

- L3 40m Wide Main Tunnel Corridor
- L3 40m wide Link Sewer Corridor
- WS1 Work Shafts
- AS1 Access Shafts
- L1S3 Link Shafts
- Shaft Analysis Location
- 1
—
1 Tunnel Analysis Section

A3 SCALE 1:40,000
 A1 SCALE 1:20,000

0 500 1000 1500 2000 2500 (m)

NOTES:
 1. All dimensions are in metres unless noted otherwise.
 2. Aerial photo sourced from Terralink International (Copyright 2002–2005 Terralink International Limited and its licensors).

ORIGINAL IN COLOUR

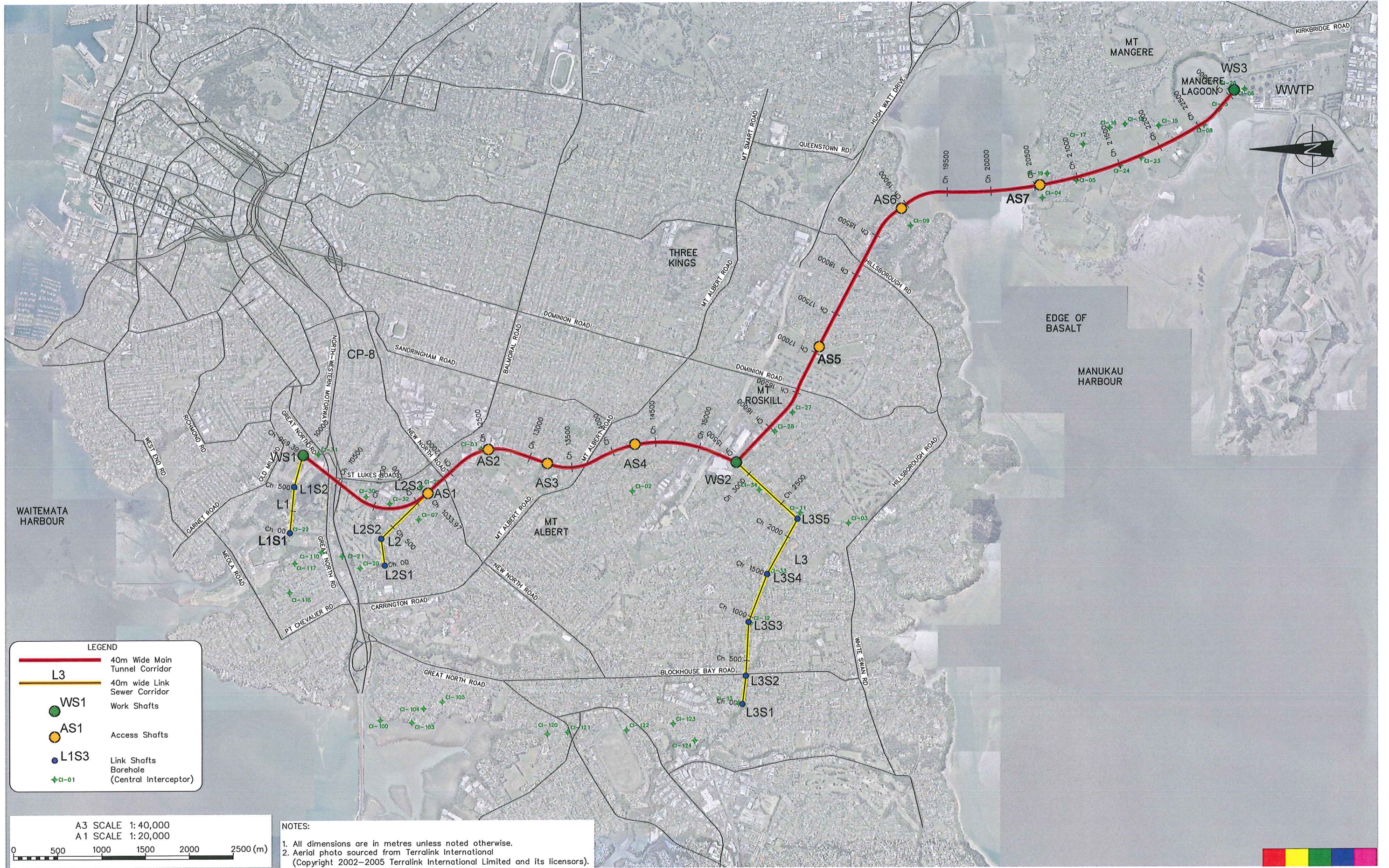
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ISSUE	DATE	AMENDMENT	BY	APPD.	APP'D P.DIR	BY	DATE	ASSET MANAGER
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					DES. CHECKED	KPH	Jul.2012	
					DRAWN	JATG	Jul.2012	OPERATIONS
					DWG. CHECKED	RBS	Jul.2012	
					REV'D P.MGR	GRT	Jul.2012	
					APP'D P.DIR	RPB	Jul.2012	
29200 FINAL ALIGNMENT			JC	GLS				



CENTRAL INTERCEPTOR
 GROUNDWATER REGIME AND SURFACE SETTLEMENT
 TUNNEL SECTION & SHAFT ANALYSIS LOCATIONS

CAD FILE 29200-FA1_FA4	DATE 1-Jun-12
ORIGINAL SCALE A1	CONTRACT No.
1:20,000	—
DRAWING No.	ISSUE
FIGURE A1	2



LEGEND

- 40m Wide Main Tunnel Corridor
- L3 40m wide Link Sewer Corridor
- WS1 Work Shafts
- AS1 Access Shafts
- L1S3 Link Shafts Borehole (Central Interceptor)
- + CI-01

A3 SCALE 1:40,000
 A1 SCALE 1:20,000

NOTES:

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ORIGINAL IN COLOUR

Plot Date: 19-Jun-13 3:41 p.m.
 File path: L:\29200\WorkingMaterial\CAD

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DRAWN	JATG	Jul.2012	OPERATIONS
DWG. CHECKED	RBS	Jul.2012	
REV'D P.MGR	GRT	Jul.2012	
APP'D P.DIR	RPB	Jul.2012	ASSET MANAGER
ISSUE	DATE	AMENDMENT	BY
2	13 JUN 2013	FINAL ALIGNMENT	JC

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CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
 GEOTECHNICAL CONDITIONS
 PROJECT SPECIFIC INVESTIGATIONS

CAD FILE 29200-FA1_FA4	DATE 1-Jun-12
ORIGINAL SCALE A1	CONTRACT No.
1:20,000	—
DRAWING No.	ISSUE
FIGURE A2	2

Plot Date: 24-Jun-12 4:19 pm
 File path: C:\26145\26145_300\Working\Intercept\CAD\Figures

LEGEND

<p> 40m Wide Main Tunnel Corridor</p> <p> L3 40m wide Link Sewer Corridor</p> <p> WS1 Work Shafts</p> <p> AS1 Access Shafts</p> <p> L1S3 Link Shafts</p> <p> CI-01 Borehole (Central Interceptor)</p> <p> Relevant Historical Borehole</p> <p> BH1 Relevant Historical Borehole with Ground Water Monitoring</p> <p> Existing ground profile</p> <p> Tunnel crown</p> <p> Tunnel Invert</p> <p> Inferred geological boundary</p> <p> Envelope 5m above tunnel invert level</p> <p> Envelope 15m below tunnel invert level</p> <p> Fault (inferred)</p> <p> Borehole</p> <p> Piezometer screen and water level</p> <p> Vibrating wire piezometer and water level</p> <p> Artesian water</p>	<p> Fill</p> <p>TAURANGA GROUP (HOLOCENE)</p> <p> Estuarine muds and sand</p> <p> Undifferentiated Tauranga Group alluvium plus miscellaneous fill</p> <p>AUCKLAND VOLCANIC FIELD (PLEISTOCENE)</p> <p> Basalt</p> <p> Tuff / Ash / Scoria</p> <p>TAURANGA GROUP (PLIOCENE - PLEISTOCENE)</p> <p> Puketoka Formation Upper (fine-grained) facies</p> <p> Puketoka Formation Lower (coarse grained) facies</p> <p> Kaawa Formation</p> <p>WAIEMATA GROUP (MIOCENE)</p> <p> Undifferentiated</p> <p> Volcanic-poor flysch facies (East Coast Bays Formation)</p> <p> Muddy flysch facies</p> <p> Mixed volcanic-rich and volcanic-poor flysch facies</p> <p> Volcanic-rich to debris flow facies including Parnell Grit</p>
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ORIGINAL IN COLOUR

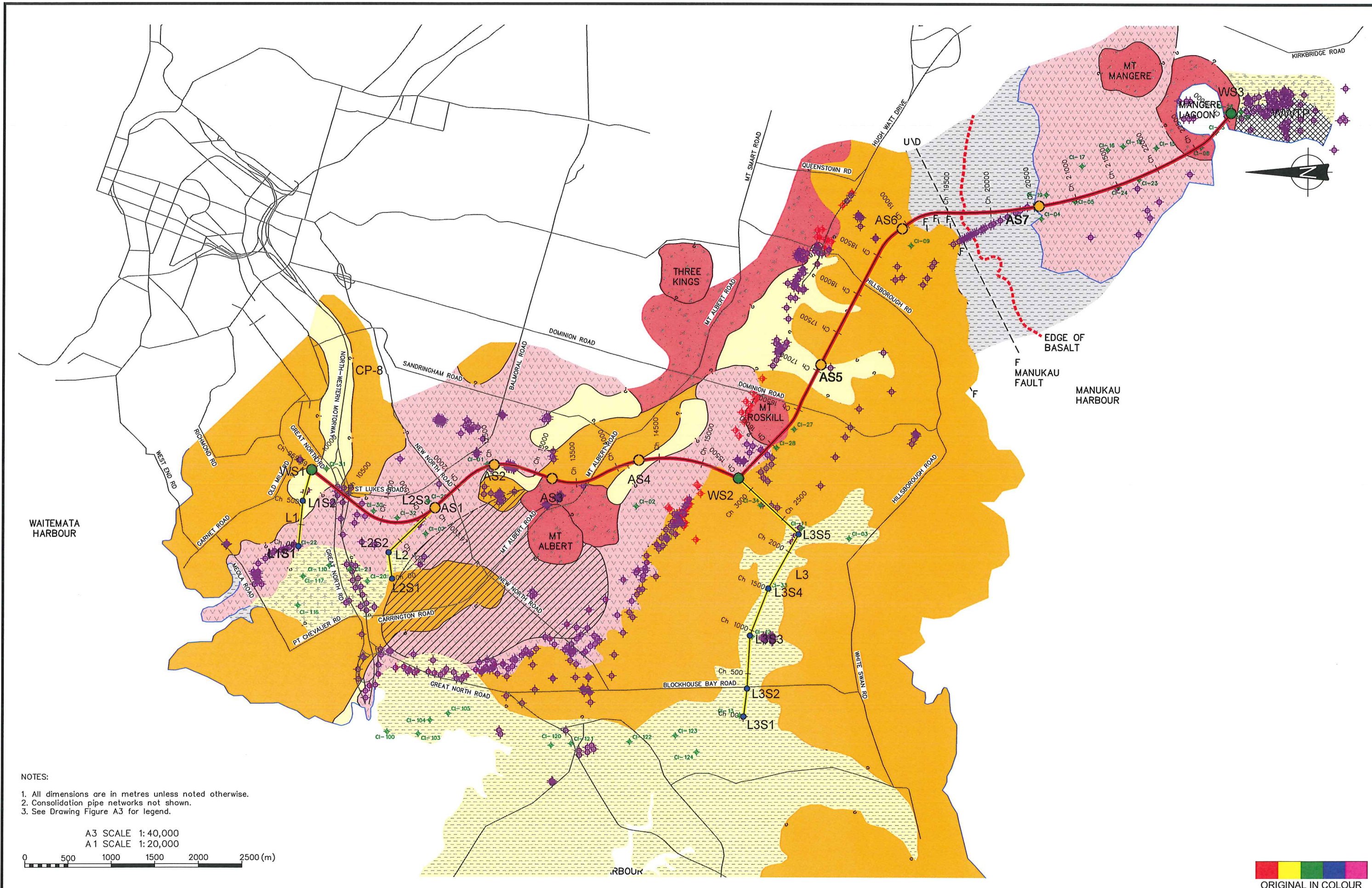
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		REV'D P.MGR	SLT	07/12			
		APP'D P.DIR	MBL	24/7/12		ASSET MANAGER	
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE	



CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
GEOTECHNICAL CONDITIONS
GEOLOGY LEGEND

CAD FILE 26145.300-CI-FA1_FA4 DATE 1-Jun-12	
ORIGINAL SCALE A1	CONTRACT No.
NTS	-
DRAWING No.	ISSUE
FIGURE A3	-

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- NOTES:
1. All dimensions are in metres unless noted otherwise.
 2. Consolidation pipe networks not shown.
 3. See Drawing Figure A3 for legend.

A3 SCALE 1:40,000
 A1 SCALE 1:20,000



Plot Date: 19-Jun-13 3:46 p.m.
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REV'D P.MGR	GRT	Jul.2012		
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ISSUE	DATE	AMENDMENT	BY	APPD.
2		CI13 FINAL ALIGNMENT	JC	

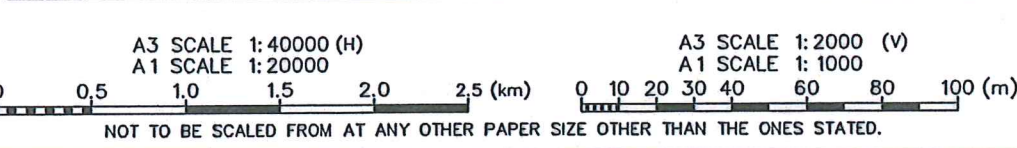
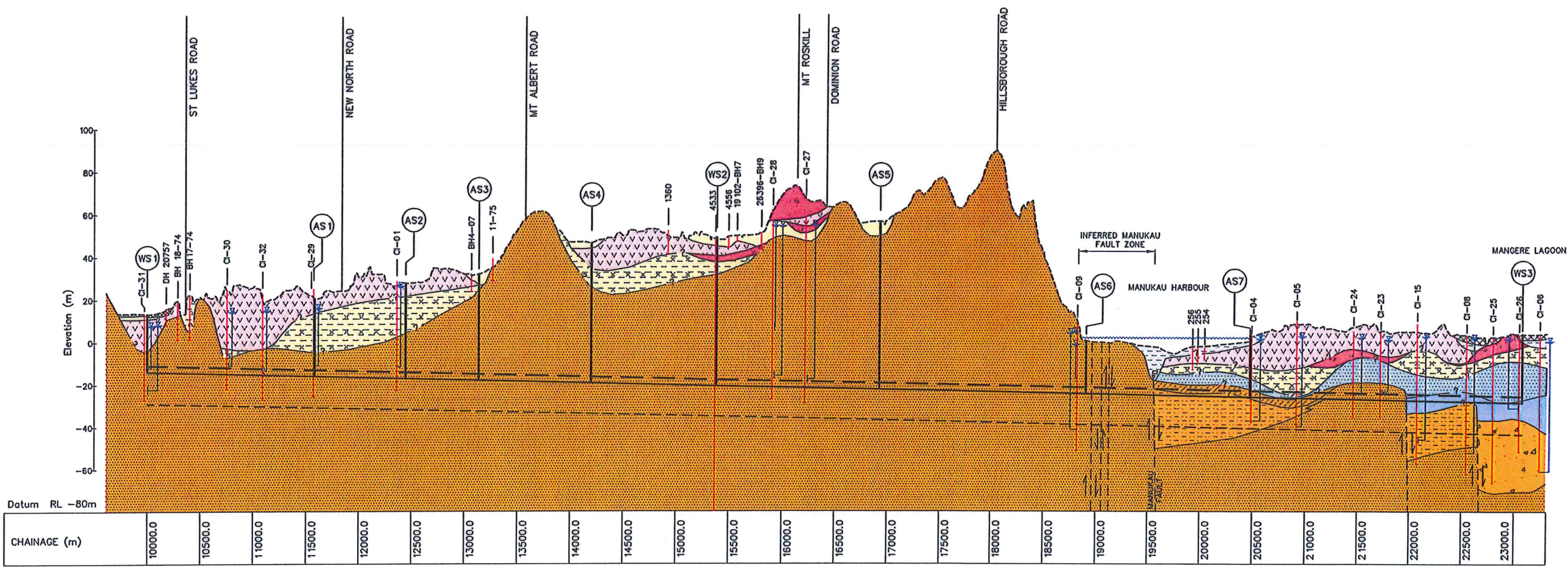
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CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
GEOTECHNICAL CONDITIONS
 GEOLOGICAL MAP - RELEVANT BOREHOLE INVESTIGATIONS

CAD FILE 29200-FA1_FA4	DATE 1-Jun-12
ORIGINAL SCALE A1	CONTRACT No.
1:20,000	-
DRAWING No.	ISSUE
FIGURE A4	2

Plot Date: 24-Jul-12 12:58 p.m.
 File path: L:\26145\26145_300\Working\Station\CAD\Figures



NOTES:

1. All dimensions are in metres unless noted otherwise.
2. The ground surface topography is based on Lidar data supplied by ALGGI.
3. Only these piezometers located near to tunnel level are shown on this drawing.
3. See Figure A3 for legend

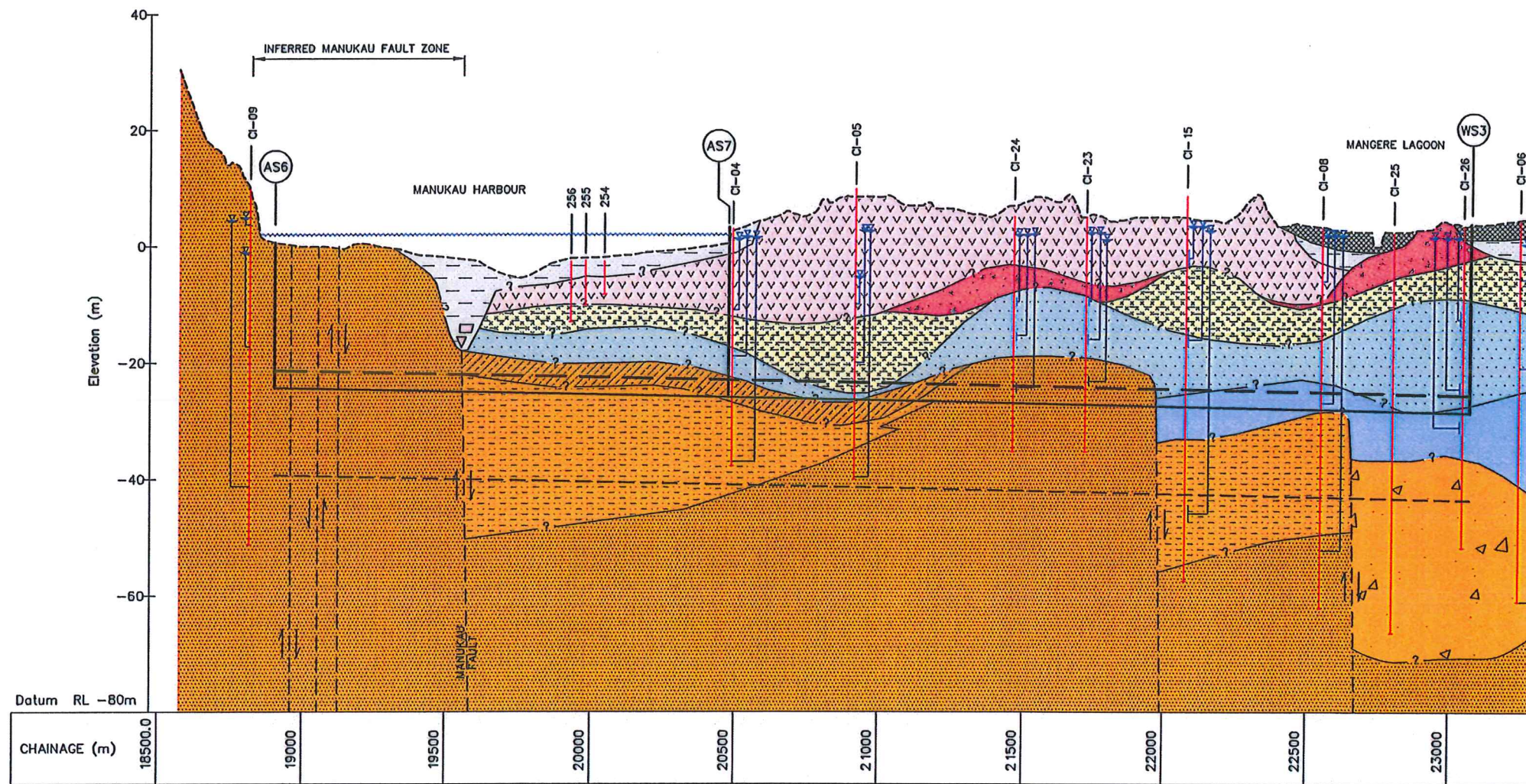
ORIGINAL IN COLOUR

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DRAWN	<i>JATG</i>		OPERATIONS
DWG. CHECKED	<i>APB</i>	<i>7/12</i>	
REV'D P.MGR	<i>SPB</i>	<i>07/12</i>	
APP'D P.DIR	<i>PD</i>	<i>24/7/10</i>	ASSET MANAGER
ISSUE	DATE	AMENDMENT	BY APPD.



CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
GEOTECHNICAL CONDITIONS
GEOLOGICAL SECTION, MAIN TUNNEL

CAD FILE 26145.300-CI-FA5_FA10DATE 23-Jun-11	
ORIGINAL SCALE A1	CONTRACT No.
AS SHOWN	—
DRAWING No.	ISSUE
FIGURE A5	



A3 SCALE 1:20000 (H)
 A1 SCALE 1:10000
 0 0.2 0.4 0.6 0.8 1.0 (km)

A3 SCALE 1:1000 (V)
 A1 SCALE 1:500
 0 10 20 30 40 50 (m)

NOTES:

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3. Only these piezometers located near to tunnel level are shown on this drawing.
3. See Figure A3 for legend

ORIGINAL IN COLOUR

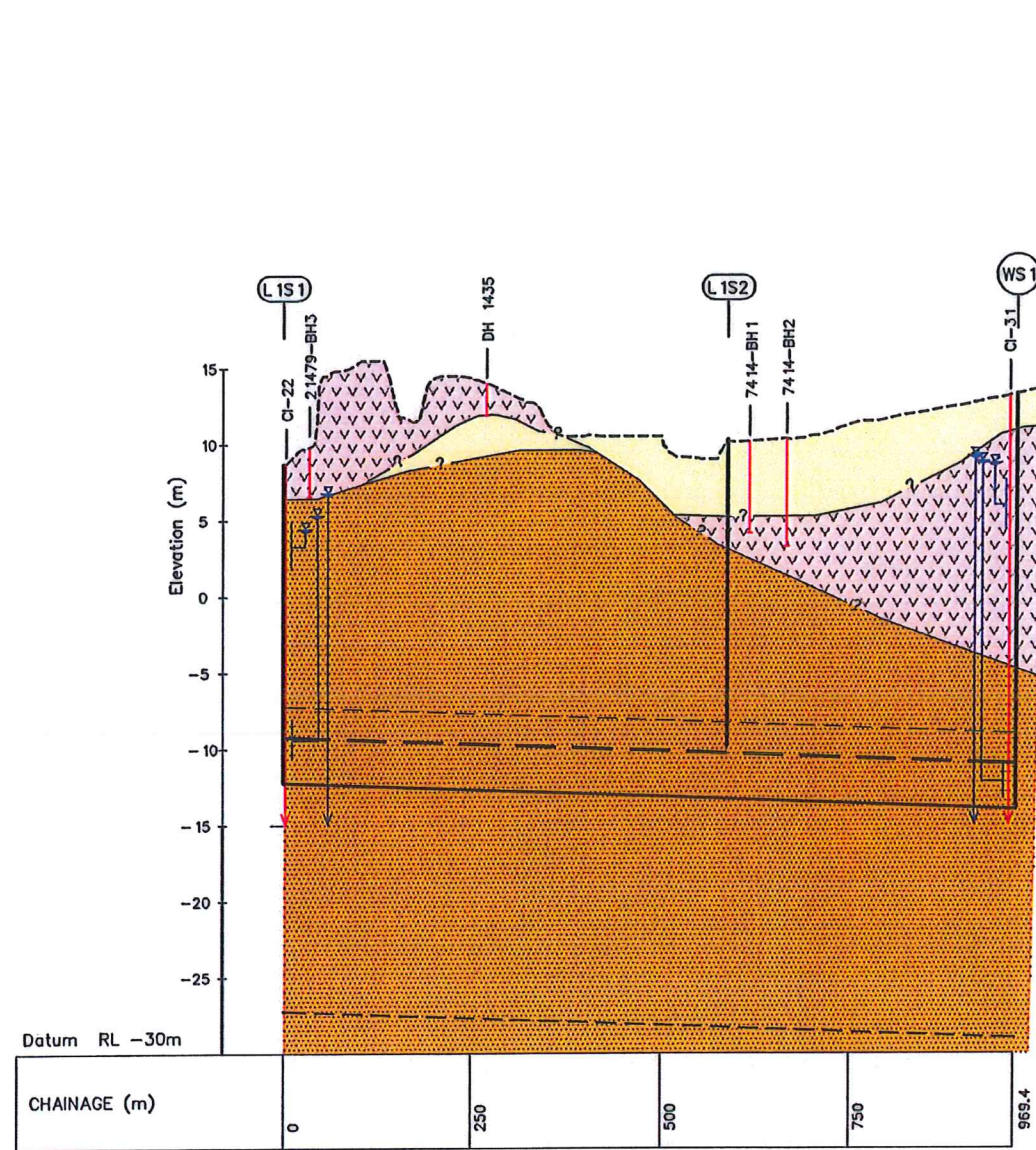
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APP'D P.DIR	PPG	24/7/10			ASSET MANAGER
ISSUE	DATE	AMENDMENT	BY	APPD.	BY



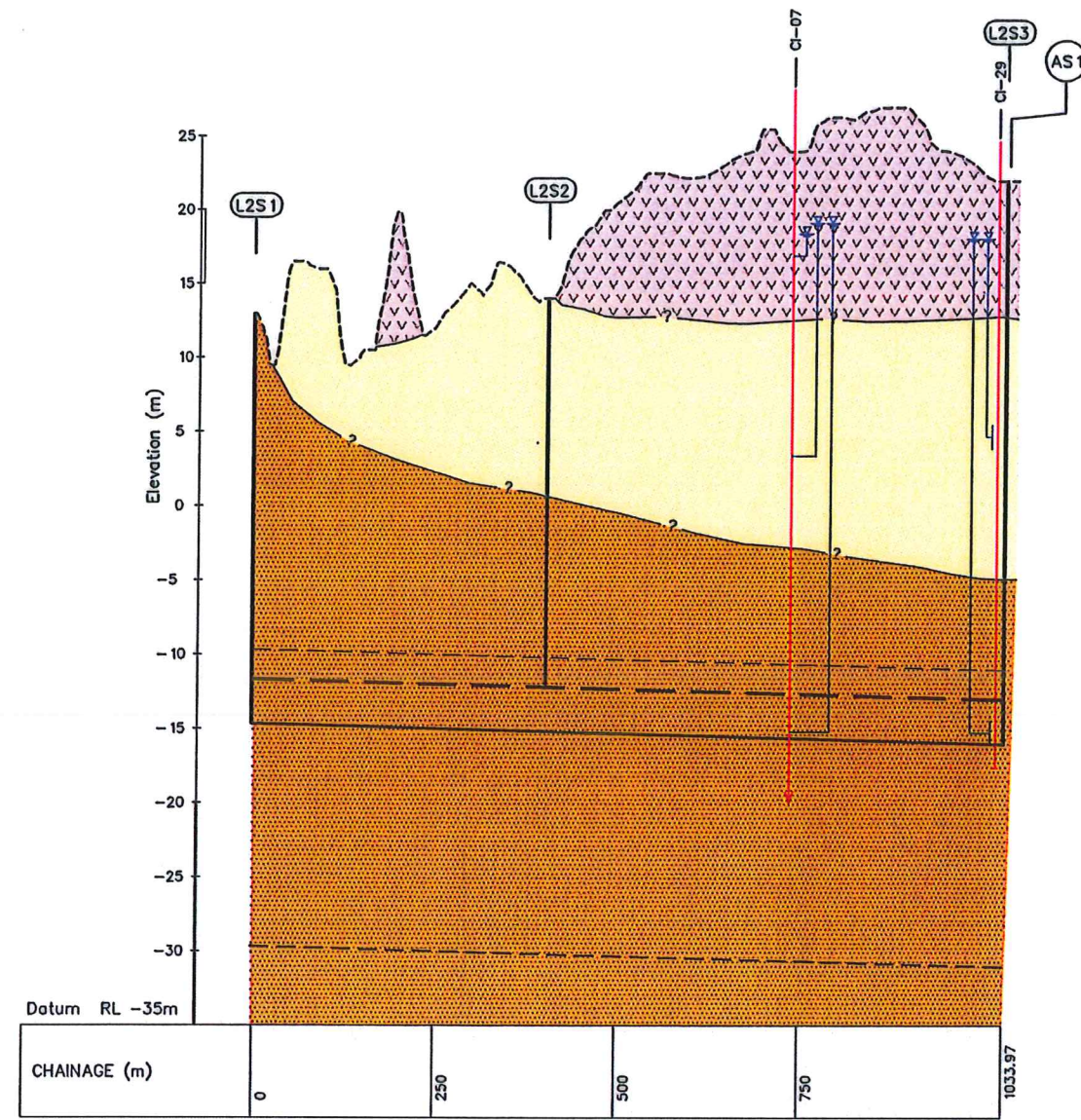
CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
 GEOTECHNICAL CONDITIONS
 GEOLOGICAL SECTION, MANGERE BRIDGE

CAD FILE 26145.300-CI-FA5_FA10DATE 23-Jun-11	
ORIGINAL SCALE A1	CONTRACT No.
AS SHOWN	-
DRAWING No.	ISSUE
FIGURE A6	

Plot Date: 24-Jul-12 12:58 p.m.
 File path: L:\26145\26145_300\Working\Intercept\CI01\Figures



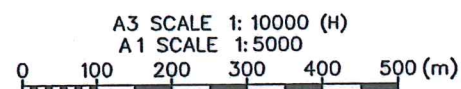
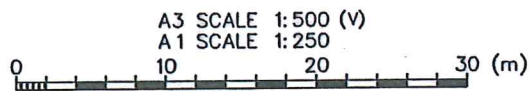
LINK SEWER LS1



LINK SEWER LS2

NOTES:

1. All dimensions are in metres unless noted otherwise.
2. The ground surface topography is based on Lidar data supplied by ALGGI.
3. Only these piezometers located near to tunnel level are shown on this drawing.
3. See Figure A3 for legend



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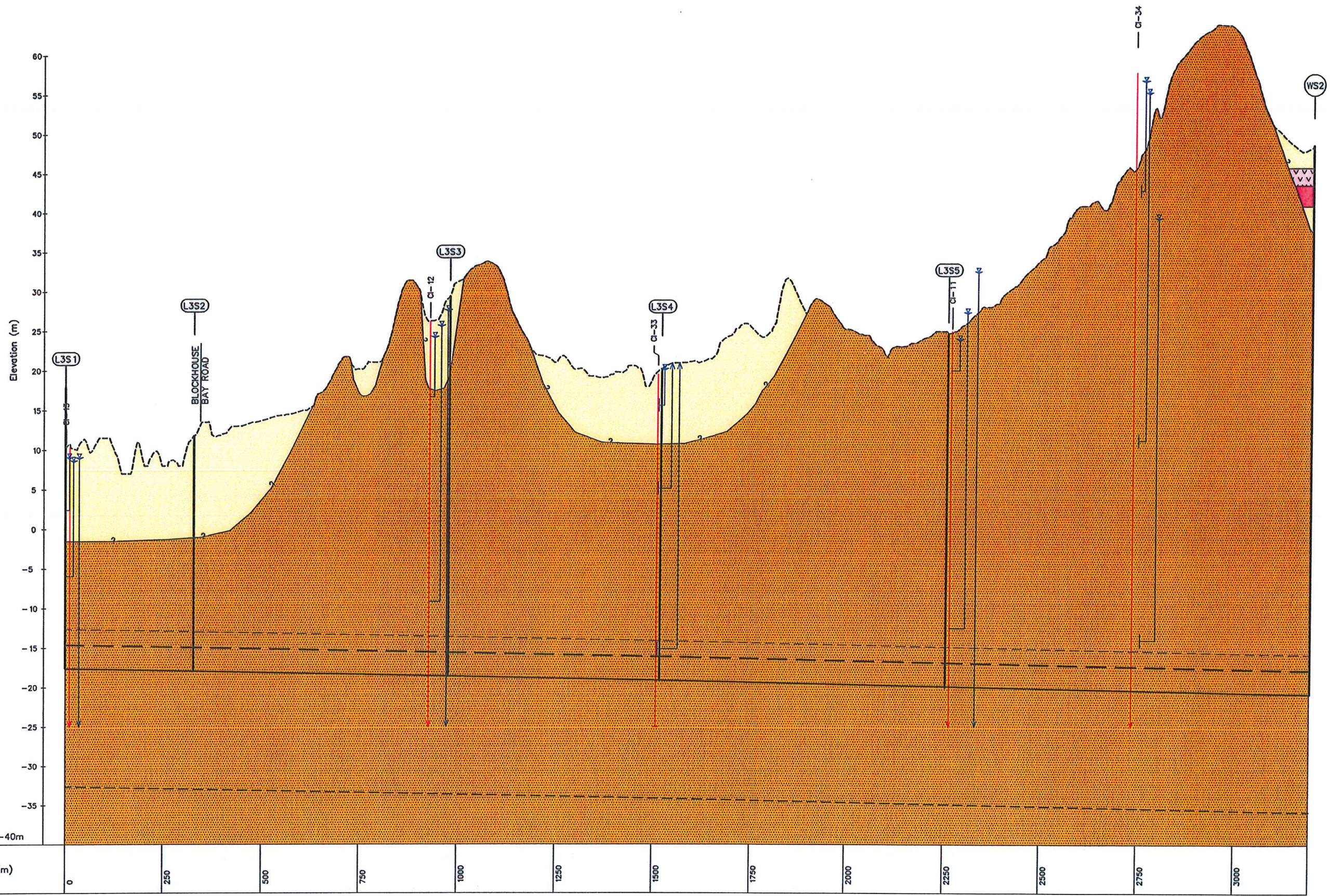
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DWG. CHECKED	ABS	7/12	
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ISSUE	DATE	AMENDMENT	BY APPD.



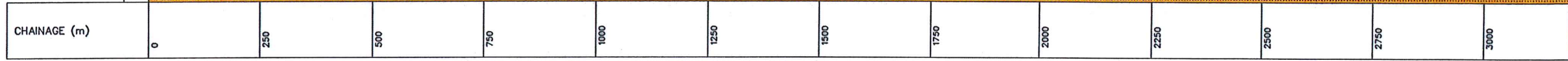
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CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
 GEOTECHNICAL CONDITIONS
 GEOLOGICAL SECTIONS, LINK SEWERS LS1 AND LS2

CAD FILE 26145.300-CI-FA5_FA10DATE 23-Jun-11	
ORIGINAL SCALE A1	CONTRACT No.
AS SHOWN	-
DRAWING No.	ISSUE
FIGURE A7	



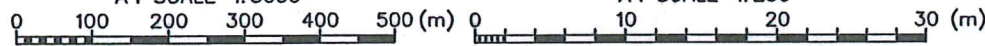
Datum RL -40m



LINK SEWER LS3

A3 SCALE 1: 10000 (H)
A1 SCALE 1: 5000

A3 SCALE 1: 500 (V)
A1 SCALE 1: 250



NOTES:

1. All dimensions are in metres unless noted otherwise.
2. The ground surface topography is based on Lidar data supplied by ALGGI.
3. Only these piezometers located near to tunnel level are shown on this drawing.



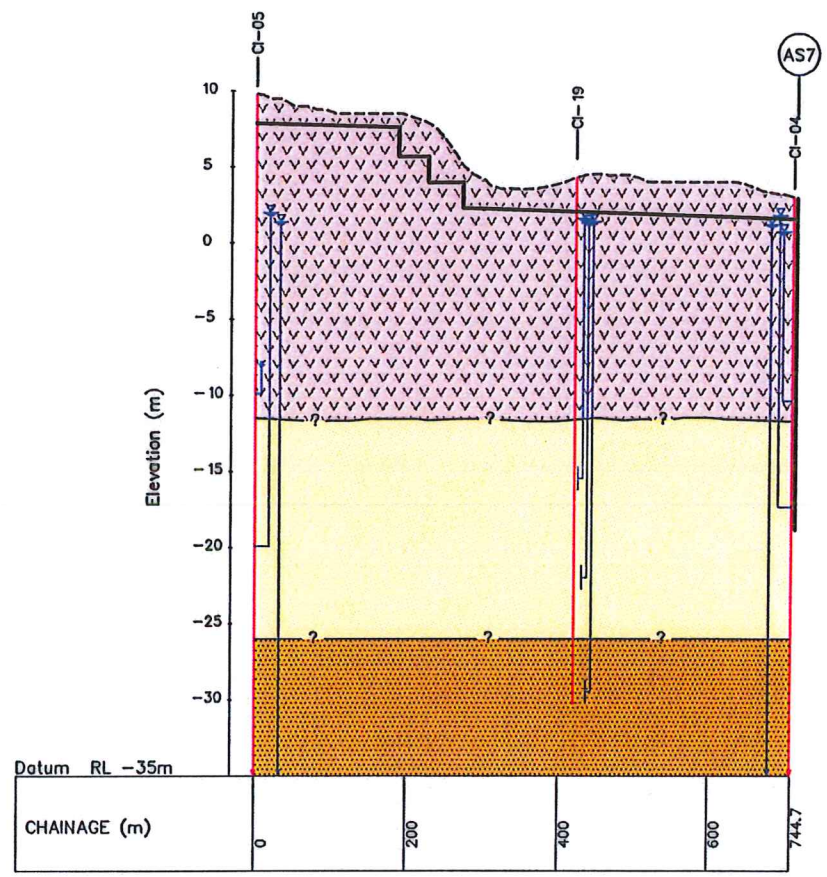
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DRAWN	JATC		OPERATIONS
DWG. CHECKED	RBS	7/12	
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ISSUE	DATE	AMENDMENT	BY APPD.

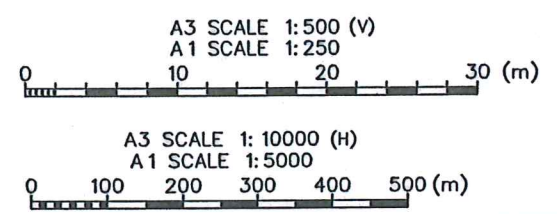


CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
GEOTECHNICAL CONDITIONS
GEOLOGICAL SECTION, LINK SEWER LS3

CAD FILE 26145.300-CI-FA5_FA10DATE 23-Jun-11	
ORIGINAL SCALE A1	CONTRACT No.
AS SHOWN	-
DRAWING No.	ISSUE
FIGURE A8	



LINK SEWER LS4



NOTES:

1. All dimensions are in metres unless noted otherwise.
2. The ground surface topography is based on Lidar data supplied by ALGGI.
3. Only these piezometers located near to tunnel level are shown on this drawing.
3. See Figure A3 for legend



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DRAWN	JAG		OPERATIONS
DWG. CHECKED	LAB	7/12	
REV'D P.MGR	SPJ	07/12	
APP'D P.DIR	SPJ	14/7/12	ASSET MANAGER
ISSUE	DATE	AMENDMENT	BY APPD.



CENTRAL INTERCEPTOR AND ASSOCIATED WORKS
 GEOTECHNICAL CONDITIONS
 GEOLOGICAL SECTION, LINK SEWER LS4

CAD FILE 26145.300-CI-FA5_FA10DATE 23-Jun-11	
ORIGINAL SCALE A1	CONTRACT No.
AS SHOWN	-
DRAWING No.	ISSUE
FIGURE A9	