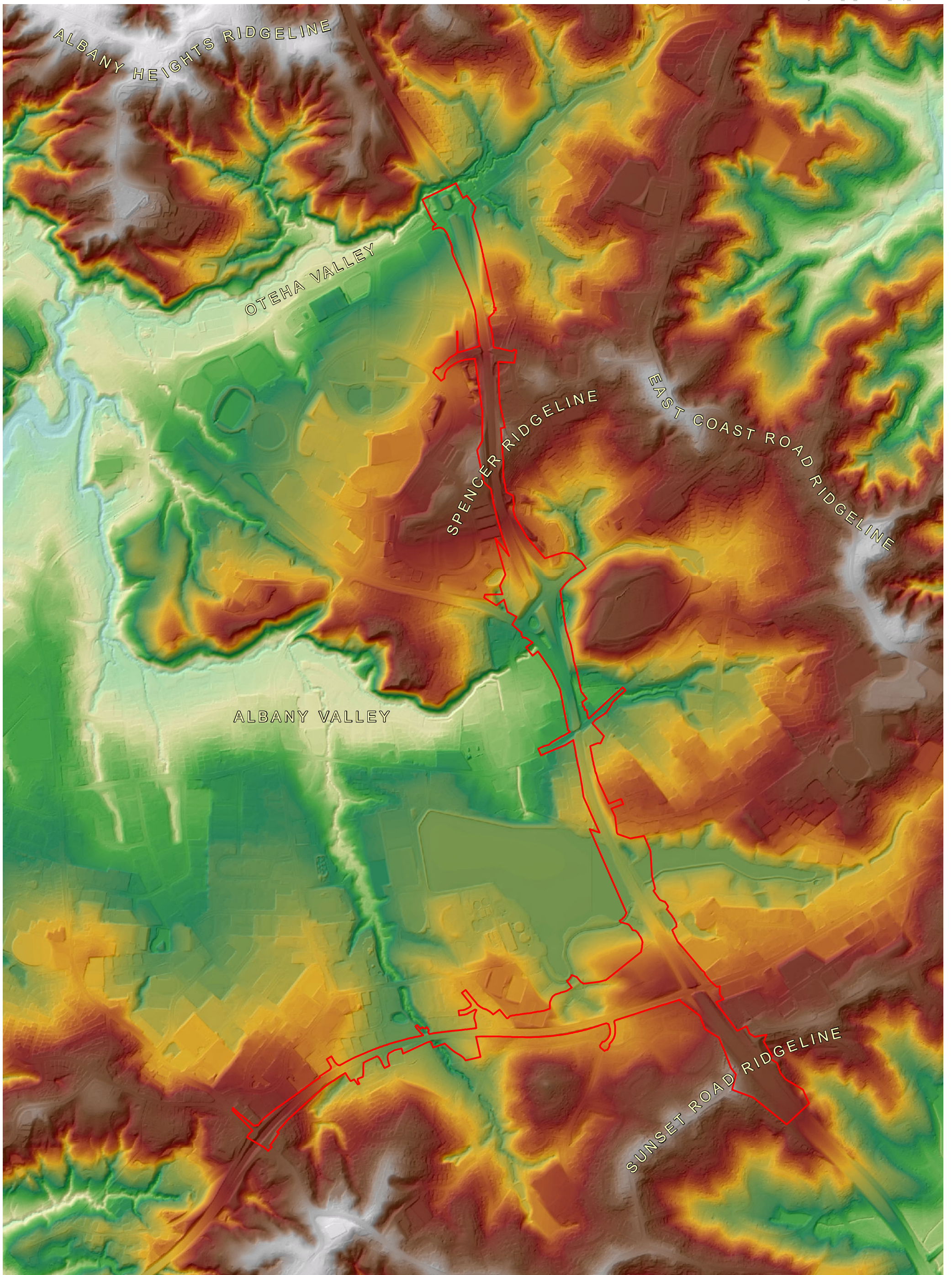




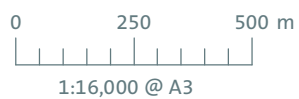
This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use, in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

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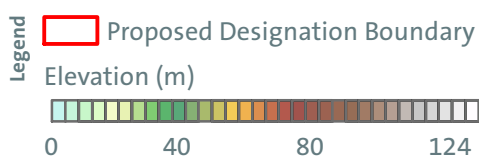




This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use, in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.



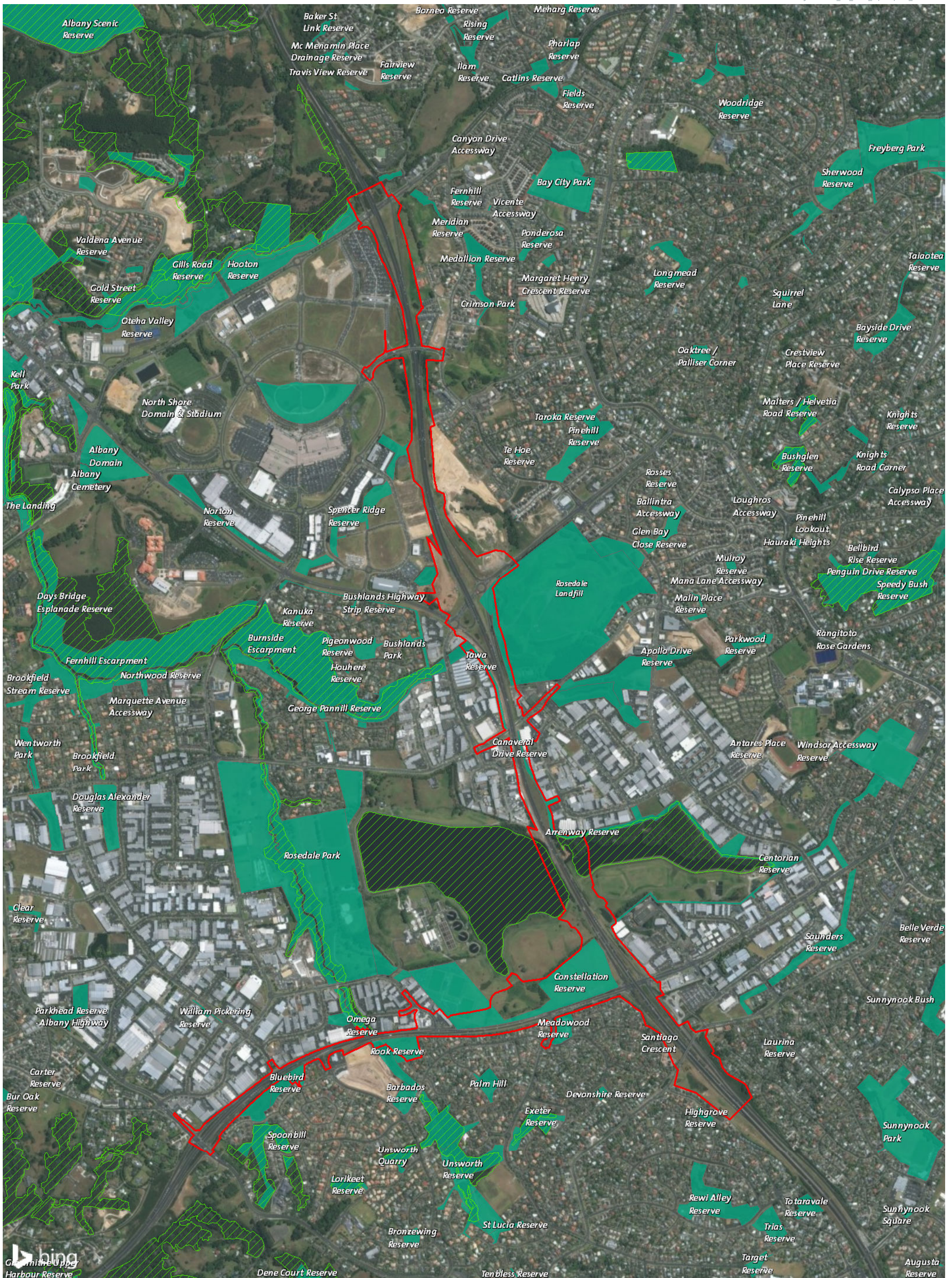
Data Sources: Auckland Council Lidar (2013), Aurecon Designation.
Projection: NZGD 2000 New Zealand Transverse Mercator

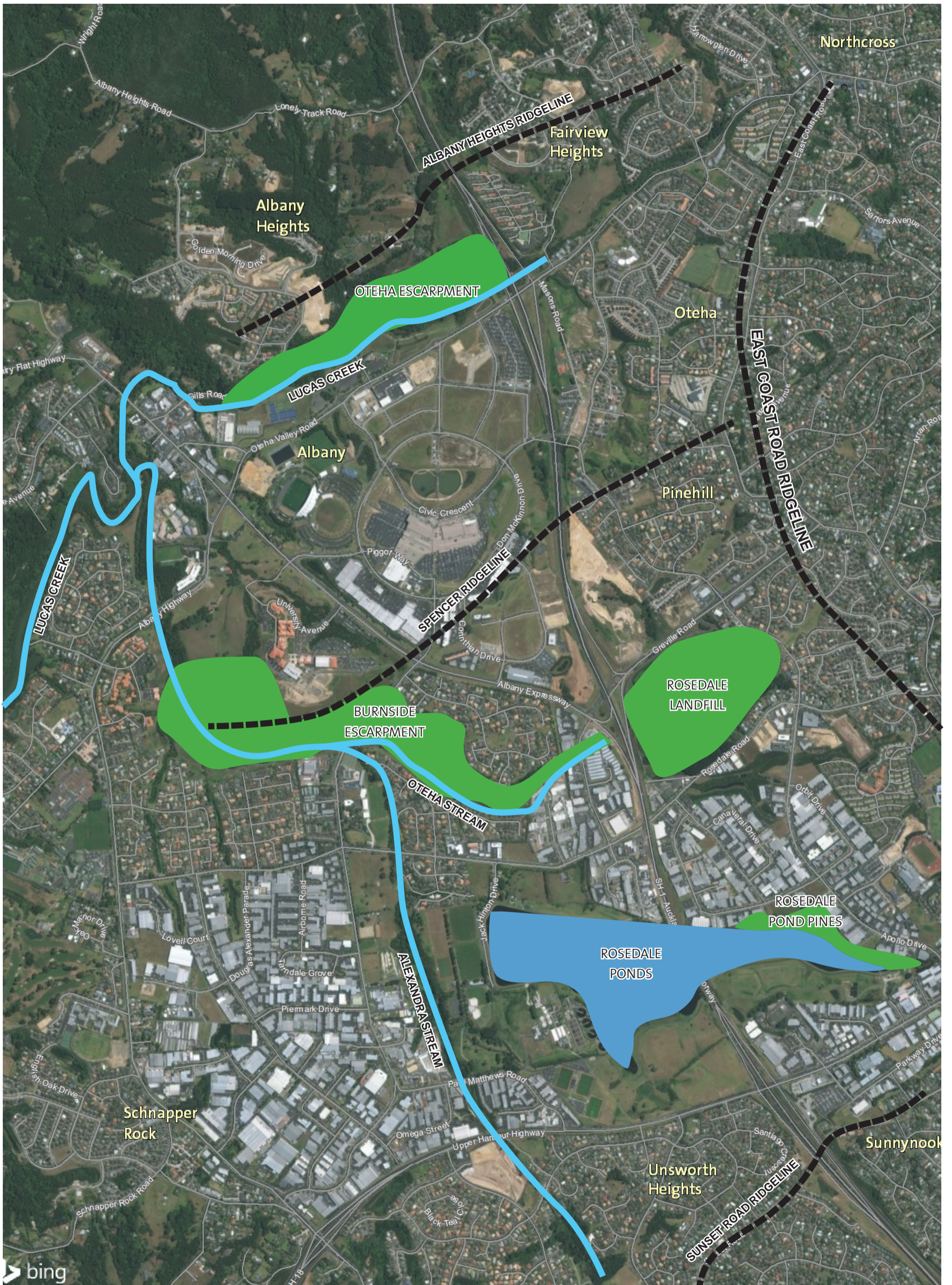


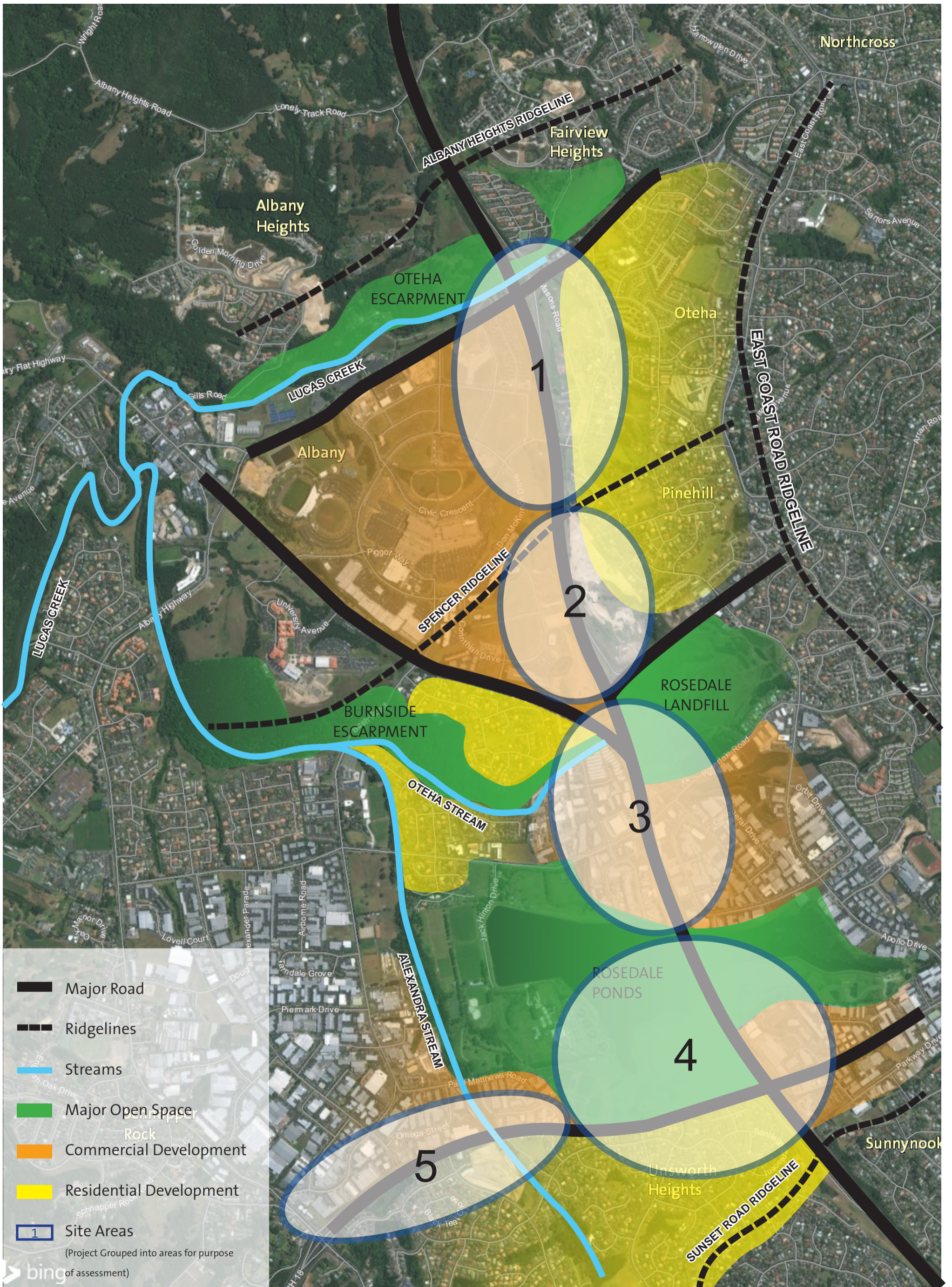
This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use, in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.



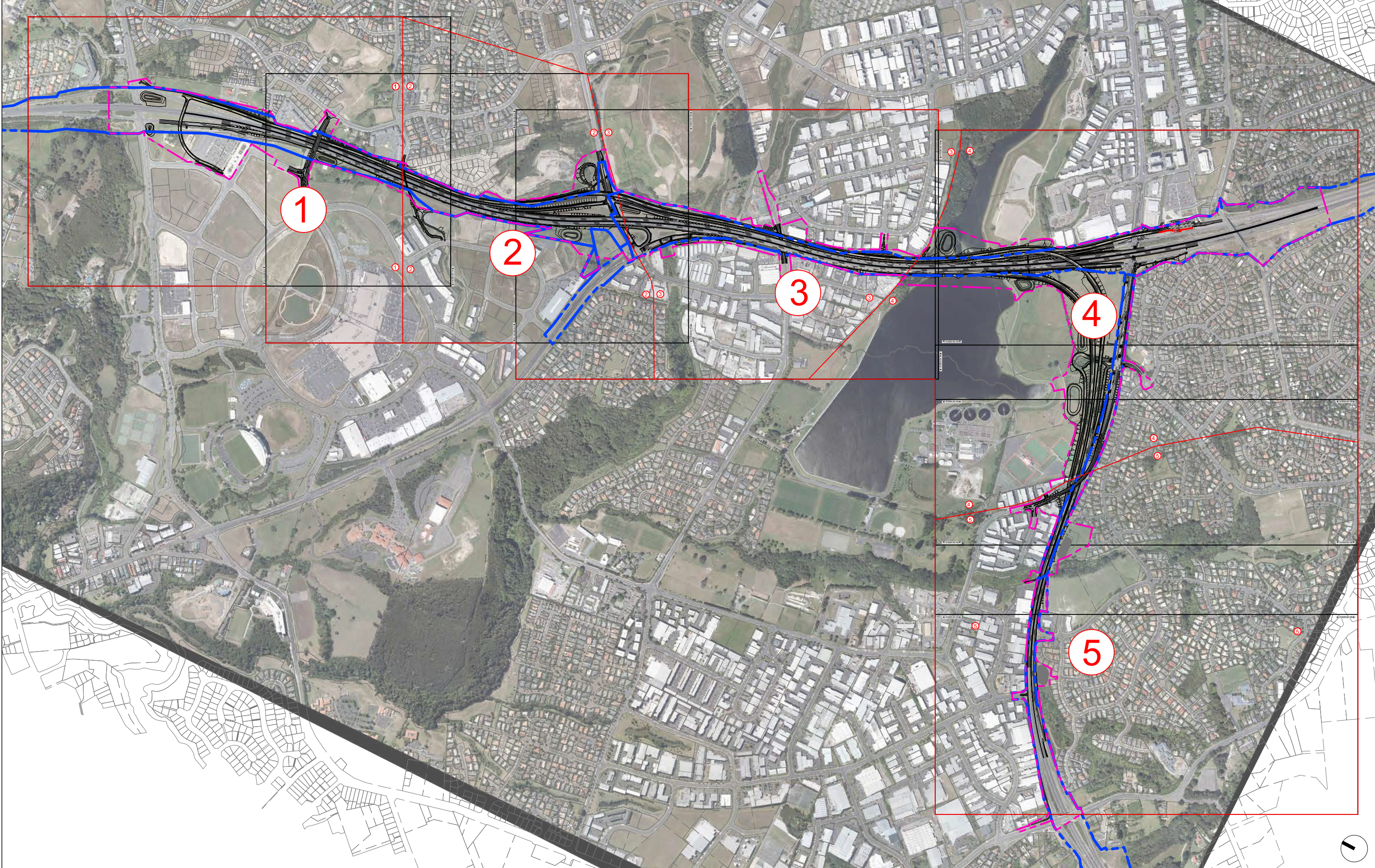
This graphic has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use, in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.







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Printed 10/10/2016 2:53:18 p.m.

NOTES

CONTRACTORS TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING WORK;
 CONTRACTORS ARE RESPONSIBLE FOR CONFIRMING THE LOCATION OF ALL UNDERGROUND SERVICES ON SITE PRIOR TO COMMENCING WORK;
 FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.

KEY

- Proposed Designation Boundary
- Existing Designation Boundary
- 5 Site Area

REV DATE DESCRIPTION

A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT

NZ Transport Agency

CONSULTANTS

NORTHERN CORRIDOR

SITE AREAS (OVERVIEW)
LV08

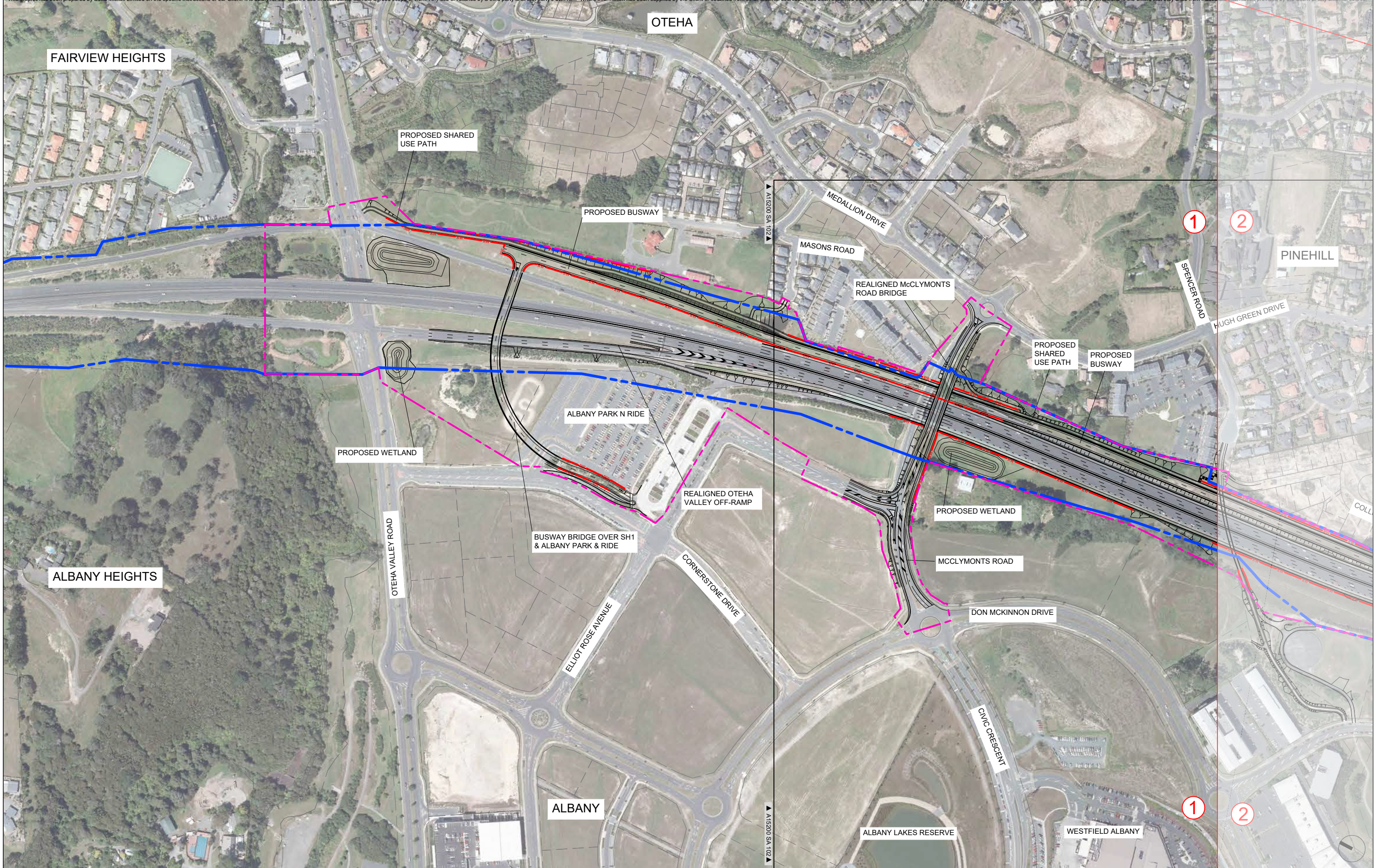
Preliminary

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Check	TLi	1:13000 @ A3	
Appvd	JGo		

DRAWING NO.	REVISION
A15200_SA_100	(B)

U:\2015\A15200_SBy_Northern_Corridor_Improvements\CAD\A15200_Base_20160822.dwg

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 FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.

KEY

- Proposed Designation Boundary
- Proposed Retaining Wall
- Existing Designation Boundary

REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT
 NZ Transport Agency

CONSULTANTS

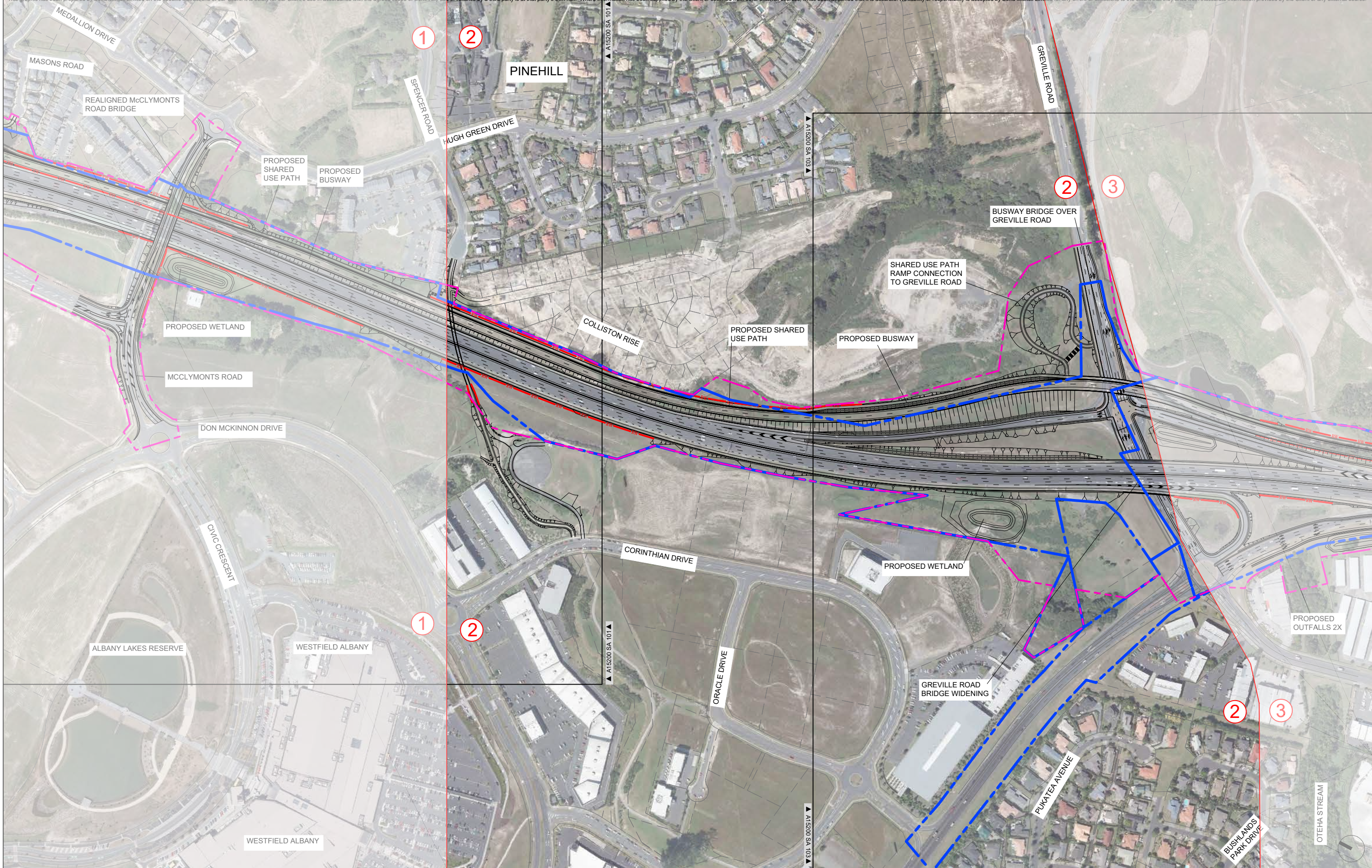
Preliminary

NORTHERN CORRIDOR

SITE AREA 1
 LV09

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Check	TLi	1:4000 @ A3	
Appr'd	JGo		
DRAWING NO.	REVISION		
A15200_SA_101	(B)		

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 FIGURED DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALED DIMENSIONS.

KEY
 - - - - - Proposed Designation Boundary
 - - - - - Proposed Retaining Wall
 - - - - - Existing Designation Boundary

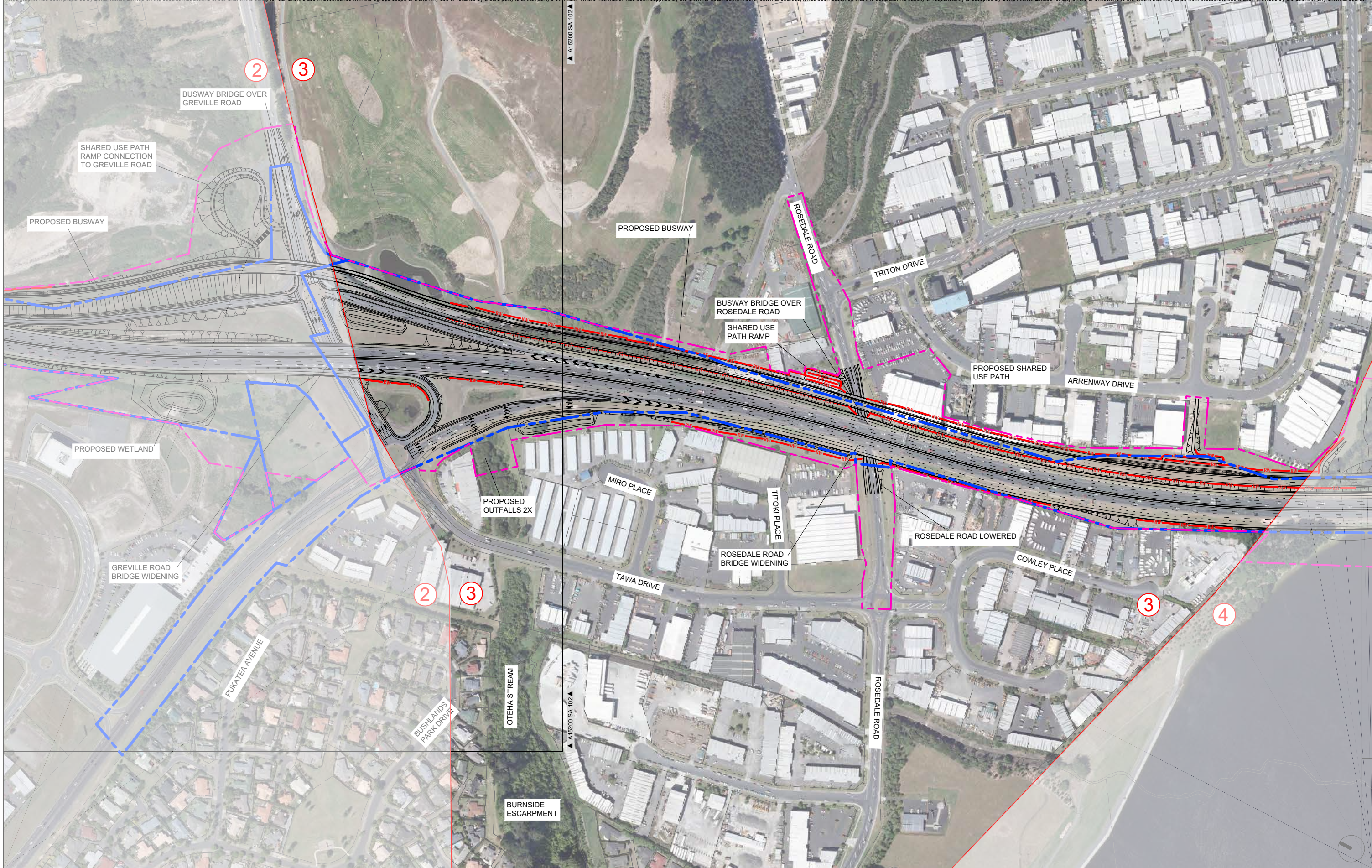
REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT: NZ Transport Agency
 CONSULTANTS: [Redacted]
Preliminary

NORTHERN CORRIDOR
 SITE AREA 2
 LV10

Design	TLI	Scale	Date
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Check	TLI	1:4000 @ A3	
Appr'd	JGo		
DRAWING NO.		REVISION	
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KEY

- Proposed Designation Boundary
- Proposed Retaining Wall
- Existing Designation Boundary

REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT
 NZ Transport Agency

CONSULTANTS

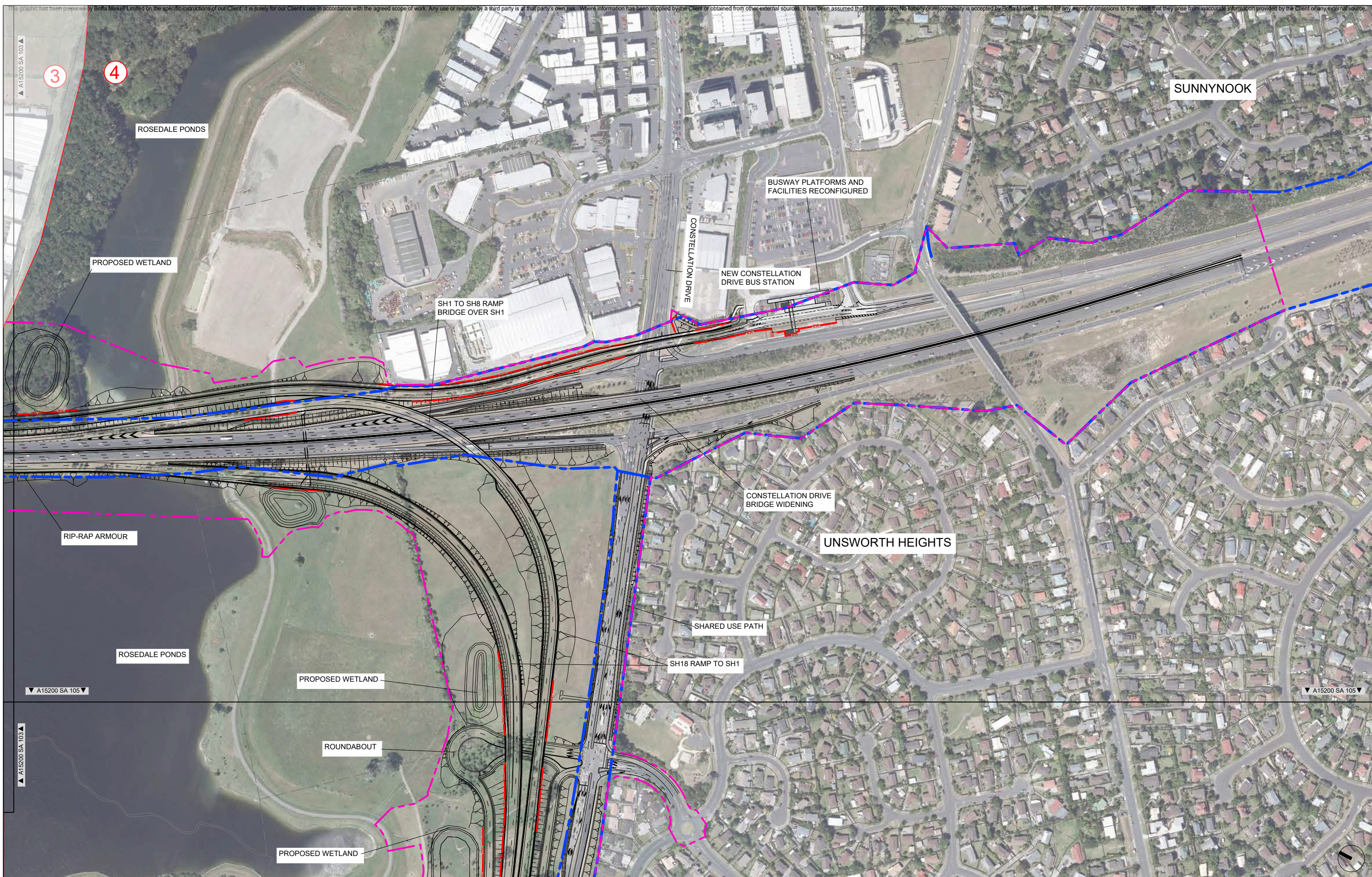
NORTHERN CORRIDOR

SITE AREA 3
 LV11

Preliminary

Design	TLi	Scale	Date
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Check	TLi	1:4000 @ A3	
Appvd	JGo		

DRAWING NO.	REVISION
A15200_SA_103	(B)



Printed 10/10/2016 2:54:04 p.m.

NOTES

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KEY

- Proposed Designation Boundary
- Proposed Retaining Wall
- Existing Designation Boundary

REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT: NZ Transport Agency
 CONSULTANTS:

NORTHERN CORRIDOR

SITE AREA 4
 LV12

Preliminary

Design	TLi	Scale	Date
Drawn	DWh	1:2000 @ A1	22.08.2016
Check	TLi	1:4000 @ A3	
App'd	JGo		

DRAWING NO.	REVISION
A15200_SA_104	(B)

U:\2015\A15200_SBy_Northern_Corridor_Improvements\CAD\A15200_Base_20160822.dwg



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▲ A15200 SA 103 ▲
 ▲ A15200 SA 104 ▲
 ▲ A15200 SA 104 ▲
 ▼ A15200 SA 106 ▼
 ▼ A15200 SA 106 ▼

Boffa Miskell
 Printed 10/10/2016 2:54:13 p.m.

NOTES
 CONTRACTORS TO VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCING WORK;
 CONTRACTORS ARE RESPONSIBLE FOR CONFIRMING THE LOCATION OF ALL UNDERGROUND SERVICES ON SITE PRIOR TO COMMENCING WORK;
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KEY

	Proposed Designation Boundary
	Proposed Retaining Wall
	Existing Designation Boundary

REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT: NZ Transport Agency
 CONSULTANTS:
Preliminary

NORTHERN CORRIDOR
 SITE AREA 4
 LV13

Design	TLi	Scale	Date
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Check	TLi	1:4000 @ A3	
App'd	JGo		
DRAWING NO.	REVISION		
A15200_SA_105	(B)		

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NOTES

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KEY

- Proposed Designation Boundary
- Proposed Retaining Wall
- Existing Designation Boundary

REV	DATE	DESCRIPTION
A	26.09.16	FOR ISSUE
B	12.10.16	REVISED ISSUE

CLIENT
 NZ Transport Agency

CONSULTANTS

Preliminary

NORTHERN CORRIDOR

SITE AREA 5
 LV14

Design	TLi	Scale	Date
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Check	TLi	1:4000 @ A3	
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DRAWING NO. REVISION

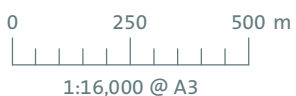
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DRAFT UNDER REVISION



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Legend

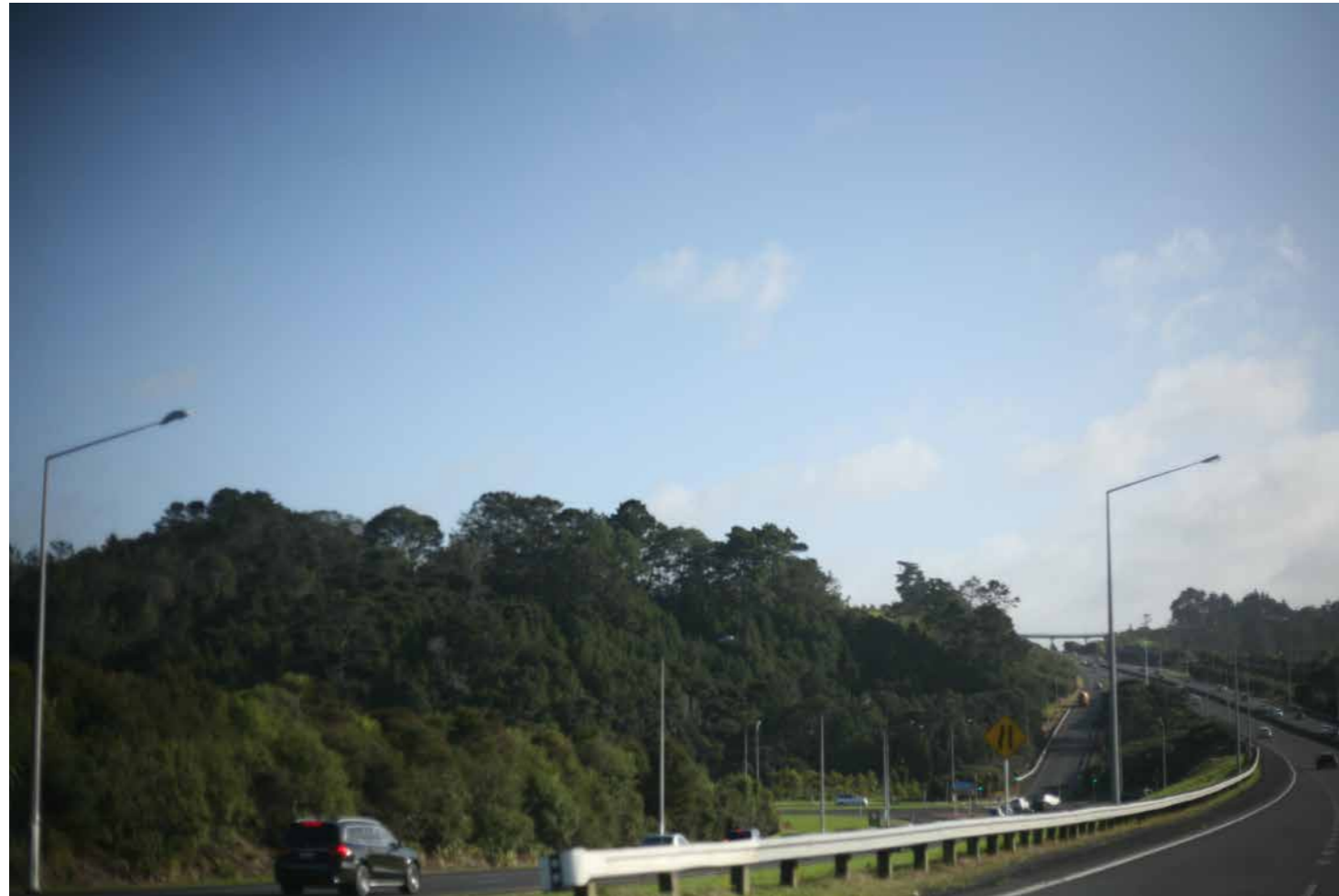
-  Proposed Designation Boundary
-  Site Appraisal Photographs
-  Site Context Photographs



Viewpoint A: Southbound towards Oteha Valley Road



Viewpoint B: Northbound over Oteha Valley Road



Viewpoint C: Northbound towards Oteha Valley Road



Viewpoint D: Southbound over Oteha Valley Road



Viewpoint E: Northbound towards Oteha Valley Road



Viewpoint F: Southbound towards Greville Road



Viewpoint G: Northbound towards Greville Road



Viewpoint H: Southbound towards Upper Harbour Highway



Viewpoint I: Northbound - looking west towards Rosedale treatment Pont



Viewpoint J: Southbound towards Sunset Road



Viewpoint K: Northbound over Upper Harbour Highway



Viewpoint 1: View from No. 11 Hatfield Place looking southeast



Viewpoint 2: View from No 147 Lonely Track Road looking south



Viewpoint 3: View from No. 69 Namsan Close looking southwest



Viewpoint 4: View from No. Travis View Road looking south



Viewpoint 5: View from East Coast Bay Football Field looking west



Viewpoint 6: View from Rangitoto College Car park off East Coast Road, looking west



Viewpoint 7: View from No. 166 Sunset Road looking north



Viewpoint 8: View from No. 164 Sunset Road looking north



Viewpoint 9: View from No. 13 Jumento Place looking north



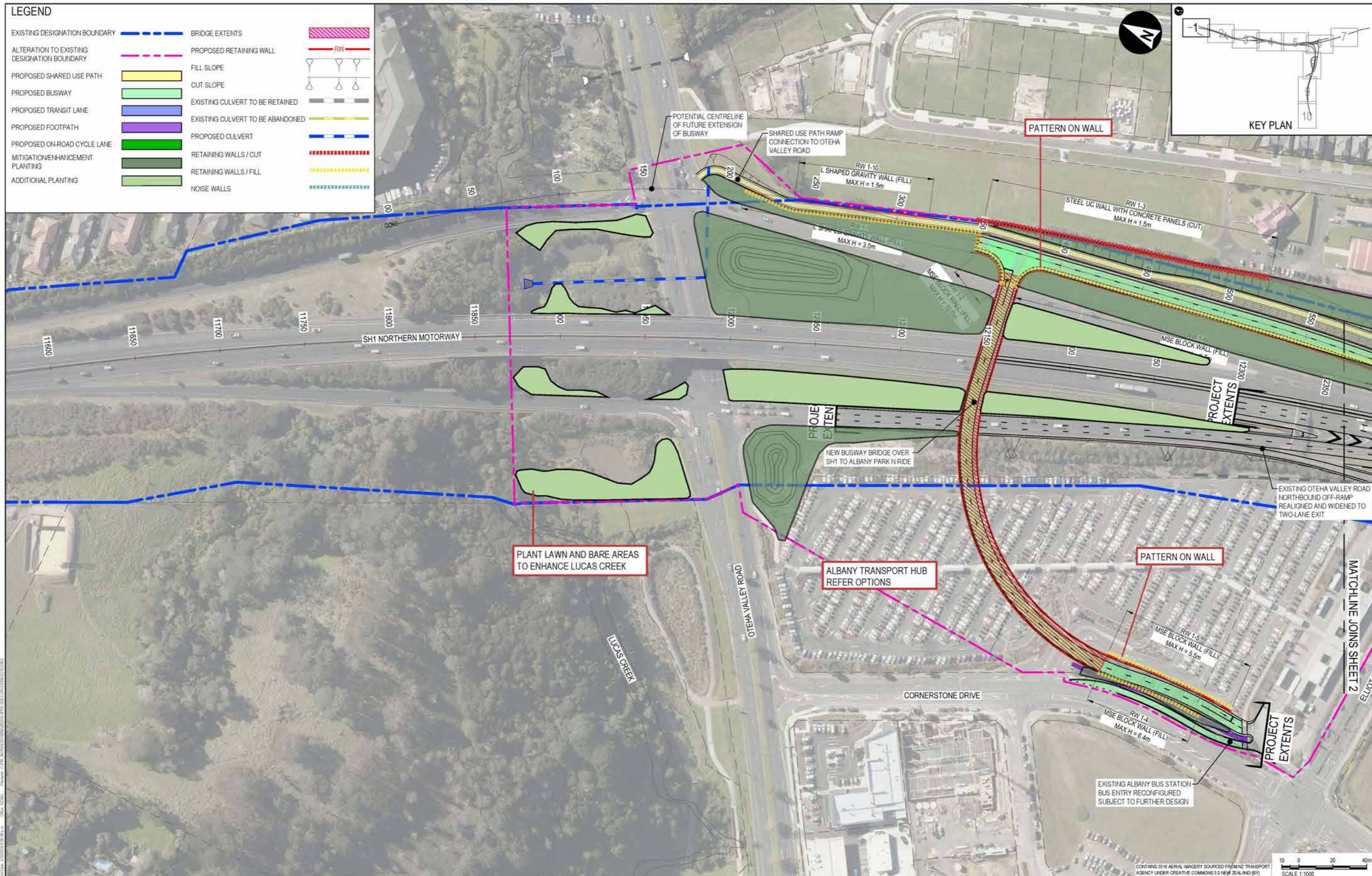
Viewpoint 10: View from No 25 Jumento Place looking North

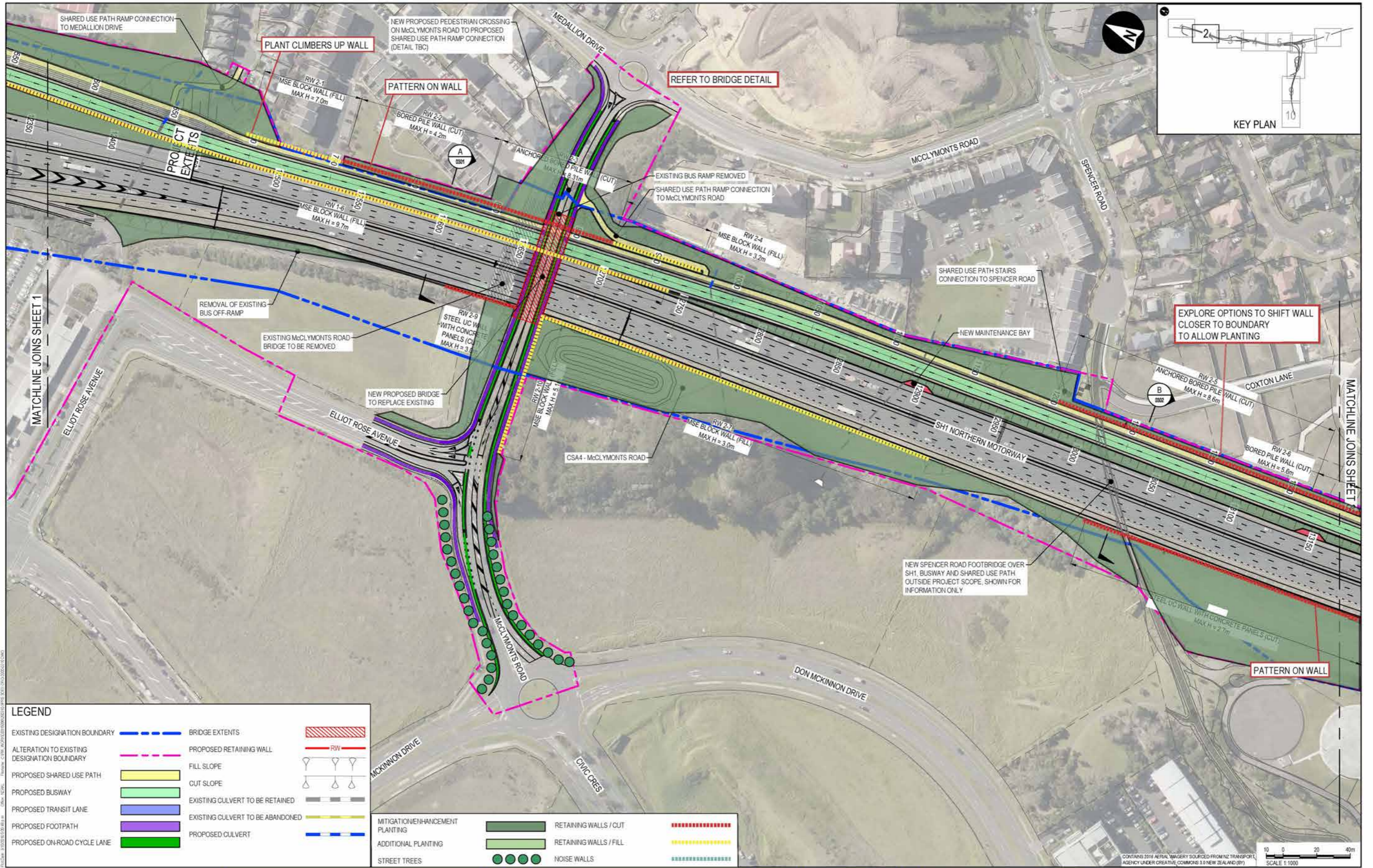


Viewpoint 11: View from Palm Hill looking north

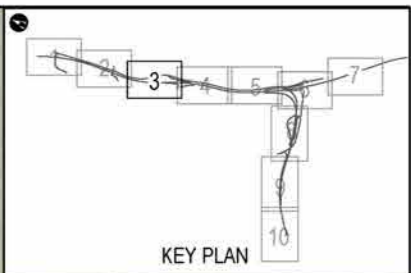
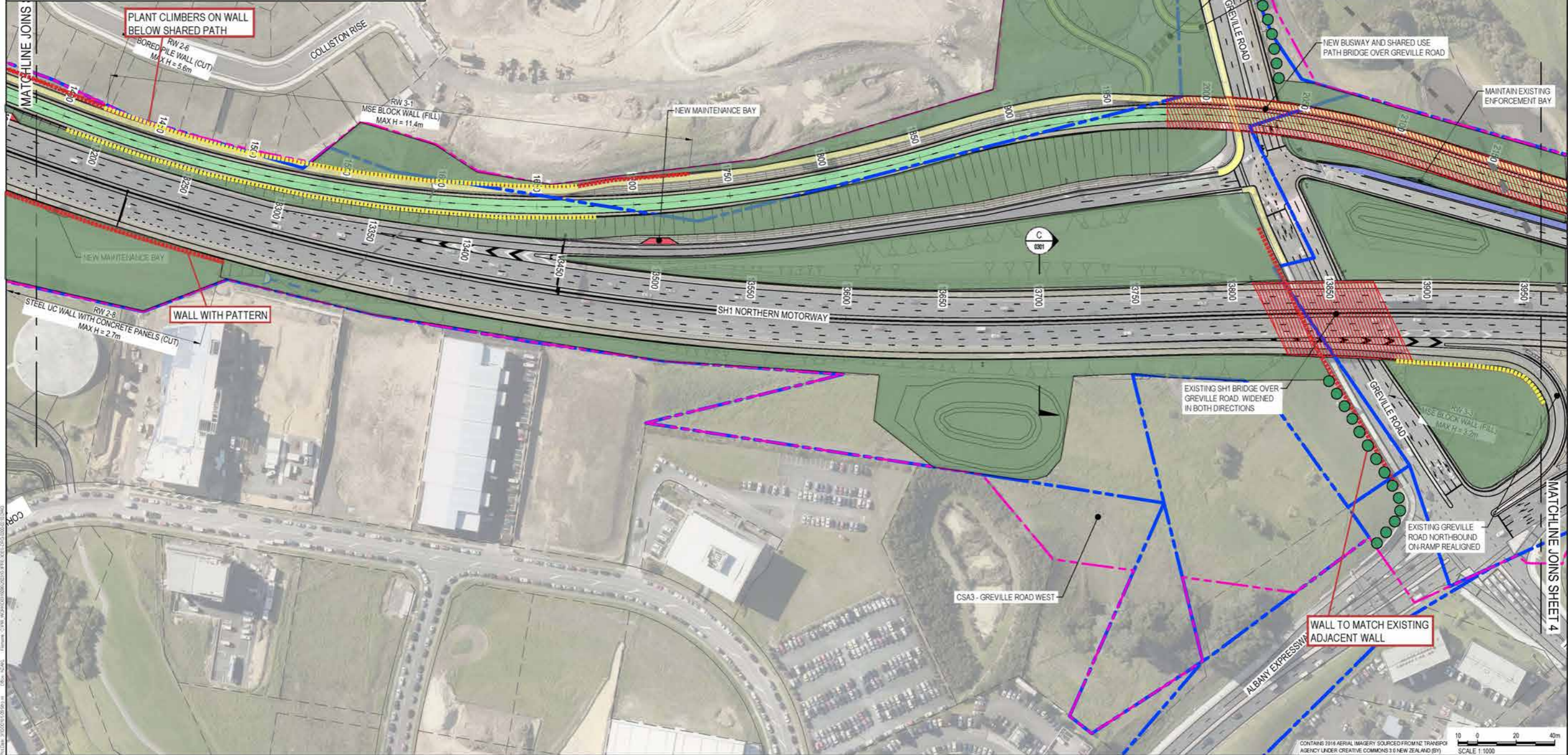


Viewpoint 12: View from No. 12 Bluebird Crescent looking north





LEGEND	
EXISTING DESIGNATION BOUNDARY	BRIDGE EXTENTS
ALTERATION TO EXISTING DESIGNATION BOUNDARY	PROPOSED RETAINING WALL
PROPOSED SHARED USE PATH	FILL SLOPE
PROPOSED BUSWAY	CUT SLOPE
PROPOSED TRANSIT LANE	EXISTING CULVERT TO BE RETAINED
PROPOSED FOOTPATH	EXISTING CULVERT TO BE ABANDONED
PROPOSED ON-ROAD CYCLE LANE	PROPOSED CULVERT
MITIGATION/ENHANCEMENT PLANTING	RETAINING WALLS / CUT
ADDITIONAL PLANTING	RETAINING WALLS / FILL
STREET TREES	NOISE WALLS



MATCHLINE JOINS

PLANT CLIMBERS ON WALL BELOW SHARED PATH

BORED PILE WALL (CUT) MAX H = 5.6m

COLLISTON RISE

RW 2-6

RW 3-1

MSE BLOCK WALL (FILL) MAX H = 11.4m

NEW MAINTENANCE BAY

SH1 NORTHERN MOTORWAY

STAIRS

SHARED USE PATH RAMP CONNECTION TO GREVILLE ROAD

NEW BUSWAY AND SHARED USE PATH BRIDGE OVER GREVILLE ROAD

MAINTAIN EXISTING ENFORCEMENT BAY

WALL WITH PATTERN

RW 2-8

STEEL UC WALL WITH CONCRETE PANELS (CUT) MAX H = 2.7m

EXISTING SH1 BRIDGE OVER GREVILLE ROAD WIDENED IN BOTH DIRECTIONS

EXISTING GREVILLE ROAD NORTH-BOUND ON-RAMP REALIGNED

WALL TO MATCH EXISTING ADJACENT WALL

CSA3 - GREVILLE ROAD WEST

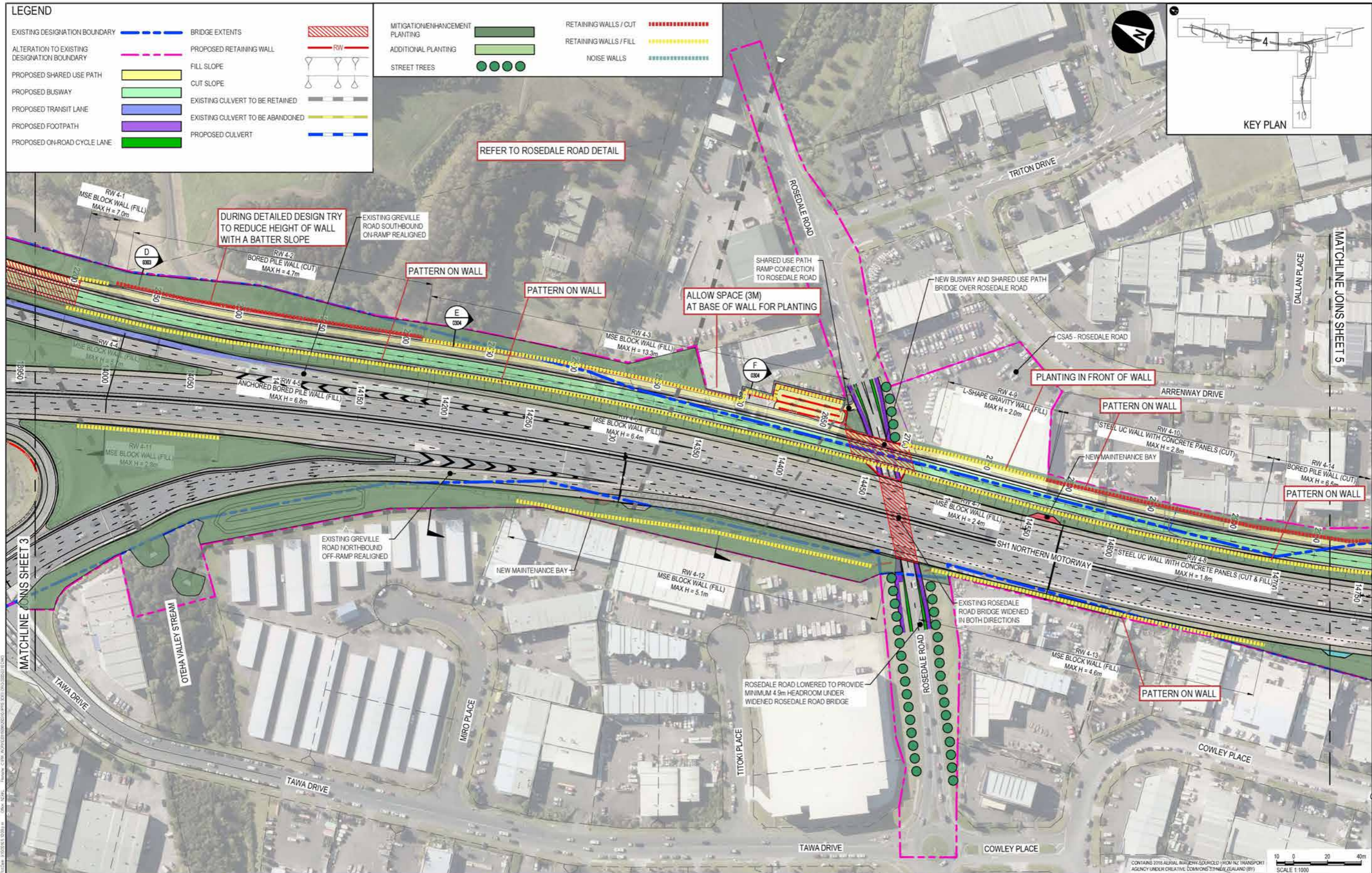
CSA6 - GREVILLE ROAD EAST

ALBANY EXPRESSWAY

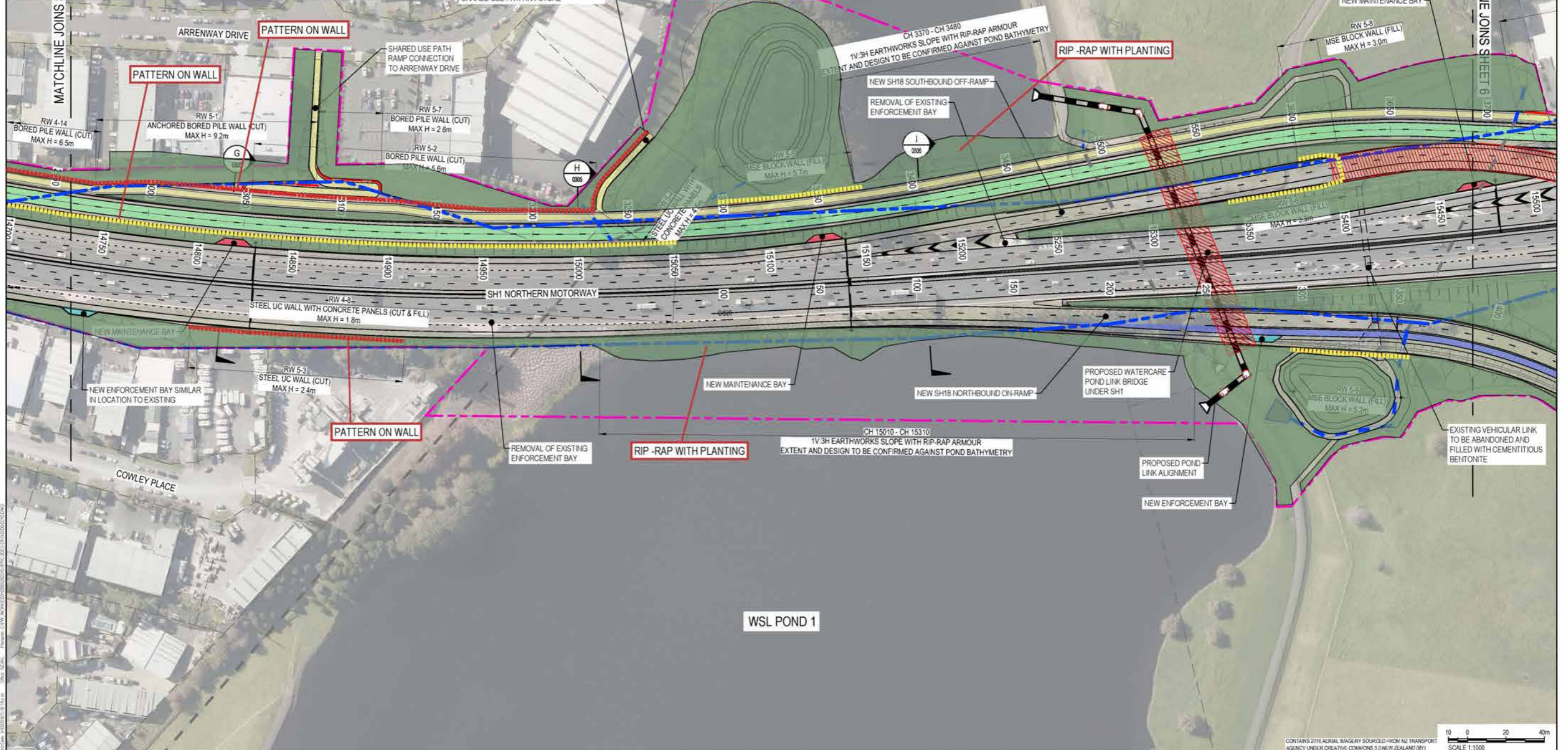
MATCHLINE JOINS SHEET 4

SCALE 1:1000

CONTAINS 2014 AERIAL IMAGERY SOURCED FROM NZ TRANSPORT AGENCY UNDER CREATIVE COMMONS 3.0 NEW ZEALAND (BY)



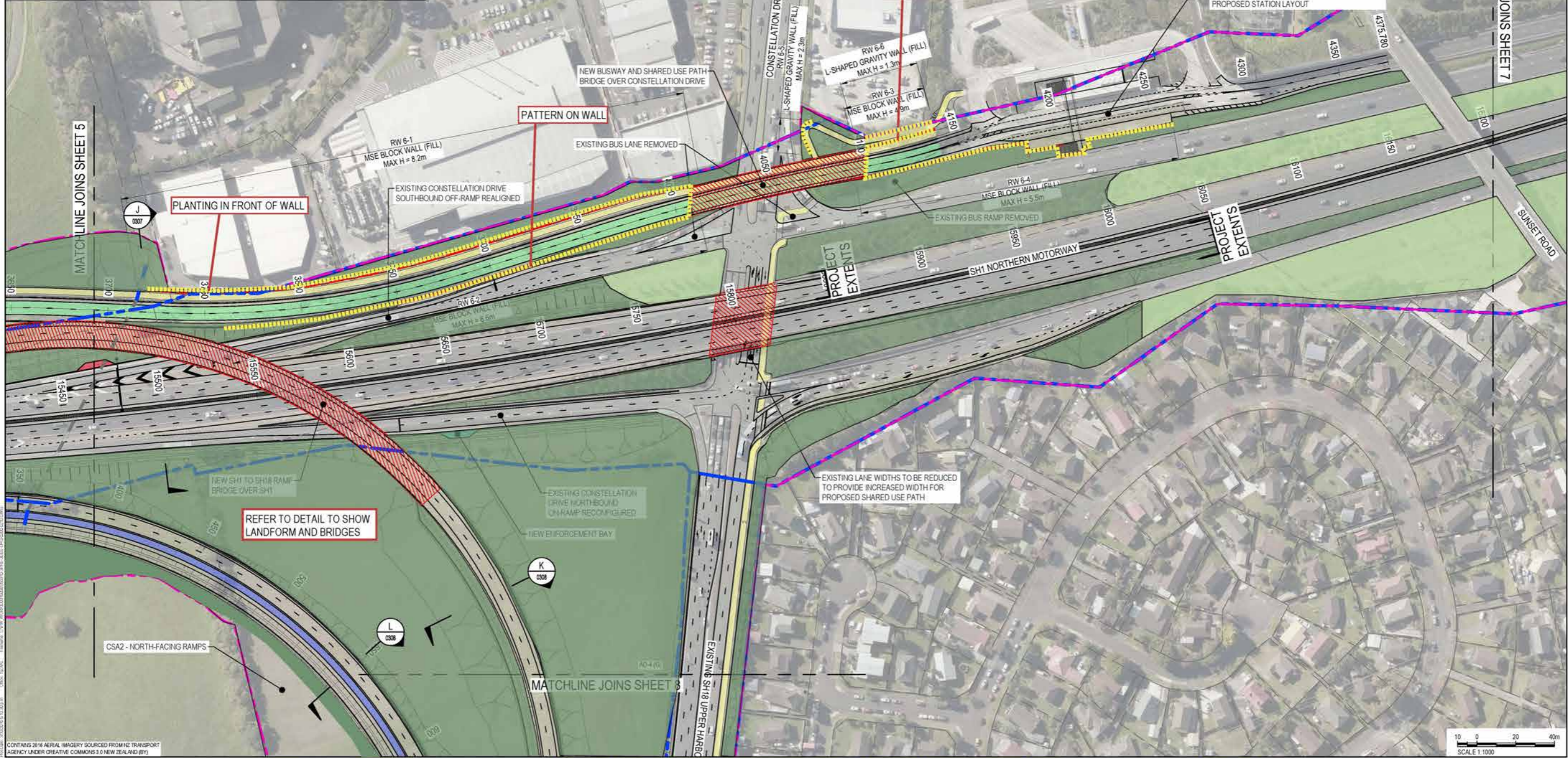
LEGEND	
EXISTING DESIGNATION BOUNDARY	BRIDGE EXTENTS
ALTERATION TO EXISTING DESIGNATION BOUNDARY	PROPOSED RETAINING WALL
PROPOSED SHARED USE PATH	FILL SLOPE
PROPOSED BUSWAY	CUT SLOPE
PROPOSED TRANSIT LANE	EXISTING CULVERT TO BE RETAINED
PROPOSED FOOTPATH	EXISTING CULVERT TO BE ABANDONED
PROPOSED ON-ROAD CYCLE LANE	PROPOSED CULVERT
MITIGATION/ENHANCEMENT PLANTING	RETAINING WALLS / CUT
ADDITIONAL PLANTING	RETAINING WALLS / FILL
	NOISE WALLS



10/10/2018 10:30:00 AM
 Project: SH1 Northern Motorway
 Drawing: SH1 Northern Motorway - Retaining Walls and Earthworks
 Scale: 1:1000
 Author: [Name]
 Checker: [Name]
 Date: 10/10/2018

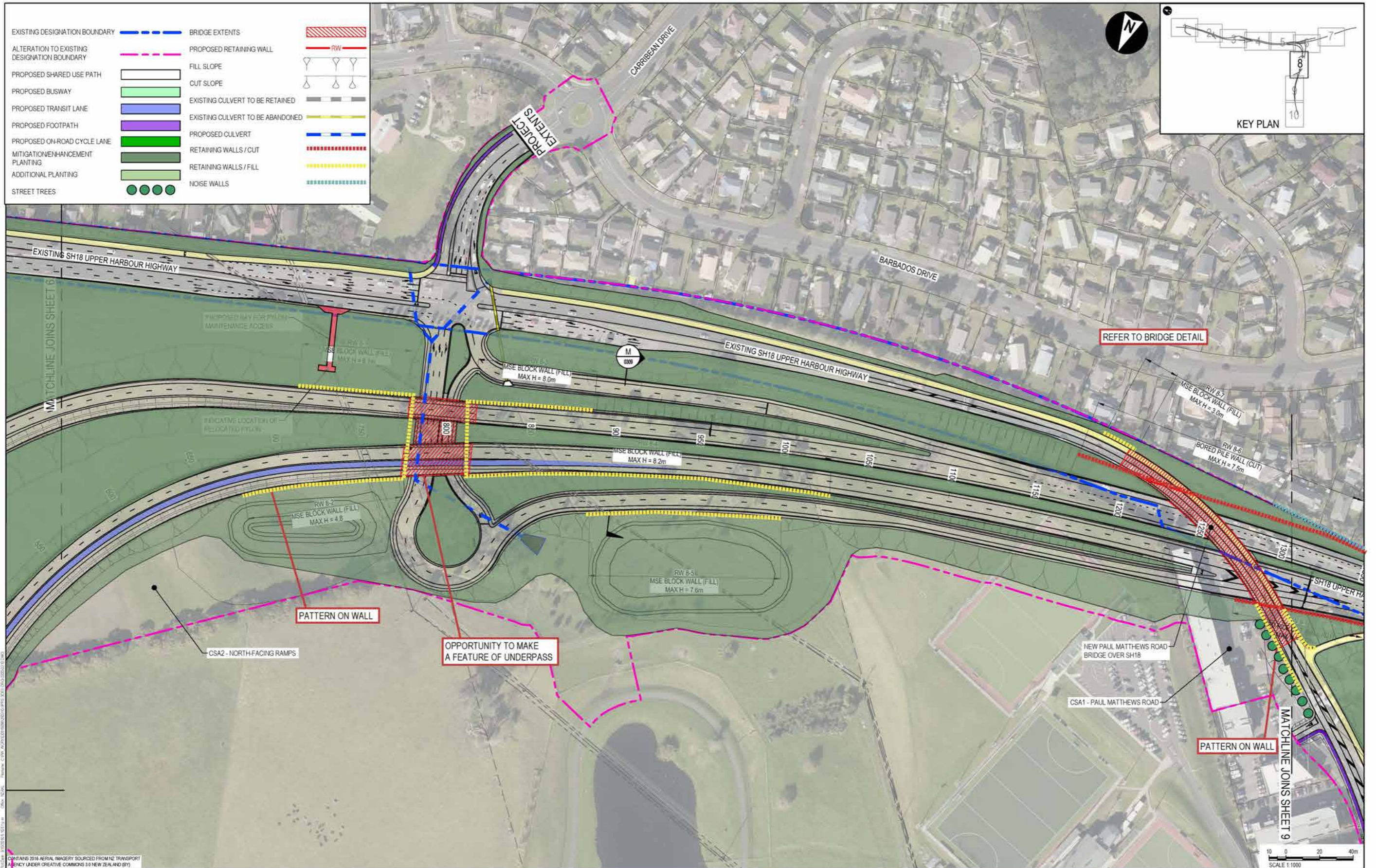
CONTAINS 2018 AERIAL IMAGERY SOURCED FROM NZ TRANSPORT AGENCY UNDER CREATIVE COMMONS 3.0 NEW ZEALAND (BY)
 SCALE 1:1000

LEGEND	
EXISTING DESIGNATION BOUNDARY	BRIDGE EXTENTS
ALTERATION TO EXISTING DESIGNATION BOUNDARY	PROPOSED RETAINING WALL
PROPOSED SHARED USE PATH	FILL SLOPE
PROPOSED BUSWAY	CUT SLOPE
PROPOSED TRANSIT LANE	EXISTING CULVERT TO BE RETAINED
PROPOSED FOOTPATH	EXISTING CULVERT TO BE ABANDONED
PROPOSED ON-ROAD CYCLE LANE	PROPOSED CULVERT
MITIGATION/ENHANCEMENT PLANTING	RETAINING WALLS / CUT
ADDITIONAL PLANTING	RETAINING WALLS / FILL
	NOISE WALLS

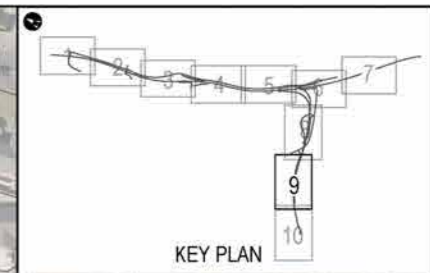
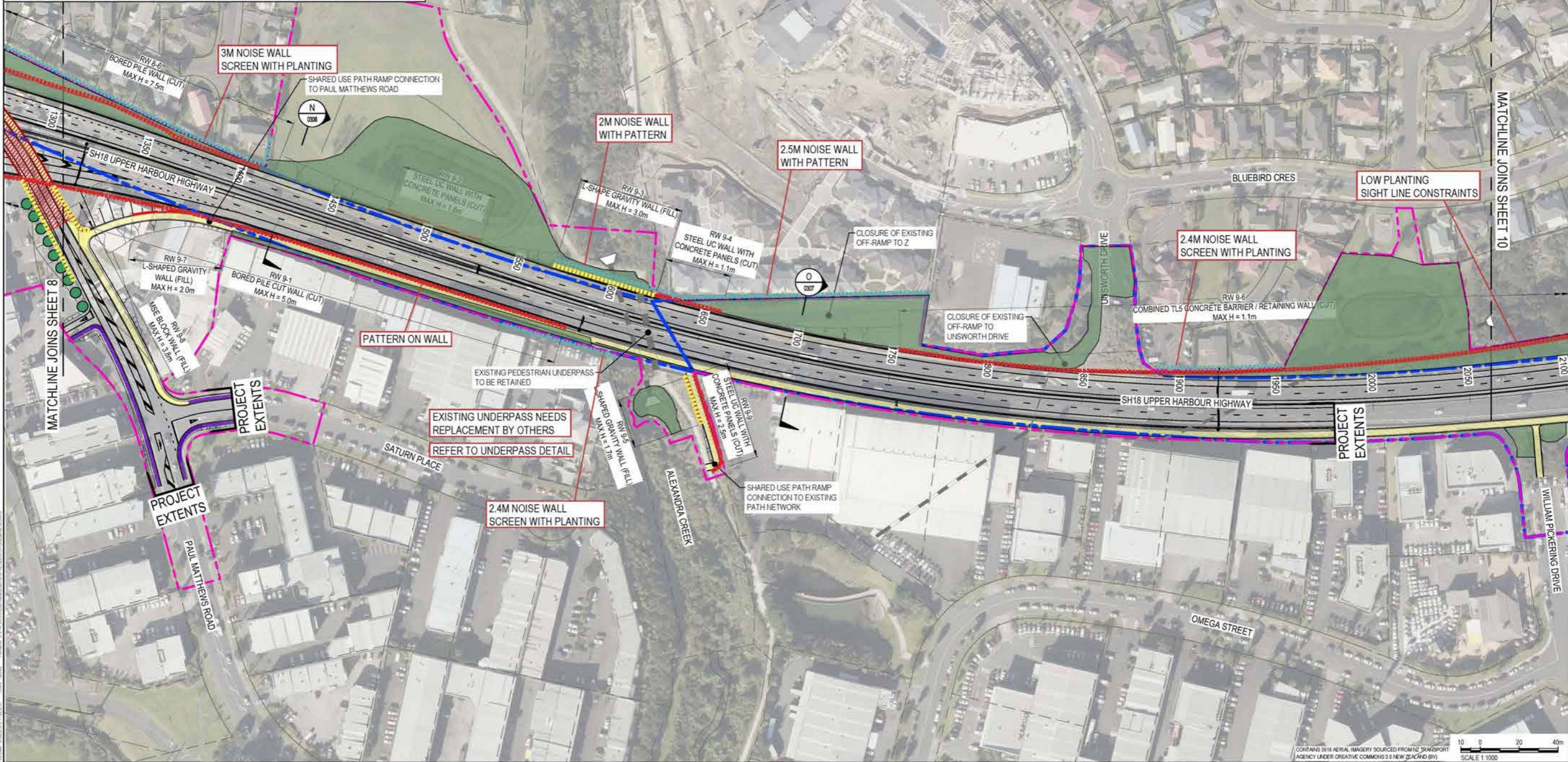


LEGEND			
EXISTING DESIGNATION BOUNDARY		BRIDGE EXTENTS	
ALTERATION TO EXISTING DESIGNATION BOUNDARY		PROPOSED RETAINING WALL	
PROPOSED SHARED USE PATH		FILL SLOPE	
PROPOSED BUSWAY		CUT SLOPE	
PROPOSED TRANSIT LANE		EXISTING CULVERT TO BE RETAINED	
PROPOSED FOOTPATH		EXISTING CULVERT TO BE ABANDONED	
PROPOSED ON-ROAD CYCLE LANE		PROPOSED CULVERT	
MITIGATION/ENHANCEMENT PLANTING		RETAINING WALLS / CUT	
ADDITIONAL PLANTING		RETAINING WALLS / FILL	
		NOISE WALLS	

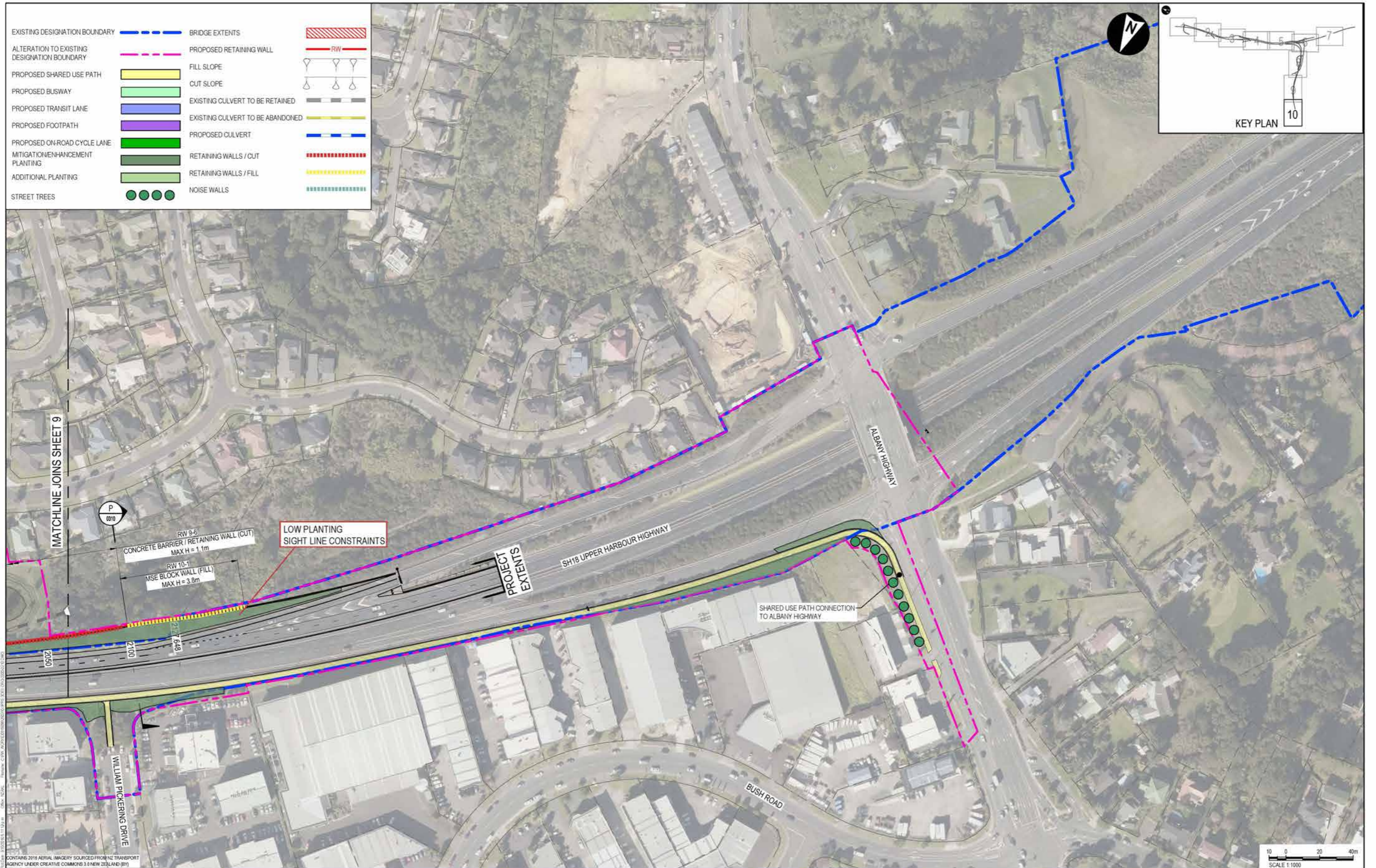


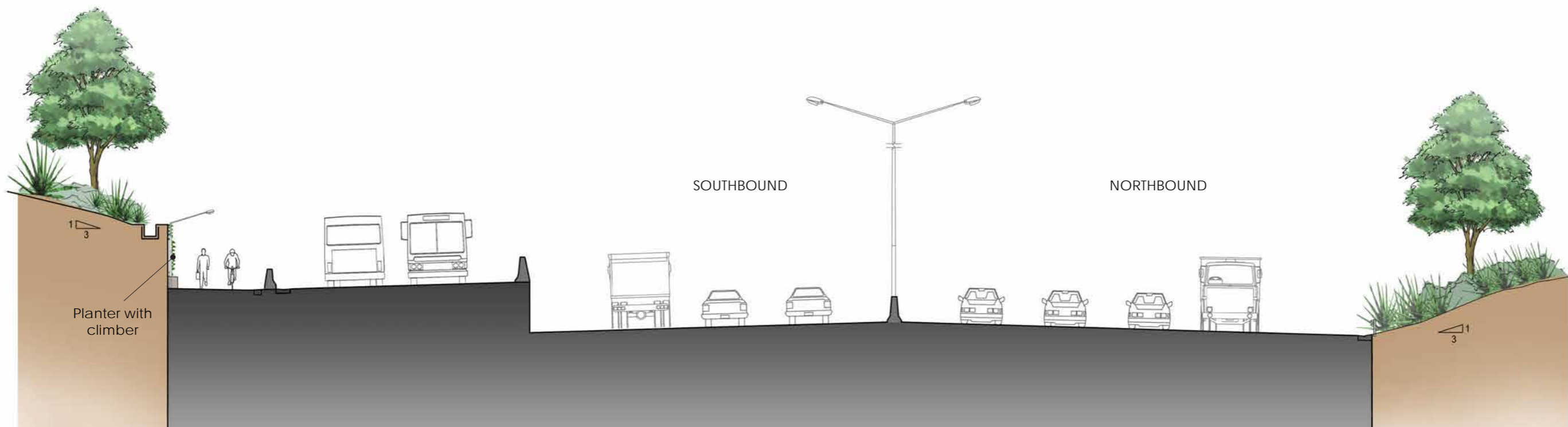


LEGEND	
EXISTING DESIGNATION BOUNDARY	BRIDGE EXTENTS
ALTERATION TO EXISTING DESIGNATION BOUNDARY	PROPOSED RETAINING WALL
PROPOSED SHARED USE PATH	FILL SLOPE
PROPOSED BUSWAY	CUT SLOPE
PROPOSED TRANSIT LANE	EXISTING CULVERT TO BE RETAINED
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PROPOSED ON-ROAD CYCLE LANE	PROPOSED CULVERT
MITIGATION/ENHANCEMENT PLANTING	RETAINING WALLS / CUT
ADDITIONAL PLANTING	RETAINING WALLS / FILL
	NOISE WALLS



CONTAINS 2018 AERIAL IMAGERY SOURCED FROM NZ TRANSPORT AGENCY UNDER CREATIVE COMMONS 3.0 NEW ZEALAND (BY) SCALE 1:1000

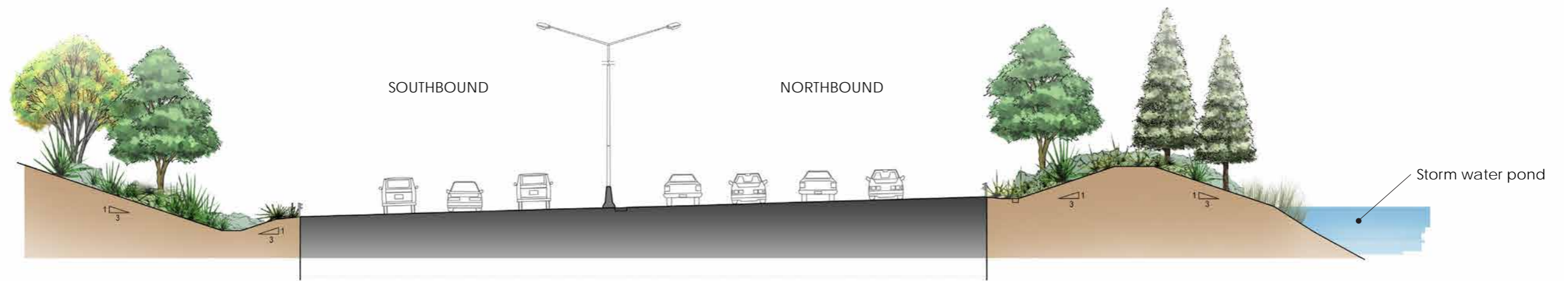




SECTION A TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH12600)

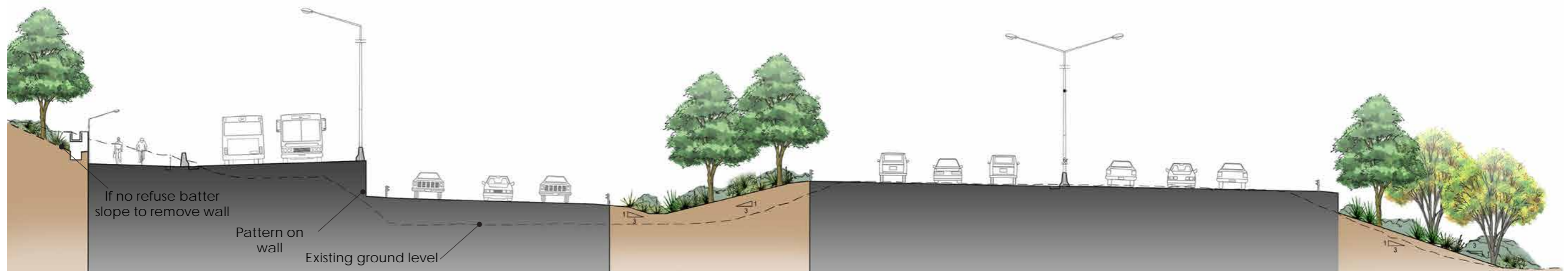


SECTION B BUSWAY / MAINTENANCE BAY CONFIGURATION - OPTION 2
BUSWAY ON EMBANKMENT

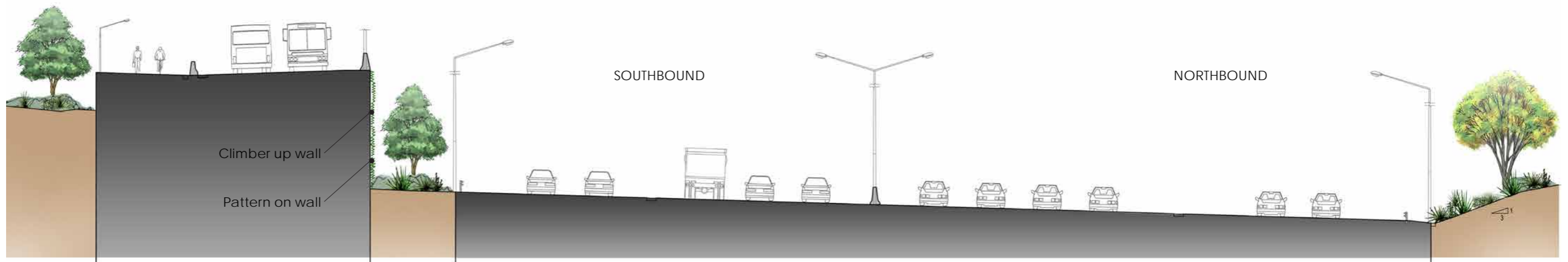


SECTION C TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH13700)

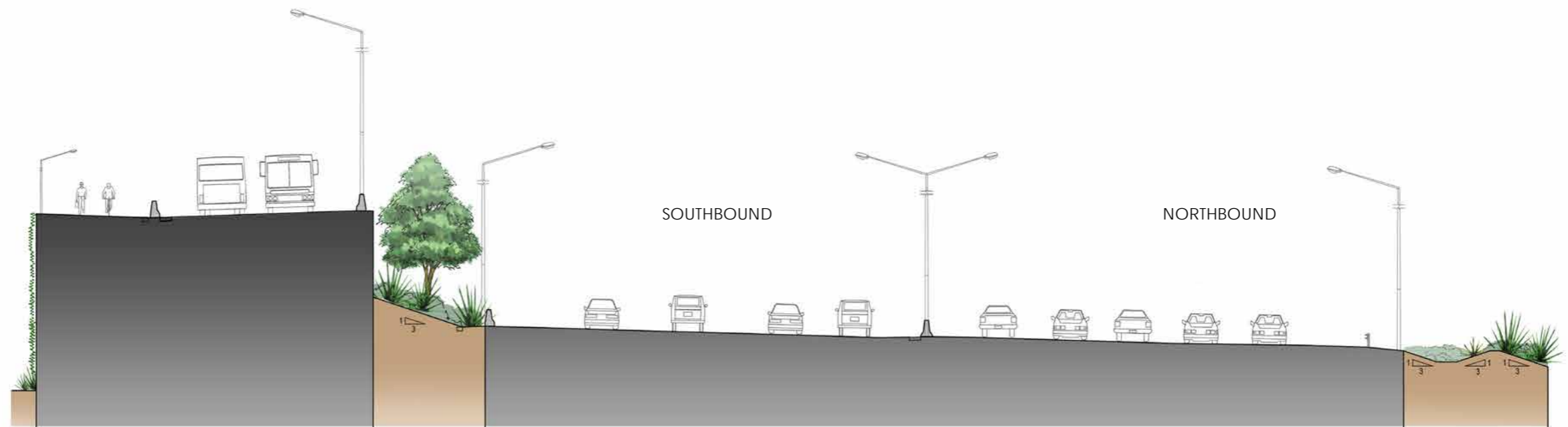
Rosedale landfill



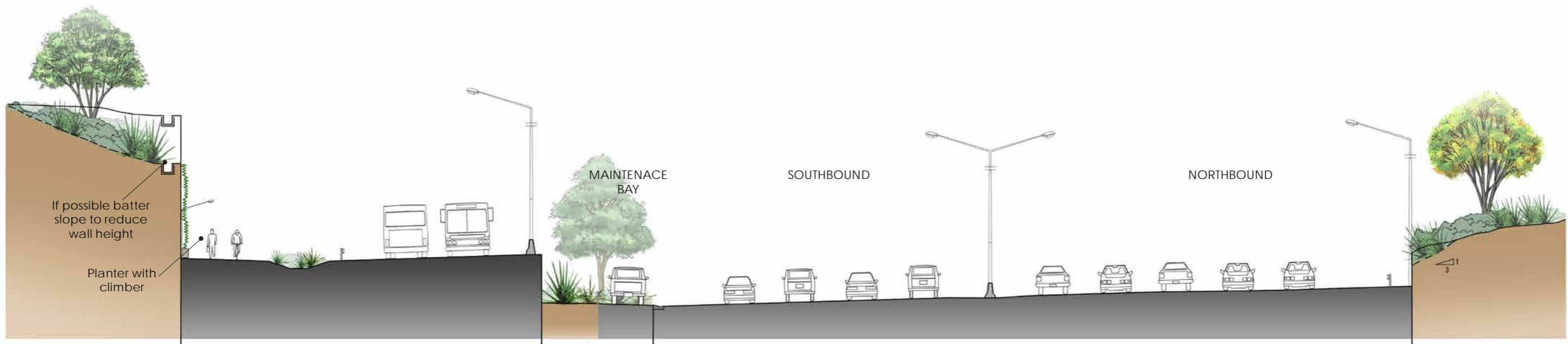
SECTION D TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH14000)



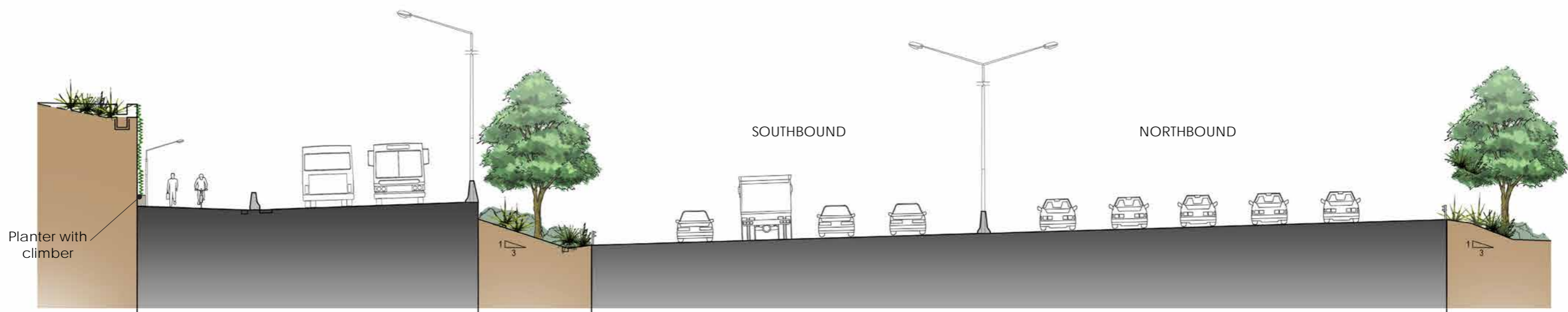
SECTION E TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH14200)



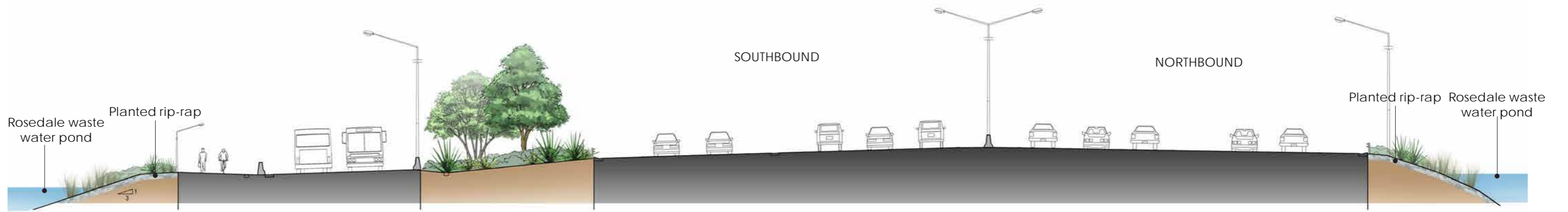
SECTION F TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH14360)



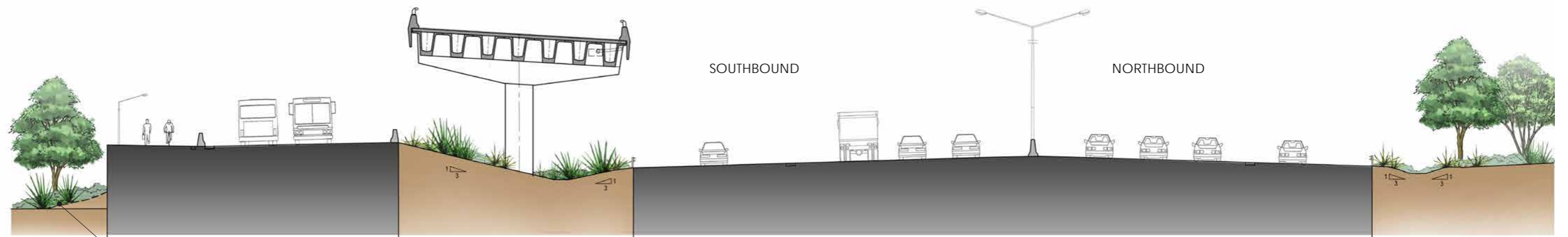
SECTION G TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH14820)



SECTION H TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH15000)

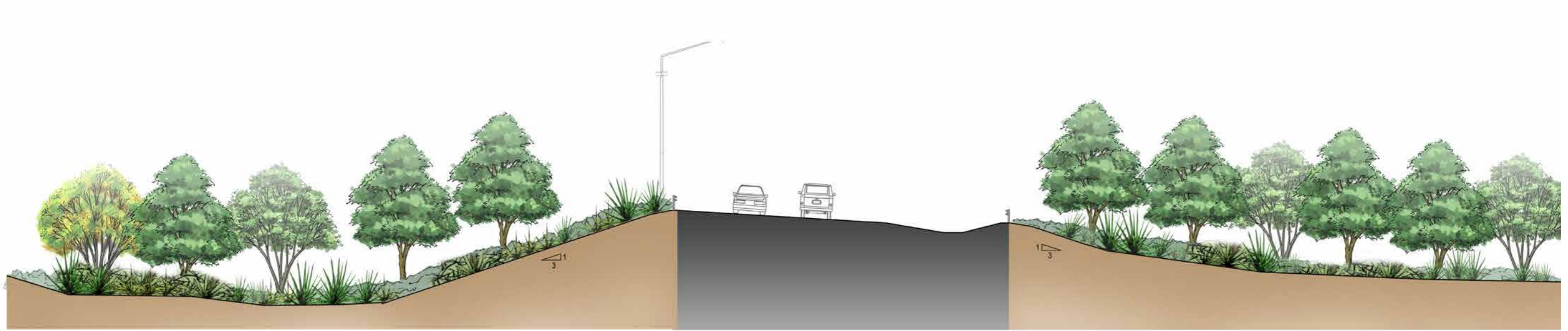


SECTION I TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH15180)

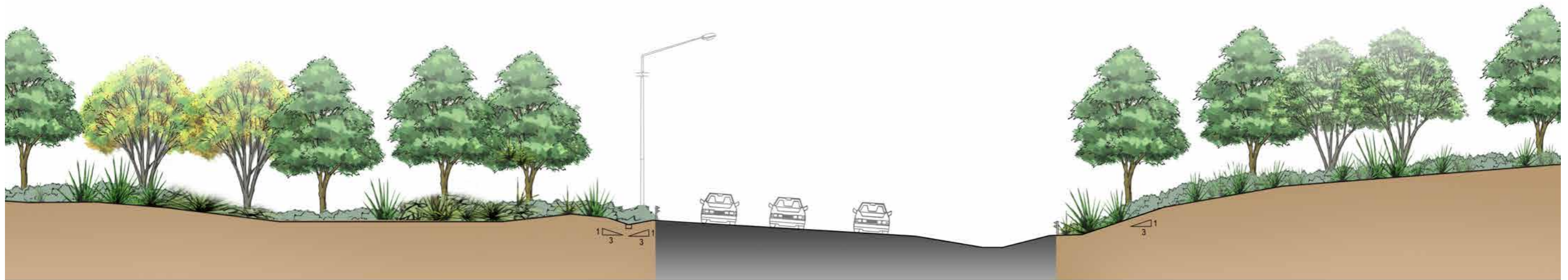


Proposed batter slope to reduce height of wall

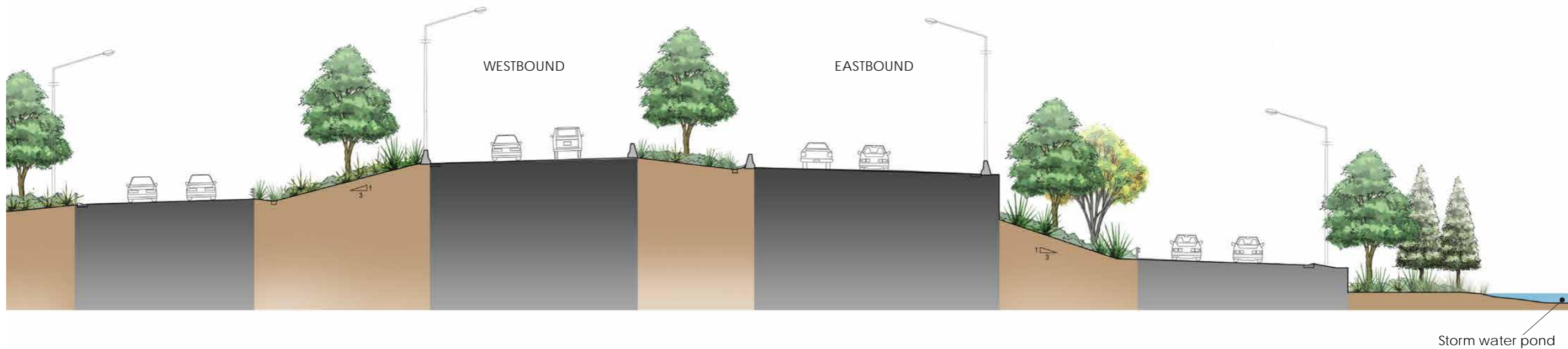
SECTION J TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY (CH15500)



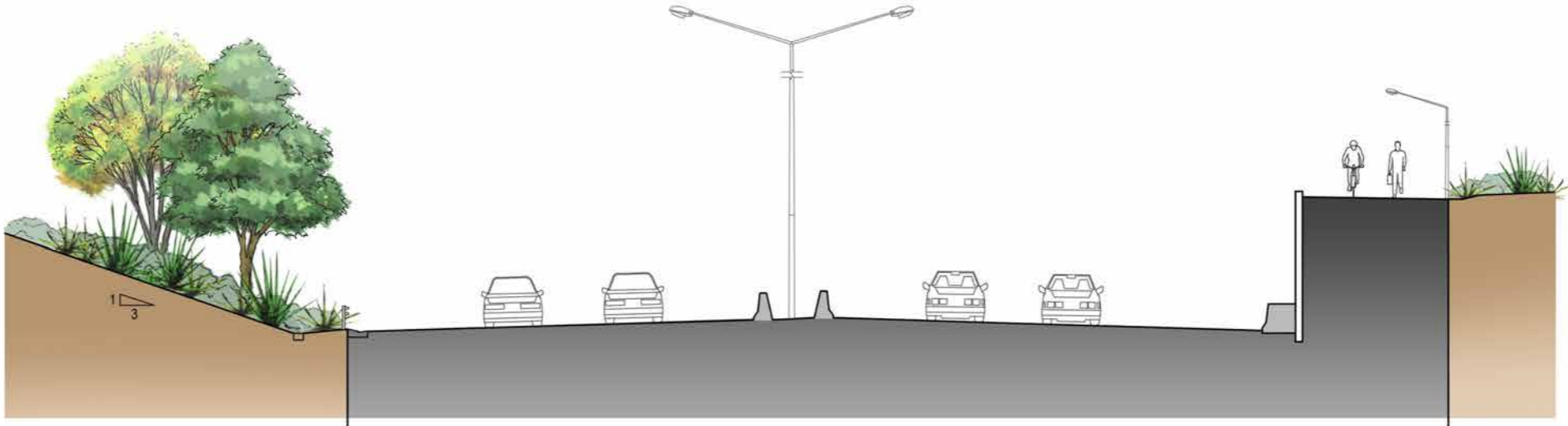
SECTION K TYPICAL CROSS SECTION SH1 NORTHERN MOTORWAY TO SH18 UPPER HARBOUR
HIGHWAY SOUTHBOUND LINK (CH500)



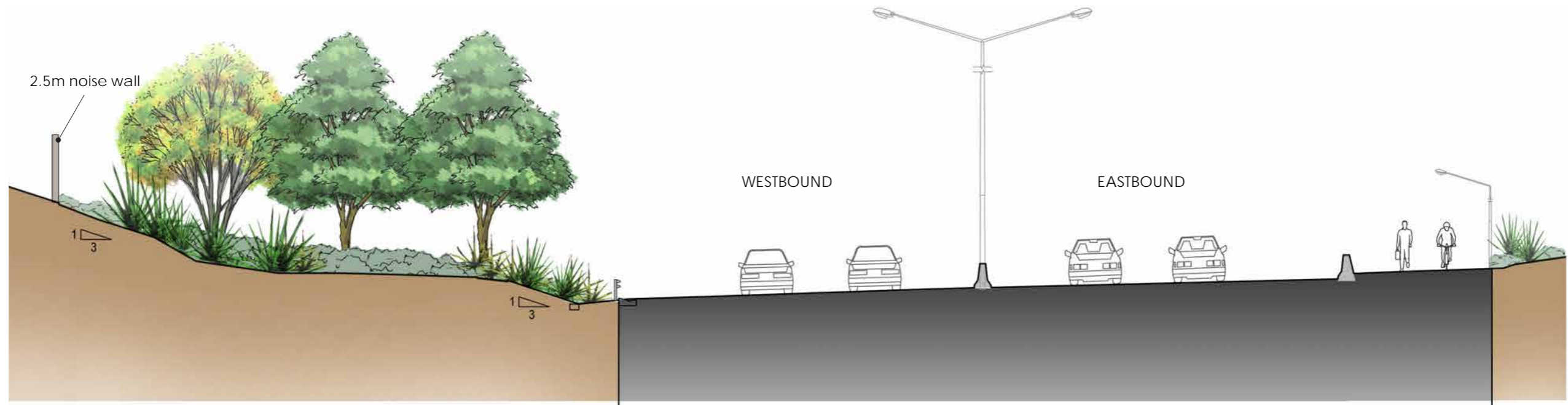
SECTION L TYPICAL CROSS SECTION SH18 UPPER HARBOUR TO SH1
NORTHERN MOTORWAY NORTHBOUND LINK (CH550)



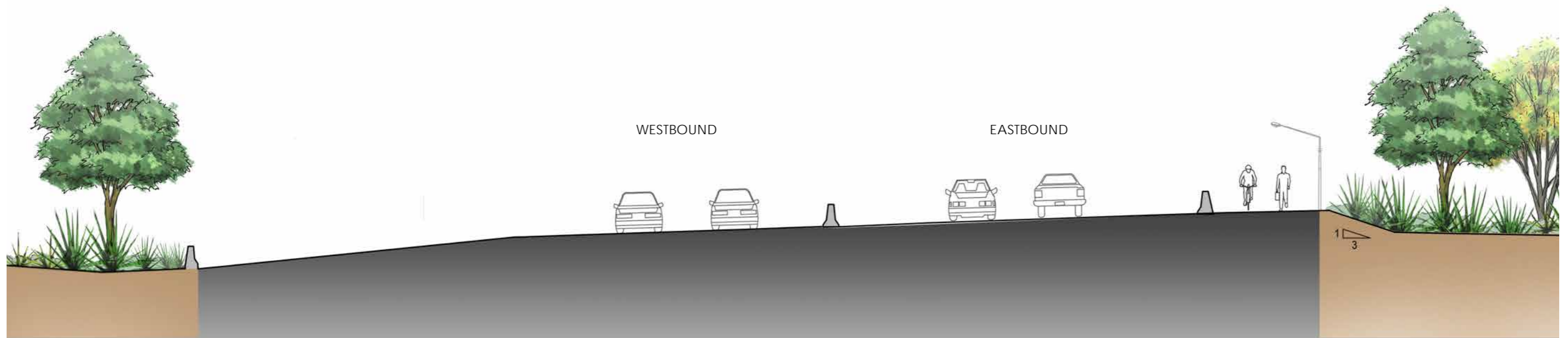
SECTION M TYPICAL CROSS SECTION SH18 UPPER HARBOUR HIGHWAY (CH900)



SECTION N TYPICAL CROSS SECTION SH18 UPPER HARBOUR HIGHWAY (CH 1430)



SECTION O TYPICAL CROSS SECTION SH18 UPPER HARBOUR HIGHWAY (CH 1700)



SECTION P TYPICAL CROSS SECTION SH18 UPPER HARBOUR HIGHWAY (CH 2100)