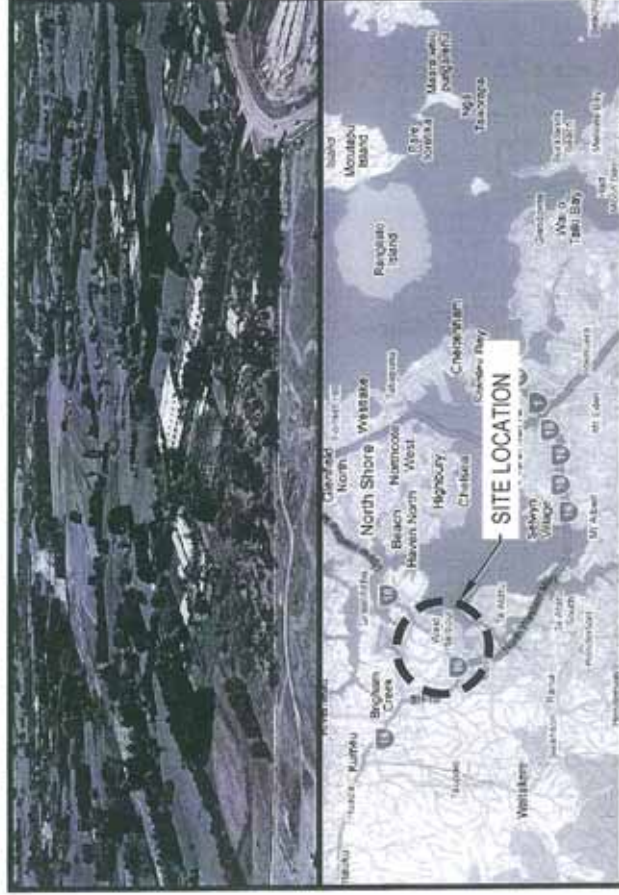




51-28664



NOTES
1. SP = SEPARABLE PORTION

1:2500
1cm = 25m
SCALE BAR

CONSTRUCTION

Auckland Transport An Auckland Council Organisation		AUCKLAND TRANSPORT NORSGA - NORTHSIDE DRIVE EAST OVERALL LOCALITY PLAN		Client: Auckland Transport Project: NORSGA - NORTHSIDE DRIVE EAST No: 51-28664-G14004
1 STAGING ACCORD 0 ISSUED FOR CONSTRUCTION	MJ MJ	MJ MJ	MJ MJ	Date: 18/01/2020 Project Manager: [Signature] Scale: 1:2500
DO NOT SCALE CHD Limited This document may only be used for the purpose of the project and is not to be used for any other purpose without the written consent of CHD Limited.				
Auckland Transport An Auckland Council Organisation				

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH NANTUCKET CITY COUNCIL CODE OF PRACTICE-CITY INFRASTRUCTURE AND LAND DEVELOPMENT, UNLESS SPECIFIED OTHERWISE.
2. THE CONTRACTOR'S HEALTH AND SAFETY MANUAL IS TO BE ADHERED TO AND ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY ACT MET.
3. ALL DIMENSIONS, SETOUTS AND LEVELS TO BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.

THE EXISTING SERVICES INDICATED ON THE PLANS HAVE BEEN OBTAINED FROM INFORMATION PROVIDED BY THE RELEVANT SERVICE AUTHORITIES AND ARE TO BE USED AS A GUIDE ONLY. THE CONTRACTOR SHALL OBTAIN COPIES OF ALL SERVICE AUTHORITY PLANS AND SHALL LOCATE ALL SERVICES IN THE VICINITY OF THE WORKS PRIOR TO COMMENCEMENT OF WORKS.

THE SERVICE AUTHORITY PLANS SHALL BE HELD ON SITE FOR THE DURATION OF THE CONTRACT.

THE CONTRACTOR IS TO OBTAIN THE NECESSARY PERMITS PRIOR TO COMMENCEMENT OF WORK.

THE CONTRACTOR SHALL BE AFFECTED BY THE CONSTRUCTION WORKS SHALL BE RESET TO ORIGINAL DESIGN LEVELS. THE CONTRACT SHALL JAMME WITH THE RELEVANT SERVICE AUTHORITIES REARRANGEMENT OF LIDS ETC.

1. WHERE USED ALL CONCRETE TO HAVE A 28-DAY STRENGTH OF 25MPa UNLESS OTHERWISE NOTED AND MUST BE PRODUCED FROM A REGISTERED CONCRETE PRODUCTION FACILITY.

1. ALL RICH DRAWINGS AND SIGNS TO COMPLY WITH THE TRAFFIC CONTROL DEVICES AND N2 TRANSPORT AGENCY'S MANUAL OF TRAFFIC SIGNS AND MARKINGS (MOTSM), UNLESS SPECIFIED OTHERWISE.
2. ALL RICH DRAWINGS TO BE THERMOPLASTIC (UNLESS SPECIFIED OTHERWISE).
3. PROPOSED LOCATIONS FOR SIGNALS, SIGNS AND MARKINGS ARE TO BE VERIFIED ON SITE BY THE ENGINEER AND APPROVED BY THE ROAD CONTROLLING AUTHORITY (RCA) PRIOR TO CONSTRUCTION.
4. ALL SIGNS TO COMPLY WITH RSM COMPLIANCE STAMPS FOR TRAFFIC SIGNS.

1. THE CONTRACTOR SHALL ENSURE THAT ALL CATCHPITS ARE CLEARED OF DEBRIS/SILT AND ARE IN WORKING ORDER DURING AND UPON COMPLETION OF THE WORKS.
2. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND DEPTHS OF ALL EXISTING SERVICES AND THE ADJUSTMENT OF NEW PIPES PRIOR TO COMMENCING EXCAVATION.
3. THE CONTRACTOR SHALL LIAISE WITH ALL UTILITY OPERATORS.
4. WHERE WORK TAKES PLACE IN EXISTING MANHOLES AND LINES, THE CONTRACTOR SHALL ENSURE THAT FLOW IS MAINTAINED AT ALL TIMES.
5. EXCAVATED GROUND SHALL BE RESTORED ON COMPLETION OF THE WORKS EXCEPT WHERE DEFECTS/URGES ARE IDENTIFIED AND THESE ARE TO BE REPAIRED.
6. ALL DAMAGE TO ANY INFRASTRUCTURE OR USE CAUSED BY MACHINERY OUTSIDE THE EXCAVATION AREA IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE RESTORED IMMEDIATELY.
7. ALL STRUCTURES, FENCES, GARDENS, ETC., AFFECTED BY THE WORKS ARE TO BE FULLY RESTORED TO ORIGINAL CONDITION, ON AS ORDERED.

1. LIGHTING DESIGNED AS PER ASIANX 1158
2. ALL LIGHTING TECHNICAL PARAMETERS HAVE BEEN CHECKED FOR COMPLIANCE AGAINST WAITINGRE CITY ROAD LIGHTING DESIGN REQUIREMENTS.
3. LIGHTING CATEGORY - SHV- V3

4. OBTAIN A FULL SET OF UNDERGROUND LAYOUT PLANS FOR ALL SERVICES PRIOR TO DIGGING.
5. LOCATE AND MARK UNDERGROUND SERVICES WHERE PRESENT IN VICINITY.
6. THE TRENCHING FOR ALL UNDERGROUND SUPPLY CABLES IS TO BE CAREFULLY HANDLED WITHIN 1m OF LOCATED UNDERGROUND SERVICES OR WITHIN 5m OF ANY POWER POLES. ALL WORKING TO COMPLY WITH RELEVANT NETWORK AUTHORITY REQUIREMENTS. ECPM AND AS/NZS3000.

7. LUMINAIRE MAINTENANCE VALUE ADJUSTED IS 0.7

8. ALL ELECTRICAL SUPPLY INSTALLATIONS TO BE CARRIED OUT BY THE NETWORK OPERATOR, TO THE OPERATORS STANDARDS. STREET LIGHT SUPPLIES TO BE NORMAL 240V SUPPLY TO THE POLE, WITH PHOTOCELL CONTROL AT THE STANDARDS. OPERATOR OR POLE FOR JARUP AND ALMA POLES. SEE TRAFFIC SIGNALS NOTE.

9. NEW ELECTRICAL CABLE TO BE 10mm² PVC CABLE AND IN 600mm DEEP TRENCH UNLESS SPECIFIED OTHERWISE.

10. NEW ELECTRICAL CABLE TO BE 16mm² PVC BUSHED WITH 50mm DRAMWOOD AND WAFER LOCATED.

11. ELECTRICAL INSTALLATIONS TO COMPLY WITH BS6231, 300V AND 400V, AND CITY STANDARD DETAIL REQUIREMENTS SECTION 0900.

12. WHERE THE EARTH-CONDUCTING CONDUCTOR IS NOT ALLOWED, AN EARTH ELECTRODE IS TO BE INSTALLED IN EACH LIGHT POLE TO COMPLY WITH ANSYS 3000 AND AS DETAILED IN PLAN 005 OF AUCLAND CITY STANDARD DETAIL.
13. ALL DIMENSIONS ARE INDICATIVE ONLY AND TO BE CONFIRMED ON SITE AND RECORDED ON AS-BUILT PLANS.
14. ALL REINFORCING CABLES TO BE MADE SAFE AND RECORDED ON AS-BUILT PLANS.
15. NEW STREET LIGHT ASSEMBLIES TO BE SUPPLIED POWER FROM EXISTING ELECTRICAL CABLE, WHERE SHOWN UNDERGROUND.
16. THE LUMINAIRE MANUFACTURER IS TO FIT ALL LUMINAIRES WITH ZOOMIN SST-1 PHOTO-ELECTRIC CONTROL, ENSURING THE RELIABILITY OF THE FITTING IS NOT AFFECTED BY LOCAL LUMINAIRES AS PER MANUFACTURER'S INSTRUCTIONS.

1. ALL EQUIPMENT INSTALLATION, TESTING, AND COMMISSIONING SHALL CONFORM TO THE NATIONAL TRAFFIC SIGNAL SPECIFICATION REV. 2.
2. FOR JUMP AND SUMA POLES THE STREETLIGHTS ARE TO BE SUPPLIED FROM THE TRAFFIC CONTROL CABINET. AS PER AUSTRALIAN CITY SPECIFIC 2008/09, TO GIVE ONE POINT OF REGULATION.

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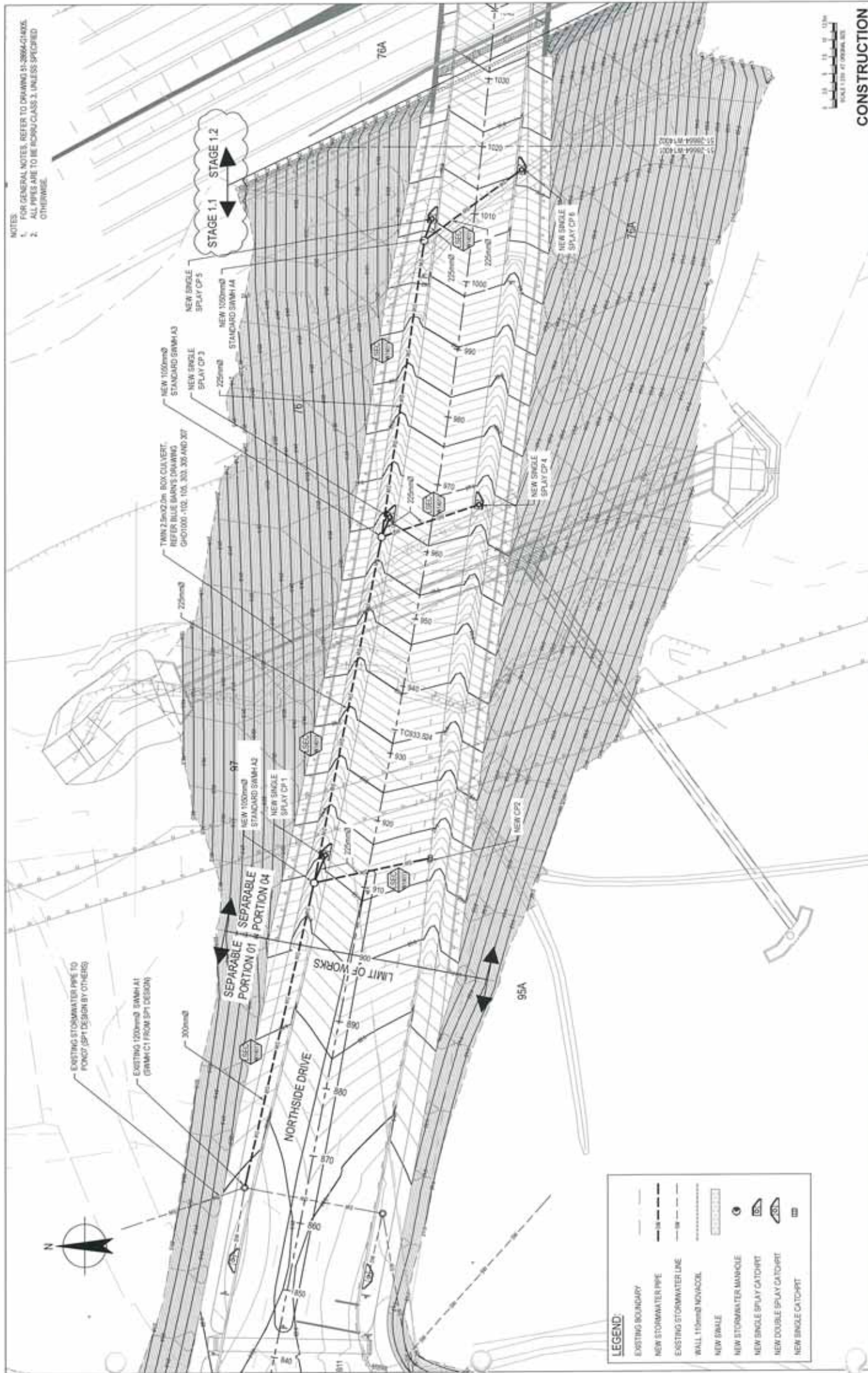
A-1

51-28664-G14005

1000



- NOTES
- FOR GENERAL NOTES, REFER TO DRAWING 51-28664-01/001.
 - ALL PIPES ARE TO BE HDPE/CLASS 3, UNLESS SPECIFIED OTHERWISE.



LEGEND

---	EXISTING BOUNDARY
---	NEW STORMWATER PIPE
---	EXISTING STORMWATER LINE
---	WALL 115mm MONOCOL
---	NEW SWALE
---	NEW STORMWATER MANHOLE
---	NEW SINGLE SPILL CATCHMENT
---	NEW DOUBLE SPILL CATCHMENT
---	NEW SINGLE CATCHMENT



NOTES

- FOR GENERAL NOTES, REFER TO DRAWING 51-28664-01/001.
- ALL PIPES ARE TO BE HDPE/CLASS 3, UNLESS SPECIFIED OTHERWISE.

CONSTRUCTION

AUCKLAND TRANSPORT
NORSGA - NORTHSIDE DRIVE EAST
NORTHSIDE DRIVE
STORMWATER PLAN - SHEET 1 OF 8

Project: 51-28664-W14001
Drawing No: 51-28664-W14001
Rev: 1

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AUCKLAND TRANSPORT
NORSGA - NORTHSIDE DRIVE EAST
NORTHSIDE DRIVE
STORMWATER PLAN - SHEET 1 OF 8

Project: 51-28664-W14001
Drawing No: 51-28664-W14001
Rev: 1

NOTES:
1. FOR GENERAL NOTES, REFER TO DRAWING 51-28064-01A-005.
2. ALL PIPES ARE TO BE RCP/CLASS 3, UNLESS SPECIFIED OTHERWISE.



CONSTRUCTION

AUCKLAND TRANSPORT
NORSGA - NORTHSIDE DRIVE EAST
NORTHSIDE DRIVE
STORMWATER PLAN - SHEET 2 OF 8
Drawing No: 51-28664-W14002

Rev. 1



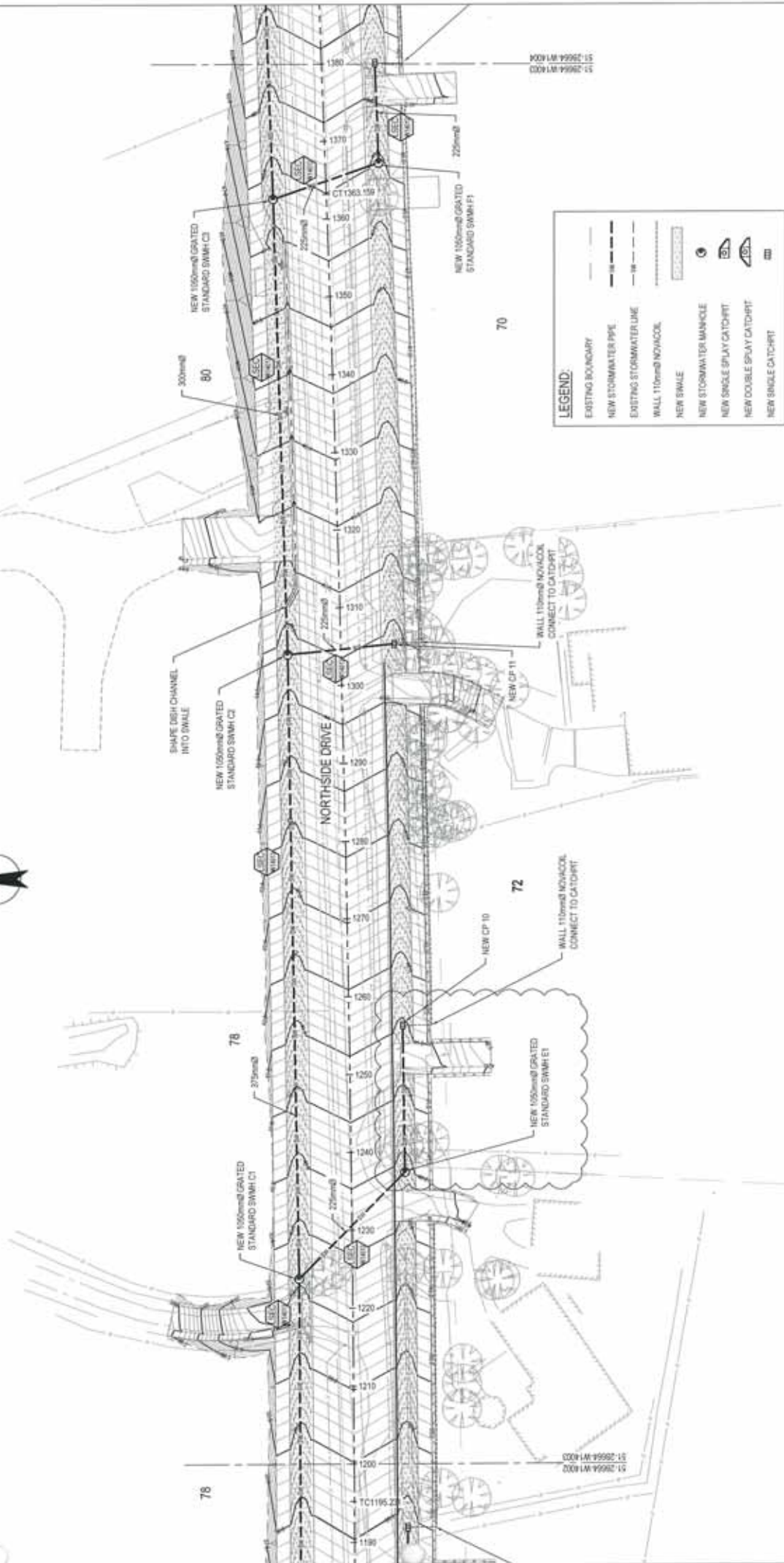
Auckland Transport

Art Auckland Council

1	MANHOLE NAMES CHANGED, STAGING ADDED	DC	17.09				
0	ISSUED FOR CONSTRUCTION	MJ	TMP	15.05.12	DMF		
						Approved	Checked
						For Approval	For Issue

[illegible]

FOR GENERAL NOTES, REFER TO DRAWING 51-2096A-GT-MODS.
ALL PIPES ARE TO BE RING CLASS 3, UNLESS SPECIFIED OTHERWISE.



CONSTRUCTION

AUCKLAND TRANSPORT
NORSGA - NORTHSIDE DRIVE EAST
NORTHSIDE DRIVE
UNCOMMUTED RAIL - SHEET 2 OF 8

Drawing No: **51-28664-W14003** Rev: **1**

Page 1

An Auckland Council Organisation

Task	Project Director	Case
------	------------------	------

[illegible]

Is the study a randomized, controlled trial?	Yes
--	-----

Study	Year	Sample Size	Prevalence	OR	95% CI
1	2001	100	10%	1.0	0.5-2.0
2	2002	200	15%	1.5	0.8-2.8
3	2003	300	20%	2.0	1.2-3.5
4	2004	400	25%	2.5	1.5-4.2
5	2005	500	30%	3.0	1.8-5.0
6	2006	600	35%	3.5	2.0-6.0
7	2007	700	40%	4.0	2.2-7.0
8	2008	800	45%	4.5	2.5-8.0
9	2009	900	50%	5.0	2.8-8.5
10	2010	1000	55%	5.5	3.0-10.0
11	2011	1100	60%	6.0	3.2-11.0
12	2012	1200	65%	6.5	3.5-12.0
13	2013	1300	70%	7.0	3.8-13.0
14	2014	1400	75%	7.5	4.0-14.0
15	2015	1500	80%	8.0	4.2-15.0
16	2016	1600	85%	8.5	4.5-16.0
17	2017	1700	90%	9.0	4.8-17.0
18	2018	1800	95%	9.5	5.0-18.0
19	2019	1900	100%	10.0	5.2-19.0
20	2020	2000	100%	10.0	5.2-19.0

姓名	性别	年龄	职业
张三	男	35	教师
李四	女	28	医生
王五	男	42	工程师
赵六	女	31	护士
孙七	男	25	学生
周八	女	38	公务员
吴九	男	45	经理
郑十	女	33	会计
冯十一	男	29	程序员
陈十二	女	36	设计师
林十三	男	41	销售
黄十四	女	34	文员
周十五	男	27	司机
吴十六	女	39	保洁
郑十七	男	43	保安
冯十八	女	32	厨师
陈十九	男	26	快递员
林二十	女	37	服务员
黄二十一	男	44	农民
周二十二	女	30	工人
吴二十三	男	46	老板
郑二十四	女	35	白领
冯二十五	男	28	蓝领
陈二十六	女	36	自由职业
林二十七	男	41	兼职
黄二十八	女	34	全职
周二十九	男	27	实习
吴三十	女	39	退休
郑三十一	男	43	失业
冯三十二	女	32	创业
陈三十三	男	26	转行
林三十四	女	37	深造
黄三十五	男	44	移民
周三十六	女	30	留学
吴三十七	男	46	归国
郑三十八	女	35	海归
冯三十九	男	28	海归
陈四十	女	36	海归
林四十一	男	41	海归
黄四十二	女	34	海归
周四十三	男	27	海归
吴四十四	女	39	海归
郑四十五	男	43	海归
冯四十六	女	32	海归
陈四十七	男	26	海归
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周五十	女	30	海归

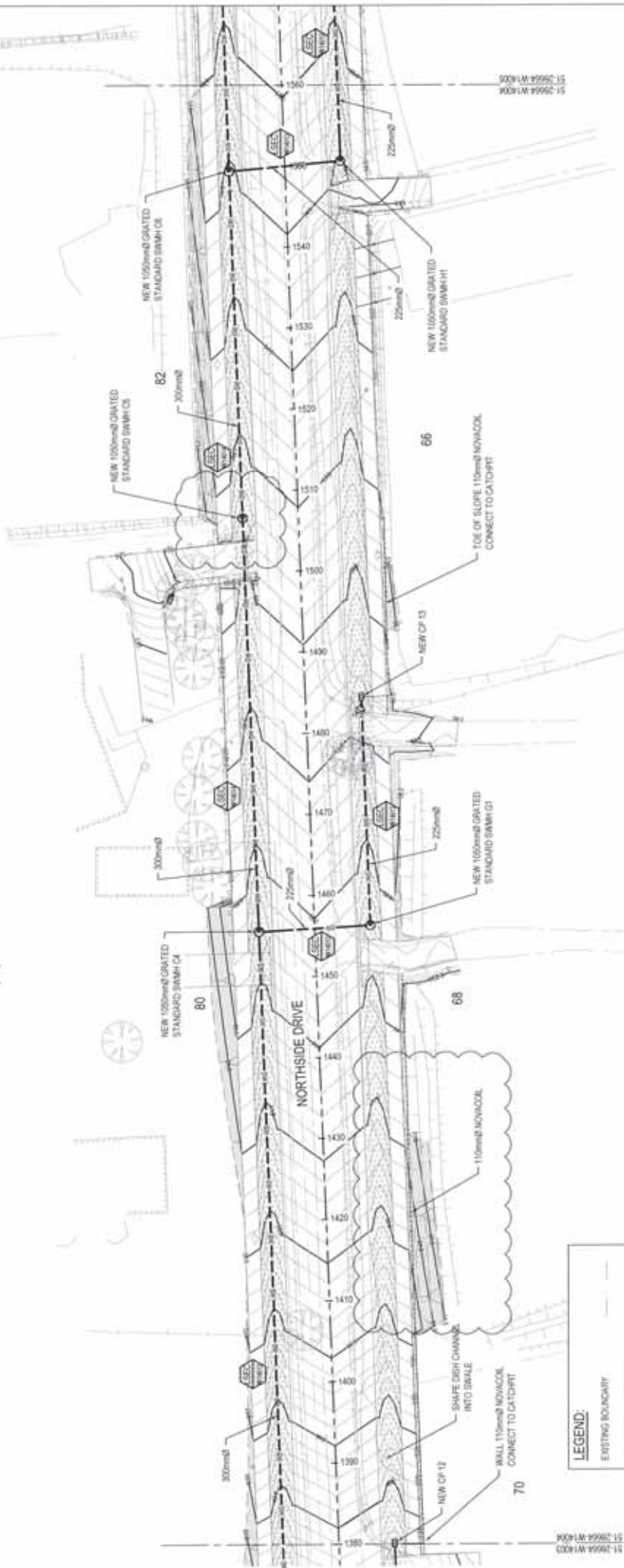
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1	2
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主	要
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1

1. FOR GENERAL NOTES, REFER TO DRAWING 91-2092A-G1-MIXES.
2. ALL PIPES ARE TO BE RIGID CLASS 3 UNLESS SPECIFIED OTHERWISE.



LEGEND:

	EXISTING BOUNDARY
	NEW STORMWATER PIPE
	EXISTING STORMWATER LINE
	WALL TO 10'±±± NOVAPOOL
	NEW SWALE
	NEW STORMWATER MANHOLE
	NEW SINGLE SPRAY CATCHPIT
	NEW DOUBLE SPRAY CATCHPIT
	NEW SINGLE CATCHPIT

CONSTRUCTION

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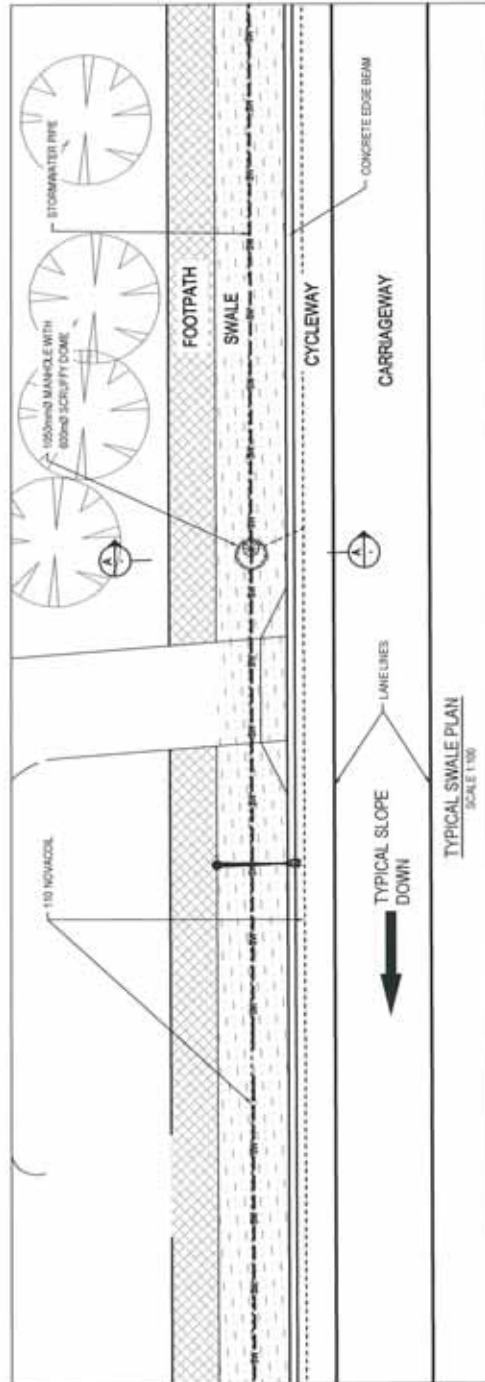
NOTES:
1. FOR GENERAL NOTES, REFER TO DRAWING 55-2066A-Q1000X.
2. ALL PIPES ARE TO BE RICHU CLASS 3, UNLESS SPECIFIED OTHERWISE.



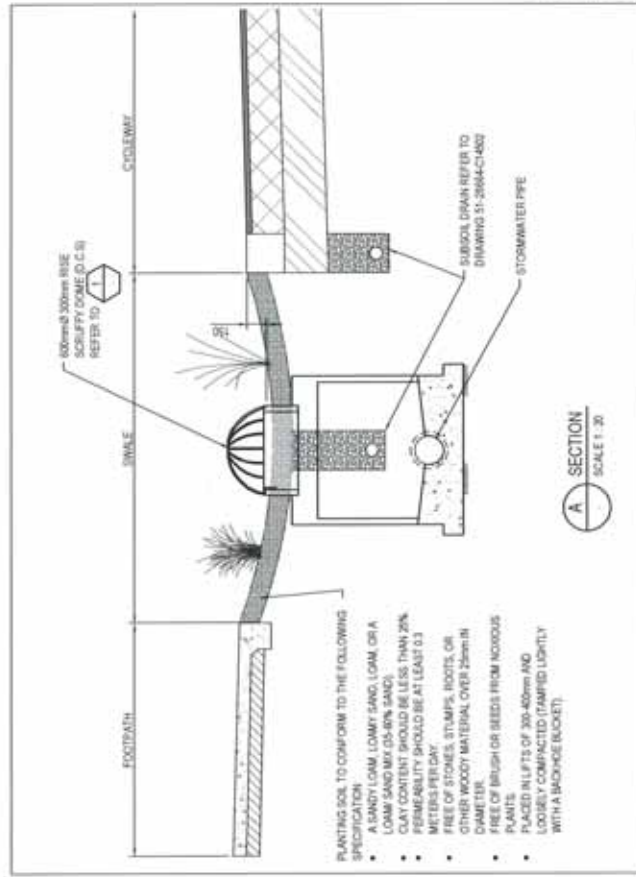
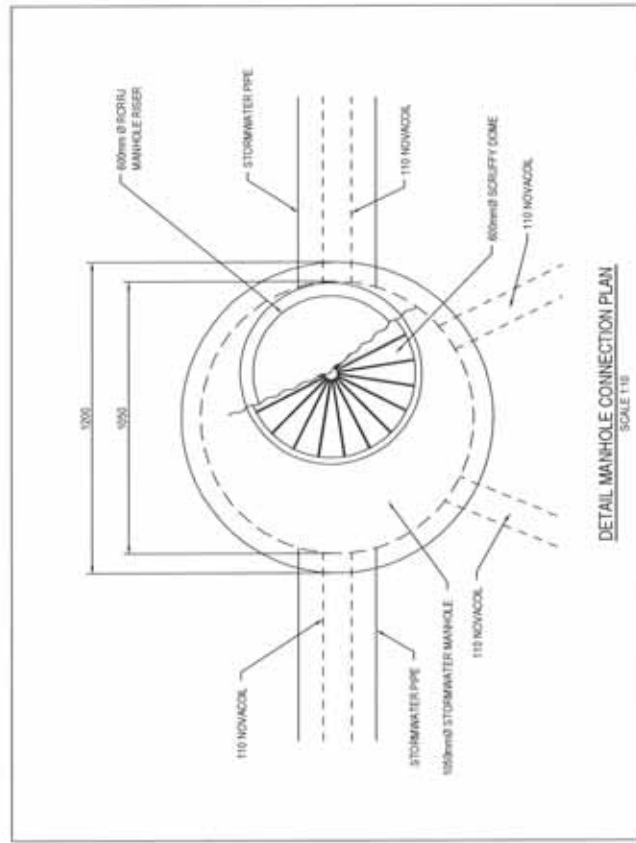
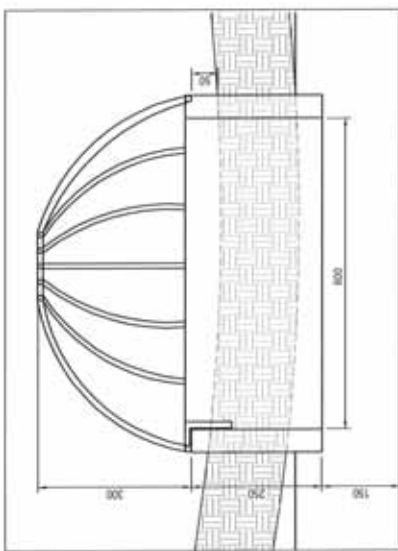
CONSTRUCTION

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Plane 1



1 DETAIL
SCALE 1:5



ISSUED FOR CONSTRUCTION

Prepared: [Name] Date: [Date]

Checked: [Name] Date: [Date]

Drawn: [Name] Date: [Date]

Scale: [Scale]

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Design: [Name] Date: [Date]

Project: [Name] Date: [Date]

Client: [Name] Date: [Date]

Auckland Transport
An Auckland Council Organisation

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PO Box 100, Auckland 1140
Phone: 09 308 3000

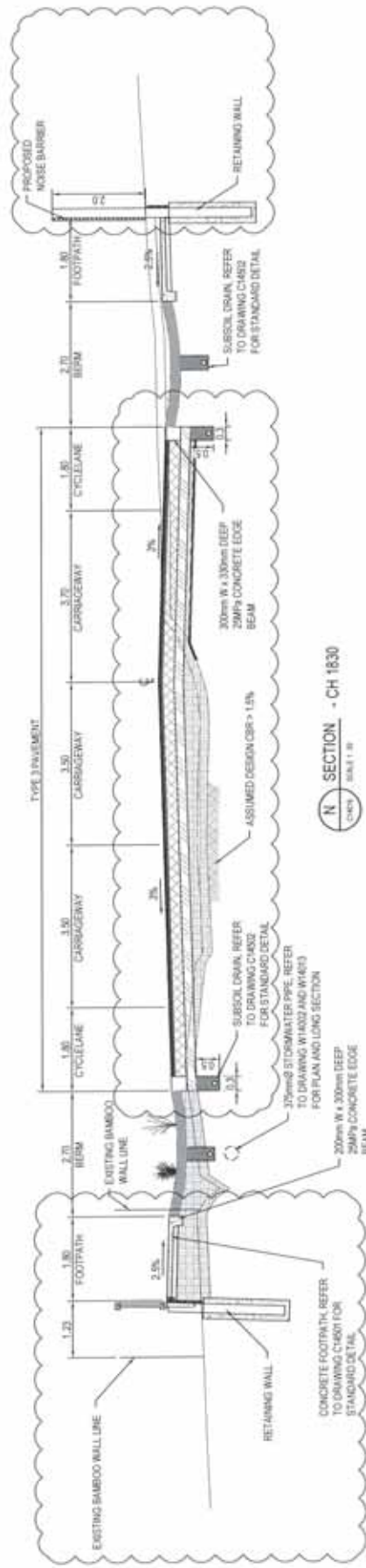
CONSTRUCTION

AUCKLAND TRANSPORT
NORSSGA - NORTHSHORE DRIVE EAST
NORTHSHORE DRIVE
STORMWATER SWALE DETAILS - SHEET 1 OF 2

Drawing No: 51-28664-W14508

Rev: 0

1. REFER TO DRAWING NO 91-29964-C14041 FOR PAVEMENT TYPE DETAILS.
2. REFER TO DRAWING NO 91-29964-W14508 AND W14509 FOR SHALE DETAILS.
3. REFER TO DRAWING NO 91-29964-C14221 AND W14222 FOR NOSE BARRIER AND WIND BREAK TYPE DETAILS.



CONSTRUCTION

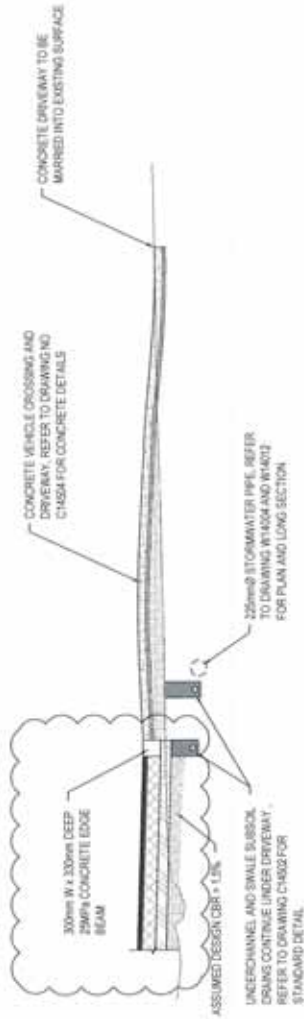
AST
-SHEET 3 OF 4
044 Rev: 1

AST
-SHEET 3 OF 4
044 Rev: 1

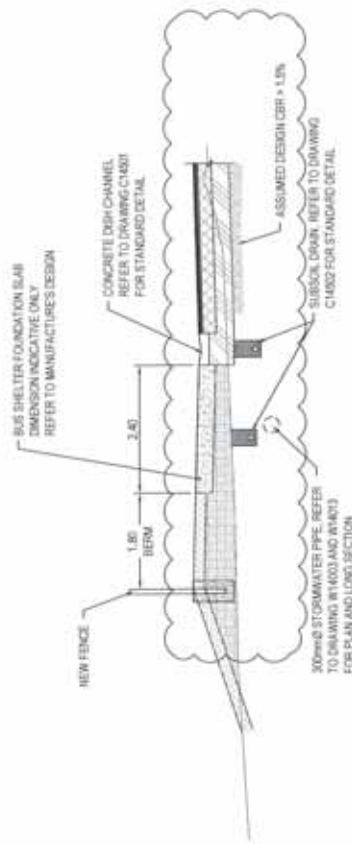
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NOTES

1. REFER TO DRAWING NO 51-28664-C1401 FOR PAVEMENT TYPE DETAILS.
2. REFER TO DRAWING NO 51-28664-A1458 AND A1459 FOR SWALE DETAILS.
3. REFER TO DRAWING NO 51-28664-C1427 AND A1427 FOR MOSE BARRIER AND WIND BREAK TYPE DETAILS.



S SECTION CH 1480
SCALE 1:50
DRIVEWAY

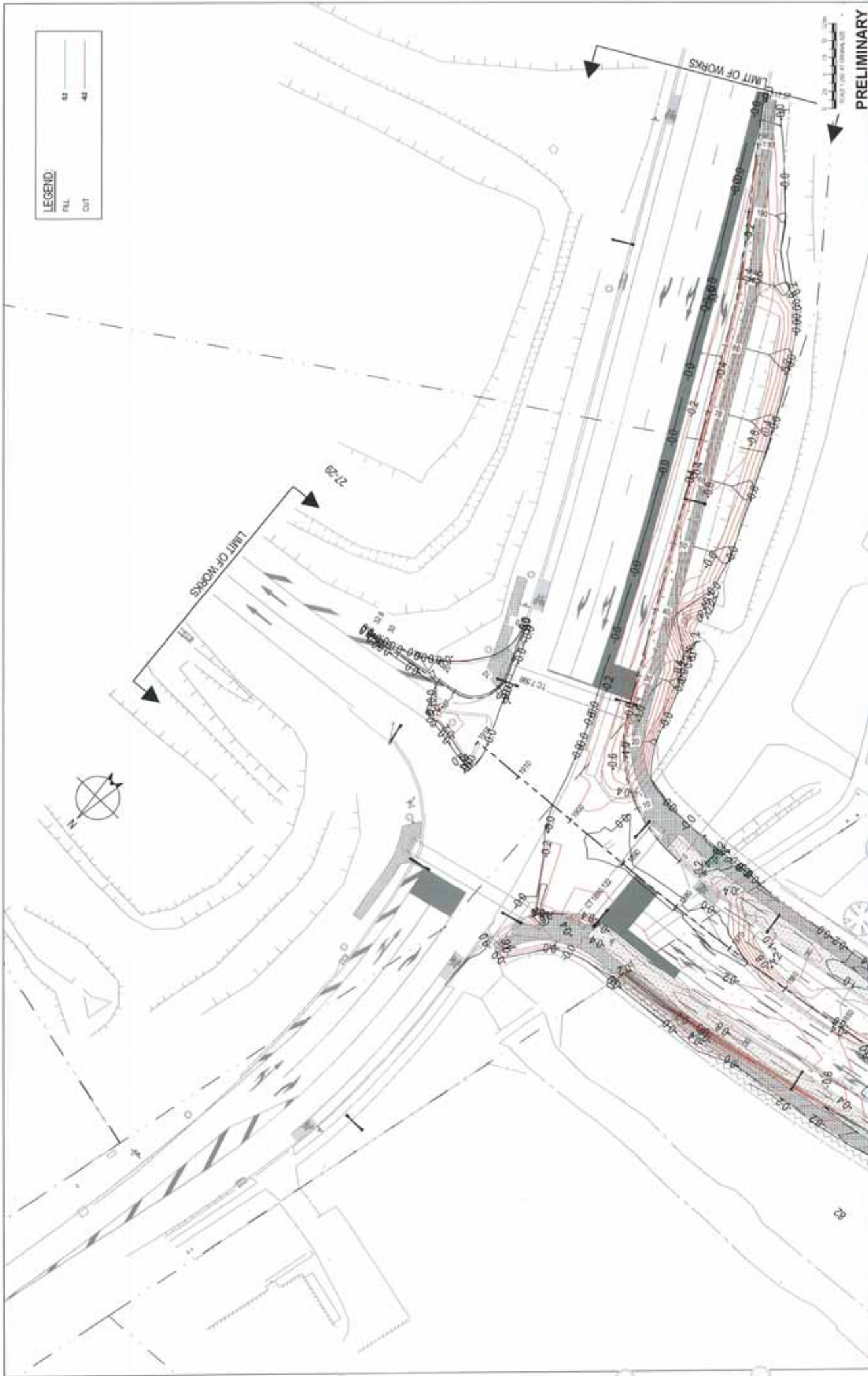


R SECTION CH 1340
SCALE 1:50
BUS SHELTER



CONSTRUCTION

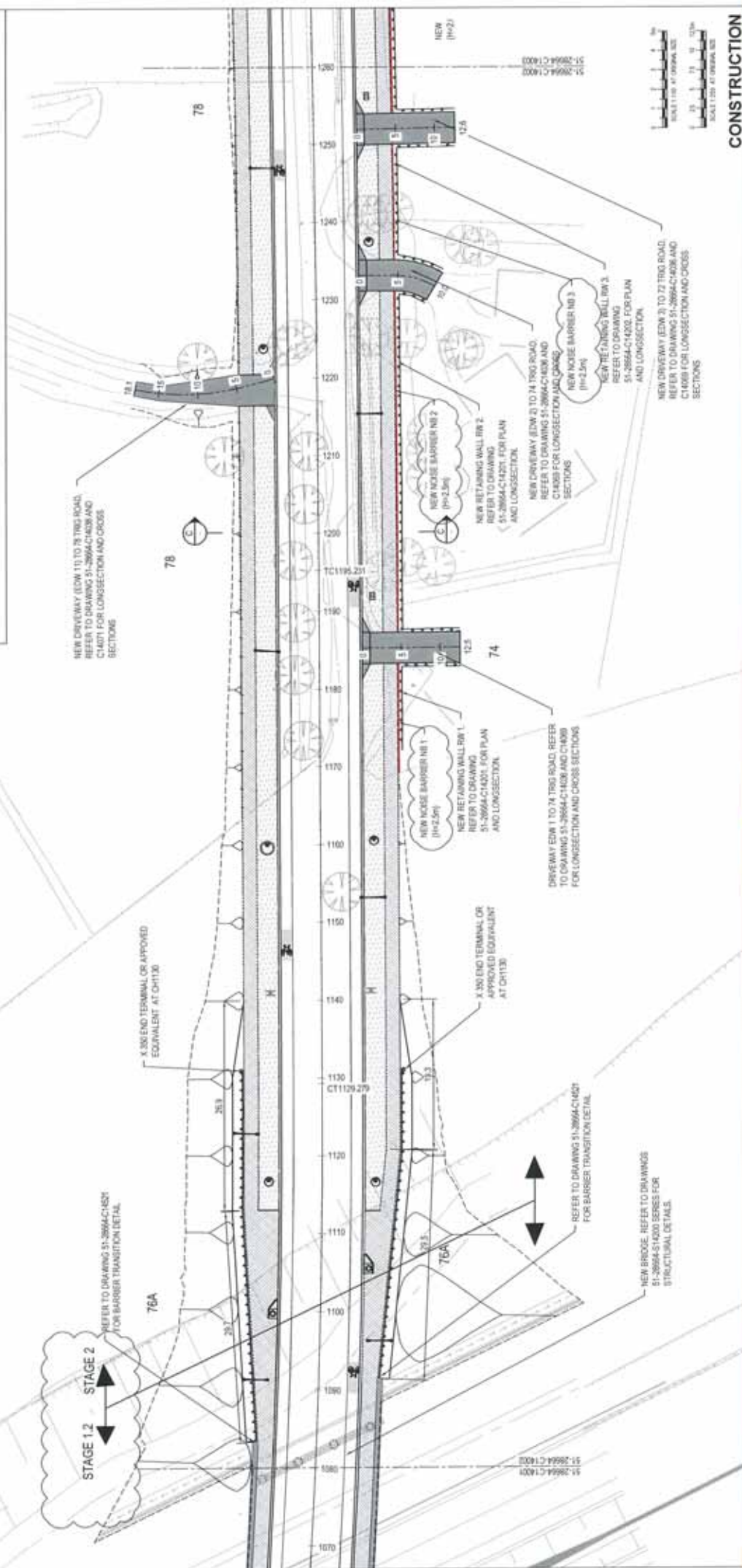
Auckland Transport NORSGA - NORTHSIDE DRIVE EAST NORTHSHORE DRIVE PAVEMENT TYPICAL SECTIONS - SHEET 4 OF 4				Client: Auckland Transport Project: NORSGA - NORTHSIDE DRIVE EAST Title: PAVEMENT TYPICAL SECTIONS - SHEET 4 OF 4 Drawing No: 51-28664-C14045 Rev: 1
DO NOT SCALE GHD Limited The information on this drawing is for use by the client only and is not to be used for any other purpose without the written consent of GHD Limited. 27 Napier Street, Auckland 1011, New Zealand Tel: 09 308 3300 Email: auckland@ghd.co.nz				Designer: M. J. King Checker: A. M. King Date: 18/10/12 Scale: ALL SHOWN Author: A. M. King
Auckland Transport An Auckland Council Organisation				1 BUS SHELTER FOUNDATION SLAB MODIFIED, DCPA ADDED 0 ISSUED FOR CONSTRUCTION Date: 18/10/12 Drawn: M. J. King Checked: A. M. King Date: 18/10/12



PRELIMINARY		AUCKLAND TRANSPORT		NORSGA - NORTHSIDE DRIVE EAST		EARTHWORKS CONTOUR PLAN - SHEET 6 OF 6		PRELIMINARY	
Client		Project		Title		Scale		Revision	
Auckland Transport		NORSGA - NORTHSIDE DRIVE EAST		EARTHWORKS CONTOUR PLAN - SHEET 6 OF 6		1:1000		A1	
Drawn		Checked		Design		Scale		Revision	
M. J. J. J.		M. J. J. J.		M. J. J. J.		1:1000		A1	
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Auckland Transport		Auckland Transport		Auckland Transport		Auckland Transport		Auckland Transport	
An Auckland Council Organisation		An Auckland Council Organisation		An Auckland Council Organisation		An Auckland Council Organisation		An Auckland Council Organisation	
Author		Checker		Designer		Scale		Revision	
M. J. J. J.		M. J. J. J.		M. J. J. J.		1:1000		A1	
Drawn		Checked		Design		Scale		Revision	
M. J. J. J.		M. J. J. J.		M. J. J. J.		1:1000		A1	

1. FOR CIVIL WORKS GENERAL LEGEND, REFER TO G1000.
2. FOR LIGHTING LAYOUT DETAILS, REFER TO E1000.
3. FOR SIGNAGE LAYOUT DETAILS, REFER TO S1000.
4. FOR HYDRAULIC LAYOUT DETAILS, REFER TO H1000.
5. REFER TO S1, SYMBOL CHANGES FOR EARTHWORKS CROSS SECTIONS FROM 0.00 TO 0.00.
6. ALL TREES WITHIN ROAD RESERVE TO BE REMOVED, UNLESS STATED OTHERWISE.
7. TREES OVERHANGING NEW ROAD RESERVE TO BE TRIMMED OR REMOVED AS DIRECTED BY THE ENGINEER.
8. LOCATIONS OF RETAINING WALL, NOISE BARRIER, WALL AND FENCE ON LAYOUT ARE INDICATIVE ONLY. REFER TO CROSS SECTION DRAWINGS CH1561 TO CH1569 FOR ACTUAL LOCATIONS.

1. FOR CIVIL WORKS GENERAL LEGEND, REFER TO G1000.
2. FOR LIGHTING LAYOUT DETAILS, REFER TO E1000.
3. FOR SIGNAGE LAYOUT DETAILS, REFER TO S1000.
4. FOR HYDRAULIC LAYOUT DETAILS, REFER TO H1000.
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8. LOCATIONS OF RETAINING WALL, NOISE BARRIER, WALL AND FENCE ON LAYOUT ARE INDICATIVE ONLY. REFER TO CROSS SECTION DRAWINGS CH1561 TO CH1569 FOR ACTUAL LOCATIONS.

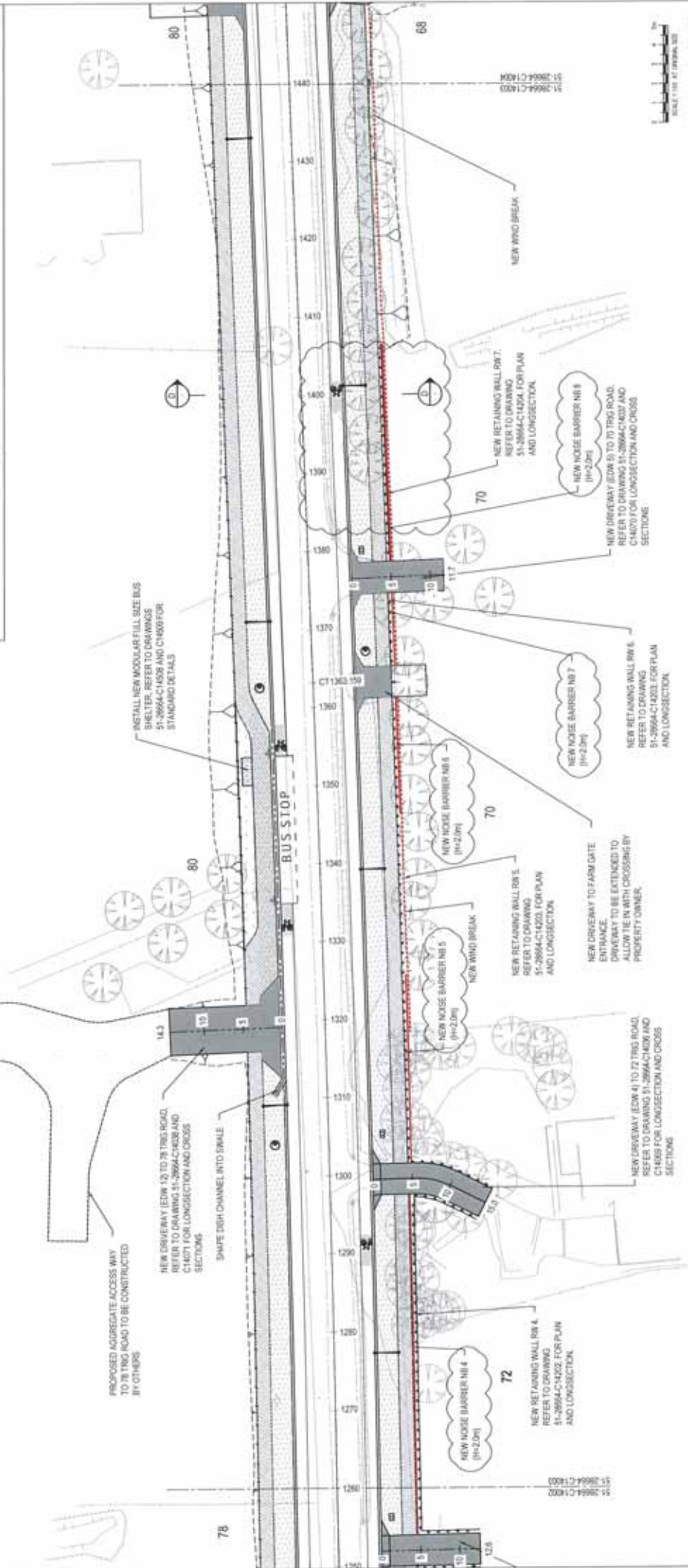
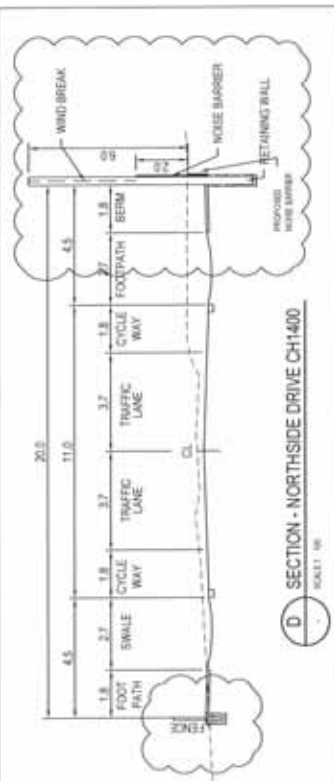


CONSTRUCTION

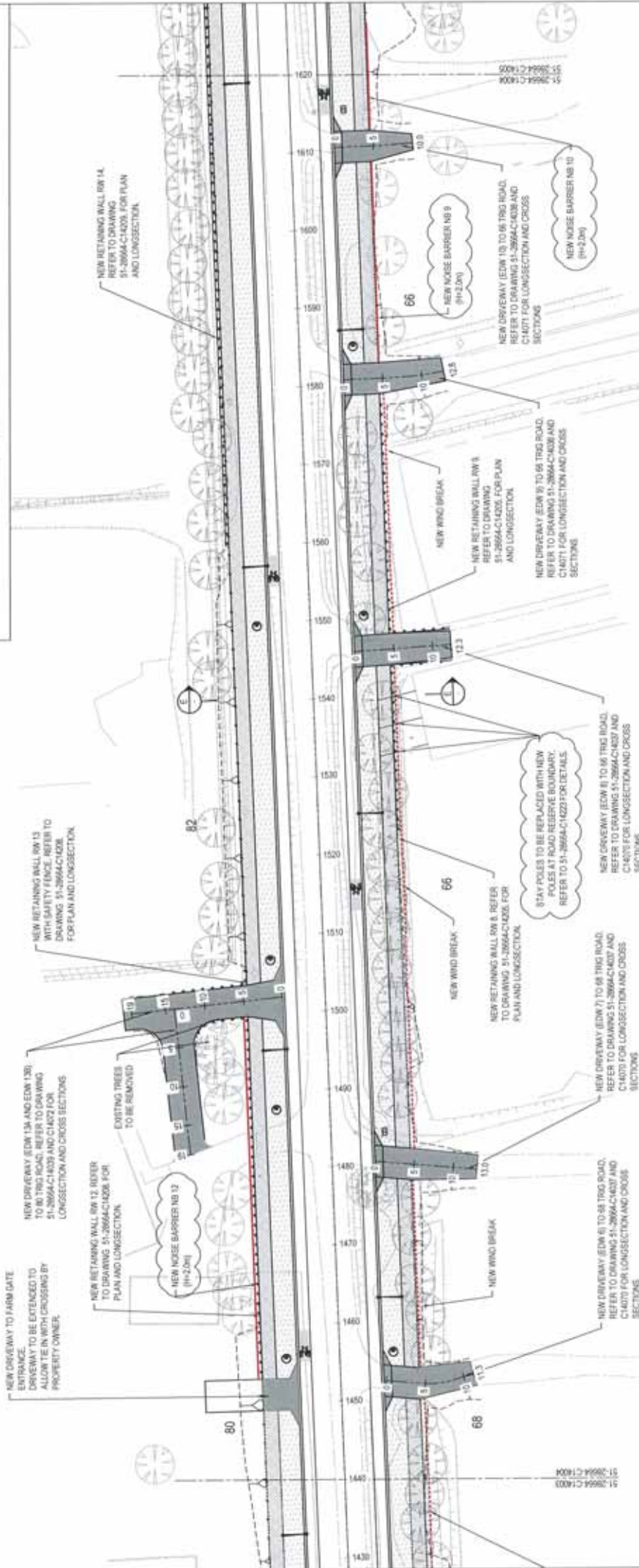
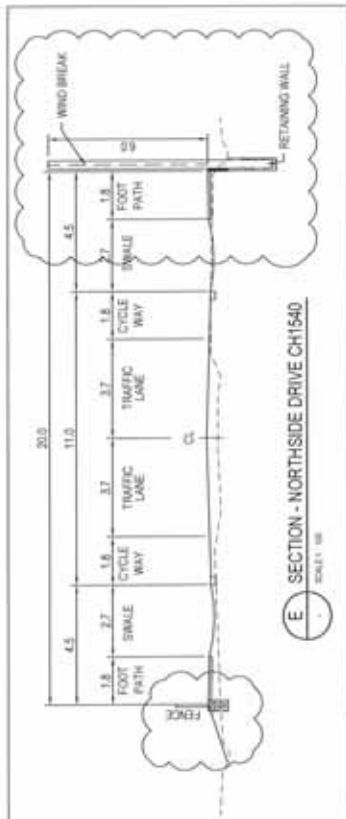
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FOR CIVIL WORKS GENERAL LEGEND REFER TO G1000.
FOR LIGHTING LAYOUT DETAILS, REFER TO E1400-ENERGY.
FOR STORMWATER LAYOUT DETAILS, REFER TO

- REFER TO 51-2004A CH 101 TO CH 106 FOR EARTHWORKS
CROSS SECTIONS FROM CH 100 TO CH 1030.
ALL TREES WITHIN NEW ROAD RESERVE TO BE REMOVED.
UNLESS STATED OTHERWISE.
TREES OVERHANGING NEW ROAD RESERVE TO BE TRIMMED
OR REMOVED AS DIRECTED BY THE ENGINEER.
LOCATIONS OF RETAINING WALL, NOISE BARRIER, WIND BREAK
AND FENCE ON LAYOUT ARE INDICATIVE ONLY. REFER TO
CROSS SECTION DRAWINGS CH 1451 TO CH 1456 FOR ACTUAL
LOCATIONS.

[illegible]

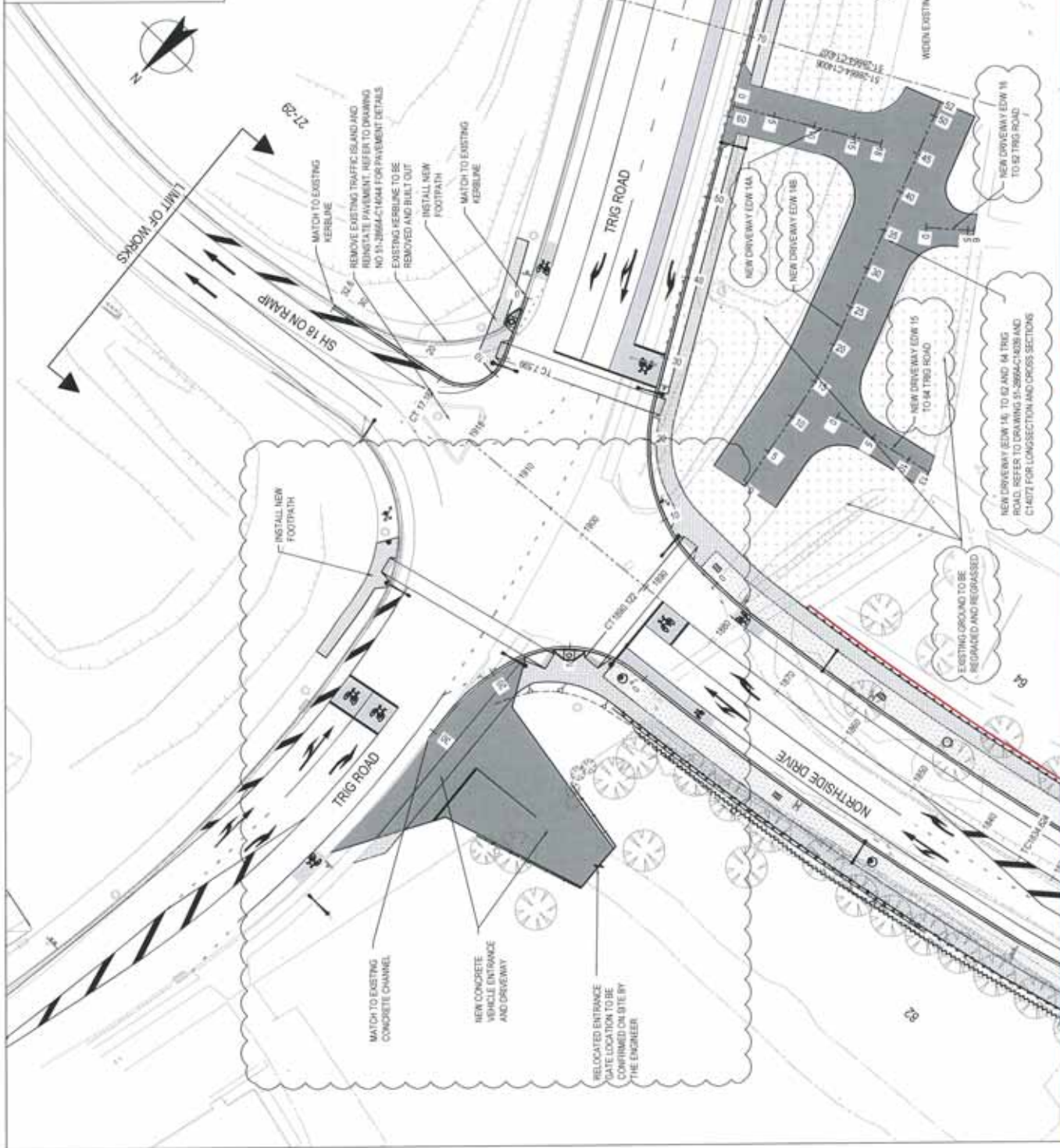
FOR CIVIL WORKS GENERAL LEGENDS, REFER TO CHAIRS.
FOR LIGHTING LAYOUT DETAILS, REFER TO ELEC-2000.
FOR SIGNAGE LAYOUT DETAILS, REFER TO ELEC-2000.
FOR STORMWATER LAYOUT DETAILS, REFER TO
REFERS TO 33604 CIVIL TO CHAIRS FOR LAYOUTS
CROSS SECTIONS, CHAIRS TO CHAIRS TO CHAIRS
ALL TREES WITH NEW ROAD RESERVE TO BE REMOVED
UNLESS STATED OTHERWISE.
PRESS EXCHANGING NEW ROAD RESERVE TO BE THINMED
OR REMOVED AS DIRECTED BY THE ENGINEER.
LOCATIONS OF RETAINING WALL NOISE BARRIER, WALLS
AND FENCE OF LAYOUT ARE INDICATIVE ONLY. REFER TO
CROSS SECTION DRAWINGS C14261 TO C14266 FOR ACTUAL
LOCATIONS.

[illegible]



NOTES

1. FOR CIVIL WORKS GENERAL LEGEND REFER TO CH 800.
2. FOR LIGHTING LAYOUT DETAILS REFER TO CH 800.
3. FOR STORMWATER LAYOUT DETAILS REFER TO CH 800.
4. REFER TO 51-28664-C15161 TO C15166 FOR EARTHWORKS CROSS SECTIONS FROM CH 900 TO CH 1000.
5. ALL TREES WITHIN NEW ROAD RESERVE TO BE REMOVED UNLESS STATED OTHERWISE.
6. TREES OVERHANGING NEW ROAD RESERVE TO BE TRIMMED OR REMOVED AS DIRECTED BY THE ENGINEER.
7. LOCATIONS OF RETAINING WALL, MOORE BARRIER, WIND BREAK AND FENCE ON LAYOUT ARE INDICATIVE ONLY. REFER TO CROSS SECTION DRAWINGS C14001 TO C14006 FOR ACTUAL LOCATIONS.

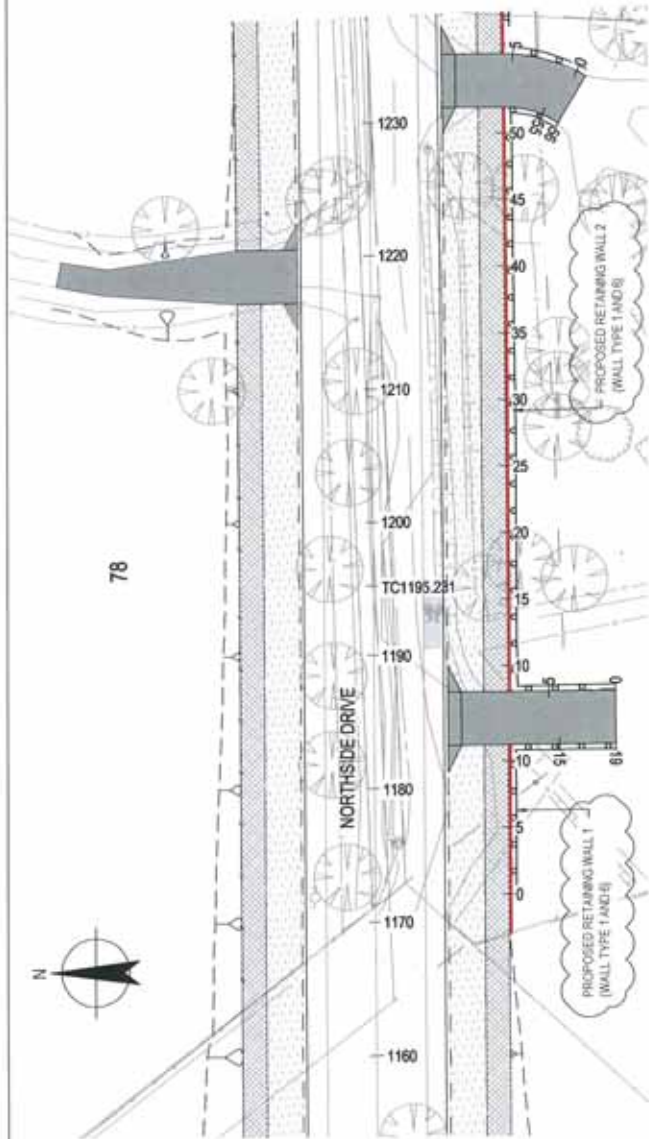


CONSTRUCTION

AUCKLAND TRANSPORT NORSGA - NORTHSIDE DRIVE EAST TRIG ROAD / TRIG ROAD INTERSECTION CIVIL WORKS PLAN - SHEET 7 OF 8		Client: Auckland Council Project: Norsga - Northside Drive East Title: Trig Road / Trig Road Intersection Date: 18/12/2023 Drawn by: A1 Checked by: A1 Approved by: A1 Scale: As Shown
DO NOT SCALE GHD LIMITED The information on this drawing is for use by the client only. It is not to be used for any other purpose without the written consent of GHD Limited.		GHD 27 Hume Street, Auckland 1011 New Zealand Tel: 09 300 8888 Email: info@ghd.co.nz
Auckland Transport An Auckland Council Organisation		1. 18/12/23 2. 18/12/23 3. 18/12/23 4. 18/12/23 5. 18/12/23 6. 18/12/23 7. 18/12/23 8. 18/12/23 9. 18/12/23 10. 18/12/23 11. 18/12/23 12. 18/12/23 13. 18/12/23 14. 18/12/23 15. 18/12/23 16. 18/12/23 17. 18/12/23 18. 18/12/23 19. 18/12/23 20. 18/12/23 21. 18/12/23 22. 18/12/23 23. 18/12/23 24. 18/12/23 25. 18/12/23 26. 18/12/23 27. 18/12/23 28. 18/12/23 29. 18/12/23 30. 18/12/23 31. 18/12/23 32. 18/12/23 33. 18/12/23 34. 18/12/23 35. 18/12/23 36. 18/12/23 37. 18/12/23 38. 18/12/23 39. 18/12/23 40. 18/12/23 41. 18/12/23 42. 18/12/23 43. 18/12/23 44. 18/12/23 45. 18/12/23 46. 18/12/23 47. 18/12/23 48. 18/12/23 49. 18/12/23 50. 18/12/23 51. 18/12/23 52. 18/12/23 53. 18/12/23 54. 18/12/23 55. 18/12/23 56. 18/12/23 57. 18/12/23 58. 18/12/23 59. 18/12/23 60. 18/12/23 61. 18/12/23 62. 18/12/23 63. 18/12/23 64. 18/12/23 65. 18/12/23 66. 18/12/23 67. 18/12/23 68. 18/12/23 69. 18/12/23 70. 18/12/23 71. 18/12/23 72. 18/12/23 73. 18/12/23 74. 18/12/23 75. 18/12/23 76. 18/12/23 77. 18/12/23 78. 18/12/23 79. 18/12/23 80. 18/12/23 81. 18/12/23 82. 18/12/23 83. 18/12/23 84. 18/12/23 85. 18/12/23 86. 18/12/23 87. 18/12/23 88. 18/12/23 89. 18/12/23 90. 18/12/23 91. 18/12/23 92. 18/12/23 93. 18/12/23 94. 18/12/23 95. 18/12/23 96. 18/12/23 97. 18/12/23 98. 18/12/23 99. 18/12/23 100. 18/12/23



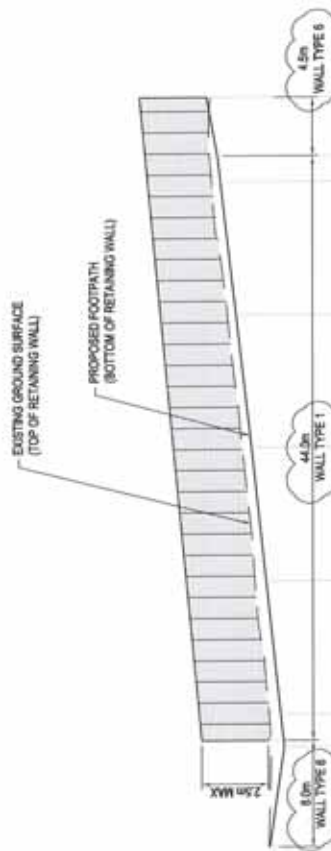
78



VERTICAL: 1:100
AT DRAWING 505
HORIZONTAL: 1:200
AT DRAWING 502

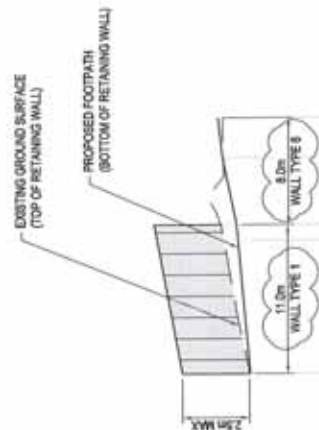
- NOTES:
- FOR DRAWING LIST, REFER TO DRAWING 51-28664-C14201 & C14202.
 - FOR GENERAL NOTES, REFER TO DRAWING 51-28664-C14201.
 - FOR WALL TYPE 1, 2, 3, 4, AND 5 DETAILS, REFER TO DRAWING 51-28664-C14201 AND C14202.
 - FOR WALL TYPE 6 DETAILS, REFER TO DRAWING 51-28664-C14201 AND C14202.
 - FOR STAY POLE DETAILS, REFER TO DRAWING 51-28664-C14201 AND C14202.
 - FOR WALL TYPE TYPICAL SECTIONS, REFER TO 51-28664-C14201 AND C14202.

LEGEND:



DATUM RL 35.00	LEVEL DIFFERENCE CUT / FILL *	DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	CHANGING
0.00	0.00	36.300	36.300	0.00
7.55	0.44	37.221	36.776	0.44
10.00	0.44	38.303	37.869	0.44
20.00	0.43	39.395	38.962	0.43
30.00	0.36	40.000	39.640	0.36
40.00	0.30	40.500	40.200	0.30
50.00	0.26	40.800	40.540	0.26
55.34	0.13	40.915	40.784	0.13

LONGITUDINAL SECTION - RETAINING WALL 2 (RW 2)

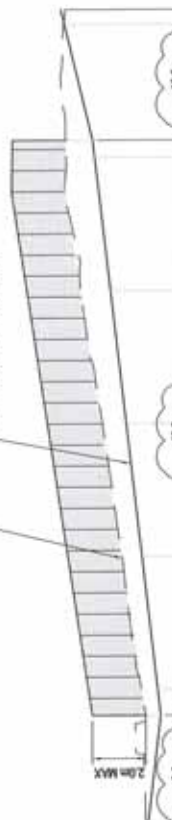
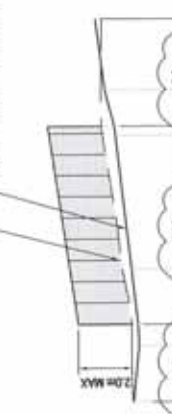


DATUM RL 34.00	LEVEL DIFFERENCE CUT / FILL *	DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	CHANGING
0.00	0.00	37.094	37.094	0.00
10.00	0.50	37.594	37.094	0.50
11.17	0.56	38.100	37.534	0.56
16.21	0.00	38.124	38.124	0.00
18.21	0.16	38.285	38.124	0.16

LONGITUDINAL SECTION - RETAINING WALL 1 (RW 1)

CONSTRUCTION

Auckland Transport		Auckland Transport		Auckland Transport	
NORSGA - NORTHSIDE DRIVE EAST		NORSGA - NORTHSIDE DRIVE EAST		NORSGA - NORTHSIDE DRIVE EAST	
PLAN AND LONG SECTIONS - SHEET 1 OF 11		PLAN AND LONG SECTIONS - SHEET 1 OF 11		PLAN AND LONG SECTIONS - SHEET 1 OF 11	
Drawing No: 51-28664-C14201		Drawing No: 51-28664-C14201		Drawing No: 51-28664-C14201	
Rev: 1		Rev: 1		Rev: 1	
Legend		Legend		Legend	
1 LEGEND ADDED, WALL TYPE ADDED		1 LEGEND ADDED, WALL TYPE ADDED		1 LEGEND ADDED, WALL TYPE ADDED	
2 ISSUED FOR CONSTRUCTION		2 ISSUED FOR CONSTRUCTION		2 ISSUED FOR CONSTRUCTION	
3		3		3	
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100		100		100	



DATUM RL 37.00	
LEVEL DIFFERENCE CUT / FILL +	
DESIGN SURFACE LEVEL	
EXISTING SURFACE LEVEL	
CHANGE	
0.00	40.625
1.24	40.678
0.36	40.400
0.23	40.439
0.35	40.685
0.48	41.272
0.15	41.662
0.23	42.027
0.77	41.796

LONGITUDINAL SECTION - RETAINING WALL 3 (RW 3)

CHANCE		EXISTING SURFACE LEVEL		DESIGN SURFACE LEVEL		LEVEL DIFFERENCE CUT - / FILL +		DATUM R.L. 99.00	
0.00	42.107	42.010	-0.10						
0.00	42.090	41.537	-0.56						
10.00	42.263	41.600	-0.67						
20.00	42.575	42.295	-0.28						
30.00	43.716	42.621	-1.09						
40.00	44.537	43.407	-1.13						
50.00	45.057	43.903	-1.00						
60.00	45.060	44.070	-0.99						
70.14	45.066	45.296	0.17						
80.00	45.156	45.116	-0.04						

LONGITUDINAL SECTION - RETAINING WALL 4 (RW 4)

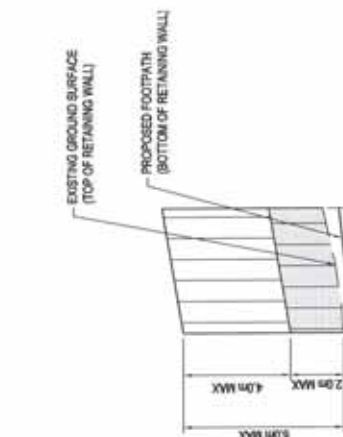
CONSTRUCTION

[illegible]



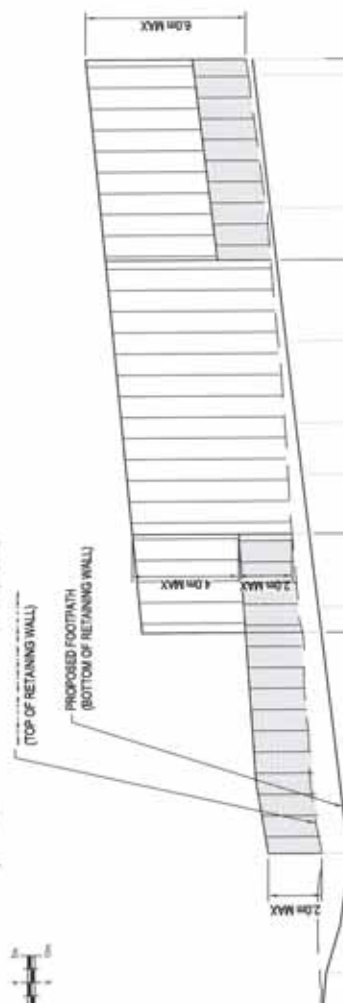
- LEGEND:

NEW RETAINING WALL
NEW NOISE BARRIER
NOISE BARRIER FACE
NEW WIND BREAK
WIND BREAK FACE
NEW FENCE



SATUR. FL. 11.00	
LEVEL DIFFERENCE	CUT - FILL *
DESIGN SURFACE LEVEL	
EXISTING SURFACE LEVEL	
CHANGE	
0.00	48.575
1.44	48.641
1.20	48.779
0.63	48.550
-0.36	48.294
-0.17	48.206

LONGITUDINAL SECTION - RETAINING WALL 8 (RW 6)



DATUM: RL 41.00	
LEVEL DIFFERENCE CUT - FILL *	
DESIGN SURFACE LEVEL	
EXISTING SURFACE LEVEL	
CHANGE	
45.200	45.200
45.302	45.121
45.423	44.572
45.318	44.305
45.318	-1.01
45.352	-0.97
45.125	45.303
46.504	45.985
46.625	46.217
46.871	46.576
47.285	47.181
47.958	47.745
48.005	47.815
47.100	-0.21
47.000	-0.12

LONGITUDINAL SECTION - RETAINING WALL 5 (RW 5)

CONSTRUCTION

HAUCKLAND TRANSPORT
NORSGA - NORTHSIDE DRIVE EAST
NORTHSIDE DRIVE - RETAINING WALL
PLAN AND LONG SECTIONS - SHEET 3 OF 11

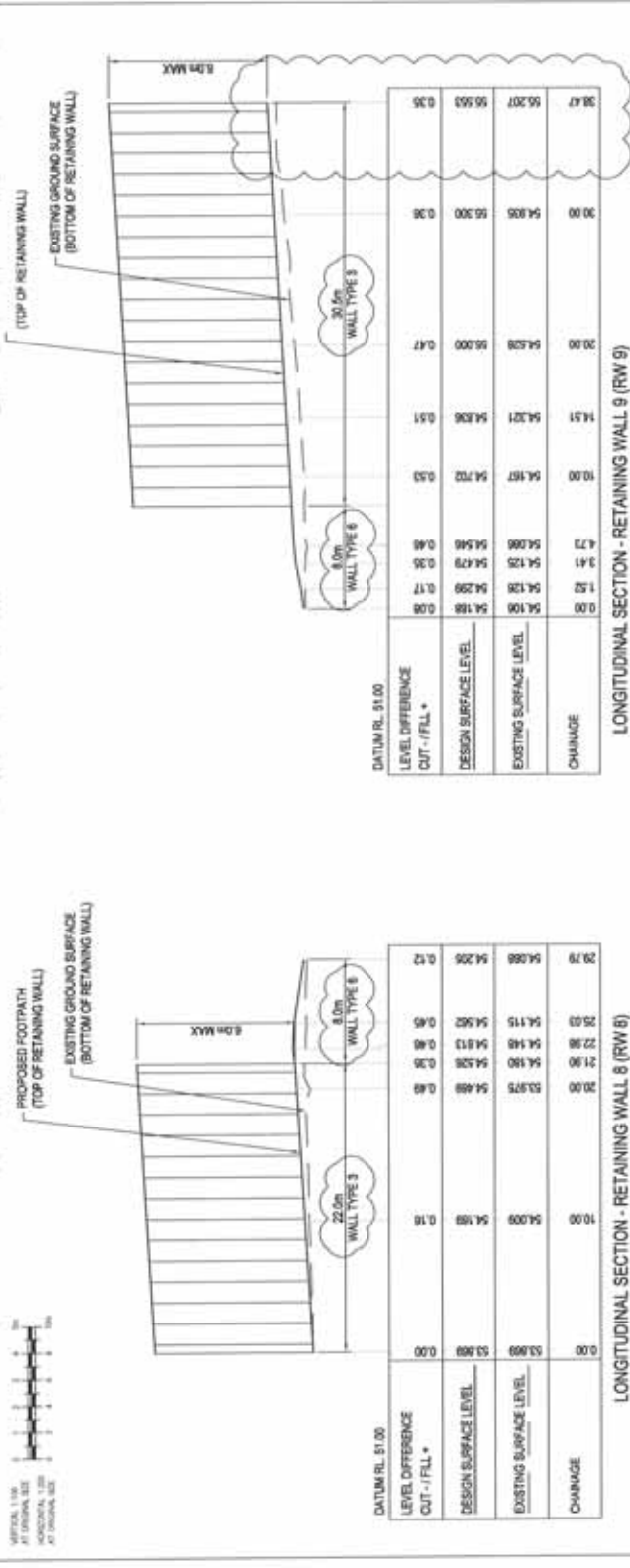
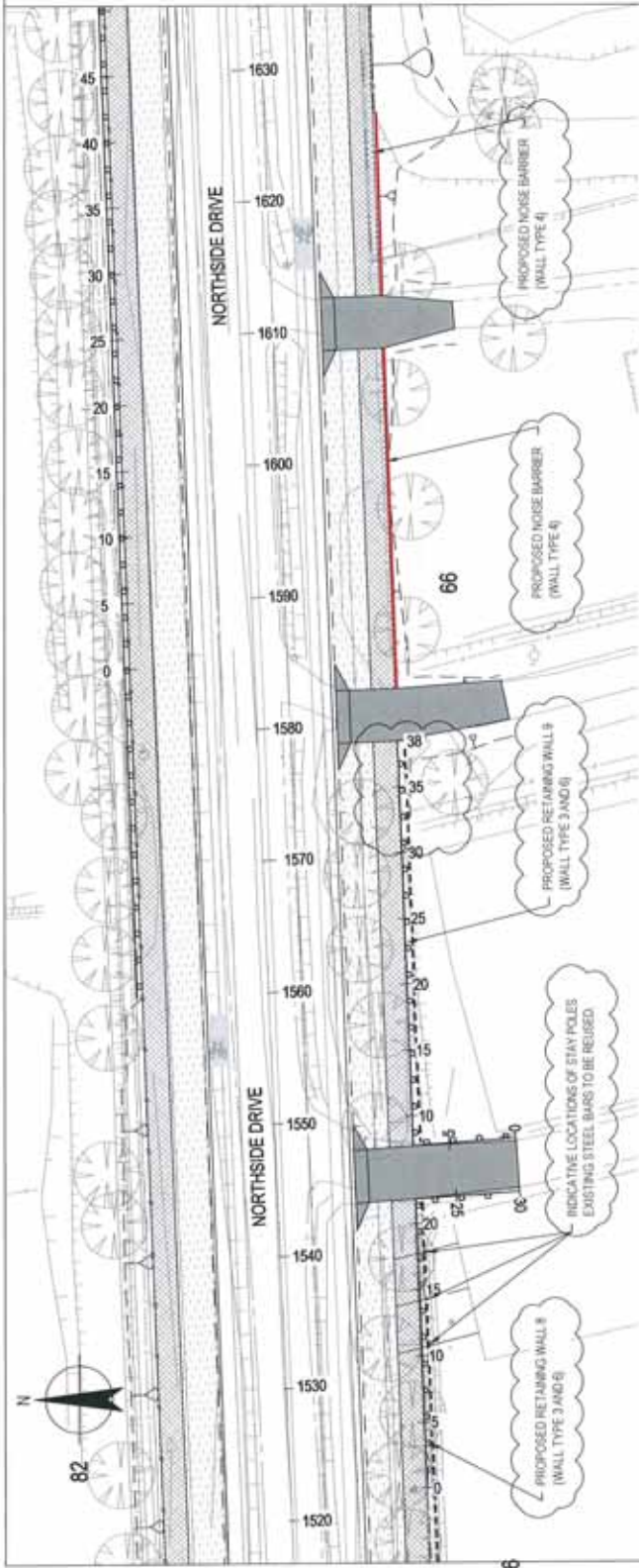
Flavor: 1

Auckland
Transport

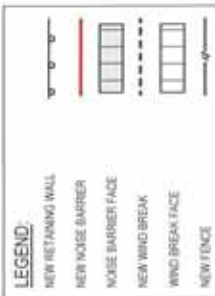
An Auckland Council Organisation

From	To	Location	Product	Weight	Volume	Value
10/1/00	10/31/00	10/1/00	10/31/00	10/1/00	10/31/00	10/1/00

Subject to: revised law



- NOTES**
- FOR DRAWING LIST, REFER TO DRAWING S1-28664-G1402 & G1403.
 - FOR GENERAL NOTES, REFER TO DRAWING S1-28664-G1402.
 - FOR WALL TYPE 1, 2, 3, 4, AND DETAILS, REFER TO DRAWING S1-28664-C1421 AND C1422.
 - FOR WALL TYPE 6 DETAILS, REFER TO DRAWING S1-28664-C1423 AND C1424.
 - FOR STAY POLE DETAILS, REFER TO DRAWING S1-28664-C1425 AND C1426.
 - FOR WALL TYPE TYPICAL SECTIONS, REFER TO S1-28664-C1427 AND C1428.

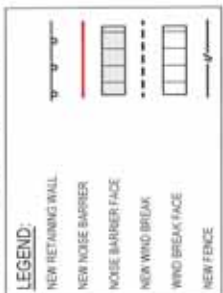


CONSTRUCTION

Auckland Transport An Auckland Council Organisation		Client Auckland Transport Project NORTSGA - NORTSIDE DRIVE EAST Title NORTSIDE DRIVE - RETAINING WALL PLAN AND LONG SECTIONS - SHEET 5 OF 11	Drawn M. J. J. J. Checked A. H. H. H. Design S. J. J. J. Date 12/10/17	DO NOT SCALE GHD LINES The information on this drawing is for the purpose of design only and is not to be used for construction. It is the responsibility of the user to ensure that the information is correct and up to date.	Scale 1:100 Sheet 5 of 11	Rev 1
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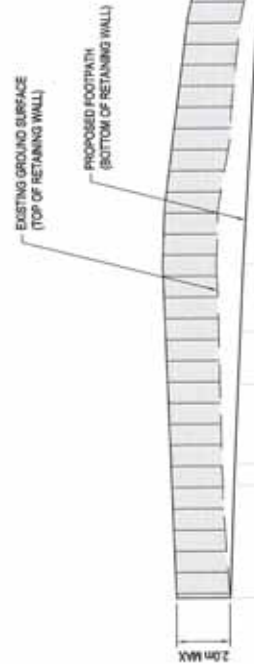
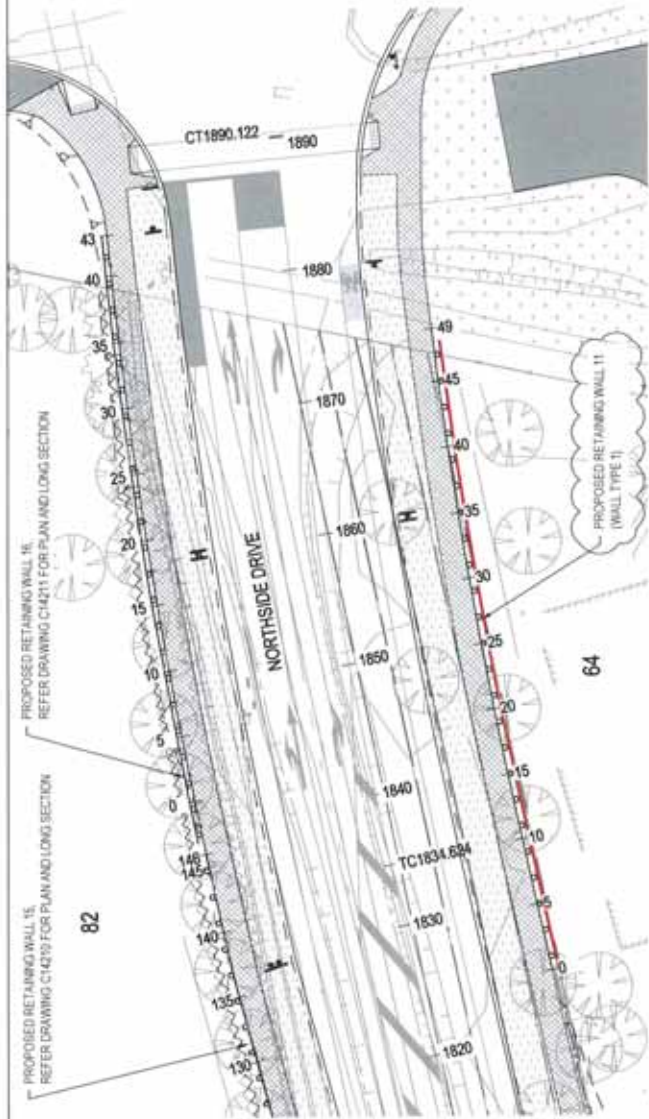


- NOTES:
1. FOR DRAWING LIST, REFER TO DRAWING 51-3856A-C14202 & C14203.
 2. FOR GENERAL NOTES, REFER TO DRAWING 51-3856A-G1005.
 3. FOR WALL TYPE 1, 2, 3, 4 AND 5 DETAILS, REFER TO DRAWING 51-3856A-C14201 AND C14203.
 4. FOR WALL TYPE 6 DETAILS, REFER TO DRAWING 51-3856A-C14202 & C14203.
 5. FOR STAY POLE DETAILS, REFER TO DRAWING 51-3856A-C14203.
 6. FOR WALL TYPE TYPICAL SECTIONS, REFER TO 51-3856A-C14205 AND C14207.



	DATUM RL: 54.00	
	LEVEL DIFFERENCE OUT - / FILL +	
CHAINAGE		
EXISTING SURFACE LEVEL		
DESIGN SURFACE LEVEL		
	-0.53	57.866
		57.869
	0.43	57.849
	-0.42	57.889
	-0.32	57.829
	△ 19	57.539
		57.590
	-0.03	57.604
	-0.11	57.642
		57.750
		57.881
		57.890
		57.891
		58.42

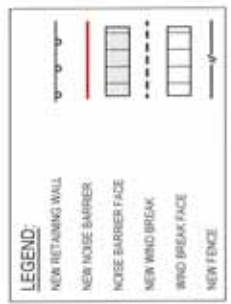
LONGITUDINAL SECTION - RETAINING WALL 10 (RW 10)



DATUM RL 50.00	LEVEL DIFFERENCE OUT - FILL +	DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	CHANGE
48.57	0.16	56.966	56.170	0.80
48.00	0.71	56.242	56.901	-0.66
30.00	-1.00	56.505	57.548	-1.04
27.12	-1.00	56.863	57.863	-1.00
20.00	0.81	56.790	57.580	-0.79
15.92	0.88	56.872	57.548	-0.68
10.00	0.43	56.991	57.448	-0.46
0.00	0.01	57.167	57.166	0.00

LONGITUDINAL SECTION - RETAINING WALL 11 (RW 11)

- NOTES:
- FOR DRAWING LIST, REFER TO DRAWING 51-28664-G1400 & G1403.
 - FOR GENERAL NOTES, REFER TO DRAWING 51-28664-G1400.
 - FOR WALL TYPE 1, 2, 3, 4, AND 5 DETAILS, REFER TO DRAWING 51-28664-C1421 AND C1422.
 - FOR WALL TYPE 6 DETAILS, REFER TO DRAWING 51-28664-C1423 AND C1424.
 - FOR STAY POLE DETAILS, REFER TO DRAWING 51-28664-C1425 AND C1426.
 - FOR WALL TYPE TYPICAL SECTION, REFER TO 51-28664-C1427 AND C1428.



CONSTRUCTION

AUCKLAND TRANSPORT

NORSGA - NORTHSIDE DRIVE EAST

NORTHSIDE DRIVE - RETAINING WALL

PLAN AND LONG SECTIONS - SHEET 7 OF 11

51-28664-C14207

Rev: 1

Client: Auckland Transport

Project: Norsga - Northside Drive East

Drawn: M. J. AND

Checked: A. J. AND

Approved: A. J. AND

Date: 18/10/12

Scale: ALL SHOWN

Notes: This drawing is to be used for construction only. It is not to be used for any other purpose.

DO NOT SCALE

CHD (L100)

This drawing is to be used for construction only. It is not to be used for any other purpose.

Auckland Transport

An Auckland Council Organisation

LEGEND ADDED, WALL TYPE ADDED

ISSUED FOR CONSTRUCTION

18/10/12

18/10/12

18/10/12

18/10/12



DATE: JUL. 48.20	
LEVEL DIFFERENCE OUT - FULL *	
DESIGN SURFACE LEVEL	52.597
EXISTING SURFACE LEVEL	52.591
CHANGE	12.50
	8.50
	8.68
	52.819
	52.803
	52.875
	52.552
	52.706
	52.590
	0.05
	0.36
	52.342
	0.52
	0.52
	52.407

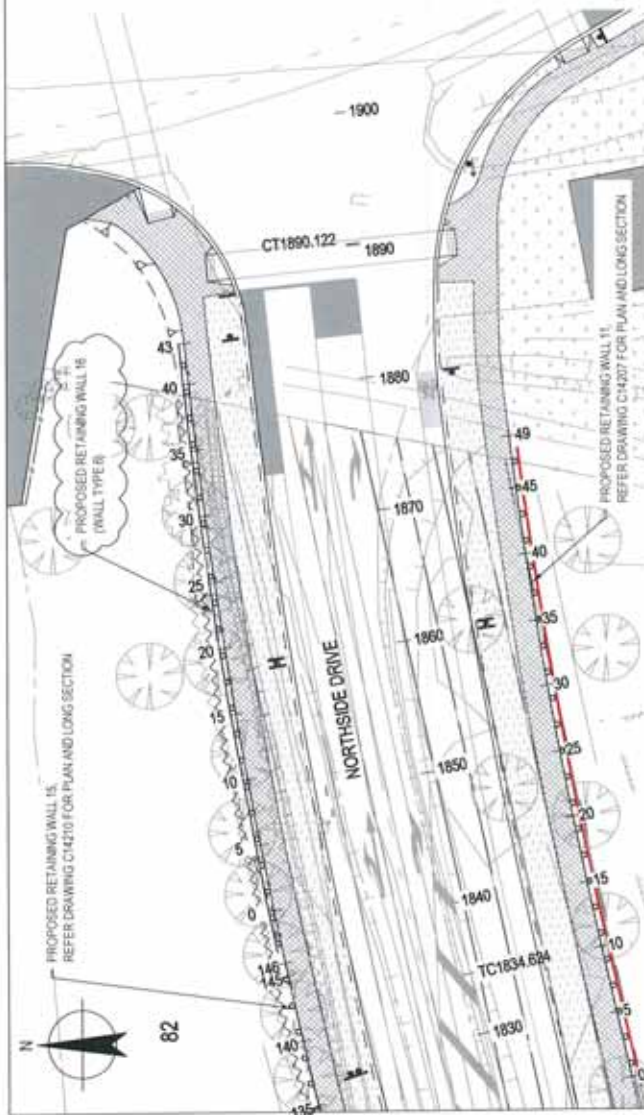
LEGEND:
NEW RETAINMENT
NEW NOISE BARRIER
NOISE BARRIER
NEW WIND BREAK
WIND BREAK
NEW FENCE

NOTE:
 1. FOR DRAWING LIST, REFER TO DRAWING S1-2856A-C4202 & C14203.
 2. FOR GENERAL NOTES, REFER TO DRAWING S1-2856A-C4202.
 3. FOR WALL TYPE 1, 2, 3, 4 AND DETAILS, REFER TO DRAWING S1-2856A-C14211 AND C14223.
 4. FOR WALL TYPE 6 DETAILS, REFER TO DRAWING S120100 - 300 AND GH01000 - 400.
 5. FOR STAY POLE DETAILS, REFER TO DRAWING S1-2856A-C14223.
 6. FOR WALL TYPE TYPICAL SECTIONS, REFER TO S1-2856A-C14226 AND C14227.

CONSTRUCTION

[illegible]

[illegible]



- NOTES:**
- FOR DRAWING LIST, REFER TO DRAWING H1-38664-C14227 & CH001.
 - FOR GENERAL NOTES, REFER TO DRAWING H1-38664-C14227.
 - FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
 - FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
 - FOR STAY POLE DETAILS, REFER TO DRAWING H1-38664-C14227.
 - FOR WALL TYPE TYPICAL SECTIONS, REFER TO H1-38664-C14227 AND C14227.



DATUM RL: 53.00	LEVEL DIFFERENCE CUT - FILL *	DESIGN SURFACE LEVEL	EXISTING SURFACE LEVEL	CHANGE
42.00	0.21	0.00	0.00	0.00
40.00	0.21	0.00	0.00	0.00
38.00	0.21	0.00	0.00	0.00
36.00	0.21	0.00	0.00	0.00
34.00	0.21	0.00	0.00	0.00
32.00	0.21	0.00	0.00	0.00
30.00	0.21	0.00	0.00	0.00
28.00	0.21	0.00	0.00	0.00
26.00	0.21	0.00	0.00	0.00
24.00	0.21	0.00	0.00	0.00
22.00	0.21	0.00	0.00	0.00
20.00	0.21	0.00	0.00	0.00
18.00	0.21	0.00	0.00	0.00
16.00	0.21	0.00	0.00	0.00
14.00	0.21	0.00	0.00	0.00
12.00	0.21	0.00	0.00	0.00
10.00	0.21	0.00	0.00	0.00
8.00	0.21	0.00	0.00	0.00
6.00	0.21	0.00	0.00	0.00
4.00	0.21	0.00	0.00	0.00
2.00	0.21	0.00	0.00	0.00
0.00	0.21	0.00	0.00	0.00



LEGEND:

- NEW RETAINING WALL
- NEW NOISE BARRIER
- NOISE BARRIER FACE
- NEW WIND BREAK
- WIND BREAK FACE
- NEW FENCE

NOTES:

- FOR DRAWING LIST, REFER TO DRAWING H1-38664-C14227 & CH001.
- FOR GENERAL NOTES, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR STAY POLE DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE TYPICAL SECTIONS, REFER TO H1-38664-C14227 AND C14227.

DO NOT SCALE

THIS DOCUMENT IS FOR INFORMATION ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED.

CONSTRUCTION

AUCKLAND TRANSPORT

NORRGA - NORTHSIDE DRIVE EAST

NORTHSIDE DRIVE - RETAINING WALL

PLAN AND LONG SECTIONS - SHEET 11 OF 11

Project No: 51-28664-C14211

Rev: 1

Auckland Transport

An Auckland Council Organisation

Legend:

- NEW RETAINING WALL
- NEW NOISE BARRIER
- NOISE BARRIER FACE
- NEW WIND BREAK
- WIND BREAK FACE
- NEW FENCE

LEGEND:

- NEW RETAINING WALL
- NEW NOISE BARRIER
- NOISE BARRIER FACE
- NEW WIND BREAK
- WIND BREAK FACE
- NEW FENCE

NOTES:

- FOR DRAWING LIST, REFER TO DRAWING H1-38664-C14227 & CH001.
- FOR GENERAL NOTES, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE 8 DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR STAY POLE DETAILS, REFER TO DRAWING H1-38664-C14227.
- FOR WALL TYPE TYPICAL SECTIONS, REFER TO H1-38664-C14227 AND C14227.

DO NOT SCALE

THIS DOCUMENT IS FOR INFORMATION ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED.

CONSTRUCTION

AUCKLAND TRANSPORT

NORRGA - NORTHSIDE DRIVE EAST

NORTHSIDE DRIVE - RETAINING WALL

PLAN AND LONG SECTIONS - SHEET 11 OF 11

Project No: 51-28664-C14211

Rev: 1

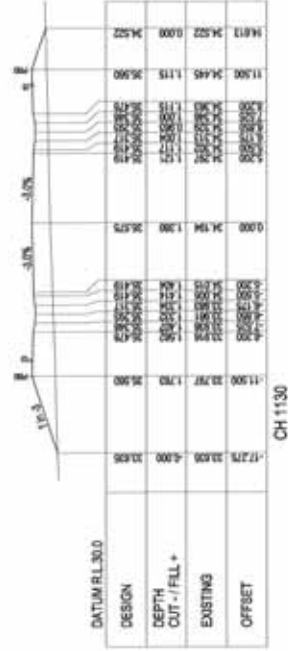
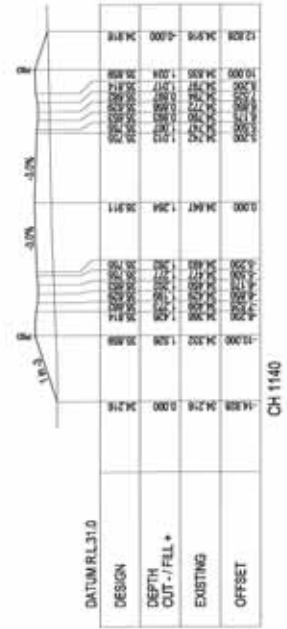
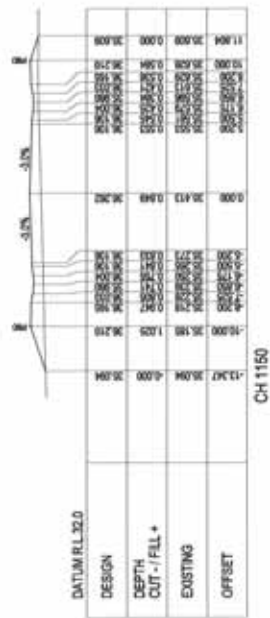
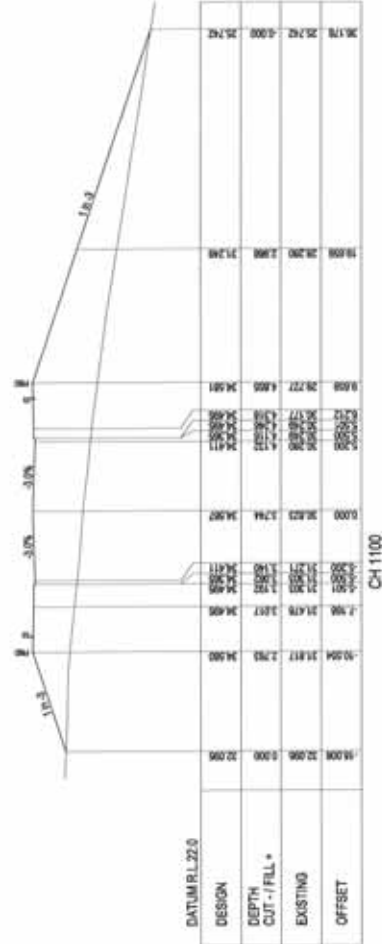
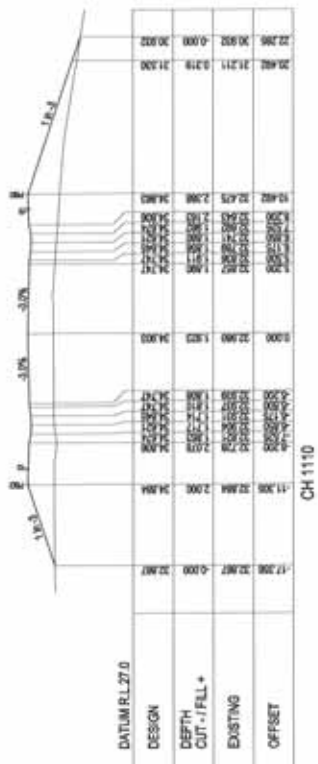
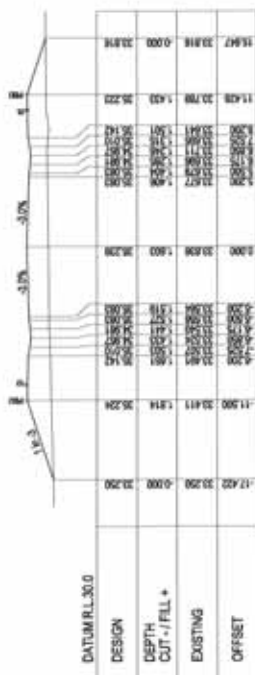
Auckland Transport

An Auckland Council Organisation

Legend:

- NEW RETAINING WALL
- NEW NOISE BARRIER
- NOISE BARRIER FACE
- NEW WIND BREAK
- WIND BREAK FACE
- NEW FENCE

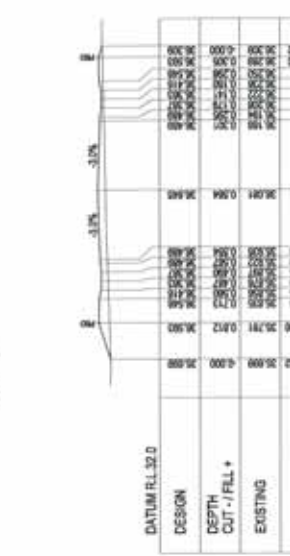
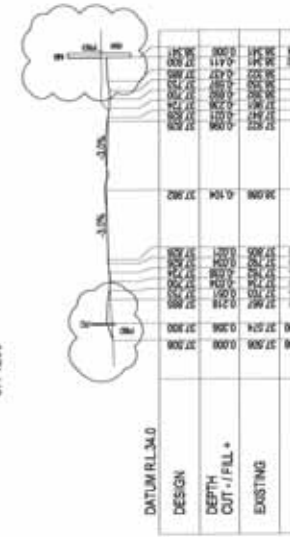
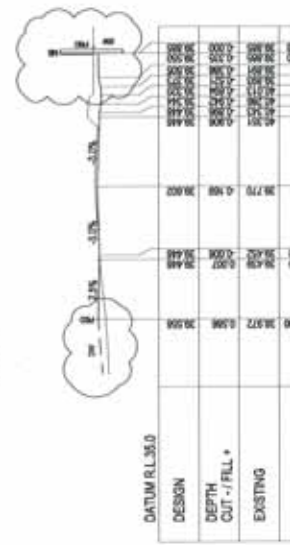
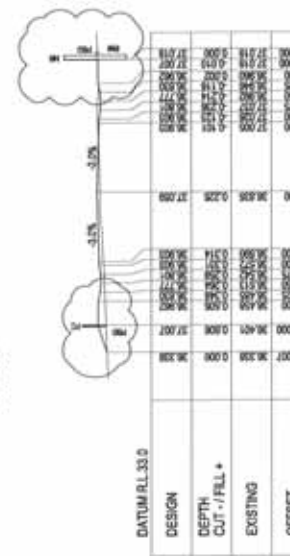
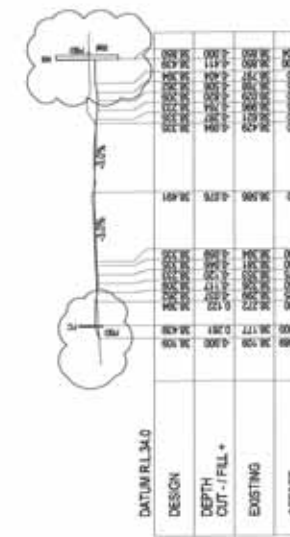
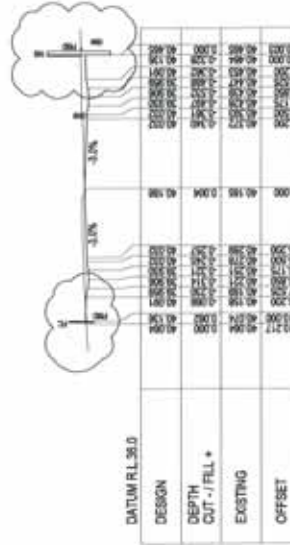
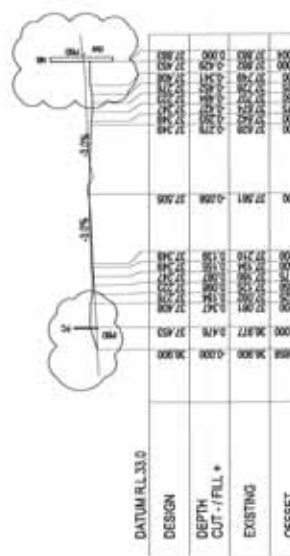
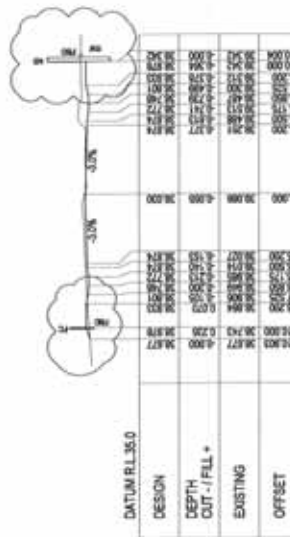
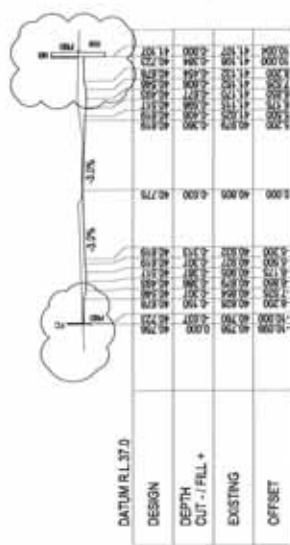
100' NEW DRIVEWAY
 100' NEW FENCE
 100' PROPOSED ROAD BOUNDARY
 100' EXISTING BAMBOO WALL LINE
 100' NEW MOOSE BARRIER
 100' NEW WING BREAK
 100' NEW RETAINING WALL



CONSTRUCTION

[illegible]

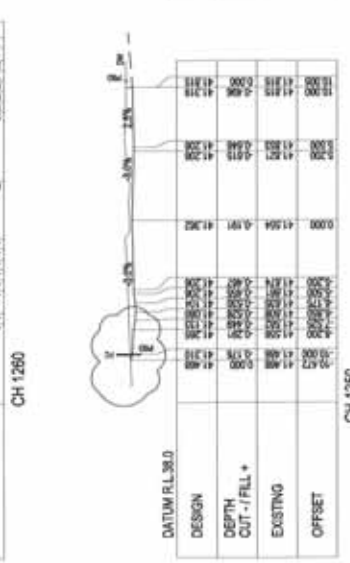
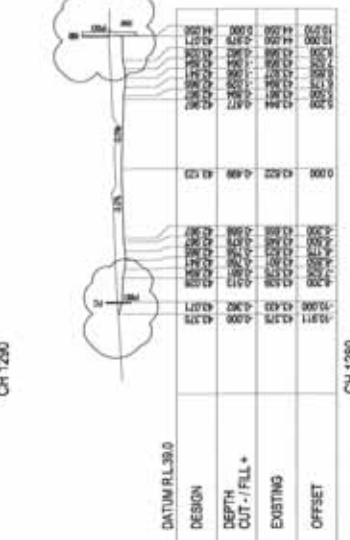
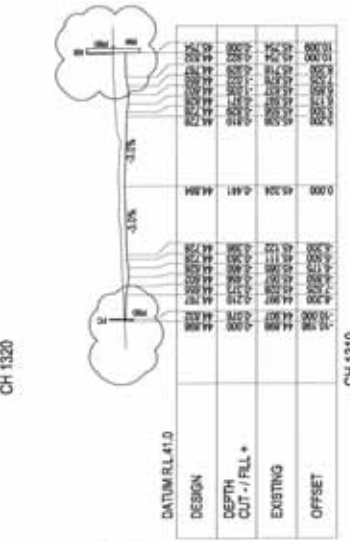
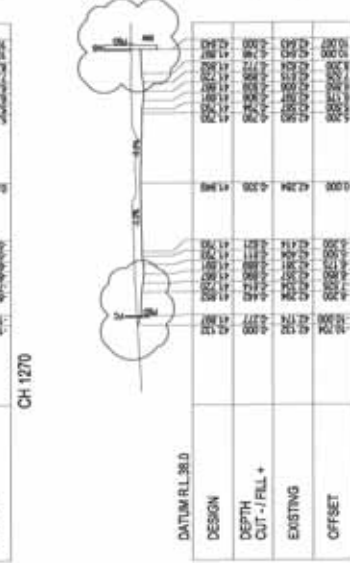
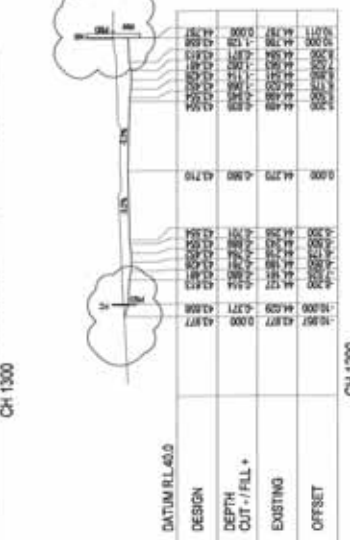
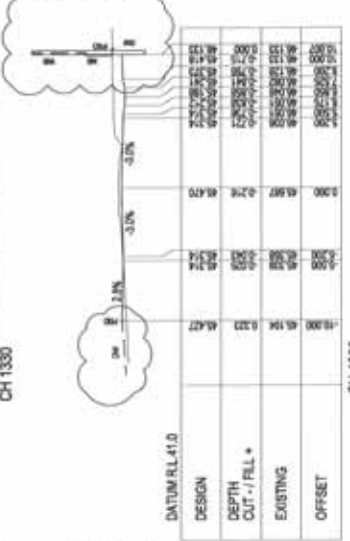
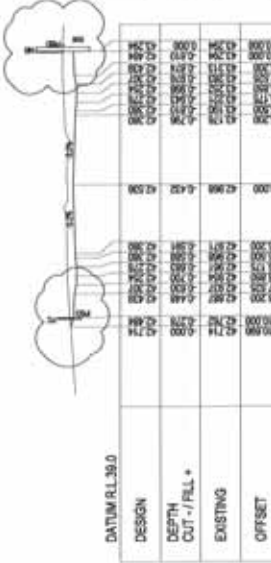
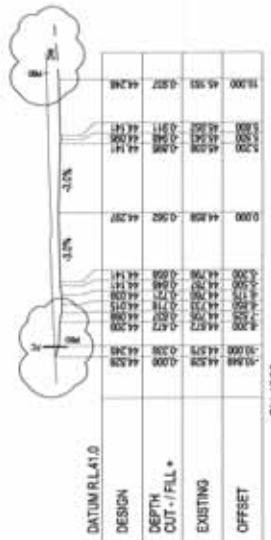
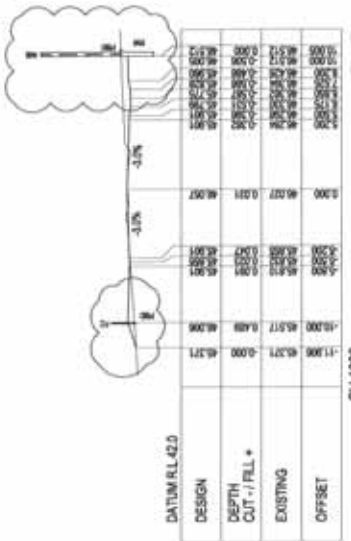
DW: NEW DRIVEWAY
FC: NEW FENCE
PSD: PROPOSED ROAD BOUNDARY
BB: EXISTING BAMBOO WALL LINE
NB: NEW NOISE BARRIER
WS: NEW WIND BREAK
RW: NEW RETAINING WALL



CONSTRUCTION

[illegible]

LEGEND:
 DW: NEW DRIVEWAY
 FC: NEW FENCE
 PB: PROPOSED ROAD BOUNDARY
 BS: EXISTING BAMBOO WALL LINE
 NS: NEW NOSE BARRIER
 WB: NEW WIND BREAK
 RW: NEW RETAINING WALL



CONSTRUCTION

Auckland Transport
 NORSGA - NORTHSIDE DRIVE EAST
 NORTHSIDE DRIVE
 CROSS SECTIONS - SHEET 9 OF 16

Client: Auckland Transport
 Designer: M. J. J. J.
 Project: NORSGA
 Date: 18/10/12
 Title: CROSS SECTIONS - SHEET 9 OF 16
 Drawing No: 51-28664-C14059

DO NOT SCALE

CHD LIMITED
 The information on this drawing is for use by the client only. It is not to be used for any other purpose without the written consent of CHD Limited.

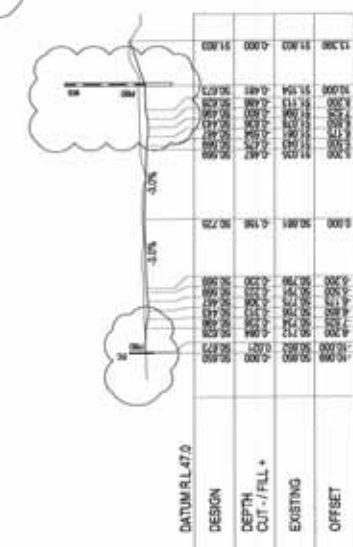
CHD Limited
 27 New Street, Auckland 1011 New Zealand
 Tel: 09 308 9000
 Email: info@chd.co.nz

1 CROSS SECTIONS MODIFIED, LEGEND AMENDED
2 ISSUED FOR CONSTRUCTION

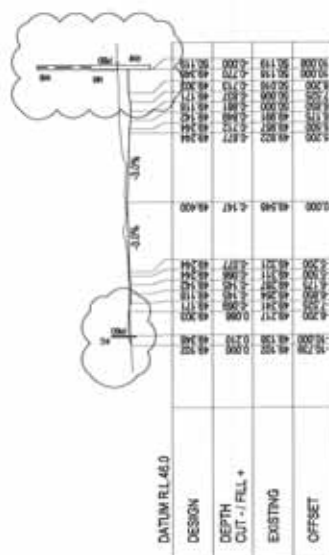
Rev: 17 October 2012 11:00 AM
 Rev: 17 October 2012 11:00 AM

Scale: 1:100
 Date: 18/10/12
 Drawn: M. J. J. J.
 Checked: M. J. J. J.
 Approved: M. J. J. J.

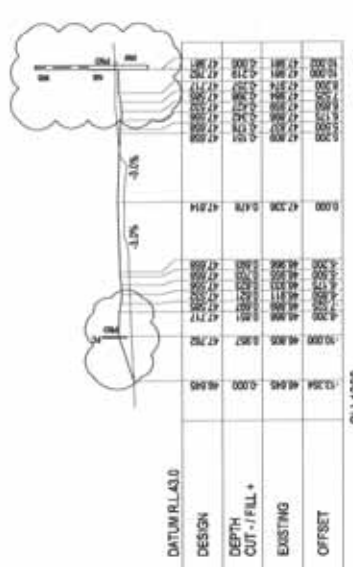
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 FW : NEW FENCE
 FC : NEW FENCE
 PR : PROPOSED ROAD BOUNDARY
 EX : EXISTING BAMBOO WALL LINE
 NB : NEW NOISE BARRIER
 WB : NEW WIND BREAK
 RW : NEW RETAINING WALL



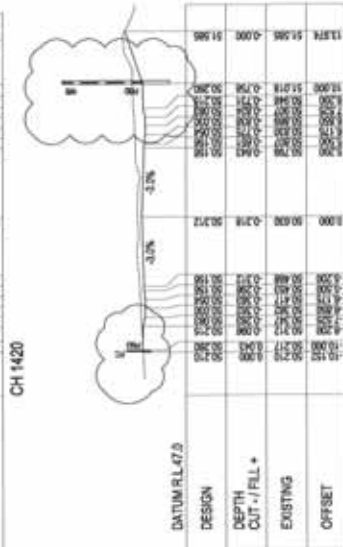
CH 1420



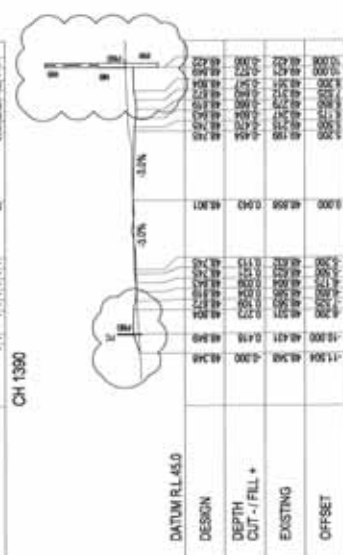
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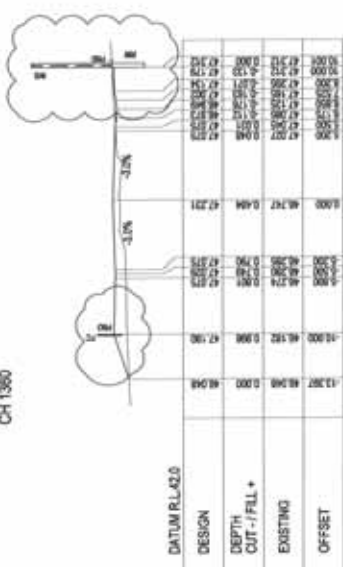
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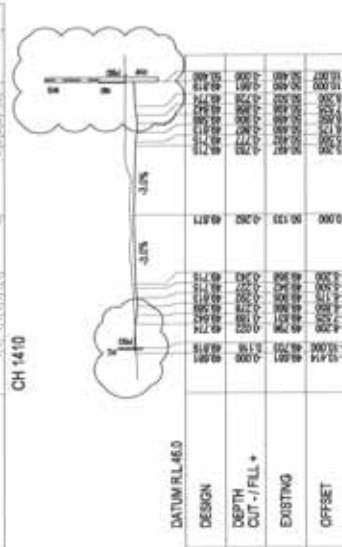
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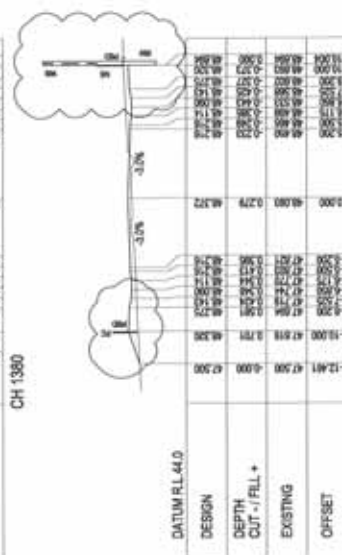
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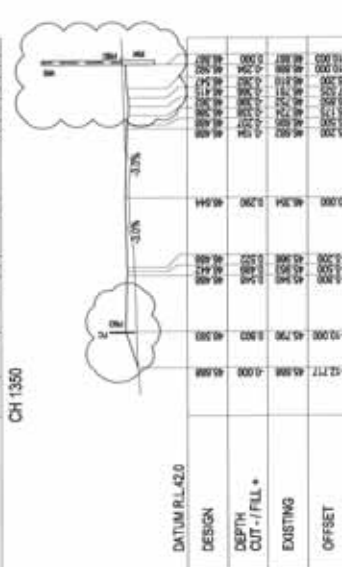
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CH 1400



CH 1370



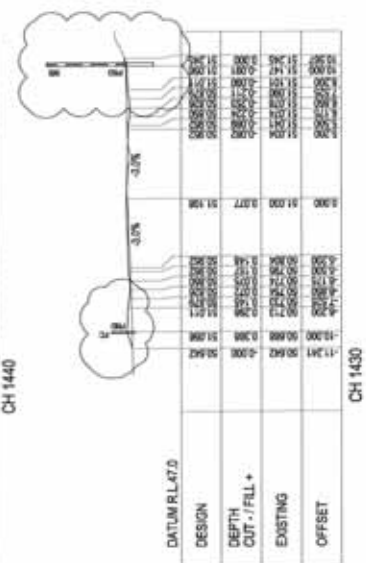
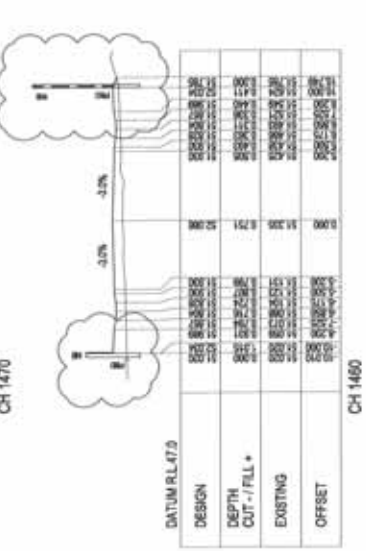
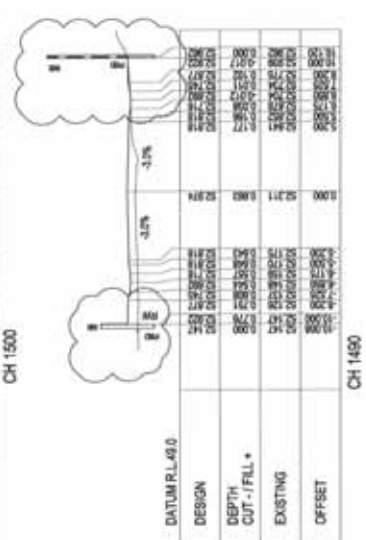
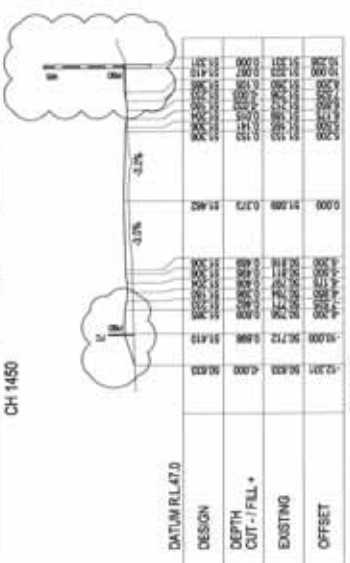
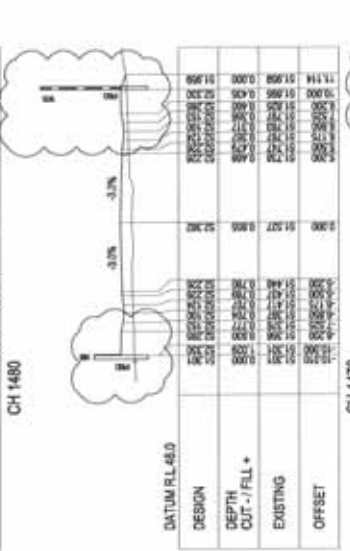
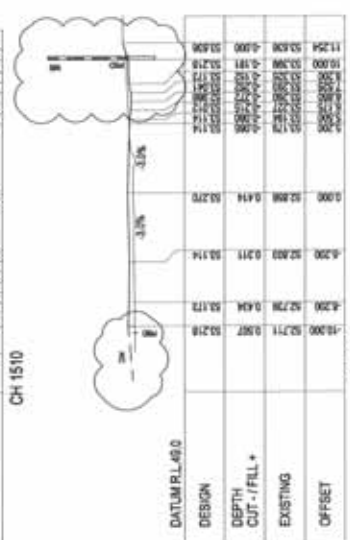
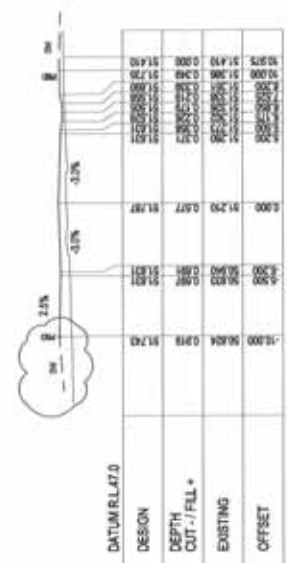
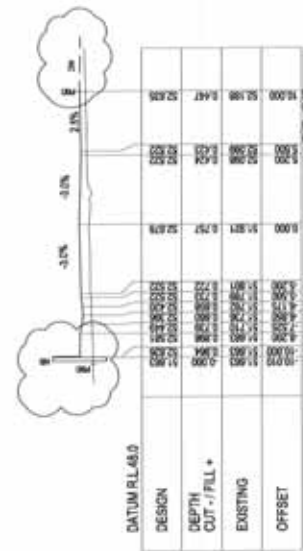
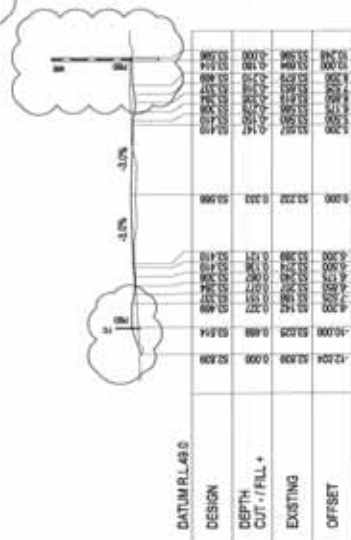
CW 1340



CONSTRUCTION

[illegible]

LEGEND:
 LW: NEW DRIVEWAY
 FC: NEW FENCE
 PW: PROPOSED ROAD BOUNDARY
 EW: EXISTING BAMBOO WALL LINE
 NB: NEW NOISE BARRIER
 WB: NEW WIND BREAK
 RW: NEW RETAINING WALL

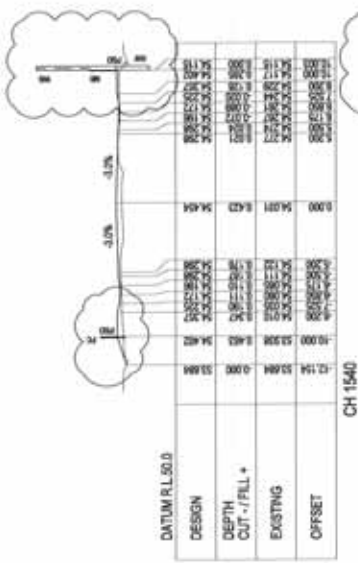


CONSTRUCTION

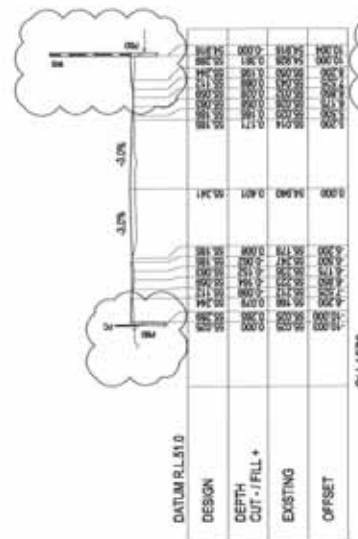
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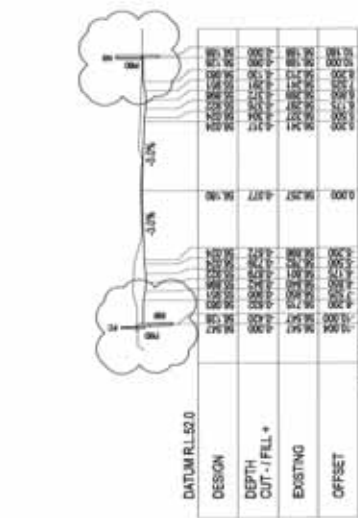
- DN - NEW DRIVEWAY
- PC - NEW FENCE
- PD - PROPOSED ROAD BOUNDARY
- BT - EXISTING BARRICADE WALL LINE
- NS - NEW FENCE BARRIER
- NS - NEW MNC BARRICADE
- RA - NEW RETAINING WALL



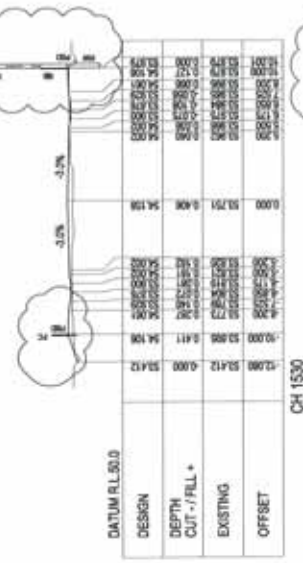
CH 1540



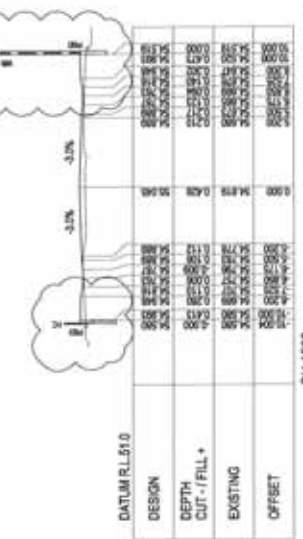
CH 1570



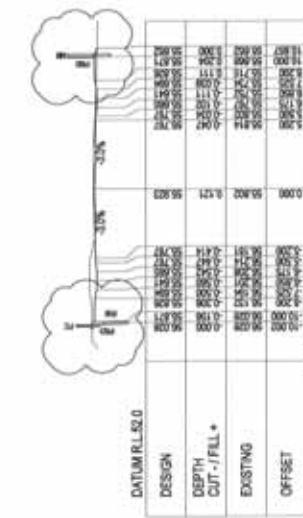
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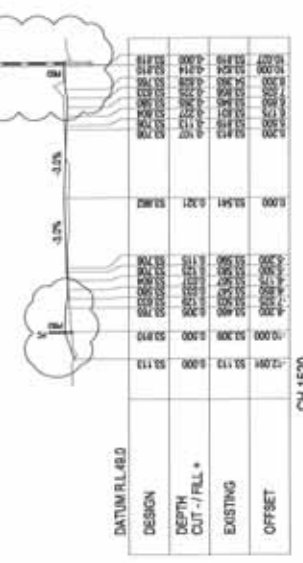
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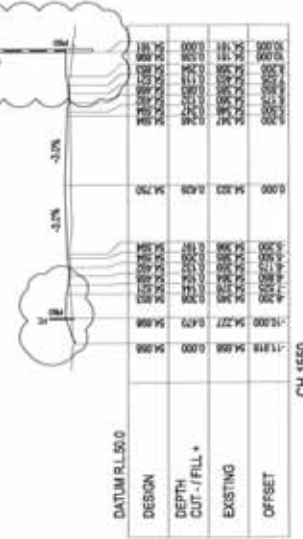
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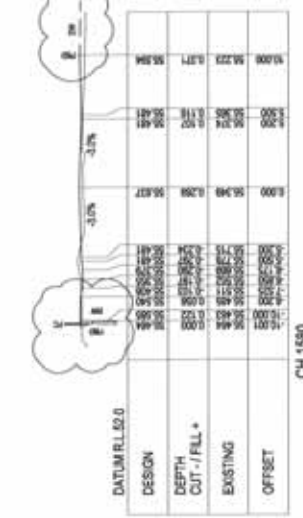
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CH 1520



CH 1550



CH 1580

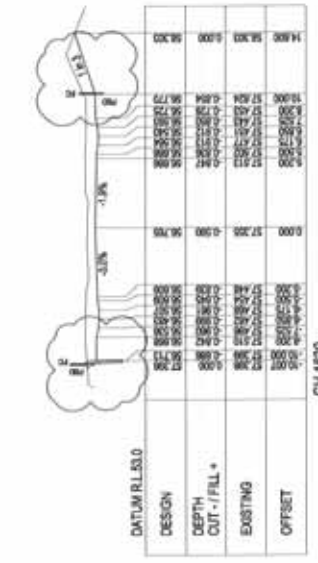


CONSTRUCTION

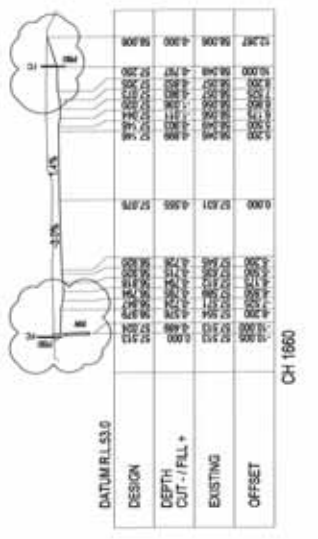
Auckland Transport An Auckland Council Organisation		DO NOT SCALE This document may only be used for the purpose of providing information to the public. It is not to be used for any other purpose.	Drawn: M. J. J. J. Checked: M. J. J. J. Design: M. J. J. J. Date: 10/10/12	Client: Auckland Transport Project: NORSGA - NORTH SIDE DRIVE EAST Title: NORTH SIDE DRIVE CROSS SECTIONS - SHEET 12 OF 16
1 CROSS SECTIONS MODIFIED, LINDSEY AMENDS 0 ISSUED FOR CONSTRUCTION		M. J. J. J. M. J. J. J. M. J. J. J.	Date: 10/10/12 Drawn: M. J. J. J. Checked: M. J. J. J. Design: M. J. J. J.	A1 Drawing No: 51-28664-C14062 Rev: 1

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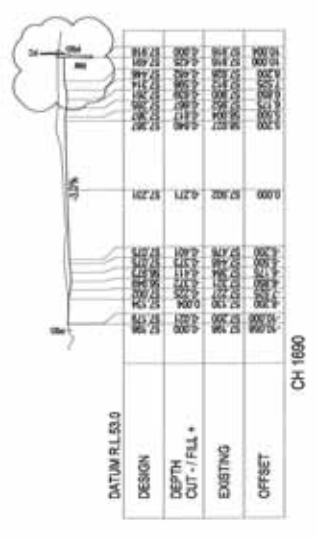
- FW - NEW FUTURE
- FC - NEW FUTURE
- PR - PROPOSED ROAD BOUNDARY
- RD - EXISTING ROAD BOUNDARY
- WB - NEW WIDE BARRIER
- WB - NEW WIDE BARRIER
- RW - NEW ROAD BARRIER
- RW - NEW ROAD BARRIER



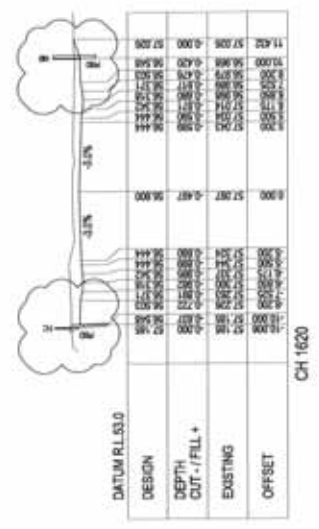
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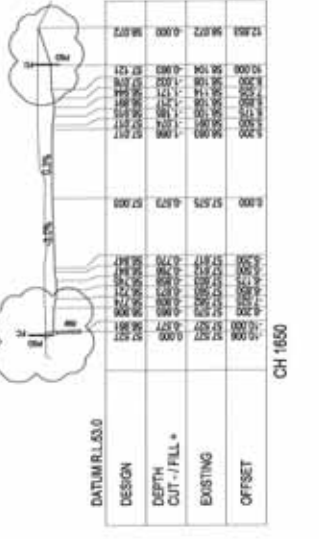
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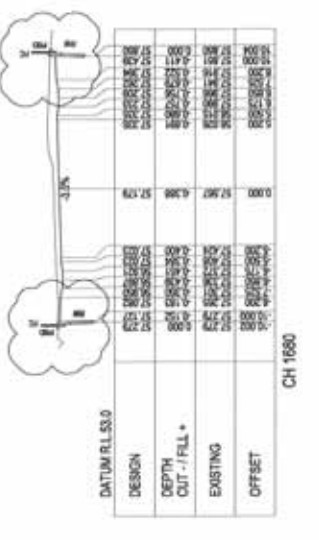
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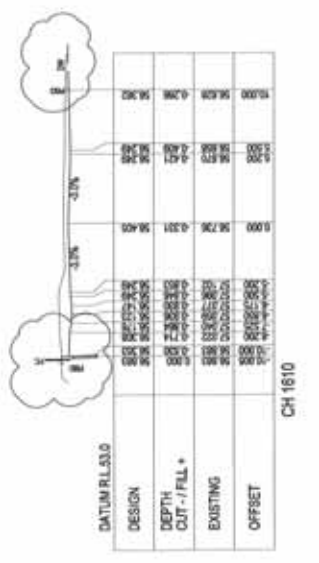
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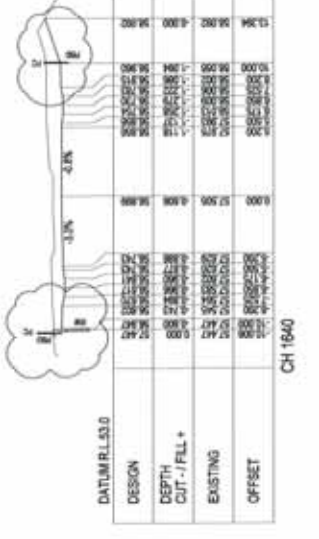
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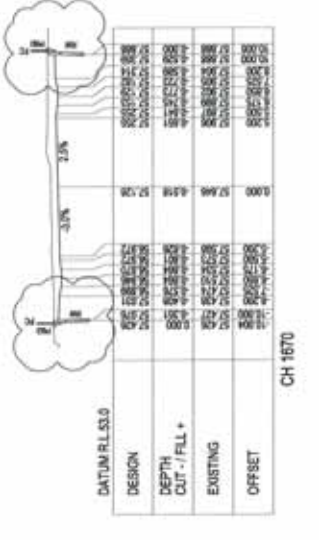
CH 1680



CH 1610



CH 1640



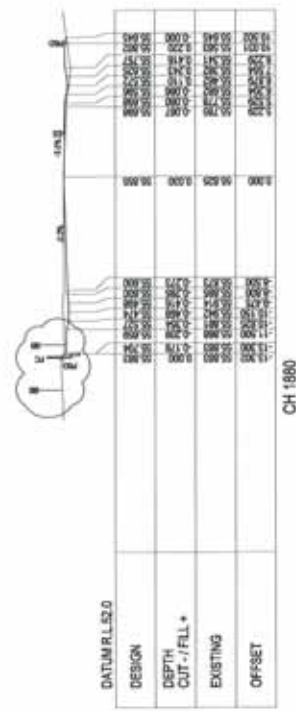
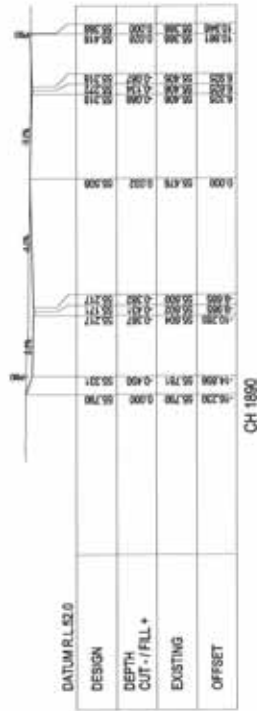
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CONSTRUCTION

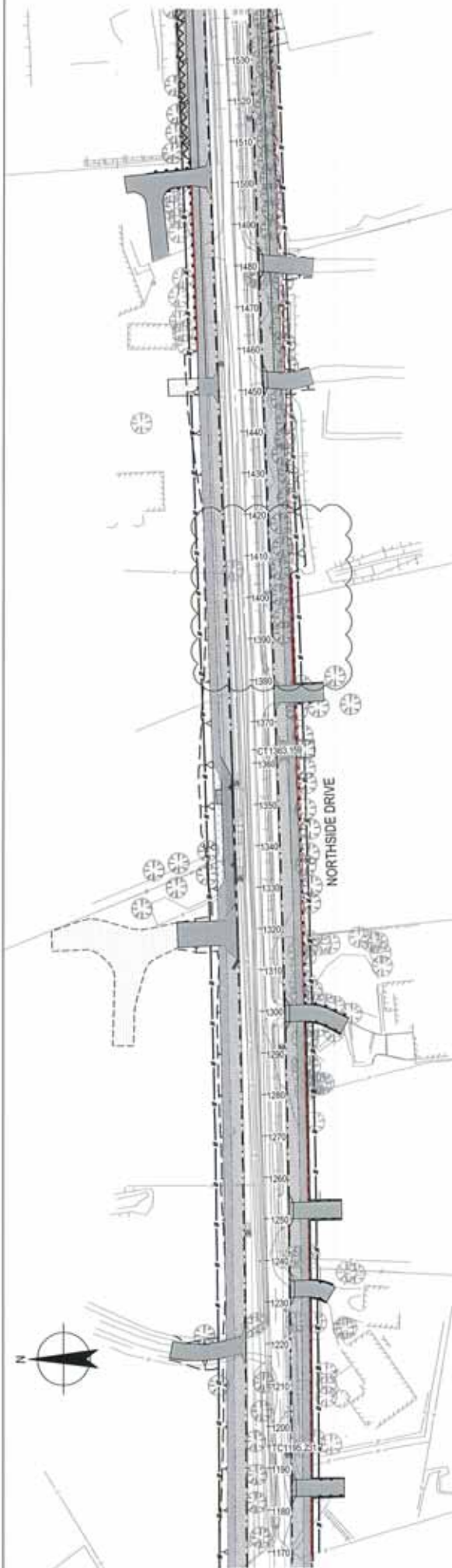
Auckland Transport NORSGA - NORTH SIDE DRIVE EAST CROSS SECTIONS - SHEET 13 OF 16		Client: Auckland Transport Project: NORSGA - NORTH SIDE DRIVE EAST Sheet: 13 OF 16 Scale: 1:100
Legend: - FW - NEW FUTURE - FC - NEW FUTURE - PR - PROPOSED ROAD BOUNDARY - RD - EXISTING ROAD BOUNDARY - WB - NEW WIDE BARRIER - WB - NEW WIDE BARRIER - RW - NEW ROAD BARRIER - RW - NEW ROAD BARRIER		DO NOT SCALE CH 1610 CH 1620 CH 1630 CH 1640 CH 1650 CH 1660 CH 1670 CH 1680 CH 1690
1 CROSS SECTIONS MODIFIED, LEGEND AMENDED 0 ISSUED FOR CONSTRUCTION		Author: [Signature] Check: [Signature] Date: 18/10/12

DW : NEW DRIVEWAY
FC : NEW FENCE
PSD : PROPOSED ROAD BOUNDARY
BB : EXISTING BAMBOO WALL LINE
NB : NEW NOISE BARRIER
WB : NEW WIND BREAK
RW : NEW RETAINING WALL

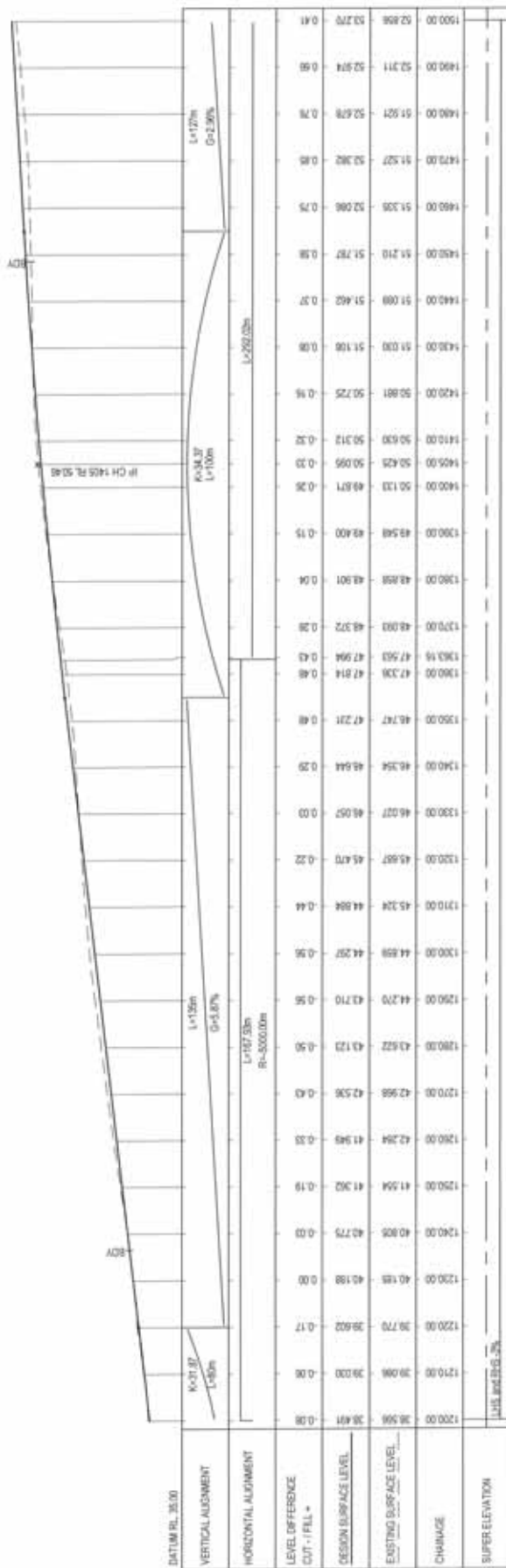


CONSTRUCTION

[illegible]



PLAN



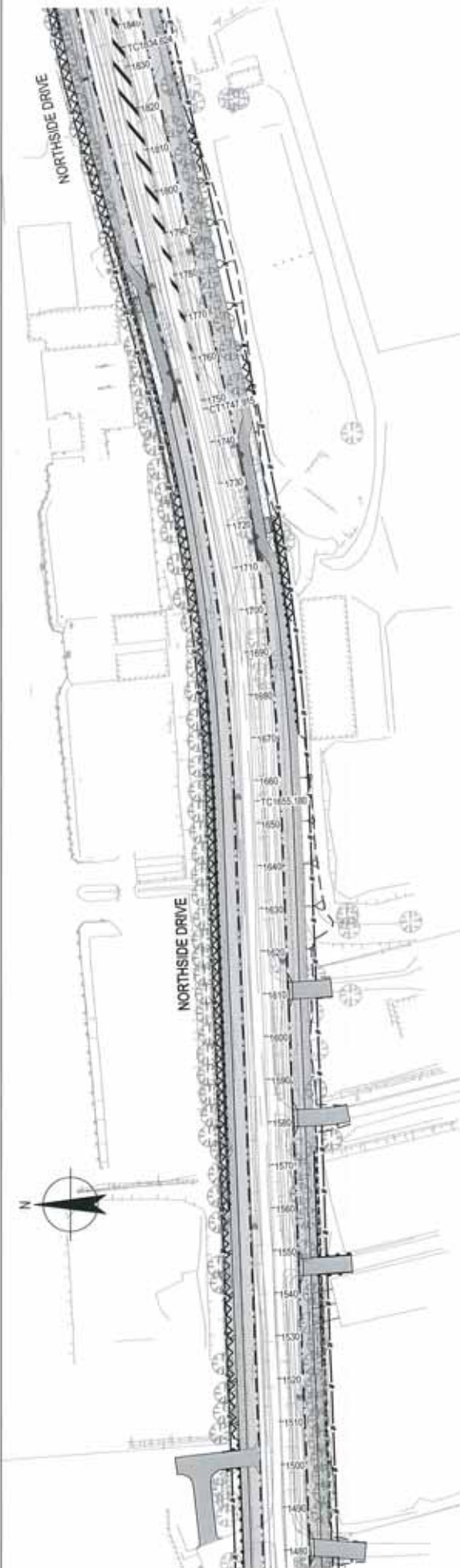
LONGITUDINAL SECTION - NORTHSIDE DRIVE
(CH 1200 TO CH 1500)



CONSTRUCTION

[illegible]

doi:10.1017/S0022292412001906 Published online by Cambridge University Press



PLAN

CH 1773.57 RL 57.1

IF CH 1622 RL 56.88

DATUM RL 50.00		LONGITUDINAL SECTION - NORTHSIDE DRIVE (CH 1500 TO CH 1800)	
VERTICAL ALIGNMENT			
HORIZONTAL ALIGNMENT			
LEVEL DIFFERENCE CUT - FILL +			
DESIGN SURFACE LEVEL			
EXISTING SURFACE LEVEL			
CHANGE			
SUPER ELEVATION			

LONGITUDINAL SECTION - NORTHSIDE DRIVE
(CH 1500 TO CH 1800)



ISSUED FOR CONSTRUCTION

Rev: 0

Auckland Transport

An Auckland Council Organisation

CONSTRUCTION

AUCKLAND TRANSPORT

NORSGA - NORTHSIDE DRIVE EAST

NORTHSIDE DRIVE

PLAN AND LONG SECTION - SHEET 3 OF 4

Drawing No: **51-28664-C14033**

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Scale: 1:100

Date: 18/10/19

Author: MJ

Checker: MJ

Engineer: MJ

Project Manager: MJ

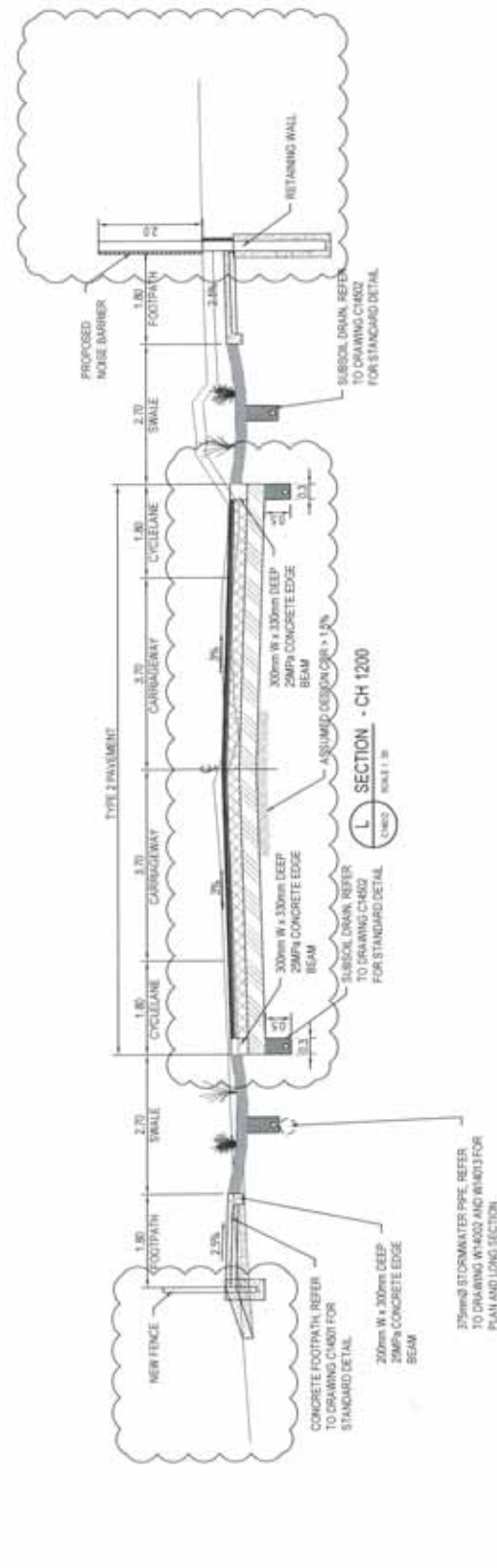
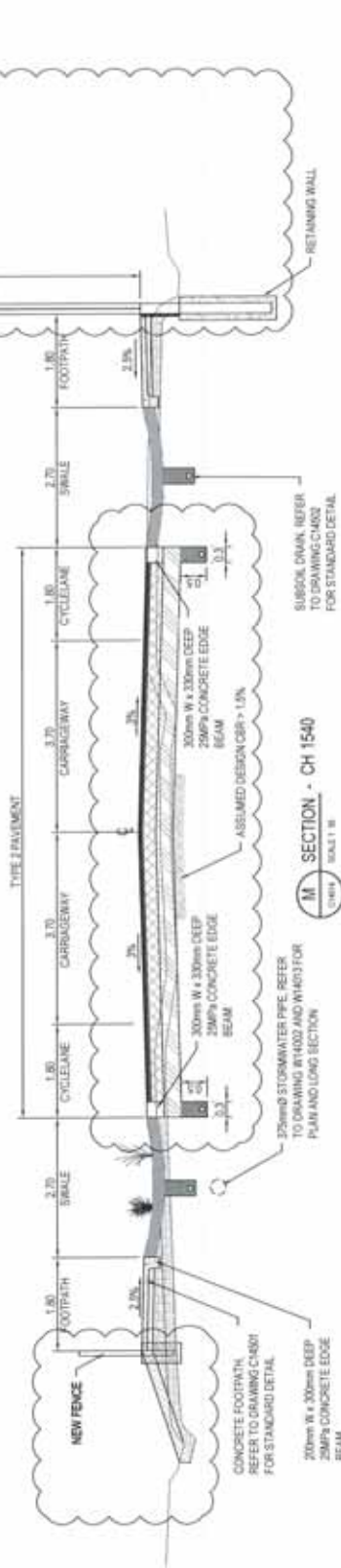
Client: Auckland Transport

Project: NORSGA - NORTHSIDE DRIVE EAST

Sheet: 3 of 4

NOTES

1. REFER TO DRAWING NO 51-28664-C14041 FOR PAVEMENT TYPE DETAILS.
2. REFER TO DRAWING NO 51-28664-W14508 AND W14509 FOR SWALE DETAILS.
3. REFER TO DRAWING NO 51-28664-C14221 AND W14222 FOR MAZE BARRIER AND WIND BREAK TYPE DETAILS.



CONSTRUCTION

Auckland Transport NORSGA - NORTHSIDE DRIVE EAST NORTHSIDE DRIVE PAVEMENT TYPICAL SECTIONS - SHEET 2 OF 4		Client: Auckland Transport Project: NORSGA - NORTHSIDE DRIVE EAST Title: PAVEMENT TYPICAL SECTIONS - SHEET 2 OF 4
Designer: M. J. JONES Checker: A. J. JONES Approved: A. J. JONES Date: 18/06/12	Designer: M. J. JONES Checker: A. J. JONES Approved: A. J. JONES Date: 18/06/12	Title: A1 Drawing No: 51-28664-C14043
DO NOT SCALE CIVIL ENGINE The drawings are to be used for construction purposes only. They are not to be used for any other purpose.		Scale: 1:50 Date: 18/06/12
Auckland Transport An Auckland Council Organisation		Scale: 1:50 Date: 18/06/12
1. NOTE AMENDED 0. ISSUED FOR CONSTRUCTION	M. J. JONES A. J. JONES A. J. JONES	M. J. JONES A. J. JONES A. J. JONES