

LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- SITE CLEARANCE AREA
- EXTENT OF EARTHWORKS
- EXISTING BUILDINGS TO BE REMOVED
- PROTECTED TREES TO BE REMOVED
- PROTECTED TREES TO BE RETAINED
- PROTECTED TREES TO BE REMOVED (MAYBE RETAINED SUBJECT TO DETAILED DESIGN)
- TREE NUMBERS
- BUILDING NUMBERS

- NOTES:**
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 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

Auckland Council
BUN60386270 & LUC60386272
 Approved Resource Consent Plan
 29/06/2022

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date

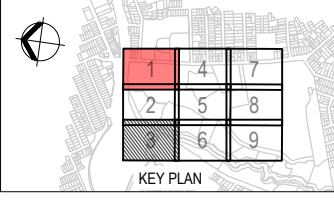
Drawing Originator:

Beca	Design	C.BREYENBACH	31.05.21	Approved For Construction*
	Drawn	B.POPLI	31.05.21	Date
	Dwg Verifier			
	Dwg Check			
	Scale (A3)			
	Scale (A1)			
	Original Scale (A1)			
	Reduced Scale (A3)			
	Scale (A1)			

* Refer to Revision 1 for Original Signature

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ	Project:	CARRINGTON BACKBONE WORKS PROJECT
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Title:	SITE CLEARANCE & DEMOLITION OVERALL LAYOUT	Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-2100	Rev:	E



LEGEND:

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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
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E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

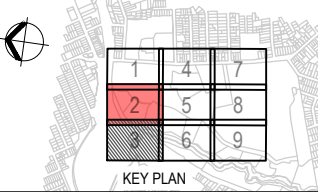
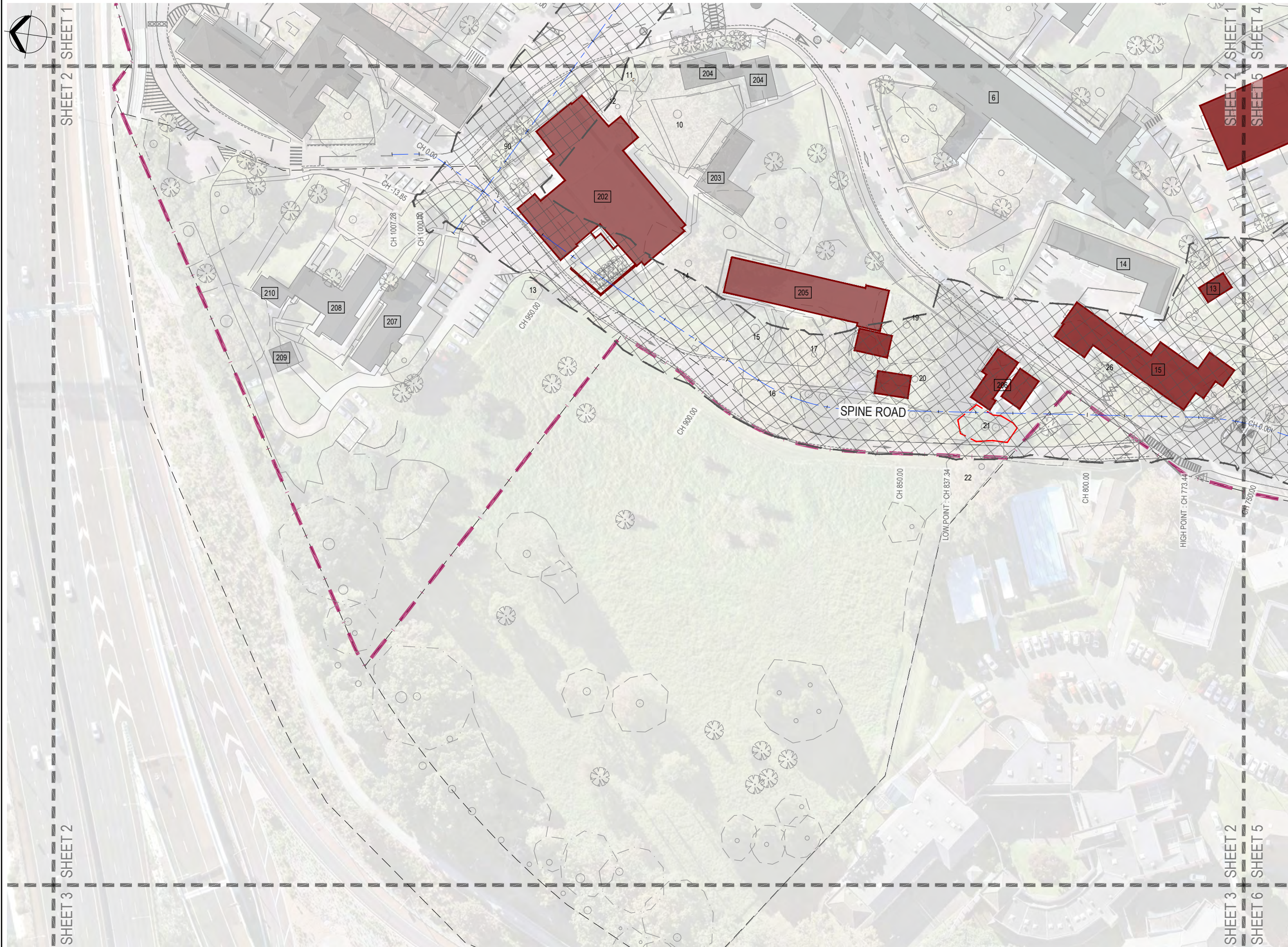
Design: C.BREYTENBACH 31.05.21
Drawn: B.POPLI 31.05.21
Dwg Verifier:
Dwg Check:
Date:
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2101
Rev.	E



LEGEND:

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E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
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C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Drawn	B.POPLI	31.05.21	Date
Dwg Verifier			
Dwg Check			

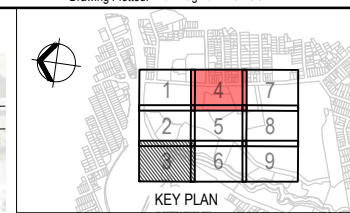
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

SITE CLEARANCE & DEMOLITION LAYOUT SHEET 2

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2102
Rev.	E



LEGEND:

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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	Drawn	31.05.21	Approved For Construction*
1:500	C.BREYENBACH	B.POPLI	31.05.21	
Reduced Scale (A3)	Design Check	Date		
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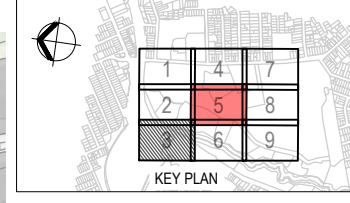
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2104
Rev.	E



LEGEND:

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D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator: **Beca**

Original Scale (A1)	1:500	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	B.POPLI	31.05.21	Date
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		Design Check			

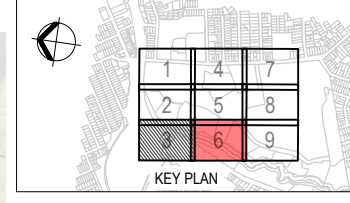
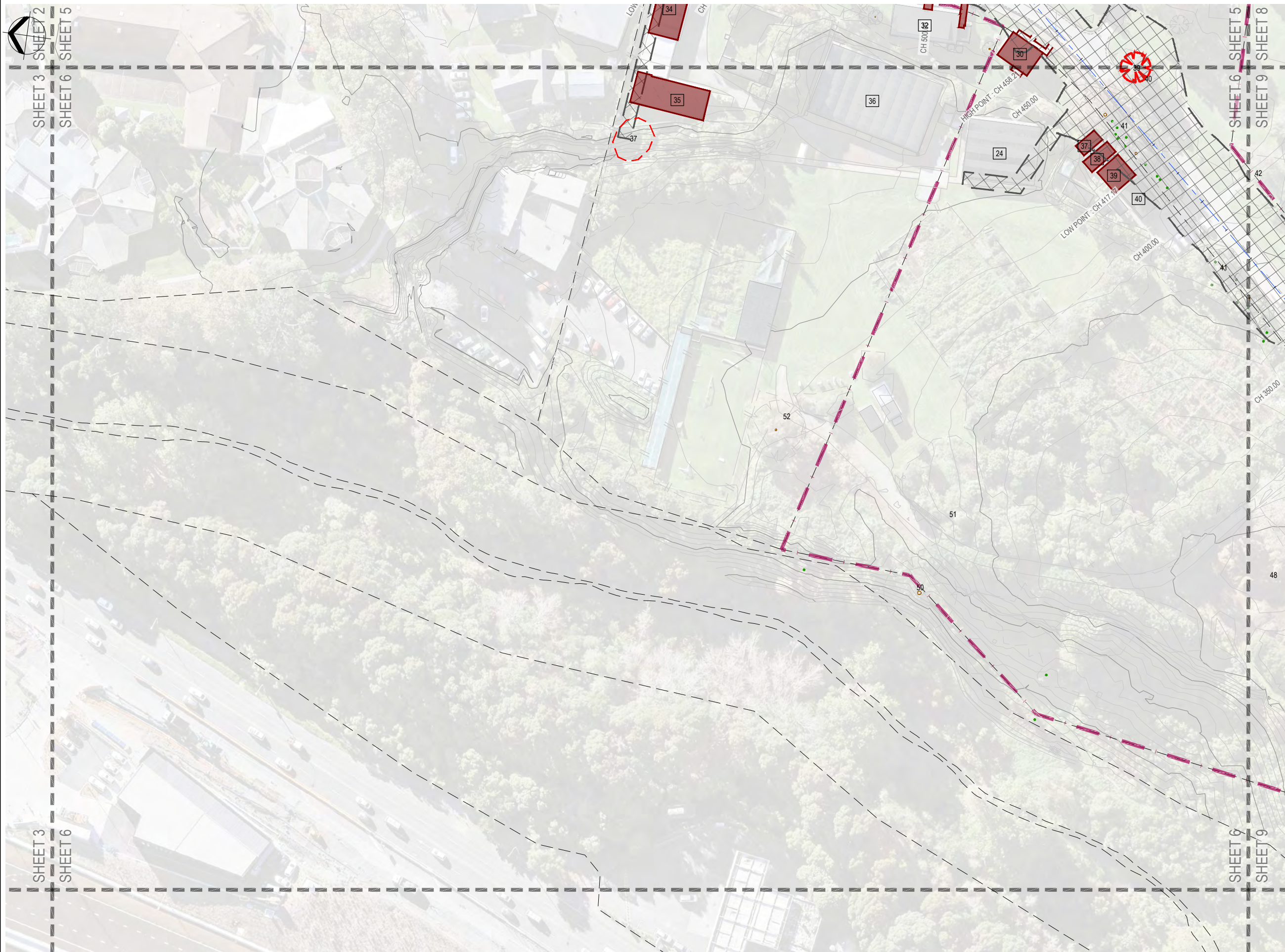
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2105
Rev.	E



LEGEND:

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- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
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- EXTENT OF EARTHWORKS
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

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D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:500	Design	C.BREYENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	B.POPLI	31.05.21	Date
		Design Verifier			
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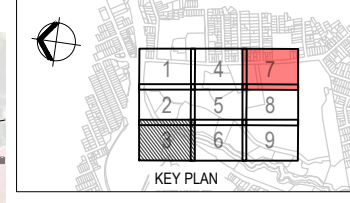
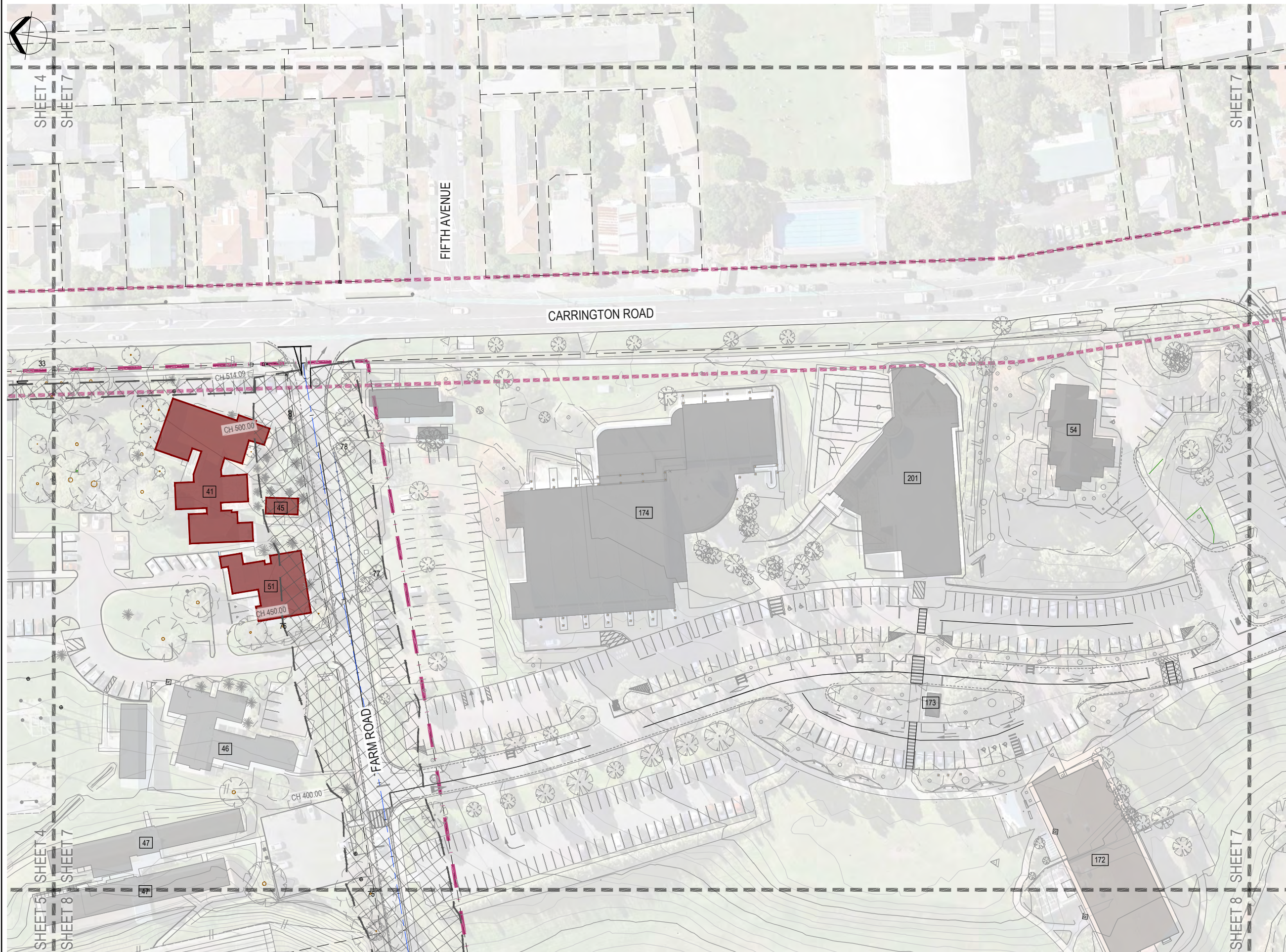
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2106
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
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- SITE CLEARANCE AREA
- EXTENT OF EARTHWORKS
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
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E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	C.BREYENBACH	31.05.21	Approved For Construction*
1:500	Drawn	B.POPLI	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
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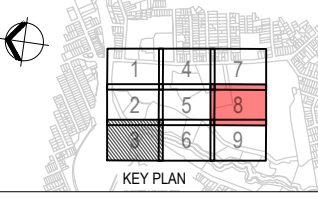
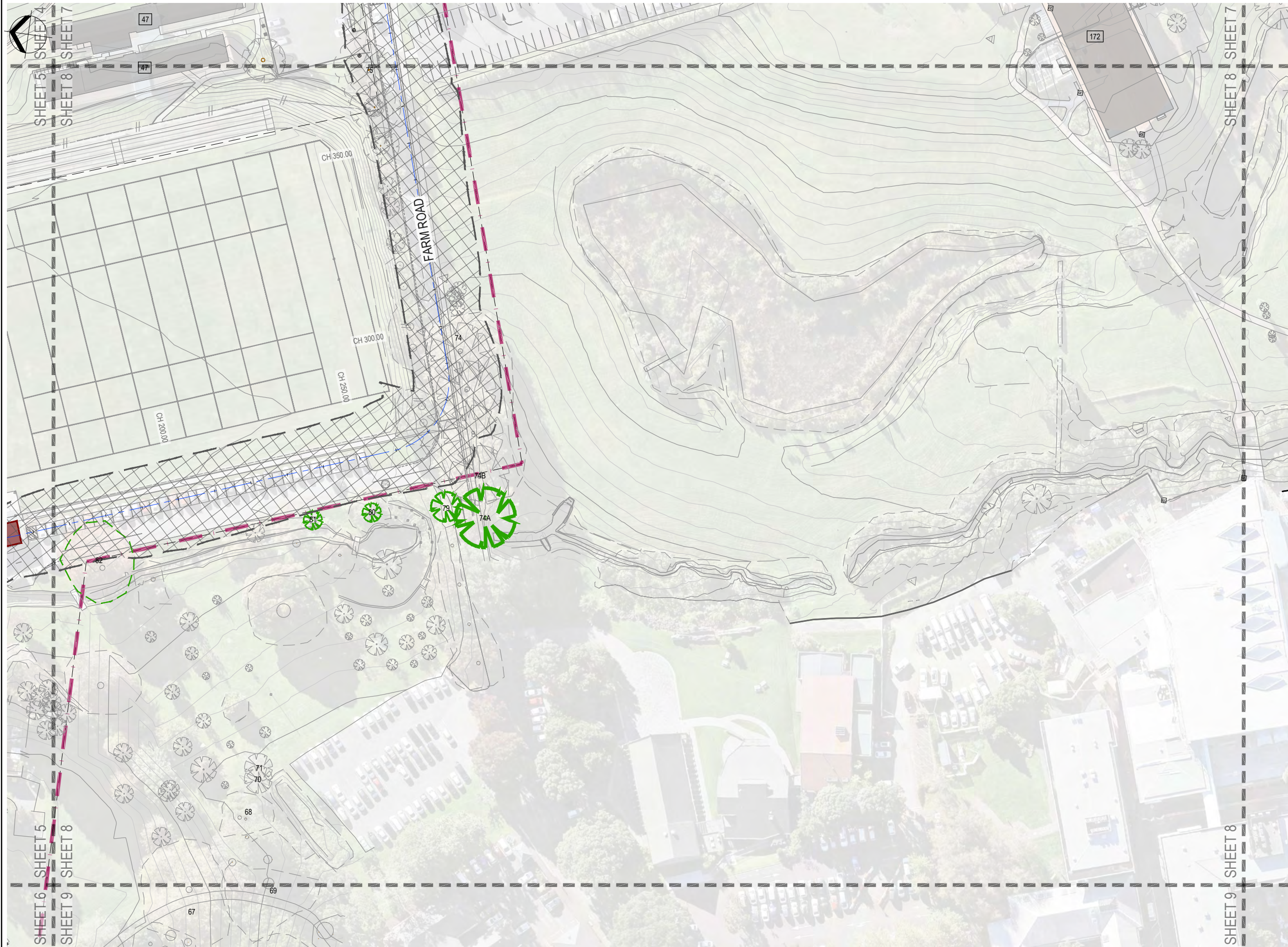
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2107
Rev.	E



LEGEND:

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E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

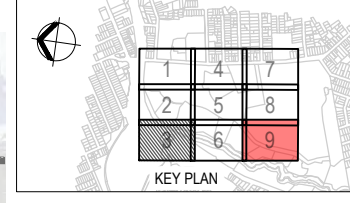
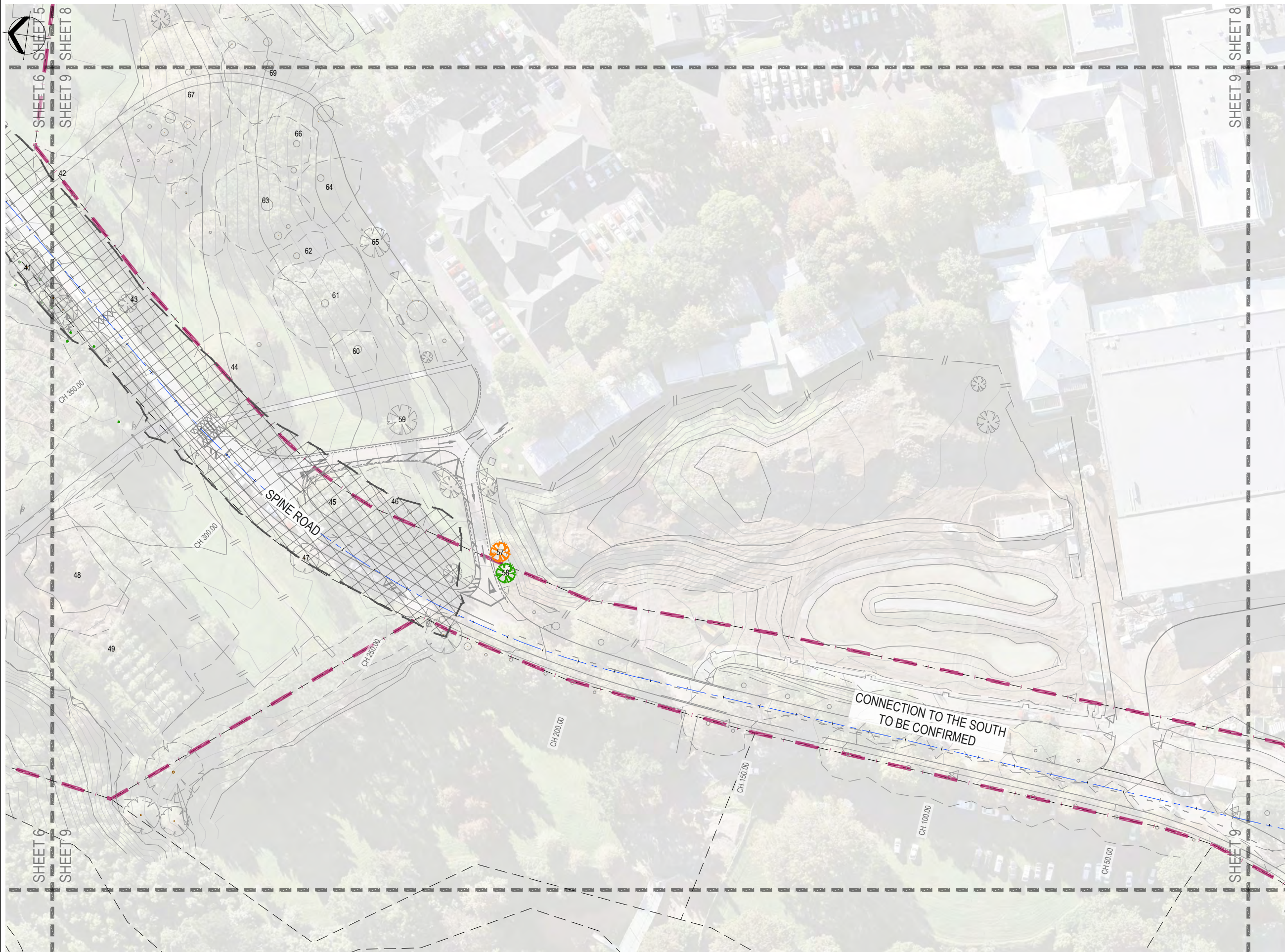
Original Scale (A1)	1:500	Design	C.BREYENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	B.POPLI	31.05.21	Date
		Dag Verifier			
		Dag Check			
		* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2108
Rev.	E



LEGEND:

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**ORIGINAL DRAWING
IN COLOUR**

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No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	Drawn	Checked	Date
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Reduced Scale (A3)	Design Verifier	Day Check		
1:1000				

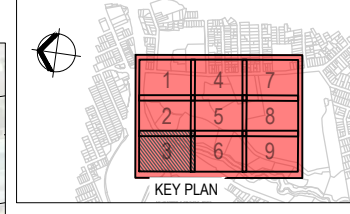
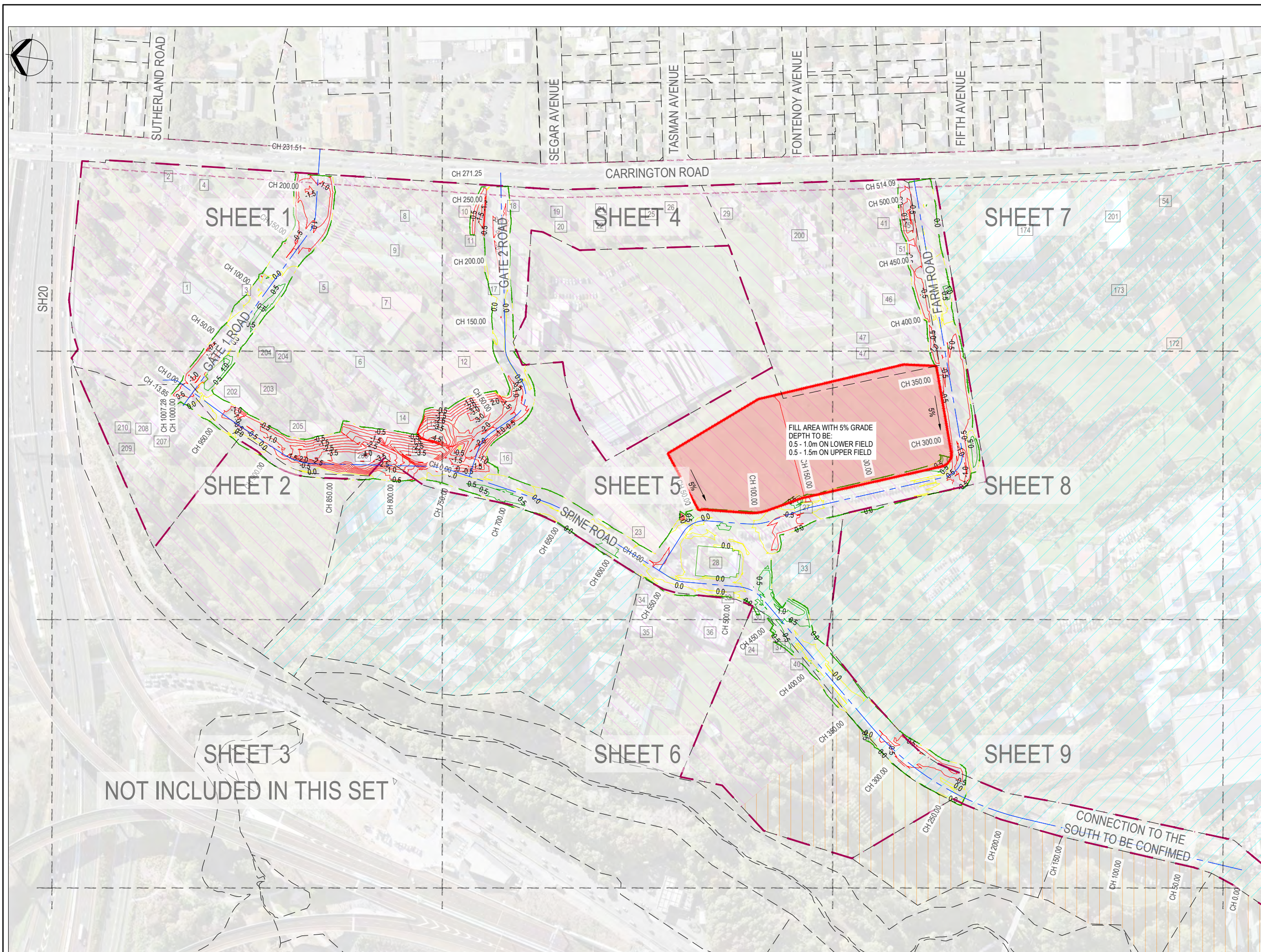
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **SITE CLEARANCE & DEMOLITION LAYOUT SHEET 9**

Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-2109



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE

- NOTES:**
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B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Original Scale (A1) 1:1500
Reduced Scale (A3) 1:3000

Beca

Design: C.BREYTENBACH 31.05.21
Drawn: A.FAZEKAS 31.05.21
Design Check: []
Date: []

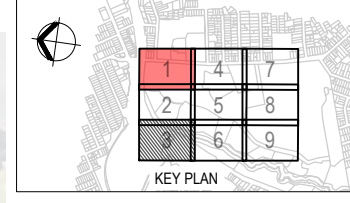
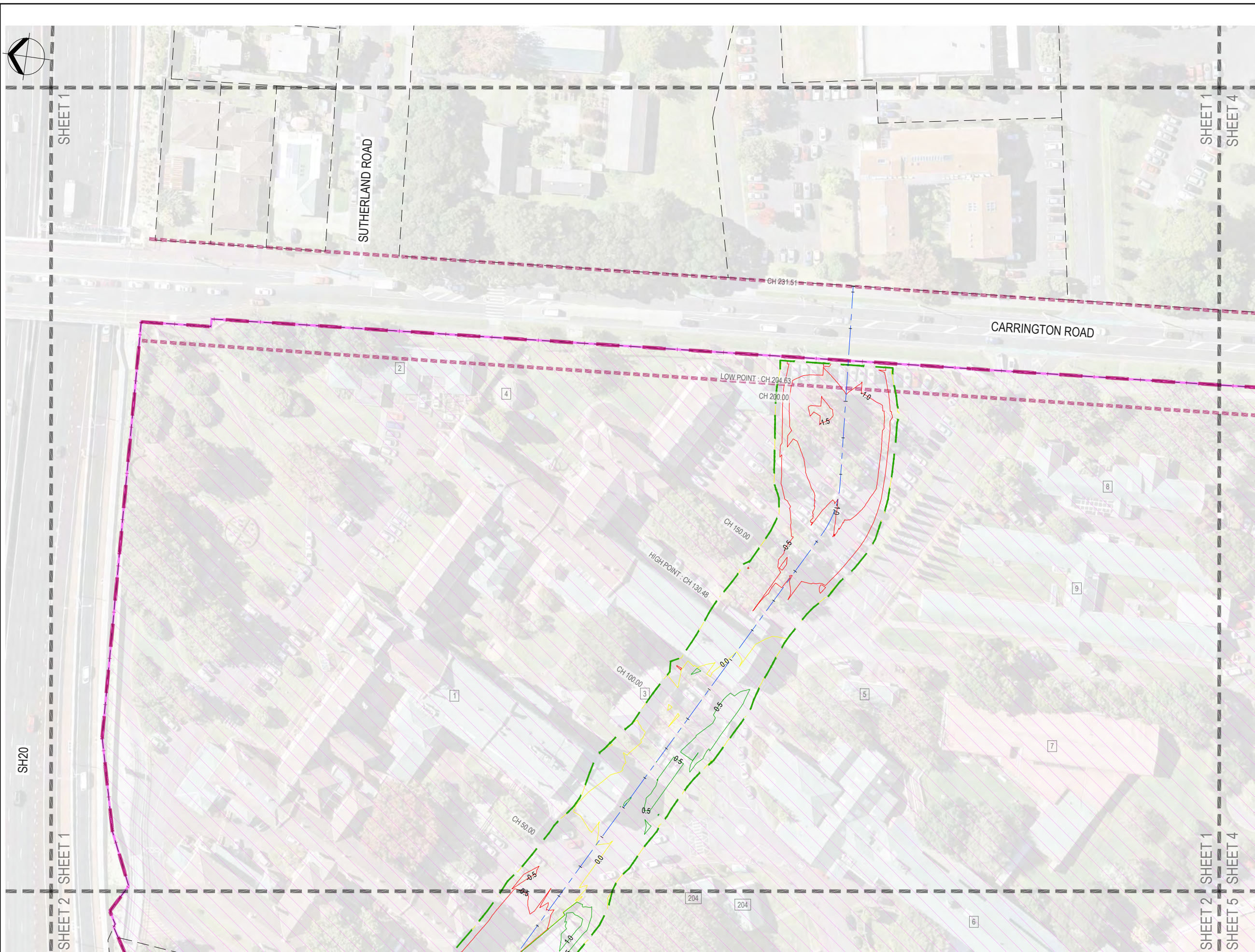
Approved For Construction: []
Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR OVERALL LAYOUT**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2200
Rev.	E



LEGEND:

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Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	31.05.21	Date
		Day Verifier			
		Day Check			

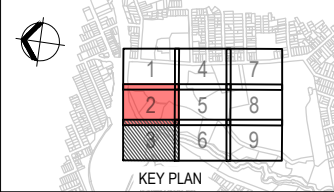
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2201
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

RESOURCE CONSENT
 NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
 Reduced Scale (A3) 1:1000

Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Drawn	A.FAZEKAS	31.05.21	Date
Dwg Verifier			
Dwg Check			

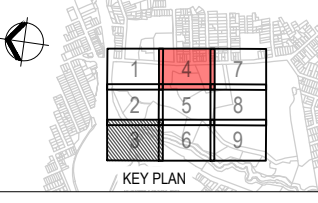
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 2**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2202
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

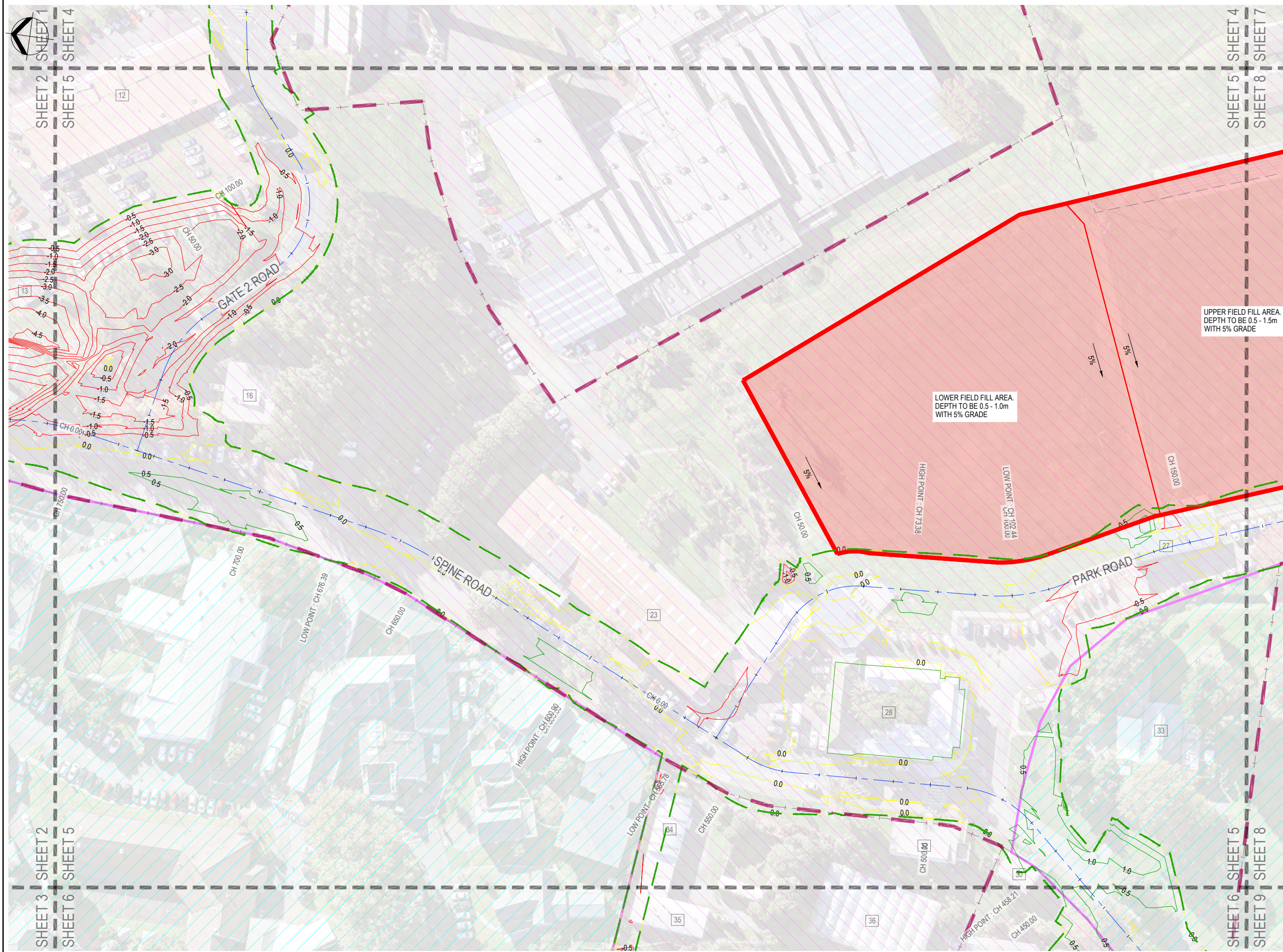
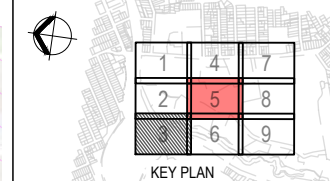
Original Scale (A1)	1:500	Design	C.BREYENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			

* Refer to Revision 1 for Original Signature

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ	Project:	CARRINGTON BACKBONE WORKS PROJECT
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Title:	CUT/FILL CONTOUR LAYOUT SHEET 4
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-2204
Rev:	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE
- BUILDING NUMBERS

UPPER FIELD FILL AREA.
DEPTH TO BE 0.5 - 1.5m
WITH 5% GRADE

LOWER FIELD FILL AREA.
DEPTH TO BE 0.5 - 1.0m
WITH 5% GRADE

NOTES:

1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS COMMENCING.
3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

G	FOR RESOURCE CONSENT	ABL	CJB	DP	25.02.22
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
No.	Revision	By	CHK	Appd	Date

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	C.BREYENBACH	31.05.21	Approved For Construction*
Drawn	A.FAZEKAS	31.05.21	Date
Dwg Verifier			
Dwg Check			

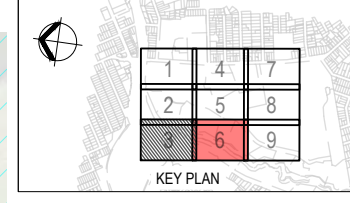
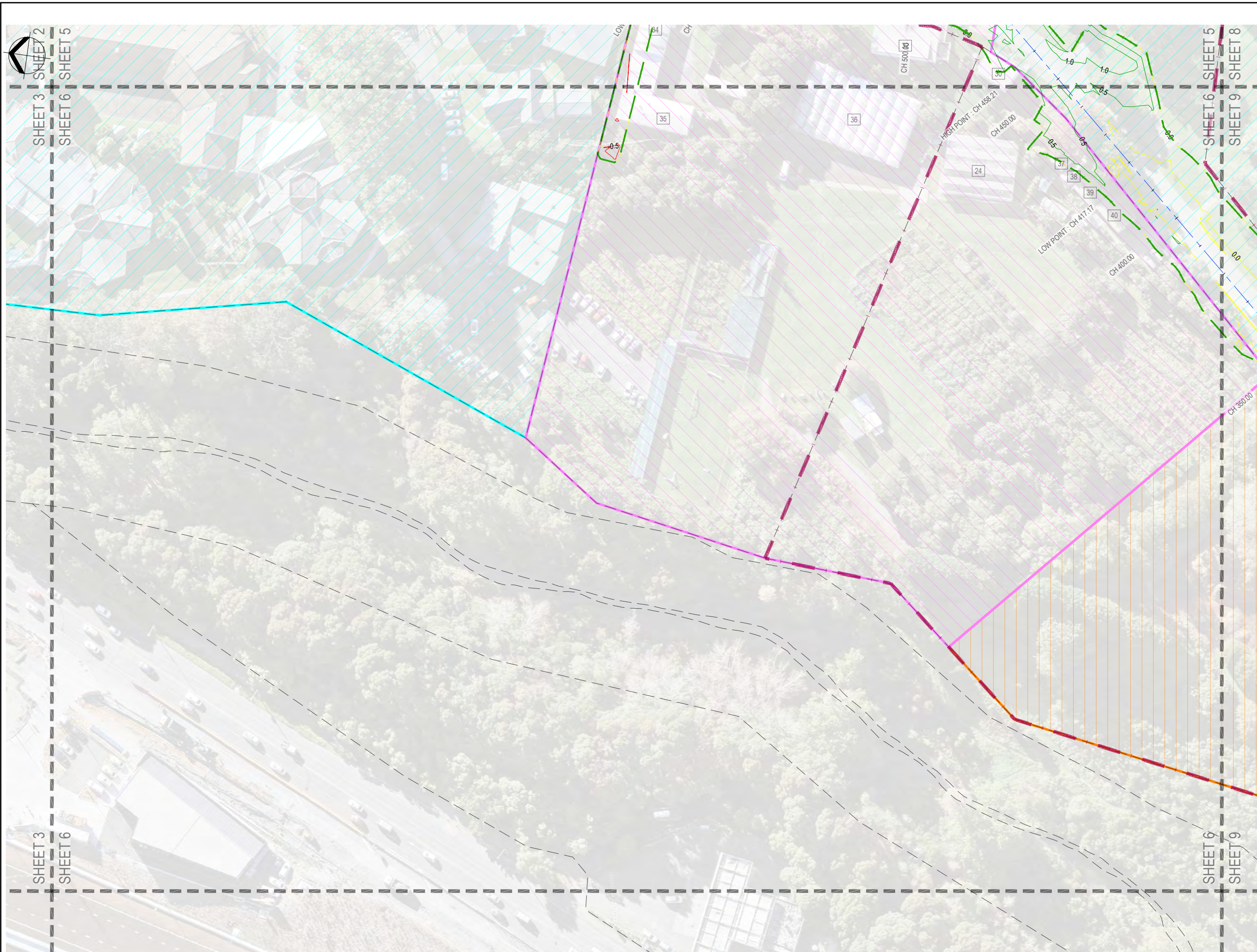
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2205
Rev.	G



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE
- BUILDING NUMBERS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS COMMENCING.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
G	FOR RESOURCE CONSENT	ABL	CJB	DP	25.02.22
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21

Drawing Originator: **Beca**

Original Scale (A1)	1:500	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	31.05.21	Date
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		Dag Check			

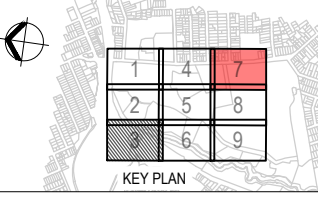
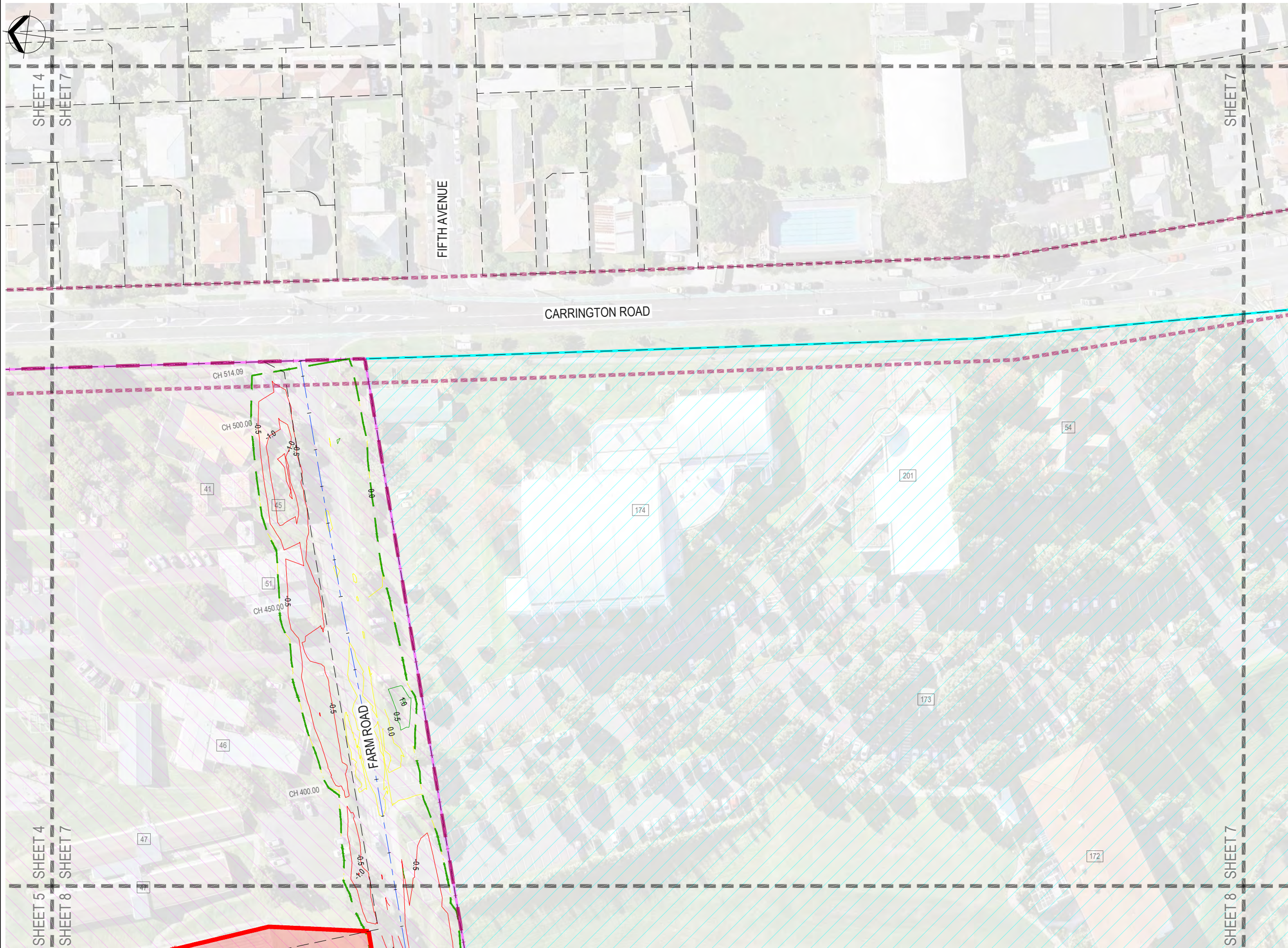
* Refer to Revision 1 for Original Signature

Client: **MARUTŪĀHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-2206	Rev.
		G



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- Business - Mixed Use Zone
- Special Purpose Zone
- Residential - Terrace Housing and Apartment Buildings Zone

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING IN COLOUR

RESOURCE CONSENT NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:
Beca

Original Scale (A1)	Design	Drawn	31.05.21	Approved For Construction*
1:500	C.BREYENBACH	A.FAZEKAS	31.05.21	
Reduced Scale (A3)	Dwg Verifier	Dwg Check	Date	
1:1000				

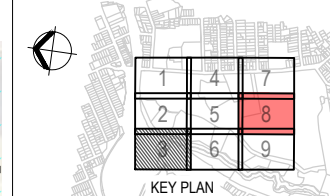
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 7**

Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-2207



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- BUSINESS - MIXED USE ZONE
- SPECIAL PURPOSE ZONE
- RESIDENTIAL - TERRACE HOUSING AND APARTMENT BUILDINGS ZONE

NOTES:

1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	31.05.21	Date
		Dwg Verifier			
		Dwg Check			

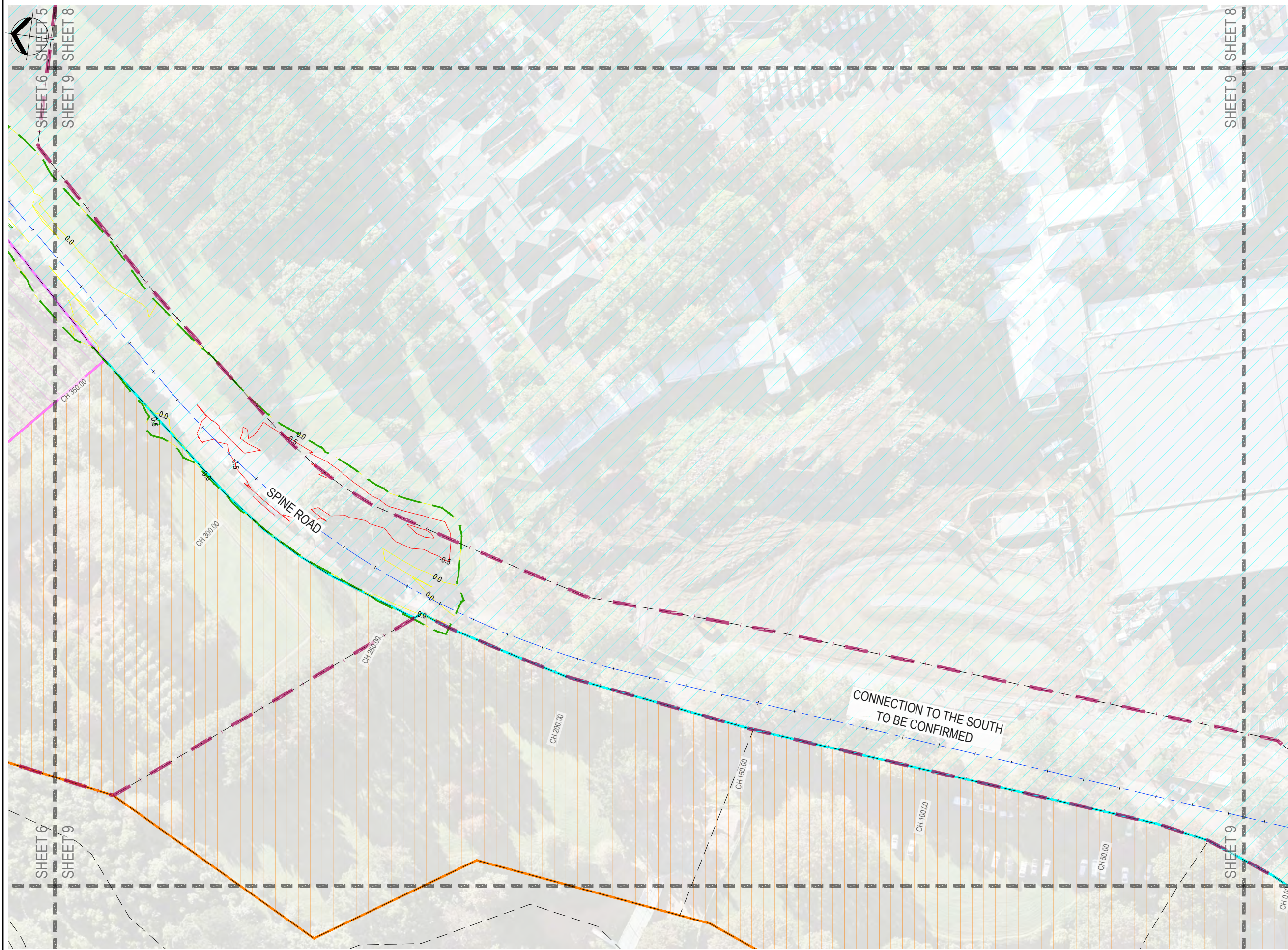
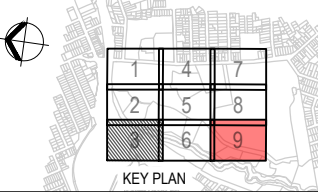
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2208
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXTENT OF EARTHWORKS
- 0.5 CUT CONTOUR LINES
- 0.5 FILL CONTOUR LINES
- 0.0 ZERO CONTOUR LINES
- Business - Mixed Use Zone
- Special Purpose Zone
- Residential - Terrace Housing and Apartment Buildings Zone

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:500	Design	C.BREYENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	31.05.21	Date
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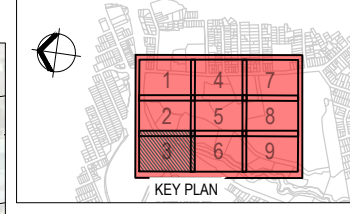
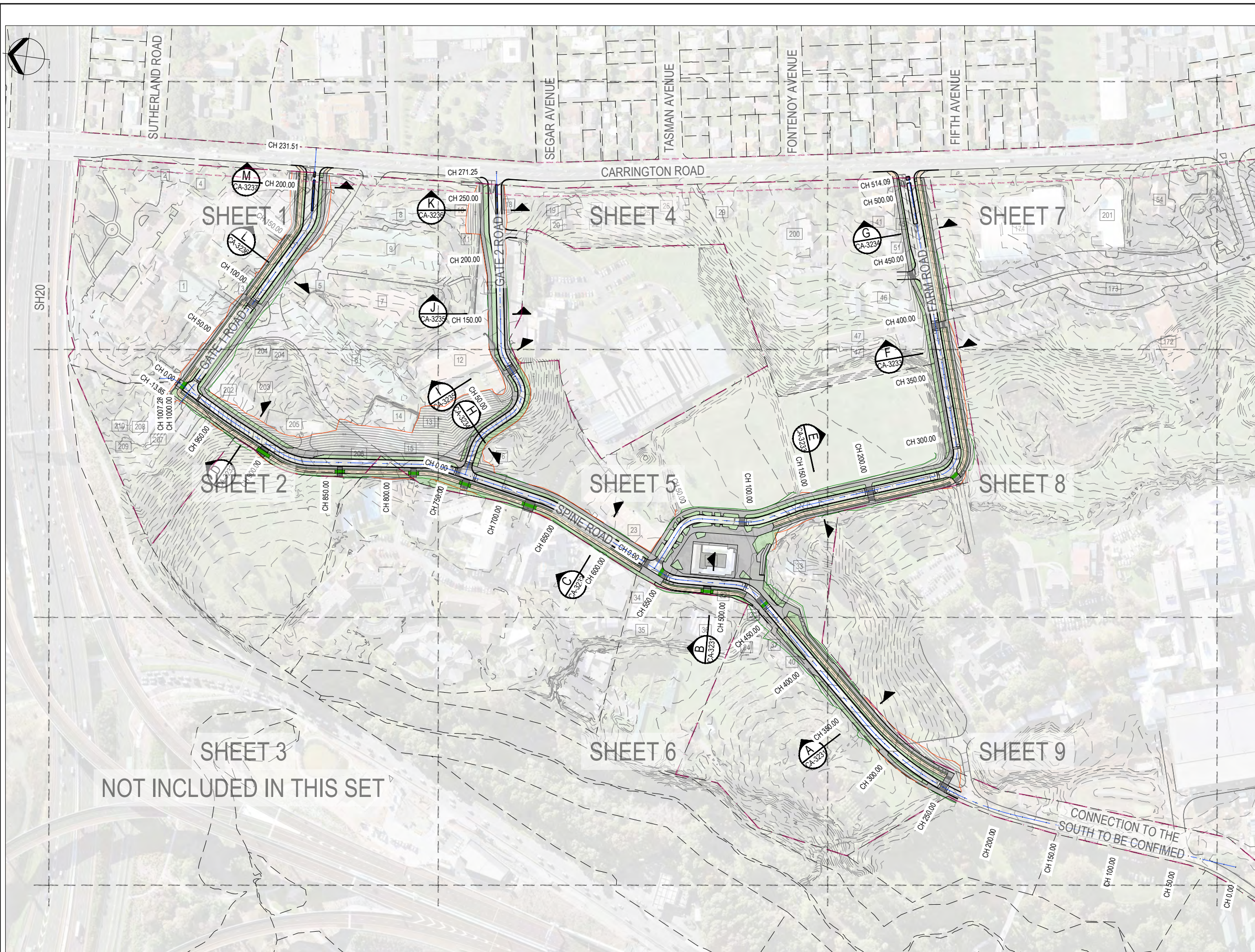
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **CUT/FILL CONTOUR LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-2209
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 2. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 3. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:1500	Design	N.KUSEL	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:3000	Drawn	A.FAZEKAS	31.05.21	Date
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		Dag Check			

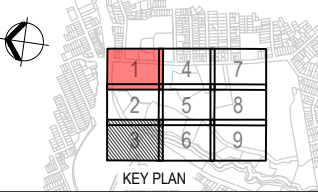
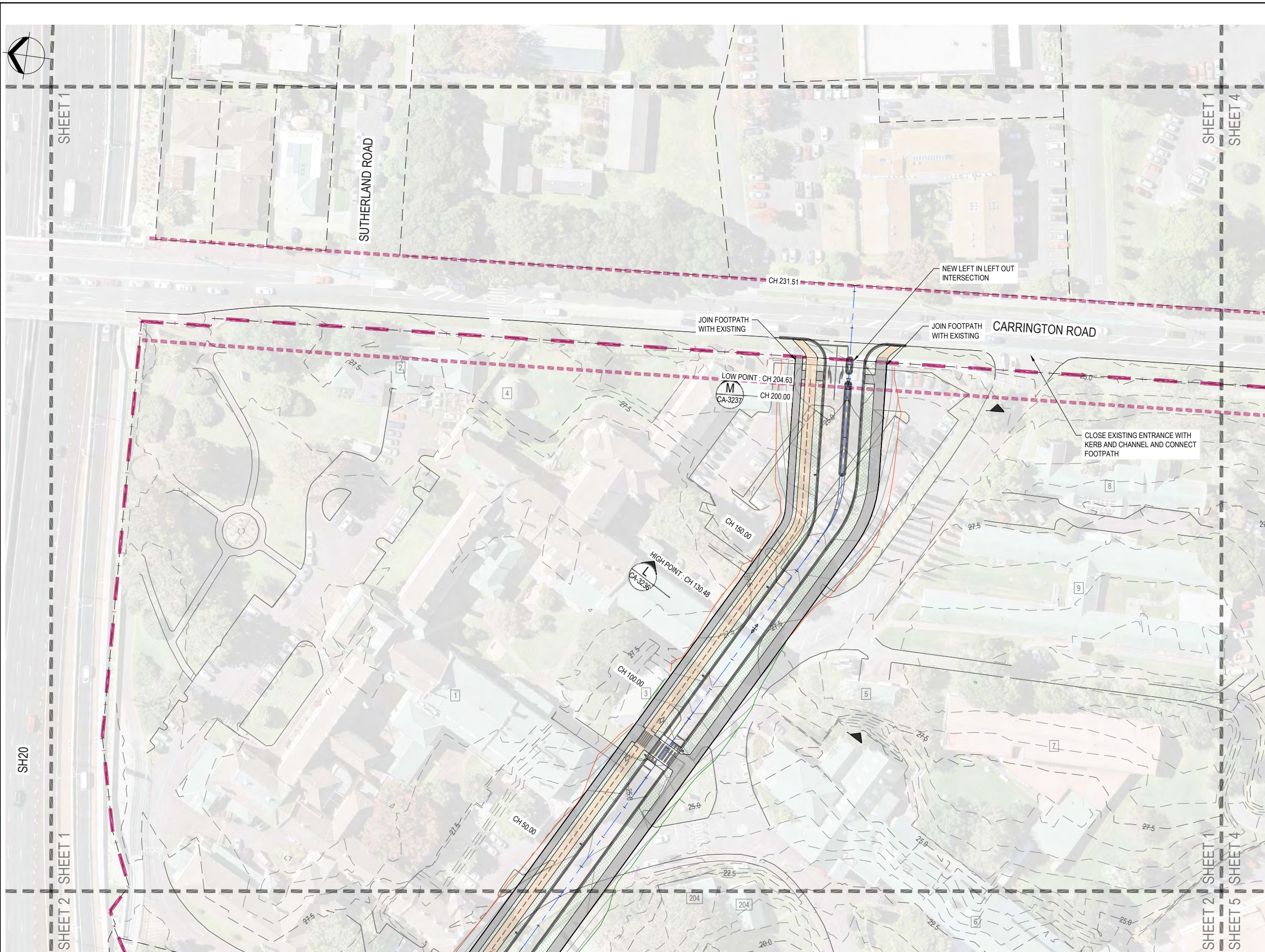
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING OVERALL LAYOUT**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3100
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design: N.KUSEL 31.05.21
Drawn: A.FAZEKAS 31.05.21
Dwg Verifier: []
Dwg Check: []
Date: []

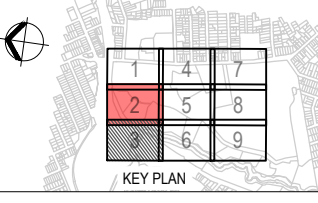
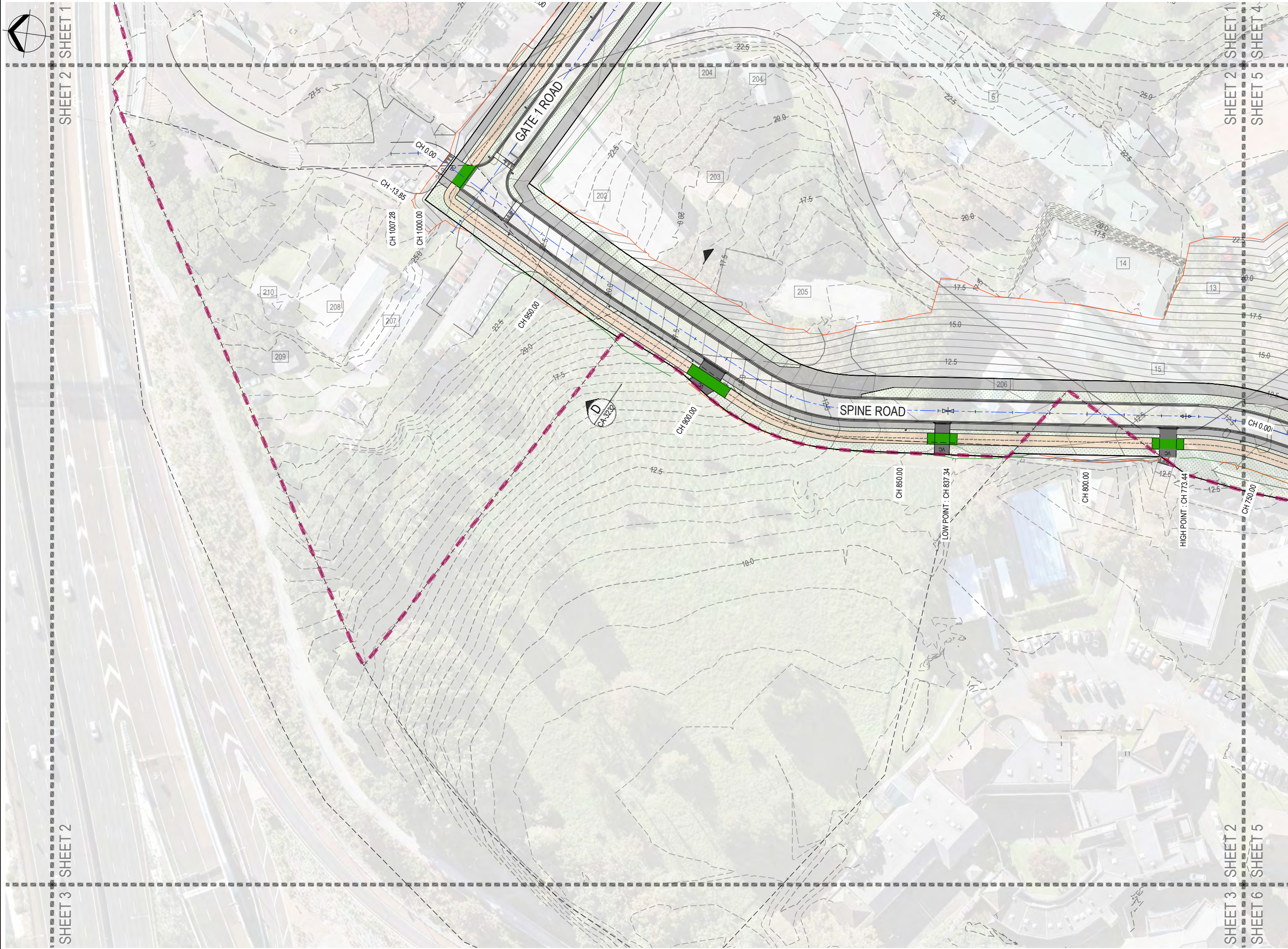
Approved For Construction* []
Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-3101	Rev.
		E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	Drawn	Date	Approved For Construction*
1:500	N.KUSEL	A.FAZEKAS	31.05.21	31.05.21
Reduced Scale (A3)	Dag Verifier			Date
1:1000	Dag Check			

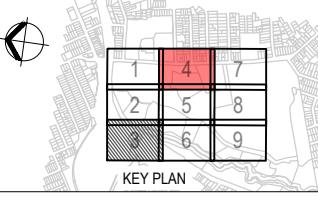
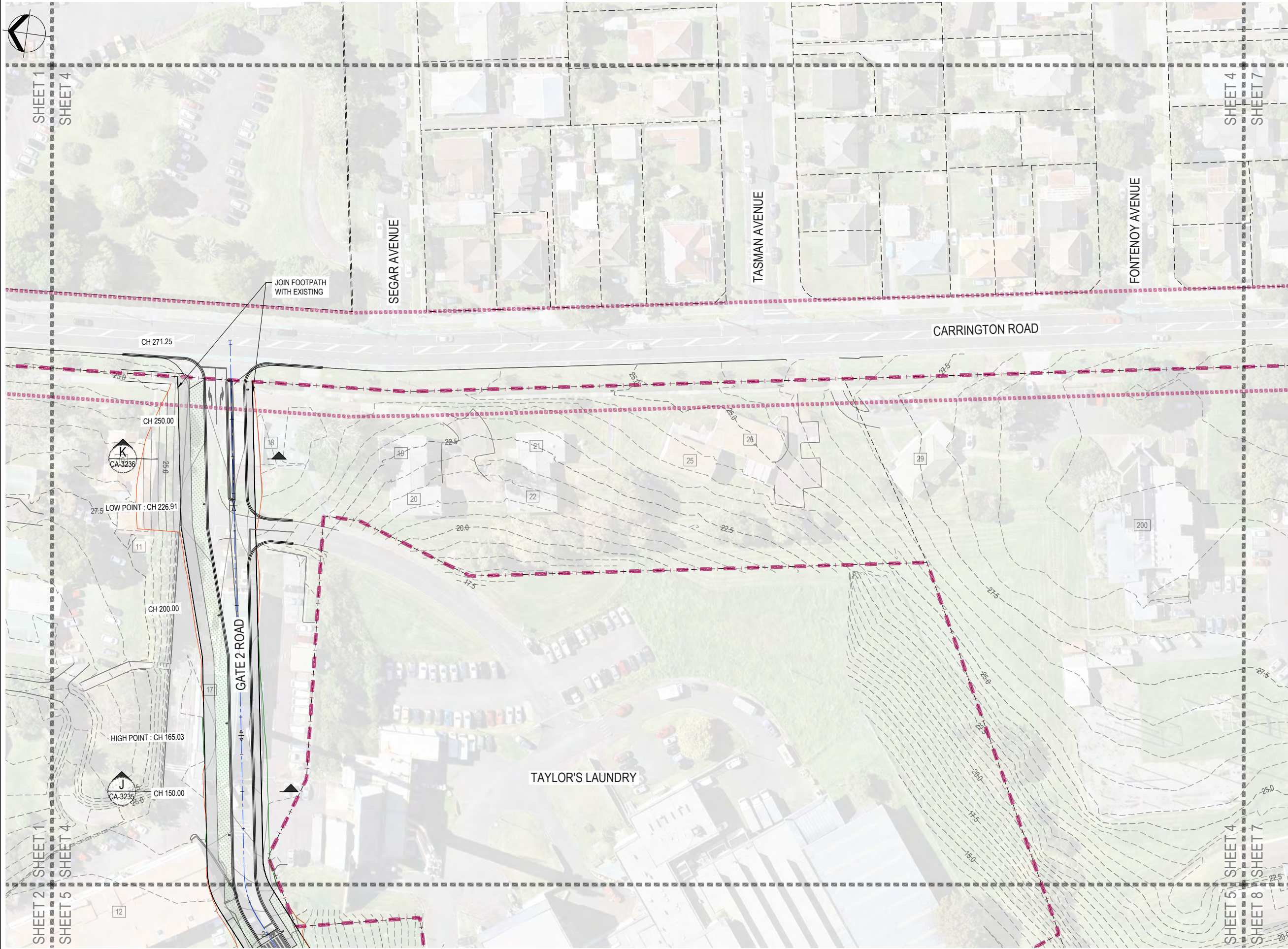
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 2**

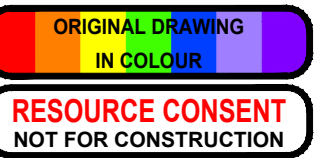
Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-3102



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Check			
1:1000				

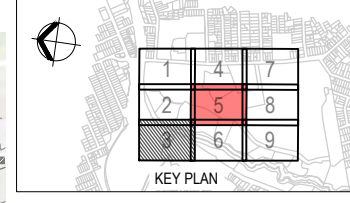
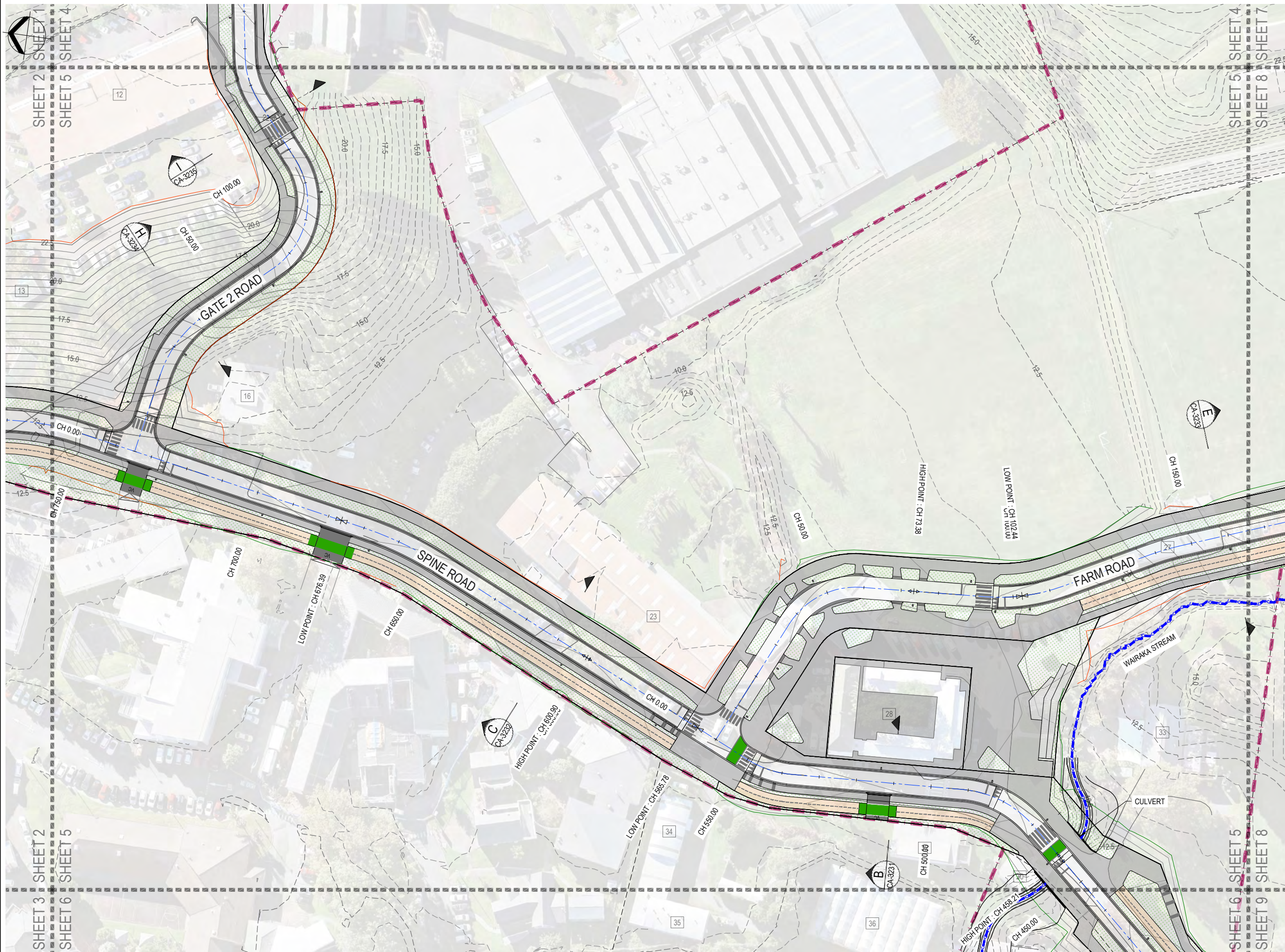
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3104
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
 IN COLOUR
 RESOURCE CONSENT
 NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
 Reduced Scale (A3) 1:1000

Design: N.KUSEL 31.05.21
 Drawn: A.FAZEKAS 31.05.21
 Design Check: []
 Date: []

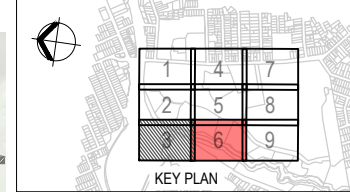
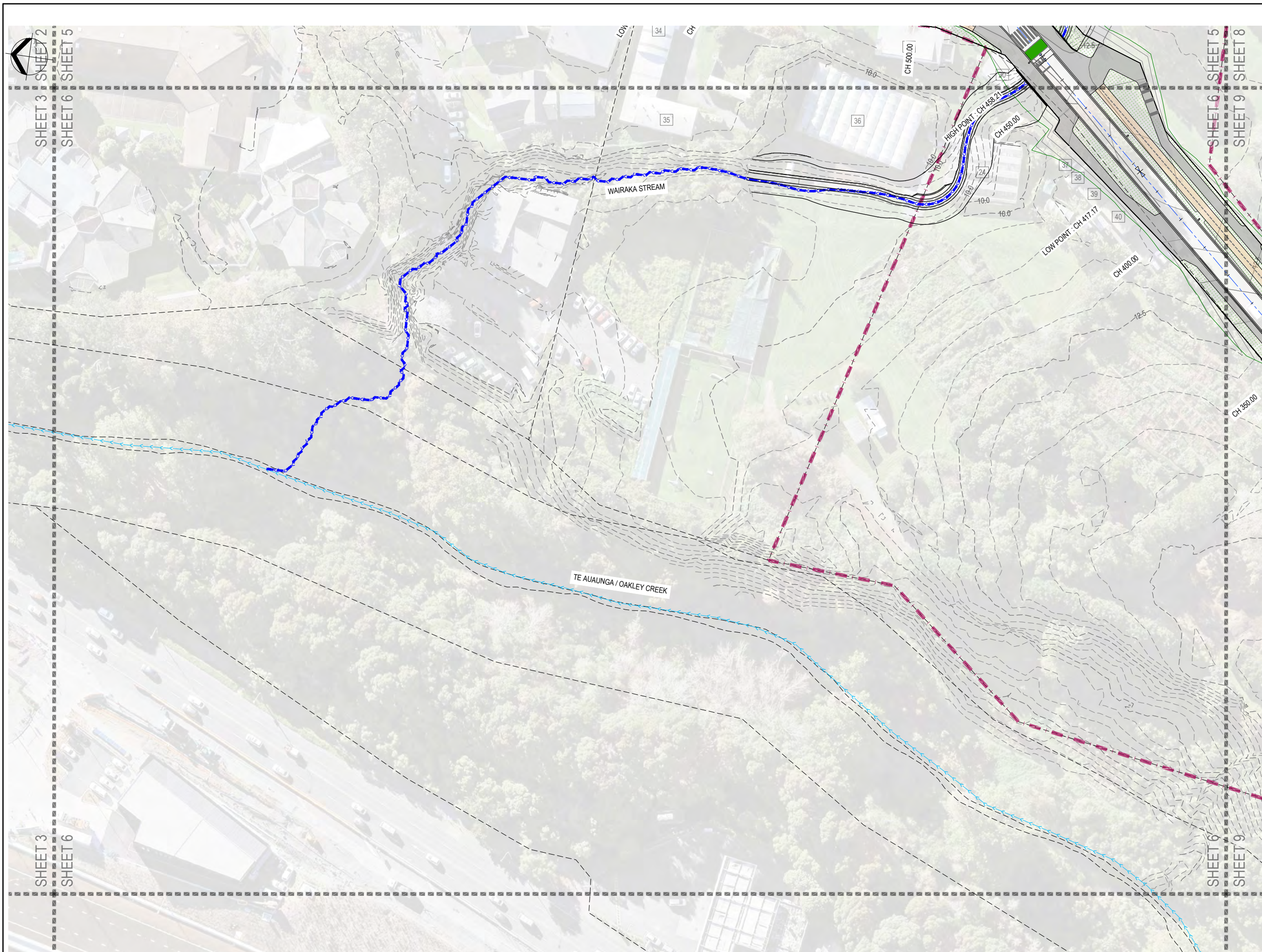
Approved For Construction: []
 Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3105
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING IN COLOUR

RESOURCE CONSENT NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	Drawn	31.05.21	Approved For Construction*
1:500	N.KUSEL	A.FAZEKAS	31.05.21	
Reduced Scale (A3)	Design Verifier	Design Check	Date	
1:1000				

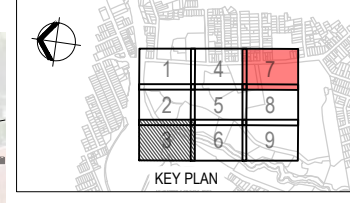
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 6**

Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-3106



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Checker			
1:1000	Design Checker			

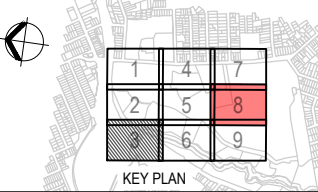
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-3107	Rev.
		E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	
Reduced Scale (A3)	Design Verifier			Date
1:1000	Design Check			

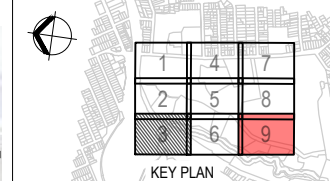
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-3108	Rev.
		E

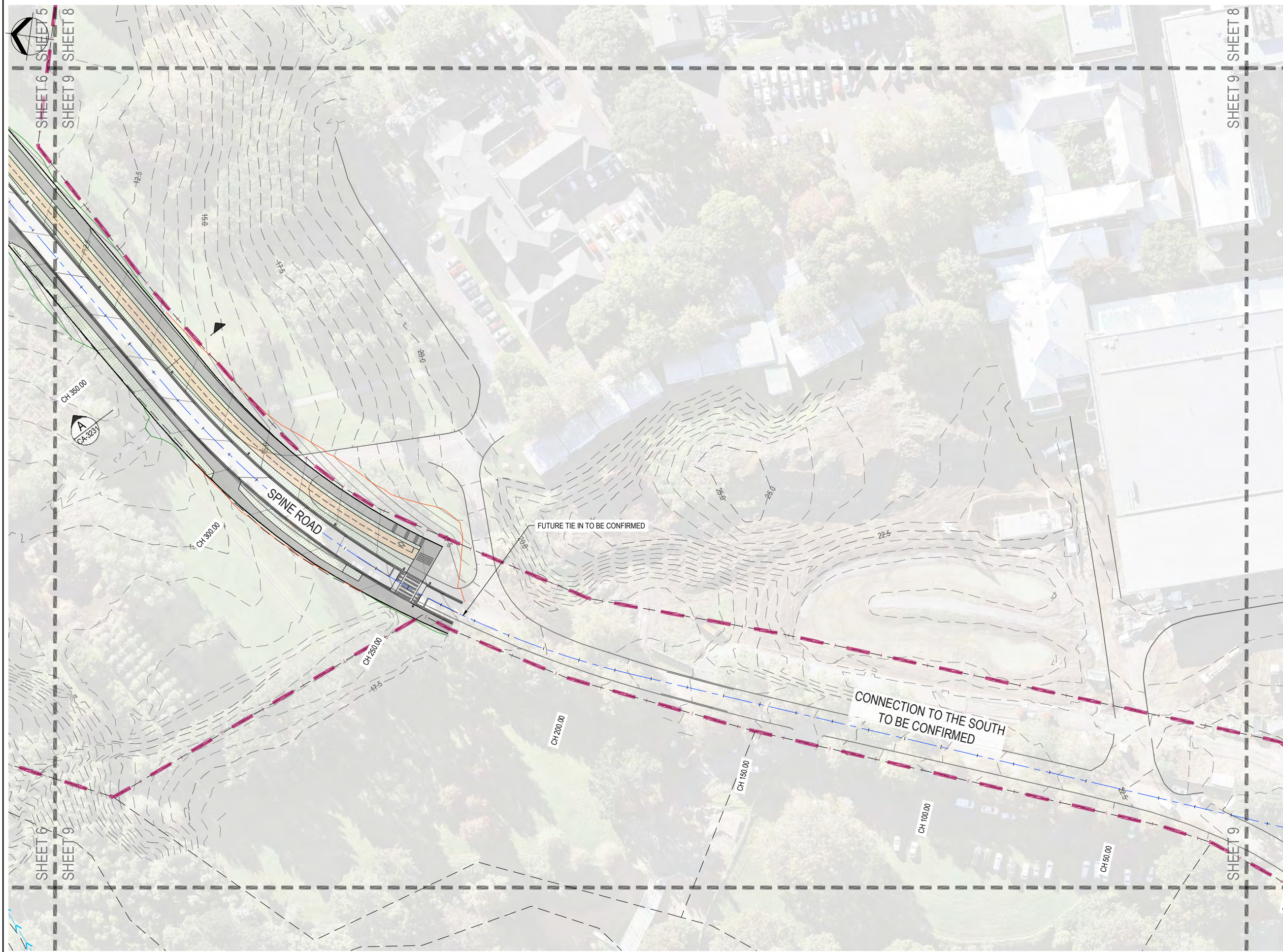


LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS

NOTES:

1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
1:1000	Design Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

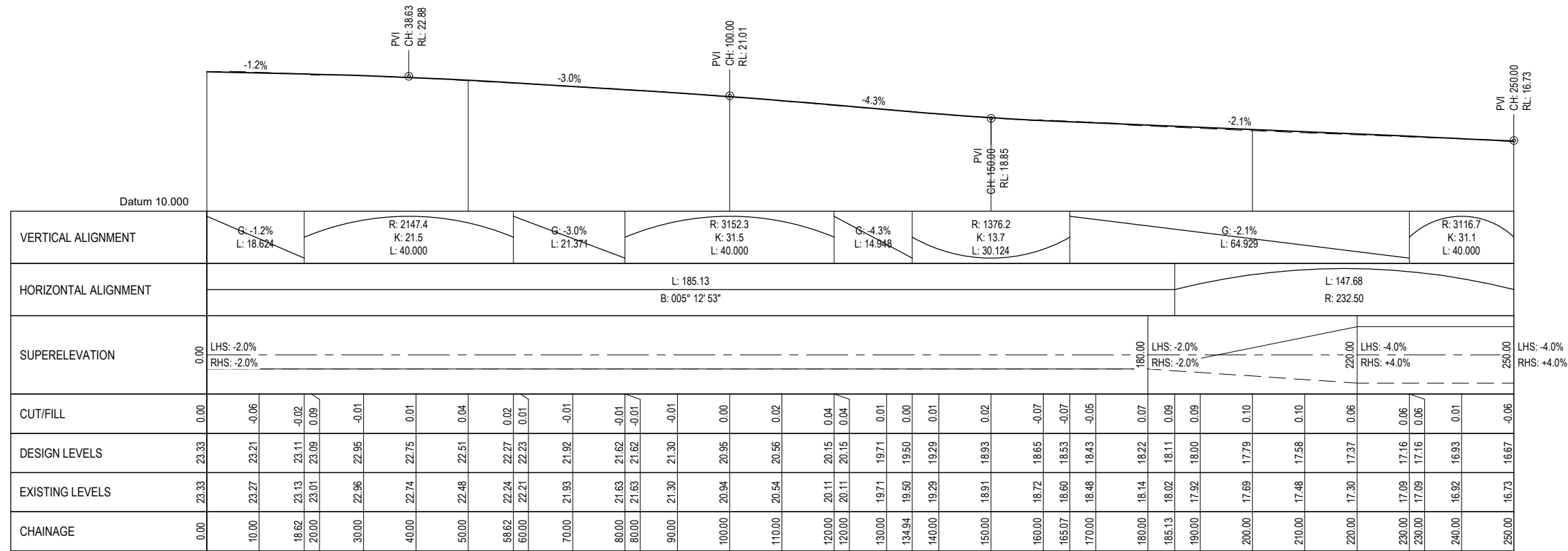
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LAYOUT SHEET 9**

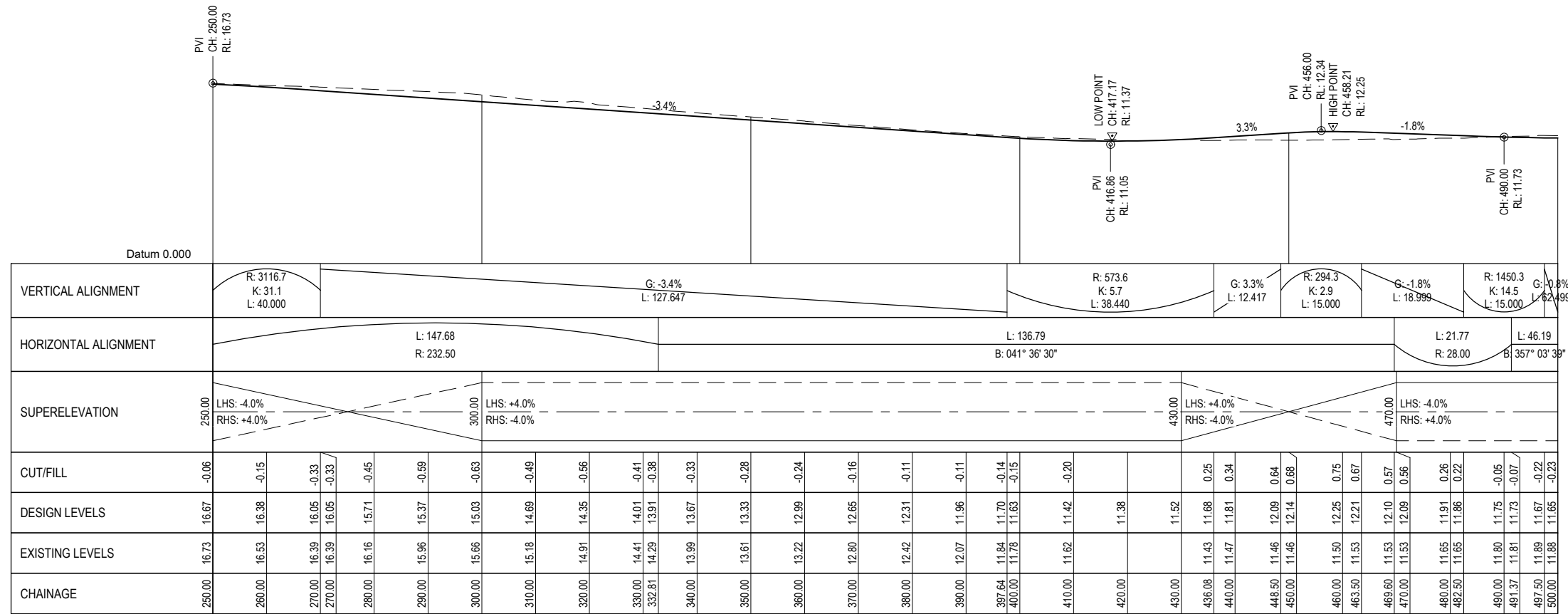
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3109
Rev.	E

LEGEND:

- EXISTING SURFACE
- DESIGN SURFACE



LONGITUDINAL SECTION SPINE ROAD - CHAINAGE 0 TO 250



LONGITUDINAL SECTION SPINE ROAD - CHAINAGE 250 TO 500

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:500 (H) 1:250 (V)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3) 1:1000 (H) 1:500 (V)	Drawn	A.FAZEKAS	31.05.21	Date
	Design Verifier			
	Design Check			

Client: **MARUTUAHU AND WAIOHUA-TAMAKI ROPU**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

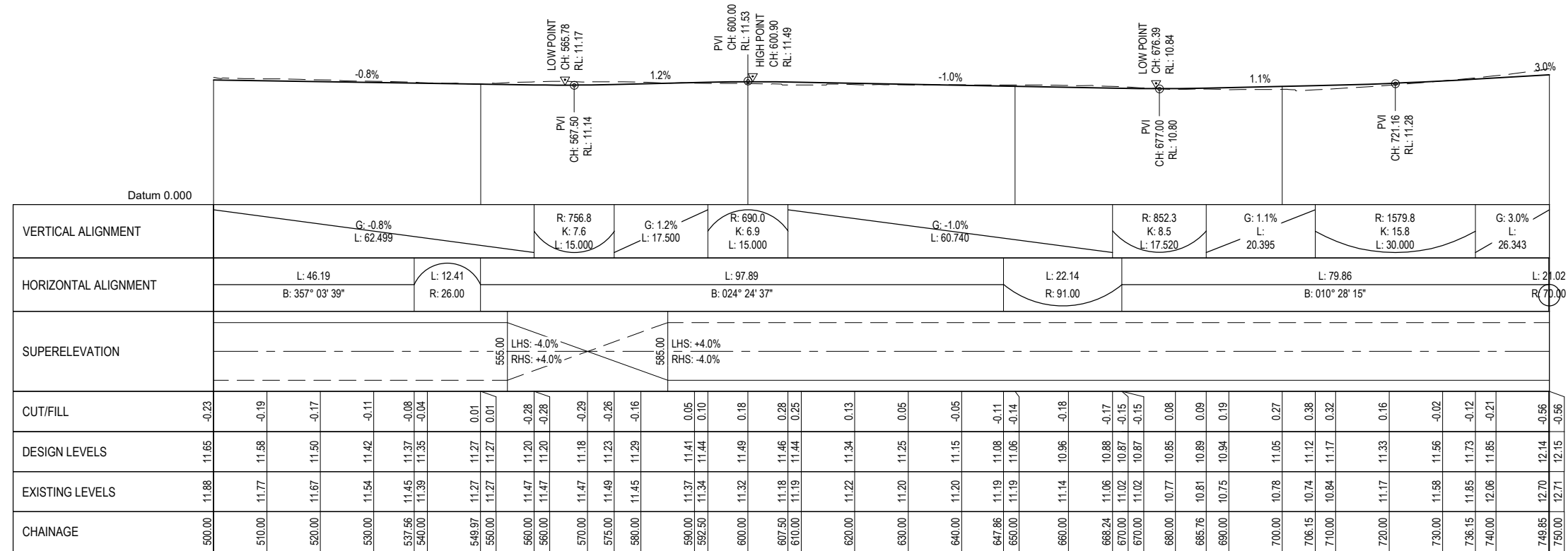
Title: **ROADING LONGITUDINAL SECTIONS SHEET 1**

RESOURCE CONSENT NOT FOR CONSTRUCTION

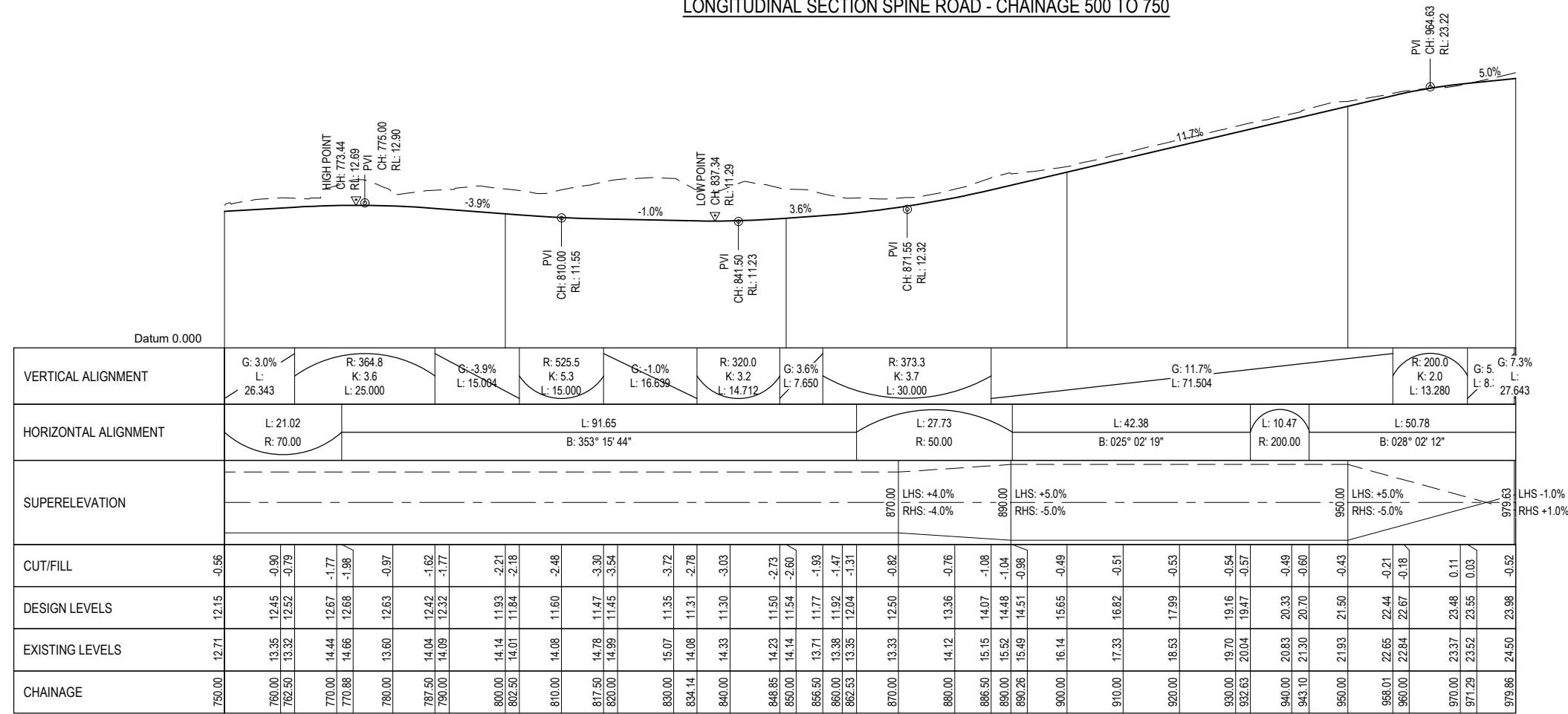
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3201
Rev.	E

LEGEND:

- EXISTING SURFACE
- DESIGN SURFACE



LONGITUDINAL SECTION SPINE ROAD - CHAINAGE 500 TO 750



LONGITUDINAL SECTION SPINE ROAD - CHAINAGE 750 TO 980

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:500 (H) 1:250 (V)	Design C.BREYENBACH 31.05.21	Approved For Construction*
Reduced Scale (A3) 1:1000 (H) 1:500 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	

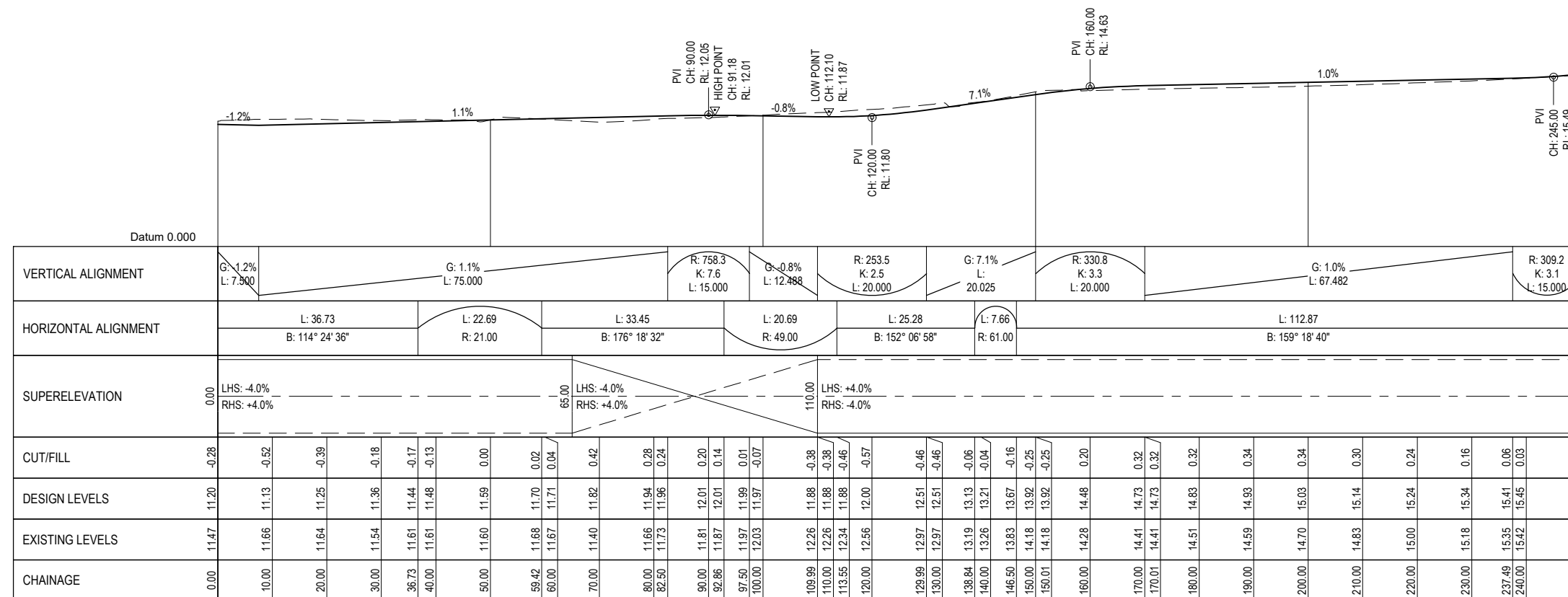
Client:	MARUTUĀHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

Title:	ROADING LONGITUDINAL SECTIONS SHEET 2
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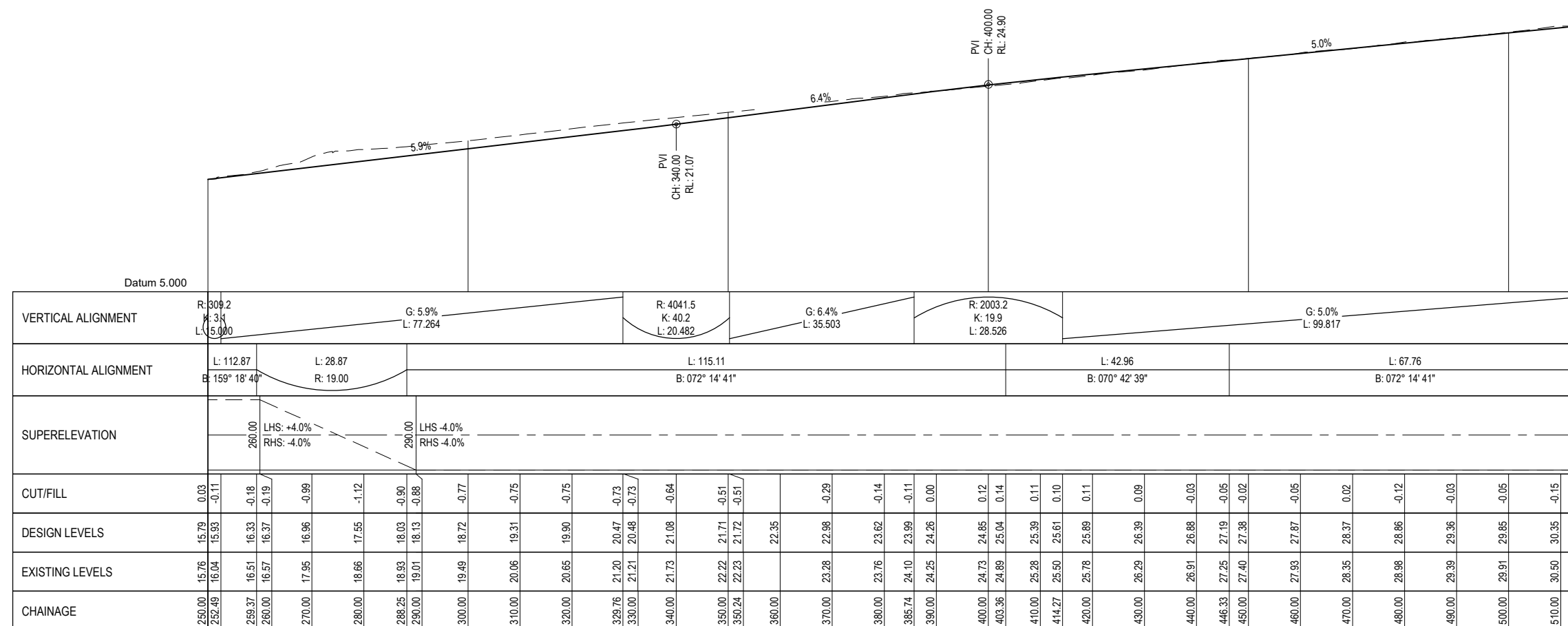
Discipline:	CIVIL ENGINEERING
Drawing No.:	3126447-CA-3202
Rev.:	E

RESOURCE CONSENT
NOT FOR CONSTRUCTION

LEGEND:
 - - - - - EXISTING SURFACE
 ————— DESIGN SURFACE



LONGITUDINAL SECTION FARM ROAD - CHAINAGE 0 TO 250



LONGITUDINAL SECTION FARM ROAD - CHAINAGE 250 TO 514

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date



Original Scale (A1)	1:500 (H) 1:250 (V)	Design	C.BREYENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000 (H) 1:500 (V)	Drawn	A.FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

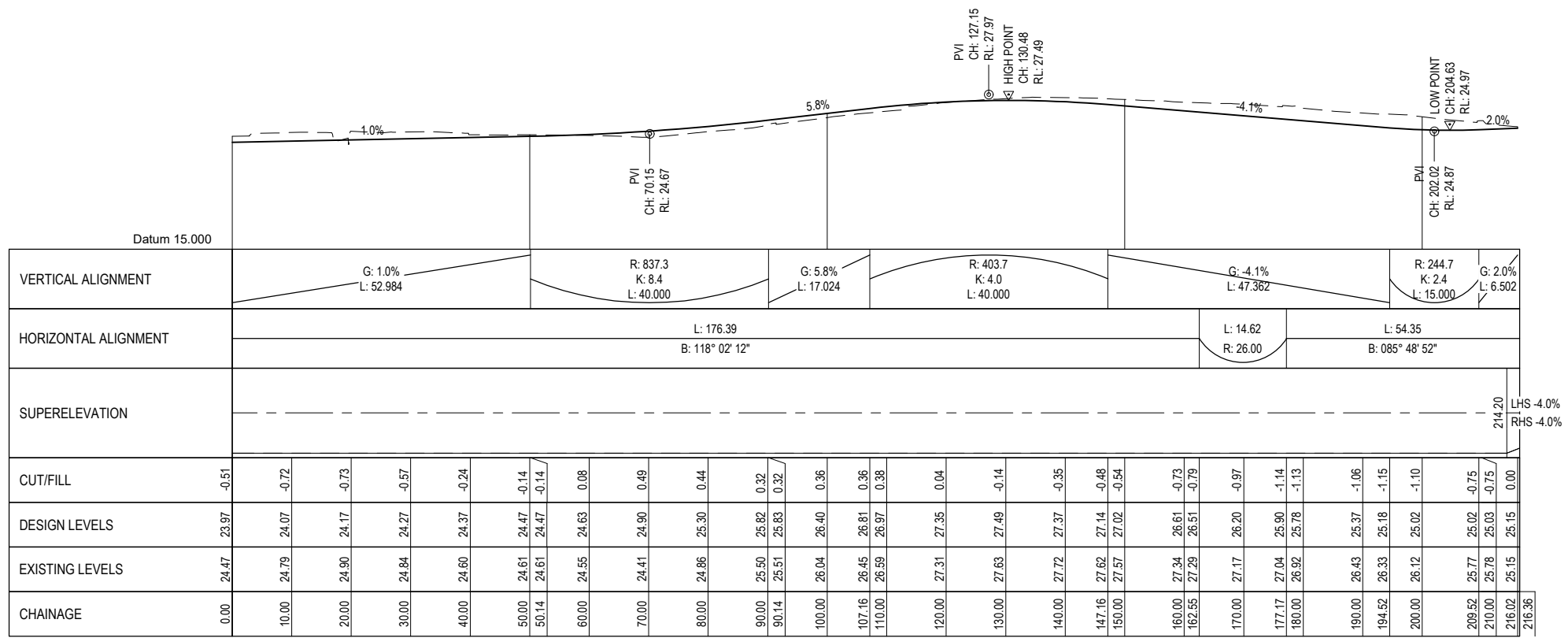
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING LONGITUDINAL SECTIONS SHEET 3**

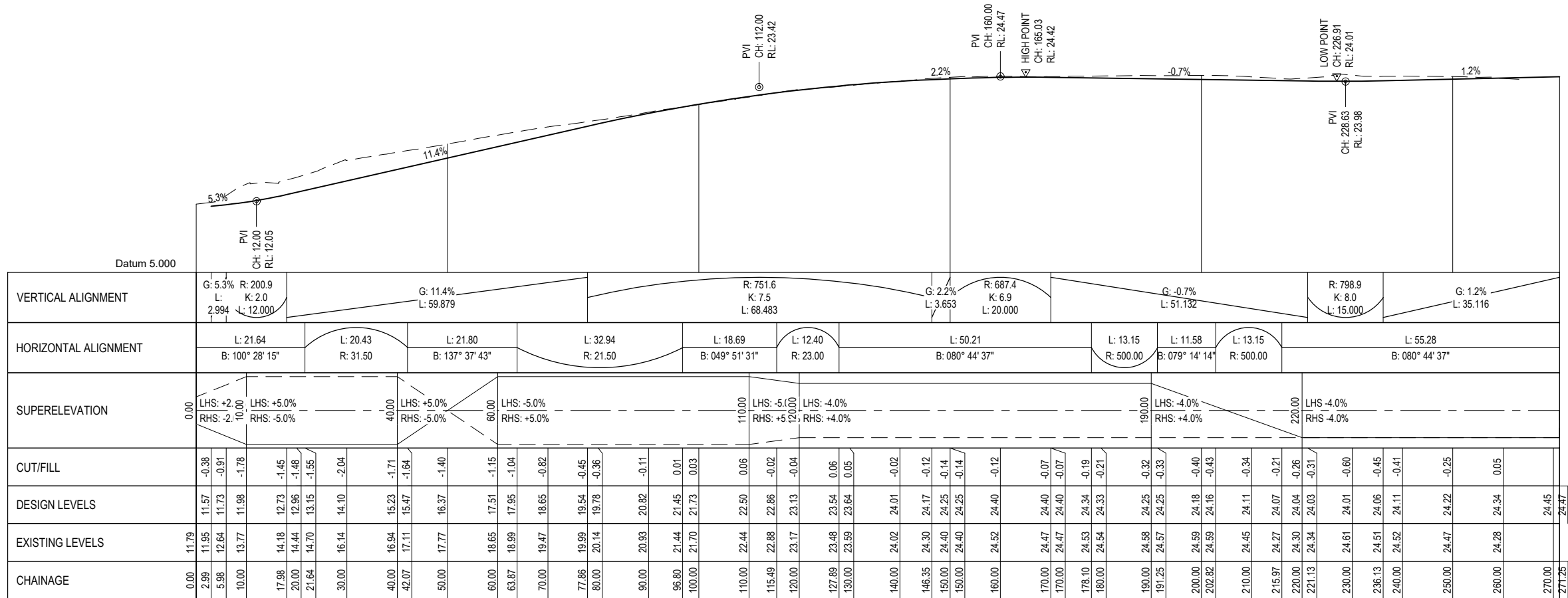
RESOURCE CONSENT NOT FOR CONSTRUCTION

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3203
Rev.	E

LEGEND:
 - - - - - EXISTING SURFACE
 ————— DESIGN SURFACE



LONGITUDINAL SECTION GATE 1 ROAD - CHAINAGE 0 TO 216



LONGITUDINAL SECTION GATE 2 ROAD - CHAINAGE 0 TO 271

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date



Original Scale (A1)	Design	C.BREYENBACH	31.05.21	Approved For Construction*
1:500 (H) 1:250 (V)	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
1:1000 (H) 1:500 (V)	Design Check			






Client:	MARUTUĀHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

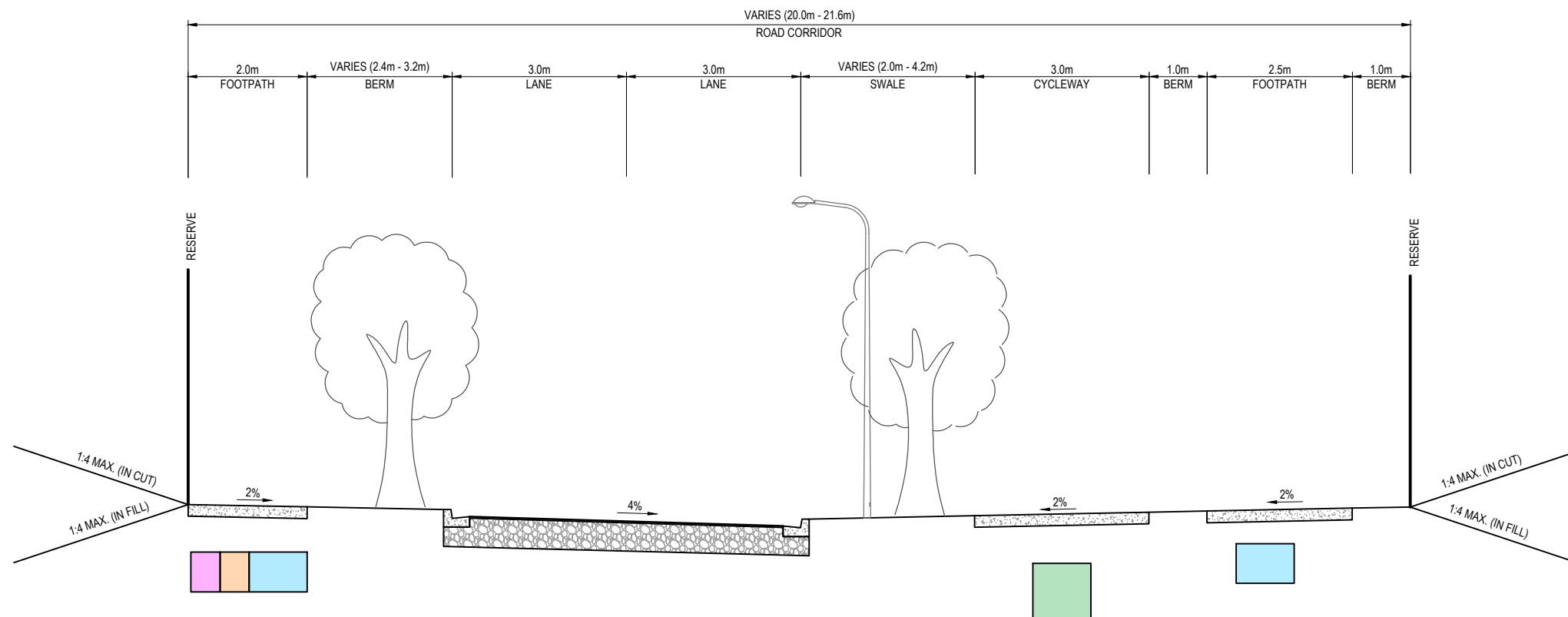
Title:	ROADING LONGITUDINAL SECTIONS SHEET 4
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-3204
Rev:	E

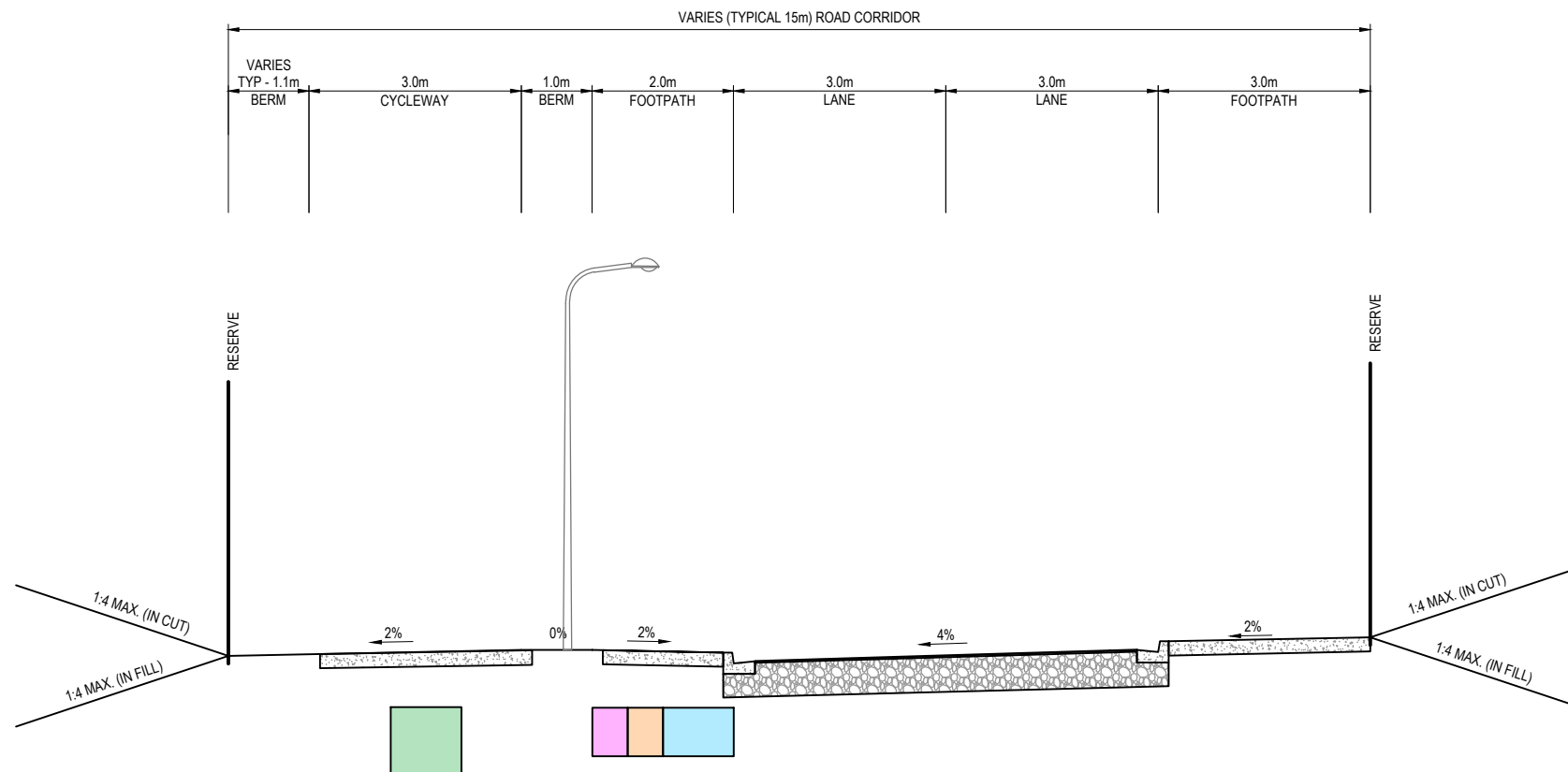
RESOURCE CONSENT
NOT FOR CONSTRUCTION

LEGEND:

	WATER LINES CORRIDOR
	COMMUNICATION CORRIDOR
	ELECTRICAL CORRIDOR
	STORMWATER LINES CORRIDOR
	WASTEWATER LINES CORRIDOR



A TYPICAL CROSS SECTION
CA-3109 SCALE HOR 1:50 VER 1:50 (A1)



B TYPICAL CROSS SECTION
CA-3109 SCALE HOR 1:50 VER 1:50 (A1)

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Dwg Verifier			
1:100	Dwg Check			

* Refer to Revision 1 for Original Signature






Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

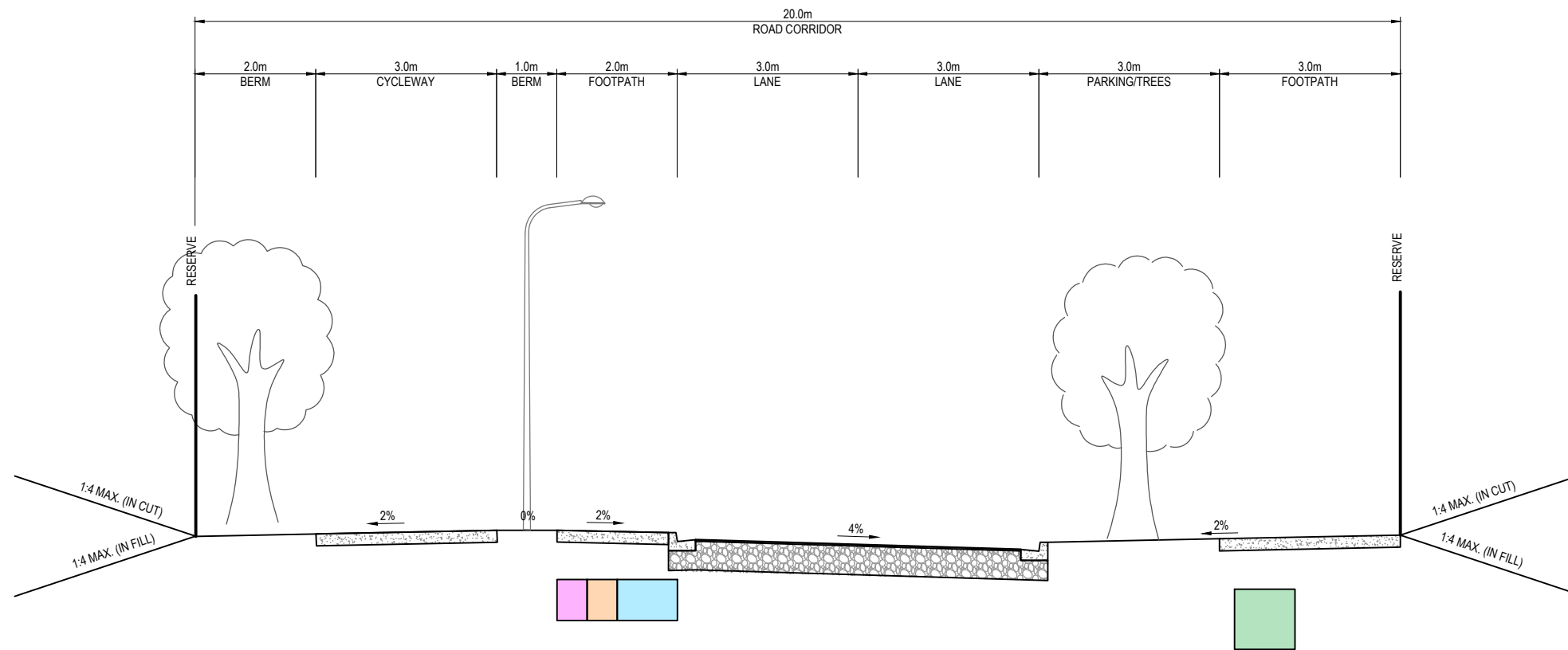
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 1**

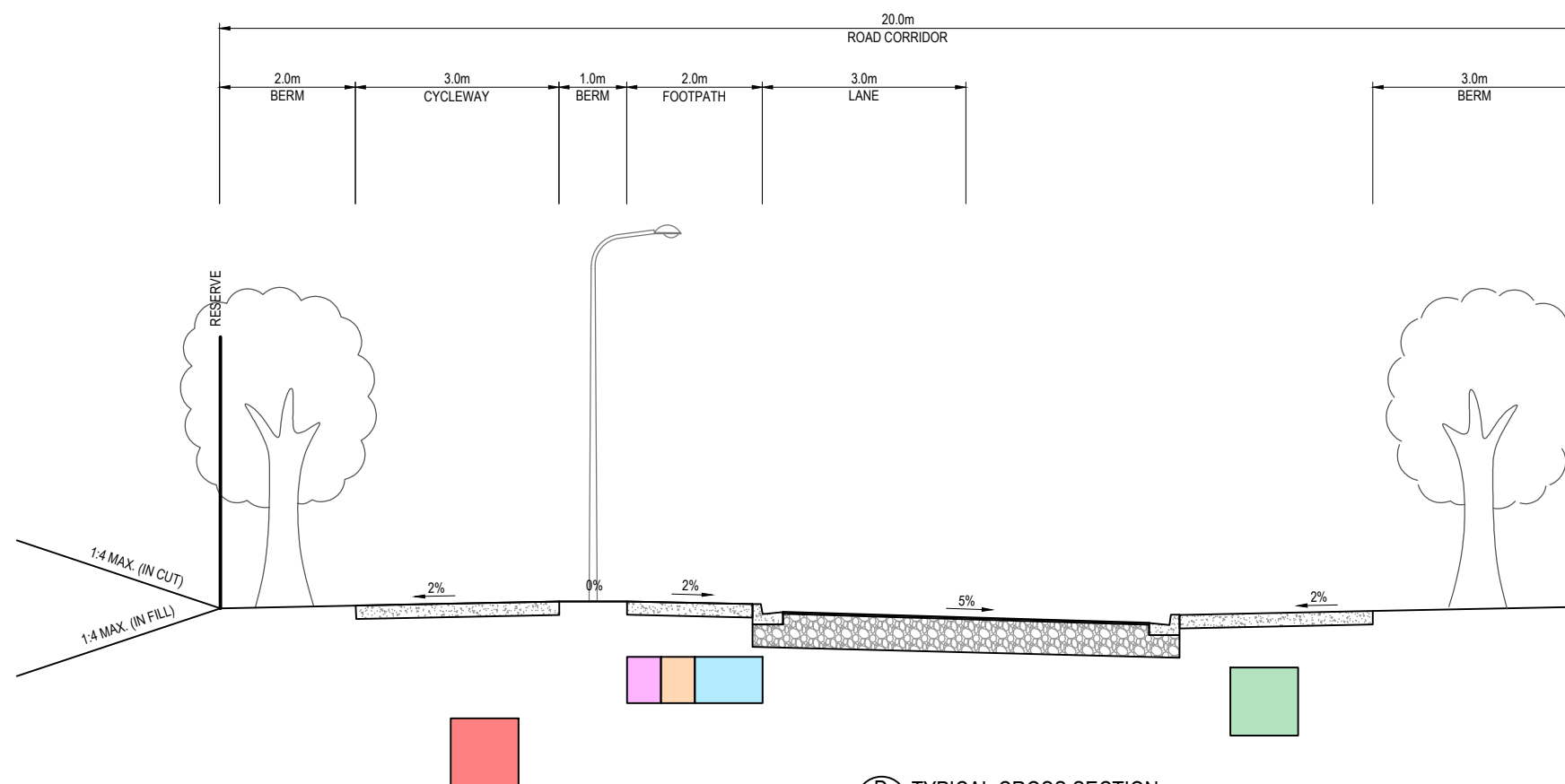
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3231
Rev.	E

LEGEND:

	WATER LINES CORRIDOR
	COMMUNICATION CORRIDOR
	ELECTRICAL CORRIDOR
	STORMWATER LINES CORRIDOR
	WASTEWATER LINES CORRIDOR



C TYPICAL CROSS SECTION
CA-3105 SCALE HOR 1:50 VER 1:50 (A1)



D TYPICAL CROSS SECTION
CA-3107 SCALE HOR 1:50 VER 1:50 (A1)

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Check			
1:100	Design Check			

* Refer to Revision 1 for Original Signature






Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

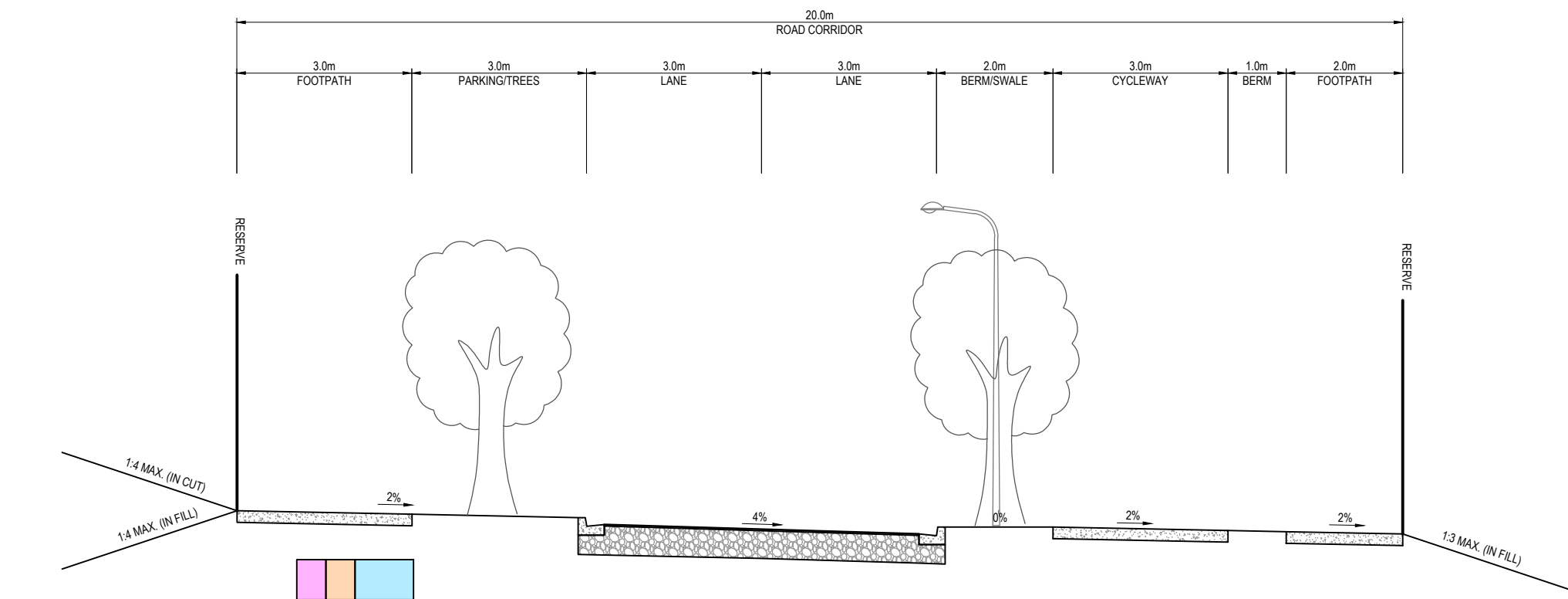
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 2**

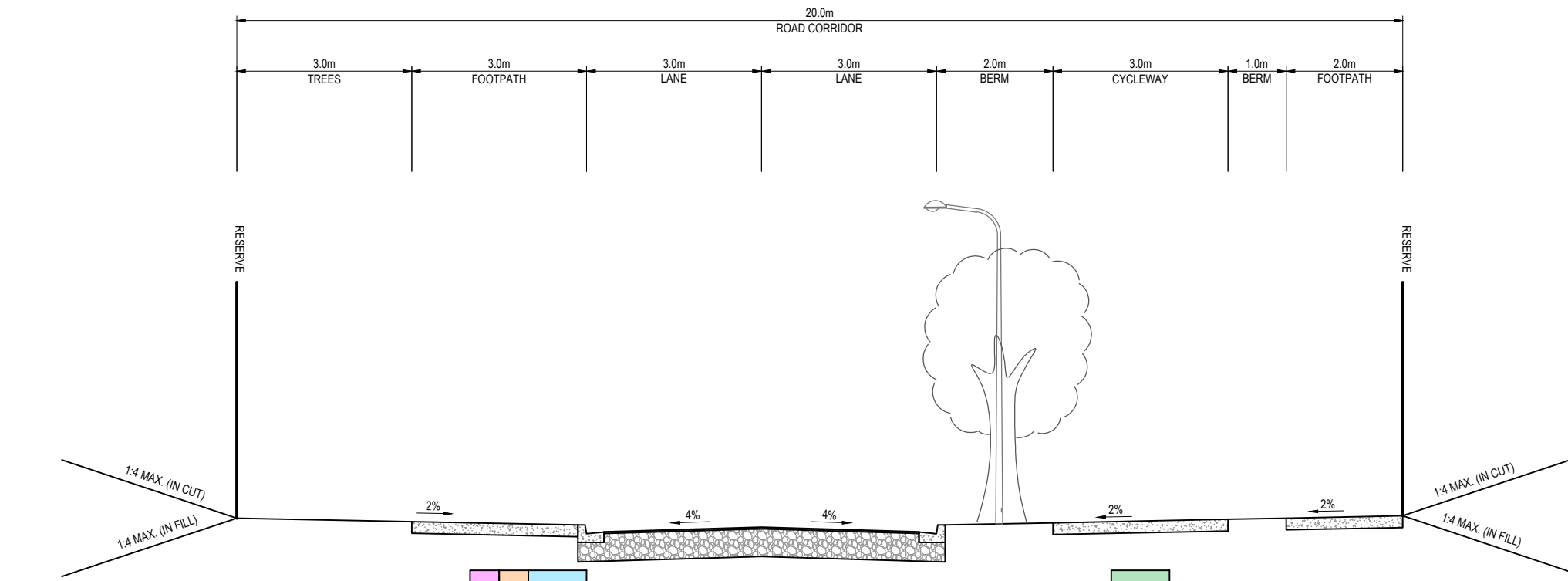
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3232
Rev.	E

LEGEND:

	WATER LINES CORRIDOR
	COMMUNICATION CORRIDOR
	ELECTRICAL CORRIDOR
	STORMWATER LINES CORRIDOR
	WASTEWATER LINES CORRIDOR



E TYPICAL CROSS SECTION
CA-3105 SCALE HOR 1:50 VER 1:50 (A1)



F TYPICAL CROSS SECTION
CA-3106 SCALE HOR 1:50 VER 1:50 (A1)

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:



Original Scale (A1)	1:50	Design	N.KUSEL	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:100	Drawn	A.FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

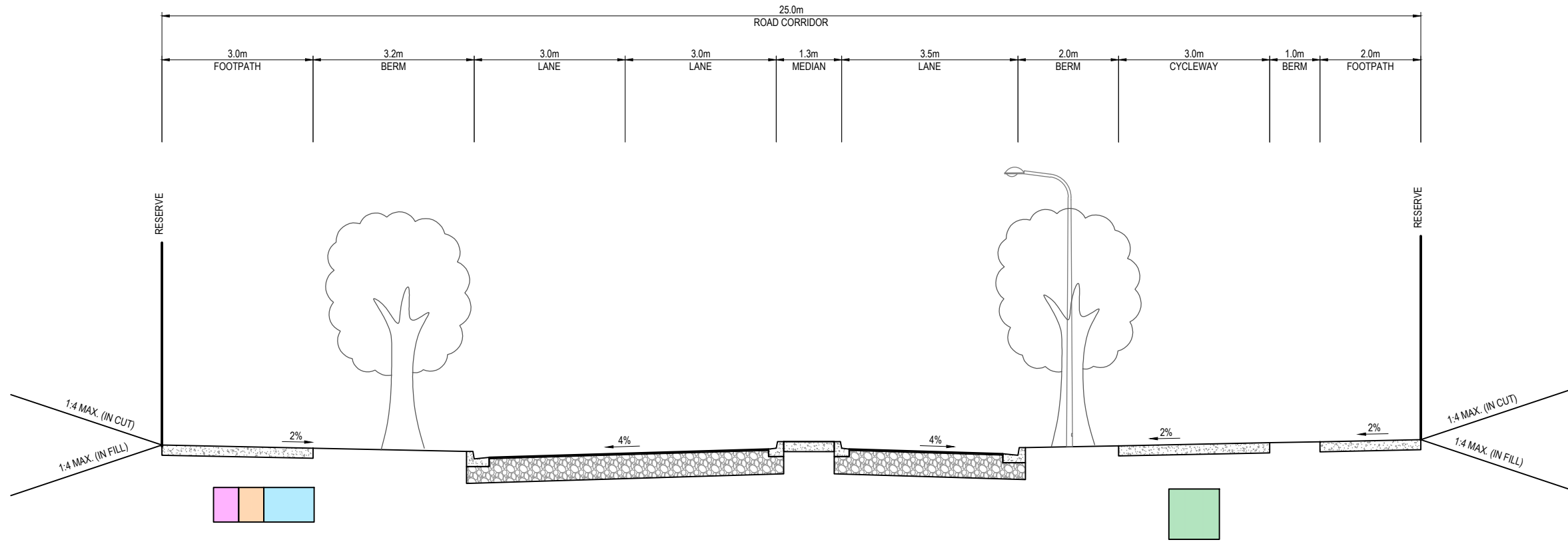
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 3**

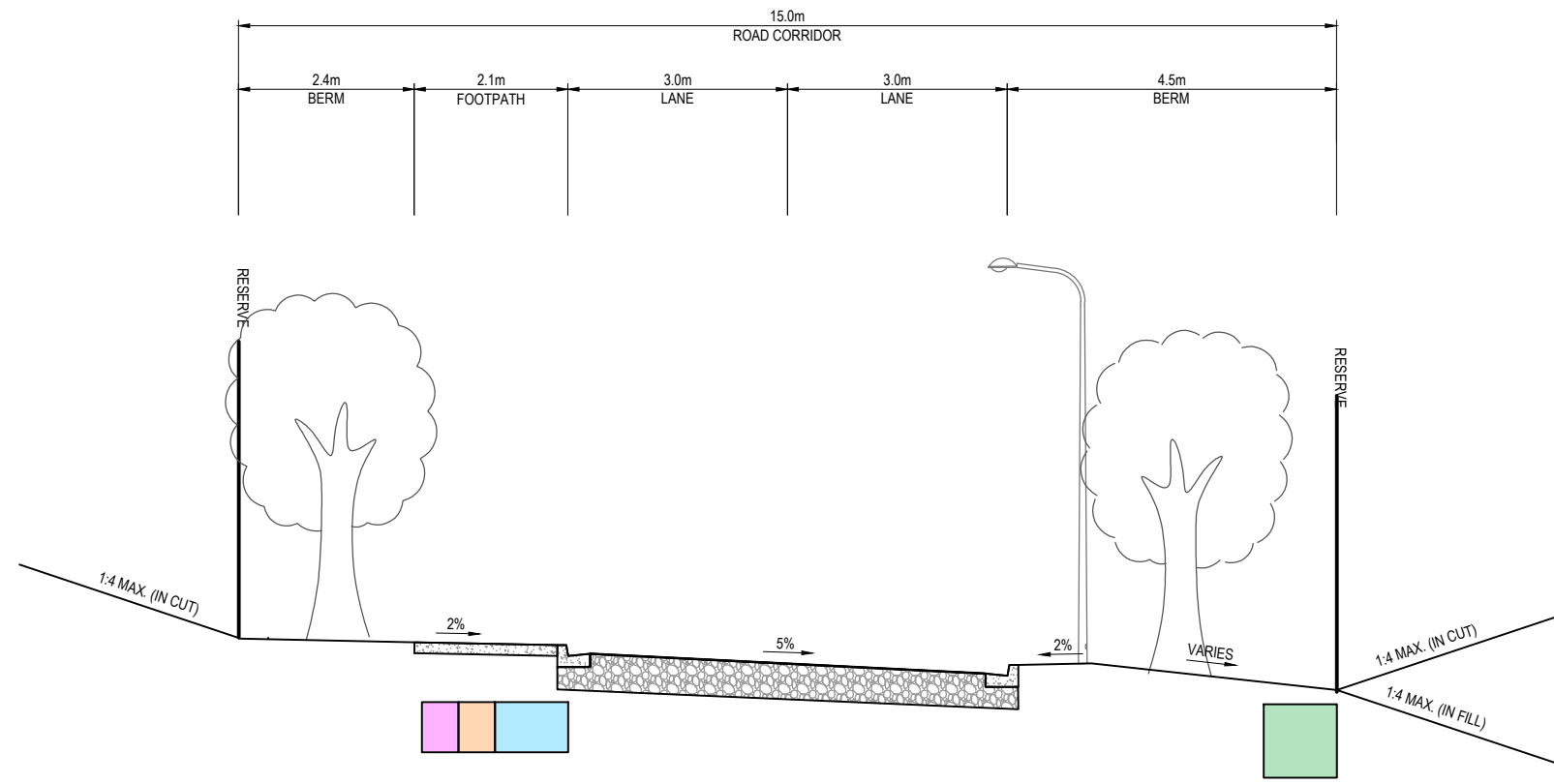
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3233
Rev.	E

LEGEND:

- WATER LINES CORRIDOR
- COMMUNICATION CORRIDOR
- ELECTRICAL CORRIDOR
- STORMWATER LINES CORRIDOR
- WASTEWATER LINES CORRIDOR



G TYPICAL CROSS SECTION
CA-3107 SCALE HOR 1:50 VER 1:50 (A1)



H TYPICAL CROSS SECTION
CA-3105 SCALE HOR 1:50 VER 1:50 (A1)

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:
Beca

Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Checker			
1:100	Design Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**






Title: **ROADING TYPICAL CROSS SECTIONS SHEET 4**

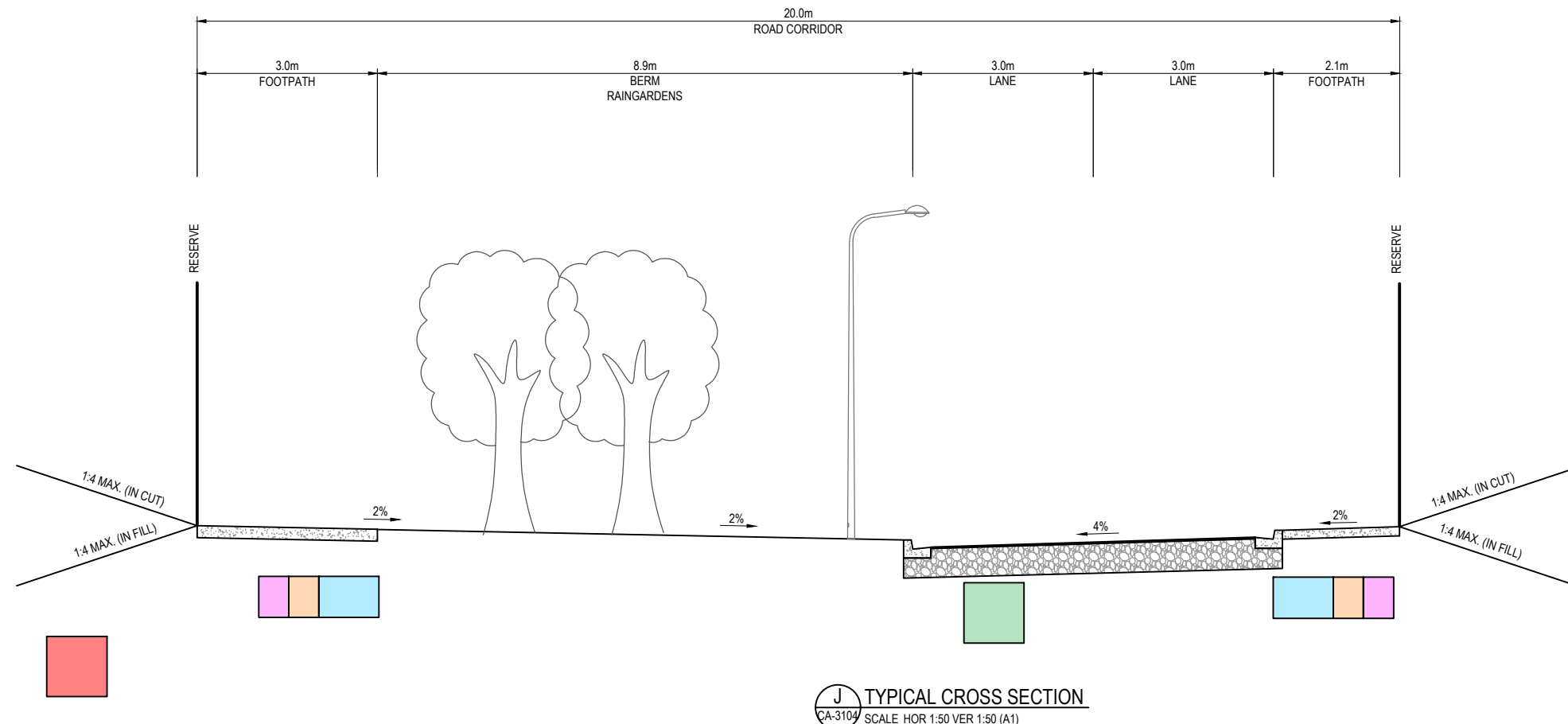
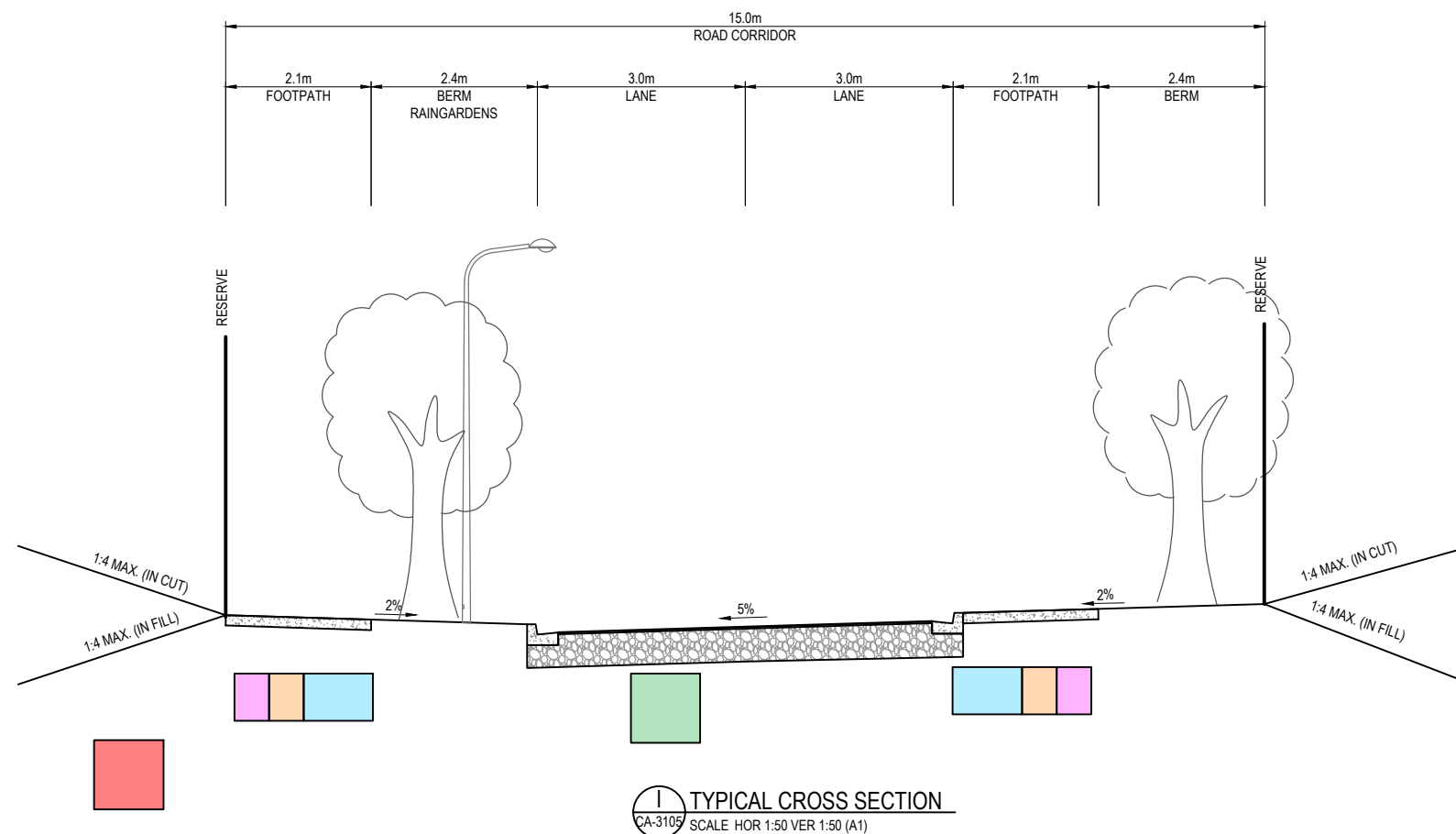
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3234
Rev.	E

ORIGINAL DRAWING IN COLOUR

RESOURCE CONSENT NOT FOR CONSTRUCTION

LEGEND:

	WATER LINES CORRIDOR
	COMMUNICATION CORRIDOR
	ELECTRICAL CORRIDOR
	STORMWATER LINES CORRIDOR
	WASTEWATER LINES CORRIDOR




ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Checker			
1:100	Design Check			

* Refer to Revision 1 for Original Signature






Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

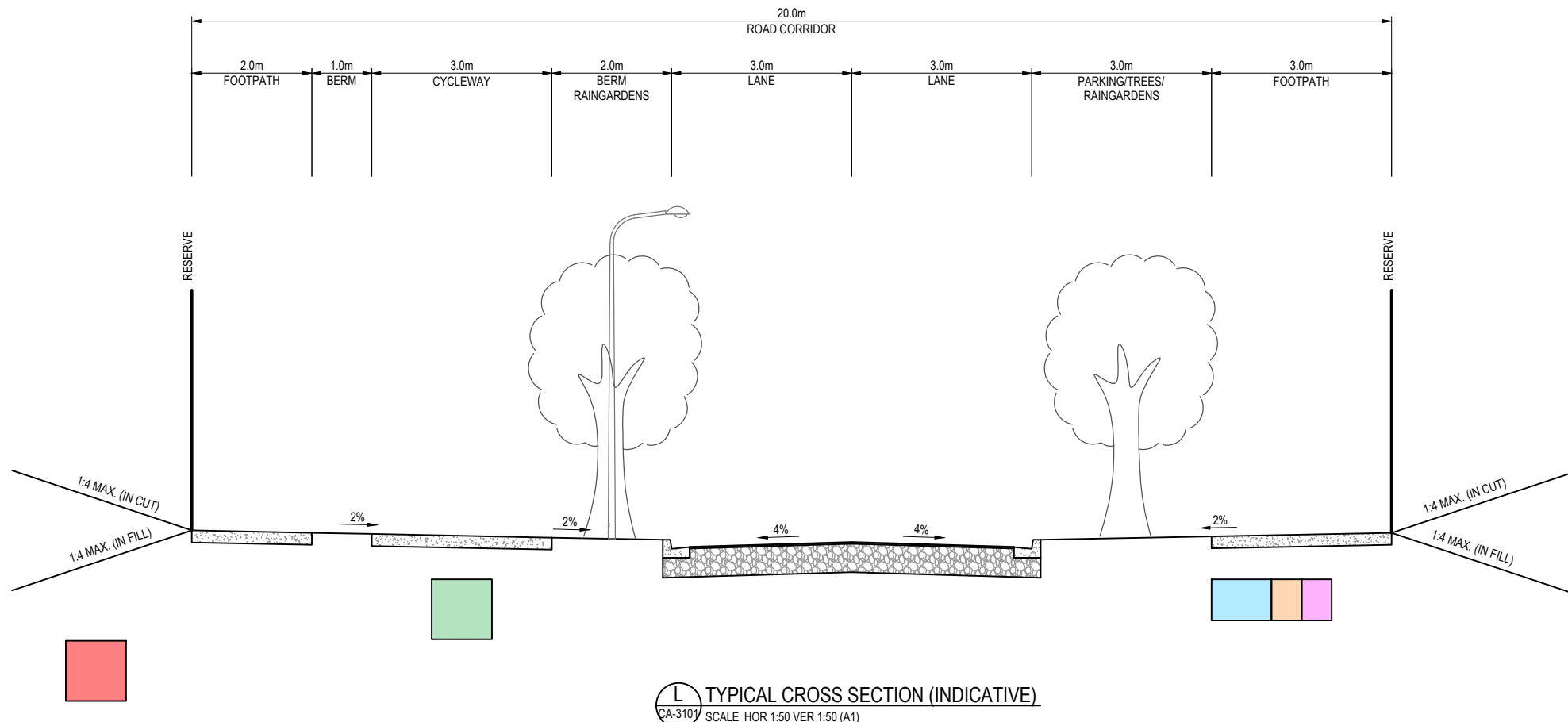
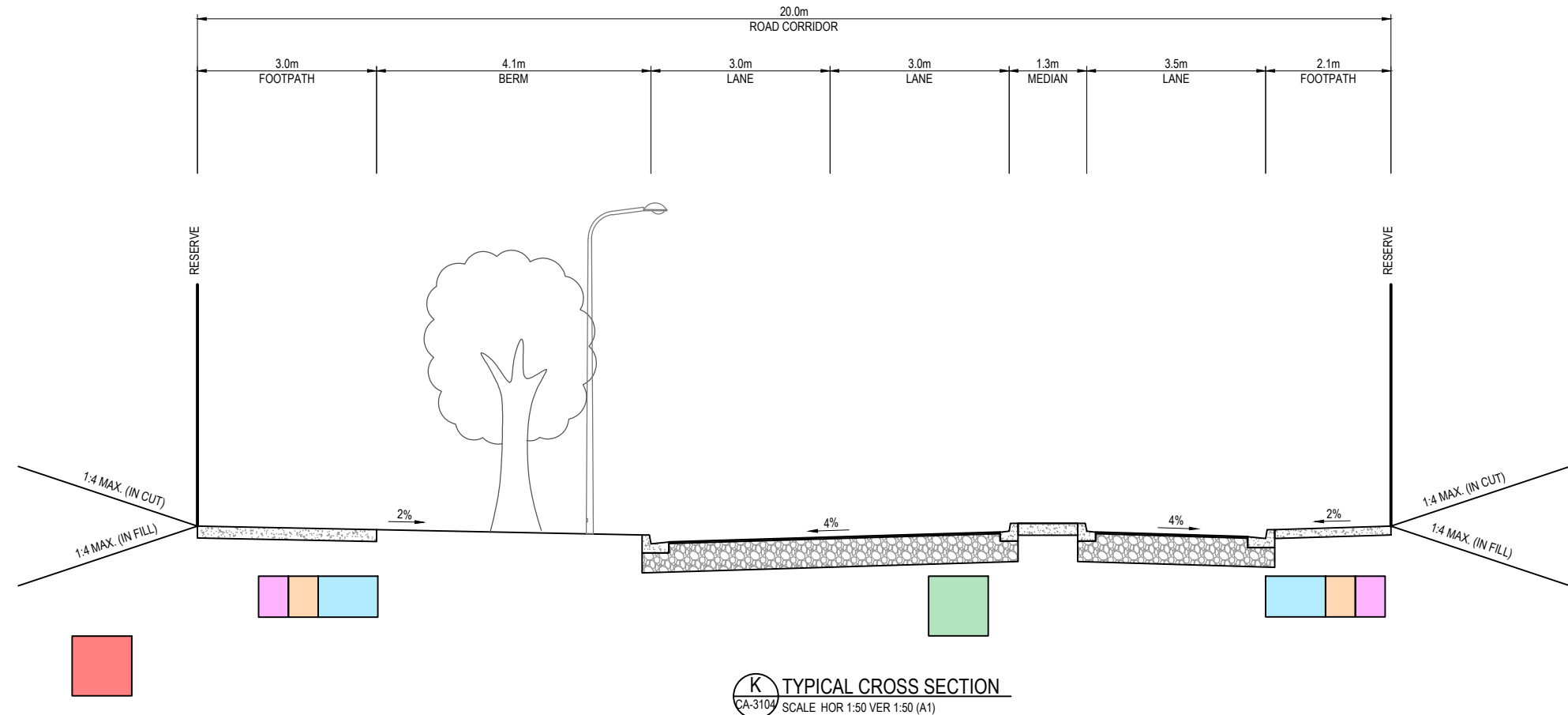
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3235
Rev.	E

LEGEND:

	WATER LINES CORRIDOR
	COMMUNICATION CORRIDOR
	ELECTRICAL CORRIDOR
	STORMWATER LINES CORRIDOR
	WASTEWATER LINES CORRIDOR



No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	Design	N.KUSEL	31.05.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	31.05.21	
Reduced Scale (A3)	Design Verifier			Date
1:100	Design Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 6**

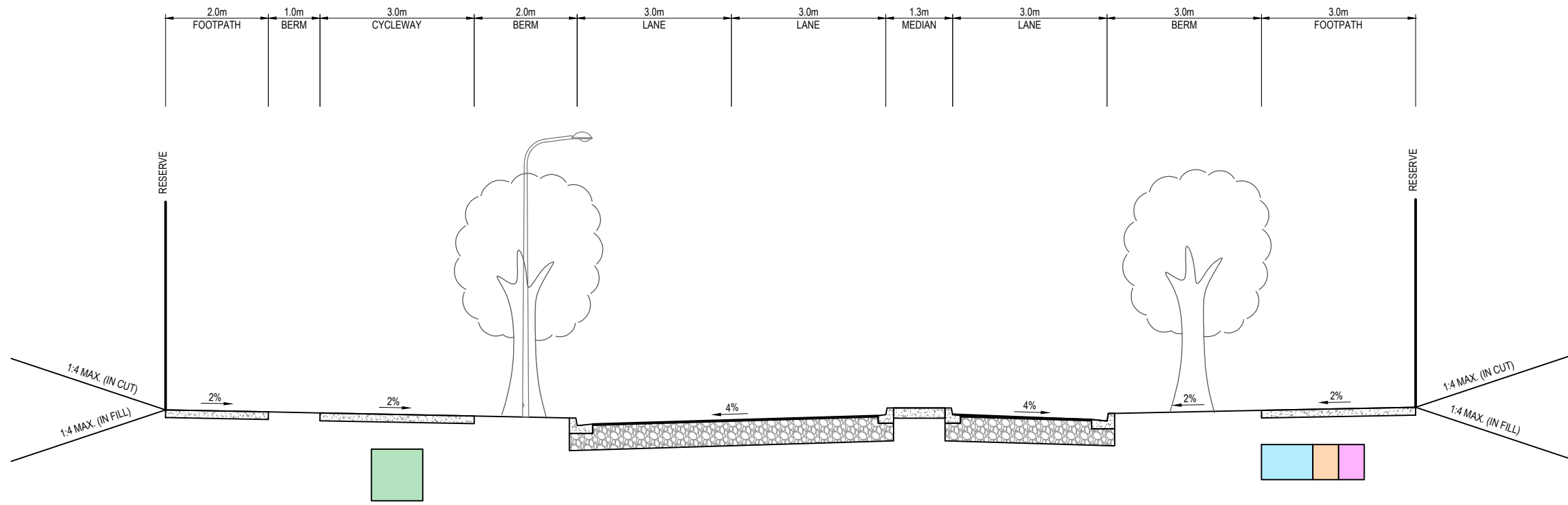
ORIGINAL DRAWING IN COLOUR

RESOURCE CONSENT NOT FOR CONSTRUCTION

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3236
Rev.	E

LEGEND:

- WATER LINES CORRIDOR
- COMMUNICATION CORRIDOR
- ELECTRICAL CORRIDOR
- STORMWATER LINES CORRIDOR
- WASTEWATER LINES CORRIDOR



M TYPICAL CROSS SECTION
 CA-3104 SCALE HOR 1:50 VER 1:50 (A1)

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21

Drawing Originator:

Original Scale (A1)	Design	C.BREYTENBACH	10.08.21	Approved For Construction*
1:50	Drawn	A.FAZEKAS	10.08.21	Date
Reduced Scale (A3)	Dwg Verifier			
1:100	Dwg Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **ROADING TYPICAL CROSS SECTIONS SHEET 7**

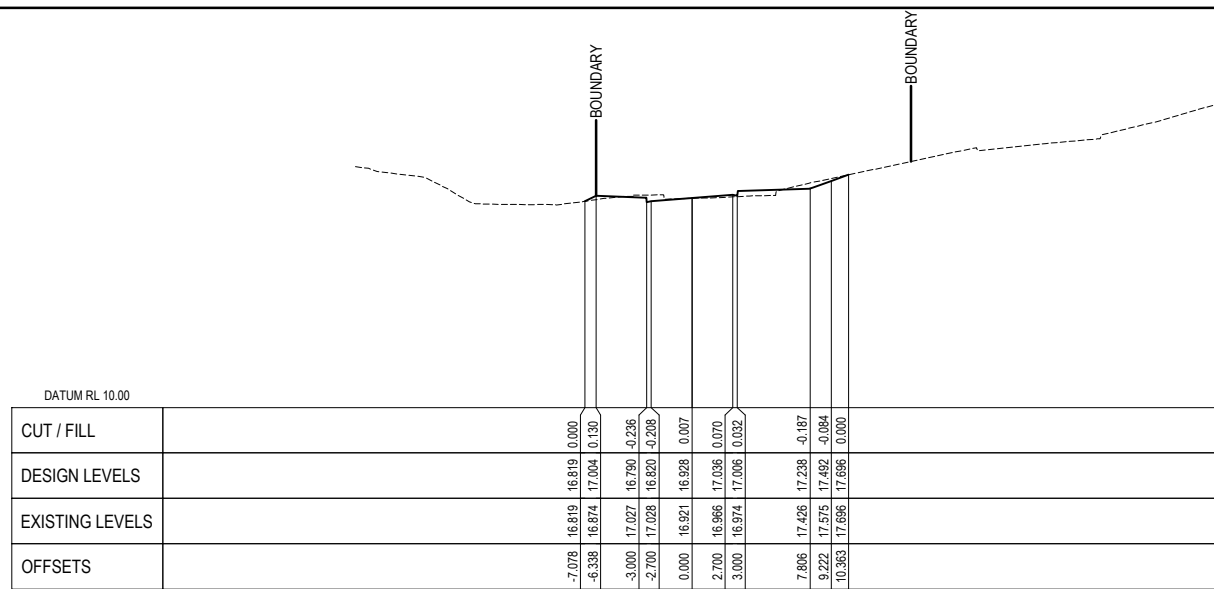
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3237
Rev.	E

**ORIGINAL DRAWING
IN COLOUR**

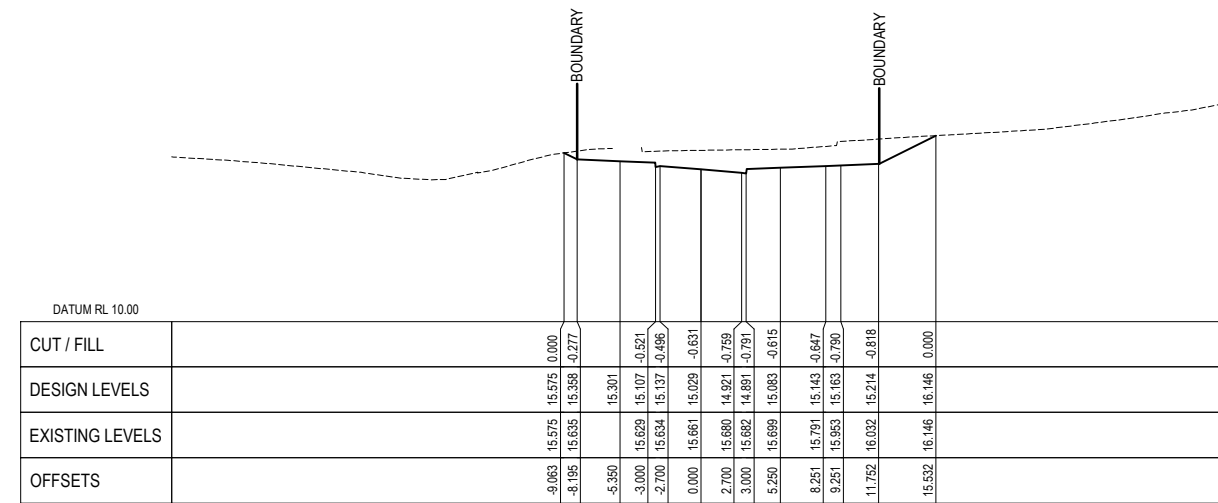
**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

LEGEND:

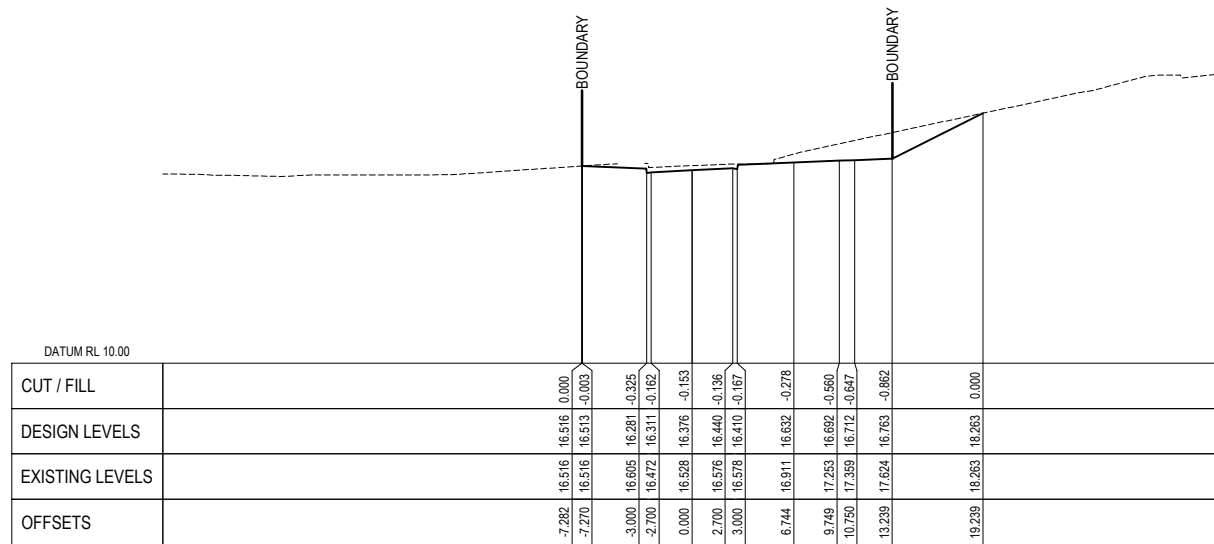
- EXISTING SURFACE
- DESIGN SURFACE



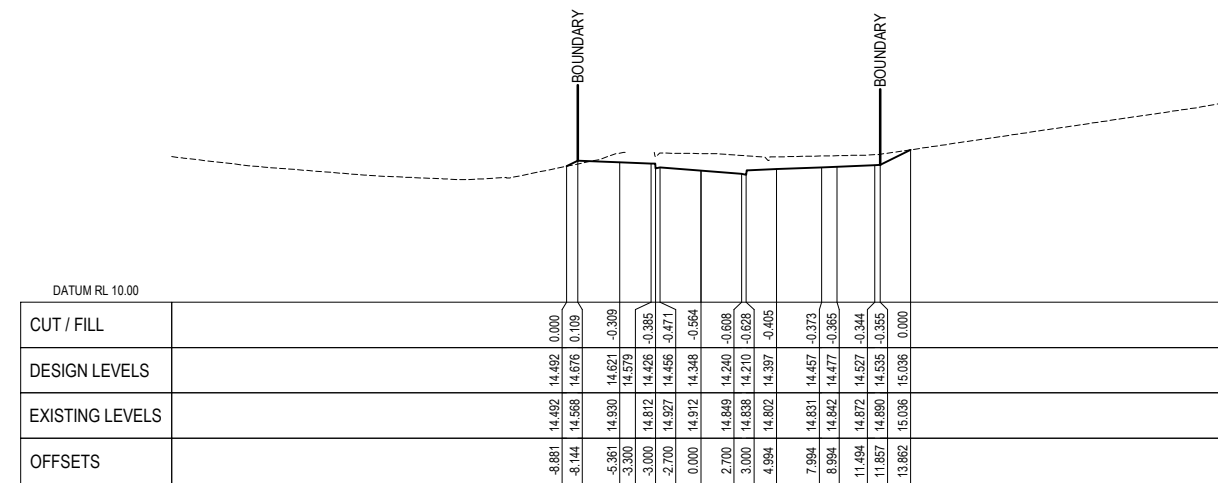
SPINE ROAD : CHAINAGE 240



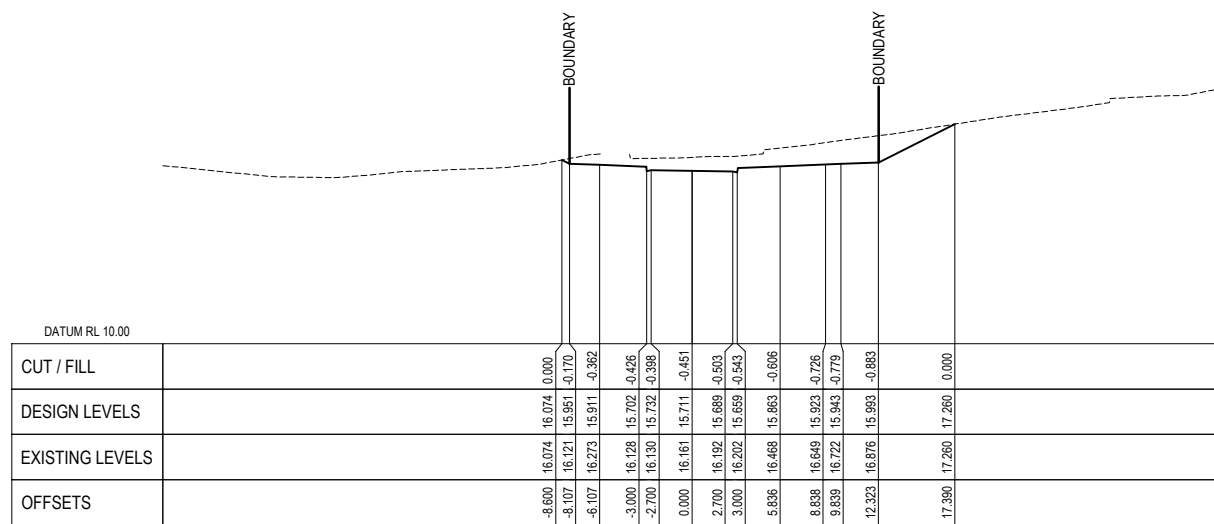
SPINE ROAD : CHAINAGE 300



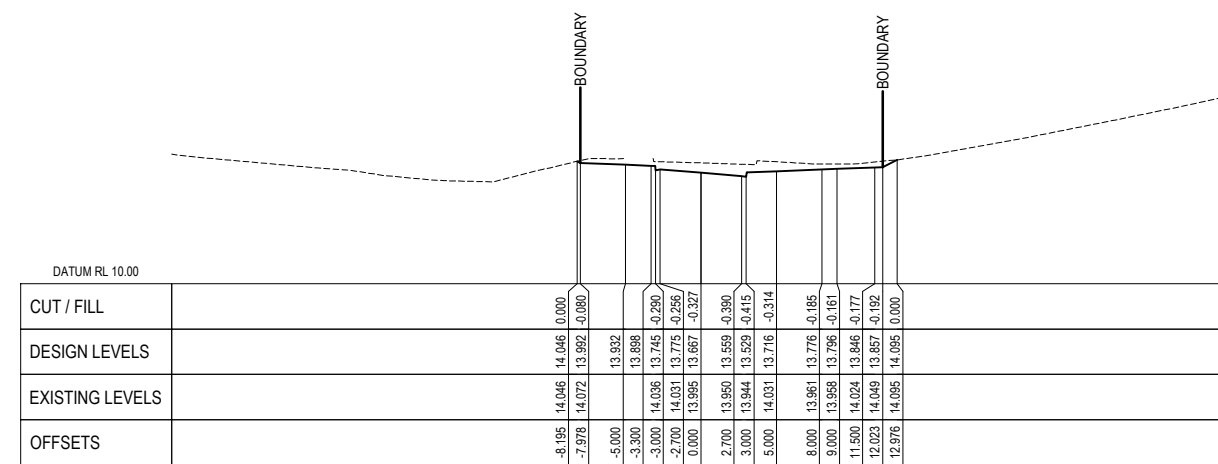
SPINE ROAD : CHAINAGE 260



SPINE ROAD : CHAINAGE 320



SPINE ROAD : CHAINAGE 280



SPINE ROAD : CHAINAGE 340

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction 31.05.21
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

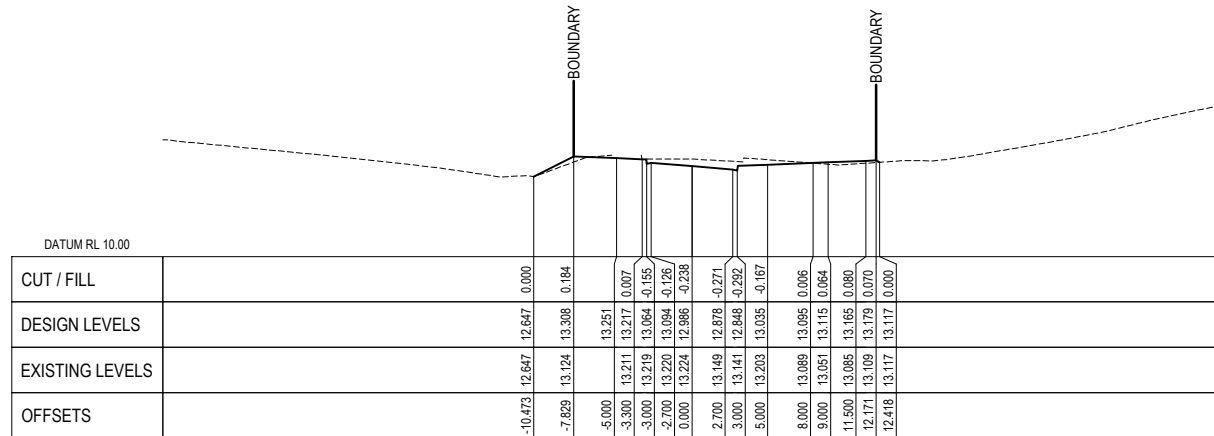
Title: ROADING DETAILED CROSS SECTIONS SHEET 1

RESOURCE CONSENT NOT FOR CONSTRUCTION

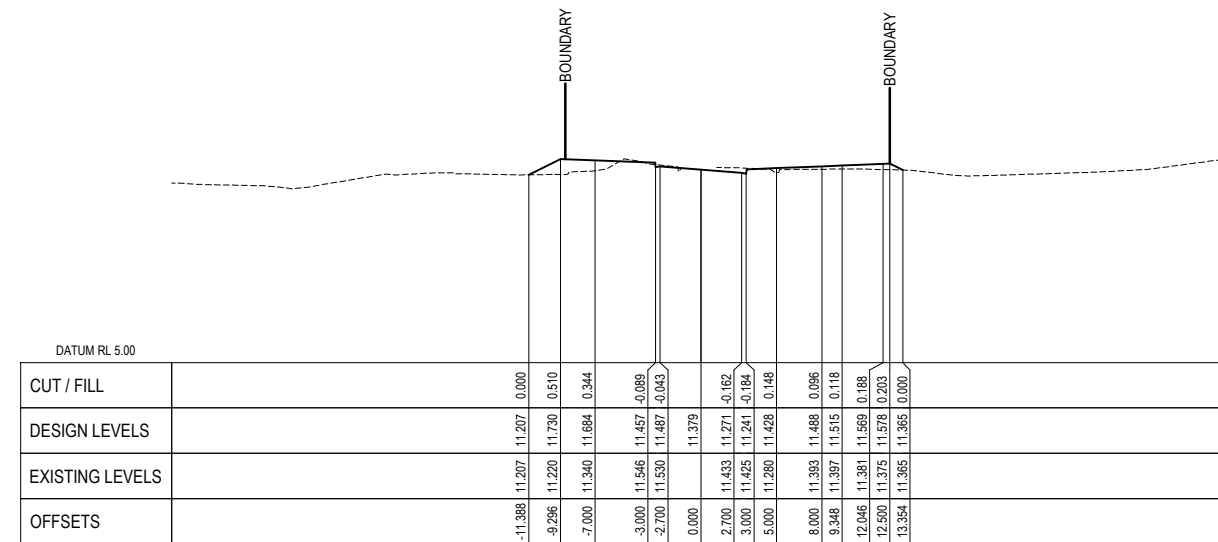
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3251
Rev.	E

LEGEND:

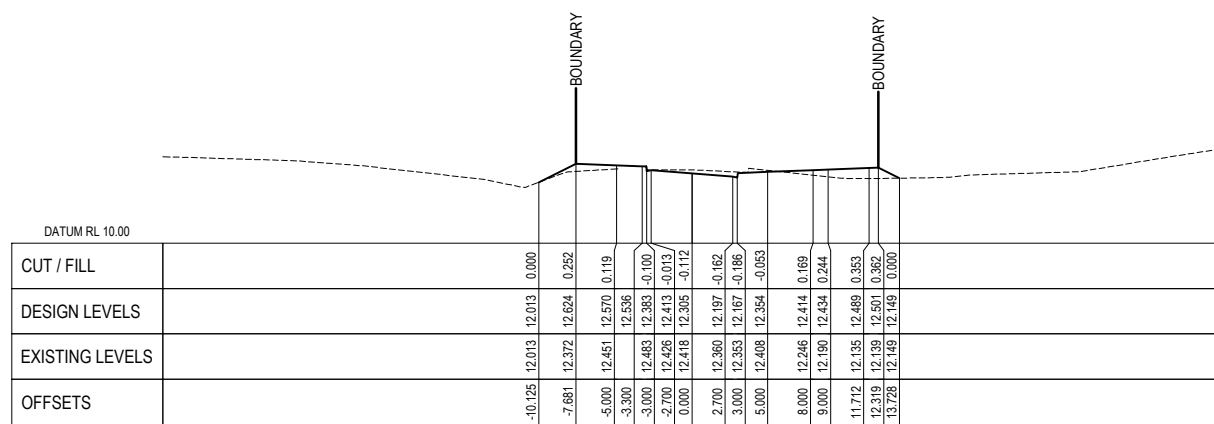
- EXISTING SURFACE
- DESIGN SURFACE



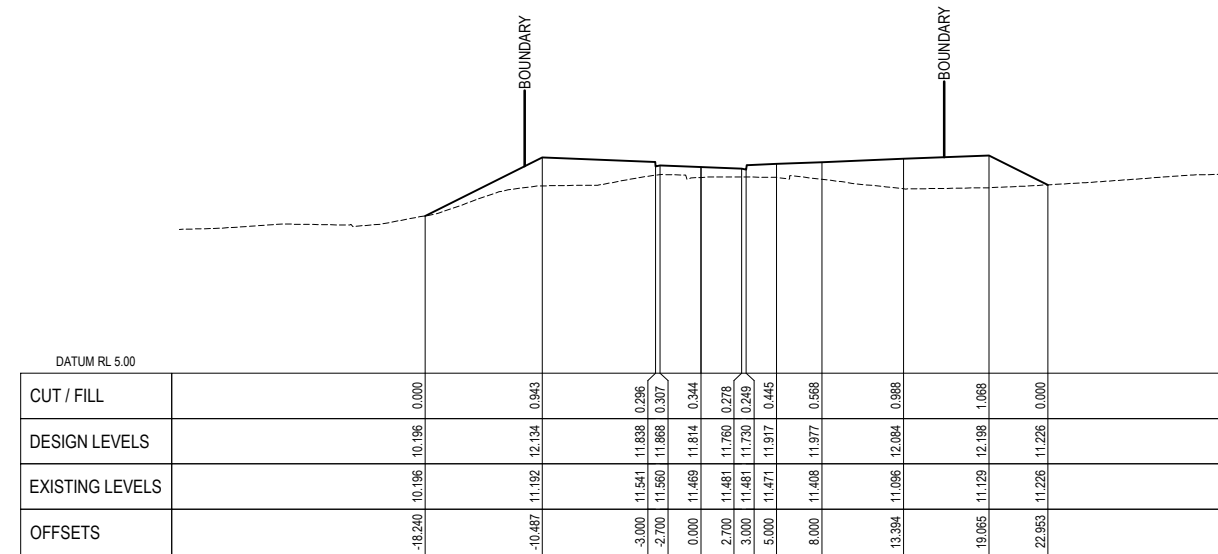
SPINE ROAD : CHAINAGE 360



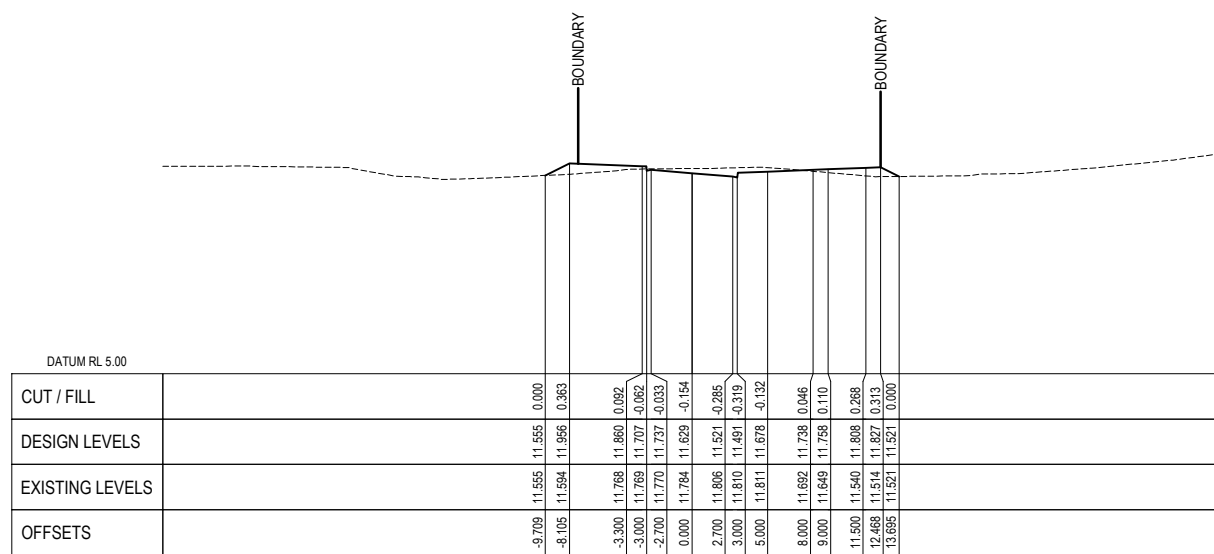
SPINE ROAD : CHAINAGE 420



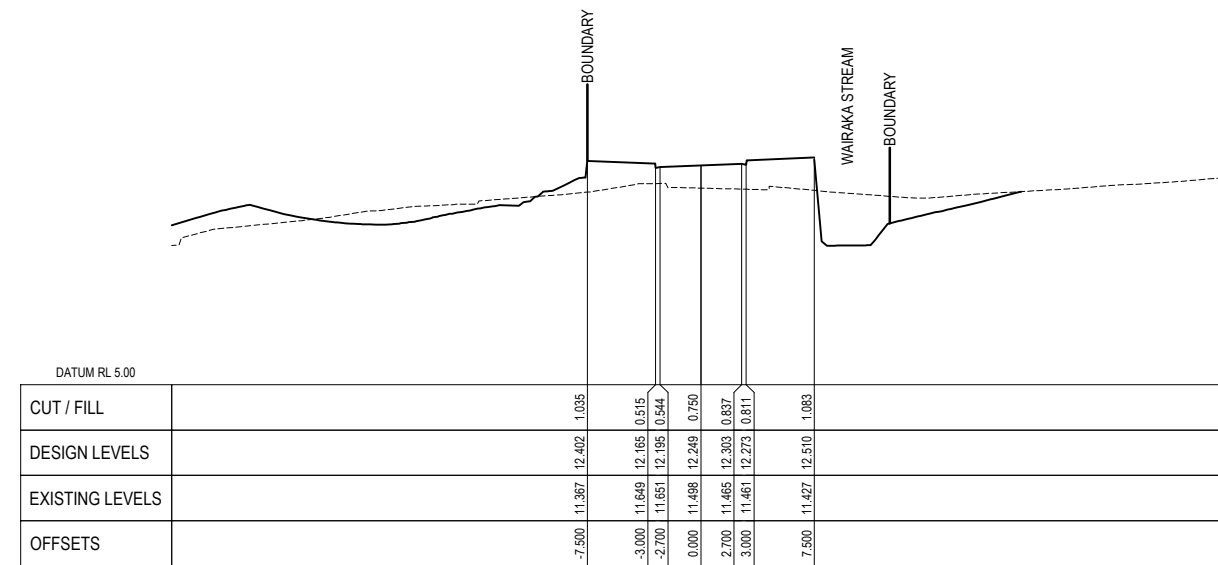
SPINE ROAD : CHAINAGE 380



SPINE ROAD : CHAINAGE 440



SPINE ROAD : CHAINAGE 400



SPINE ROAD : CHAINAGE 460

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:250 (H) 1:125 (V)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:500 (H) 1:250 (V)	Drawn	A.FAZEKAS	31.05.21	Date
		Dag Verifier			
		Dag Check			

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

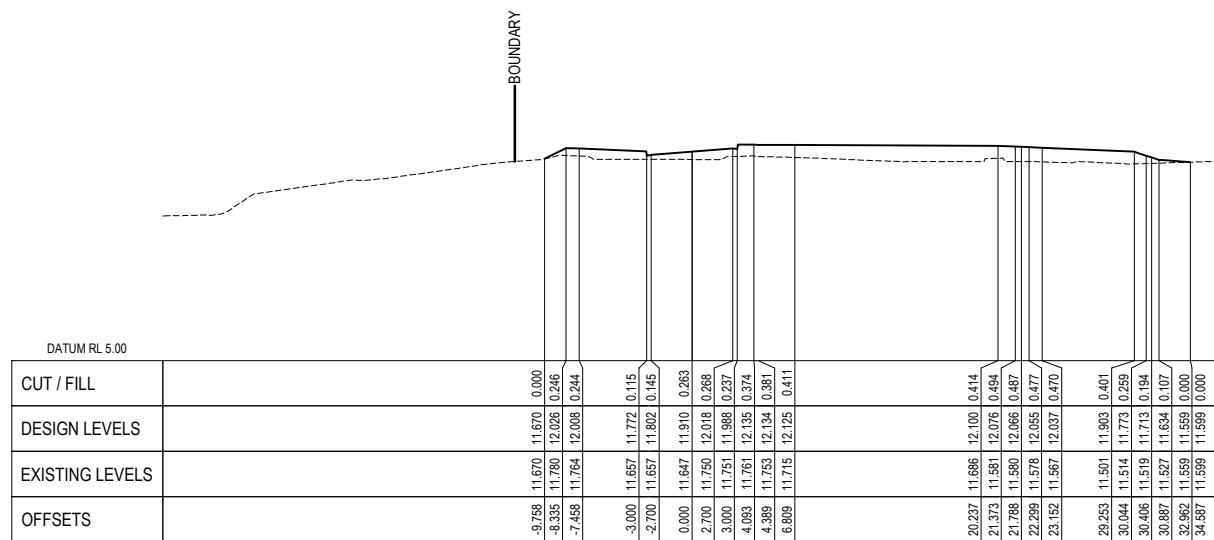
Title:	ROADING DETAILED CROSS SECTIONS SHEET 2
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-3252
Rev:	E

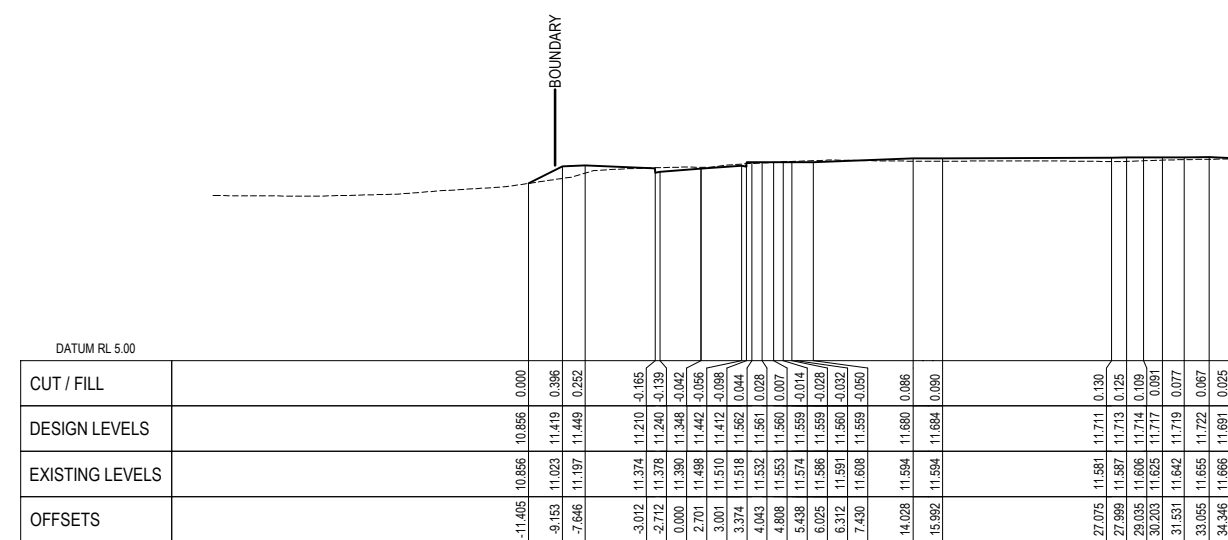
RESOURCE CONSENT NOT FOR CONSTRUCTION

LEGEND:

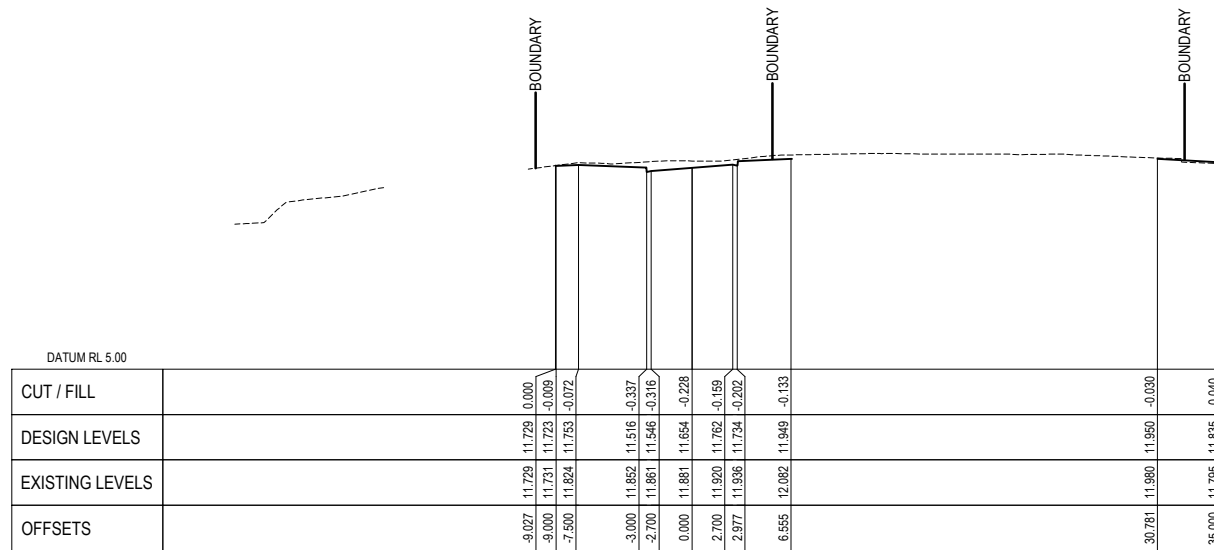
- EXISTING SURFACE
- DESIGN SURFACE



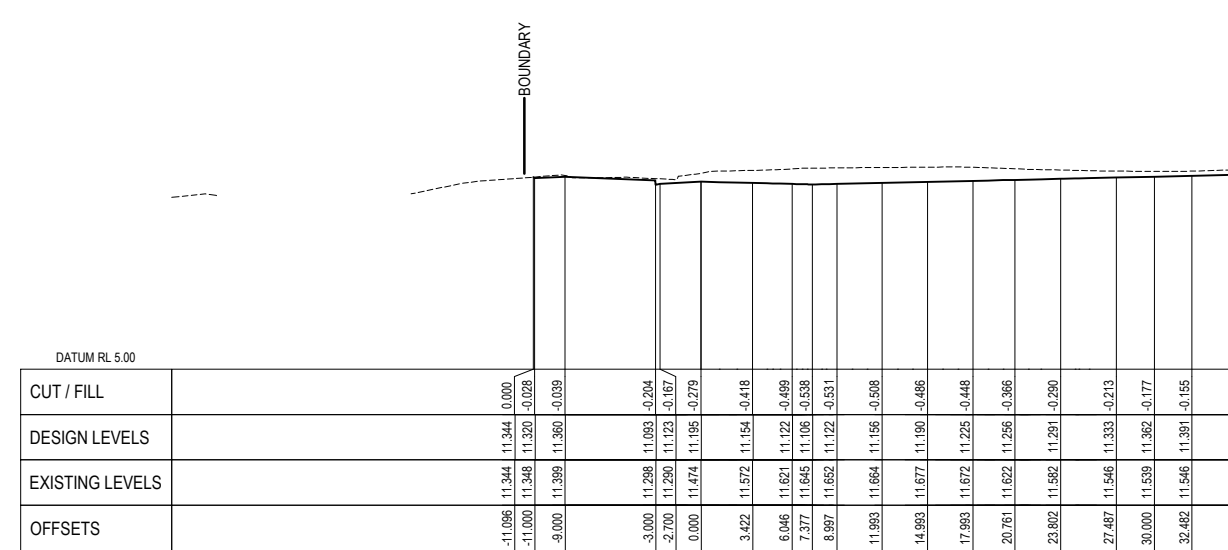
SPINE ROAD : CHAINAGE 480



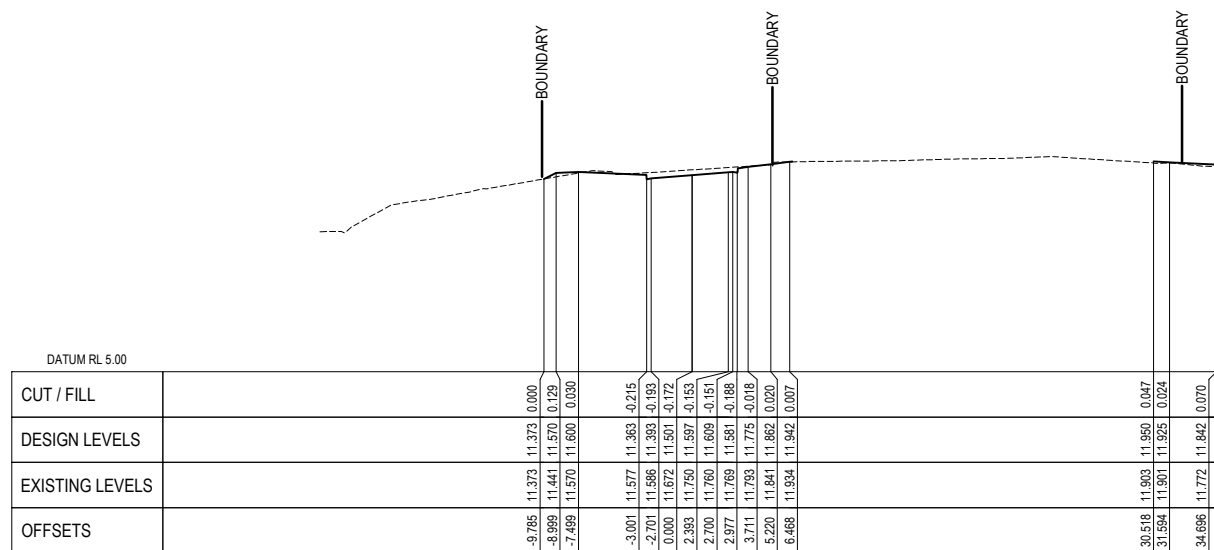
SPINE ROAD : CHAINAGE 540



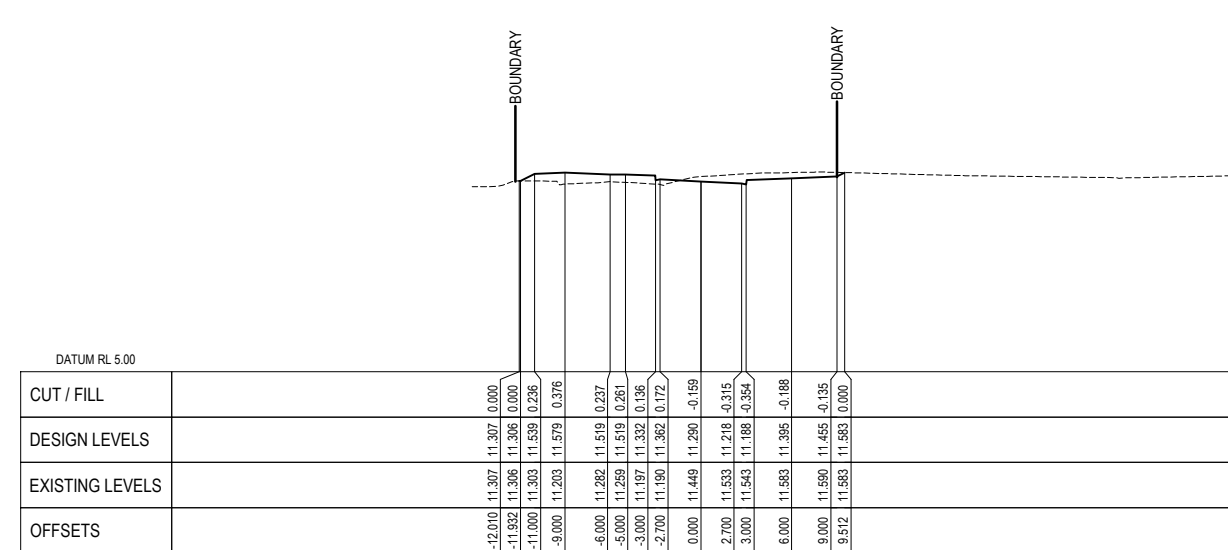
SPINE ROAD : CHAINAGE 500



SPINE ROAD : CHAINAGE 560



SPINE ROAD : CHAINAGE 520



SPINE ROAD : CHAINAGE 580

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction*
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

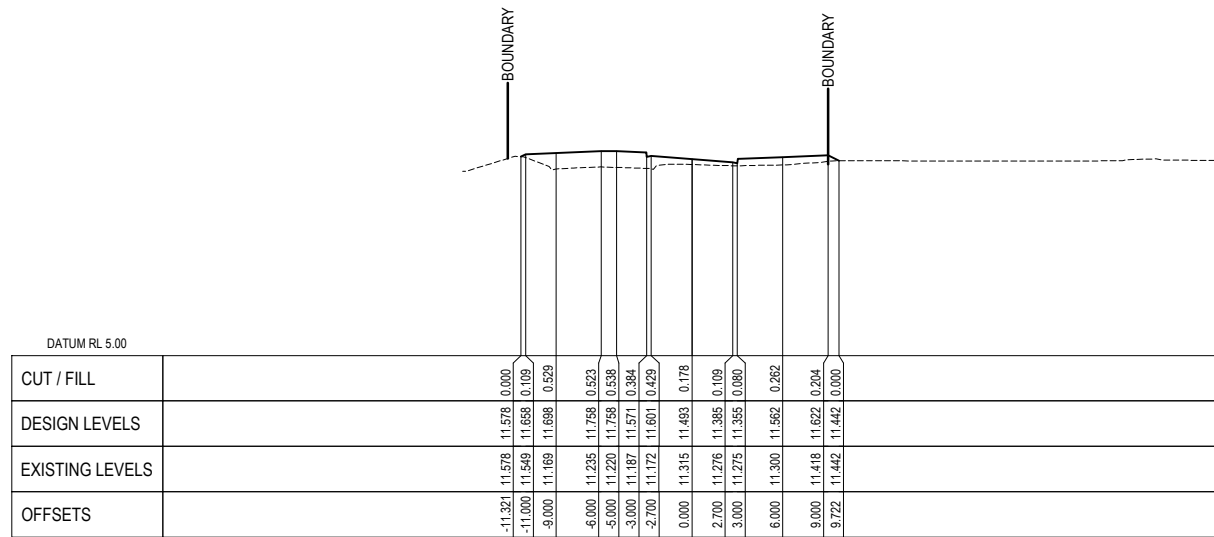
Title: **ROADING DETAILED CROSS SECTIONS SHEET 3**

RESOURCE CONSENT NOT FOR CONSTRUCTION

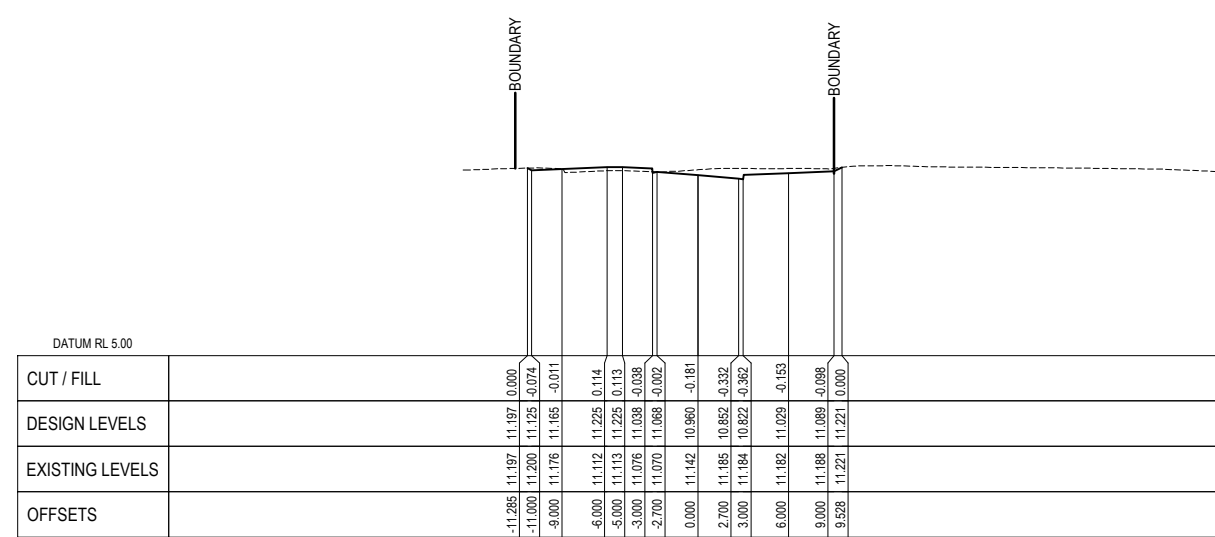
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3253
Rev.	E

LEGEND:

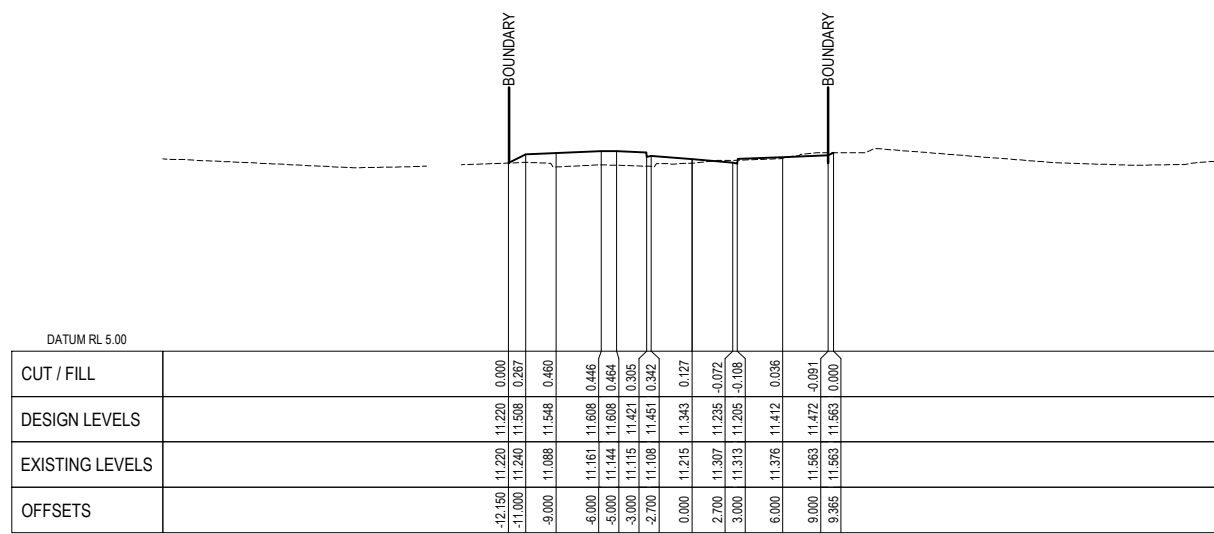
- EXISTING SURFACE
- DESIGN SURFACE



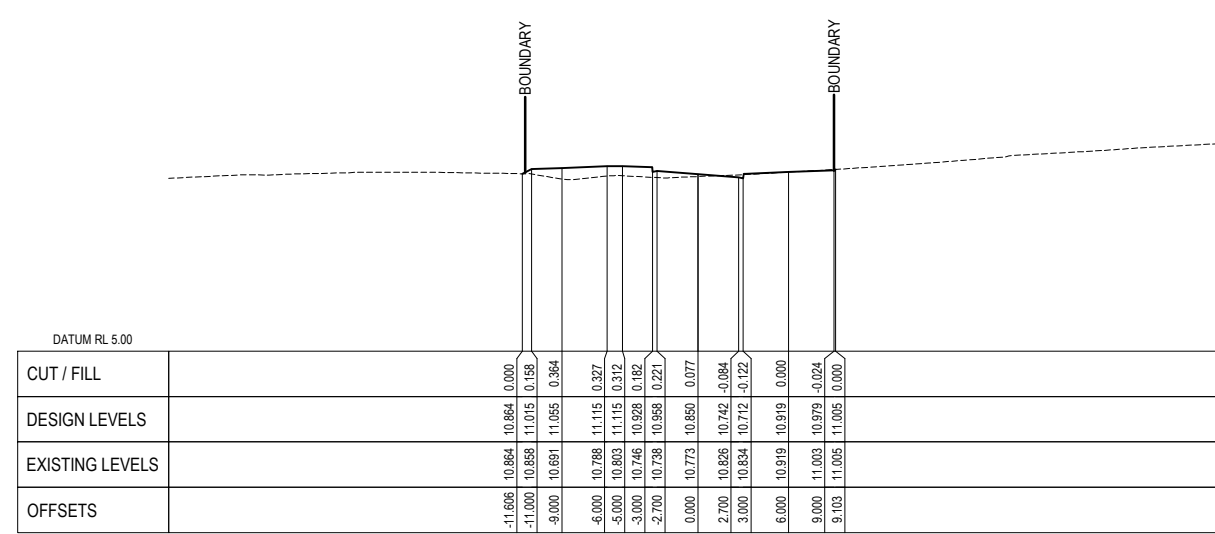
SPINE ROAD : CHAINAGE 600



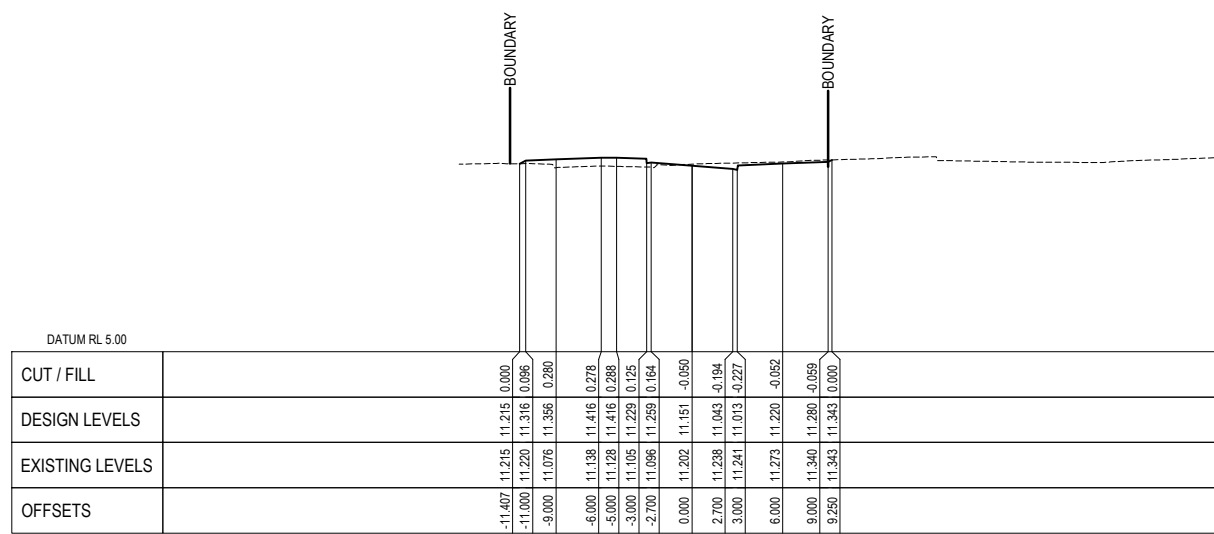
SPINE ROAD : CHAINAGE 660



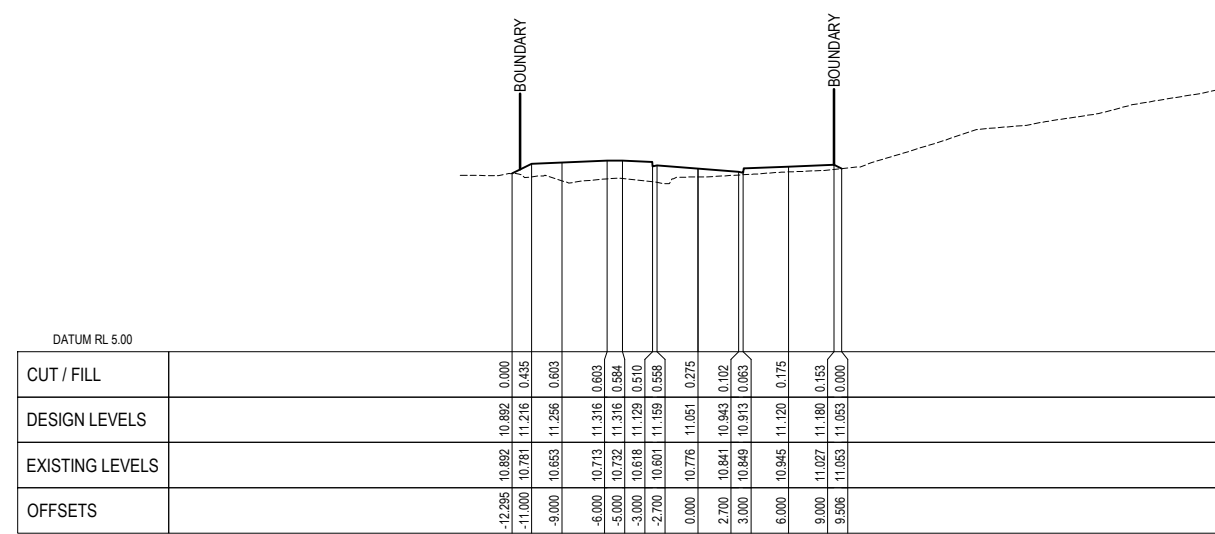
SPINE ROAD : CHAINAGE 620



SPINE ROAD : CHAINAGE 680



SPINE ROAD : CHAINAGE 640



SPINE ROAD : CHAINAGE 700

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction 31.05.21
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

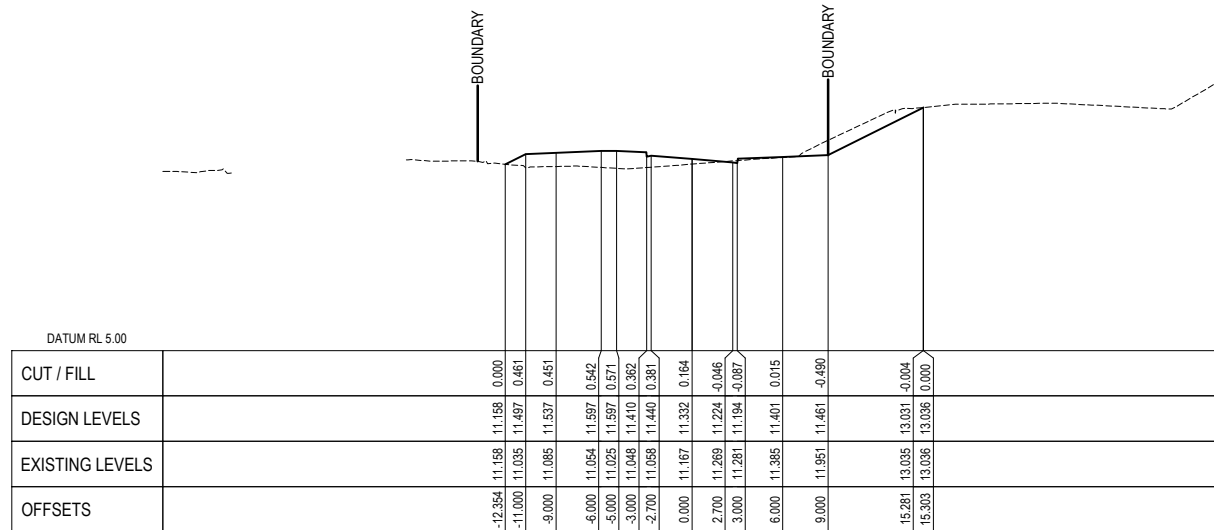
Title: ROADING DETAILED CROSS SECTIONS SHEET 4

RESOURCE CONSENT NOT FOR CONSTRUCTION

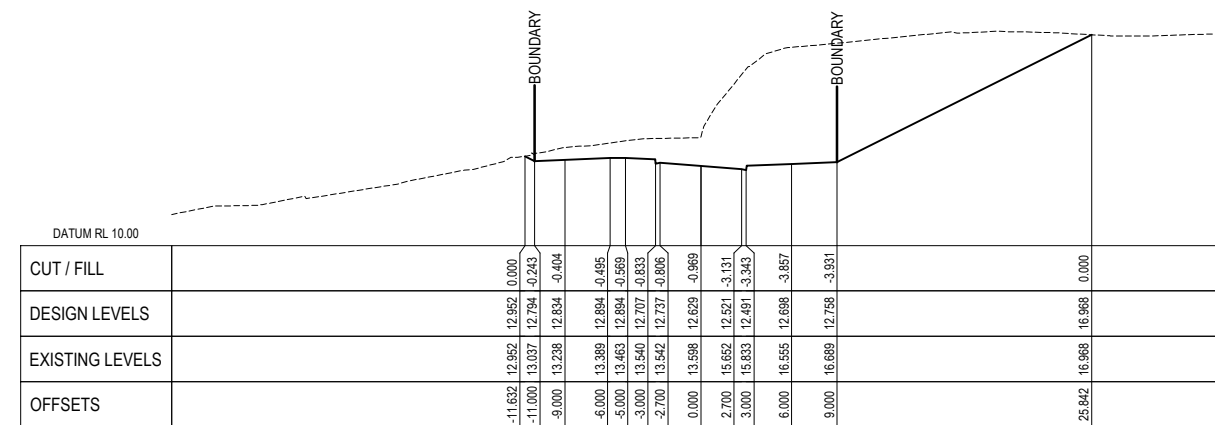
Discipline CIVIL ENGINEERING	Rev. E
Drawing No. 3126447-CA-3254	

LEGEND:

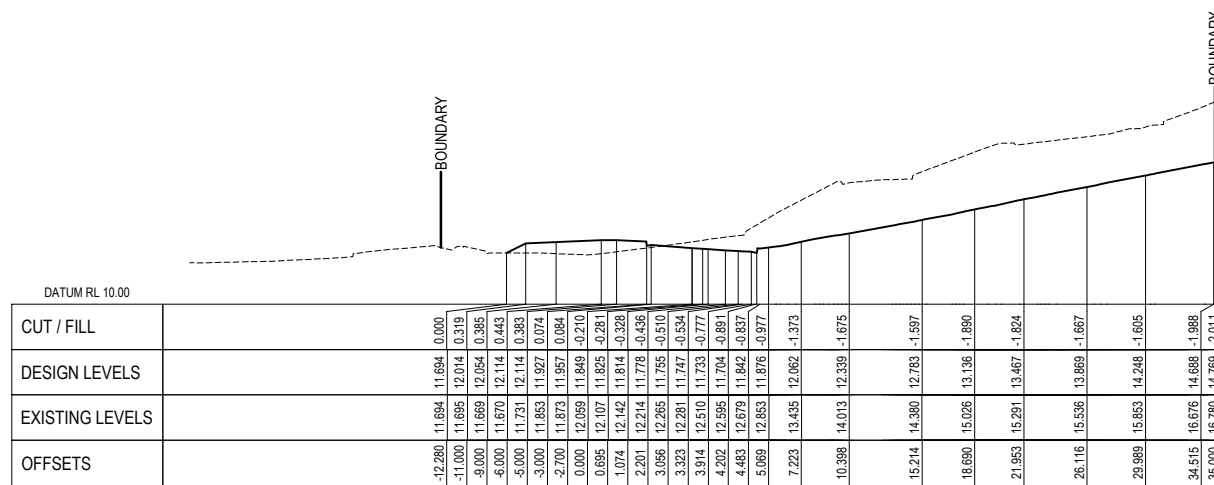
- EXISTING SURFACE
- DESIGN SURFACE



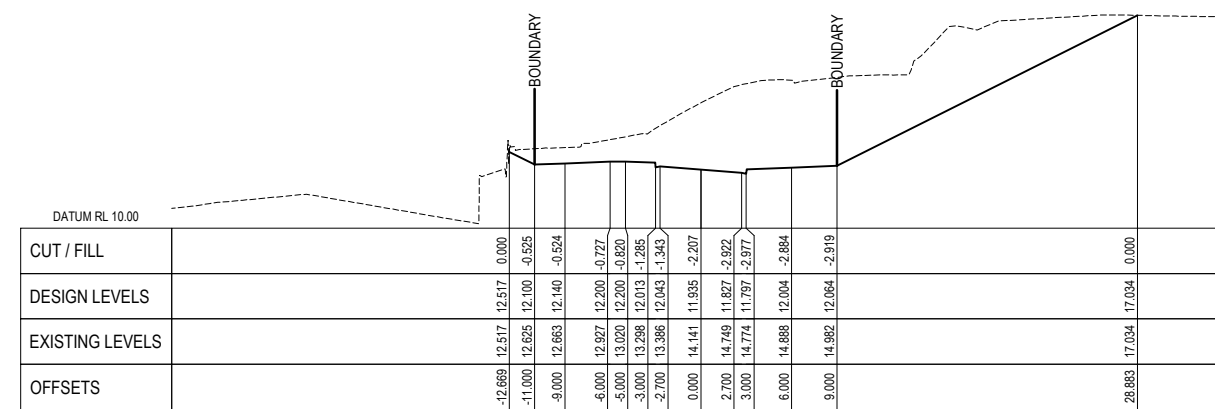
SPINE ROAD : CHAINAGE 720



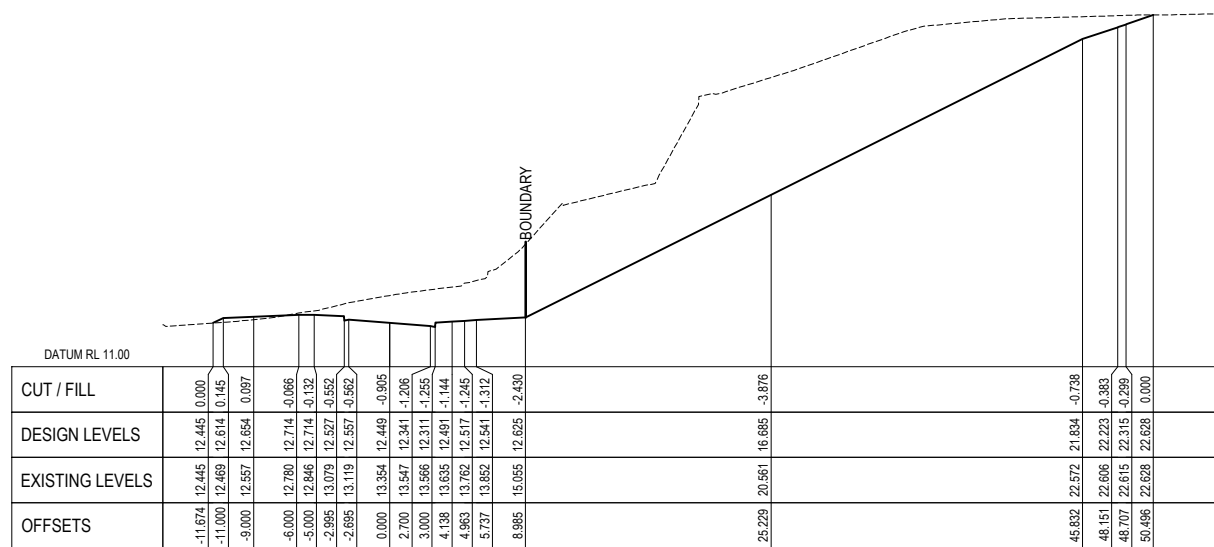
SPINE ROAD : CHAINAGE 780



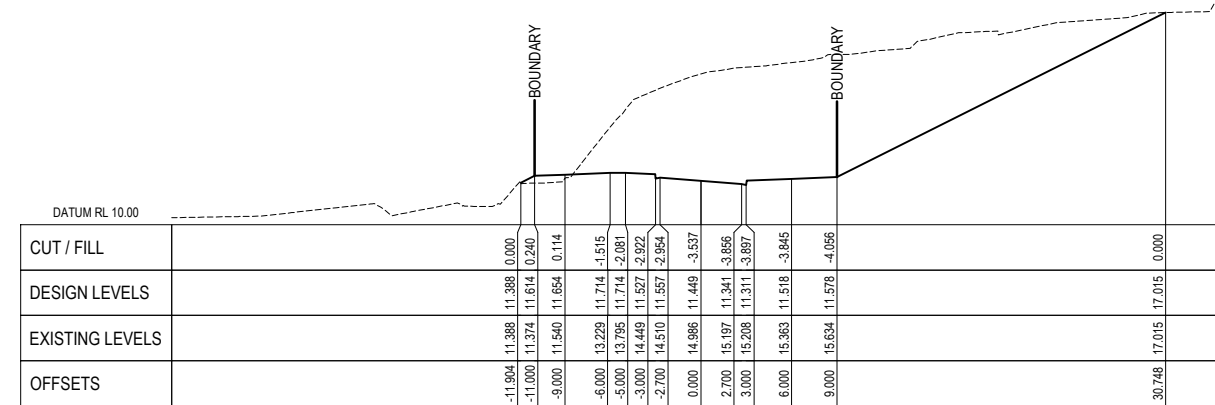
SPINE ROAD : CHAINAGE 740



SPINE ROAD : CHAINAGE 800



SPINE ROAD : CHAINAGE 760



SPINE ROAD : CHAINAGE 820

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction*
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

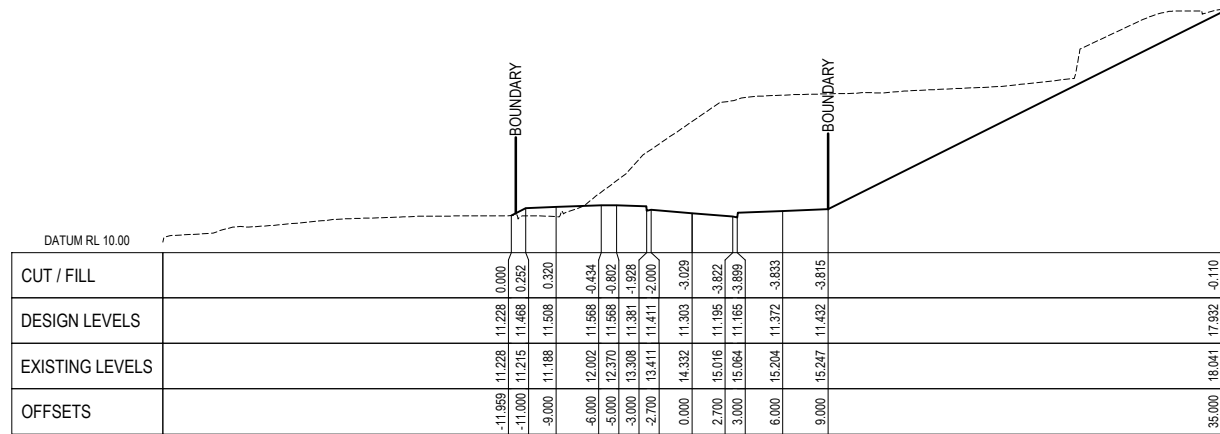
Title: ROADING DETAILED CROSS SECTIONS SHEET 5

RESOURCE CONSENT NOT FOR CONSTRUCTION

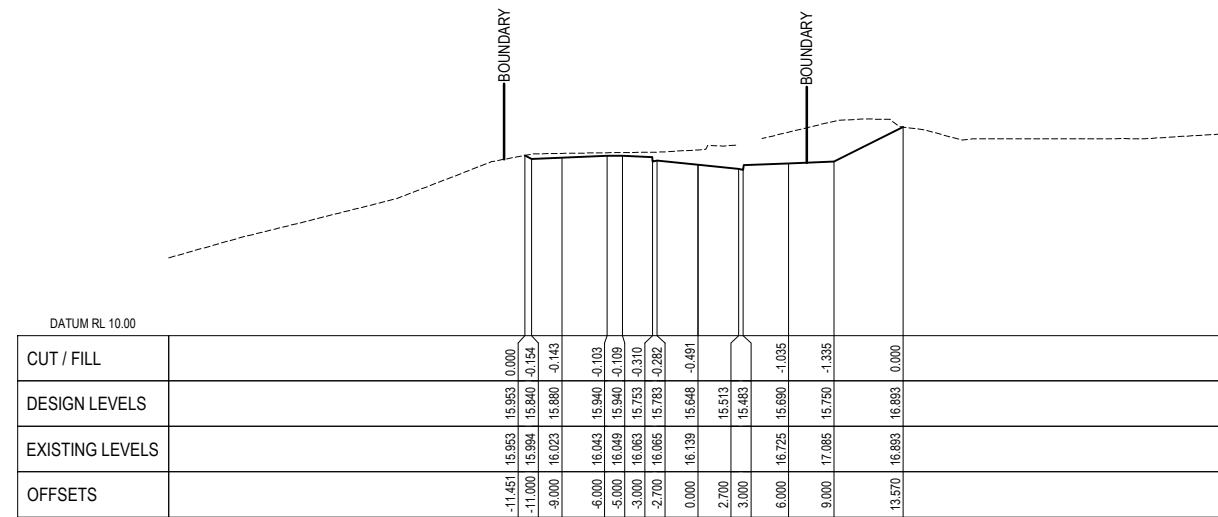
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3255
Rev.	E

LEGEND:

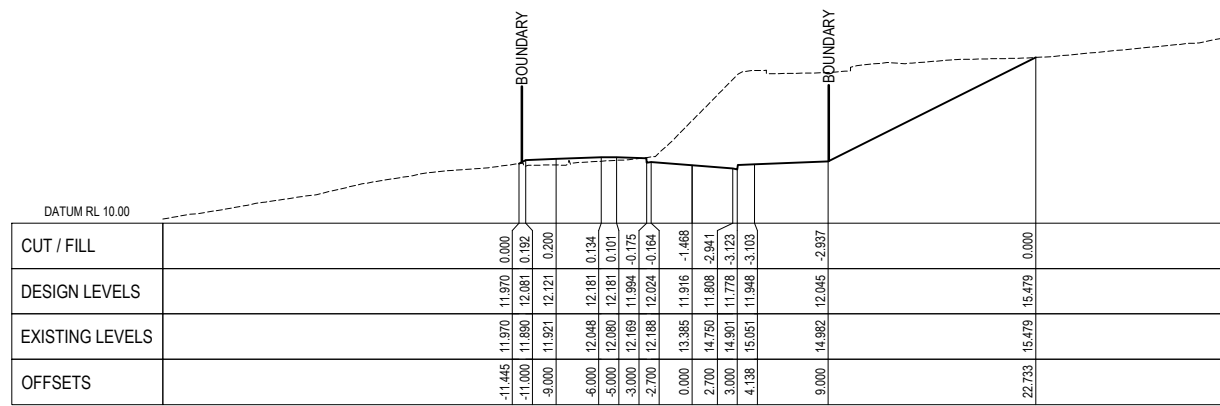
- EXISTING SURFACE
- DESIGN SURFACE



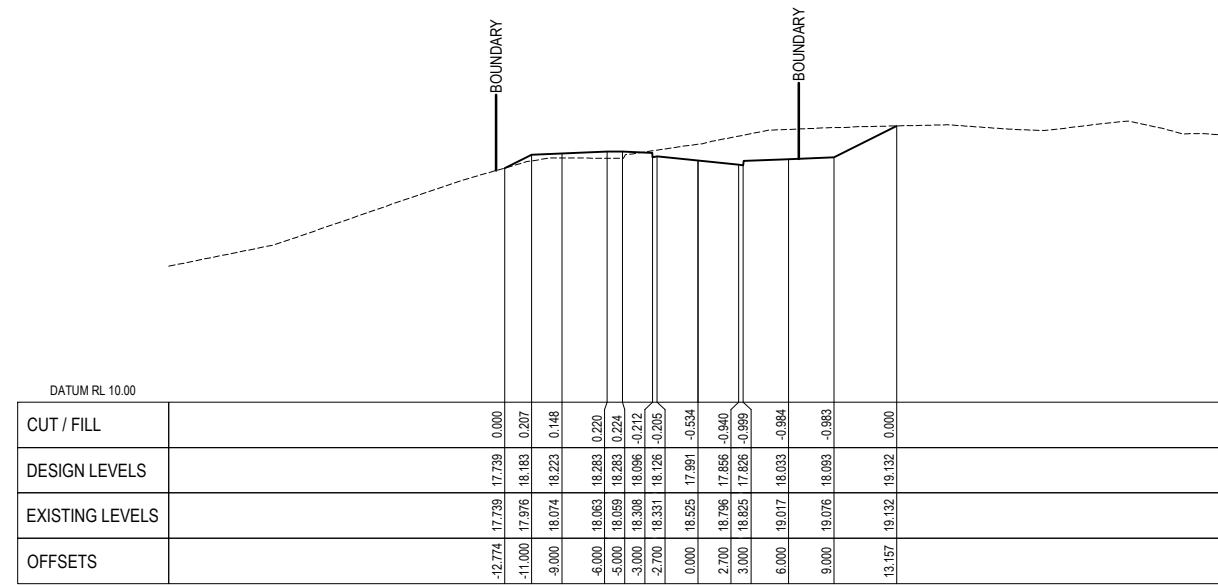
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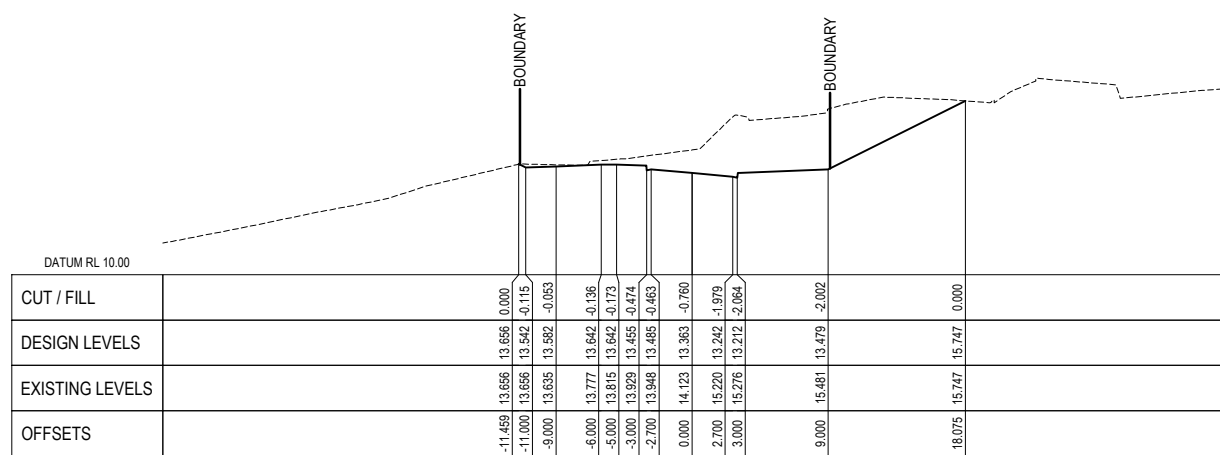
SPINE ROAD : CHAINAGE 900



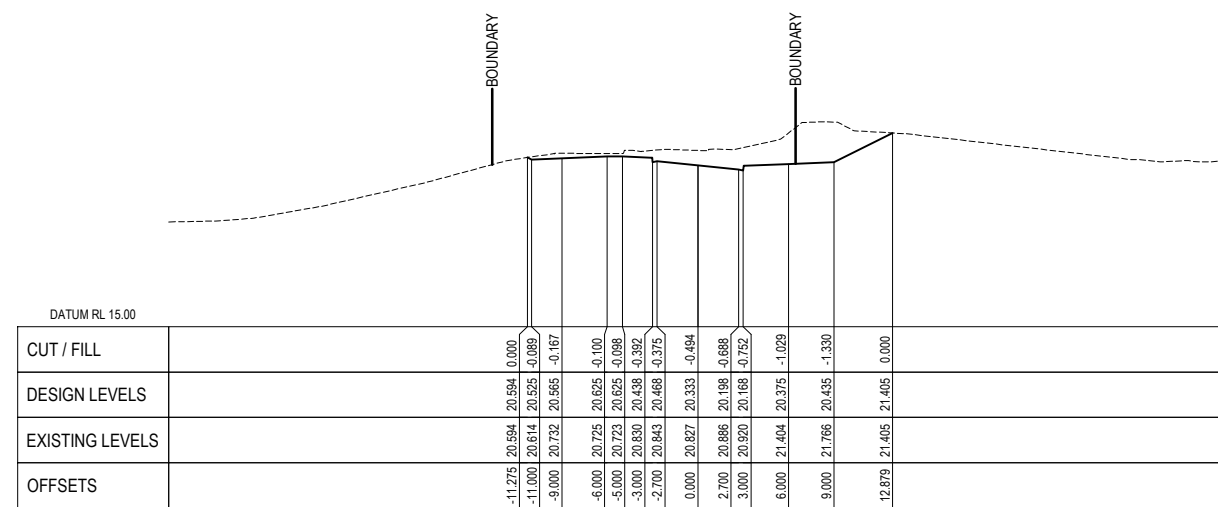
SPINE ROAD : CHAINAGE 860



SPINE ROAD : CHAINAGE 920



SPINE ROAD : CHAINAGE 880



SPINE ROAD : CHAINAGE 940

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	Chk.	Appd	Date



Original Scale (A1)	1:250 (H) 1:125 (V)
Design	C.BREYTENBACH 31.05.21
Drawn	A.FAZEKAS 31.05.21
Design Verifier	
Design Check	
Reduced Scale (A3)	1:500 (H) 1:250 (V)
* Refer to Revision 1 for Original Signature	

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

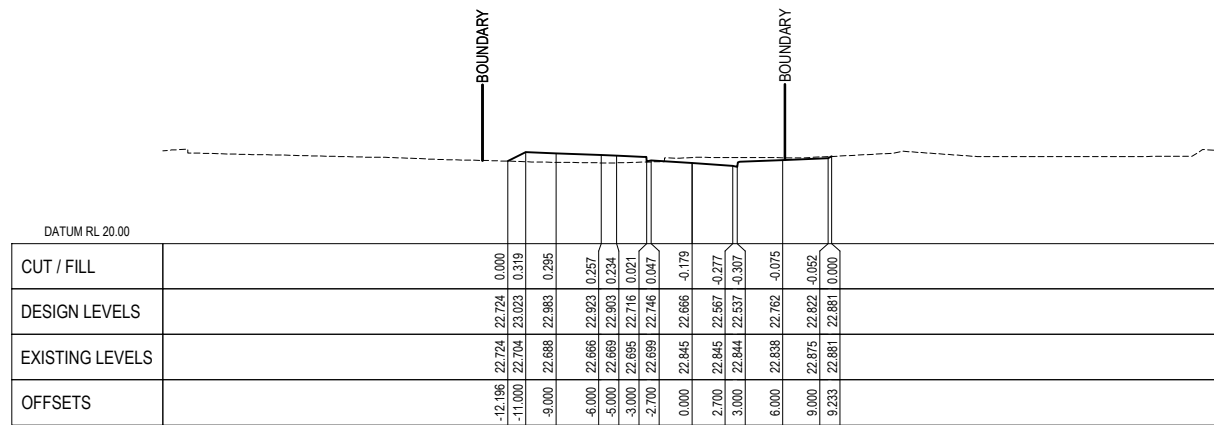
Title:	ROADING DETAILED CROSS SECTIONS SHEET 6
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-3256
Rev:	E

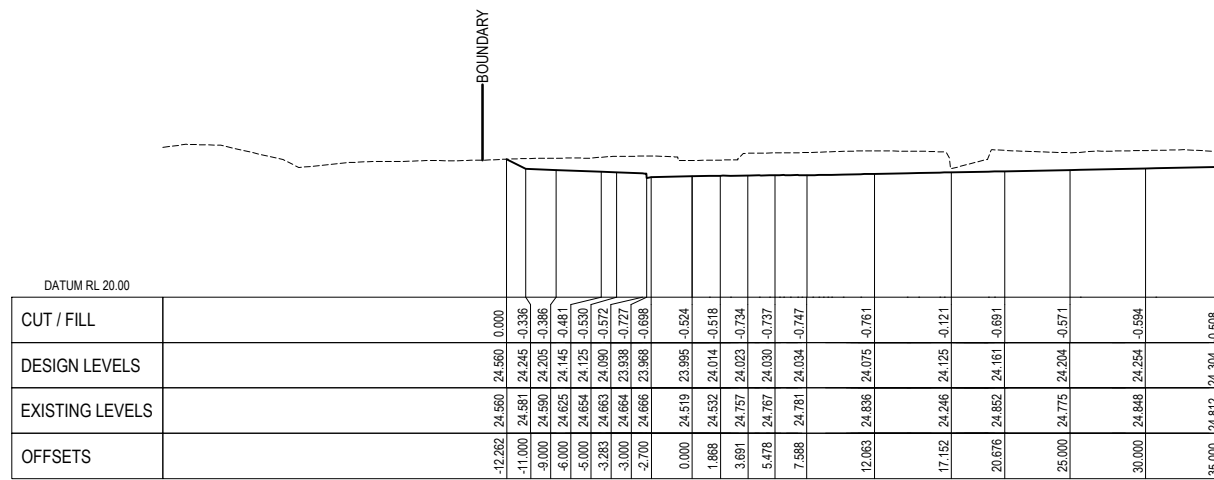
RESOURCE CONSENT NOT FOR CONSTRUCTION

LEGEND:

- EXISTING SURFACE
- DESIGN SURFACE



SPINE ROAD : CHAINAGE 960



SPINE ROAD : CHAINAGE 980

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction*
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS 31.05.21	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client:	MARUTŪĀHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

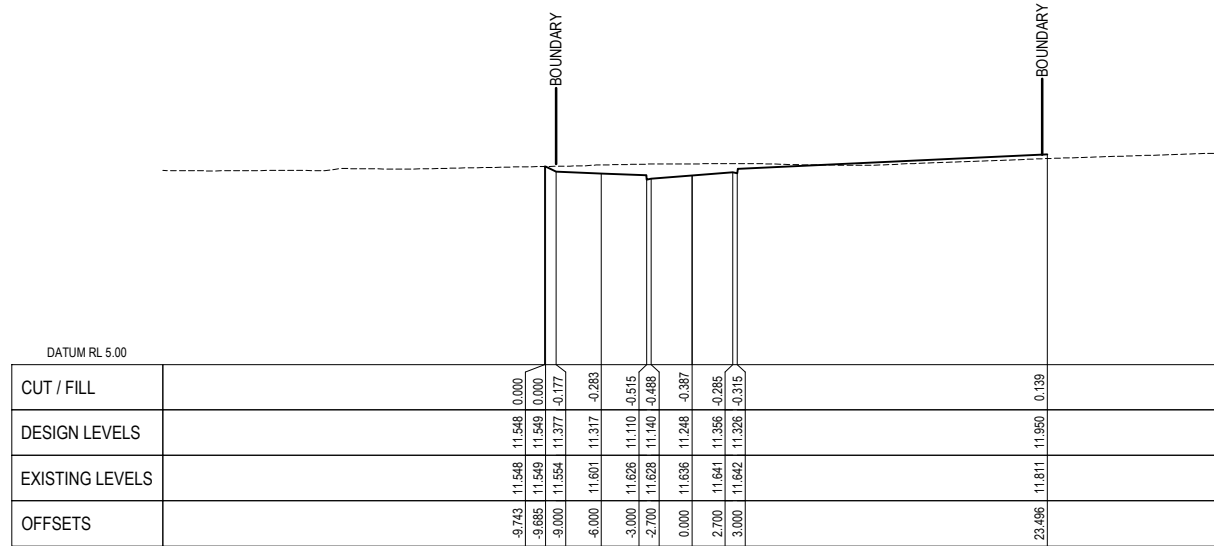
Title:	ROADING DETAILED CROSS SECTIONS SHEET 7
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Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3257
Rev.	E

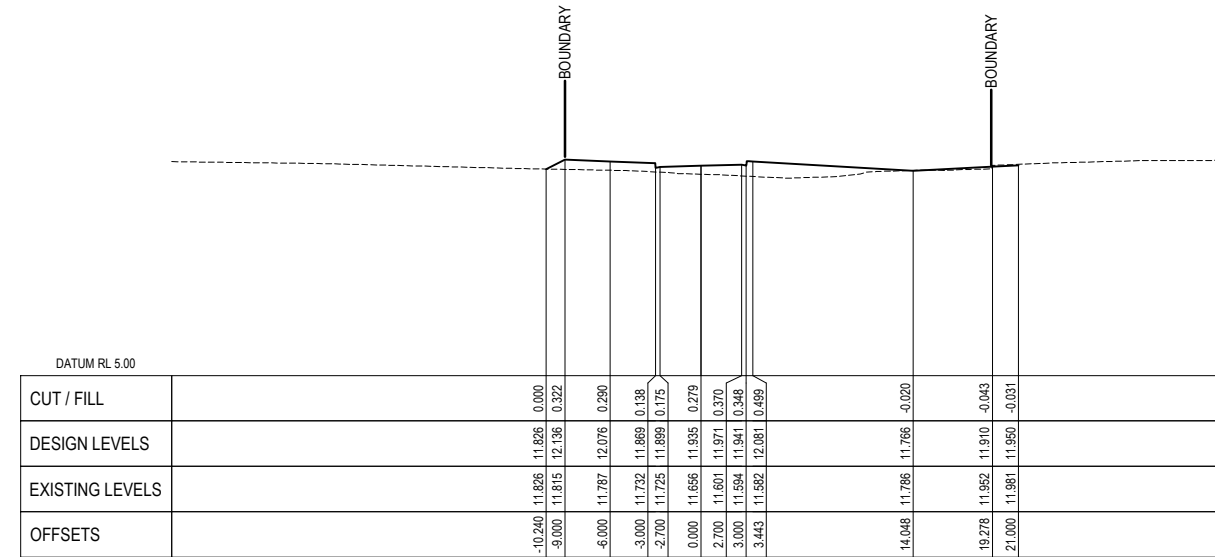
**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

LEGEND:

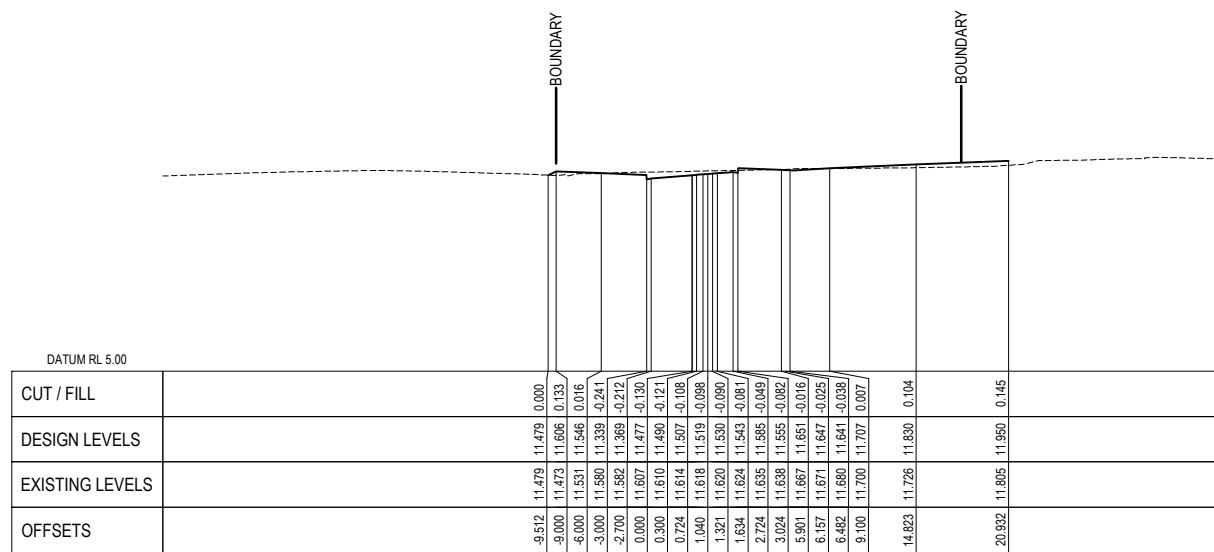
- EXISTING SURFACE
- DESIGN SURFACE



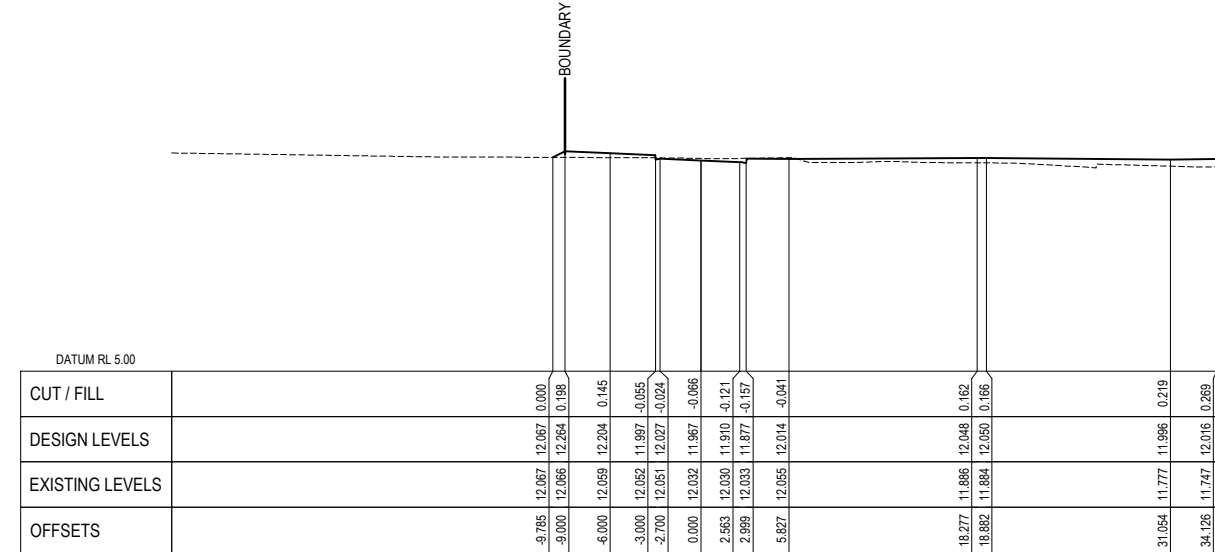
FARM ROAD : CHAINAGE 20



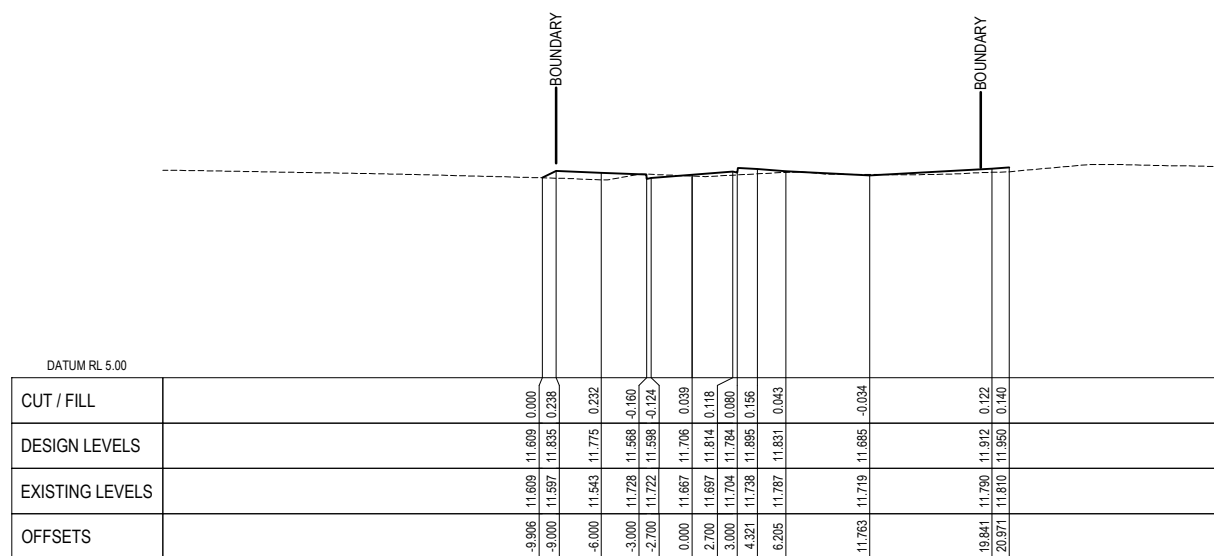
FARM ROAD : CHAINAGE 80



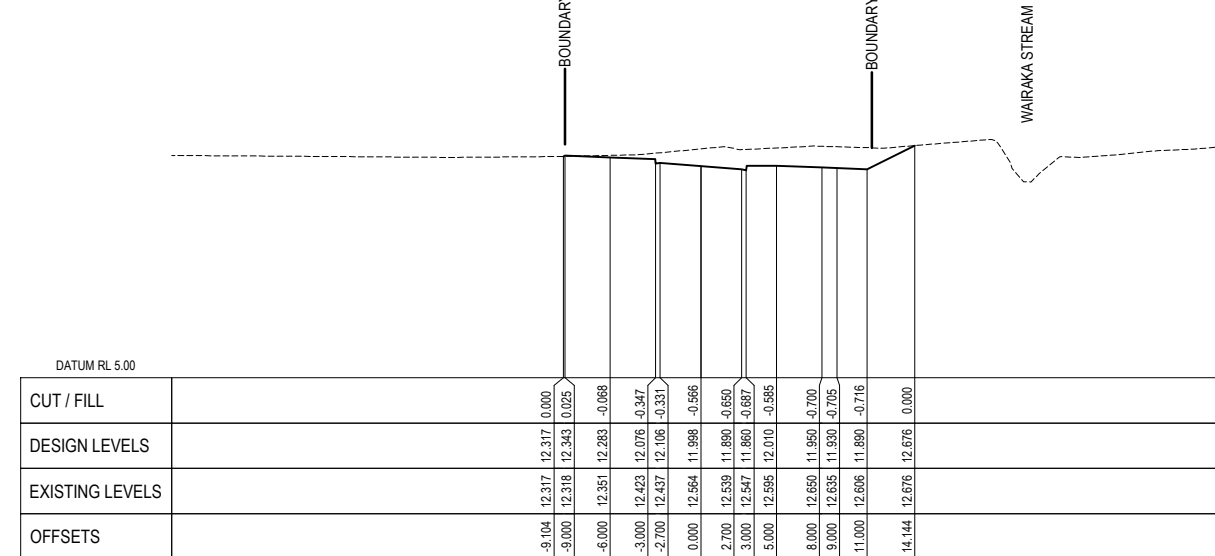
FARM ROAD : CHAINAGE 40



FARM ROAD : CHAINAGE 100



FARM ROAD : CHAINAGE 60



FARM ROAD : CHAINAGE 120

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction 31.05.21
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS	Date
	Day Verifier	
	Day Check	
	* Refer to Revision 1 for Original Signature	

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

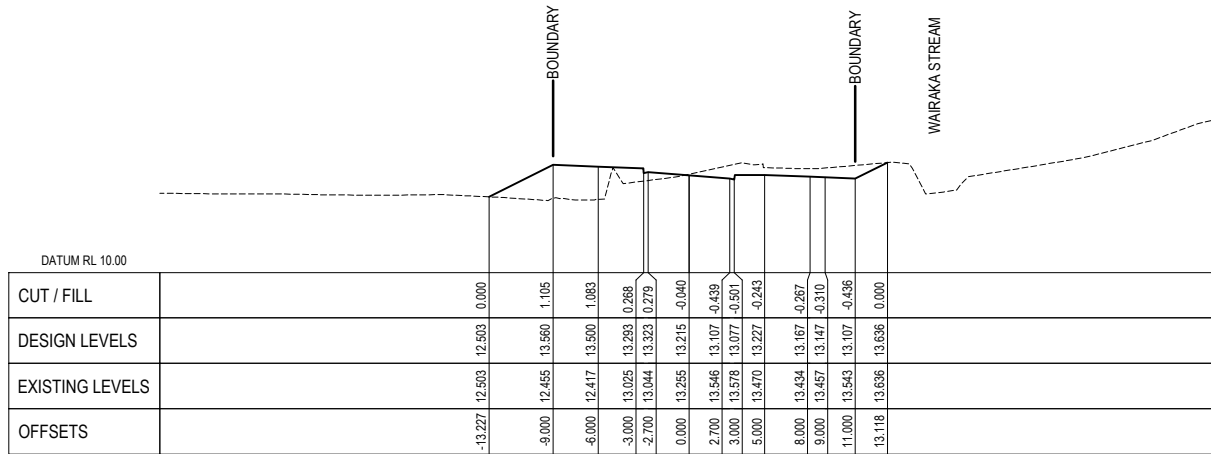
Project: CARRINGTON BACKBONE WORKS PROJECT

Title: ROADING DETAILED CROSS SECTIONS SHEET 8

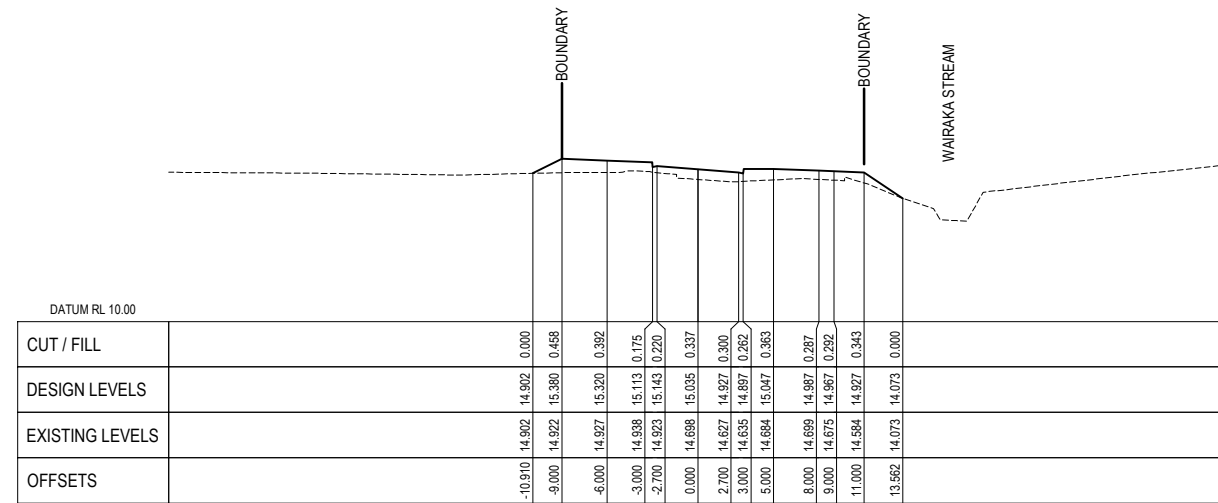
RESOURCE CONSENT NOT FOR CONSTRUCTION

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3258
Rev.	E

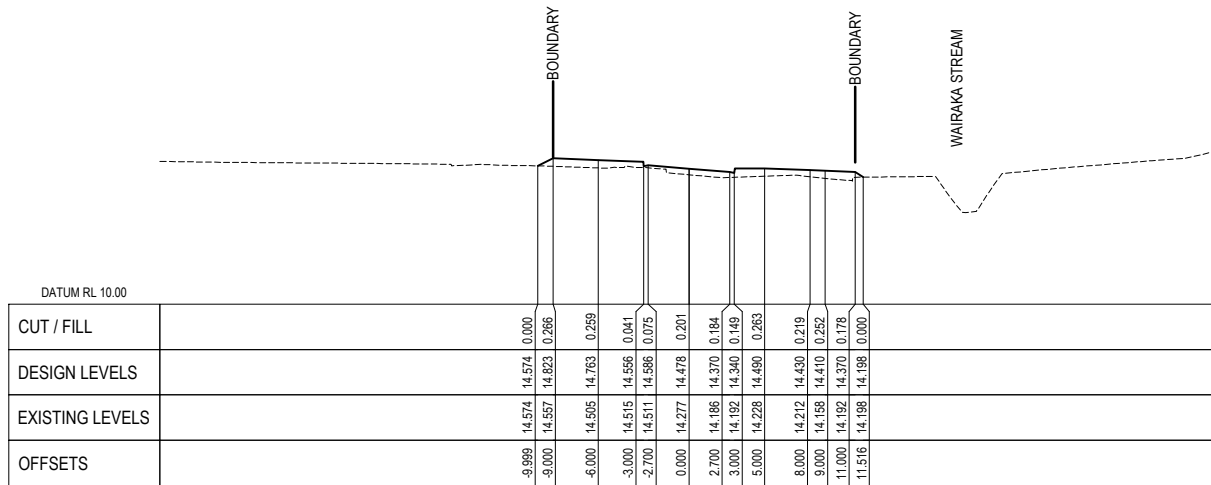
LEGEND:
 - - - - - EXISTING SURFACE
 ——— DESIGN SURFACE



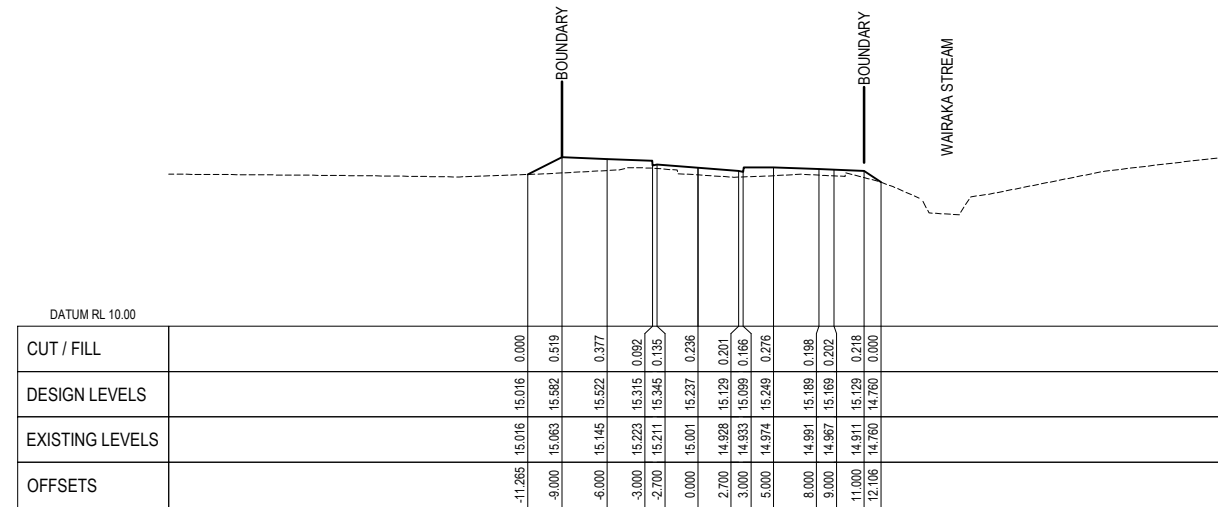
FARM ROAD : CHAINAGE 140



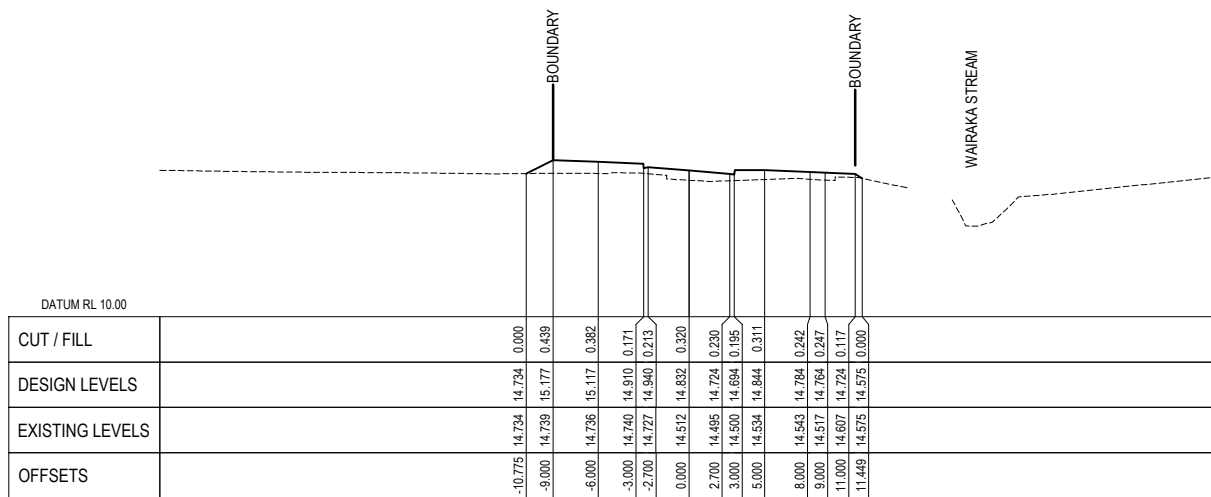
FARM ROAD : CHAINAGE 200



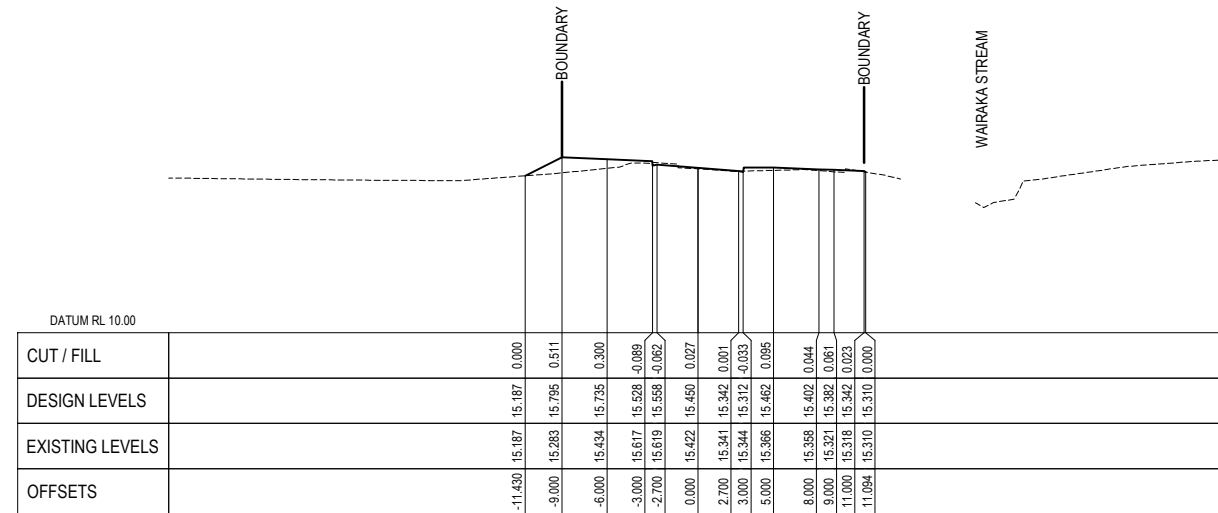
FARM ROAD : CHAINAGE 160



FARM ROAD : CHAINAGE 220



FARM ROAD : CHAINAGE 180



FARM ROAD : CHAINAGE 240

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:
 Beca

Original Scale (A1)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
1:250 (H) 1:125 (V)	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Dwg Verifier			
1:500 (H) 1:250 (V)	Dwg Check			
	* Refer to Revision 1 for Original Signature			

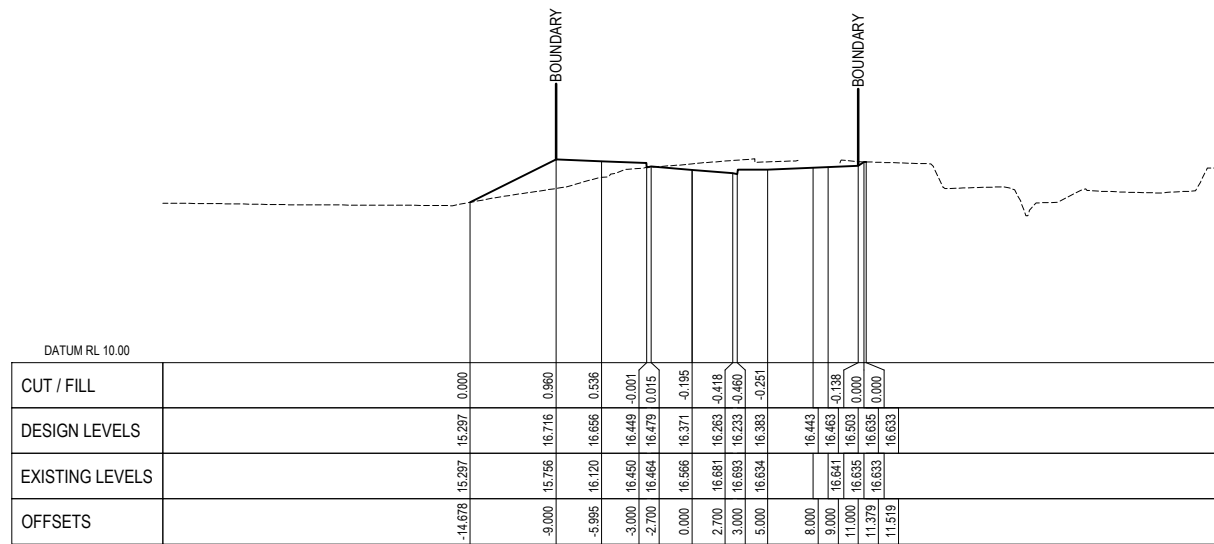
Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ	Project:	CARRINGTON BACKBONE WORKS PROJECT	Title:	ROADING DETAILED CROSS SECTIONS SHEET 9
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Discipline:	CIVIL ENGINEERING	Rev.	E
Drawing No.	3126447-CA-3259		

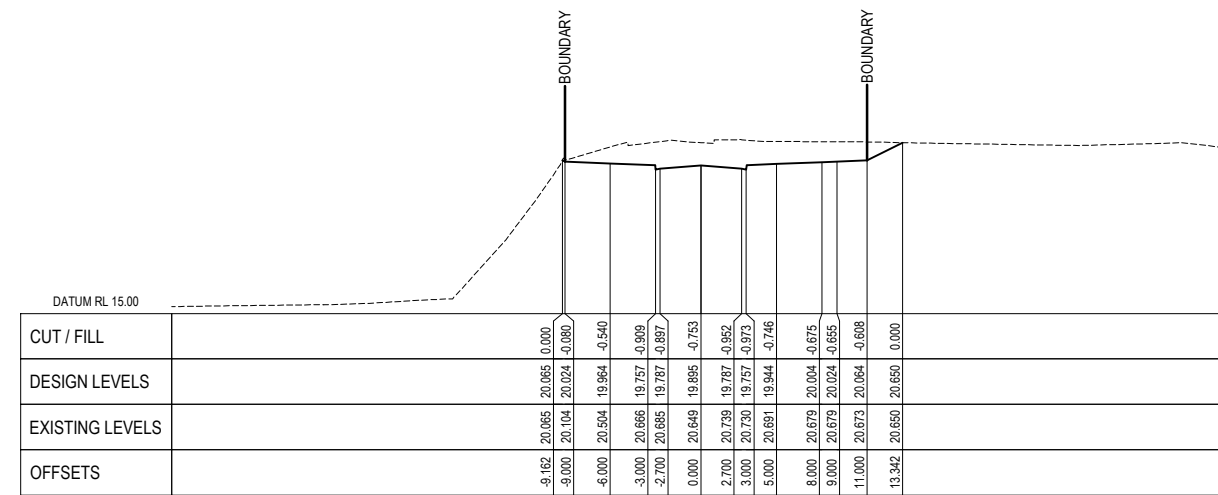
RESOURCE CONSENT
 NOT FOR CONSTRUCTION

LEGEND:

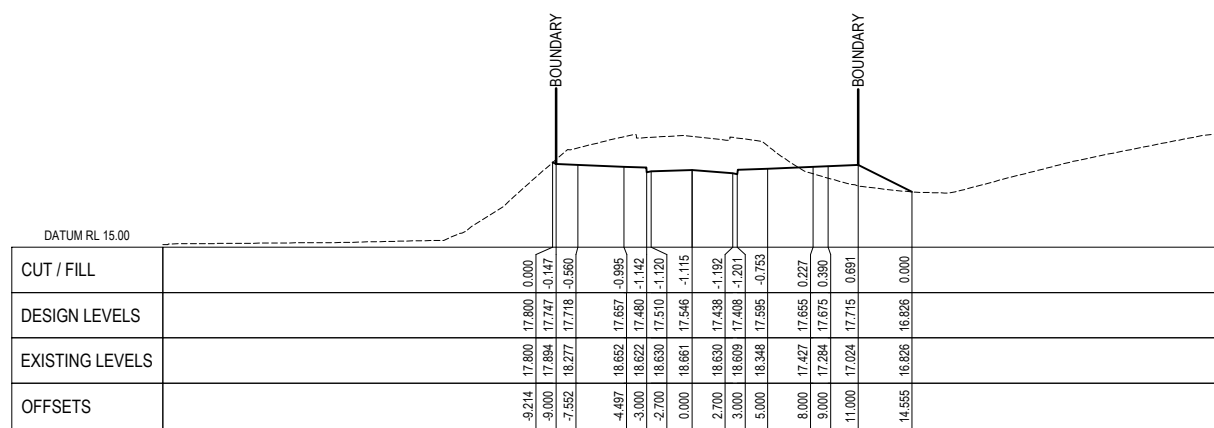
- EXISTING SURFACE
- DESIGN SURFACE



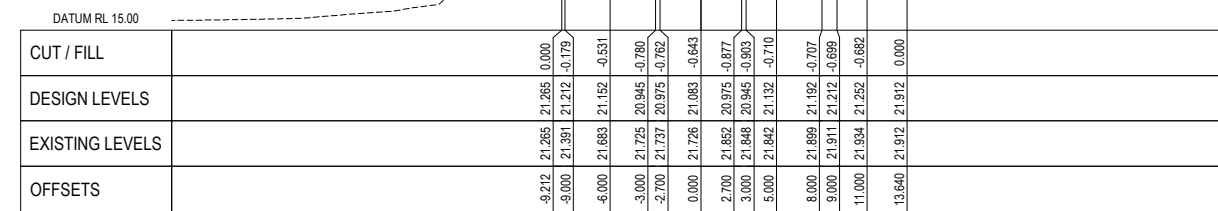
FARM ROAD : CHAINAGE 260



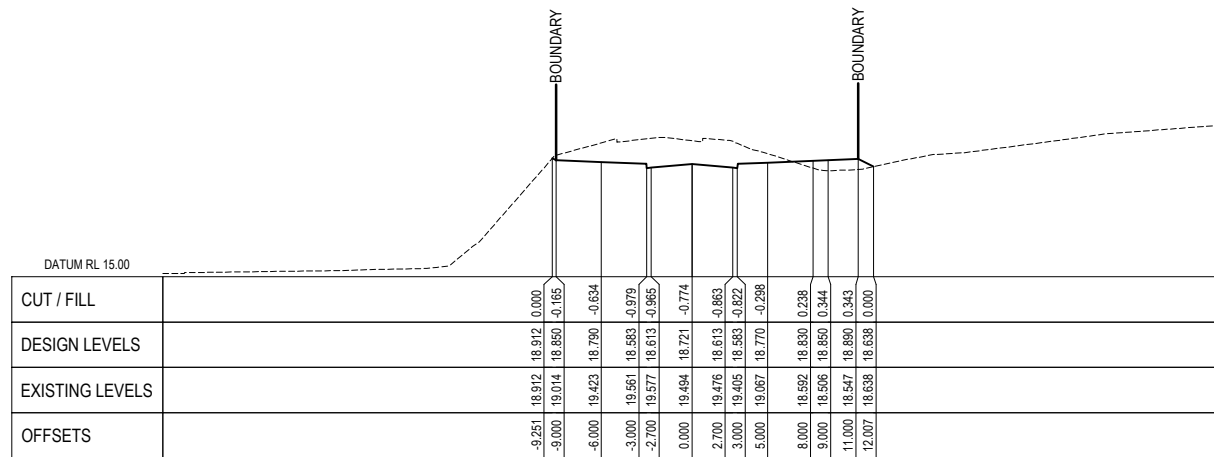
FARM ROAD : CHAINAGE 320



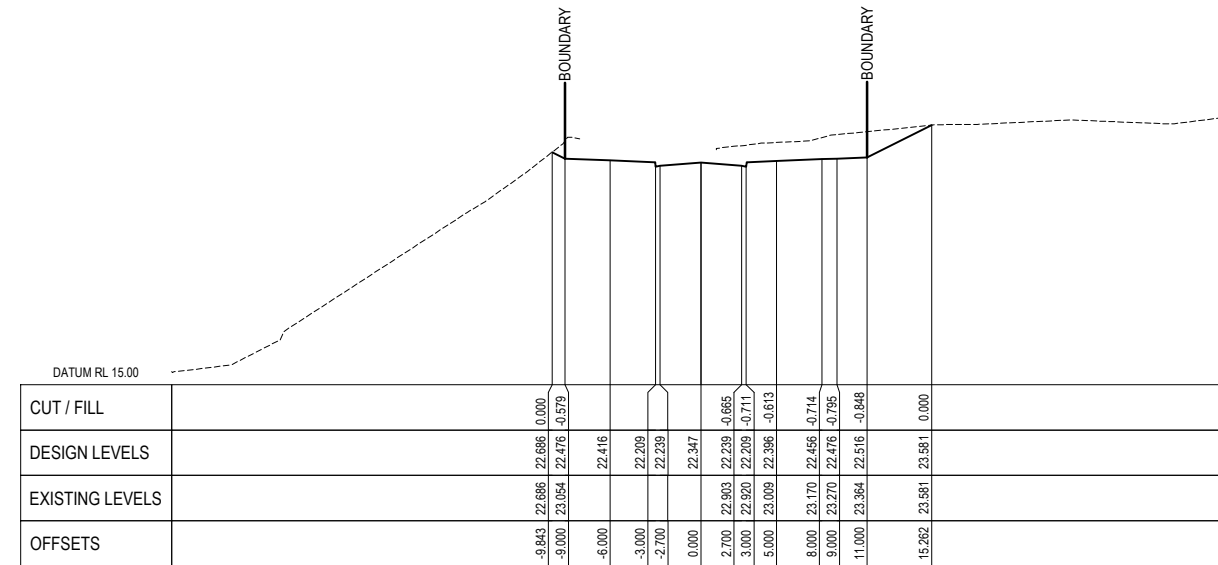
FARM ROAD : CHAINAGE 280



FARM ROAD : CHAINAGE 340



FARM ROAD : CHAINAGE 300



FARM ROAD : CHAINAGE 360

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date



Original Scale (A1)	1:250 (H) 1:125 (V)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:500 (H) 1:250 (V)	Drawn	A.FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			
		* Refer to Revision 1 for Original Signature			

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

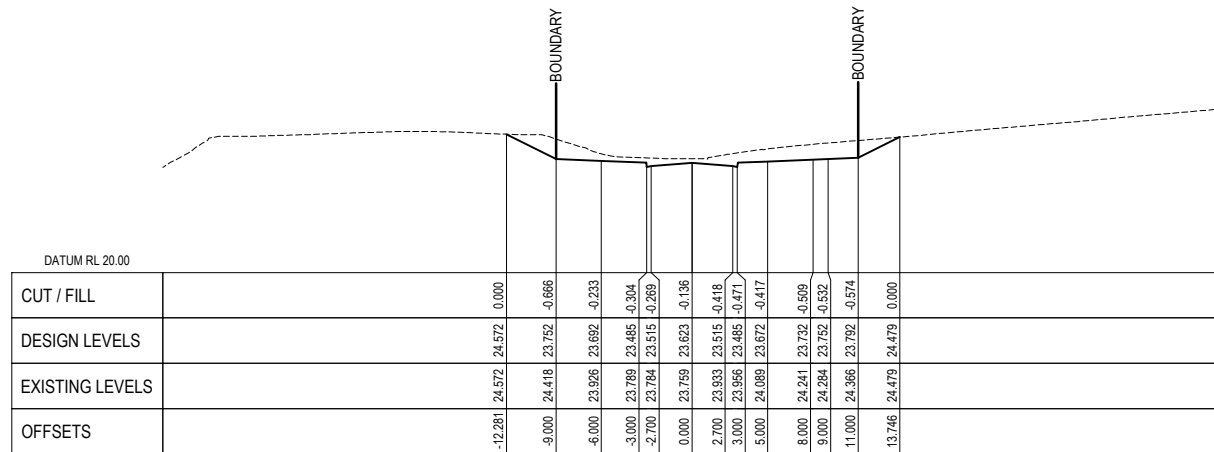
Title:	ROADING DETAILED CROSS SECTIONS SHEET 10
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Discipline:	CIVIL ENGINEERING
Drawing No.:	3126447-CA-3260
Rev.:	E

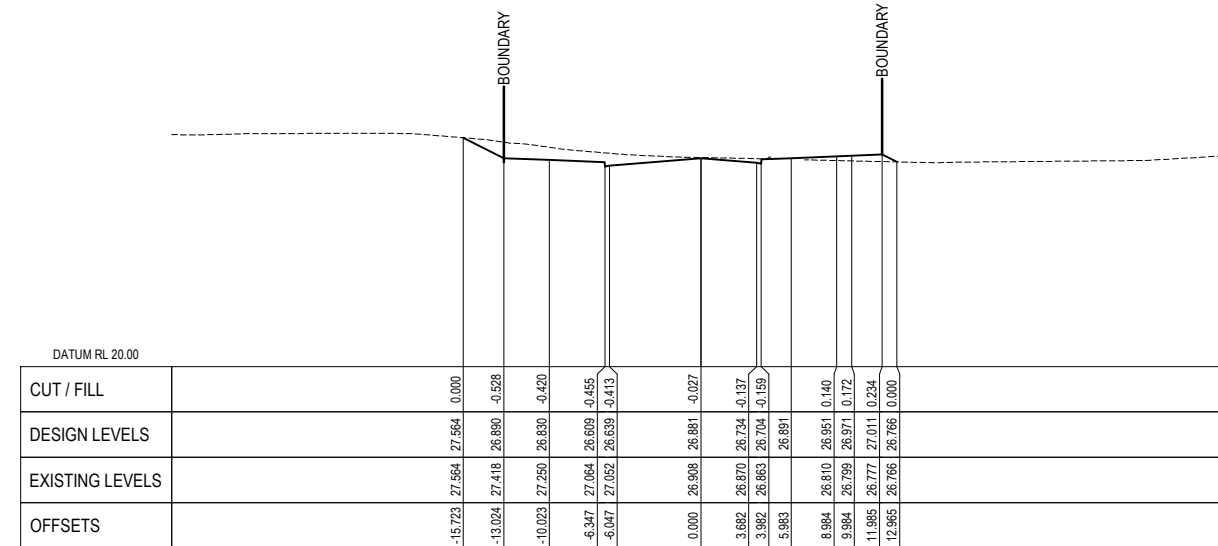
RESOURCE CONSENT NOT FOR CONSTRUCTION

LEGEND:

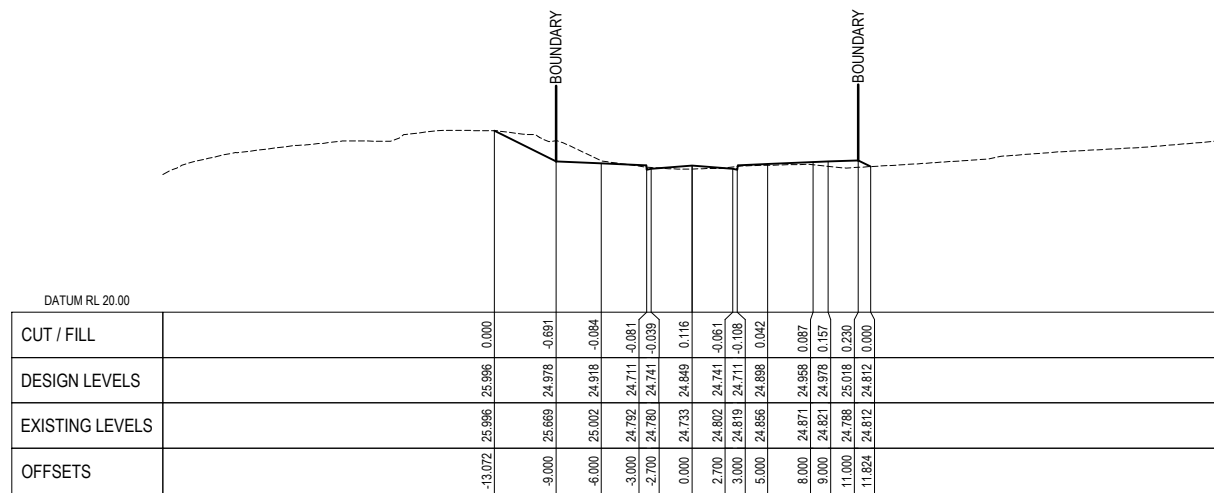
- EXISTING SURFACE
- DESIGN SURFACE



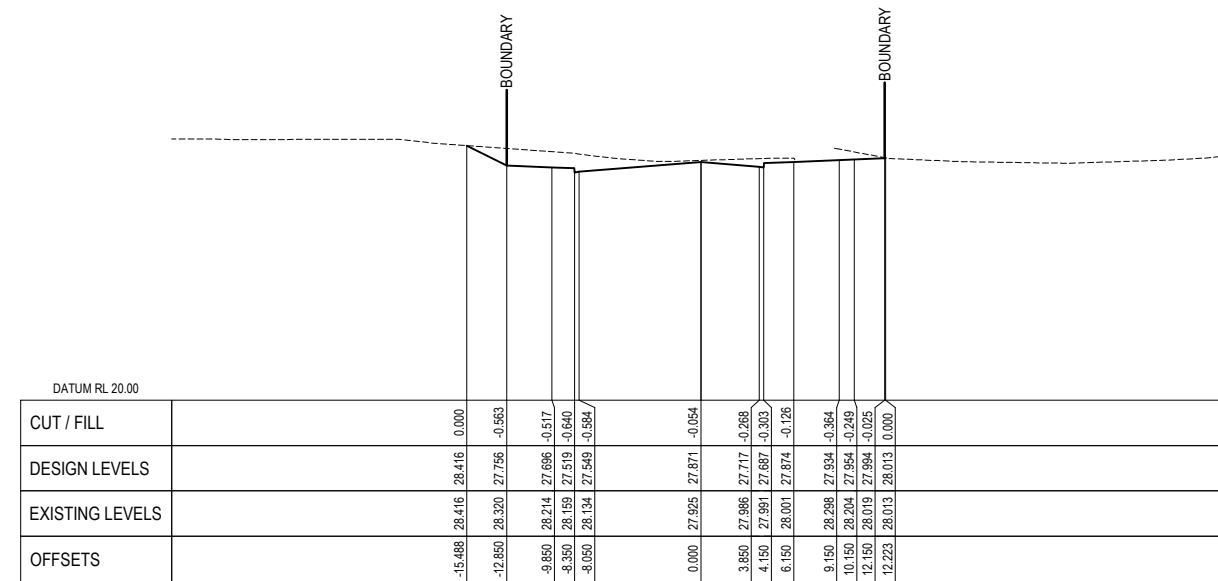
FARM ROAD : CHAINAGE 380



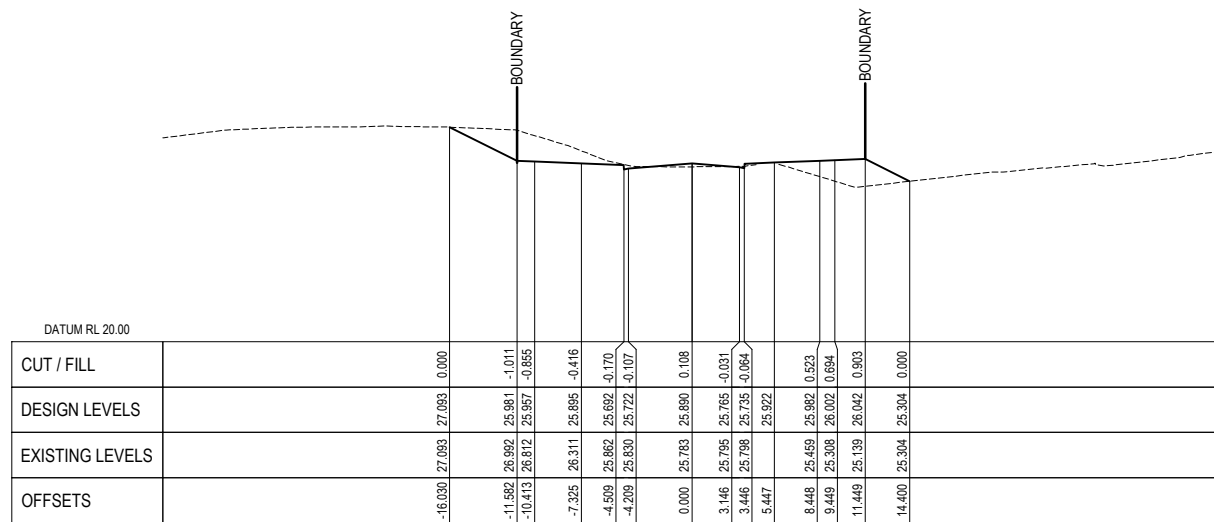
FARM ROAD : CHAINAGE 440



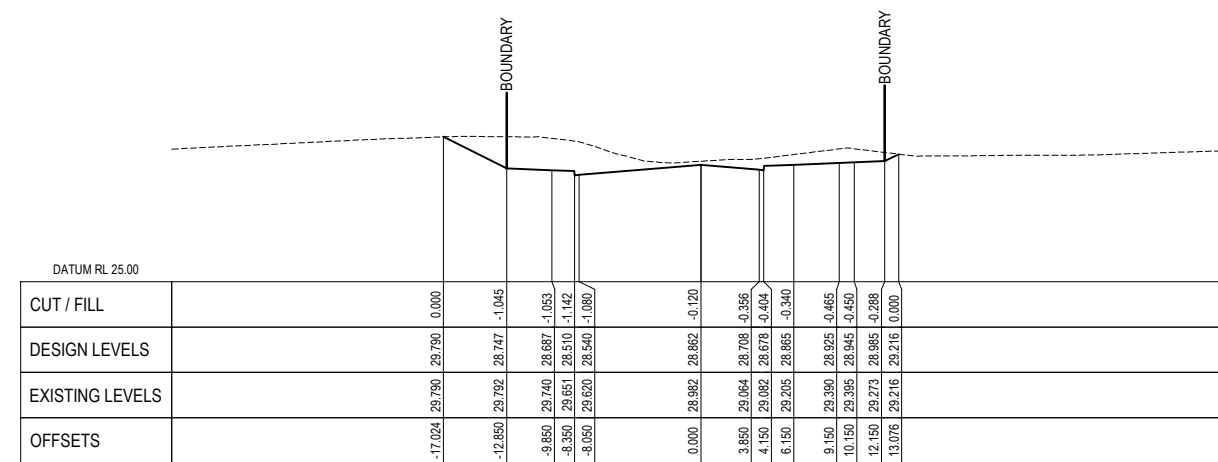
FARM ROAD : CHAINAGE 400



FARM ROAD : CHAINAGE 460



FARM ROAD : CHAINAGE 420



FARM ROAD : CHAINAGE 480

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:250 (H) 1:125 (V)
Design	C.BREYTENBACH 31.05.21
Drawn	A.FAZEKAS 31.05.21
Design Verifier	
Design Check	
Approved For Construction	Date

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

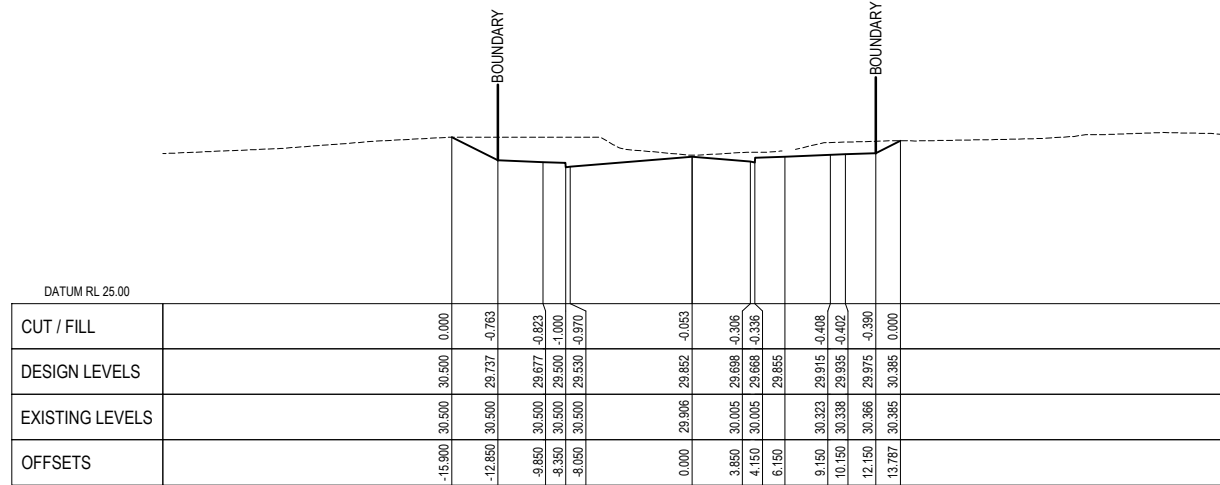
Title: ROADING DETAILED CROSS SECTIONS SHEET 11

RESOURCE CONSENT NOT FOR CONSTRUCTION

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3261
Rev.	E

LEGEND:

- EXISTING SURFACE
- DESIGN SURFACE



FARM ROAD : CHAINAGE 500

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:



Original Scale (A1)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
1:250 (H) 1:125 (V)	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
1:500 (H) 1:250 (V)	Design Check			

* Refer to Revision 1 for Original Signature

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ	Project: CARRINGTON BACKBONE WORKS PROJECT
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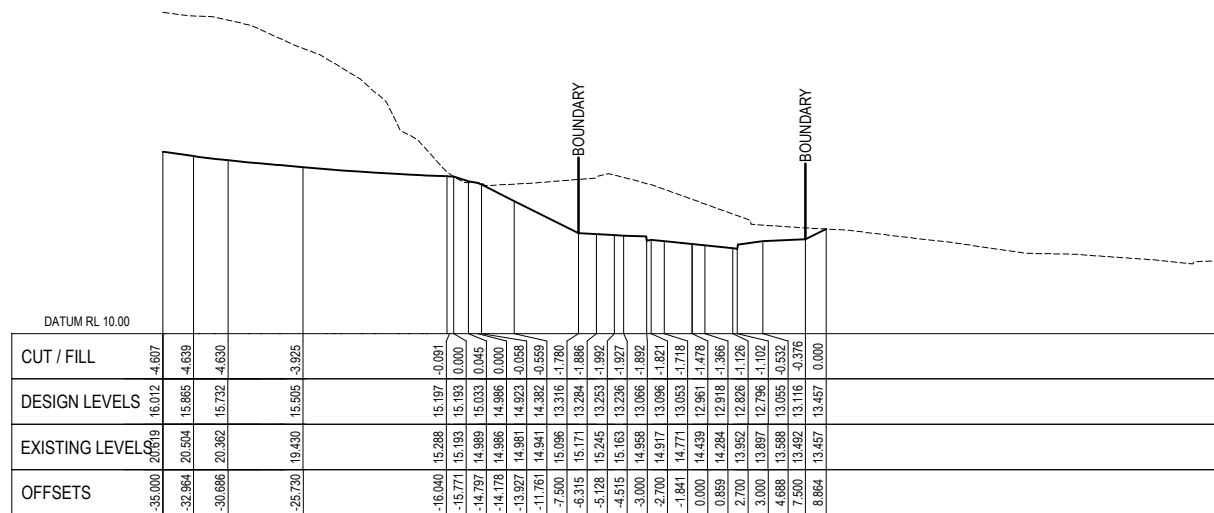
Title: ROADING DETAILED CROSS SECTIONS SHEET 12	Discipline: CIVIL ENGINEERING
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Drawing No: 3126447-CA-3262	Rev: E
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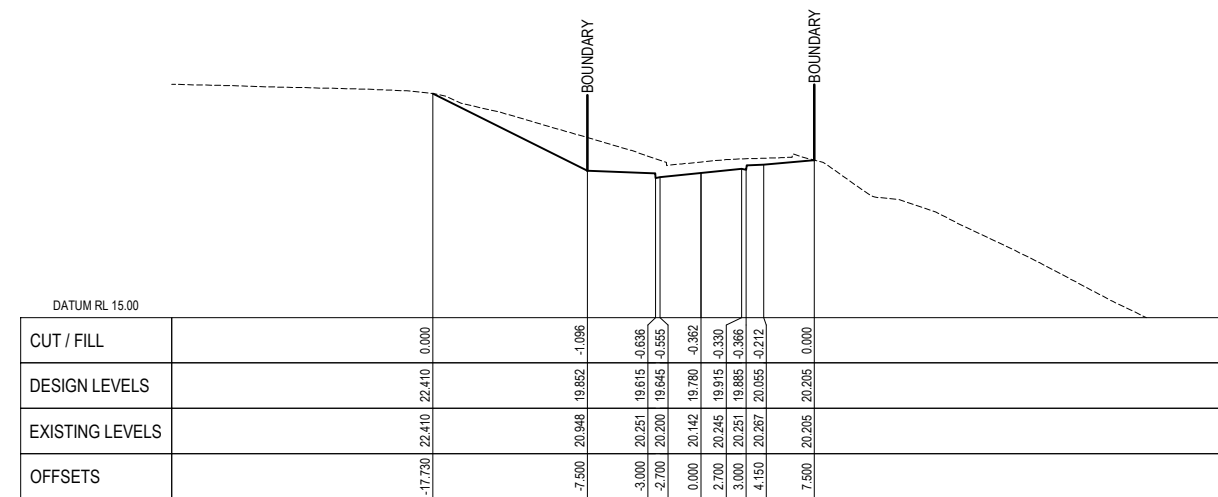
RESOURCE CONSENT
 NOT FOR CONSTRUCTION

LEGEND:

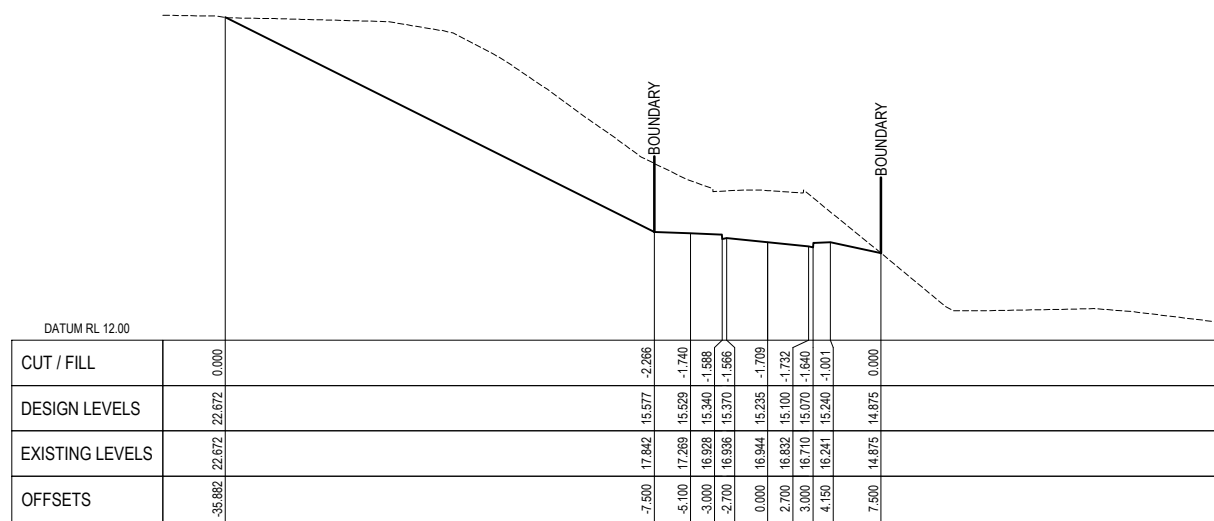
- EXISTING SURFACE
- DESIGN SURFACE



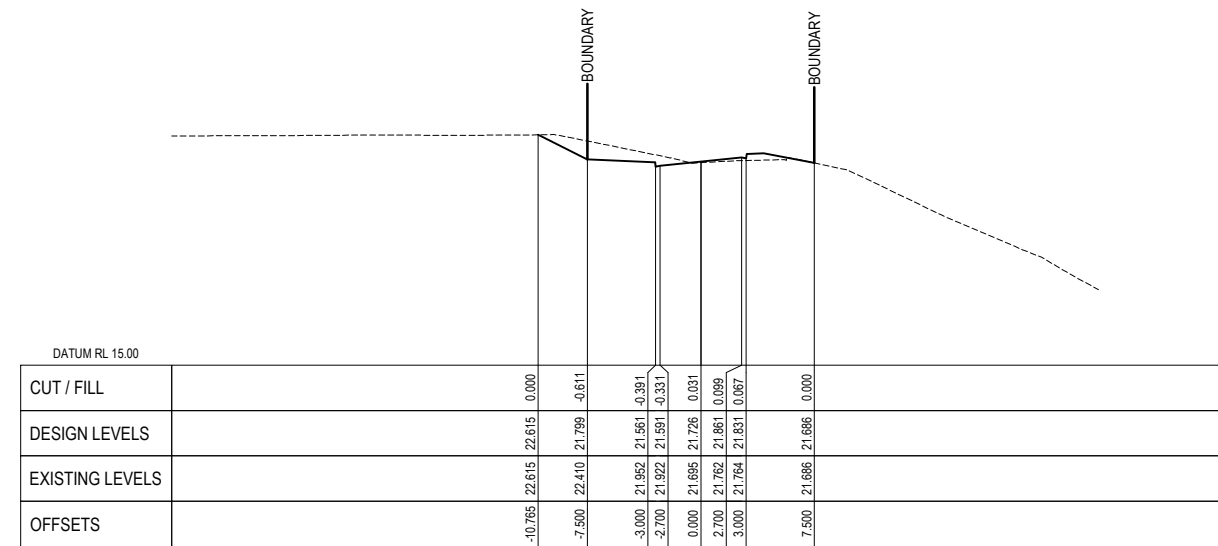
GATE 2 ROAD : CHAINAGE 20



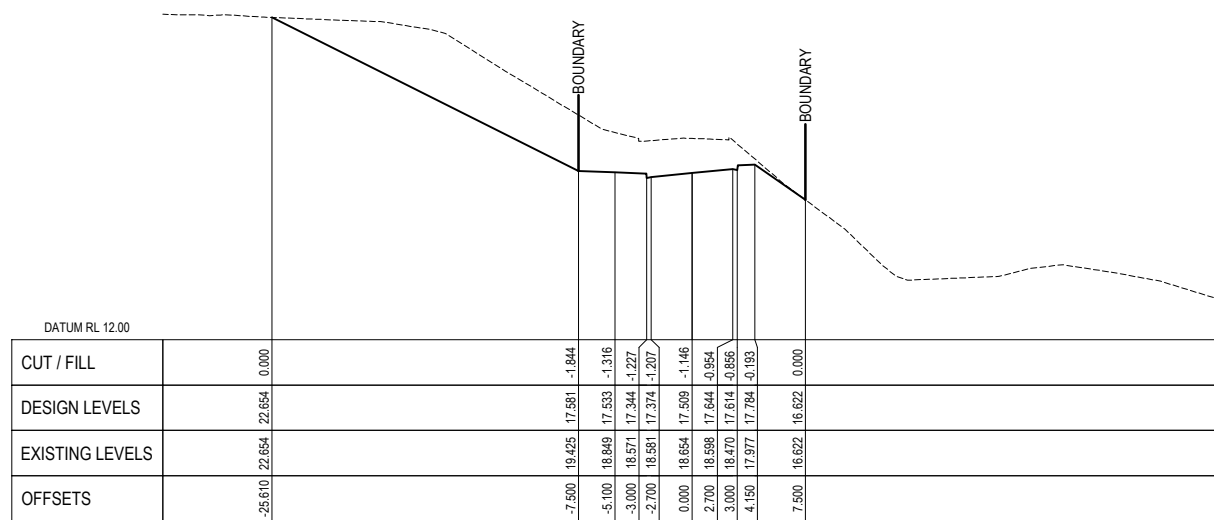
GATE 2 ROAD : CHAINAGE 80



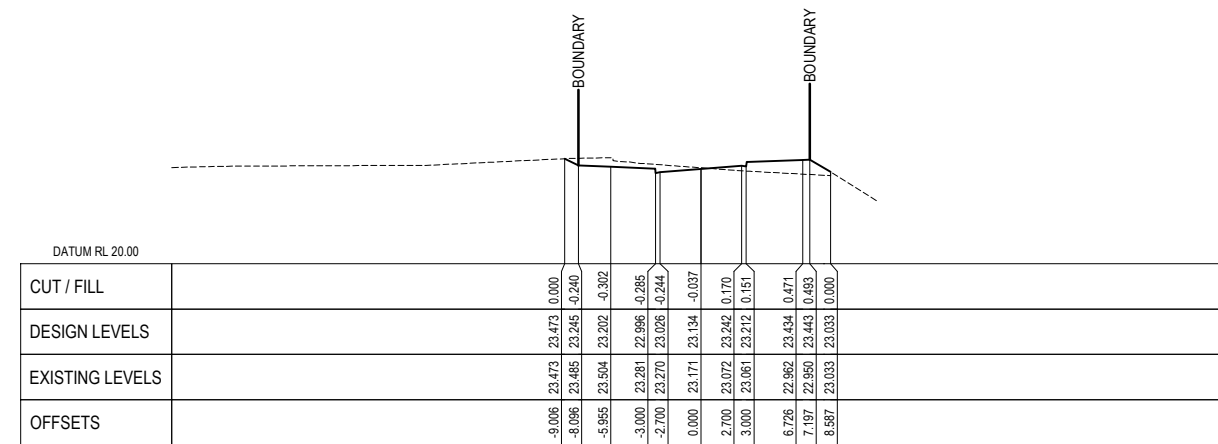
GATE 2 ROAD : CHAINAGE 40



GATE 2 ROAD : CHAINAGE 100



GATE 2 ROAD : CHAINAGE 60



GATE 2 ROAD : CHAINAGE 120

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:250 (H) 1:125 (V)	Design	C.BREYTENBACH	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:500 (H) 1:250 (V)	Drawn	A.FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Checker			

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

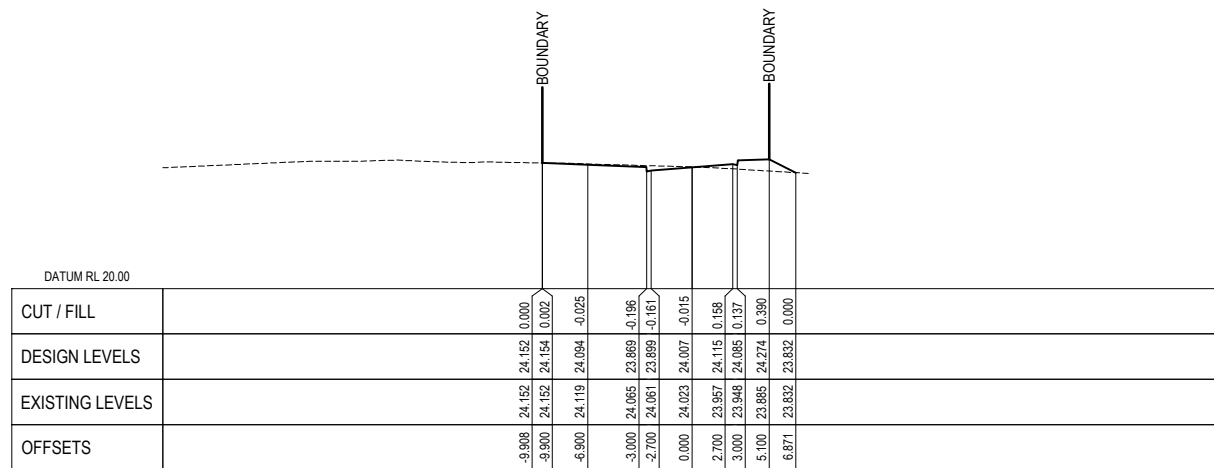
Title:	ROADING DETAILED CROSS SECTIONS SHEET 13
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Discipline:	CIVIL ENGINEERING
Drawing No.:	3126447-CA-3263
Rev.:	E

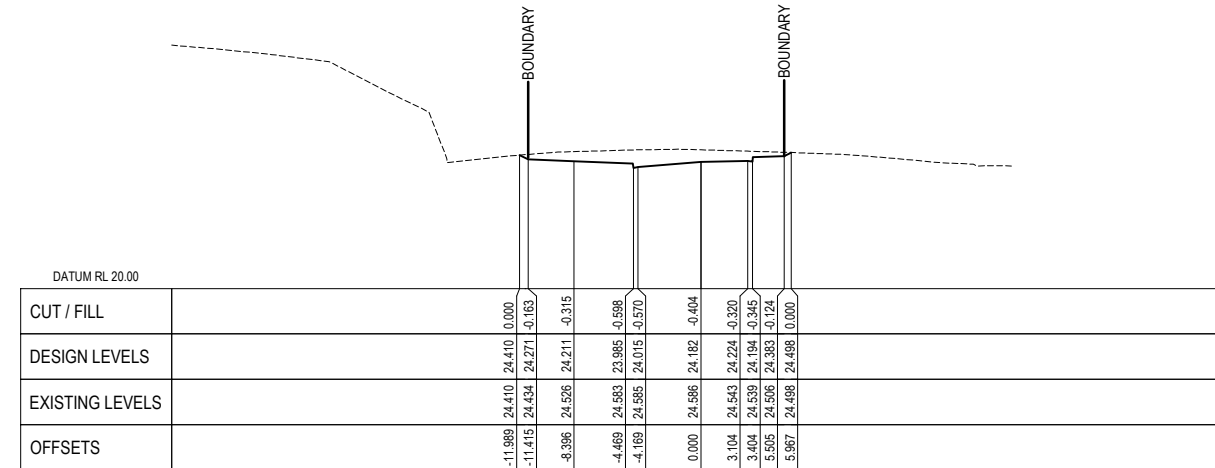
RESOURCE CONSENT
NOT FOR CONSTRUCTION

LEGEND:

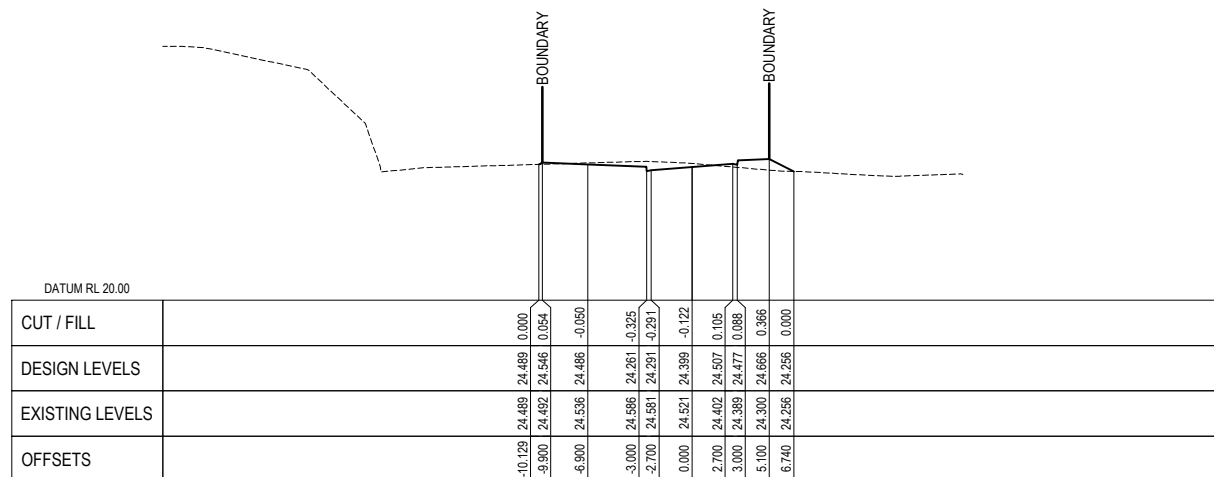
- EXISTING SURFACE
- DESIGN SURFACE



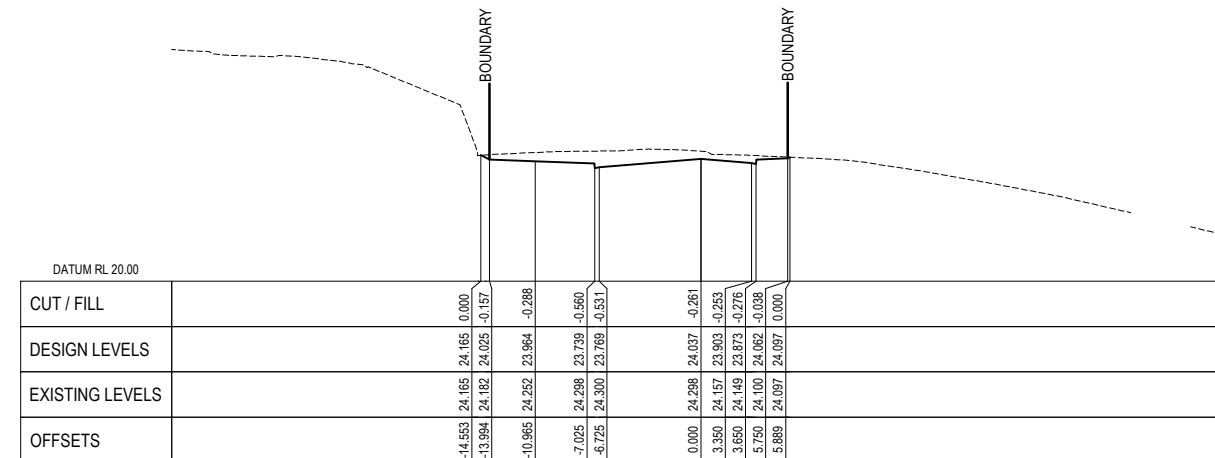
GATE 2 ROAD : CHAINAGE 140



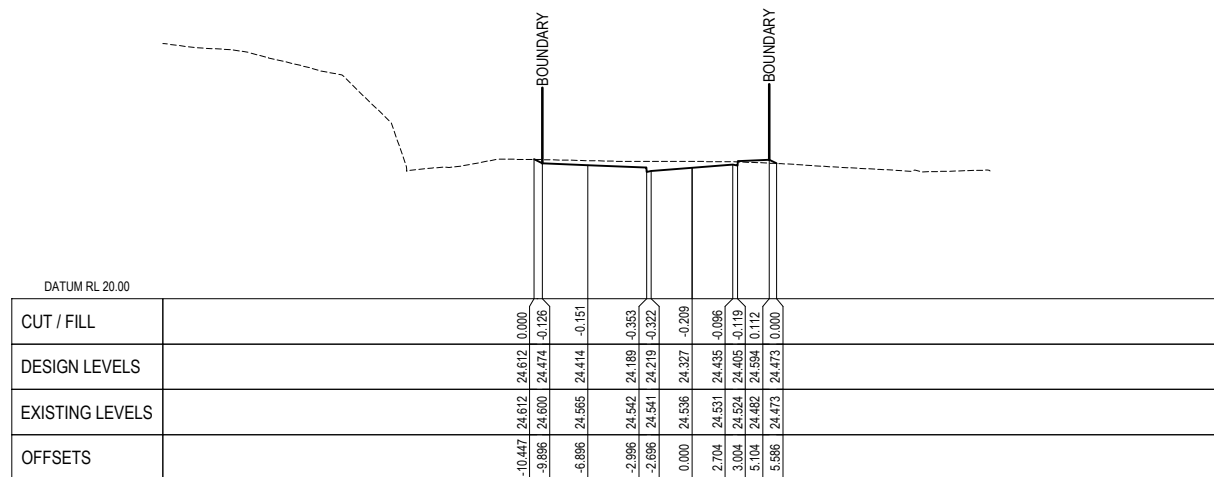
GATE 2 ROAD : CHAINAGE 200



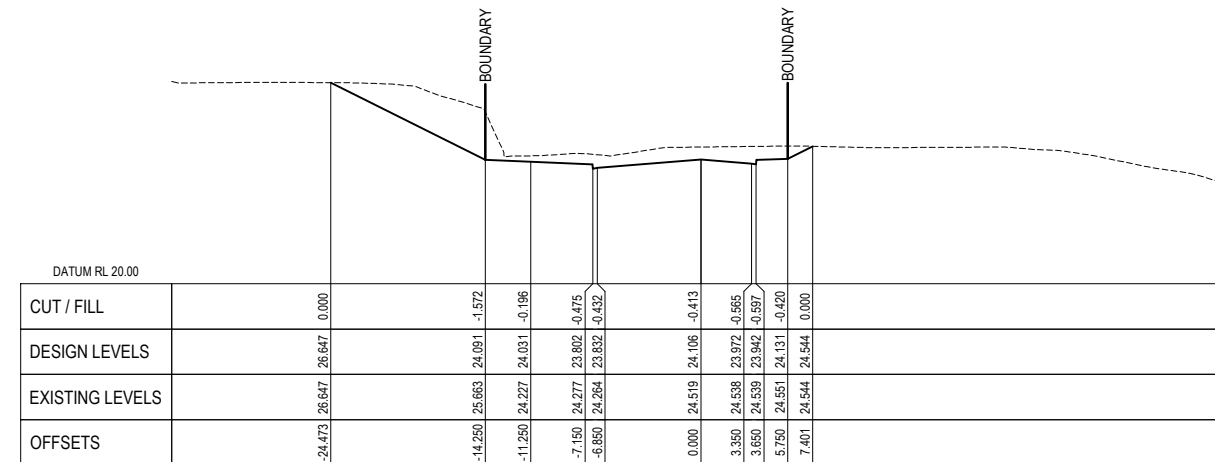
GATE 2 ROAD : CHAINAGE 160



GATE 2 ROAD : CHAINAGE 220



GATE 2 ROAD : CHAINAGE 180



GATE 2 ROAD : CHAINAGE 240

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21



Original Scale (A1)	1:250 (H) 1:125 (V)
Design	C.BREYTENBACH 31.05.21
Drawn	A.FAZEKAS 31.05.21
Design Verifier	
Design Check	
Reduced Scale (A3)	1:500 (H) 1:250 (V)
* Refer to Revision 1 for Original Signature	

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

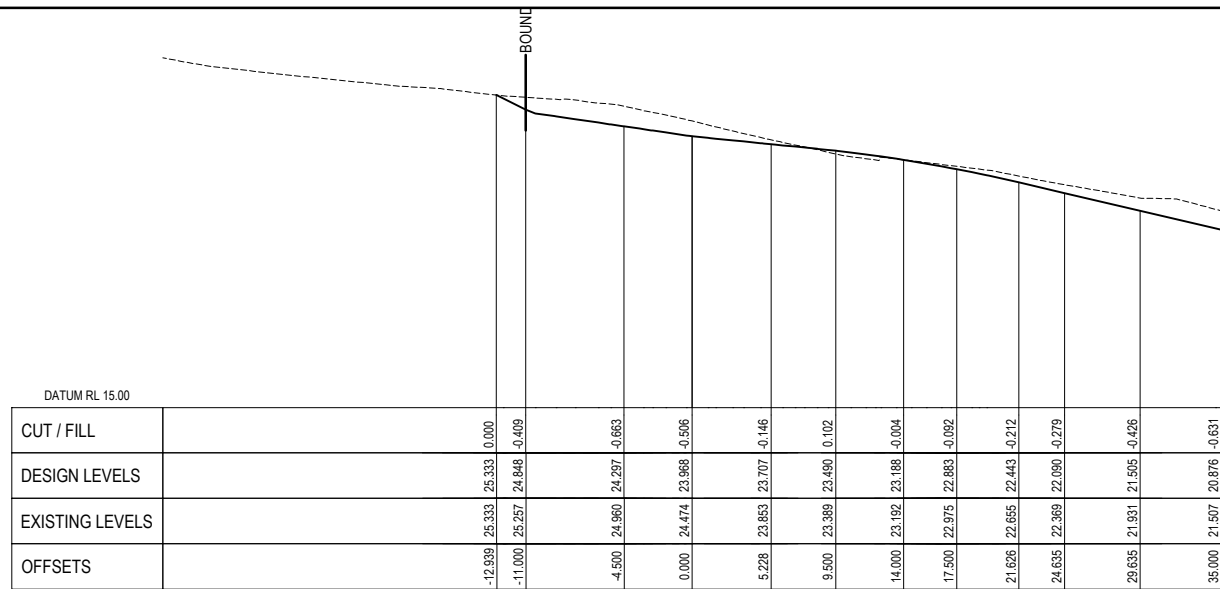
Title:	ROADING DETAILED CROSS SECTIONS SHEET 14
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-3264
Rev:	E

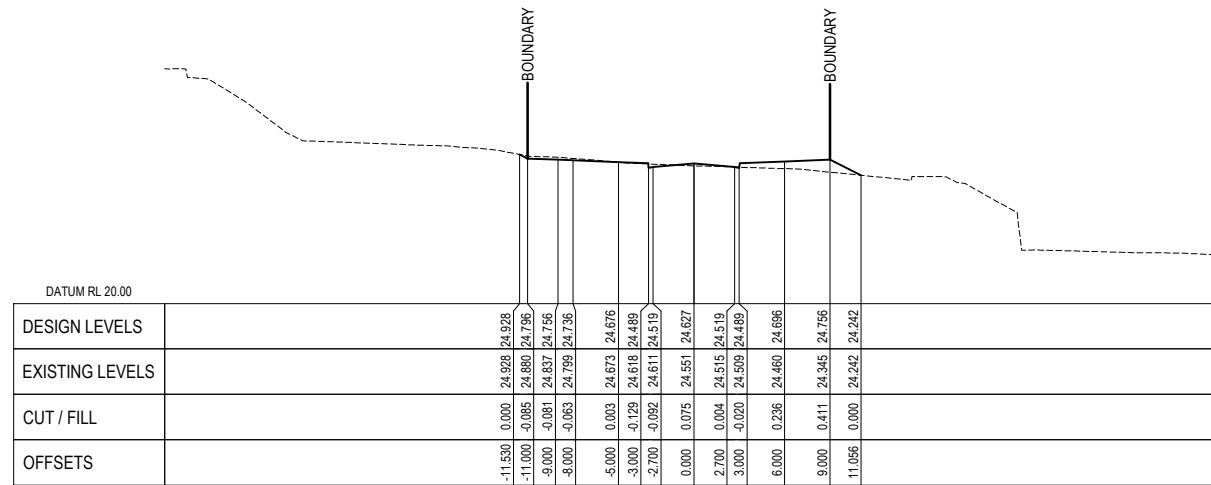


LEGEND:

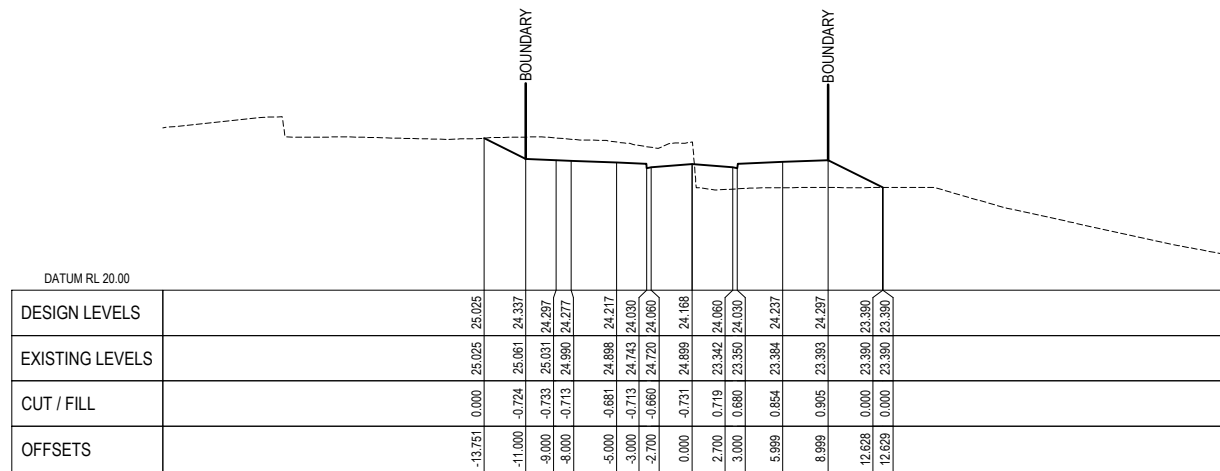
- EXISTING SURFACE
- DESIGN SURFACE



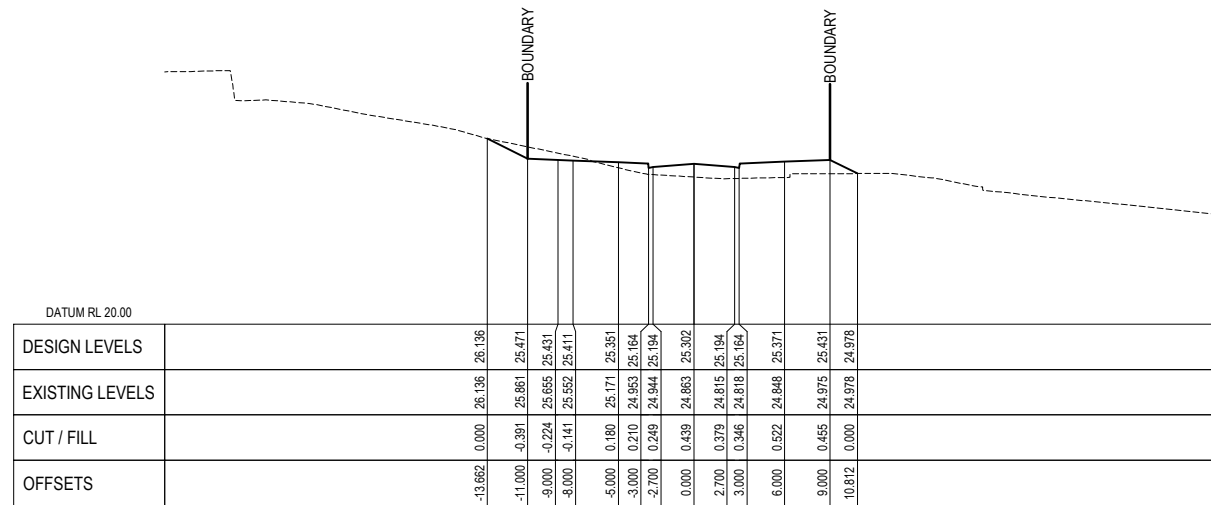
GATE 1 ROAD : CHAINAGE 0



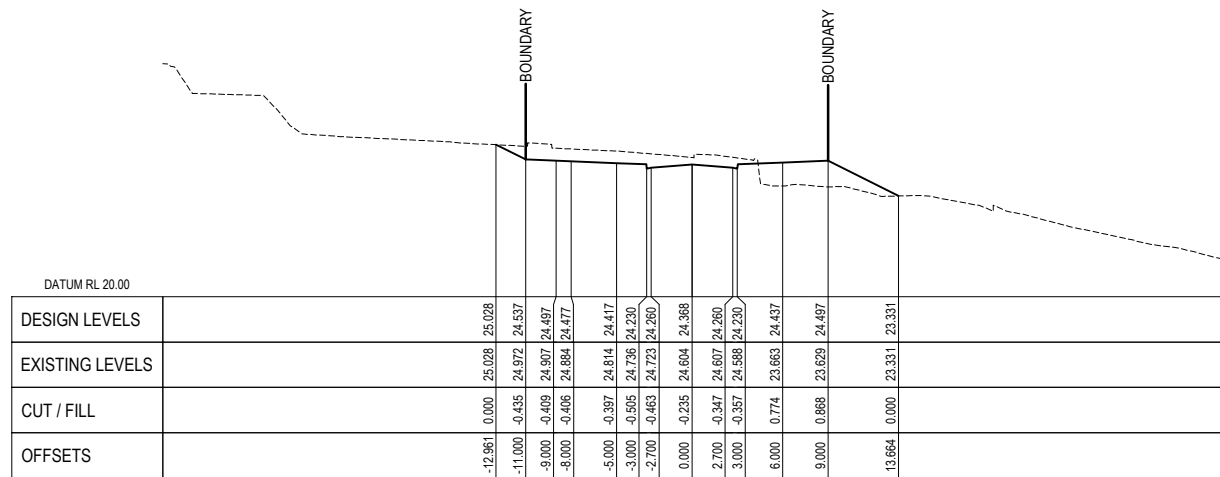
GATE 1 ROAD : CHAINAGE 60



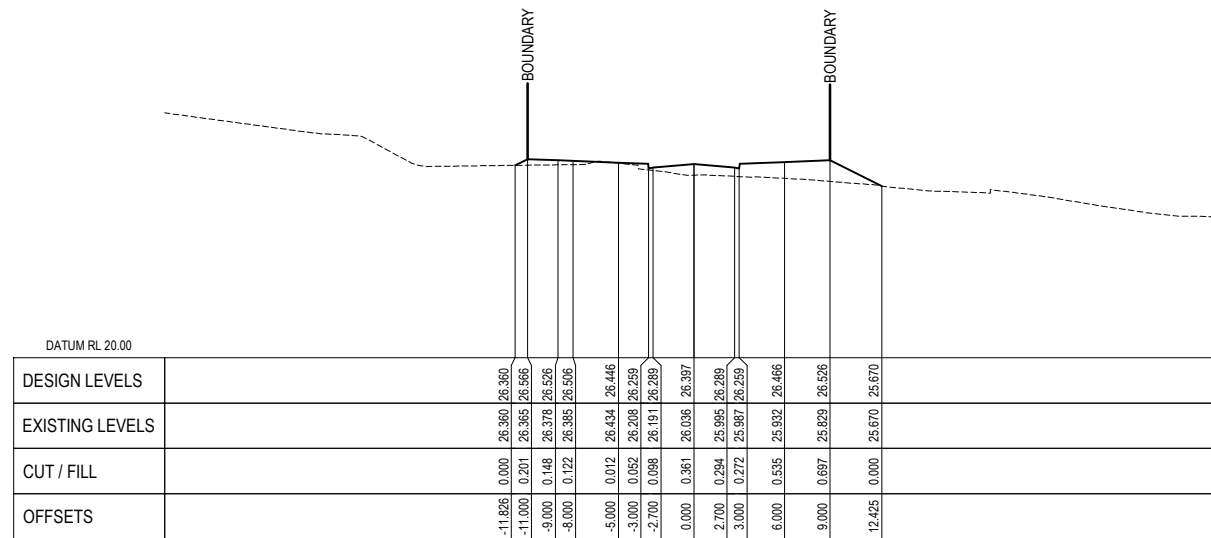
GATE 1 ROAD : CHAINAGE 20



GATE 1 ROAD : CHAINAGE 80



GATE 1 ROAD : CHAINAGE 40



GATE 1 ROAD : CHAINAGE 100

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21



Original Scale (A1) 1:250 (H) 1:125 (V)	Design C.BREYTENBACH 31.05.21	Approved For Construction 31.05.21
Reduced Scale (A3) 1:500 (H) 1:250 (V)	Drawn A.FAZEKAS	Date
	Design Verifier	
	Design Check	
	* Refer to Revision 1 for Original Signature	

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

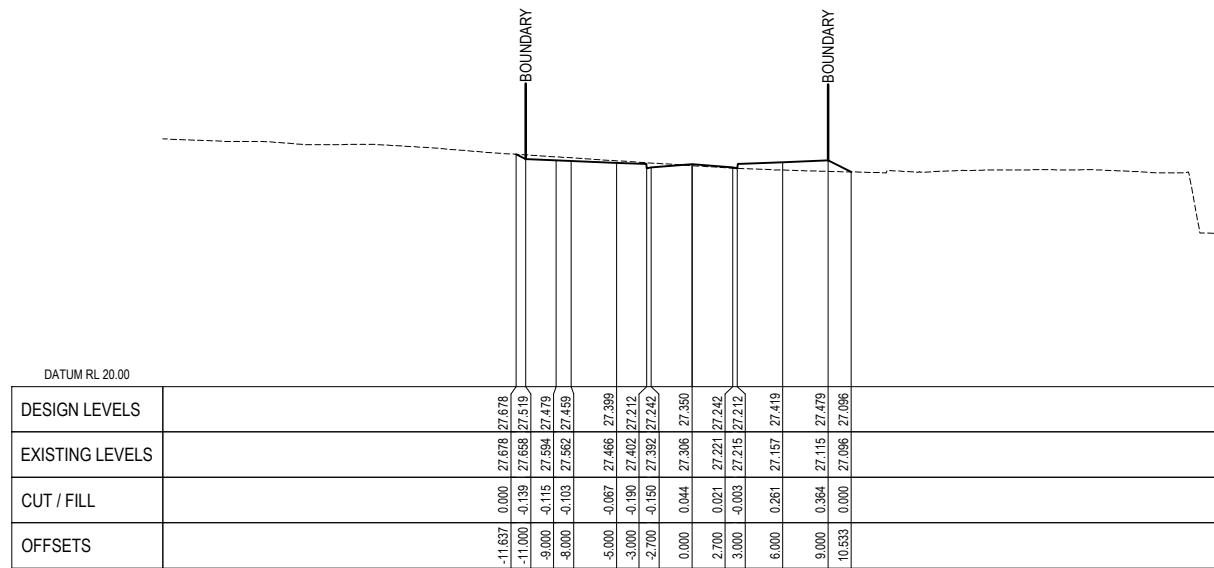
Title: ROADING DETAILED CROSS SECTIONS SHEET 15

RESOURCE CONSENT
NOT FOR CONSTRUCTION

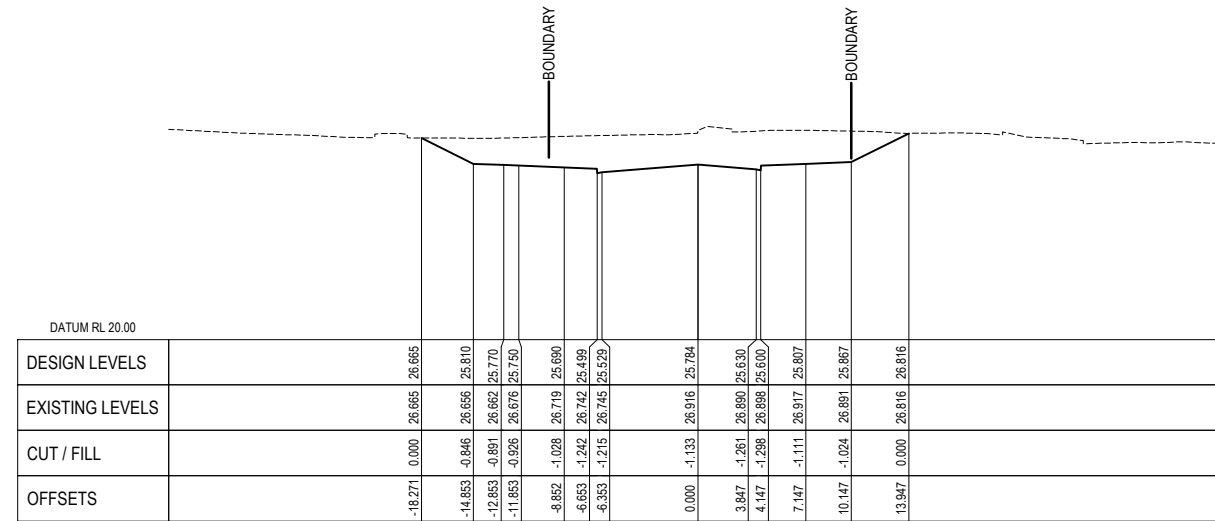
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-3265
Rev.	E

LEGEND:

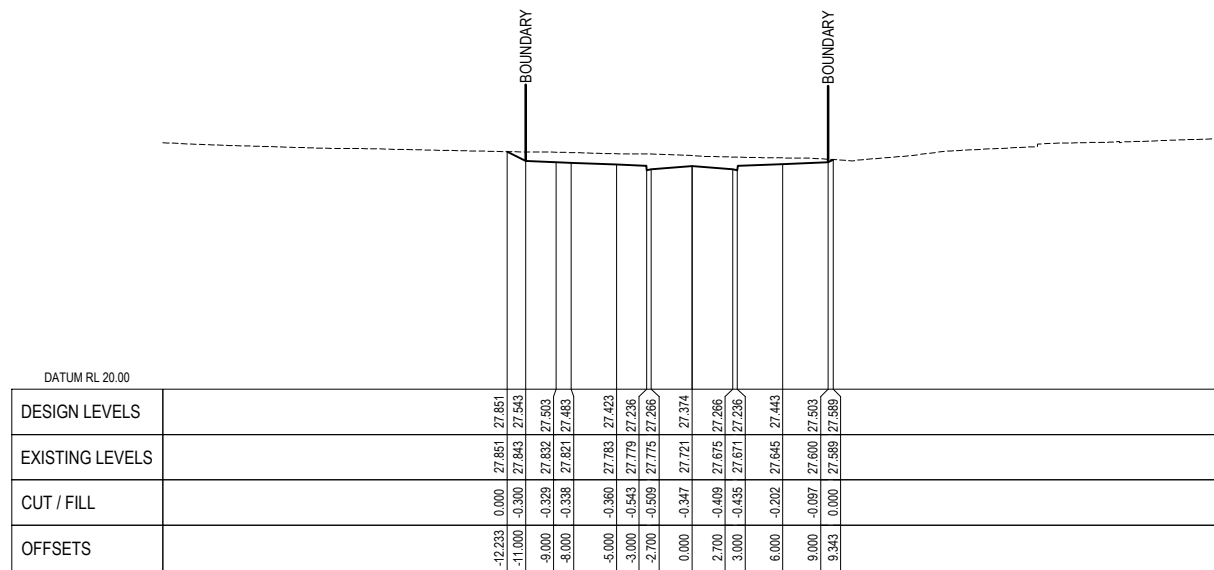
- EXISTING SURFACE
- DESIGN SURFACE



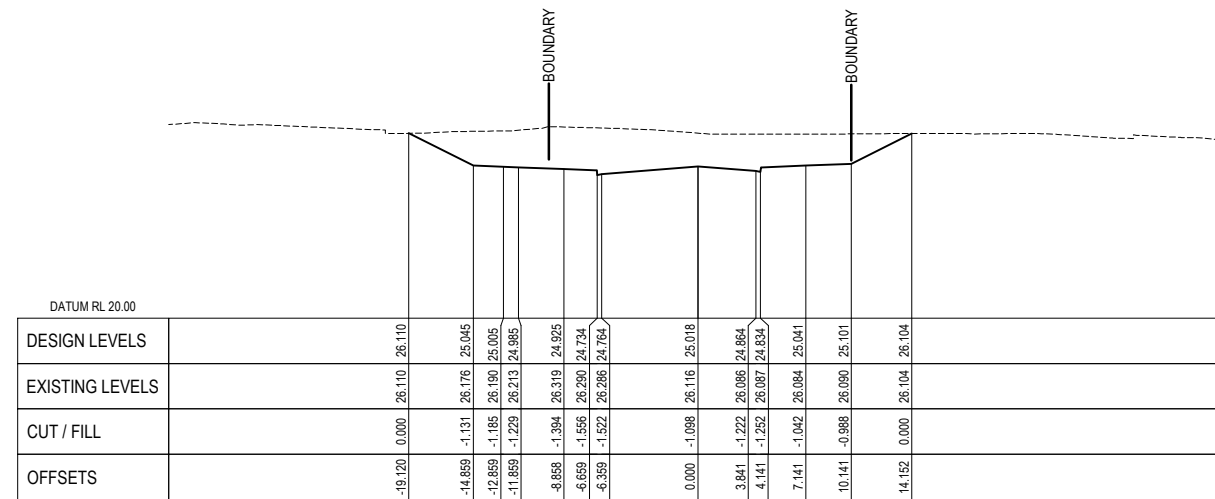
GATE 1 ROAD : CHAINAGE 120



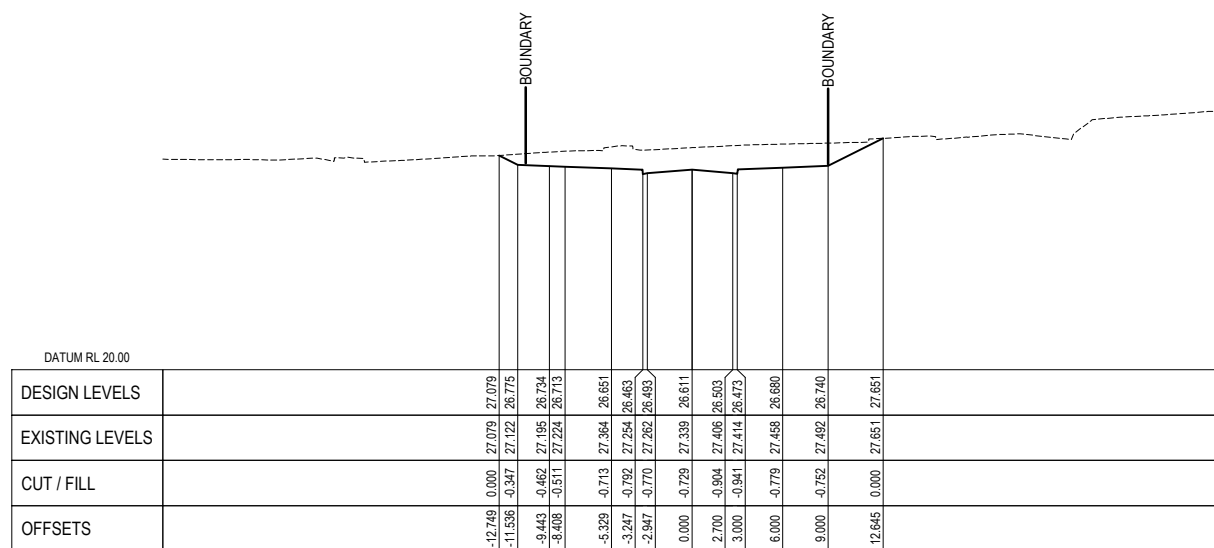
GATE 1 ROAD : CHAINAGE 180



GATE 1 ROAD : CHAINAGE 140



GATE 1 ROAD : CHAINAGE 200



GATE 1 ROAD : CHAINAGE 160

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21



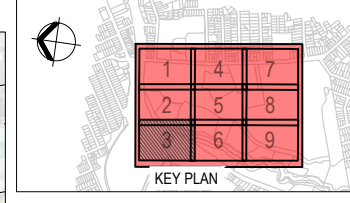
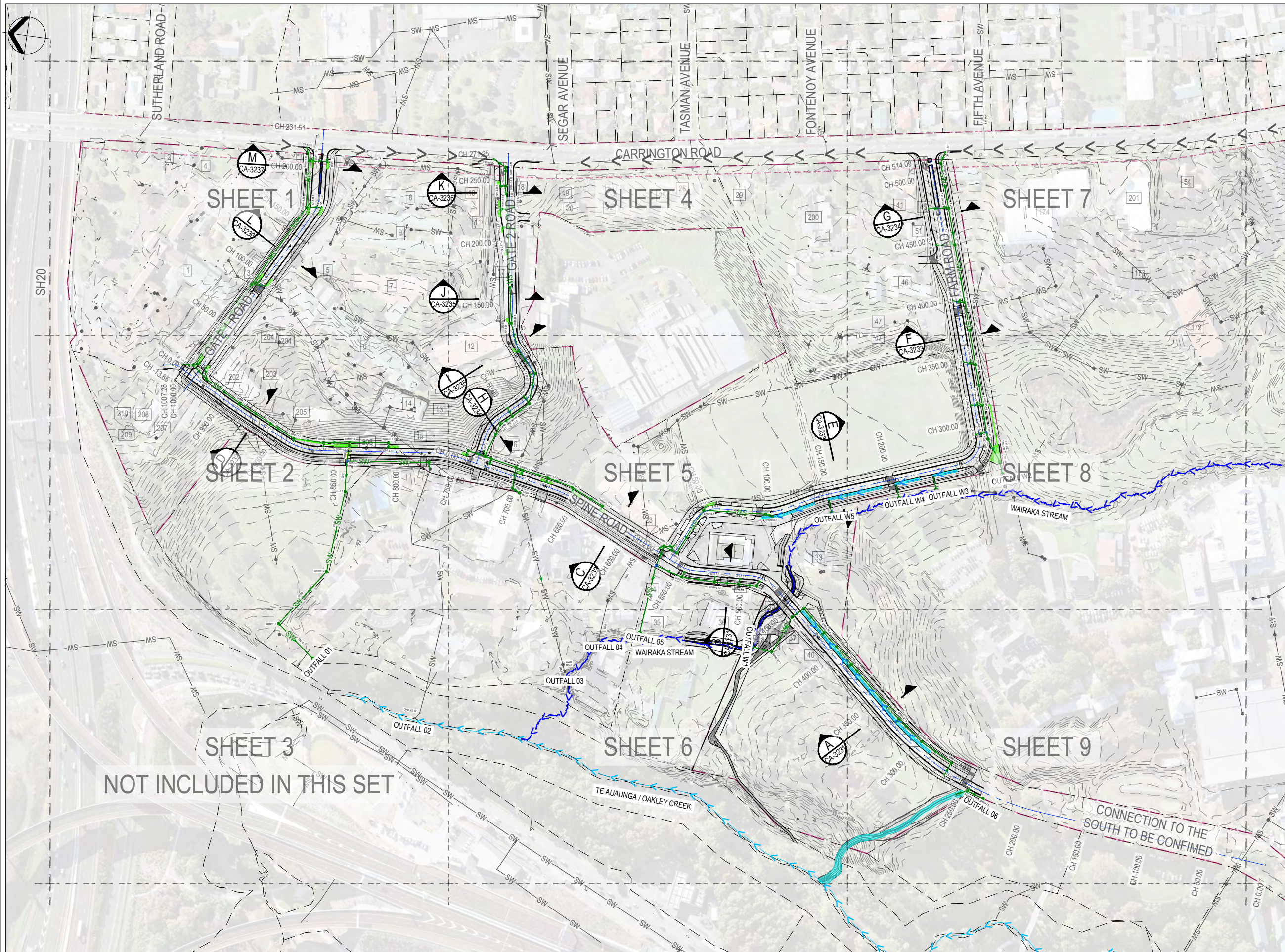
Original Scale (A1)	1:250 (H) 1:125 (V)	Design	C.BREYTENBACH	31.05.21	Approved For Construction
Drawn	A.FAZEKAS	31.05.21			
Reduced Scale (A3)	1:500 (H) 1:250 (V)	Design Verifier			
		Design Check			

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
Project:	CARRINGTON BACKBONE WORKS PROJECT

Title:	ROADING DETAILED CROSS SECTIONS SHEET 16
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Discipline:	CIVIL ENGINEERING
Drawing No.:	3126447-CA-3266
Rev.:	E

RESOURCE CONSENT NOT FOR CONSTRUCTION



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER CATCHPIT
- GPT
- RAINGARDENS
- SWALES
- DIRECTION OF OVERLAND FLOW

- NOTES:**
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 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.
 - EXISTING UTILITIES INFORMATION TO BE CONFIRMED.

ORIGINAL DRAWING IN COLOUR

RESOURCE CONSENT NOT FOR CONSTRUCTION

E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator: **Beca**

Original Scale (A1) 1:1500
 Design F.M. UNDERWOOD 31.05.21
 Drawn A. FAZEKAS 31.05.21
 Reduced Scale (A3) 1:3000
 Design Check Date
 Approved For Construction Date

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER OVERALL LAYOUT**

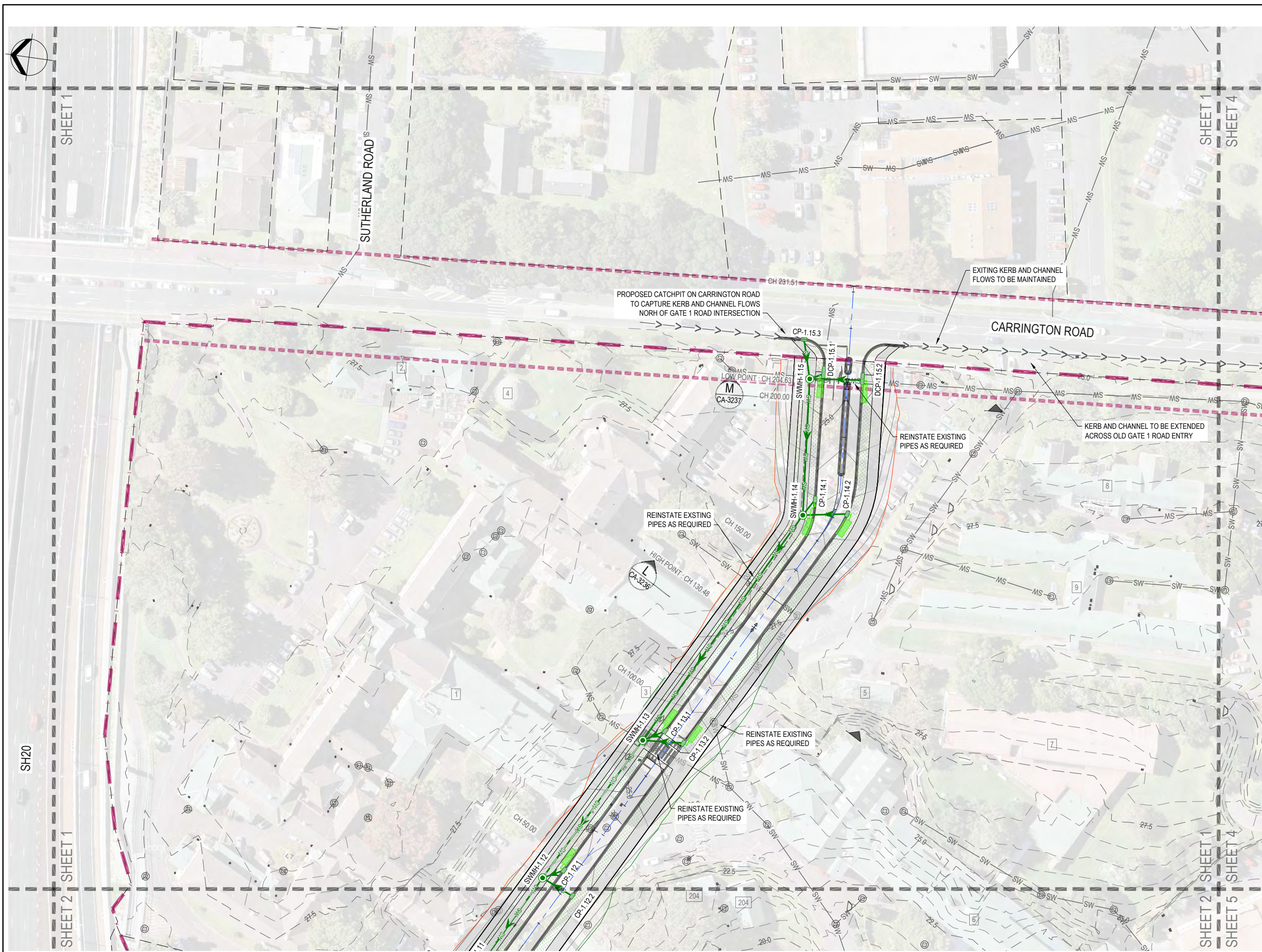
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4100
Rev.	E

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Document No. 3126447-CA-4100.DWG

IF IN DOUBT ASK



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER CATCHPIT
- GPT
- RAINGARDENS
- SWALES
- DIRECTION OF OVERLAND FLOW

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 5. EXISTING UTILITIES INFORMATION TO CONFIRMED.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	1:500	Design	F.M. UNDERWOOD	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A. FAZEKAS	31.05.21	Date
		Dag Verifier			
		Dag Check			

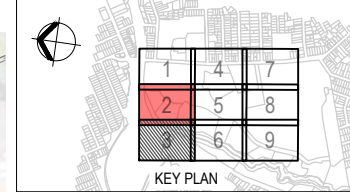
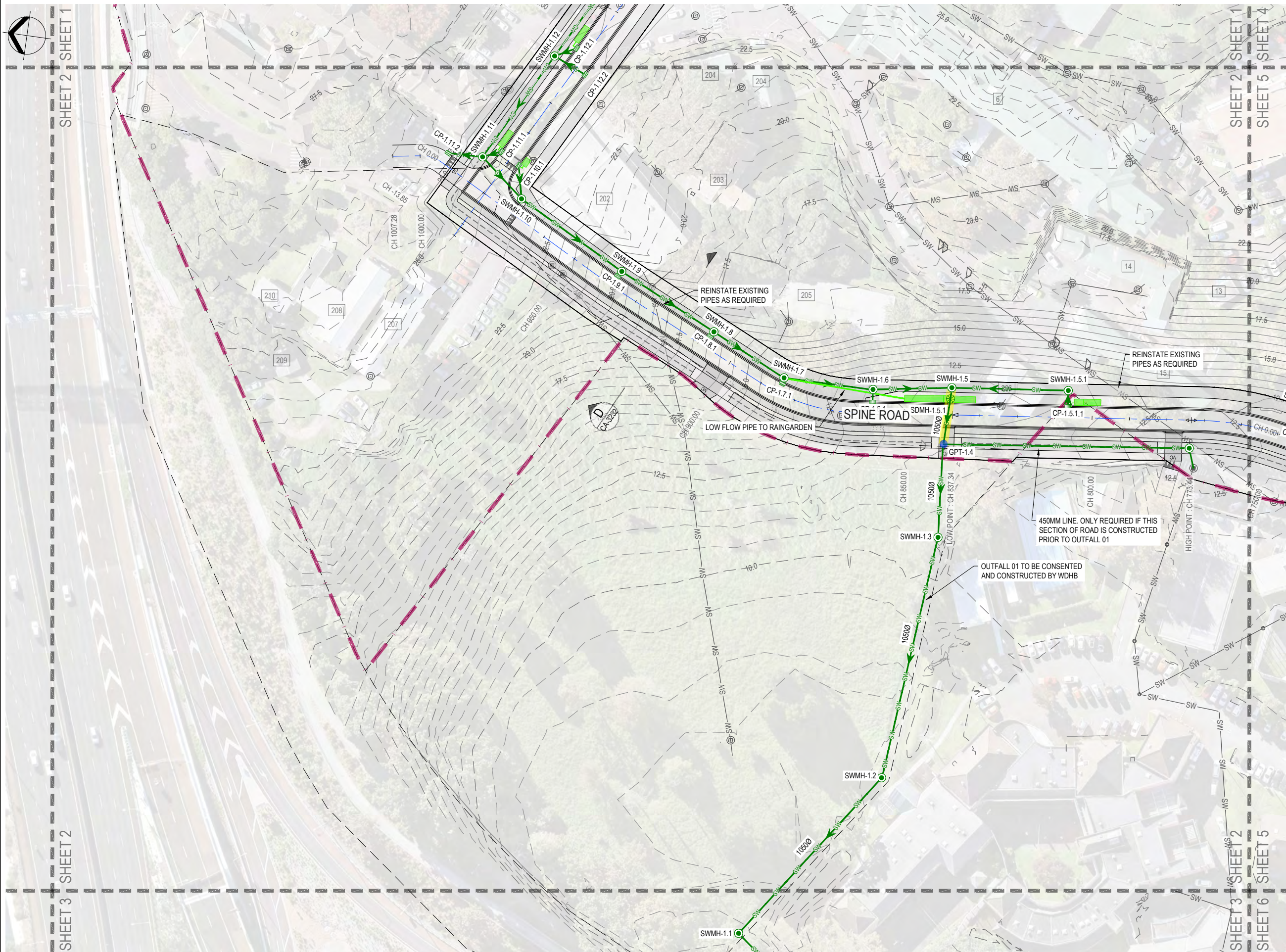
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4101
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER CATCHPIT
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- SWALES
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	F.M-UNDERWOOD	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Checker			
1:1000	Design Checker			

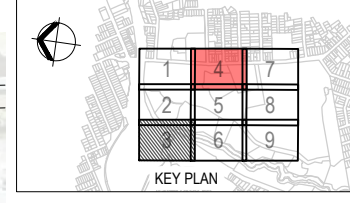
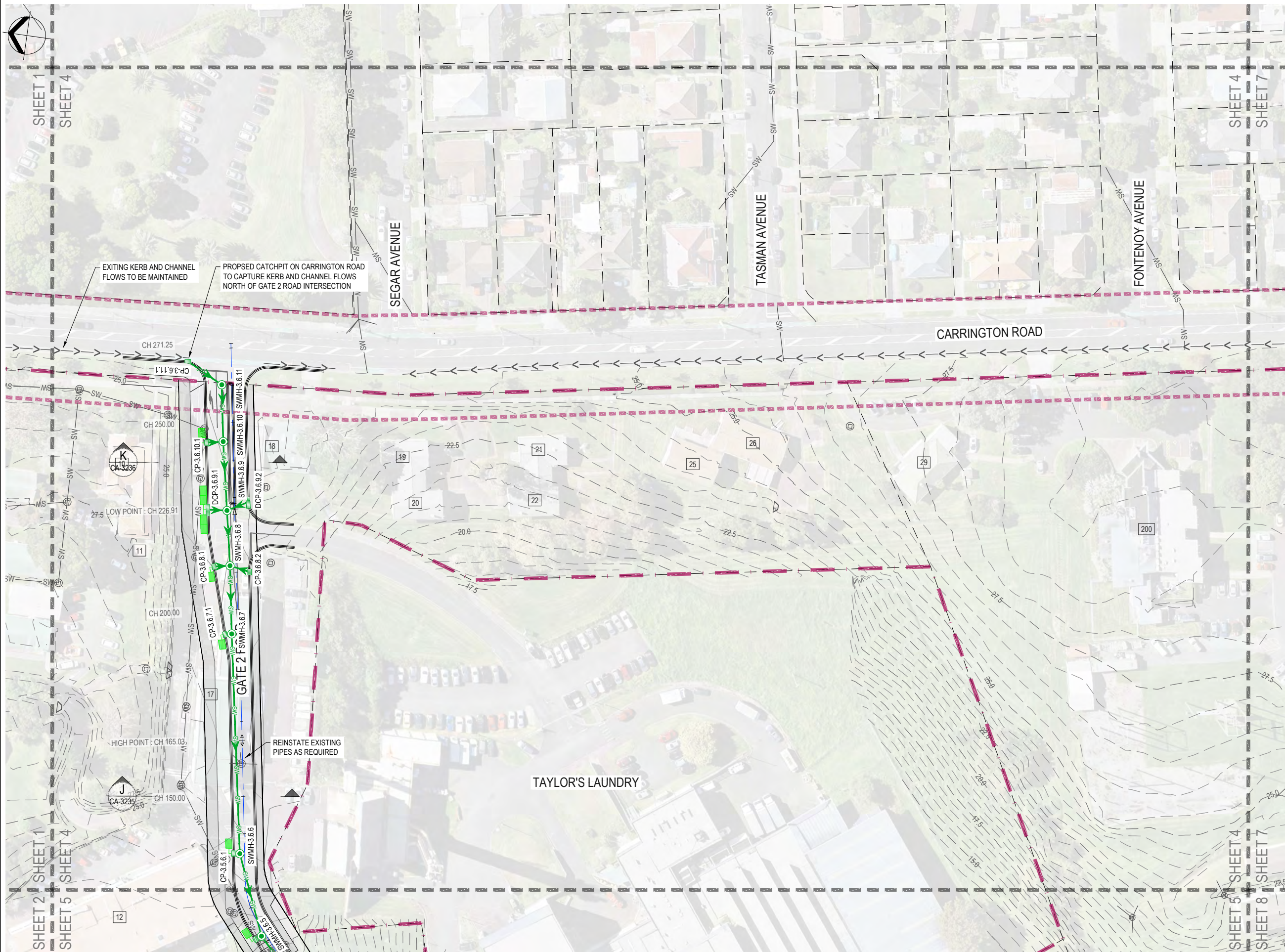
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 2**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4102
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED STORMWATER MANHOLE
- PROPOSED STORMWATER CATCHPIT
- GPT
- RAINGARDENS
- SWALES
- DIRECTION OF OVERLAND FLOW

- NOTES:**
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design: F.M-UNDERWOOD 31.05.21
Drawn: A.FAZEKAS 31.05.21
Dag Verifier: []
Dag Check: []
Date: []

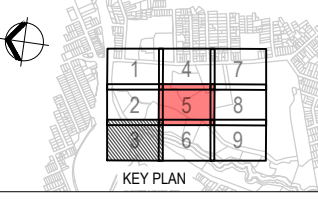
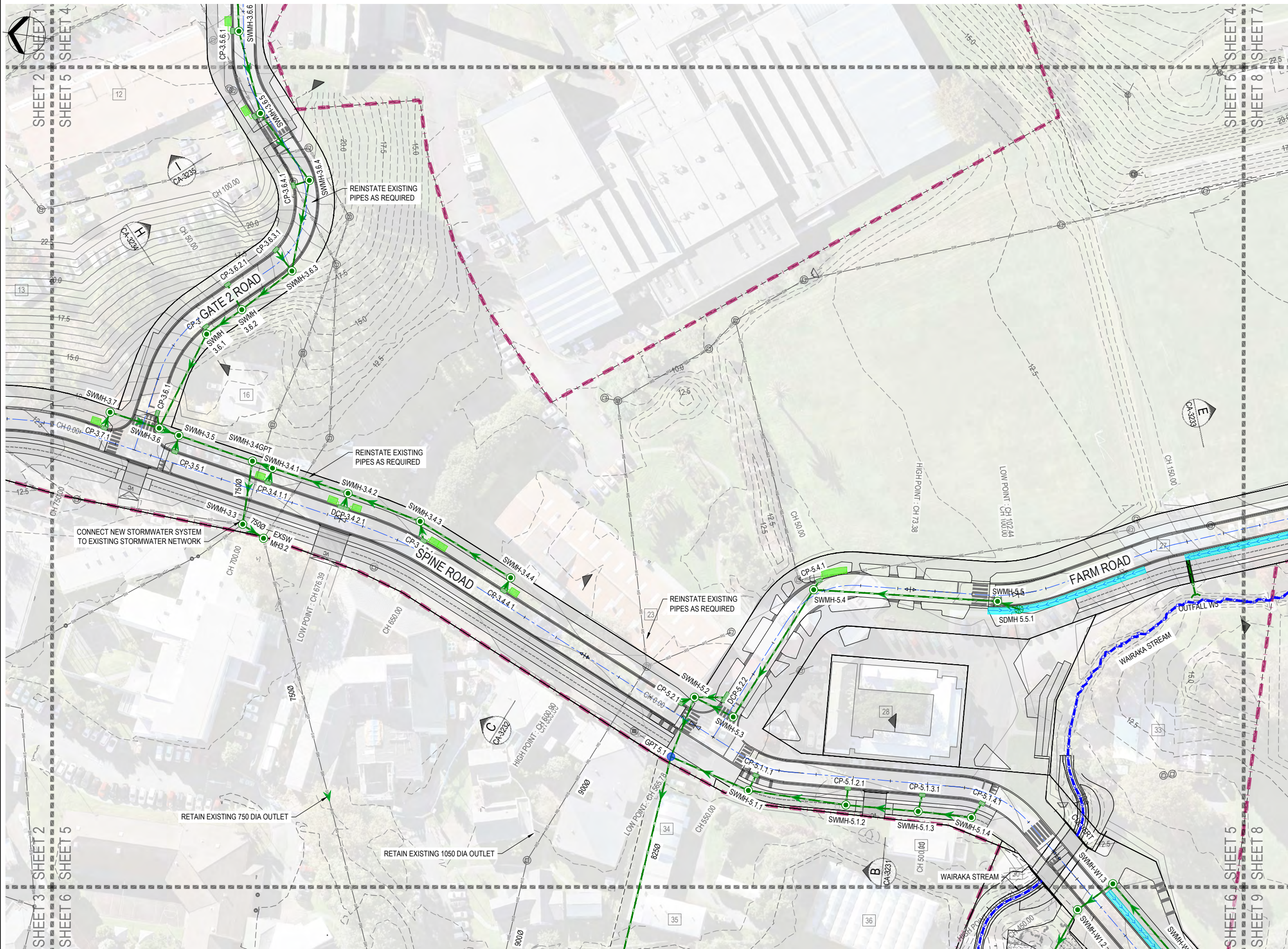
Approved For Construction: []
Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4104
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21

Drawing Originator:

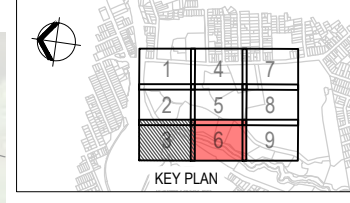
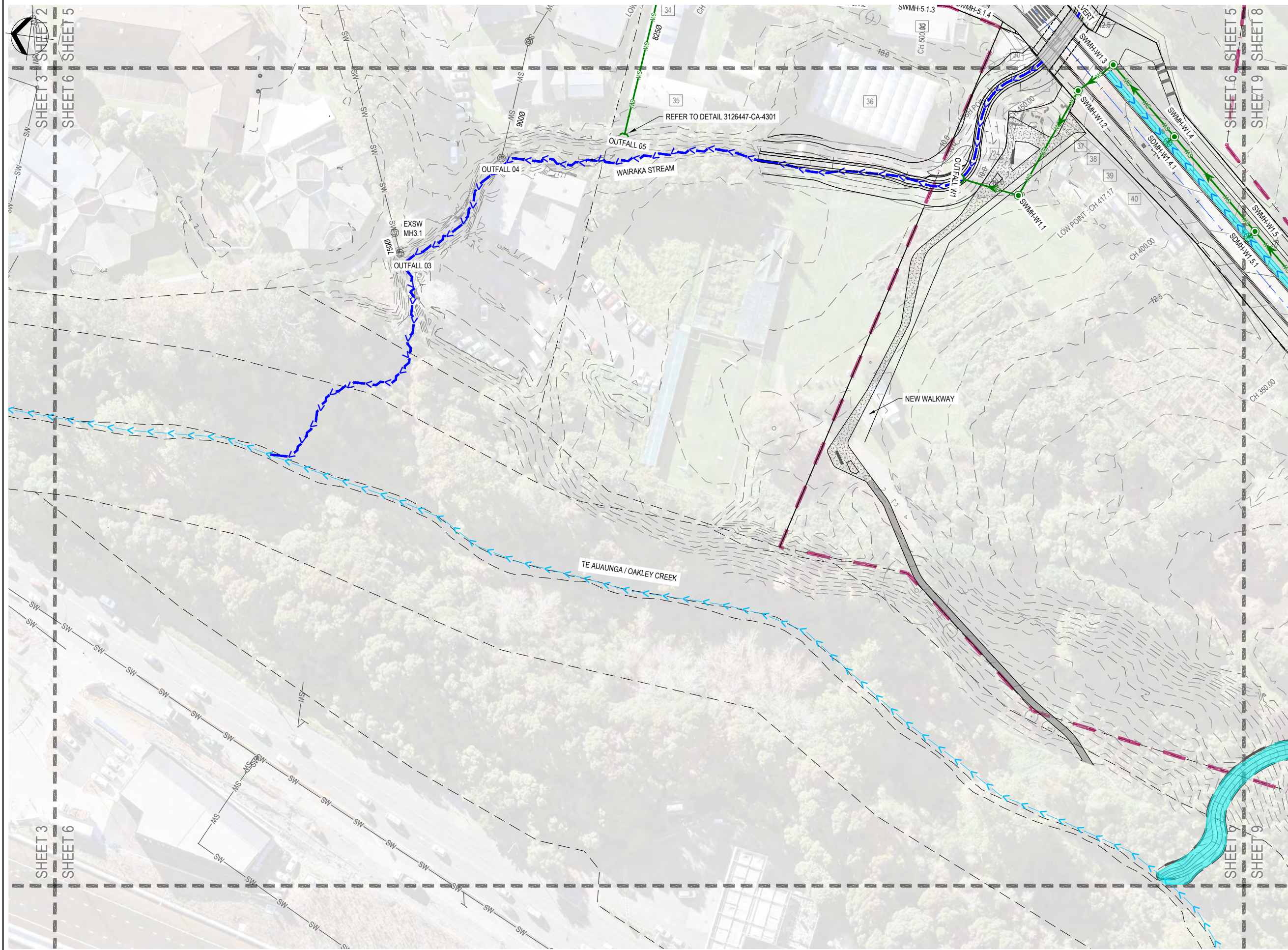
Original Scale (A1) 1:500
 Design F.M. UNDERWOOD 31.05.21
 Drawn A. FAZEKAS 31.05.21
 Design Check Date
 Reduced Scale (A3) 1:1000
 * Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4105
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
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- PROPOSED STORMWATER CATCHPIT
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- RAINGARDENS
- SWALES
- DIRECTION OF OVERLAND FLOW

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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design Drawn: F.M-UNDERWOOD 31.05.21
A.FAZEKAS 31.05.21

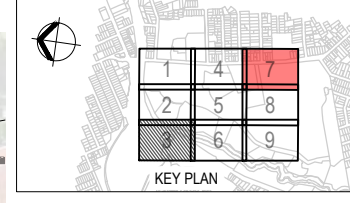
Approved For Construction*
Date

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-4106	Rev. E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	F.M-UNDERWOOD	31.05.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	31.05.21	
Reduced Scale (A3)	Design Checker			Date
1:1000	Design Checker			

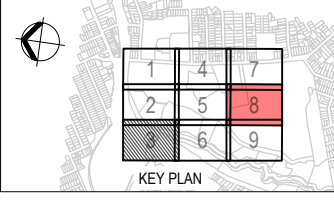
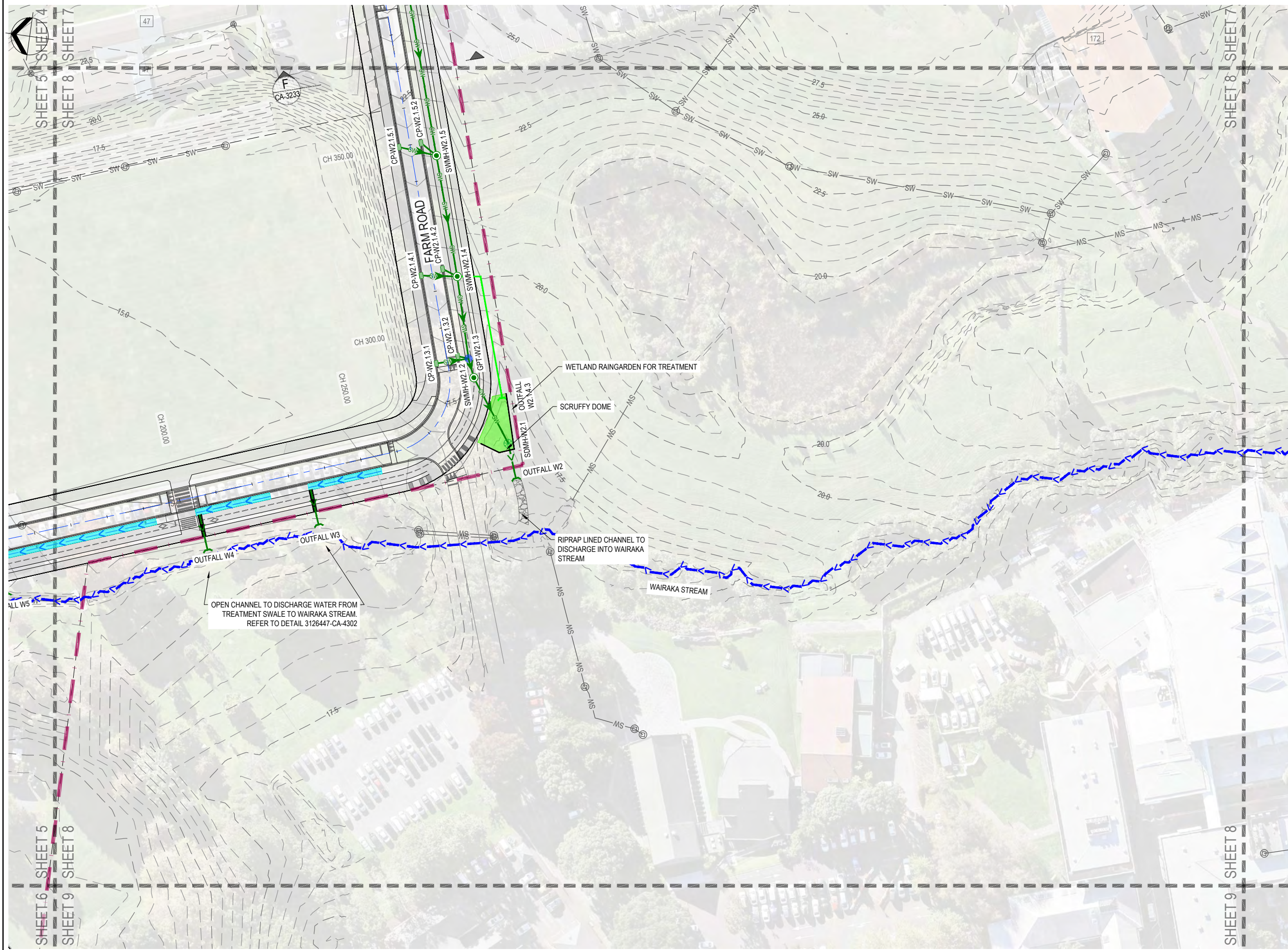
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4107
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
- PROPOSED STORMWATER MANHOLE
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- SWALES
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Design Originator: **Beca**

Original Scale (A1)	Design	F.M. UNDERWOOD	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
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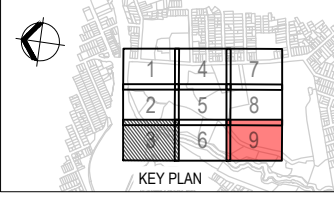
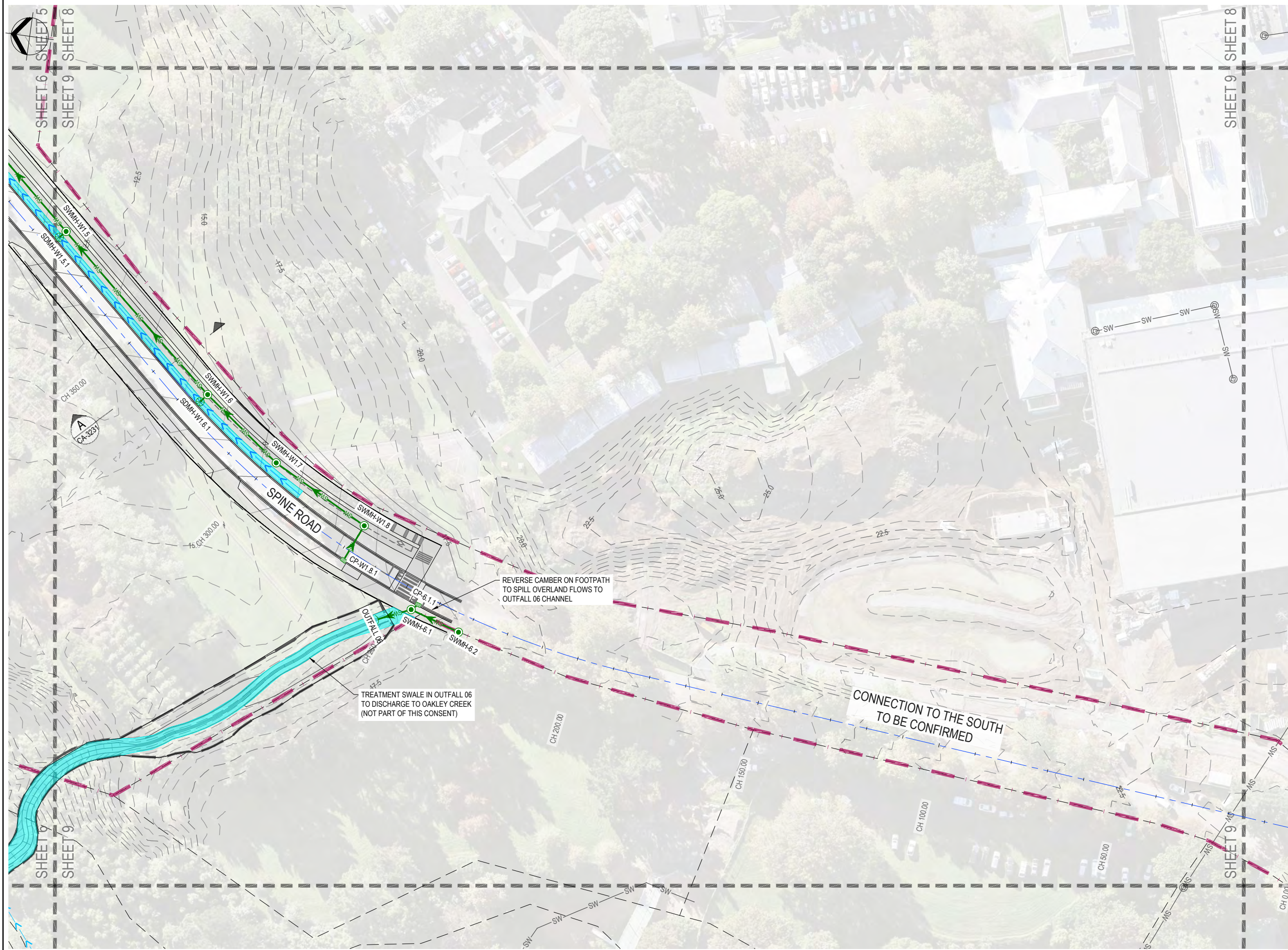
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4108
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING STORMWATER LINE
- PROPOSED STORMWATER LINE
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	FMU	RM	05.07.21

Design Originals:

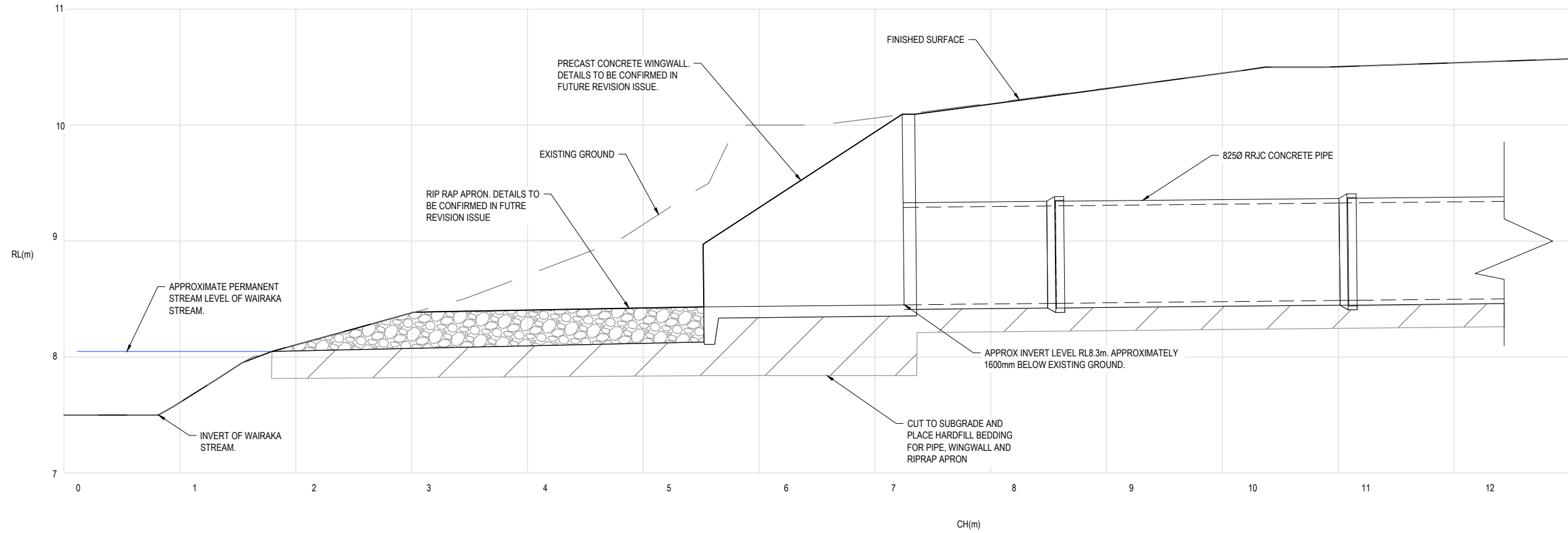
Original Scale (A1) 1:500
 Design F.M. UNDERWOOD 31.05.21
 Drawn A. FAZEKAS 31.05.21
 Reduced Scale (A3) 1:1000
 Design Verifier
 Day Check
 Date

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-4109
Rev.	E



LONGITUDINAL SECTION - OUTFALL 05 OUTLET DETAIL
 SCALE HOR 1:125 VER 1:125 (A1) : HOR 1:250 VER 1:250 (A3)



No.	Revision	By	Chk	Appd	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21

Drawing Originator:			
Beca			
Original Scale (A1)	Design	N.MCLEAN	16.07.21
1:125	Drawn	N.MCLEAN	16.07.21
Reduced Scale (A3)	Design Verifier		
1:250	Design Check		
	* Refer to Revision 1 for Original Signature		Date

Client:	MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
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Project:	CARRINGTON BACKBONE WORKS PROJECT
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Title:	STORMWATER DETAILS SHEET 1
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Discipline:	CIVIL ENGINEERING
Drawing No:	3126447-CA-4301
Rev:	E

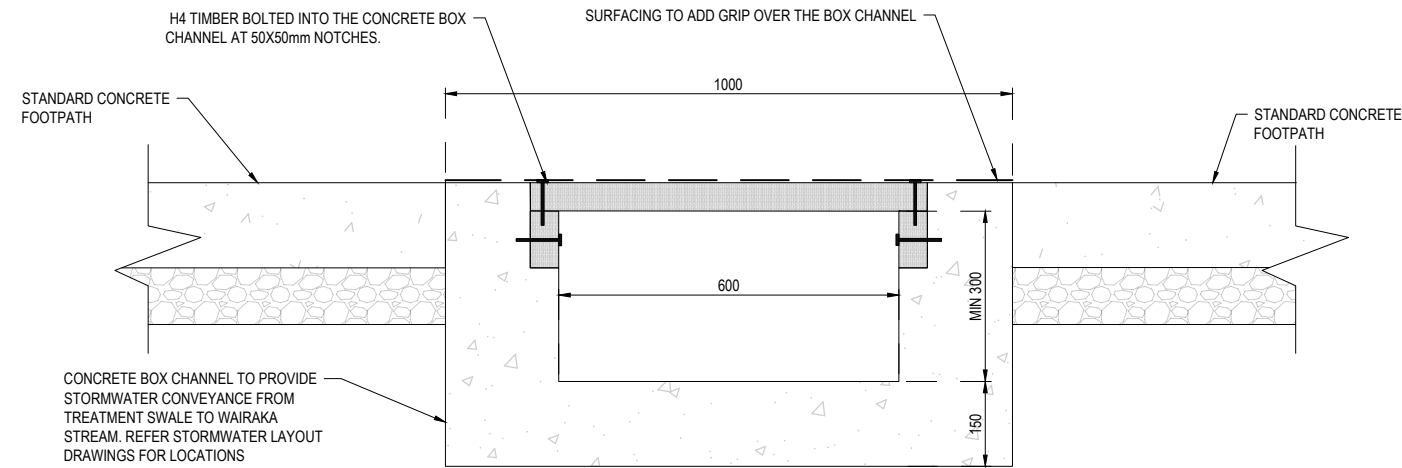
OPEN CHANNEL TO DISCHARGE INTO WAIRAKA STREAM. RIPRAP TO BE USED AS SCOUR PROTECTION INTO STREAM.

CONCRETE BOX CHANNEL TO PROVIDE STORMWATER CONVEYANCE FROM TREATMENT SWALE TO WAIRAKA STREAM. REFER STORMWATER LAYOUT DRAWINGS FOR LOCATIONS

TREATMENT SWALE TO DISCHARGE INTO CONCRETE BOX CHANNEL

H4 TIMBER BOLTED INTO THE CONCRETE BOX CHANNEL AT 50X50mm NOTCHES.

FARM ROAD TREATMENT SWALE DISCHARGE DETAIL
SCALE 1:20 (A1) : 1:40 (A3)



CROSS SECTION A - FARM ROAD TREATMENT SWALE DISCHARGE DETAIL
NTS

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	FMU	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	FMU	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	FMU	DP	23.07.21



Original Scale (A1)	Design	Drawn	Design Date	Approved For Construction*
AS SHOWN	N.MCLEAN	N.MCLEAN	16.07.21	16.07.21
Reduced Scale (A3)	HALF SHOWN			

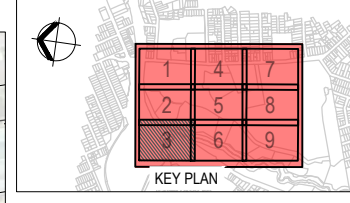
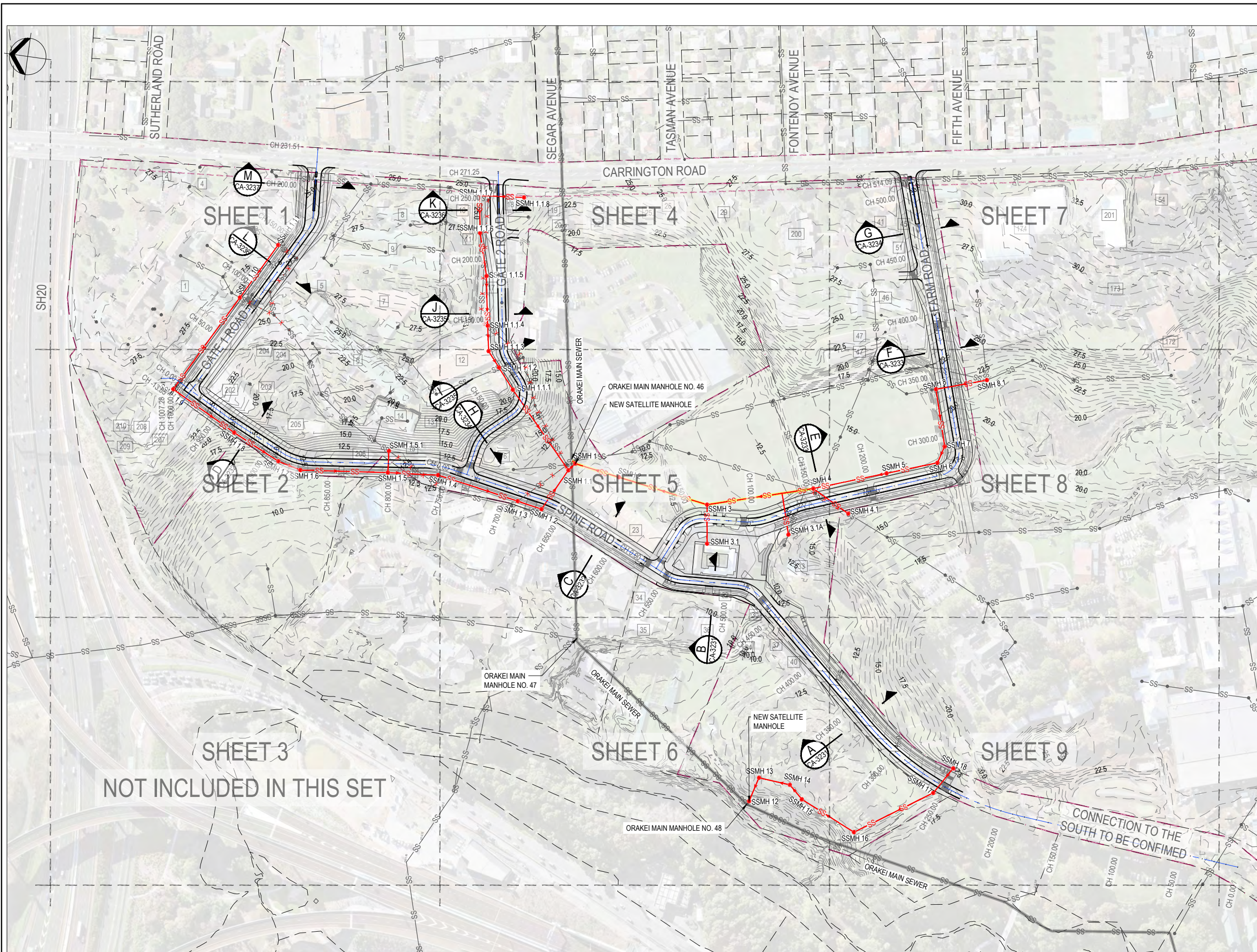
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER DETAILS SHEET 2**

Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-4302



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
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ORIGINAL DRAWING
IN COLOUR
RESOURCE CONSENT
NOT FOR CONSTRUCTION

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator: **Beca**

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:1500	Drawn	A. FAZEKAS	31.05.21	
Reduced Scale (A3)	Dwg Verifier			
1:3000	Dwg Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

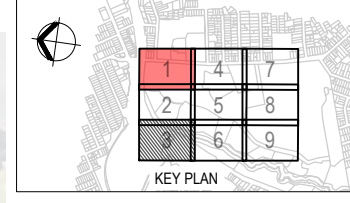
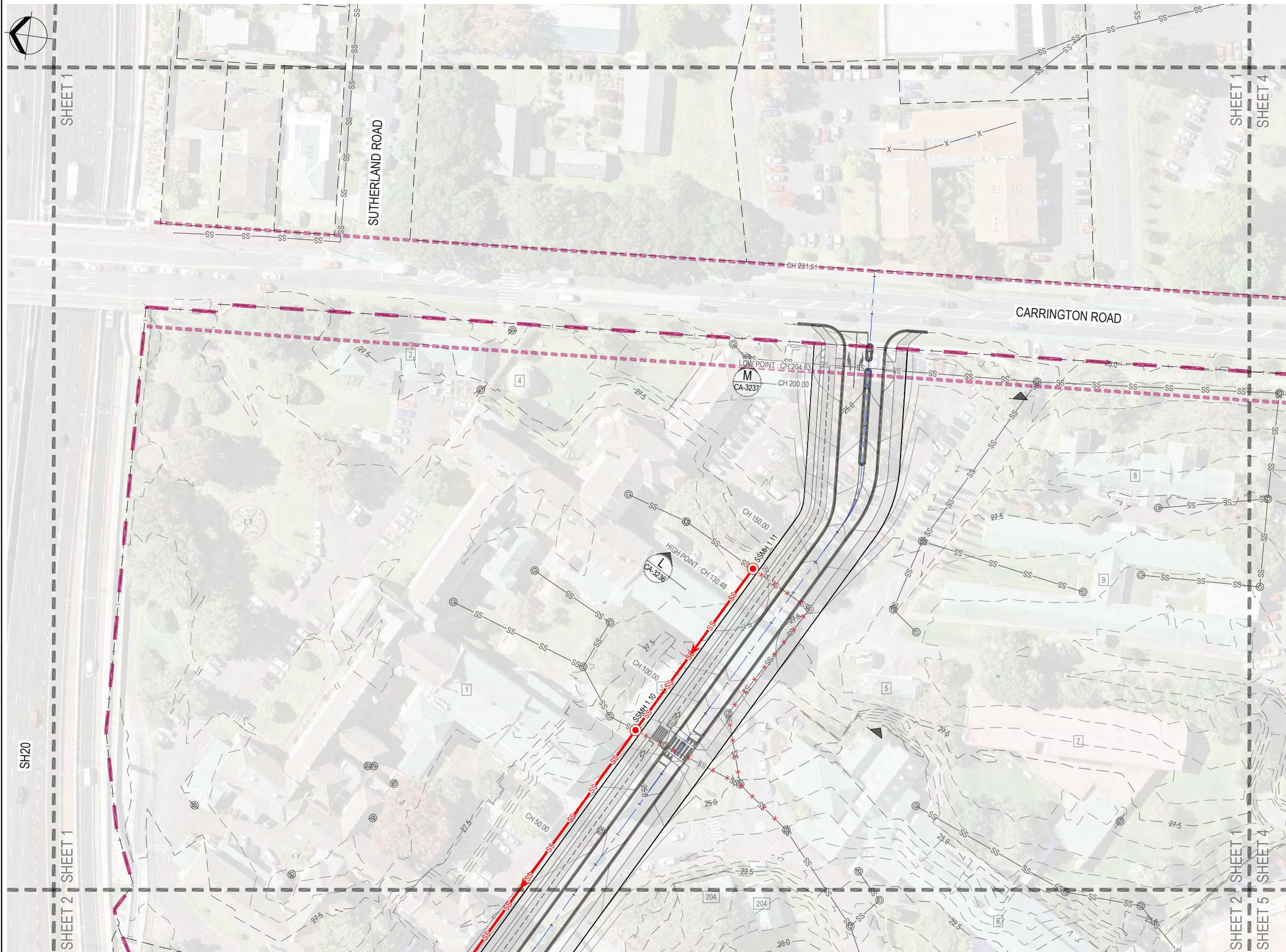
Title: **WASTEWATER OVERALL LAYOUT**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-5100	Rev.
		E

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Document No. 3126447-CA-5100.DWG



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design: B. POPLI 31.05.21
Drawn: A. FAZEKAS 31.05.21
Dwg Verifier: [blank]
Dwg Check: [blank]

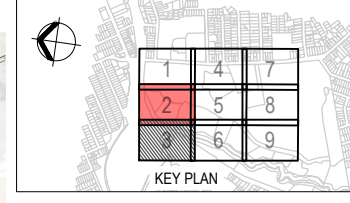
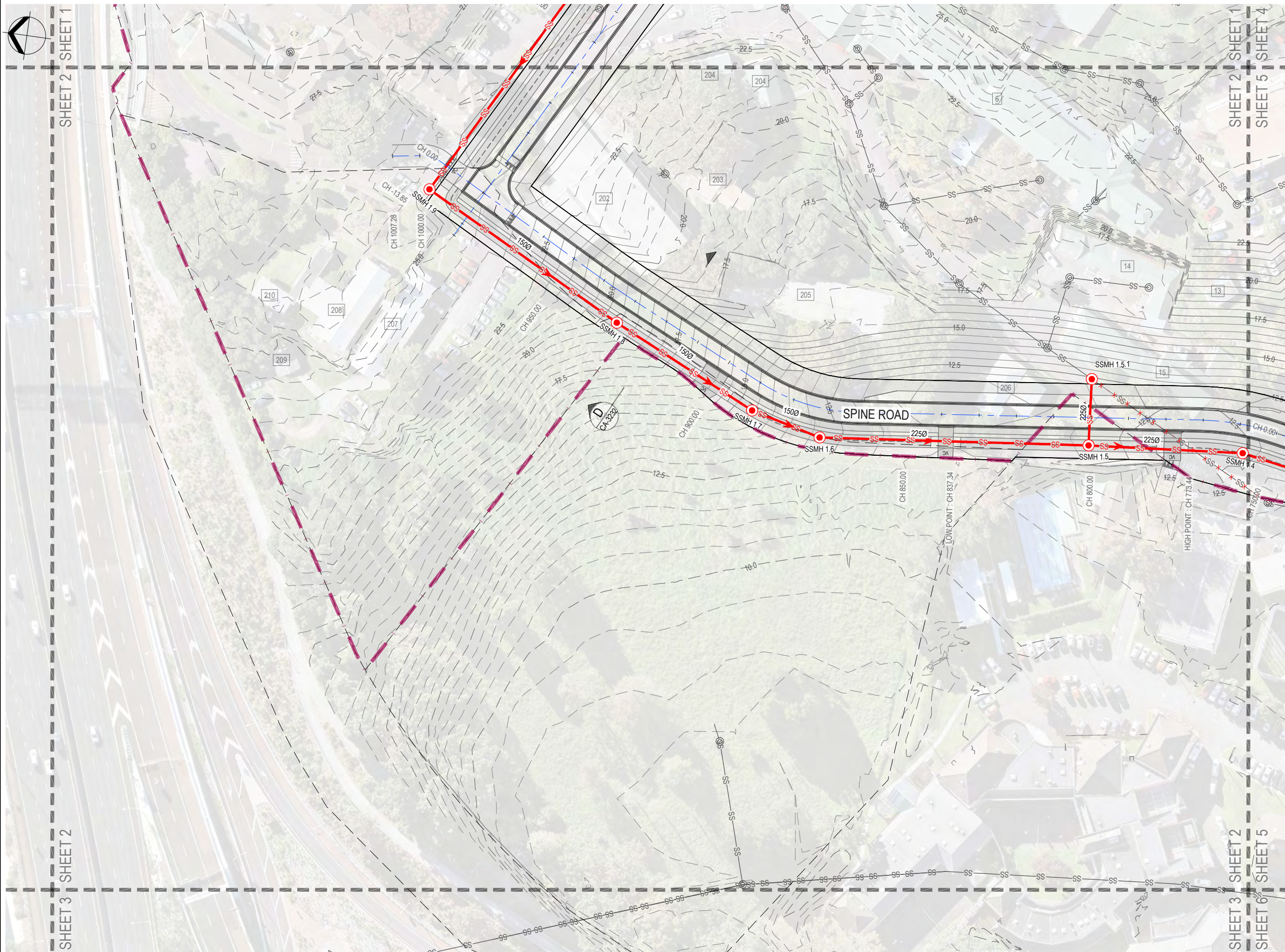
Approved For Construction*
Date

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5101
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Check			
1:1000				

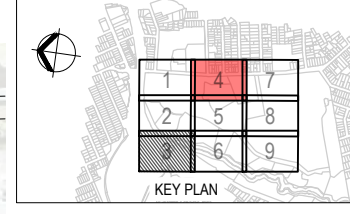
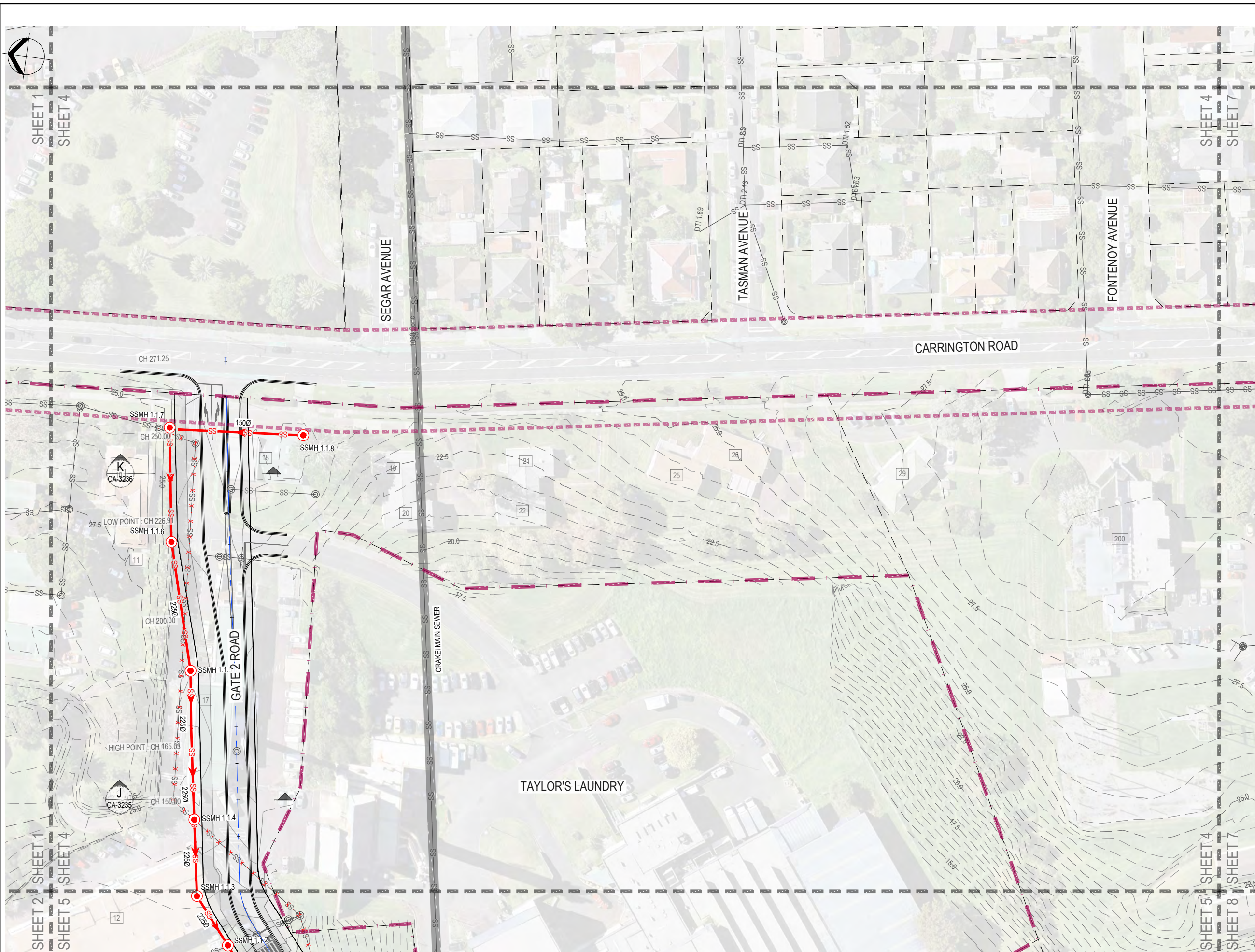
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 2**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-5102	Rev.
		E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
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 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Dwg Verifier			
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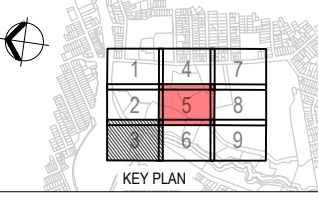
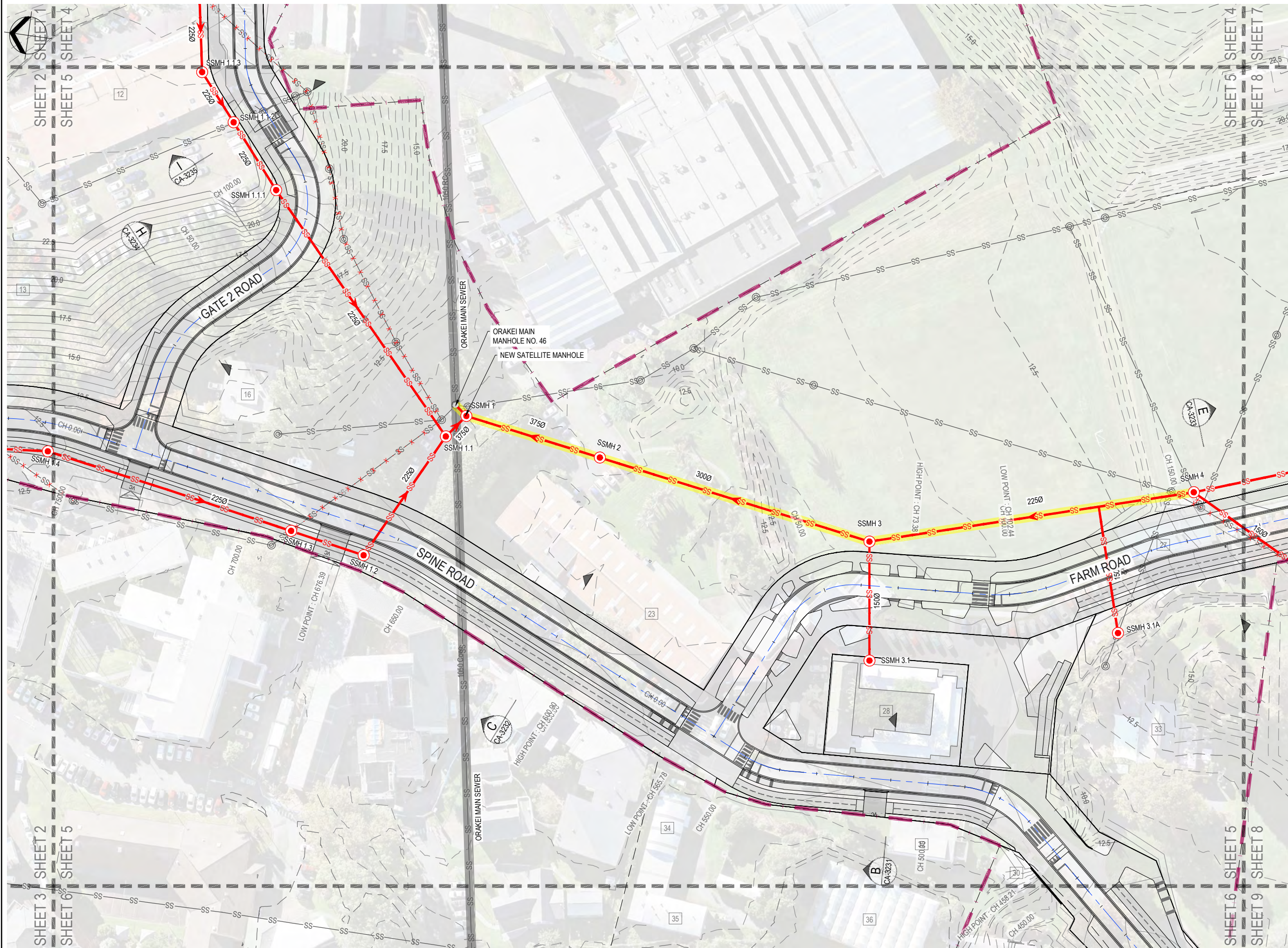
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5104
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design: B. POPLI 31.05.21
Drawn: A. FAZEKAS 31.05.21
Dwg Verifier: []
Dwg Check: []
* Refer to Revision 1 for Original Signature

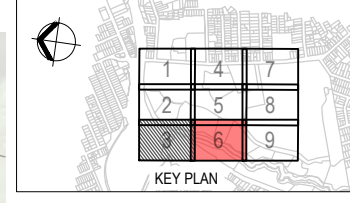
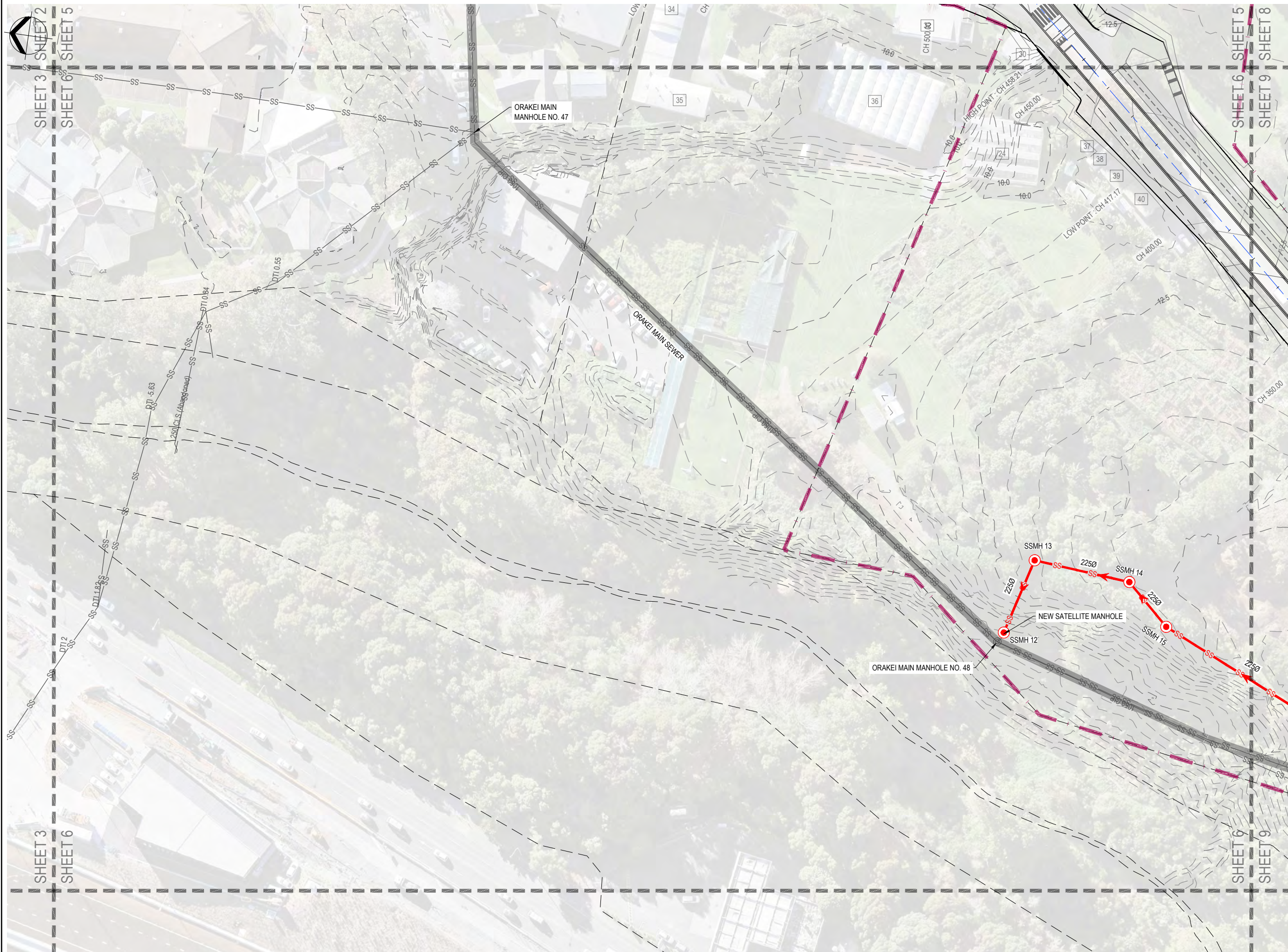
Approved For Construction: []
Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 5**

Discipline: CIVIL ENGINEERING	Rev: E
Drawing No: 3126447-CA-5105	



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
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 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
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Reduced Scale (A3)	Design Checker			
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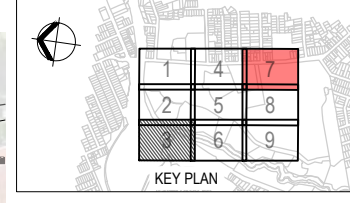
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5106
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

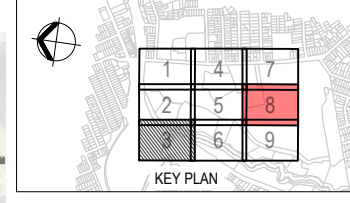
Original Scale (A1) 1:500
 Design B. POPLI 31.05.21
 Drawn A. FAZEKAS 31.05.21
 Design Verifier
 Design Check
 Date
 * Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5107
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
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 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	
Reduced Scale (A3)	Design Checker			Date
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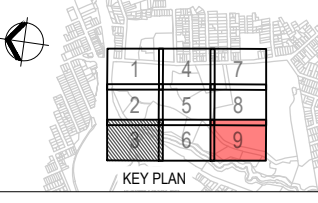
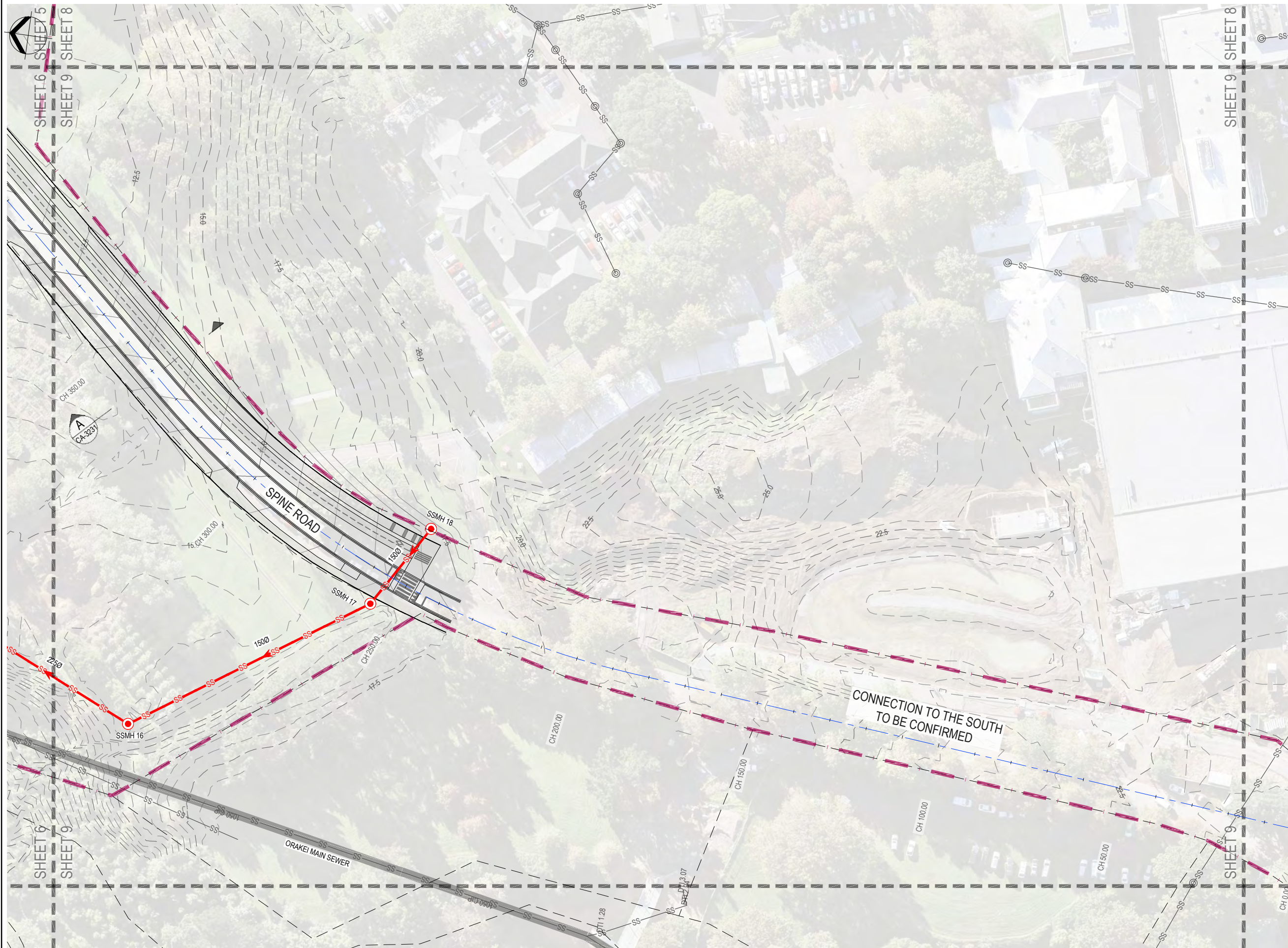
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5108
Rev.	E



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WASTEWATER
- EXISTING WASTEWATER TO BE ABANDONED
- NEW WASTEWATER
- NEW WASTEWATER (EARLY WORKS)

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
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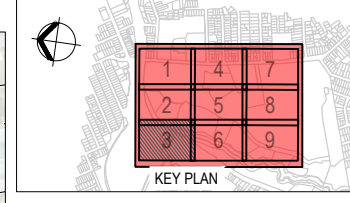
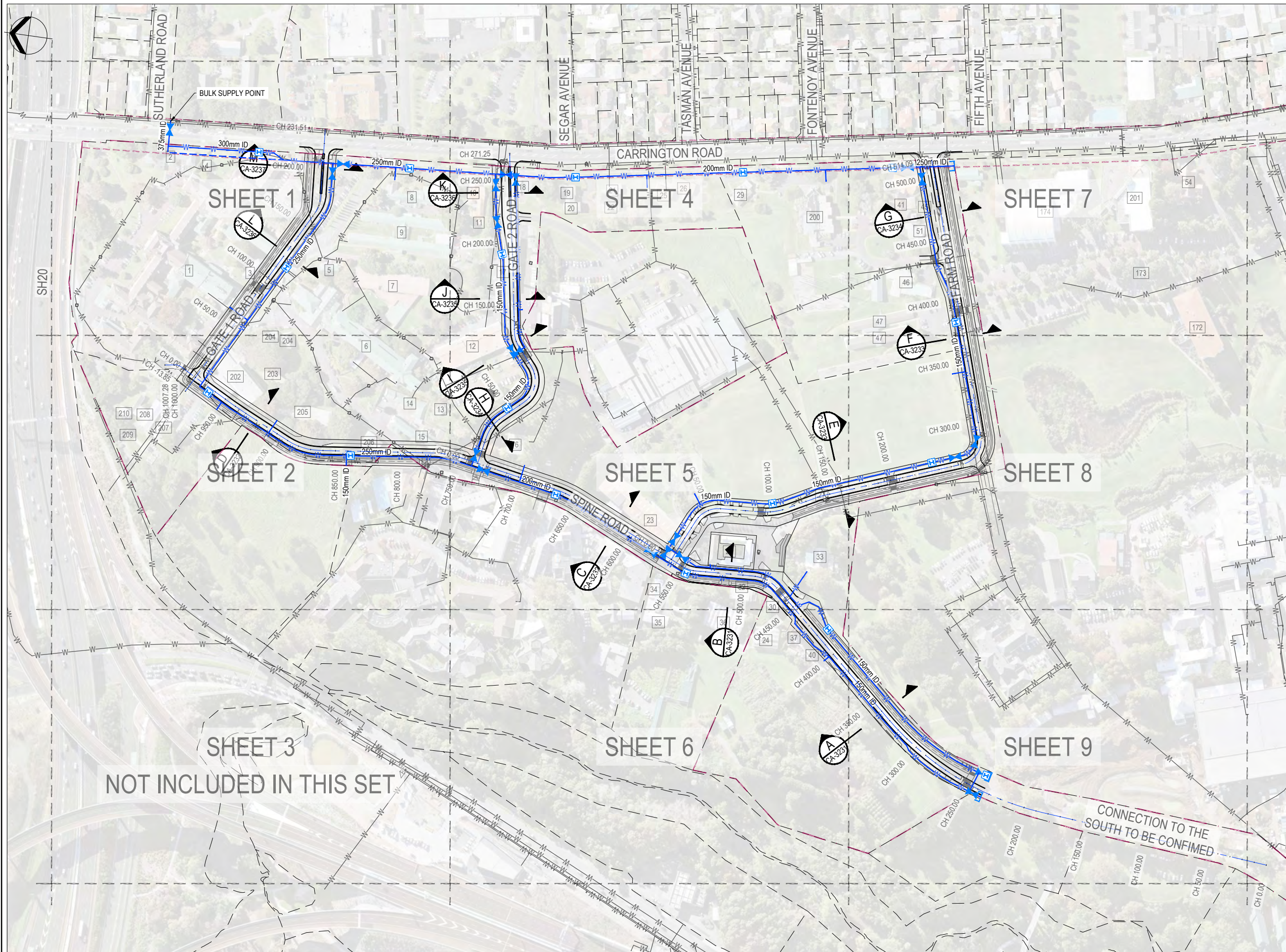
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WASTEWATER LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-5109
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Design Originals:

Original Scale (A1) 1:1500
Reduced Scale (A3) 1:3000

Design	B. POPLI	31.05.21	Approved For Construction*
Drawn	A. FAZEKAS	31.05.21	Date
Design Check			
Design Verifier			

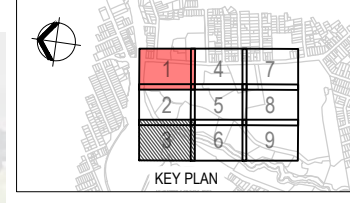
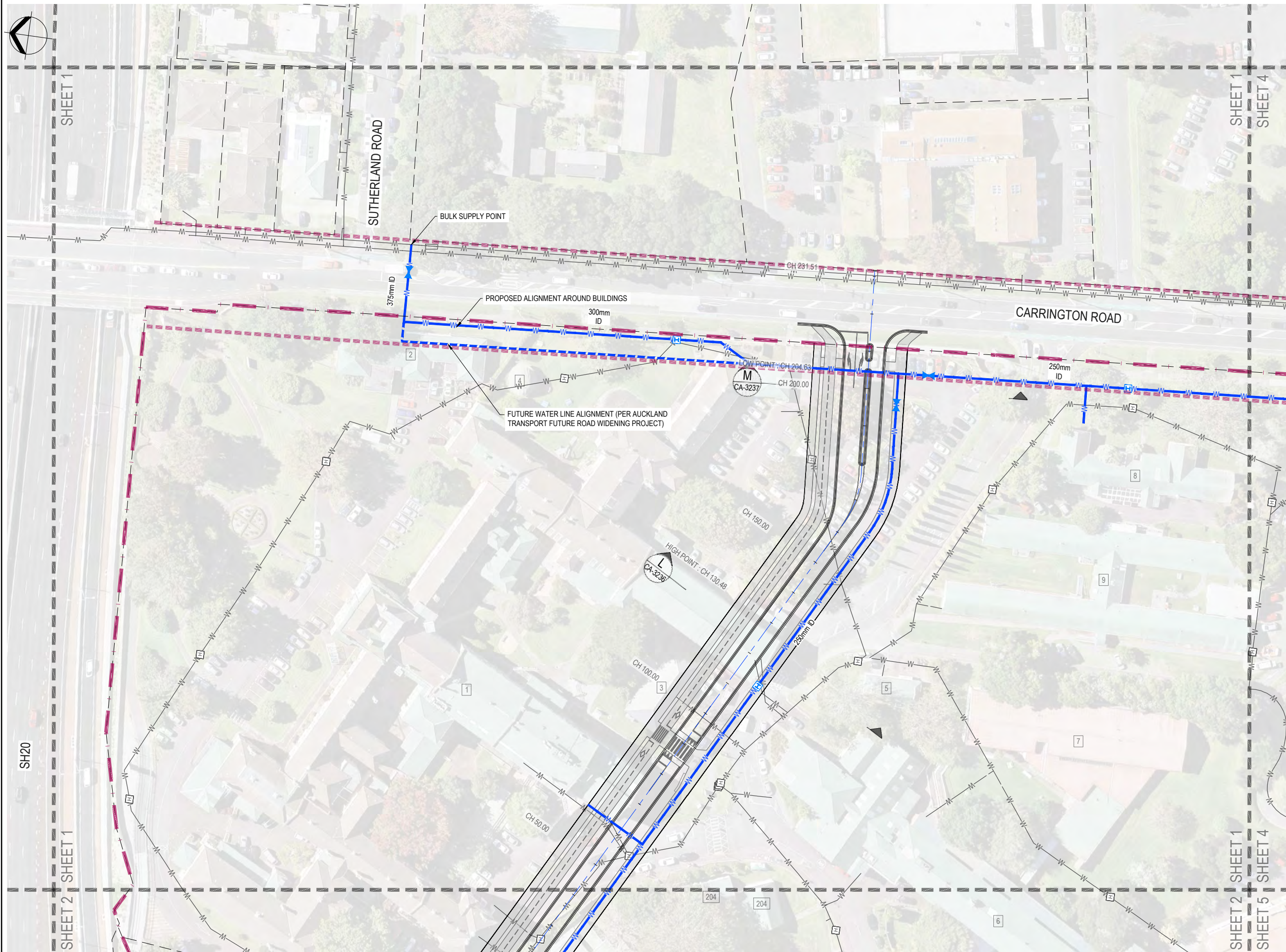
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION OVERALL LAYOUT**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6100
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- X NEW WATER SUPPLY VALVE
- L NEW END CAP

- NOTES:**
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator: **Beca**

Original Scale (A1)	Design	B. POPLI	31.05.21	Approved For Construction*
1:500	Drawn	A. FAZEKAS	31.05.21	Date
Reduced Scale (A3)	Design Verifier			
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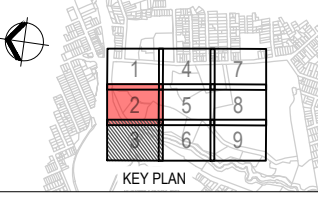
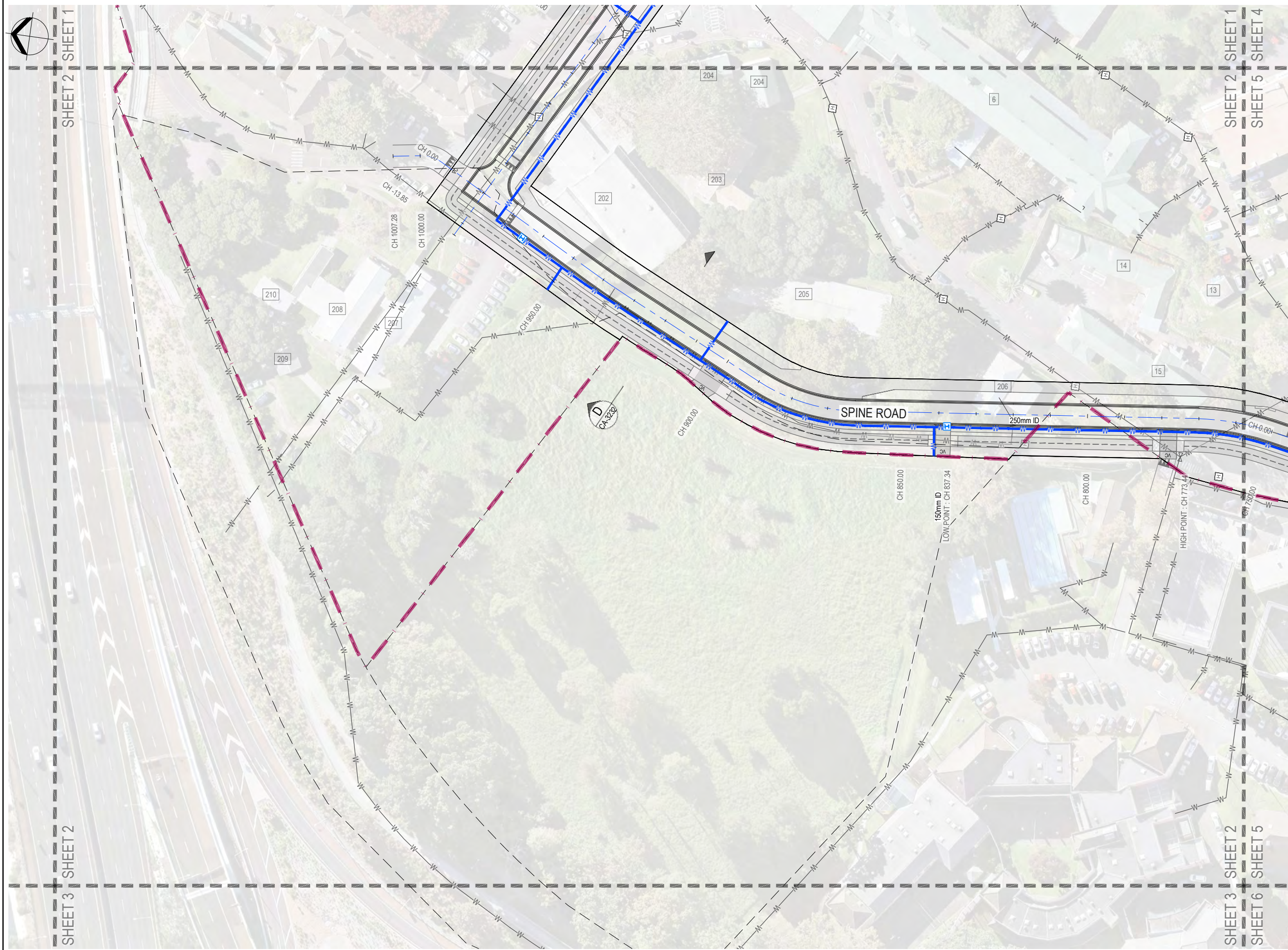
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6101
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

- NOTES:**
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**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	1:500	Design	B. POPLI	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A. FAZEKAS	31.05.21	Date
		Dwg Verifier			
		Dwg Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 2**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-6102	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- - - SITE BOUNDARY
- - - FUTURE CARRINGTON ROAD WIDENING
- W- EXISTING WATER LINE
- ⊠ EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- - - FUTURE WATER RETICULATION LINE
- ⊠ NEW FIRE HYDRANT
- ⊗ NEW WATER SUPPLY VALVE
- └ NEW END CAP

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	B.POPLI	31.05.21	Approved For Construction*
Drawn	A.FAZEKAS	31.05.21	Date
Dwg Verifier			
Dwg Check			

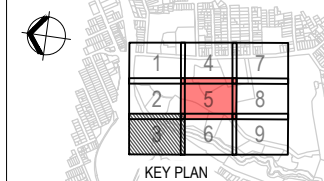
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6104
Rev.	E

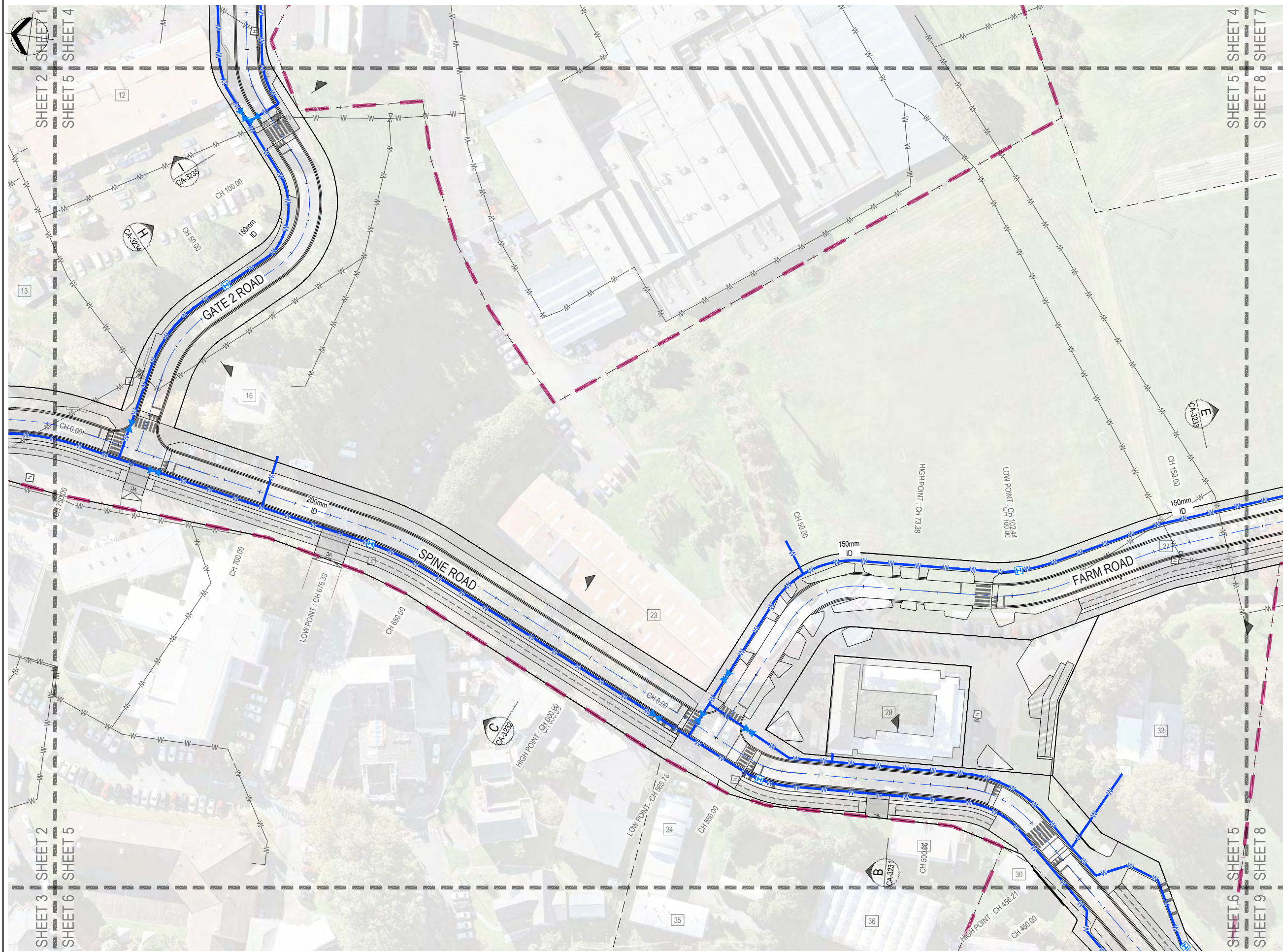


LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

NOTES:

1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date



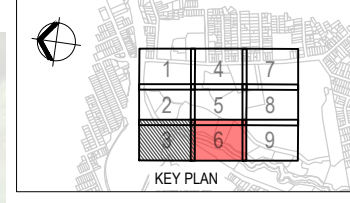
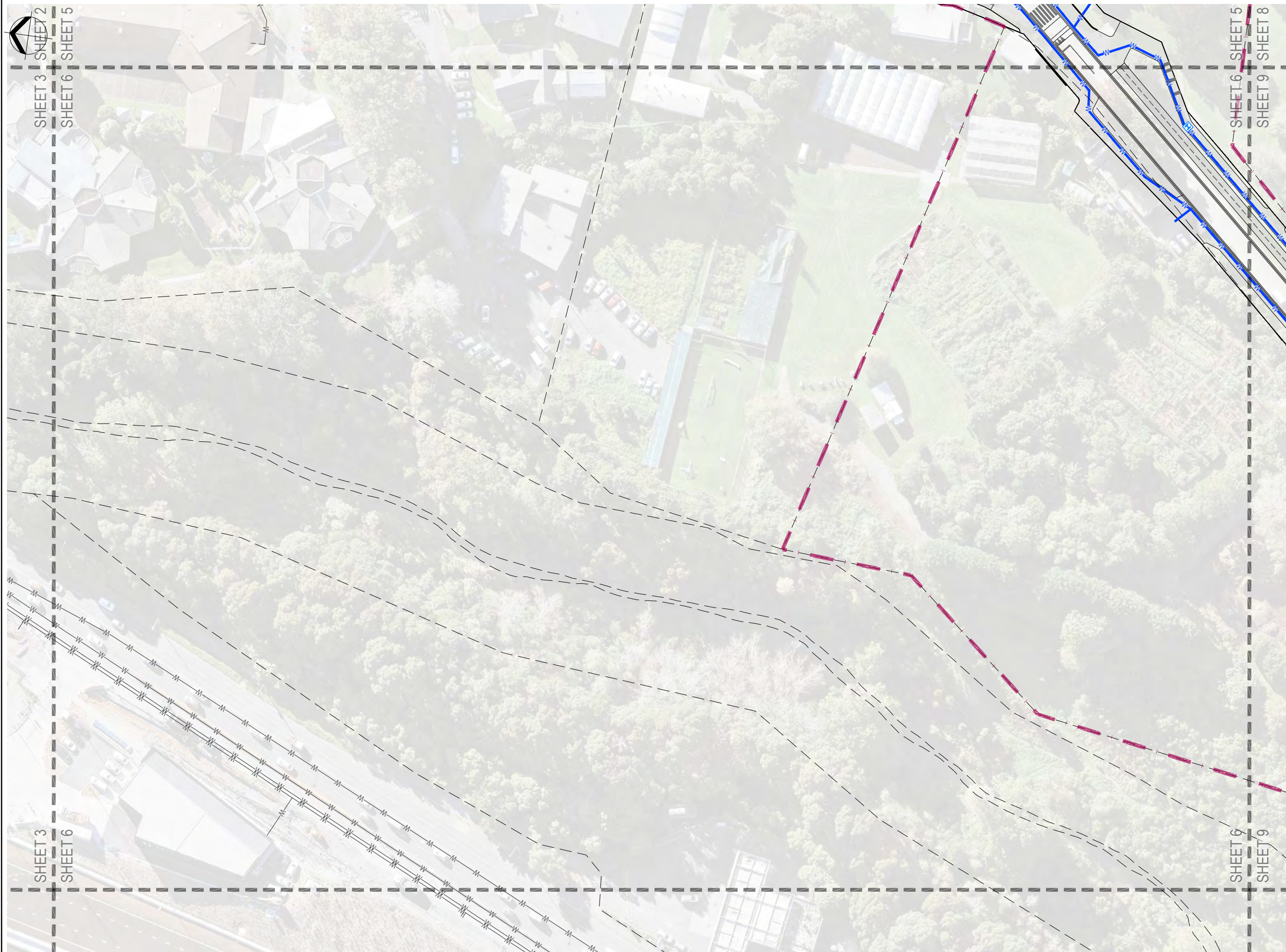
Original Scale (A1)	1:500	Design	B. POPLI	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A. FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			
		* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6105
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	B. POPLI	31.05.21	Approved For Construction*
Drawn	A. FAZEKAS	31.05.21	Date
Design Verifier			
Design Check			

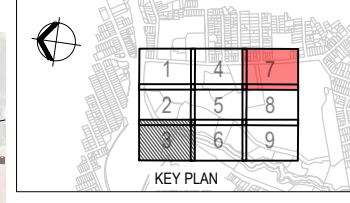
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-6106	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21
No.	Revision	By	Chk.	Appd.	Date

Drawing Originator:

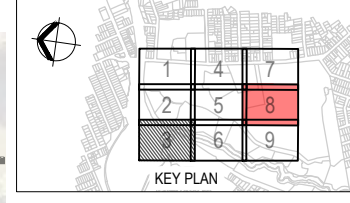
Original Scale (A1) 1:500
 Design: B. POPLI 31.05.21
 Drawn: A. FAZEKAS 31.05.21
 Design Checker: [Blank] [Blank]
 Date: [Blank]

Approved For Construction: [Blank]
 Date: [Blank]

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ
 Project: CARRINGTON BACKBONE WORKS PROJECT

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6107
Rev.	E

Title:	WATER RETICULATION LAYOUT SHEET 7
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LEGEND:

---	PROPERTY BOUNDARIES
---	SITE BOUNDARY
---	FUTURE CARRINGTON ROAD WIDENING
—W—	EXISTING WATER LINE
⊠	EXISTING HYDRANT
—W—	NEW WATER RETICULATION LINE
---	FUTURE WATER RETICULATION LINE
⊠	NEW FIRE HYDRANT
⊗	NEW WATER SUPPLY VALVE
⊥	NEW END CAP

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR
RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator: **Beca**

Original Scale (A1)	1:500	Design	B. POPLI	31.05.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A. FAZEKAS	31.05.21	Date
		Design Verifier			
		Design Check			

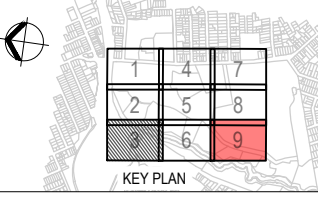
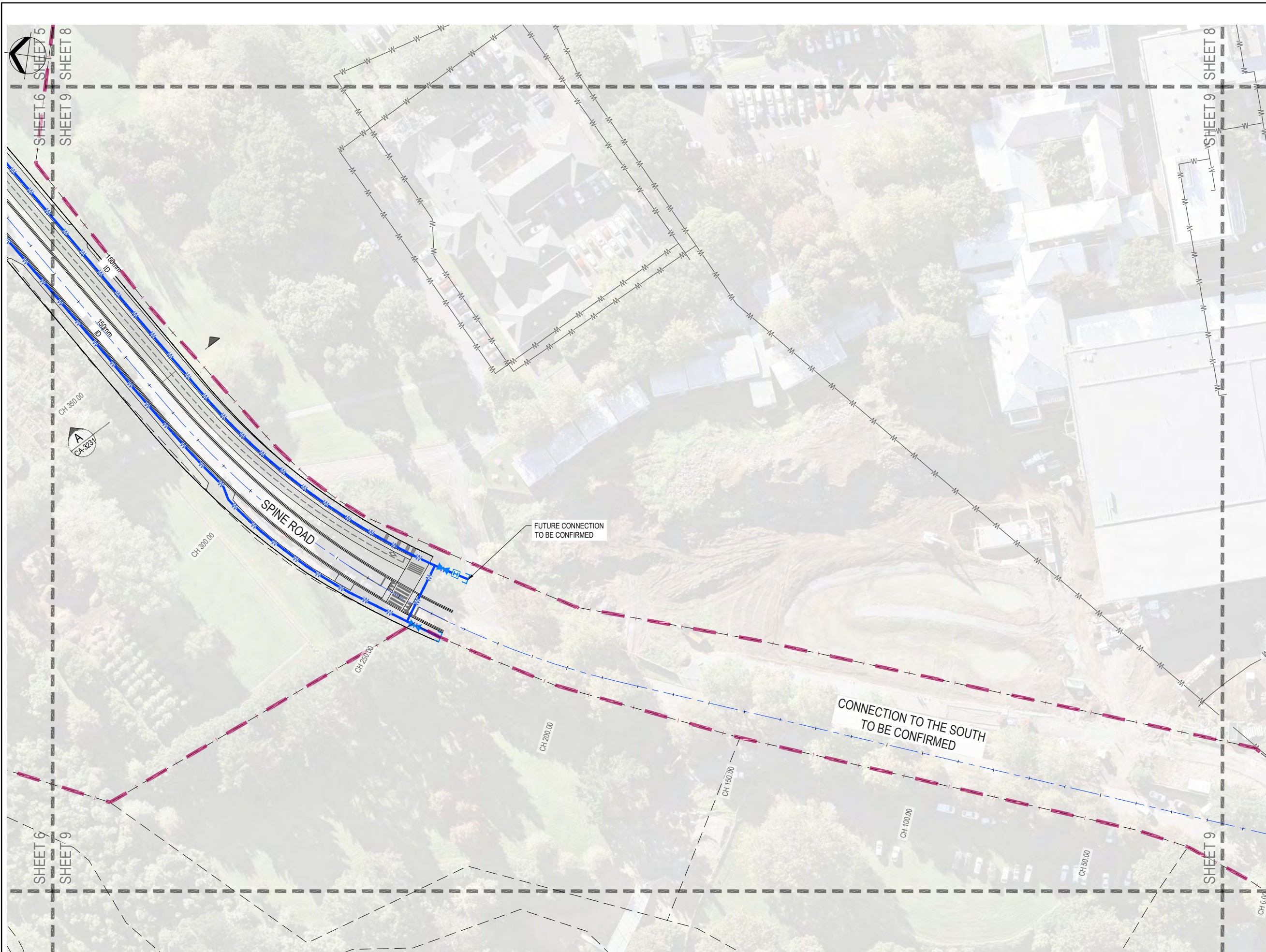
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-6108
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING WATER LINE
- EXISTING HYDRANT
- NEW WATER RETICULATION LINE
- FUTURE WATER RETICULATION LINE
- NEW FIRE HYDRANT
- NEW WATER SUPPLY VALVE
- NEW END CAP

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	BP	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Design	B. POPLI	31.05.21	Approved For Construction*
Drawn	A. FAZEKAS	31.05.21	Date
Design Verifier			
Design Check			

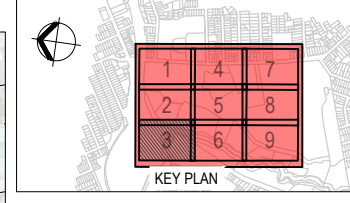
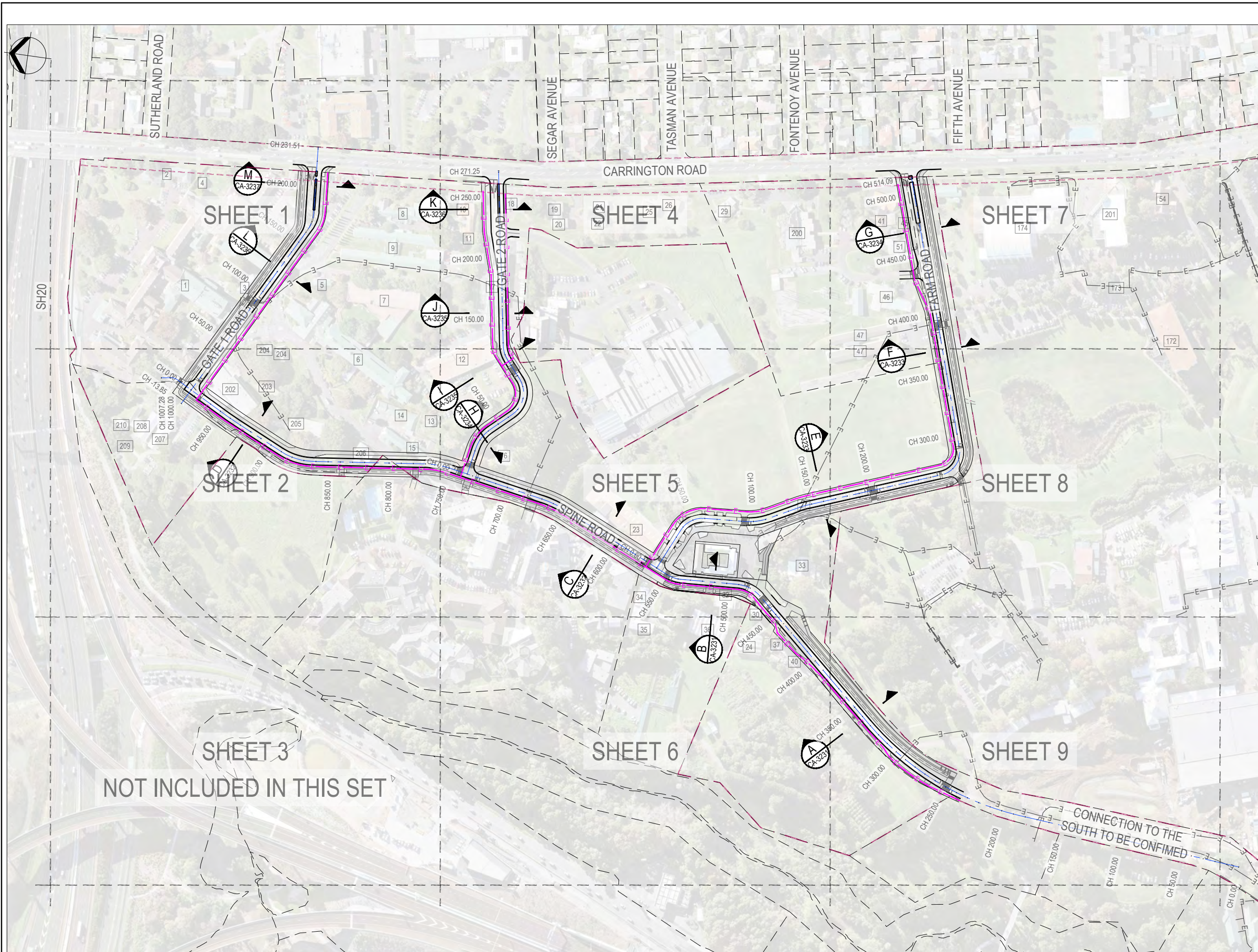
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **WATER RETICULATION LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-6109	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Design Originals:

Original Scale (A1) 1:1500
Reduced Scale (A3) 1:3000

Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Drawn	A.FAZEKAS	08.06.21	Date
Design Verifier			
Design Check			

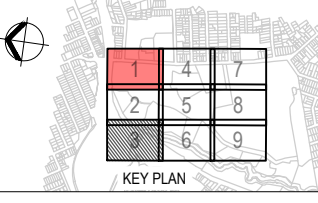
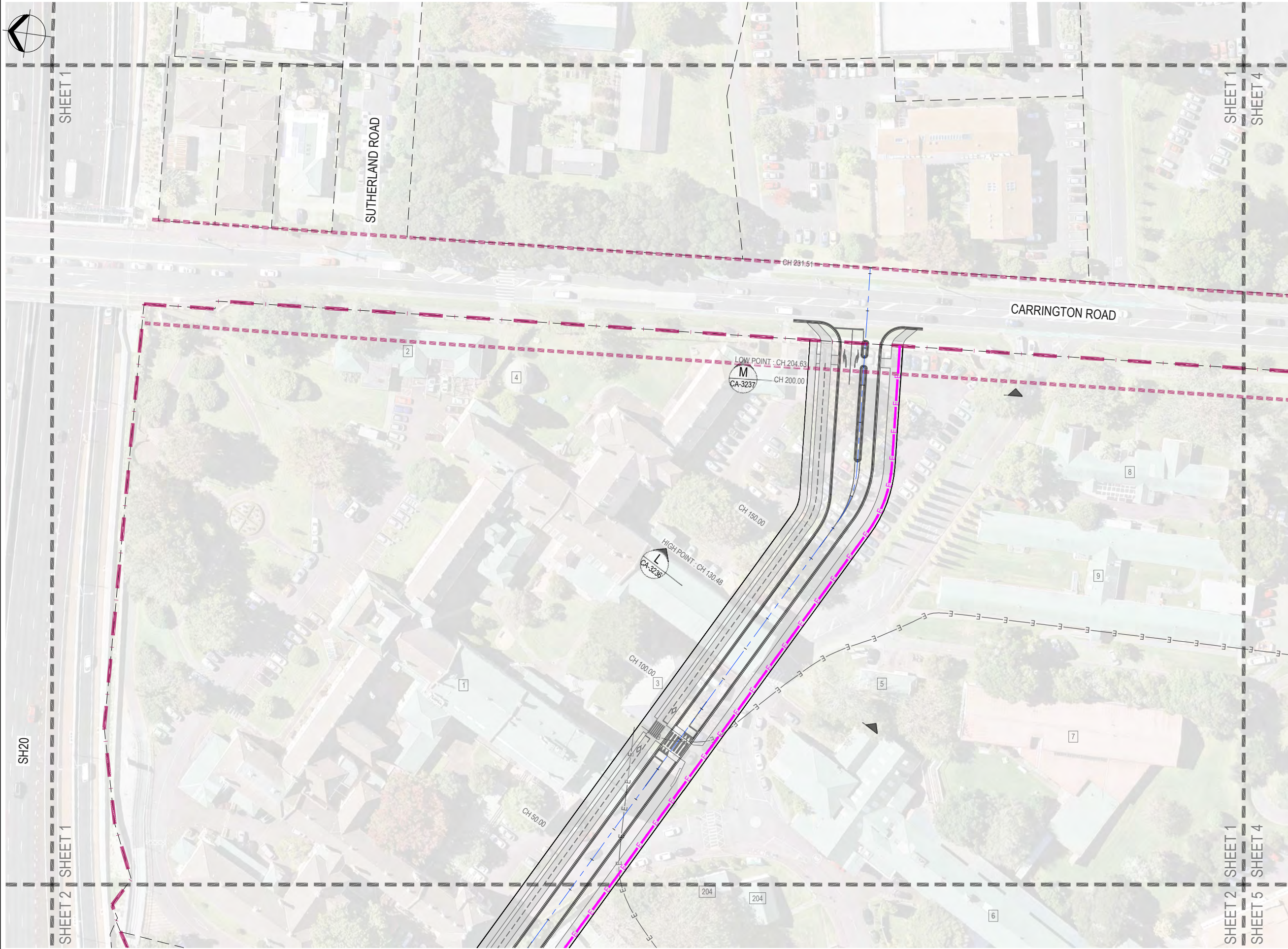
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER OVERALL LAYOUT**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7200
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

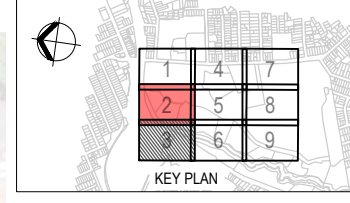
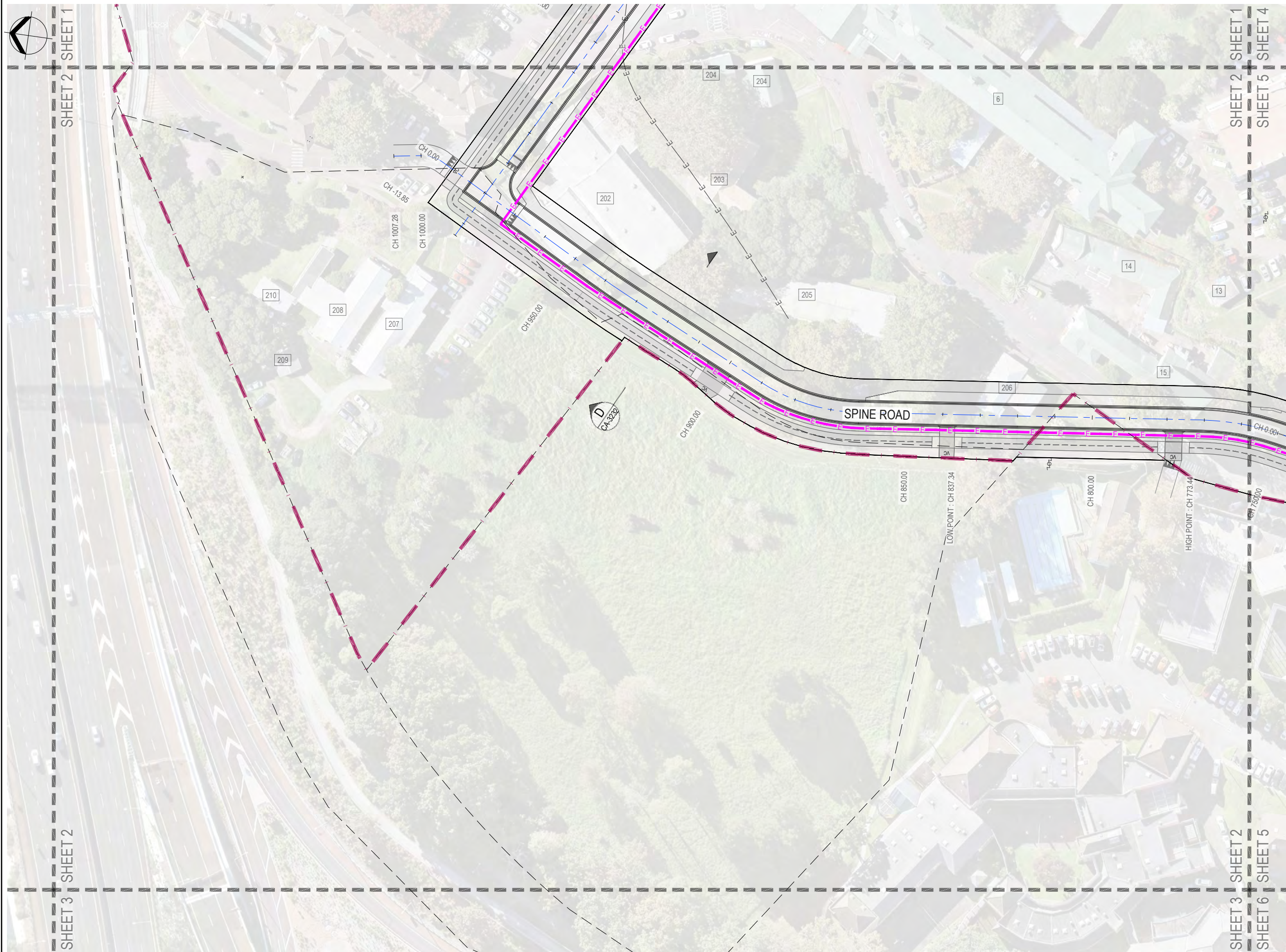
Design: C.BREYTENBACH 08.06.21
Drawn: A.FAZEKAS 08.06.21
Design Verifier:
Design Check:
Date:
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7201
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017.
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	Drawn	Design Date	Approved For Construction*
1:500	C.BREYTENBACH	A.FAZEKAS	08.06.21	08.06.21
Reduced Scale (A3)	Dwg Verifier			Date
1:1000	Dwg Check			

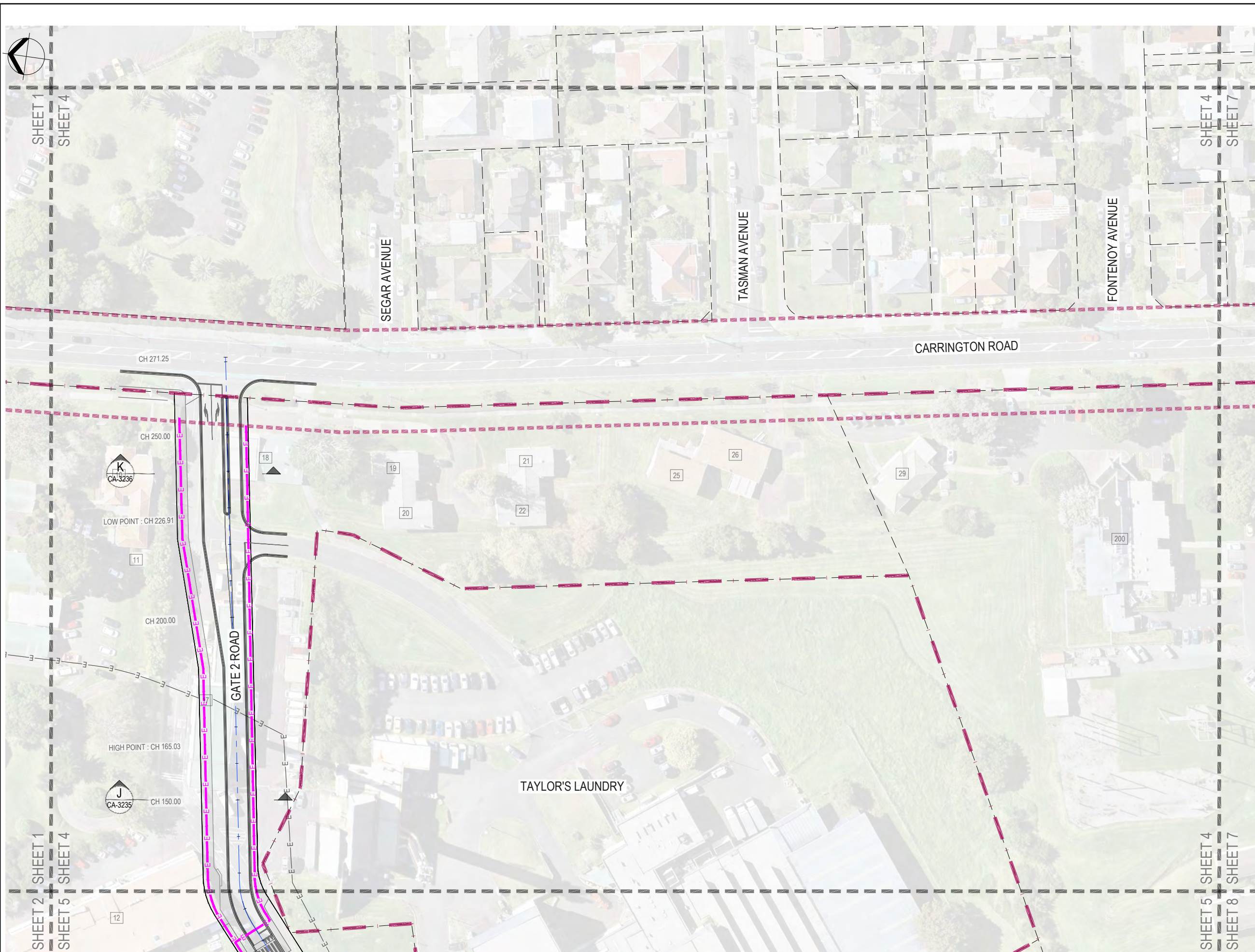
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 2**

Discipline	Rev.
CIVIL ENGINEERING	E
Drawing No.	3126447-CA-7202



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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		Dag Check			

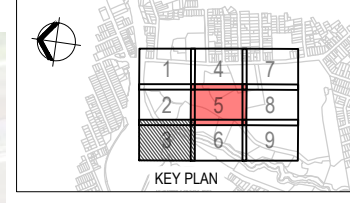
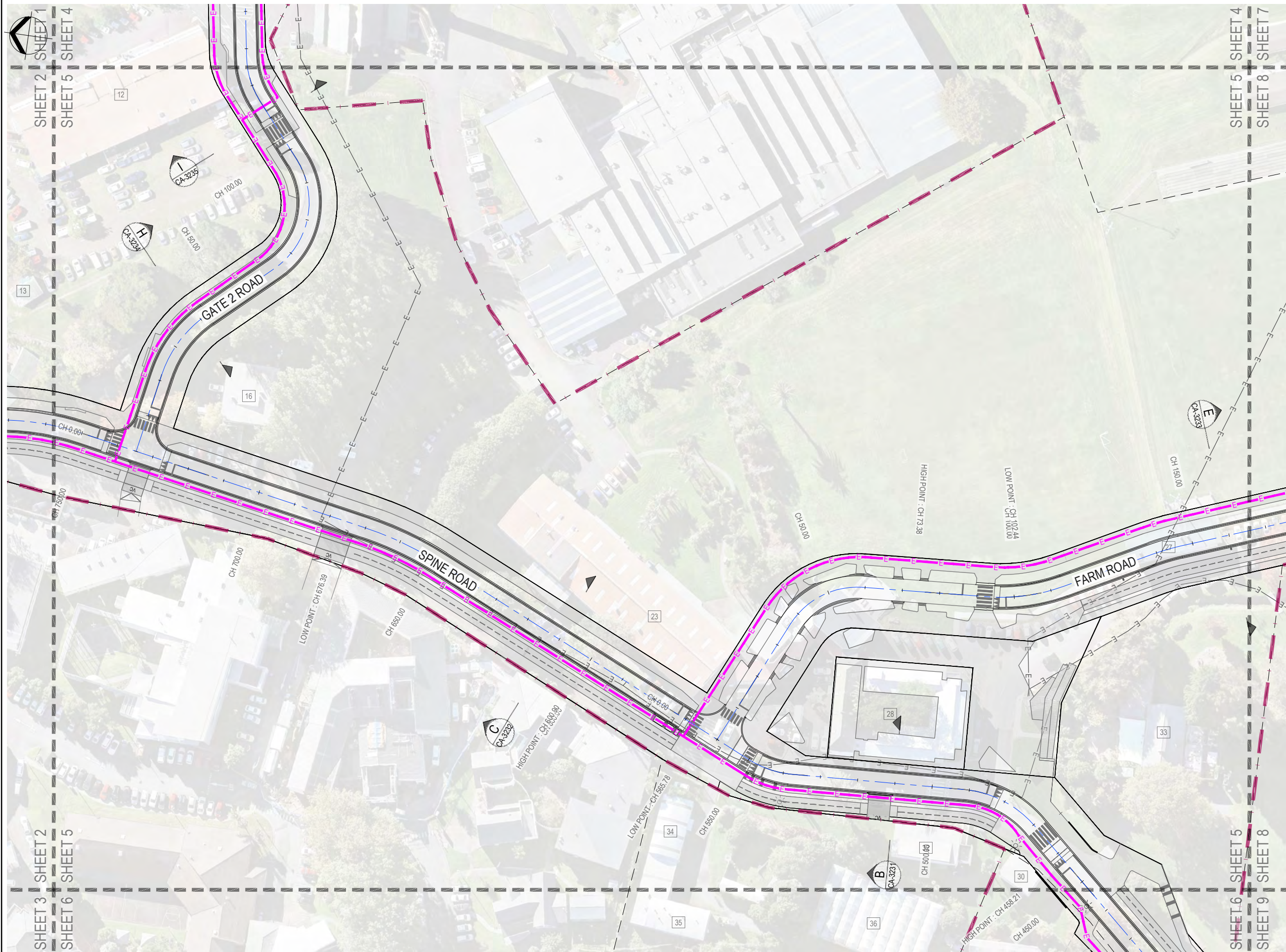
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7204	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR
RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:
Beca

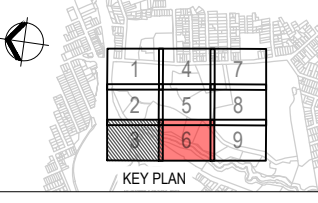
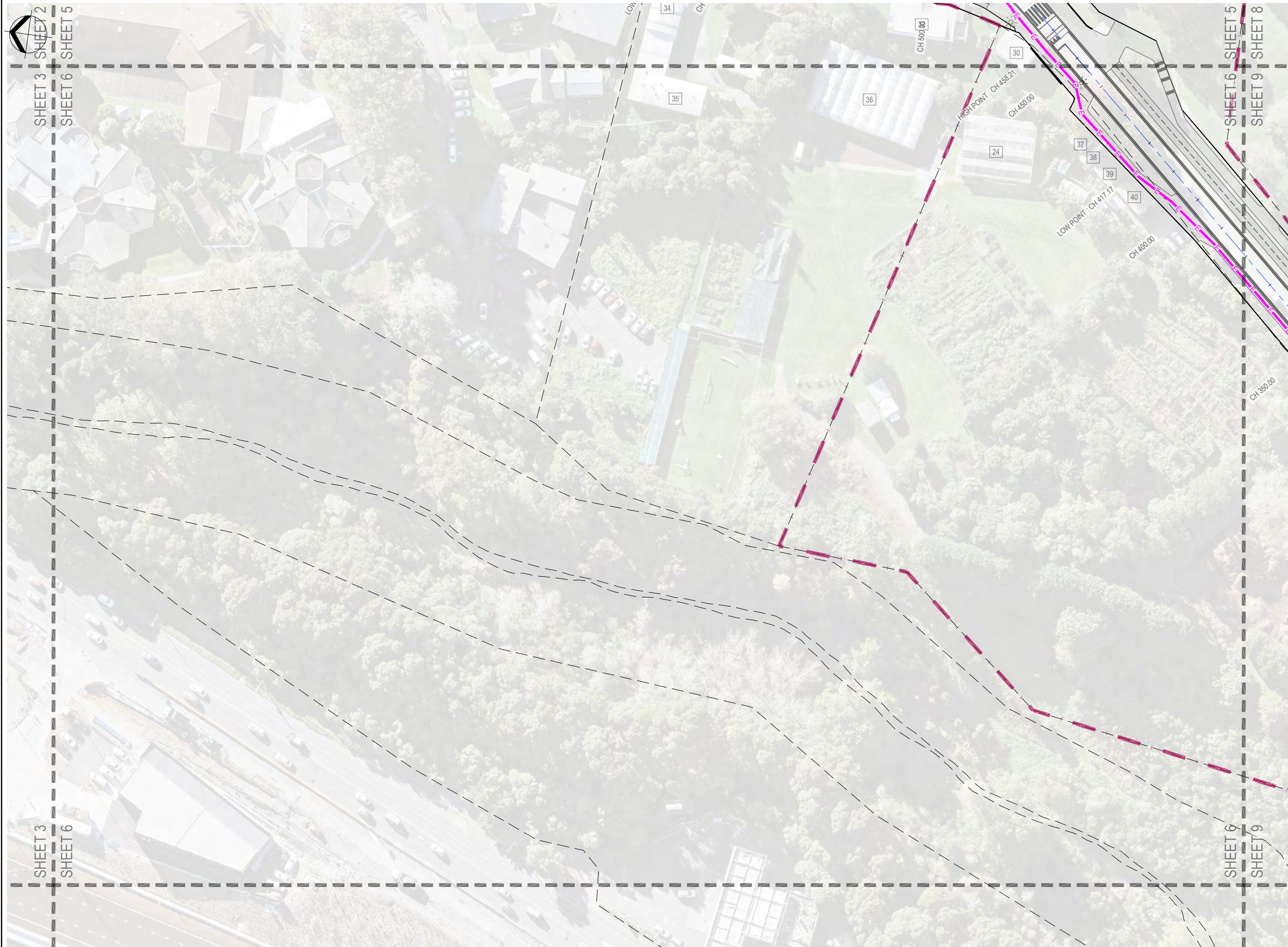
Original Scale (A1) 1:500	Design C.BREYTENBACH 08.06.21	Approved For Construction* A.FAZEKAS 08.06.21
Reduced Scale (A3) 1:1000	Dwg Verifier	Date
	Dwg Check	
	* Refer to Revision 1 for Original Signature	

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 5**

Discipline CIVIL ENGINEERING	Rev. E
Drawing No. 3126447-CA-7205	



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date

Drawing Originator:

Original Scale (A1)	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	08.06.21	Date
Reduced Scale (A3)	Design Checker			
1:1000	Design Check			

* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7206	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

NOTES:

1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:
Beca

Original Scale (A1)	1:500	Design	C.BREYENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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		Dwg Check			

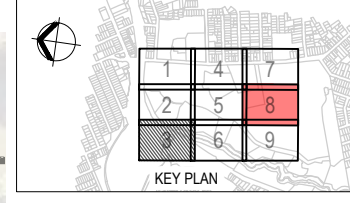
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7207
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- E--- EXISTING ELECTRICAL
- E--- ELECTRICAL CORRIDOR

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.



No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



Original Scale (A1)	1:500	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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		Design Check			

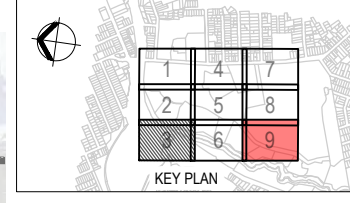
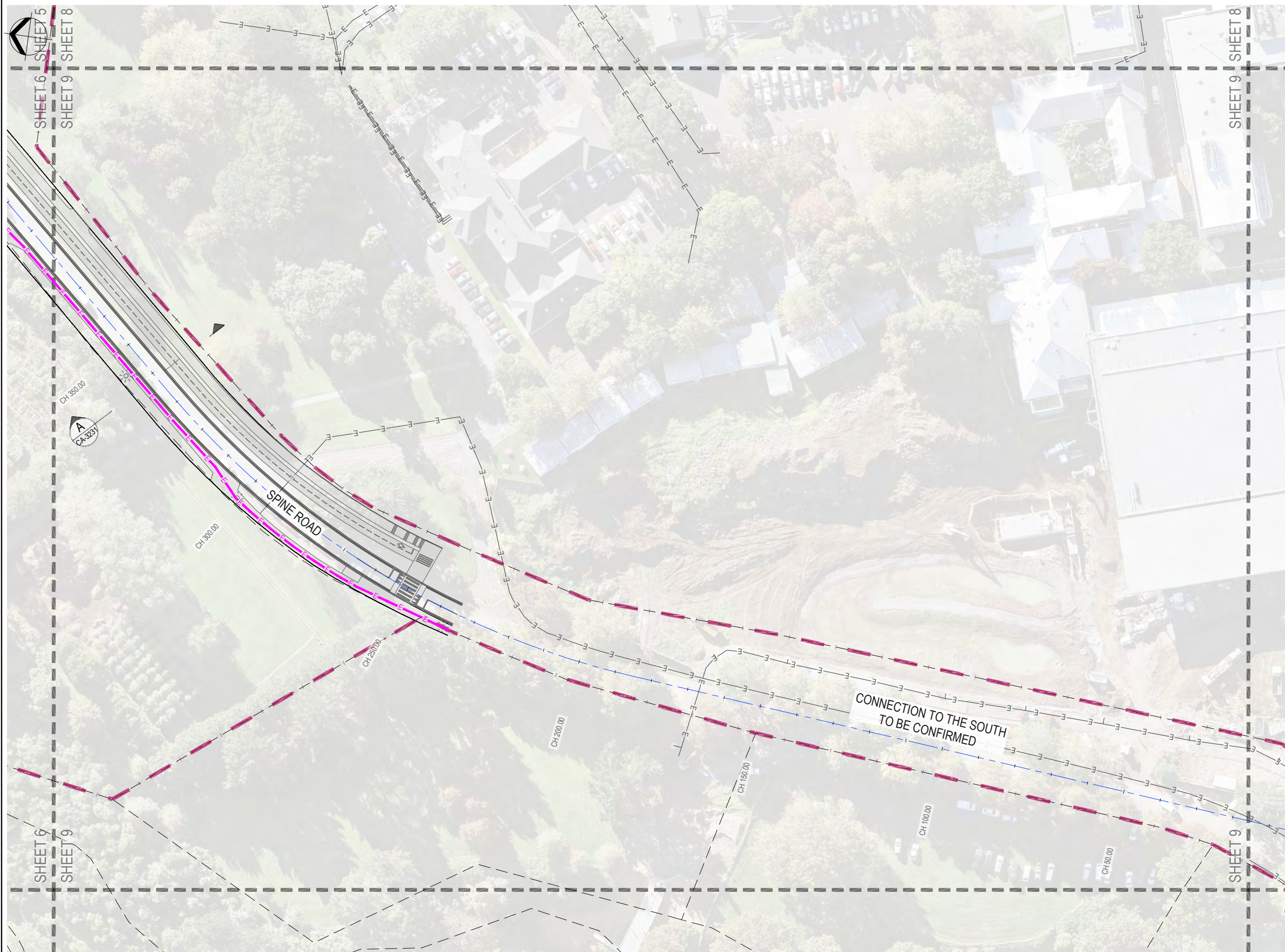
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7208	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING ELECTRICAL
- ELECTRICAL CORRIDOR

- NOTES:**
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	08.06.21	Date
Reduced Scale (A3)	Design Verifier			
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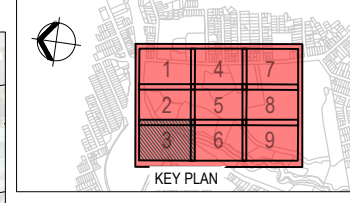
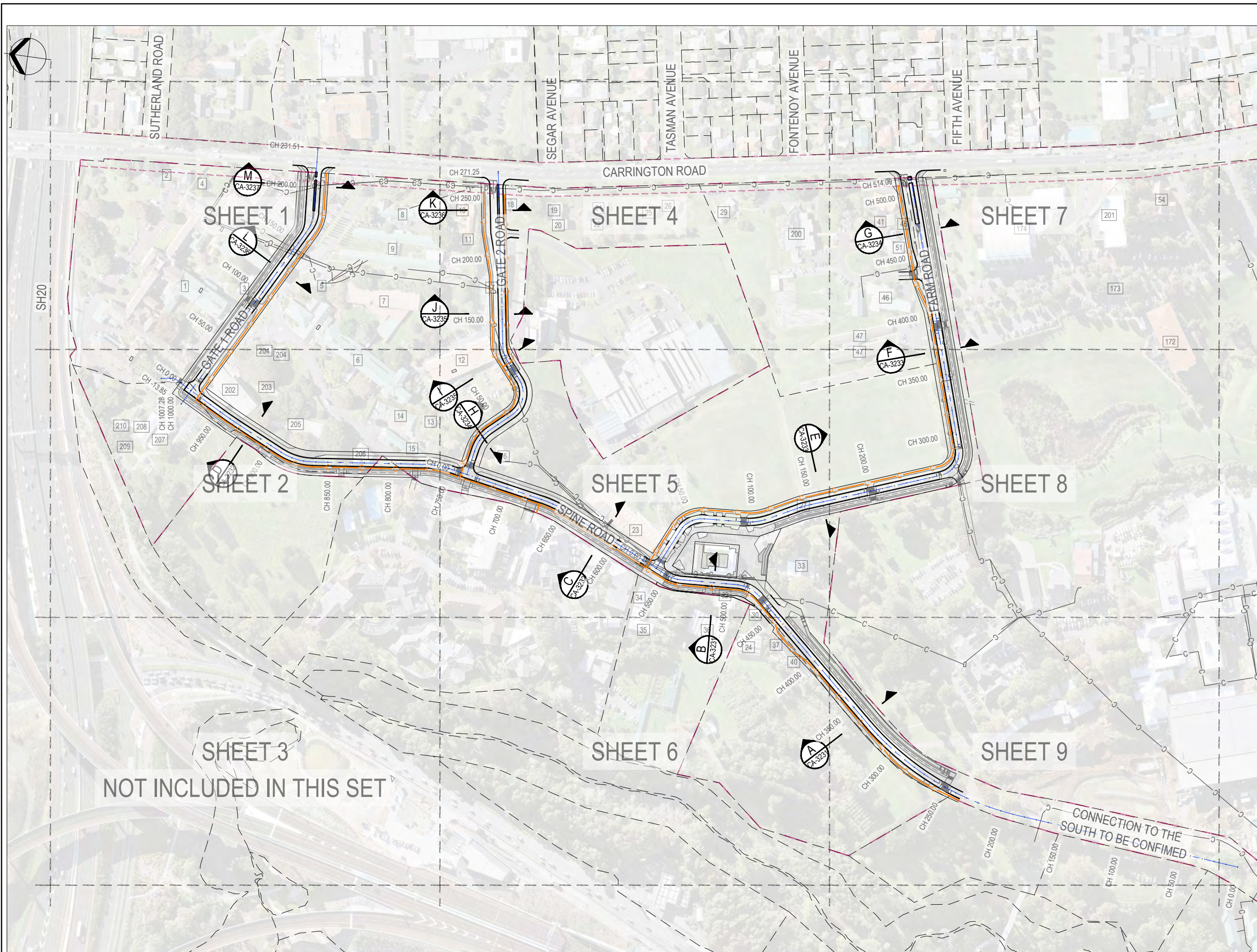
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **POWER LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7209
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED IN 2017. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 2. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 3. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21



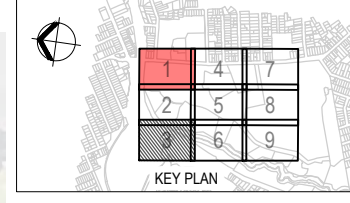
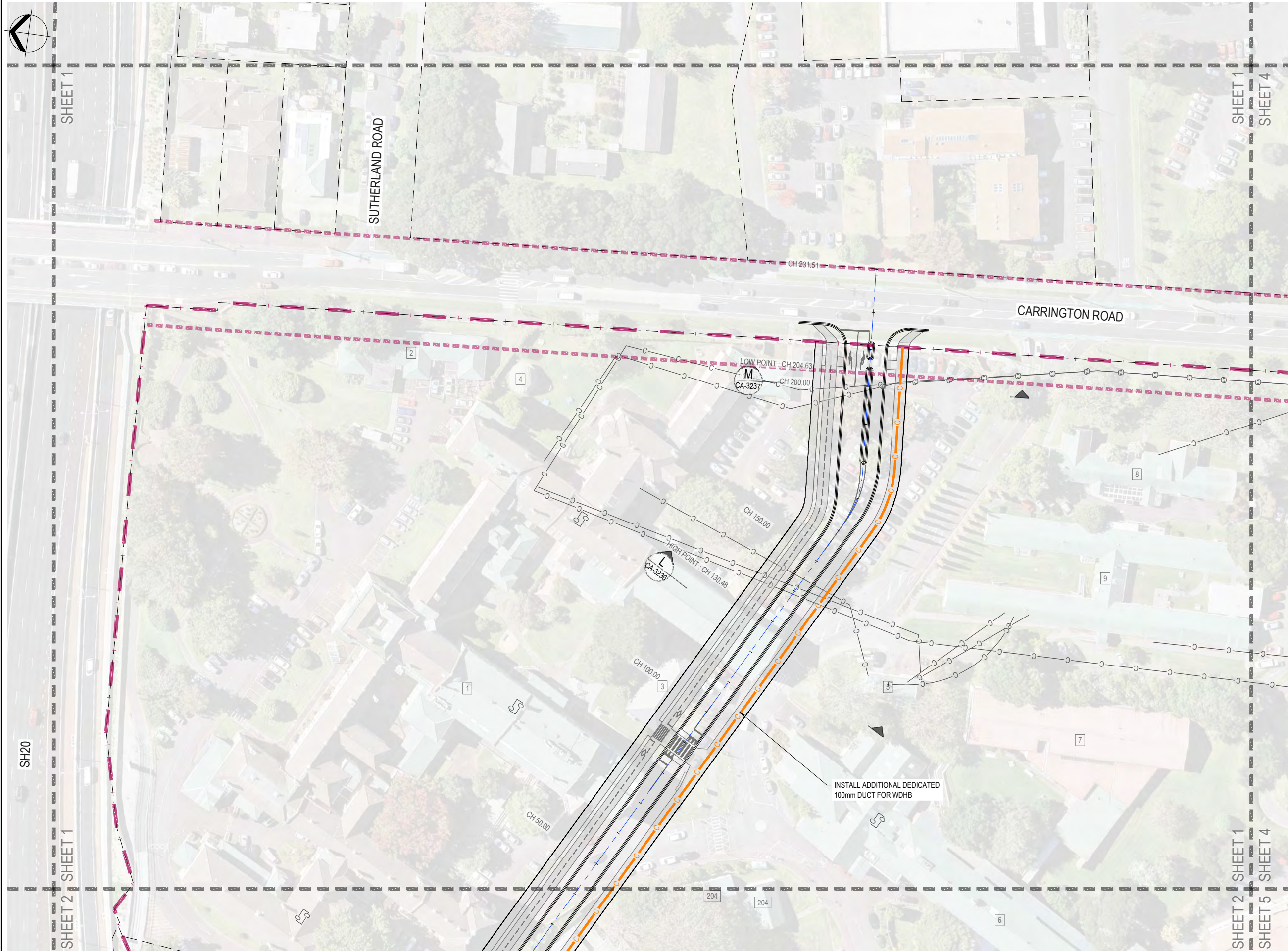
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Reduced Scale (A3) 1:3000	Design Verifier Date	

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS OVERALL LAYOUT**

Discipline CIVIL ENGINEERING	Rev. E
Drawing No. 3126447-CA-7300	



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	1:500
Reduced Scale (A3)	1:1000

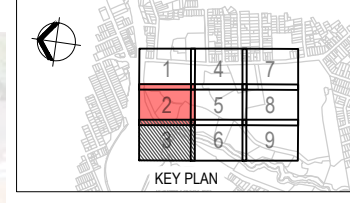
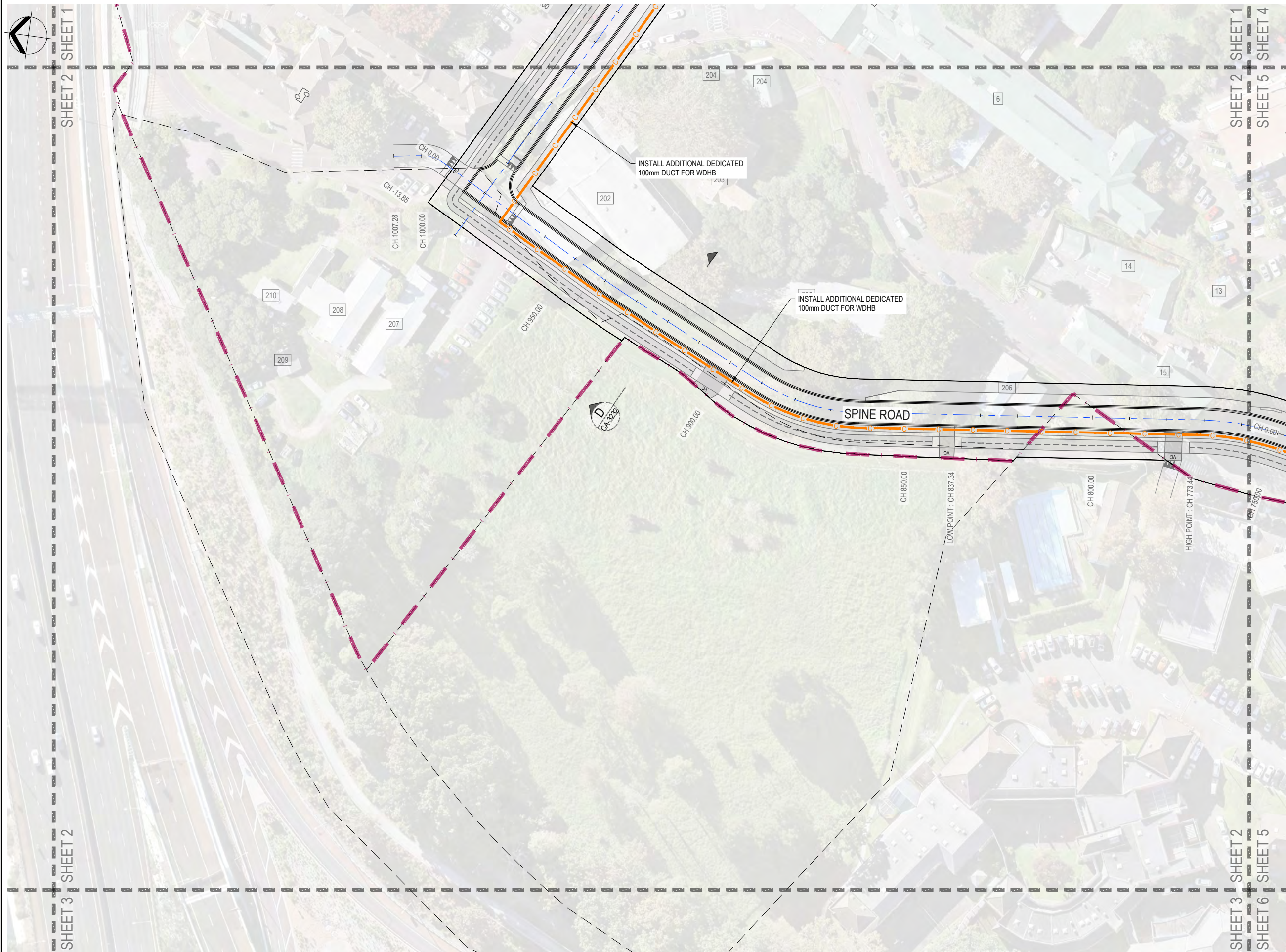
Design	C.BREYENBACH	08.06.21	Approved For Construction*
Drawn	A.FAZEKAS	08.06.21	Date
Design Verifier			
Design Check			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7301
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk.	Appd.	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Original Scale (A1) 1:500
Reduced Scale (A3) 1:1000

Beca

Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Drawn	A.FAZEKAS	08.06.21	Date
Dwg Verifier			
Dwg Check			

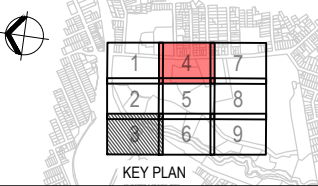
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 2**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7302
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR



- NOTES:**
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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		Dag Check			

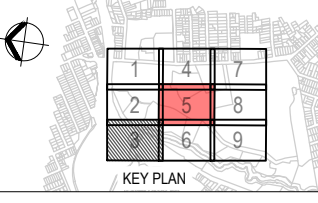
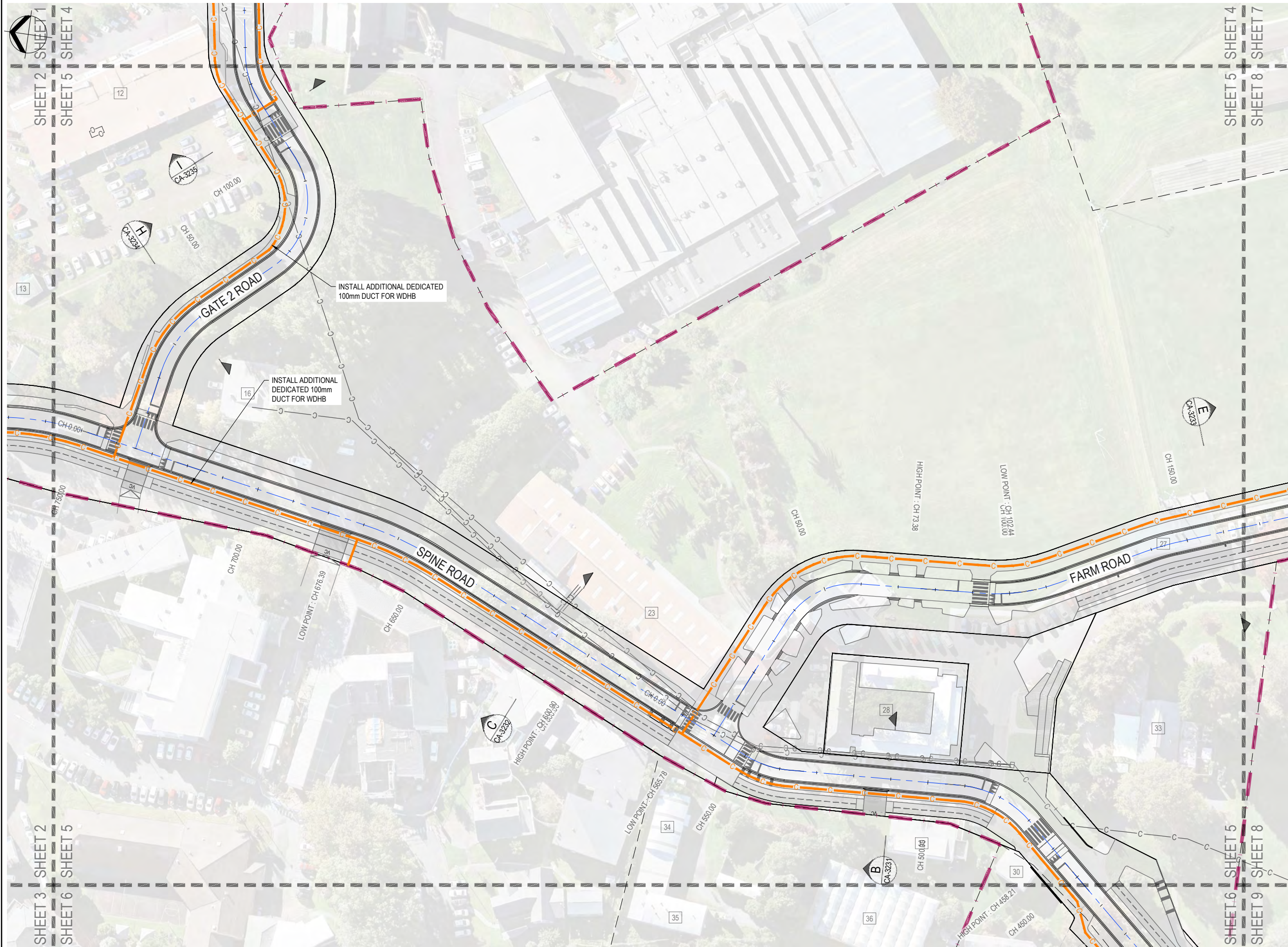
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 4**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7304
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- - - SITE BOUNDARY
- - - FUTURE CARRINGTON ROAD WIDENING
- C - EXISTING COMMUNICATIONS
- C - COMMUNICATIONS CORRIDOR

- NOTES:**
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 3. COORDINATES ARE IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

ORIGINAL DRAWING
IN COLOUR
RESOURCE CONSENT
NOT FOR CONSTRUCTION

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date

Drawing Originator:

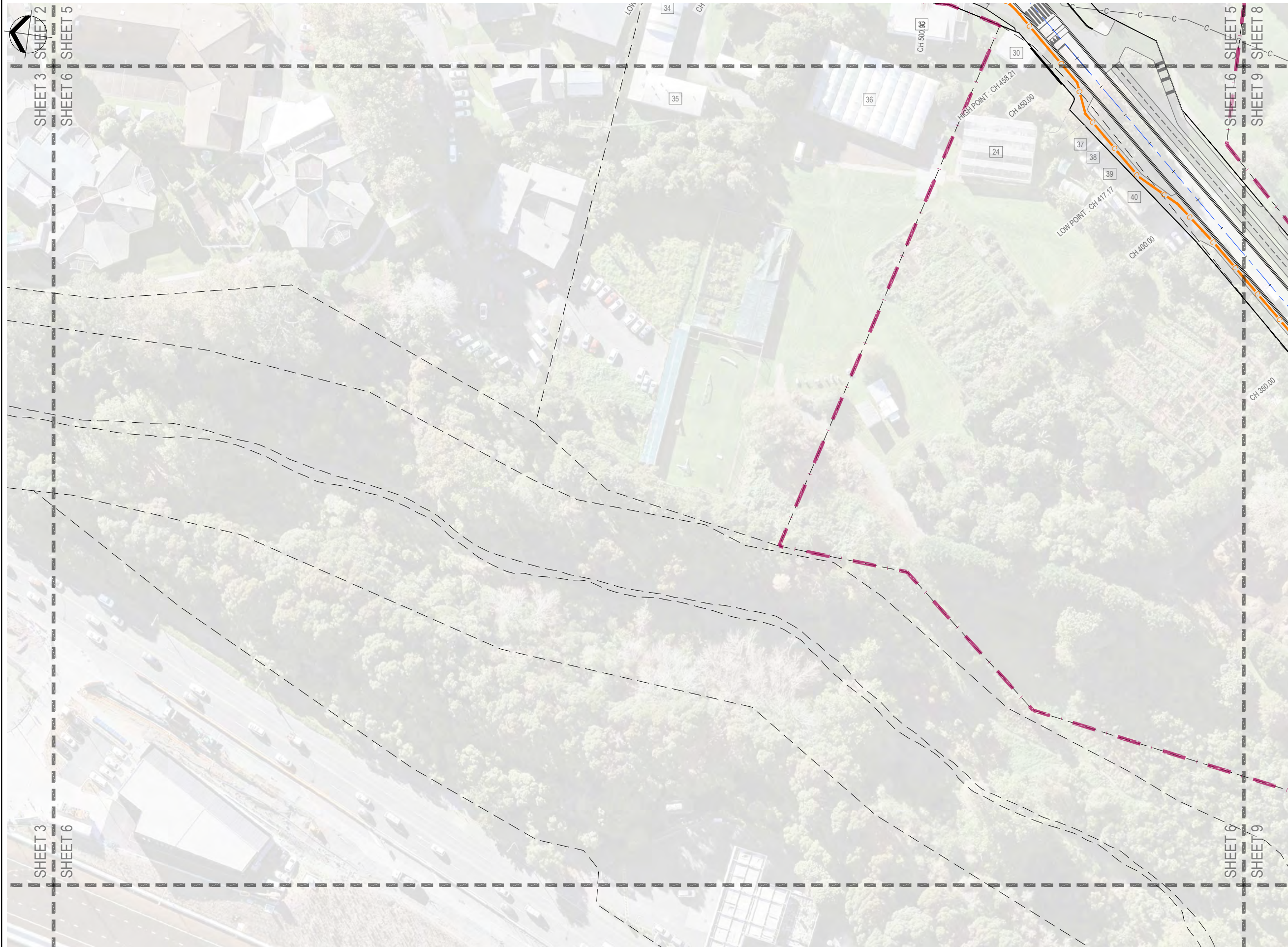
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Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
		Design Verifier			
		Design Check			
		* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 5**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7305	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.

**ORIGINAL DRAWING
IN COLOUR**

**RESOURCE CONSENT
NOT FOR CONSTRUCTION**

E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21
No.	Revision	By	CHK	Appd	Date

Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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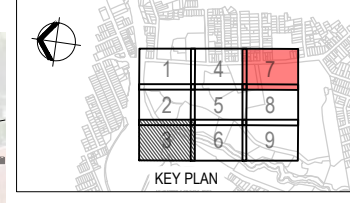
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 6**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7306	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

BECA

Original Scale (A1) 1:500	Design C.BREYTENBACH 08.06.21	Approved For Construction*
Reduced Scale (A3) 1:1000	Drawn A.FAZEKAS 08.06.21	Date
	Day Verifier	
	Day Check	

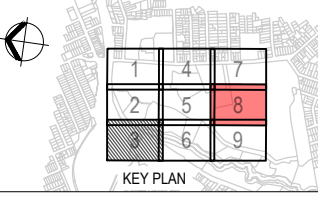
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 7**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7307
Rev.	E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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ORIGINAL DRAWING
IN COLOUR

RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	1:500	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
Reduced Scale (A3)	1:1000	Drawn	A.FAZEKAS	08.06.21	Date
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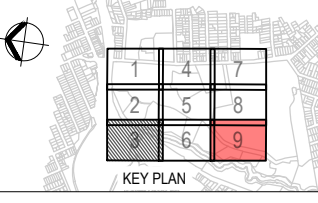
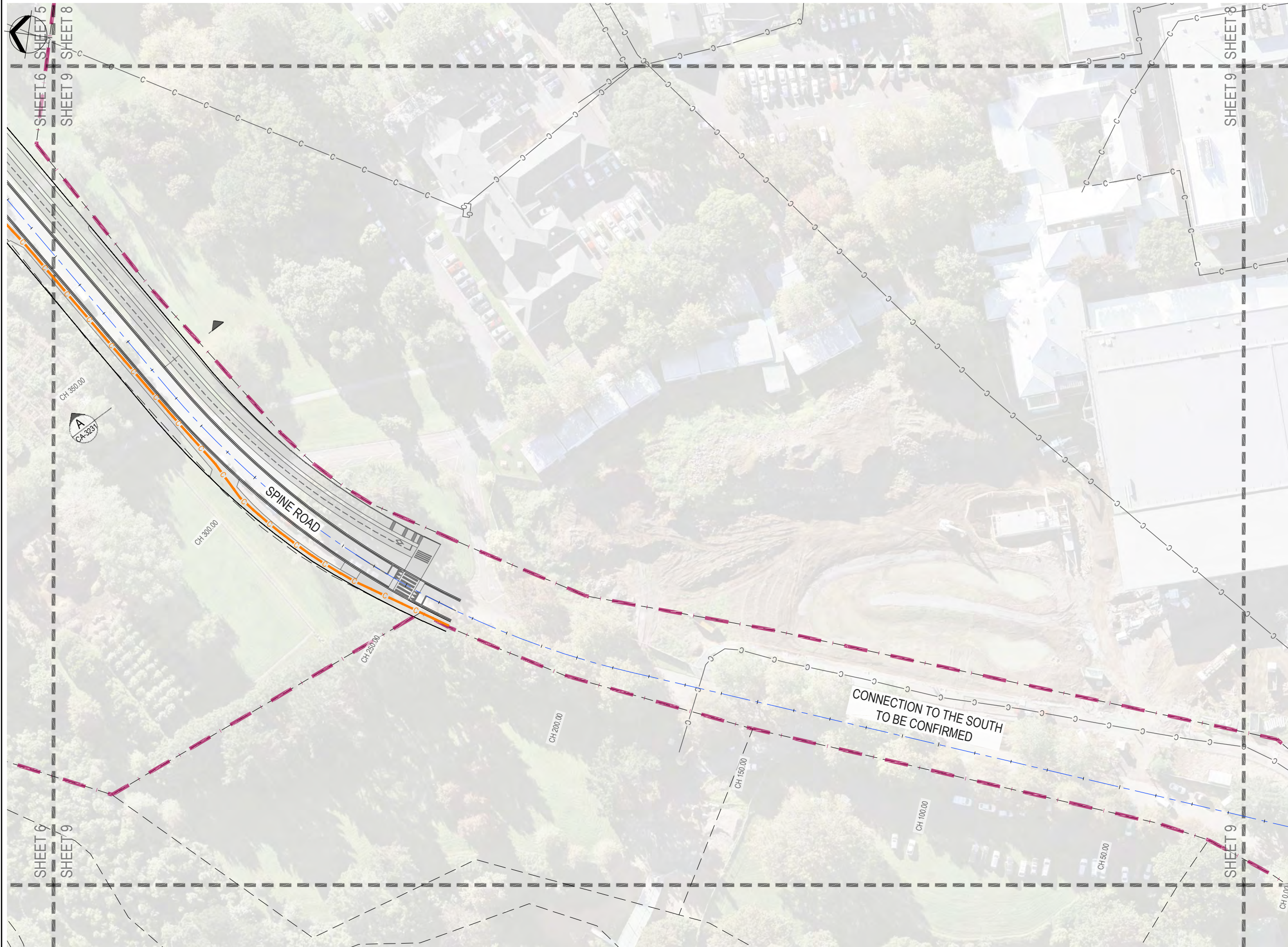
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **COMMUNICATIONS LAYOUT SHEET 8**

Discipline	CIVIL ENGINEERING	
Drawing No.	3126447-CA-7308	Rev.
		E



LEGEND:

- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- EXISTING COMMUNICATIONS
- COMMUNICATIONS CORRIDOR

- NOTES:**
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ORIGINAL DRAWING
IN COLOUR
RESOURCE CONSENT
NOT FOR CONSTRUCTION

No.	Revision	By	CHK	Appd	Date
E	MINOR AMENDMENTS	ABL	CJB	DP	31.08.21
D	INTERSECTION AMENDMENTS	ABL	CJB	DP	11.08.21
C	GATE 1 ROAD ADDED	ABL	CJB	DP	23.07.21
B	FOR RESOURCE CONSENT	ABL	CJB	RM	05.07.21

Drawing Originator:

Original Scale (A1)	Design	C.BREYTENBACH	08.06.21	Approved For Construction*
1:500	Drawn	A.FAZEKAS	08.06.21	Date
Reduced Scale (A3)	Design Verifier			
1:1000	Design Check			

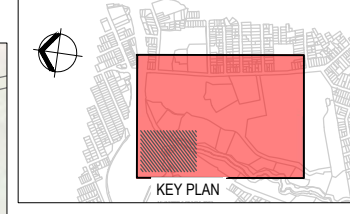
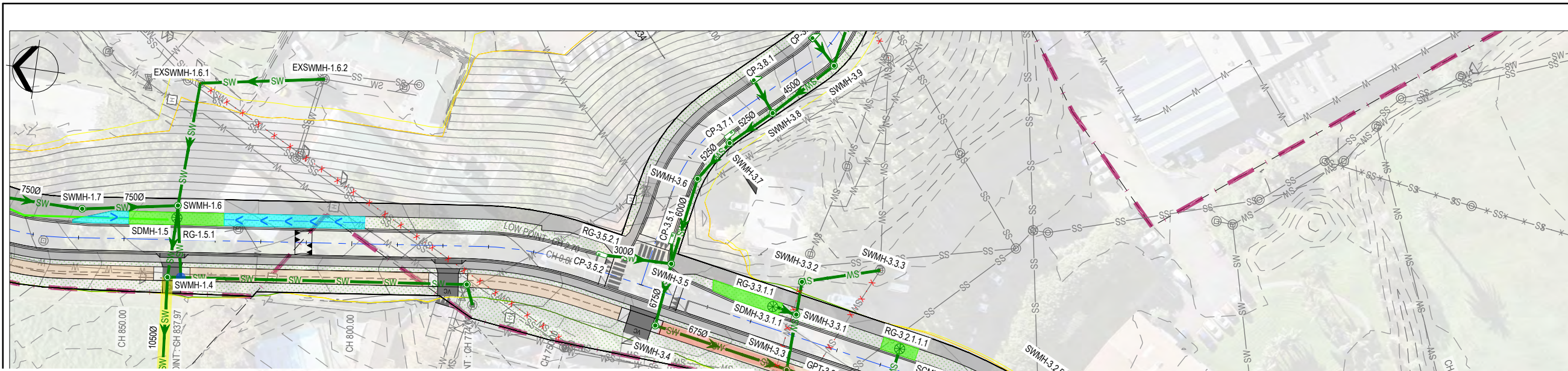
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

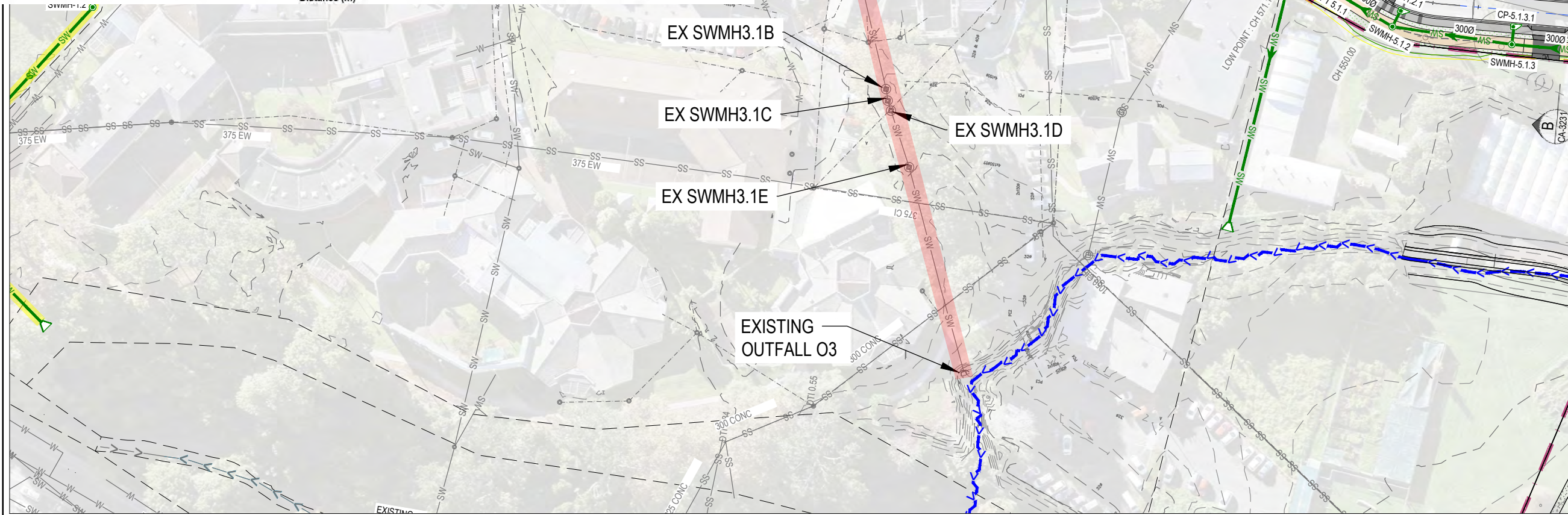
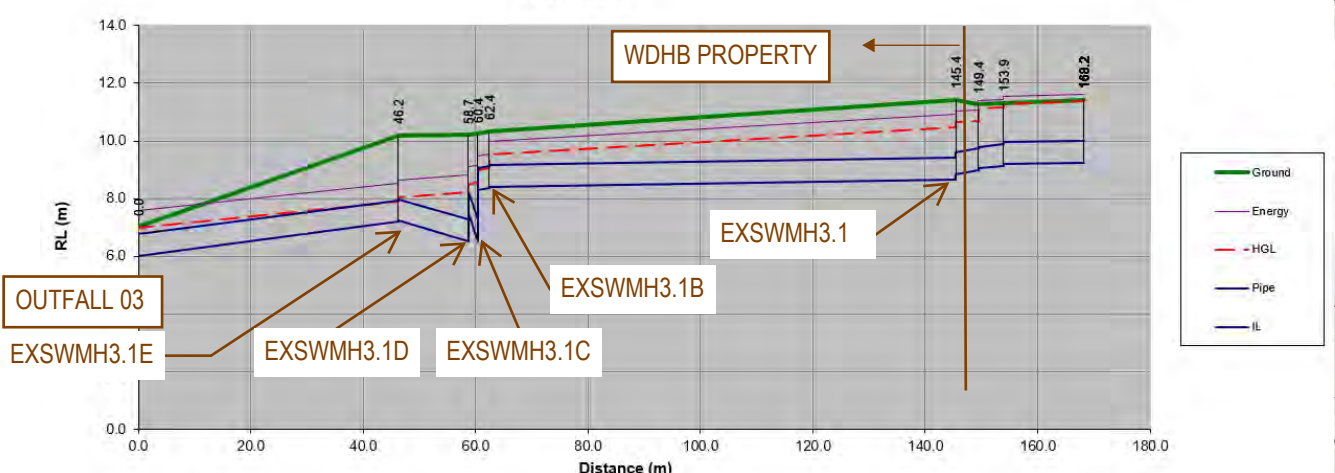
Title: **COMMUNICATIONS LAYOUT SHEET 9**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-7309
Rev.	E



- LEGEND:**
- EXIST. CONTOURS (0.5m INTERVALS)
 - DESIGN CONTOURS (0.5m INTERVALS)
 - PROPERTY BOUNDARIES
 - SITE BOUNDARY
 - FUTURE CARRINGTON ROAD WIDENING
 - EXIST. STORMWATER LINE
 - NEW STORMWATER LINE
 - NEW STORMWATER MANHOLE/GPT
 - NEW SCRUFFY DOME
 - NEW SPLAY/FIELD CATCHPIT
 - NEW SEMI-RECESSED CATCHPIT
 - CONCRETE HEADWALL
 - RAINGARDENS
 - SWALES
 - PROTECTED TREES WHICH MAY BE REMOVED
 - PROTECTED TREES TO BE RETAINED
 - BUILDING NUMBERS

HGL Analysis



- NOTES:**
1. SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 2. EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 3. COORDINATES IN TERMS OF MT EDEN 2000.
 4. ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.
 5. EXISTING UTILITIES INFORMATION TO BE CONFIRMED.
 6. ALL NEW STORMWATER PIPES TO BE RCRRJ TO THE CLASSES SHOWN ON THE LONG SECTIONS
 7. THE CONTRACTOR IS TO CCTV ALL SECTIONS OF THE EXISTING LINE TO BE ABANDONED TO CHECK FOR EXISTING CONNECTIONS AND CONFIRM THAT THEY ARE NO LONGER LIVE.
 8. ALL CATCHPITS TO HAVE EXTENDED INLET TYPE IN ACCORDANCE WITH AUCKLAND TRANSPORT DRAWING RD038.
 9. CONSTRUCTION DETAILS TO BE IN ACCORDANCE WITH AUCKLAND COUNCIL STORMWATER CODE OF PRACTICE TYPICAL DRAWING SW SERIES.
 10. TRENCH BACKFILL UNDER THE CARRIAGEWAY AND EXTENDING A MINIMUM 1 METRE BEYOND THE KERB FACE TO BE GAP65 COMPACTED IN 200mm LAYERS TO 95% MDD.
 11. FOR CATCHPIT LEADS UNDER THE BERMS INSTALL DENSO TAPE OR SIMILAR OVER PIPE JOINTS FOR ROOT PROTECTION.
 12. ANTI-SLIP COATING WILL BE PROVIDED ON ALL STORMWATER CHAMBER LIDS ON FOOTPATH AND CYCLE LANES

**ORIGINAL DRAWING
IN COLOUR**

**FOR INFORMATION
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
A	FOR INFORMATION	NMM			0.1.12.21

Drawing Originator: **Beca**

Original Scale (A1)	Design	N.MCLEAN	12.11.21	Approved For Construction*
1:1500	Drawn	N.MCLEAN	12.11.21	Date
Reduced Scale (A3)	Dwg Verifier			
1:3000	Dwg Check			

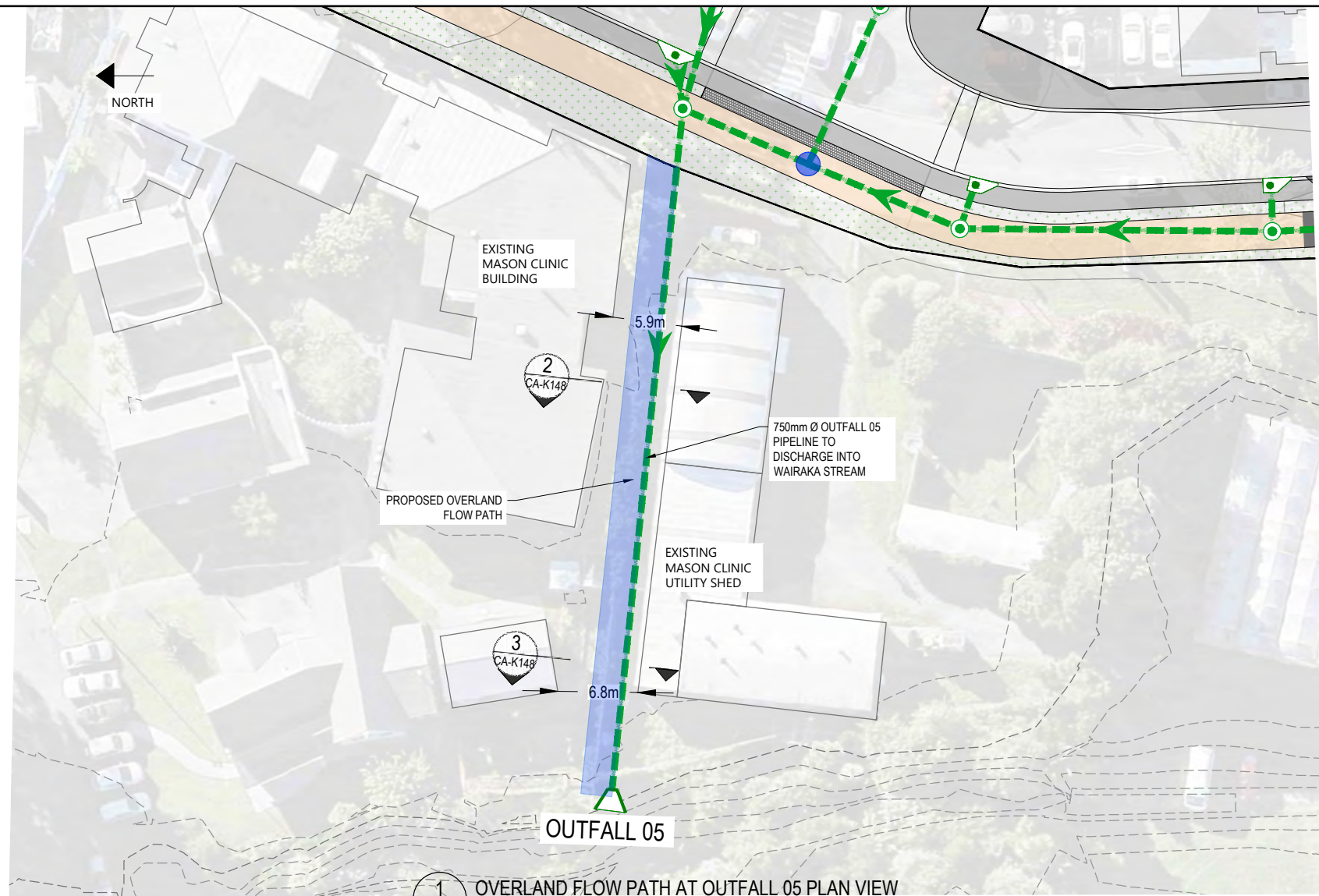
* Refer to Revision 1 for Original Signature

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPU**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER ALTERNATIVE LAYOUT PLAN OUTFALL 03 IN WDHB**

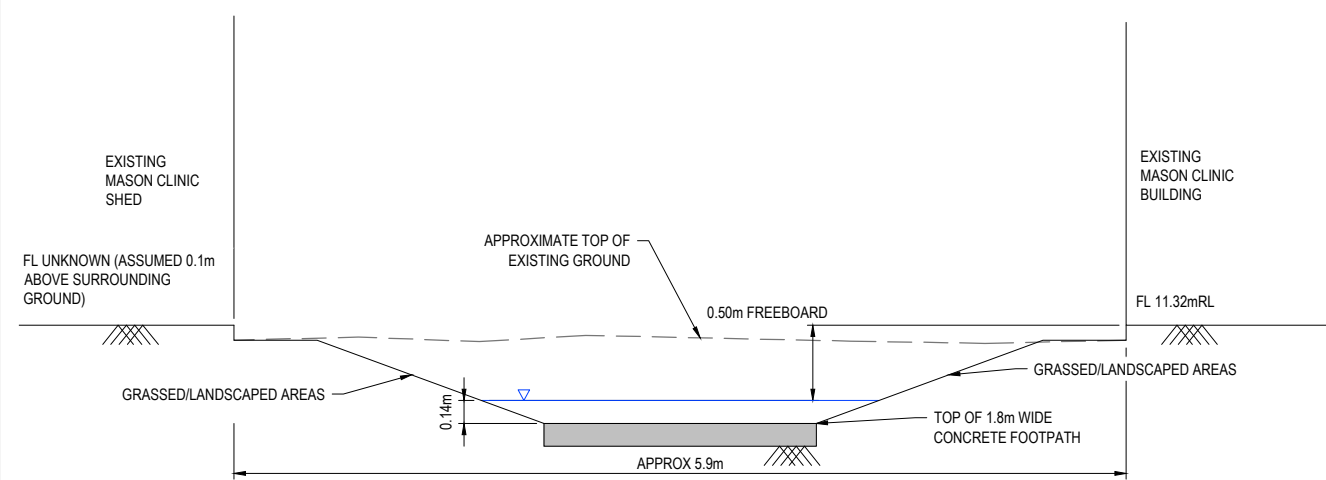
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K137
Rev.	B



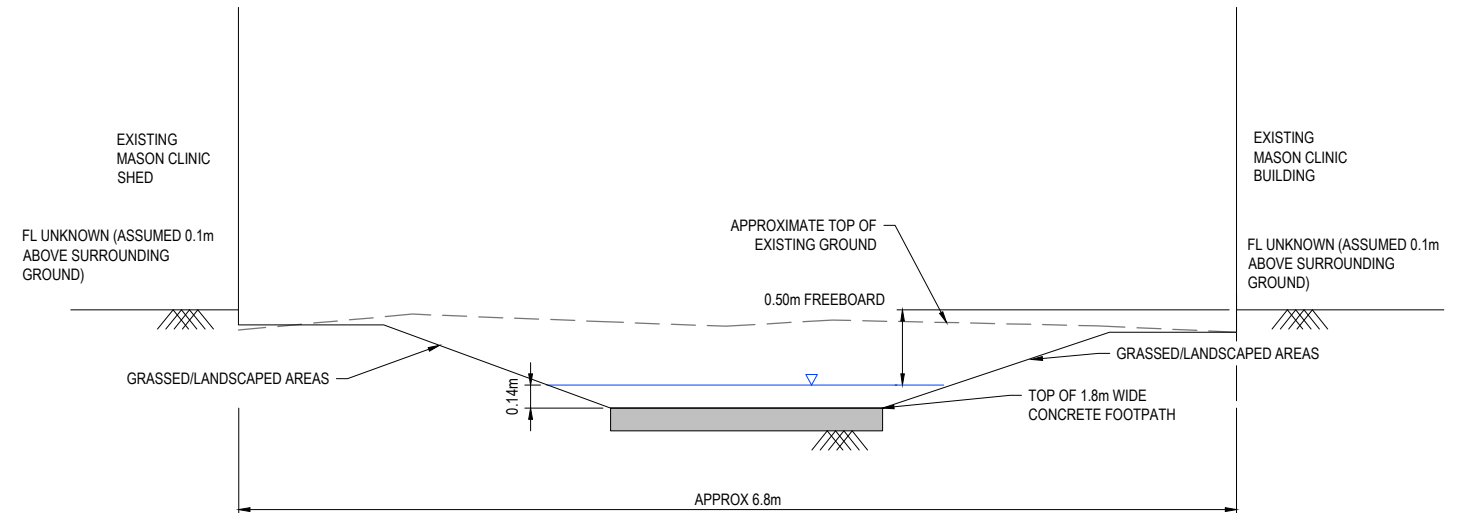
1 OVERLAND FLOW PATH AT OUTFALL 05 PLAN VIEW
K148 NTS

NOTES:

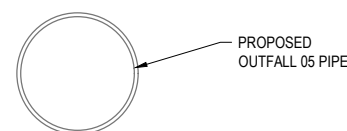
1. FLOOR LEVELS OF ADJACENT BUILDINGS TO BE CONFIRMED ON SITE BEFORE COMMENCEMENT OF WORKS
2. EXISTING GROUND LEVELS BASED ON LIDAR SURVEY
3. OVERLAND FLOW ESTIMATED ON 100 YEAR ARI FLOW, 3.8 DEGREES OF CLIMATE CHANGE AND 50% BLOCKAGE OF PRIMARY PIPED NETWORK.
4.
 - FLOW DEPTH ≈ 140mm
 - FLOW WIDTH ≈ 2.7m
 - DEPTH x VELOCITY ≈ 0.27



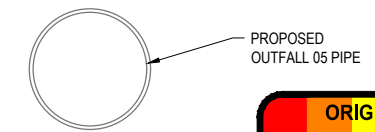
2 OVERLAND FLOW PATH AT OUTFALL 05 TYPICAL SECTION
K148 NTS



3 OVERLAND FLOW PATH AT OUTFALL 05 TYPICAL SECTION
K148 NTS



PROPOSED OUTFALL 05 PIPE



PROPOSED OUTFALL 05 PIPE

ORIGINAL DRAWING
IN COLOUR

FOR INFORMATION
NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
B	ADDITIONAL FLOW INFORMATION	NM	NM	DSP	01.02.22
A	FOR INFORMATION	FMU	NM	DSP	28.01.22

Drawing Originator:

Original Scale (A1)	Design	Drawn	Date	Approved For Construction*
AS SHOWN	N.MCLEAN	N.MCLEAN	28.01.22	28.01.22
Reduced Scale (A3)	Design Verifier			
HALF SHOWN	Design Check			

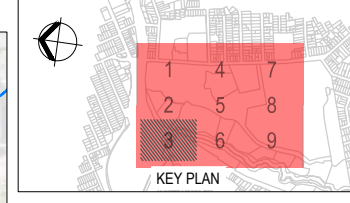
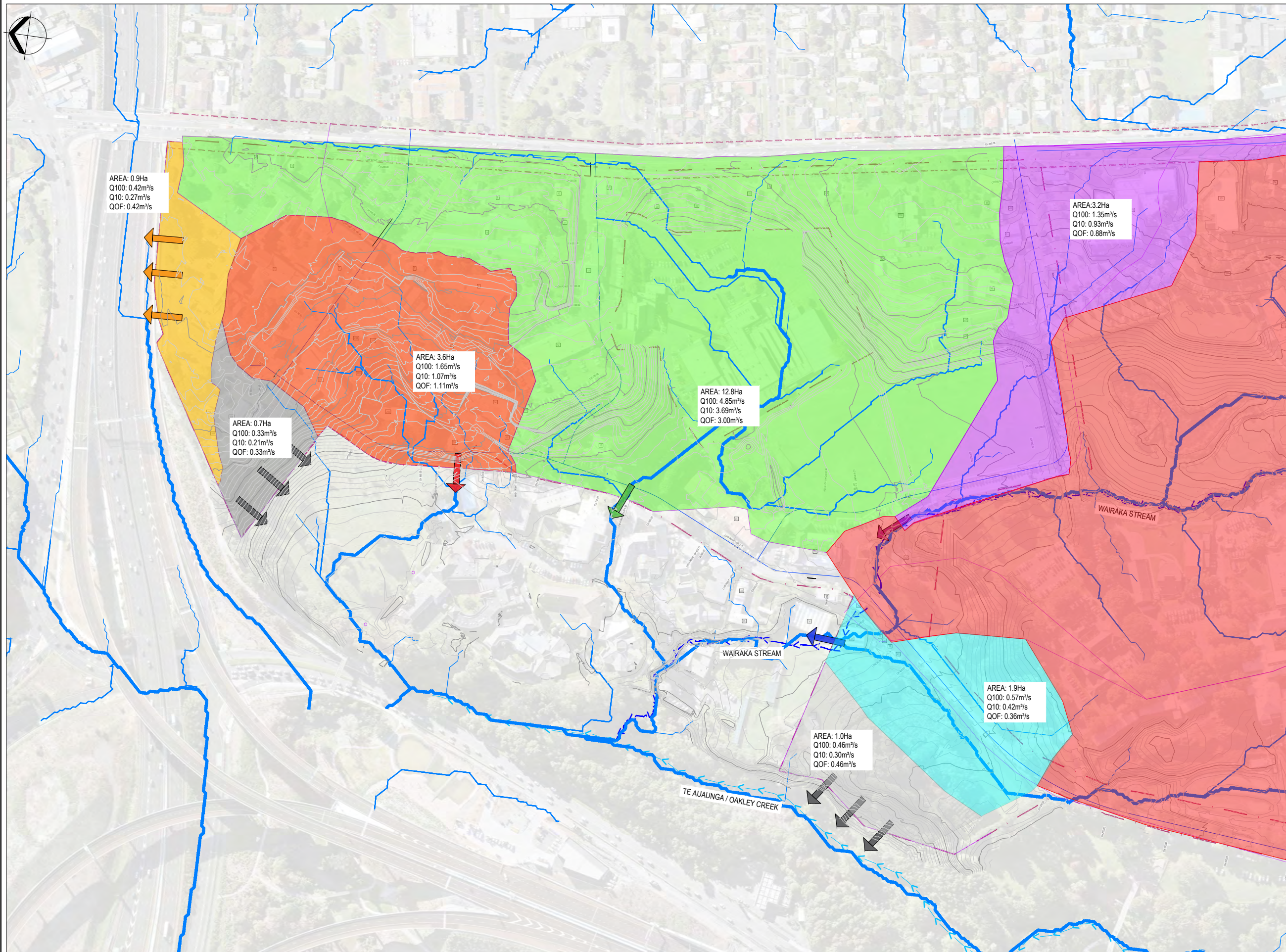
* Refer to Revision 1 for Original Signature

Client: MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ

Project: CARRINGTON BACKBONE WORKS PROJECT

Title: OUTFALL 05 OVERLAND FLOW PATH INDICATIVE DETAILS

Discipline	Rev.
CIVIL ENGINEERING	B
Drawing No.	3126447-CA-K148



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- DIRECTION OF WATER FLOWS
- OVERLAND FLOWS*
- OVERLAND FLOW EXIT
- EXISTING STORMWATER LINE

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.
 - EXISTING UTILITIES INFORMATION TO CONFIRMED.

ORIGINAL DRAWING
IN COLOUR
**FOR INFORMATION
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
C	VALUES UPDATED FOR CODE OF PRACTICE VERSION 3	NMM	RM		01.11.21
B	REVISED - FOR INFORMATION	NMM	RM		08.10.21
A	FOR INFORMATION	ABL	FMU		

Drawing Originator: **Beca**

Original Scale (A1) 1:1500
Reduced Scale (A3) 1:3000

Design: F.M. UNDERWOOD
Drawn: A. FAZEKAS
Dag Verifier: []
Dag Check: []
*Refer to Revision 1 for Original Signature

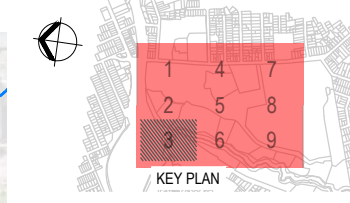
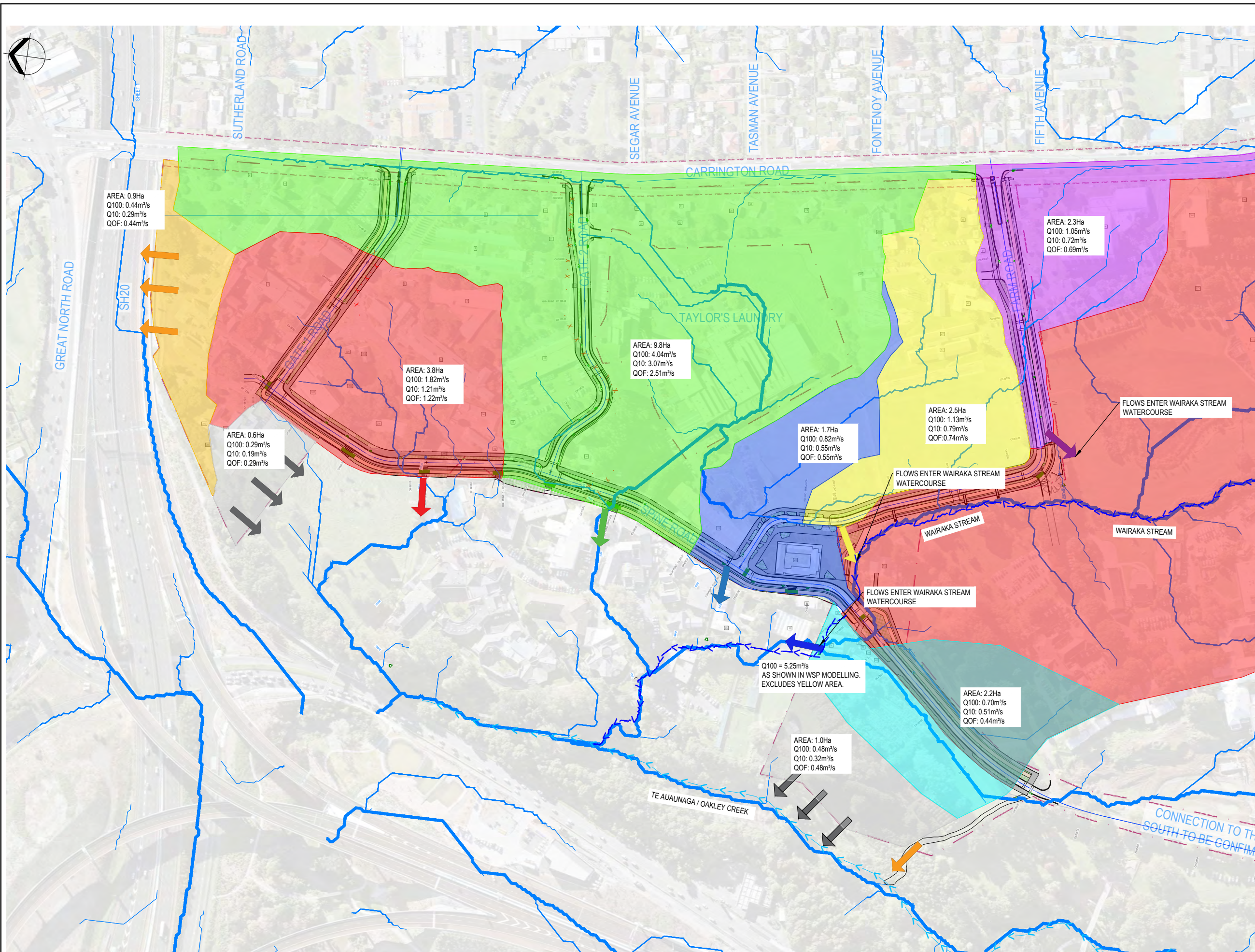
Approved For Construction*
Date: []

Client: **MARUTŪĀHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER CATCHMENT PLAN EXISTING - 1% ARI**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K088
Rev.	C



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- DIRECTION OF EXISTING WATERCOURSES
- OVERLAND FLOWS
- OVERLAND FLOW EXIT

- NOTES:**
- SURVEY DATA SHOWN ON THIS PLAN WAS PROVIDED BY CALIBRE CONSULTING LIMITED SURVEYED ON 2017.
 - EXISTING SERVICES INFORMATION HAS BEEN COMPILED FROM VARIOUS SOURCES. ACCURACY UNKNOWN. CONTRACTOR TO LOCATE AND MARK OUT SERVICES PRIOR TO CONSTRUCTION WORKS.
 - COORDINATES ARE IN TERMS OF MT EDEN 2000.
 - ELEVATIONS ARE IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016.
 - EXISTING UTILITIES INFORMATION TO BE CONFIRMED.

**ORIGINAL DRAWING
IN COLOUR**

**FOR INFORMATION
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
C	WAIRAKA STREAM AND OAKLEY CREEK LABELLED	NMM	RM		19.11.21
B	VALUES UPDATED FOR CODE OF PRACTICE VERSION 3	NMM	RM		01.11.21
A	FOR INFORMATION	NMM	RM		08.10.21

Drawing Originator: **Beca**

Original Scale (A1) 1:1500
Reduced Scale (A3) 1:3000

Design: N.MCLEAN
Drawn: A.FAZEKAS
Dwg Verifier: []
Dwg Check: []
Date: []

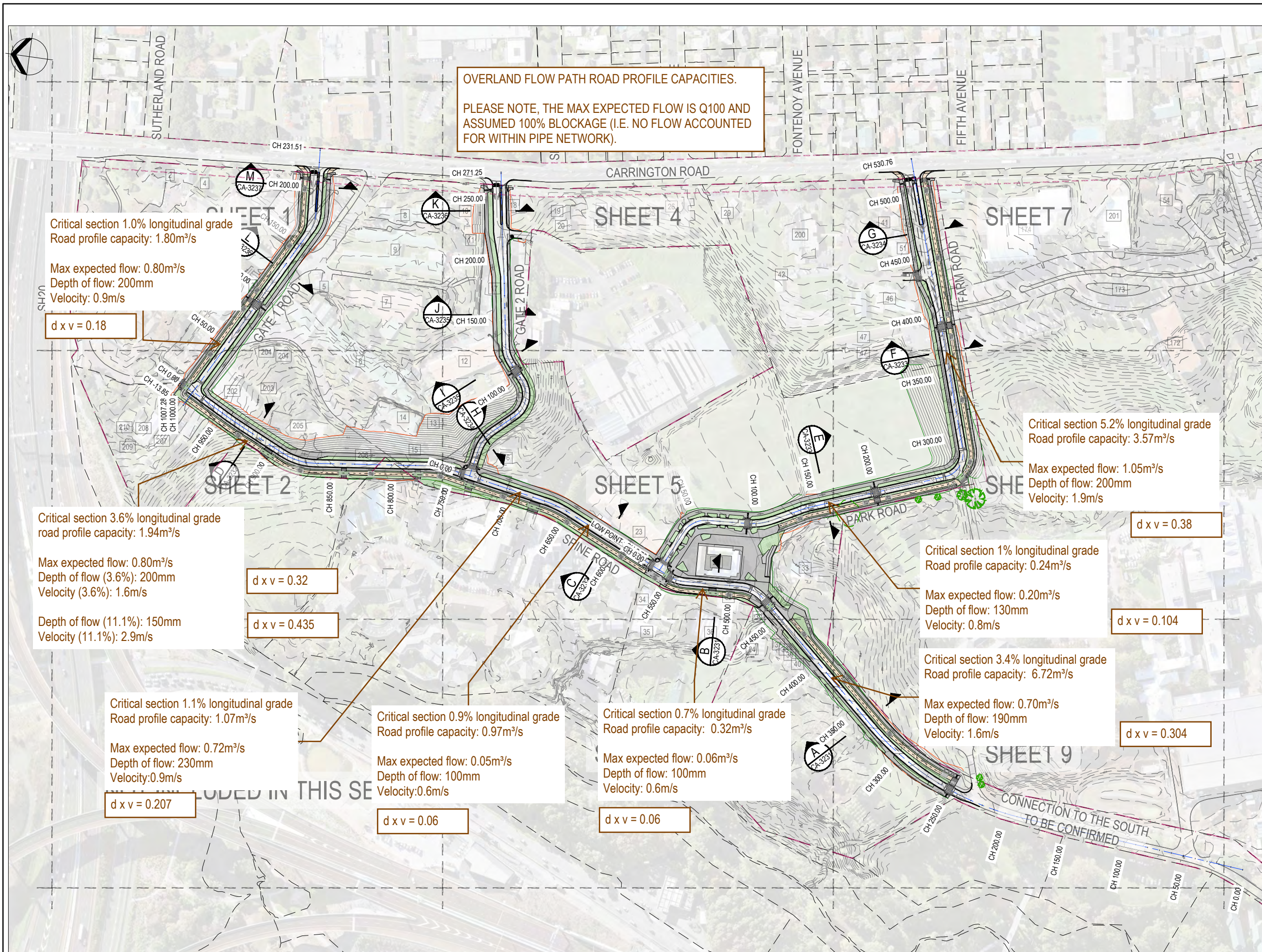
Approved For Construction: []
Date: []

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

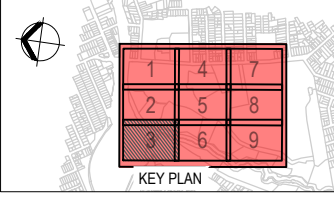
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER CATCHMENT PLAN PROPOSED - 1% ARI - OPTION E**

Discipline: CIVIL ENGINEERING	Rev: C
Drawing No: 3126447-CA-K117	



OVERLAND FLOW PATH ROAD PROFILE CAPACITIES.
 PLEASE NOTE, THE MAX EXPECTED FLOW IS Q100 AND ASSUMED 100% BLOCKAGE (I.E. NO FLOW ACCOUNTED FOR WITHIN PIPE NETWORK).



- LEGEND:**
- EXISTING CONTOURS (0.5m INTERVALS)
 - DESIGN CONTOURS (0.5m INTERVALS)
 - PROPERTY BOUNDARIES
 - SITE BOUNDARY
 - FUTURE CARRINGTON ROAD WIDENING
 - CORRIDOR DAYLIGHT CUT
 - CORRIDOR DAYLIGHT FILL
 - FOOT PATH/ SHARED PATH
 - CYCLE PATH
 - BICYCLE CROSSING
 - PLANTED AREAS
 - PROTECTED TREES TO BE REMOVED
 - PROTECTED TREES TO BE RETAINED
 - PROTECTED TREES TO BE REMOVED (MAYBE RETAINED SUBJECT TO DETAILED DESIGN)
 - BUILDING NUMBERS

Critical section 1.0% longitudinal grade
 Road profile capacity: 1.80m³/s
 Max expected flow: 0.80m³/s
 Depth of flow: 200mm
 Velocity: 0.9m/s
d x v = 0.18

Critical section 3.6% longitudinal grade
 road profile capacity: 1.94m³/s
 Max expected flow: 0.80m³/s
 Depth of flow (3.6%): 200mm
 Velocity (3.6%): 1.6m/s
d x v = 0.32
 Depth of flow (11.1%): 150mm
 Velocity (11.1%): 2.9m/s
d x v = 0.435

Critical section 1.1% longitudinal grade
 Road profile capacity: 1.07m³/s
 Max expected flow: 0.72m³/s
 Depth of flow: 230mm
 Velocity: 0.9m/s
d x v = 0.207

Critical section 0.9% longitudinal grade
 Road profile capacity: 0.97m³/s
 Max expected flow: 0.05m³/s
 Depth of flow: 100mm
 Velocity: 0.6m/s
d x v = 0.06

Critical section 0.7% longitudinal grade
 Road profile capacity: 0.32m³/s
 Max expected flow: 0.06m³/s
 Depth of flow: 100mm
 Velocity: 0.6m/s
d x v = 0.06

Critical section 5.2% longitudinal grade
 Road profile capacity: 3.57m³/s
 Max expected flow: 1.05m³/s
 Depth of flow: 200mm
 Velocity: 1.9m/s
d x v = 0.38

Critical section 1% longitudinal grade
 Road profile capacity: 0.24m³/s
 Max expected flow: 0.20m³/s
 Depth of flow: 130mm
 Velocity: 0.8m/s
d x v = 0.104

Critical section 3.4% longitudinal grade
 Road profile capacity: 6.72m³/s
 Max expected flow: 0.70m³/s
 Depth of flow: 190mm
 Velocity: 1.6m/s
d x v = 0.304

No.	Revision	By	Chk.	Appd.	Date



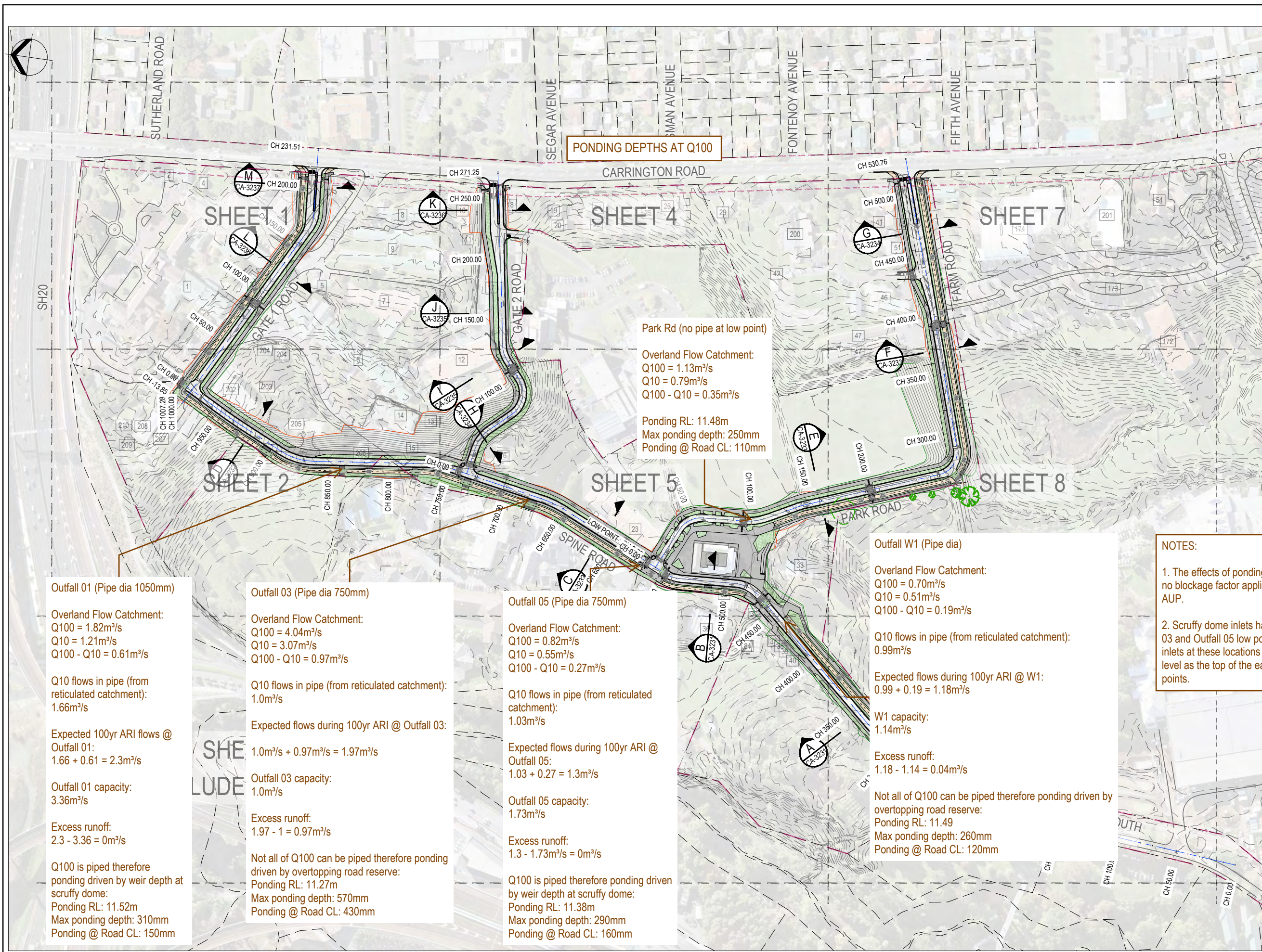
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Reduced Scale (A3)	1:3000	Drawn	N.MCLEAN	Date	
		Design Verifier			
		Design Check			
		* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **OVERLAND FLOW ROAD PROFILE CAPACITY SKETCH**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K128
Rev.	B



PONDING DEPTHS AT Q100

Park Rd (no pipe at low point)
 Overland Flow Catchment:
 Q100 = 1.13m³/s
 Q10 = 0.79m³/s
 Q100 - Q10 = 0.35m³/s
 Ponding RL: 11.48m
 Max ponding depth: 250mm
 Ponding @ Road CL: 110mm

Outfall 01 (Pipe dia 1050mm)
 Overland Flow Catchment:
 Q100 = 1.82m³/s
 Q10 = 1.21m³/s
 Q100 - Q10 = 0.61m³/s
 Q10 flows in pipe (from reticulated catchment): 1.66m³/s
 Expected 100yr ARI flows @ Outfall 01: 1.66 + 0.61 = 2.3m³/s
 Outfall 01 capacity: 3.36m³/s
 Excess runoff: 2.3 - 3.36 = 0m³/s
 Q100 is piped therefore ponding driven by weir depth at scruffy dome:
 Ponding RL: 11.52m
 Max ponding depth: 310mm
 Ponding @ Road CL: 150mm

Outfall 03 (Pipe dia 750mm)
 Overland Flow Catchment:
 Q100 = 4.04m³/s
 Q10 = 3.07m³/s
 Q100 - Q10 = 0.97m³/s
 Q10 flows in pipe (from reticulated catchment): 1.0m³/s
 Expected flows during 100yr ARI @ Outfall 03: 1.0m³/s + 0.97m³/s = 1.97m³/s
 Outfall 03 capacity: 1.0m³/s
 Excess runoff: 1.97 - 1 = 0.97m³/s
 Not all of Q100 can be piped therefore ponding driven by overtopping road reserve:
 Ponding RL: 11.27m
 Max ponding depth: 570mm
 Ponding @ Road CL: 430mm

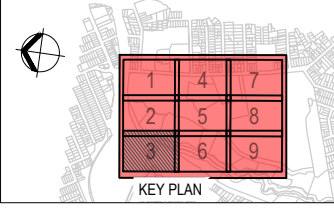
Outfall 05 (Pipe dia 750mm)
 Overland Flow Catchment:
 Q100 = 0.82m³/s
 Q10 = 0.55m³/s
 Q100 - Q10 = 0.27m³/s
 Q10 flows in pipe (from reticulated catchment): 1.03m³/s
 Expected flows during 100yr ARI @ Outfall 05: 1.03 + 0.27 = 1.3m³/s
 Outfall 05 capacity: 1.73m³/s
 Excess runoff: 1.3 - 1.73m³/s = 0m³/s
 Q100 is piped therefore ponding driven by weir depth at scruffy dome:
 Ponding RL: 11.38m
 Max ponding depth: 290mm
 Ponding @ Road CL: 160mm

Outfall W1 (Pipe dia)
 Overland Flow Catchment:
 Q100 = 0.70m³/s
 Q10 = 0.51m³/s
 Q100 - Q10 = 0.19m³/s
 Q10 flows in pipe (from reticulated catchment): 0.99m³/s
 Expected flows during 100yr ARI @ W1: 0.99 + 0.19 = 1.18m³/s
 W1 capacity: 1.14m³/s
 Excess runoff: 1.18 - 1.14 = 0.04m³/s
 Not all of Q100 can be piped therefore ponding driven by overtopping road reserve:
 Ponding RL: 11.49
 Max ponding depth: 260mm
 Ponding @ Road CL: 120mm

NOTES:
 1. The effects of ponding depths have been assessed with no blockage factor applied to the primary network as per the AUP.
 2. Scruffy dome inlets have been used at Outfall 01, Outfall 03 and Outfall 05 low points. The top of the scruffy dome inlets at these locations have been assumed to be the same level as the top of the eastern kerb of the road at the sag points.

LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS
- PROTECTED TREES TO BE REMOVED
- PROTECTED TREES TO BE RETAINED
- PROTECTED TREES TO BE REMOVED (MAYBE RETAINED SUBJECT TO DETAILED DESIGN)
- BUILDING NUMBERS



No.	Revision	By	Chk.	Appd.	Date

Original Scale (A1) 1:1500
 Reduced Scale (A3) 1:3000

Beca

Design: N.MCLEAN
 Drawn: N.MCLEAN
 Design Verifier: [Signature]
 Design Check: [Signature]
 * Refer to Revision 1 for Original Signature

Approved For Construction? [Signature]
 Date: [Date]

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **OVERLAND FLOW PONDING DEPTHS SKETCH**

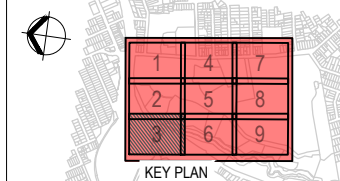
Discipline: **CIVIL ENGINEERING**

Drawing No: **3126447-CA-K129**

Rev: **C**

ORIGINAL DRAWING IN COLOUR

DEVELOPED DESIGN NOT FOR CONSTRUCTION



LEGEND:

- EXISTING CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- CORRIDOR DAYLIGHT CUT
- CORRIDOR DAYLIGHT FILL
- FOOT PATH/ SHARED PATH
- CYCLE PATH
- BICYCLE CROSSING
- PLANTED AREAS
- PROTECTED TREES TO BE REMOVED
- PROTECTED TREES TO BE RETAINED
- PROTECTED TREES TO BE REMOVED (MAYBE RETAINED SUBJECT TO DETAILED DESIGN)
- BUILDING NUMBERS

PONDING DEPTHS AT Q100

Outfall 01 (Pipe dia 1050mm)

Overland Flow Catchment:
 Q100 = 1.82m³/s
 Q10 = 1.21m³/s
 Q100 - Q10 = 0.61m³/s

Q10 flows in pipe (from reticulated catchment):
 1.66m³/s

Expected 100yr ARI flows @
 Outfall 01:
 1.66 + 0.61 = 2.3m³/s

Outfall 01 capacity:
 3.36m³/s

Excess runoff:
 2.3 - 3.36 = 0m³/s

Q100 is piped therefore ponding driven by weir depth at scruffy dome:
 Ponding RL: 11.52m
 Max ponding depth: 310mm
 Ponding @ Road CL: 150mm

Outfall 05 (Pipe dia 750mm)

Overland Flow Catchment:
 Q100 = 0.82m³/s
 Q10 = 0.55m³/s
 Q100 - Q10 = 0.27m³/s

Q10 flows in pipe (from reticulated catchment):
 1.03m³/s

Expected flows during 100yr ARI @
 Outfall 05:
 1.03 + 0.27 = 1.3m³/s

Outfall 05 capacity:
 1.73m³/s

Excess runoff:
 1.3 - 1.73m³/s = 0m³/s

Q100 is piped therefore ponding driven by weir depth at scruffy dome:
 Ponding RL: 11.38m
 Max ponding depth: 290mm
 Ponding @ Road CL: 160mm

Park Rd (no pipe at low point)

Overland Flow Catchment:
 Q100 = 1.13m³/s
 Q10 = 0.79m³/s
 Q100 - Q10 = 0.35m³/s

Ponding RL: 11.48m
 Max ponding depth: 250mm
 Ponding @ Road CL: 110mm

Outfall 03 (Pipe dia 750mm)

Overland Flow Catchment:
 Q100 = 4.04m³/s
 Q10 = 3.07m³/s
 Q100 - Q10 = 0.97m³/s

Q10 flows in pipe (from reticulated catchment):
 1.0m³/s

Expected flows during 100yr ARI @ Outfall 03:

1.0m³/s + 0.97m³/s = 1.97m³/s

Outfall 03 capacity:
 1.0m³/s

Excess runoff:
 1.97 - 1 = 0.97m³/s

Not all of Q100 can be piped therefore ponding driven by overtopping road reserve:
 Ponding RL: 11.27m
 Max ponding depth: 570mm
 Ponding @ Road CL: 430mm

Outfall W1 (Pipe dia)

Overland Flow Catchment:
 Q100 = 0.70m³/s
 Q10 = 0.51m³/s
 Q100 - Q10 = 0.19m³/s

Q10 flows in pipe (from reticulated catchment):
 0.99m³/s

Expected flows during 100yr ARI @ W1:
 0.99 + 0.19 = 1.18m³/s

W1 capacity:
 1.14m³/s

Excess runoff:
 1.18 - 1.14 = 0.04m³/s

Not all of Q100 can be piped therefore ponding driven by overtopping road reserve:
 Ponding RL: 11.49
 Max ponding depth: 260mm
 Ponding @ Road CL: 120mm

NOTES:

- The effects of ponding depths have been assessed with no blockage factor applied to the primary network as per the AUP.
- Scruffy dome inlets have been used at Outfall 01, Outfall 03 and Outfall 05 low points. The top of the scruffy dome inlets at these locations have been assumed to be the same level as the top of the eastern kerb of the road at the sag points.

NOT INCLUDE

No.	Revision	By	Chk	Appd	Date



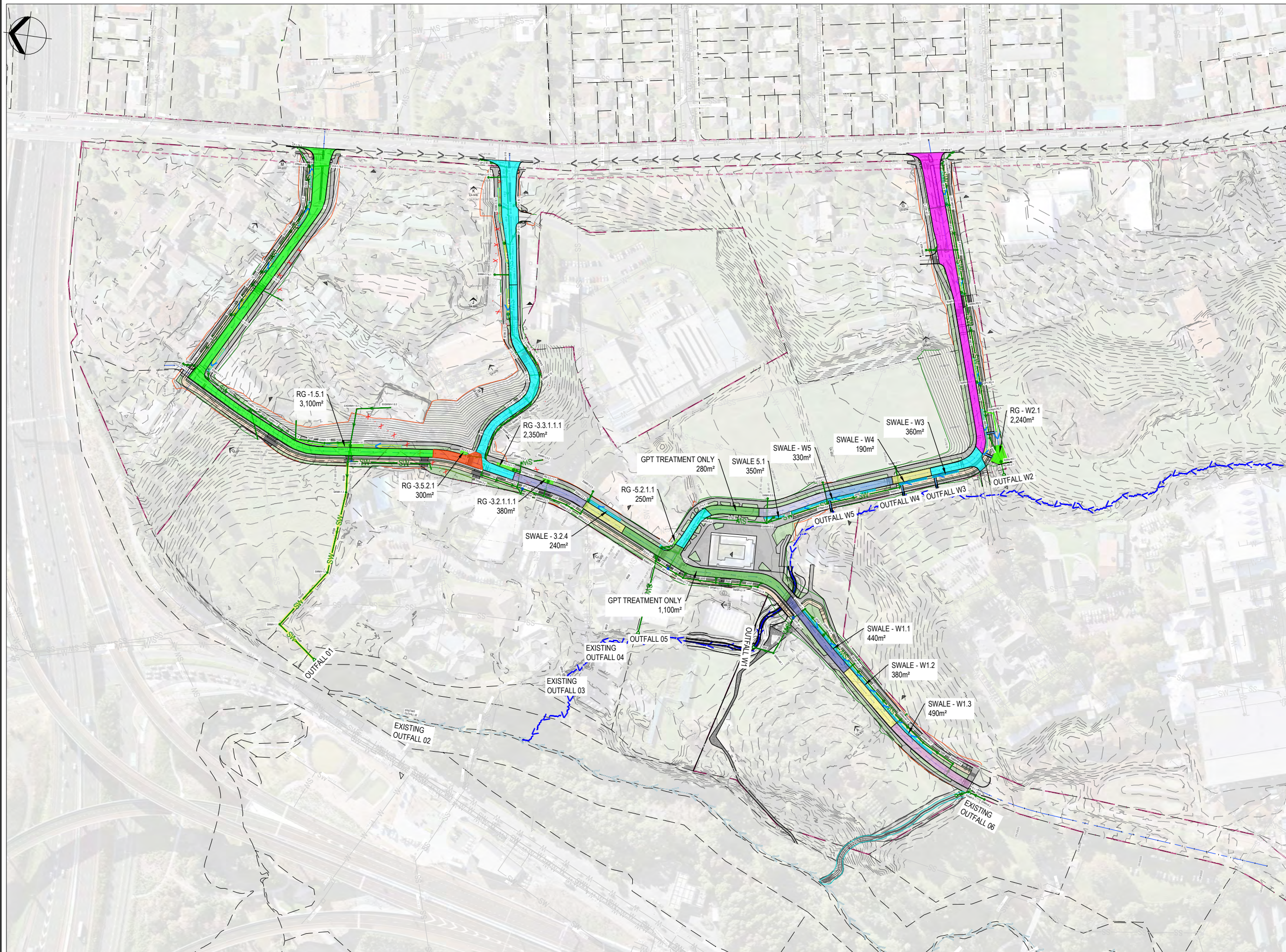
Original Scale (A1)	1:1500	Design	N.MCLEAN	Approved For Construction*	
Reduced Scale (A3)	1:3000	Drawn	N.MCLEAN	Date	
		Design Verifier			
		Design Check			
		* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPU**

Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **OVERLAND FLOW PONDING DEPTHS SKETCH**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K129
Rev.	C



LEGEND:

- EXIST. CONTOURS (0.5m INTERVALS)
- DESIGN CONTOURS (0.5m INTERVALS)
- PROPERTY BOUNDARIES
- SITE BOUNDARY
- FUTURE CARRINGTON ROAD WIDENING
- SW - EXIST. STORMWATER LINE
- SW - NEW STORMWATER LINE
- NEW STORMWATER MANHOLE/GPT
- NEW SCRUFFY DOME
- NEW PLAYFIELD CATCHPIT
- NEW SEMI-RECESSED CATCHPIT
- CONCRETE HEADWALL
- RAINGARDENS
- CONVEYANCE SWALES
- TREATMENT SWALES
- PROTECTED TREES WHICH MAY BE REMOVED
- PROTECTED TREES TO BE RETAINED
- BUILDING NUMBERS
- ABANDONED STORMWATER LINE

ORIGINAL DRAWING
IN COLOUR
**FOR INFORMATION
NOT FOR CONSTRUCTION**

No.	Revision	By	Chk	Appd	Date
A	FOR INFORMATION	NMM			08.12.21



Original Scale (A1)	1:1500		
Reduced Scale (A3)	1:3000		
Design	N.MCLEAN	12.11.21	Approved For Construction*
Drawn	N.MCLEAN	12.11.21	Date
Dwg Verifier			
Dwg Check			
* Refer to Revision 1 for Original Signature			

Client: **MARUTŪAHU AND WAIOHUA-TĀMAKI RŌPŪ**

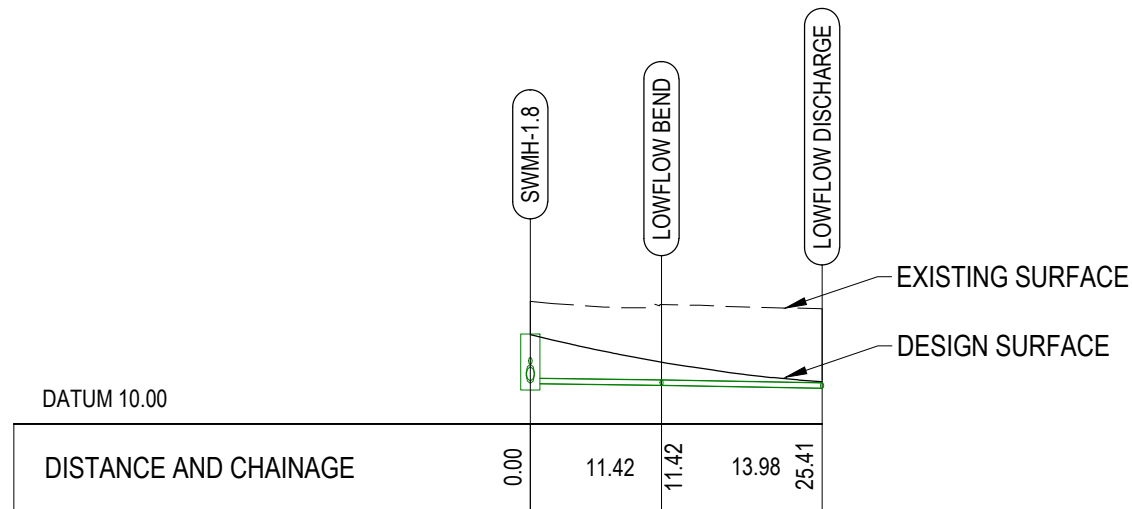
Project: **CARRINGTON BACKBONE WORKS PROJECT**

Title: **STORMWATER TREATMENT DEVICE CATCHMENT PLAN**

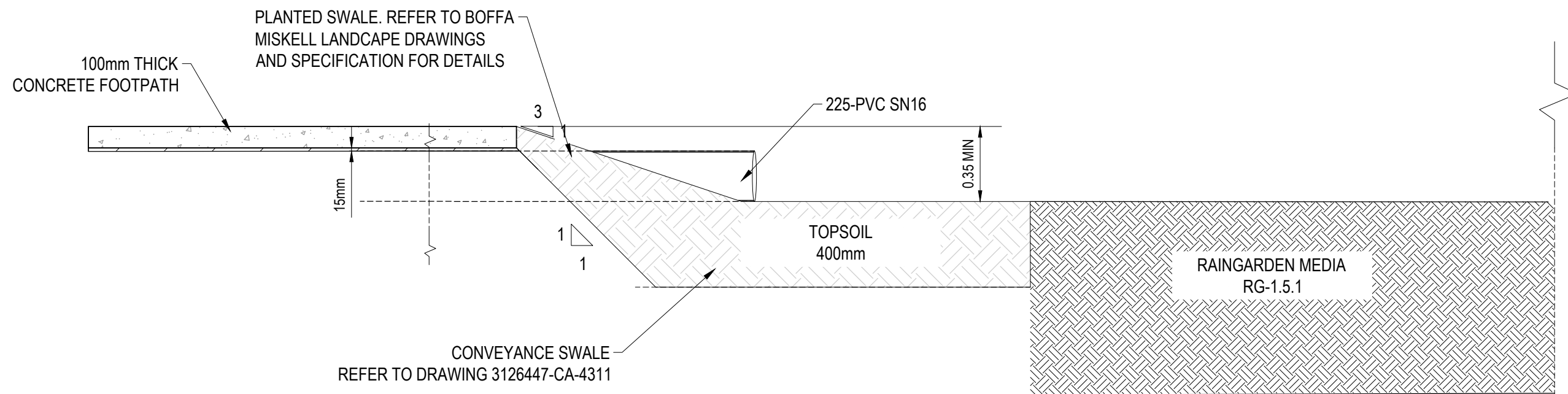
Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K138
Rev.	A

NOTES:

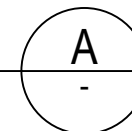
1. PLANTING AND LANDSCAPING OF RAINGARDENS WITHIN BOFFA MISKELL DRAWINGS AND SPECIFICATION.



LONGITUDINAL SECTION SWMH-1.8 LOWFLOW TO RAINGARDEN



TREATMENT FLOWS DISCHARGE
RG-1.5.1
 1:20 (A1)



ORIGINAL DRAWING
IN COLOUR
FOR INFORMATION
 NOT FOR CONSTRUCTION

No.	Revision	By	Chk	Appd	Date
A	FOR INFORMATION	NM	NM		08.12.21



Original Scale (A1)	AS SHOWN	Design	N.MCLEAN	08.12.21	Approved For Construction*
Reduced Scale (A3)	HALF SHOWN	Drawn	N.MCLEAN	08.12.21	Date
		Dag Verifier			
		Dag Check			

Client: **MARUTŪĀHU AND WAIOHUA-TĀMAKI RŌPŪ**












Project: **CARRINGTON BACKBONE WORKS PROJECT**

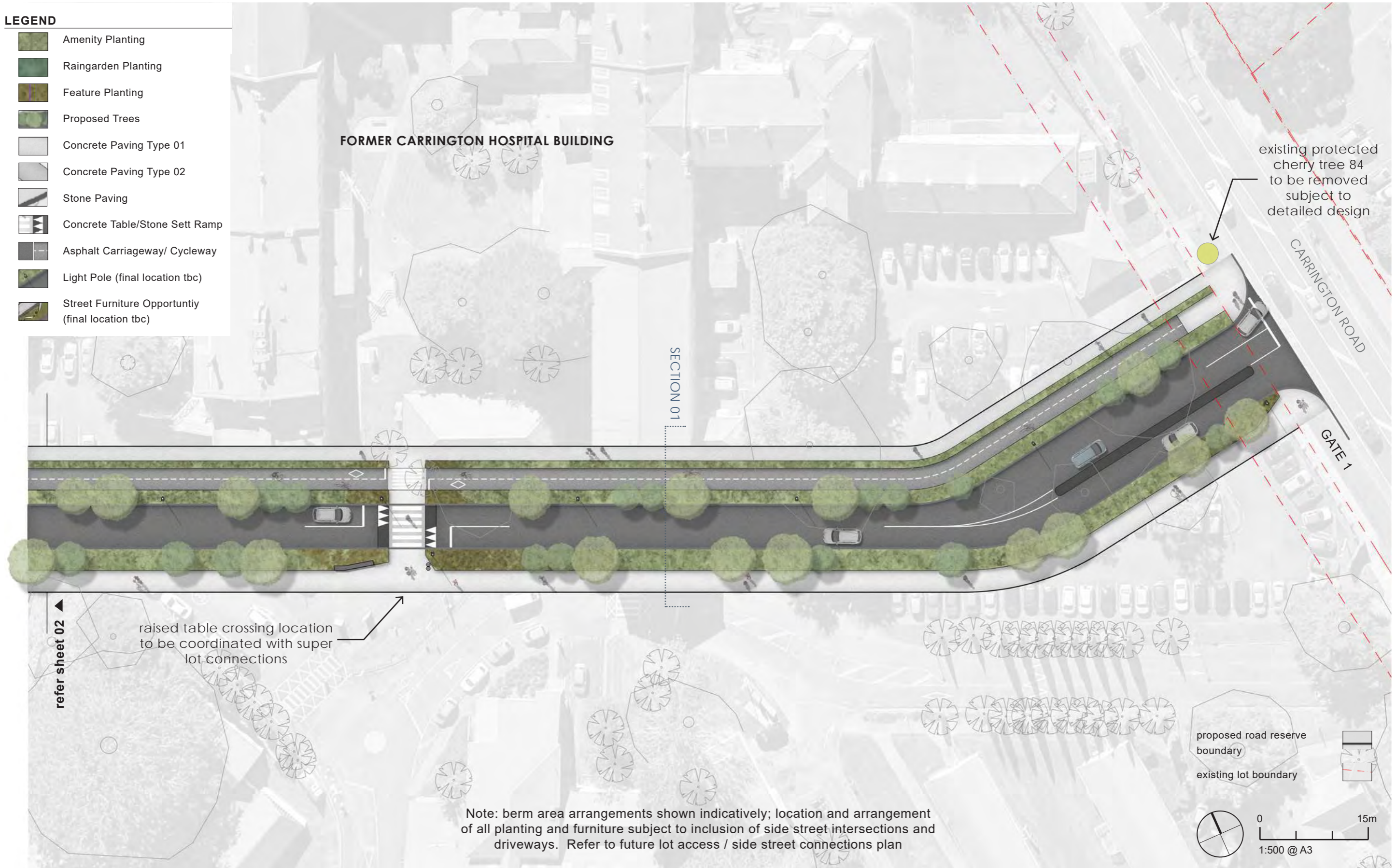
Title: **STORMWATER TREATMENT FLOW DISCHARGE DETAILS TO RG-1.5.1**

Discipline	CIVIL ENGINEERING
Drawing No.	3126447-CA-K139
Rev.	A

PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 01 - GATE 1 ROAD












- LEGEND**
-  Amenity Planting
 -  Raingarden Planting
 -  Feature Planting
 -  Proposed Trees
 -  Concrete Paving Type 01
 -  Concrete Paving Type 02
 -  Stone Paving
 -  Concrete Table/Stone Sett Ramp
 -  Asphalt Carriageway/ Cycleway
 -  Light Pole (final location tbc)
 -  Street Furniture Opportuntiy (final location tbc)

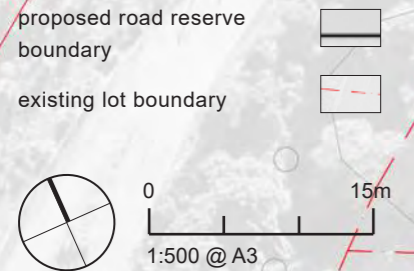


refer sheet 02
 raised table crossing location to be coordinated with super lot connections

PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 02 - GATE 1 ROAD












- LEGEND**
-  Amenity Planting
 -  Raingarden Planting
 -  Feature Planting
 -  Proposed Trees
 -  Concrete Paving Type 01
 -  Concrete Paving Type 02
 -  Stone Paving
 -  Concrete Table/Stone Sett Ramp
 -  Asphalt Carriageway/ Cycleway
 -  Light Pole (final location tbc)
 -  Street Furniture Opportuntiy (final location tbc)

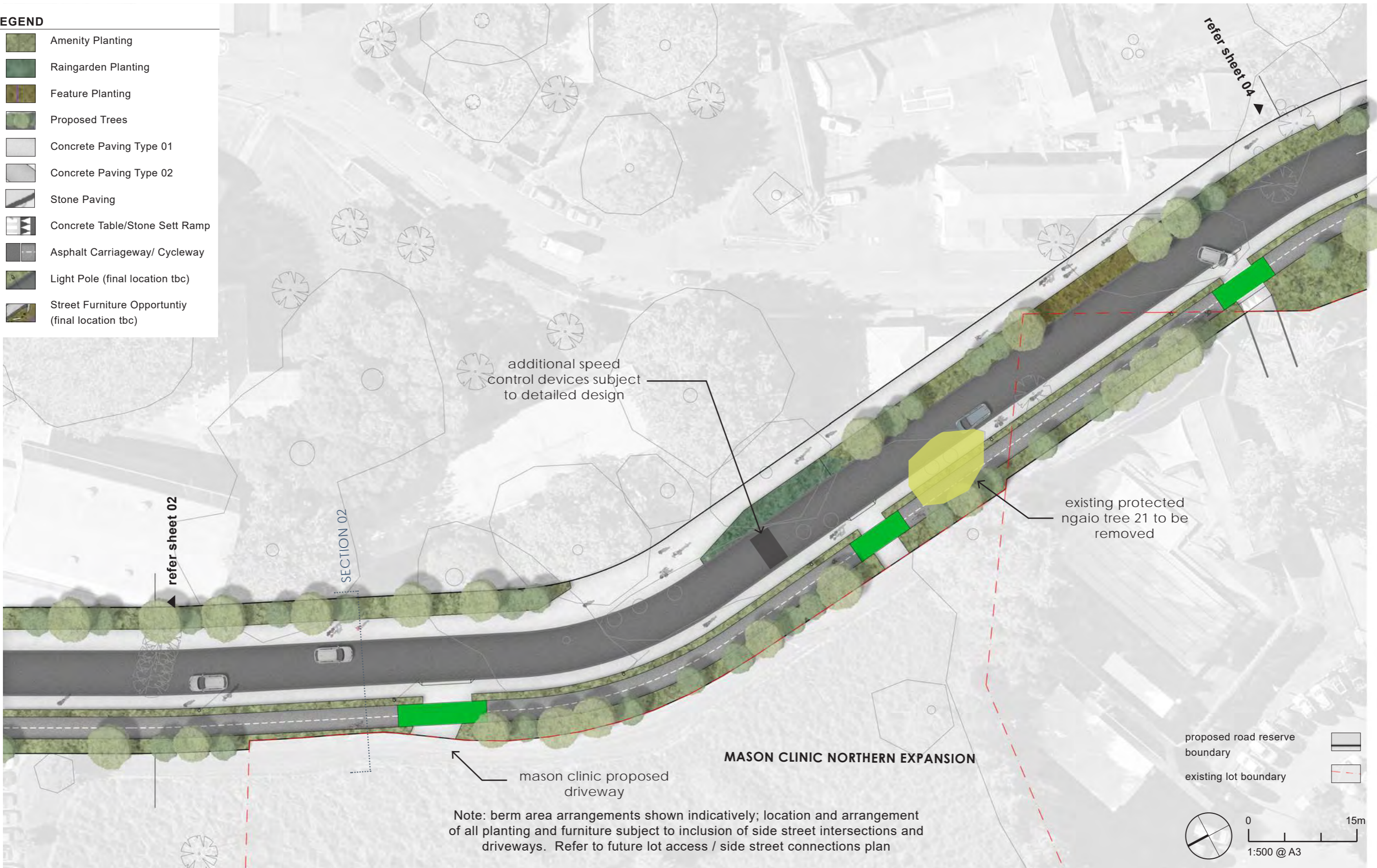


PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 03 - SPINE ROAD - GATE 1 ROAD

LEGEND

-  Amenity Planting
-  Raingarden Planting
-  Feature Planting
-  Proposed Trees
-  Concrete Paving Type 01
-  Concrete Paving Type 02
-  Stone Paving
-  Concrete Table/Stone Sett Ramp
-  Asphalt Carriageway/ Cycleway
-  Light Pole (final location tbc)
-  Street Furniture Opportuntiy (final location tbc)



Note: berm area arrangements shown indicatively; location and arrangement of all planting and furniture subject to inclusion of side street intersections and driveways. Refer to future lot access / side street connections plan

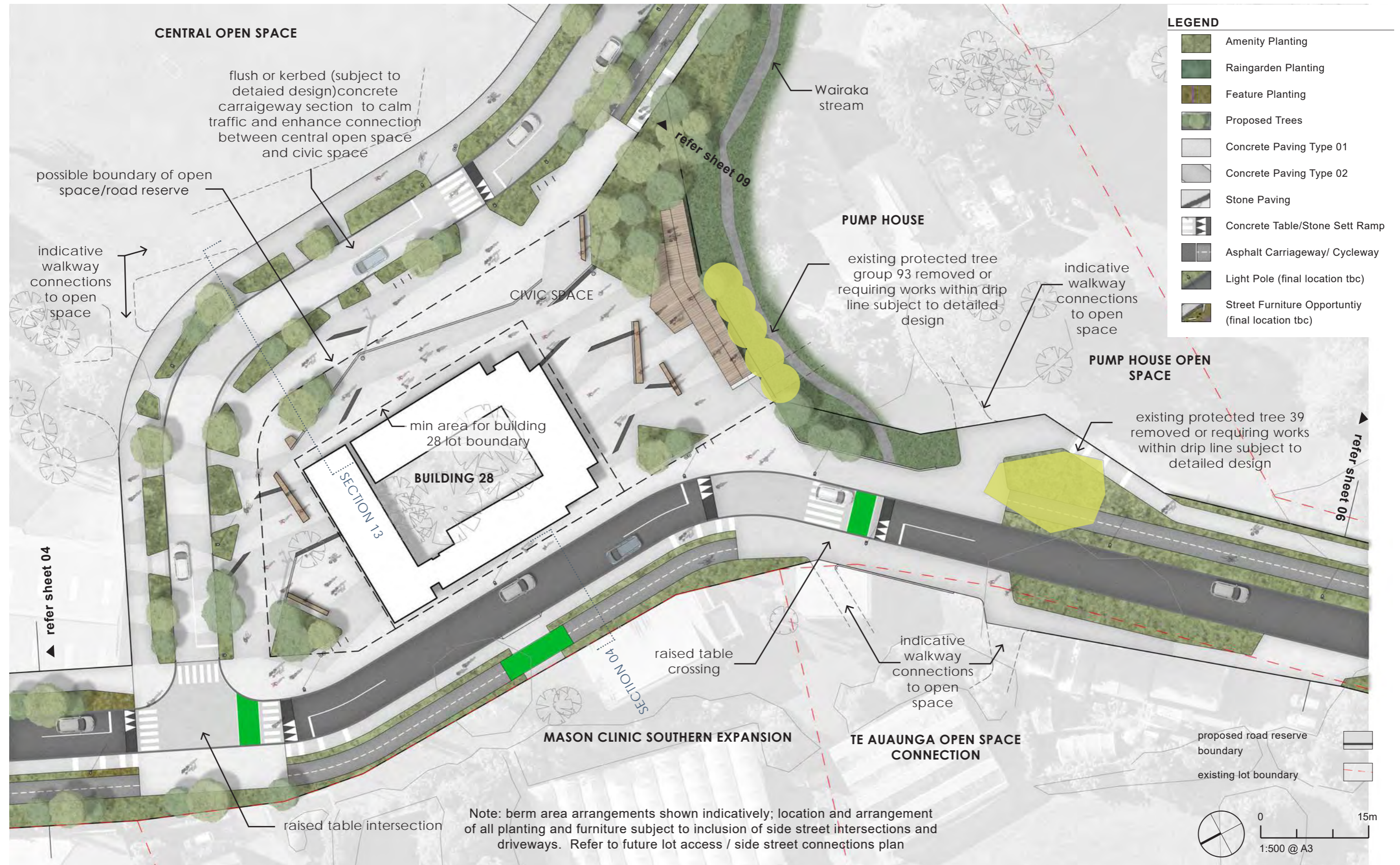
PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 04 - SPINE ROAD + GATE 2 ROAD INTERSECTION



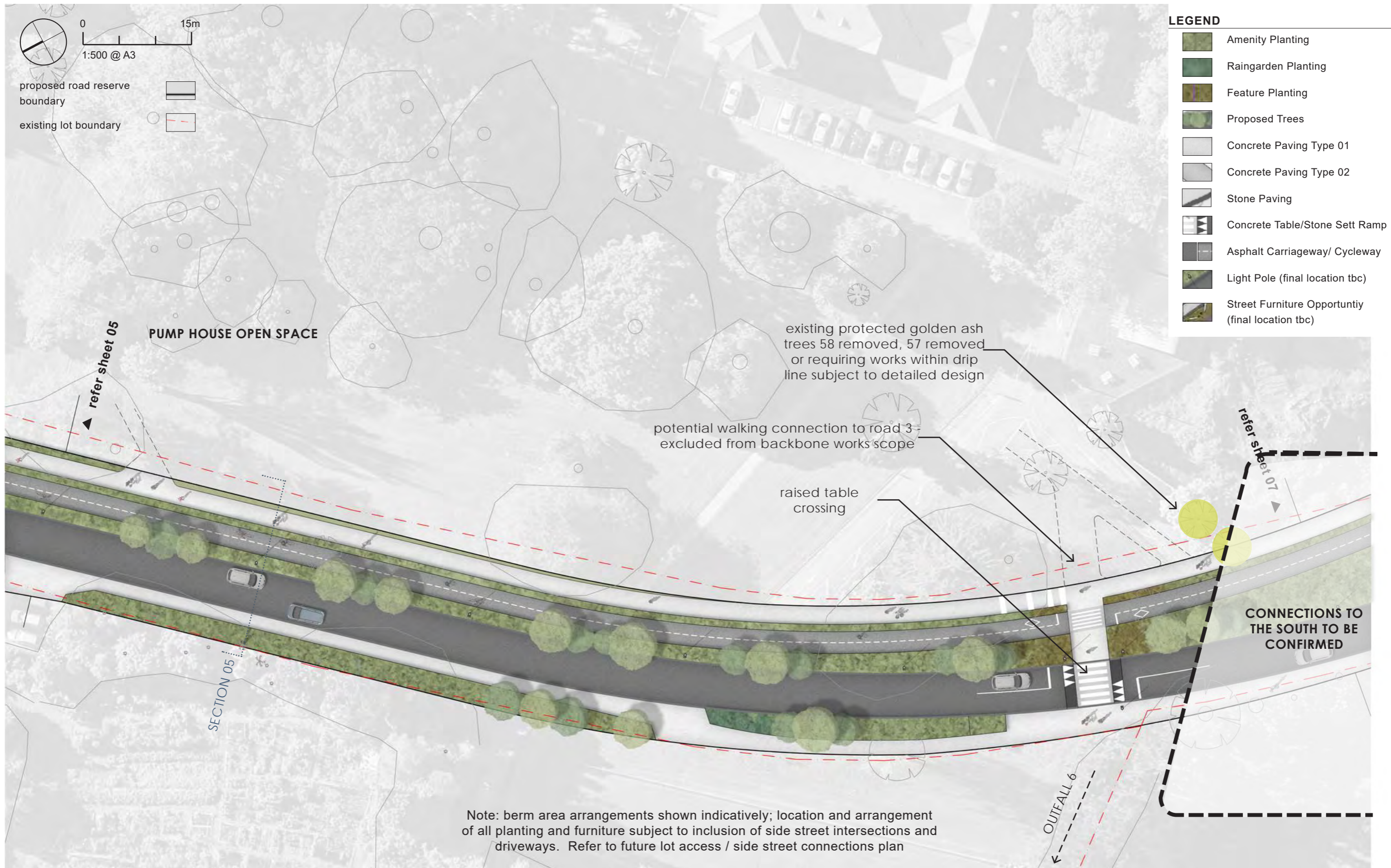
PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 05 - SPINE ROAD + GATE 3 ROAD INTERSECTION



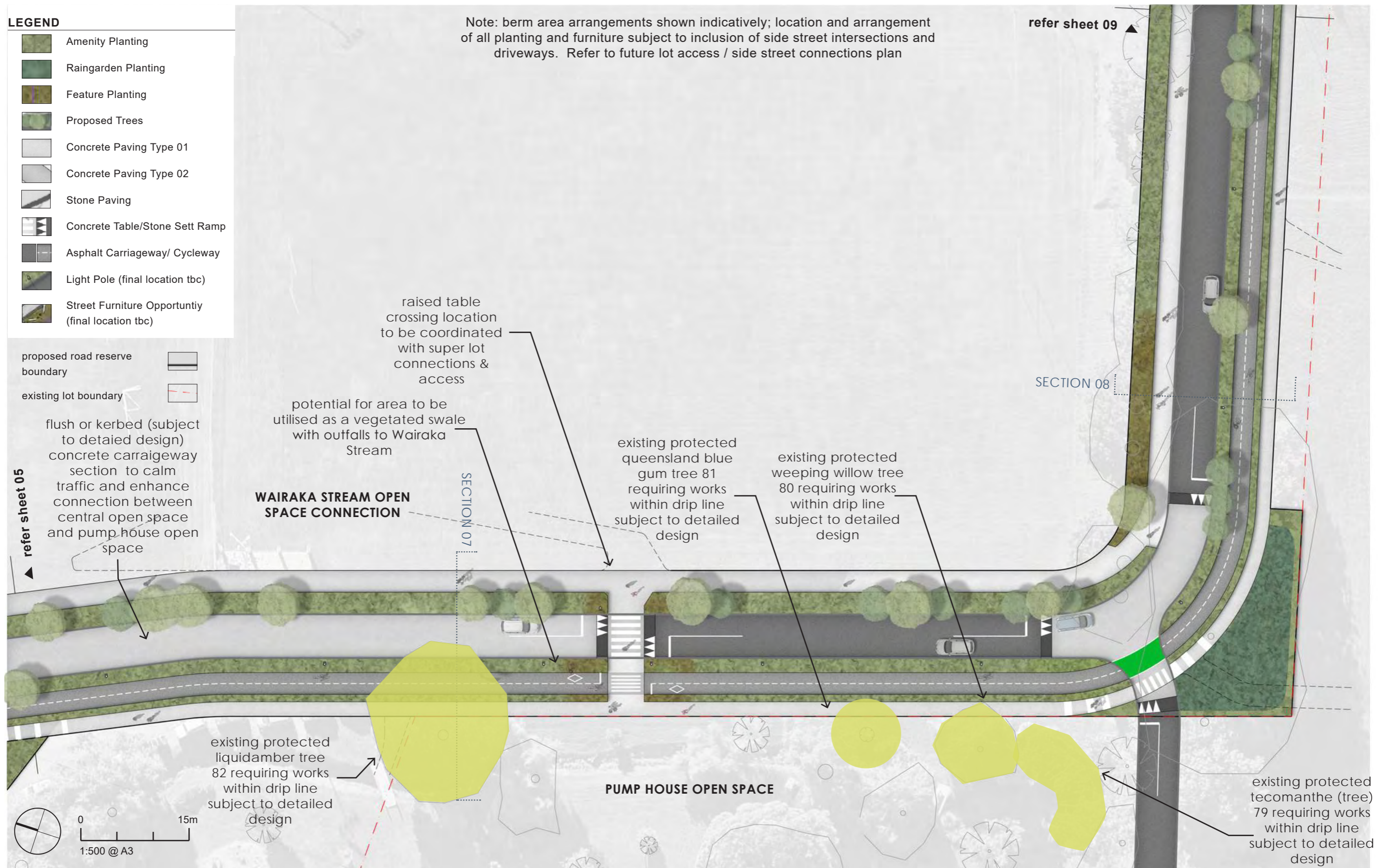
PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 06 - SPINE ROAD



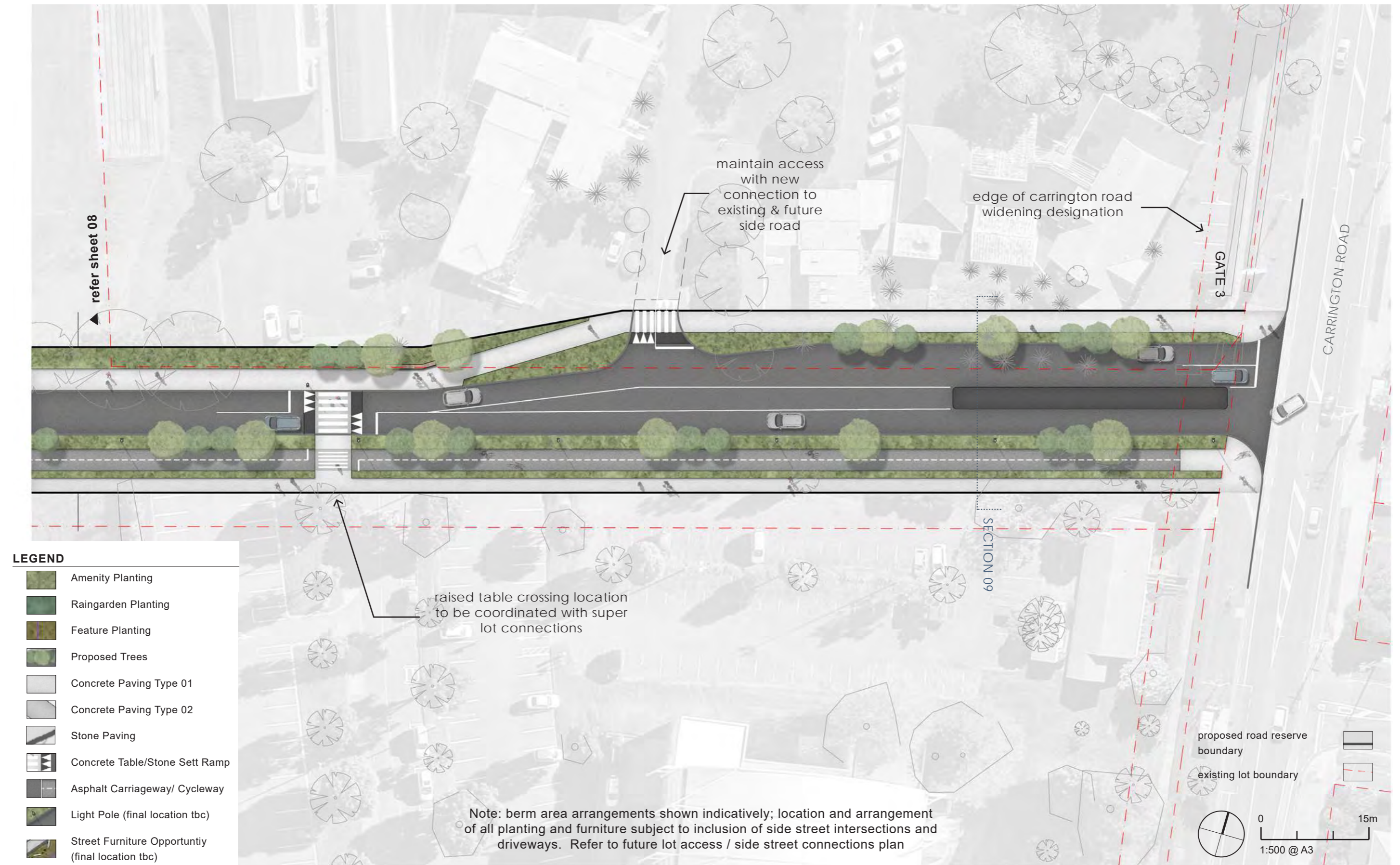
PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 08 - GATE 3 ROAD



PRELIMINARY DESIGN PLAN - BACKBONE WORKS












SHEET 09 - GATE 3 ROAD

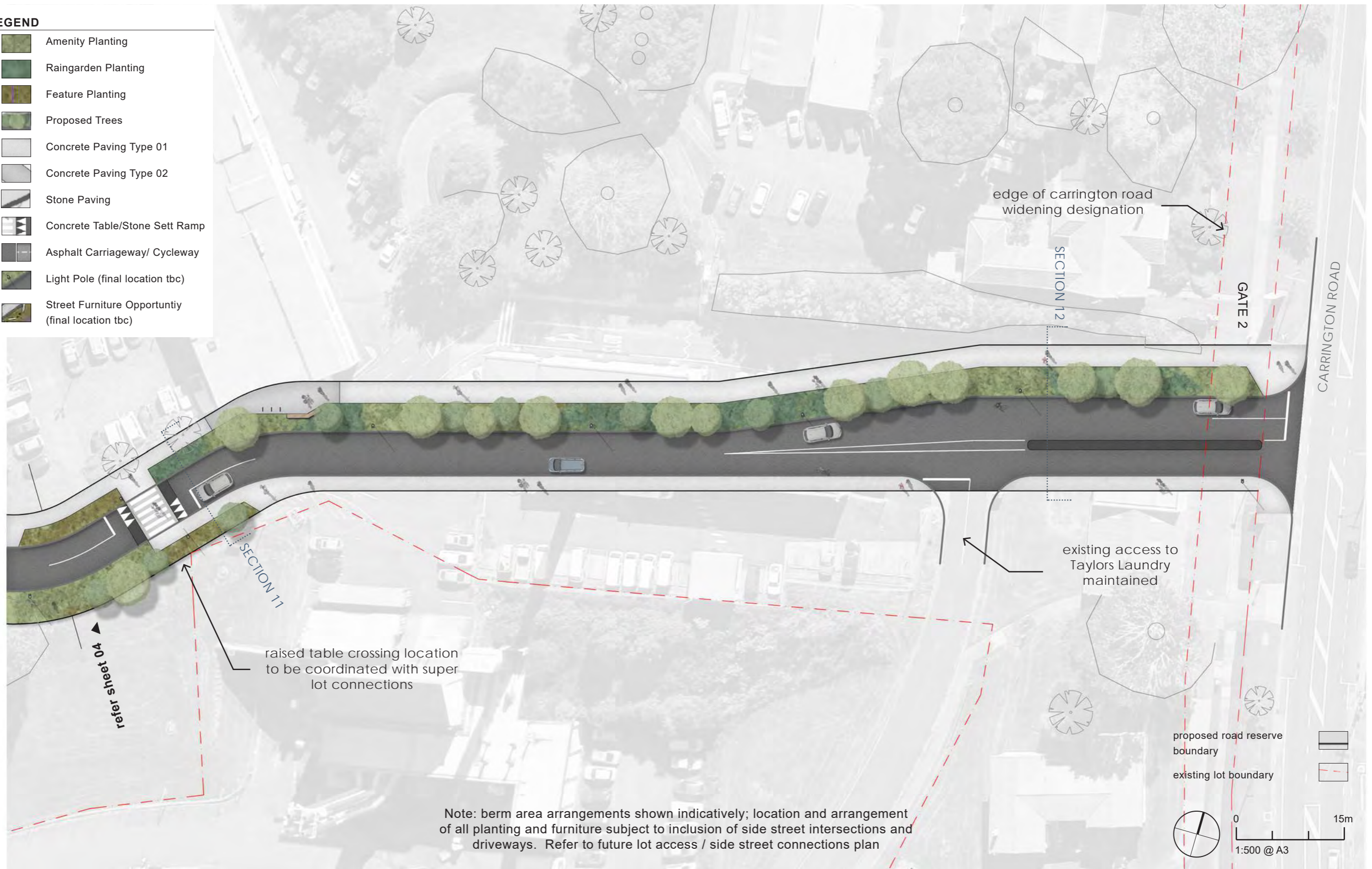


PRELIMINARY DESIGN PLAN - BACKBONE WORKS

SHEET 10 - GATE 2 ROAD

LEGEND

-  Amenity Planting
-  Raingarden Planting
-  Feature Planting
-  Proposed Trees
-  Concrete Paving Type 01
-  Concrete Paving Type 02
-  Stone Paving
-  Concrete Table/Stone Sett Ramp
-  Asphalt Carriageway/ Cycleway
-  Light Pole (final location tbc)
-  Street Furniture Opportunity (final location tbc)



OPEN SPACE STRATEGY - NORTHERN OPEN SPACE
















LANDSCAPE PLAN

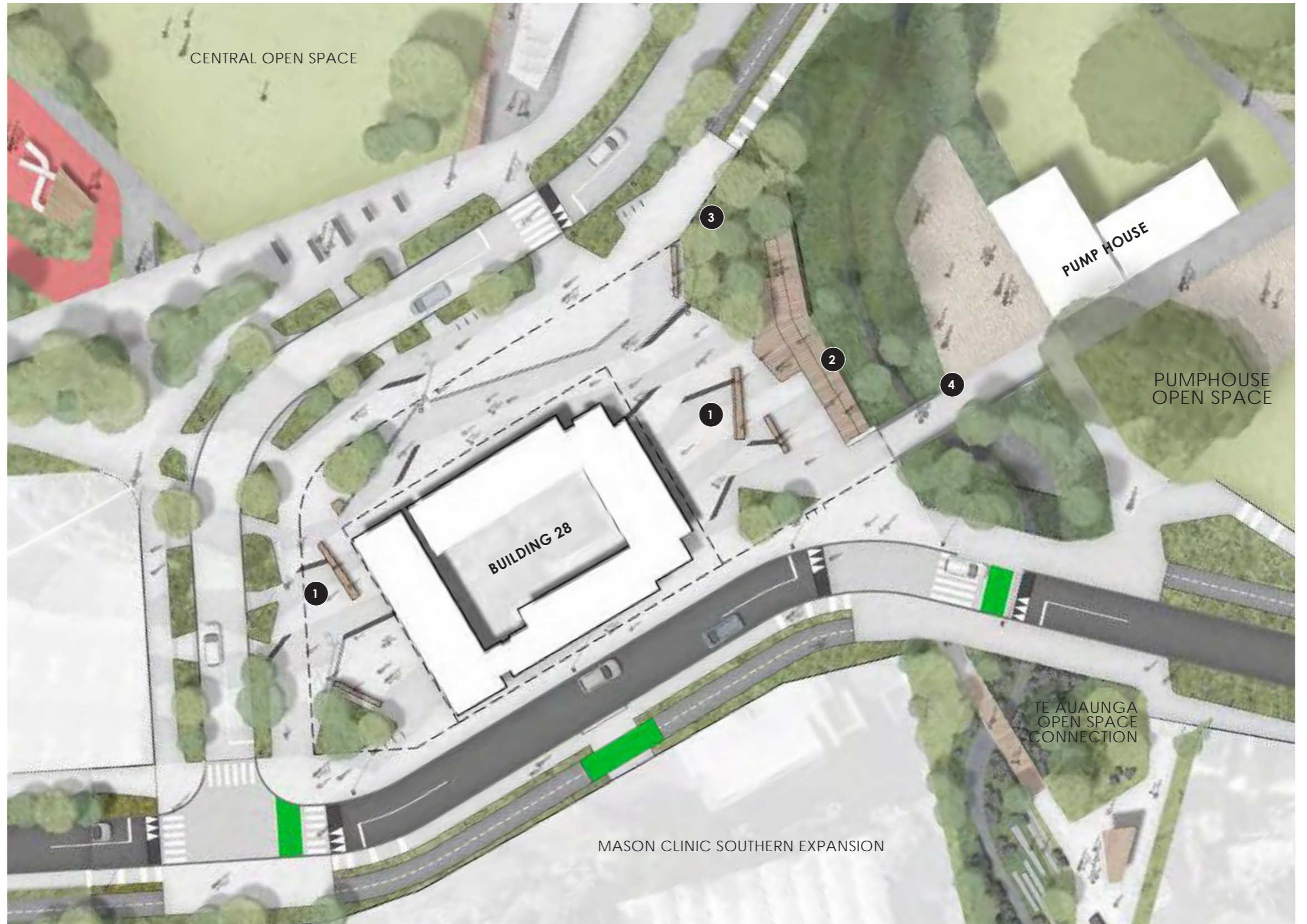


OPEN SPACE STRATEGY - CIVIC SPACE

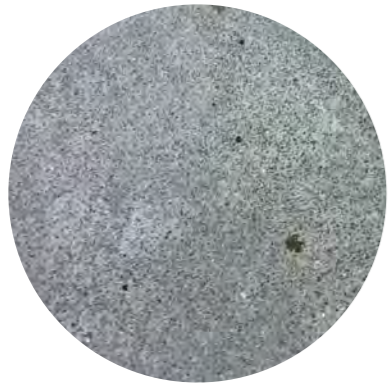
LANDSCAPE PLAN

LEGEND

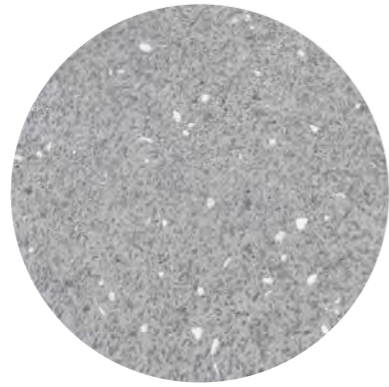
-  Amenity Planting
-  Raingarden Planting
-  Place Feature Planting
-  Proposed Trees
-  Concrete Paving Type 01
-  Concrete Paving Type 02
-  Stone Paving
-  Concrete Table/Stone Sett Ramp
-  Asphalt Carriageway/ Cycleway
-  Light Pole (final location tbc)
-  Street Furniture Opportunity (final location tbc)
-  1 Informal Seating Elements
-  2 Stream Edge Terrace + Stage
-  3 Street Play Node
-  4 Indicative Bridge Connection to Pump House



MATERIALS AND FURNITURE STRATEGY



INSITU CONCRETE PAVING 01
150 / 180mm U5E insitu concrete 10mm basalt chip, lightly exposed aggregate oxide



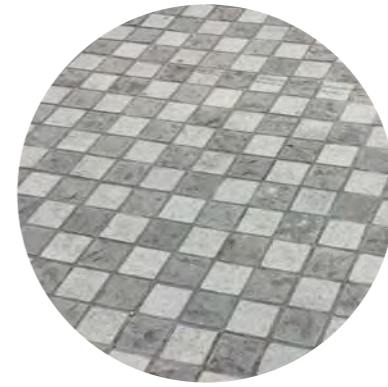
INSITU CONCRETE PAVING 02
150 / 180mm U5E insitu concrete 13mm pebble, lightly exposed aggregate, 4% Firth 'Fog' oxide



INSITU CONCRETE PAVING 03 (OPEN SPACES)
150 U5E insitu concrete 10mm basalt oxide



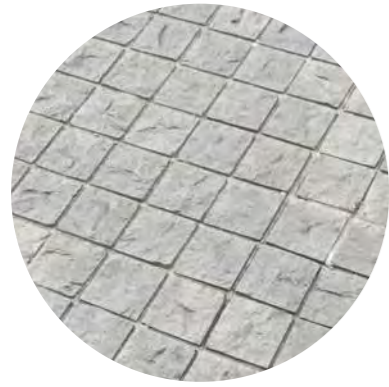
INSITU CONCRETE PAVING 04 (SEPERATED SHARED PATHS)
150 / 180mm U5E insitu concrete 10mm for shared paths



GRANITE SETTS TO RAMPS
97 x 97 x 75mm PT Black Granite split pattern



TIMARU BLUESTONE SETTS
95 x 95 x 40mm Timaru Bluestone sawn pattern



STONE SETTS TO MEDIAN
97 x 97 x 75mm Type B basalt, split face



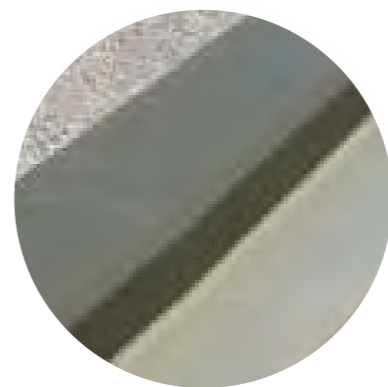
ASPHALT PAVING
City Mix10 (TNZ-M/10 spec) for cycleway areas



STONE PAVING STRIP
40mm stone paving cut and laid to pattern



PLAY TRAIL
Beam and stepper logs (use site won timber where available)



KERB
300mm wide dark grey slip form kerb with 300mm wide concrete channel or



PRECAST CONCRETE SEAT
Precast concrete seat purpleheart timber battens, gauged and chamfered to cover top and side of concrete plinth with skate deterrents



LITTER BIN
Kalos twin waste bin by Streetscape NZ



REMOVAL BOLLARD
Removal Viper bollard by Streetscape NZ



BIKE RACK
Scope bike rack by Streetscape NZ

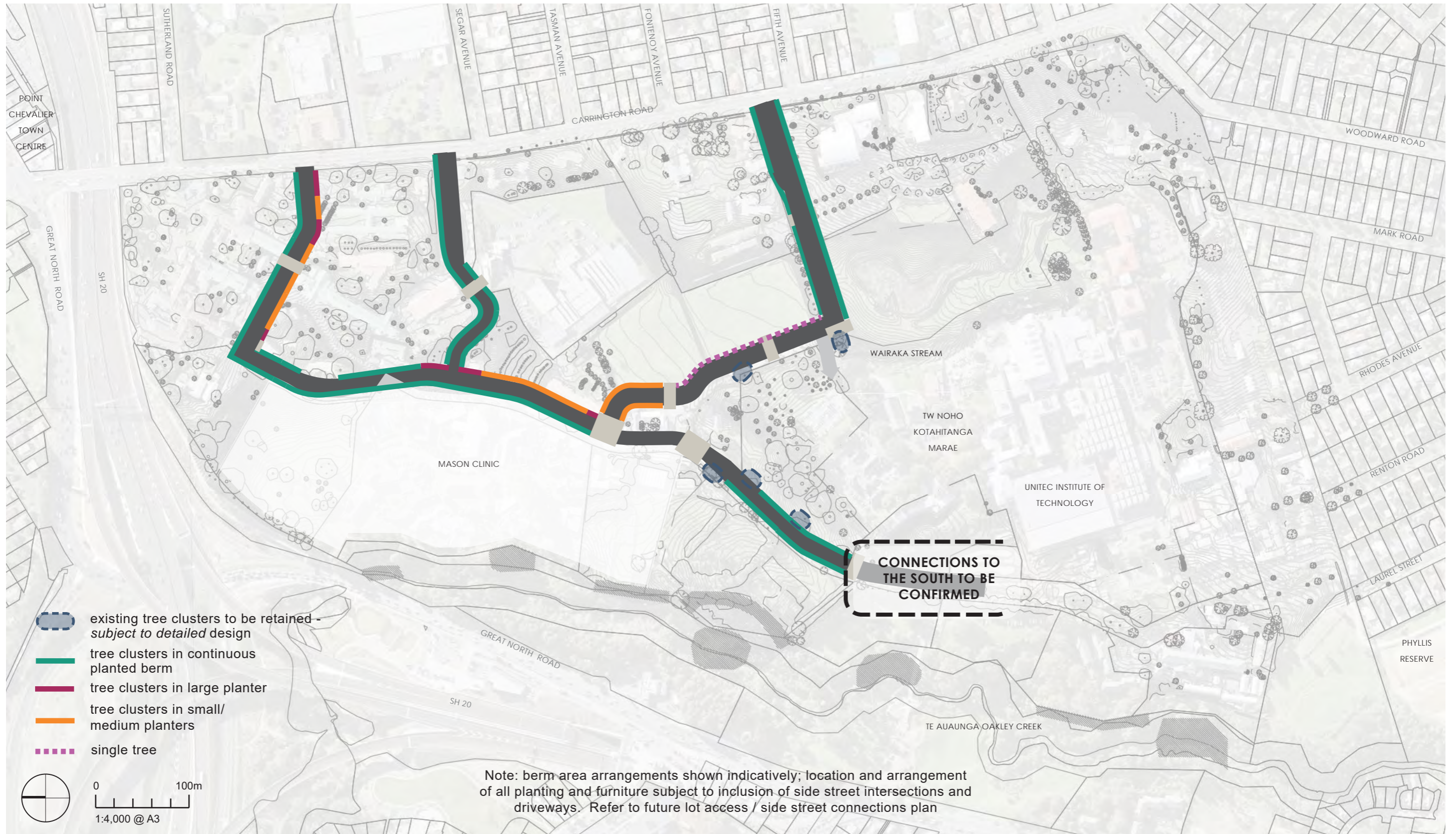


DRINKING FOUNTAIN
ACC CBD Accessible Drinking Fountain by Streetscape NZ

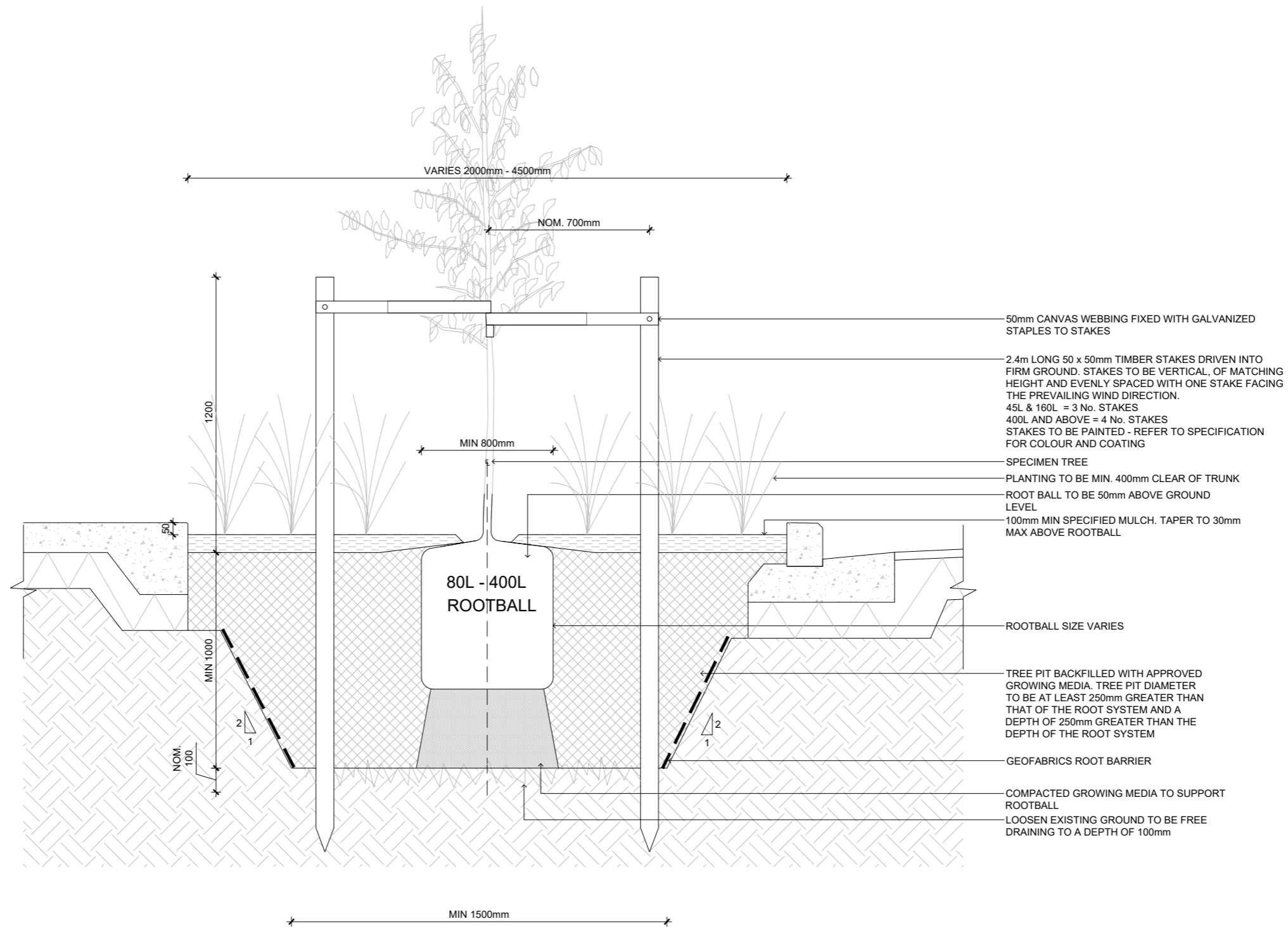


LIGHTPOLE
6m high tapered lightpole (AT approved), Luminaires VFL530-SE LED by WE-EF or similar approved

STREET TREE PLACEMENT STRATEGY



TYPICAL TREE PIT DETAIL



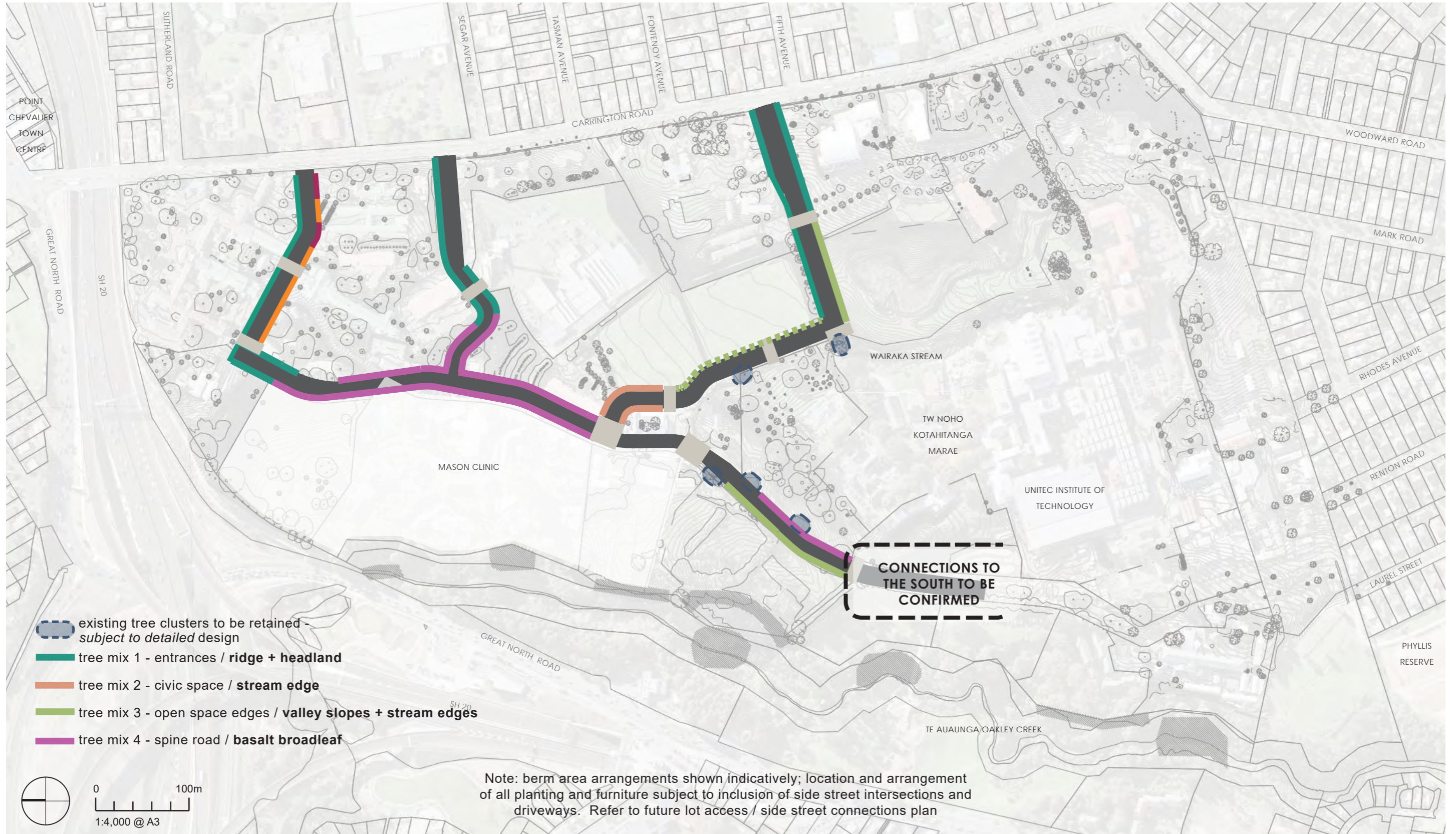
PROPOSED TREES

- 40% - 400L
- 30% - 200L
- 30% - 80L

NOTE:
 MIN. TREE PIT VOLUME PER TREE 3.5m³
 VOLUME TO INCREASE WHERE WIDTH
 AND DEPTH OF PLANTER ALLOWS UP
 TO 10m³, WHEN TREES ARE GROUPED
 TREE PIT VOLUMES TO BE JOINED INTO
 A SINGLE EXTENT.
 DETAIL IN ACCORDANCE WITH
 AUCKLAND COUNCIL TYPICAL TREE
 PLANTING DETAIL. REFER TO
 AUCKLAND CoP FOR LAND
 DEVELOPMENT AND SUBDIVISION,
 CHAPTER 7, LANDSCAPE

01 SPECIMEN TREE - TYPICAL DETAIL IN PLANTED BERM
 Scale: 1:10 @ A1; 1:20 @ A3

STREET TREE SPECIES STRATEGY



STREET TREE SPECIES STRATEGY

TREE MIX 1 - ENTRANCES / RIDGE & HEADLAND



REWAREWA
Knightia excelsa



POHUTUKAWA
Metrosideros excelsa



TANEKAHA
Phyllocladus trichomanoides

TREE MIX 4 - SPINE ROAD / BASALT BROADLEAF



KOHEKOHE
Dysoxylum spectabile



PŪRIRI
Vitex lucens



KŌWHAI
Sophora microphylly

TREE MIX 2 - CIVIC SPACE / BASALT BROADLEAF + STREAM EDGE



TITOKI
Alectryon excelsus



TI KOUKA
Cordyline australis



KARAKA
Corynocarpus laevigatus



KOHEKOHE
Dysoxylum spectabile



PŪRIRI
Vitex lucens



KŌWHAI
Sophora microphylly

TREE MIX 3 - OPEN SPACE EDGES / VALLEY SLOPES + STREAM EDGES



TARAIRE
Beilschmiedia taraire



TI KOUKA
Cordyline australis



PŪRIRI
Vitex lucens



MAIRE
Syzygium maire



NĪKAU
Rhopalostylis sapida

VEGETATION STRATEGY

AMENITY PLANTING



TŪRUTU
Dianella nigra



RENGARENGA
Anthropodium cirratum



PŌHUEHUE
Muehlenbeckia complexa



PUKUPUKU
Doodia australis



KOWHARWHARA
Astelia banksii



OIOI
Apodasmia similis



KIOKIO
Blechnum discolor

FEATURE PLANTING



MIKOIKOI
Libertia grandiflora



NZ IRIS
Libertia ixioides



TŪRUTU
Dianella nigra



DIETES ROBINSONIANA



OIOI
Apodasmia similis



KIOKIO
Blechnum discolor



PANAKENAKE
Lobelia angulata



TAUPATA
Coprosma repens
'Poor Knights'



PIRIPIRI
Acaena inermis

RAINGARDEN + PLANTING FOR STORMWATER QUALITY



TI KOŪKA
Cordyline australis



KAHIKATEA
Dacrycarpus dacrydioides



PUTAPUTAWĒTĀ
Carpodetus serratus



NIKAU
Rhopalostylis sapida



HARAKEKE
Phormium tenax



UOKO TANGATA
Cyperus ustulatus



CAREX LAMBERTIANA



CAREX LESSONIANA



PŪREI
Carex secta



CAREX VIRGATA



PIRIPIRI
Acaena novae-zelandiae



KŌWAOWAO
Microsorium pustulatum



PARATANIWHA
Elatostema rugosum



KIOKIO
Blechnum minus



WĪWĪ
Juncus edgariae



PĒPPEPE
Machaerina sinclairii