

Appendix M Concept design

ASHBURTON - TINWALD CONNECTIVITY DBC HAKATERE RIVER SECOND CROSSING

DRAWINGS INDEX

DWG No.	DRAWING TITLE
310205125-01-001-C001	COVER, LOCALITY PLAN AND DRAWING INDEX
310205125-01-001-C004	SHEET LAYOUT PLAN
310205125-01-001-C201	PLAN AND LONGITUDINAL SECTION (MC00) SHEET 1
310205125-01-001-C202	PLAN AND LONGITUDINAL SECTION (MC00) SHEET 2
310205125-01-001-C203	PLAN AND LONGITUDINAL SECTION (MC00) SHEET 3
310205125-01-001-C204	PLAN AND LONGITUDINAL SECTION (MC00) SHEET 4
310205125-01-001-C205	PLAN AND LONGITUDINAL SECTION (MC00) SHEET 5
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DRAWINGS INDEX

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310205125-01-001-C602	LAND REQUIREMENT PLAN SHEET 2
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310205125-01-001-C605	LAND REQUIREMENT PLAN SHEET 5
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310205125-01-001-C906	CROSS SECTIONS (MC00) SHEET 6
310205125-01-001-C907	CROSS SECTIONS (MC00) SHEET 7
310205125-01-001-C908	CROSS SECTIONS (MC00) SHEET 8
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310205125-01-001-C911	CROSS SECTIONS (MC00) SHEET 11
310205125-01-001-C912	CROSS SECTIONS (MC00) SHEET 12

DRAWINGS INDEX

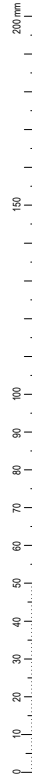
DWG No.	DRAWING TITLE
310205125-01-001-C913	CROSS SECTIONS (MC00) SHEET 13
310205125-01-001-C914	CROSS SECTIONS (MC00) SHEET 14
310205125-01-001-C915	CROSS SECTIONS (MC00) SHEET 15
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310205125-01-001-C928	CROSS SECTIONS (MC00) SHEET 28
310205125-01-001-C929	CROSS SECTIONS (MC00) SHEET 29

LOCALITY PLAN

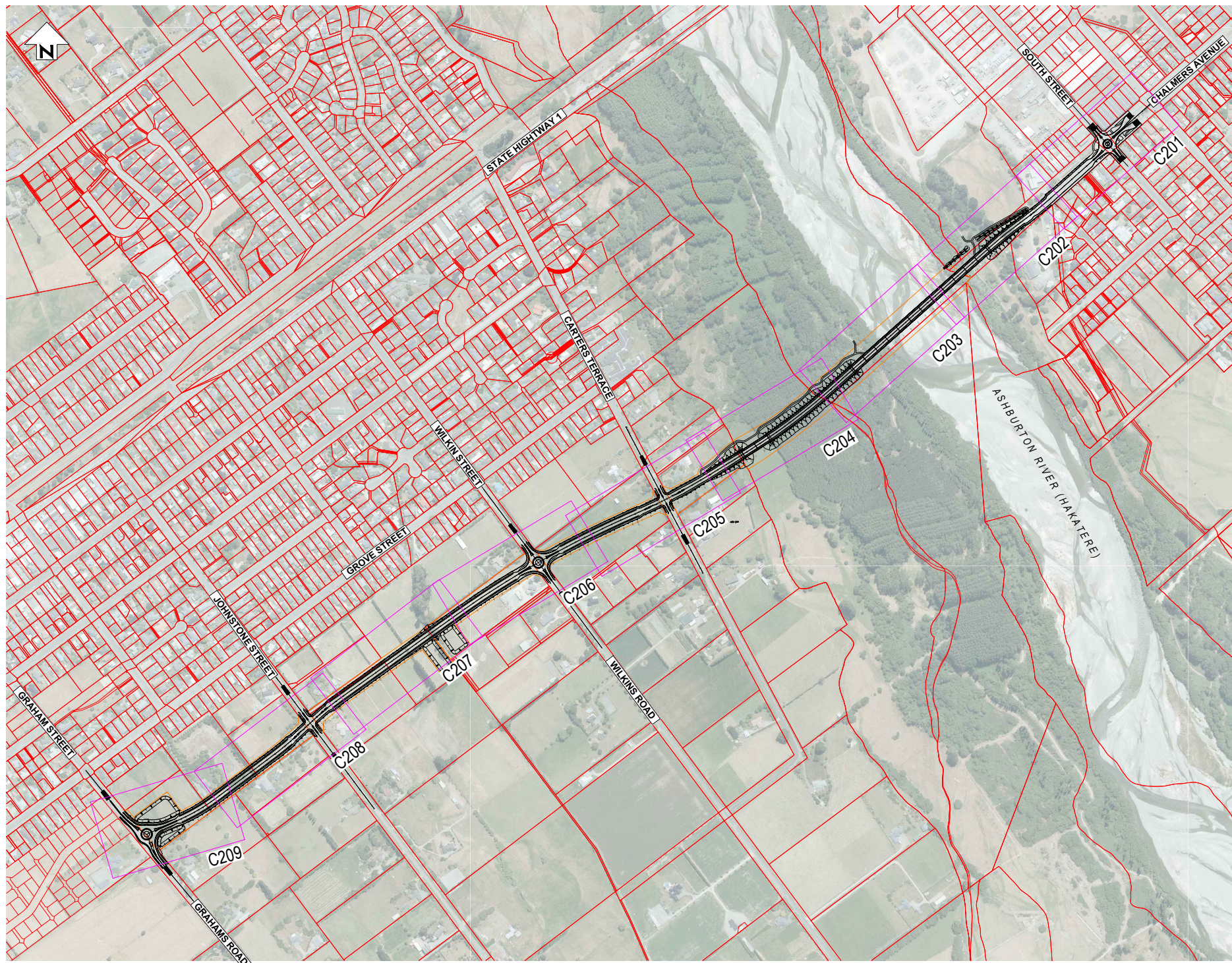


SCHEME ASSESSMENT 22.07.22

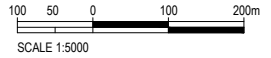
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



SHEET LAYOUT PLAN
SCALE 1 : 5000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



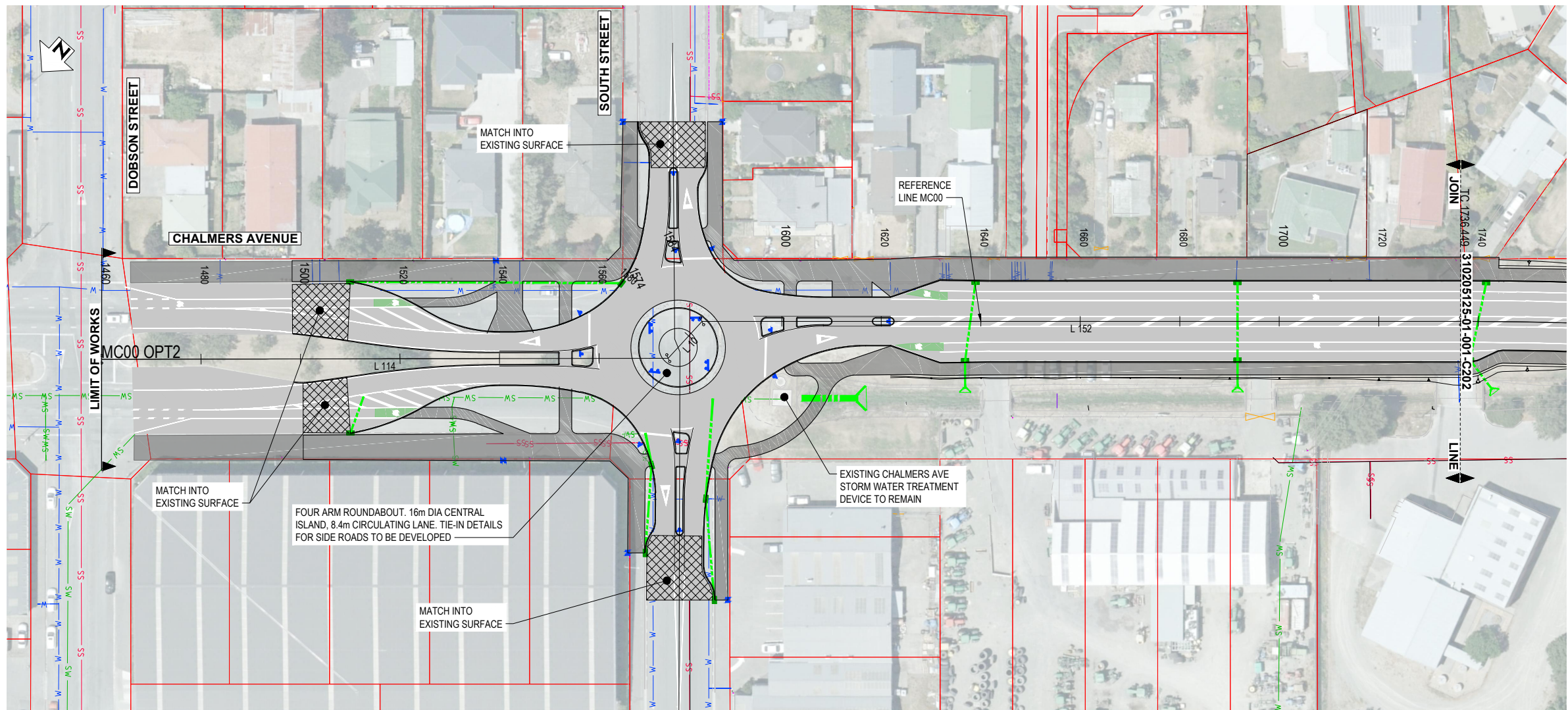
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

SHEET LAYOUT PLAN

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Drawing No.	310205125-01-001-C004
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500

- NOTES:**
- CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
 - COORDINATES ARE IN TERMS OF NZGD2000 GAWLER CIRCUIT. HEIGHTS ARE IN TERMS OF NZVD2016.
 - ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
 - PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
 - DESIGN BATTERS ARE INDICATIVE ONLY. ON SITE BATTER WORKS TO BE MODIFIED AS REQUIRED TO TIE INTO EXISTING LEVELS.
 - AFFECTED PRIVATE PROPERTY FENCES, GATES AND LETTERBOXES TO BE RAISED, RELOCATED, OR MOVED AS APPROPRIATE FOLLOWING CONSULTATION WITH LAND OWNERS.
 - REFER TO MOTSAM PART 1 FOR TRAFFIC SIGNS.
 - REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - EXISTING CENTRELINE
 - EXISTING FENCE
 - EXISTING EDGE OF METAL
 - EXISTING TOP OF BANK
 - EXISTING GATE
 - EXISTING POWER POLE
 - EXISTING LIGHT POLE
 - EXISTING TELECOMMUNICATIONS
 - EXISTING SURVEY MARK
 - EXISTING SIGN
 - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - BATTER SLOPES
 - NEW SIGN TYPE INDICATED
 - NEW CULVERT (SIZE AND TYPE NOTED)
 - NEW STANDARD HEADWALL
 - NEW DRAINAGE MANHOLE
 - NEW STORMWATER SUMP
 - NEW INFILTRATION POND
 - OVERHEAD POWER
 - EXISTING SEWER
 - EXISTING WATER SUPPLY
 - EXISTING STORMWATER
 - FIBRE OPTIC
 - TELECOMMUNICATIONS

CH: 1589 738
RL: 90.584



DATUM RL 87.0	
DESIGN LEVEL	91.226 91.127 91.028 90.929 90.830 90.731 90.634 90.537 90.432 90.333 90.234 90.135 90.036 90.519 90.501 90.483 90.464 90.449
EXISTING LEVEL	91.225 91.289 91.112 91.012 90.881 90.844 90.587 90.583 90.562 90.563 90.556 90.538 90.517 90.649 90.613 90.708 91.163
CUT/FILL	0.001 -0.162 -0.084 -0.083 -0.051 -0.112 0.047 0.049 0.012 0.012 -0.033 -0.051 -0.098 -0.148 -0.130 -0.244 -0.704
CHAINAGE	1460.000 1480.000 1500.000 1520.000 1540.000 1560.000 1579.657 1580.000 1599.620 1600.000 1620.000 1640.000 1660.000 1680.000 1700.000 1720.000 1736.449
HORIZONTAL GEOMETRY	L=113.91 L=10.05 L=152.49
VERTICAL GEOMETRY	P=-0.5% L=119.66 K=50 L=20.16 P=-0.09% L=189.93

LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
		DRN	CHK	APP

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22

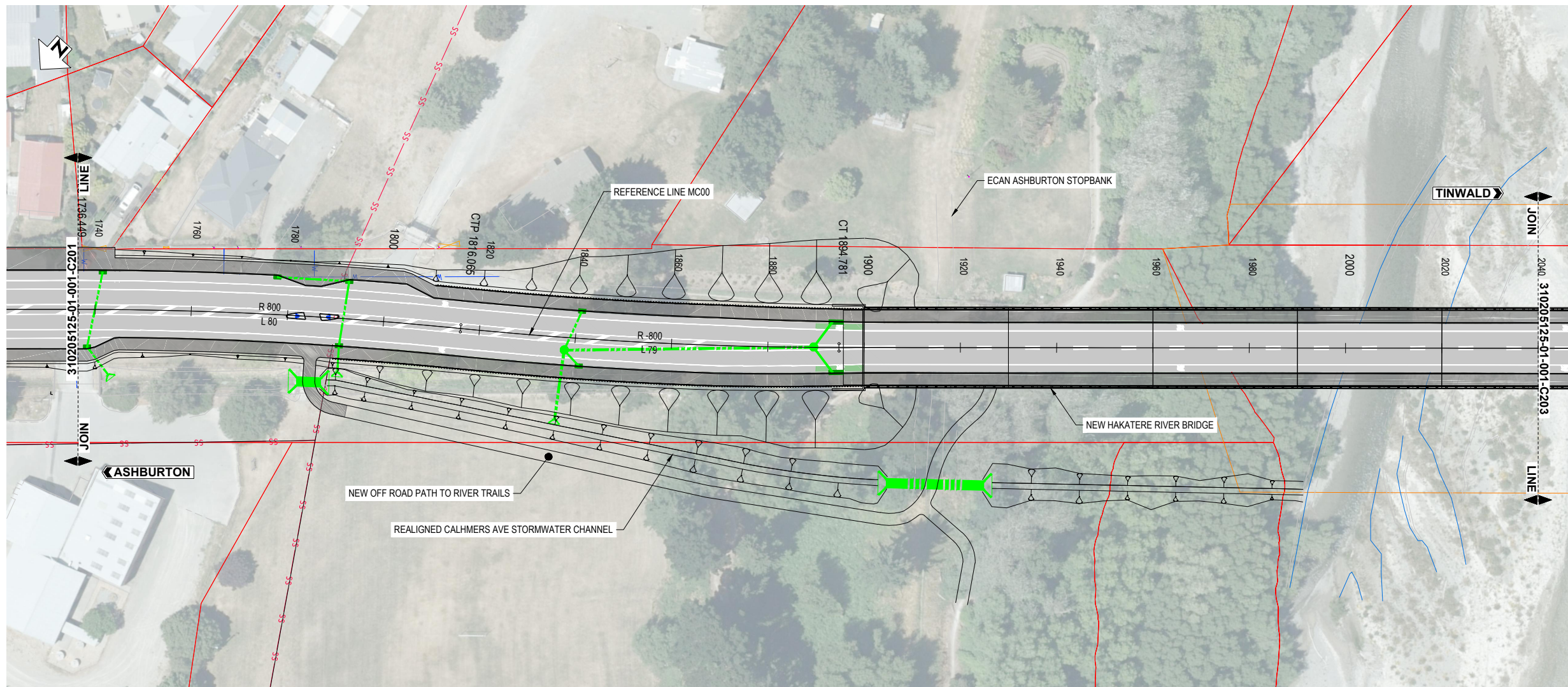


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 1

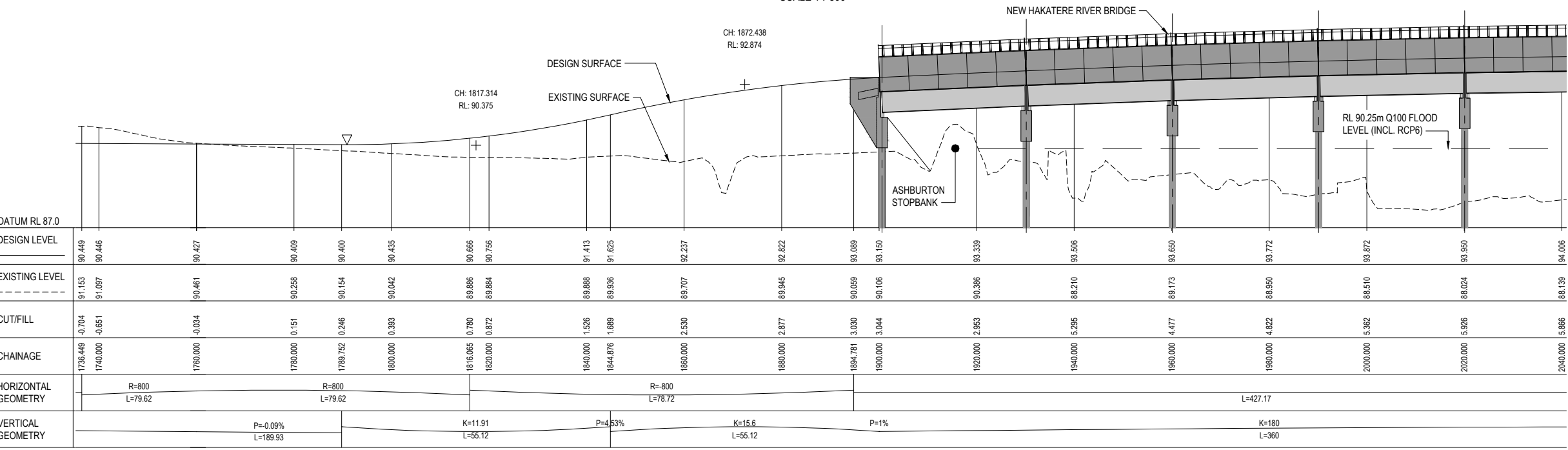
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C201
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1:500 VERT. 1:100

NOTES:

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- REFER TO MOTSAM PART 1 FOR TRAFFIC SIGNS.
- REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

LEGEND:

- EXISTING PARCEL BOUNDARY
- EXISTING CENTRELINE
- EXISTING FENCE
- - - EXISTING EDGE OF METAL
- - - EXISTING TOP OF BANK
- EXISTING GATE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TELECOMMUNICATIONS
- EXISTING SURVEY MARK
- EXISTING SIGN
- DESIGN CENTRELINE (MC00)
- NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- BATTER SLOPES
- NEW SIGN TYPE INDICATED
- - - NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND
- (E)OH — OVERHEAD POWER
- SS EXISTING SEWER
- SW EXISTING WATER SUPPLY
- W EXISTING STORMWATER
- FIBRE FIBRE OPTIC
- UT TELECOMMUNICATIONS

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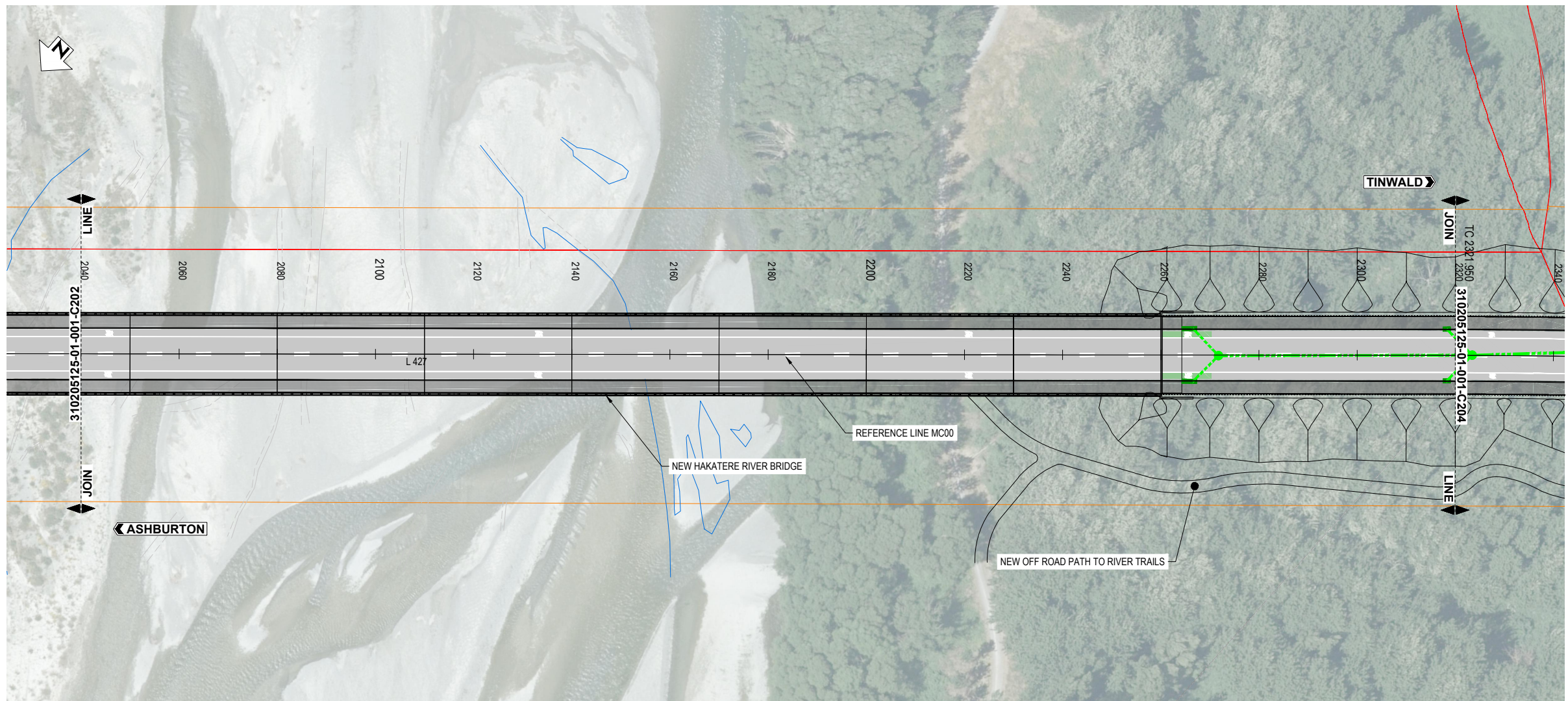


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 2

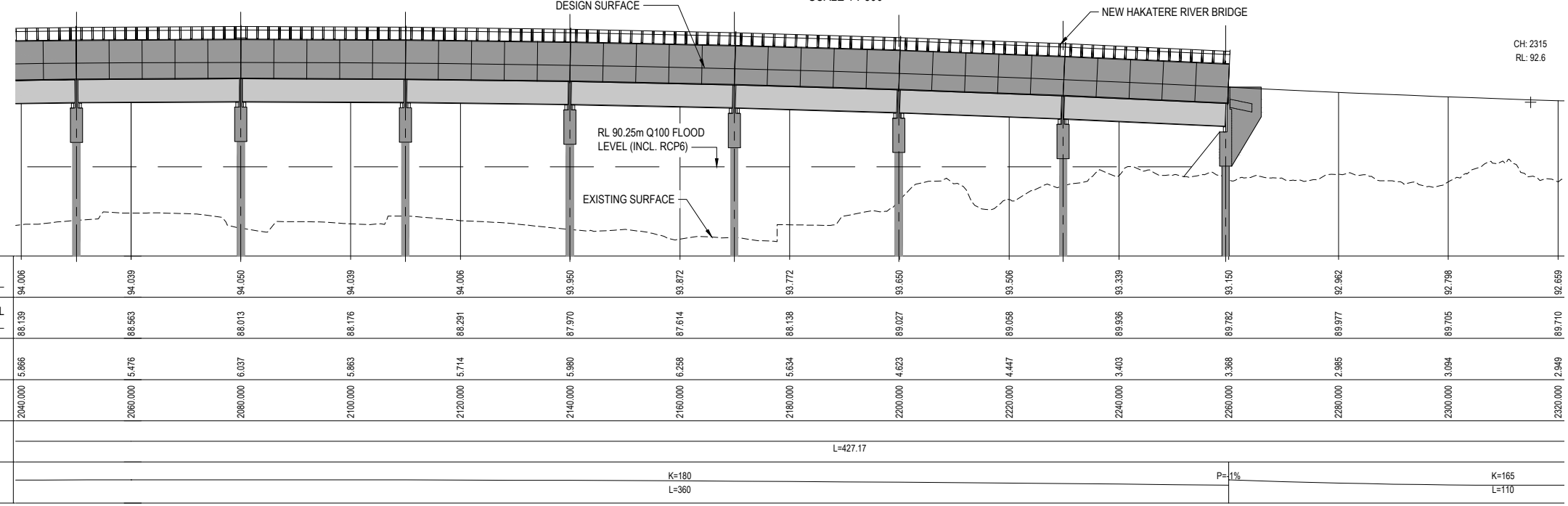
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Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C202
Rev.	B

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ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

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8. REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

LEGEND:

- EXISTING PARCEL BOUNDARY
- EXISTING CENTRELINE
- EXISTING FENCE
- - - EXISTING EDGE OF METAL
- EXISTING TOP OF BANK
- EXISTING GATE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TELECOMMUNICATIONS
- EXISTING SURVEY MARK
- EXISTING SIGN
- DESIGN CENTRELINE (MC00)
- = NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- BATTER SLOPES
- NEW SIGN TYPE INDICATED
- - - NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND
- (E)OH — OVERHEAD POWER
- SS — EXISTING SEWER
- SW — EXISTING WATER SUPPLY
- W — EXISTING STORMWATER
- FIBRE — FIBRE OPTIC
- UT — TELECOMMUNICATIONS

NOT FOR CONSTRUCTION

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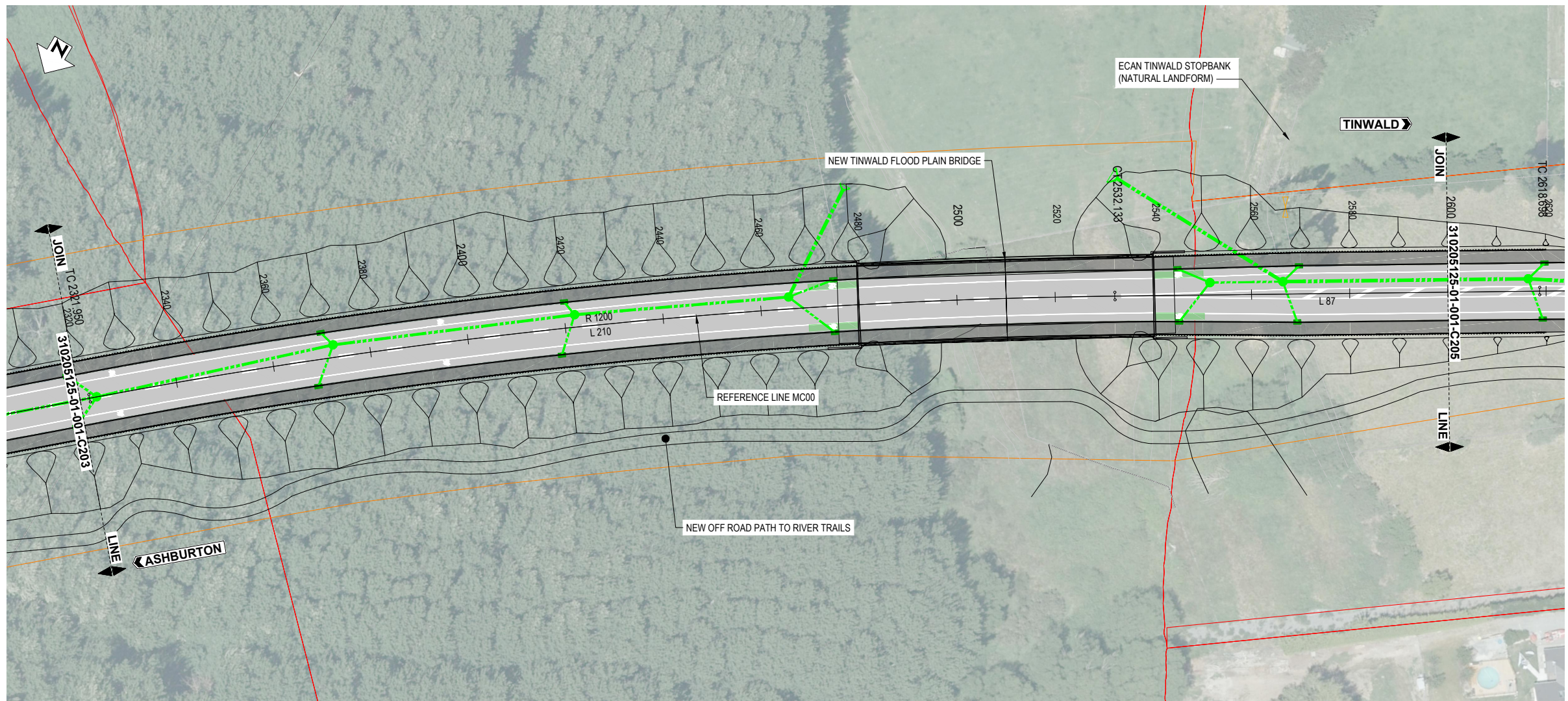
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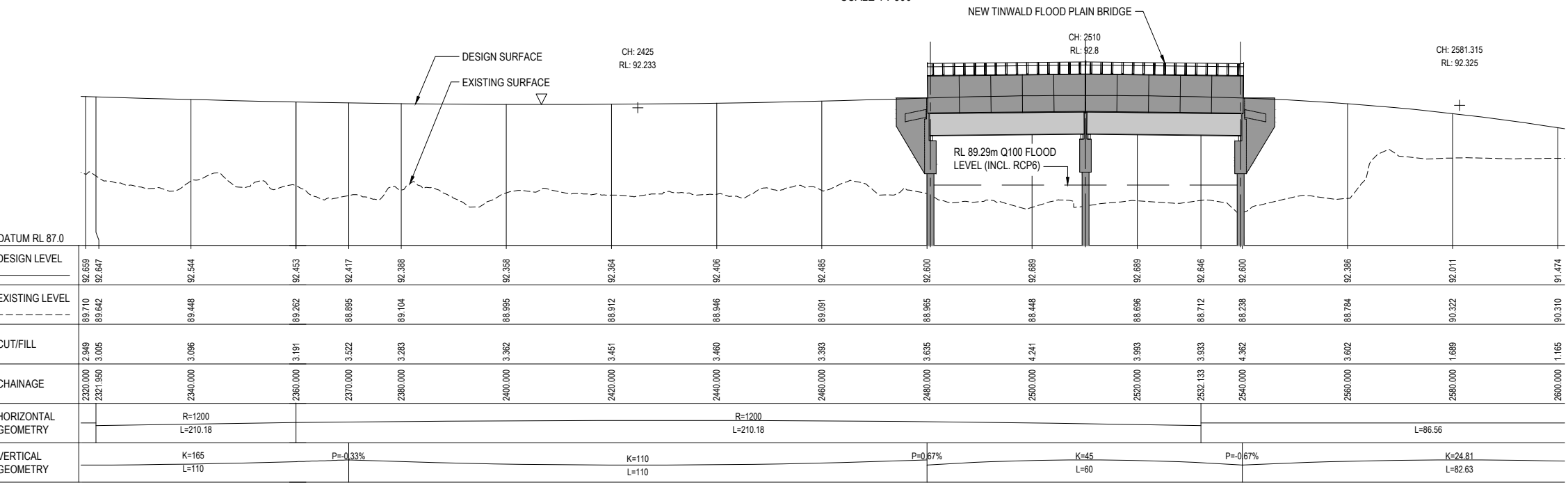
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 3

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C203
Rev.	B

ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1:500 VERT. 1:100

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LEGEND:

- EXISTING PARCEL BOUNDARY
- EXISTING CENTRELINE
- EXISTING FENCE
- EXISTING EDGE OF METAL
- EXISTING TOP OF BANK
- EXISTING GATE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TELECOMMUNICATIONS
- EXISTING SURVEY MARK
- EXISTING SIGN
- DESIGN CENTRELINE (MC00)
- NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
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- EXISTING WATER SUPPLY
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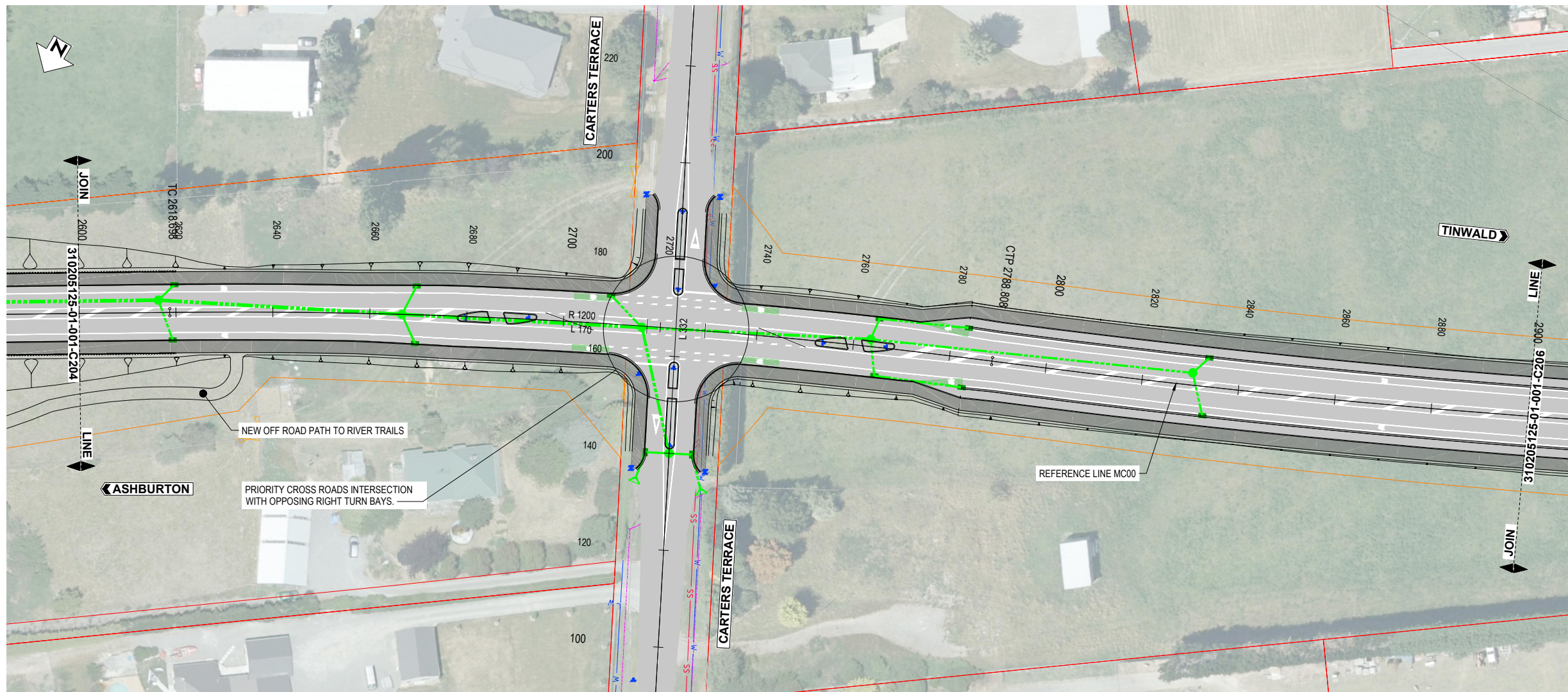


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 4

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C204
Rev.	B

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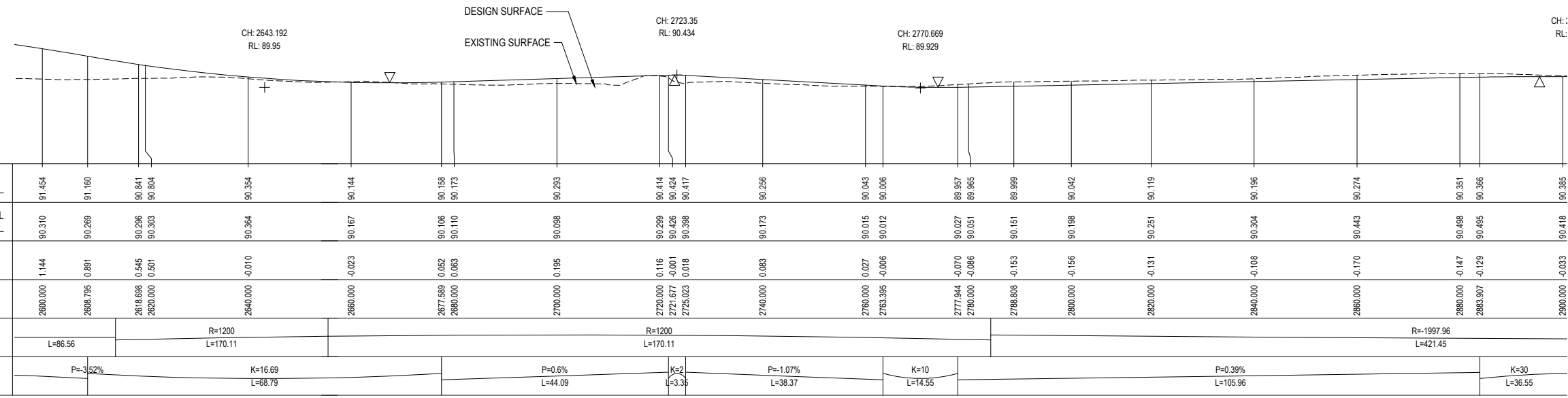
ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500

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- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - EXISTING CENTRELINE
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 - NEW KERB (VARIOUS TYPES)
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 - EXISTING WATER SUPPLY
 - EXISTING STORMWATER
 - FIBRE OPTIC
 - TELECOMMUNICATIONS



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

DATUM RL 87.0	
DESIGN LEVEL	91.454 91.160 90.841 90.804 90.354 90.144 90.158 90.173 90.293 90.414 90.424 90.417 90.256 90.043 90.006 89.957 89.965 89.999 90.042 90.119 90.196 90.274 90.351 90.351 90.366 90.385
EXISTING LEVEL	90.310 90.289 90.296 90.303 90.364 90.167 90.108 90.110 90.098 90.299 90.428 90.388 90.173 90.015 90.012 90.027 90.051 90.151 90.198 90.251 90.304 90.443 90.498 90.495 90.418
CUT/FILL	1.144 0.891 0.545 0.501 -0.010 -0.023 0.052 0.063 0.195 0.116 -0.001 0.018 0.083 0.027 -0.006 -0.070 -0.086 -0.153 -0.156 -0.131 -0.108 -0.170 -0.147 -0.129 -0.033
CHAINAGE	2600.000 2608.795 2618.698 2620.000 2640.000 2660.000 2677.589 2680.000 2700.000 2720.000 2721.677 2725.023 2740.000 2760.000 2763.395 2777.944 2780.000 2788.808 2800.000 2820.000 2820.000 2840.000 2860.000 2880.000 2883.307 2900.000
HORIZONTAL GEOMETRY	L=86.56 R=1200 L=170.11 R=1200 L=170.11 R=1997.96 L=421.45
VERTICAL GEOMETRY	P=-3.52% K=16.69 L=68.79 P=0.6% L=44.09 K=2 L=3.35 P=-1.07% L=38.37 K=10 L=14.55 P=0.39% L=105.96 K=30 L=36.55

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22

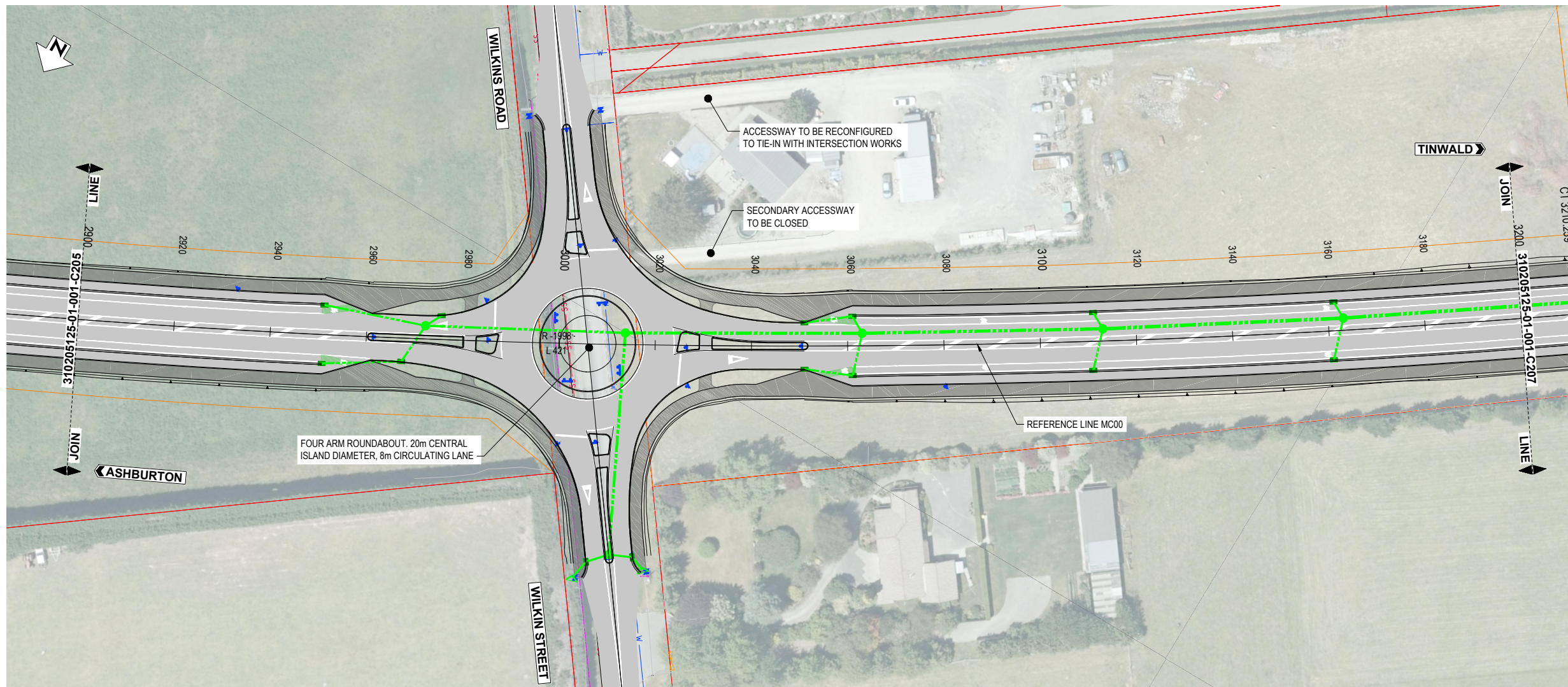


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 5

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C205
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

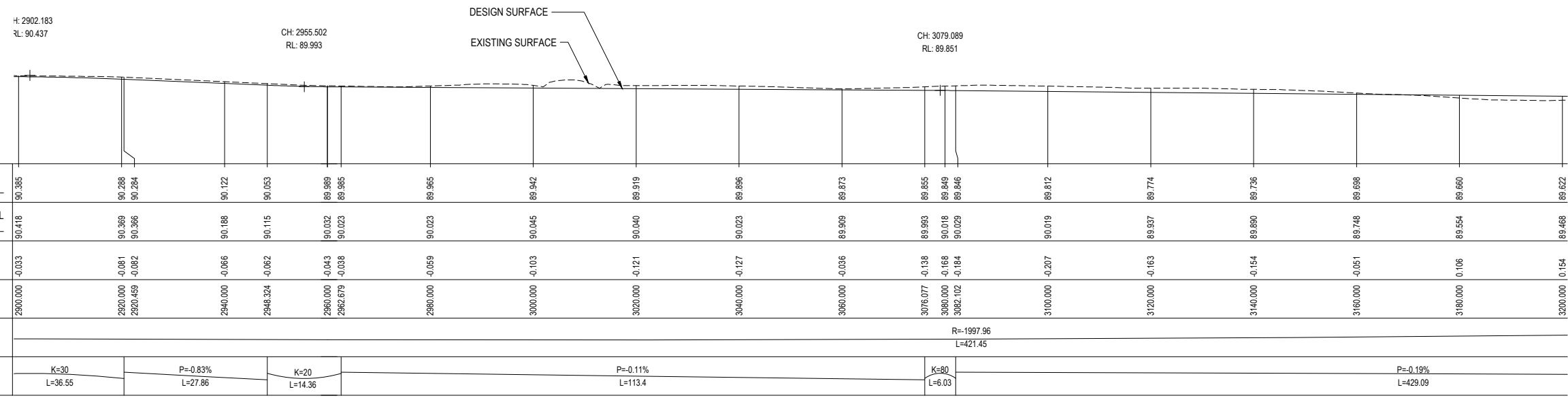
ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500

- NOTES:**
- CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
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 - DESIGN BATTERS ARE INDICATIVE ONLY. ON SITE BATTER WORKS TO BE MODIFIED AS REQUIRED TO TIE INTO EXISTING LEVELS.
 - AFFECTED PRIVATE PROPERTY FENCES, GATES AND LETTERBOXES TO BE RAISED, RELOCATED, OR MOVED AS APPROPRIATE FOLLOWING CONSULTATION WITH LAND OWNERS.
 - REFER TO MOTSAM PART 1 FOR TRAFFIC SIGNS.
 - REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - EXISTING CENTRELINE
 - EXISTING FENCE
 - EXISTING EDGE OF METAL
 - EXISTING TOP OF BANK
 - EXISTING GATE
 - EXISTING POWER POLE
 - EXISTING LIGHT POLE
 - EXISTING TELECOMMUNICATIONS
 - EXISTING SURVEY MARK
 - EXISTING SIGN
 - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - BATTER SLOPES
 - NEW SIGN TYPE INDICATED
 - NEW CULVERT (SIZE AND TYPE NOTED)
 - NEW STANDARD HEADWALL
 - NEW DRAINAGE MANHOLE
 - NEW STORMWATER SUMP
 - NEW INFILTRATION POND
 - OVERHEAD POWER
 - EXISTING SEWER
 - EXISTING WATER SUPPLY
 - EXISTING STORMWATER
 - FIBRE OPTIC
 - TELECOMMUNICATIONS



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1:500 VERT. 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
		DRN	CHK	APP

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
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DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22

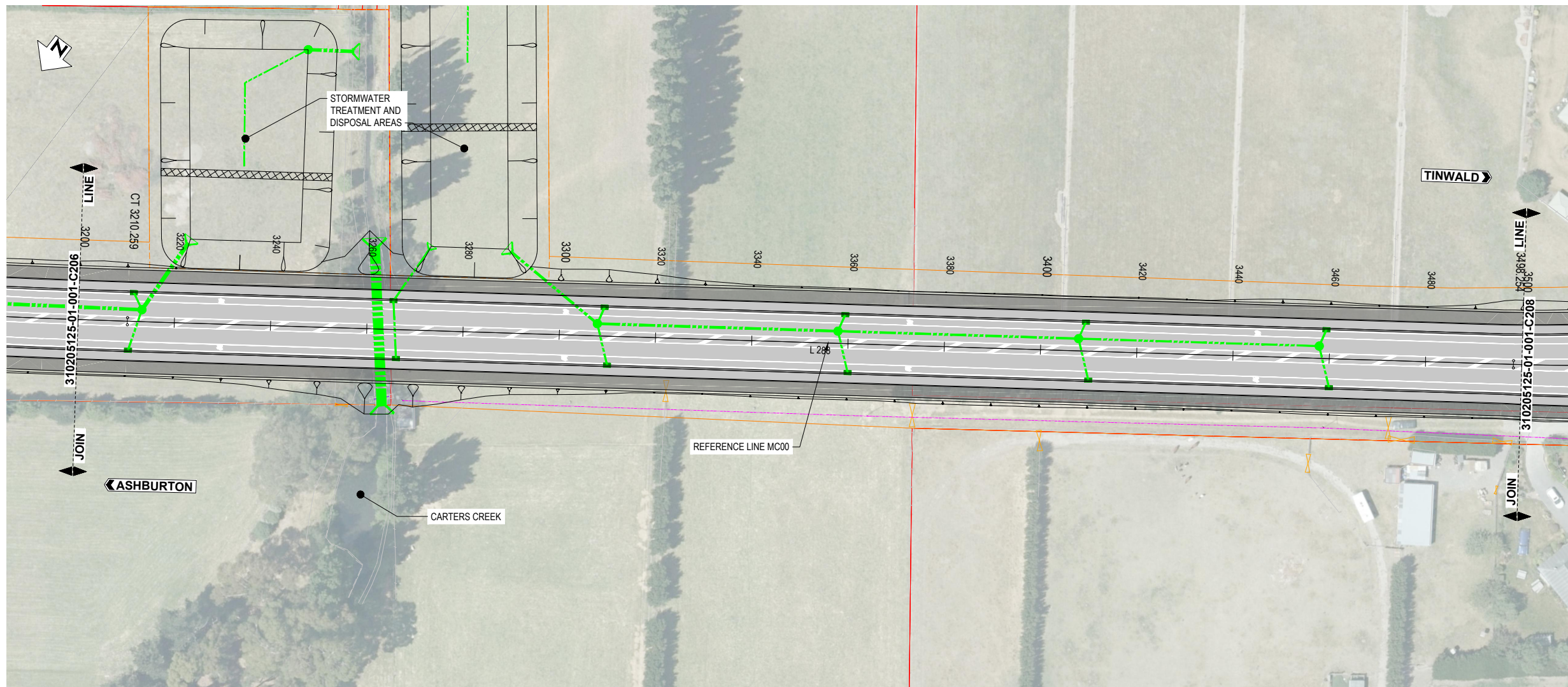


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 6

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C206
Rev.	B

ORIGINAL SIZE A1

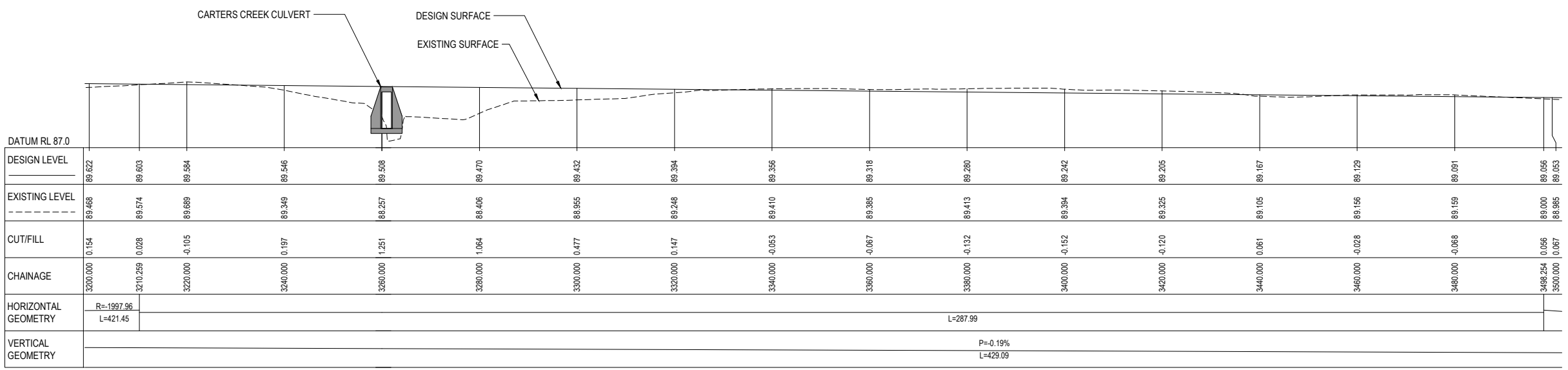
DO NOT SCALE - IF IN DOUBT, ASK



PLAN (MC00)
SCALE 1 : 500

- NOTES:**
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 - REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - EXISTING CENTRELINE
 - EXISTING FENCE
 - EXISTING EDGE OF METAL
 - EXISTING TOP OF BANK
 - EXISTING GATE
 - EXISTING POWER POLE
 - EXISTING LIGHT POLE
 - EXISTING TELECOMMUNICATIONS
 - EXISTING SURVEY MARK
 - EXISTING SIGN
 - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - BATTER SLOPES
 - NEW SIGN TYPE INDICATED
 - NEW CULVERT (SIZE AND TYPE NOTED)
 - NEW STANDARD HEADWALL
 - NEW DRAINAGE MANHOLE
 - NEW STORMWATER SUMP
 - NEW INFILTRATION POND
 - OVERHEAD POWER
 - EXISTING SEWER
 - EXISTING WATER SUPPLY
 - EXISTING STORMWATER
 - FIBRE OPTIC
 - TELECOMMUNICATIONS



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
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		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22



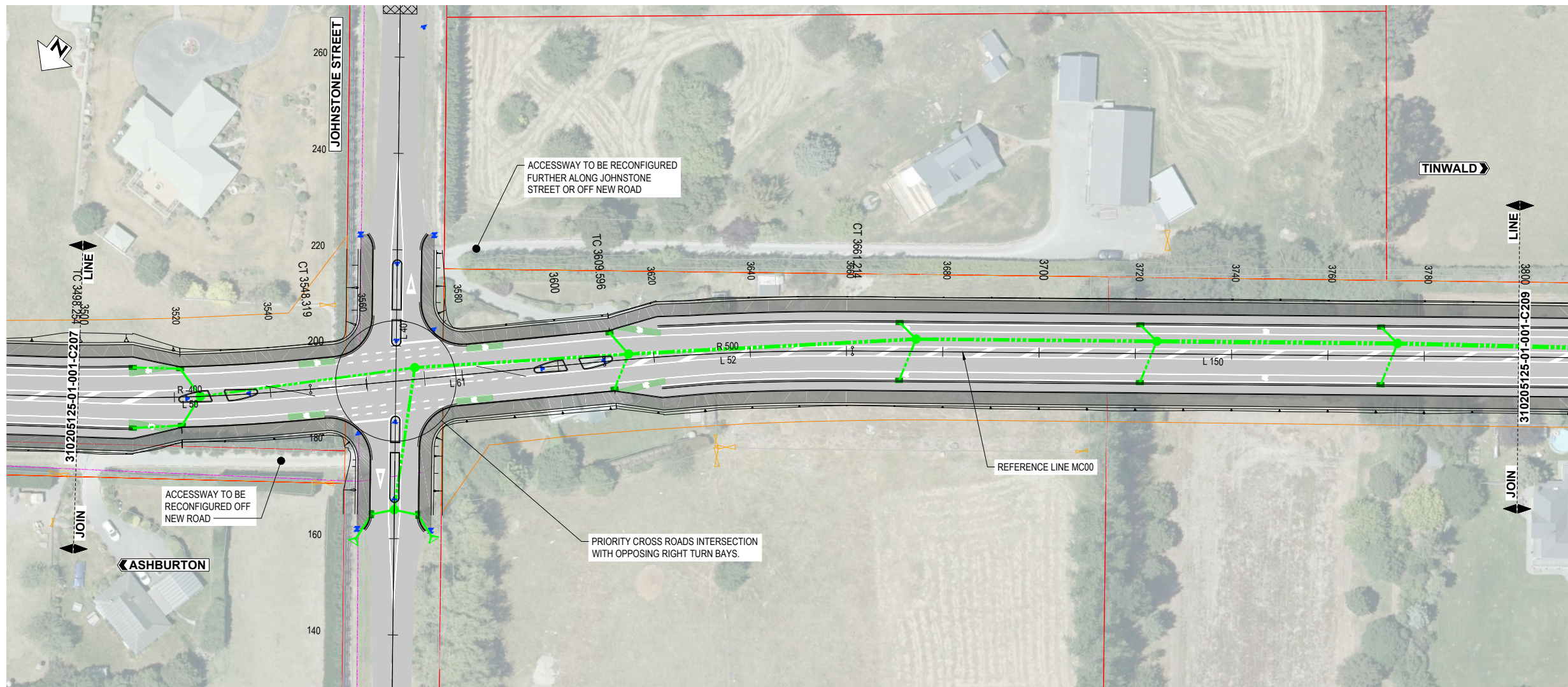
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 7

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C207
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

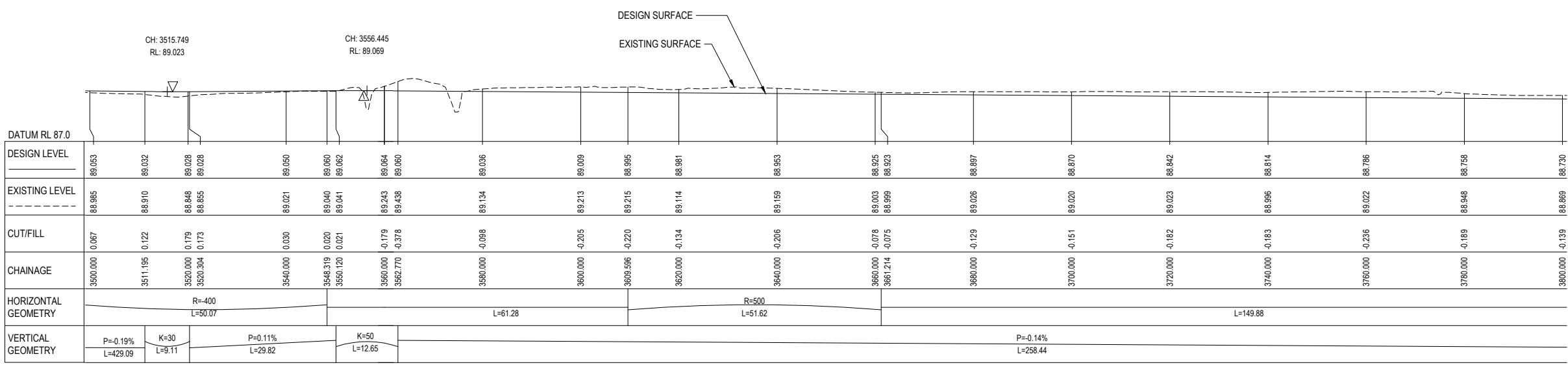
ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500

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- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - EXISTING CENTRELINE
 - EXISTING FENCE
 - EXISTING EDGE OF METAL
 - EXISTING TOP OF BANK
 - EXISTING GATE
 - EXISTING POWER POLE
 - EXISTING LIGHT POLE
 - EXISTING TELECOMMUNICATIONS
 - EXISTING SURVEY MARK
 - EXISTING SIGN
 - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - BATTER SLOPES
 - NEW SIGN TYPE INDICATED
 - NEW CULVERT (SIZE AND TYPE NOTED)
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 - EXISTING STORMWATER
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 - TELECOMMUNICATIONS



LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

STATION	DESIGN LEVEL	EXISTING LEVEL	CUT/FILL	CHAINAGE	HORIZONTAL GEOMETRY	VERTICAL GEOMETRY
3500.000	89.053	88.985	0.067	3500.000	R=400 L=50.07	P=-0.19% L=429.09
3511.056	89.032	88.910	0.122	3511.056		
3520.000	89.028	88.848	0.179	3520.000	K=30 L=9.11	P=0.11% L=29.82
3520.304	89.028	88.855	0.173	3520.304		
3540.000	89.050	89.021	0.030	3540.000	L=61.28	K=50 L=12.65
3548.319	89.060	89.040	0.020	3548.319		
3560.000	89.064	89.243	-0.179	3560.000	R=500 L=51.62	P=-0.14% L=258.44
3562.770	89.060	89.438	-0.378	3562.770		
3600.000	89.036	89.134	-0.098	3600.000	L=149.88	
3609.996	89.009	89.213	-0.205	3609.996		
3620.000	88.995	89.215	-0.220	3620.000		
3661.214	88.981	89.114	-0.134	3661.214		
3680.000	88.953	89.159	-0.206	3680.000		
3700.000	88.925	89.003	-0.078	3700.000		
3720.000	88.923	88.999	-0.075	3720.000		
3740.000	88.897	89.026	-0.129	3740.000		
3760.000	88.870	89.020	-0.151	3760.000		
3780.000	88.842	89.023	-0.182	3780.000		
3800.000	88.814	88.996	-0.183	3800.000		
3820.000	88.786	89.022	-0.236	3820.000		
3840.000	88.758	88.948	-0.189	3840.000		
3860.000	88.730	88.869	-0.139	3860.000		

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
		DRN	CHK	APP

DATE	BY	DESCRIPTION
04.22	DAVIS OGILVIE - AORAKI	SURVEYED
04.22	B. BROWNE	DESIGNED
04.22	Nigel Lister	DRAWN
21.07.22	Phillip Cook	CAD REVIEW
21.07.22	Graeme Corin	DESIGN CHECK
21.07.22	Nigel Lister	DESIGN REVIEW
22.07.22	All Siddiqui	APPROVED

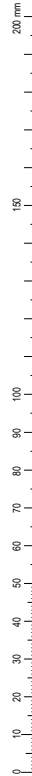
Stantec **Ashburton DISTRICT COUNCIL**

ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

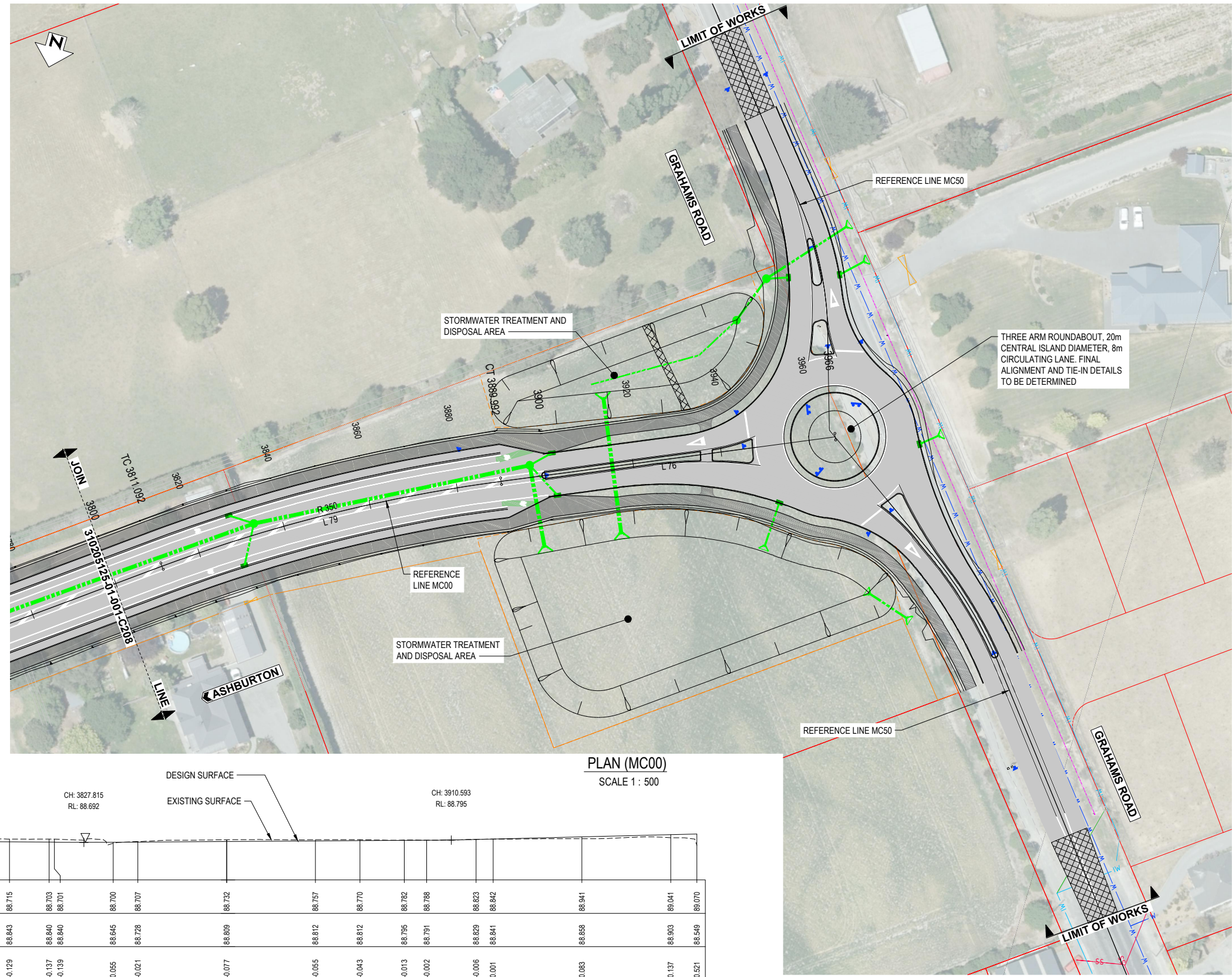
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 8

STATUS	DATE
SCHEME ASSESSMENT	22.07.22
AS SHOWN	
310205125-01-001-C208	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



PLAN (MC00)
SCALE 1 : 500



DATUM RL 87.0	
DESIGN LEVEL	88.730, 88.715, 88.703, 88.701, 88.700, 88.707, 88.732, 88.757, 88.770, 88.782, 88.786, 88.823, 88.842, 88.941, 89.041, 89.070
EXISTING LEVEL	88.889, 88.843, 88.840, 88.840, 88.845, 88.728, 88.809, 88.812, 88.812, 88.795, 88.791, 88.829, 88.841, 88.858, 88.903, 88.549
CUT/FILL	-0.139, -0.129, -0.137, -0.139, 0.055, -0.021, -0.077, -0.055, -0.043, -0.013, -0.002, -0.006, 0.001, 0.083, 0.137, 0.521
CHAINAGE	3800.000, 3811.092, 3820.000, 3821.206, 3834.424, 3840.000, 3860.000, 3880.000, 3889.992, 3900.000, 3905.027, 3916.160, 3920.000, 3940.000, 3960.000, 3965.920
HORIZONTAL GEOMETRY	L=149.88, R=350, L=78.9, R=350, L=78.9, L=75.93
VERTICAL GEOMETRY	P=-0.14%, L=258.44; K=50, L=13.22; P=0.13%, L=70.6; P=0.13%, L=70.6; K=30, L=11.13; P=0.5%, L=49.76

LONGITUDINAL SECTION (MC00)
SCALE HORIZ. 1 : 500 VERT. 1 : 100

NOTES:

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- REFER TO MOTSAM PART 2 FOR PAVEMENT MARKINGS.

LEGEND:

- EXISTING PARCEL BOUNDARY
- EXISTING CENTRELINE
- EXISTING FENCE
- EXISTING EDGE OF METAL
- EXISTING TOP OF BANK
- EXISTING GATE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TELECOMMUNICATIONS
- EXISTING SURVEY MARK
- EXISTING SIGN
- DESIGN CENTRELINE (MC00)
- NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- BATTER SLOPES
- NEW SIGN TYPE INDICATED
- NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND
- OVERHEAD POWER
- EXISTING SEWER
- EXISTING WATER SUPPLY
- EXISTING STORMWATER
- FIBRE OPTIC
- TELECOMMUNICATIONS

NOT FOR CONSTRUCTION

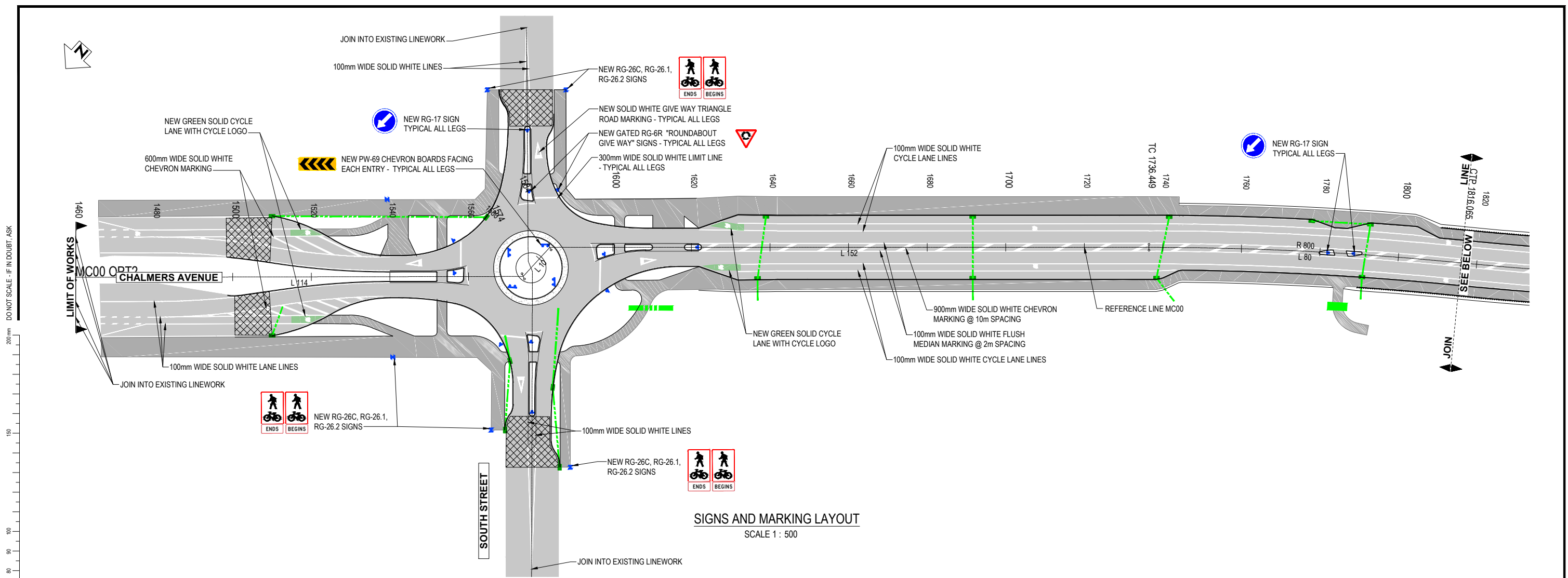
REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	PJC	NL	06/22
REV		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
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DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22
PROF REGISTRATION:		

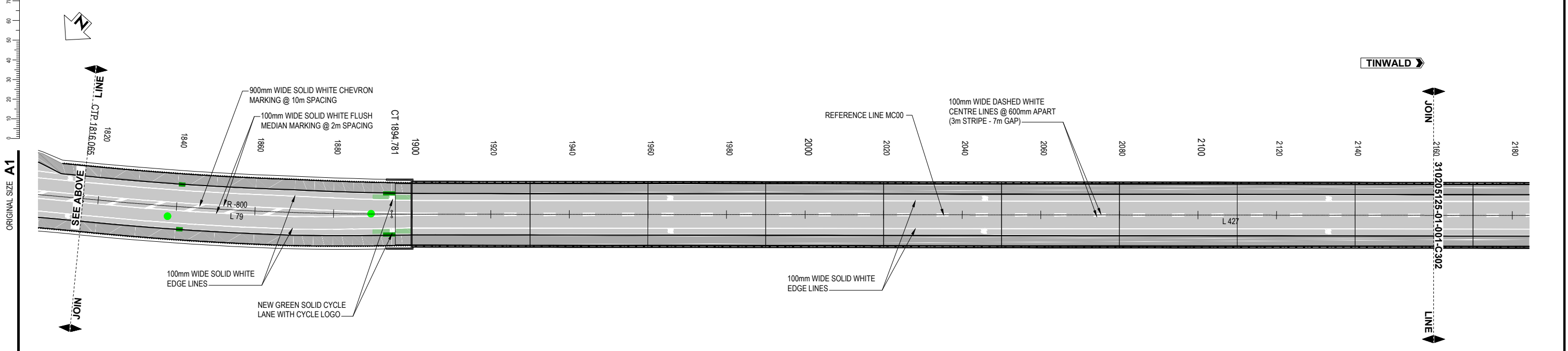


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
PLAN AND LONGITUDINAL SECTION (MC00)
SHEET 9

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C209
Rev.	B



SIGNS AND MARKING LAYOUT
SCALE 1 : 500



SIGNS AND MARKING LAYOUT
SCALE 1 : 500

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1

REV

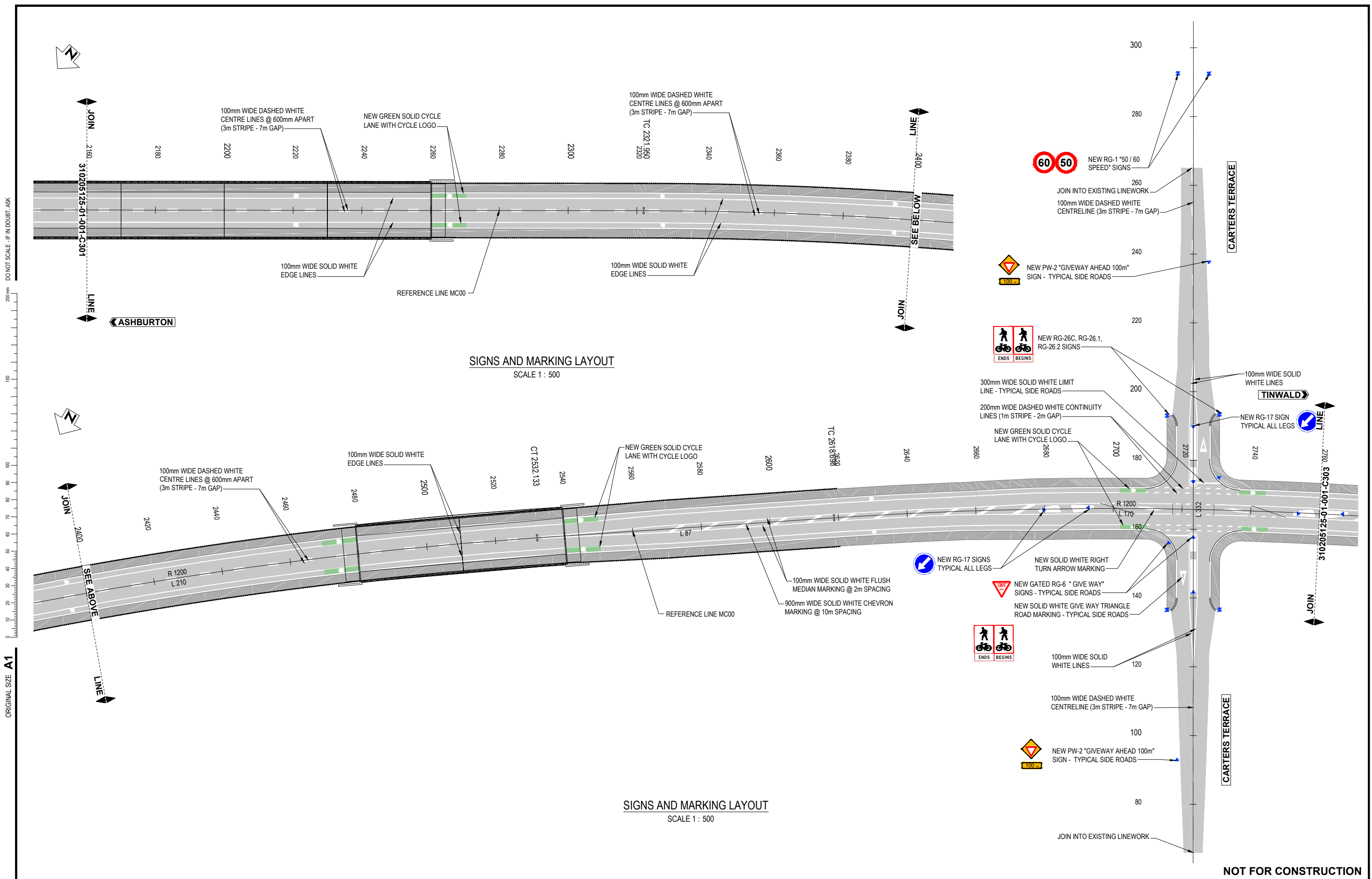
REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	NL	07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED	DRN	CHK	06/22

SURVEYED	DAVIS OGLIVIE - AORAKI	04/22
DESIGNED	B. BROWNE	04/22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
SIGNS AND PAVEMENT MARKING PLAN
SHEET 1

NOT FOR CONSTRUCTION	
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C301
Rev.	B



ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	
			DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Phillip J Cook	06.22
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DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

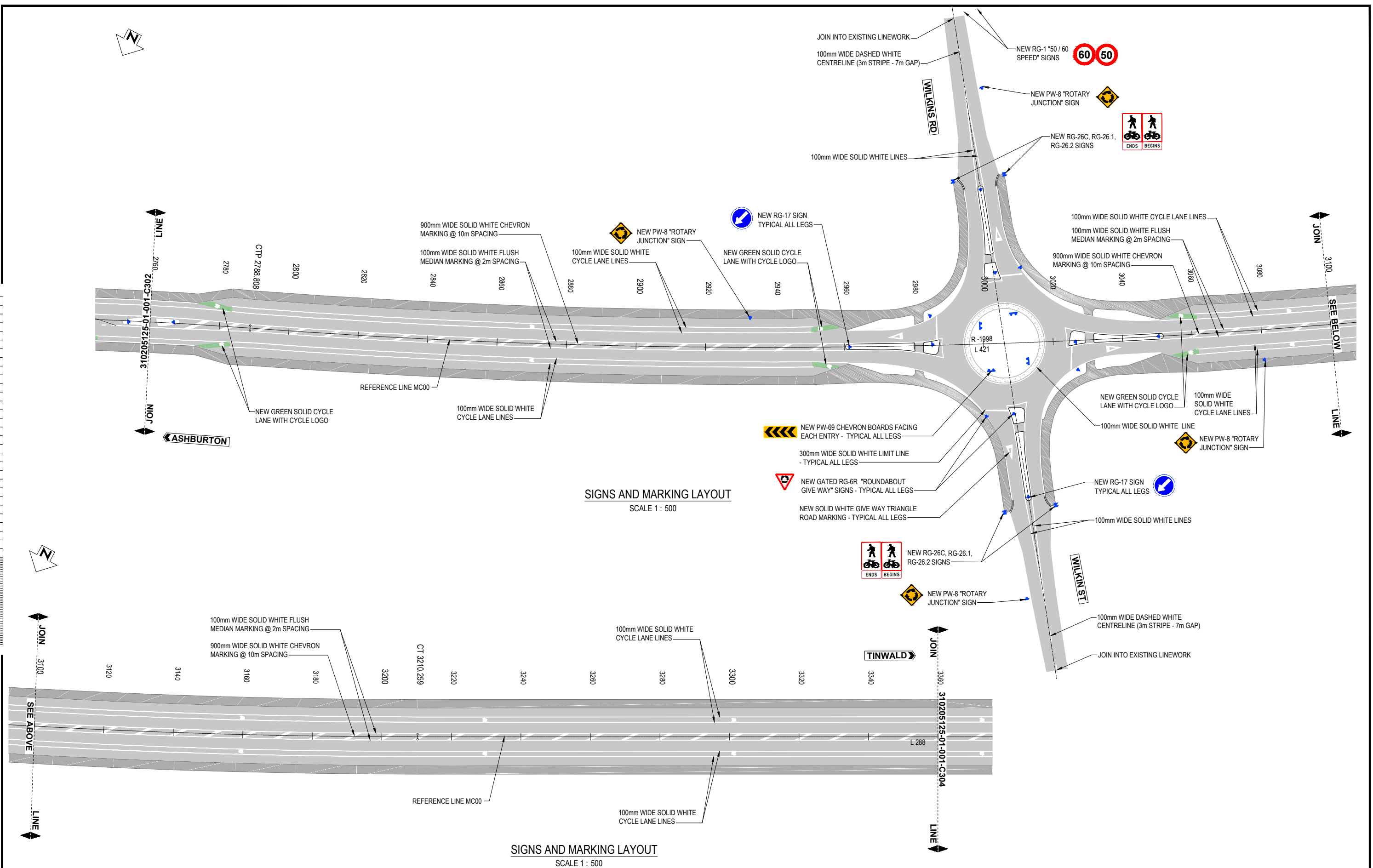
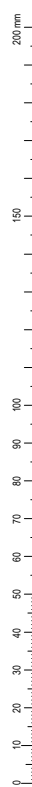


ASHBURTON - TINWALD CONNECTIVITY DBC
 HAKATERE RIVER SECOND CROSSING
 SIGNS AND PAVEMENT MARKING PLAN
 SHEET 2

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1:500
Drawing No.	310205125-01-001-C302
Rev.	B

ORIGINAL SIZE A1

DO NOT SCALE - IF IN DOUBT, ASK



SIGNS AND MARKING LAYOUT
SCALE 1 : 500

SIGNS AND MARKING LAYOUT
SCALE 1 : 500

REV	DESCRIPTION	NL	MS	DATE
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SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	B. BROWNE	04/22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



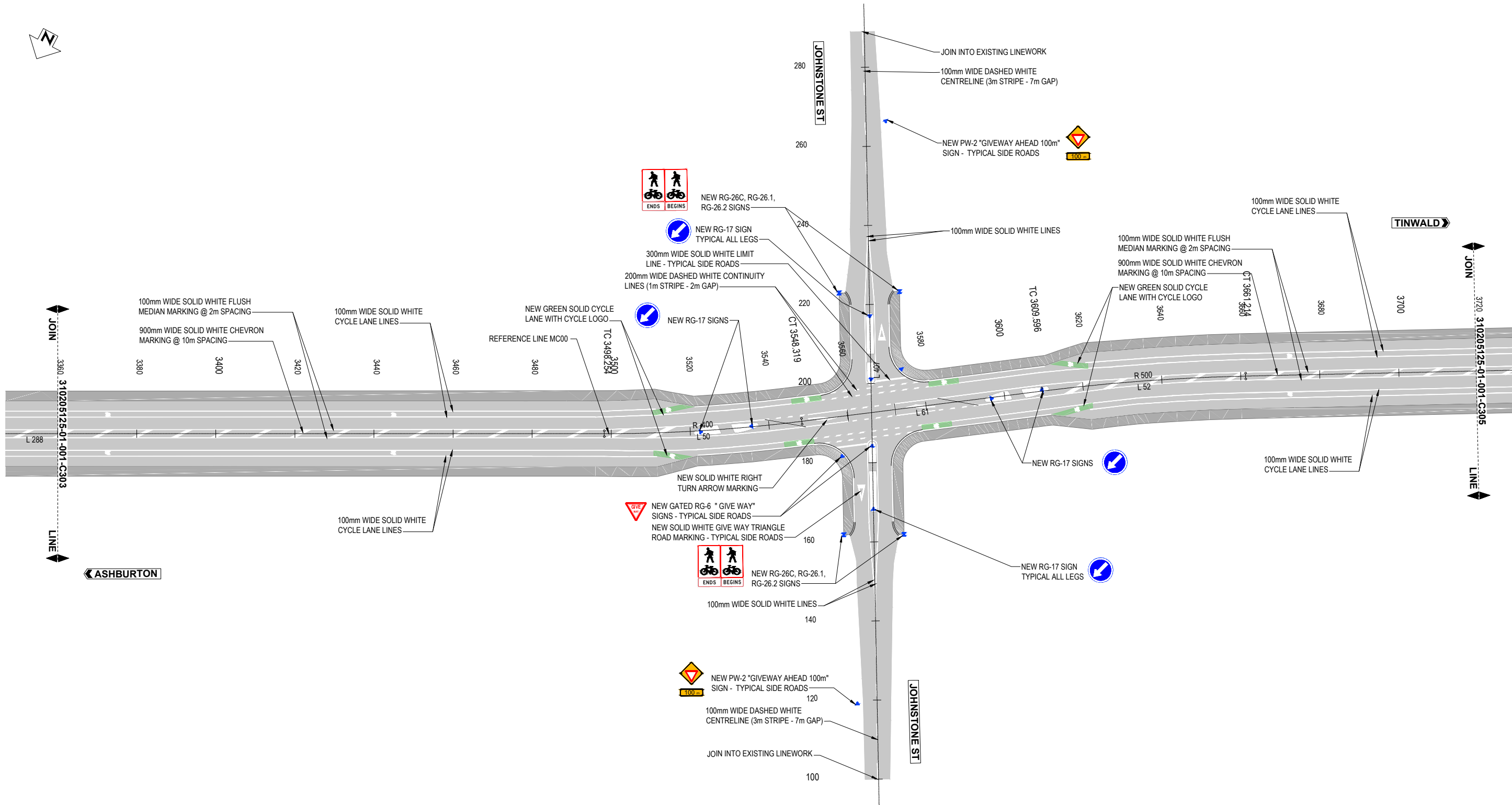
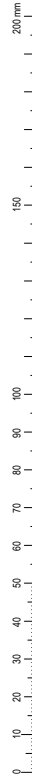
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

SIGNS AND PAVEMENT MARKING PLAN
SHEET 3

NOT FOR CONSTRUCTION	
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C303
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



SIGNS AND MARKING LAYOUT
SCALE 1 : 500

REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	
	REVISIONS		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	B. BROWNE	04.22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



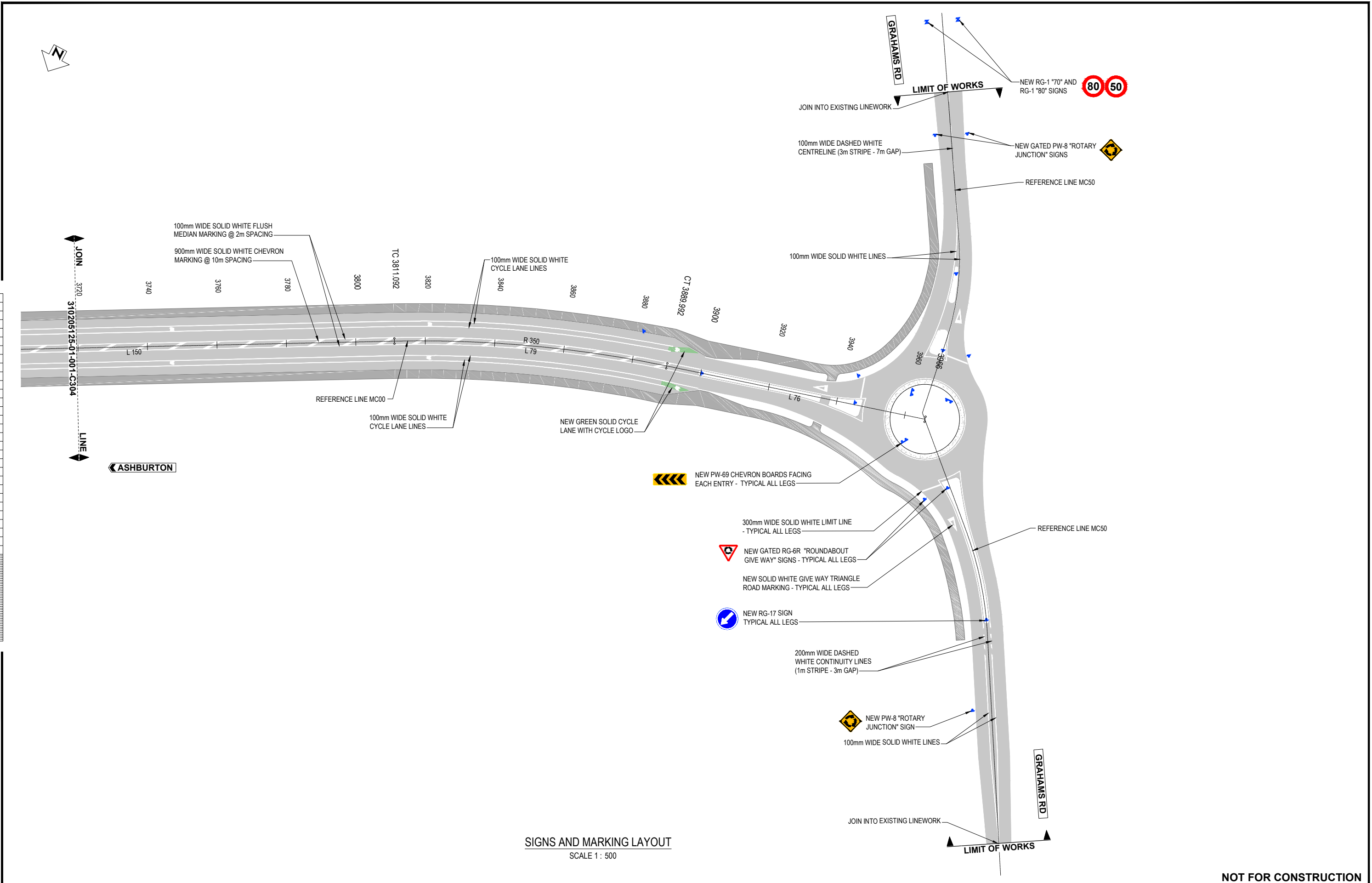
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

SIGNS AND PAVEMENT MARKING PLAN
SHEET 4

NOT FOR CONSTRUCTION	
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C304
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



SIGNS AND MARKING LAYOUT
SCALE 1 : 500

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	

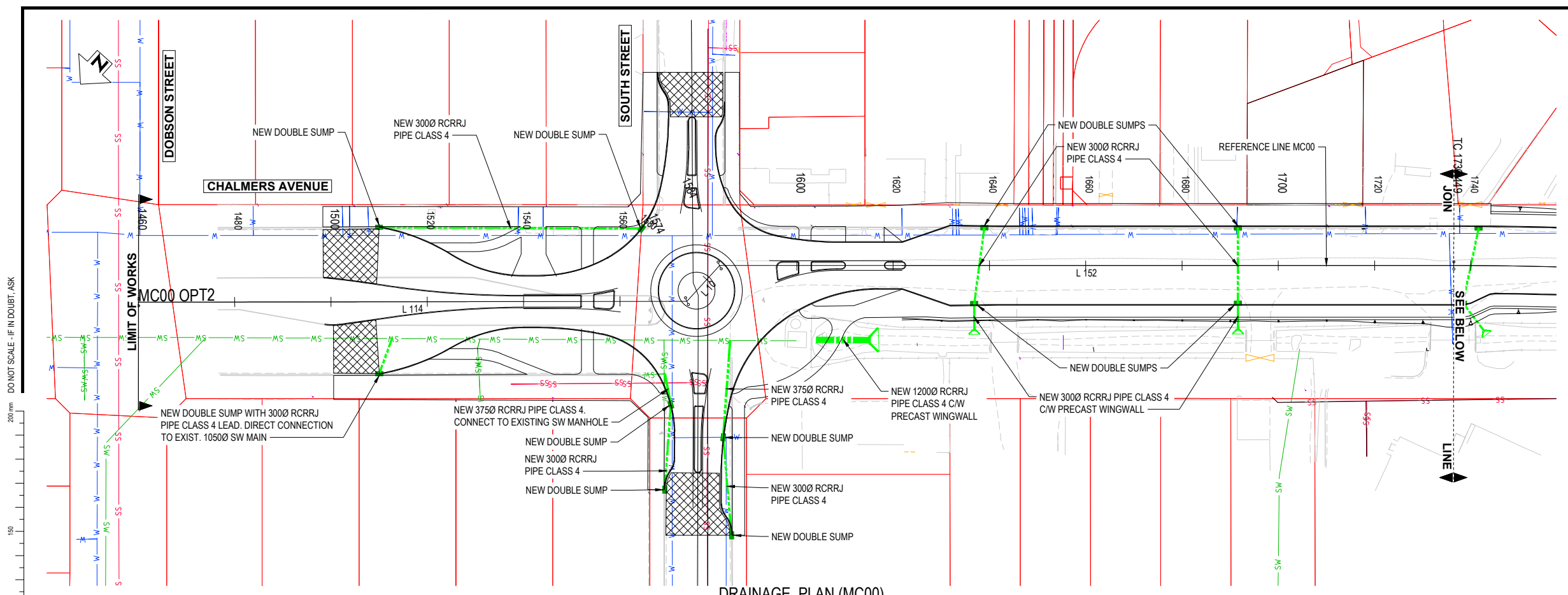
SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	B. BROWNE	04/22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22



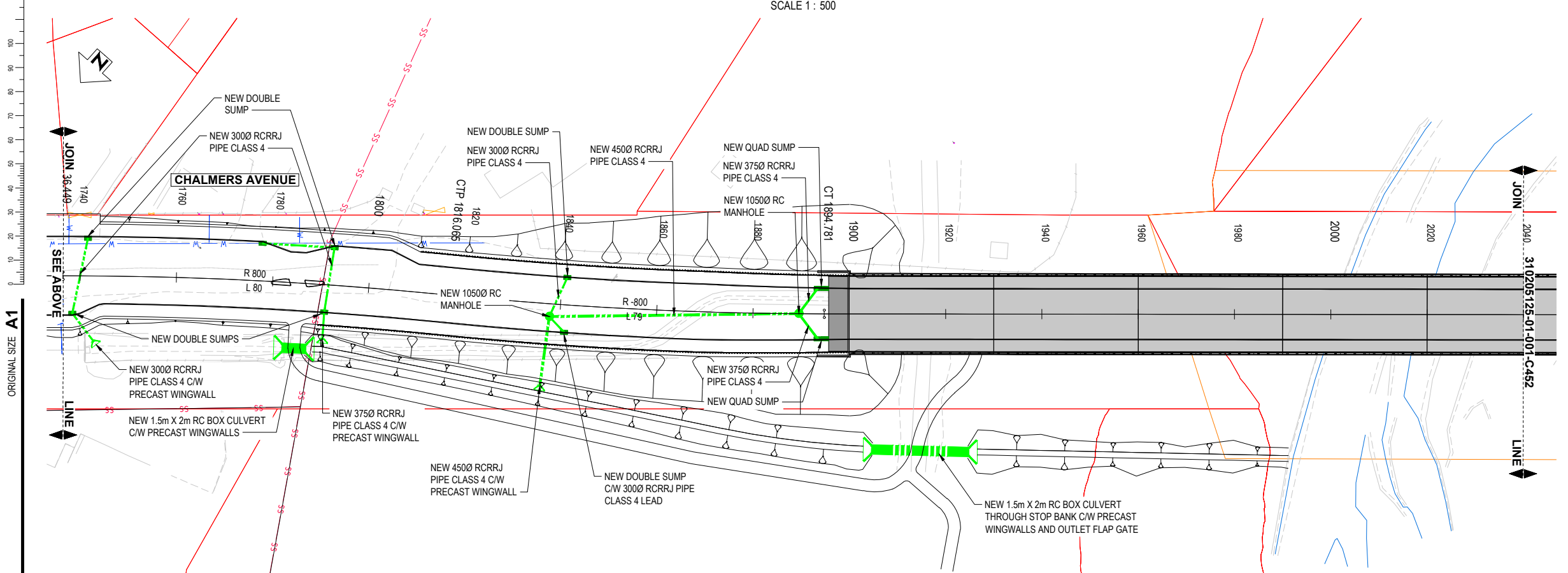
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

SIGNS AND PAVEMENT MARKING PLAN
SHEET 5

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C305
Rev.	B



DRAINAGE PLAN (MC00)
SCALE 1 : 500



DRAINAGE PLAN (MC00)
SCALE 1 : 500

- NOTES:**
1. THESE DRAINAGE PLANS TO BE READ IN CONJUNCTION WITH THE C200 SERIES PLANS.
 2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
 3. PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
 4. CONTRACTOR TO CONFIRM EXISTING PIPE DIAMETERS AND MATERIAL AT CONNECTIONS PRIOR TO ORDERING FITTINGS.
 5. CONTRACTOR TO CONFIRM ALL EXISTING PIPES AT CONNECTION POINTS.

- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - - - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - NEW CULVERT (SIZE AND TYPE NOTED)
 - NEW STANDARD HEADWALL
 - NEW DRAINAGE MANHOLE
 - NEW STORMWATER SUMP
 - ▭ NEW INFILTRATION POND

- EXISTING SERVICES**
- E(OH) — OVERHEAD POWER
 - SS — EXISTING SEWER
 - SW — EXISTING WATER SUPPLY
 - W — EXISTING STORMWATER
 - FIBRE — FIBRE OPTIC
 - UT — TELECOMMUNICATIONS

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
A	DRAFT FOR CLIENT	PJC	NL	06/22
		DRN	CHK	APP

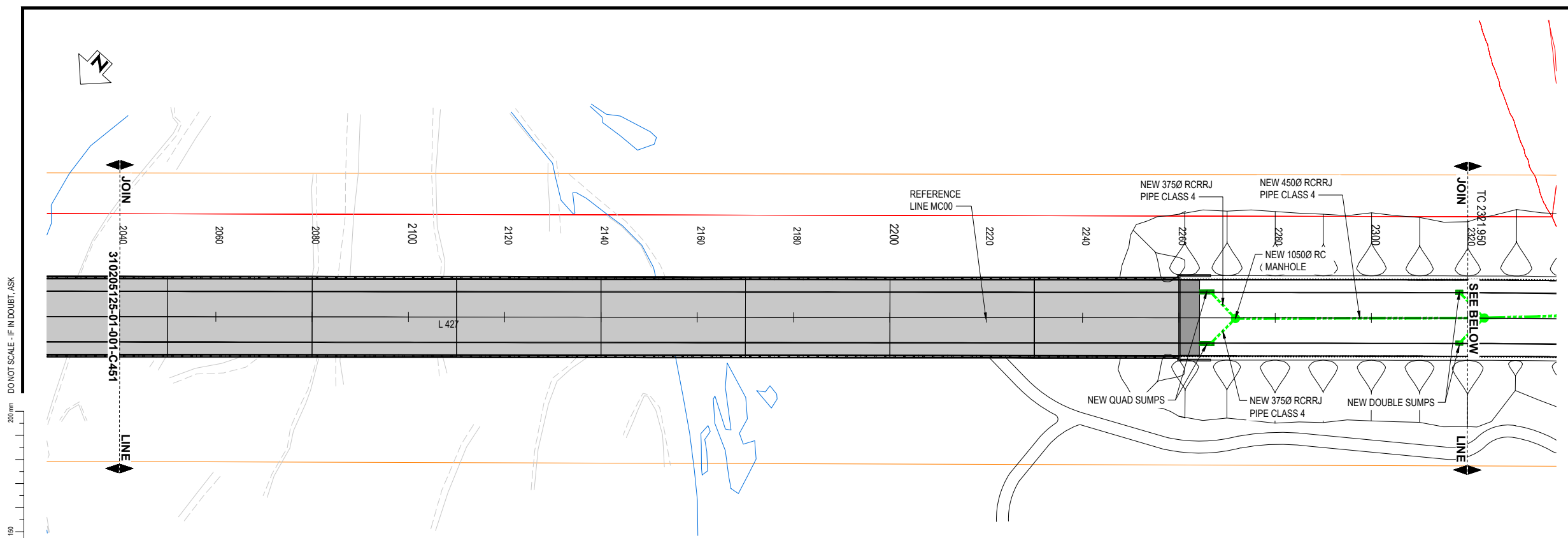
SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Nigel Lister	05.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

DRAINAGE LAYOUT PLANS
SHEET 1

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C451
Rev.	B

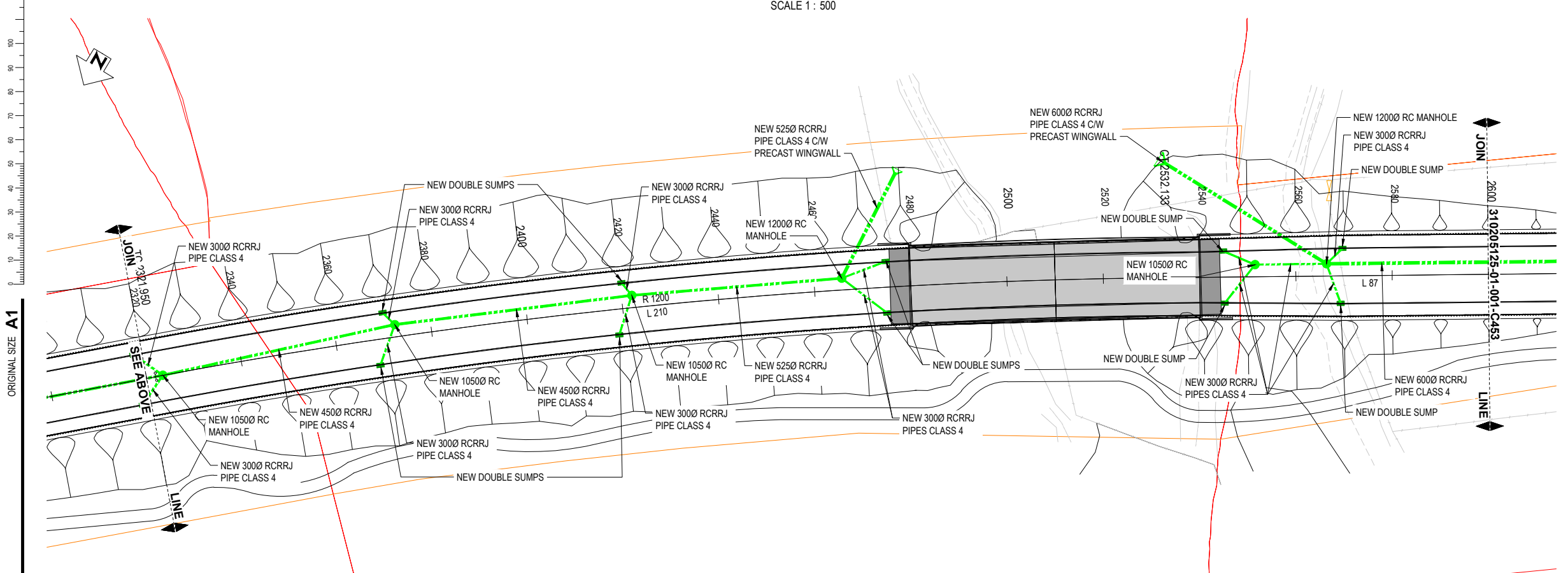


DRAINAGE PLAN (MC00)
SCALE 1 : 500

- NOTES:**
1. THESE DRAINAGE PLANS TO BE READ IN CONJUNCTION WITH THE C200 SERIES PLANS.
 2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
 3. PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
 4. CONTRACTOR TO CONFIRM EXISTING PIPE DIAMETERS AND MATERIAL AT CONNECTIONS PRIOR TO ORDERING FITTINGS.
 5. CONTRACTOR TO CONFIRM ALL EXISTING PIPES AT CONNECTION POINTS.

- LEGEND:**
- EXISTING PARCEL BOUNDARY
 - - - DESIGN CENTRELINE (MC00)
 - NEW KERB (VARIOUS TYPES)
 - NEW EDGE OF SEAL
 - NEW CULVERT (SIZE AND TYPE NOTED)
 - NEW STANDARD HEADWALL
 - NEW DRAINAGE MANHOLE
 - NEW STORMWATER SUMP
 - ▭ NEW INFILTRATION POND

- EXISTING SERVICES**
- E(OH) — OVERHEAD POWER
 - SS — EXISTING SEWER
 - SW — EXISTING WATER SUPPLY
 - W — EXISTING STORMWATER
 - FIBRE — FIBRE OPTIC
 - UT — TELECOMMUNICATIONS



DRAINAGE PLAN (MC00)
SCALE 1 : 500

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	NL	07/22
A	DRAFT FOR CLIENT	DRN	CHK	06/22

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Nigel Lister	05.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	Ali Siddiqui	22.07.22



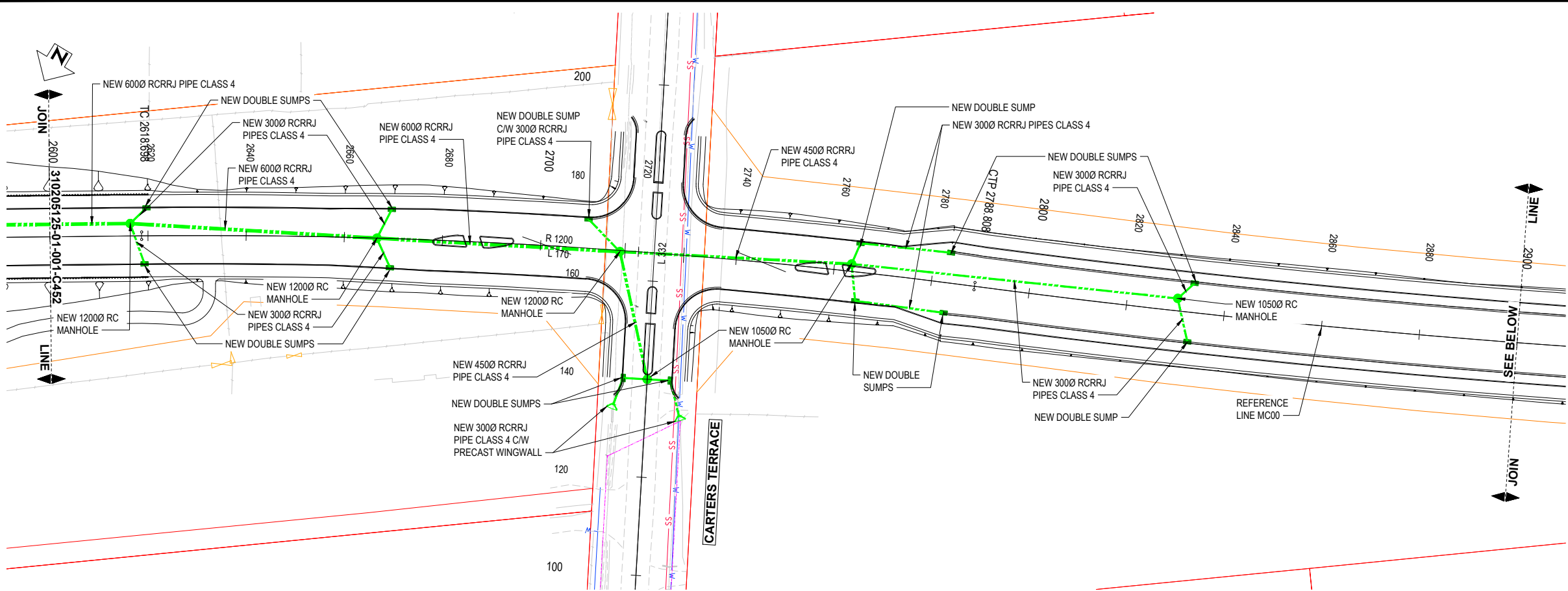
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

DRAINAGE LAYOUT PLANS
SHEET 2

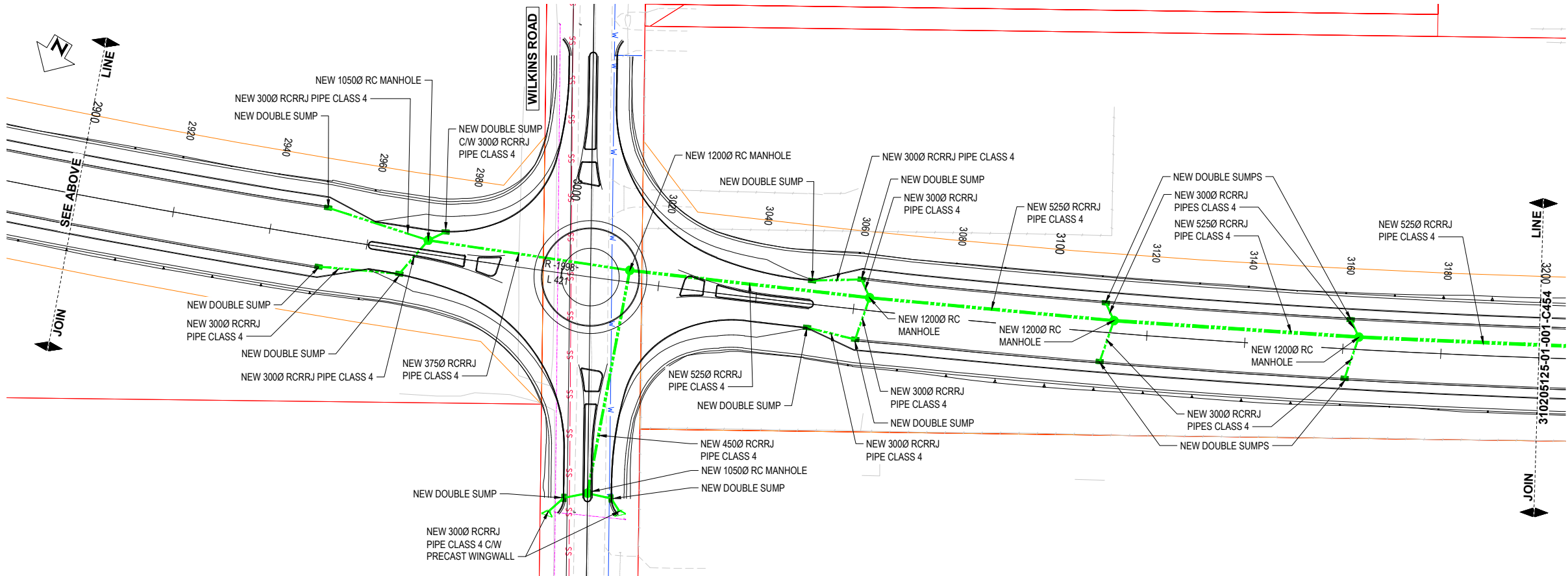
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C452
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



DRAINAGE PLAN (MC00)
SCALE 1 : 500



DRAINAGE PLAN (MC00)
SCALE 1 : 500

NOTES:

1. THESE DRAINAGE PLANS TO BE READ IN CONJUNCTION WITH THE C200 SERIES PLANS.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
3. PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
4. CONTRACTOR TO CONFIRM EXISTING PIPE DIAMETERS AND MATERIAL AT CONNECTIONS PRIOR TO ORDERING FITTINGS.
5. CONTRACTOR TO CONFIRM ALL EXISTING PIPES AT CONNECTION POINTS.

LEGEND:

- EXISTING PARCEL BOUNDARY
- DESIGN CENTRELINE (MC00)
- NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- - - NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND

EXISTING SERVICES

- E(OH) OVERHEAD POWER
- SS EXISTING SEWER
- Sw EXISTING WATER SUPPLY
- W EXISTING STORMWATER
- FIBRE FIBRE OPTIC
- UT TELECOMMUNICATIONS

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	NL	07/22
A	DRAFT FOR CLIENT	DRN	CHK	06/22

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Nigel Lister	05.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	All Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

DRAINAGE LAYOUT PLANS
SHEET 3

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C453
Rev.	B

NOTES:

1. THESE DRAINAGE PLANS TO BE READ IN CONJUNCTION WITH THE C200 SERIES PLANS.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
3. PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
4. CONTRACTOR TO CONFIRM EXISTING PIPE DIAMETERS AND MATERIAL AT CONNECTIONS PRIOR TO ORDERING FITTINGS.
5. CONTRACTOR TO CONFIRM ALL EXISTING PIPES AT CONNECTION POINTS.

LEGEND:

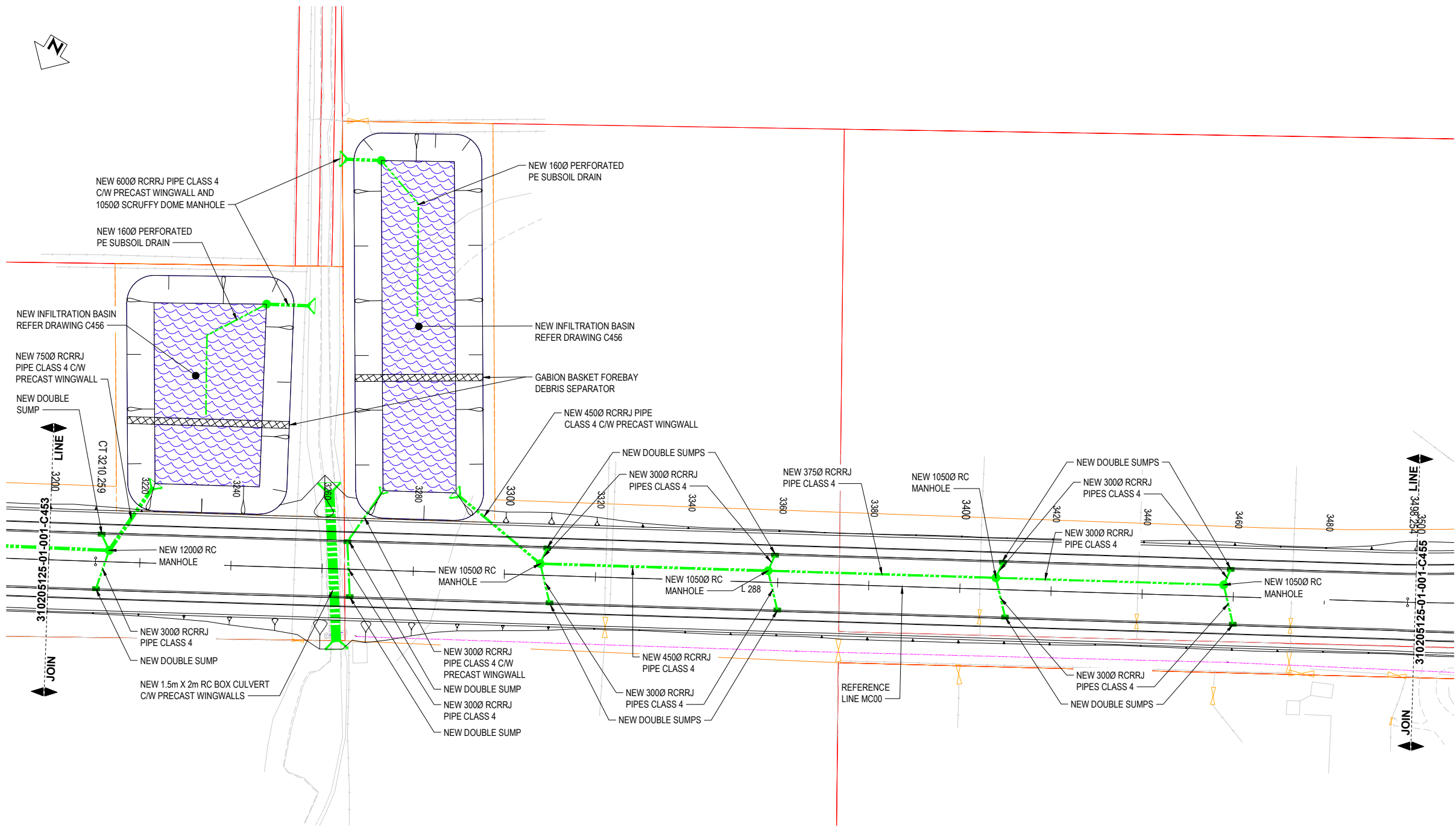
- EXISTING PARCEL BOUNDARY
- DESIGN CENTRELINE (MC00)
- NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND

EXISTING SERVICES

- OVERHEAD POWER
- EXISTING SEWER
- EXISTING WATER SUPPLY
- EXISTING STORMWATER
- FIBRE OPTIC
- TELECOMMUNICATIONS

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



DRAINAGE PLAN (MC00)
SCALE 1 : 500

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	NL	MS	07/22
A	DRAFT FOR CLIENT	PJC	NL	06/22
		DRN	CHK	APP

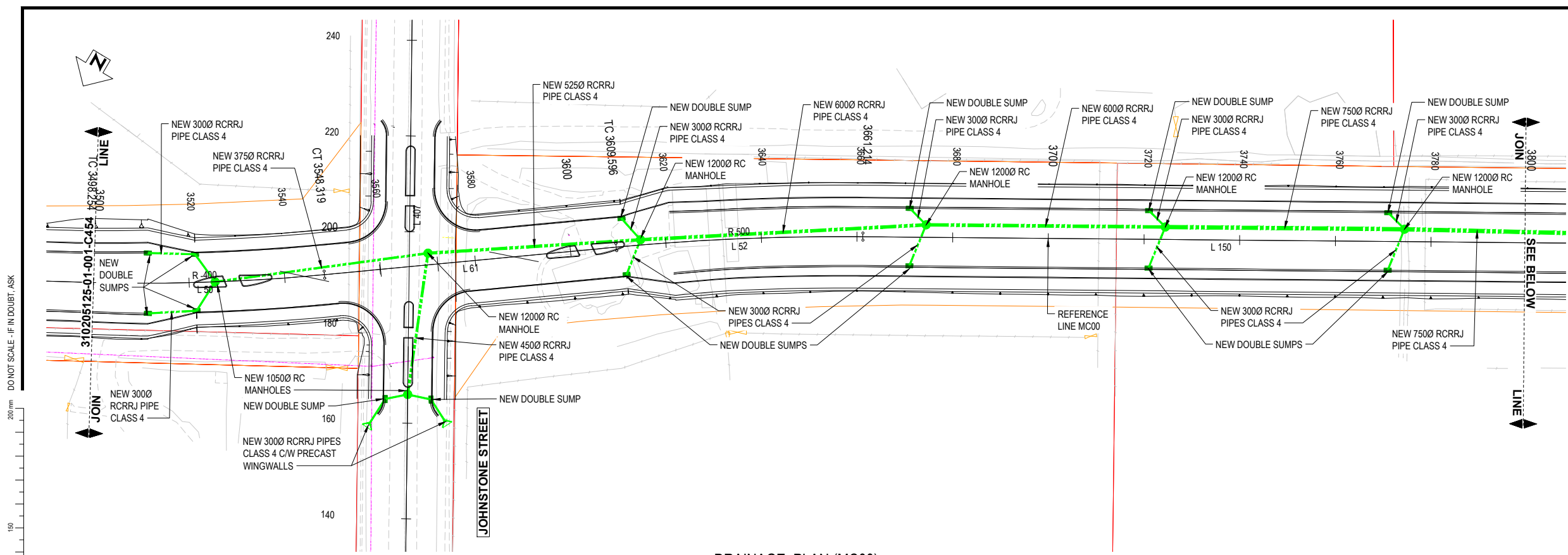
SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Nigel Lister	05.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	Ali Siddiqui	22.07.22



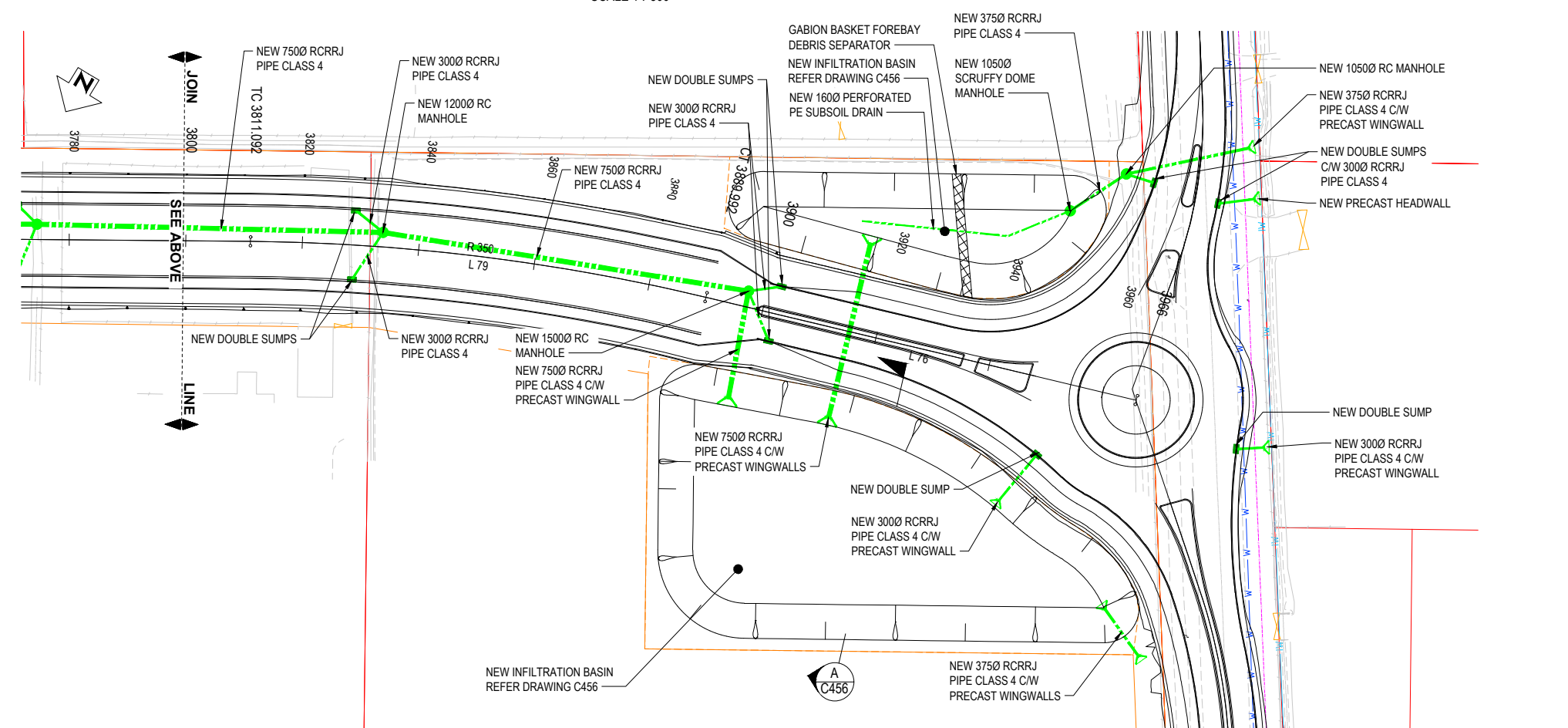
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

DRAINAGE LAYOUT PLANS
SHEET 4

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C454
Rev.	B



DRAINAGE PLAN (MC00)
SCALE 1 : 500



DRAINAGE PLAN (MC00)
SCALE 1 : 500

NOTES:

1. THESE DRAINAGE PLANS TO BE READ IN CONJUNCTION WITH THE C200 SERIES PLANS.
2. ALL DIMENSIONS IN METRES UNLESS OTHERWISE NOTED.
3. PIPES, CABLES AND OTHER UTILITIES, FOUNDATIONS, LEVELS, REFERENCE MARKS AND OTHER OBSTRUCTIONS INDICATED ON THIS DRAWING ARE BASED ONLY ON READILY AVAILABLE RECORD PLANS AND OTHER INFORMATION. THIS INFORMATION MAY NOT BE COMPLETE, ACCURATE, NOR UP TO DATE, PRIOR TO CARRYING OUT ANY EXCAVATION OR OTHER PHYSICAL WORK. CONTRACTORS SHALL OBTAIN THE LATEST INFORMATION FROM UTILITY PROVIDERS AND CARRY OUT DETAILED EXPLORATORY WORK, TRACING, LOCATING, PROTECTION, ISOLATION AND ALTERATIONS AS ARE REQUIRED UNDER NZS 3910 CLAUSE 5.13.
4. CONTRACTOR TO CONFIRM EXISTING PIPE DIAMETERS AND MATERIAL AT CONNECTIONS PRIOR TO ORDERING FITTINGS.
5. CONTRACTOR TO CONFIRM ALL EXISTING PIPES AT CONNECTION POINTS.

LEGEND:

- EXISTING PARCEL BOUNDARY
- - - DESIGN CENTRELINE (MC00)
- = NEW KERB (VARIOUS TYPES)
- NEW EDGE OF SEAL
- - - NEW CULVERT (SIZE AND TYPE NOTED)
- NEW STANDARD HEADWALL
- NEW DRAINAGE MANHOLE
- NEW STORMWATER SUMP
- NEW INFILTRATION POND

EXISTING SERVICES

- E(OH) OVERHEAD POWER
- SS EXISTING SEWER
- SW EXISTING WATER SUPPLY
- W EXISTING STORMWATER
- FIBRE FIBRE OPTIC
- UT TELECOMMUNICATIONS

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1

NOT FOR CONSTRUCTION

REV	DESCRIPTION	NL	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	NL	07/22
A	DRAFT FOR CLIENT	DRN	CHK	06/22

SURVEYED	DAVIS OGILOVE - AORAKI	04.22
DESIGNED	Nigel Lister	05.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	Ali Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

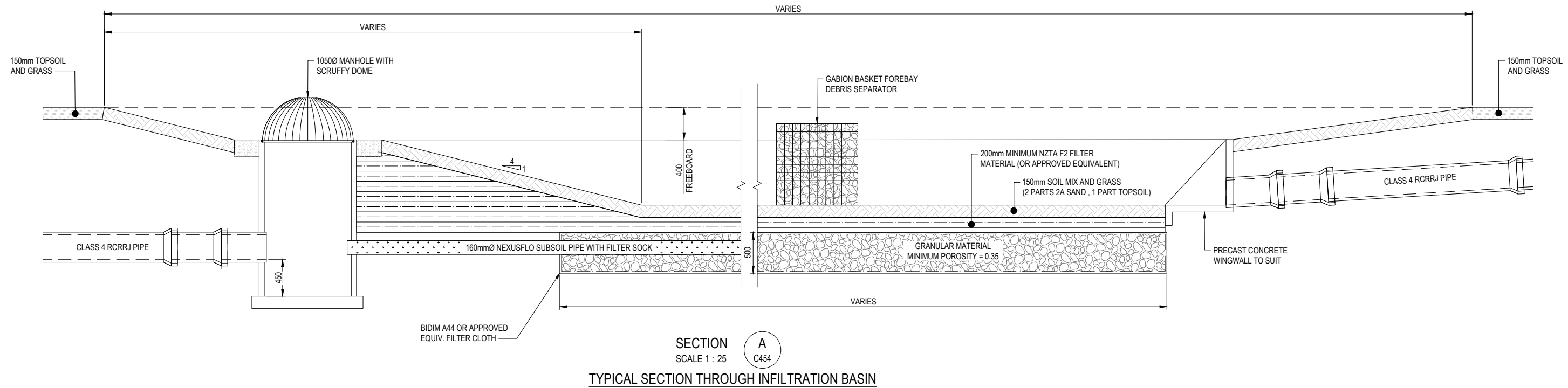
DRAINAGE LAYOUT PLANS
SHEET 5

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C455
Rev.	B

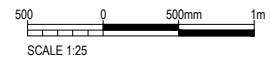
DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1



SECTION A
SCALE 1 : 25
TYPICAL SECTION THROUGH INFILTRATION BASIN



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT	06/22	PJC	NL	
	REVISIONS				

SURVEYED		
DESIGNED	Nigel Lister	06/22
DRAWN	Phillip J Cook	06/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Bryan Peters	21.07.22
DESIGN REVIEW	Bryan Peters	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

INFILTRATION BASIN DETAIL

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	AS SHOWN
Drawing No.	310205125-01-001-C456
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm

150

100

80

70

60

50

40

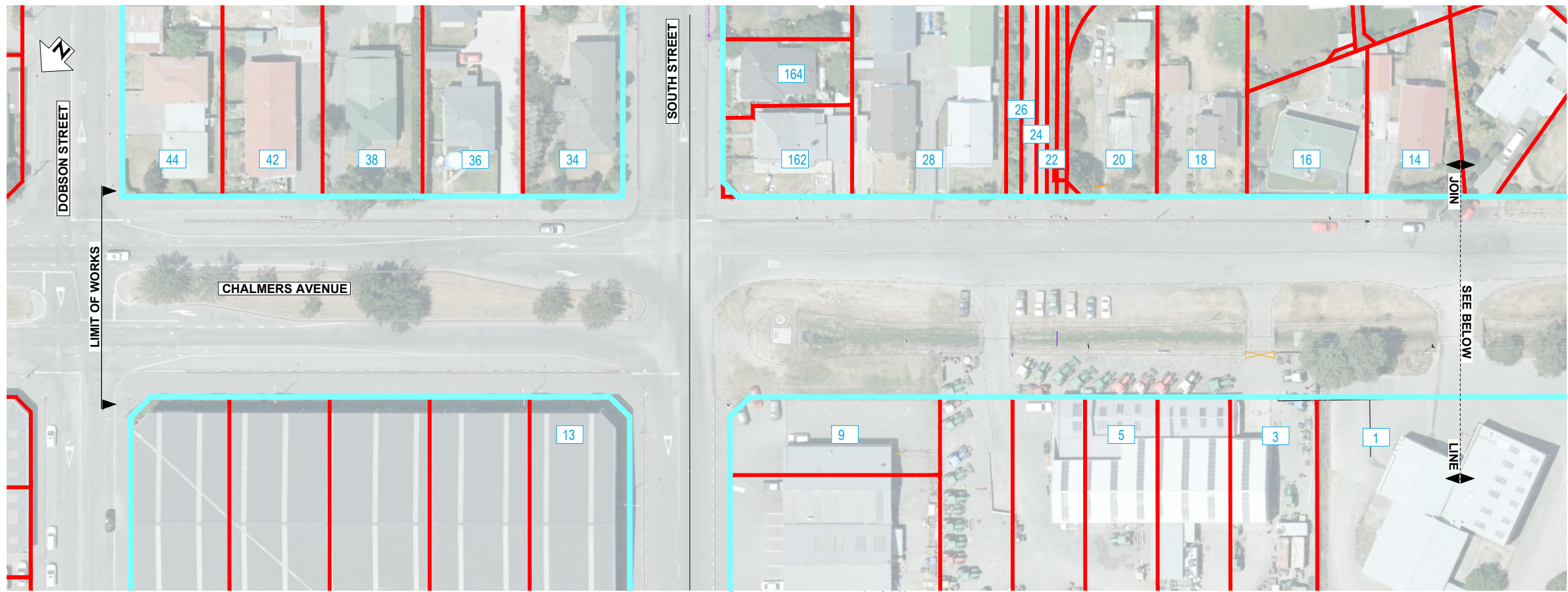
30

20

10

0

ORIGINAL SIZE A1



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500

NOTES:

1. CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
2. THE COORDINATES ARE IN TERMS OF NZGD2000 GAWLER CIRCUIT.
3. AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY ON COMPLETION OF THE WORKS.
4. THIS DRAWING MUST ALWAYS BE REPRODUCED IN COLOUR.
5. LAND AREA SHOWN IN PROPERTY TITLE INFORMATION ON PLANS IS IN HECTARES.

LEGEND:

- EXISTING ROAD BOUNDARY
- PROPOSED NEW ROAD BOUNDARY
- EXISTING PARCEL BOUNDARY
- LAND TO BE ACQUIRED AND SET APART FOR ROAD
- LAND TO BE ACQUIRED AND SET APART FOR STORMWATER
- 1 PROPERTY REFERENCE NUMBER
- 100 PROPERTY ADDRESS

LAND REQUIRED FOR ROAD

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
1	12,345	PART RURAL SECTION 4354	AARON GEOFFREY BUTTERICK, GILBERT WARREN BUTTERICK
2	8,020	PART LOT 5 DP821	ASHBURTON DISTRICT COUNCIL
3	8,660	LOT 4 DP821	ASHBURTON DISTRICT COUNCIL
4	8,905	LOT 3 DP33684	ALEX BRAAS
7	4,605	LOT 3 DP60937	WALLACE HENRY BREACH
8	4,845	LOT 2 DP60937	GRAEME MEREDITH WILSON, JOCELYN WILSON
9	4,500	LOT 33 DP 821	ASHBURTON DISTRICT COUNCIL
10	3,535	LOT 1 DP 62260	ASHBURTON DISTRICT COUNCIL
11	4,620	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	60,035		

LAND REQUIRED FOR STORMWATER

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
5	2,735	LOT 3 DP33684	ALEX BRAAS
6	2,880	LOT 3 DP60937	WALLACE HENRY BREACH
12	1,250	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
13	3,180	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	5,615		

NOTE: AREAS ROUNDED UP TO NEAREST 5m²

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP
A	DRAFT FOR CLIENT REVIEW			

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Nigel Lister	07/22
DRAWN	Nigel Lister	07/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Barbara Browne	21.07.22
DESIGN REVIEW	Matt Soper	21.07.22
APPROVED	All Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

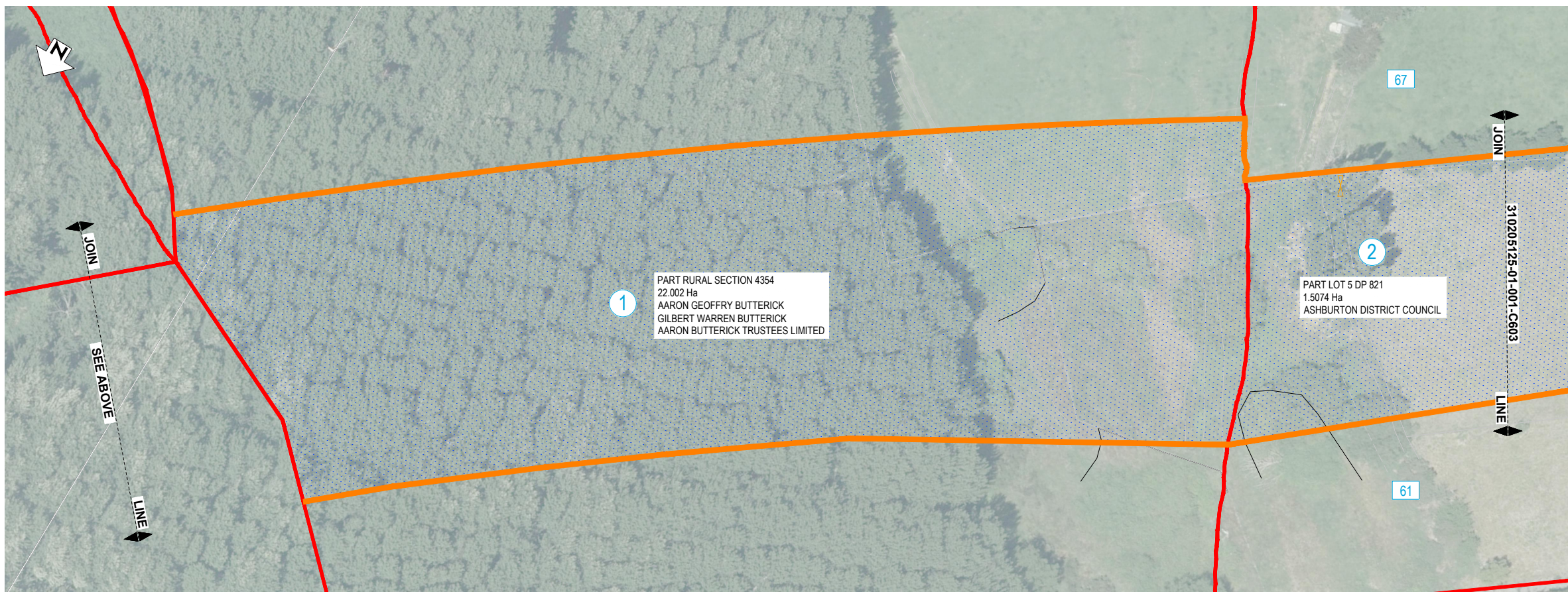
LAND REQUIREMENT PLAN
SHEET 1

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C601
Rev.	A



LAND REQUIREMENT PLAN (MC00)

SCALE 1 : 500



LAND REQUIREMENT PLAN (MC00)

SCALE 1 : 500

NOTES:

1. CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
2. THE COORDINATES ARE IN TERMS OF NZGD2000 GAWLER CIRCUIT.
3. AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY ON COMPLETION OF THE WORKS.
4. THIS DRAWING MUST ALWAYS BE REPRODUCED IN COLOUR.
5. LAND AREA SHOWN IN PROPERTY TITLE INFORMATION ON PLANS IS IN HECTARES.

LEGEND:

- EXISTING ROAD BOUNDARY
- PROPOSED NEW ROAD BOUNDARY
- EXISTING PARCEL BOUNDARY
- LAND TO BE ACQUIRED AND SET APART FOR ROAD
- LAND TO BE ACQUIRED AND SET APART FOR STORMWATER
- PROPERTY REFERENCE NUMBER
- PROPERTY ADDRESS

LAND REQUIRED FOR ROAD

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
1	12,345	PART RURAL SECTION 4354	AARON GEOFFREY BUTTERICK, GILBERT WARREN BUTTERICK
2	8,020	PART LOT 5 DP821	ASHBURTON DISTRICT COUNCIL
3	8,660	LOT 4 DP821	ASHBURTON DISTRICT COUNCIL
4	8,905	LOT 3 DP33684	ALEX BRAAS
7	4,605	LOT 3 DP60937	WALLACE HENRY BREACH
8	4,845	LOT 2 DP60937	GRAEME MEREDITH WILSON, JOCELYN WILSON
9	4,500	LOT 33 DP 821	ASHBURTON DISTRICT COUNCIL
10	3,535	LOT 1 DP 62260	ASHBURTON DISTRICT COUNCIL
11	4,620	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	60,035		

LAND REQUIRED FOR STORMWATER

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
5	2,735	LOT 3 DP33684	ALEX BRAAS
6	2,880	LOT 3 DP60937	WALLACE HENRY BREACH
12	1,250	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
13	3,180	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	5,615		

NOTE: AREAS ROUNDED UP TO NEAREST 5m²

DO NOT SCALE - IF IN DOUBT, ASK

200mm

150

100

50

0

0

10

20

30

40

50

60

70

80

90

100

0

0

0

0

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ORIGINAL SIZE A1

NOT FOR CONSTRUCTION

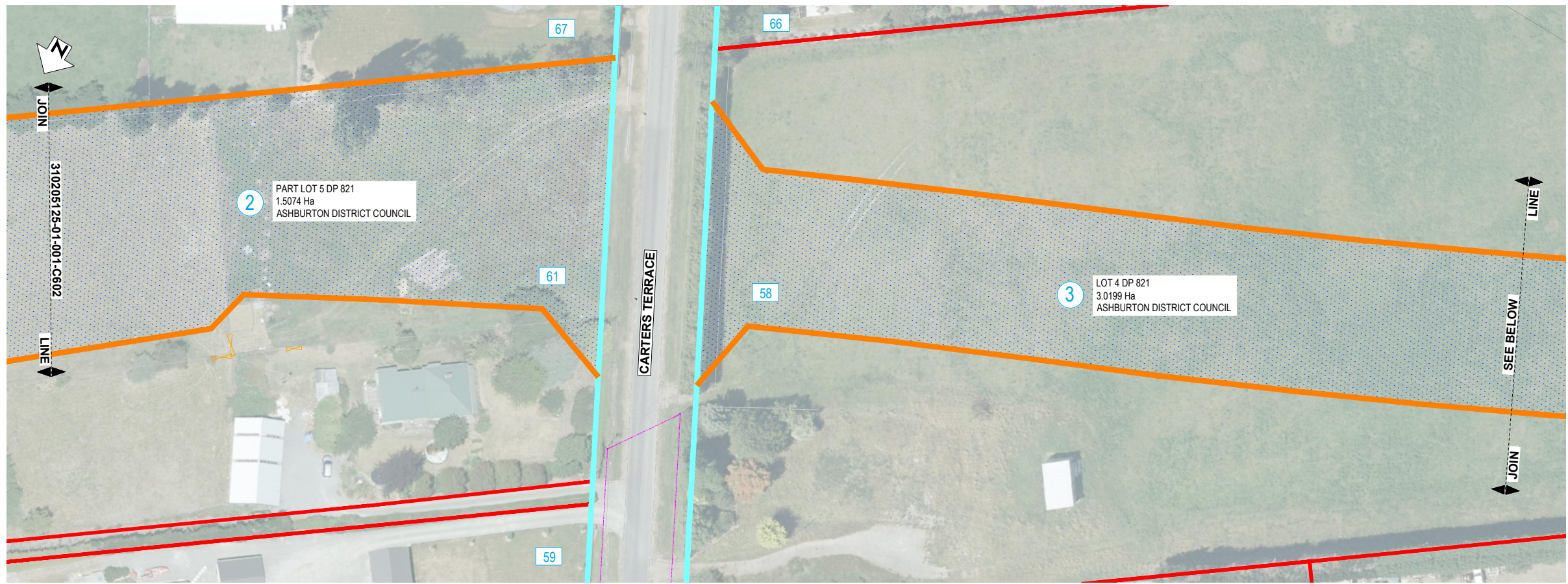
REV	DESCRIPTION	PJC	NL	APP	DATE
A	DRAFT FOR CLIENT REVIEW				07/22

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Nigel Lister	07/22
DRAWN	Nigel Lister	07/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Barbara Browne	21.07.22
DESIGN REVIEW	Matt Soper	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		

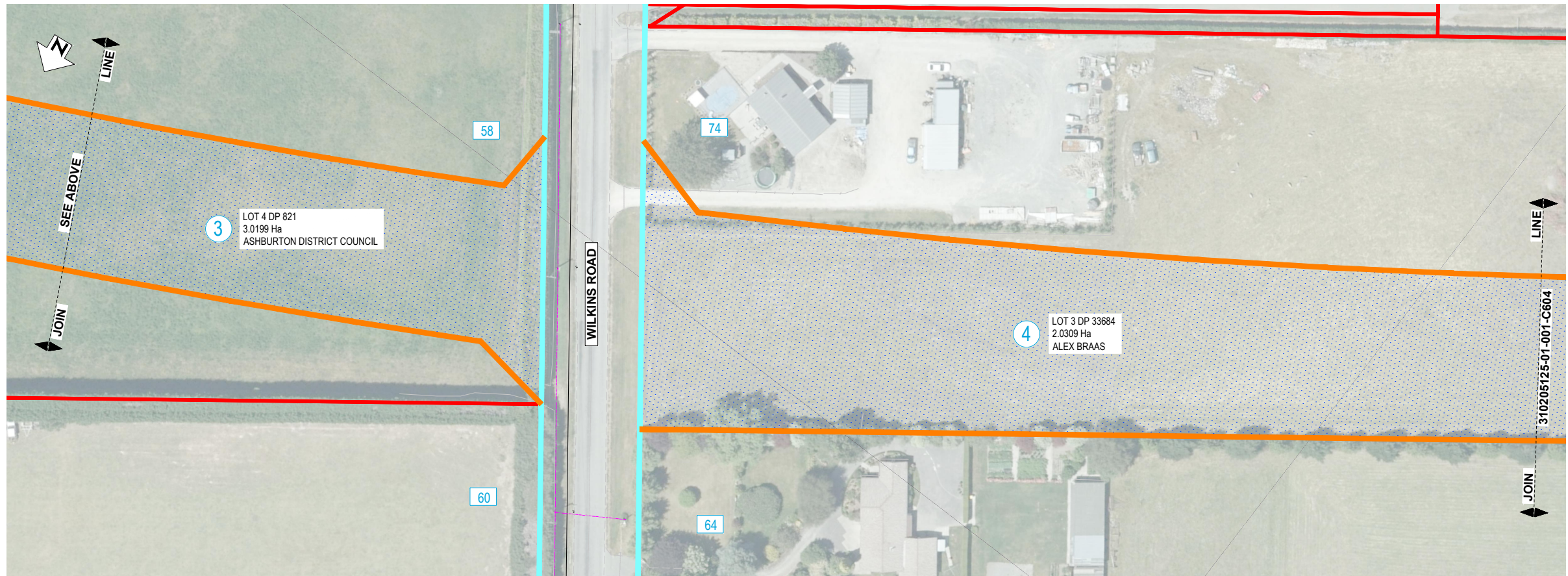
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

LAND REQUIREMENT PLAN
SHEET 2

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C602
Rev.	A



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500

NOTES:

- CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
- THE COORDINATES ARE IN TERMS OF NZGD2000 GAWLER CIRCUIT.
- AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY ON COMPLETION OF THE WORKS.
- THIS DRAWING MUST ALWAYS BE REPRODUCED IN COLOUR.
- LAND AREA SHOWN IN PROPERTY TITLE INFORMATION ON PLANS IS IN HECTARES.

LEGEND:

- EXISTING ROAD BOUNDARY
- PROPOSED NEW ROAD BOUNDARY
- EXISTING PARCEL BOUNDARY
- LAND TO BE ACQUIRED AND SET APART FOR ROAD
- LAND TO BE ACQUIRED AND SET APART FOR STORMWATER
- 1 PROPERTY REFERENCE NUMBER
- 100 PROPERTY ADDRESS

LAND REQUIRED FOR ROAD

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
1	12,345	PART RURAL SECTION 4354	AARON GEOFFREY BUTTERICK, GILBERT WARREN BUTTERICK
2	8,020	PART LOT 5 DP821	ASHBURTON DISTRICT COUNCIL
3	8,660	LOT 4 DP821	ASHBURTON DISTRICT COUNCIL
4	8,905	LOT 3 DP33684	ALEX BRAAS
7	4,605	LOT 3 DP60937	WALLACE HENRY BREACH
8	4,845	LOT 2 DP60937	GRAEME MEREDITH WILSON, JOCELYN WILSON
9	4,500	LOT 33 DP 821	ASHBURTON DISTRICT COUNCIL
10	3,535	LOT 1 DP 62260	ASHBURTON DISTRICT COUNCIL
11	4,620	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	60,035		

LAND REQUIRED FOR STORMWATER

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
5	2,735	LOT 3 DP33684	ALEX BRAAS
6	2,880	LOT 3 DP60937	WALLACE HENRY BREACH
12	1,250	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
13	3,180	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	5,615		

NOTE: AREAS ROUNDED UP TO NEAREST 5m²

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1

REV	DESCRIPTION	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP
A	DRAFT FOR CLIENT REVIEW			

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Nigel Lister	07/22
DRAWN	Nigel Lister	07/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Barbara Browne	21.07.22
DESIGN REVIEW	Matt Soper	21.07.22
APPROVED	All Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

LAND REQUIREMENT PLAN
SHEET 3


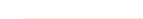


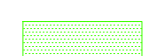

NOT FOR CONSTRUCTION

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C603
Rev.	A

NOTES:

- CADASTRAL BOUNDARIES ARE INDICATIVE ONLY. BOUNDARIES ARE TO BE VERIFIED BY SURVEY.
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- AREAS ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY ON COMPLETION OF THE WORKS.
- THIS DRAWING MUST ALWAYS BE REPRODUCED IN COLOUR.
- LAND AREA SHOWN IN PROPERTY TITLE INFORMATION ON PLANS IS IN HECTARES.

LEGEND:

-  EXISTING ROAD BOUNDARY
-  PROPOSED NEW ROAD BOUNDARY
-  EXISTING PARCEL BOUNDARY
-  LAND TO BE ACQUIRED AND SET APART FOR ROAD
-  LAND TO BE ACQUIRED AND SET APART FOR STORMWATER
-  PROPERTY REFERENCE NUMBER
-  PROPERTY ADDRESS

LAND REQUIRED FOR ROAD

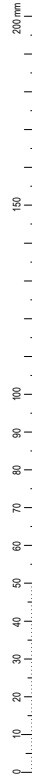
PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
1	12,345	PART RURAL SECTION 4354	AARON GEOFFREY BUTTERICK, GILBERT WARREN BUTTERICK
2	8,020	PART LOT 5 DP821	ASHBURTON DISTRICT COUNCIL
3	8,660	LOT 4 DP821	ASHBURTON DISTRICT COUNCIL
4	8,905	LOT 3 DP33684	ALEX BRAAS
7	4,605	LOT 3 DP60937	WALLACE HENRY BREACH
8	4,845	LOT 2 DP60937	GRAEME MEREDITH WILSON, JOCELYN WILSON
9	4,500	LOT 33 DP 821	ASHBURTON DISTRICT COUNCIL
10	3,535	LOT 1 DP 62260	ASHBURTON DISTRICT COUNCIL
11	4,620	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	60,035		

LAND REQUIRED FOR STORMWATER

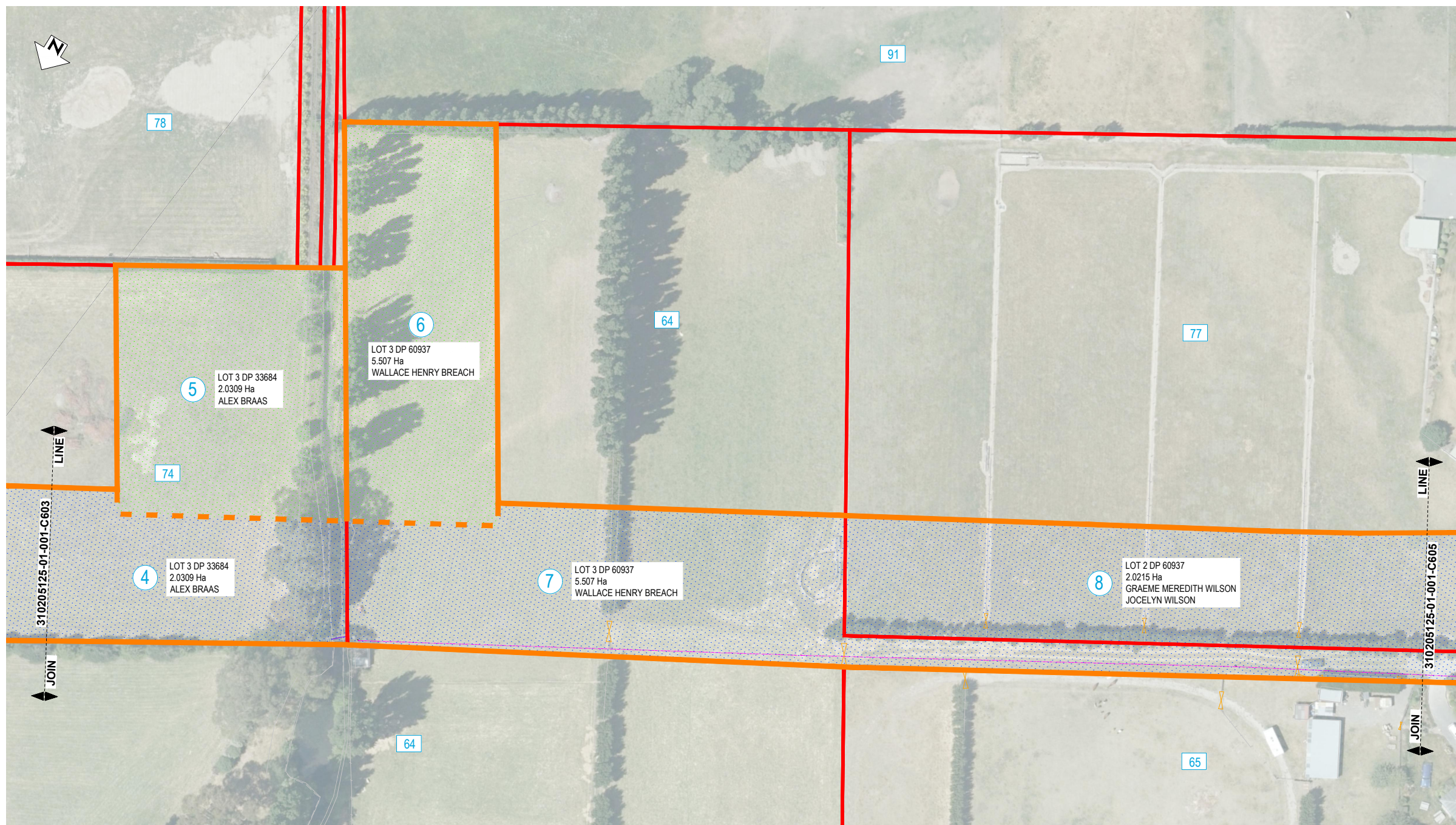
PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
5	2,735	LOT 3 DP33684	ALEX BRAAS
6	2,880	LOT 3 DP60937	WALLACE HENRY BREACH
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13	3,180	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	5,615		

NOTE: AREAS ROUNDED UP TO NEAREST 5m²

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



LAND REQUIREMENT PLAN (MC00)

SCALE 1 : 500

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP
A	DRAFT FOR CLIENT REVIEW			

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Nigel Lister	07/22
DRAWN	Nigel Lister	07/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Barbara Browne	21.07.22
DESIGN REVIEW	Matt Soper	21.07.22
APPROVED	All Siddiqui	22.07.22



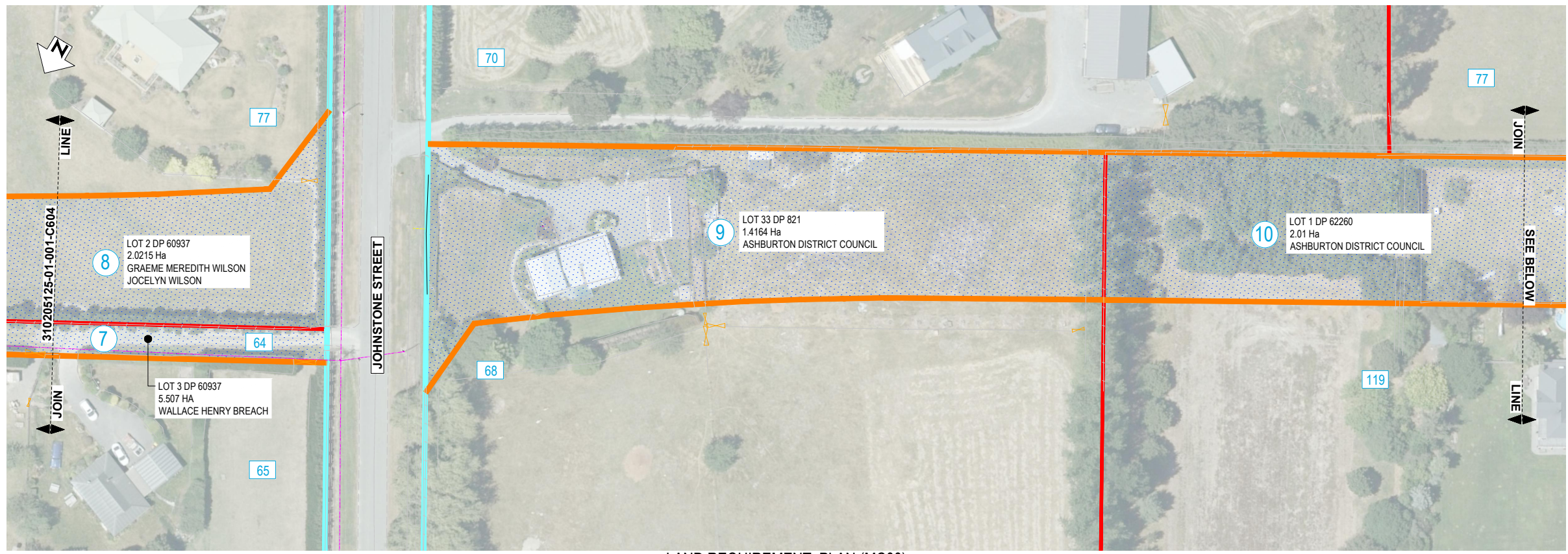
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

LAND REQUIREMENT PLAN
SHEET 4

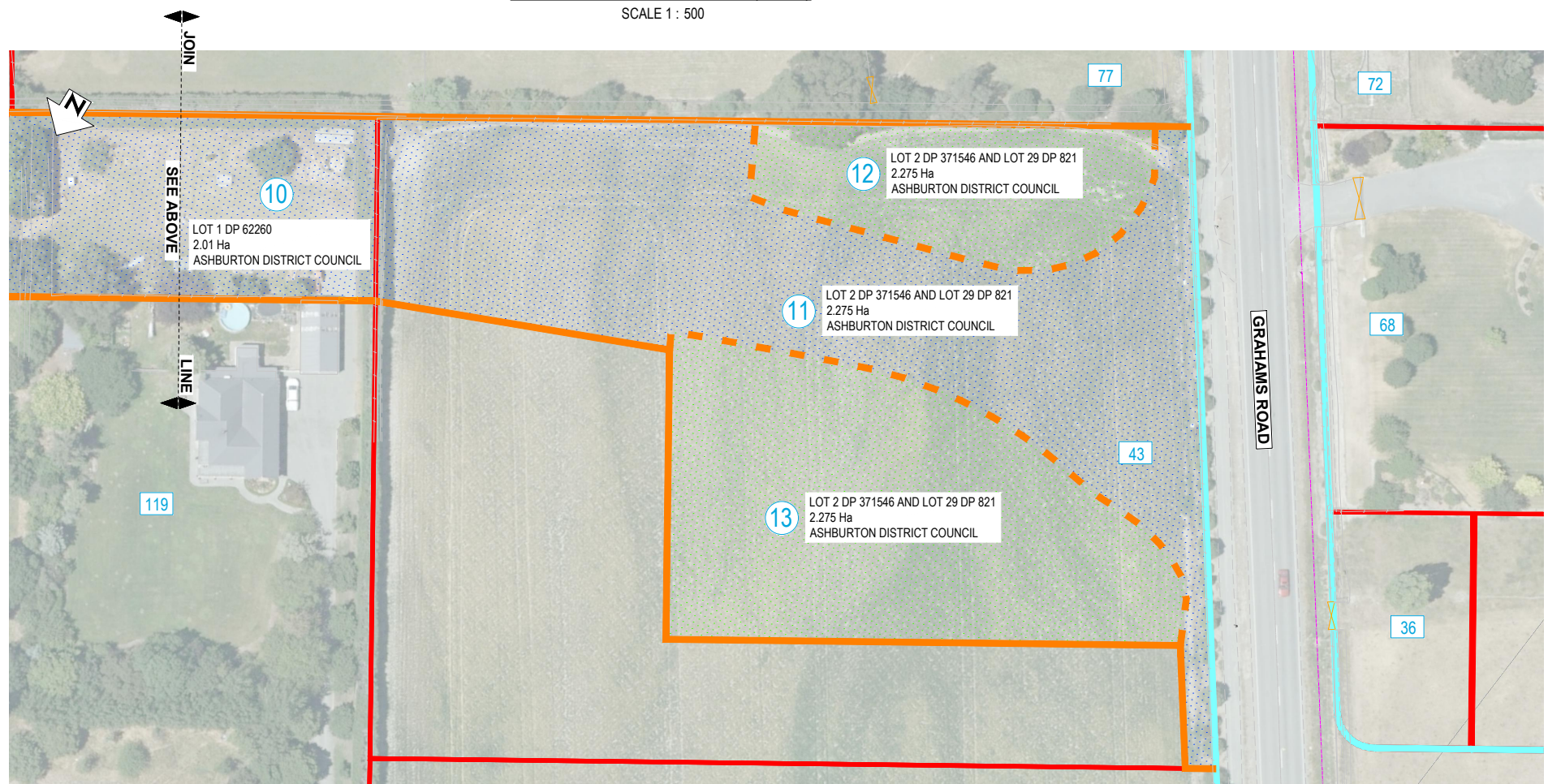
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C604
Rev.	A

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500



LAND REQUIREMENT PLAN (MC00)
SCALE 1 : 500

NOTES:

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- EXISTING PARCEL BOUNDARY
- LAND TO BE ACQUIRED AND SET APART FOR ROAD
- LAND TO BE ACQUIRED AND SET APART FOR STORMWATER
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- 100 PROPERTY ADDRESS

LAND REQUIRED FOR ROAD

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
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3	8,660	LOT 4 DP821	ASHBURTON DISTRICT COUNCIL
4	8,905	LOT 3 DP33684	ALEX BRAAS
7	4,605	LOT 3 DP60937	WALLACE HENRY BREACH
8	4,845	LOT 2 DP60937	GRAEME MEREDITH WILSON, JOCELYN WILSON
9	4,500	LOT 33 DP 821	ASHBURTON DISTRICT COUNCIL
10	3,535	LOT 1 DP 62260	ASHBURTON DISTRICT COUNCIL
11	4,620	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	60,035		

LAND REQUIRED FOR STORMWATER

PROPERTY REFERENCE NUMBER	AREA (m ²)	LEGAL DESCRIPTION	OWNER
5	2,735	LOT 3 DP33684	ALEX BRAAS
6	2,880	LOT 3 DP60937	WALLACE HENRY BREACH
12	1,250	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
13	3,180	LOT 2 DP 371546 AND LOT 29 DP821	ASHBURTON DISTRICT COUNCIL
TOTAL	5,615		

NOTE: AREAS ROUNDED UP TO NEAREST 5m²

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP
A	DRAFT FOR CLIENT REVIEW			

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Nigel Lister	07/22
DRAWN	Nigel Lister	07/22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Barbara Browne	21.07.22
DESIGN REVIEW	Matt Soper	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

LAND REQUIREMENT PLAN
SHEET 5

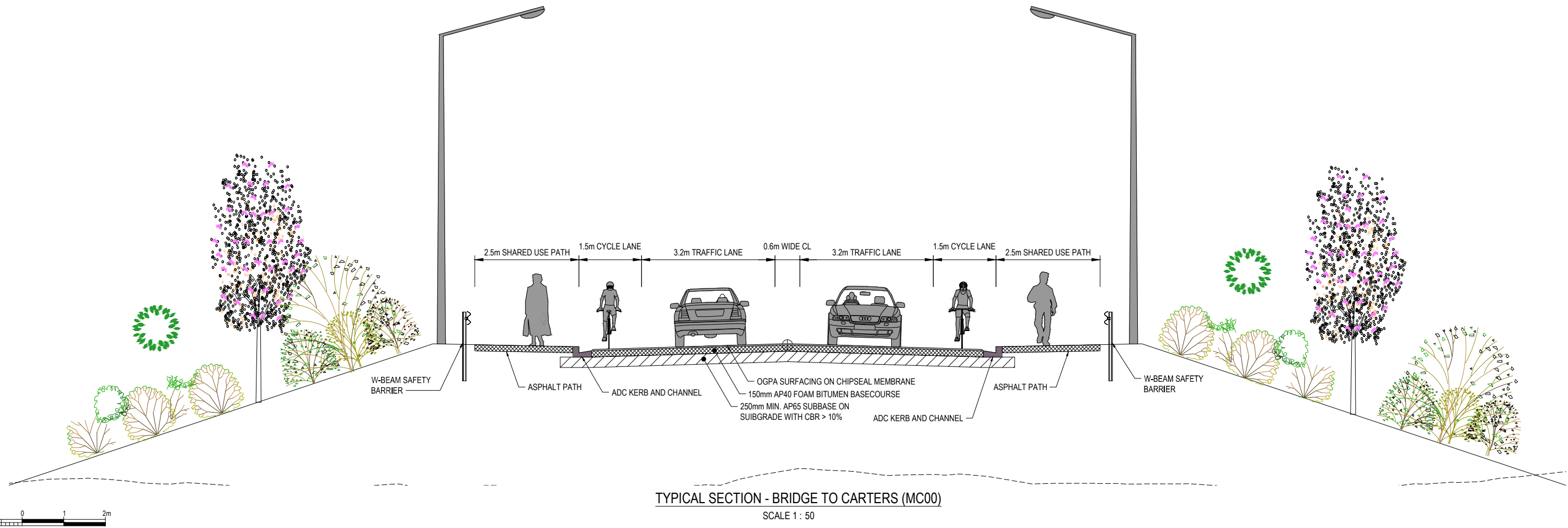
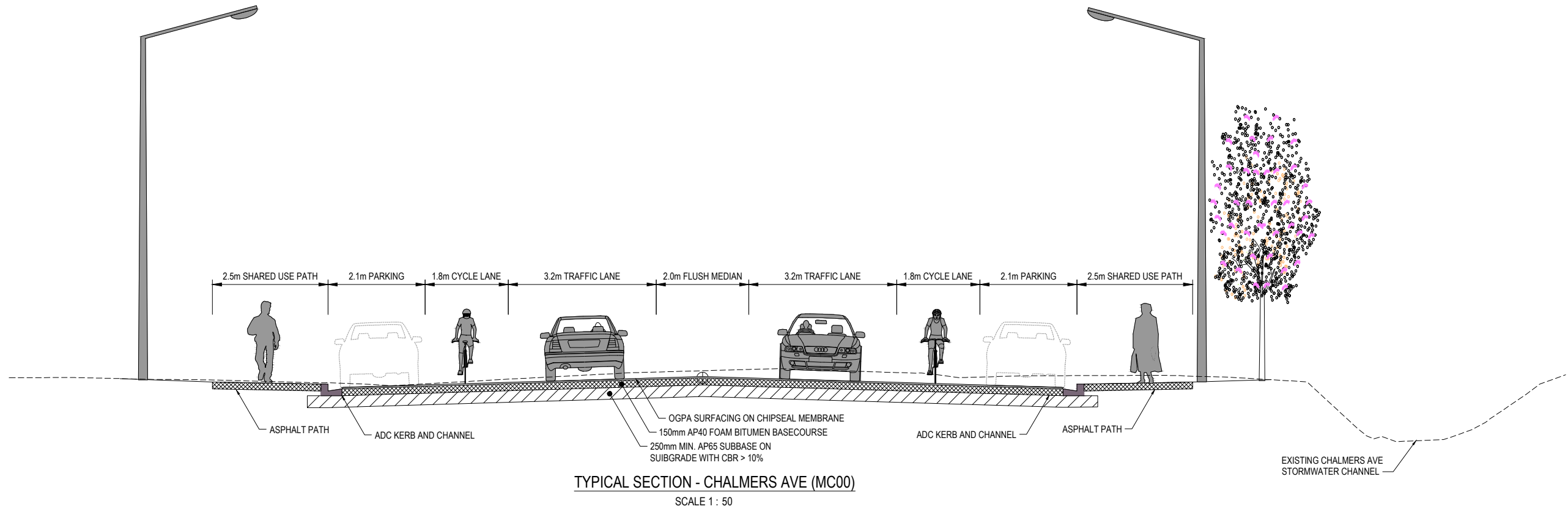
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 500
Drawing No.	310205125-01-001-C605
Rev.	A

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Last modified: Mar 25 2020 By Phillip Cook



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHECKED	APP
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	
			DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

TYPICAL CROSS SECTIONS
SHEET 1

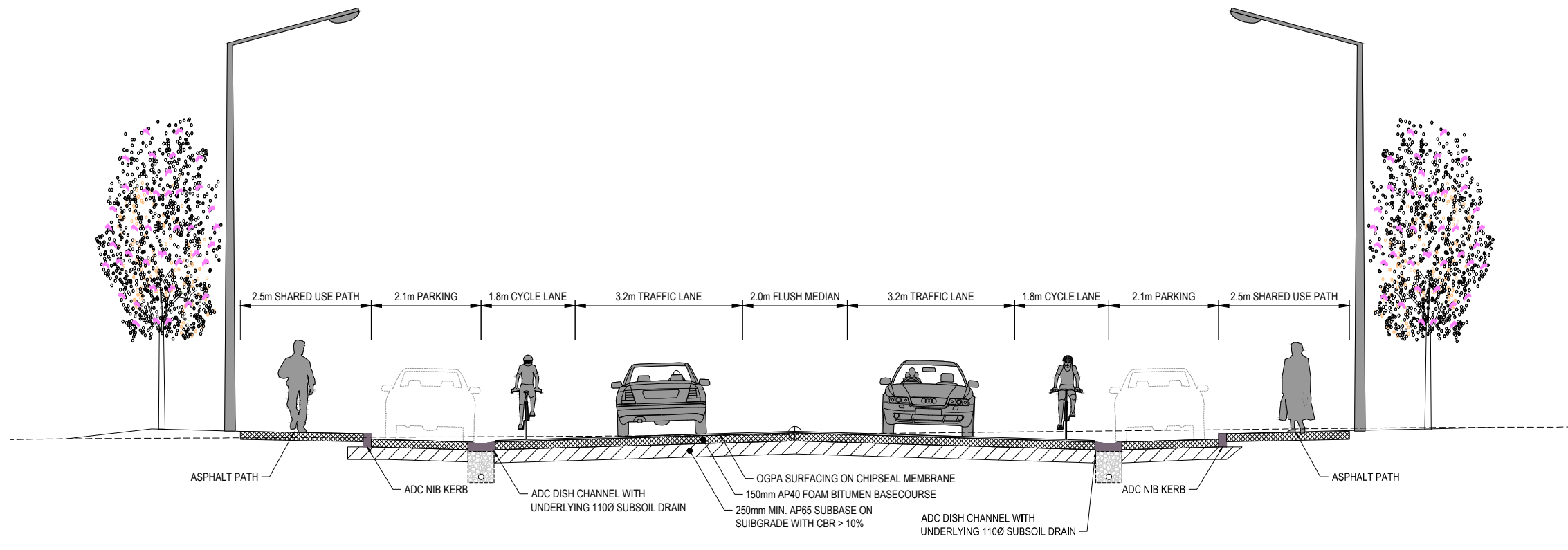
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Date Stamp	22.07.22
Scales	1 : 50
Drawing No.	310205125-01-001-C751
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

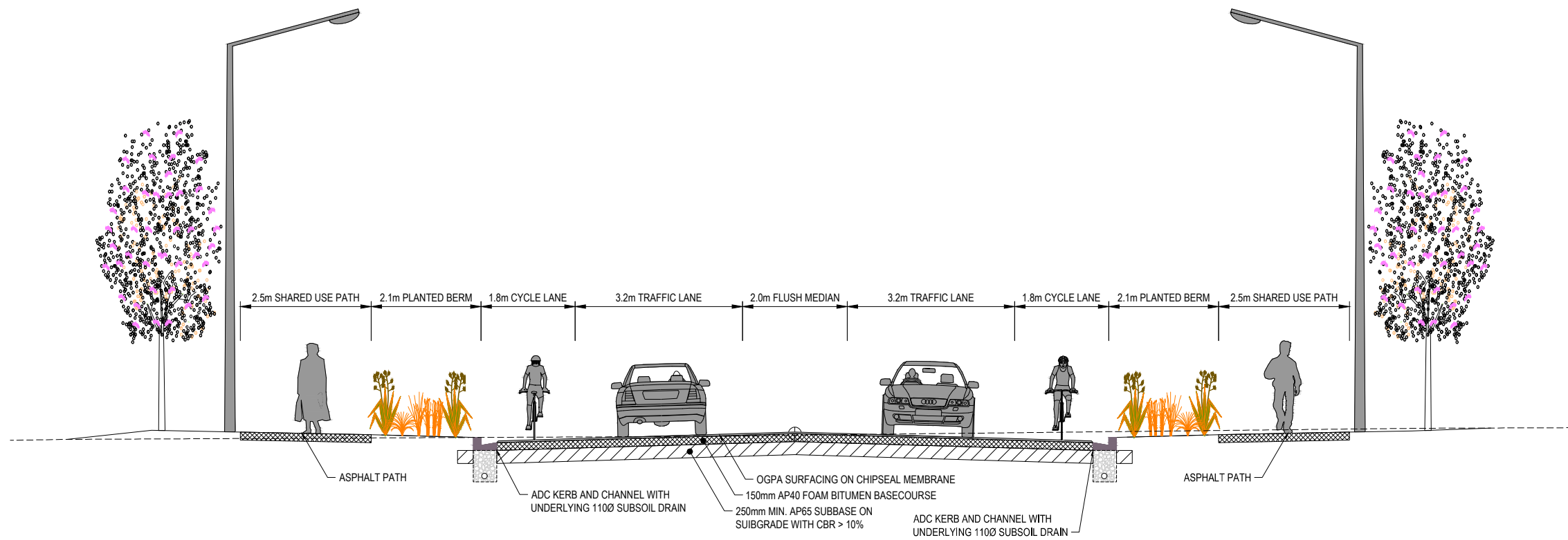
200 mm
150
100
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80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Last modified: Mar 25 2020 By Phillip Cook



TYPICAL SECTION - CARTERS TO GRAHAMS (MC00)
SCALE 1 : 50



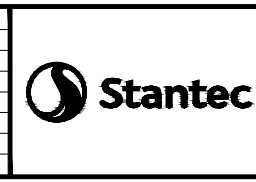
TYPICAL SECTION - CARTERS TO GRAHAMS (MC00)
SCALE 1 : 50



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

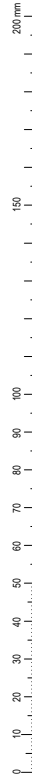


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

TYPICAL CROSS SECTIONS
SHEET 2

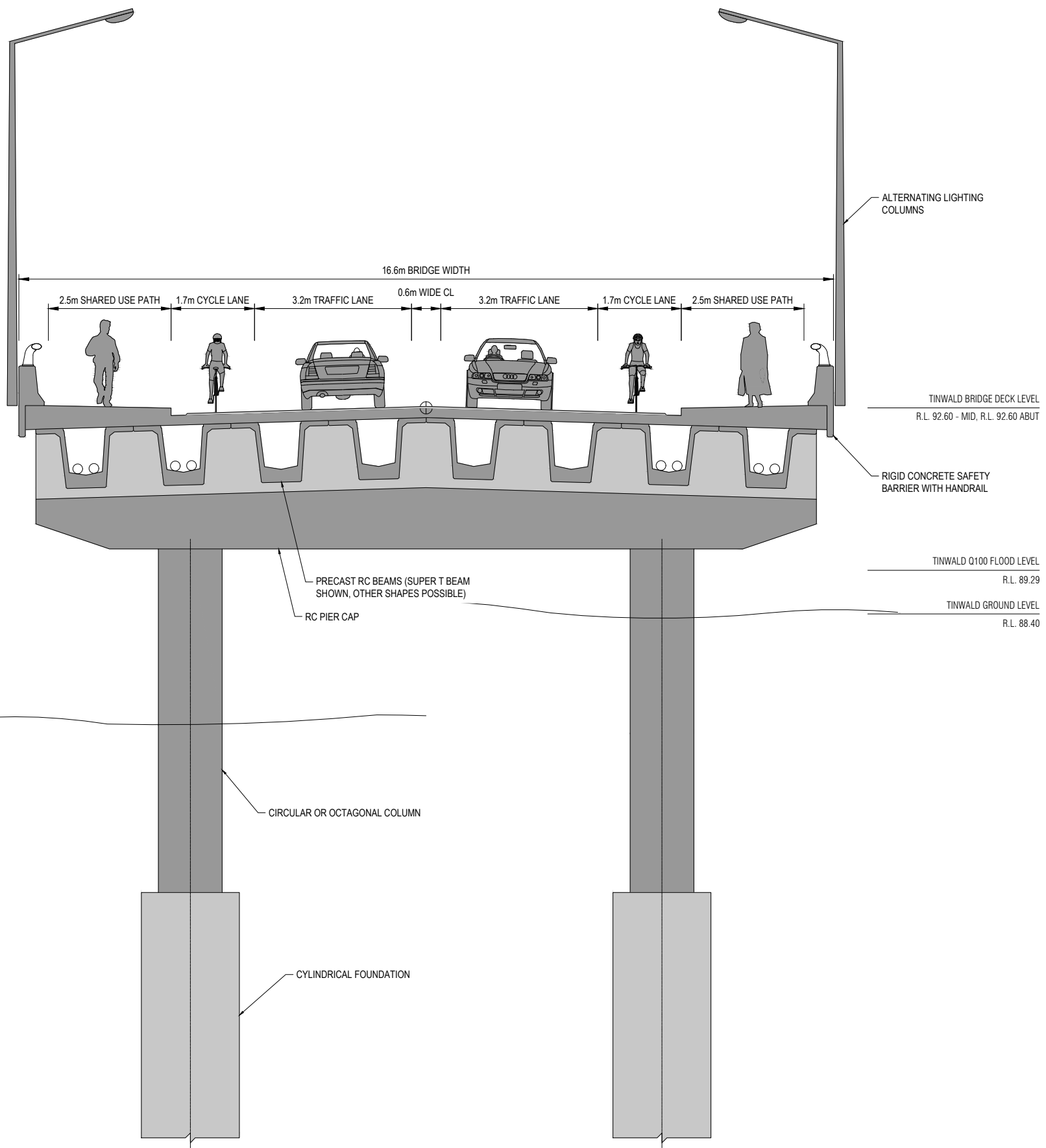
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 50
Drawing No.	310205125-01-001-C752
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Last modified: Mar 25 2020 By Phillip Cook



TYPICAL SECTION - HAKATERE RIVER AND TINWALD FLOOD PLAIN BRIDGE

SCALE 1 : 50



REV	DESCRIPTION	DATE	APP	CHK	DRN
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	
	REVISIONS				

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Nigel Lister	04.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

TYPICAL CROSS SECTIONS
SHEET 3

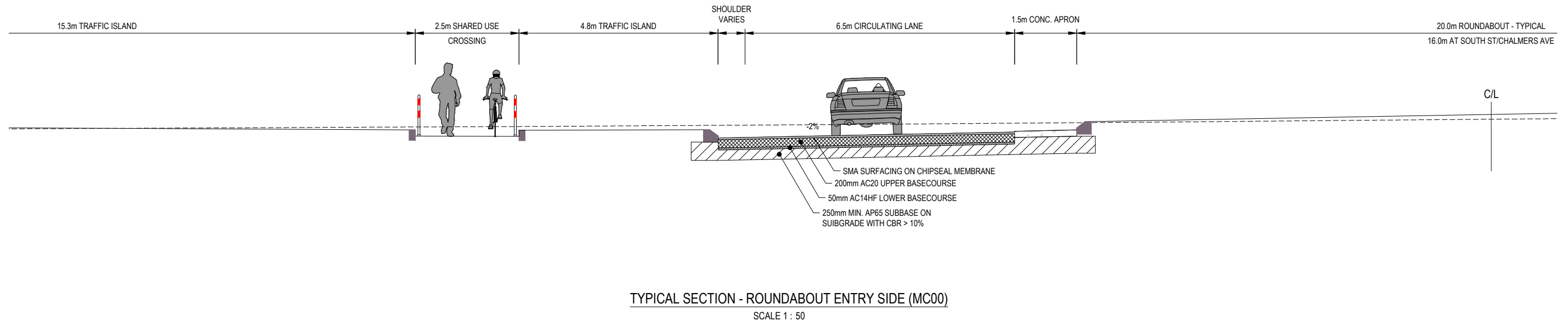
NOT FOR CONSTRUCTION

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 50
Drawing No.	310205125-01-001-C753
Rev.	B

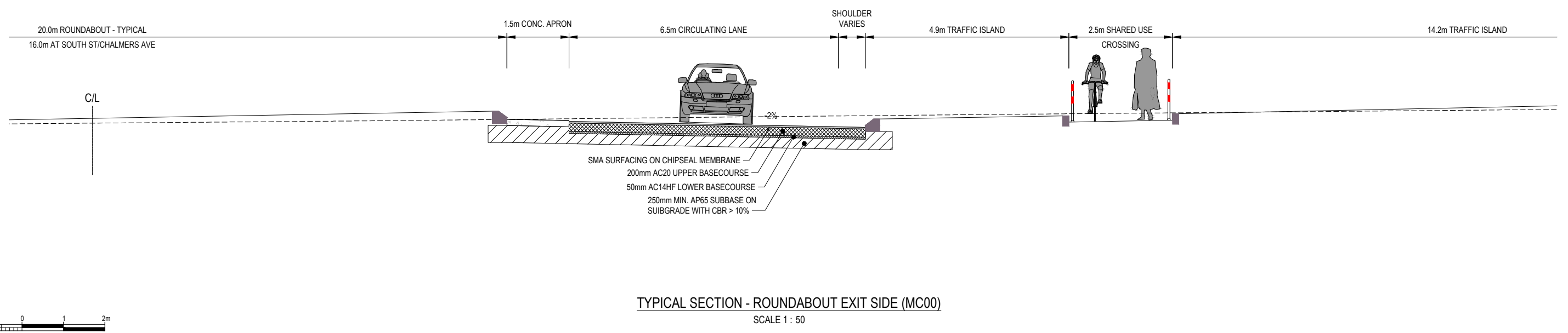
DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1

Last modified: Mar 25 2020 By Phillip Cook



TYPICAL SECTION - ROUNDABOUT ENTRY SIDE (MC00)
SCALE 1 : 50



TYPICAL SECTION - ROUNDABOUT EXIT SIDE (MC00)
SCALE 1 : 50



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHK	APP
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	NL	MS	
A	DRAFT FOR CLIENT - DESIGN UPDATED	06/22	PJC	NL	
			DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	06.22
DRAWN	Phillip J Cook	06.22
CAD REVIEW	Phillip Cook	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22

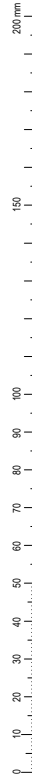


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

TYPICAL CROSS SECTIONS
SHEET 4

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 50
Drawing No.	310205125-01-001-C754
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 431173.692
Y = 781738.124
Z = 91.028
DATUM RL 88.500

DESIGN LEVEL	90.757	90.874	91.028	90.874	90.757
CUT/FILL	0.097	0.067	-0.084	-0.113	-0.136
EXISTING LEVEL	90.660	90.807	91.112	90.987	90.893
OFFSET	-9.048	-5.159	0.000	5.159	9.048

CHAINAGE 1500.000

Centreline Data
X = 431188.577
Y = 781751.482
Z = 91.127
DATUM RL 88.500

DESIGN LEVEL	90.821	90.941	91.127	90.941	90.821
CUT/FILL	0.071	0.074	-0.162	-0.141	-0.174
EXISTING LEVEL	90.750	90.867	91.289	91.082	90.996
OFFSET	-10.200	-6.200	0.000	6.200	10.200

CHAINAGE 1480.000

Centreline Data
X = 431203.463
Y = 781764.839
Z = 91.226
DATUM RL 88.750

DESIGN LEVEL	90.920	91.040	91.226	91.040	90.920
CUT/FILL	-0.020	0.012	0.001	-0.177	-0.269
EXISTING LEVEL	90.940	91.028	91.225	91.217	91.190
OFFSET	-10.200	-6.200	0.000	6.200	10.200

CHAINAGE 1460.000

Centreline Data
X = 431076.783
Y = 781641.362
Z = 90.538
DATUM RL 87.750

DESIGN LEVEL	90.497	90.404	90.403	90.253	90.303	90.357	90.411	90.508	90.538	90.508	90.411	90.357	90.303	90.253	90.404	90.454	90.504	
CUT/FILL	0.081	0.039	0.038	-0.112	0.037	0.038	0.002	-0.059	-0.051	-0.103	-0.176	-0.184	-0.208	-0.256	-0.106	-0.047	-0.040	0.000
EXISTING LEVEL	90.416	90.365	90.364	90.266	90.266	90.319	90.409	90.566	90.588	90.610	90.587	90.541	90.511	90.509	90.509	90.501	90.504	90.504
OFFSET	-12.928	-8.278	-8.129	-8.128	-7.828	-6.028	-4.228	-1.000	0.000	1.000	4.228	6.028	7.828	8.128	8.129	10.778	11.278	11.400

CHAINAGE 1640.000

CHAMBERS STREET/ SHORT STREET ROUNDABOUT
- REFER C750 DRAWING SERIES TYPICAL SECTIONS

Centreline Data
X = 431143.920
Y = 781711.410
Z = 90.830
DATUM RL 88.000

DESIGN LEVEL	90.781	90.780	90.680	90.785	90.830	90.785	90.680	90.630	90.781
CUT/FILL	0.230	0.223	0.110	-0.073	-0.061	-0.142	-0.086	-0.126	0.030
EXISTING LEVEL	90.551	90.557	90.570	90.858	90.891	90.927	90.766	90.756	90.751
OFFSET	-5.450	-5.301	-5.000	-1.500	0.000	1.500	5.000	5.300	5.450

CHAINAGE 1540.000

Centreline Data
X = 431158.806
Y = 781724.767
Z = 90.929
DATUM RL 88.250

DESIGN LEVEL	90.667	90.666	90.566	90.745	90.853	90.929	90.853	90.745	90.580	90.530	90.681
CUT/FILL	0.215	0.210	0.101	0.083	-0.088	-0.083	-0.215	-0.123	-0.135	-0.179	-0.025
EXISTING LEVEL	90.452	90.456	90.465	90.661	90.951	91.012	91.068	90.868	90.715	90.709	90.706
OFFSET	-12.549	-12.400	-12.099	-4.152	-2.541	0.000	2.541	6.152	11.643	11.943	12.093

CHAINAGE 1520.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	DRAFT FOR CLIENT - DESIGN UPDATED			06/22
REV	REVISIONS	DRN	CHK	APP

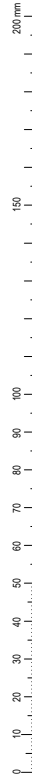
SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04.22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

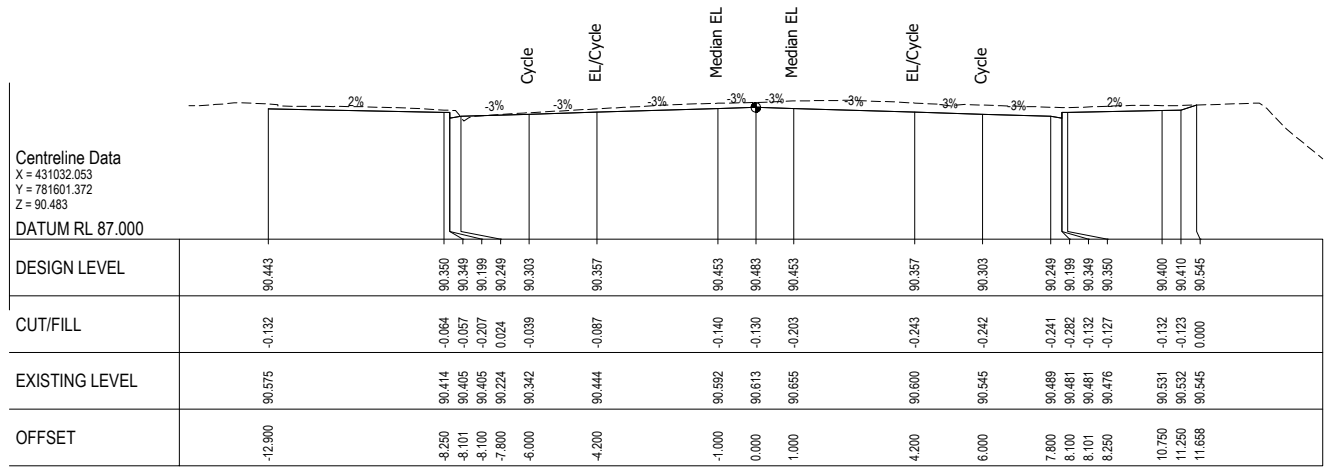
CROSS SECTIONS (MC00)
SHEET 1

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C901
Rev.	B

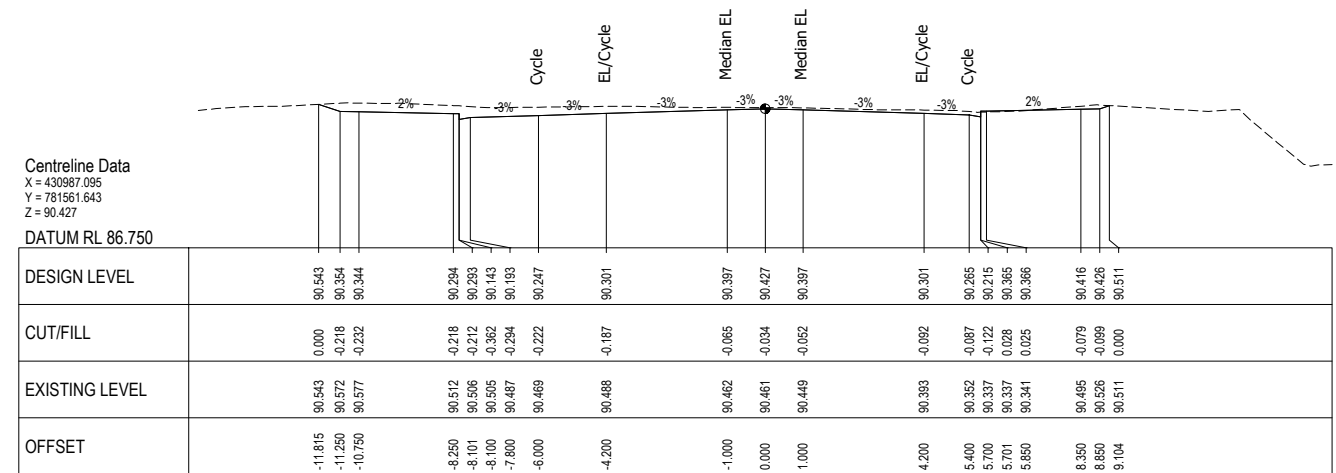
DO NOT SCALE - IF IN DOUBT, ASK



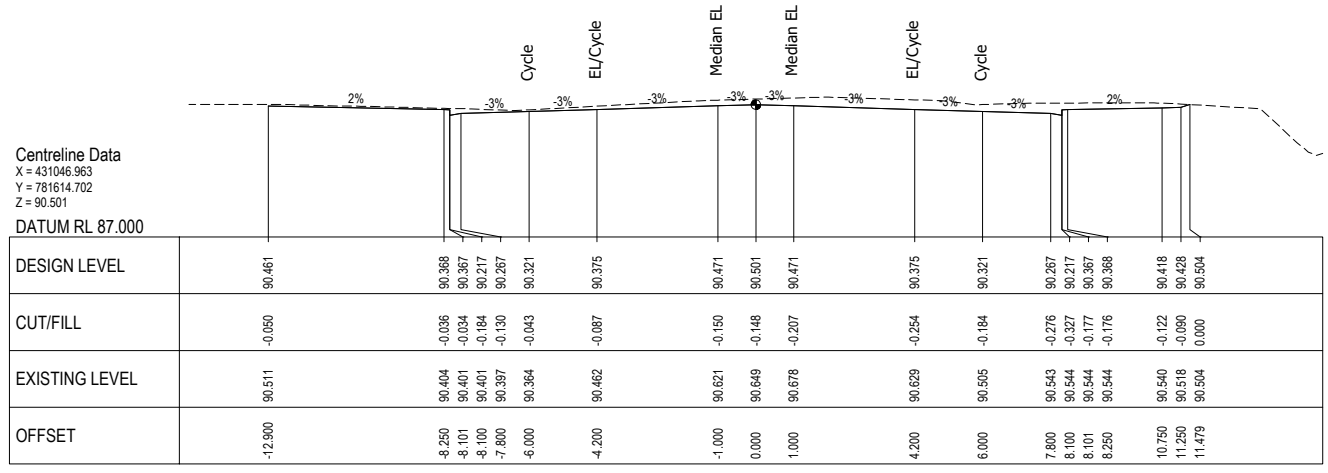
ORIGINAL SIZE A1



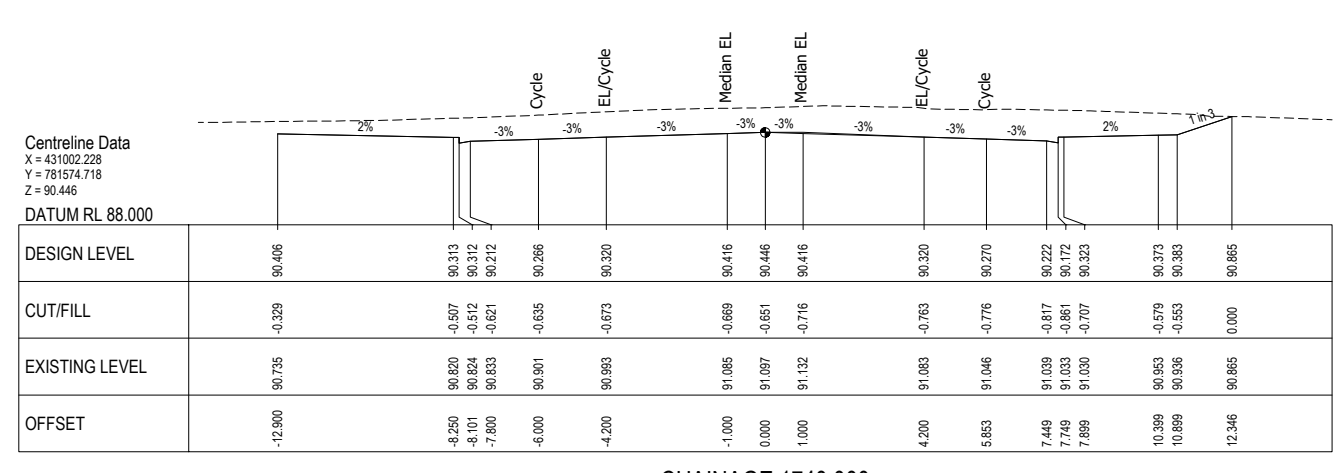
CHAINAGE 1700.000



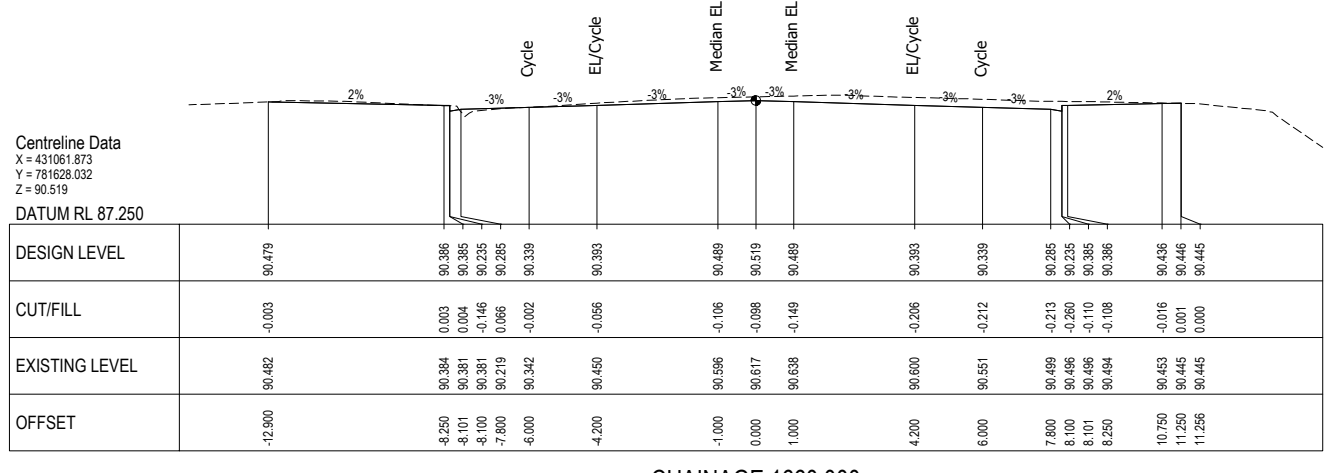
CHAINAGE 1760.000



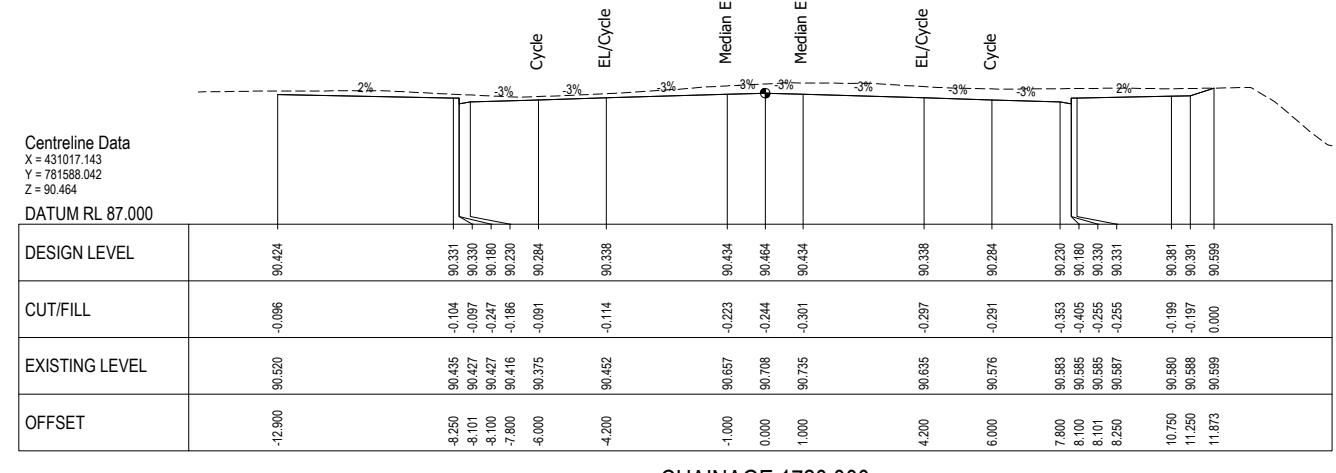
CHAINAGE 1680.000



CHAINAGE 1740.000



CHAINAGE 1660.000



CHAINAGE 1720.000



NOT FOR CONSTRUCTION

REV	B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	MS	07/22	
	A	FOR REVIEW	PJC	NL	07/22	
			DRN	CHK	APP	DATE

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04.22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

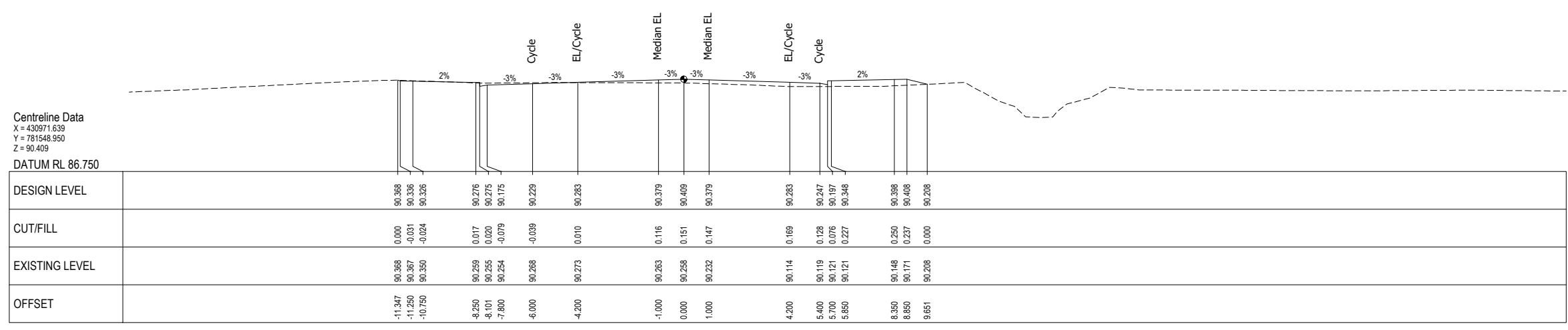
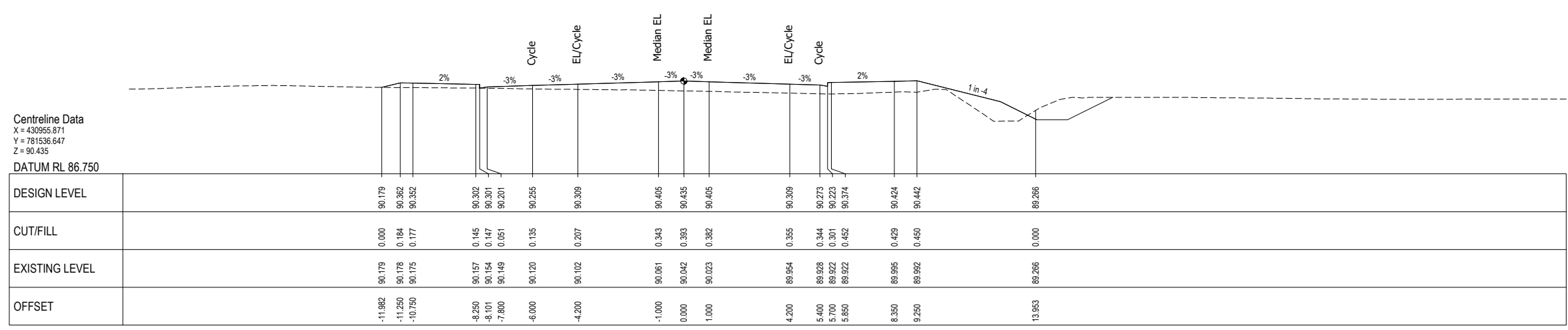
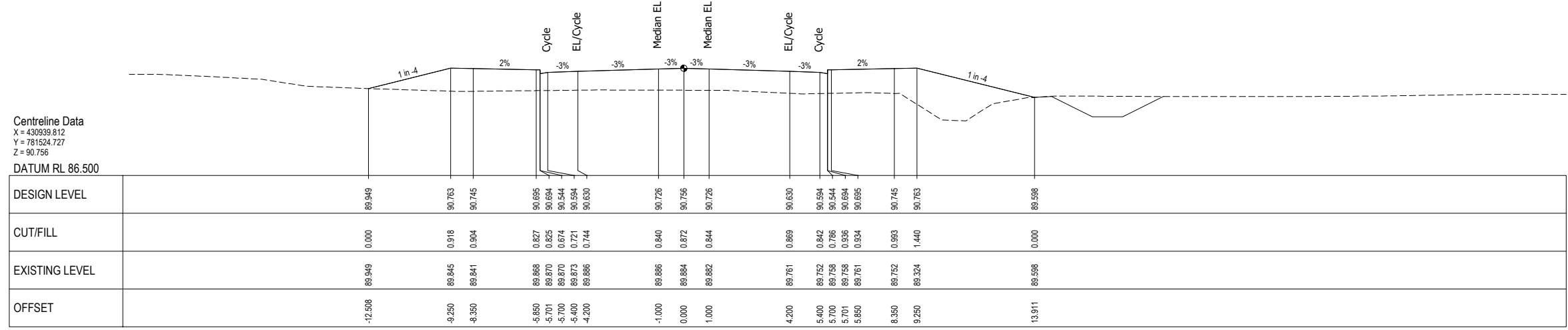


ASHBURTON - TINWALD CONNECTIVITY DBC HAKATERE RIVER SECOND CROSSING	
CROSS SECTIONS (MC00) SHEET 2	

Scheme Assessment	
Date Stamp	22.07.22
Scales 1:100	
Drawing No.	310205125-01-001-C902
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



NOT FOR CONSTRUCTION

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22

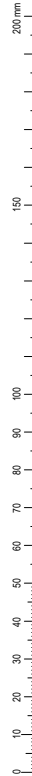


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 3

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C903
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
 X = 430908.214
 Y = 781500.208
 Z = 92.237
 DATUM RL 86.250

DESIGN LEVEL	89.674	92.244	92.244	92.228	92.176	92.175	92.111	92.207	92.237	92.207	92.111	92.075	92.075	92.176	92.228	92.244	89.974
CUT/FILL	0.000	2.372	2.345	2.281	2.287	2.200	2.289	2.509	2.530	2.491	2.791	3.327	3.461	3.742	2.523	2.383	0.000
EXISTING LEVEL	89.674	89.872	89.881	89.895	89.888	89.875	89.822	89.698	89.707	89.716	89.320	88.748	88.564	88.434	89.703	89.861	89.974
OFFSET	-19.529	-9.250	-8.350	-6.850	-5.701	-5.400	-4.200	-1.000	0.000	1.000	4.200	5.400	5.700	5.850	8.350	9.250	18.329

CHAINAGE 1860.000

Centreline Data
 X = 430923.860
 Y = 781512.665
 Z = 91.413
 DATUM RL 86.500

DESIGN LEVEL	89.501	91.420	91.402	91.352	91.351	91.251	91.287	91.383	91.413	91.383	91.287	91.251	91.201	91.352	91.402	91.420	89.725
CUT/FILL	0.000	1.632	1.564	1.502	1.499	1.394	1.413	1.492	1.526	1.509	1.438	1.398	1.347	1.506	2.281	2.771	0.000
EXISTING LEVEL	89.501	89.788	89.838	89.850	89.853	89.857	89.874	89.891	89.888	89.875	89.851	89.853	89.855	89.847	89.122	89.650	89.725
OFFSET	-16.928	-9.250	-8.350	-6.850	-5.701	-5.400	-4.200	-1.000	0.000	1.000	4.200	5.400	5.700	5.850	8.350	9.250	16.033

CHAINAGE 1840.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
 HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
 SHEET 4

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C904
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Centreline Data
X = 430877.969
Y = 781474.153
Z = 93.160
DATUM RL 86.500

DESIGN LEVEL		93.172	93.154	93.104	93.103	93.045	93.141	93.150	93.141	93.045	93.003	92.953	93.104	93.154	93.172	90.067
CUT/FILL		3.191	3.137	3.188	3.224	3.200	3.028	3.044	3.043	3.099	3.059	3.005	3.154	3.172	3.178	0.000
EXISTING LEVEL		89.981	90.017	89.916	89.879	89.803	90.113	90.106	90.098	89.946	89.944	89.948	89.950	89.982	89.994	90.067
OFFSET		-8.750	-7.850	-5.350	-5.201	-4.900	-0.300	0.000	0.300	3.500	4.900	5.200	5.350	7.850	8.750	21.170

CHAINAGE 1900.000

Centreline Data
X = 430892.884
Y = 781487.364
Z = 92.822
DATUM RL 86.500

DESIGN LEVEL	89.742	92.854	92.816	92.766	92.765	92.685	92.703	92.799	92.822	92.799	92.703	92.685	92.766	92.816	92.834	90.154
CUT/FILL	0.000	2.908	2.888	2.754	2.757	2.674	3.637	2.916	2.877	2.848	2.725	2.677	2.642	2.800	2.972	3.002
EXISTING LEVEL	89.742	89.926	89.927	90.012	90.008	89.991	89.065	89.883	89.945	89.950	89.977	89.988	89.973	89.966	89.844	89.832
OFFSET	-21.449	-9.083	-8.183	-5.683	-5.534	-5.233	-3.967	-0.767	0.000	0.767	3.967	5.233	5.533	5.683	8.183	9.083

CHAINAGE 1880.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 5

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C905
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Centreline Data
X = 430848.018
Y = 781447.526
Z = 93.506
DATUM RL 85.250

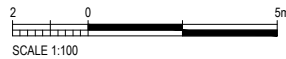
DESIGN LEVEL		93.510	94.710	93.510	93.460	93.459	93.401	93.497	93.506	93.497	93.401	93.359	93.309	93.460	93.510	94.710	93.510
CUT/FILL		3.454	4.655	3.461	3.433	3.431	4.848	5.608	5.295	5.180	3.353	3.405	3.359	3.510	3.543	4.739	3.501
EXISTING LEVEL		90.056	90.055	90.048	90.027	90.027	88.552	87.889	88.210	88.317	90.047	89.954	89.949	89.949	89.967	89.971	90.009
OFFSET		-8.450	-8.350	-7.950	-5.350	-5.201	-3.500	-0.300	0.000	0.300	3.500	4.900	5.200	5.350	7.850	7.950	8.450

CHAINAGE 1940.000

Centreline Data
X = 430862.943
Y = 781460.839
Z = 93.339
DATUM RL 86.250

DESIGN LEVEL		93.343	94.543	93.343	93.293	93.292	93.234	93.330	93.339	93.330	93.234	93.192	93.142	93.293	93.343	94.543	93.343
CUT/FILL		2.342	3.547	2.372	2.639	2.695	2.944	2.986	2.983	2.901	2.669	2.524	2.474	2.624	2.669	3.869	2.669
EXISTING LEVEL		91.001	90.996	90.976	90.654	90.597	90.483	90.344	90.398	90.428	90.665	90.668	90.674	90.668	90.674	90.674	90.674
OFFSET		-8.450	-8.350	-7.950	-5.350	-5.201	-3.500	-0.300	0.000	0.300	3.500	4.900	5.200	5.350	7.850	7.950	8.450

CHAINAGE 1920.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Barbara Browne	04/22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

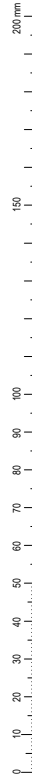


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 6

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C906
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 430818.168
Y = 781420.900
Z = 93.772
DATUM RL 85.750

DESIGN LEVEL			93.776	94.976	94.976	93.776														
CUT/FILL			5.312	6.500	6.451	5.238														
EXISTING LEVEL			88.464	88.476	88.526	88.538														
OFFSET			-8.450	-8.350	-7.950	-7.850														

CHAINAGE 1980.000

Centreline Data
X = 430833.093
Y = 781434.213
Z = 93.650
DATUM RL 86.000

DESIGN LEVEL			93.654	94.854	94.854	93.654														
CUT/FILL			5.073	6.265	6.181	4.963														
EXISTING LEVEL			88.581	88.599	88.673	88.691														
OFFSET			-8.450	-8.350	-7.950	-7.850														

CHAINAGE 1960.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 7

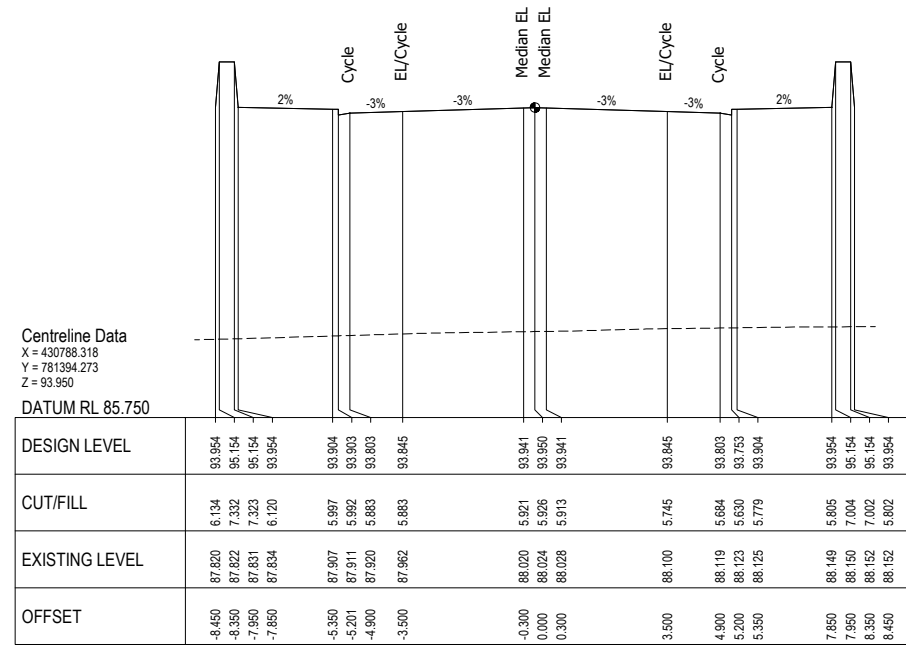
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C907
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

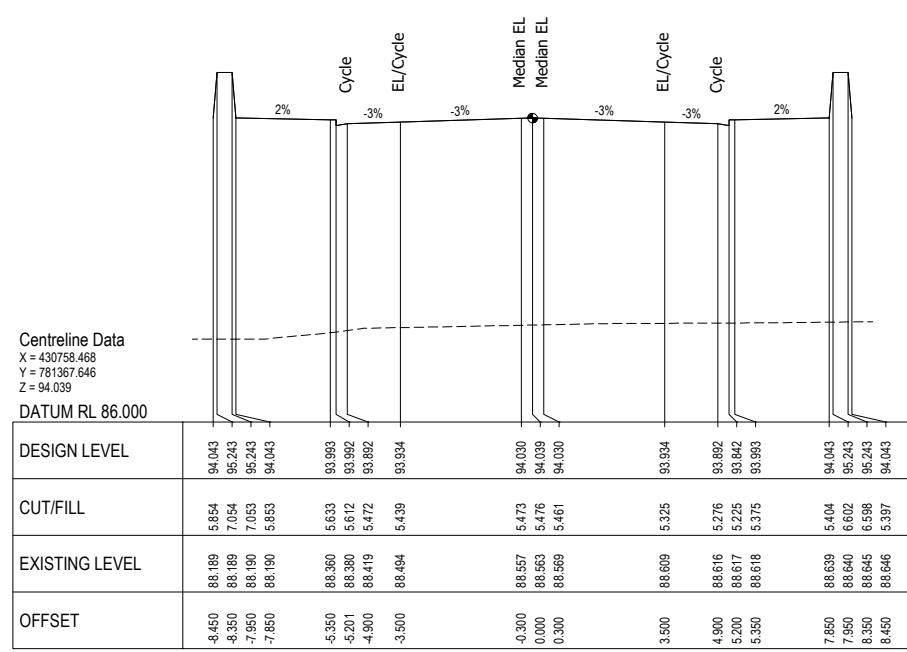
200 mm

ORIGINAL SIZE A1

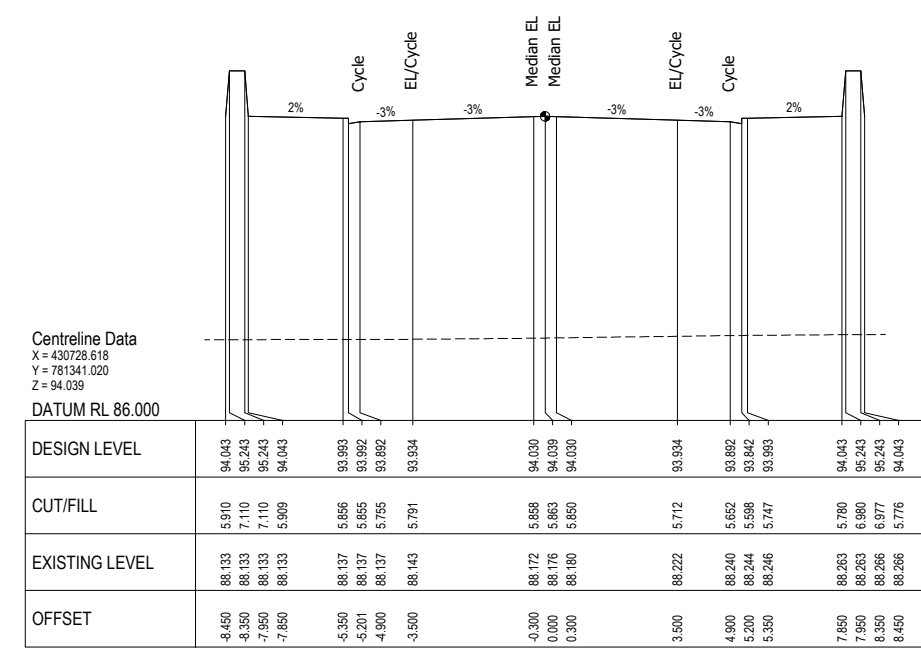
SCALE 1:100



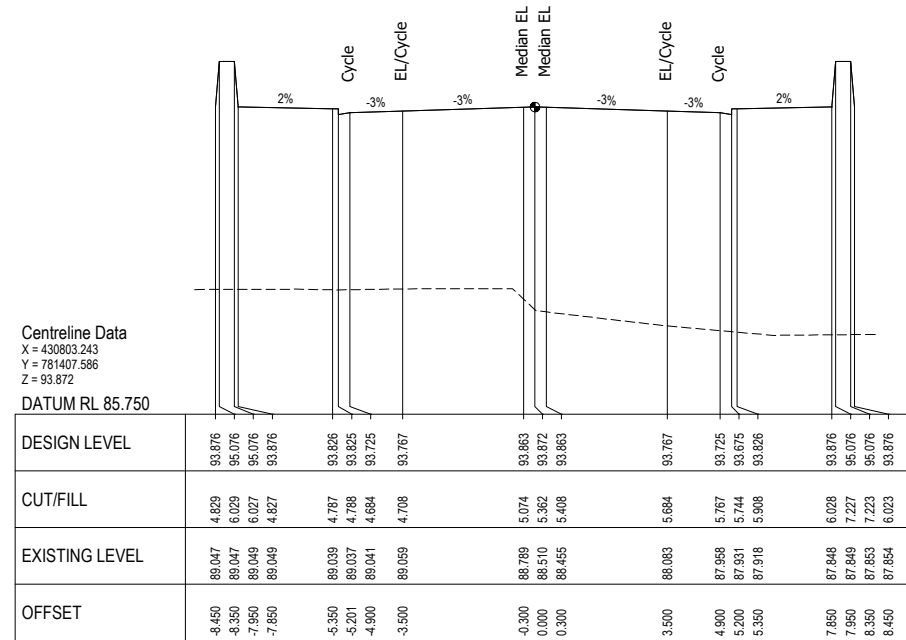
CHAINAGE 2020.000



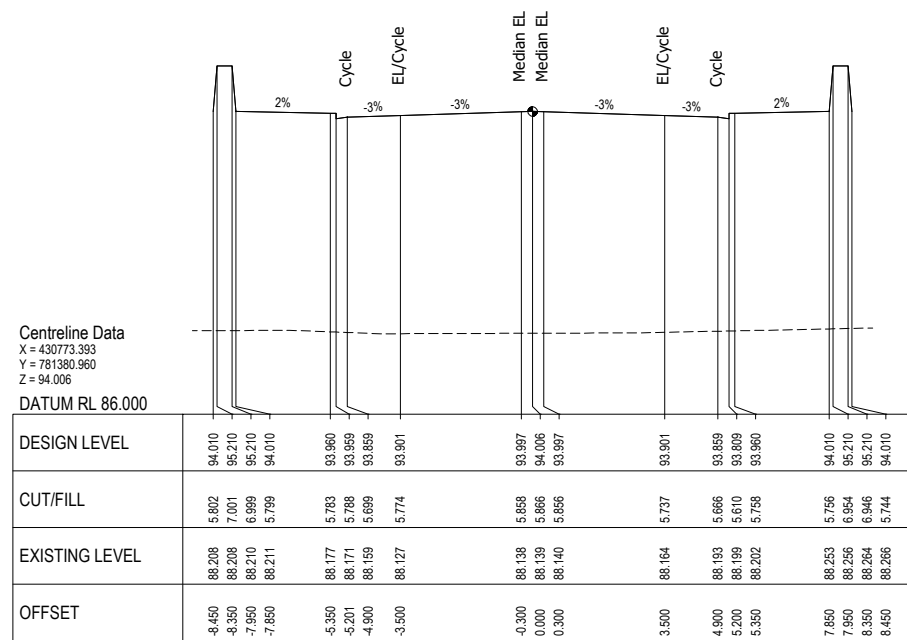
CHAINAGE 2060.000



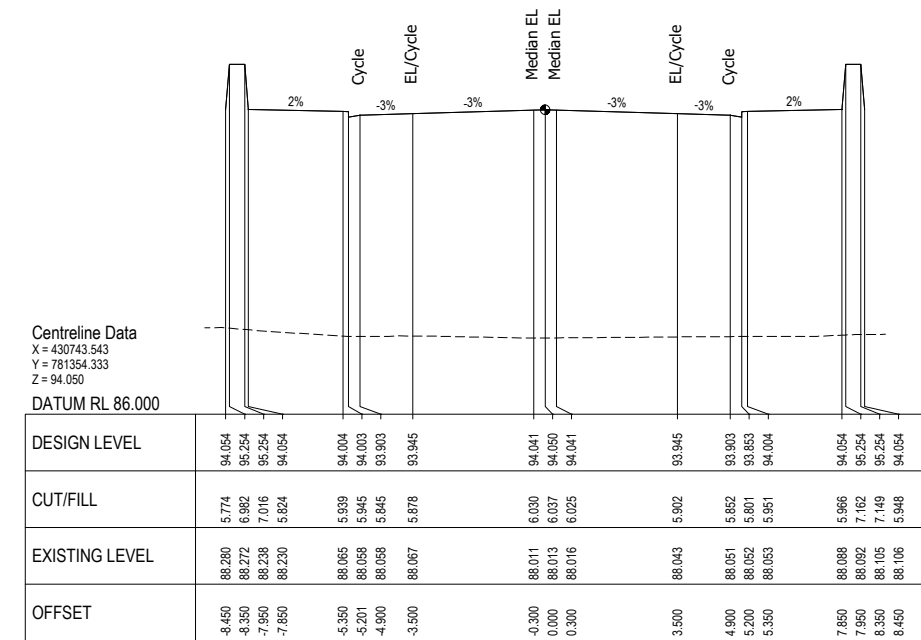
CHAINAGE 2100.000



CHAINAGE 2000.000



CHAINAGE 2040.000



CHAINAGE 2080.000

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 8

NOT FOR CONSTRUCTION	
SCHEME ASSESSMENT	
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C908
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200mm

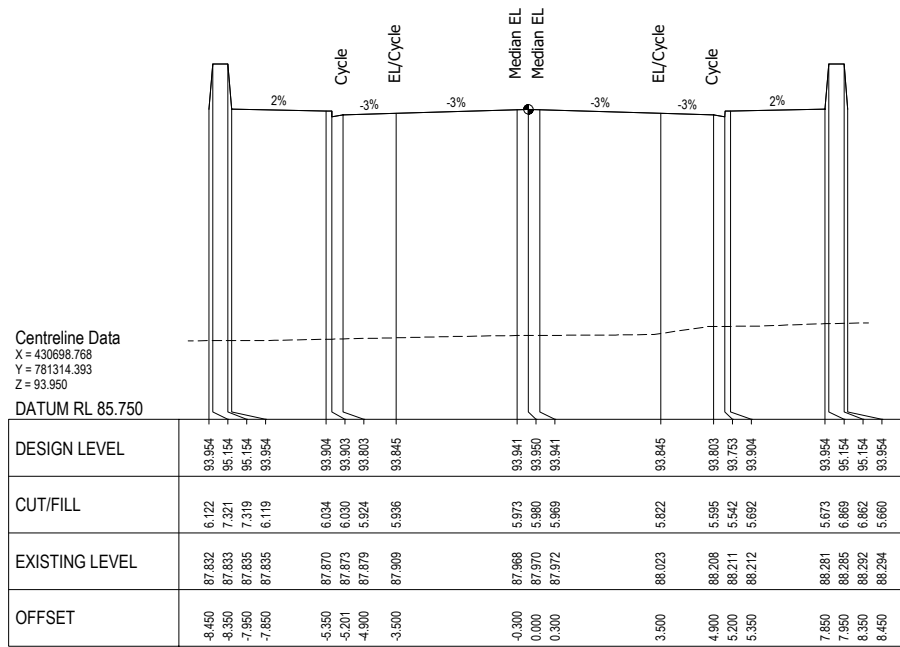
150

100

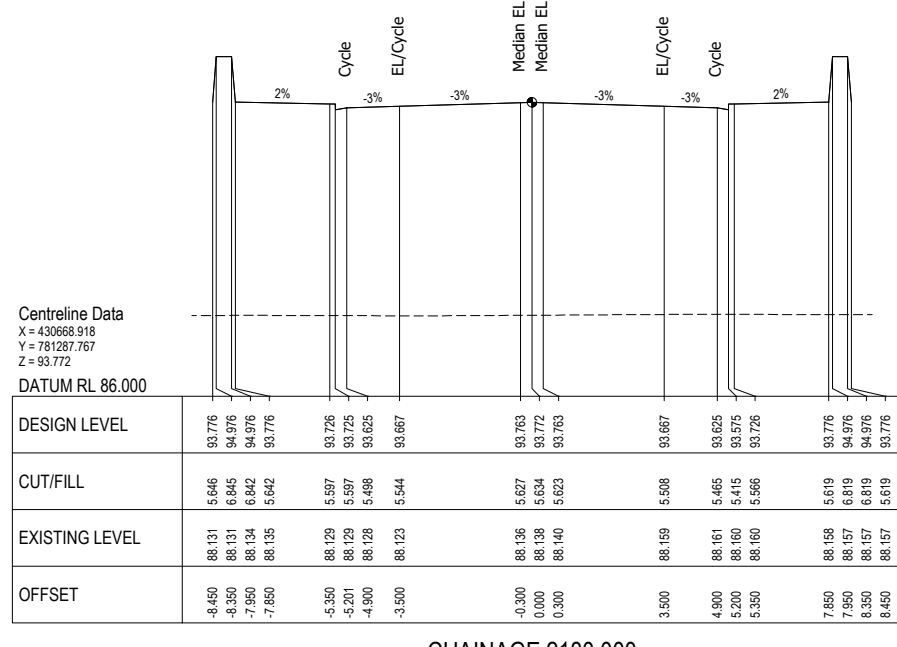
50

0

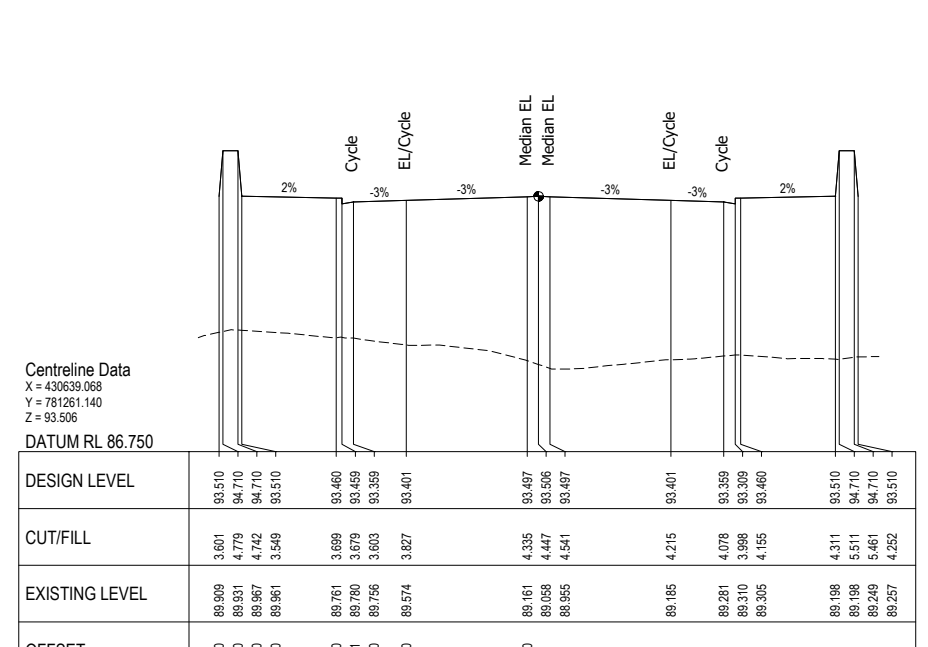
ORIGINAL SIZE A1



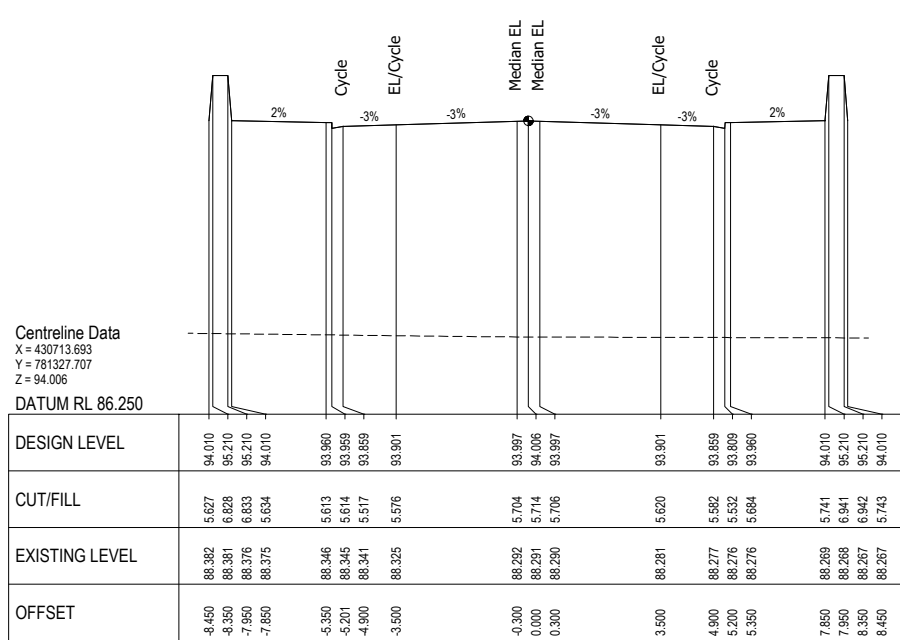
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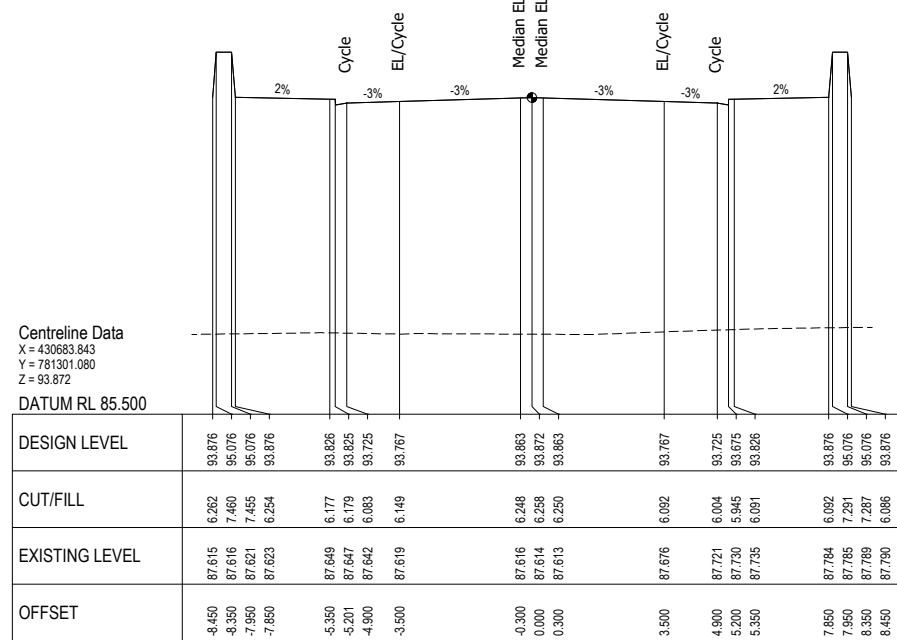
CHAINAGE 2180.000



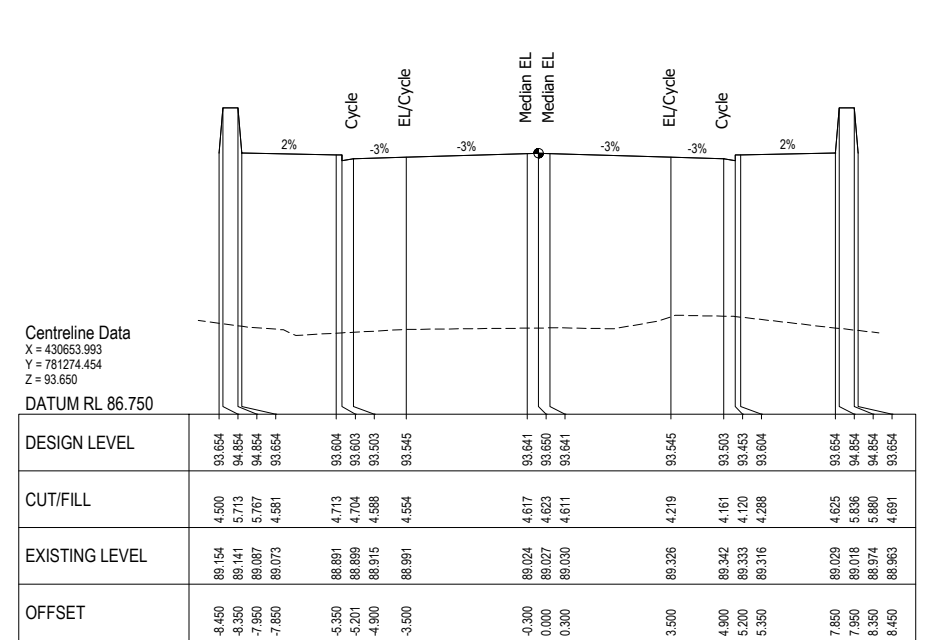
CHAINAGE 2220.000



CHAINAGE 2120.000



CHAINAGE 2160.000



CHAINAGE 2200.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGIIVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22
PROF REGISTRATION:		

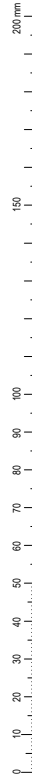


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

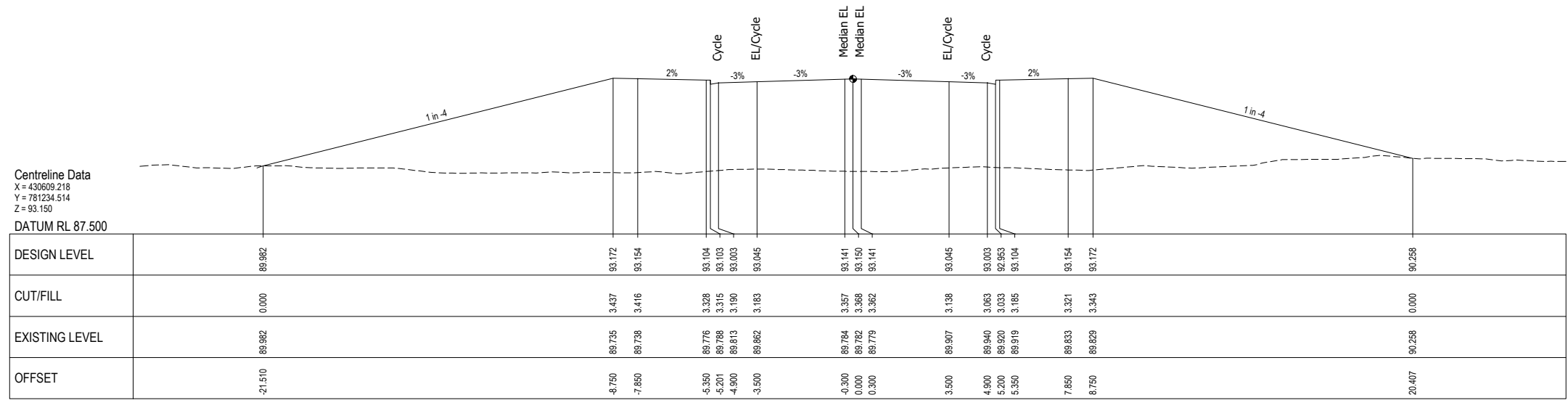
CROSS SECTIONS (MC00)
SHEET 9

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C909
Rev.	B

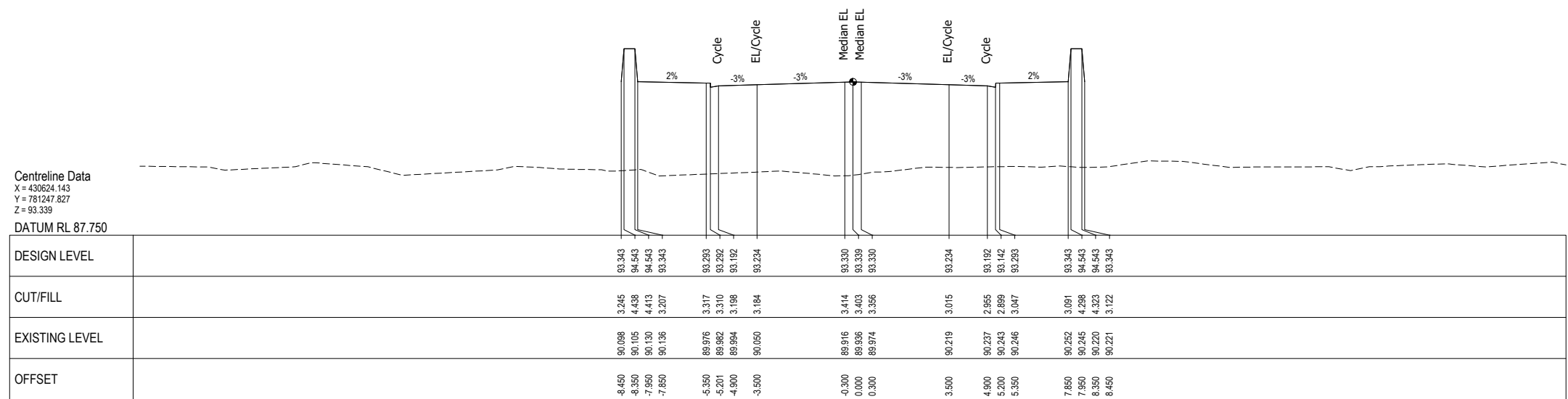
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



CHAINAGE 2260.000



CHAINAGE 2240.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

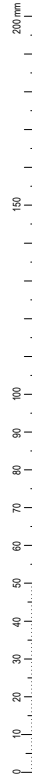
SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



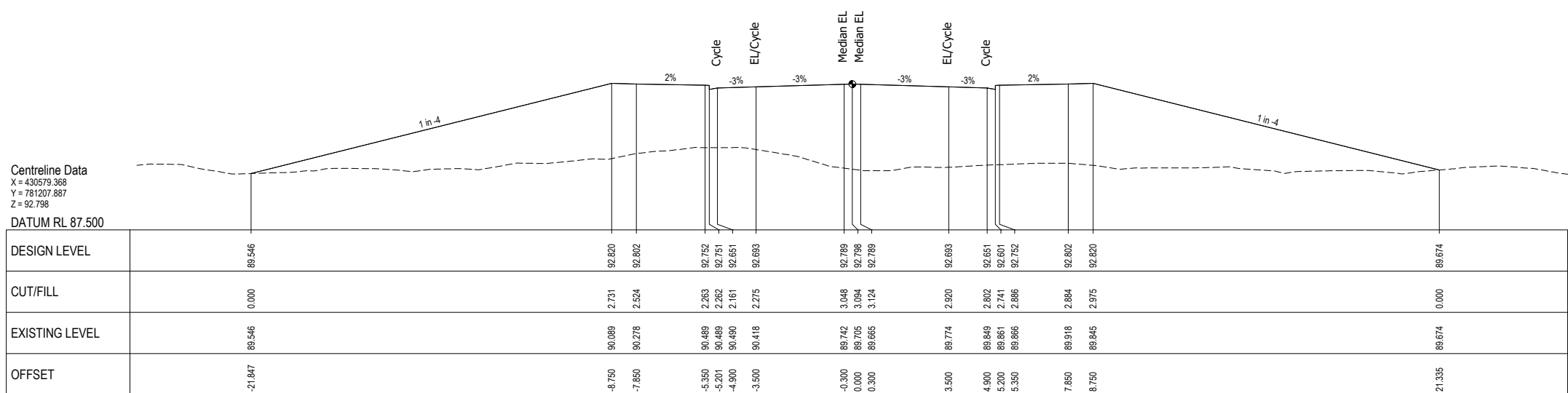
ASHBURTON - TINWALD CONNECTIVITY DBC
 HAKATERE RIVER SECOND CROSSING
 CROSS SECTIONS (MC00)
 SHEET 10

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C910
Rev.	B

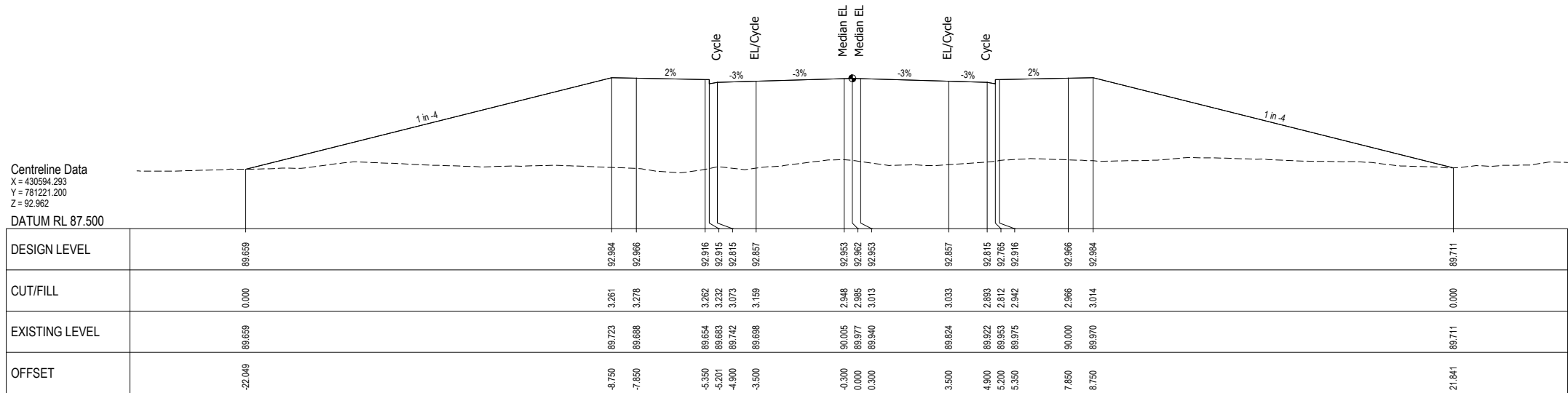
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



CHAINAGE 2300.000



CHAINAGE 2280.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Barbara Browne	04/22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

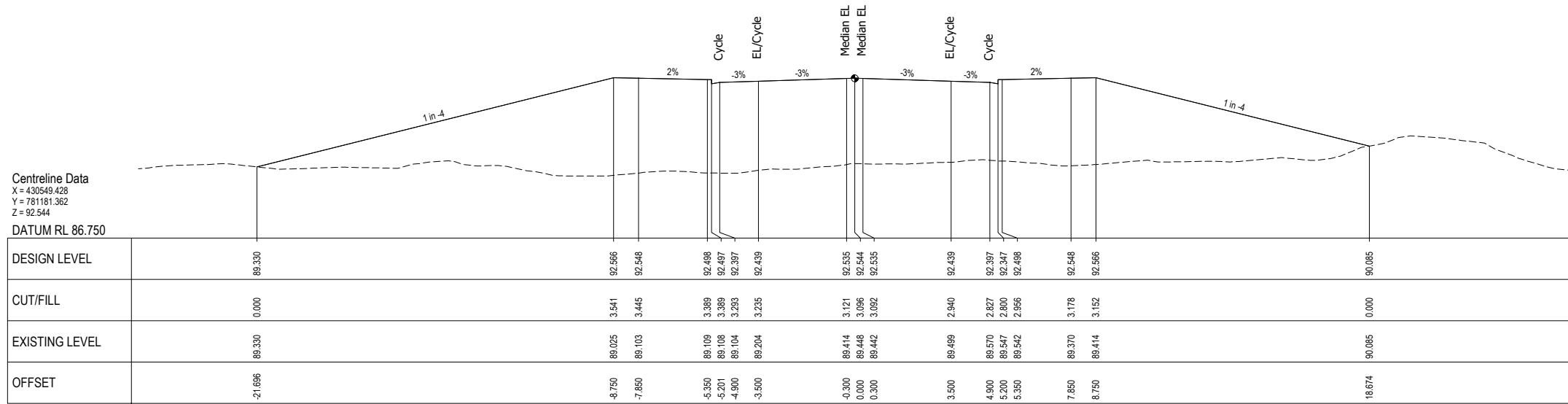
CROSS SECTIONS (MC00)
SHEET 11

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C911
Rev.	B

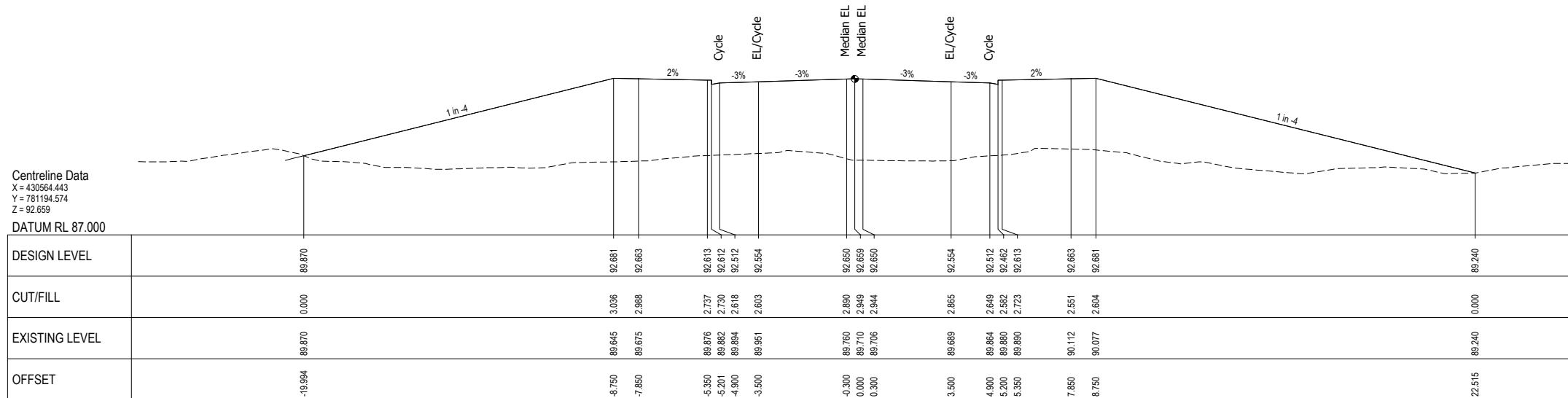
DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1



CHAINAGE 2340.000



CHAINAGE 2320.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

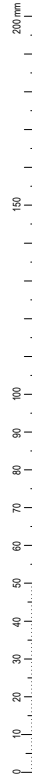


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 12

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C912
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centrelines Data
 X = 430518.750
 Y = 781155.697
 Z = 92.388
 DATUM RL 86.500

DESIGN LEVEL	89.092			92.410	92.392	92.342	92.341	92.341	92.341	92.379	92.388	92.379	92.283	92.241	92.341	92.342	92.392	92.410	89.295
CUT/FILL	0.000			3.603	3.584	3.634	3.625	3.475	3.461	3.350	3.283	3.199	3.177	3.246	3.379	3.396	3.467	3.507	0.000
EXISTING LEVEL	89.092			88.807	88.808	88.708	88.715	88.715	88.731	88.029	88.104	88.180	88.105	88.995	88.962	88.946	88.924	88.902	89.295
OFFSET	-22.021			-8.750	-7.850	-5.350	-5.201	-5.200	-4.900	-0.300	0.000	0.300	3.500	4.900	5.200	5.201	7.850	8.750	21.209

CHAINAGE 2380.000

Centrelines Data
 X = 430534.196
 Y = 781168.402
 Z = 92.453
 DATUM RL 86.500

DESIGN LEVEL	89.282			92.475	92.457	92.407	92.406	92.396	92.348	92.444	92.453	92.444	92.348	92.306	92.256	92.407	92.457	92.475	89.219
CUT/FILL	0.000			3.110	3.031	3.012	3.023	2.943	2.882	3.141	3.191	3.272	3.247	3.357	3.325	3.480	3.709	3.646	0.000
EXISTING LEVEL	89.282			89.365	89.426	89.395	89.383	89.363	89.466	89.303	89.262	89.232	89.101	88.949	88.931	88.927	88.748	88.829	89.219
OFFSET	-21.520			-8.750	-7.850	-5.350	-5.201	-4.900	-3.500	-0.300	0.000	0.300	3.500	4.900	5.200	5.350	7.850	8.750	21.774

CHAINAGE 2360.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

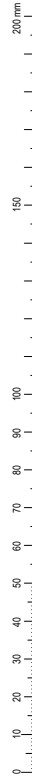
SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



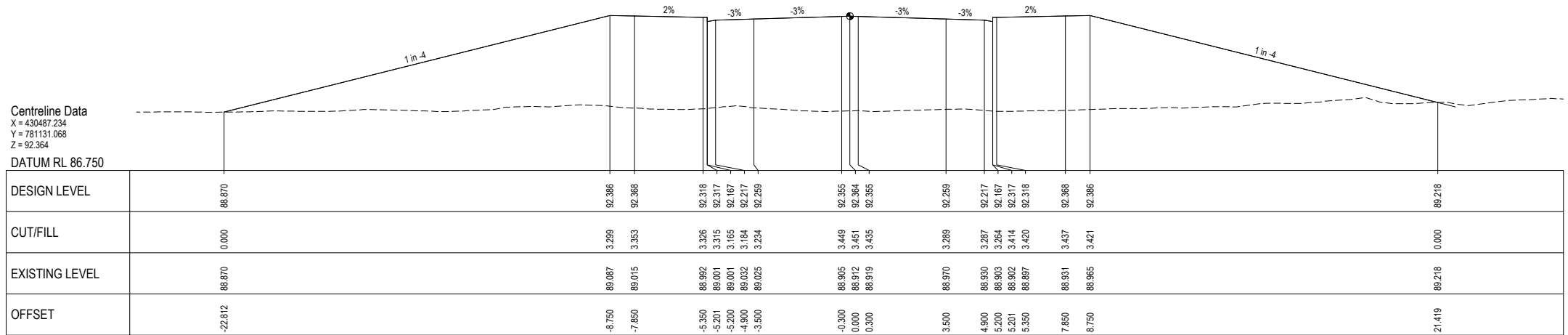
ASHBURTON - TINWALD CONNECTIVITY DBC
 HAKATERE RIVER SECOND CROSSING
 CROSS SECTIONS (MC00)
 SHEET 13

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C913
Rev.	B

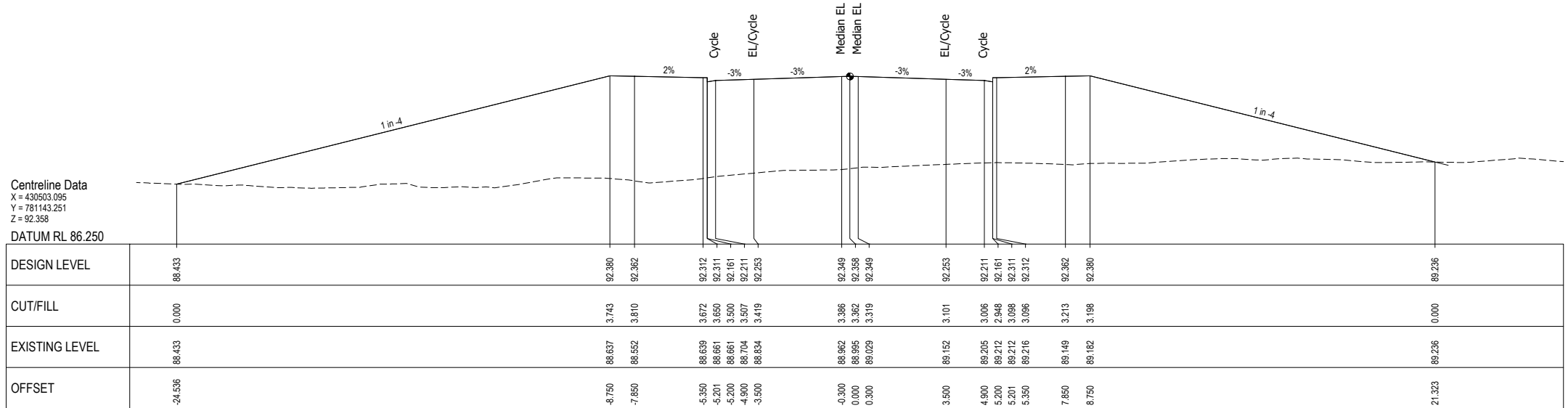
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



CHAINAGE 2420.000



CHAINAGE 2400.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

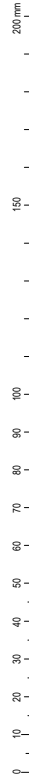


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

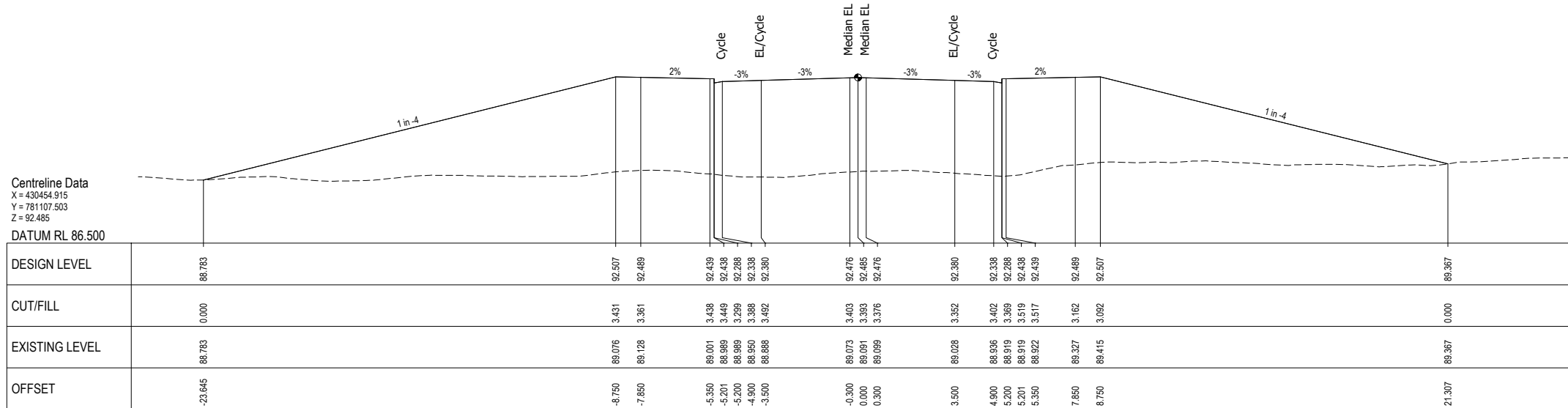
CROSS SECTIONS (MC00)
SHEET 14

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C914
Rev.	B

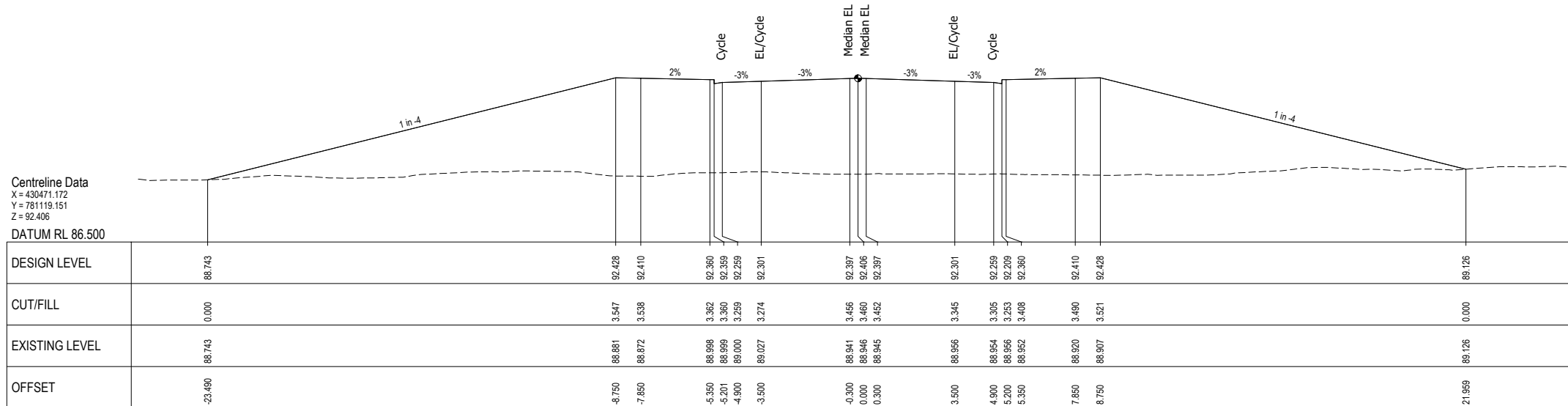
DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



CHAINAGE 2460.000



CHAINAGE 2440.000



SCALE 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	MS	07/22
A	FOR REVIEW	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



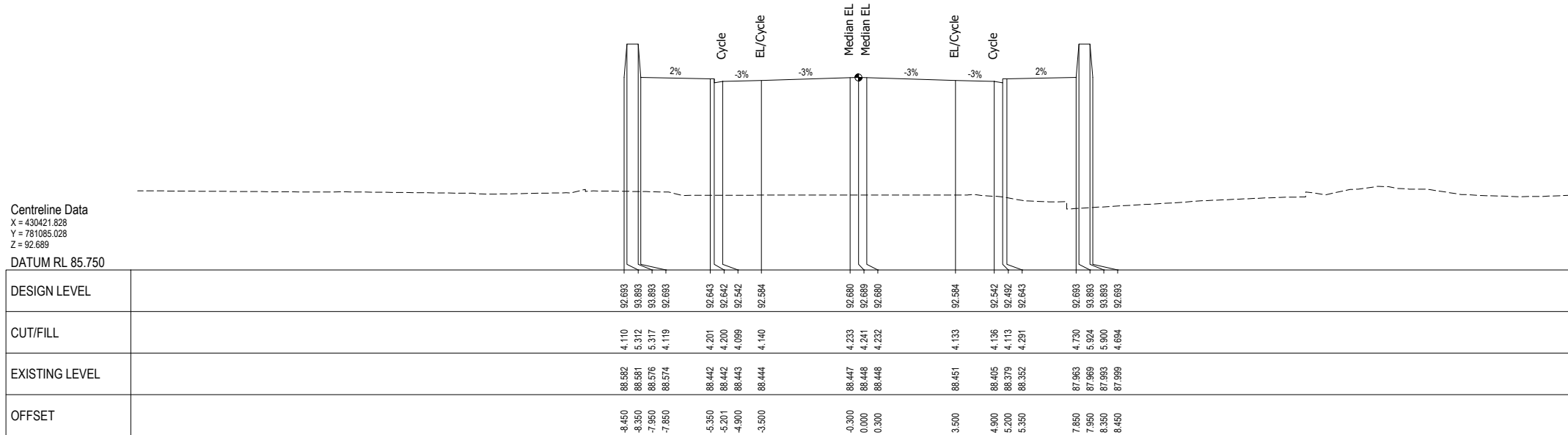
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 15

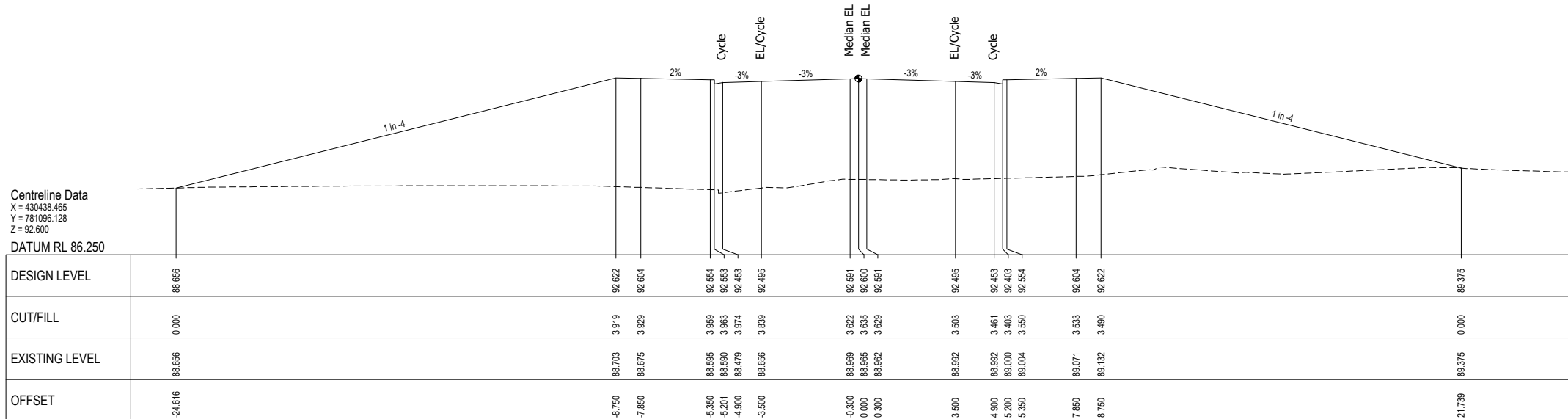
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C915
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



CHAINAGE 2500.000



CHAINAGE 2480.000

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	MS	07/22
A	FOR REVIEW	PJC	NL	07/22
REV	REVISIONS	DRN	CHK	APP

SURVEYED	DAVIS OGLIVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

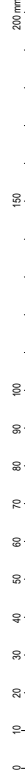


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 16

Status Stamp	SCHEME ASSESSMENT	
Date Stamp	22.07.22	
Scales	1 : 100	
Drawing No.	310205125-01-001-C916	Rev. B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 430388.024
Y = 781063.646
Z = 92.600
DATUM RL 86.000

DESIGN LEVEL	88.478		92.622	92.604	92.554	92.553	92.403	92.453	92.495	92.591	92.600	92.591	92.495	92.453	92.403	92.554	92.604	92.622	88.407
CUT/FILL	0.000		4.446	4.405	4.300	4.295	4.145	4.188	4.195	4.342	4.362	4.363	4.380	4.307	4.249	4.396	4.377	4.370	0.000
EXISTING LEVEL	88.478		88.176	88.199	88.254	88.258	88.258	88.265	88.300	88.249	88.238	88.228	88.115	88.146	88.154	88.158	88.227	88.252	88.407
OFFSET	-25.327		-8.750	-7.850	-5.350	-5.201	-5.200	-4.900	-3.500	-0.300	0.000	0.300	3.500	4.900	5.201	5.350	7.850	8.750	25.610

CHAINAGE 2540.000

Centreline Data
X = 430405.008
Y = 781074.207
Z = 92.689
DATUM RL 86.500

DESIGN LEVEL			92.693	93.893	93.893	92.643	92.642	92.492	92.542	92.594	92.680	92.689	92.680	92.594	92.542	92.492	92.642	92.643	92.693	93.893	93.893	92.693	
CUT/FILL			4.080	5.277	5.266	3.944	3.946	3.796	3.849	3.890	3.984	3.993	3.984	3.885	3.844	3.794	3.944	3.946	3.999	5.199	5.200	93.893	92.693
EXISTING LEVEL			88.613	88.616	88.627	88.699	88.696	88.696	88.693	88.694	88.696	88.696	88.696	88.699	88.698	88.697	88.697	88.697	88.694	88.694	88.694	88.693	88.693
OFFSET			-8.450	-8.350	-7.950	-5.350	-5.201	-5.200	-4.900	-3.500	-0.300	0.000	0.300	3.500	4.900	5.201	5.350	7.850	8.450	8.450	8.450	8.450	8.450

CHAINAGE 2520.000



SCALE 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

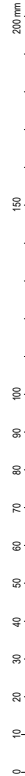
SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Barbara Browne	04/22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
CROSS SECTIONS (MC00)
SHEET 17

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C917
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 430336.974
Y = 781032.120
Z = 91.474

DATUM RL 88.000

DESIGN LEVEL		90.226		91.481	91.463	91.413	91.412	91.412	91.412	91.444	91.474	91.444	91.348	91.312	91.412	91.413	91.463	91.481	90.277	
CUT/FILL		0.000		1.227	1.201	1.135	1.133	0.983	1.031	1.137	1.665	1.138	1.054	1.022	0.973	1.123	1.125	1.184	1.202	0.000
EXISTING LEVEL		90.226		90.255	90.263	90.279	90.280	90.280	90.282	90.308	90.310	90.306	90.295	90.290	90.289	90.289	90.280	90.279	90.277	
OFFSET		-14.271		-9.250	-8.350	-5.850	-5.701	-5.700	-5.400	-1.000	0.000	1.000	4.200	5.400	5.701	5.850	8.350	9.250	14.069	

CHAINAGE 2600.000

Centreline Data
X = 430353.991
Y = 781042.629
Z = 92.011

DATUM RL 88.000

DESIGN LEVEL		90.242		92.018	92.000	91.950	91.949	91.949	91.949	91.981	92.011	91.981	91.885	91.849	91.799	91.949	91.950	92.000	92.018	90.247
CUT/FILL		0.000		1.724	1.702	1.642	1.640	1.640	1.539	1.659	1.689	1.661	1.571	1.541	1.644	1.646	1.718	1.745		0.000
EXISTING LEVEL		90.242		90.294	90.298	90.308	90.308	90.308	90.310	90.322	90.322	90.320	90.314	90.308	90.305	90.304	90.281	90.273	90.247	
OFFSET		-16.355		-9.250	-8.350	-5.850	-5.701	-5.700	-5.400	-1.000	0.000	1.000	4.200	5.400	5.701	5.850	8.350	9.250	16.334	

CHAINAGE 2580.000

Centreline Data
X = 430371.007
Y = 781053.138
Z = 92.386

DATUM RL 86.250

DESIGN LEVEL		89.107		92.398	92.390	92.330	92.329	92.179	92.229	92.363	92.386	92.363	92.267	92.229	92.330	92.390	92.398		88.794
CUT/FILL		0.000		3.534	3.617	3.639	3.651	3.701	3.777	3.600	3.602	3.552	3.336	3.294	3.389	3.406	3.422		0.000
EXISTING LEVEL		89.107		88.864	88.763	88.691	88.678	88.478	88.452	88.763	88.784	88.811	88.331	88.335	88.339	88.974	88.976		88.794
OFFSET		-22.247		-9.083	-8.183	-5.683	-5.534	-5.533	-5.233	-0.767	0.000	0.767	3.967	5.233	5.534	8.183	9.083		23.501

CHAINAGE 2560.000



SCALE 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 18

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C918
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Centreline Data
X = 430285.558
Y = 781001.203
Z = 89.687

DATUM RL 87.250

DESIGN LEVEL	90.194	89.683	89.673	89.623	89.622	89.472	89.522	89.623	89.673	89.683	90.192
CUT/FILL	0.000	-0.523	-0.535	-0.578	-0.578	-0.728	-0.725	-0.725	-0.521	-0.510	0.000
EXISTING LEVEL	90.194	90.206	90.209	90.202	90.201	90.201	90.197	90.197	90.194	90.193	90.192
OFFSET	-10.458	-8.925	-8.425	-5.925	-5.776	-5.475	-5.475	-5.925	-8.425	-8.925	10.450

CHAINAGE 2660.000

Centreline Data
X = 430232.731
Y = 780972.767
Z = 90.139

DATUM RL 87.750

DESIGN LEVEL	89.988	90.094	90.139	90.084	89.988
CUT/FILL	-0.261	-0.192	-0.159	-0.217	-0.336
EXISTING LEVEL	90.259	90.286	90.299	90.311	90.335
OFFSET	-4.700	-1.500	0.000	1.500	4.700

CHAINAGE 2720.000

Centreline Data
X = 430302.842
Y = 781011.264
Z = 90.088

DATUM RL 87.750

DESIGN LEVEL	90.385	90.087	90.077	90.027	90.026	90.087	90.088	90.088	90.088	90.087	90.373
CUT/FILL	0.000	-0.307	-0.323	-0.389	-0.389	-0.467	-0.423	-0.305	-0.276	-0.306	0.000
EXISTING LEVEL	90.385	90.395	90.401	90.397	90.396	90.394	90.395	90.393	90.384	90.395	90.373
OFFSET	-9.742	-8.850	-8.350	-5.850	-5.701	-5.400	-4.200	-1.000	0.000	1.000	9.706

CHAINAGE 2640.000

Centreline Data
X = 430250.497
Y = 780981.951
Z = 89.755

DATUM RL 87.500

DESIGN LEVEL	89.946	89.739	89.729	89.679	89.678	89.528	89.614	89.710	89.755	89.710	89.614	89.578	89.528	89.678	89.679	89.729	89.739	89.946
CUT/FILL	0.000	-0.213	-0.228	-0.307	-0.311	-0.461	-0.416	-0.367	-0.344	-0.408	-0.531	-0.577	-0.629	-0.479	-0.479	-0.438	-0.430	0.000
EXISTING LEVEL	89.946	89.952	89.956	89.986	89.988	89.988	89.984	90.076	90.098	90.118	90.144	90.154	90.157	90.157	90.158	90.167	90.168	89.946
OFFSET	-9.973	-9.350	-8.850	-6.350	-6.201	-5.900	-4.700	-1.500	0.000	1.500	4.700	5.900	6.201	6.350	6.350	8.850	9.350	10.675

CHAINAGE 2700.000

Centreline Data
X = 430319.957
Y = 781021.612
Z = 90.777

DATUM RL 88.000

DESIGN LEVEL	90.190	90.784	90.766	90.716	90.715	90.651	90.747	90.777	90.747	90.651	90.716	90.784	90.338
CUT/FILL	0.000	0.544	0.517	0.450	0.449	0.347	0.464	0.474	0.435	0.338	0.301	0.251	0.402
EXISTING LEVEL	90.190	90.240	90.248	90.265	90.266	90.274	90.293	90.303	90.312	90.315	90.314	90.314	90.314
OFFSET	-11.624	-9.250	-8.350	-5.850	-5.701	-4.200	-1.000	0.000	1.000	4.200	5.400	5.700	5.850

CHAINAGE 2620.000

Centreline Data
X = 430268.107
Y = 780991.431
Z = 89.575

DATUM RL 87.250

DESIGN LEVEL	90.120	89.559	89.549	89.499	89.498	89.434	89.530	89.575	89.530	89.434	89.499	89.559	90.091
CUT/FILL	0.000	-0.547	-0.553	-0.592	-0.592	-0.660	-0.570	-0.534	-0.568	-0.656	-0.701	-0.754	0.000
EXISTING LEVEL	90.120	90.106	90.103	90.091	90.091	90.084	90.100	90.110	90.098	90.091	90.100	90.102	90.091
OFFSET	-11.032	-9.350	-8.850	-6.350	-6.201	-4.700	-1.500	0.000	1.500	4.700	5.900	6.200	10.944

CHAINAGE 2680.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 19

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C919
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Centreline Data
X = 430178.549
Y = 780947.006
Z = 89.944

DATUM RL 87.750

DESIGN LEVEL		89.985	90.034	89.974	89.973	89.811	89.907	89.944	89.907	89.811	89.873	89.874	90.024	90.207
CUT/FILL		0.029	0.076	-0.002	-0.104	-0.195	-0.131	-0.107	-0.157	-0.286	-0.255	-0.155	-0.130	0.044
EXISTING LEVEL		89.957	89.958	89.976	89.977	90.006	90.038	90.051	90.064	90.096	90.128	90.129	90.154	90.207
OFFSET		-10.913	-10.718	-7.718	-7.589	-4.450	-1.250	0.000	1.250	4.450	7.588	7.718	10.218	11.237

CHAINAGE 2780.000

Centreline Data
X = 430123.838
Y = 780922.380
Z = 90.196

DATUM RL 87.750

DESIGN LEVEL		90.347	90.222	90.162	90.161	90.070	90.166	90.196	90.166	90.070	90.025	90.025	90.061	90.212
CUT/FILL		0.000	-0.124	-0.180	-0.181	-0.281	-0.147	-0.108	-0.129	-0.197	-0.229	-0.277	-0.172	-0.014
EXISTING LEVEL		90.347	90.346	90.343	90.343	90.340	90.313	90.304	90.286	90.285	90.285	90.249	90.234	90.222
OFFSET		-11.623	-11.250	-8.250	-8.101	-6.300	-1.000	0.000	4.200	5.700	6.000	6.300	8.100	10.750

CHAINAGE 2840.000

Centreline Data
X = 430196.752
Y = 780955.292
Z = 89.706

DATUM RL 87.250

DESIGN LEVEL		89.954	89.690	89.680	89.630	89.629	89.629	89.661	89.706	89.661	89.555	89.529	89.529	90.137
CUT/FILL		0.000	-0.265	-0.275	-0.327	-0.328	-0.478	-0.337	-0.310	-0.372	-0.504	-0.554	-0.457	0.000
EXISTING LEVEL		89.954	89.955	89.955	89.957	89.957	89.957	89.998	90.015	90.032	90.069	90.083	90.086	90.137
OFFSET		-10.144	-9.350	-8.850	-6.350	-6.201	-5.900	-1.500	0.000	1.500	4.700	5.900	6.201	10.691

CHAINAGE 2760.000

Centreline Data
X = 430142.000
Y = 780930.756
Z = 90.119

DATUM RL 87.750

DESIGN LEVEL		90.166	90.145	90.084	90.084	90.085	90.085	90.089	90.119	90.089	89.993	89.948	89.948	90.135
CUT/FILL		0.000	-0.021	-0.112	-0.115	-0.269	-0.276	-0.163	-0.131	-0.160	-0.250	-0.252	-0.291	-0.096
EXISTING LEVEL		90.166	90.166	90.197	90.199	90.218	90.221	90.252	90.251	90.249	90.243	90.241	90.239	90.232
OFFSET		-11.311	-11.250	-8.250	-8.101	-6.300	-5.700	-1.000	0.000	4.200	5.700	6.000	6.300	10.750

CHAINAGE 2820.000

Centreline Data
X = 430214.814
Y = 780963.879
Z = 89.843

DATUM RL 87.500

DESIGN LEVEL		90.119	89.827	89.817	89.767	89.766	89.702	89.798	89.843	89.798	89.702	89.686	89.616	90.261
CUT/FILL		0.000	-0.294	-0.306	-0.363	-0.365	-0.468	-0.366	-0.330	-0.384	-0.501	-0.547	-0.420	0.000
EXISTING LEVEL		90.119	90.122	90.123	90.131	90.132	90.134	90.164	90.173	90.182	90.203	90.213	90.216	90.261
OFFSET		-10.225	-9.350	-8.850	-6.350	-6.201	-4.700	-1.500	0.000	1.500	4.700	5.900	6.201	10.651

CHAINAGE 2740.000

Centreline Data
X = 430160.244
Y = 780938.949
Z = 90.042

DATUM RL 87.750

DESIGN LEVEL		90.066	90.068	90.068	90.008	90.007	90.007	90.012	90.042	90.012	89.916	89.871	89.871	90.068
CUT/FILL		0.000	0.002	-0.014	-0.094	-0.097	-0.255	-0.176	-0.156	-0.196	-0.323	-0.378	-0.429	-0.203
EXISTING LEVEL		90.066	90.072	90.072	90.102	90.104	90.126	90.188	90.198	90.208	90.239	90.249	90.250	90.261
OFFSET		-11.258	-11.250	-10.750	-8.250	-8.101	-6.300	-1.000	0.000	4.200	5.700	6.000	6.300	11.844

CHAINAGE 2800.000



NOT FOR CONSTRUCTION

REV	B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	MS	07/22	
	A	FOR REVIEW	PJC	NL	07/22	
			DRN	CHK	APP	DATE

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Alli Siddiqui	22.07.22
PROF REGISTRATION:		

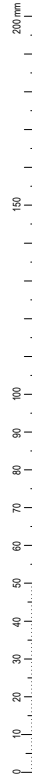


ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 20

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C920
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 430069.868
Y = 780896.169
Z = 90.385

DATUM RL 88.000

DESIGN LEVEL	90.348	90.411	90.401	90.351	90.350	90.250	90.214	90.164	90.214	90.250	90.351	90.401	90.411	90.557
CUT/FILL	0.000	0.061	0.047	-0.022	-0.024	-0.124	-0.173	-0.225	-0.177	-0.143	-0.063	-0.033	-0.063	-0.191
EXISTING LEVEL	90.348	90.350	90.354	90.372	90.374	90.374	90.387	90.389	90.391	90.402	90.418	90.418	90.418	90.450
OFFSET	-11.500	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200

CHAINAGE 2900.000

Centreline Data
X = 430016.710
Y = 780868.350
Z = 89.989

DATUM RL 87.750

DESIGN LEVEL	89.992	90.083	90.073	89.969	89.968	89.855	89.959	89.989	89.959	89.855	89.868	89.968	90.074	90.197
CUT/FILL	0.042	0.132	0.120	-0.003	-0.005	-0.105	-0.099	-0.043	-0.086	-0.237	-0.233	-0.133	-0.065	0.053
EXISTING LEVEL	89.951	89.951	89.953	89.972	89.973	89.978	90.019	90.032	90.046	90.093	90.102	90.102	90.140	90.144
OFFSET	-11.358	-10.995	-10.495	-5.292	-5.143	-4.485	-1.000	0.000	1.000	4.470	5.128	5.129	10.480	11.319

CHAINAGE 2960.000

Centreline Data
X = 430087.770
Y = 780905.086
Z = 90.351

DATUM RL 88.000

DESIGN LEVEL	90.449	90.377	90.367	90.317	90.316	90.216	90.180	90.130	90.180	90.225	90.321	90.351	90.321	90.367
CUT/FILL	0.000	-0.072	-0.083	-0.134	-0.136	-0.236	-0.284	-0.336	-0.288	-0.255	-0.179	-0.147	-0.174	-0.104
EXISTING LEVEL	90.449	90.449	90.449	90.451	90.451	90.451	90.463	90.466	90.468	90.479	90.500	90.498	90.495	90.471
OFFSET	-11.466	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200

CHAINAGE 2880.000

Centreline Data
X = 430034.336
Y = 780877.800
Z = 90.122

DATUM RL 87.750

DESIGN LEVEL	90.126	90.148	90.138	90.126	90.127	90.127	90.149	90.151	90.152	90.159	90.092	90.122	90.092	90.138
CUT/FILL	0.000	0.021	0.009	-0.002	0.009	-0.052	-0.198	-0.250	-0.201	-0.163	-0.083	-0.066	-0.110	-0.170
EXISTING LEVEL	90.126	90.127	90.129	90.140	90.141	90.141	90.149	90.151	90.152	90.159	90.175	90.188	90.202	90.308
OFFSET	-11.337	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200

CHAINAGE 2940.000

Centreline Data
X = 430105.761
Y = 780913.823
Z = 90.274

DATUM RL 88.000

DESIGN LEVEL	90.490	90.300	90.290	90.240	90.239	90.103	90.053	90.103	90.148	90.244	90.274	90.244	90.148	90.290
CUT/FILL	0.000	-0.189	-0.197	-0.237	-0.238	-0.367	-0.415	-0.364	-0.314	-0.205	-0.170	-0.195	-0.275	-0.101
EXISTING LEVEL	90.490	90.488	90.488	90.477	90.476	90.469	90.468	90.467	90.461	90.448	90.443	90.439	90.423	90.390
OFFSET	-11.522	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	10.750

CHAINAGE 2860.000

Centreline Data
X = 430052.056
Y = 780887.074
Z = 90.288

DATUM RL 88.000

DESIGN LEVEL	90.243	90.314	90.304	90.254	90.253	90.117	90.067	90.117	90.162	90.258	90.288	90.258	90.162	90.304
CUT/FILL	0.000	0.068	0.052	-0.026	-0.028	-0.184	-0.237	-0.191	-0.162	-0.101	-0.081	-0.121	-0.249	-0.179
EXISTING LEVEL	90.243	90.247	90.252	90.280	90.281	90.301	90.305	90.308	90.324	90.359	90.369	90.379	90.411	90.483
OFFSET	-11.533	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	10.750

CHAINAGE 2920.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

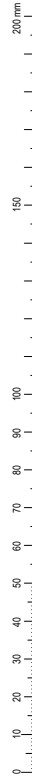
SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		

ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 21

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C921
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 429930.046
Y = 780818.478
Z = 89.873

DATUM RL 87.500

DESIGN LEVEL	89.919	89.980	89.970	89.914	89.913	89.742	89.843	89.873	89.843	89.742	89.813	89.914	89.970	90.057
CUT/FILL	0.046	0.107	0.086	0.032	0.030	-0.150	-0.059	-0.036	-0.074	-0.201	-0.158	-0.059	-0.025	0.057
EXISTING LEVEL	89.873	89.873	89.874	89.882	89.883	89.883	89.902	89.909	89.917	89.944	89.972	89.973	89.985	90.001
OFFSET	-11.601	-11.355	-10.855	-8.058	-7.909	-4.365	-1.000	0.000	1.000	4.365	7.988	8.058	10.855	11.587

CHAINAGE 3060.000

Centreline Data
X = 429947.177
Y = 780828.798
Z = 89.896

DATUM RL 87.750

DESIGN LEVEL	89.896
CUT/FILL	-0.127
EXISTING LEVEL	90.023
OFFSET	0.000

CHAINAGE 3040.000

PROPOSED NEW WILKIN STREET ROUNDABOUT
- REFER C750 DRAWING SERIES TYPICAL SECTIONS

Centreline Data
X = 429999.179
Y = 780858.723
Z = 89.965

DATUM RL 87.750

DESIGN LEVEL	89.965
CUT/FILL	-0.059
EXISTING LEVEL	90.023
OFFSET	0.000

CHAINAGE 2980.000

Centreline Data
X = 429679.283
Y = 780736.495
Z = 89.774

DATUM RL 87.500

DESIGN LEVEL	89.867	89.800	89.790	89.740	89.739	89.603	89.603	89.648	89.744	89.774	89.744	89.648	89.603	89.603	89.639	89.740	89.790	89.800	90.010	
CUT/FILL	0.000	-0.068	-0.081	-0.146	-0.147	-0.295	-0.299	-0.264	-0.187	-0.163	-0.199	-0.314	-0.367	-0.419	-0.371	-0.345	-0.245	-0.211	-0.205	0.000
EXISTING LEVEL	89.867	89.868	89.871	89.885	89.886	89.898	89.900	89.902	89.931	89.937	89.943	89.961	89.970	89.972	89.974	89.984	89.985	90.000	90.005	90.010
OFFSET	-11.451	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750	11.250

CHAINAGE 3120.000

Centreline Data
X = 429896.097
Y = 780797.325
Z = 89.812

DATUM RL 87.500

DESIGN LEVEL	89.906	89.838	89.828	89.778	89.777	89.641	89.641	89.686	89.782	89.812	89.782	89.686	89.641	89.641	89.677	89.778	89.828	89.838	90.135
CUT/FILL	0.000	-0.070	-0.085	-0.160	-0.162	-0.316	-0.322	-0.292	-0.227	-0.207	-0.247	-0.374	-0.434	-0.487	-0.421	-0.295	-0.289	-0.289	0.000
EXISTING LEVEL	89.906	89.908	89.913	89.937	89.939	89.957	89.960	89.963	90.009	90.019	90.029	90.060	90.074	90.077	90.080	90.098	90.123	90.127	90.135
OFFSET	-11.454	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750

CHAINAGE 3100.000

Centreline Data
X = 429913.018
Y = 780807.986
Z = 89.849

DATUM RL 87.500

DESIGN LEVEL	89.906	89.815	89.814	89.678	89.678	89.723	89.819	89.849	89.819	89.723	89.678	89.678	89.714	89.815	89.865	89.865	90.082
CUT/FILL	0.000	-0.031	-0.047	-0.122	-0.125	-0.280	-0.168	-0.168	-0.207	-0.327	-0.378	-0.429	-0.352	-0.252	-0.212	-0.204	0.000
EXISTING LEVEL	89.906	89.838	89.839	89.839	89.839	89.959	90.009	90.018	90.027	90.050	90.056	90.058	90.066	90.067	90.077	90.079	90.082
OFFSET	-11.342	-11.250	-10.750	-8.250	-8.101	-6.300	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750

CHAINAGE 3080.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
CROSS SECTIONS (MC00)
SHEET 22

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C922
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm
150
100
90
80
70
60
50
40
30
20
10
0

ORIGINAL SIZE A1

Centreline Data
X = 429731.874
Y = 780683.229
Z = 89.432
DATUM RL 86.750

DESIGN LEVEL	88.867	89.458	89.448	89.398	89.297	89.261	89.261	89.297	89.397	89.398	89.448	89.458	88.867
CUT/FILL	0.000	0.601	0.593	0.542	0.440	0.395	0.344	0.302	0.309	0.311	0.311	0.311	0.000
EXISTING LEVEL	88.867	88.857	88.855	88.856	88.857	88.866	88.867	88.869	88.876	88.876	88.876	88.876	88.867
OFFSET	-13.616	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200

CHAINAGE 3300.000

Centreline Data
X = 429748.124
Y = 780694.889
Z = 89.470
DATUM RL 85.500

DESIGN LEVEL	89.496	89.486	89.436	89.435	89.399	89.299	89.299	89.335	89.435	89.436	89.486	89.496	88.769
CUT/FILL	1.083	1.080	1.071	1.073	0.996	0.811	0.811	0.811	0.808	0.807	0.807	0.807	0.000
EXISTING LEVEL	88.414	88.406	88.365	88.363	88.333	88.328	88.323	88.311	88.333	88.333	88.333	88.333	88.769
OFFSET	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	14.168

CHAINAGE 3280.000

Centreline Data
X = 429764.373
Y = 780706.549
Z = 89.508
DATUM RL 85.500

DESIGN LEVEL	89.534	89.524	89.474	89.473	89.337	89.287	89.337	89.382	89.478	89.478	89.524	89.534	88.769
CUT/FILL	1.598	1.593	1.263	1.261	1.114	1.062	1.110	1.145	1.221	1.251	1.307	1.316	0.000
EXISTING LEVEL	87.976	88.021	88.211	88.212	88.223	88.225	88.227	88.237	88.257	88.257	88.217	88.218	88.769
OFFSET	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	14.168

CHAINAGE 3260.000

Centreline Data
X = 429683.126
Y = 780648.250
Z = 89.318
DATUM RL 87.000

DESIGN LEVEL	89.272	89.344	89.284	89.283	89.147	89.147	89.192	89.288	89.318	89.288	89.192	89.147	89.272
CUT/FILL	0.000	0.070	-0.013	-0.015	-0.168	-0.221	-0.174	-0.082	-0.067	-0.111	-0.216	-0.264	0.000
EXISTING LEVEL	89.272	89.275	89.297	89.298	89.315	89.318	89.321	89.318	89.318	89.318	89.318	89.318	89.272
OFFSET	-11.540	-11.250	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	11.660

CHAINAGE 3360.000

Centreline Data
X = 429689.376
Y = 780659.910
Z = 89.356
DATUM RL 87.000

DESIGN LEVEL	89.292	89.362	89.322	89.321	89.185	89.185	89.230	89.326	89.356	89.326	89.230	89.185	89.292
CUT/FILL	0.000	0.082	-0.011	-0.013	-0.165	-0.170	-0.138	-0.075	-0.053	-0.092	-0.217	-0.275	0.000
EXISTING LEVEL	89.292	89.300	89.333	89.335	89.353	89.356	89.356	89.410	89.410	89.410	89.410	89.410	89.292
OFFSET	-11.610	-11.250	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	11.625

CHAINAGE 3340.000

Centreline Data
X = 429715.625
Y = 780671.570
Z = 89.394
DATUM RL 86.750

DESIGN LEVEL	89.965	89.420	89.350	89.359	89.223	89.223	89.288	89.364	89.394	89.364	89.288	89.420	89.965
CUT/FILL	0.000	0.416	0.291	0.287	0.112	0.099	0.111	0.138	0.147	0.095	-0.070	-0.140	0.000
EXISTING LEVEL	88.965	89.004	89.069	89.073	89.111	89.124	89.157	89.226	89.248	89.269	89.339	89.363	88.965
OFFSET	-13.071	-11.250	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	11.452

CHAINAGE 3320.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
REV	REVISIONS	DRN	CHK	APP

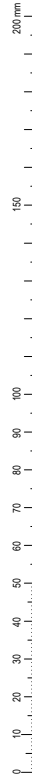
SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING
CROSS SECTIONS (MC00)
SHEET 24

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C924
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 429634.378
Y = 780613.270
Z = 89.205
DATUM RL 86.750

DESIGN LEVEL	89.299	89.231	89.221	89.171	89.170	89.070	89.034	89.034	89.079	89.175	89.205	89.175	89.079	89.034	89.034	89.070	89.170	89.221	89.399
CUT/FILL	0.000	-0.070	-0.083	-0.138	-0.139	-0.239	-0.274	-0.274	-0.229	-0.152	-0.120	-0.147	-0.240	-0.288	-0.340	-0.298	-0.198	-0.171	0.000
EXISTING LEVEL	89.299	89.300	89.304	89.308	89.308	89.308	89.308	89.308	89.308	89.327	89.325	89.322	89.319	89.321	89.324	89.368	89.368	89.401	89.399
OFFSET	-11.454	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	8.100	8.100	10.750	11.754

CHAINAGE 3420.000

Centreline Data
X = 429585.629
Y = 780578.290
Z = 89.091
DATUM RL 86.750

DESIGN LEVEL	89.069	89.117	89.107	89.057	89.056	89.056	89.020	89.020	89.061	89.081	89.061	89.061	89.061	89.057	89.056	89.020	89.117	89.220	
CUT/FILL	0.000	0.046	0.031	-0.039	-0.041	-0.041	-0.141	-0.141	-0.087	-0.068	-0.108	-0.156	-0.237	-0.297	-0.351	-0.304	-0.092	-0.095	0.000
EXISTING LEVEL	89.069	89.071	89.076	89.095	89.096	89.096	89.108	89.108	89.148	89.159	89.169	89.169	89.202	89.217	89.220	89.223	89.225	89.212	89.220
OFFSET	-11.442	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.100	10.750	11.560

CHAINAGE 3480.000

Centreline Data
X = 429650.627
Y = 780624.930
Z = 89.242
DATUM RL 87.000

DESIGN LEVEL	89.323	89.268	89.258	89.208	89.207	89.107	89.071	89.071	89.116	89.212	89.242	89.212	89.116	89.071	89.021	89.207	89.268	89.506
CUT/FILL	0.000	-0.057	-0.070	-0.138	-0.140	-0.240	-0.288	-0.288	-0.258	-0.180	-0.152	-0.188	-0.312	-0.370	-0.422	-0.256	-0.230	0.000
EXISTING LEVEL	89.323	89.325	89.329	89.346	89.347	89.347	89.360	89.362	89.375	89.392	89.394	89.401	89.428	89.441	89.444	89.463	89.498	89.506
OFFSET	-11.415	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	8.100	8.100	11.982

CHAINAGE 3400.000

Centreline Data
X = 429601.879
Y = 780589.950
Z = 89.129
DATUM RL 86.750

DESIGN LEVEL	89.985	89.155	89.145	89.095	89.094	89.094	89.058	89.058	89.099	89.129	89.099	89.099	89.099	89.095	89.094	89.058	89.155	89.305	
CUT/FILL	0.000	0.159	0.141	0.050	0.047	0.047	-0.053	-0.053	-0.042	-0.028	-0.073	-0.104	-0.217	-0.266	-0.341	-0.296	-0.163	-0.149	0.000
EXISTING LEVEL	89.985	89.996	89.994	89.944	89.947	89.947	89.976	89.976	89.941	89.956	89.971	89.971	89.220	89.244	89.248	89.253	89.289	89.308	89.305
OFFSET	-11.530	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.100	10.750	11.702

CHAINAGE 3460.000

Centreline Data
X = 429666.877
Y = 780636.590
Z = 89.280
DATUM RL 87.000

DESIGN LEVEL	89.323	89.306	89.296	89.246	89.245	89.145	89.109	89.109	89.154	89.250	89.280	89.250	89.154	89.109	89.059	89.246	89.306	89.534
CUT/FILL	0.000	-0.017	-0.031	-0.100	-0.102	-0.202	-0.252	-0.252	-0.223	-0.151	-0.132	-0.174	-0.307	-0.370	-0.424	-0.280	-0.237	0.000
EXISTING LEVEL	89.323	89.323	89.327	89.347	89.348	89.348	89.362	89.364	89.378	89.401	89.413	89.424	89.462	89.480	89.483	89.528	89.543	89.534
OFFSET	-11.298	-11.250	-10.750	-8.250	-8.100	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	8.100	8.100	11.934

CHAINAGE 3380.000

Centreline Data
X = 429618.128
Y = 780601.610
Z = 89.167
DATUM RL 86.750

DESIGN LEVEL	89.095	89.183	89.183	89.133	89.132	89.032	89.096	89.096	89.041	89.137	89.167	89.137	89.041	89.096	89.132	89.183	89.183	89.271	
CUT/FILL	0.000	0.043	0.043	-0.043	-0.042	-0.058	-0.089	-0.089	-0.044	0.036	0.061	0.026	-0.091	-0.162	-0.217	-0.173	-0.090	-0.079	0.000
EXISTING LEVEL	89.095	89.089	89.089	89.090	89.090	89.089	89.095	89.094	89.084	89.100	89.105	89.110	89.131	89.158	89.163	89.168	89.206	89.271	89.271
OFFSET	-11.639	-11.250	-10.750	-8.250	-8.100	-8.100	-6.300	-6.000	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	10.750	11.485

CHAINAGE 3440.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	PJC	MS	DATE	
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22	
A	FOR REVIEW			07/22	
REV	REVISIONS	DRN	CHK	APP	DATE

SURVEYED	DAVIS OGILVIE - AORAKI	04/22
DESIGNED	Barbara Browne	04/22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		



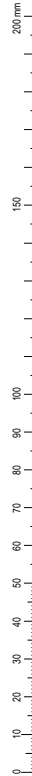
ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 25

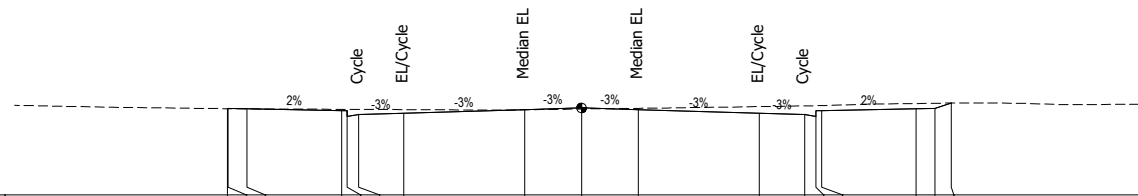
Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C925
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

ORIGINAL SIZE A1



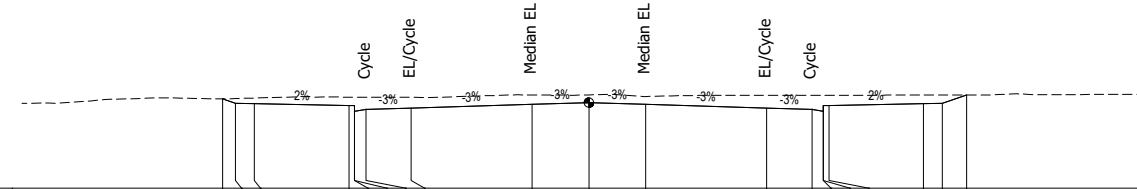
Centreline Data
X = 429538.211
Y = 780541.586
Z = 89.050
DATUM RL 86.750



DESIGN LEVEL	88.030	88.034	88.024	88.974	88.973	88.973	88.909	89.005	89.050	89.005	88.909	88.873	88.823	88.974	88.024	88.179
CUT/FILL	0.000	0.005	-0.000	-0.039	-0.039	-0.138	-0.096	0.004	0.030	-0.034	-0.175	-0.229	-0.284	-0.137	-0.142	-0.139
EXISTING LEVEL	89.030	89.030	89.025	89.014	89.013	89.012	89.006	89.001	89.021	89.040	89.085	89.103	89.107	89.112	89.167	89.179
OFFSET	-9.368	-9.350	-8.850	-6.350	-6.201	-5.900	-4.700	-1.500	0.000	1.500	4.700	5.900	6.200	6.350	8.850	9.350

CHAINAGE 3540.000

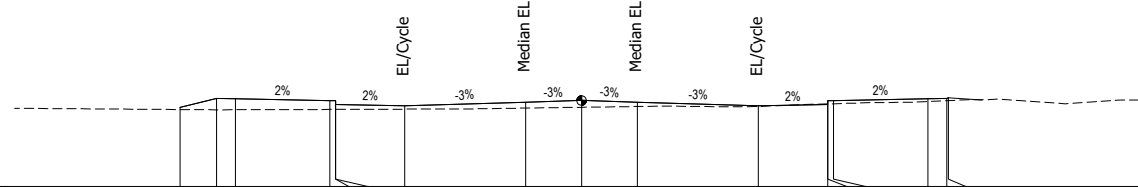
Centreline Data
X = 429494.153
Y = 780500.858
Z = 89.009
DATUM RL 86.750



DESIGN LEVEL	89.107	88.983	88.983	88.933	88.932	88.932	88.868	88.964	89.009	88.964	88.868	88.832	88.782	88.932	88.933	88.983
CUT/FILL	0.000	-0.123	-0.147	-0.221	-0.222	-0.372	-0.283	-0.249	-0.205	-0.208	-0.330	-0.367	-0.418	-0.268	-0.267	-0.227
EXISTING LEVEL	89.107	89.116	89.130	89.153	89.153	89.154	89.150	89.213	89.213	89.171	89.198	89.199	89.199	89.199	89.210	89.188
OFFSET	-9.694	-9.350	-8.850	-6.350	-6.201	-5.900	-4.700	-1.500	0.000	1.500	4.700	5.900	6.201	6.350	8.850	9.350

CHAINAGE 3600.000

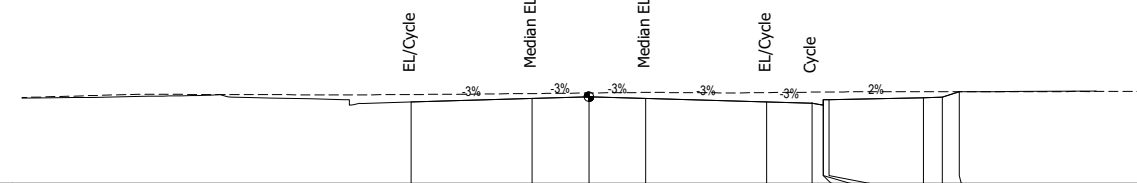
Centreline Data
X = 429553.483
Y = 780554.496
Z = 89.026
DATUM RL 86.750



DESIGN LEVEL	88.845	89.085	89.075	89.025	89.024	88.924	88.887	88.983	89.028	88.983	88.887	88.924	89.025	89.075	89.085	89.087
CUT/FILL	0.056	0.303	0.253	0.234	0.233	0.133	0.089	0.156	0.179	0.114	0.016	-0.014	0.086	0.061	0.061	0.071
EXISTING LEVEL	88.789	88.782	88.762	88.790	88.791	88.791	88.799	88.827	88.848	88.870	88.872	88.938	88.942	89.000	89.024	89.026
OFFSET	-10.620	-9.659	-9.159	-6.659	-6.510	-5.509	-4.680	-1.480	0.000	1.480	4.680	6.515	6.516	9.165	9.665	9.702

CHAINAGE 3520.000

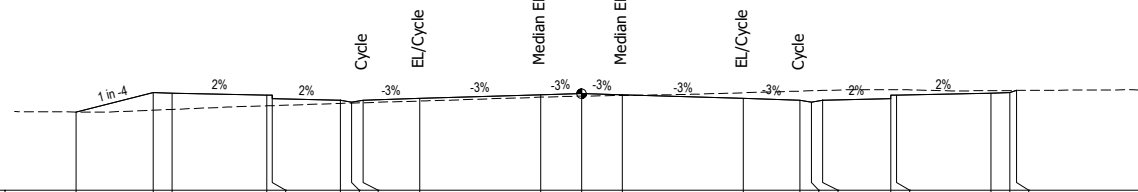
Centreline Data
X = 429508.919
Y = 780514.455
Z = 89.036
DATUM RL 86.750



DESIGN LEVEL	88.965	88.991	88.991	88.936	88.936	88.936	88.865	88.991	89.036	88.991	88.865	88.865	88.865	88.910	89.020	89.168
CUT/FILL	-0.198	-0.128	-0.098	-0.098	-0.098	-0.158	-0.249	-0.128	-0.098	-0.158	-0.249	-0.297	-0.350	-0.200	-0.147	0.000
EXISTING LEVEL	89.063	89.119	89.134	89.134	89.134	89.134	89.145	89.119	89.134	89.134	89.145	89.156	89.156	89.156	89.168	89.168
OFFSET	-4.700	-1.500	0.000	1.500	1.500	4.700	5.900	6.200	6.201	6.350	8.850	9.350	9.350	9.350	9.794	9.794

CHAINAGE 3580.000

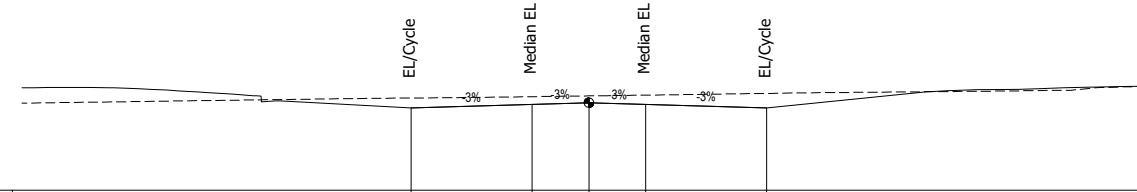
Centreline Data
X = 429569.382
Y = 780566.627
Z = 89.053
DATUM RL 86.500



DESIGN LEVEL	88.567	88.076	88.066	88.016	88.015	88.879	88.879	89.020	89.053	89.020	88.924	88.879	88.829	88.879	88.915	88.066
CUT/FILL	0.000	0.462	0.431	0.286	0.280	0.087	0.028	0.063	0.067	0.017	-0.150	-0.240	-0.298	-0.257	-0.138	-0.064
EXISTING LEVEL	88.567	88.515	88.535	88.730	88.735	88.793	88.802	88.956	88.985	88.903	89.075	89.119	89.128	89.137	89.155	89.136
OFFSET	-13.369	-11.330	-10.830	-4.330	-4.181	-6.380	-6.080	-1.080	0.000	1.080	4.280	5.780	6.080	6.380	8.180	10.830

CHAINAGE 3500.000

Centreline Data
X = 429523.486
Y = 780528.052
Z = 89.064
DATUM RL 86.750



DESIGN LEVEL	88.923	88.919	88.964	88.919	88.923	88.923	88.923	88.923	88.919	88.919	88.923	88.923	88.923	88.923	88.923	88.923
CUT/FILL	-0.264	-0.204	-0.179	-0.244	-0.386	-0.386	-0.386	-0.264	-0.204	-0.244	-0.386	-0.386	-0.386	-0.386	-0.386	-0.386
EXISTING LEVEL	89.187	89.223	89.243	89.263	89.369	89.369	89.369	89.187	89.223	89.243	89.263	89.263	89.263	89.263	89.263	89.263
OFFSET	-4.700	-1.500	0.000	1.500	4.700	4.700	4.700	-4.700	-1.500	0.000	1.500	4.700	4.700	4.700	4.700	4.700

CHAINAGE 3560.000



NOT FOR CONSTRUCTION

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04.22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	All Siddiqui	22.07.22
PROF REGISTRATION:		

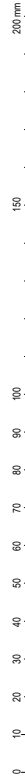


**ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING**

CROSS SECTIONS (MC00)
SHEET 26

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1:100
Drawing No.	310205125-01-001-C926
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1

Centreline Data
X = 429448.489
Y = 780461.986
Z = 88.925

DATUM RL 86.500

DESIGN LEVEL	88.947	88.947	88.947	88.891	88.890	88.754	88.754	88.799	88.895	88.925	88.895	88.799	88.941	88.951	88.986
CUT/FILL	0.000	0.004	-0.008	-0.068	-0.070	-0.214	-0.265	-0.181	-0.103	-0.078	-0.113	-0.221	-0.044	-0.034	0.000
EXISTING LEVEL	88.947	88.947	88.949	88.959	88.960	88.968	88.970	88.960	88.998	89.003	89.008	89.020	88.996	88.996	88.986
OFFSET	-11.268	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-4.200	-1.000	0.000	1.000	4.200	10.750	11.250	11.353

CHAINAGE 3660.000

Centreline Data
X = 429400.520
Y = 780425.944
Z = 88.842

DATUM RL 86.500

DESIGN LEVEL	88.908	88.868	88.858	88.808	88.807	88.671	88.621	88.671	88.716	88.812	88.842	88.812	88.716	88.671	88.621	88.671	88.707	88.808	88.858	88.868	88.904	
CUT/FILL	0.000	-0.043	-0.068	-0.157	-0.160	-0.313	-0.366	-0.319	-0.285	-0.208	-0.182	-0.213	-0.314	-0.372	-0.425	-0.378	-0.357	-0.257	-0.220	-0.213	-0.213	0.000
EXISTING LEVEL	88.908	88.911	88.925	88.965	88.966	88.984	88.986	88.989	89.001	89.020	89.023	89.025	89.029	89.043	89.046	89.046	89.064	89.065	89.078	89.081	88.868	88.904
OFFSET	-11.370	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750	11.250	11.899	0.000

CHAINAGE 3720.000

Centreline Data
X = 429464.204
Y = 780474.354
Z = 88.953

DATUM RL 86.500

DESIGN LEVEL	88.028	88.979	88.969	88.919	88.918	88.782	88.732	88.827	88.923	88.953	88.923	88.827	88.969	88.979	88.917
CUT/FILL	0.000	-0.052	-0.069	-0.149	-0.152	-0.310	-0.364	-0.301	-0.234	-0.206	-0.238	-0.333	-0.157	-0.142	0.000
EXISTING LEVEL	88.028	89.031	89.038	89.068	89.070	89.092	89.096	89.128	89.157	89.159	89.161	89.149	89.126	89.121	89.117
OFFSET	-11.396	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-4.200	-1.000	0.000	1.000	4.200	10.750	11.250	11.665

CHAINAGE 3640.000

Centreline Data
X = 429416.510
Y = 780437.957
Z = 88.870

DATUM RL 86.500

DESIGN LEVEL	88.933	88.896	88.886	88.836	88.835	88.699	88.649	88.699	88.744	88.840	88.870	88.840	88.744	88.699	88.649	88.699	88.735	88.836	88.896	88.933	88.965
CUT/FILL	0.000	-0.038	-0.053	-0.127	-0.130	-0.288	-0.340	-0.292	-0.255	-0.175	-0.151	-0.186	-0.296	-0.346	-0.397	-0.349	-0.319	-0.218	-0.176	-0.168	0.000
EXISTING LEVEL	88.933	88.934	88.938	88.963	88.965	88.987	88.989	88.990	88.998	89.015	89.020	89.025	89.039	89.045	89.046	89.047	89.053	89.054	89.062	89.063	89.065
OFFSET	-11.362	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750	11.250	11.759

CHAINAGE 3700.000

Centreline Data
X = 429479.413
Y = 780487.340
Z = 88.981

DATUM RL 86.750

DESIGN LEVEL	88.039	88.980	88.970	88.920	88.919	88.784	88.734	88.847	88.943	88.981	88.941	88.845	88.987	88.980	88.917	88.918	88.784	88.880	88.913	88.923	88.940
CUT/FILL	0.090	0.091	0.083	0.014	0.004	-0.096	-0.226	-0.159	-0.134	-0.201	-0.352	-0.276	-0.103	-0.089	0.052	-0.174	-0.174	-0.174	-0.126	-0.116	0.000
EXISTING LEVEL	88.989	88.988	88.987	89.006	89.015	89.015	89.073	89.102	89.114	89.142	89.142	89.193	89.171	89.167	89.165	89.165	89.193	89.193	89.193	89.193	89.193
OFFSET	-11.383	-11.219	-10.719	-8.219	-8.070	-8.069	-4.467	-1.267	0.000	1.325	4.525	8.127	10.777	11.277	11.692	8.277	8.128	8.128	8.128	8.128	8.128

CHAINAGE 3620.000

Centreline Data
X = 429432.500
Y = 780449.971
Z = 88.897

DATUM RL 86.500

DESIGN LEVEL	88.925	88.923	88.913	88.863	88.862	88.726	88.676	88.726	88.771	88.867	88.897	88.867	88.771	88.726	88.676	88.726	88.762	88.863	88.913	88.923	88.940
CUT/FILL	0.000	-0.002	-0.017	-0.099	-0.101	-0.260	-0.314	-0.257	-0.241	-0.155	-0.129	-0.162	-0.264	-0.310	-0.360	-0.310	-0.275	-0.174	-0.126	-0.116	0.000
EXISTING LEVEL	88.925	88.925	88.931	88.962	88.964	88.986	88.984	88.984	89.012	89.023	89.025	89.029	89.036	89.036	89.037	89.037	89.038	89.038	89.039	89.039	89.040
OFFSET	-11.255	-11.250	-10.750	-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	4.200	5.700	6.000	6.300	8.100	8.250	10.750	11.250	11.599

CHAINAGE 3680.000



NOT FOR CONSTRUCTION

REV	B	UPDATE DESIGN TO FINAL DBC LAYOUT	PJC	MS	07/22	
A	FOR REVIEW		PJC	NL	07/22	
			DRN	CHK	APP	DATE

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22



ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 27

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C927
Rev.	B

DO NOT SCALE - IF IN DOUBT, ASK

200 mm

150

100

90

80

70

60

50

40

30

20

10

0

ORIGINAL SIZE A1

Centreline Data
 X = 429352.550
 Y = 780389.904
 Z = 88.758
 DATUM RL 86.500

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3780.000

Centreline Data
 X = 429368.540
 Y = 780401.917
 Z = 88.786
 DATUM RL 86.500

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3760.000

Centreline Data
 X = 429384.530
 Y = 780413.931
 Z = 88.814
 DATUM RL 86.500

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3740.000

Centreline Data
 X = 429303.890
 Y = 780354.837
 Z = 88.707
 DATUM RL 86.250

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3840.000

Centreline Data
 X = 429320.503
 Y = 780365.968
 Z = 88.703
 DATUM RL 86.250

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3820.000

Centreline Data
 X = 429336.561
 Y = 780377.890
 Z = 88.730
 DATUM RL 86.500

DESIGN LEVEL																											
CUT/FILL																											
EXISTING LEVEL																											
OFFSET																											

CHAINAGE 3800.000



NOT FOR CONSTRUCTION

REV	DESCRIPTION	P/JC	MS	DATE
B	UPDATE DESIGN TO FINAL DBC LAYOUT			07/22
A	FOR REVIEW			07/22
		DRN	CHK	APP

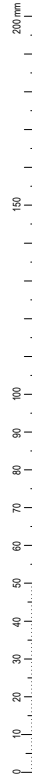
SURVEYED	DAVIS OGIWIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
CAD REVIEW	Nigel Lister	21.07.22
DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		



ASHBURTON - TINWALD CONNECTIVITY DBC
 HAKATERE RIVER SECOND CROSSING
 CROSS SECTIONS (MC00)
 SHEET 28

Status Stamp	SCHEME ASSESSMENT	
Date Stamp	22.07.22	
Scales	1 : 100	
Drawing No.	310205125-01-001-C928	Rev B

DO NOT SCALE - IF IN DOUBT, ASK



ORIGINAL SIZE A1



Centreline Data
X = 429250.683
Y = 780327.244
Z = 88.782

DATUM RL 85.750

DESIGN LEVEL			88.751	88.856	88.846			88.759	88.756	88.756	88.752	88.782	88.752	88.647	88.658	88.758	88.759			88.844	88.856	88.846		
CUT/FILL			0.000	0.004	0.092			-0.011	-0.013	-0.113	-0.125	-0.038	-0.013	-0.048	-0.170	-0.162	-0.062	-0.062		0.003	0.010	0.000		
EXISTING LEVEL			88.751	88.753	88.754			88.770	88.771	88.771	88.773	88.790	88.795	88.800	88.817	88.820	88.821	88.821		88.844	88.846	88.846		
OFFSET			-10.466	-10.444	-9.544			5.174	-5.025	-5.024	-4.490	-1.000	0.000	1.000	4.490	5.024	5.025	5.174		9.544	10.044	10.085		

CHAINAGE 3900.000

Centreline Data
X = 429268.895
Y = 780335.509
Z = 88.757

DATUM RL 86.500

DESIGN LEVEL			88.752	88.753	88.773			88.723	88.722	88.596	88.596	88.631	88.727	88.757	88.727	88.631	88.596	88.596	88.622	88.723				
CUT/FILL			0.000	0.030	0.017			-0.051	-0.053	-0.202	-0.254	-0.206	-0.083	-0.055	-0.087	-0.190	-0.238	-0.289	-0.239	-0.106	-0.062	-0.055	0.000	
EXISTING LEVEL			88.752	88.753	88.756			88.774	88.775	88.788	88.790	88.792	88.810	88.812	88.814	88.821	88.824	88.825	88.825	88.829	88.829	88.835	88.838	88.838
OFFSET			-11.376	-11.250	-10.750			-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	5.700	6.000	6.300	8.100	8.250	10.750	11.416	

CHAINAGE 3880.000

Centreline Data
X = 429286.669
Y = 780344.673
Z = 88.732

DATUM RL 86.500

DESIGN LEVEL			88.771	88.758	88.748			88.698	88.697	88.561	88.511	88.561	88.702	88.732	88.702	88.606	88.561	88.561	88.597	88.698				
CUT/FILL			0.000	-0.013	-0.030			-0.110	-0.112	-0.254	-0.305	-0.255	-0.108	-0.077	-0.106	-0.198	-0.246	-0.297	-0.248	-0.216	-0.115	-0.070	-0.062	0.000
EXISTING LEVEL			88.771	88.771	88.778			88.808	88.809	88.815	88.816	88.816	88.810	88.809	88.808	88.804	88.807	88.808	88.809	88.813	88.813	88.818	88.820	88.820
OFFSET			-11.288	-11.250	-10.750			-8.250	-8.101	-6.300	-6.000	-5.700	-4.200	-1.000	0.000	1.000	5.700	6.000	6.300	8.100	8.250	10.750	11.250	11.436

CHAINAGE 3860.000

Centreline Data
X = 429214.142
Y = 780310.973
Z = 88.941

DATUM RL 86.750

DESIGN LEVEL			88.941		
CUT/FILL			0.083		
EXISTING LEVEL			88.858		
OFFSET			0.000		

CHAINAGE 3940.000

PROPOSED NEW GRAHAMS ROAD ROUNDABOUT
- REFER C750 DRAWING SERIES TYPICAL SECTIONS

Centreline Data
X = 429232.413
Y = 780319.109
Z = 88.842

DATUM RL 86.750

DESIGN LEVEL			88.842		
CUT/FILL			0.001		
EXISTING LEVEL			88.841		
OFFSET			0.000		

CHAINAGE 3920.000

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHK	APP
B	UPDATE DESIGN TO FINAL DBC LAYOUT	07/22	PJC	MS	
A	FOR REVIEW	07/22	PJC	NL	
	REVISIONS		DRN	CHK	

SURVEYED	DAVIS OGILVIE - AORAKI	04.22
DESIGNED	Barbara Browne	04.22
DRAWN	Phillip J Cook	04/22
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DESIGN CHECK	Graeme Corin	21.07.22
DESIGN REVIEW	Nigel Lister	21.07.22
APPROVED	Ali Siddiqui	22.07.22
PROF REGISTRATION:		

ASHBURTON - TINWALD CONNECTIVITY DBC
HAKATERE RIVER SECOND CROSSING

CROSS SECTIONS (MC00)
SHEET 29

Status Stamp	SCHEME ASSESSMENT
Date Stamp	22.07.22
Scales	1 : 100
Drawing No.	310205125-01-001-C929
Rev.	B