAIN RIDGE ROAD NEW BEITH

DRAWING TITLE <b>CONCEPT BULK EARTHWORKS DEPTH LAYOUT PLAN SHEET 5 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P120</b>	REVISION <b>A</b>



**KEY PLAN**  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

**NOTE:**  
THE DESIGN INFORMATION SHOWN ON THIS DRAWING IS A CONCEPTUAL GUIDE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PLANNING, DESIGN (INCLUDING CERTIFICATION), IMPLEMENTATION AND MAINTENANCE OF AN EROSION AND SEDIMENT CONTROL PLAN THAT IS COMPLIANT WITH THE 'MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION, LANDCOM - MARCH 2004'. THE CONTRACTOR SHALL MONITOR AND MANAGE THE EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT ALL DIFFERENT PHASES OF CONSTRUCTION.



- LEGEND**
- PROPOSED STAGE BOUNDARY
  - - - PROPOSED ROAD CONTROL LINE
  - - - EXISTING ROAD CROWN
  - PROPOSED KERB INVERT LINE
  - PROPOSED CONCRETE PATH AND PRAM RAMP
  - PROPOSED NEW ROAD PAVEMENT
  - PROPOSED CONCRETE DRIVEWAY
  - PROPOSED CONCRETE
  - PROPOSED 3.0m SHARED FOOTPATH
  - PROPOSED FOOTPATH
  - PROPOSED 2.5m SHARED PATH
  - PROPOSED 3.0m CYCLE PATH
  - ▲ INDICATIVE DRIVEWAY LOCATION
  - - -24.0 PROPOSED SURFACE CONTOUR
  - - -24.0 EXISTING SURFACE CONTOUR
  - PROPOSED STORMWATER DRAINAGE PIPE
  - - - EXISTING STORMWATER DRAINAGE PIPE
  - PROPOSED ROOFWATER DRAINAGE PIPE
  - PROPOSED AREA OF FILTER MEDIA
  - EDGE OF VEGETATION
  - PROPOSED RETAINING WALL
  - S-S PROPOSED SEWERAGE MAIN
  - ST-ST PROPOSED TRUNK SEWERAGE MAIN
  - SR-SR EXISTING SEWERAGE RISING MAIN
  - W-W PROPOSED WATER MAIN
  - W-W EXISTING WATER MAIN
  - WT-WT PROPOSED TRUNK WATER MAIN
  - TU-TU EXISTING TELECOMMUNICATION U/G
  - PROPOSED SEDIMENT FENCE

ALL INTERFACE BATTERS TO BE LANDSCAPED AND STABILISED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS DETAILS AS SOON AS PRACTICALLY POSSIBLE

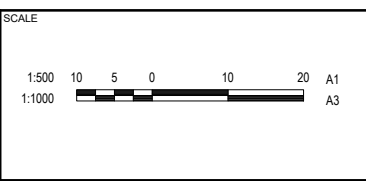
ALL INTERFACE BATTERS TO BE LANDSCAPED AND STABILISED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS DETAILS AS SOON AS PRACTICALLY POSSIBLE

REFER SHEET 2 FOR CONTINUATION

REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DESIGN APPROVED DANIEL COLLINS
DATE 14.08.25
PROJECT NO. RPEQ 18631



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

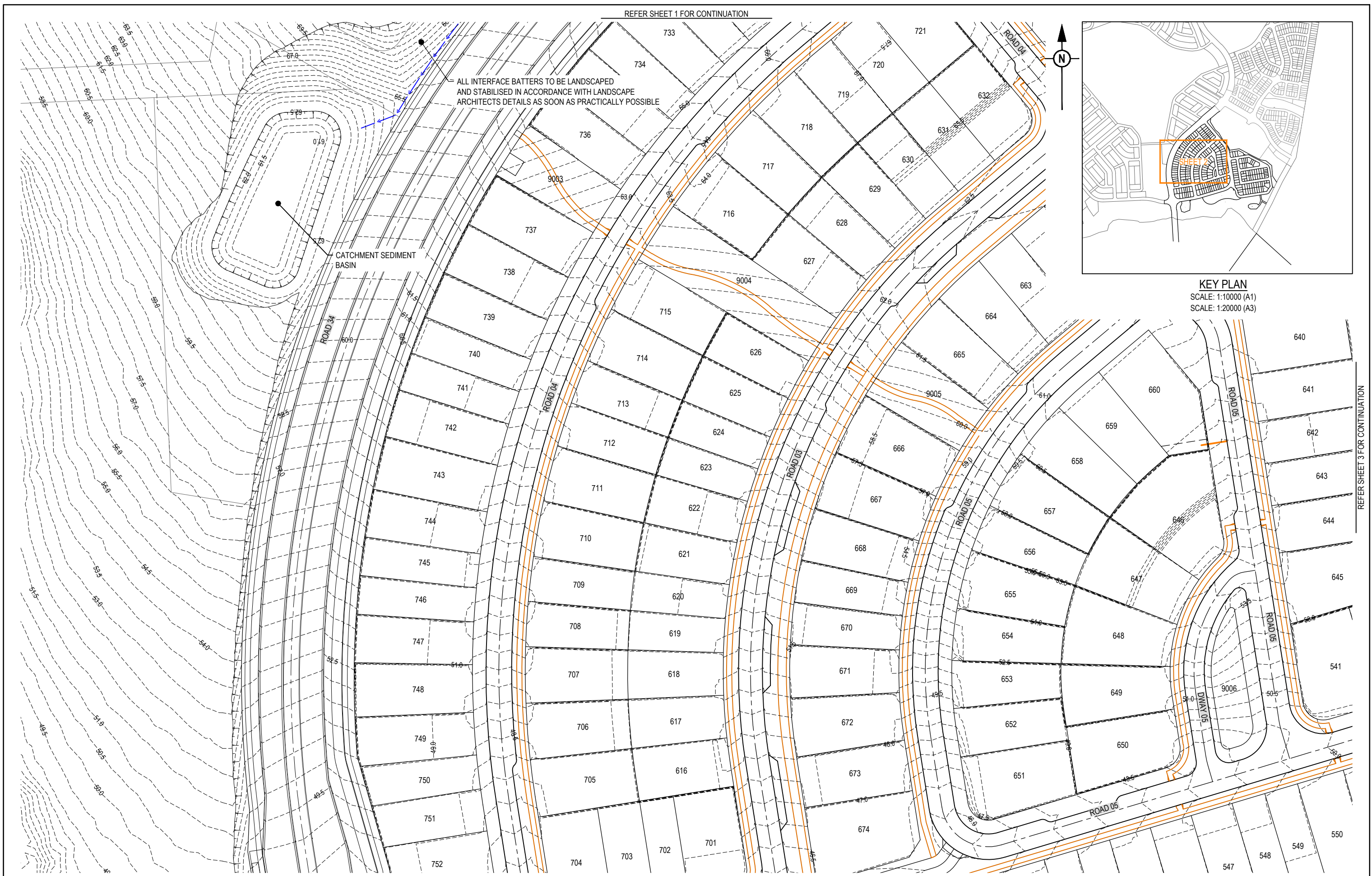
ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

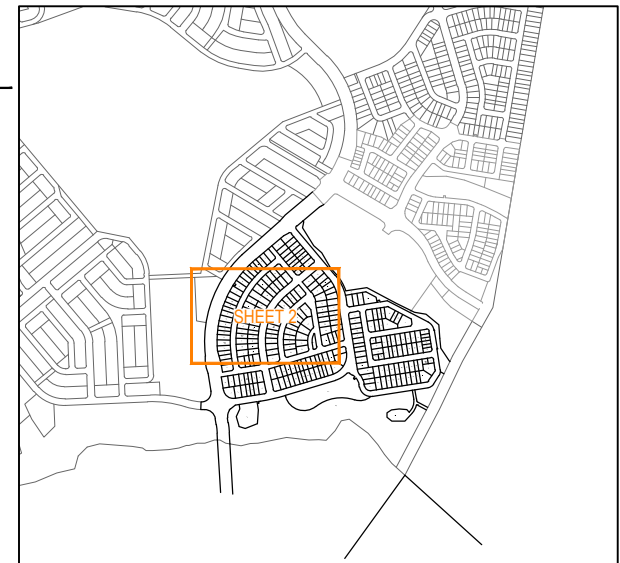
DRAWING TITLE <b>CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 1 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P121</b>	REVISION <b>A</b>

REFER SHEET 1 FOR CONTINUATION



ALL INTERFACE BATTERS TO BE LANDSCAPED AND STABILISED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS DETAILS AS SOON AS PRACTICALLY POSSIBLE

CATCHMENT SEDIMENT BASIN



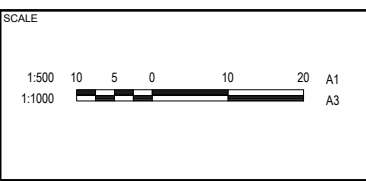
KEY PLAN  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

REFER SHEET 4 FOR CONTINUATION

REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	STATUS	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>	
DESIGN	APPROVED	DANIEL COLLINS	RPEQ 18631
	DATE		14.08.25
FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD			



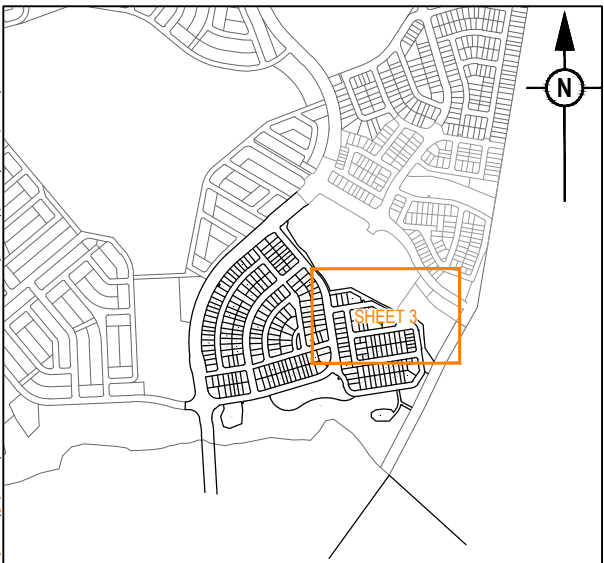
CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE <b>CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 5</b>		
PROJECT No. <b>23-0154</b>	DRAWING No. <b>P122</b>	REVISION <b>A</b>



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)

REFER SHEET 2 FOR CONTINUATION

REFER SHEET 5 FOR CONTINUATION

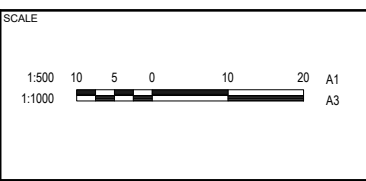
ALL INTERFACE BATTERS TO BE LANDSCAPED AND STABILISED IN ACCORDANCE WITH LANDSCAPE ARCHITECTS DETAILS AS SOON AS PRACTICALLY POSSIBLE

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
 NOT FOR CONSTRUCTION**

DESIGN APPROVED: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25

FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

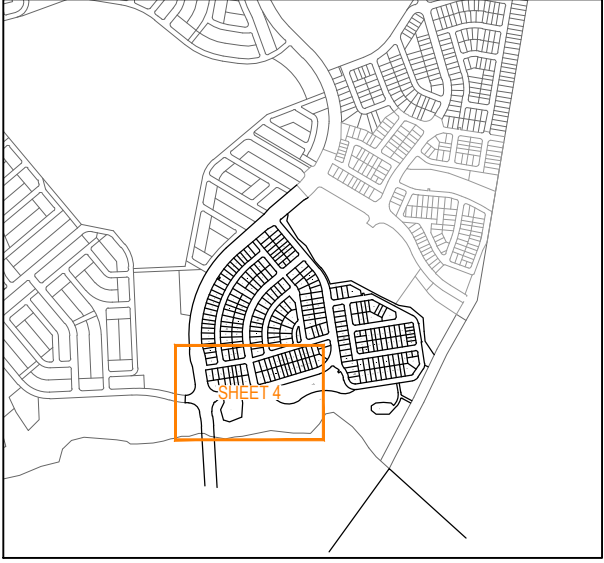
ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: **NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE: **CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 3 OF 5**

PROJECT No: **23-0154** DRAWING No: **P123** REVISION: **A**



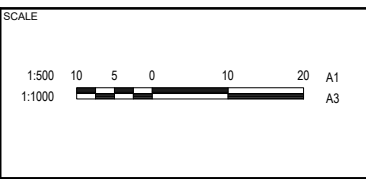
**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
 NOT FOR CONSTRUCTION**

DESIGN APPROVED: DANIEL COLLINS  
 RPEQ 18631  
 DATE: 14.08.25

FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: **NEW BEITH - PRECINCT B**

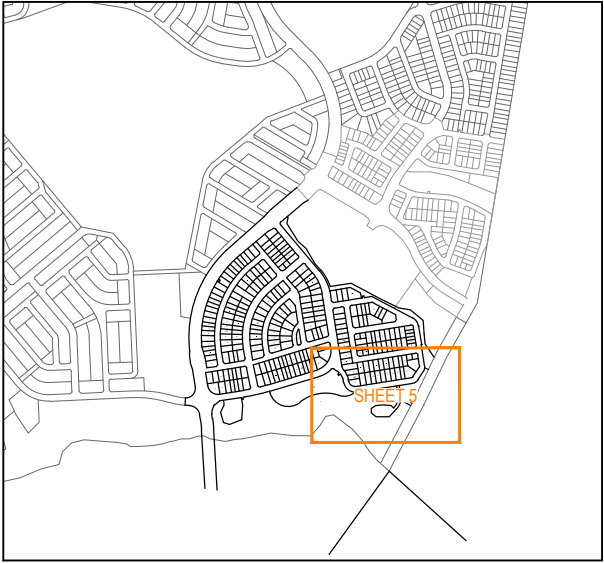
MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE: **CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 4 OF 5**

PROJECT No: **23-0154**  
 DRAWING No: **P124**  
 REVISION: **A**

REFER SHEET 3 FOR CONTINUATION

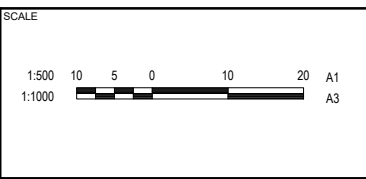
REFER SHEET 4 FOR CONTINUATION



**KEY PLAN**  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

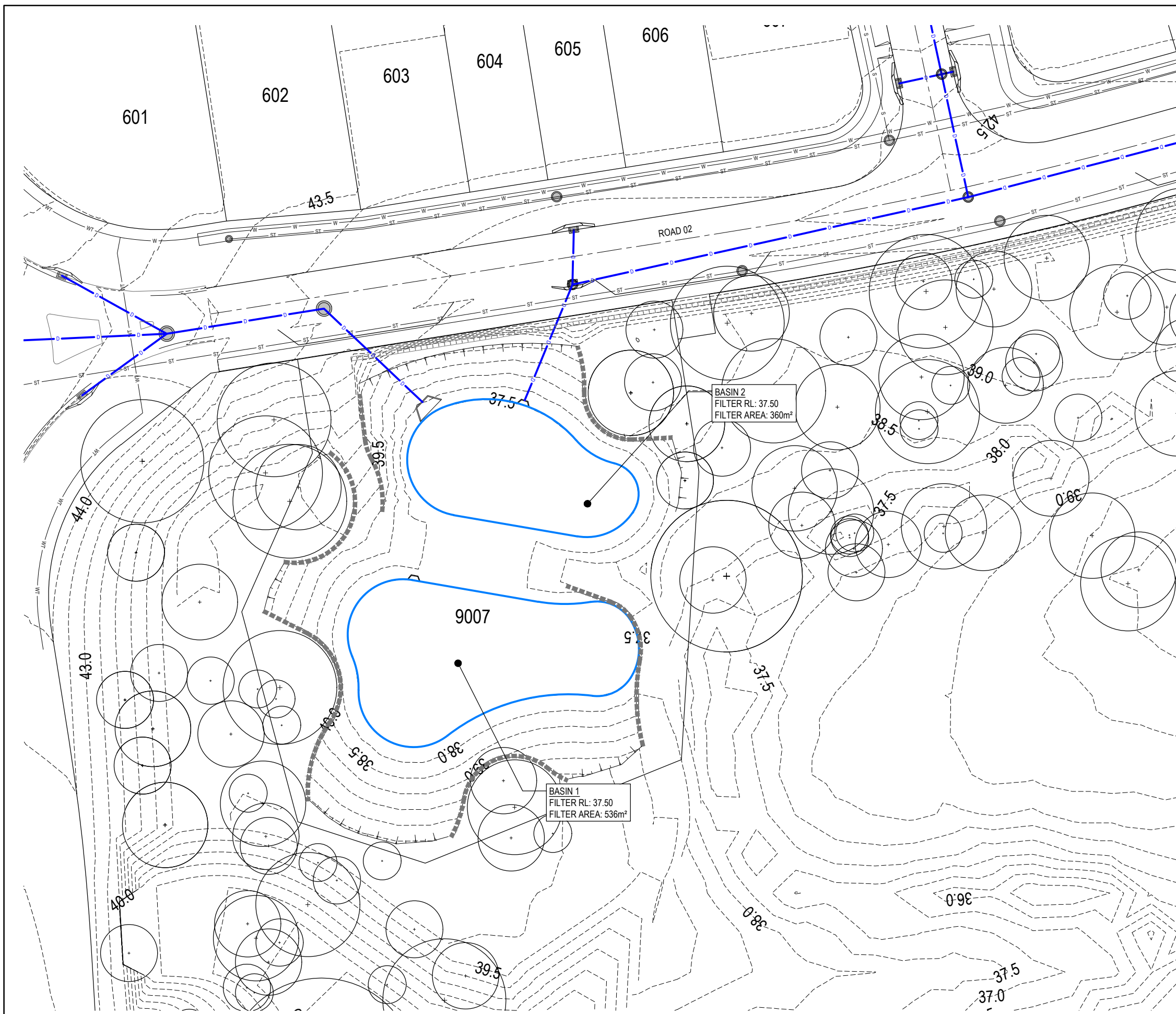
DRAWN	STATUS	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>		
DESIGN	APPROVED	DANIEL COLLINS	RPEQ 18631	DATE 14.08.25
FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD				



CLIENT	<b>FRASERS PROPERTY AUSTRALIA</b>
ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

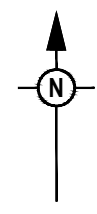
PROJECT NAME	<b>NEW BEITH - PRECINCT B</b>
MOUNTAIN RIDGE ROAD NEW BEITH	

DRAWING TITLE		
<b>CONCEPT EROSION AND SEDIMENT CONTROL PLAN SHEET 5 OF 5</b>		
PROJECT No.	DRAWING No.	REVISION
<b>23-0154</b>	<b>P125</b>	<b>A</b>



**LEGEND**

- FINISHED SURFACE CONTOUR
- PROPOSED BATTER LINE
- PROPOSED RETAINING WALL
- PROPOSED STORMWATER DRAINAGE PIPE
- PROPOSED TRUNK SEWER MAIN
- PROPOSED SEWER RISING MAIN
- PROPOSED BIO RETENTION FILTER AREA

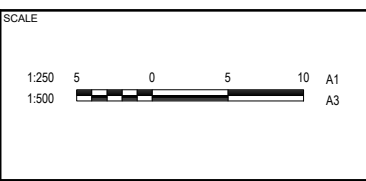


REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

**FOR DEVELOPMENT APPLICATION  
NOT FOR CONSTRUCTION**

DESIGN APPROVED: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25

FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**

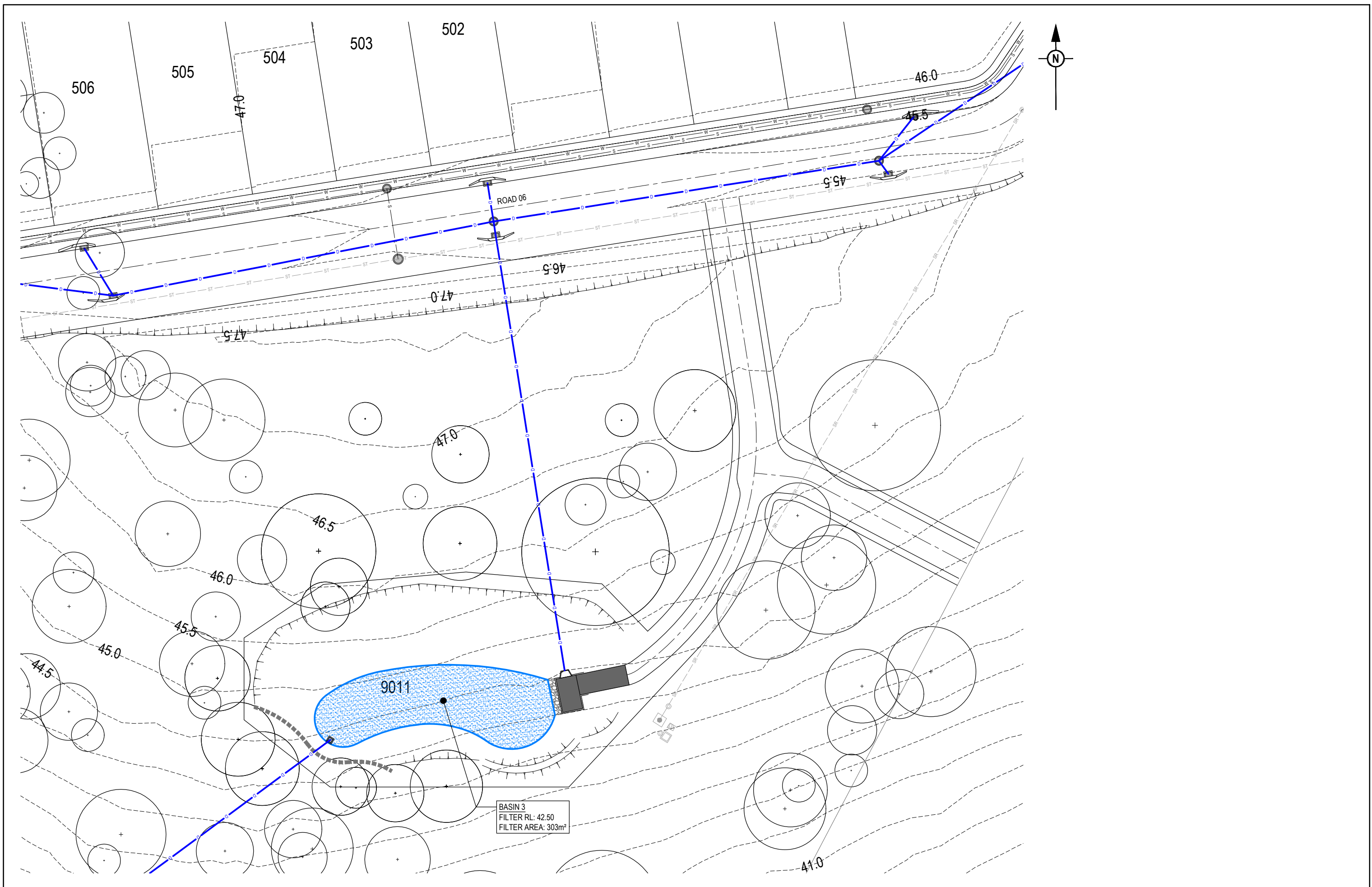
ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: **NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE: **CONCEPT BIO RETENTION LAYOUT PLAN SHEET 1 OF 2**

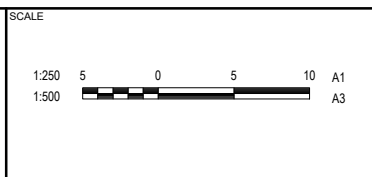
PROJECT No. **23-0154** DRAWING No. **P200** REVISION **A**



BASIN 3  
 FILTER RL: 42.50  
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REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

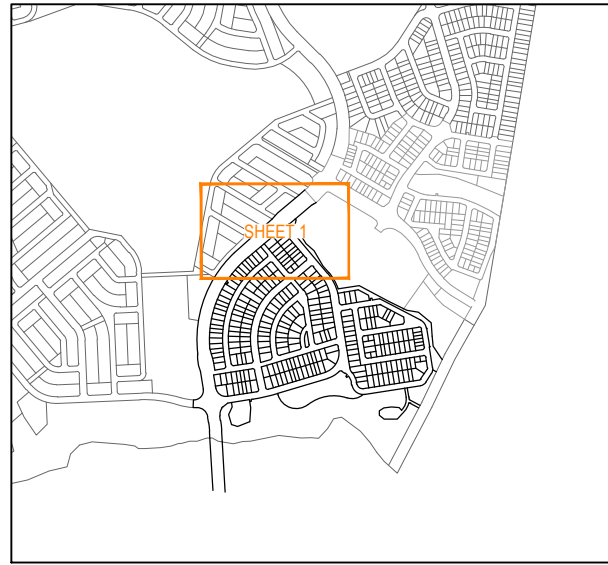
**FOR DEVELOPMENT APPLICATION  
 NOT FOR CONSTRUCTION**  
 DRAWN: [ ] STATUS: [ ]  
 DESIGN: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25  
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT: **FRASERS PROPERTY AUSTRALIA**  
 ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

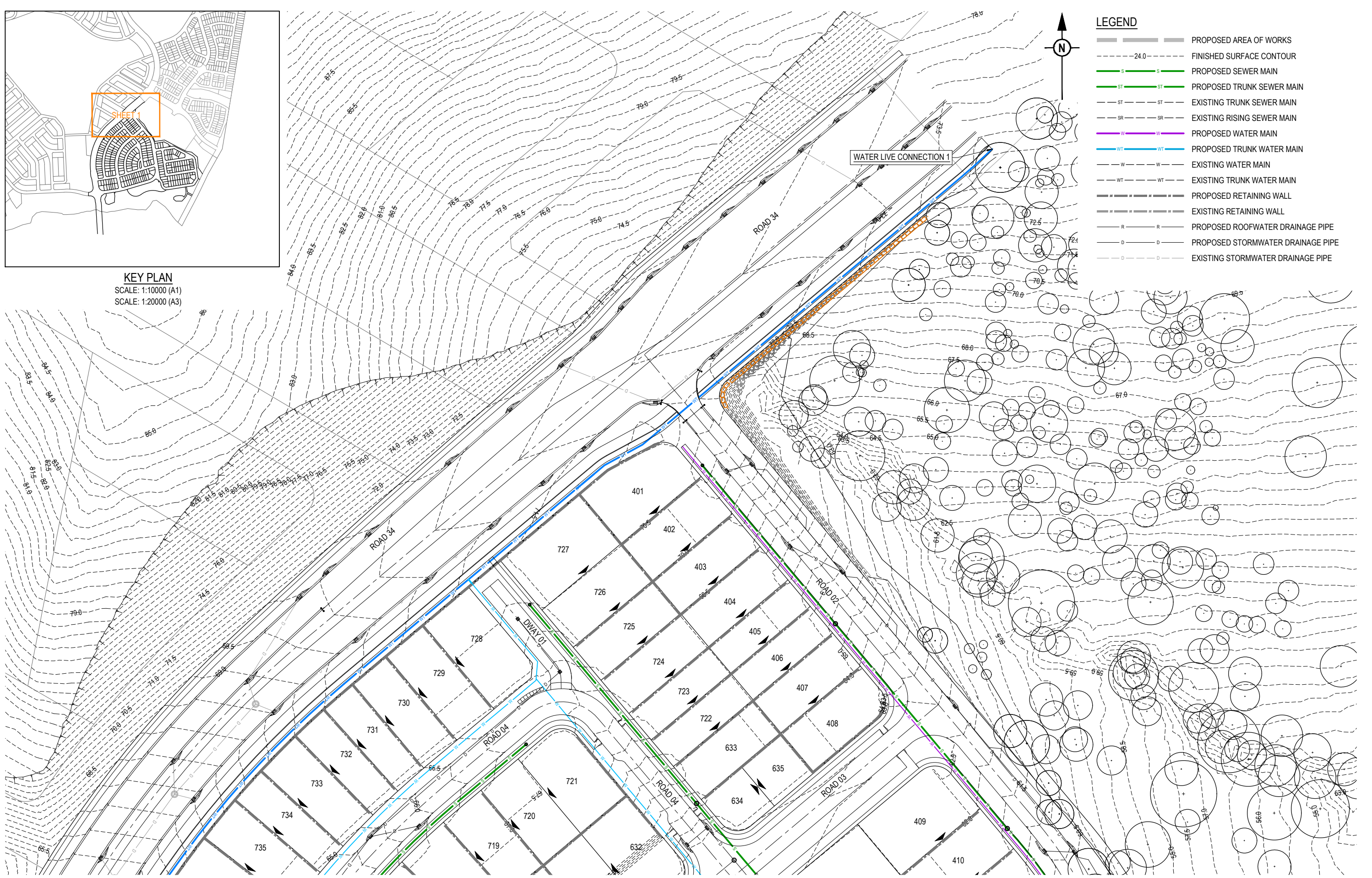
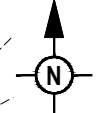
PROJECT NAME: **NEW BEITH - PRECINCT B**  
 MOUNTAIN RIDGE ROAD  
 NEW BEITH

DRAWING TITLE: **CONCEPT BIO RETENTION LAYOUT PLAN SHEET 2 OF 2**  
 PROJECT No: 23-0154  
 DRAWING No: P201  
 REVISION: A



**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)

- LEGEND**
- PROPOSED AREA OF WORKS
  - FINISHED SURFACE CONTOUR
  - PROPOSED SEWER MAIN
  - PROPOSED TRUNK SEWER MAIN
  - EXISTING TRUNK SEWER MAIN
  - EXISTING RISING SEWER MAIN
  - PROPOSED WATER MAIN
  - PROPOSED TRUNK WATER MAIN
  - EXISTING WATER MAIN
  - EXISTING TRUNK WATER MAIN
  - PROPOSED RETAINING WALL
  - EXISTING RETAINING WALL
  - PROPOSED ROOFWATER DRAINAGE PIPE
  - PROPOSED STORMWATER DRAINAGE PIPE
  - EXISTING STORMWATER DRAINAGE PIPE



REFER SHEET 2 FOR CONTINUATION

REFER SHEET 3 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>
DESIGN: DANIEL COLLINS RPEQ 18631 DATE: 14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD

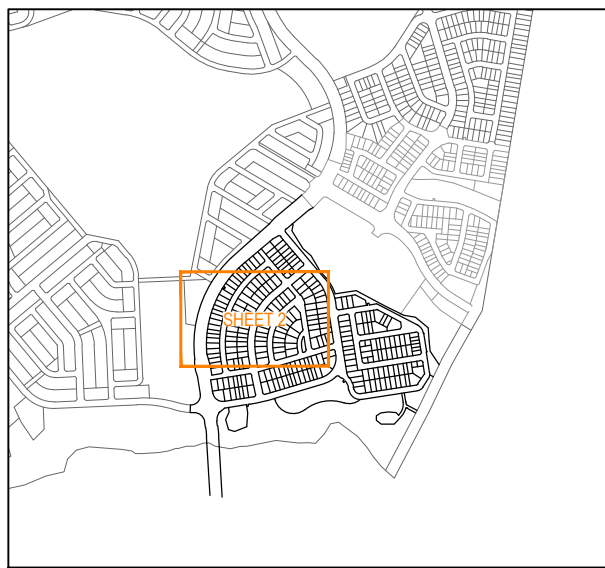


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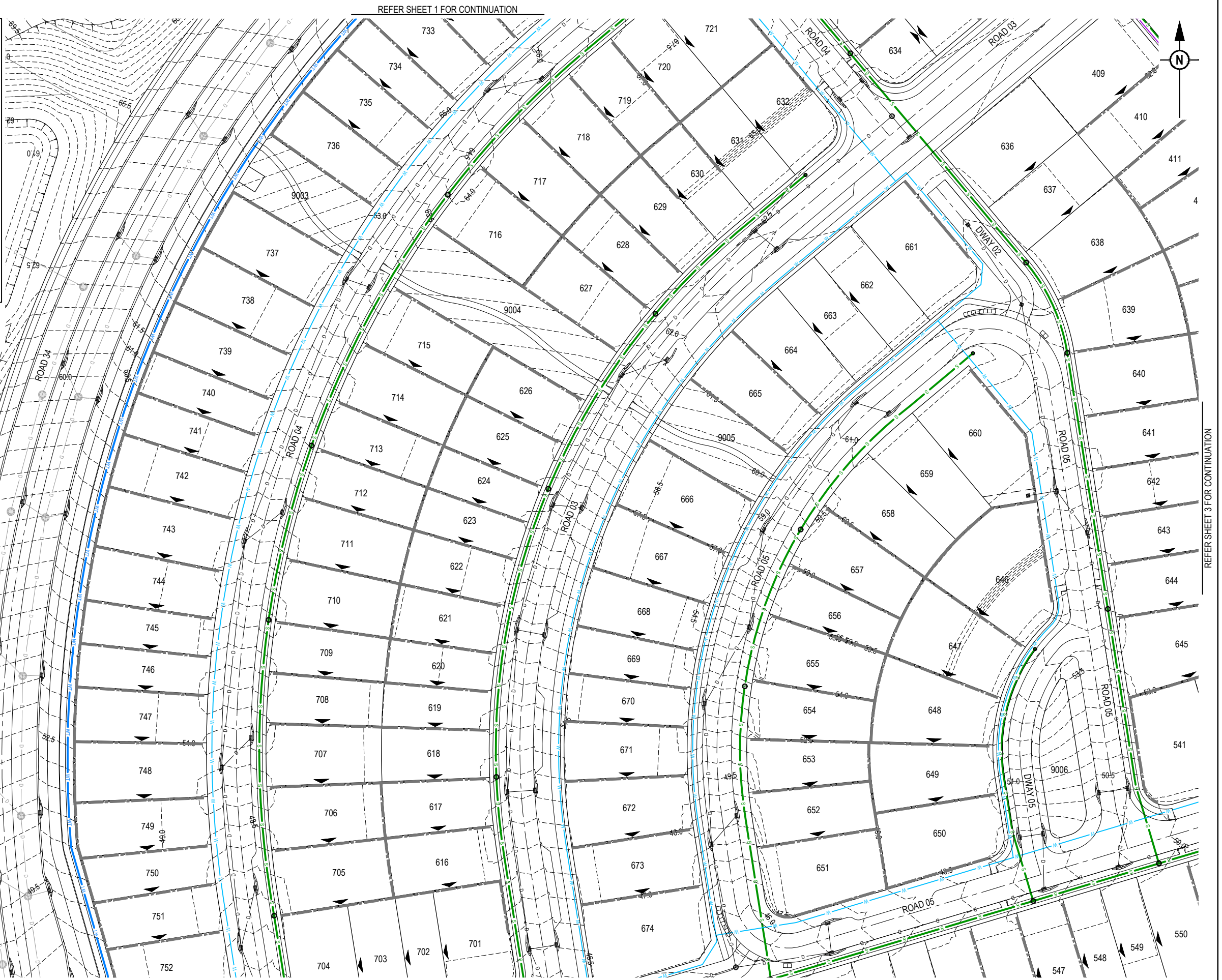
CLIENT: <b>FRASERS PROPERTY AUSTRALIA</b>
ASSOCIATED CONSULTANT: RPS GROUP (07) 3539 9500

PROJECT NAME: <b>NEW BEITH - PRECINCT B</b>
MOUNTAIN RIDGE ROAD NEW BEITH

DRAWING TITLE: <b>CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 1 OF 5</b>		
PROJECT No: 23-0154	DRAWING No: P300	REVISION: A

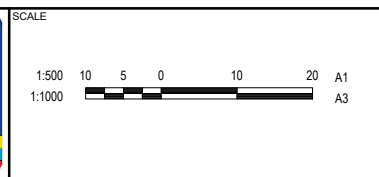


**KEY PLAN**  
 SCALE: 1:10000 (A1)  
 SCALE: 1:20000 (A3)



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	STATUS
DESIGN	APPROVED
<b>FOR DEVELOPMENT APPLICATION          NOT FOR CONSTRUCTION</b>	
DANIEL COLLINS	RPEQ 18631
	DATE: 14.08.25
<small>FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING &amp; DESIGN PTY LTD</small>	



CLIENT	PROJECT NAME
<b>FRASERS PROPERTY AUSTRALIA</b>	<b>NEW BEITH - PRECINCT B</b>
ASSOCIATED CONSULTANT	MOUNTAIN RIDGE ROAD NEW BEITH
RPS GROUP (07) 3539 9500	

DRAWING TITLE
<b>CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 2 OF 5</b>
PROJECT No.
<b>23-0154</b>
DRAWING No.
<b>P301</b>
REVISION
<b>A</b>

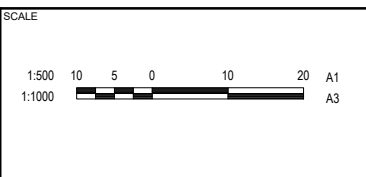


REFER SHEET 2 FOR CONTINUATION

REFER SHEET 5 FOR CONTINUATION

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

DRAWN	STATUS
DESIGN	APPROVED
DANIEL COLLINS	RPEQ 18631
	DATE
	14.08.25
FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD	



CLIENT

**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT

RPS GROUP  
(07) 3539 9500

PROJECT NAME

**NEW BEITH - PRECINCT B**

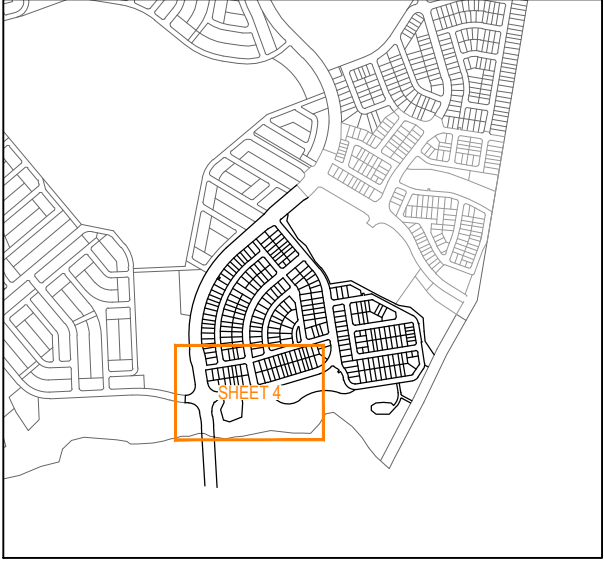
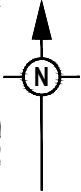
MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE		
<b>CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 3 OF 5</b>		
PROJECT No.	DRAWING No.	REVISION
23-0154	P302	A



REFER SHEET 3 FOR CONTINUATION

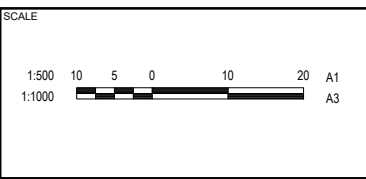
REFER SHEET 5 FOR CONTINUATION



KEY PLAN  
SCALE: 1:10000 (A1)  
SCALE: 1:20000 (A3)

REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

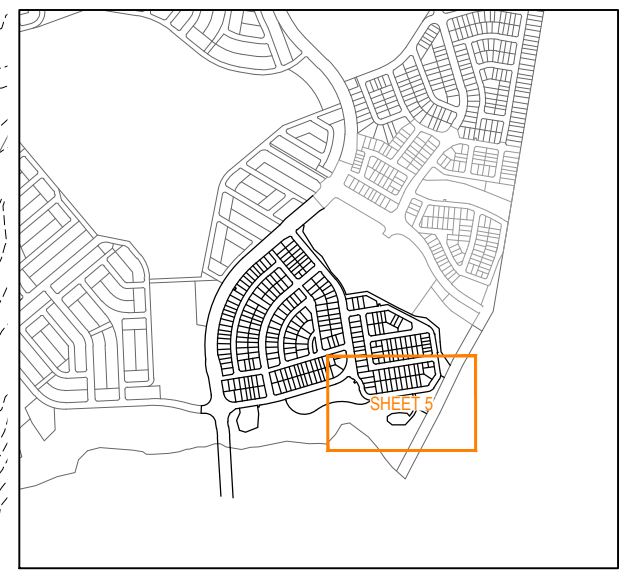
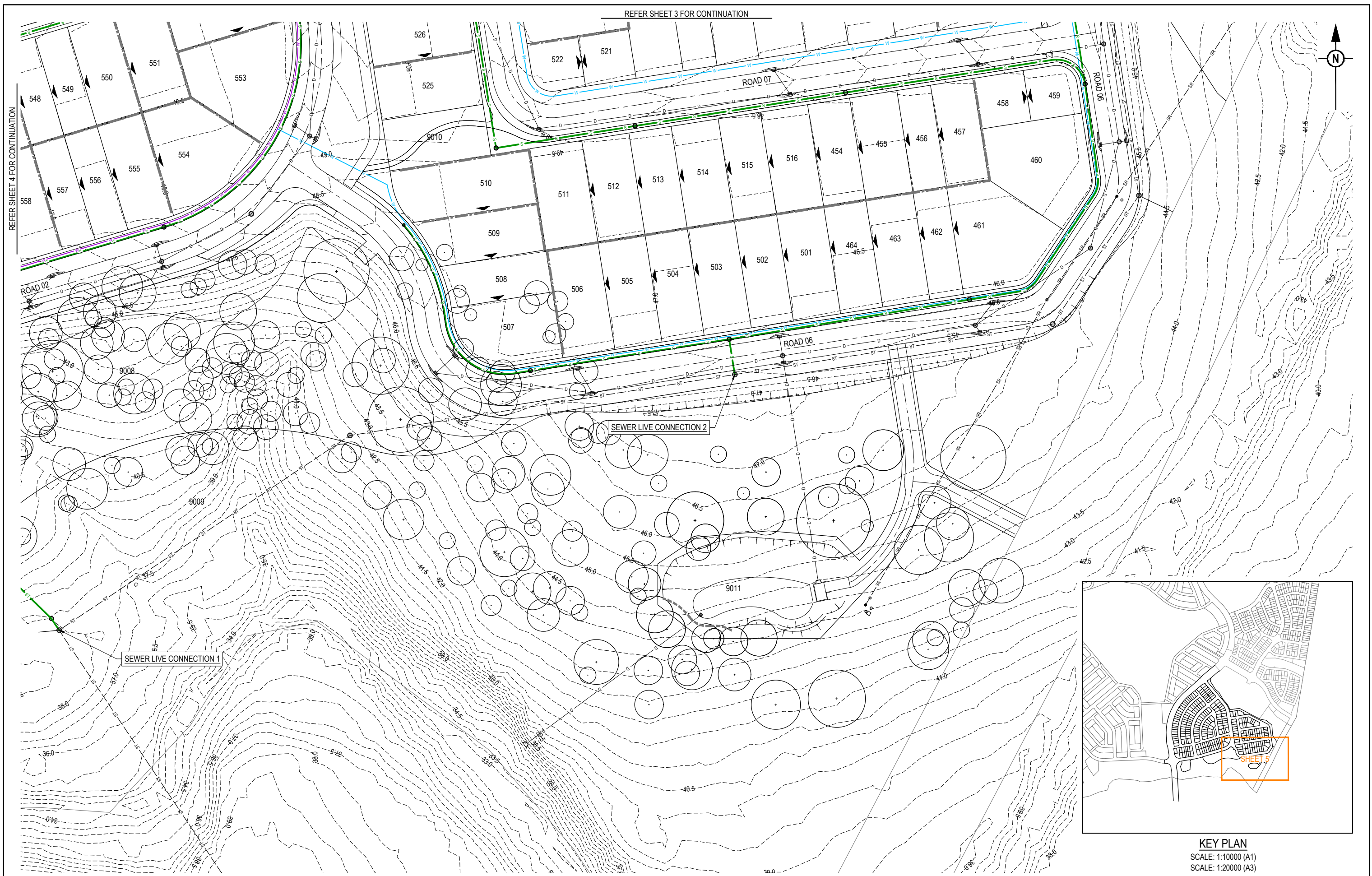
DRAWN	STATUS	<b>FOR DEVELOPMENT APPLICATION NOT FOR CONSTRUCTION</b>	
DESIGN	APPROVED	DATE	
	DANIEL COLLINS	RPEQ 18631	14.08.25
FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY LTD			



CLIENT	<b>FRASERS PROPERTY AUSTRALIA</b>
ASSOCIATED CONSULTANT	RPS GROUP (07) 3539 9500

PROJECT NAME	<b>NEW BEITH - PRECINCT B</b>
	MOUNTAIN RIDGE ROAD NEW BEITH

DRAWING TITLE		
<b>CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 4 OF 5</b>		
PROJECT No.	DRAWING No.	REVISION
<b>23-0154</b>	<b>P303</b>	<b>A</b>



REV	DATE	DESIGN	DRAWN	REVISION DETAILS
A	14.08.25	BR	TG	ORIGINAL ISSUE

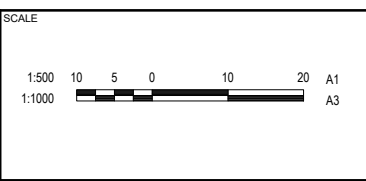
**FOR DEVELOPMENT APPLICATION  
NOT FOR CONSTRUCTION**

DESIGN APPROVED  
**DANIEL COLLINS**

DATE  
14.08.25

RPEQ 18631

FOR AND ON BEHALF OF COLLIER'S INTERNATIONAL ENGINEERING & DESIGN PTY LTD



CLIENT  
**FRASERS PROPERTY AUSTRALIA**

ASSOCIATED CONSULTANT  
RPS GROUP  
(07) 3539 9500

PROJECT NAME  
**NEW BEITH - PRECINCT B**

MOUNTAIN RIDGE ROAD  
NEW BEITH

DRAWING TITLE  
**CONCEPT SEWER AND WATER LAYOUT PLAN SHEET 5 OF 5**

PROJECT No.  
**23-0154**

DRAWING No.  
**P304**

REVISION  
**A**

# Appendices

Appendix A      Concept Engineering Drawings



At Colliers,  
we are  
**enterprising.**

We maximise the potential of property to accelerate the success of our clients and our people.

Our expert advice to property occupiers, owners and investors leads the industry into the future. We invest in relationships to create enduring value. What sets us apart is not what we do, but how we do it. Our people are passionate, take personal responsibility and always do what's right for our clients, people and communities. We attract and develop industry leaders, empowering them to think and act differently to drive exceptional results. What's more, our global reach maximizes the potential of property, wherever our clients do business.

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