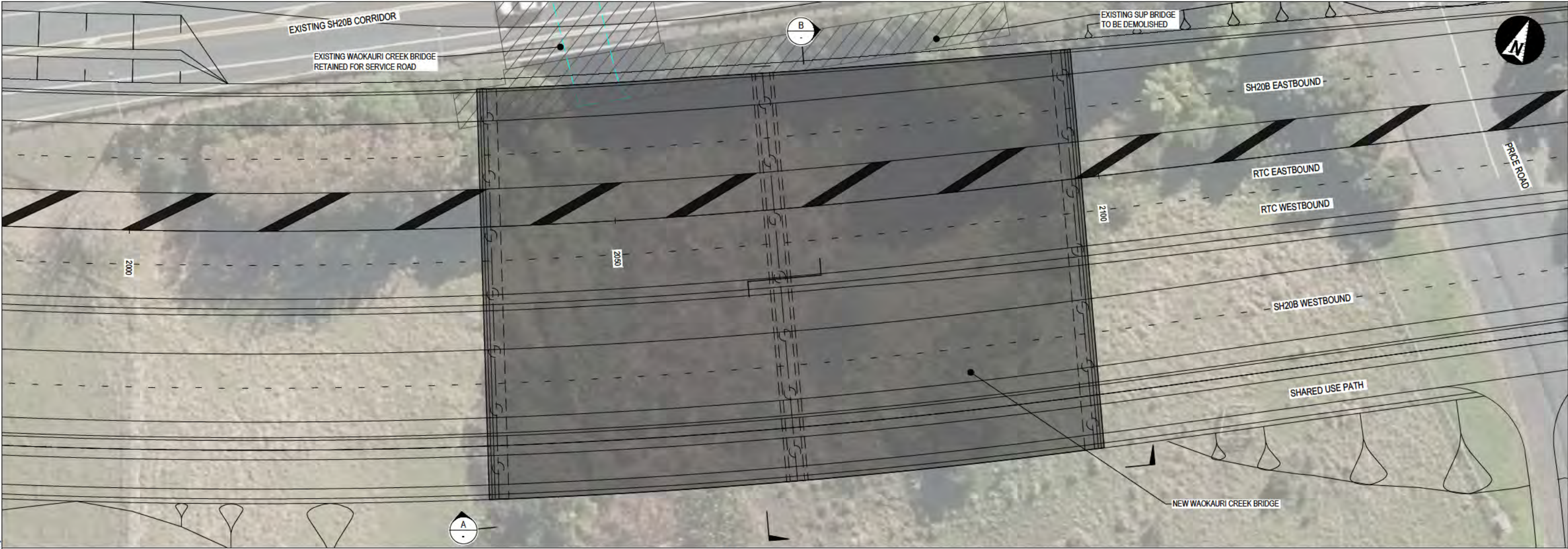


Appendix O

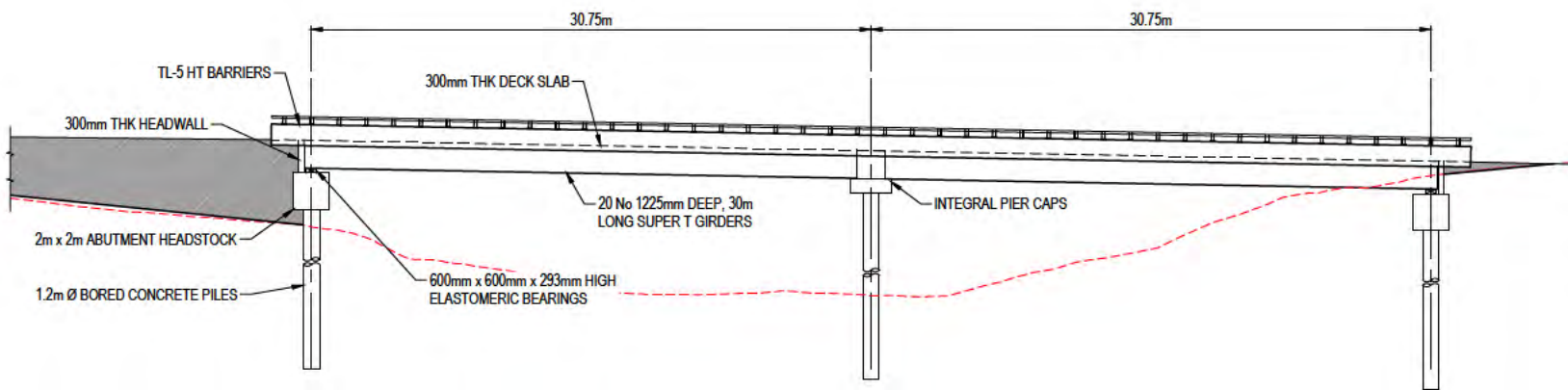


20Connect Design Drawings

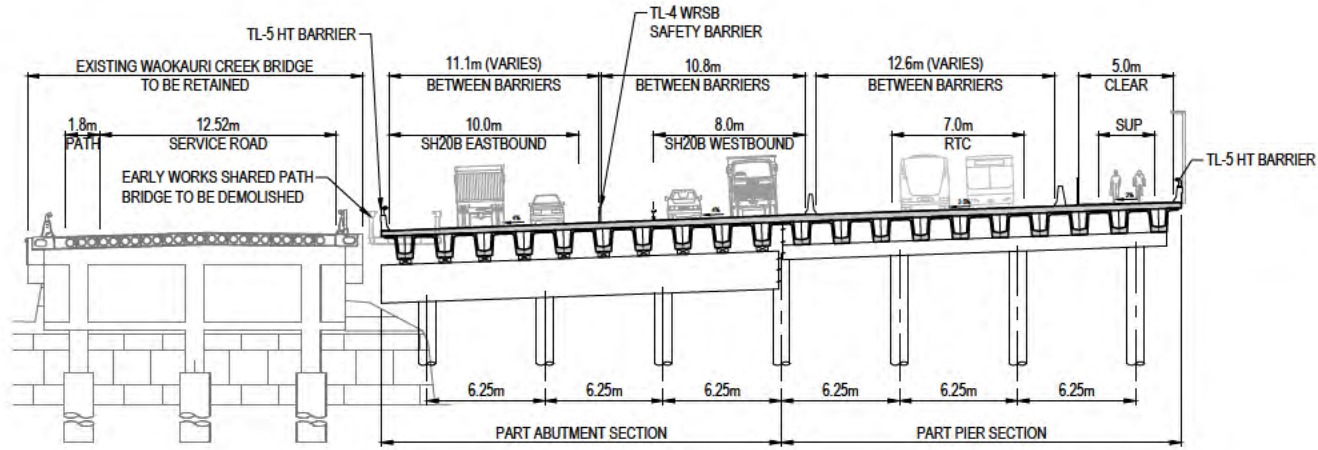
Bridge Detail Drawings



PLAN
1:200

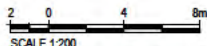


ELEVATION
1:200

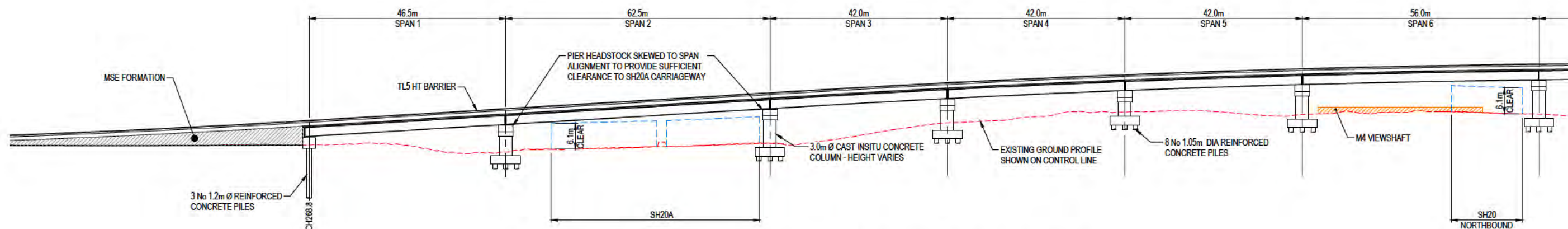


SECTION
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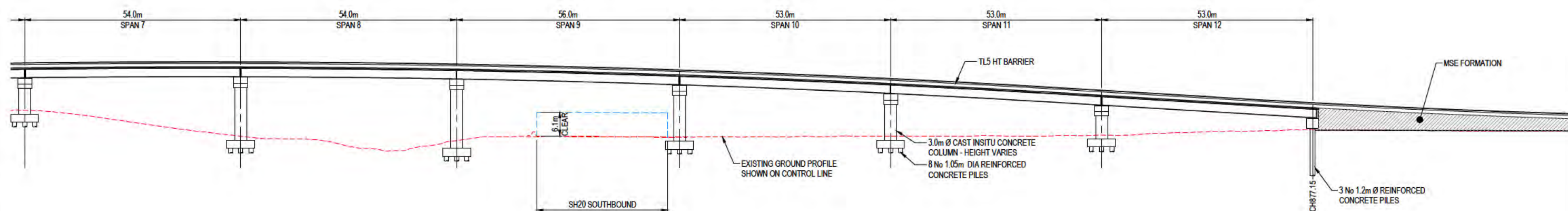
Supplementary Aerial Imagery sourced from the LINZ Data Service and licensed by Auckland Council for re-use under the Creative Commons Attribution 4.0 New Zealand licence.



CLIENT			REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY NOT FOR CONSTRUCTION		PROJECT	A2B / 20CONNECT SSBC					
			A	04.10.19	ISSUED FOR 20CONNECT SSBC		AS SHOWN	A1									
							DRAWN										
							DESIGNED										
							REVIEWED										



LONG SECTION THROUGH PROPOSED SH20A/SH20 SOUTHBOUND RAMP (SPAN 1 TO SPAN 6)
1:500



LONG SECTION THROUGH PROPOSED SH20A/SH20 SOUTHBOUND RAMP (SPAN 7 TO SPAN 12)
1:500

5 0 10 20m
SCALE 1:500

CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE AS SHOWN SIZE A1

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

TITLE

PREFERRED OPTION
SH20A/SH20 SOUTHBOUND RAMP
BRIDGE DETAILS - SHEET 2

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

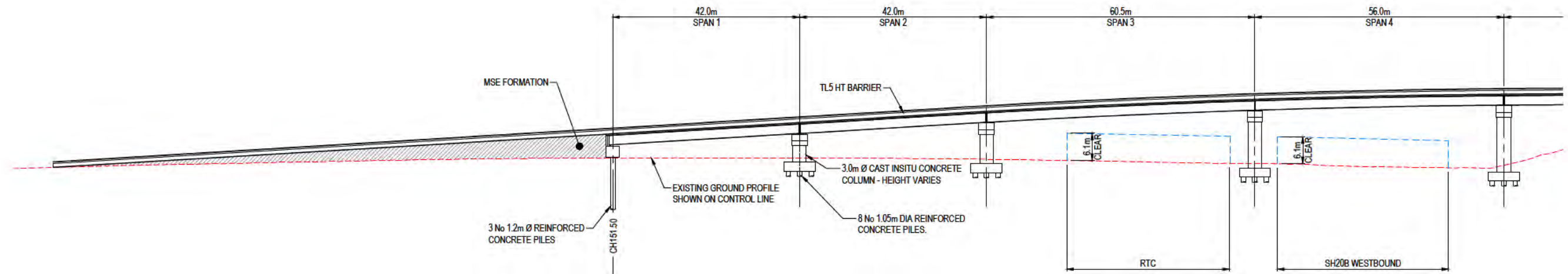
DRG

BB

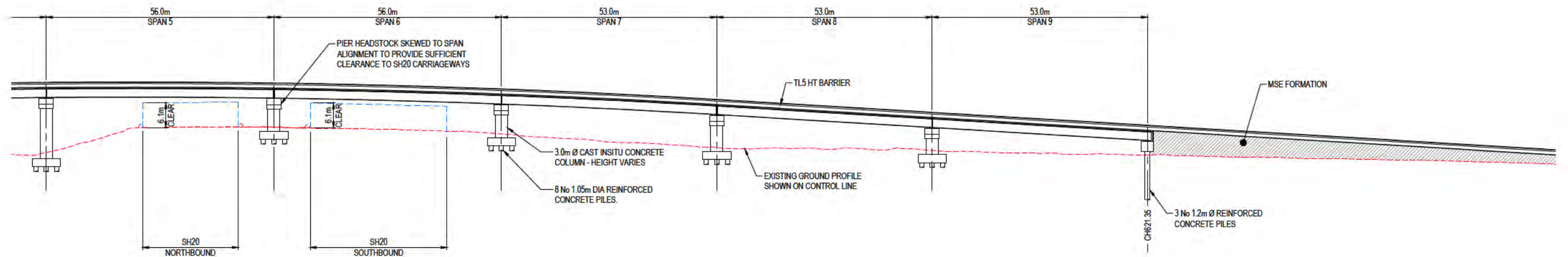
1012

A

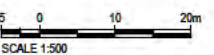




LONG SECTION THROUGH PROPOSED SH20B/SH20 SOUTHBOUND RAMP (SPAN 1 TO SPAN 4)
1:500



LONG SECTION THROUGH PROPOSED SH20B/SH20 SOUTHBOUND RAMP (SPAN 5 TO SPAN 9)
1:500



CLIENT			REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY NOT FOR CONSTRUCTION		PROJECT	A2B / 20CONNECT SSBC										
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							DRAWN		APPROVED													
							DESIGNED		DATE		TITLE	PREFERRED OPTION SH20B/SH20 SOUTHBOUND RAMP BRIDGE DETAILS - SHEET 2										
							REVIEWED															
											DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV					
												501094	-	4403	-	DRG	-	BB	-	1022	-	A

General Arrangement Plan Drawings



DRAWING INDEX	
DRG No.	DRAWING TITLE
501094-4403-DRG-RR-1261	PLAN AND LONG SECTION (MCM0) - SH20B SOUTHBOUND RAMP - SHEET 1
501094-4403-DRG-RR-1262	PLAN AND LONG SECTION (MCM0) - SH20B SOUTHBOUND RAMP - SHEET 2
501094-4403-DRG-RR-1265	PLAN AND LONG SECTION (MCA0) - SH20 RIMU ROAD NORTHBOUND ON-RAMP
501094-4403-DRG-RR-1266	PLAN AND LONG SECTION (MCB0) - SH20 WALMSLEY ROAD SOUTHBOUND OFF-RAMP
501094-4403-DRG-RR-1267	PLAN AND LONG SECTION (MCC0) - SH20 WALMSLEY ROAD SOUTHBOUND ON-RAMP
501094-4403-DRG-RR-1268	PLAN AND LONG SECTION (MCD0) - SH20 CORONATION ROAD NORTHBOUND ON-RAMP
501094-4403-DRG-RR-1269	PLAN AND LONG SECTION (MCE0) - SH20 CORONATION ROAD NORTHBOUND OFF-RAMP
501094-4403-DRG-RR-1270	PLAN AND LONG SECTION (MCF0) - SH20 NORTHBOUND TO SH20A WESTBOUND RAMP
501094-4403-DRG-RR-1271	PLAN AND LONG SECTION (MCG0) - SH20 MASSEY ROAD SOUTHBOUND OFF-RAMP
501094-4403-DRG-RR-1272	PLAN AND LONG SECTION (MCH0) - SH20 MASSEY ROAD SOUTHBOUND ON-RAMP
501094-4403-DRG-RR-1273	PLAN AND LONG SECTION (MCJ0) - SH20 MASSEY ROAD NORTHBOUND ON-RAMP
501094-4403-DRG-RR-1274	PLAN AND LONG SECTION (MCK0) - SH20 MASSEY ROAD NORTHBOUND OFF-RAMP
501094-4403-DRG-RR-1275	PLAN AND LONG SECTION (MCL0) - SH20 PUHINUI ROAD SOUTHBOUND OFF-RAMP
501094-4403-DRG-RR-1276	PLAN AND LONG SECTION (MCL0) - SH20 PUHINUI ROAD NORTHBOUND ON-RAMP
501094-4403-DRG-RR-1279	PLAN AND LONG SECTION (MCN0) - SH20A KIRKBRIDE ROAD EASTBOUND ON-RAMP
501094-4403-DRG-RR-1280	PLAN AND LONG SECTION (MCO0) - SH20 CAVENDISH DRIVE SOUTHBOUND ON-RAMP
501094-4403-DRG-RR-1281	PLAN AND LONG SECTION (MCP0) - SH20 LAMBIE DRIVE NORTHBOUND ON-RAMP
501094-4403-DRG-RR-1282	PLAN AND LONG SECTION (MC90) - SH20 PUHINUI ROAD SOUTHBOUND BRAIDED RAMP
501094-4403-DRG-RR-1301	TYPICAL CROSS SECTIONS - SHEET 1
501094-4403-DRG-RR-1302	TYPICAL CROSS SECTIONS - SHEET 2
501094-4403-DRG-RR-1303	TYPICAL CROSS SECTIONS - SHEET 3
501094-4403-DRG-RR-1304	TYPICAL CROSS SECTIONS - SHEET 4
501094-4403-DRG-RR-1305	TYPICAL CROSS SECTIONS - SHEET 5
501094-4403-DRG-RR-1306	TYPICAL CROSS SECTIONS - SHEET 6
501094-4403-DRG-RR-1307	TYPICAL CROSS SECTIONS - SHEET 7
501094-4403-DRG-RR-1308	TYPICAL CROSS SECTIONS - SHEET 8
501094-4403-DRG-RR-1309	TYPICAL CROSS SECTIONS - SHEET 9
501094-4403-DRG-RR-1310	TYPICAL CROSS SECTIONS - SHEET 10

[illegible]













NE
OV
WE

RW
LE
MAX.































Plan and Long Section Drawings























PRO









1



H WEST

X.
a



























PROJE



















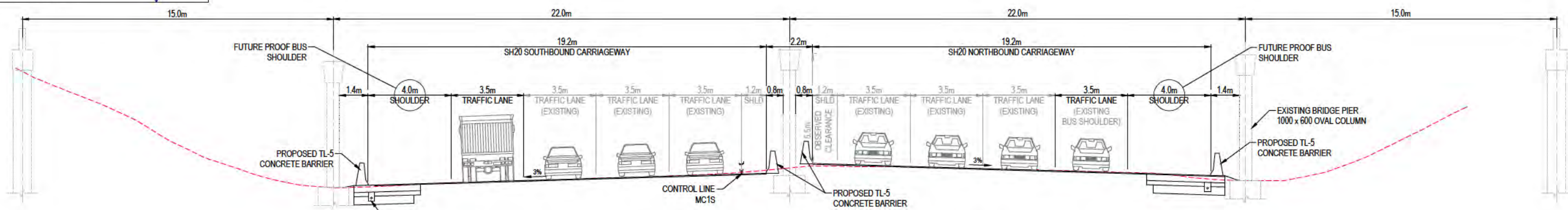
Typical Cross Section Drawings

LEGEND

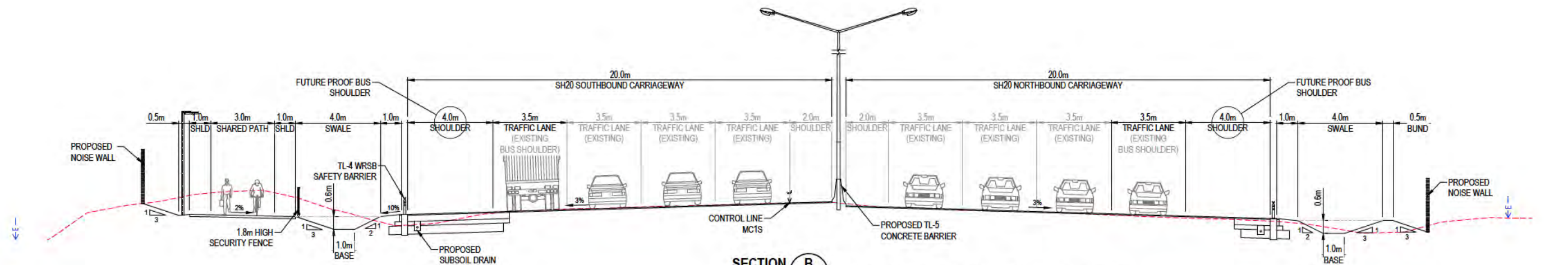
EXISTING SURFACE

DESIGN SURFACE

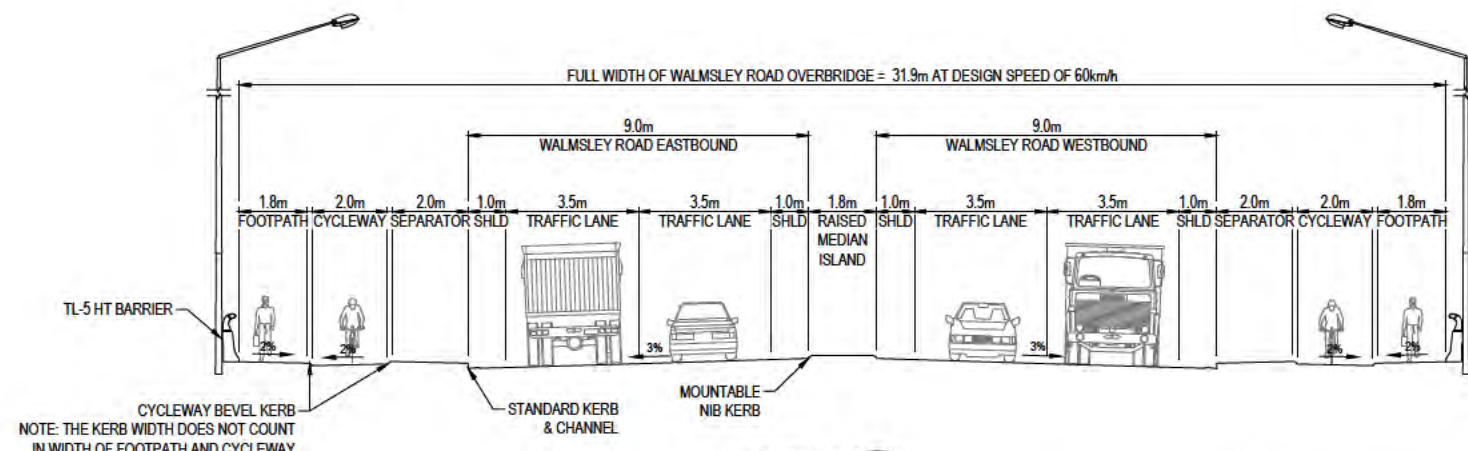
NZTA DESIGNATION BOUNDARY



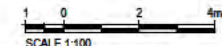
SECTION A
CH12,250 (MC1S) RR-1101 SH20 TYPICAL CROSS SECTION UNDER RIMU ROAD OVERBRIDGE



SECTION B
CH12,960 (MC1S) RR-1102 SH20 TYPICAL CROSS SECTION WITH SWALES



SECTION C
RR-1103 SH20 WALMSLEY ROAD OVERBRIDGE TYPICAL CROSS SECTION



CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE 1:100 SIZE A1

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SBC

A 02.08.19 ISSUE FOR ROAD SAFETY AUDIT

DRAWN

APPROVED

TITLE

PREFERRED OPTION TYPICAL CROSS SECTIONS SHEET 1

DESIGNED

DATE 06.03.19

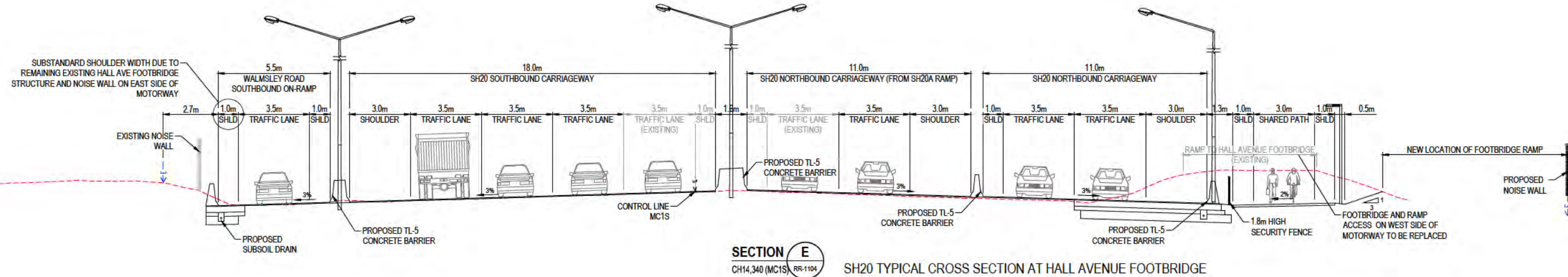
REVIEWED

EXISTING SURFACE

DESIGN SURFACE

NZTA DESIGNATION BOUNDARY

The diagram shows three horizontal lines. The top line is dashed red and labeled 'EXISTING SURFACE'. The middle line is solid black and labeled 'DESIGN SURFACE'. The bottom line is solid black and labeled 'NZTA DESIGNATION BOUNDARY'. A vertical double-headed arrow between the 'DESIGN SURFACE' and 'NZTA DESIGNATION BOUNDARY' lines is labeled '3'.



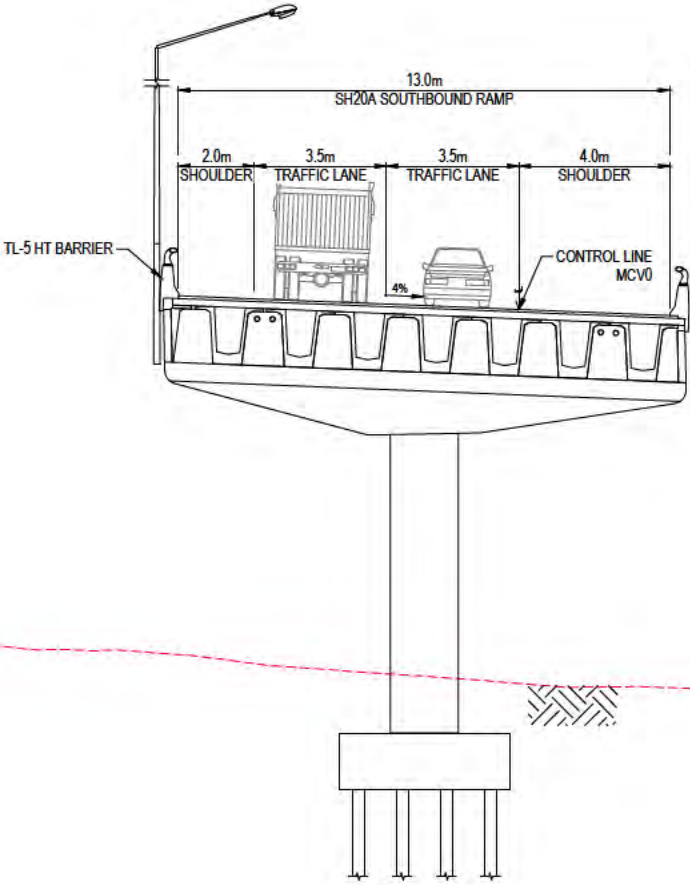
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					DRAWN			APPROVED						
					DESIGNED			DATE	TITLE	PREFERRED OPTION TYPICAL CROSS SECTIONS SHEET 2				
					REVIEWED			06.03.19						
								DRAWING No.	PROJECT No.	WBS	TYPE	DISC	NUMBER	REV
									501094	- 4403	- DRG	- RR	- 1302	- A

LEGEND

EXISTING SURFACE

DESIGN SURFACE

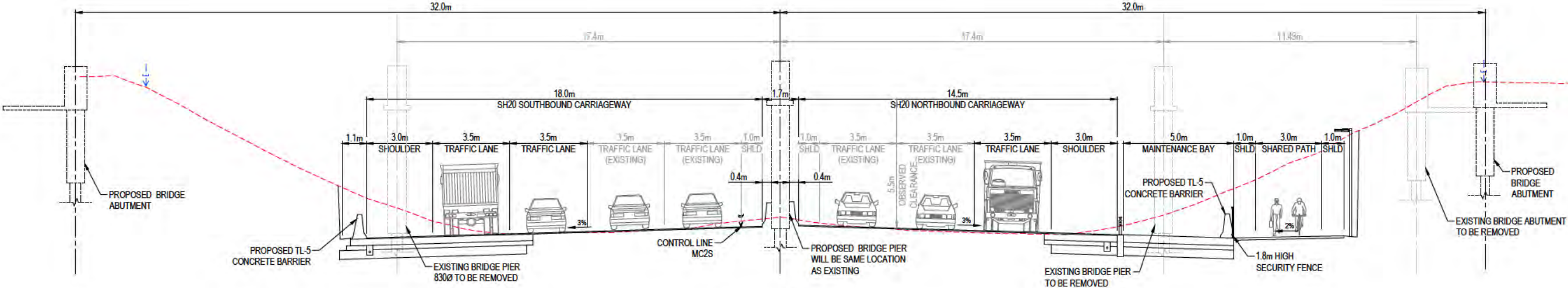
NZTA DESIGNATION BOUNDARY



SECTION F

CH440 (MCV0) RR-1105

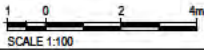
SH20A SOUTHBOUND RAMP BRIDGE TYPICAL CROSS SECTION



SECTION G

CH13,30 (MC2S) RR-1106

SH20 TYPICAL CROSS SECTION UNDER BADER DRIVE OVERBRIDGE



CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE

SIZE

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

DRAWN

DESIGNED

REVIEWED

APPROVED

DATE

06.03.19

TITLE

PREFERRED OPTION
TYPICAL CROSS SECTIONS
SHEET 3

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

DRG

RR

1303

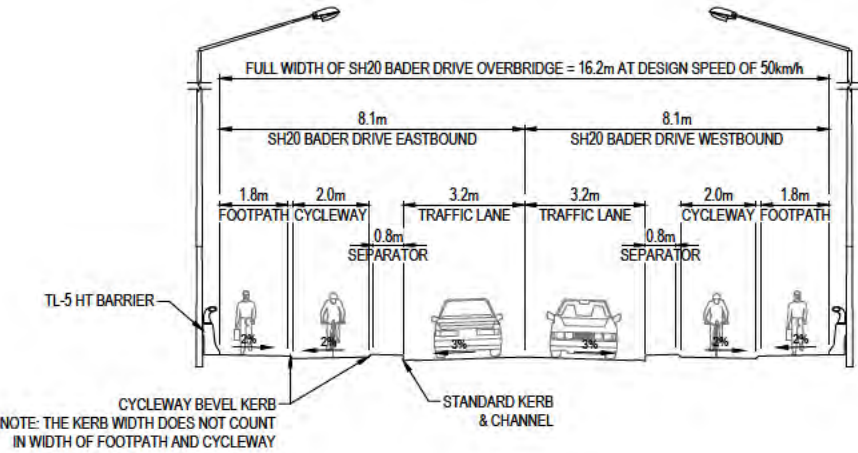
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LEGEND

EXISTING SURFACE

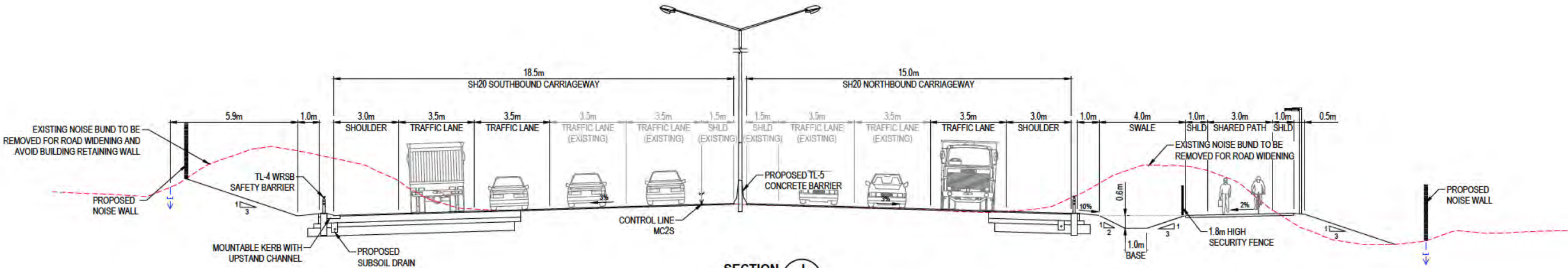
DESIGN SURFACE

NZTA DESIGNATION BOUNDARY



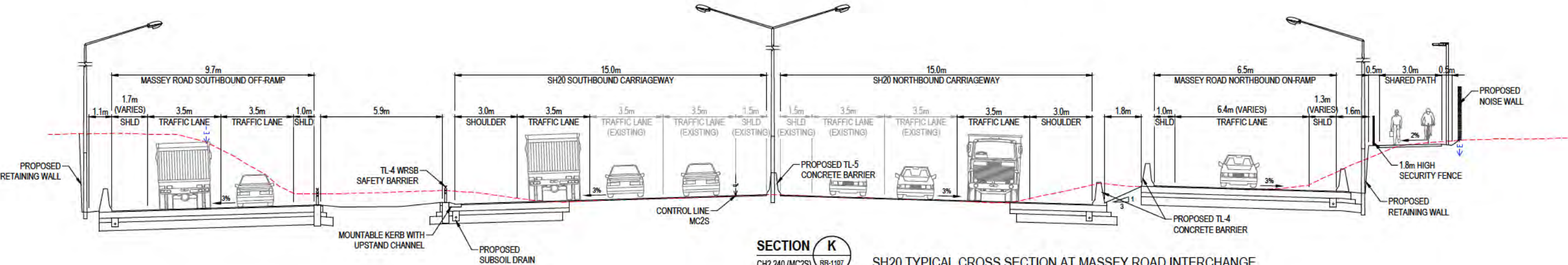
SECTION H

SH20 BADER DRIVE OVERBRIDGE TYPICAL CROSS SECTION



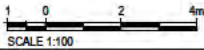
SECTION J

SH20 TYPICAL CROSS SECTION WITH SWALES



SECTION K

SH20 TYPICAL CROSS SECTION AT MASSEY ROAD INTERCHANGE



CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE

SIZE

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

DRAWN

DESIGNED

REVIEWED

APPROVED

DATE

06.03.19

TITLE

PREFERRED OPTION
TYPICAL CROSS SECTIONS
SHEET 4

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

DRG

RR

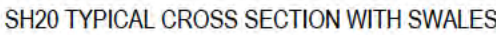
1304

A

EXISTING SURFACE

DESIGN SURFACE

NZTA DESIGNATION BOUNDARY



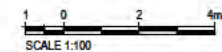
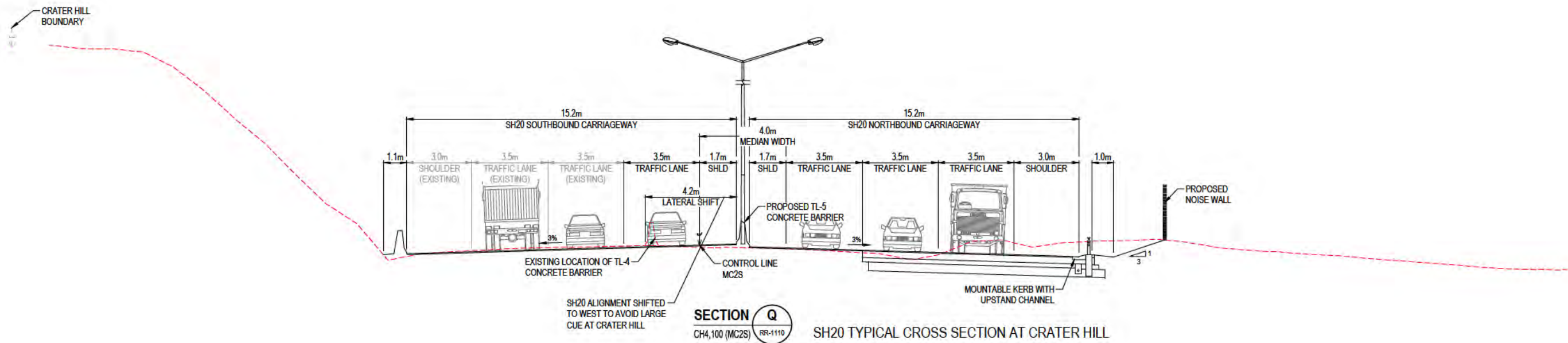
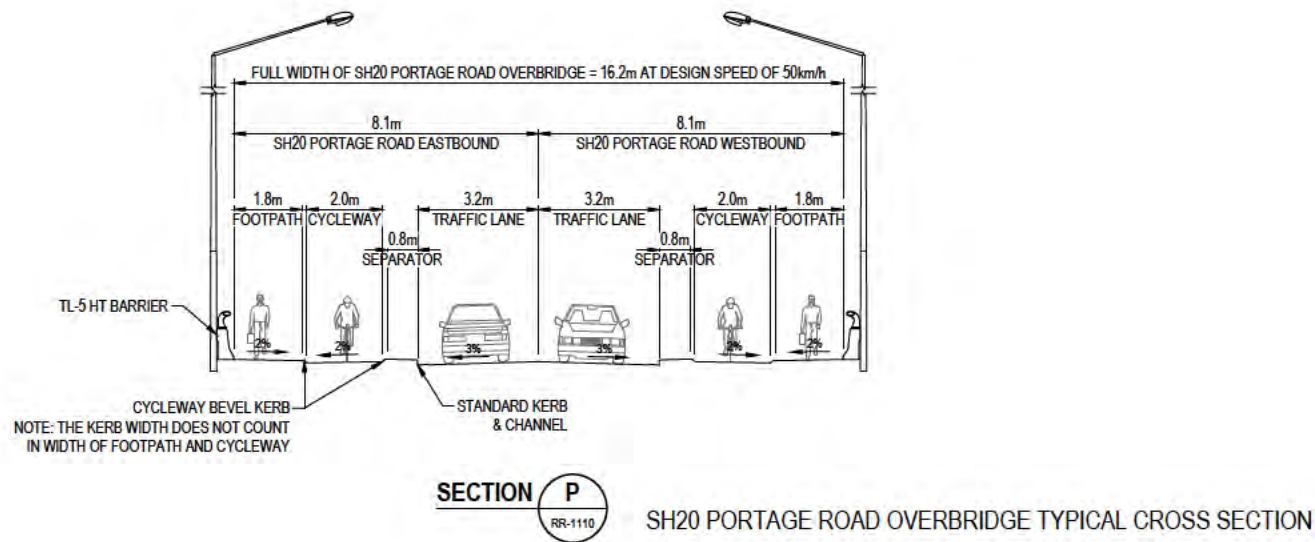
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					DRAWN		APPROVED		PREFERRED OPTION					
					DESIGNED		DATE	TITLE	TYPICAL CROSS SECTIONS					
					REVIEWED		06.08.19		SHEET 5					
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									501094	- 4403	- DRG	- RR	- 1305	- A

LEGEND

EXISTING SURFACE

DESIGN SURFACE

NZTA DESIGNATION BOUNDARY



CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE AS SHOWN SIZE A1

PRELIMINARY NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

DRAWN

DESIGNED

REVIEWED

APPROVED

DATE

06.03.19

TITLE

PREFERRED OPTION
TYPICAL CROSS SECTIONS
SHEET 6

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

DRG

RR

1306

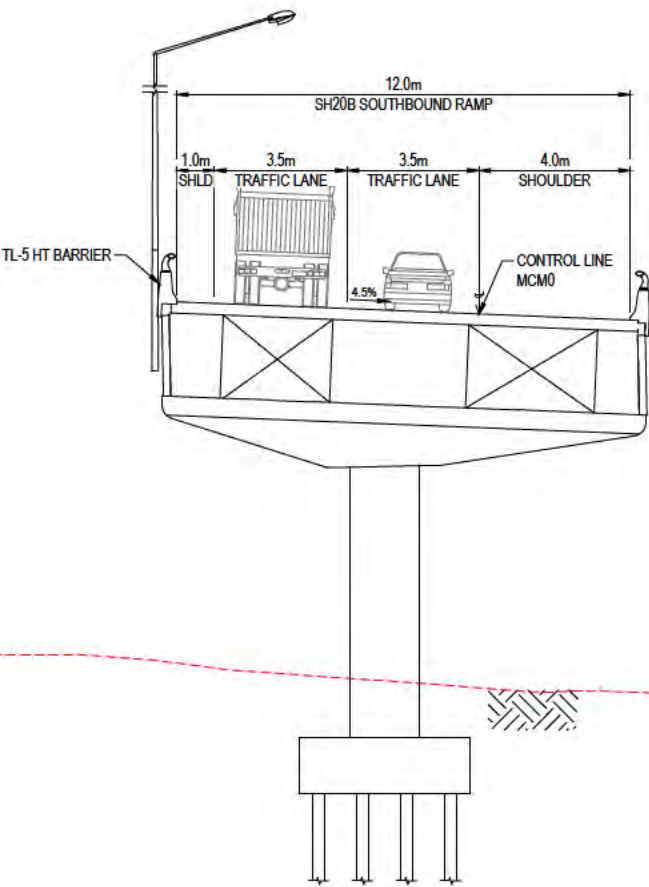
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LEGEND

EXISTING SURFACE

DESIGN SURFACE

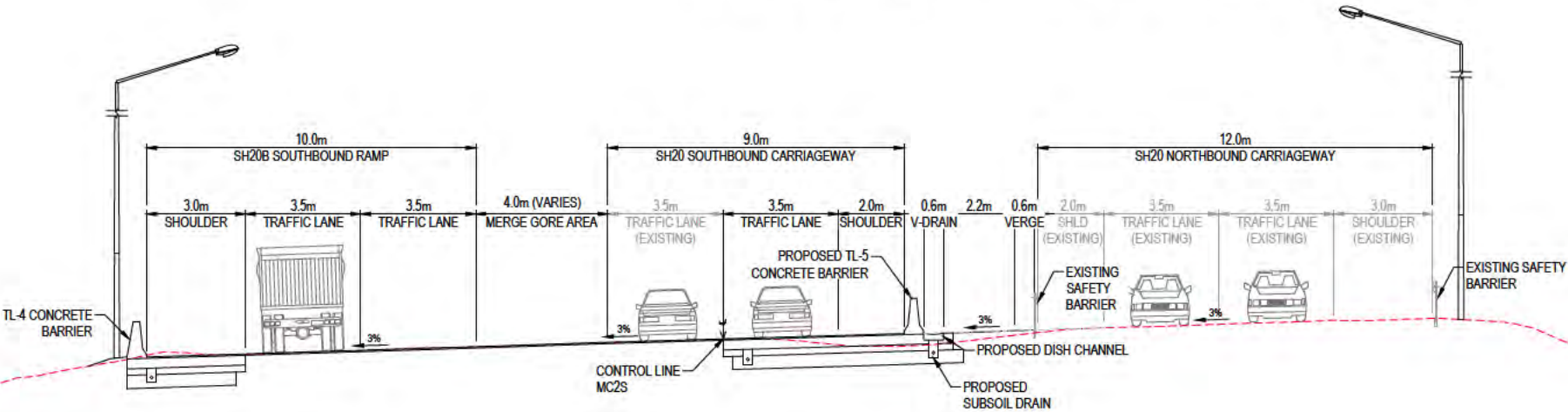
NZTA DESIGNATION BOUNDARY



SECTION R

CH410 (MCM0) RR-1112

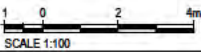
SH20B SOUTHBOUND RAMP BRIDGE TYPICAL CROSS SECTION



SECTION S

CH6,300 (MC2S) RR-1113

SH20 TYPICAL CROSS SECTION WITH MEDIAN WIDENING ON SUPERELEVATION



CLIENT

REV DATE REVISION DETAILS

APPROVED

SCALE AS SHOWN

SIZE A1

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

DRAWN

DESIGNED

REVIEWED

APPROVED

DATE

06.03.19

TITLE

PREFERRED OPTION
TYPICAL CROSS SECTIONS
SHEET 7

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

DRG

RR

1307

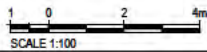
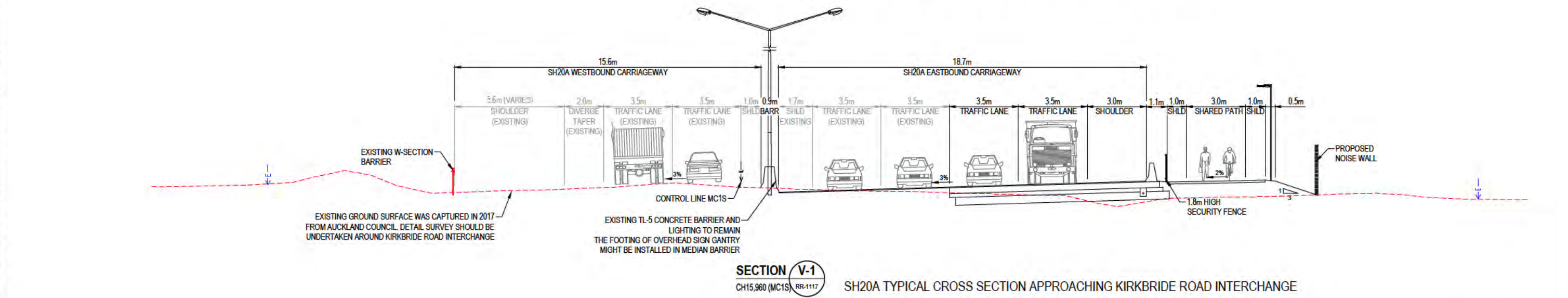
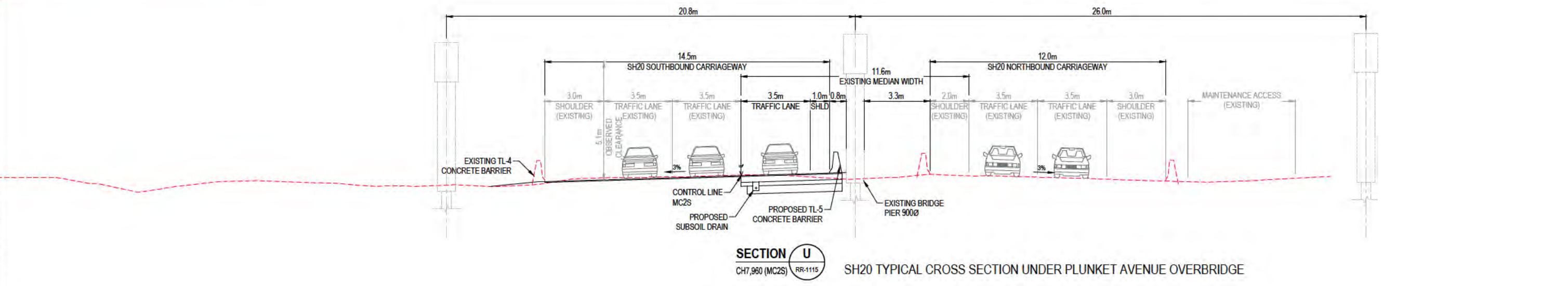
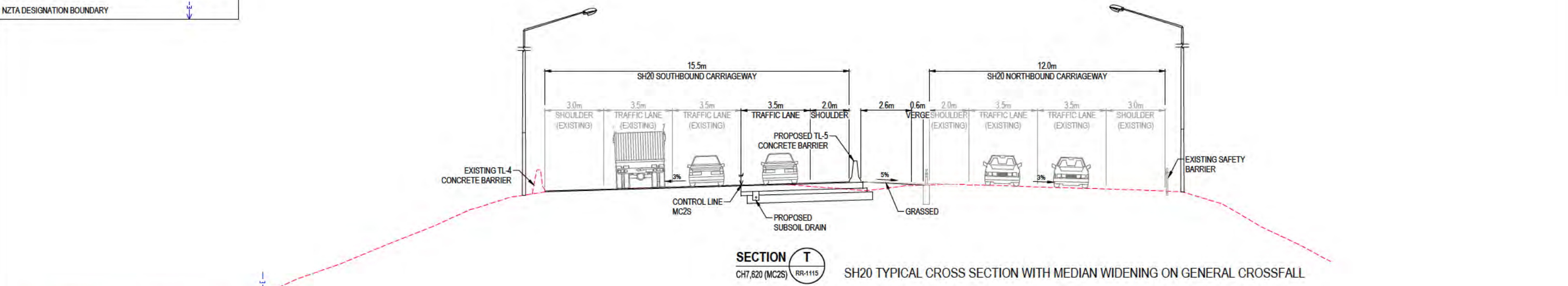
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LEGEND

EXISTING SURFACE

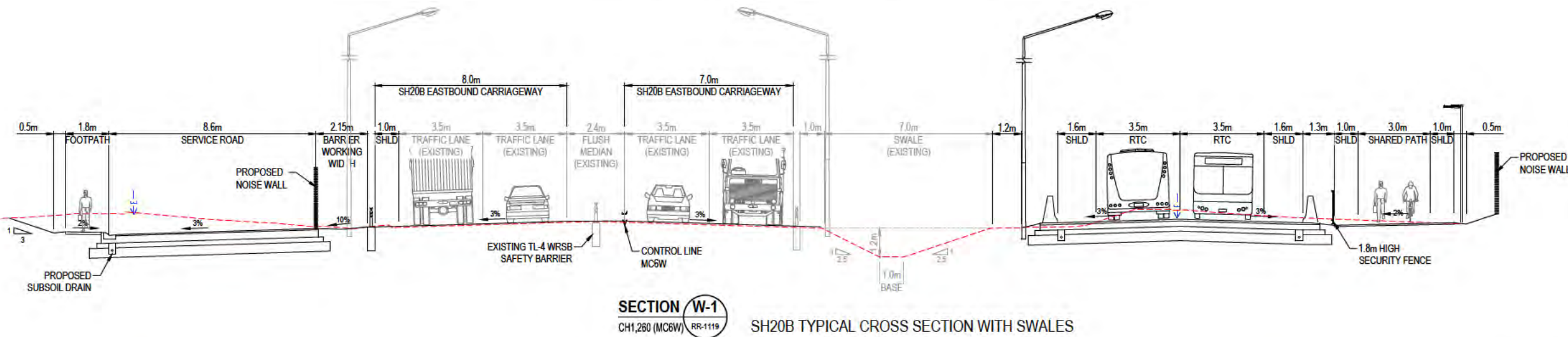
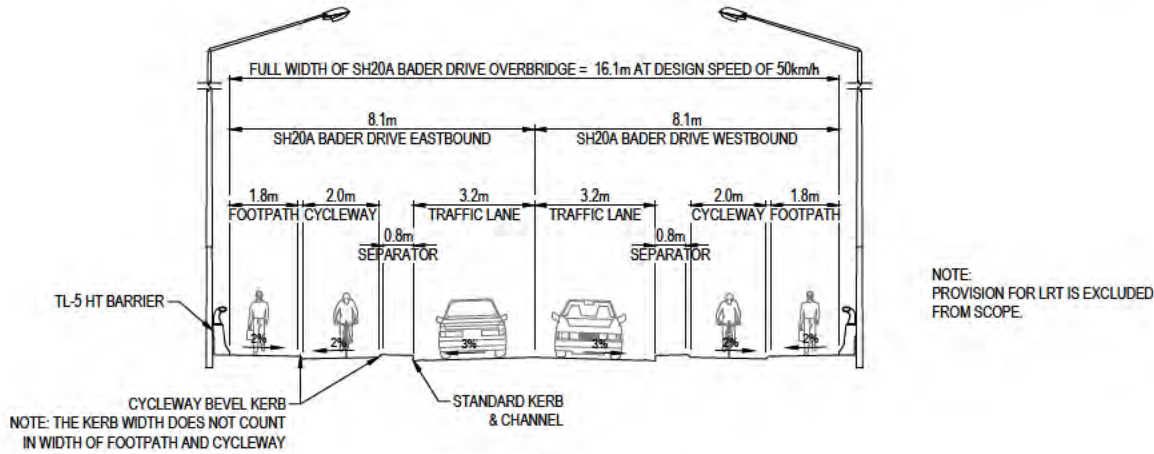
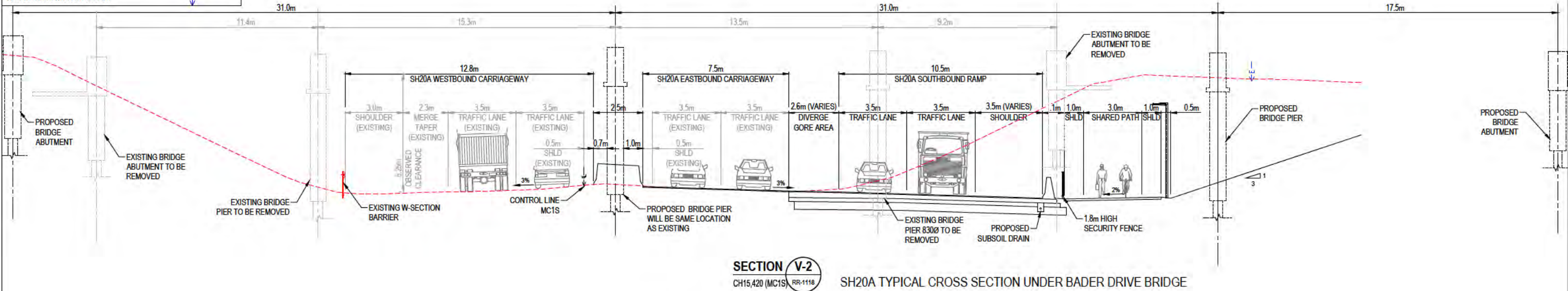
DESIGN SURFACE

NZTA DESIGNATION BOUNDARY



CLIENT			REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY NOT FOR CONSTRUCTION		PROJECT	A2B / 20CONNECT SSBC					
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									DRAWN								
									DESIGNED								
									REVIEWED								
									APPROVED								
									DATE 08.08.19								

LEGEND	
EXISTING SURFACE	---
DESIGN SURFACE	—
NZTA DESIGNATION BOUNDARY	↓



1 0 2 4m
SCALE 1:100

CLIENT

REV DATE REVISION DETAILS

A 02.08.19 ISSUE FOR ROAD SAFETY AUDIT

APPROVED

SCALE

1:100

SIZE

A1

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT

A2B / 20CONNECT SSBC

APPROVED

DATE

06.03.19

TITLE

PREFERRED OPTION
TYPICAL CROSS SECTIONS
SHEET 9

DRAWING No.

PROJECT No.

WBS

TYPE

DISC

NUMBER

REV

501094

4403

DRG

RR

1309

A

[illegible]

Stormwater Plan Drawings









































