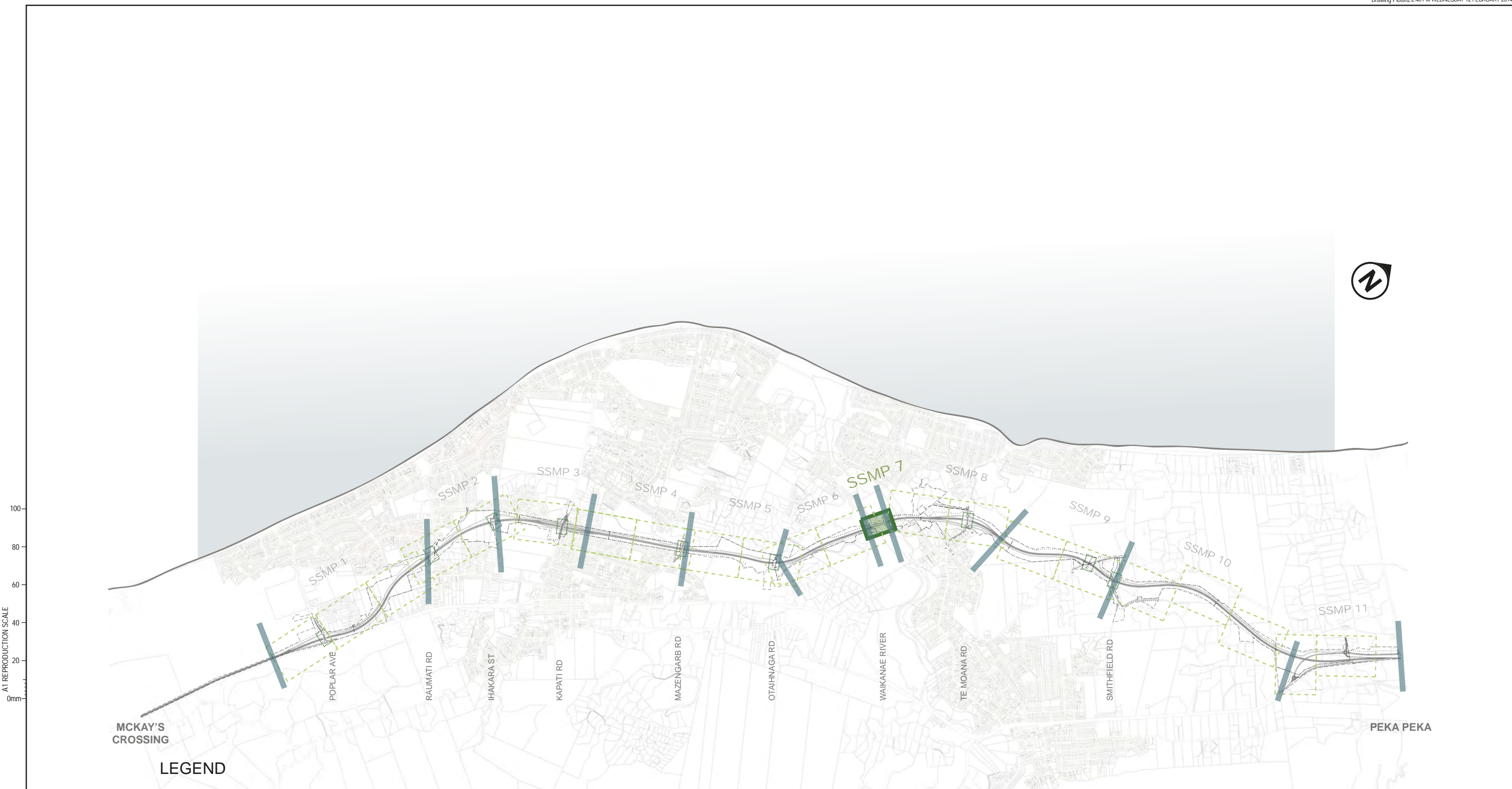


Appendix 1: DRAWING SET

Site Specific Management Plan 007 - Waikanae River
MacKays to Peka Peka Expressway
M2PP-121-D-MPL-0007

13 February 2014



A1 REPRODUCTION SCALE
0mm
20
40
60
80
100

A3 REPRODUCTION SCALE
0mm
10
20
30
40
50

LEGEND

	ROAD		SSMP SHEET (ROAD)		SSMP SHEET (BRIDGE)		PARCEL BOUNDARIES
	SSMP BOUNDARY		CURRENT SSMP SHEET (ROAD)		CURRENT SSMP SHEET (BRIDGE)		CONSTRUCTION BOUNDARY

DETAIL DESIGN (DET)

C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)				13.12.13
B	FOR CERTIFICATION				28.11.13
A	PRELIMINARY ISSUE	-			12.09.13
No.	Revision	By	Chk	Chk.V	Appd

Original Scale (A1)	Design	Approved For Construction*
1:25,000	Drawn	Date
Reduced Scale (A3)	Design Verifier	
1:50,000	Design Check	
	* Refer to Revision 1 for Original Signature	



Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 1
LOCATION PLAN

Drawing No: M2PP-121-D-GPH-8001

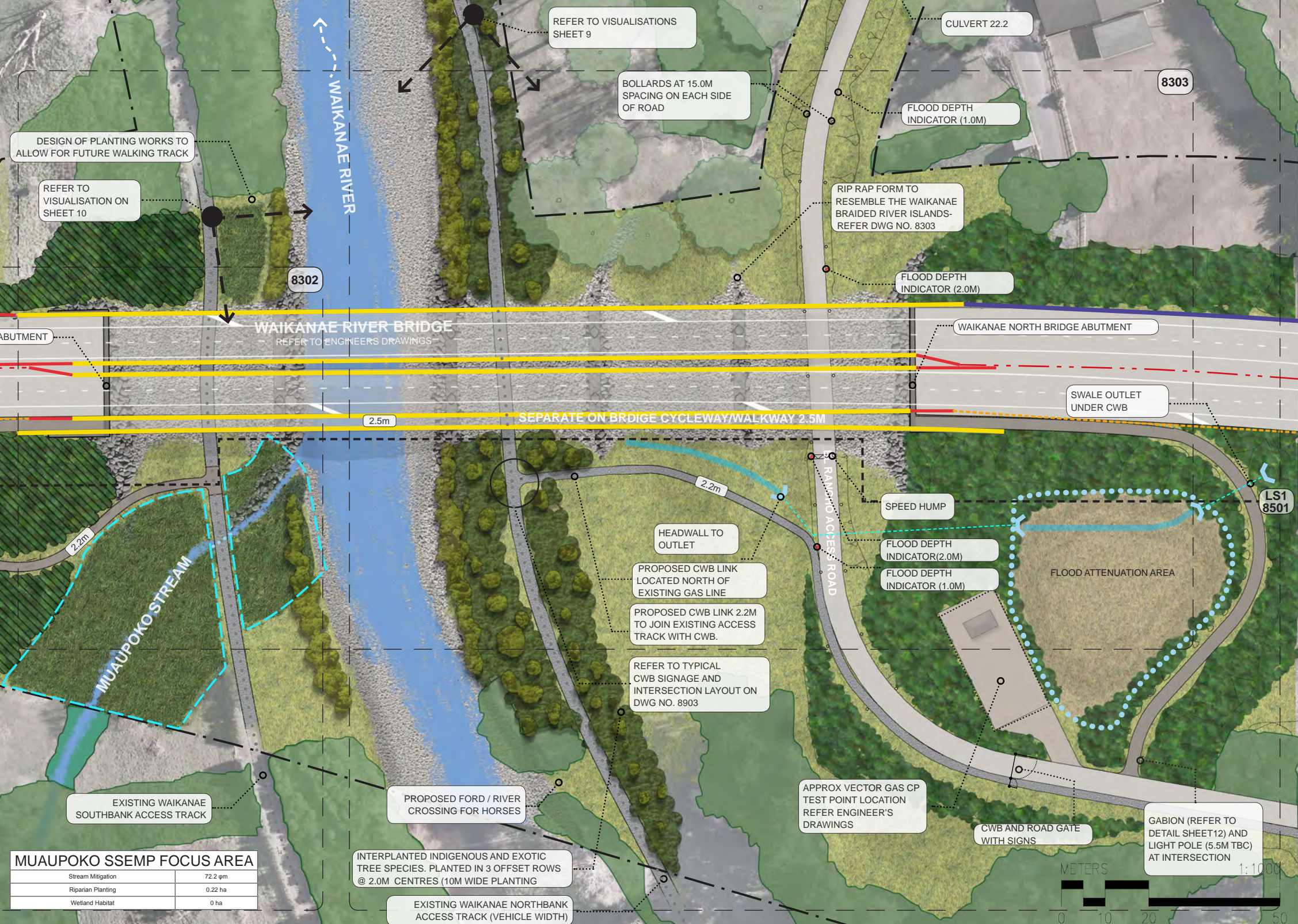
Rev: C



- | | | | | |
|------------------------------|-----------------------------|--------------------------------------|--|----------------------------------|
| General | Urban Design | Landscape | Ecology | CWB |
| --- Designation Boundary | --- Concrete Bridge Barrier | Individual Retained Trees | Retained Valued Terrestrial Vegetation | --- Loose Chip CWB |
| - - - Wire Barrier | --- Concrete Noise Wall | Retained Vegetation | Retained Valued Wetland Vegetation | --- Chip Seal CWB |
| --- Barrier Transition | --- Culvert Headwall | Grass | Planted Indigenous Terrestrial Habitat | --- Concrete CWB |
| --- Concrete Traffic Barrier | --- Retaining Wall | Massed Planting | Planted Indigenous Wetland Habitat | --- Existing Access Track or CWB |
| --- Culvert | --- Bridge Deck | Massed Planting with Tree Enrichment | Stream Mitigation / Riparian Habitat | |
| --- Swale | --- Bridge Abutment | Wetland / Riparian Planting | Existing Water Body | |
| --- Flood Attenuation Area | --- Bridge Piers | Native Tree Planting | | |
| --- Visualisation Viewpoint | | Exotic Tree Planting | | |

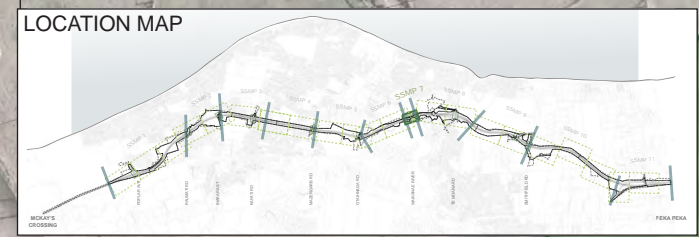
KEY CPTED CONSIDERATIONS:

- CLEAR LINES OF SIGHT AT INTERSECTIONS
- THE 'TAGABILITY' OF MATERIALS AND SURFACES
- AVOID CREATING VISUALLY ISOLATED AND ENCLOSED HABITABLE SPACES THAT MAY ENCOURAGE ANTI-SOCIAL BEHAVIOUR. FOR EXAMPLE PLANTING ADJACENT TO BRIDGE ABUTMENTS SHOULD IDEALLY BE LOW/MEDIUM DENSE PLANTING.
- THE MAJORITY OF THE CWB CORRIDOR SHOULD BE WITHIN A 5.0-6.0M WIDE OPEN SPACE (COMPRISING GRASS AND LOW PLANTINGS), PARTICULARLY AT THE APPROACHES TO AND THROUGH BENDS TO PRESERVE VISIBILITY. VEGETATION TALLER THAN 1.0M CAN BE ESTABLISHED ADJACENT TO THE PATH FOR SHORT STRETCHES (SAY 40.0 M STRETCHES AT A TIME) ALONG STRAIGHTER SECTIONS.
- PROVIDE A SEPARATION OF 4.0-5.0M BETWEEN CWB 'PAUSE SPACES' (ROAD CROSSING POINTS, INTERSECTIONS) AND VEGETATION TALLER THAN 1M.
- FLOOD HAZARD MEASURES (GATES, SIGNAGE, BOLLARDS, DEPTH INDICATORS) ARE SUBJECT TO NZTA / EL RANCHO PROPERTY AGREEMENT



A1 REPRODUCTION SCALE
0mm

A3 REPRODUCTION SCALE
0mm



MUAUPOKO SSEMP FOCUS AREA	
Stream Mitigation	72.2 qm
Riparian Planting	0.22 ha
Wetland Habitat	0 ha

No.	Revision	By	Chk	Chk.V	Appd	Date
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A	PRELIMINARY ISSUE					12.09.13

Original Scale (A1)	Design	Approved For Construction
1:500	Drawn	
Reduced Scale (A3)	Design Check	Date
1:1000		

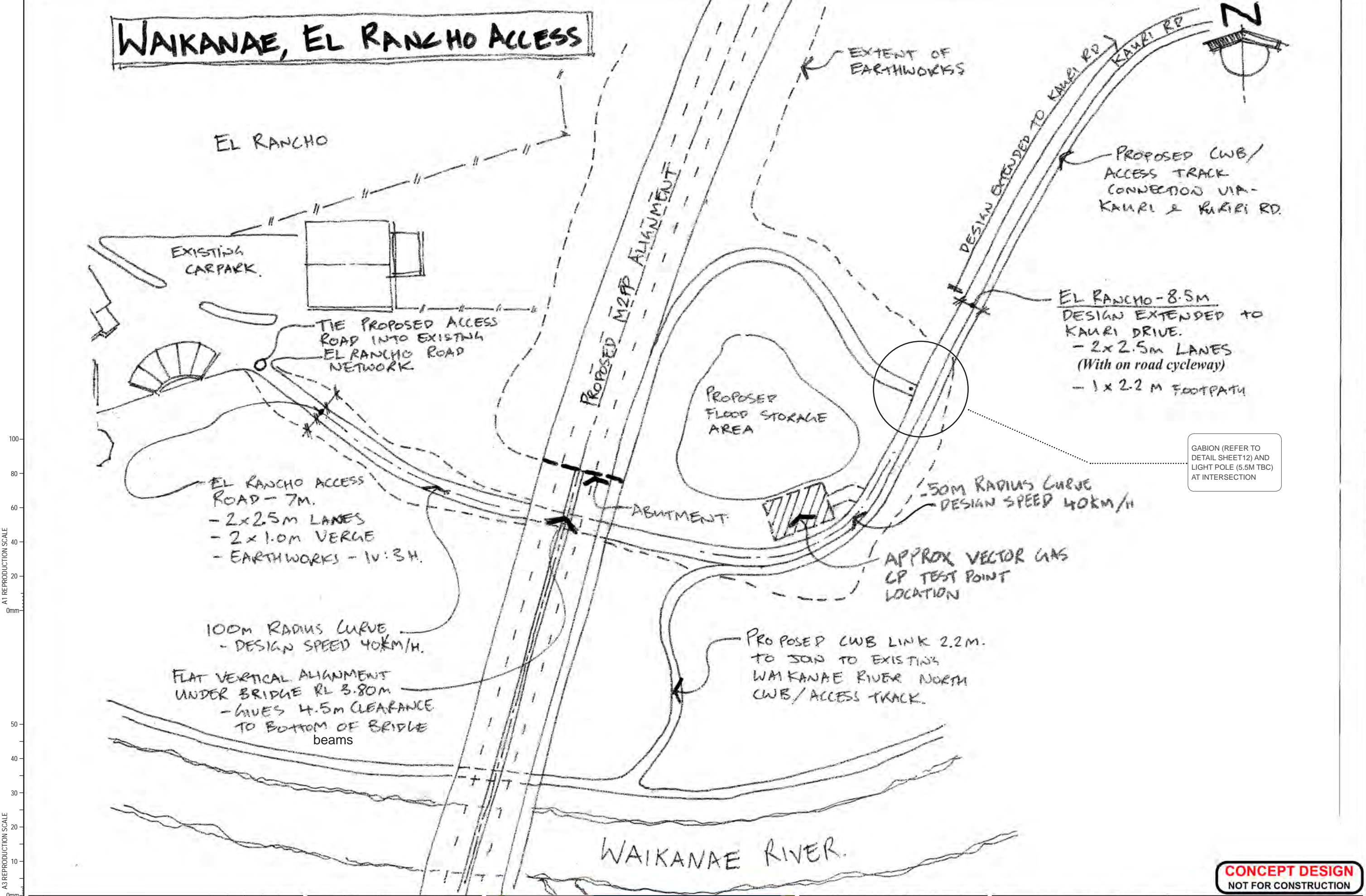
Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 2 MASTERPLAN

Drawing No: M2PP-121-D-GPH-8101
Rev: C

DETAIL DESIGN (DET)

WAIKANAE, EL RANCHO ACCESS



GABION (REFER TO DETAIL SHEET 12) AND LIGHT POLE (5.5M TBC) AT INTERSECTION

CONCEPT DESIGN
NOT FOR CONSTRUCTION

A1 REPRODUCTION SCALE 0mm 100 80 60 40 20 0mm
A3 REPRODUCTION SCALE 0mm 50 40 30 20 10 0mm

C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)				13.12.13
B	FOR CERTIFICATION				28.11.13
A	PRELIMINARY ISSUE				12.09.13
No.	Revision	By	Chk	Appd	Date

Original Scale (A1)	Design	Approved For Construction
NTS	Drawn	Date
Reduced Scale (A3)	Design Verifier	
NTS	Design Check	

* Refer to Revision 1 for Original Signature



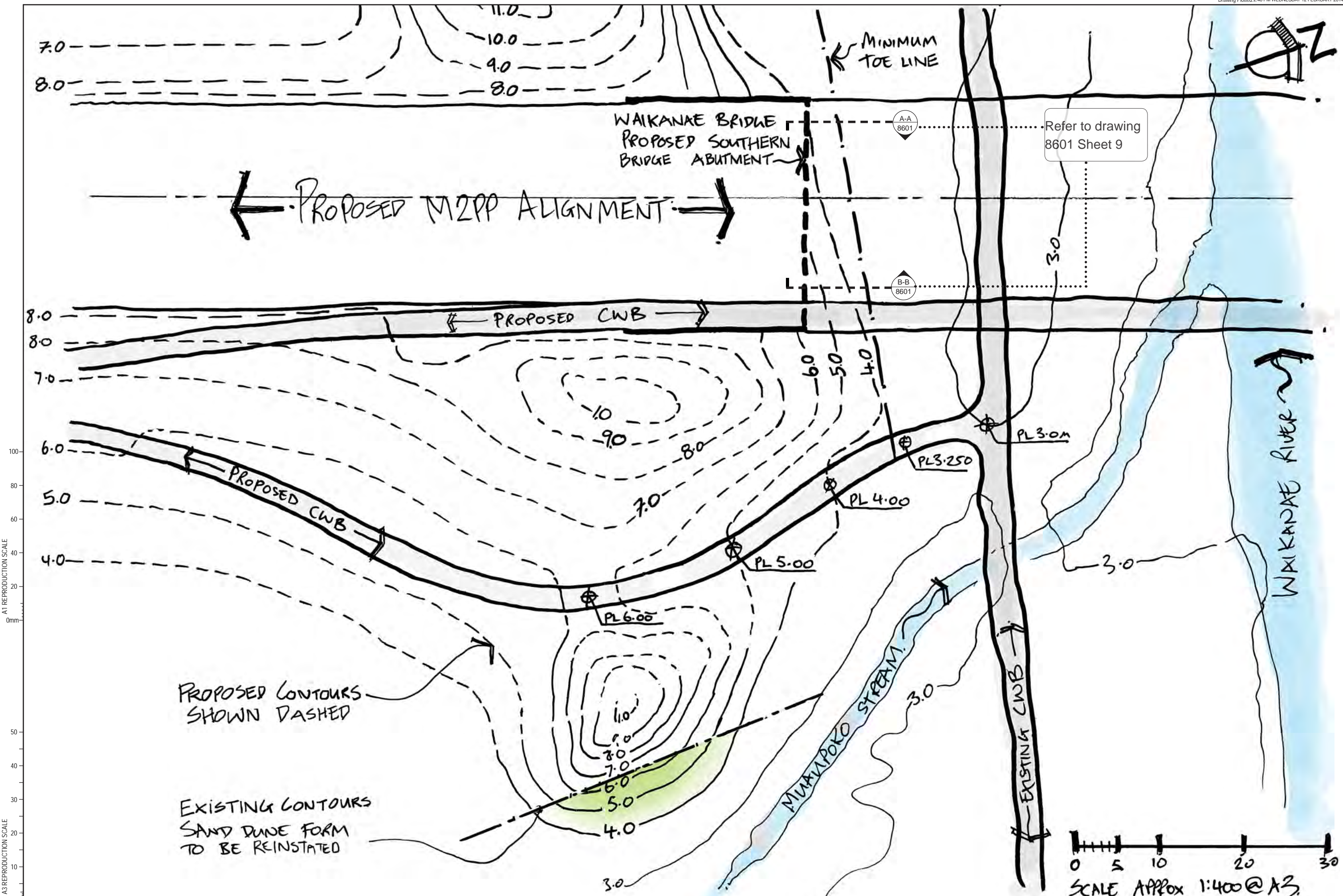
Mackays to Peka Peka

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 3
KAURI RD & NORTH ABUTMENT
DETAIL PLAN

Drawing No: M2PP-121-D-GPH-8301
Rev: C

DETAIL DESIGN (DET)



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

PROPOSED CONTOURS SHOWN DASHED

EXISTING CONTOURS SAND DUNE FORM TO BE REINSTATED

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B	FOR CERTIFICATION				28.11.13
A	PRELIMINARY ISSUE				12.09.13
No.	Revision	By	Chk	Chk.V	Appd

Original Scale (A1)	Design	Approved For Construction?
NTS	Drawn	
Reduced Scale (A3)	Design Verifier	
NTS	Design Check	
		Date

NZ TRANSPORT AGENCY
Mackays to Peka Peka

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
 RP 1012/0.00 TO 1023/5.00

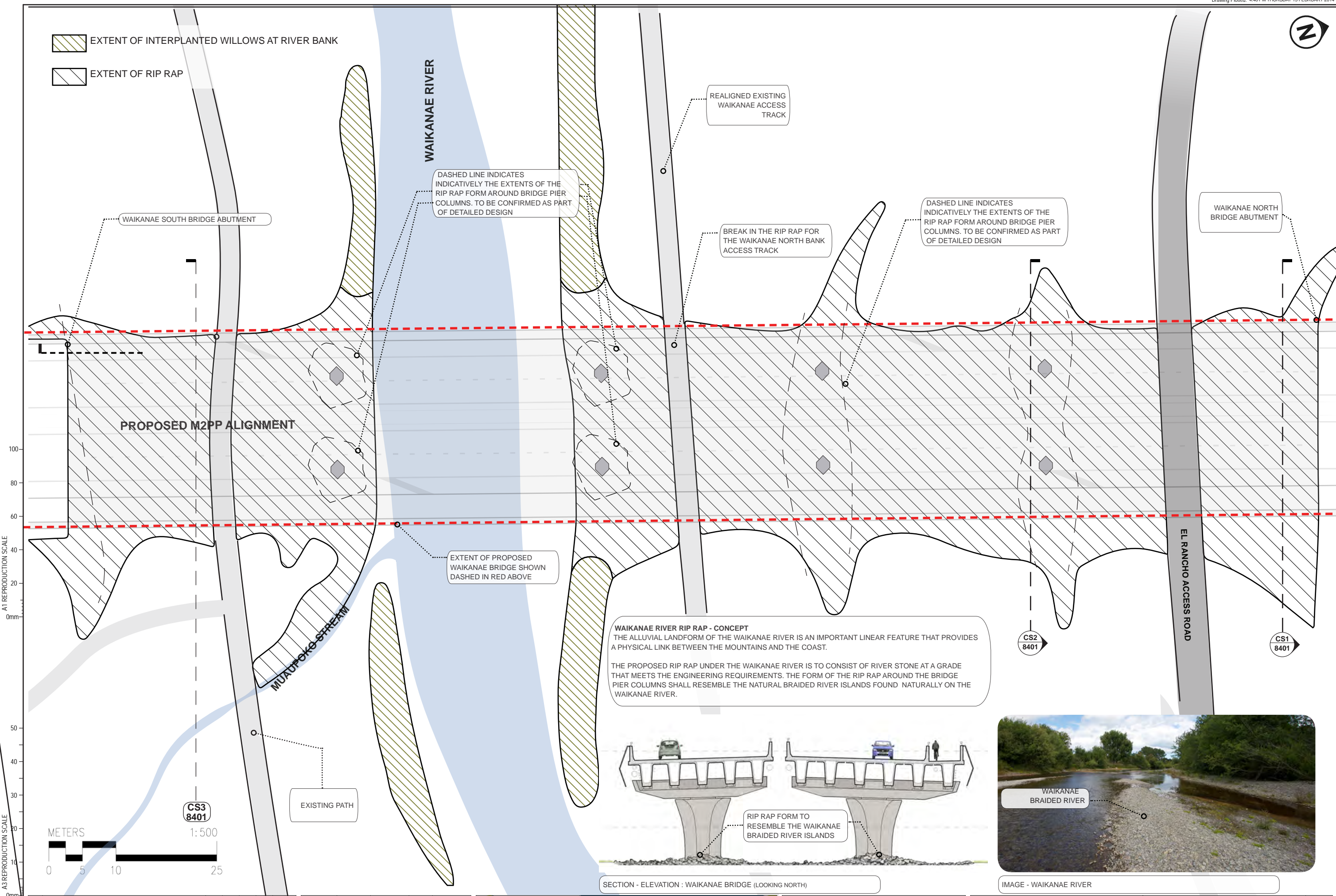
Title: SSMP 7 - SHEET 4
 SOUTHERN ABUTMENT
 DETAIL PLAN

Drawing No: M2PP-121-D-GPH-8302
 Rev: C

DETAIL DESIGN (DET)

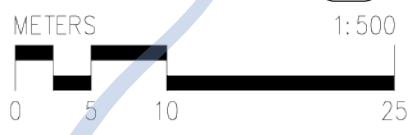


- EXTENT OF INTERPLANTED WILLOWS AT RIVER BANK
- EXTENT OF RIP RAP

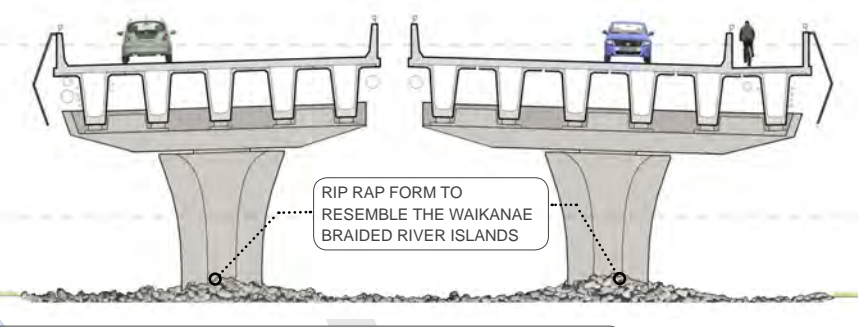


A1 REPRODUCTION SCALE
0mm
20
40
60
80
100

A3 REPRODUCTION SCALE
0mm
10
20
30
40
50



WAIKANA RIVER RIP RAP - CONCEPT
 THE ALLUVIAL LANDFORM OF THE WAIKANA RIVER IS AN IMPORTANT LINEAR FEATURE THAT PROVIDES A PHYSICAL LINK BETWEEN THE MOUNTAINS AND THE COAST.
 THE PROPOSED RIP RAP UNDER THE WAIKANA RIVER IS TO CONSIST OF RIVER STONE AT A GRADE THAT MEETS THE ENGINEERING REQUIREMENTS. THE FORM OF THE RIP RAP AROUND THE BRIDGE PIER COLUMNS SHALL RESEMBLE THE NATURAL BRAIDED RIVER ISLANDS FOUND NATURALLY ON THE WAIKANA RIVER.



SECTION - ELEVATION : WAIKANA BRIDGE (LOOKING NORTH)

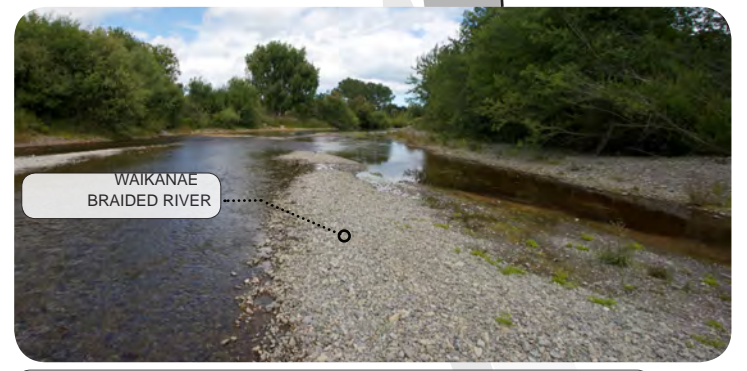


IMAGE - WAIKANA RIVER

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B	FOR CERTIFICATION				28.11.13
A	PRELIMINARY ISSUE				12.09.13
No.	Revision	By	Chk	Chk.V	Appd

Original Scale (A1)	Design	Approved For Construction?
1:250	Drawn	Date
Reduced Scale (A3)	Design Verifier	
1:500	Design Check	
	* Refer to Revision 1 for Original Signature	

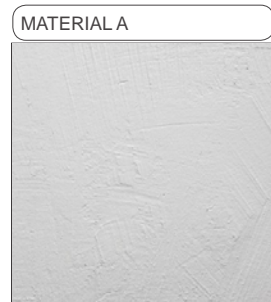


Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
 RP 1012/0.00 TO 1023/5.00

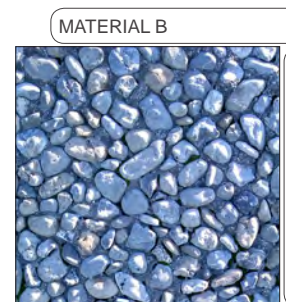
Title: SSMP 7 - SHEET 5
 RIP RAP EXTENTS

Document No.: M2PP-121-D-GPH-8303
 Rev: C

DETAIL DESIGN (DET)

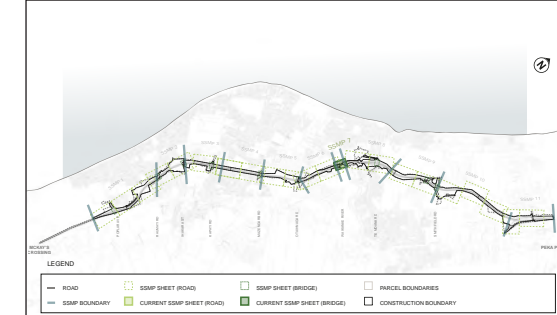


MATERIAL A
BRIDGE BARRIER:
PRECAST
CONCRETE WITH
2 COATS WHITE
KIEH COATING &
ANTI GRAFFITI
PROTECTION-
PENDING SAMPLE
PANEL APPROVAL



MATERIAL B
BRIDGE ABUTMENT:
PRECAST
CONCRETE PANEL
WITH INLAYED OTAKI
PEB 40MM STONE
AND MATT GRAFFITI
PROTECTION-
PENDING SAMPLE
PANEL APPROVAL

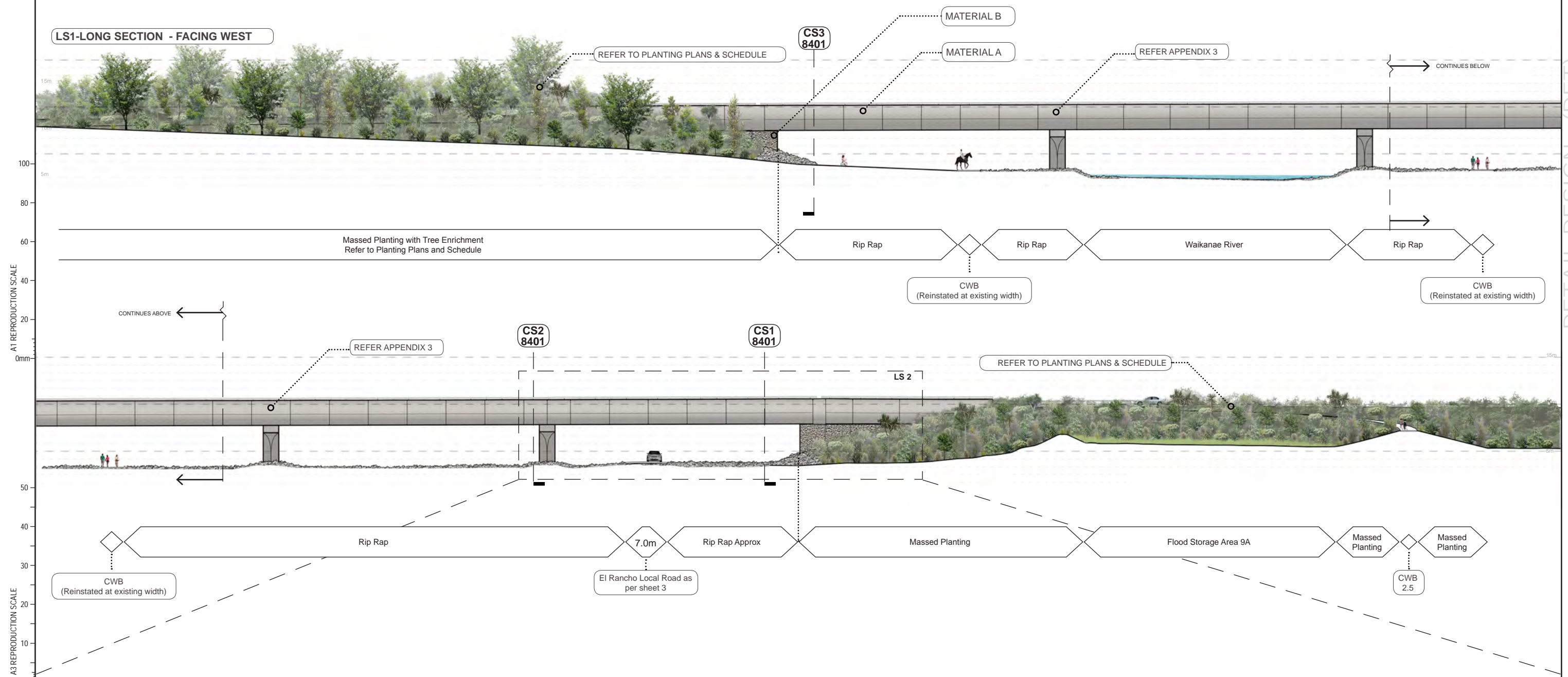
REFER TO SHEET-M2PP-121-D-GPH-8001



REFER TO SHEET-M2PP-121-D-GPH-8101



LS1-LONG SECTION - FACING WEST



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A	PRELIMINARY ISSUE				12.09.13
No.	Revision	By	Chk	Chk.V	Appd

Original Scale (A1)	Design	Approved For Construction?
1:250	Drawn	Date
Reduced Scale (A3)	Design Verifier	
1:500	Design Check	
	* Refer to Revision 1 for Original Signature	



Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

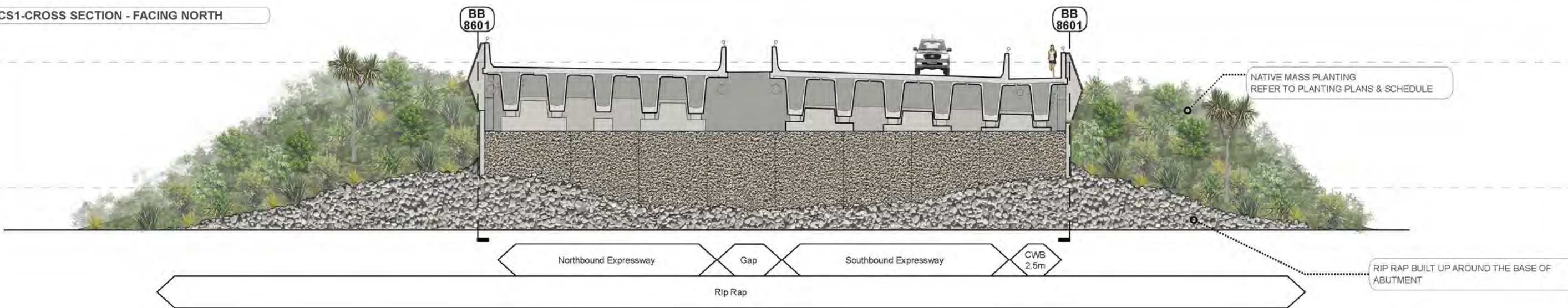
Title: SSMP 7 - SHEET 6 LONG SECTION

Drawing No: M2PP-121-D-GPH-8501

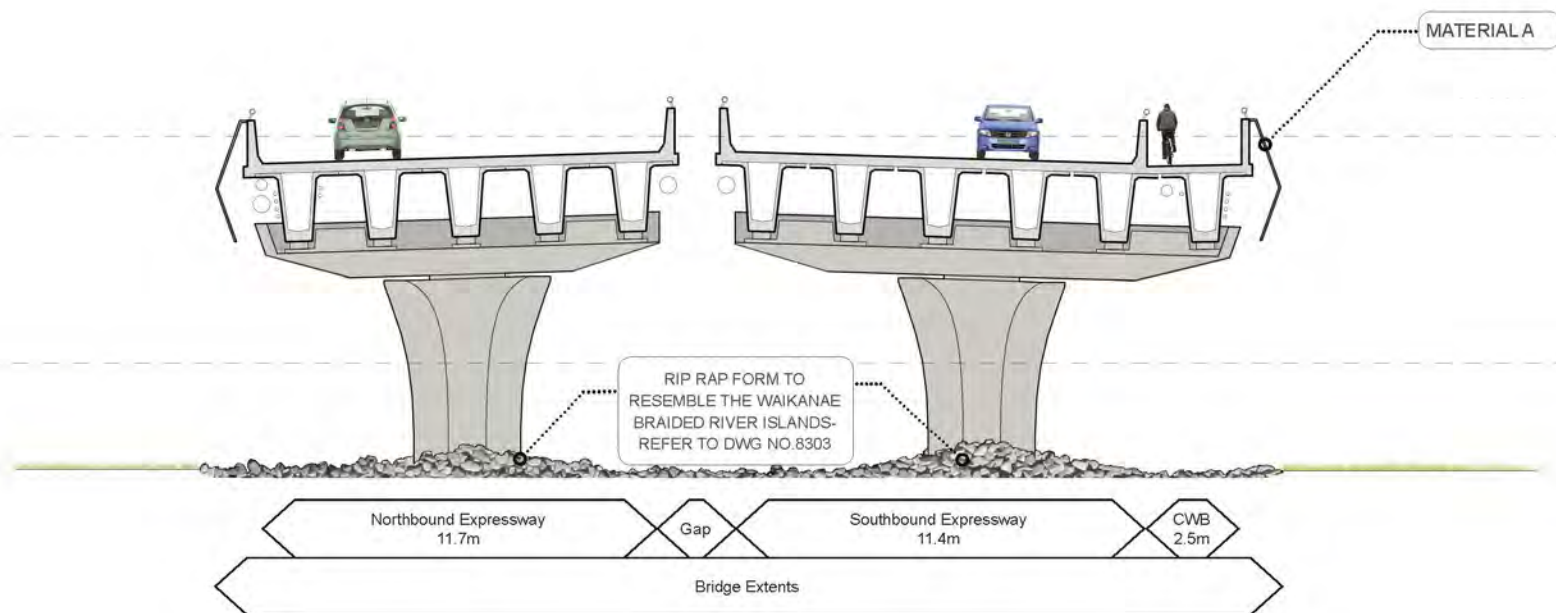
Rev: C

DETAIL DESIGN (DET)

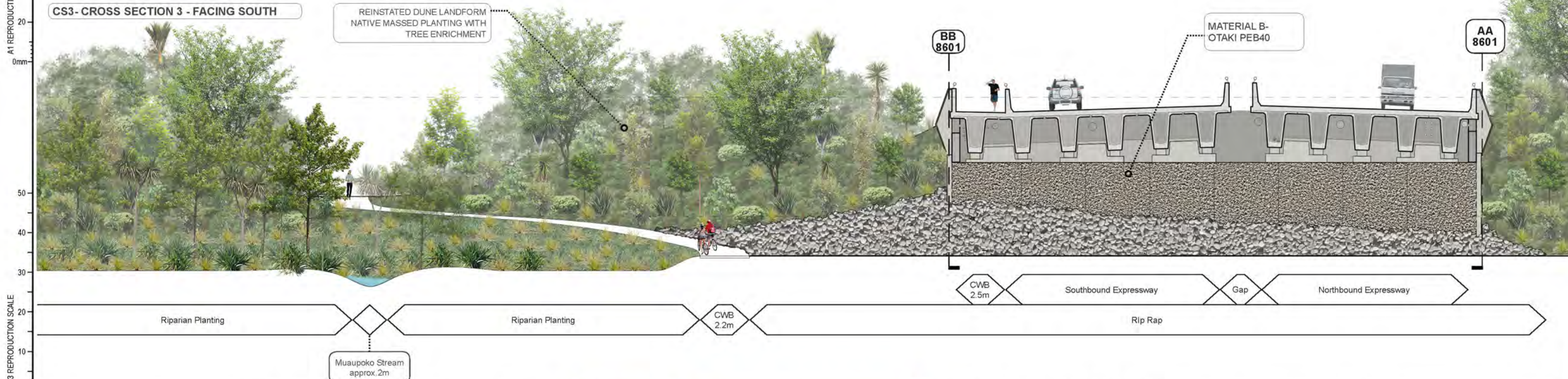
CS1-CROSS SECTION - FACING NORTH



CS2- CROSS SECTION 2 - FACING NORTH



CS3- CROSS SECTION 3 - FACING SOUTH



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

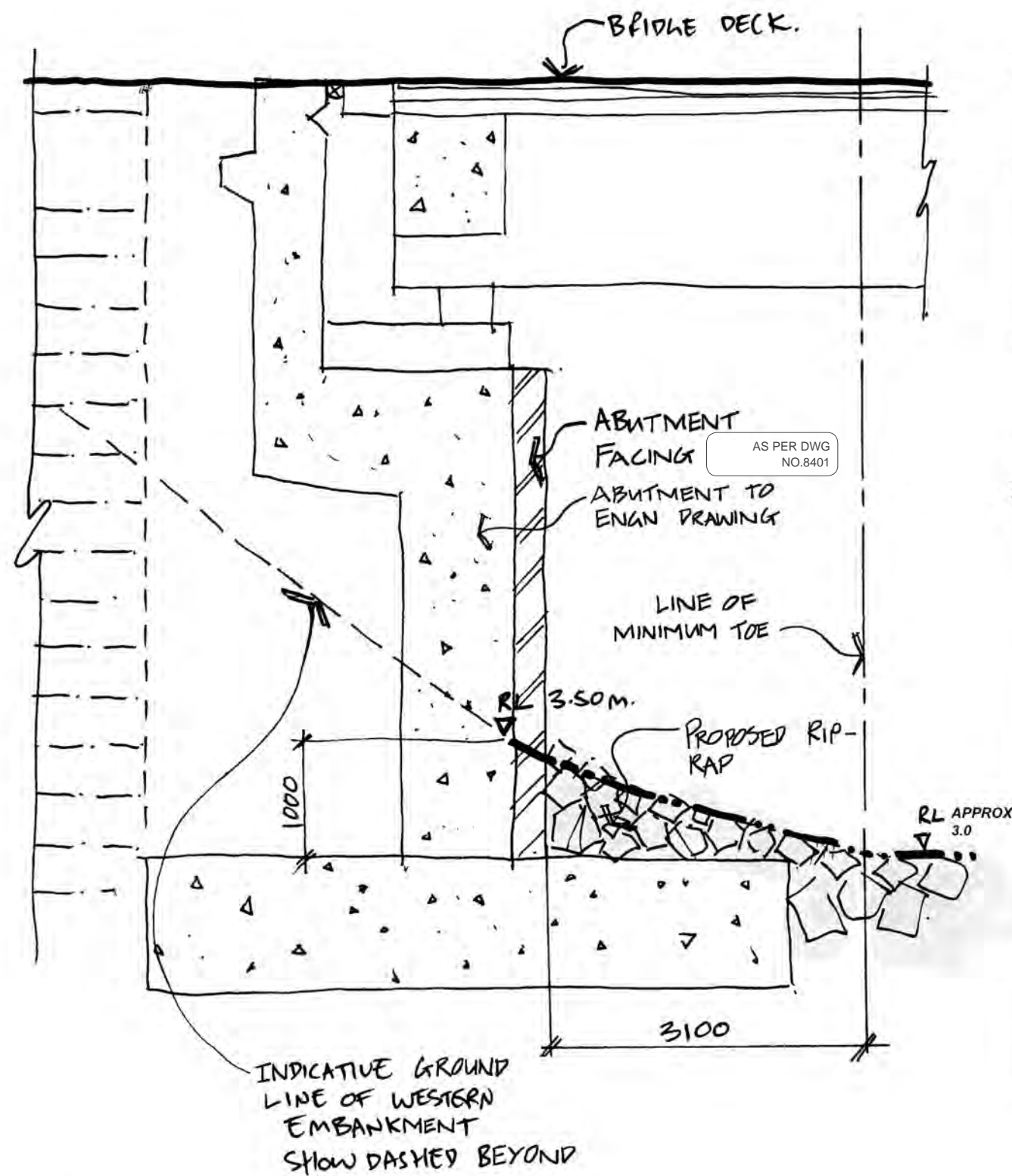
DETAIL DESIGN (DET)

C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)				13.12.13	Original Scale (A1)	Design	Approved For Construction*
B	FOR CERTIFICATION				28.11.13	1:100	Drawn	
A	PRELIMINARY ISSUE				12.09.13	Reduced Scale (A3)	Dig/Vet/Rev	
No.	Revision	By	Chk	Chk V	Appd	Date	Dwg Check	Date

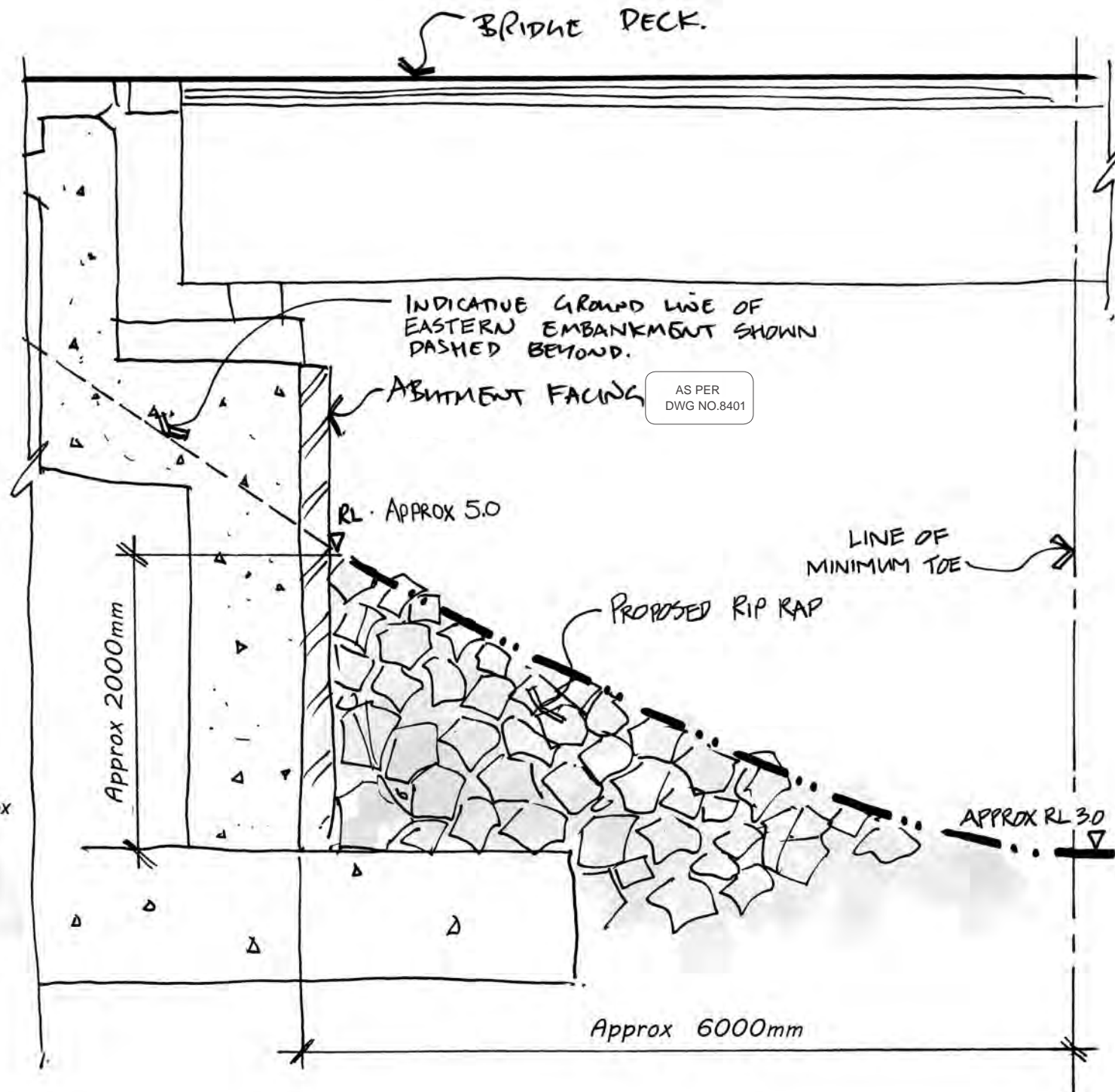
Project SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Sheet SSMP 7 - SHEET 7
CROSS SECTIONS

Drawing No. M2PP-121-D-GPH-8401
Rev. C



SECTION A-A - SOUTH WEST WAIKANA E BRIDGE
SCALE: 1:50 @ A3



SECTION B-B - SOUTH EAST WAIKANA E BRIDGE
SCALE 1:50 @ A3.

A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

DETAIL DESIGN (DET)



No.	Revision	By	Chk	Chk.V	Appd	Date
C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)					13.12.13
B	FOR CERTIFICATION					28.11.13
A	PRELIMINARY ISSUE					12.09.13

Original Scale (A1)	Design	Approved For Construction
1:25	Drawn	
Reduced Scale (A3)	Design Verifier	
1:50	Design Check	



Mackays to Peka Peka

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 8
WAIKANA E ABUTMENT DETAILS

Drawing No: M2PP-121-D-GPH-8601

Rev: C



WITHOUT PLANTING



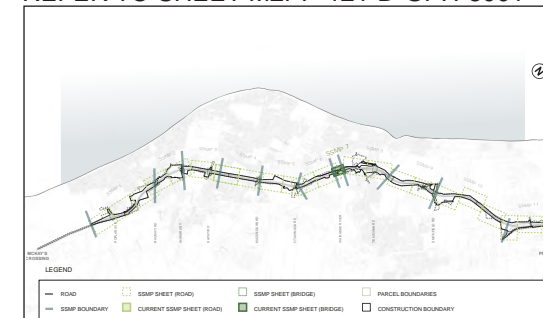
WITH MITIGATION PLANTING AT APPROXIMATELY 10 YEARS

A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

DETAIL DESIGN (DET)

REFER TO SHEET-M2PP-121-D-GPH-8001



REFER TO SHEET-M2PP-121-D-GPH-8101



No.	Revision	By	Chk	Chk.V	Appd	Date
C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)					13.12.13
B	FOR CERTIFICATION					28.11.13
A	PRELIMINARY ISSUE					12.09.13

Original Scale (A1)	Design	Approved For Construction*
Drawn		
NTS	Design Verifier	
Reduced Scale (A3)	Design Check	
NTS		

* Refer to Revision 1 for Original Signature



Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 9 BRIDGE VIEW

Drawing No: M2PP-121-D-GPH-8801

Rev: C



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

WAIKANAЕ RIVER BRIDGE LOOKING NORTH EAST - SOON AFTER CONSTRUCTION (IE. WITHOUT ANY MITIGATION PLANTING SHOWN)

DETAIL DESIGN (DET)

No.	Revision	By	Chk	Chk.V	Appd	Date
C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)					13.12.13
B	FOR CERTIFICATION					28.11.13
A	PRELIMINARY ISSUE	-				12.09.13

Original Scale (A1)	Design	Approved For Construction*
NTS	Drawn	
Reduced Scale (A3)	Design Verifier	
NTS	Design Check	

* Refer to Revision 1 for Original Signature




Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

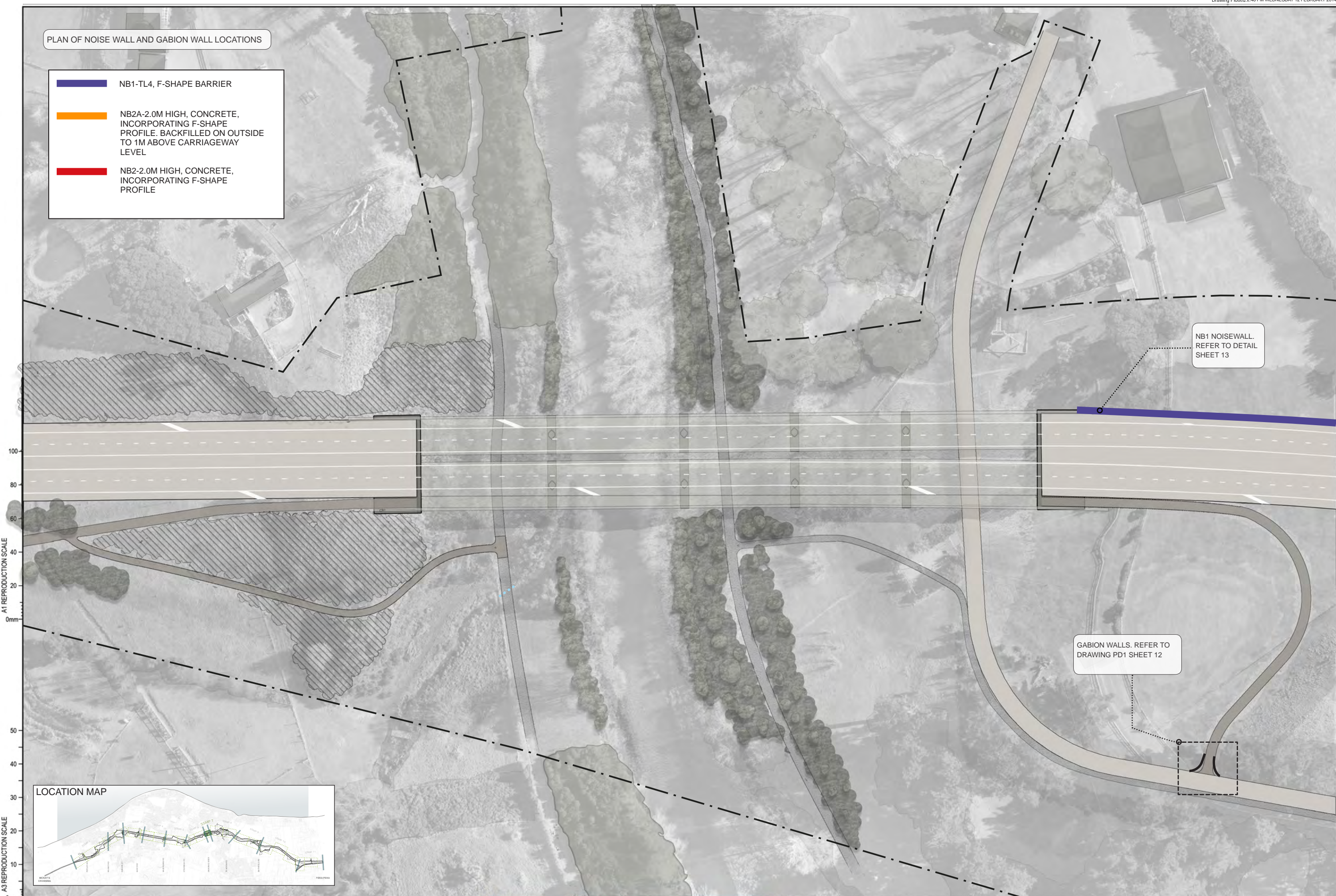
Title: SSMP 7 - SHEET 10 BRIDGE VIEWS

Drawing No: M2PP-121-D-GPH-8802

Rev. C

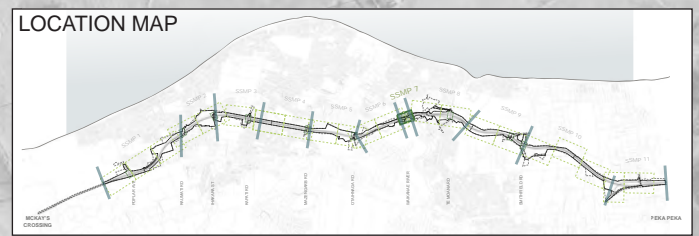
PLAN OF NOISE WALL AND GABION WALL LOCATIONS

-  NB1-TL4, F-SHAPE BARRIER
-  NB2A-2.0M HIGH, CONCRETE, INCORPORATING F-SHAPE PROFILE. BACKFILLED ON OUTSIDE TO 1M ABOVE CARRIAGEWAY LEVEL
-  NB2-2.0M HIGH, CONCRETE, INCORPORATING F-SHAPE PROFILE



NB1 NOISEWALL. REFER TO DETAIL SHEET 13

GABION WALLS. REFER TO DRAWING PD1 SHEET 12



A1 REPRODUCTION SCALE

A3 REPRODUCTION SCALE

DETAIL DESIGN (DET)

No.	Revision	By	CHK	CHK V	Appd	Date

Original Scale (A1)	Design	Approved For Construction*
Reduced Scale (A3)	Drawn	Date
	Diag Verifier	
	Diag Check	

* Refer to Revision 1 for Original Signature



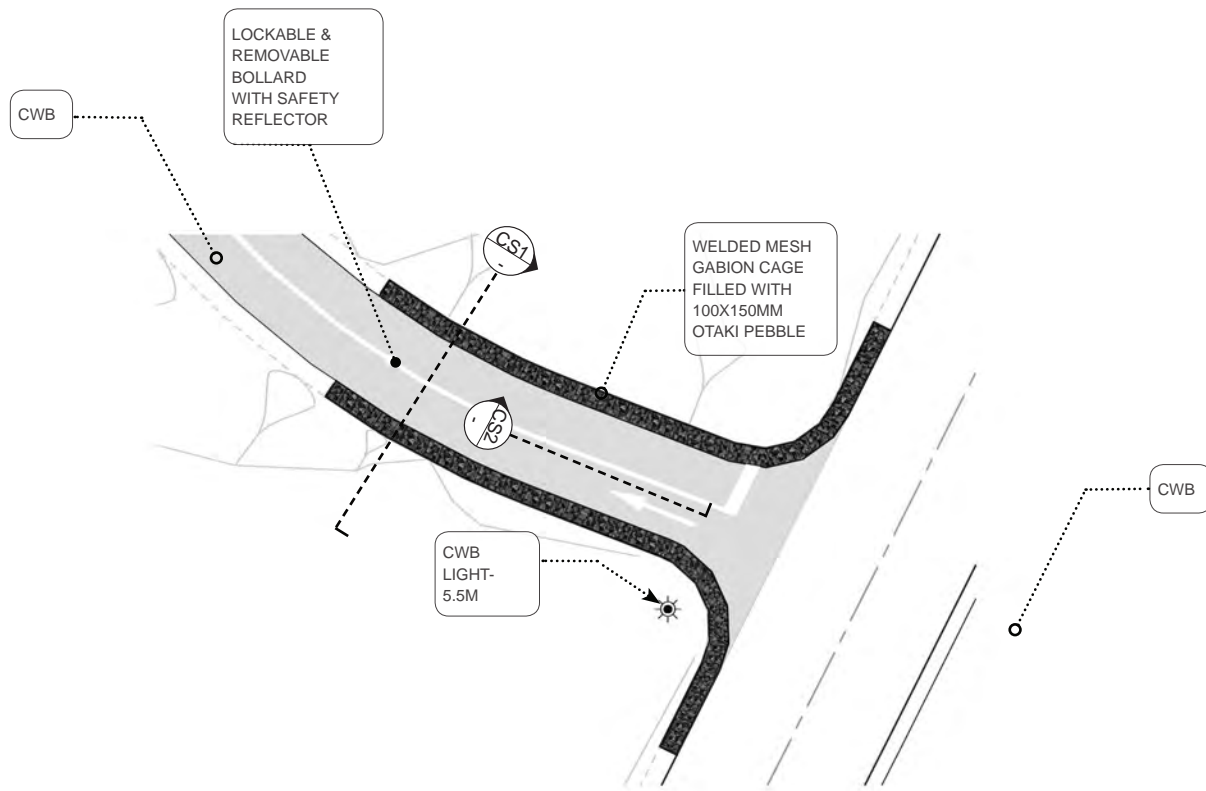
Mackays to Peka Peka

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

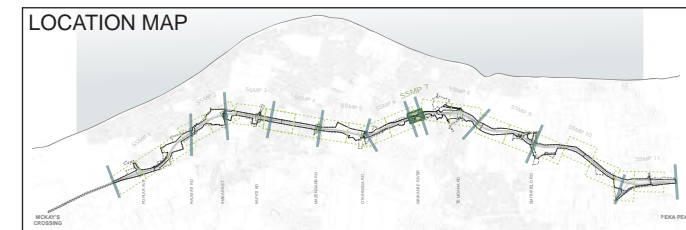
Title: SSMP 7 - SHEET 11
NOISEWALL/ GABION LOCATIONS

Document No.	Rev.
M2PP-SSMPX-D-SKT-8110.DWG	

PD1-TYPICAL GABION BARRIER



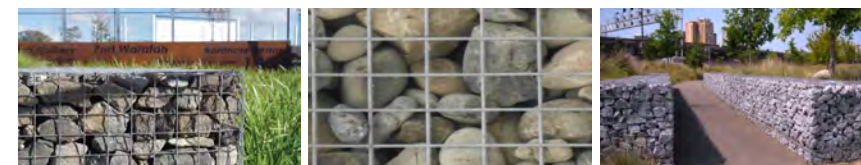
SSMP LOCATION MAP-M2PP-121-D-GPH-8001



M2PP-121-D-GPH-8101



MATERIALITY SAMPLES



CS1-CROSS SECTION CWB GABION



CS2-CROSS SECTION CWB GABION



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NTS	Drawn	Date
Reduced Scale (A3)	Design Verifier	
NTS	Design Check	

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Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

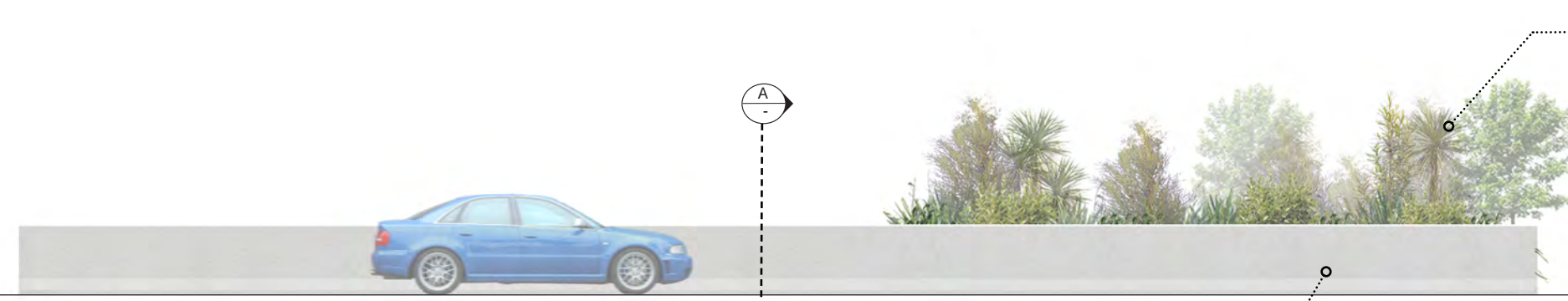
Title: SSMP 7 - SHEET 12 GABION DETAILS

Drawing No: M2PP-121-D-GPH-8802

Rev. C

A1 REPRODUCTION SCALE
0mm
20
40
60
80
100
A3 REPRODUCTION SCALE
0
10
20
30
40
50
1000
2000

ELEVATION 1 - NOISE WALL NB1(TL4)- EXPRESSWAY SIDE

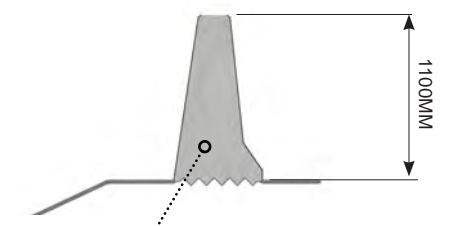


INDICATIVE PLANTING-FOR FULL PLANTING EXTENT REFER TO DWG NO. 8201

SECTION A - NOISE WALL NB1 (TL4)

SCALE - 1:25@A3

RESIDENTIAL SIDE EXPRESSWAY SIDE



ELEVATION 2 - NOISE WALL NB1 (TL4)- RESIDENTIAL SIDE



INDICATIVE PLANTING-FOR FULL PLANTING EXTENT REFER TO DWG NO. 8201

TL4 FAIR FACED CONCRETE EXPRESSWAY BARRIER

TL4 FAIR FACED CONCRETE EXPRESSWAY BARRIER

A1 REPRODUCTION SCALE

0mm

50

40

30

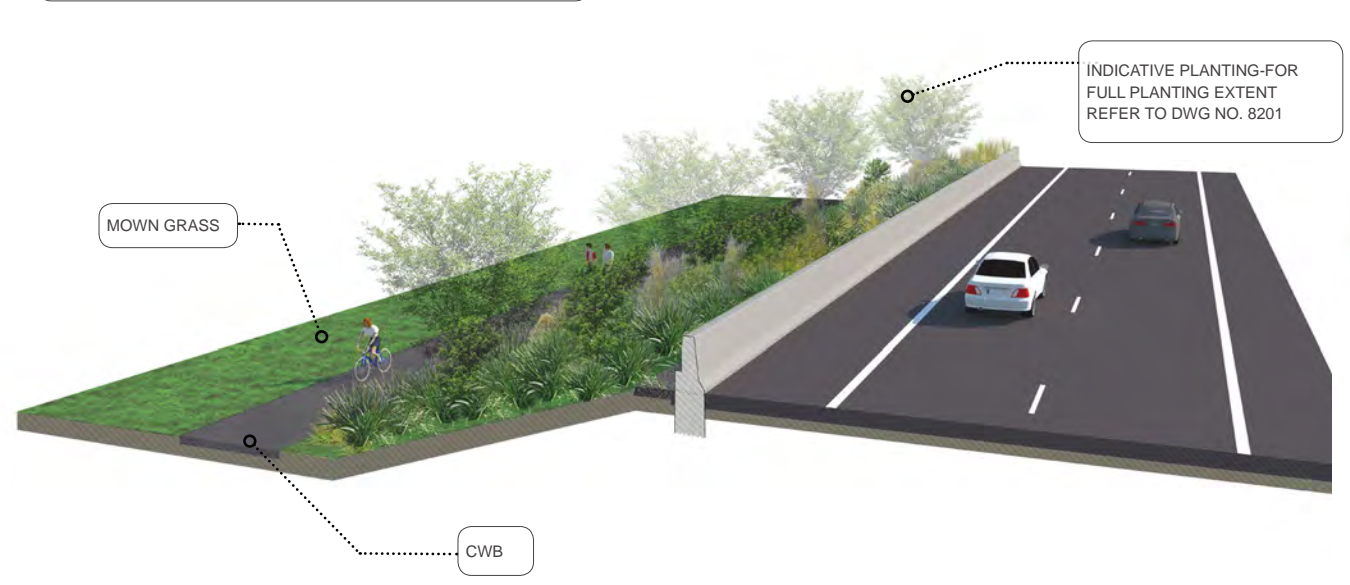
20

10

0mm

A3 REPRODUCTION SCALE

VISUALISATION EXPRESSWAY SIDE

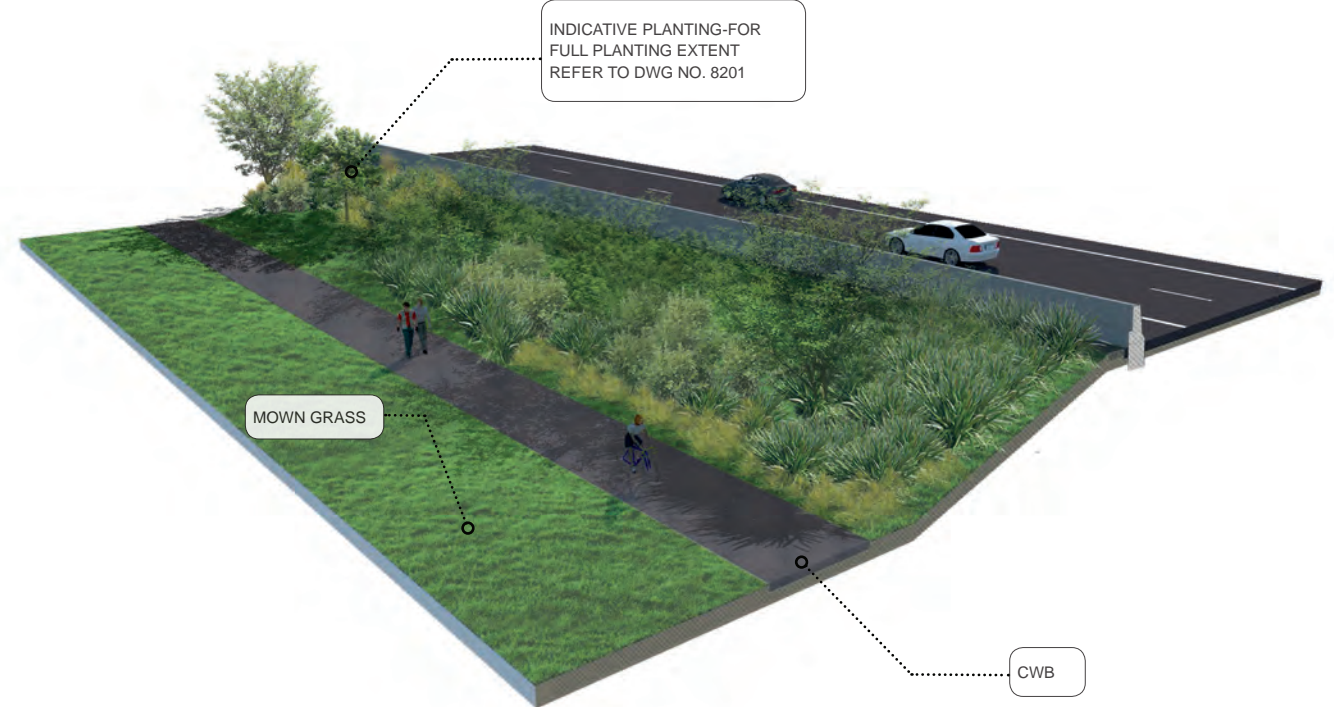


INDICATIVE PLANTING-FOR FULL PLANTING EXTENT REFER TO DWG NO. 8201

MOWN GRASS

CWB

VISUALISATION RESIDENTIAL SIDE



INDICATIVE PLANTING-FOR FULL PLANTING EXTENT REFER TO DWG NO. 8201

MOWN GRASS

CWB

C	FOR CERTIFICATION (WITH REQUESTED ALTERATIONS)				13.12.13
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No.	Revision	By	Chk	Chk.V	Appd

Original Scale (A1)	Design	Approved For Construction?
NTS	Drawn	Date
Reduced Scale (A3)	Design Verifier	
NTS	Design Check	

* Refer to Revision 1 for Original Signature

Project: SH1 MACKAYS TO PEKA PEKA EXPRESSWAY
RP 1012/0.00 TO 1023/5.00

Title: SSMP 7 - SHEET 13
NOISEWALL-NB1 DETAILS

Drawing No: M2PP-121-D-GPH-8802

Rev: B

DETAIL DESIGN (DET)

Document No.