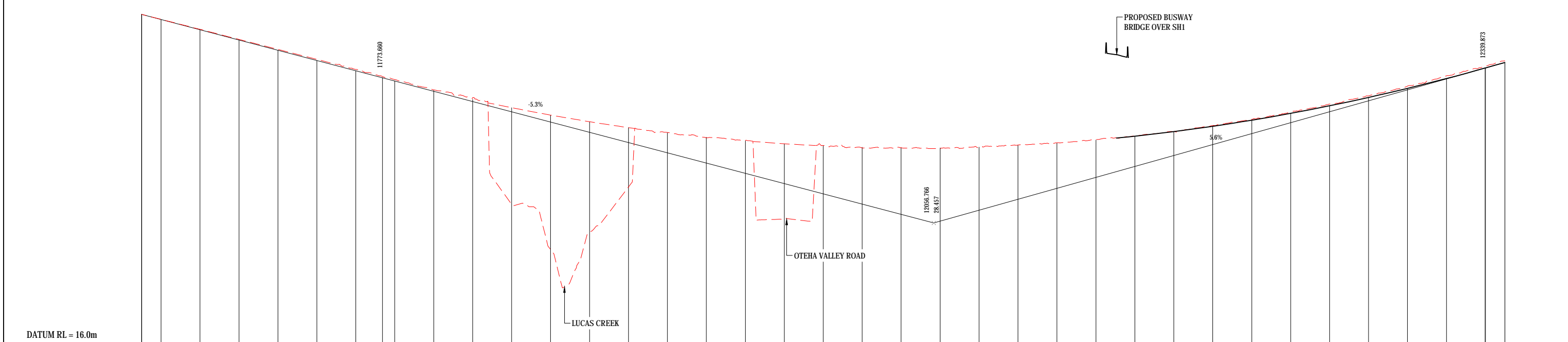
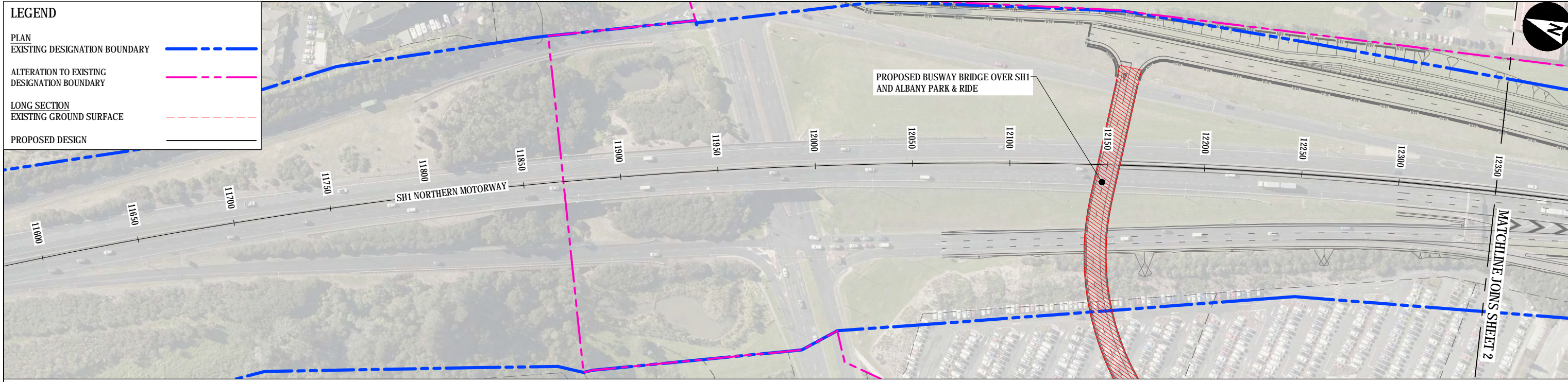


LEGEND

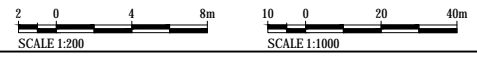
- PLAN EXISTING DESIGNATION BOUNDARY
- ALTERATION TO EXISTING DESIGNATION BOUNDARY
- LONG SECTION EXISTING GROUND SURFACE
- PROPOSED DESIGN



DATUM RL = 16.0m

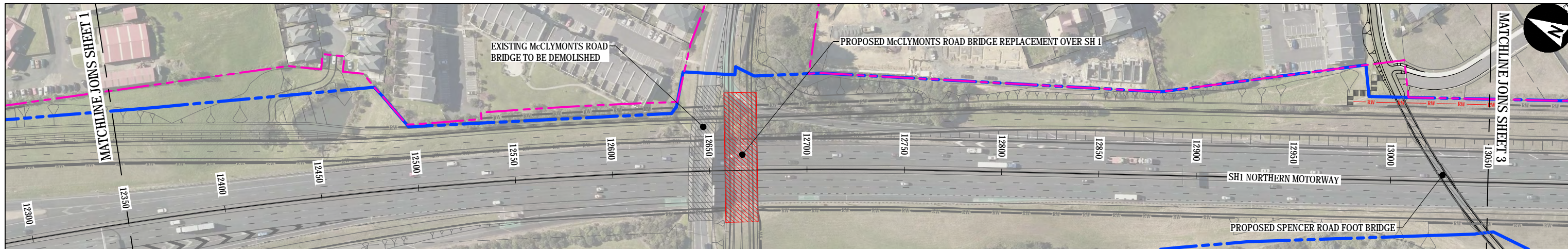
VERTICAL ALIGNMENT	P=5.3% L=273.7																				K=52.0 L=566.2										P						
HORIZONTAL ALIGNMENT	R=2400. L=1267.																																				
SUPER ELEVATION																																					
DESIGN																																					
EXISTING	49.884	49.357	48.304	47.250	46.197	45.143	44.230	43.178	42.118	41.308	30.370	25.724	27.529	32.147	37.758	37.202	36.935	28.867	36.410	36.161	36.196	36.082	36.240	36.461	36.690	37.022	37.383	37.847	38.465	38.888	39.012	39.714	40.492	41.347	42.280	43.289	44.375
CHAINAGE	11650	11660	11680	11700	11720	11740	11760	11780	11800	11820	11840	11860	11880	11900	11920	11940	11960	11980	12000	12020	12040	12060	12080	12100	12120	12140	12160	12180	12200	12220	12240	12260	12280	12300	12320	12340	

LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



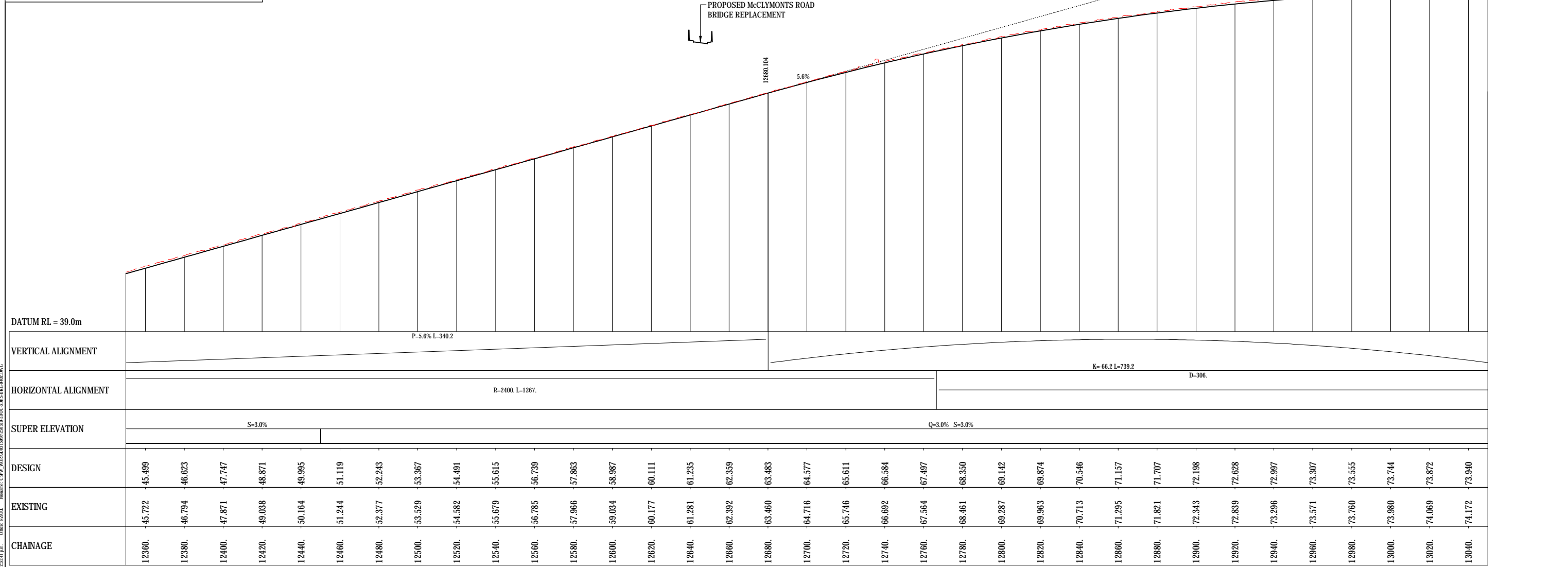
CLIENT	REV DATE REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY NOT FOR CONSTRUCTION	PROJECT
	A 06/10/16 ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	APPROVED DATE: 06/10/16 J. HIND	NORTHERN CORRIDOR IMPROVEMENTS
			DRAWN V. SMITH			TITLE
			CHECKED M. FRANCIS		J. HIND	DRAWING No. 250310 - STAGE 5DOC - WP 3DES - TYPE DRG - NUMBER 0401 - REV A

D:\Projects\250310\250310.dwg | 06/10/16 | 10:50 AM | User: J. HIND | Plot: 1:1000H 1:200V (A1)



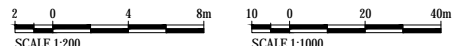
LEGEND

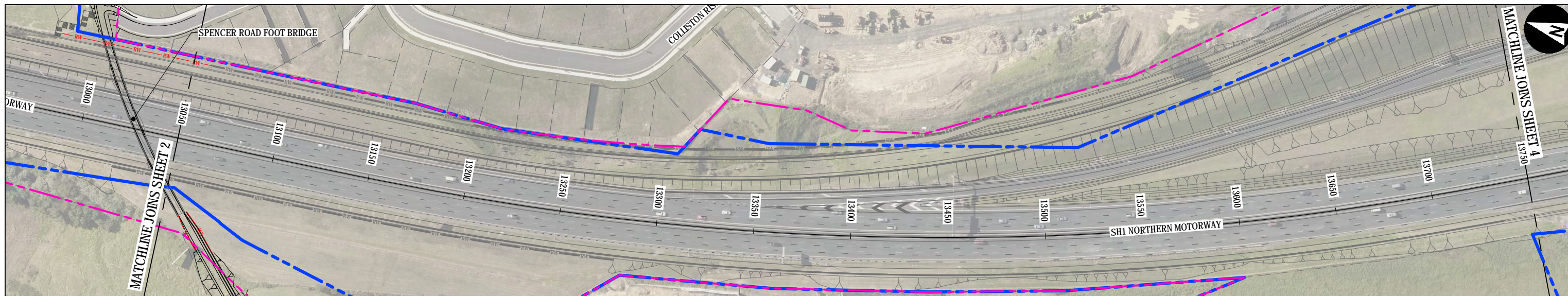
PLAN
 EXISTING DESIGNATION BOUNDARY ---
 ALTERATION TO EXISTING DESIGNATION BOUNDARY ---
 LONG SECTION
 EXISTING GROUND SURFACE ---
 PROPOSED DESIGN ---



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
 1:1000H 1:200V (A1)

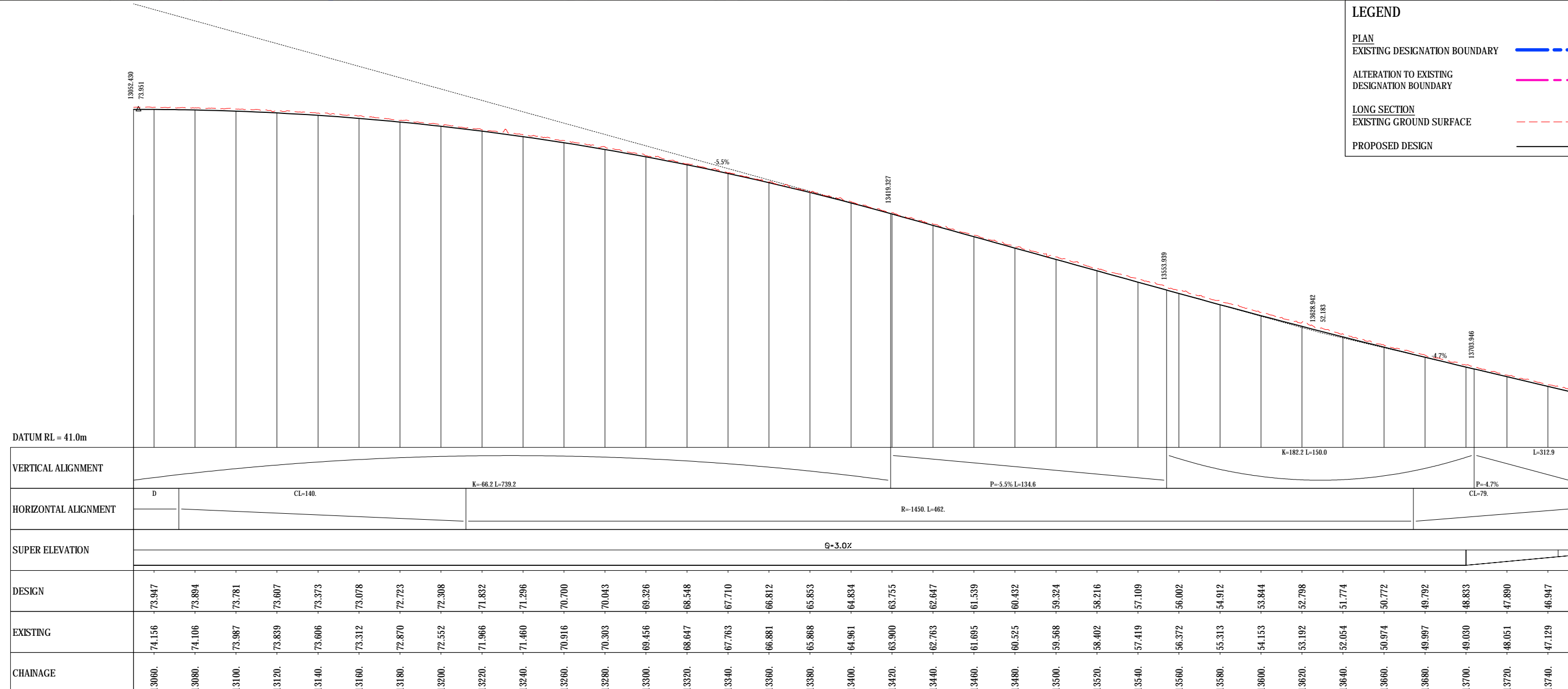
REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PROJECT	TITLE
A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	NORTHERN CORRIDOR IMPROVEMENTS	PLAN & LONG SECTION SH1 MAINLINE (MC00) SHEET 2
				DRAWN V. SMITH			
				DESIGNED M. FAN			
				CHECKED M. FRANCIS			
				APPROVED J. HIND			
				DATE 06/10/16			
				J. HIND			
						DRAWING No.	PROJECT No.
						250310	5DOC
						3DES	DRG
						0402	REV
						A	





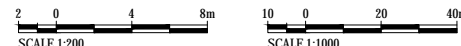
LEGEND

PLAN	
EXISTING DESIGNATION BOUNDARY	
ALTERATION TO EXISTING DESIGNATION BOUNDARY	
LONG SECTION	
EXISTING GROUND SURFACE	
PROPOSED DESIGN	



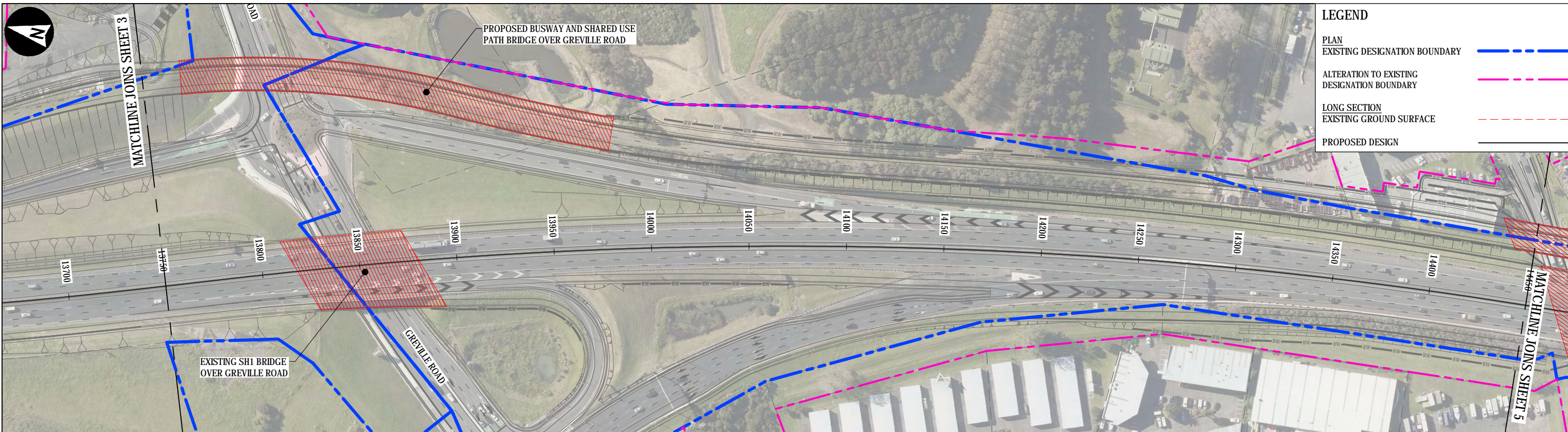
DATUM RL = 41.0m	
VERTICAL ALIGNMENT	
HORIZONTAL ALIGNMENT	D, CL=140, K=66.2 L=739.2, R=1450 L=462, P=-5.5% L=134.6, K=182.2 L=150.0, CL=79, L=312.9
SUPER ELEVATION	G=3.0%
DESIGN	73.947, 73.894, 73.781, 73.607, 73.373, 73.078, 72.723, 72.308, 71.832, 71.296, 70.700, 70.043, 69.326, 88.548, 67.710, 66.812, 65.853, 64.834, 63.755, 62.647, 61.539, 60.432, 59.324, 58.216, 57.109, 56.002, 54.912, 53.844, 52.798, 51.774, 50.772, 49.792, 48.833, 47.890, 46.947
EXISTING	74.156, 74.106, 73.987, 73.839, 73.606, 73.312, 72.870, 72.552, 71.966, 71.460, 70.916, 70.303, 69.456, 68.647, 67.763, 66.881, 65.868, 64.961, 63.900, 62.763, 61.695, 60.525, 59.568, 58.402, 57.419, 56.372, 55.313, 54.153, 53.192, 52.054, 50.974, 49.997, 49.030, 48.051, 47.129
CHAINAGE	13060, 13080, 13100, 13120, 13140, 13160, 13180, 13200, 13220, 13240, 13260, 13280, 13300, 13320, 13340, 13360, 13380, 13400, 13420, 13440, 13460, 13480, 13500, 13520, 13540, 13560, 13580, 13600, 13620, 13640, 13660, 13680, 13700, 13720, 13740

LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



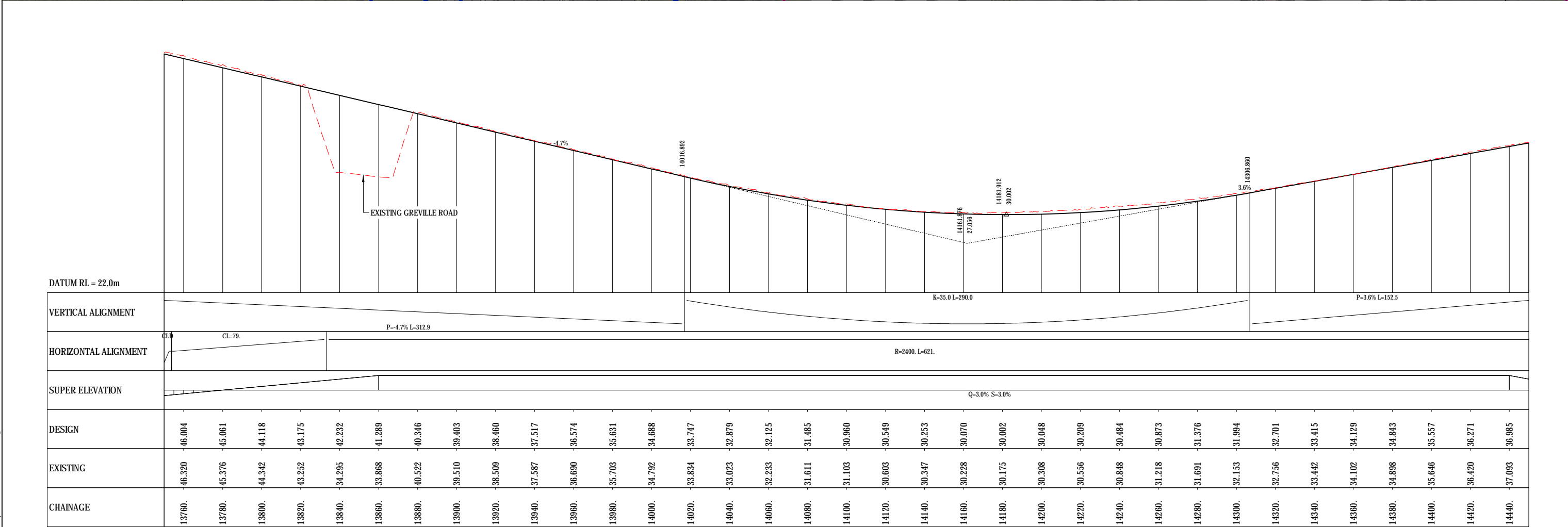
CLIENT	REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY NOT FOR CONSTRUCTION	PROJECT	NORTHERN CORRIDOR IMPROVEMENTS				
	A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1		APPROVED	TITLE	PLAN & LONG SECTION SH1 MAINLINE (MC00) SHEET 3			
					DRAWN V. SMITH		DATE	PROJECT No.		STAGE	WP	TYPE	NUMBER
					DESIGNED M. FAN		06/10/16	250310	5DOC	3DES	DRG	0403	A
					CHECKED M. FRANCIS		J. HIND						
							J. HIND						

Date: 06/10/16 2:02:07 pm. Client: NZTA. Drawing: C:\PI\WORK\1001\1001_5010_DOC\DES\3DCORRIDOR.DWG

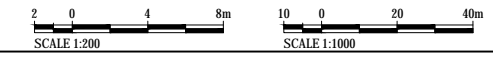


LEGEND

PLAN	---
EXISTING DESIGNATION BOUNDARY	---
ALTERATION TO EXISTING DESIGNATION BOUNDARY	---
LONG SECTION	---
EXISTING GROUND SURFACE	---
PROPOSED DESIGN	---



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



Planfile: 8192008.21204.dwg Date: 22/04/2016 10:08:00 AM User: C:\PI\WORK\101908\2010.DWG DES\BRC\BRC.DWG

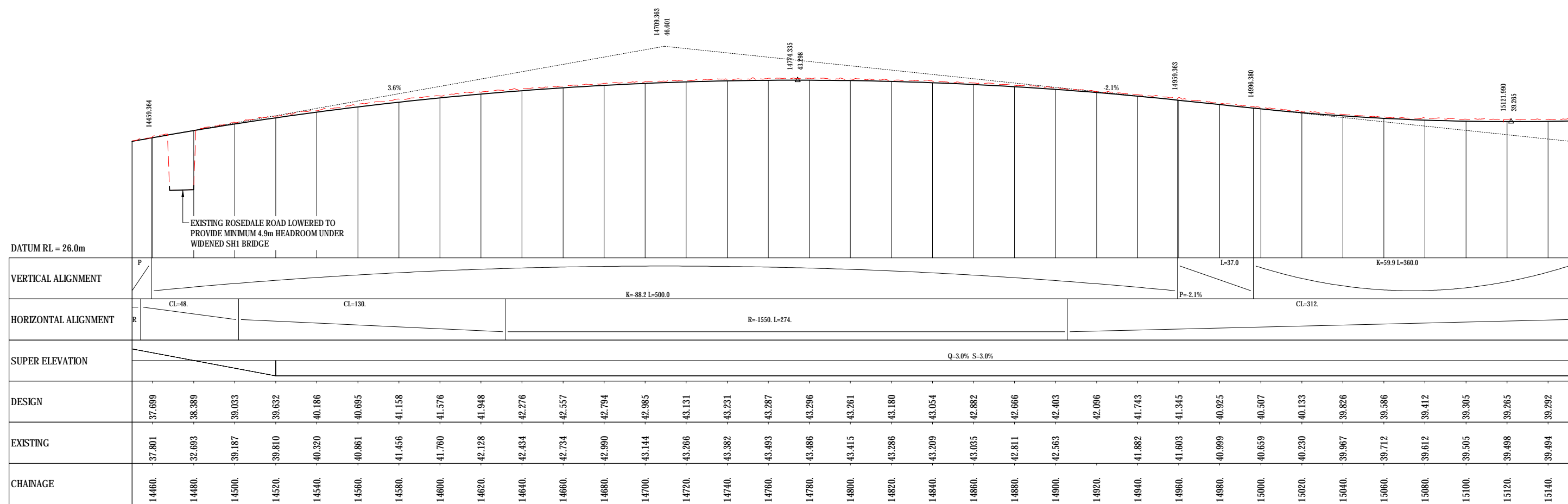
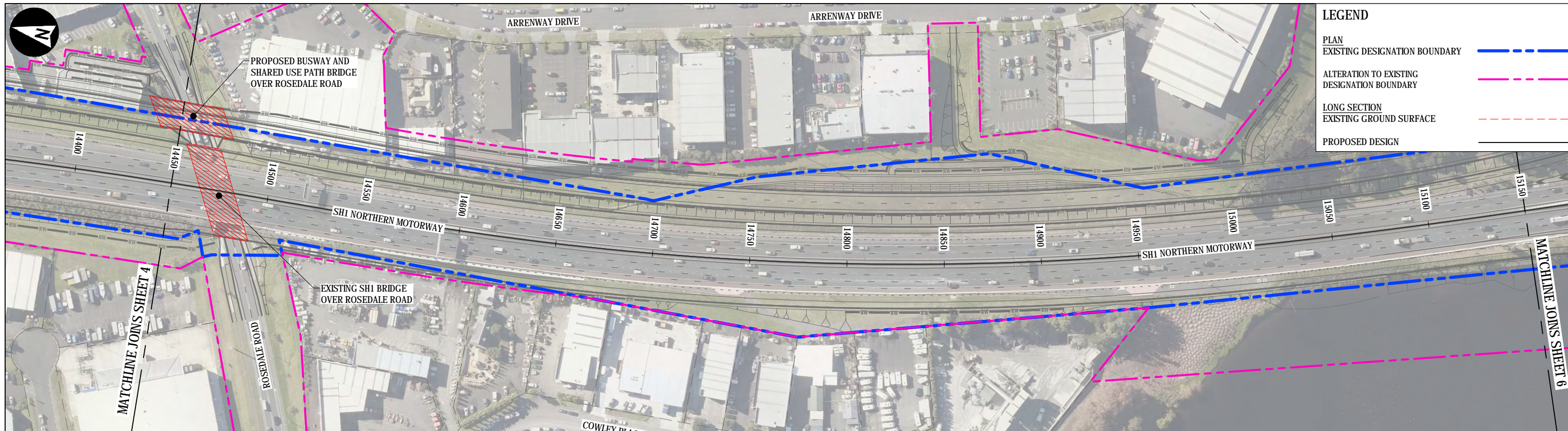


REV	DATE	REVISION DETAILS	APPROVED
A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE

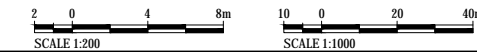
SCALE	AS SHOWN	SIZE	A1
DRAWN	V. SMITH	CHECKED	M. FRANCIS

PRELIMINARY	NOT FOR CONSTRUCTION
APPROVED	DATE: 06/10/16
J. HIND	J. HIND

PROJECT	NORTHERN CORRIDOR IMPROVEMENTS					
TITLE	PLAN & LONG SECTION SH1 MAINLINE (MC00) SHEET 4					
DRAWING No.	PROJECT No.	STAGE	WP	TYPE	NUMBER	REV
	250310	5DOC	3DES	DRG	0404	A



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



Date: 06/10/16 11:24 am, Client: NZTA, Drawing: C:\PI\WORK\2016\2016_06\2016_06_01\2016_06_01.DWG, Title: SH1 CORRIDOR IMPROVEMENTS

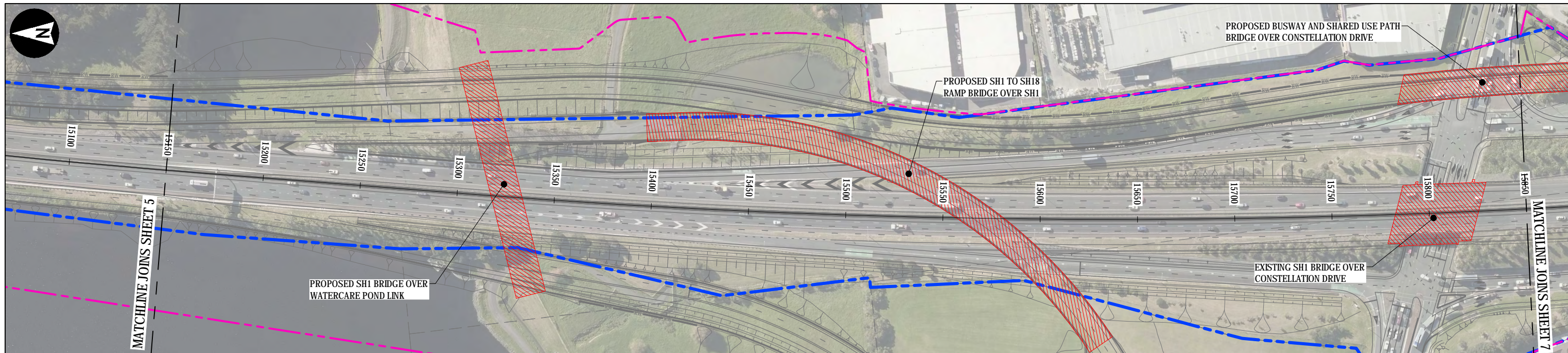


REV	DATE	REVISION DETAILS	APPROVED
A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE

SCALE	SIZE
AS SHOWN	A1

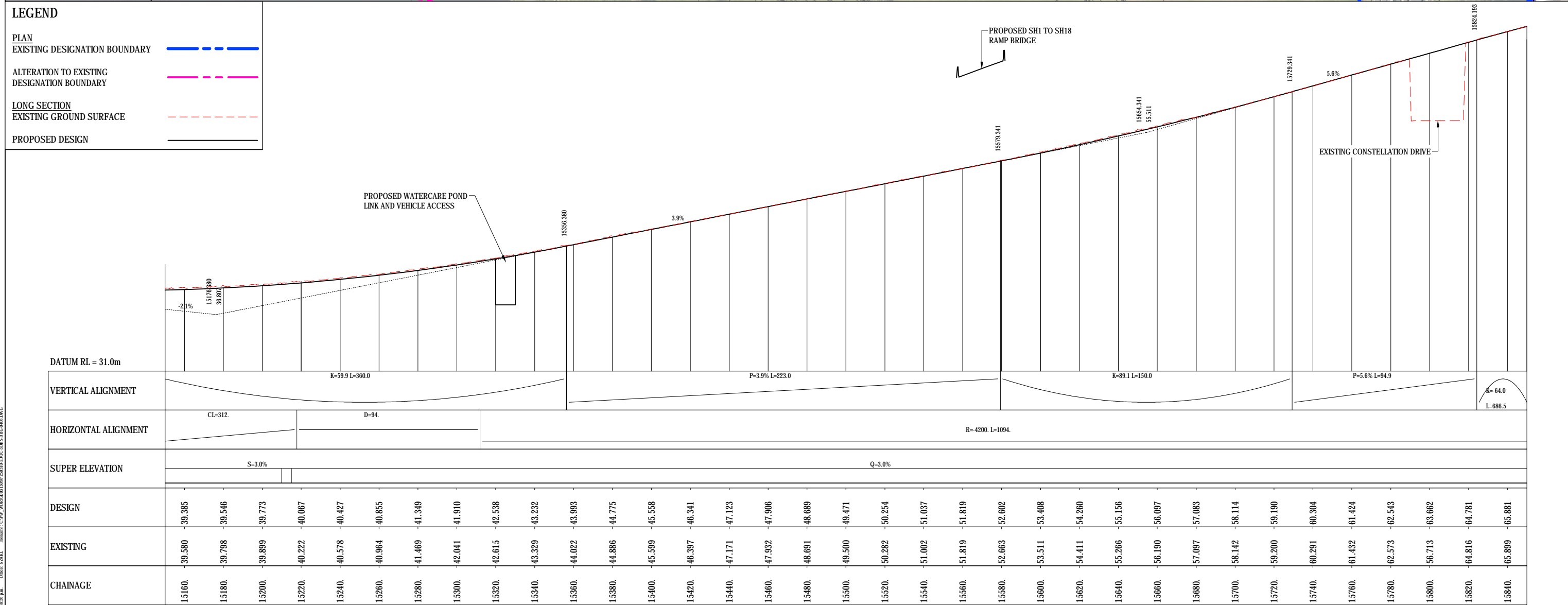
PRELIMINARY	
NOT FOR CONSTRUCTION	
APPROVED	DATE
J. HIND	06/10/16
J. HIND	

PROJECT	NORTHERN CORRIDOR IMPROVEMENTS			
TITLE	PLAN & LONG SECTION SH1 MAINLINE (MC00) SHEET 5			
DRAWING No.	PROJECT No.	STAGE	WP	TYPE
	250310	5DOC	3DES	DRG
NUMBER	REV			
0405	A			

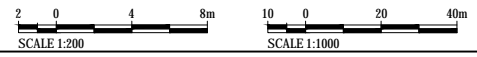


LEGEND

PLAN EXISTING DESIGNATION BOUNDARY	
ALTERATION TO EXISTING DESIGNATION BOUNDARY	
LONG SECTION EXISTING GROUND SURFACE	
PROPOSED DESIGN	

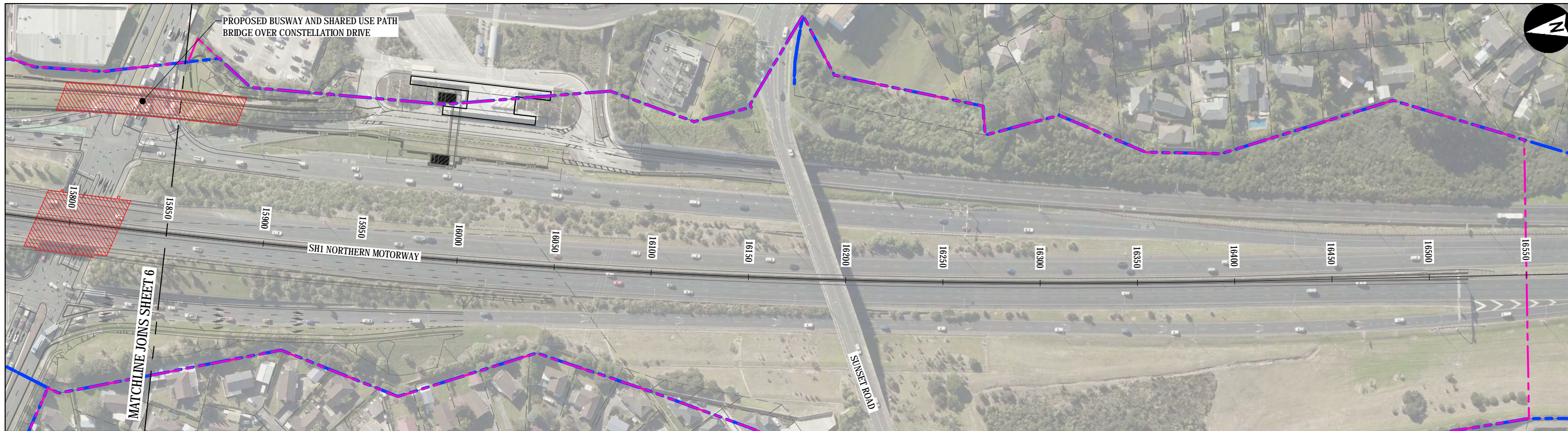


LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



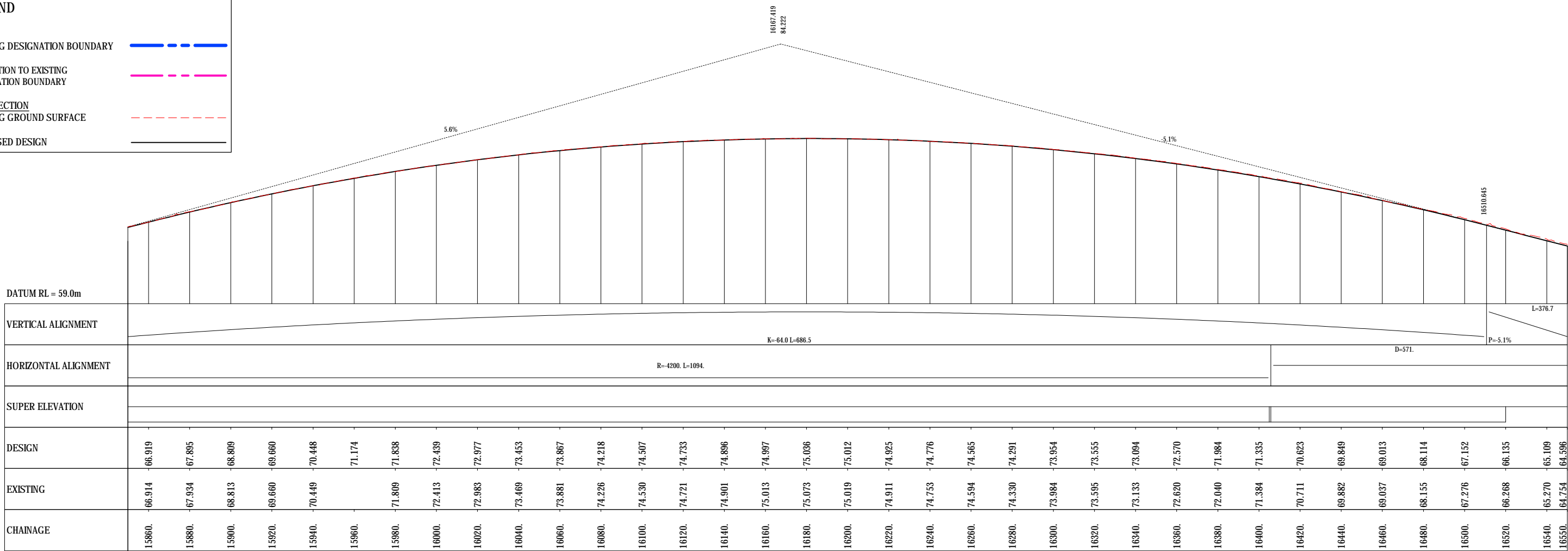
CLIENT	REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY	PROJECT
	A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	NOT FOR CONSTRUCTION	NORTHERN CORRIDOR IMPROVEMENTS
							APPROVED	
					DRAWN		DATE	TITLE
					V. SMITH		06/10/16	PLAN & LONG SECTION
					M. FAN			SH1 MAINLINE (MC00)
					CHECKED			SHEET 6
					M. FRANCIS			
					J. HIND			
					J. HIND			
DRAWING No.	PROJECT No.	STAGE	WP	TYPE	NUMBER	REV		
250310	5DOC	3DES	DRG	0406	A			

Planfile: R101001_23036.dwg Date: 06/10/16 Drawn: V. SMITH Checked: M. FRANCIS Project: NZTA



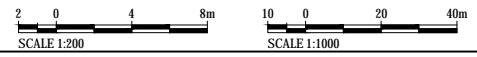
LEGEND

PLAN	
EXISTING DESIGNATION BOUNDARY	
ALTERATION TO EXISTING DESIGNATION BOUNDARY	
LONG SECTION	
EXISTING GROUND SURFACE	
PROPOSED DESIGN	



DATUM RL = 59.0m																																				
VERTICAL ALIGNMENT	L=376.7																																			
HORIZONTAL ALIGNMENT	R=4200, L=1094																																			
SUPER ELEVATION																																				
DESIGN	66.919	67.895	68.809	69.660	70.448	71.174	71.838	72.439	72.977	73.453	73.867	74.218	74.507	74.733	74.896	74.997	75.036	75.012	74.925	74.776	74.565	74.291	73.954	73.555	73.094	72.570	71.984	71.335	70.623	69.849	69.013	68.114	67.152	66.135	65.109	64.596
EXISTING	66.914	67.934	68.813	69.660	70.449	71.174	71.809	72.413	72.983	73.469	73.881	74.226	74.530	74.721	74.901	75.013	75.073	75.019	74.911	74.753	74.594	74.330	73.984	73.595	73.133	72.620	72.040	71.384	70.711	69.882	69.037	68.155	67.276	66.268	65.270	64.754
CHAINAGE	15880	15880	15900	15920	15940	15960	15980	16000	16020	16040	16060	16080	16100	16120	16140	16160	16180	16200	16220	16240	16260	16280	16300	16320	16340	16360	16380	16400	16420	16440	16460	16480	16500	16520	16540	16550

LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC00
1:1000H 1:200V (A1)



Planfile: R161001_23107.dwg, Client: NZTA, Drawing: C:\PI\WORK\1010106_2010_DOC\105\105C\105C.dwg



REV	DATE	REVISION DETAILS	APPROVED
A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE

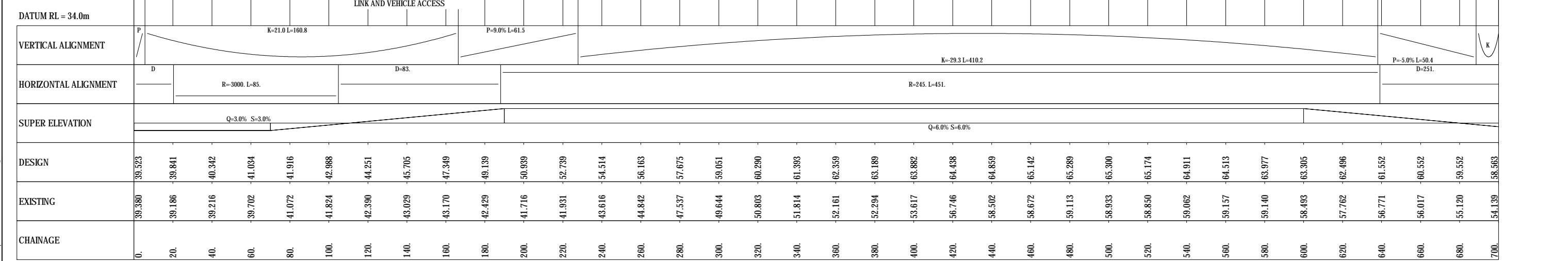
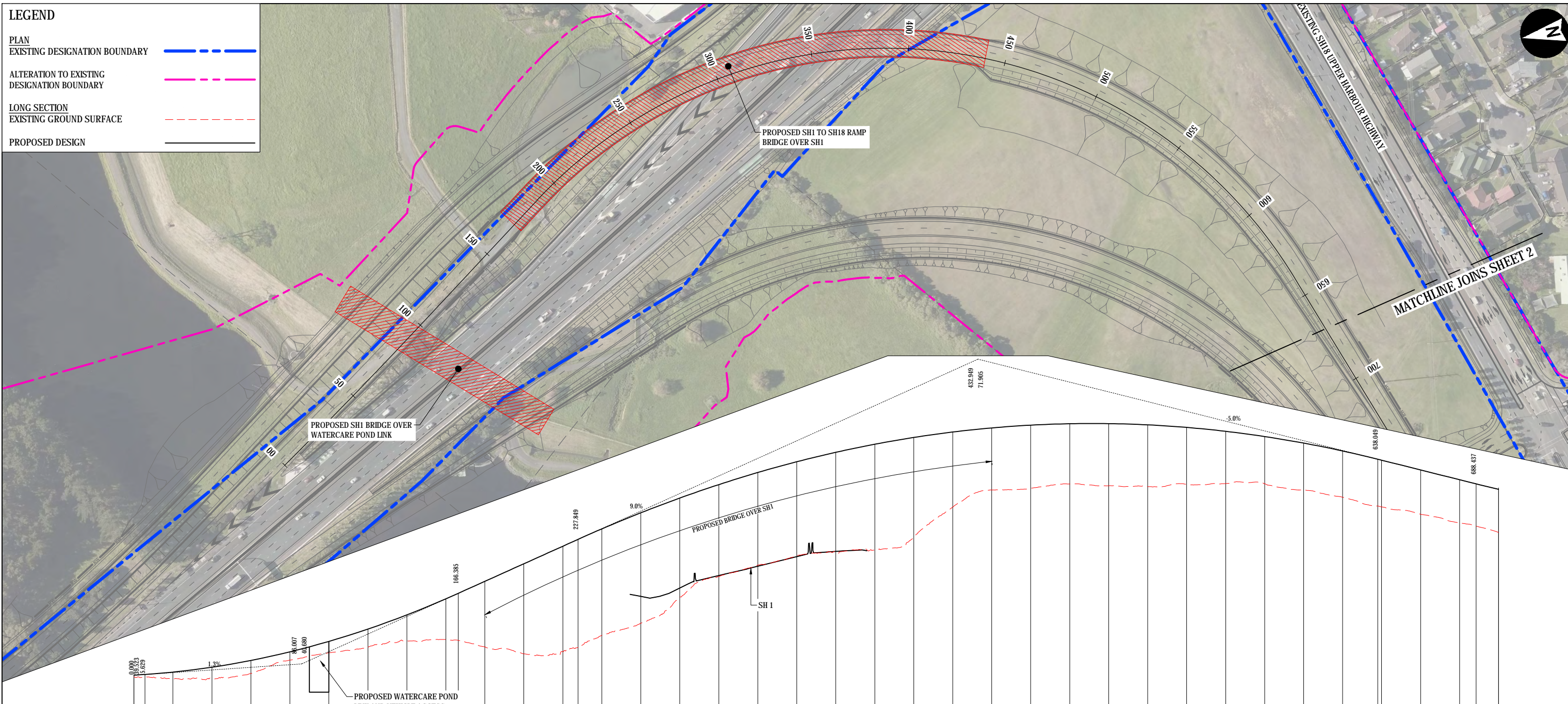
SCALE	AS SHOWN	SIZE	A1
DRAWN	V. SMITH	CHECKED	M. FRANCIS

PRELIMINARY
 NOT FOR CONSTRUCTION
 APPROVED
 J. HIND
 DATE: 06/10/16
 J. HIND

PROJECT	NORTHERN CORRIDOR IMPROVEMENTS				
TITLE	PLAN & LONG SECTION SH1 MAINLINE (MC00) SHEET 7				
DRAWING No.	PROJECT No.	STAGE	WP	TYPE	NUMBER
	250310	5DOC	3DES	DRG	0407
REV	A				

LEGEND

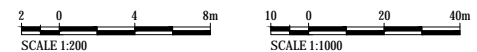
PLAN	
EXISTING DESIGNATION BOUNDARY	
ALTERATION TO EXISTING DESIGNATION BOUNDARY	
LONG SECTION	
EXISTING GROUND SURFACE	
PROPOSED DESIGN	



DATUM RL = 34.0m

DESIGN	EXISTING	CHAINAGE
39.523	39.380	0.
39.841	39.186	20.
40.342	39.216	40.
41.034	39.702	60.
41.916	41.072	80.
42.988	41.824	100.
44.251	42.390	120.
45.705	43.029	140.
47.349	43.170	160.
49.139	42.429	180.
50.939	41.716	200.
52.739	41.931	220.
54.514	43.616	240.
56.163	44.842	260.
57.675	47.537	280.
59.051	49.644	300.
60.290	50.803	320.
61.393	51.814	340.
62.359	52.161	360.
63.189	52.294	380.
63.882	53.617	400.
64.438	56.746	420.
64.859	58.502	440.
65.142	58.672	460.
65.289	59.113	480.
65.300	58.933	500.
65.174	58.850	520.
64.911	59.062	540.
64.513	59.157	560.
63.977	59.140	580.
63.305	58.493	600.
62.496	57.762	620.
61.552	56.771	640.
60.552	56.017	660.
59.552	55.120	680.
58.563	54.139	700.

LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC30
1:1000H 1:200V (A1)

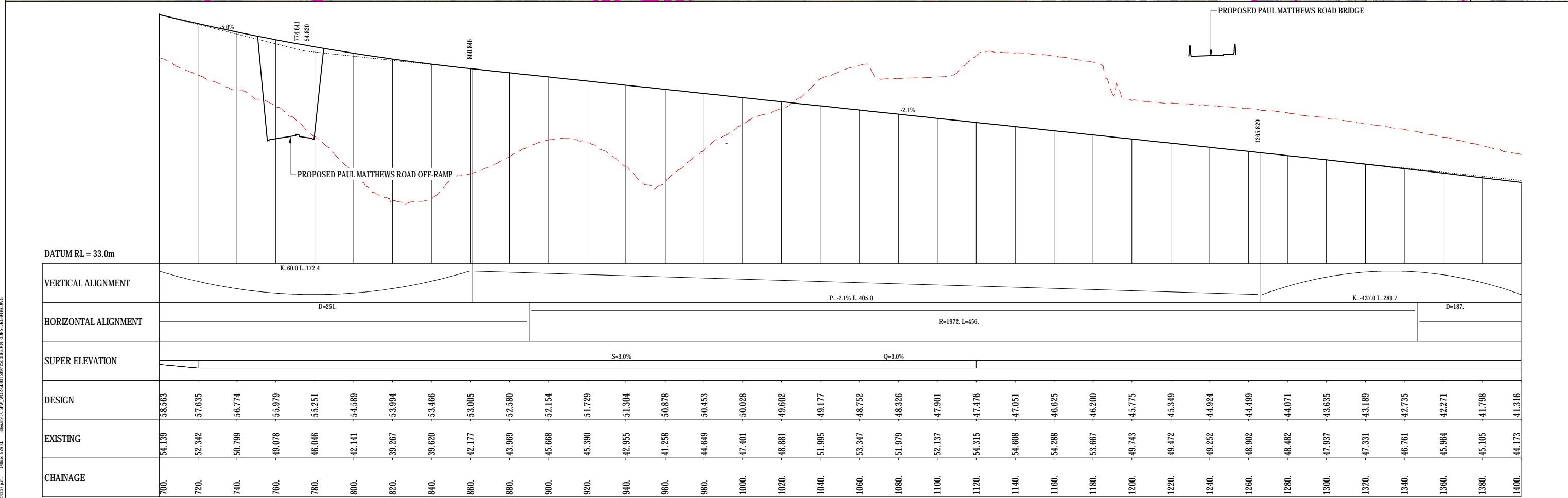
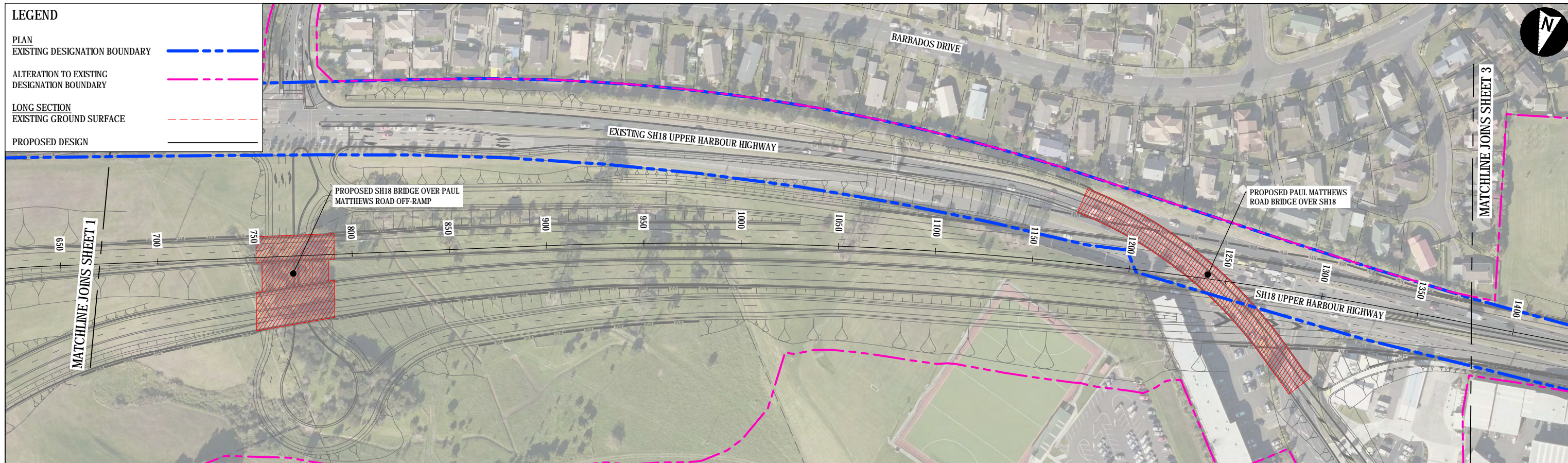


CLIENT		REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY	PROJECT
aurecon		A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	NOT FOR CONSTRUCTION	NORTHERN CORRIDOR IMPROVEMENTS
NZ TRANSPORT AGENCY WAKA KOTAHI						DRAWN		APPROVED	TITLE
						V. SMITH		DATE	PLAN & LONG SECTION
						M. FAN		06/10/16	SH18 WESTBOUND (MC30)
						CHECKED			SHEET 1
						M. FRANCIS			
						J. HIND			
						J. HIND			
DRAWING No.	PROJECT No.	STAGE	WP	TYPE	NUMBER	REV			
250310	5DOC	3DES	DRG	0415	A				

Date: 06/10/16 11:46 am
 User: C:\PI\WORK\101016\3010.DWG
 Title: SH18 WESTBOUND (MC30) SHEET 1

LEGEND

- PLAN
EXISTING DESIGNATION BOUNDARY ---
- ALTERATION TO EXISTING
DESIGNATION BOUNDARY ---
- LONG SECTION
EXISTING GROUND SURFACE ---
- PROPOSED DESIGN ---



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC30
1:1000H 1:200V (A1)

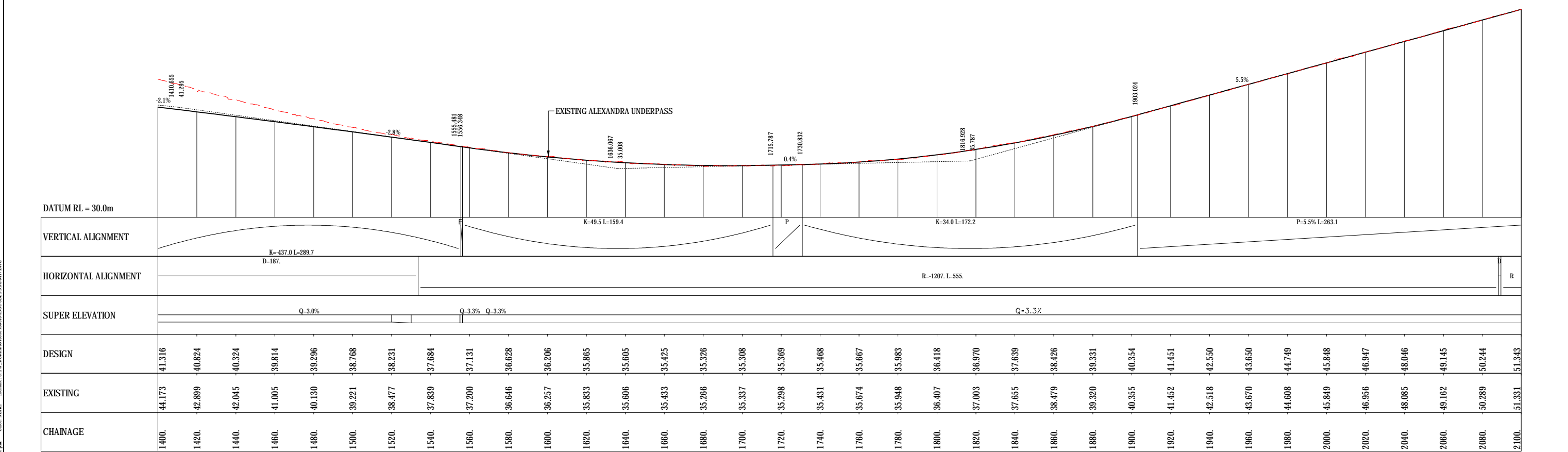
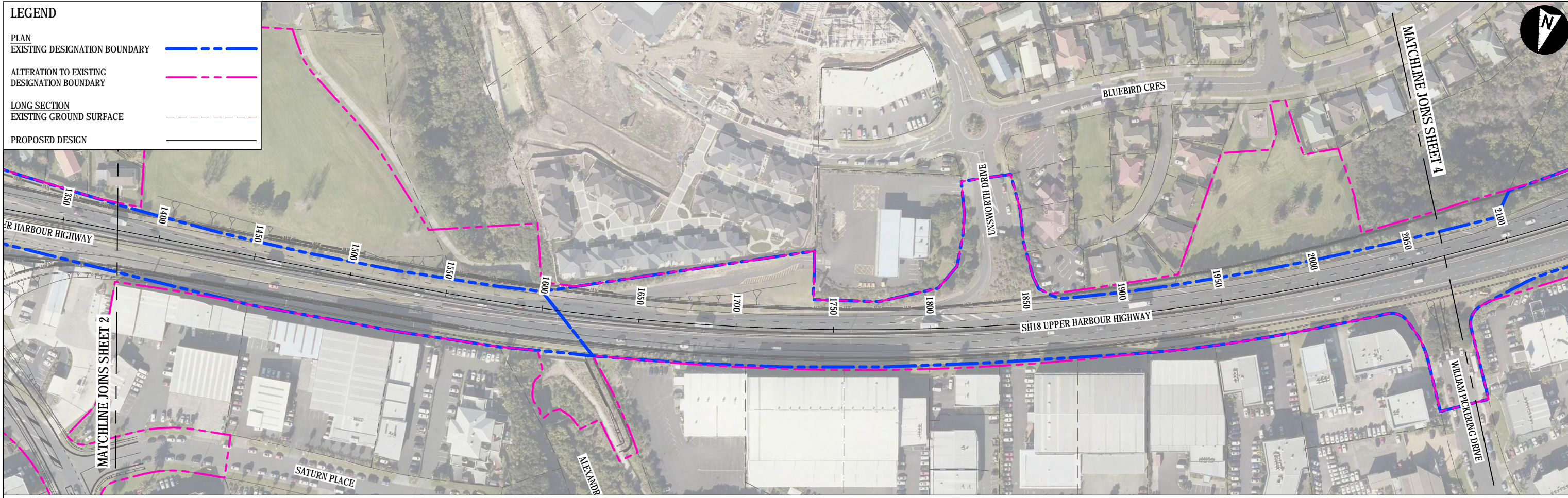


CLIENT		REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY	PROJECT
AURECON		A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	NOT FOR CONSTRUCTION	NORTHERN CORRIDOR IMPROVEMENTS
NZ TRANSPORT AGENCY WAKA KOTAHI						DRAWN V. SMITH		APPROVED	
						DESIGNED M. FAN		J. HIND	TITLE
						CHECKED M. FRANCIS		J. HIND	PLAN & LONG SECTION SH18 WESTBOUND (MC30) SHEET 2
								J. HIND	DRAWING No.
									PROJECT No. 250310
									STAGE 5DOC
									WP 3DES
									TYPE DRG
									NUMBER 0416
									REV A

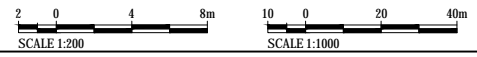
Drawn: M. FRANCIS 14/07/16, Checked: M. FRANCIS 14/07/16, Date: 14/07/16, Scale: 1:1000, Project: Northern Corridor Improvements, Sheet: 2 of 2

LEGEND

PLAN	
EXISTING DESIGNATION BOUNDARY	
ALTERATION TO EXISTING DESIGNATION BOUNDARY	
LONG SECTION	
EXISTING GROUND SURFACE	
PROPOSED DESIGN	



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC30
1:1000H 1:200V (A1)

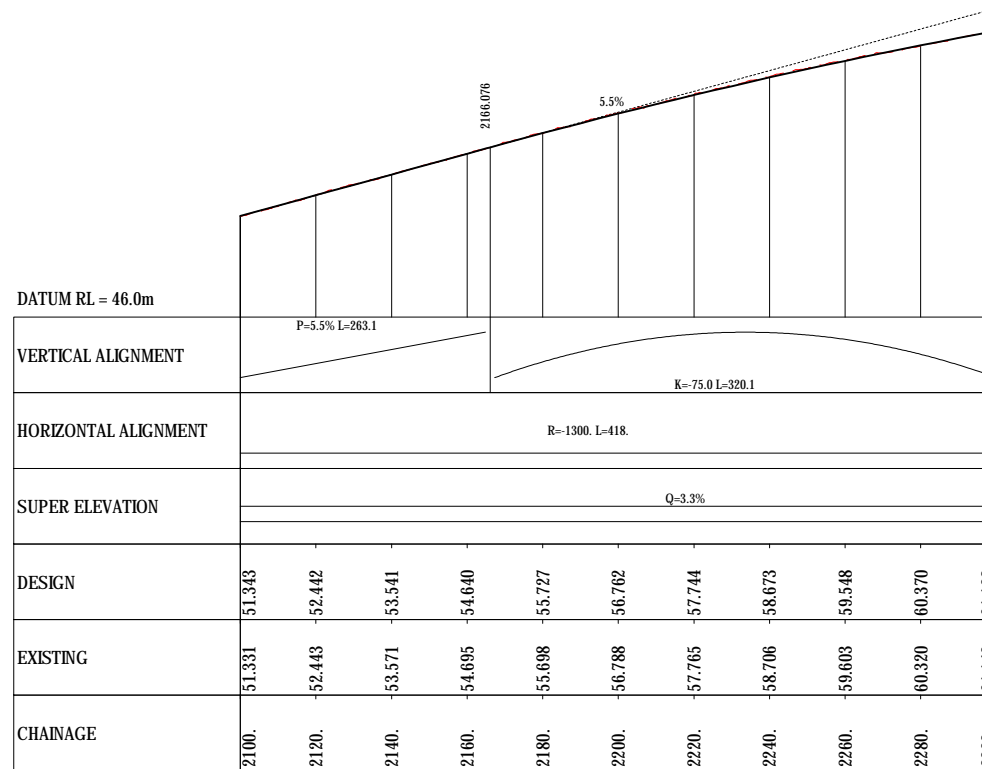
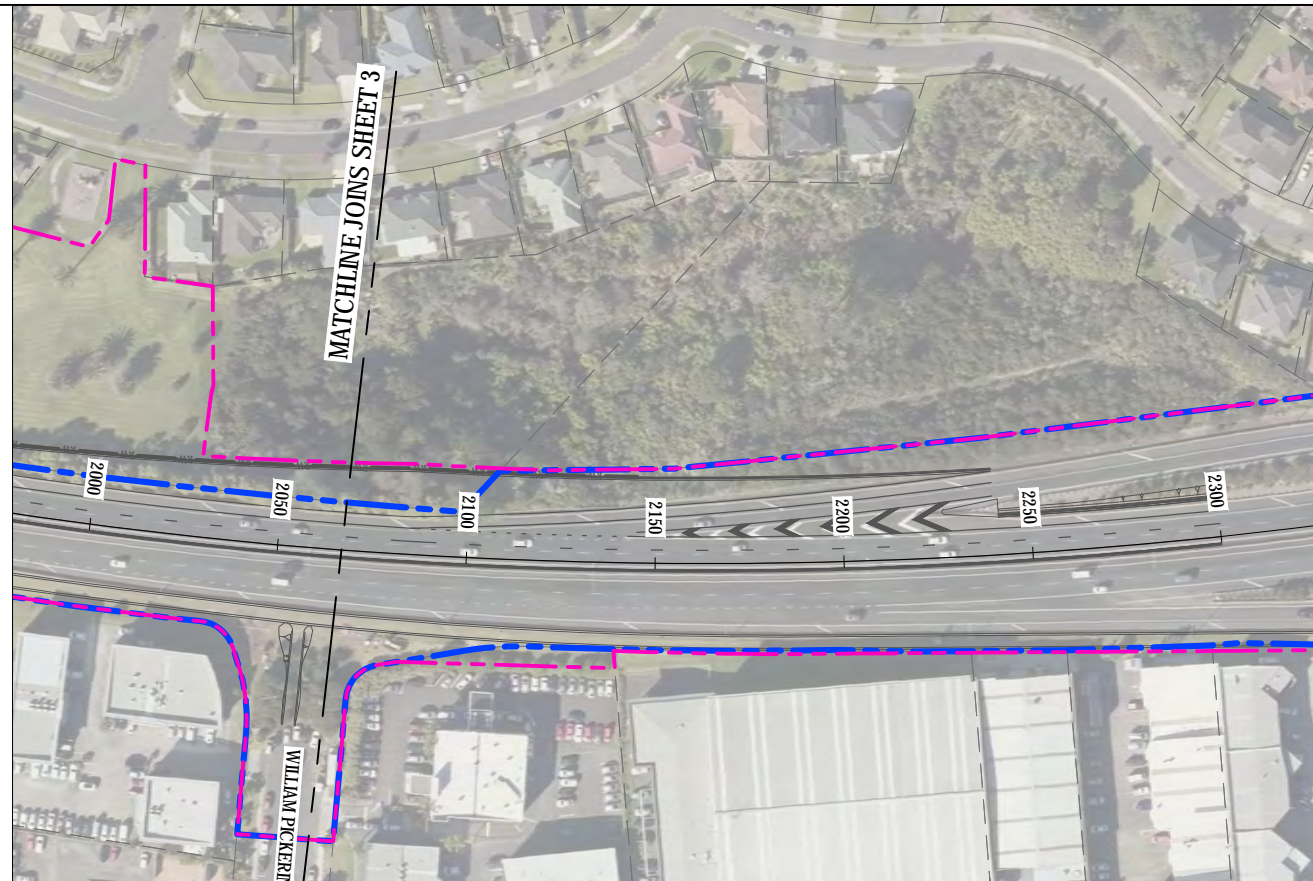


CLIENT		REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	PRELIMINARY	PROJECT
aurecon		A	06/10/16	ISSUED FOR ROAD SAFETY AUDIT	G. MOORE	AS SHOWN	A1	NOT FOR CONSTRUCTION	NORTHERN CORRIDOR IMPROVEMENTS
NZ TRANSPORT AGENCY WAKA KOTAHI						DRAWN		APPROVED	
						V. SMITH		DATE	
						M. FAN		06/10/16	
						CHECKED			TITLE
						M. FRANCIS		J. HIND	PLAN & LONG SECTION
								J. HIND	SH18 WESTBOUND (MC30)
									SHEET 3
DRAWING No.	PROJECT No.	STAGE	WP	TYPE	NUMBER	REV			
250310	5DOC	3DES	DRG	0417	A				

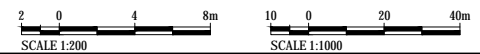
Date: 06/10/16 14:11:16
 User: C:\PI\WORK\250310\5DOC\DESIGN\DRAWING

LEGEND

- PLAN
EXISTING DESIGNATION BOUNDARY ---
- ALTERATION TO EXISTING
DESIGNATION BOUNDARY ---
- LONG SECTION
EXISTING GROUND SURFACE ---
- PROPOSED DESIGN ---



LONGITUDINAL SECTION ALONG DESIGN CONTROL LINE MC30
1:1000H 1:200V (A1)



D:\1604-01\01\01\161016_141319.dwg - 06/10/16 10:08:00 AM - C:\Program Files\Autodesk\AutoCAD 2016\acad.lsp



CLIENT		REV		DATE		REVISION DETAILS		APPROVED		SCALE		SIZE		PRELIMINARY NOT FOR CONSTRUCTION		PROJECT		NORTHERN CORRIDOR IMPROVEMENTS	
		A		06/10/16		ISSUED FOR ROAD SAFETY AUDIT		G. MOORE		AS SHOWN		A1		APPROVED DATE 06/10/16 J. HIND J. HIND		TITLE PLAN & LONG SECTION SH18 WESTBOUND (MC30) SHEET 4		DRAWING No. 250310 - STAGE 5DOC - WP 3DES - TYPE DRG - NUMBER 0418 - REV A	
										DRAWN		V. SMITH							
										DESIGNED		M. FAN							
												CHECKED		M. FRANCIS					