




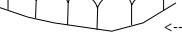

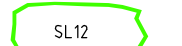




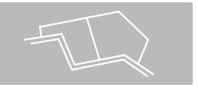





DRWG No.	DRAWING TITLE
R-001	ROAD ALIGNMENT ROAD ALIGNMENT - DRAWING INDEX, NOTES AND LEGEND
R-100	ROAD ALIGNMENT PLANS - SHEET LAYOUT
R-101	ROAD ALIGNMENT PLAN - SHEET 1 OF 15
R-102	ROAD ALIGNMENT PLAN - SHEET 2 OF 15
R-103	ROAD ALIGNMENT PLAN - SHEET 3 OF 15
R-104	ROAD ALIGNMENT PLAN - SHEET 4 OF 15
R-105	ROAD ALIGNMENT PLAN - SHEET 5 OF 15
R-106	ROAD ALIGNMENT PLAN - SHEET 6 OF 15
R-107	ROAD ALIGNMENT PLAN - SHEET 7 OF 15
R-108	ROAD ALIGNMENT PLAN - SHEET 8 OF 15
R-109	ROAD ALIGNMENT PLAN - SHEET 9 OF 15
R-110	ROAD ALIGNMENT PLAN- SHEET 10 OF 15
R-111	ROAD ALIGNMENT PLAN - SHEET 11 OF 15
R-112	ROAD ALIGNMENT PLAN - SHEET 12 OF 15
R-113	ROAD ALIGNMENT PLAN - SHEET 13 OF 15
R-114	ROAD ALIGNMENT PLAN - SHEET 14 OF 15
R-115	ROAD ALIGNMENT PLAN - SHEET 15 OF 15
R-120	ROAD PLAN AND LONGITUDINAL SECTIONS - SHEET LAYOUT
R-121	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 63650 TO CH 65250 - SHEET 1 OF 6
R-122	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 60350 TO CH 63600 - SHEET 2 OF 6
R-123	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 57050 TO CH 60300 - SHEET 3 OF 6
R-124	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 53750 TO CH 57000 - SHEET 4 OF 6
R-125	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 50450 TO CH 53700 - SHEET 5 OF 6
R-126	SOUTHBOUND ALIGNMENT MCS0 - PLAN AND LONGITUDINAL SECTION - CH 47121 TO CH 50400 - SHEET 6 OF 6
R-131	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 63650 TO CH 65250 - SHEET 1 OF 6
R-132	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 60350 TO CH 63600 - SHEET 2 OF 6
R-133	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 57050 TO CH 60300 - SHEET 3 OF 6
R-134	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 53750 TO CH 57000 - SHEET 4 OF 6
R-135	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 50450 TO CH 53700 - SHEET 5 OF 6
R-136	NORTHBOUND ALIGNMENT MCN0 - PLAN AND LONGITUDINAL SECTION - CH 47115 TO CH 50400 - SHEET 6 OF 6
R-140	WAIWERA TWO - WAY LINK MC00 - PLAN AND LONGITUDINAL SECTION
R-141	JOHNSTONE'S HILL - EMERGENCY SERVICE ACCESS MC10 - PLAN AND LONGITUDINAL SECTION
R-142	PŪHOI INTERCHANGE - SOUTHBOUND ON RAMP MC30 - PLAN AND LONGITUDINAL SECTION
R-143	PŪHOI INTERCHANGE - NORTHBOUND OFF RAMP MC20 - PLAN AND LONGITUDINAL SECTION
R-144	PŪHOI INTERCHANGE - STATE HIGHWAY 1 CONNECTION MCD0 - PLAN & LONGITUDINAL SECTION
R-147	WYLLIE ROAD MCY0 - PLAN AND LONGITUDINAL SECTION
R-148	WOODCOCKS ROAD MCW0 - PLAN AND LONGITUDINAL SECTION
R-149	CARRAN ROAD MCX0 - PLAN AND LONGITUDINAL SECTION
R-150	NORTHERN LINK TO WHANGAREI MC60 - PLAN AND LONGITUDINAL SECTION
R-151	EASTERN LINK TO WARKWORTH MC70 - PLAN AND LONGITUDINAL SECTION
R-152	MOIRS HILL ROAD MCM0 - PLAN AND LONGITUDINAL SECTION - SHEET 1 OF 3
R-153	MOIRS HILL ROAD MCM0 - PLAN AND LONGITUDINAL SECTION - SHEET 2 OF 3
R-154	MOIRS HILL ROAD MCM0 - PLAN AND LONGITUDINAL SECTION - SHEET 3 OF 3
R-201	ROAD LIGHTING PLAN - SHEET 1 OF 2 - PŪHOI INTERCHANGE - PLAN AND TYPICAL SECTION
R-202	ROAD LIGHTING PLAN - SHEET 2 OF 2 - NORTHERN INTERSECTION - PLAN AND TYPICAL SECTION

DRWG No.	DRAWING TITLE
R-211	ROAD ALIGNMENT - Continued
R-212	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 1 OF 8
R-213	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 2 OF 8
R-214	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 3 OF 8
R-215	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 4 OF 8
R-216	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 5 OF 8
R-217	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 6 OF 8
R-218	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 7 OF 8
R-219	TYPICAL CROSS SECTIONS AND DETAILS - SHEET 8 OF 8
R-221	WAIWERA LINK - TYPICAL CROSS SECTIONS
R-222	PRIVATE ACCESS ROADS - TYPICAL CROSS SECTIONS
R-223	WATSON ROAD (PRIVATE) - TYPICAL CROSS SECTIONS
R-224	MOIRS HILL ROAD - TYPICAL CROSS SECTIONS
R-225	WYLLIE ROAD - TYPICAL CROSS SECTION
R-226	WOODCOCKS ROAD / CARRAN ROAD - TYPICAL CROSS SECTION
R-227	NORTHERN LINK TO WHANGAREI - TYPICAL CROSS SECTIONS
R-228	EASTERN LINK TO WARKWORTH - TYPICAL CROSS SECTIONS

GENERAL LEGEND	
	PROPOSED DESIGNATION BOUNDARY
	ROAD PLAN
	CONTROL LINE AND CHAINAGE
	CUT SLOPES
	INDICATIVE ROAD ALIGNMENT MECHANICALLY STABILISED EARTH (MSE) SLOPE
	FILL SLOPES
	RETAINING WALL
	SPOIL DISPOSAL SITE
	LANDSCAPE FILL
	PROPOSED HIGH PRESSURE GAS PIPELINE DIVERSION
EXISTING FEATURES	
	STATE HIGHWAY
	EXISTING WATERCOURSE (DETERMINED FROM DIGITAL TERRAIN MODEL - REFER TO NOTES 4 AND 6)
	EXISTING PROPERTY BOUNDARIES
	EXISTING CONTOURS (10m INTERVALS)
	KEY ENVIRONMENTAL & HISTORICAL CONSTRAINTS
	VECTOR HIGH PRESSURE GAS PIPELINE (12m EASEMENT)

- GENERAL NOTES
- ALL MEASUREMENTS ARE IN METRES UNLESS OTHERWISE STATED.
 - ALL NAMED ROADS SHALL BE ASSUMED TO BE PUBLIC UNLESS STATED OTHERWISE.
 - AERIAL IMAGE FROM AUCKLAND COUNCIL AERIAL SURVEY, 2012.
 - DIGITAL TERRAIN MODEL DERIVED FROM AERIAL PHOTOGRAMETRIC SURVEY (MARCH 2010) TO NZTM PROJECTION.
 - EXISTING PROPERTY BOUNDARIES SOURCED FROM LINZ, APRIL 2013 UPDATE.
 - DOES NOT DIFFERENTIATE BETWEEN INTERMITTENT AND PERMANENT STREAM, REFER TO DRAWING FE-101.
 - FOR DETAILS OF OPERATIONAL WATER MANAGEMENT, REFER TO DRAWINGS SW-001 AND SW-100 TO SW-115.
 - FOR STRUCTURES PLANS, REFER TO DRAWINGS S-001 TO S-111.

0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT



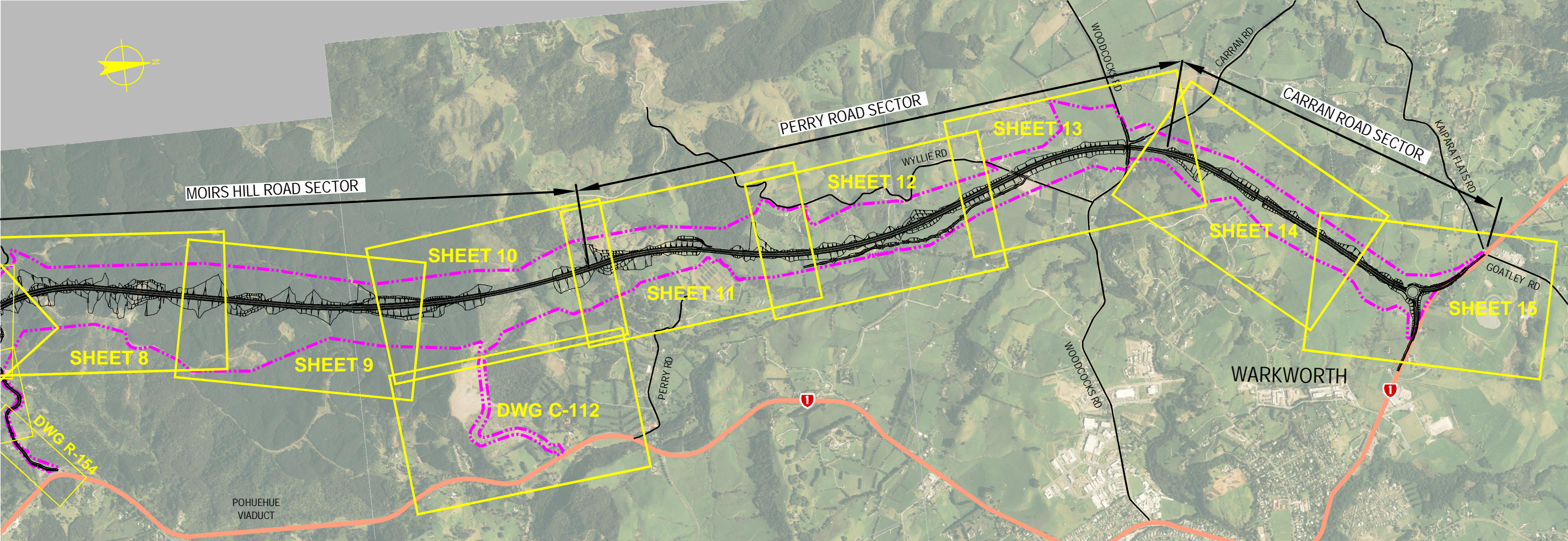
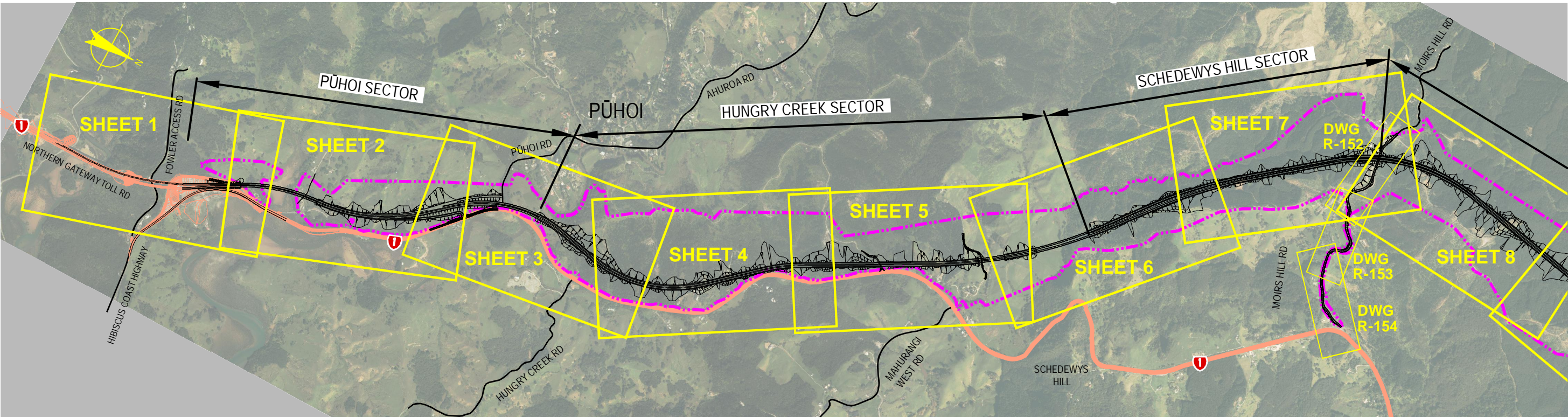
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SNP	DRAFTING CHECK RET	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED SNP	DESIGN REVIEW RET		

ROAD ALIGNMENT DRAWING INDEX, NOTES AND LEGEND			
SCALE NOT TO SCALE	CONTRACT NO. PA3748	DRAWING No R-001	AMDT 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-100.dwg Plot Date: 18 August, 2013 - 12:26 PM



NOTE: FOR DRAWING C-112 REFER TO CONSTRUCTION ACTIVITIES DRAWINGS

0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

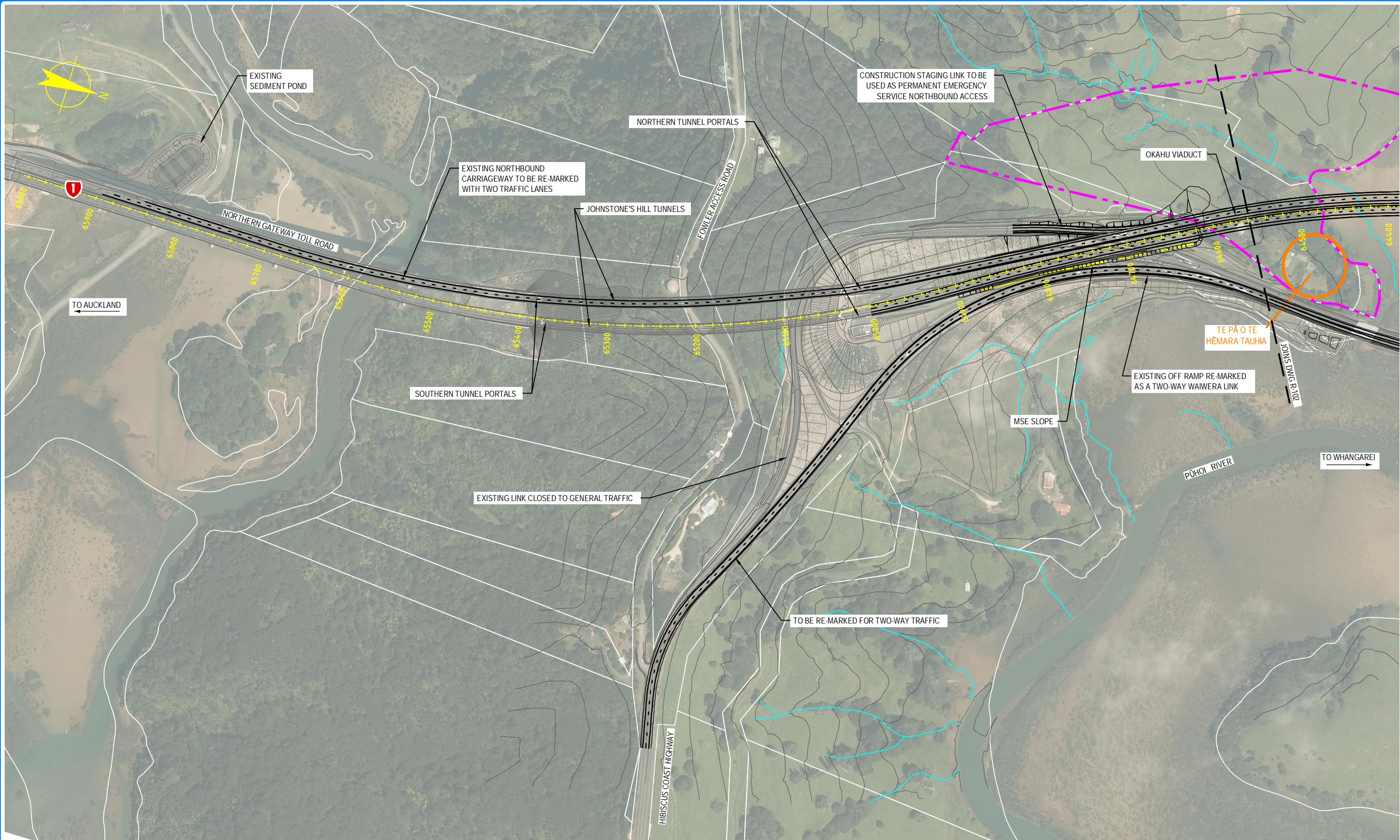


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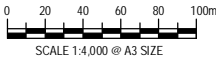
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

ROAD ALIGNMENT PLANS			
SHEET LAYOUT			
SCALE: NOT TO SCALE	CONTRACT No: PA3748	DRAWING No: R-100	AMDT: 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-101_R-105.dwg Plot Date: 18 August, 2013 - 128 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

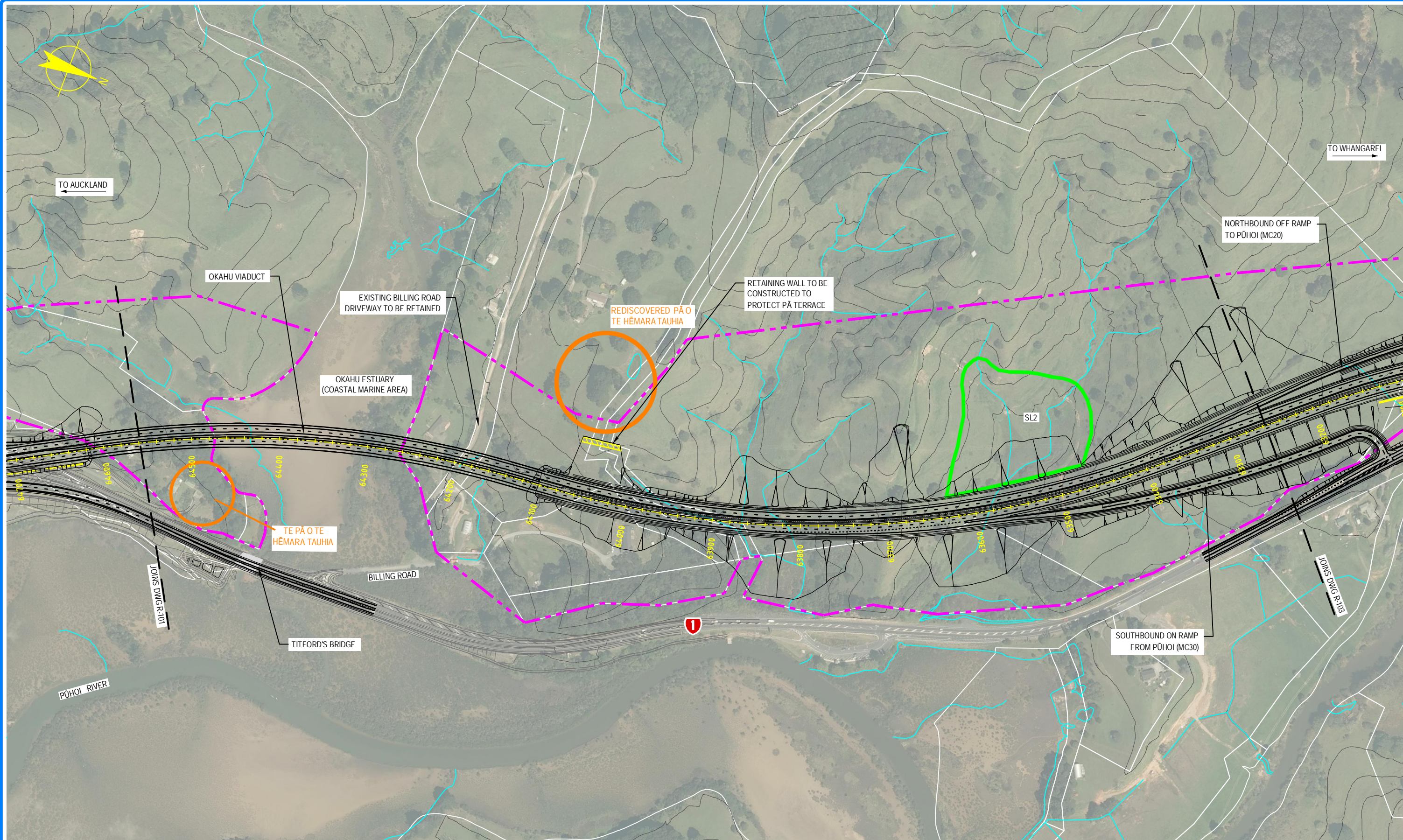


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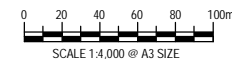
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

ROAD ALIGNMENT PLAN			
SHEET 1 OF 15			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-101	AMDT: 0

S:\Further North - PAA\3300 Design\3300 5 Technical\01-Drawing Production\CADD Drawings\R-101_R-105.dwg Plot Date: 18 August, 2013 - 129 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

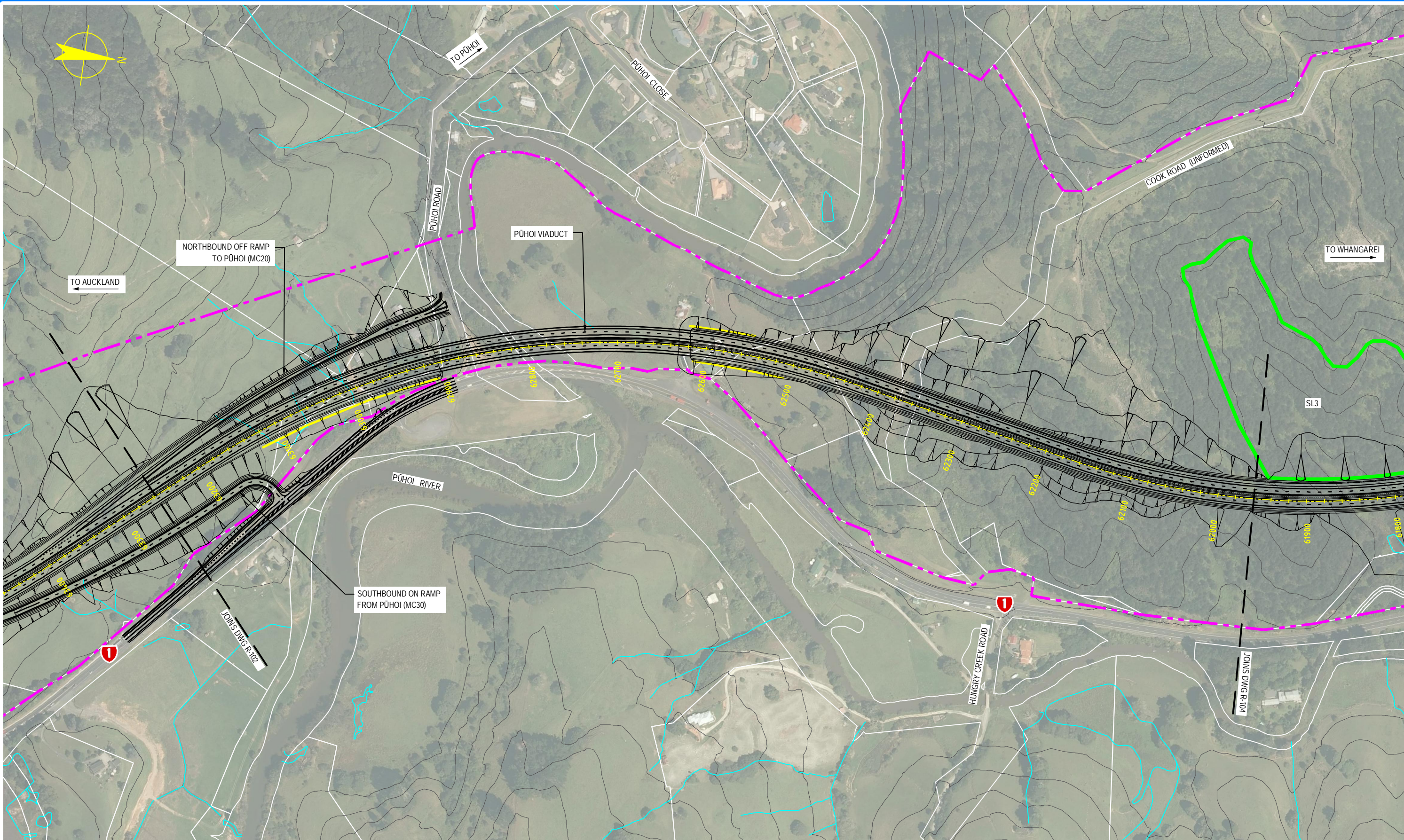


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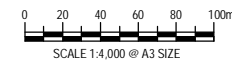
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

ROAD ALIGNMENT PLAN			
SHEET 2 OF 15			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-102	AMDT: 0

S:\Further North - PAA\3300 Design\3300 5 Technical\01-Drawing Production\CADD Drawings\R-101_R-105.dwg Plot Date: 19 August, 2013 - 11:23 AM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

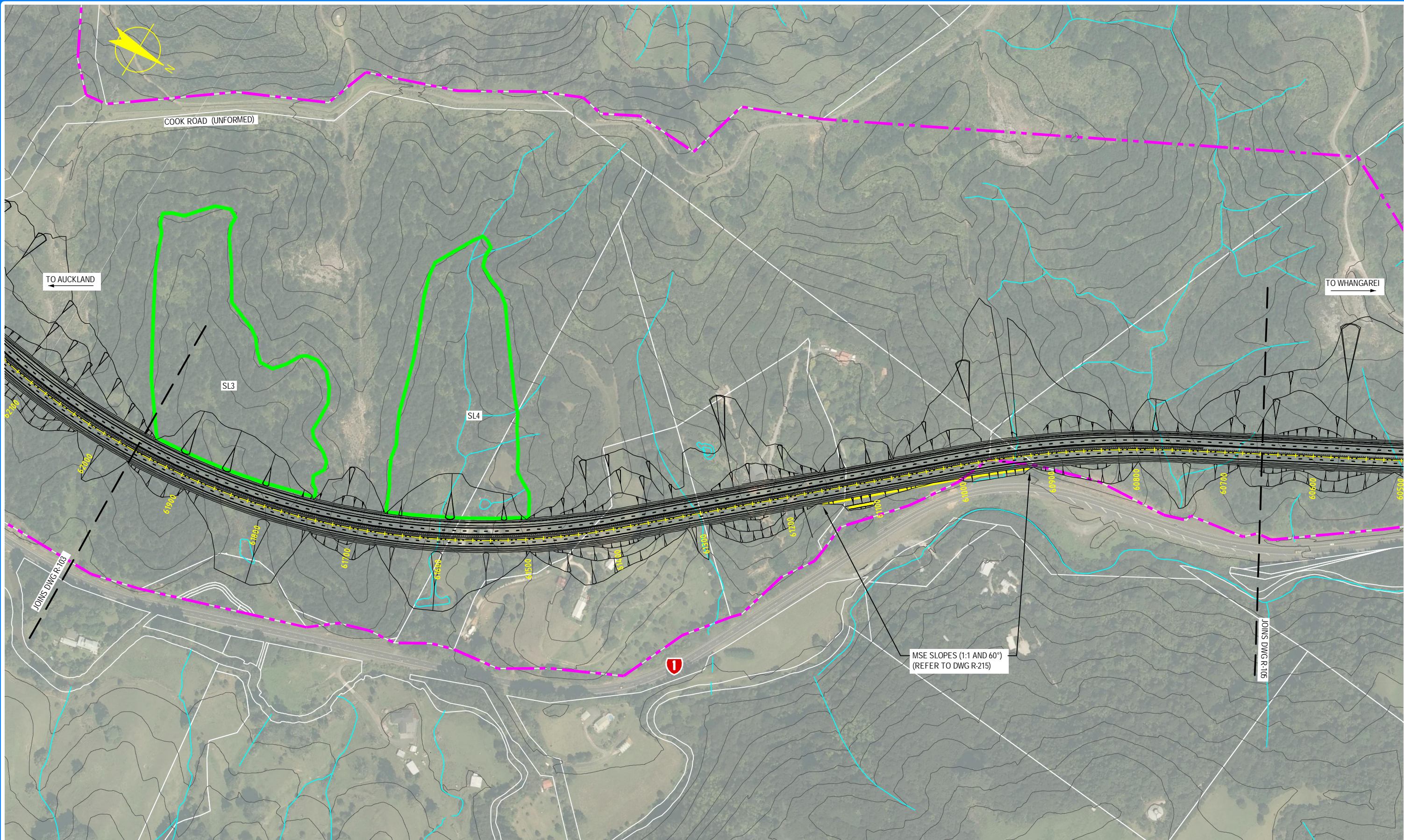


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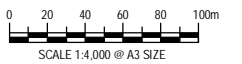
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN			
SHEET 3 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-103	AMDT 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-101_R-105.dwg Plot Date: 18 August, 2013 - 1:30 PM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



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AMD	DATE	DESIGN REVIEW	REVD. D. MGR	APPD. A. MGR	PURPOSE OF ISSUE / AMENDMENT

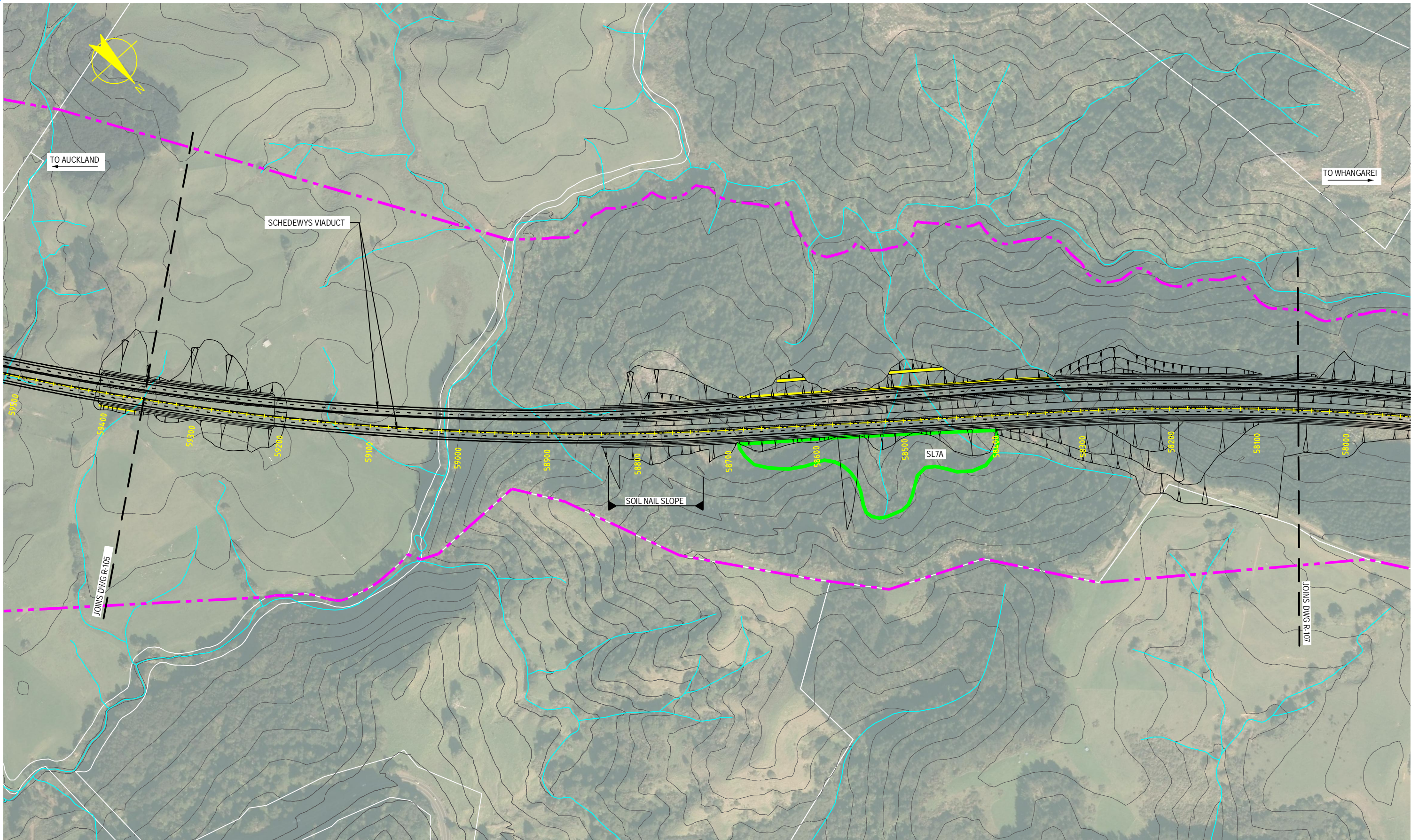


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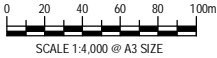
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 4 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-104	AMDT 0

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NOTE: FOR GENERAL NOTES AND LEGEND,
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AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

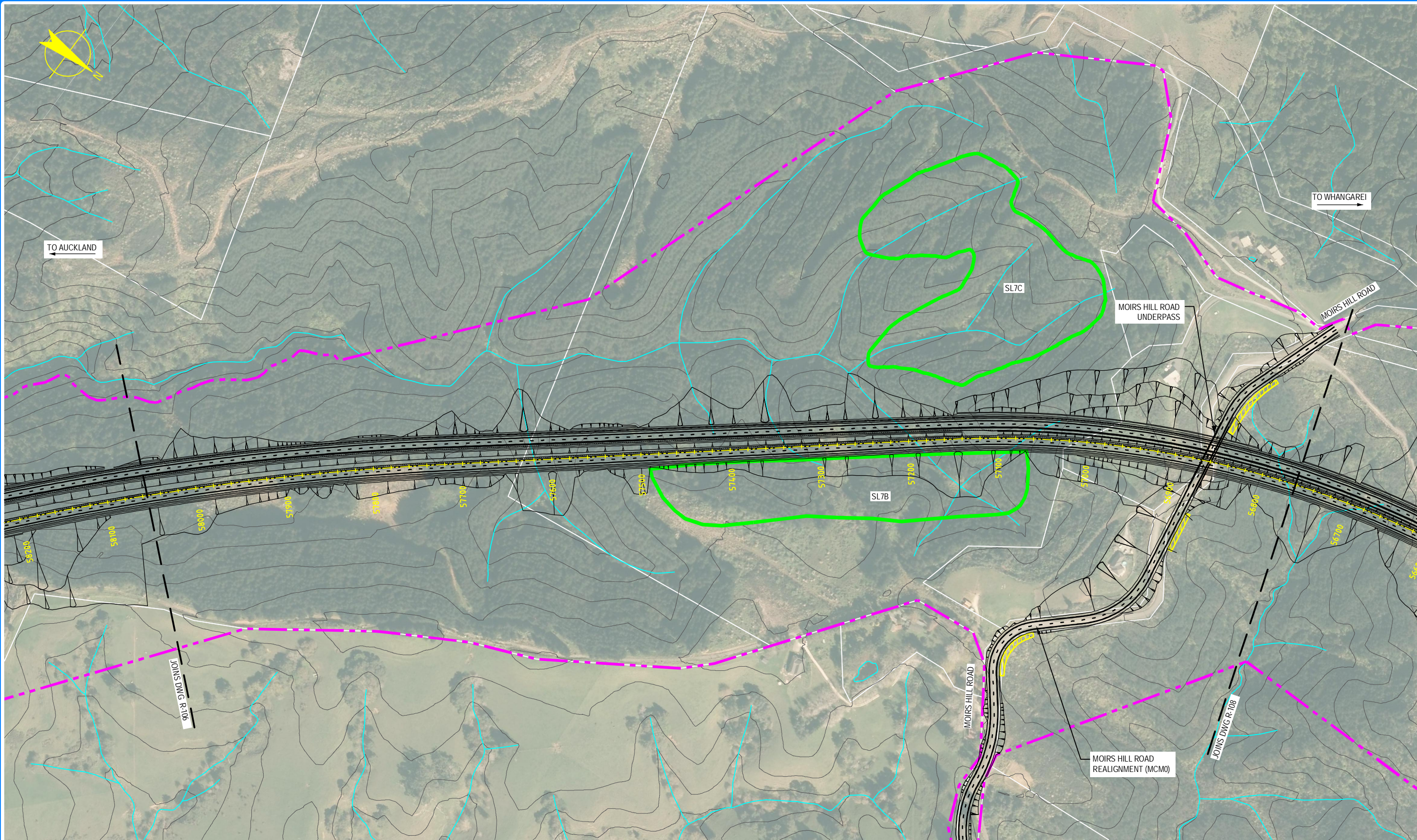


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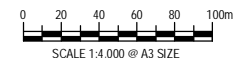
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 6 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-106	AMDT 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-107_R-110.dwg Plot Date: 17 August, 2013 - 2:35 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



AMT	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
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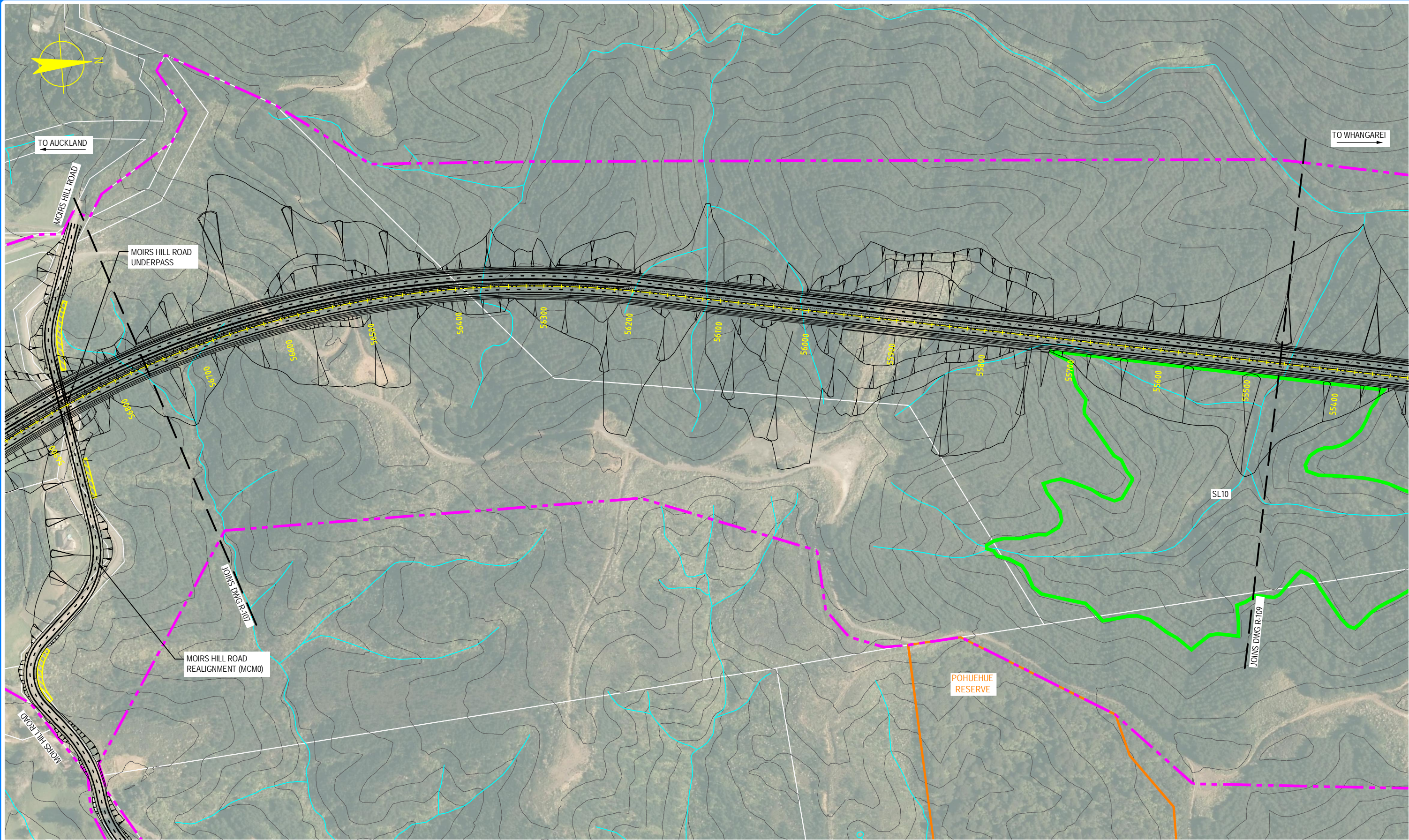


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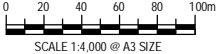
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

ROAD ALIGNMENT PLAN			
SHEET 7 OF 15			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-107	AMT: 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-106_R-110.dwg Plot Date: 17 August, 2013 - 2:36 PM



NOTE: FOR GENERAL NOTES AND LEGEND,
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0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD. D. MGR	APPD. A. MGR	PURPOSE OF ISSUE / AMENDMENT

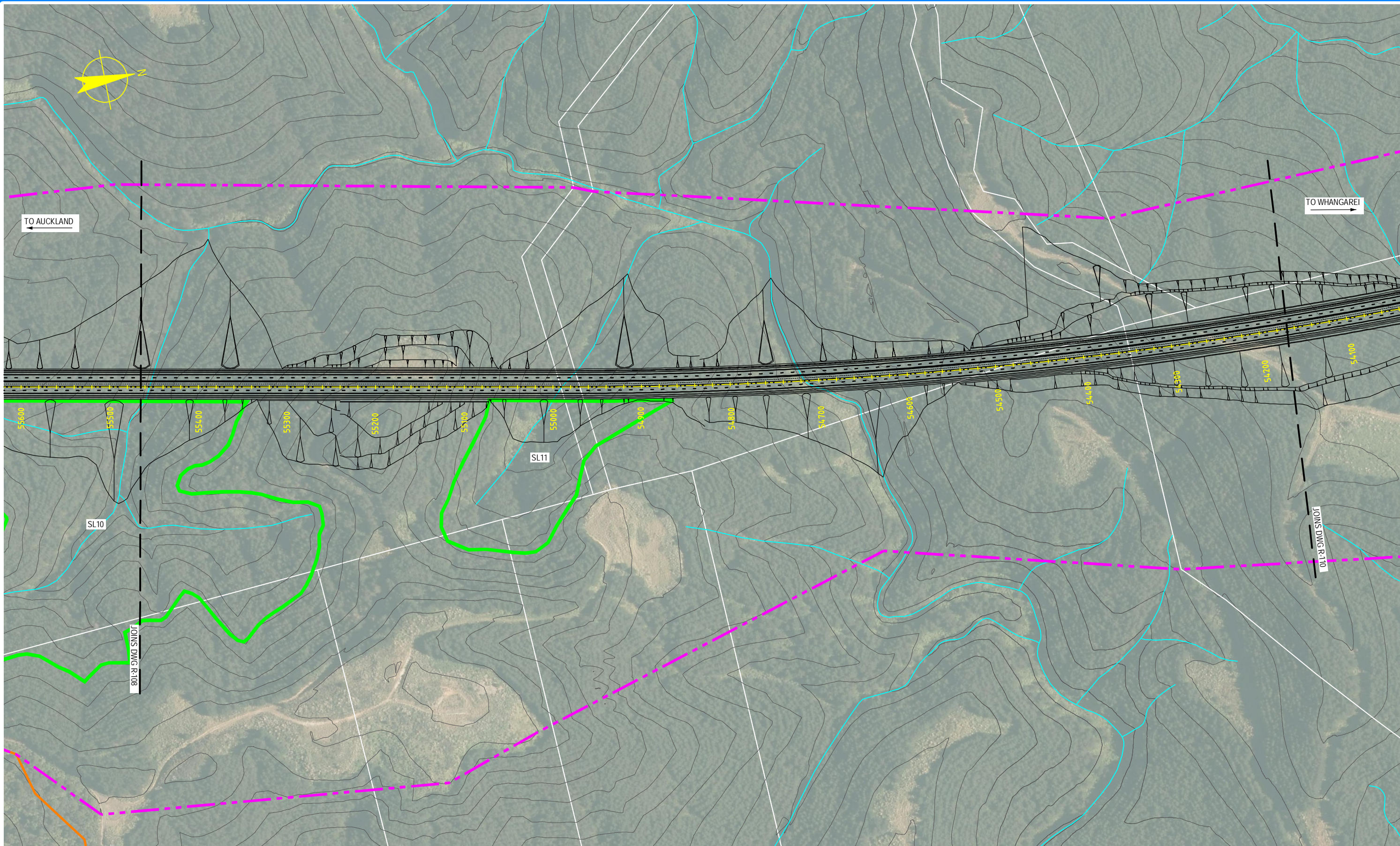


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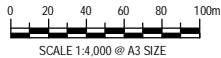
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 8 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-108	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-100_R-110.dwg Plot Date: 17 August, 2013 - 2:36 PM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APPR'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

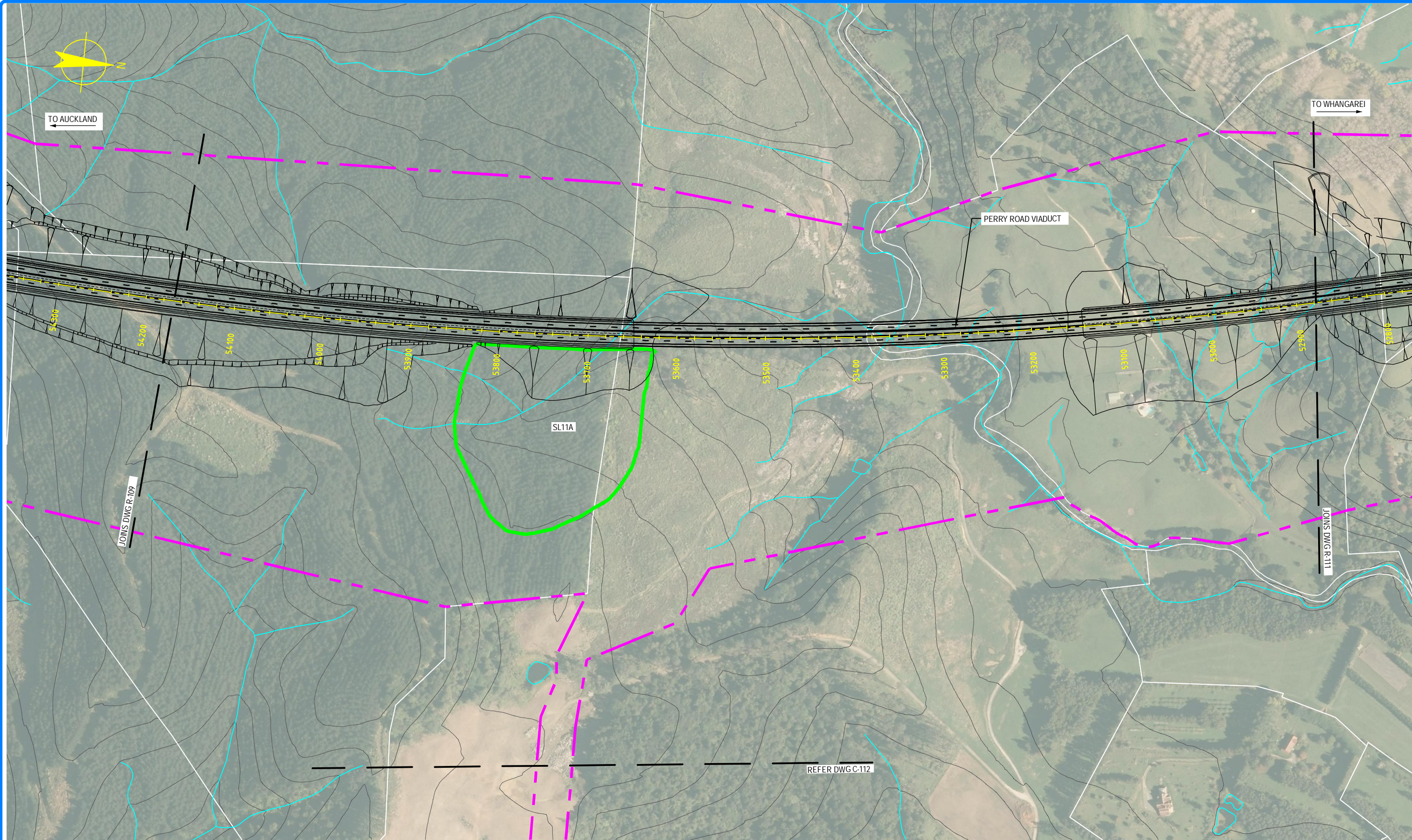


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 9 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-109	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD\Drawings\R-106_R-110.dwg Plot Date: 18 August, 2013 - 1:46 PM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

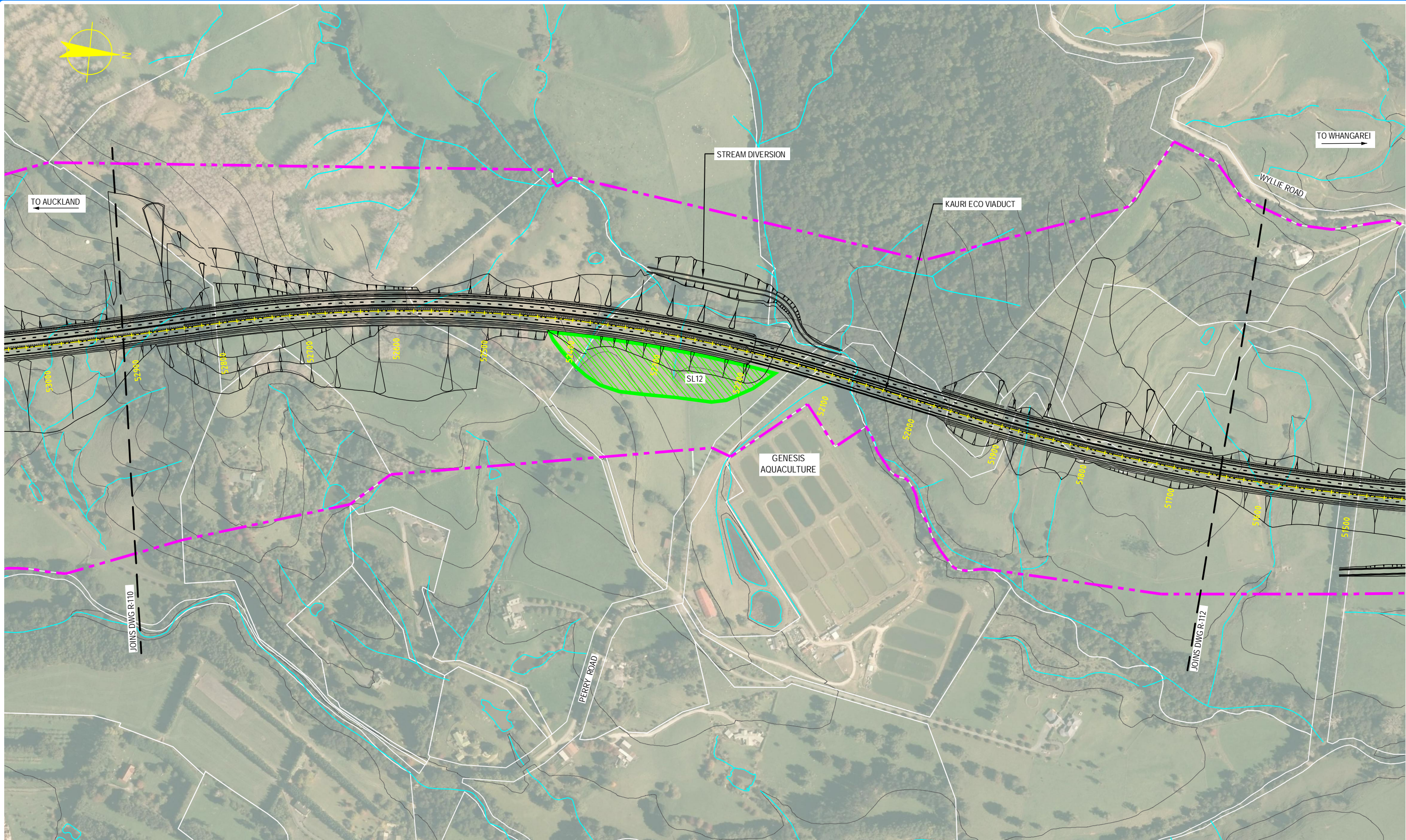


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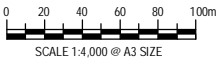
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN			
SHEET 10 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-110	AMD 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-111_R-15.dwg Plot Date: 18 August, 2019 - 2:49 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



AMT	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
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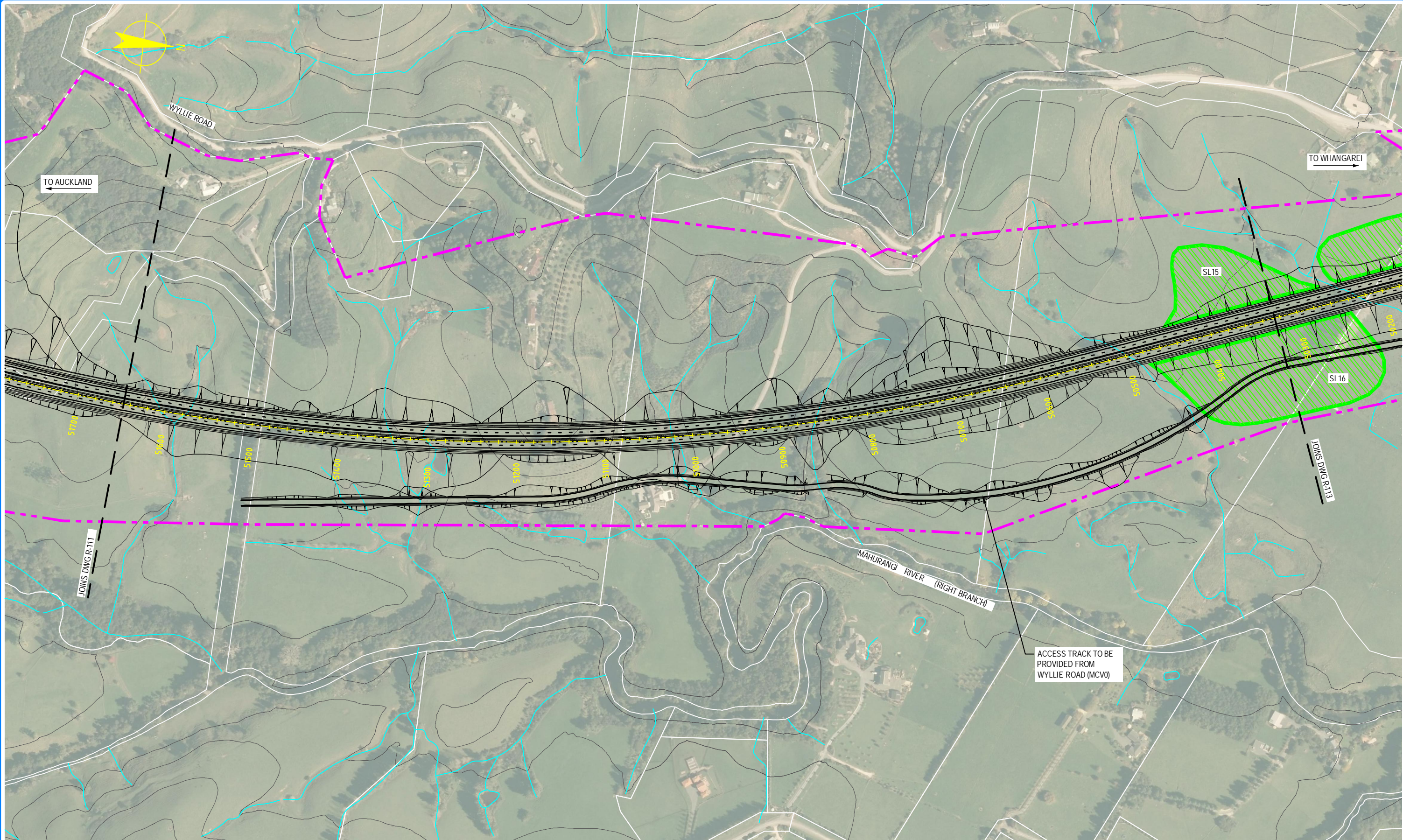


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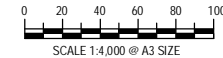
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN			
SHEET 11 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-111	AMT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-111_R-115.dwg Plot Date: 17 August 2013 2:37 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

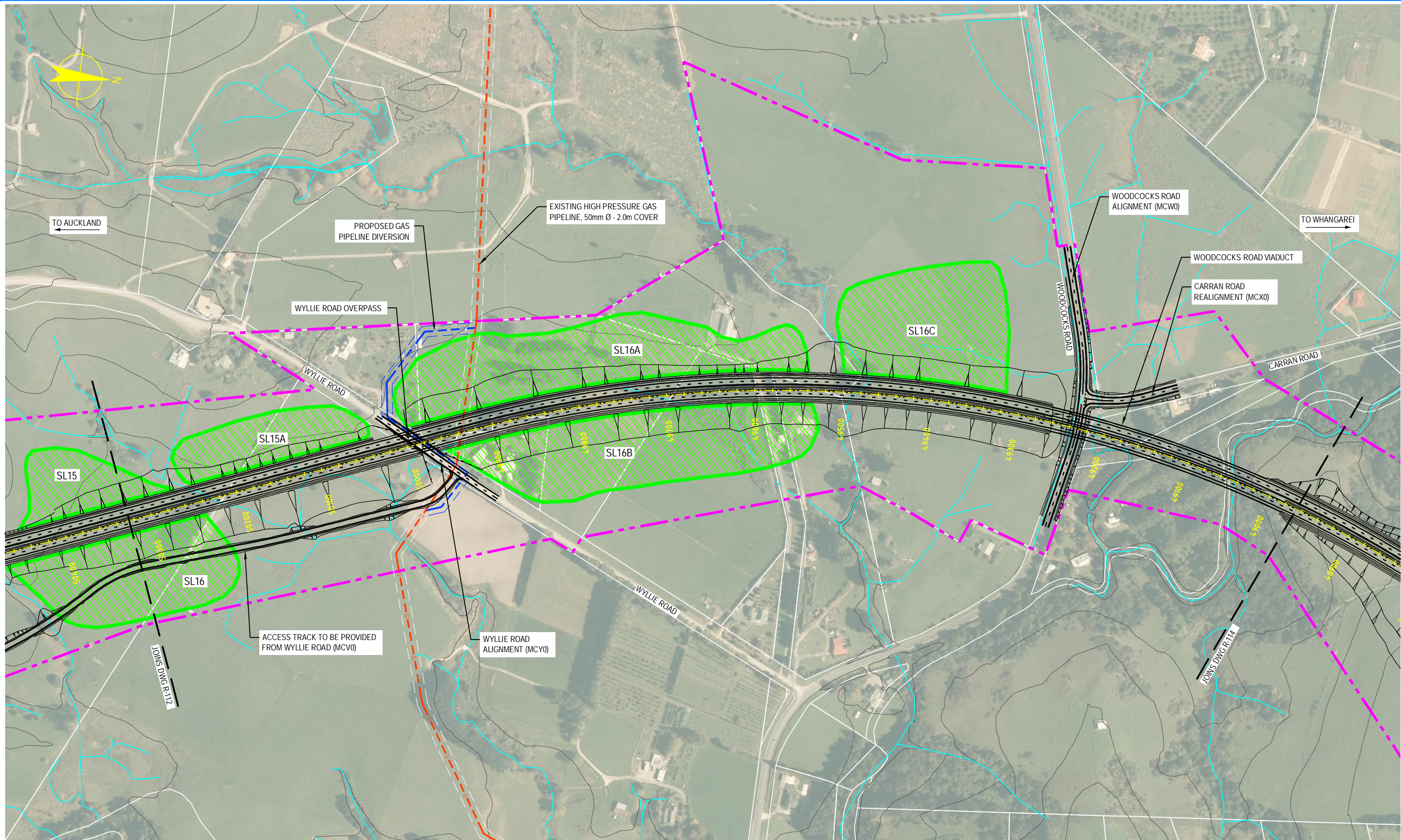


DISCLAIMER
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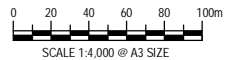
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 12 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-112	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-111_R-115.dwg Plot Date: 23 August, 2013 - 9:10 AM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

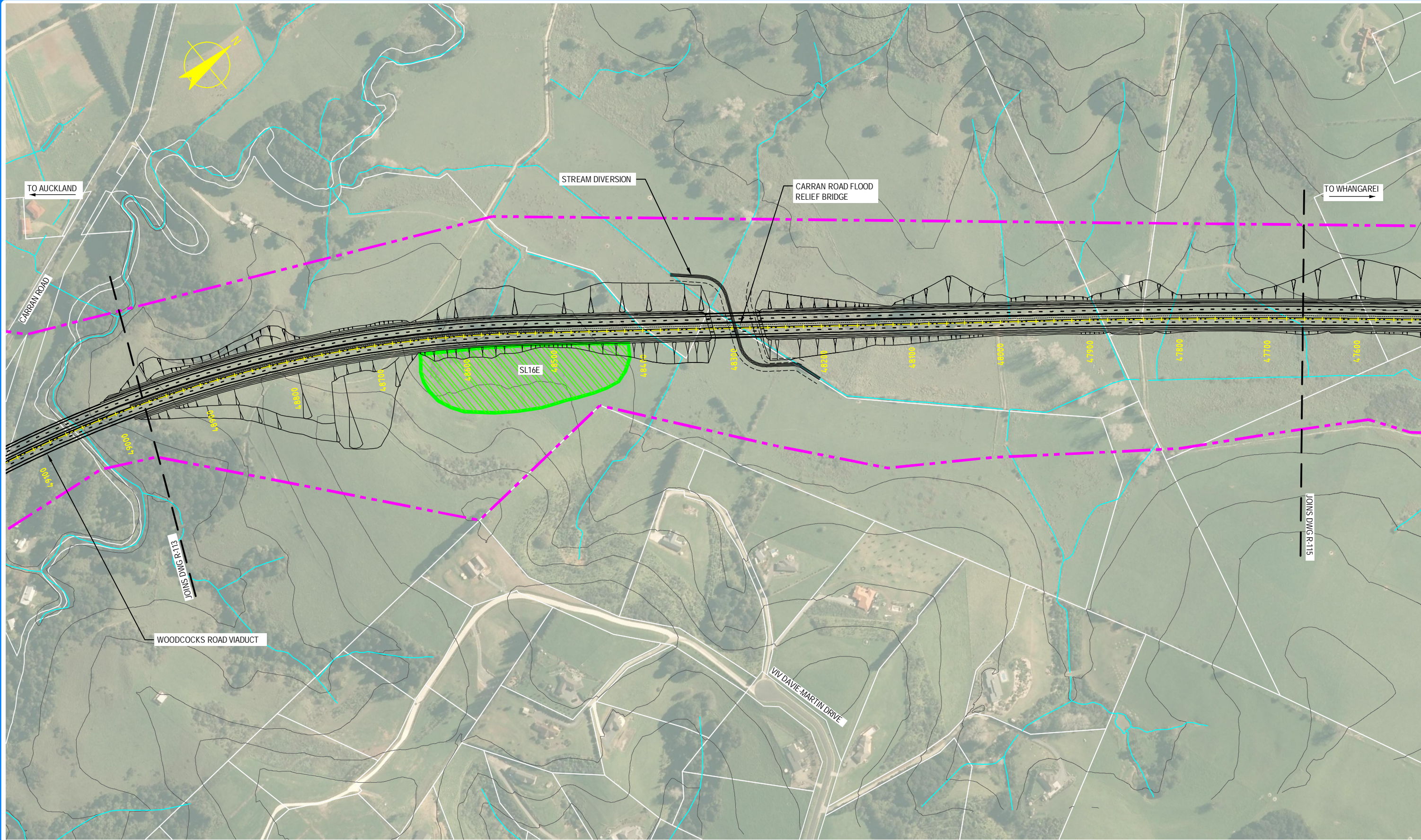


DISCLAIMER
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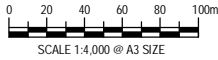
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN			
SHEET 13 OF 15			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-113	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\0-111_R-115.dwg Plot Date: 17 August 2013 - 2:38 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

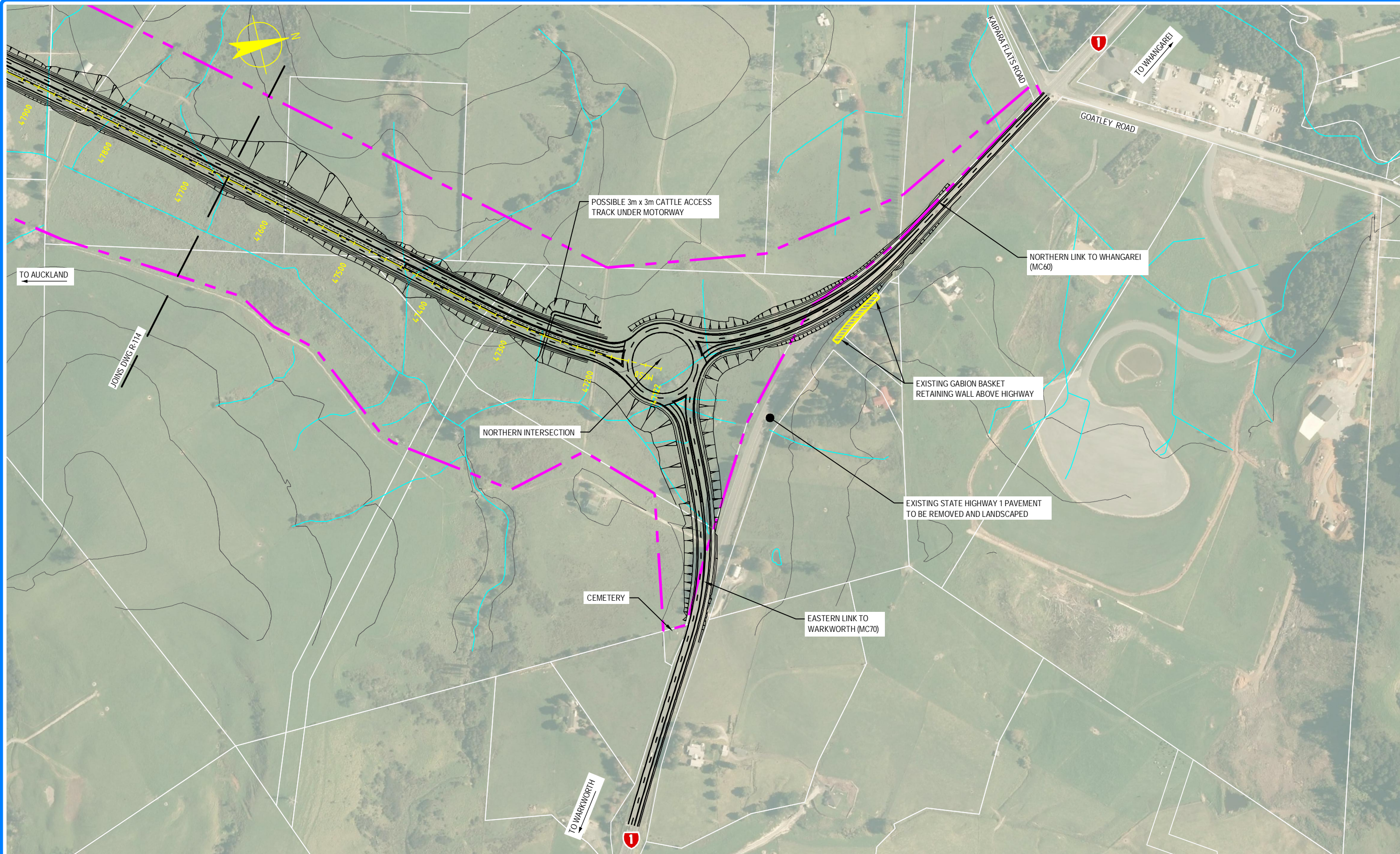


DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN SHEET 14 OF 15			
SCALE AS SHOWN	CONTRACT NO. PA3748	DRAWING No. R-114	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-111_R-115.dwg Plot Date: 17 August, 2013 - 2:39 PM



NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT



DISCLAIMER
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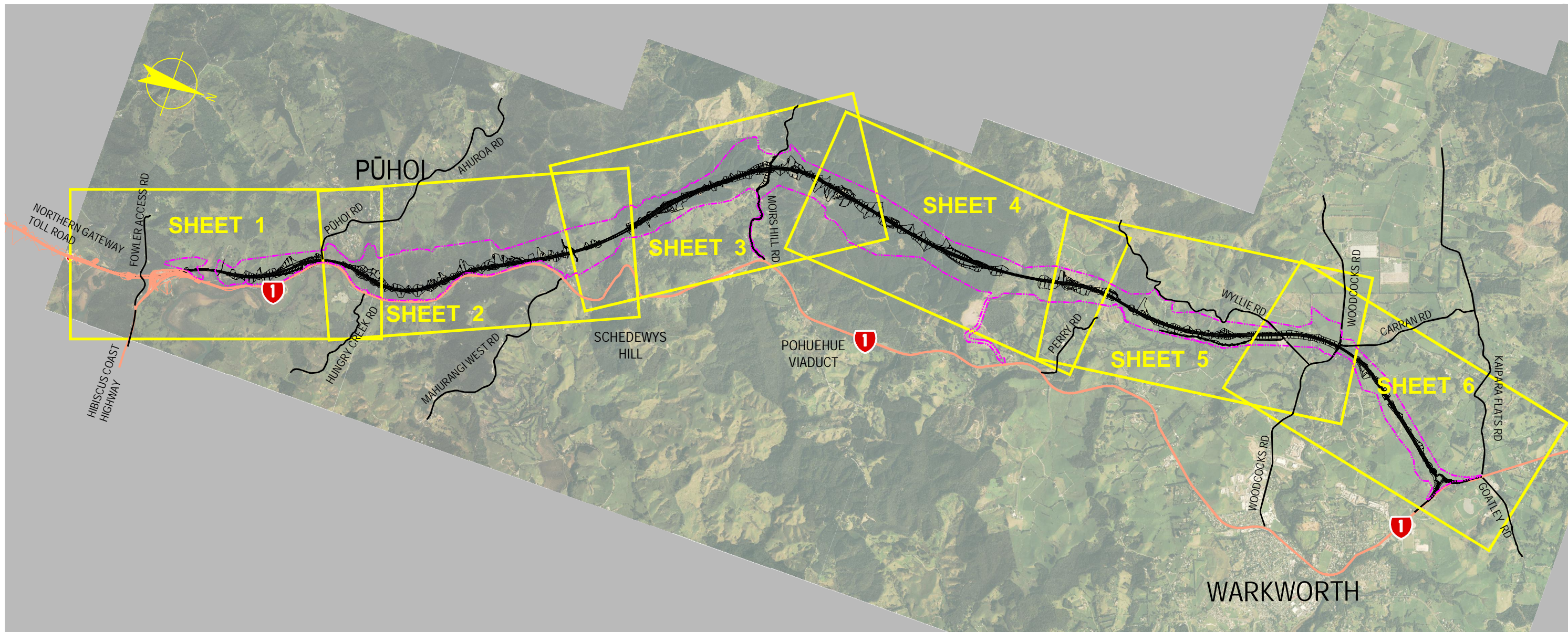
ARA TŪHONO - PŪHOI TO WELLSFORD
PŪHOI TO WARKWORTH - FOR RMA APPROVALS

DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD ALIGNMENT PLAN
SHEET 15 OF 15

SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-115	AMD 0
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S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD\Drawings\R-120.dwg Plot Date: 15 August, 2013 - 13:17 PM



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AMD	DATE	DESIGN REVIEW	REV'D BY MGR	APP'D BY MGR	PURPOSE OF ISSUE / AMENDMENT

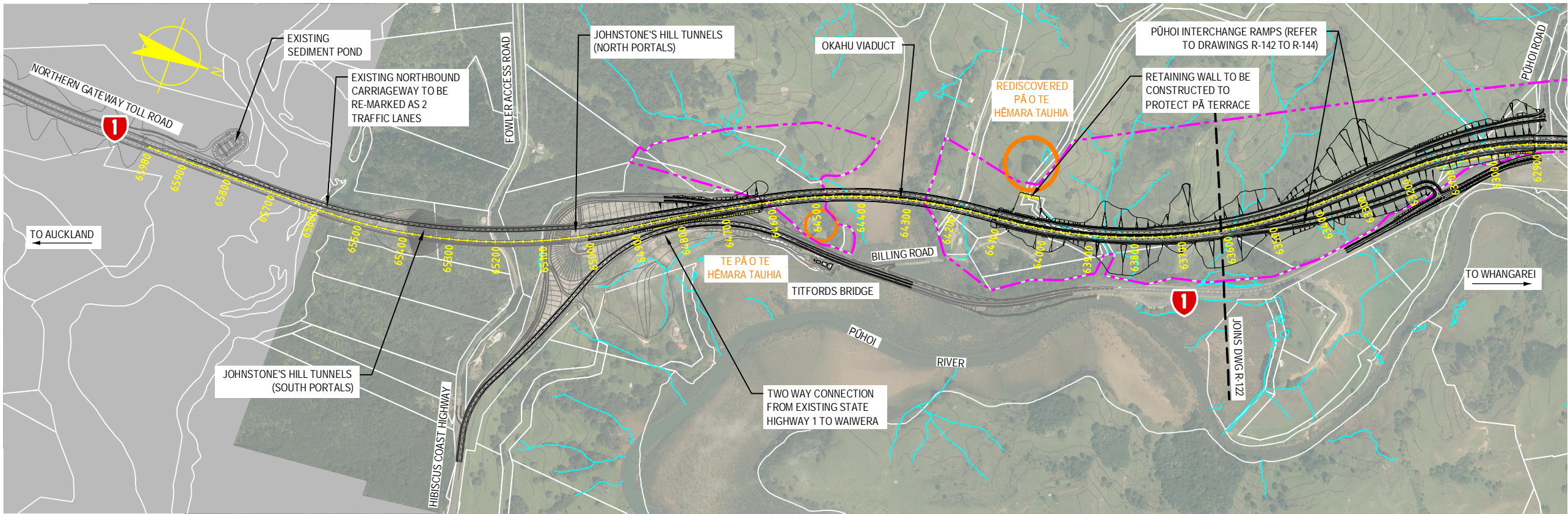


DISCLAIMER
The information shown on this drawing is solely for the purposes of supporting RMA applications for statutory approvals. All information shown is subject to review for compliance with approved consents and the outcomes of final design.

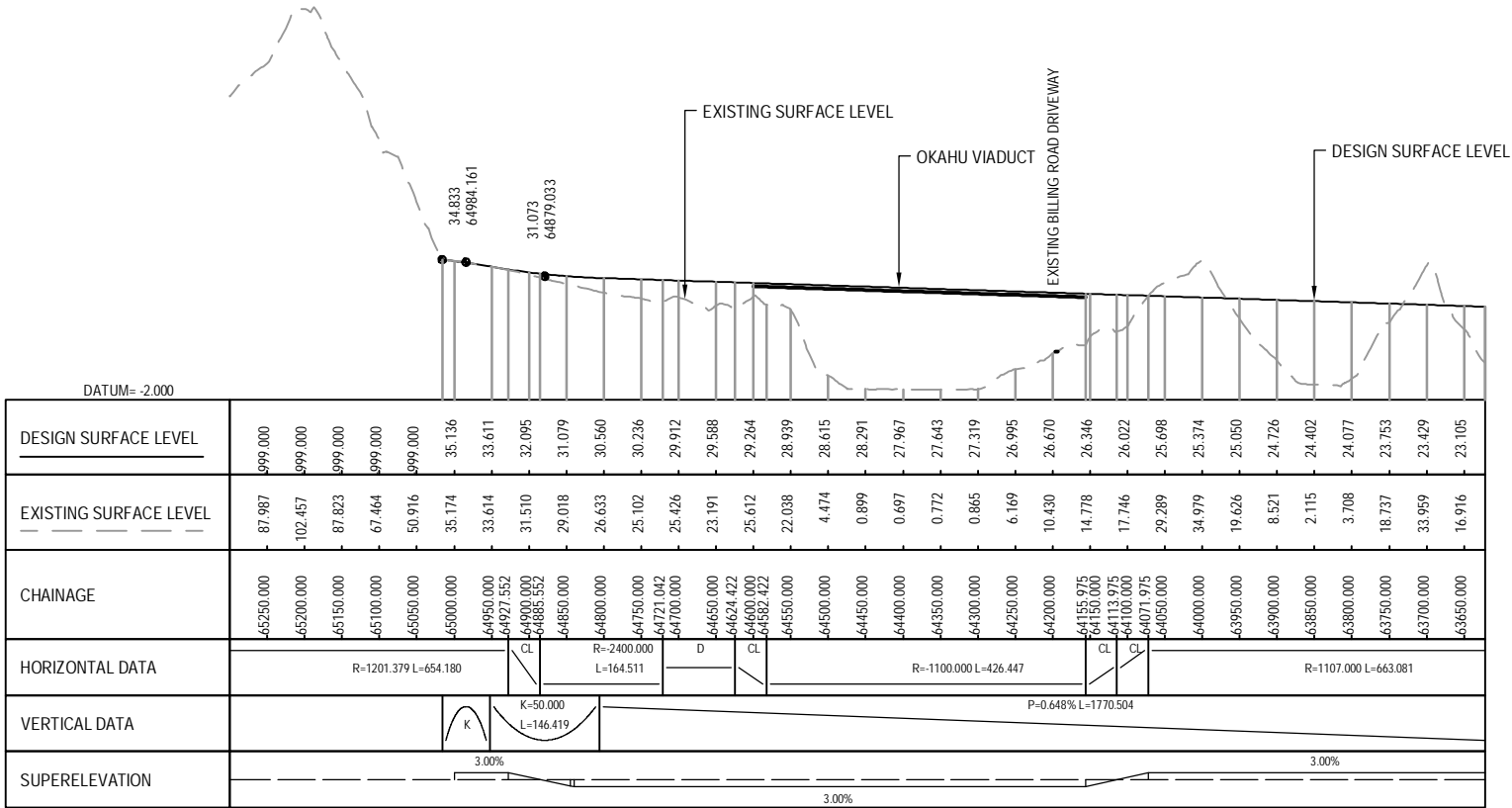
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD PLANS AND LONGITUDINAL SECTIONS SHEET LAYOUT			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-120	AMDT 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-121_R-123.dwg Plot Date: 18 August, 2013 - 2:02 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCS0 (CH 63650.000 TO CH 65250.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

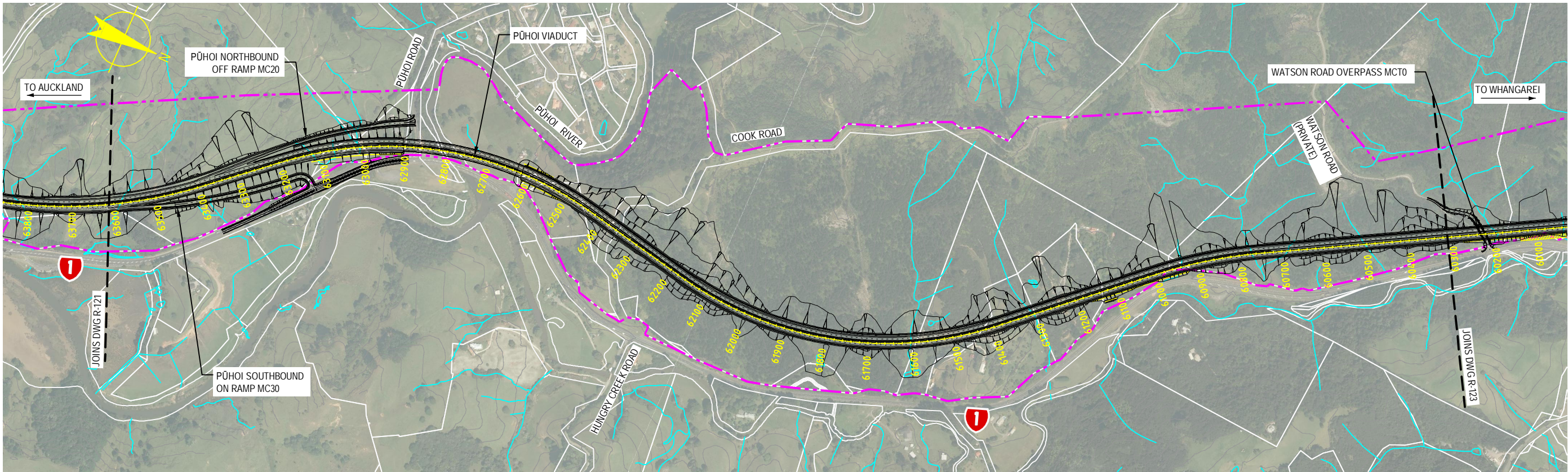


DISCLAIMER
The information shown on this drawing is solely for the purposes of supporting RMA applications for statutory approvals. All information shown is subject to review for compliance with approved consents and the outcomes of final design.

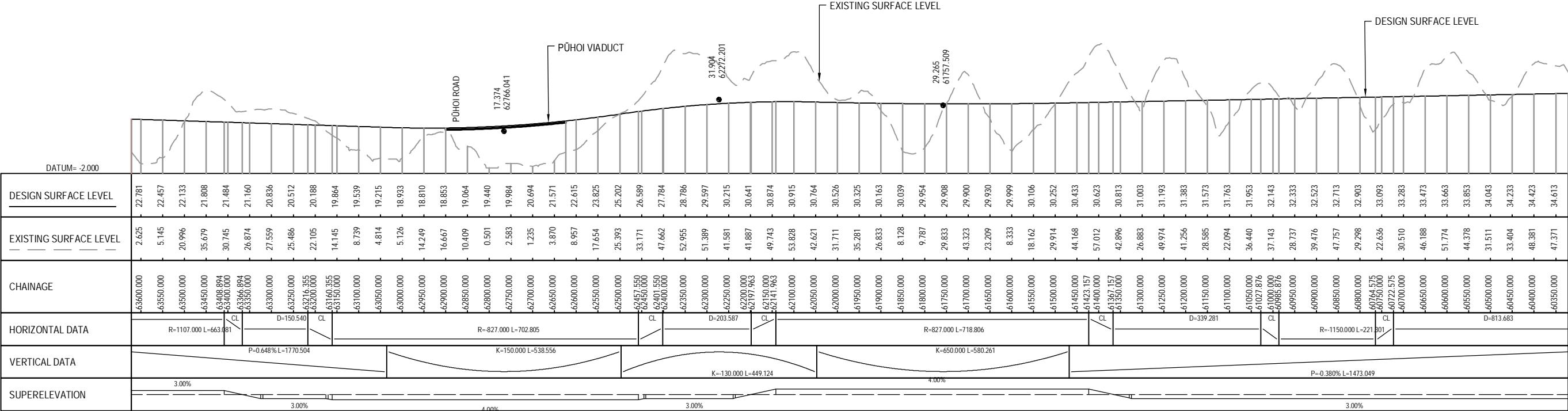
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

SOUTHBOUND ALIGNMENT MCS0 PLAN AND LONGITUDINAL SECTION CH 63650.00 TO CH 65250.00 - SHEET 1 OF 6			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-121	AMDT: 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-121_R-123.dwg Plot Date: 18 August, 2013 - 157 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCS0 (CH 60350.000 TO CH 63600.000)
HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD. D. MGR.	APPD. A. MGR.	PURPOSE OF ISSUE / AMENDMENT

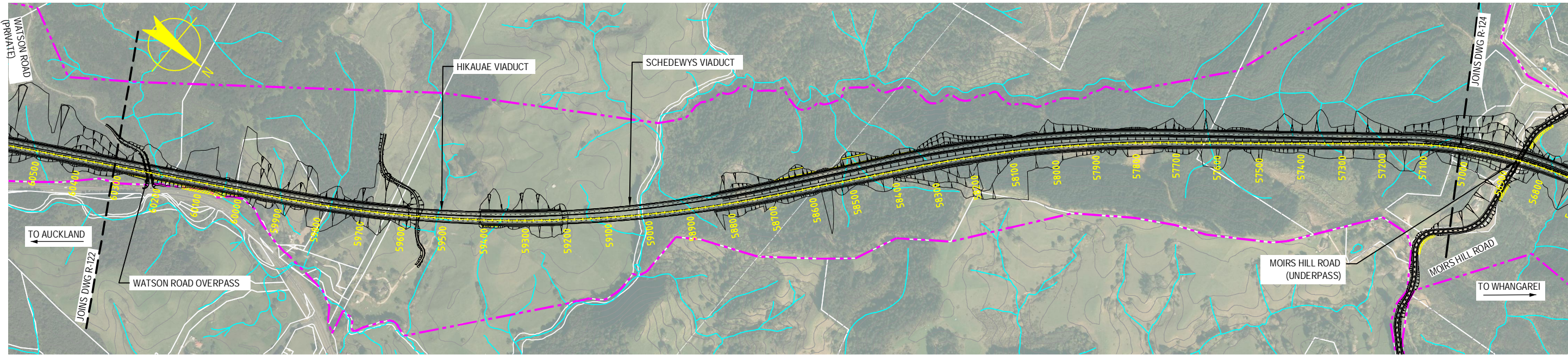


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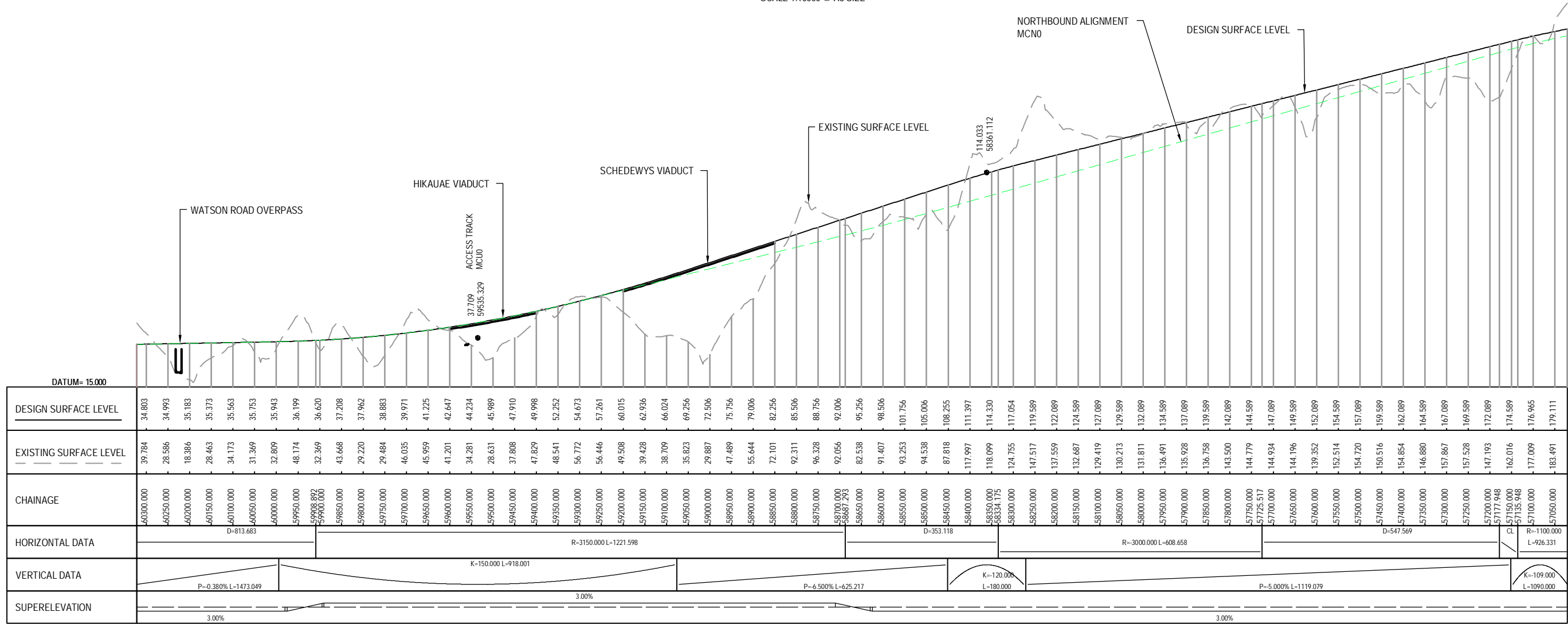
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

SOUTHBOUND ALIGNMENT MCS0 PLAN AND LONGITUDINAL SECTION CH 60350.00 TO CH 63600.00 - SHEET 2 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-122	AMD 0

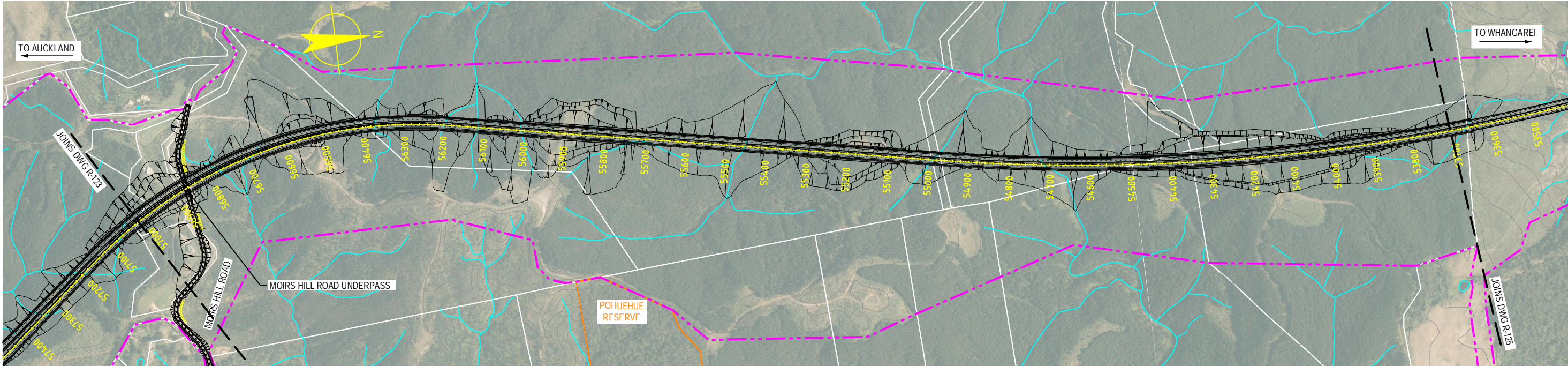
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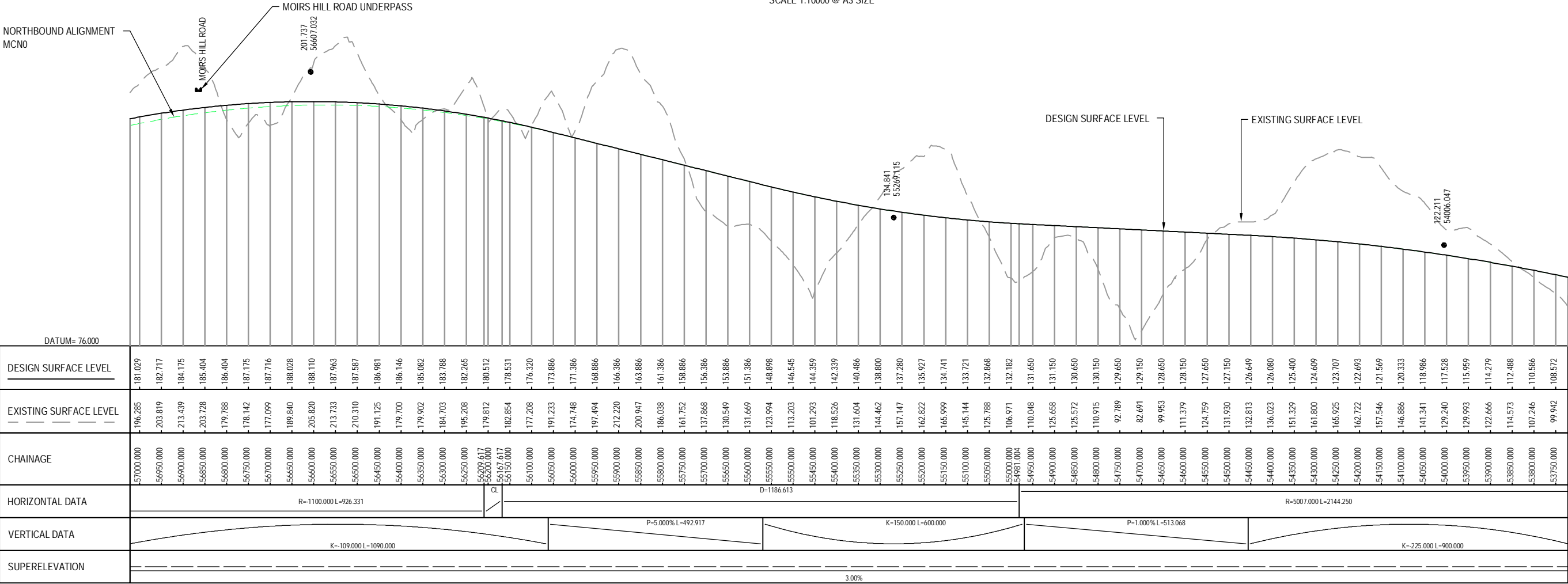
PLAN
SCALE 1:10000 @ A3 SIZE



S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-124_R-126.dwg Plot Date: 18 August, 2013 - 2:58 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCS0 (CH 53750.000 TO CH 57000.000)
HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



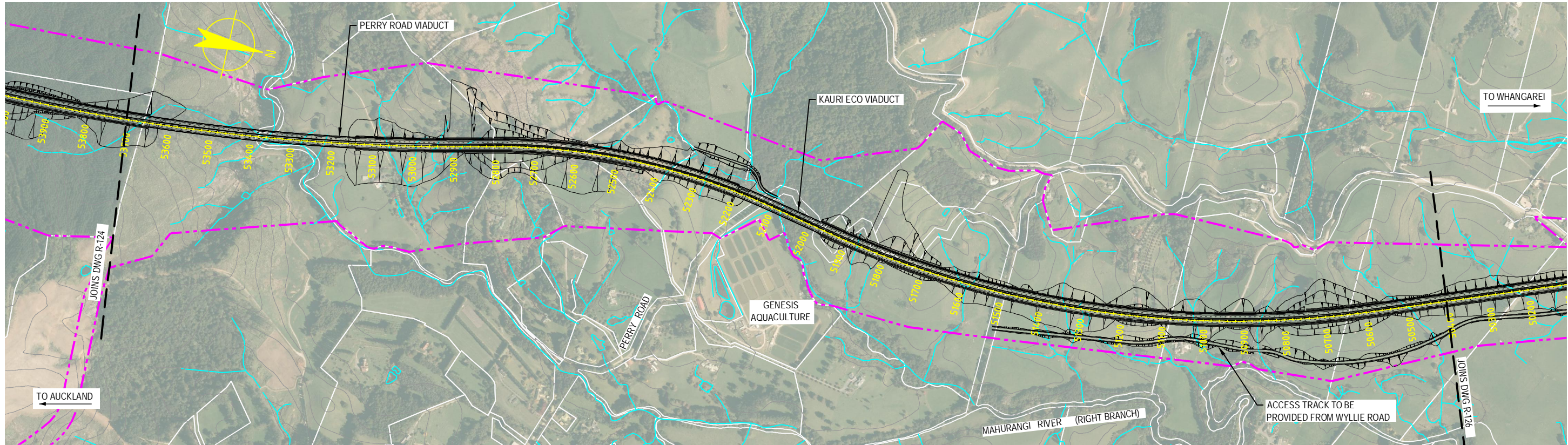
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AMD	DATE	DESIGN REVIEW	REVD. D. MGR	APPD. A. MGR	PURPOSE OF ISSUE / AMENDMENT



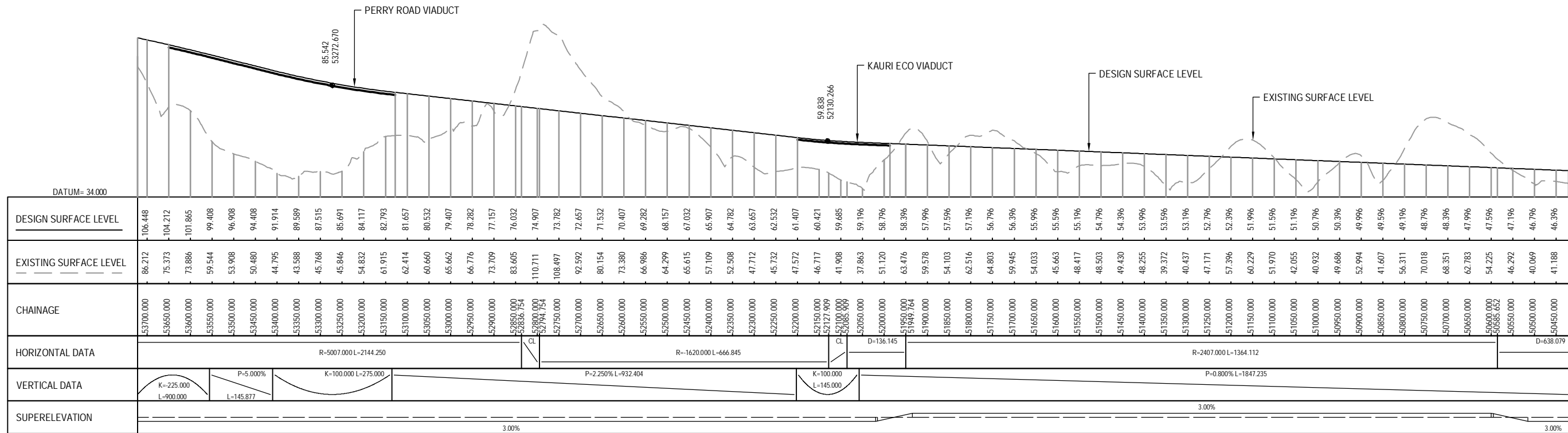
DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

SOUTHBOUND ALIGNMENT MCS0 PLAN AND LONGITUDINAL SECTION CH 53750.00 TO CH 57000.00 - SHEET 4 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-124	AMD 0



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCS0 (CH 50450.000 TO CH 53700.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

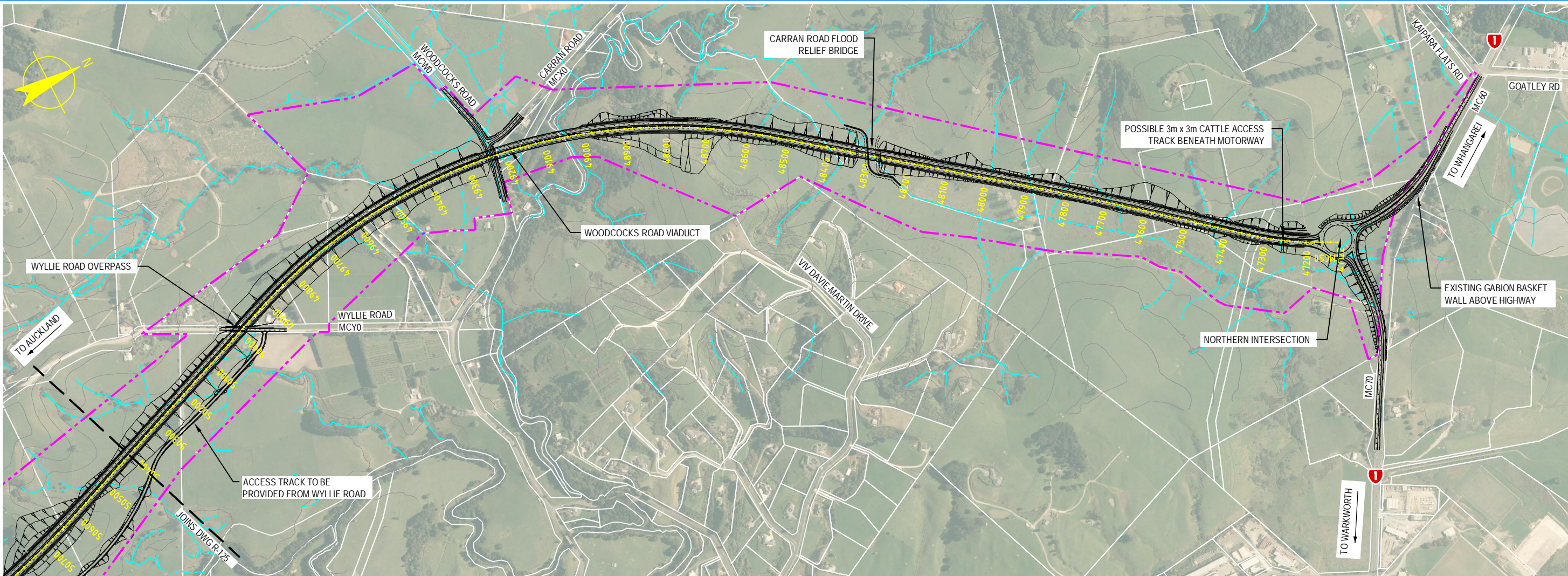


DISCLAIMER
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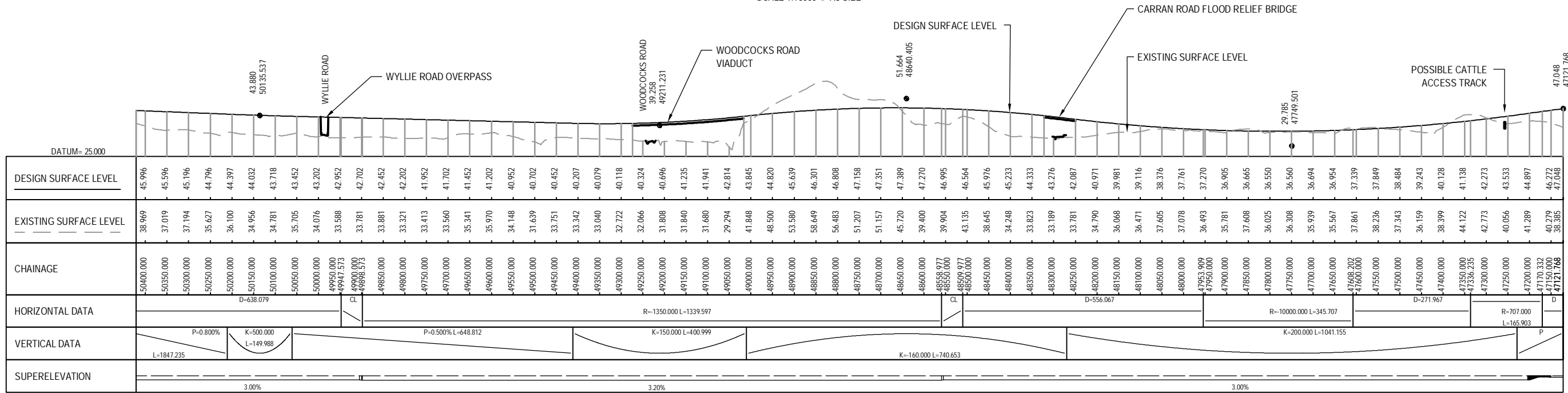
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER	APPROVED ALLIANCE MANAGER
DESIGNED IH	DESIGN REVIEW RET	MRH	TI

SOUTHBOUND ALIGNMENT MCS0 PLAN AND LONGITUDINAL SECTION CH 50450.00 TO CH 53700.00 - SHEET 5 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-125	AMD 0

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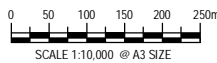


PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCS0 (CH47121.768 TO CH 50400.000)
HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

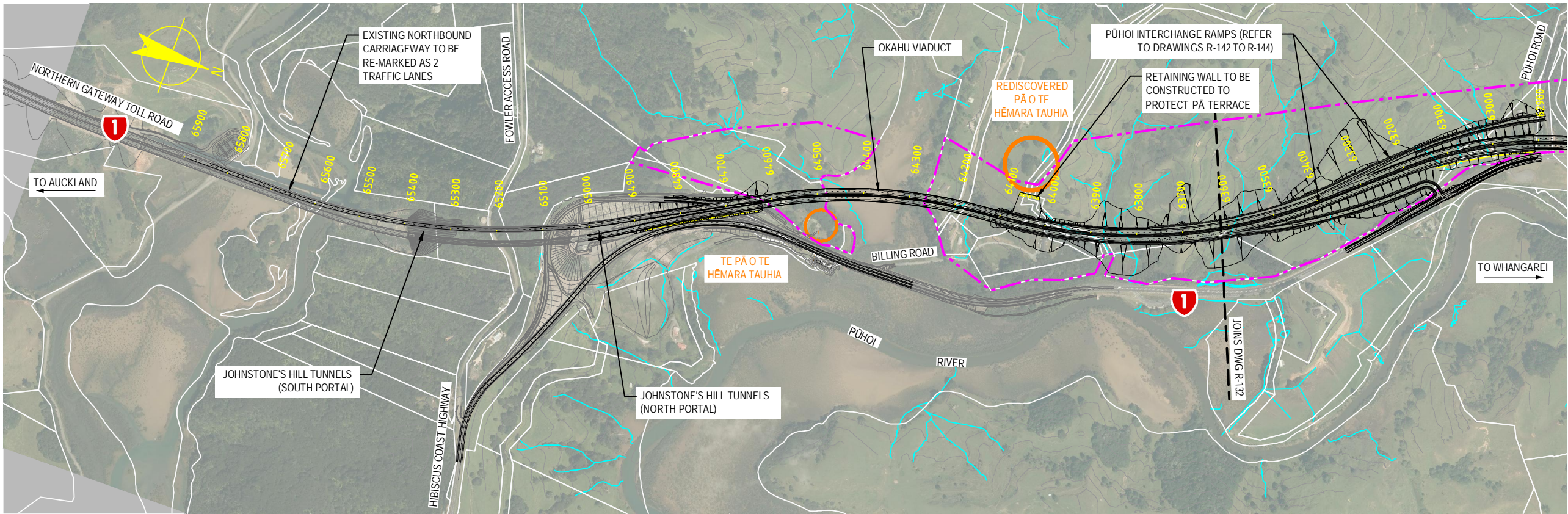


DISCLAIMER
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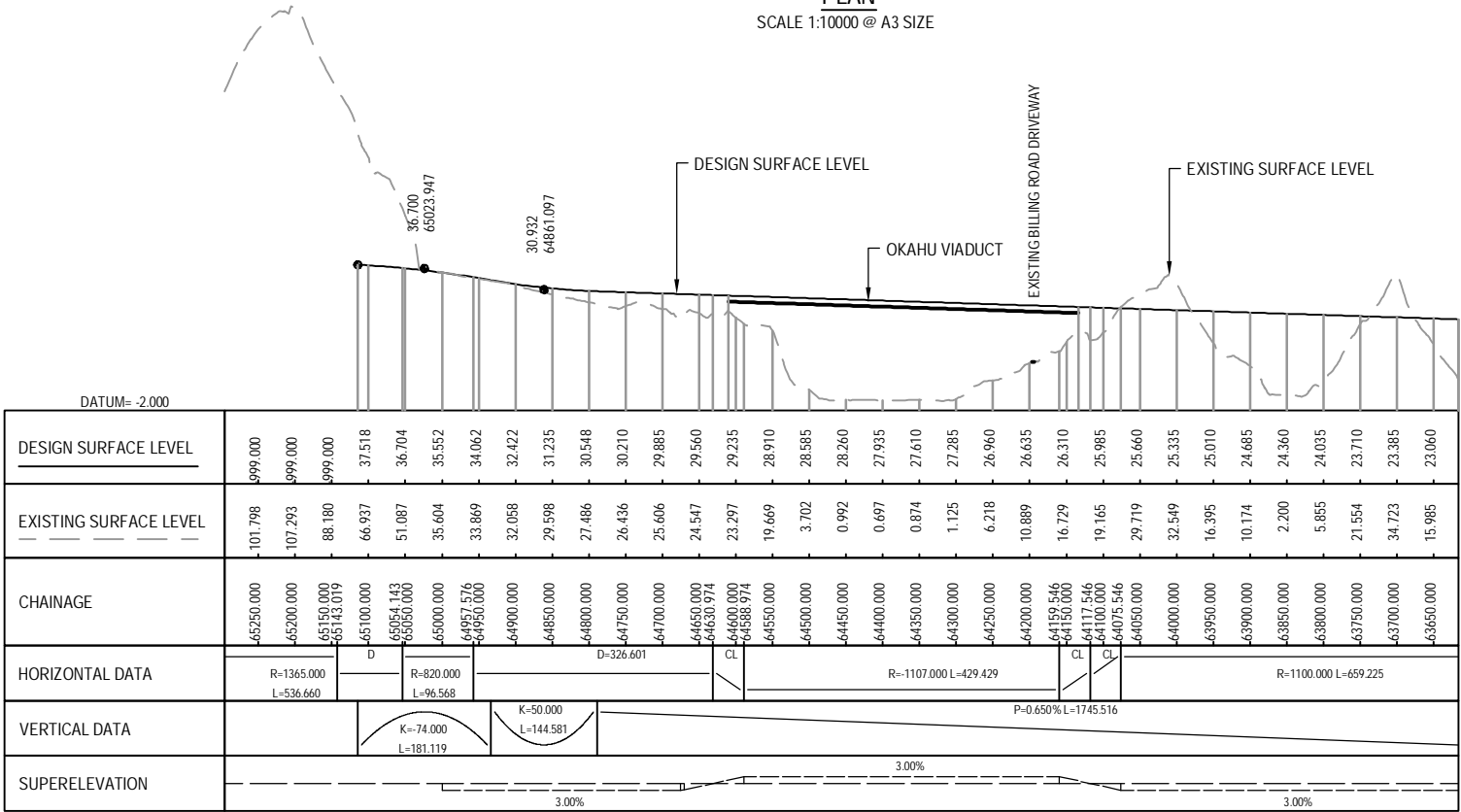
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

SOUTHBOUND ALIGNMENT MCS0 PLAN AND LONGITUDINAL SECTION CH 47121.768 TO CH 50400.00 - SHEET 6 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-126	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-131_R-133.dwg Plot Date: 18 August, 2013 - 2:59 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCN0 (CH 63650.000 TO CH 65250.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

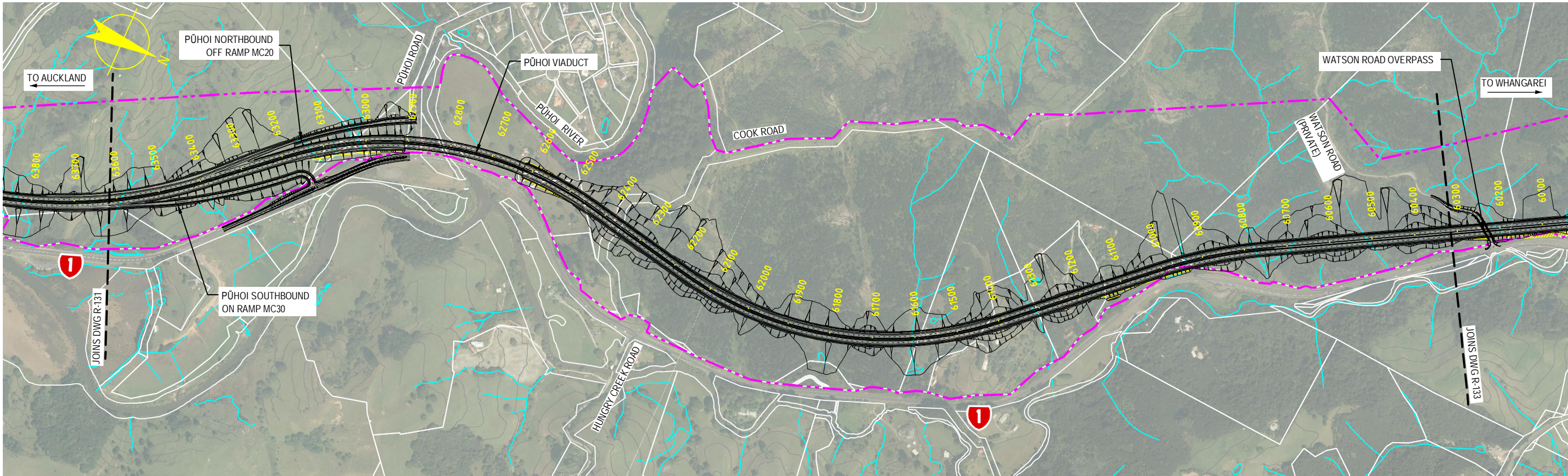


DISCLAIMER
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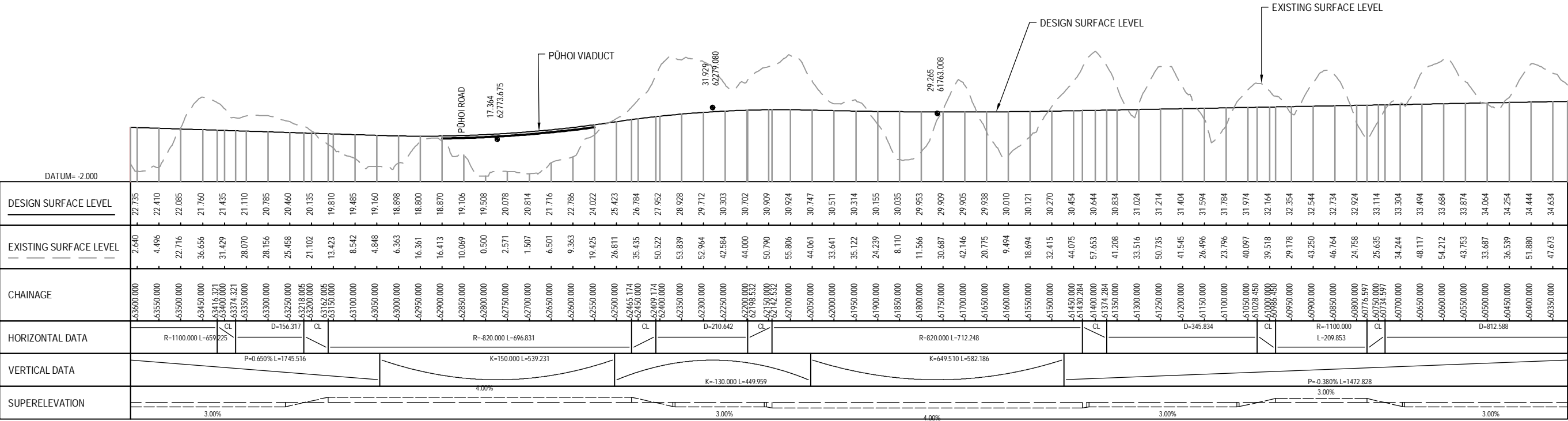
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED: DISCIPLINE MANAGER: MRH	APPROVED: ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

NORTHBOUND ALIGNMENT MCN0 PLAN AND LONGITUDINAL SECTION CH 63650.00 TO CH 65250.00 - SHEET 1 OF 6			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-131	AMDT: 0

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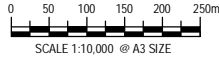


PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCN0 (CH 60350.000 TO CH 63600.000)
HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

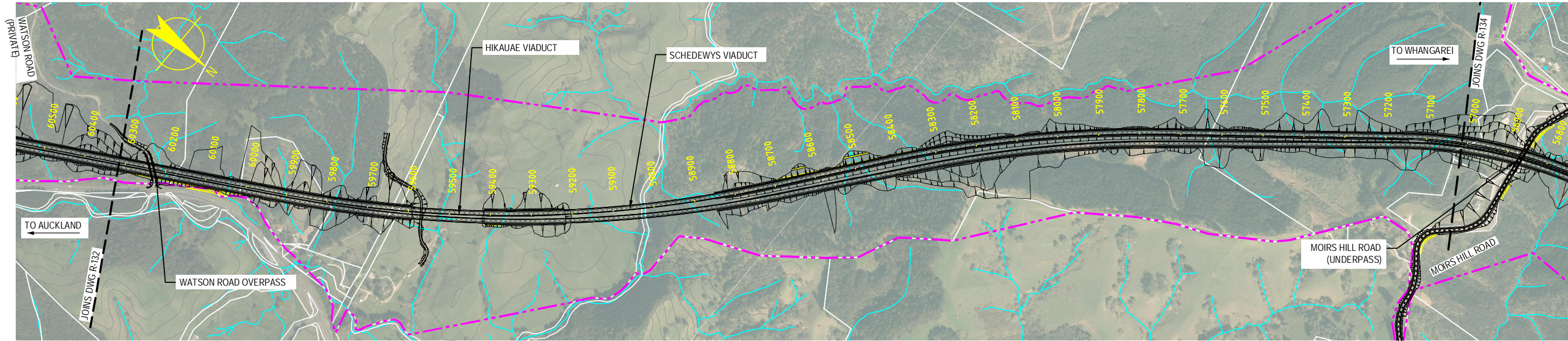


DISCLAIMER
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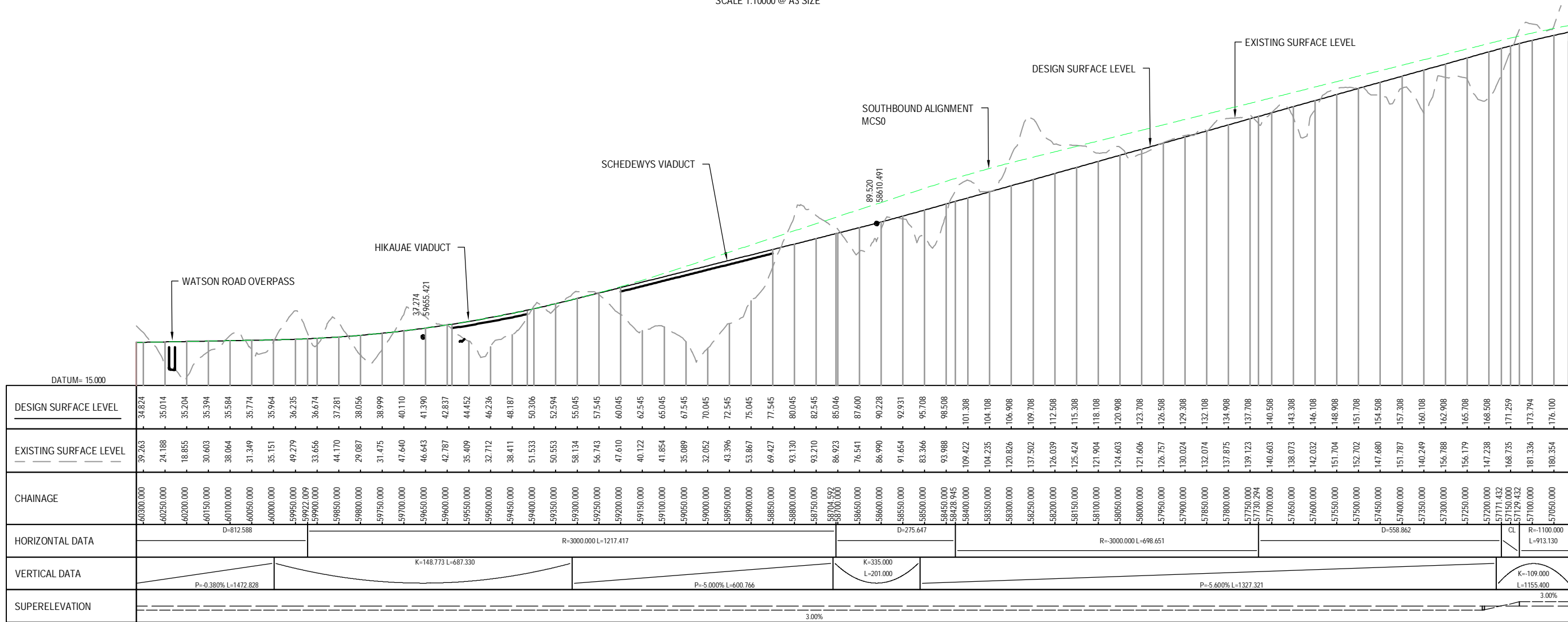
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

NORTHBOUND ALIGNMENT MCN0 PLAN AND LONGITUDINAL SECTION CH 60350.00 TO CH 63600.00 - SHEET 2 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-132	AMD 0

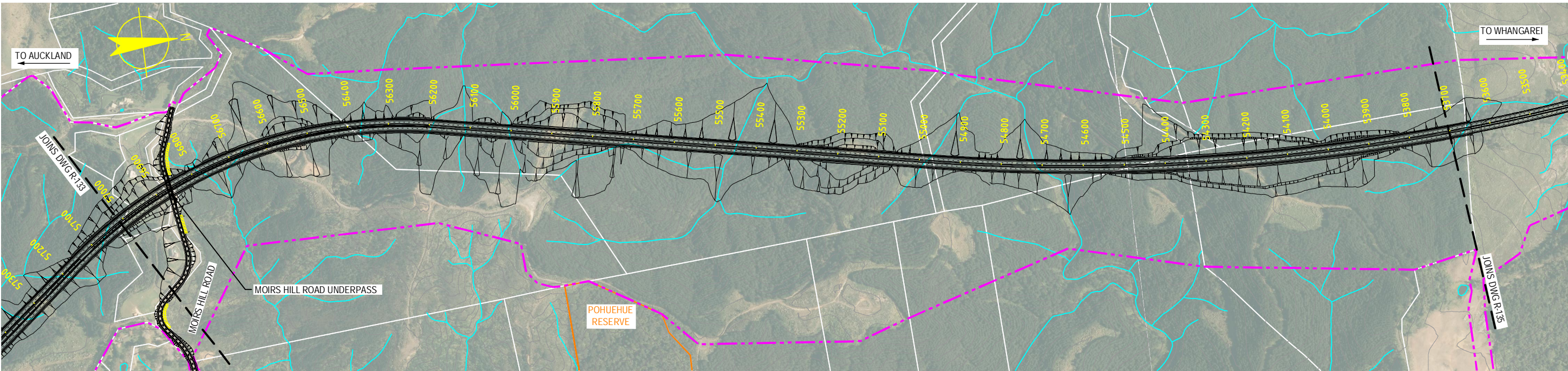
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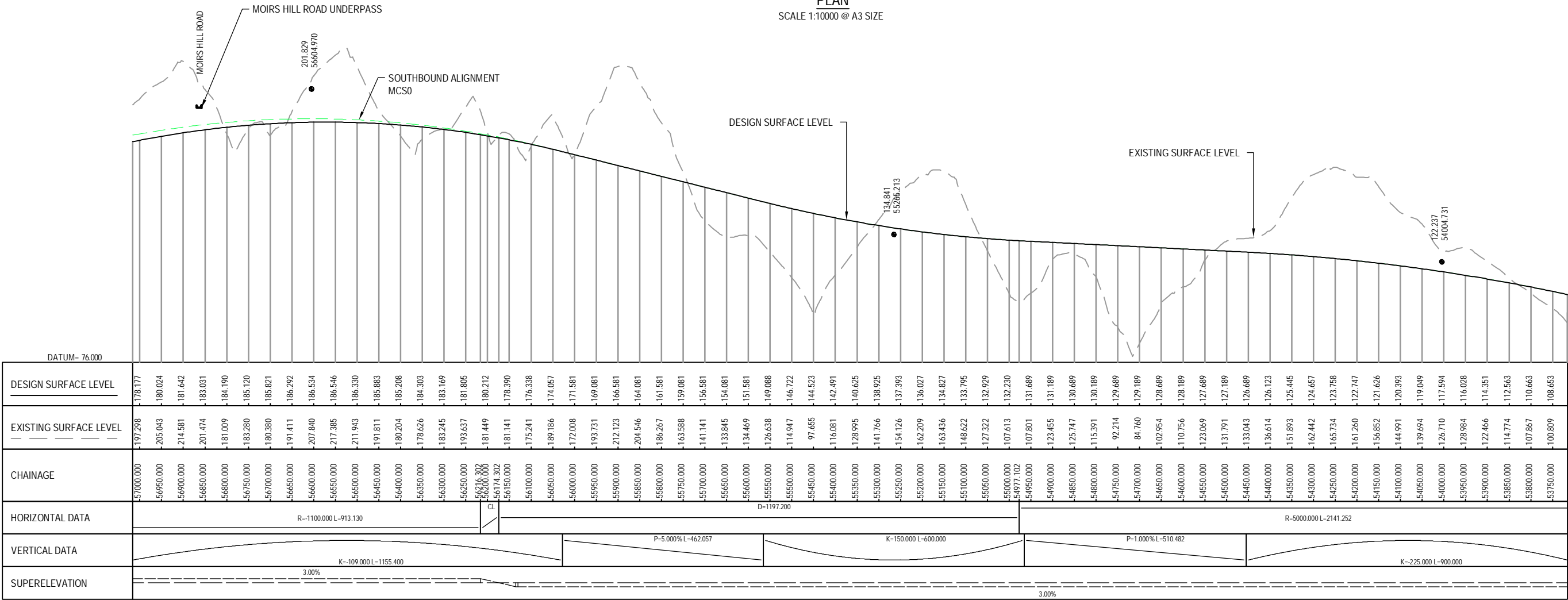
PLAN
SCALE 1:10000 @ A3 SIZE



S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-134_R-136.dwg Plot Date: 18 August, 2013 - 3:01 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCN0 (CH 53750.000 TO CH 57000.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D MGR	APP'D A_MGR	PURPOSE OF ISSUE / AMENDMENT

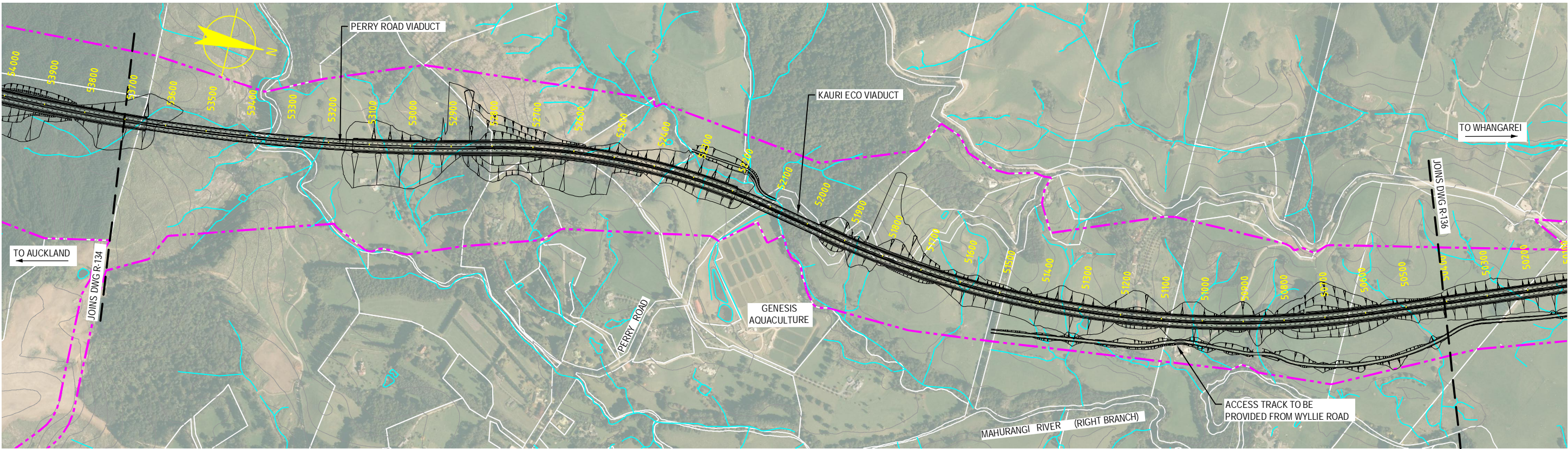


DISCLAIMER
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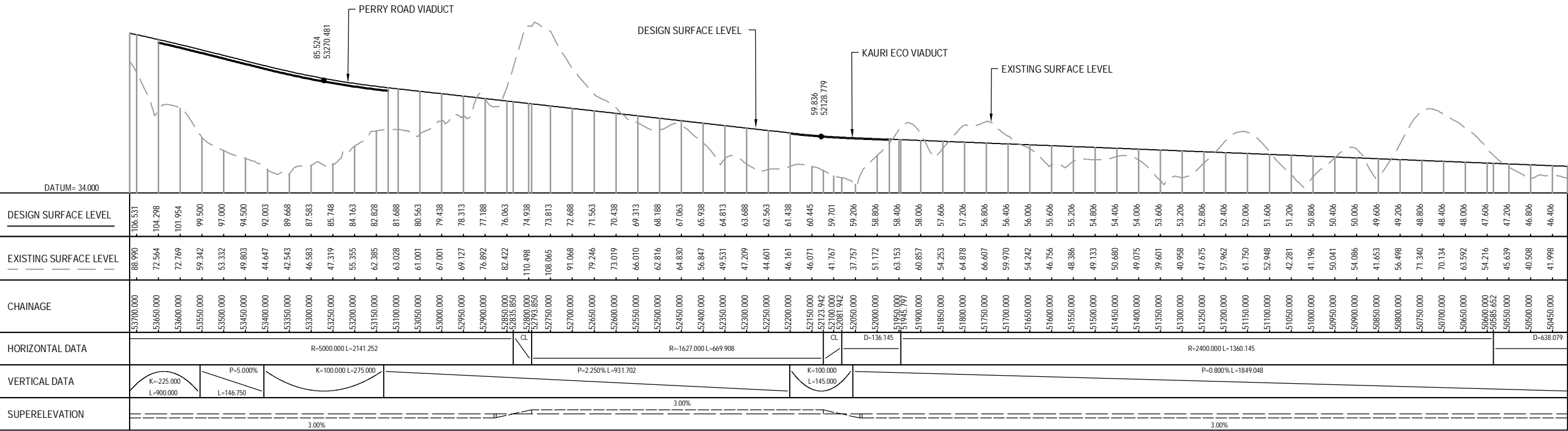
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER	APPROVED ALLIANCE MANAGER
DESIGNED IH	DESIGN REVIEW RET	MRH	TI

NORTHBOUND ALIGNMENT MCN0 PLAN AND LONGITUDINAL SECTION CH 53750.00 TO CH 57000.00 - SHEET 4 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-134	AMD 0

S:\Further North - PAA\3300 Design\3300 5 Technical\01-Drawing Production\CAAD Drawings\R-134_R-136.dwg Plot Date: 18 August, 2013 - 3:01 PM



PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCN0 (CH 50450.000 TO CH 53700.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

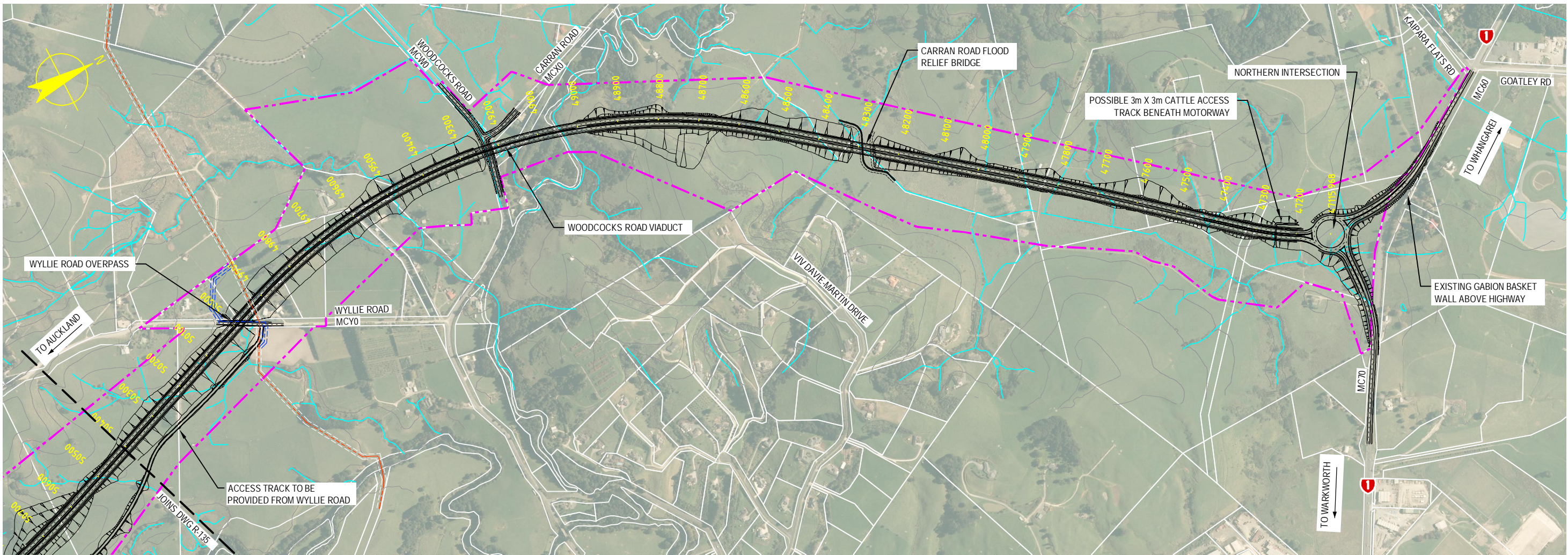


DISCLAIMER
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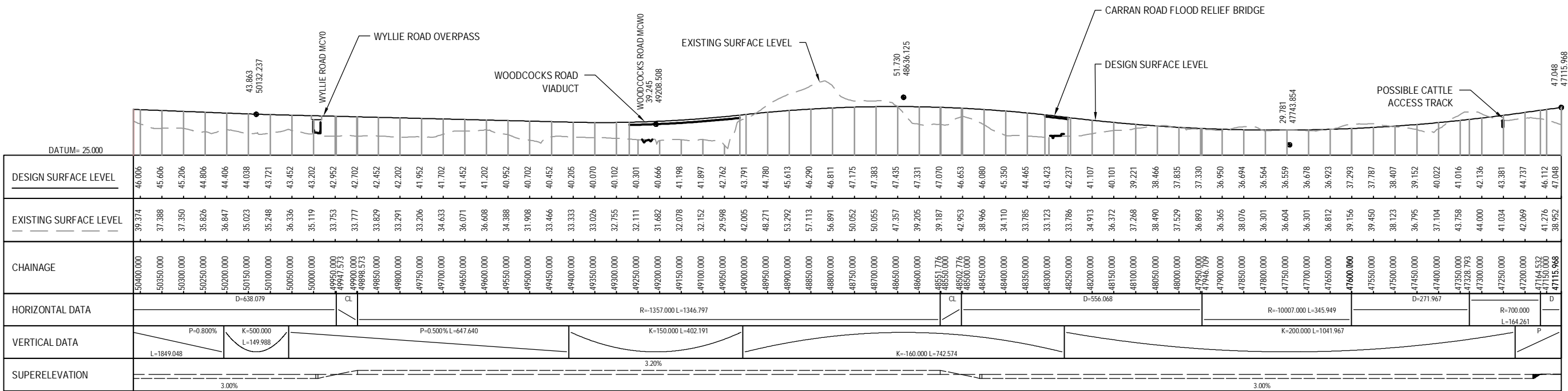
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

NORTHBOUND ALIGNMENT MCN0 PLAN AND LONGITUDINAL SECTION CH 50450.00 TO CH 53700.00 - SHEET 5 OF 6			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-135	AMD: 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-136_R-136.dwg Plot Date: 18 August, 2013 - 3:01 PM



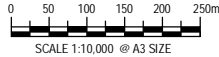
PLAN
SCALE 1:10000 @ A3 SIZE



LONGITUDINAL SECTION - MCN0 (CH 47115.968 TO CH 50400.000)

HORIZONTAL SCALE 1:10000 @ A3
VERTICAL SCALE 1:2000 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

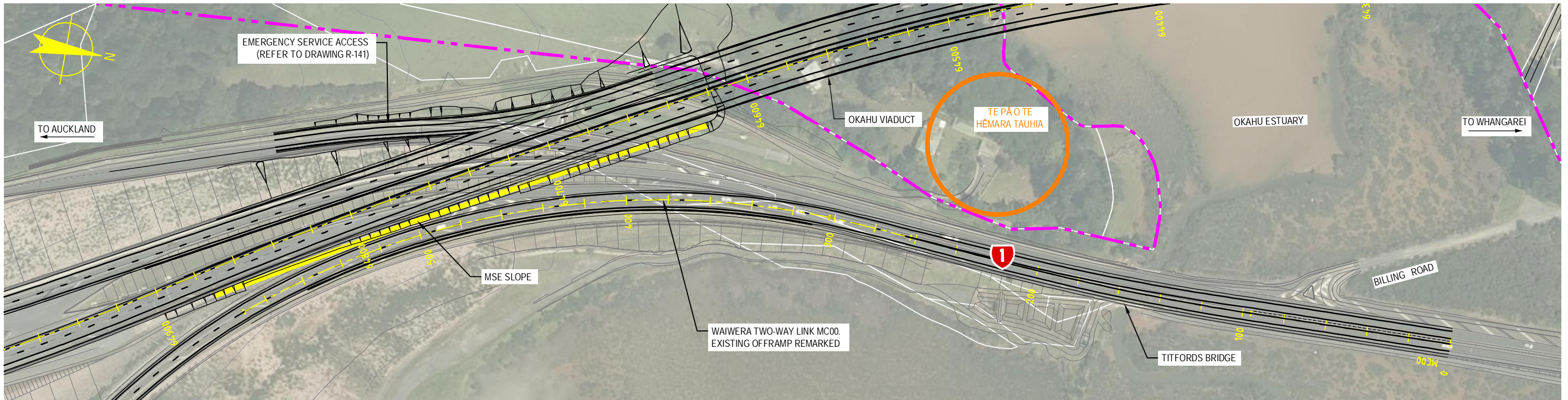


DISCLAIMER
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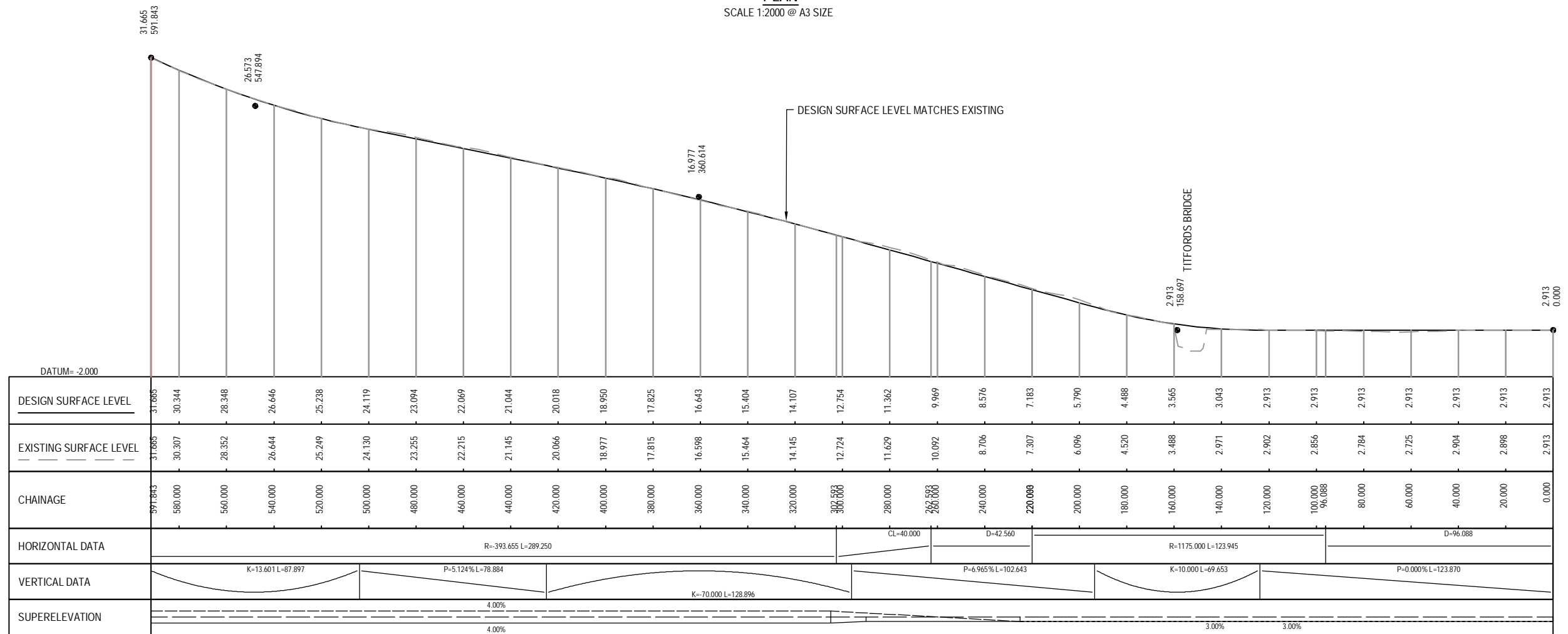
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PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

NORTHBOUND ALIGNMENT MCN0 PLAN AND LONGITUDINAL SECTION CH 47115.968 TO CH 50400.00 - SHEET 6 OF 6			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-136	AMD 0

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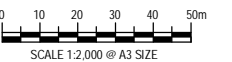
PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC00

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:500 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



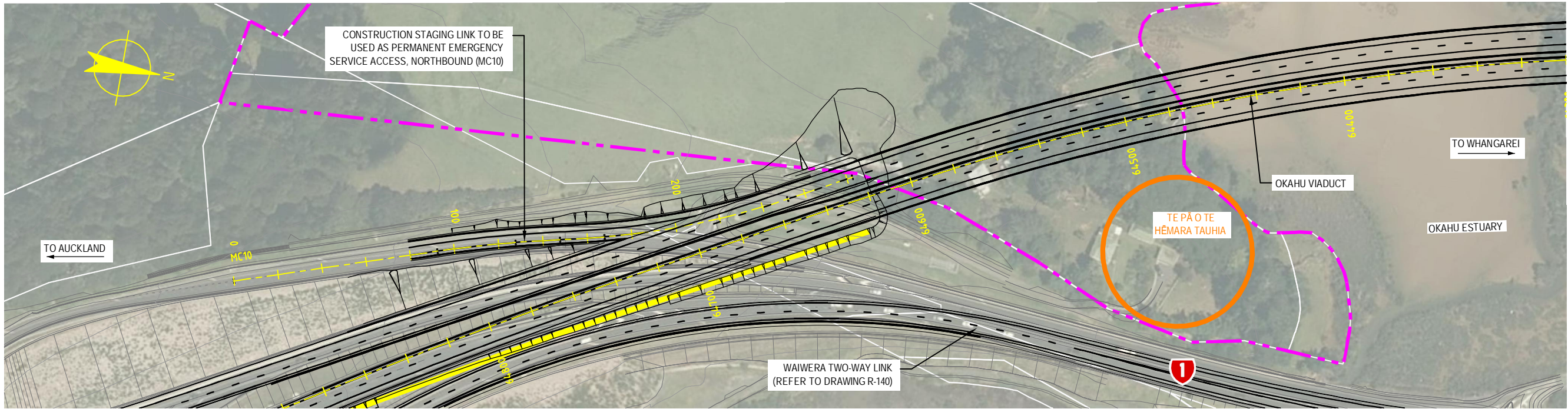
AMT	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
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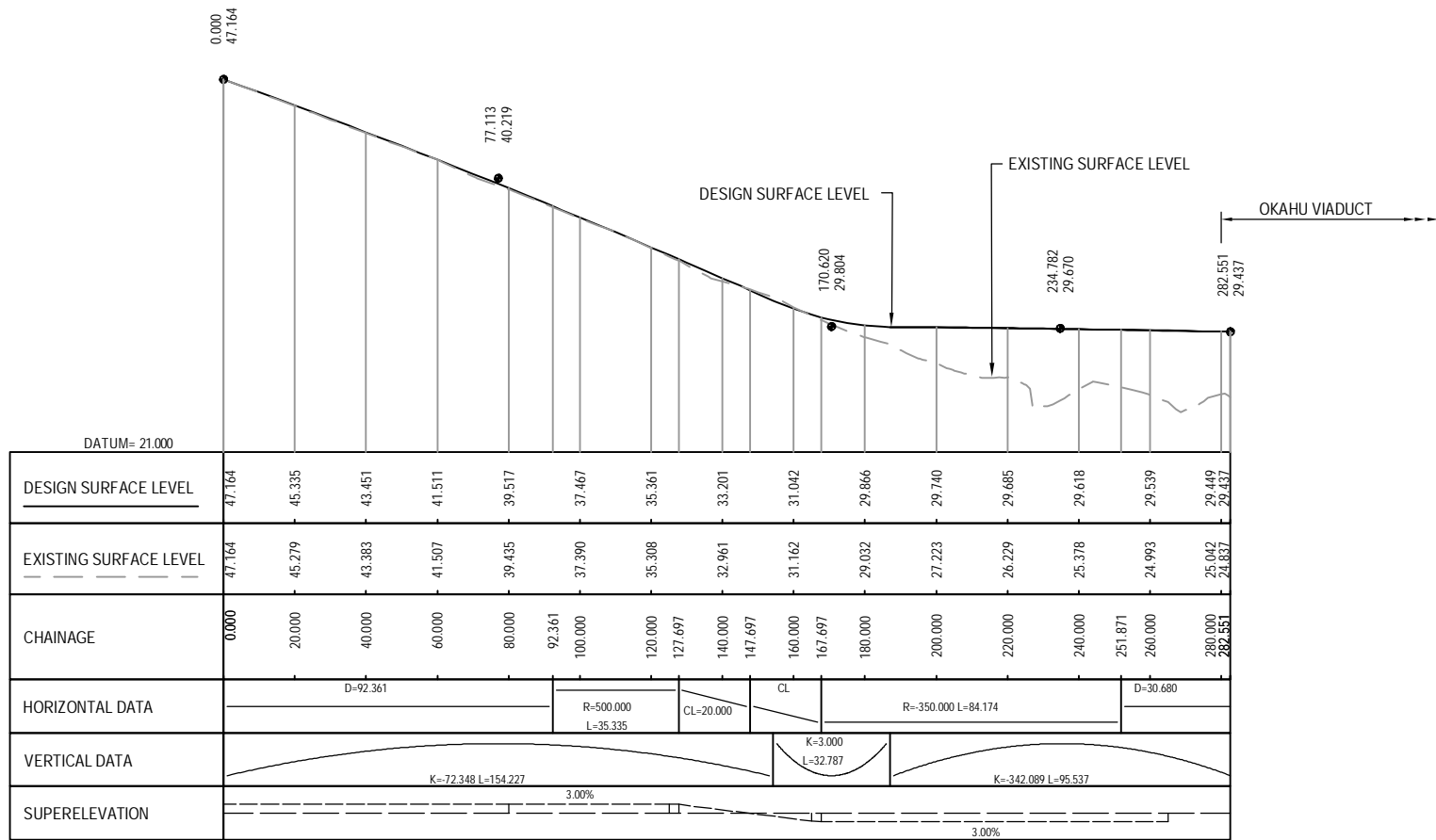
DISCLAIMER
The information shown on this drawing is solely for the purposes of supporting RMA applications for statutory approvals. All information shown is subject to review for compliance with approved consents and the outcomes of final design.

ARA TŪHONO - PŪHOI TO WELLSFORD PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

WAIWERA TWO-WAY LINK MC00 PLAN AND LONGITUDINAL SECTION			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-140	AMT 0

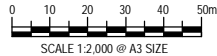


PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC10

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:500 @ A3



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

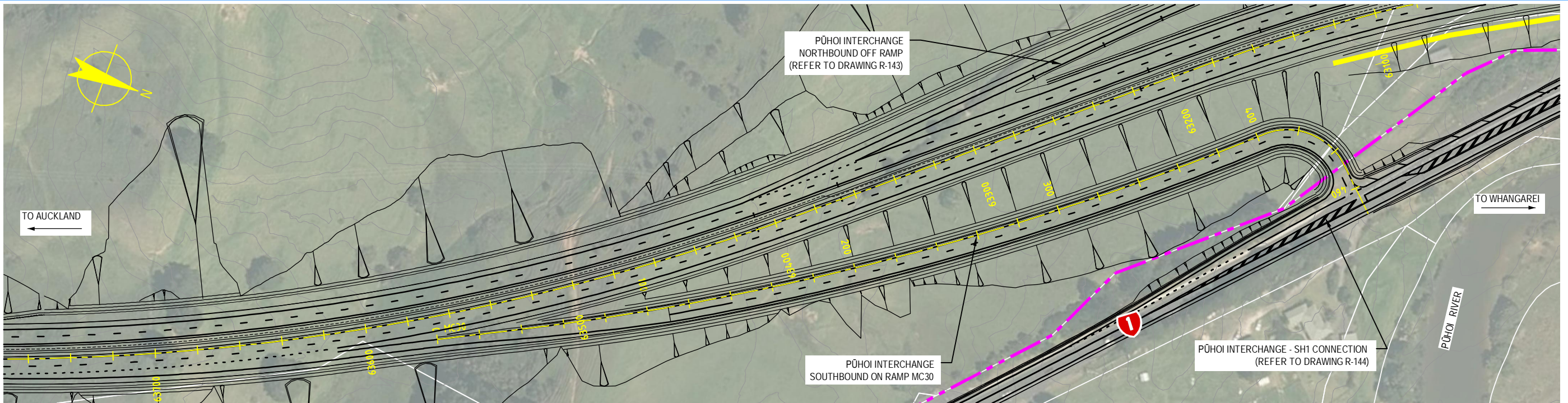


DISCLAIMER
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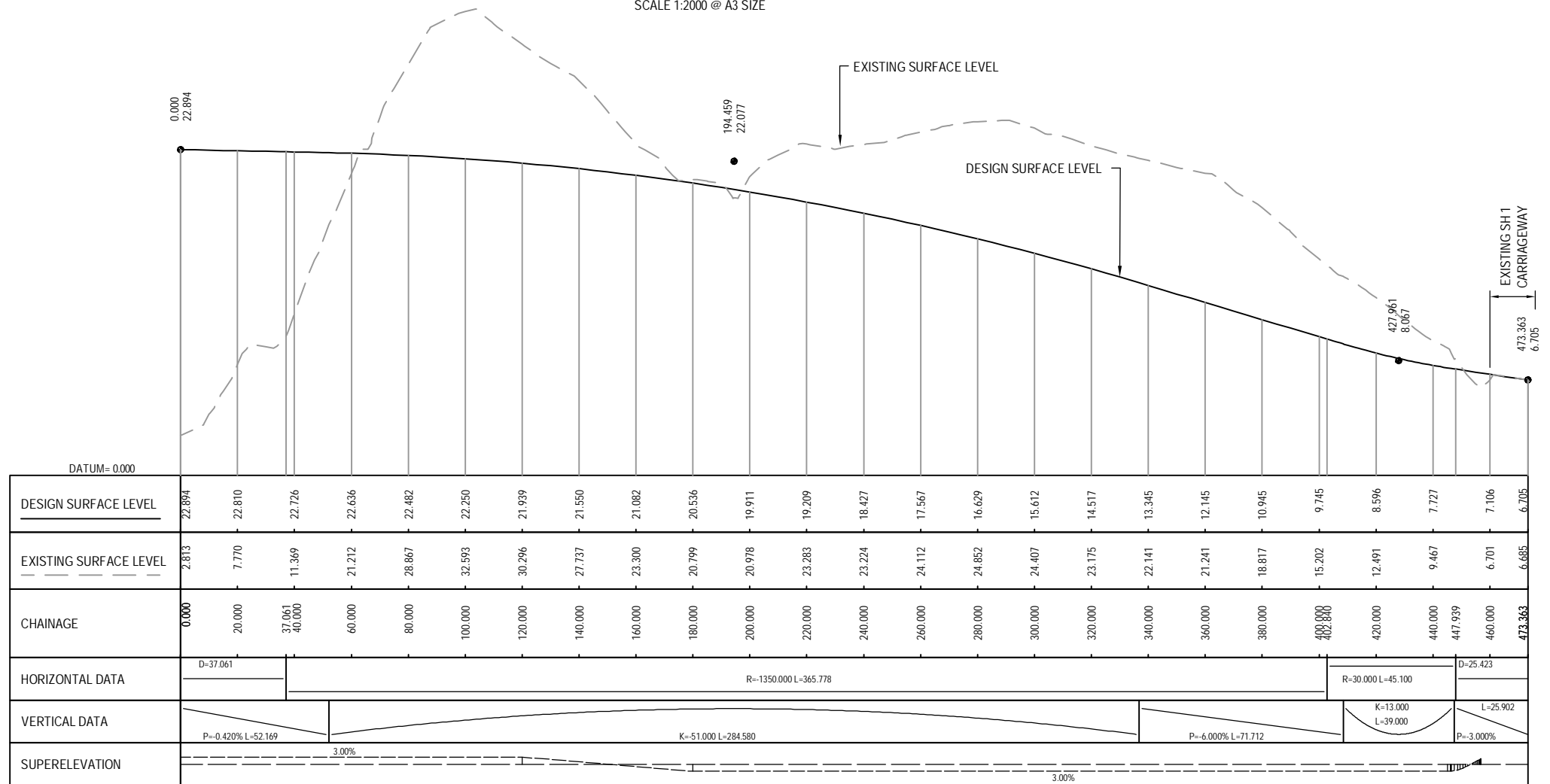
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

JOHNSTONE'S HILL EMERGENCY SERVICE ACCESS MC10 PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-141	AMDT: 0

S:\Further North - PAA\3300 Design\3300 5 Technical\01-Drawing Production\CADD Drawings\R-142_R-144.dwg Plot Date: 18 August, 2013 - 3:03 PM



PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC30

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:500 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

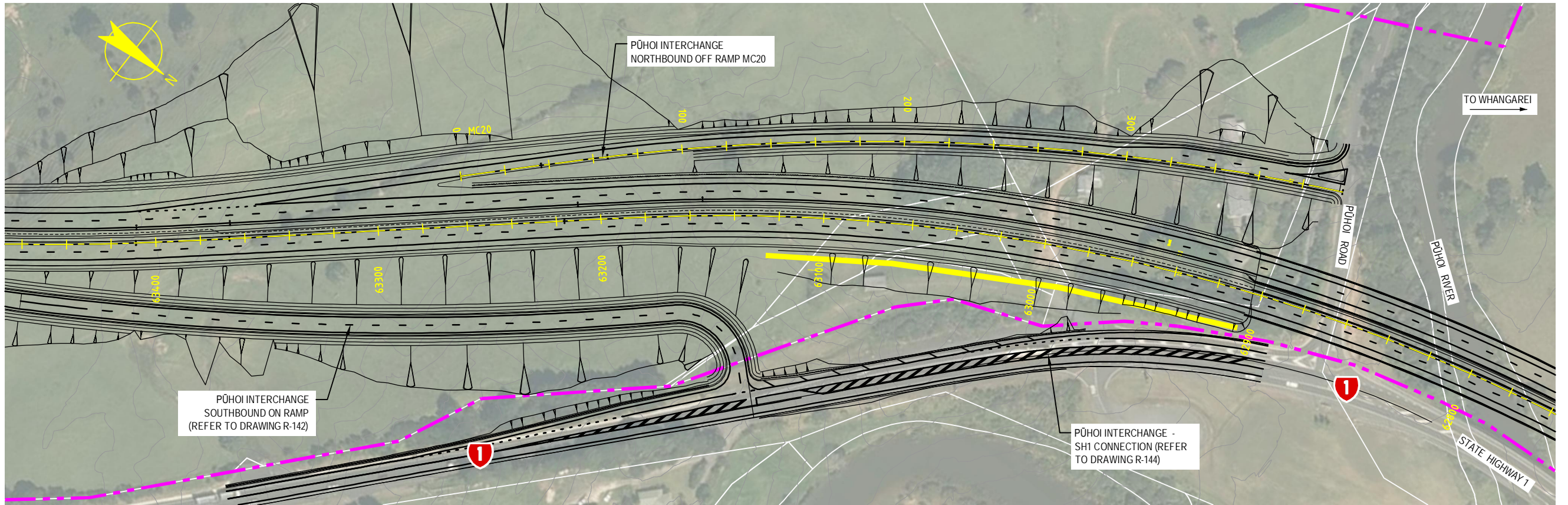


DISCLAIMER
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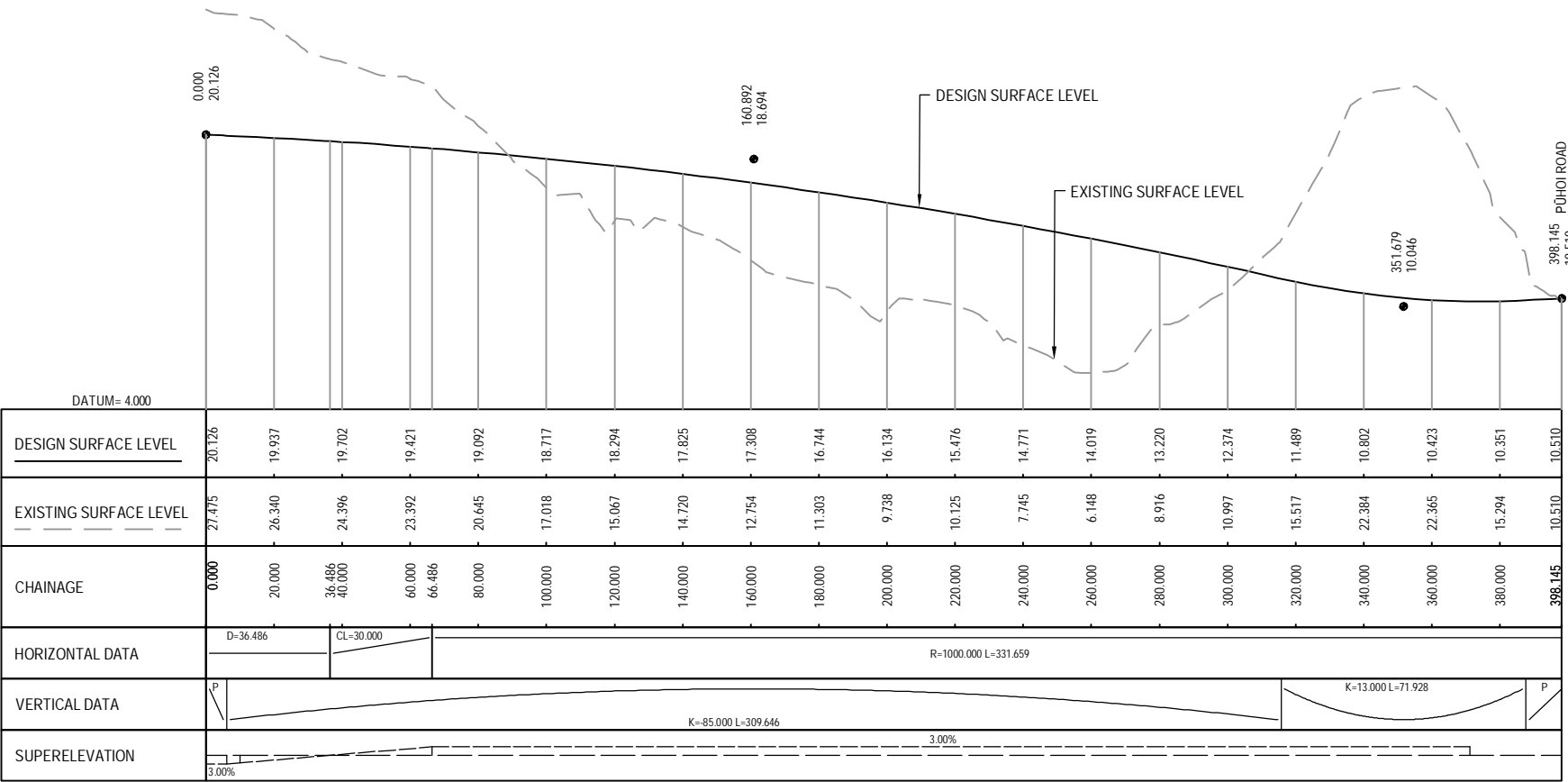
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

PŪHOI INTERCHANGE SOUTHBOUND ON RAMP MC30			
PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-142	AMDT: 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-142_R-144.dwg Plot Date: 18 August, 2013 - 3:03 PM



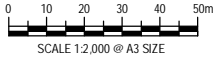
PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC20

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:500 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

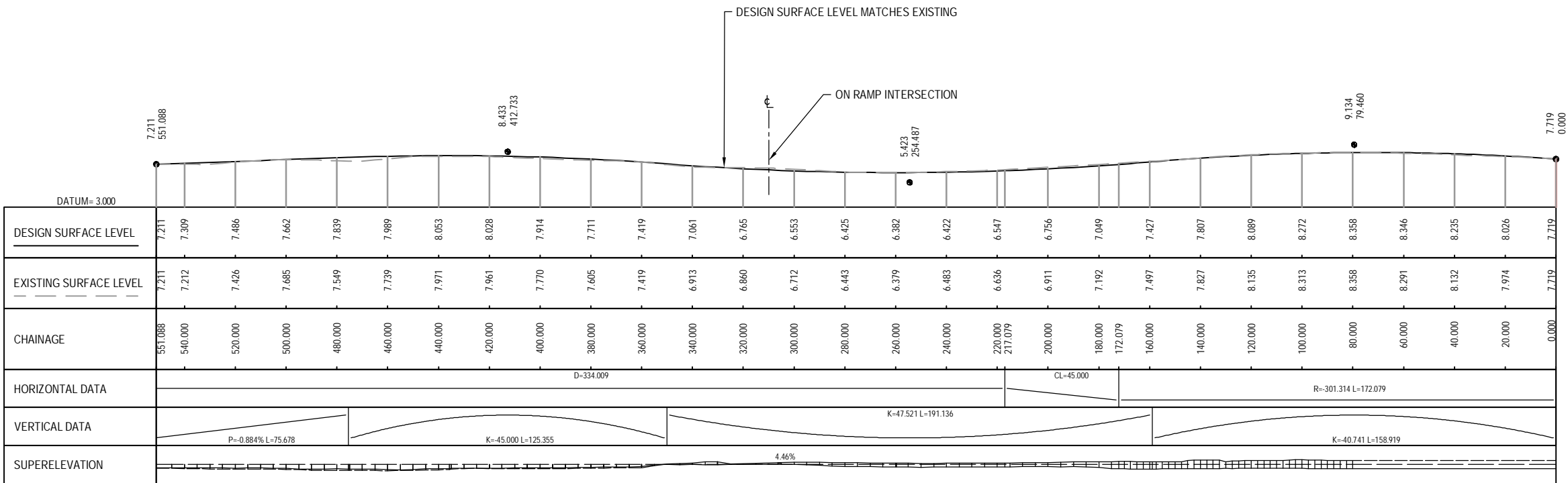
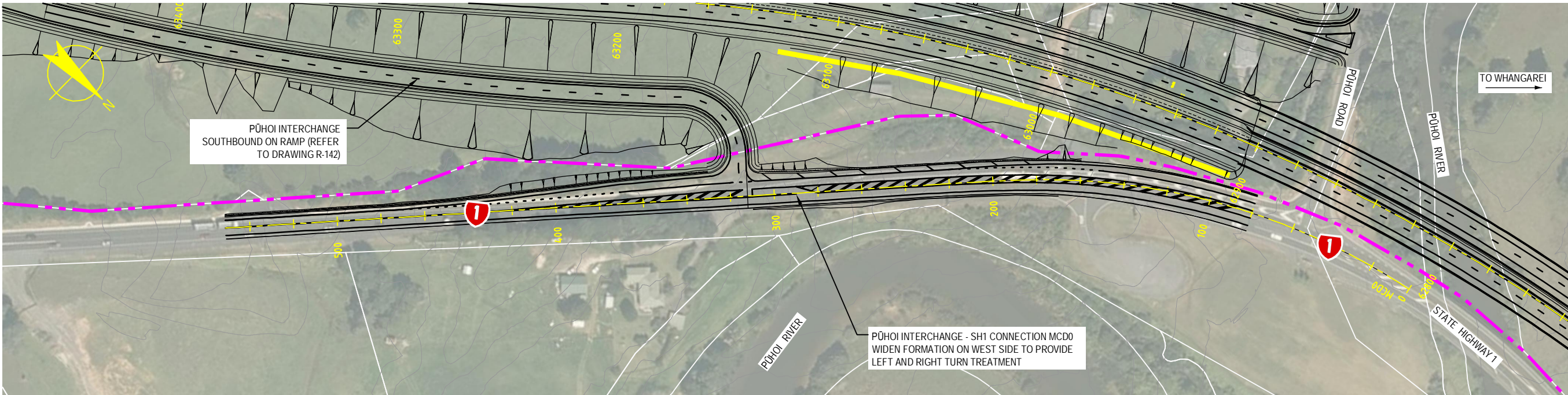


DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED: DISCIPLINE MANAGER: MRH	APPROVED: ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

PŪHOI INTERCHANGE NORTHBOUND OFF RAMP MC20			
PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-143	AMDT: 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-142_R-144.dwg Plot Date: 18 August, 2013 - 3:03 PM



NOTE: FOR GENERAL NOTES AND LEGEND, REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
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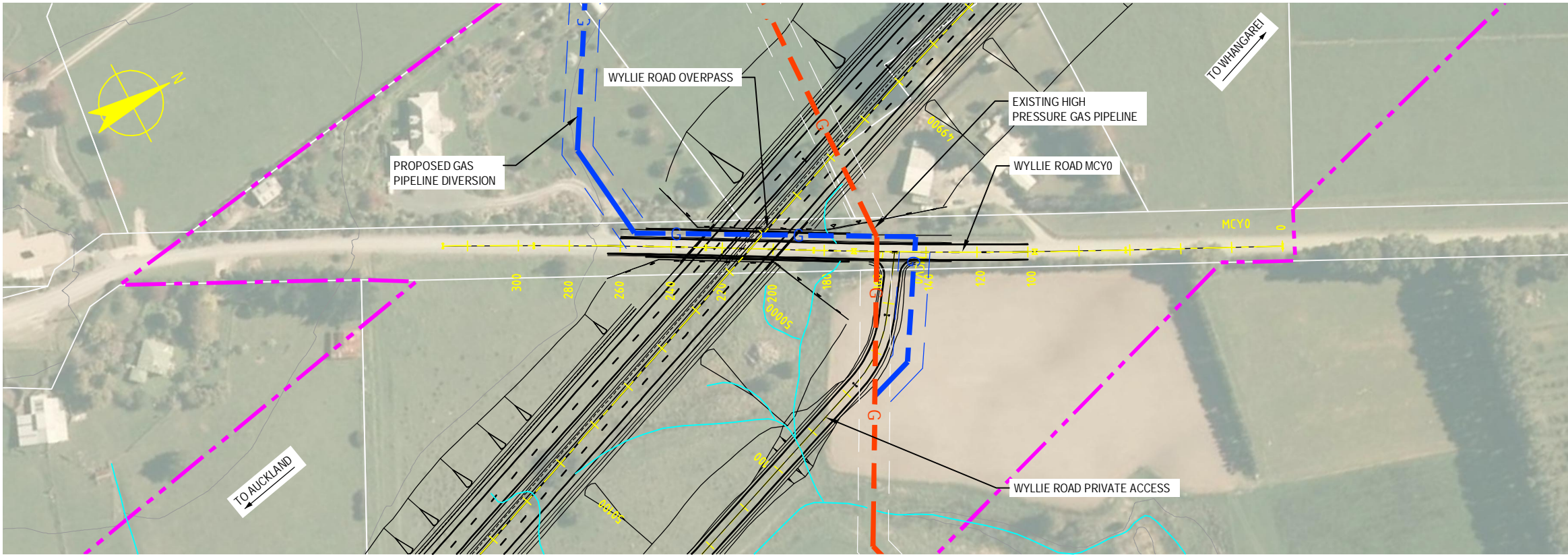


DISCLAIMER
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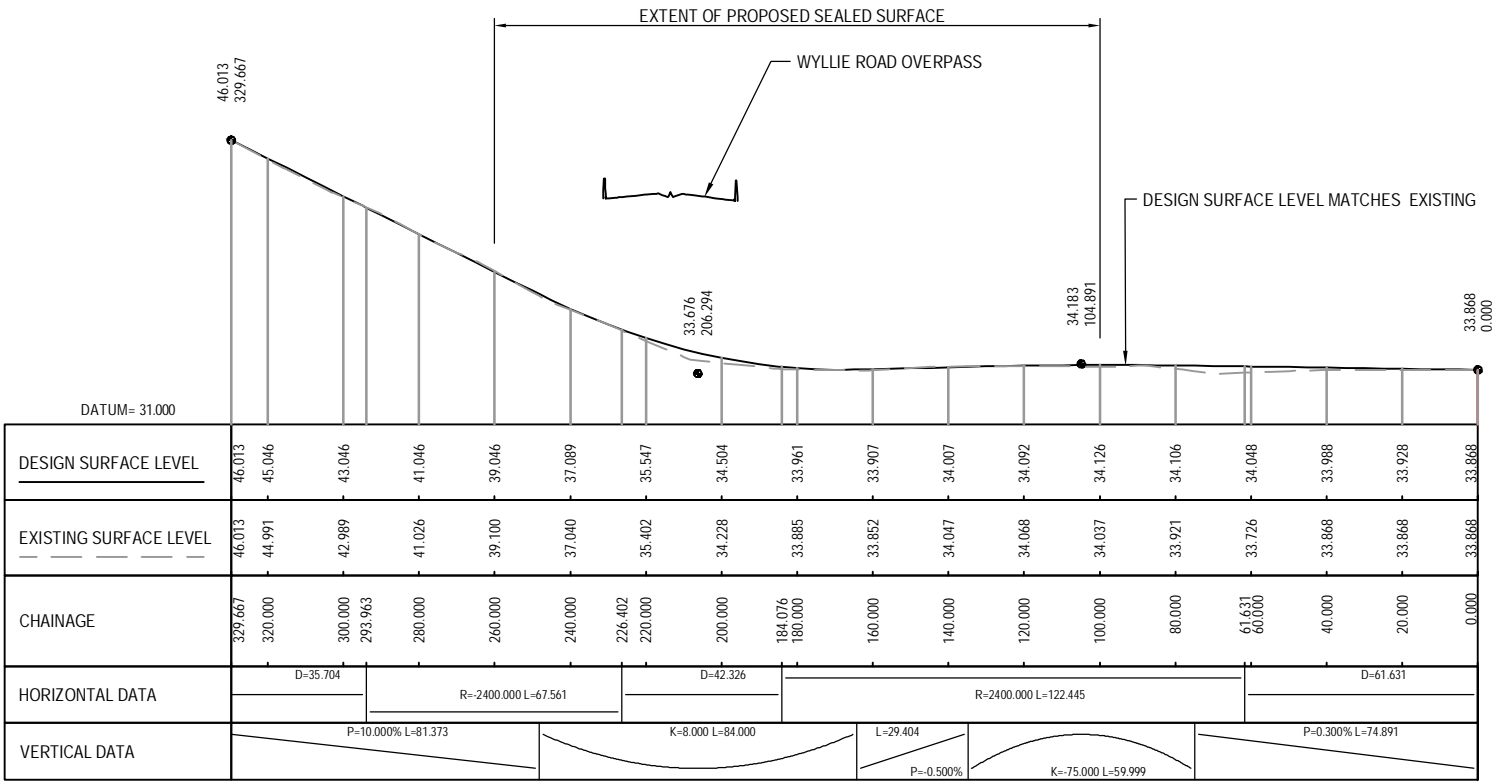
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

PŪHOI INTERCHANGE STATE HIGHWAY 1 CONNECTION MCD0 PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-144	AMD: 0

S:\Further North - PAA\3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-147.dwg Plot Date: 18 August, 2013 - 3:04 PM



PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MCY0

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APPR'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT



DISCLAIMER
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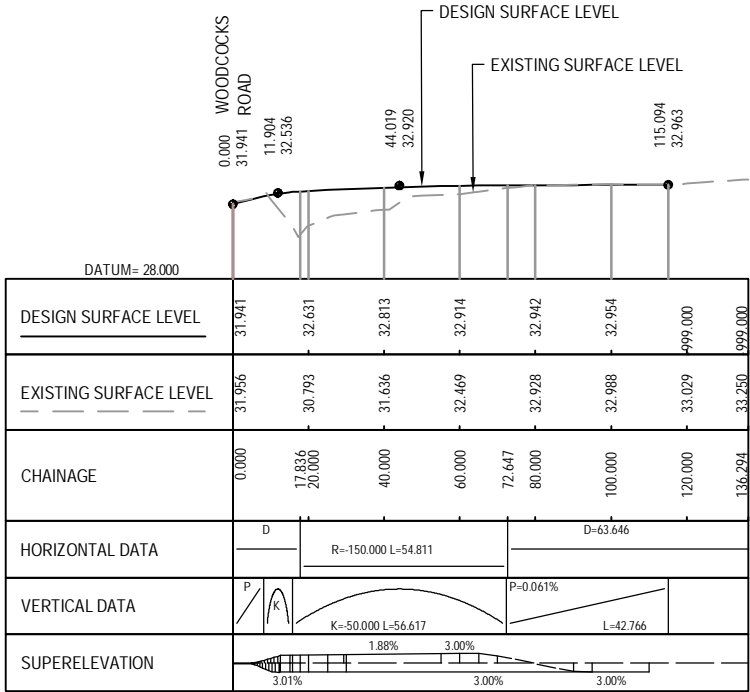
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

WYLLIE ROAD MCY0 PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-147	AMDT: 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-149.dwg Plot Date: 18 August, 2013 - 3:04 PM



PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MCX0

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

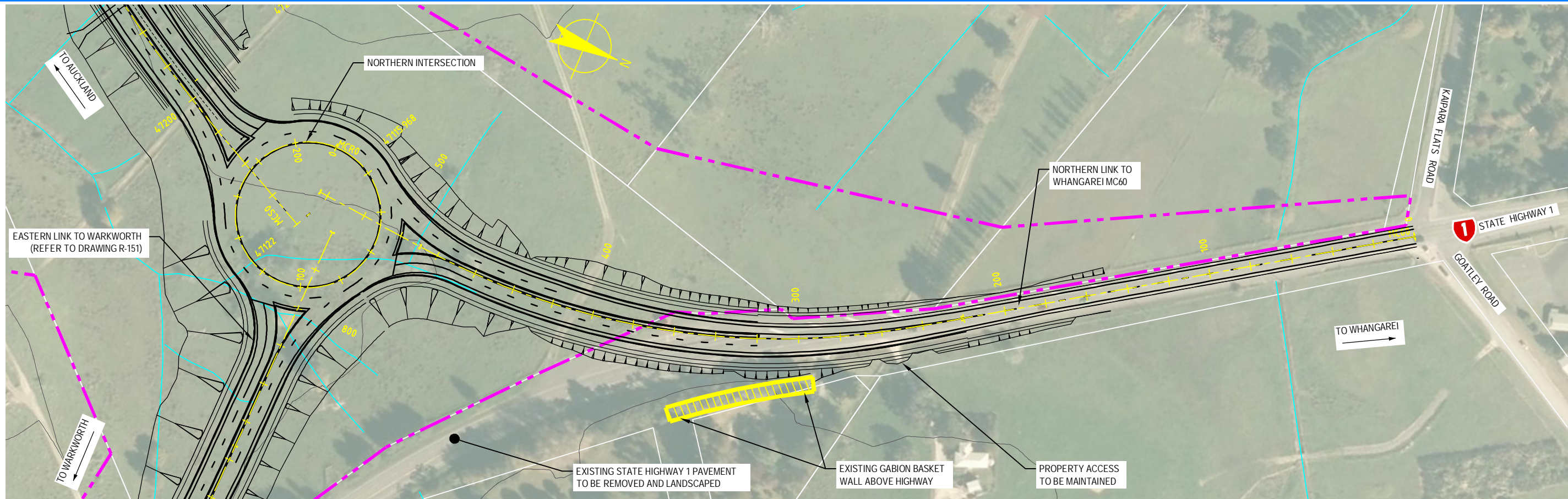


DISCLAIMER
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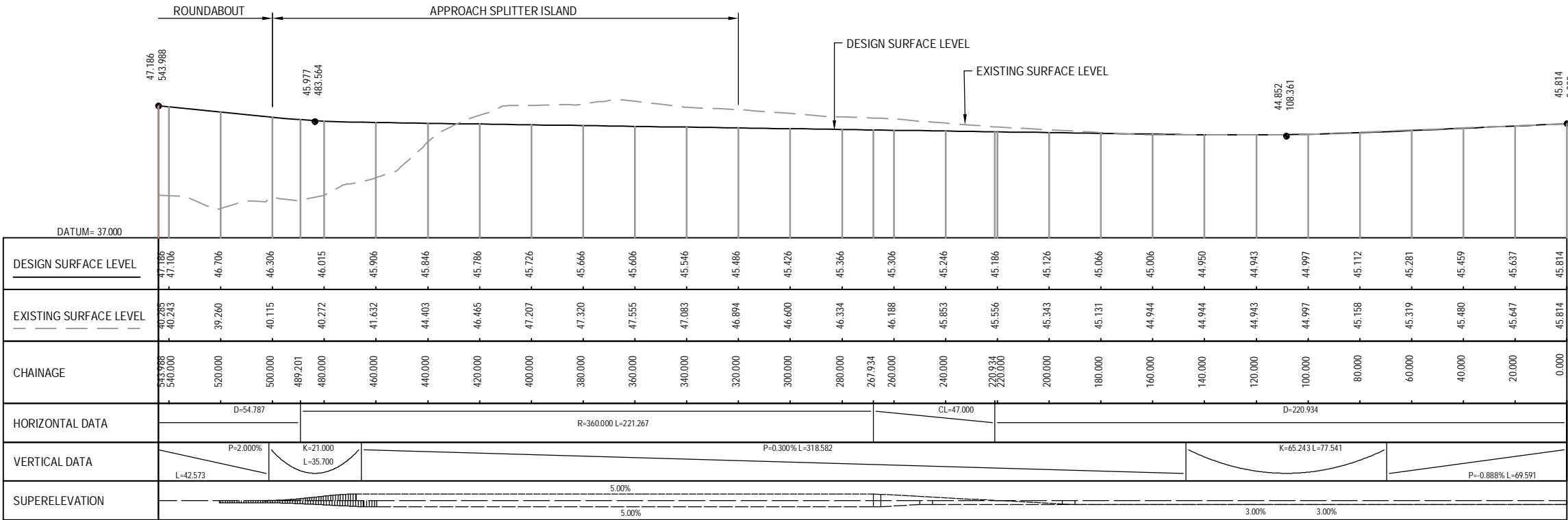
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

CARRAN ROAD MCX0
PLAN AND LONGITUDINAL SECTION

SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-149	AMDT: 0
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PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC60

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



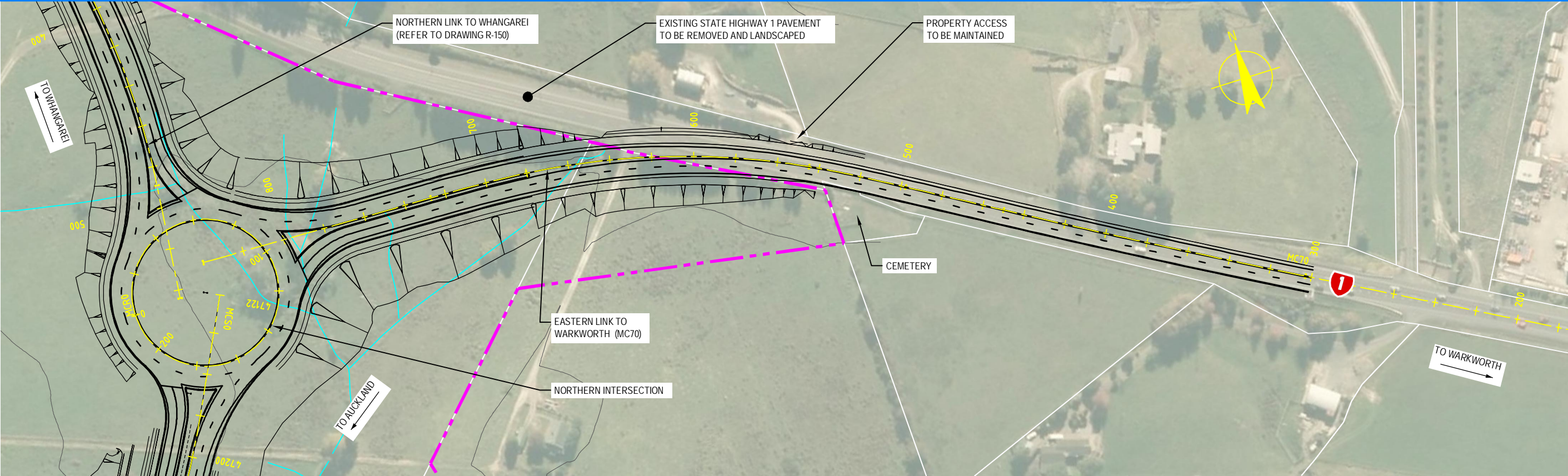
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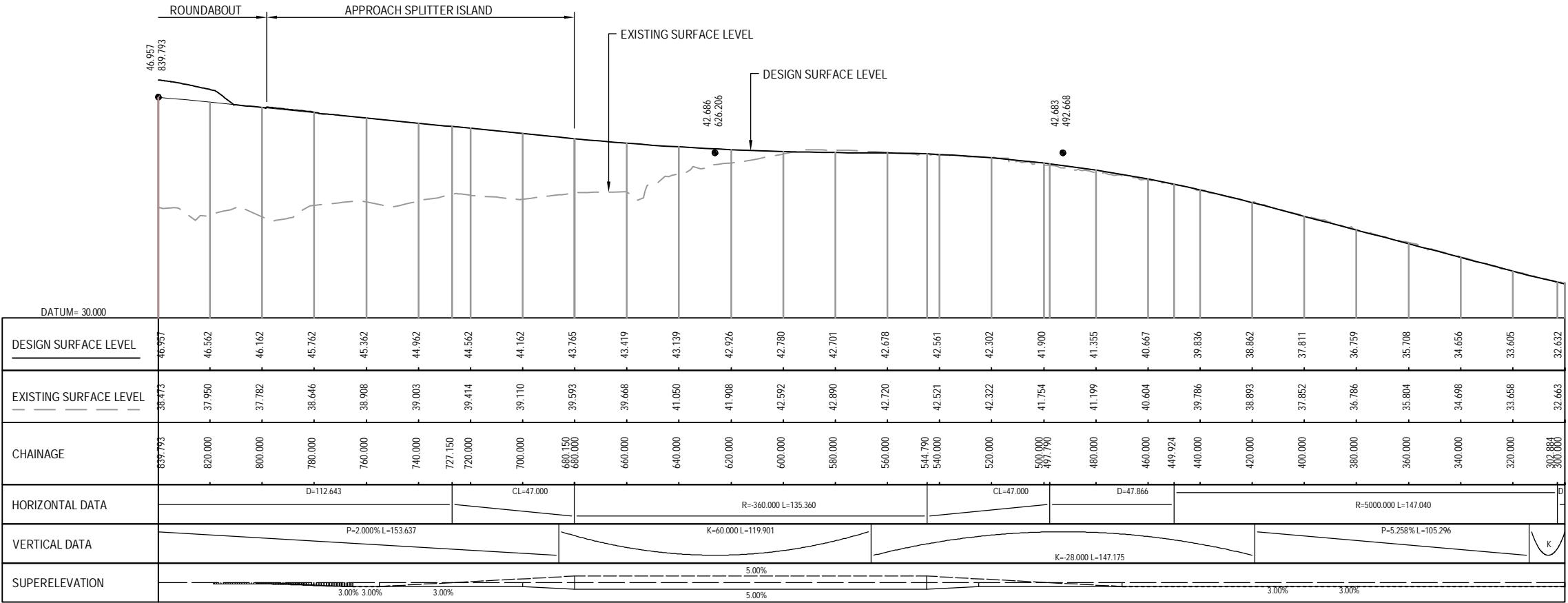
DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

NORTHERN LINK TO WHANGAREI MC60 PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-150	AMT: 0



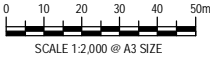
PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MC70

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

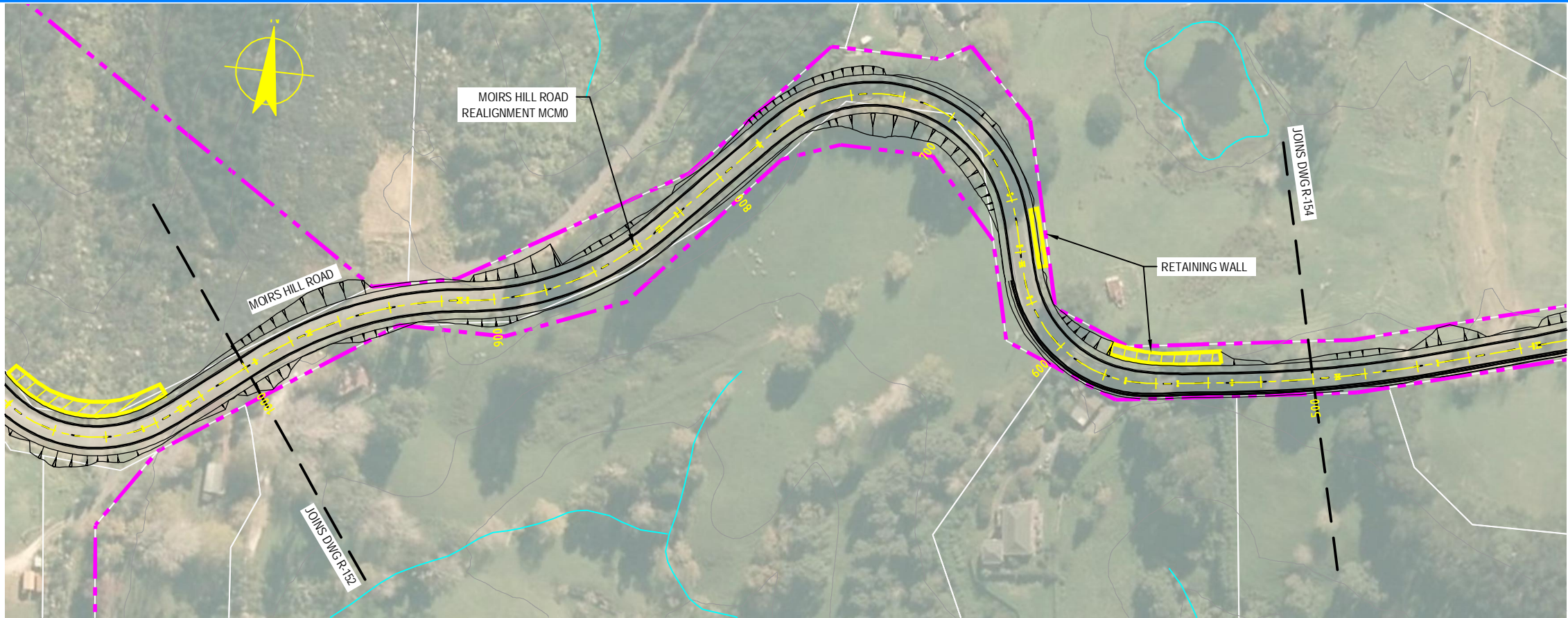


DISCLAIMER
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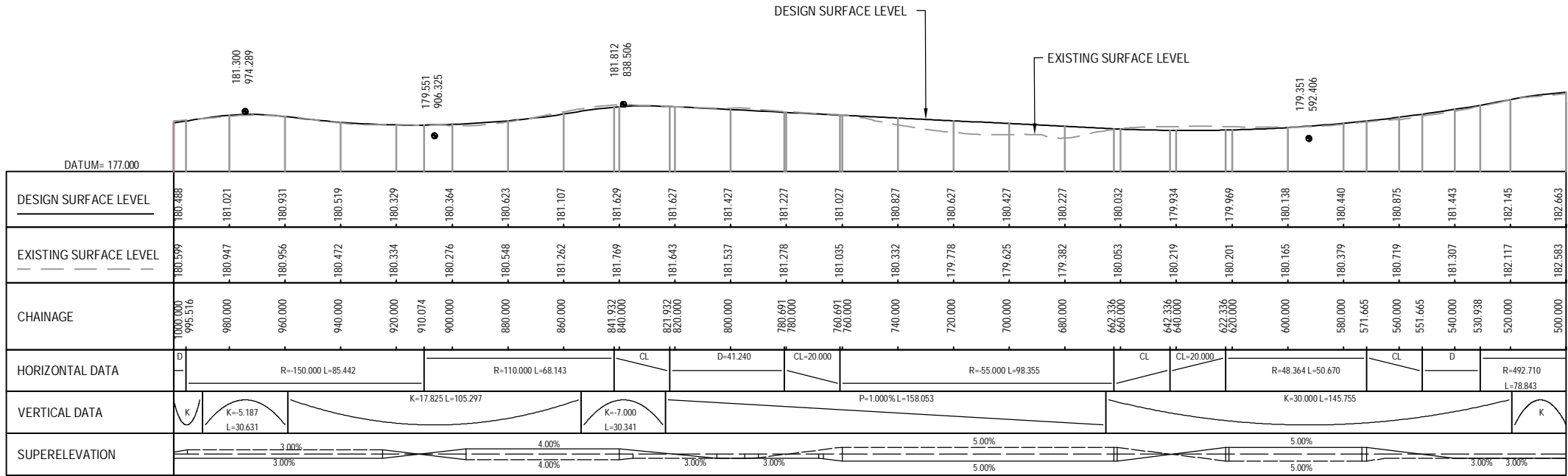
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

EASTERN LINK TO WARKWORTH MC70 PLAN AND LONGITUDINAL SECTION			
SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-151	AMD: 0

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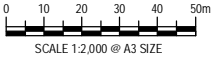
PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MCMO

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

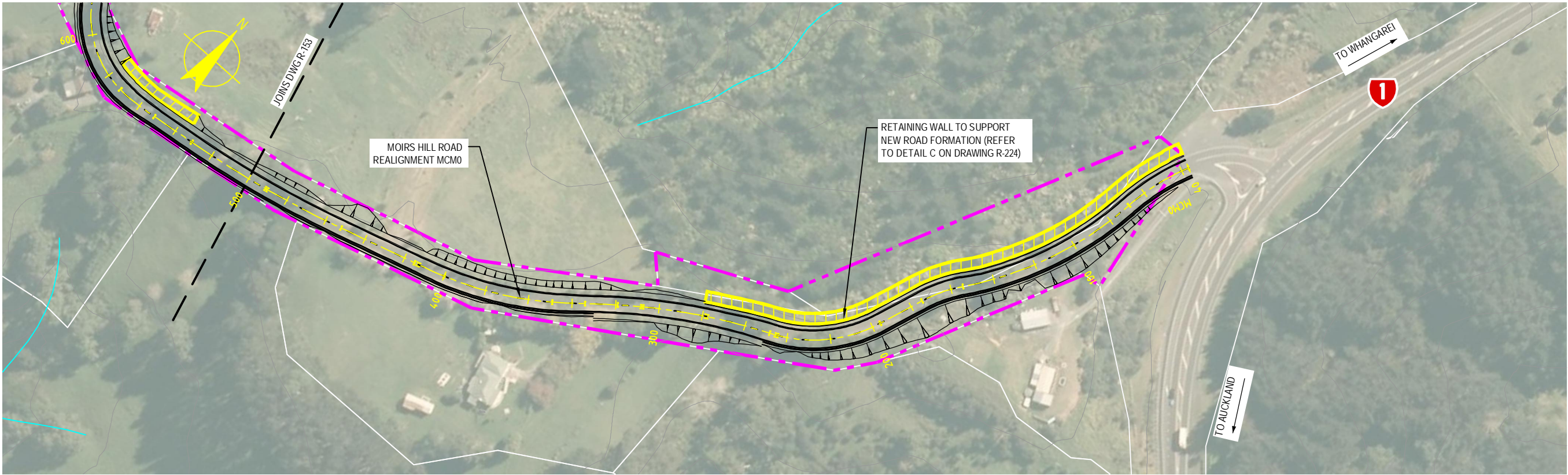


DISCLAIMER
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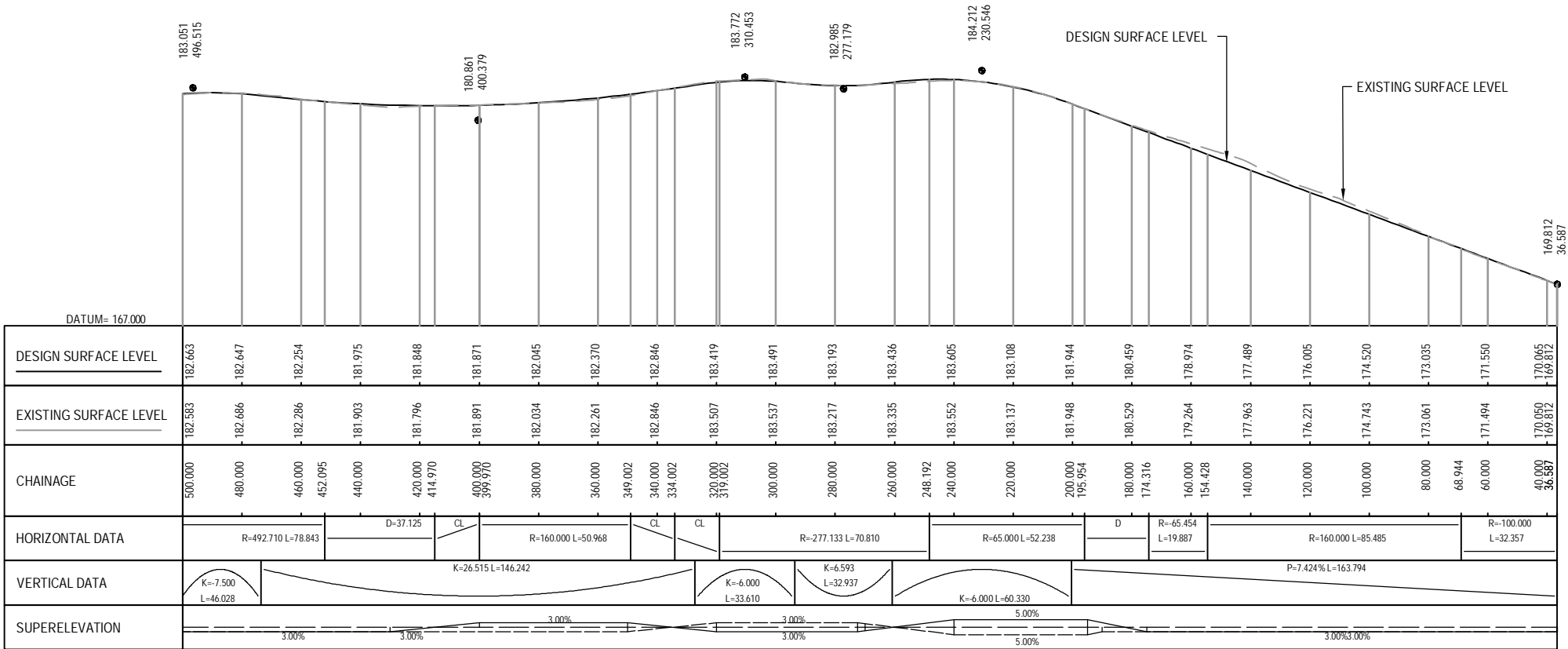
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER	APPROVED ALLIANCE MANAGER
DESIGNED IH	DESIGN REVIEW RET	MRH	TI

MOIRS HILL ROAD MCMO PLAN AND LONGITUDINAL SECTION SHEET 2 OF 3			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-153	AMDT 0

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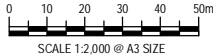
PLAN
SCALE 1:2000 @ A3 SIZE



LONGITUDINAL SECTION ON CONTROL STRING MCM0

HORIZONTAL SCALE 1:2000 @ A3
VERTICAL SCALE 1:400 @ A3

NOTE: FOR GENERAL NOTES AND LEGEND,
REFER TO DRAWING R-001



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD. D. MGR	APPD. A. MGR	PURPOSE OF ISSUE / AMENDMENT



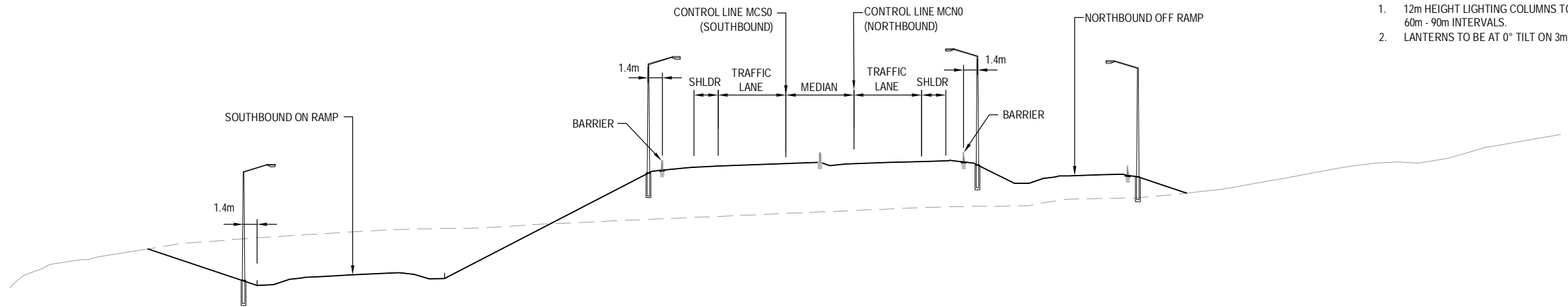
DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED: DISCIPLINE MANAGER: MRH	APPROVED: ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

MOIRS HILL ROAD MCM0
PLAN AND LONGITUDINAL SECTION
SHEET 3 OF 3

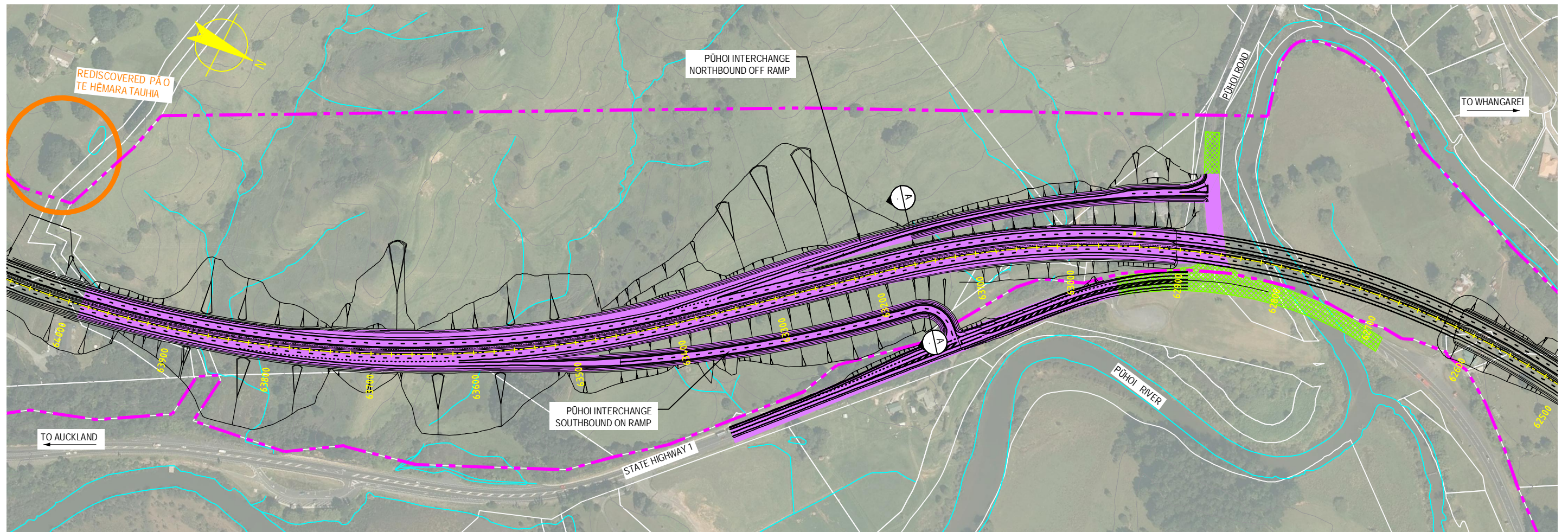
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NOTES

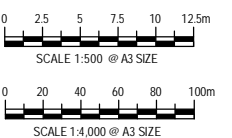
- 12m HEIGHT LIGHTING COLUMNS TO BE INSTALLED AT 60m - 90m INTERVALS.
- LANTERNS TO BE AT 0° TILT ON 3m - 4m OUTREACH.



STREET LIGHTING PLAN
SCALE 1:4000 @ A3 SIZE

KEY

- EXISTING ROAD LIGHTING TO BE RETAINED
- PROPOSED AREA OF ROAD LIGHTING



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT



DISCLAIMER

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ARA TŪHONO - PŪHOI TO WELLSFORD PŪHOI TO WARKWORTH - FOR RMA APPROVALS

DRAWN: SP / AN	DRAFTING CHECK: IH	REVIEWED DISCIPLINE MANAGER: MRH	APPROVED ALLIANCE MANAGER: TI
DESIGNED: IH	DESIGN REVIEW: RET		

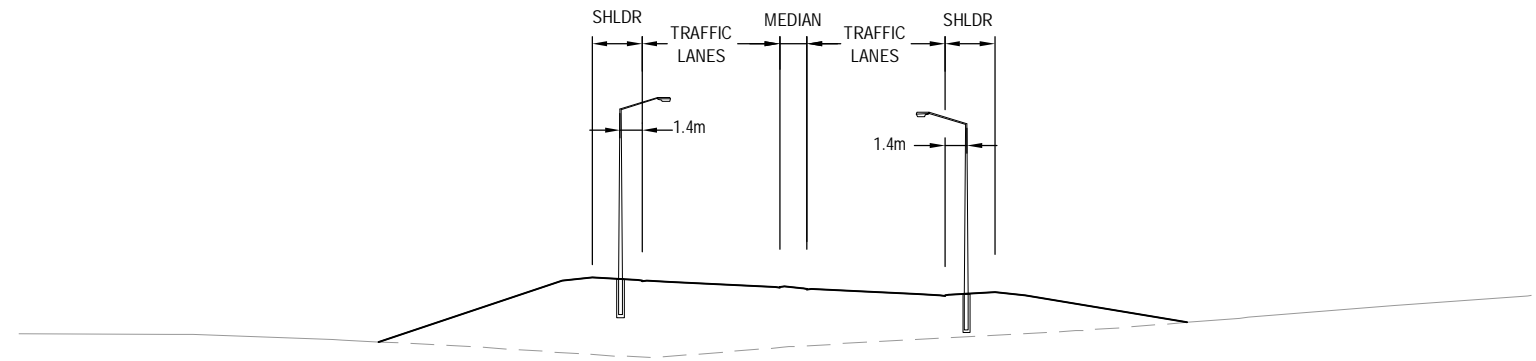
ROAD LIGHTING PLAN - SHEET 1 OF 2 PŪHOI INTERCHANGE PLAN AND TYPICAL SECTION

SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: R-201	AMD: 0
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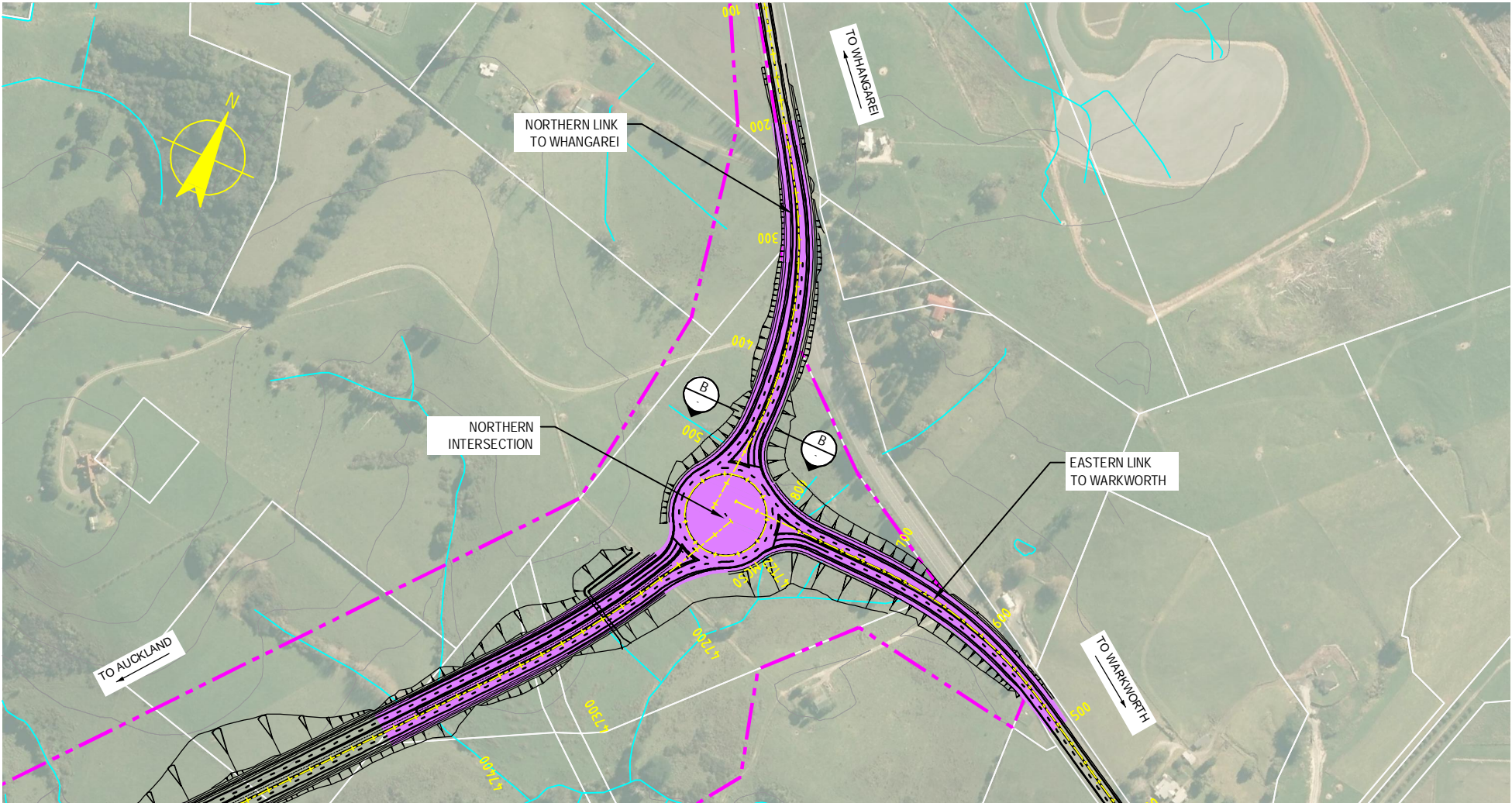
S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CAAD\Drawings\R-201_R-202.dwg Plot Date: 18 August, 2013 - 3:44 PM

NOTES

1. 12m HEIGHT LIGHTING COLUMNS TO BE INSTALLED AT 60m INTERVALS.
2. LANTERNS TO BE AT 0° TILT ON 3m - 4m OUTREACH.




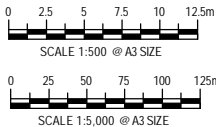
TYPICAL SECTION B-B
SCALE 1:500 @ A3 SIZE



STREET LIGHTING PLAN
SCALE 1:5000 @ A3 SIZE

KEY

 PROPOSED AREA OF ROAD LIGHTING



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT	
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT	

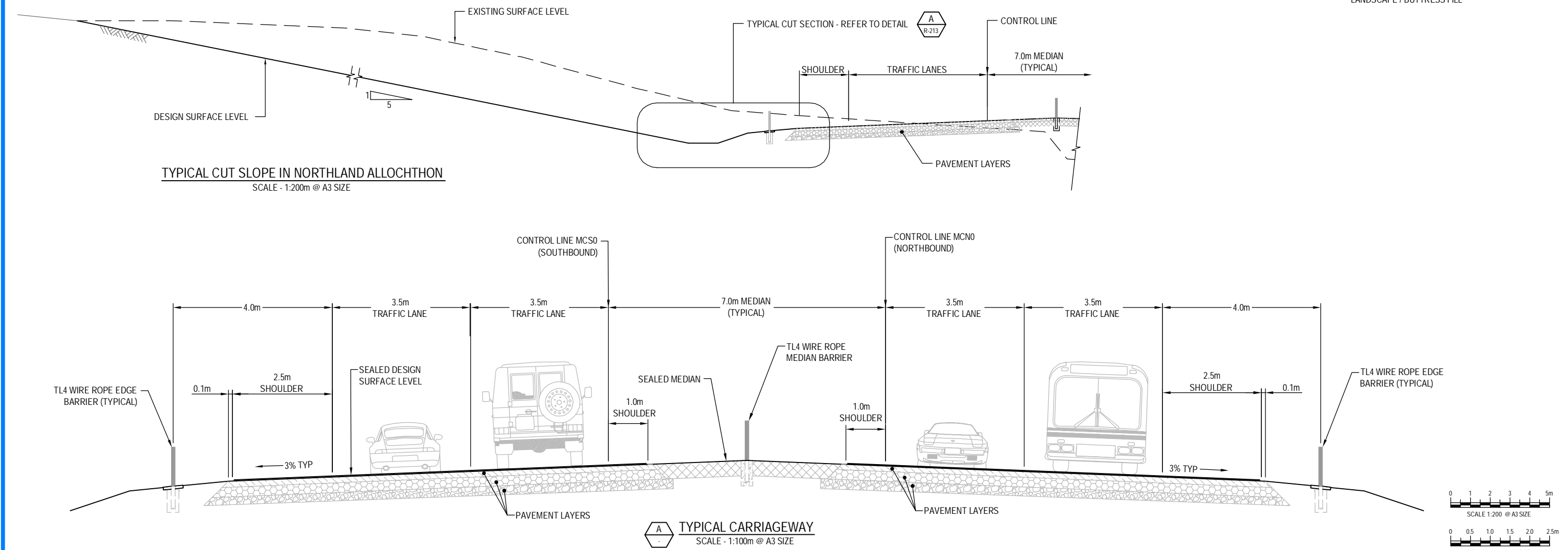
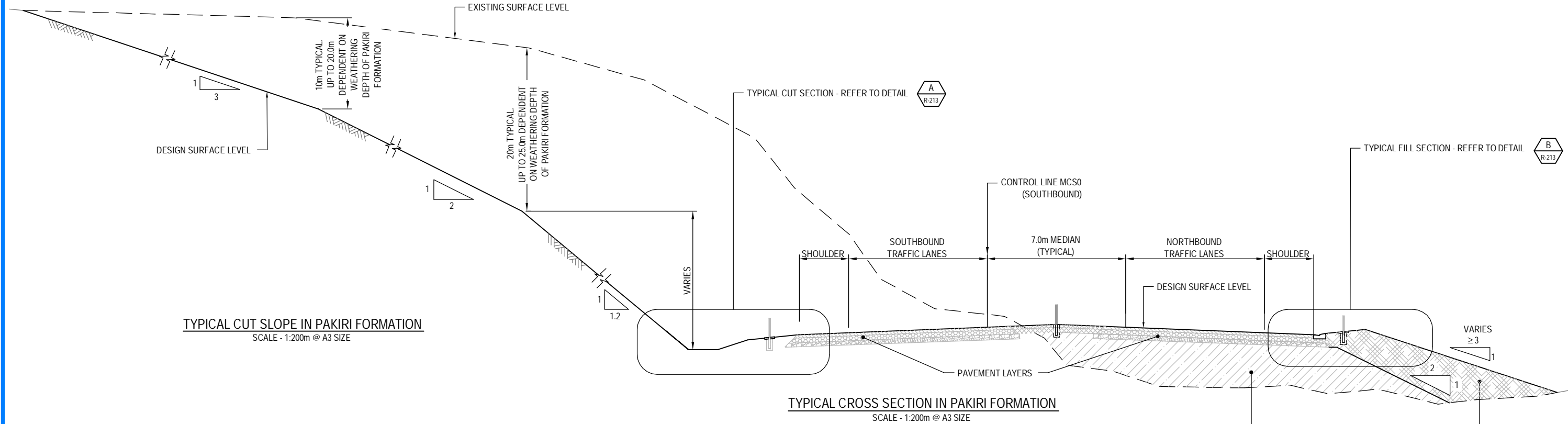


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

ROAD LIGHTING PLAN - SHEET 2 OF 2 NORTHERN INTERSECTION PLAN AND TYPICAL SECTION			
SCALE AS SHOWN	CONTRACT No. PA3748	DRAWING No. R-202	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\R-211_R-216.dwg Plot Date: 19 August, 2013 - 9:53 AM



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

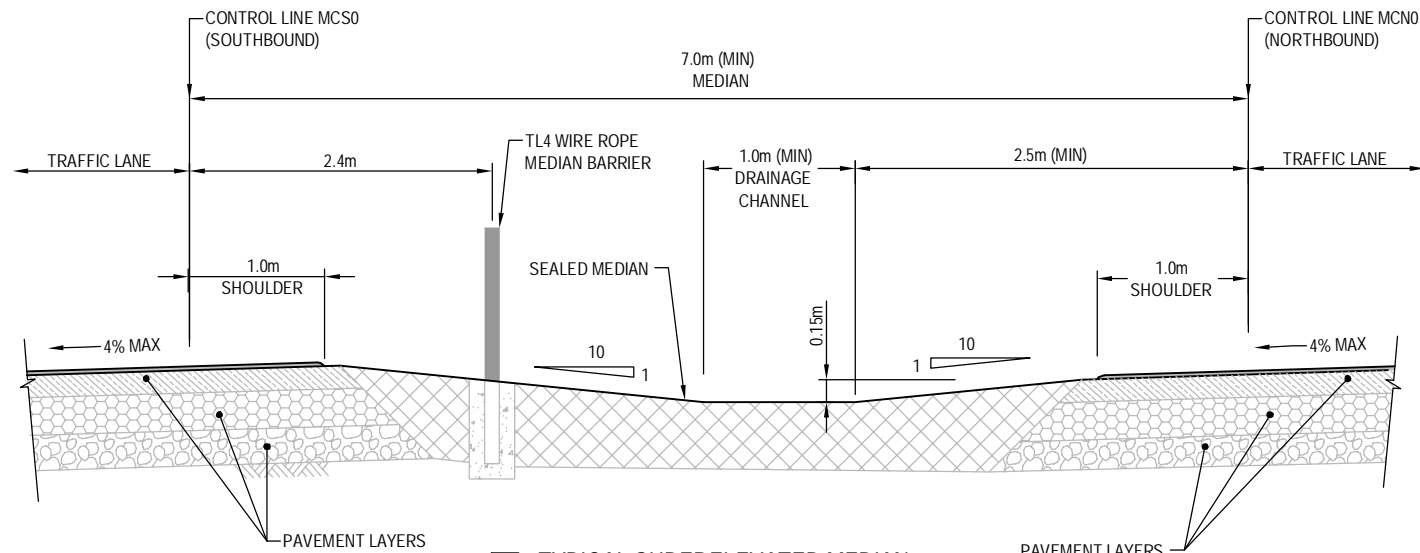


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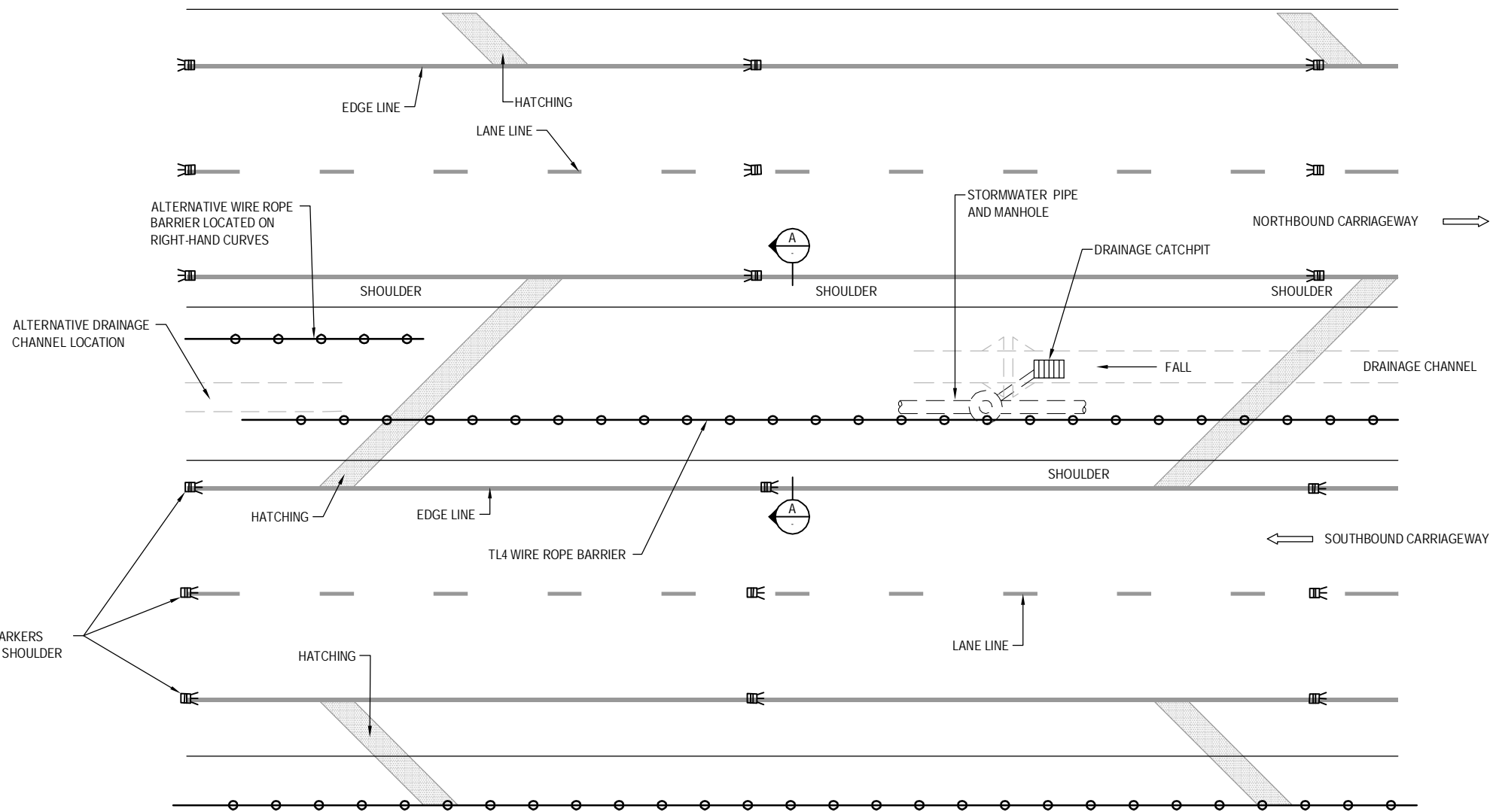
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

TYPICAL CROSS SECTIONS AND DETAILS			
SHEET 1 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-211	AMDT 0

S:\Further North - PAA3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-211_R-216.dwg Plot Date: 19 August, 2013 - 9:53 AM

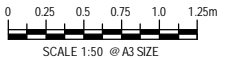


A TYPICAL SUPERELEVATED MEDIAN
SCALE - 1:50m @ A3 SIZE



PLAN
NOT TO SCALE - INDICATIVE

B TYPICAL MEDIAN - SUPERELEVATED CURVES



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

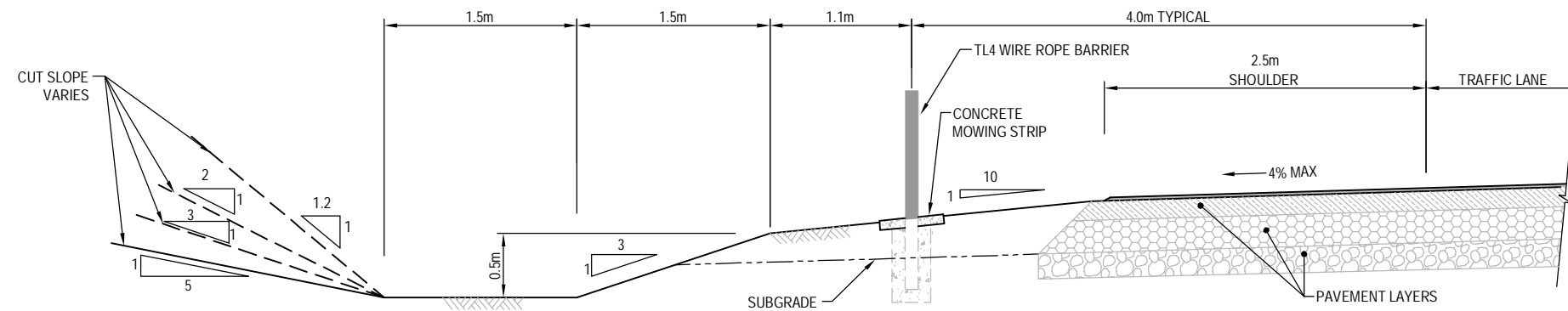


DISCLAIMER
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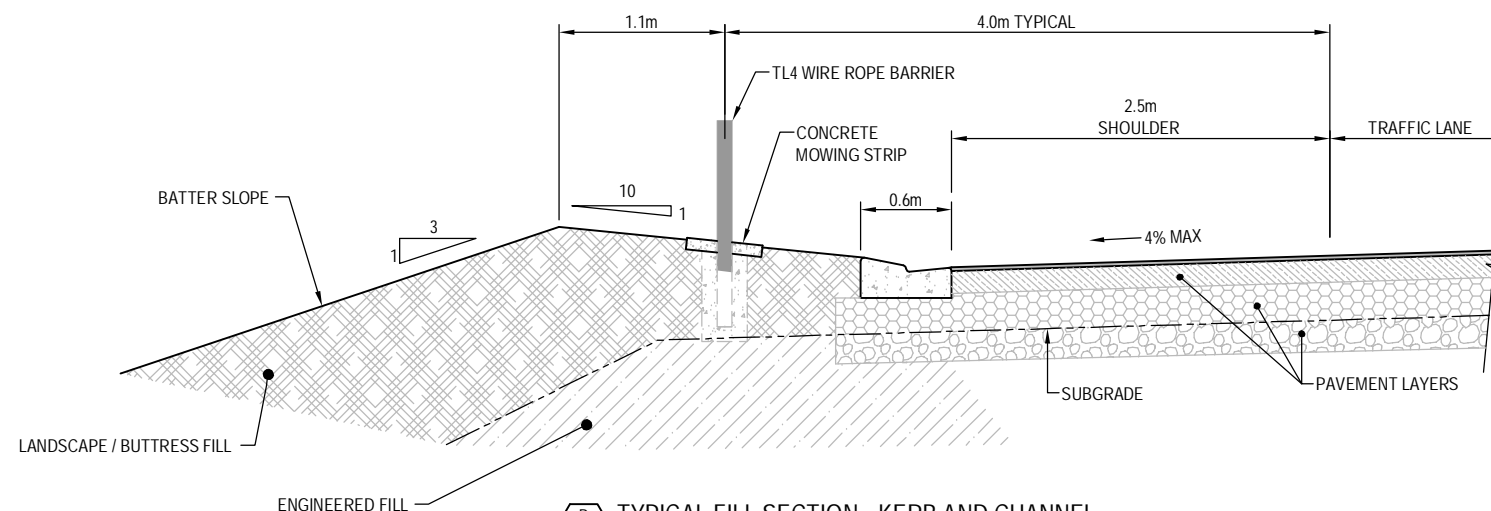
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

TYPICAL CROSS SECTIONS AND DETAILS			
SHEET 2 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-212	AMDT 0

S:\Further North - PAA3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-211_R-216.dwg Plot Date: 19 August, 2013 - 9:53 AM

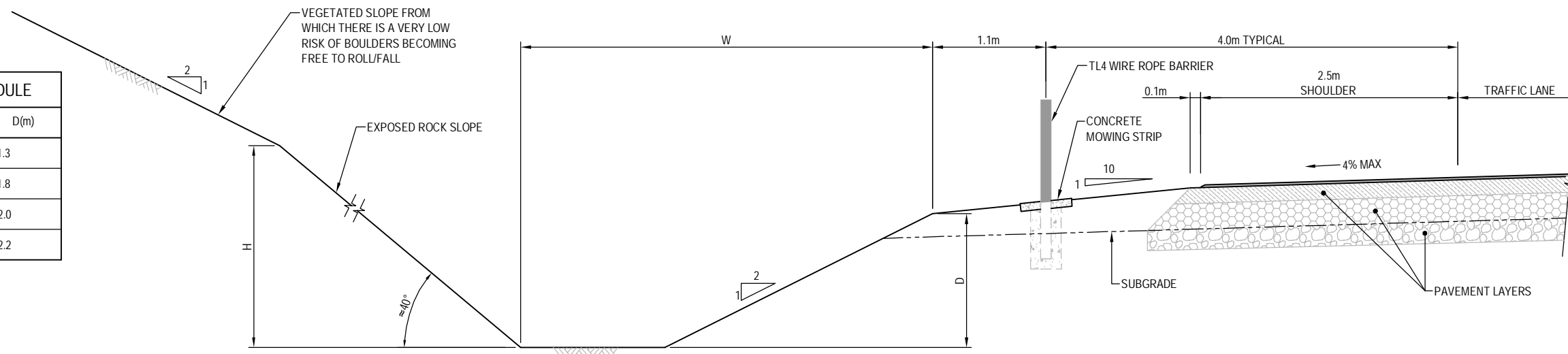


A TYPICAL CUT SECTION - DRAINAGE CHANNEL
SCALE - 1:50m @ A3 SIZE

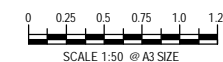


B TYPICAL FILL SECTION - KERB AND CHANNEL
SCALE - 1:50m @ A3 SIZE

ROCK TRAP SCHEDULE		
H(m)	W(m)	D(m)
5.0-10.0	4.0	1.3
10.0-20.0	4.5	1.8
20.0-30.0	4.7	2.0
30.0-40.0	5.0	2.2



C ROCK TRAP- ADJACENT TO WIRE ROPE BARRIER
SCALE - 1:50m @ A3 SIZE



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

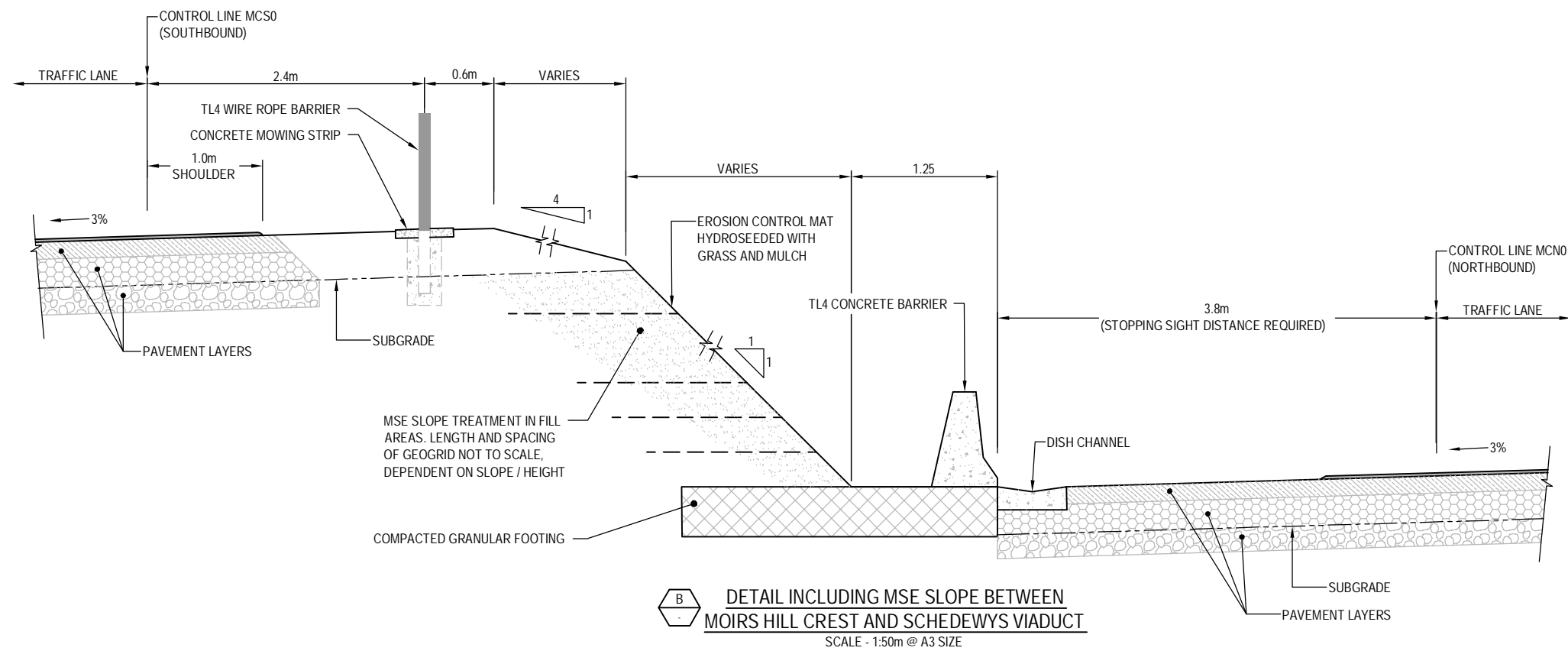
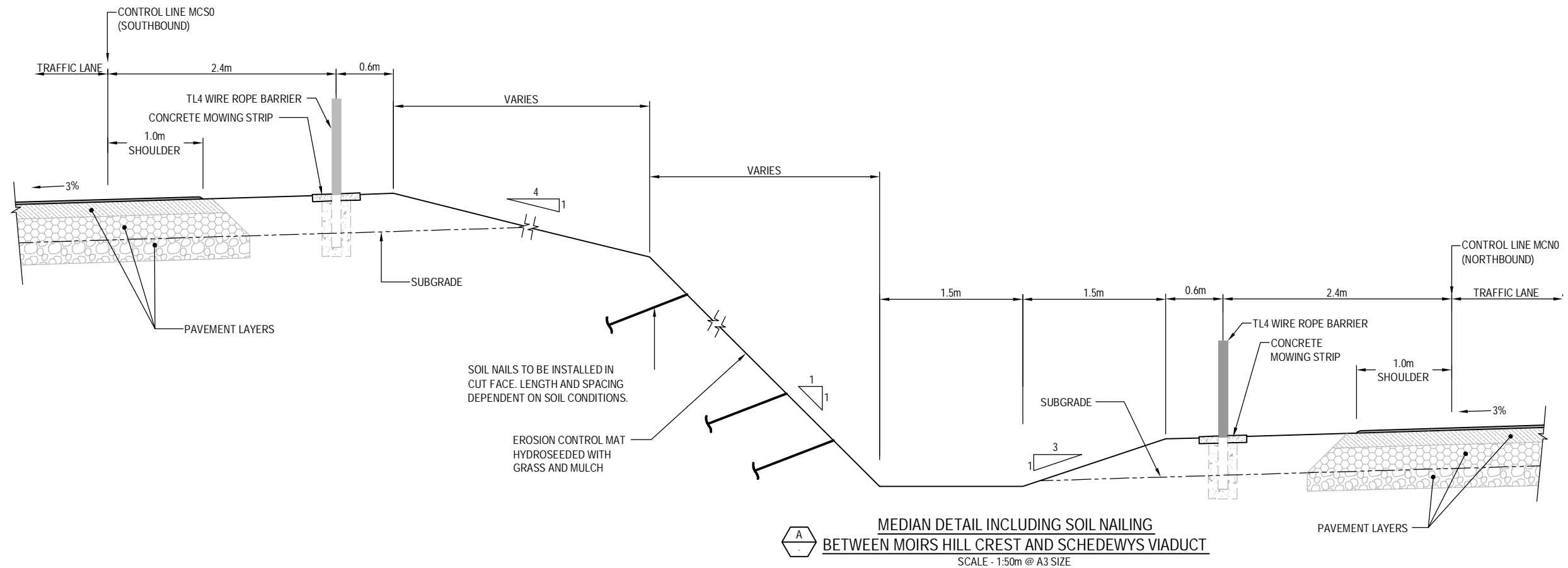


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ARA TŪHONO - PŪHOI TO WELLSFORD PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN DESIGNED IH	DRAFTING CHECK IH DESIGN REVIEW RET	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI

TYPICAL CROSS SECTIONS AND DETAILS SHEET 3 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-213	AMDT 0

S:\Further North - PAA3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-211_R-216.dwg Plot Date: 19 August, 2013 - 11:47 AM



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
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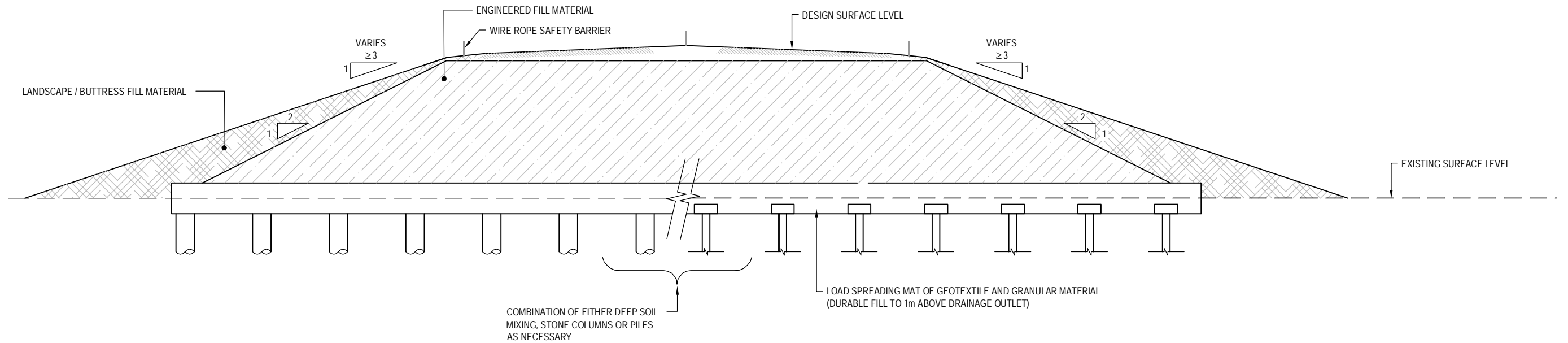


DISCLAIMER
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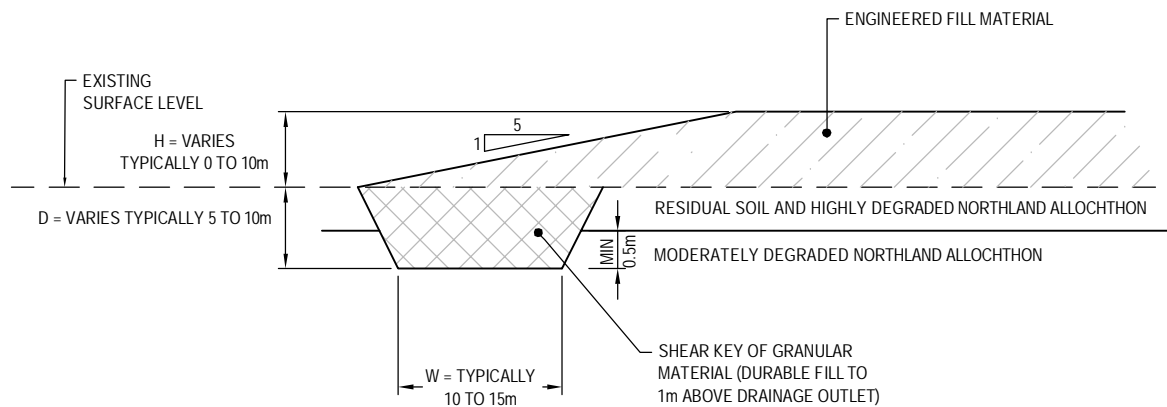
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

TYPICAL CROSS SECTIONS AND DETAILS			
SHEET 4 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-214	AMD 0

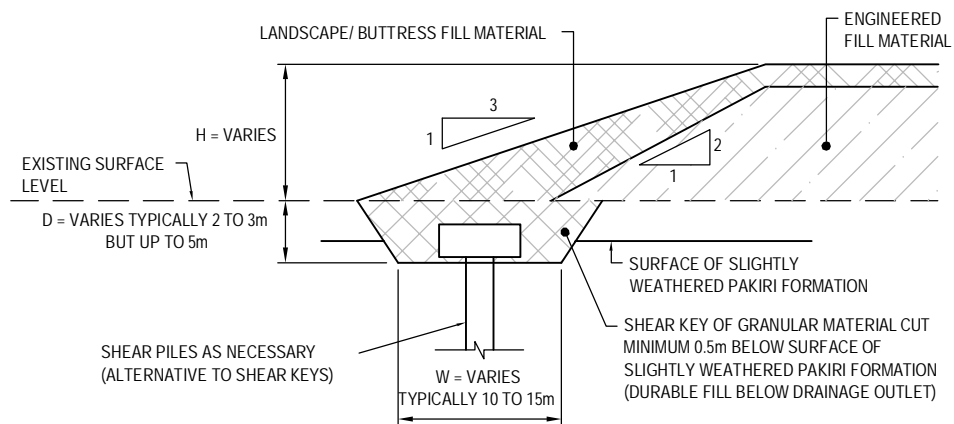
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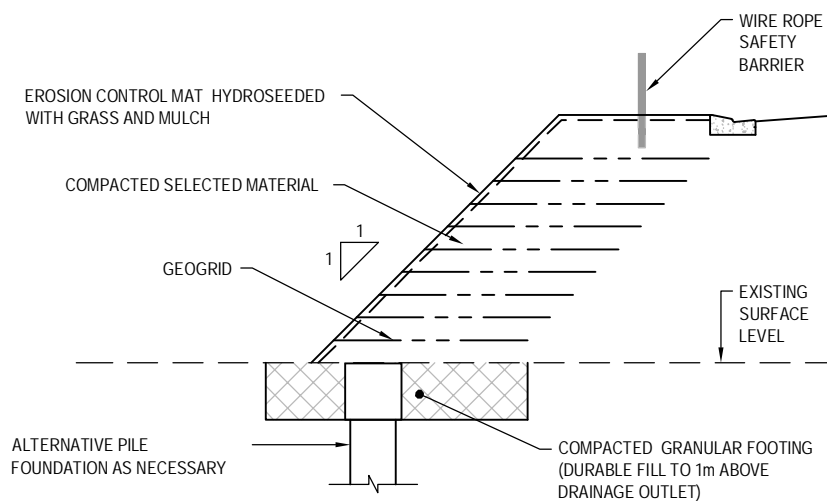
A TYPICAL FILL EMBANKMENT ON ALLUVIUM
SCALE - 1:200m @ A3 SIZE



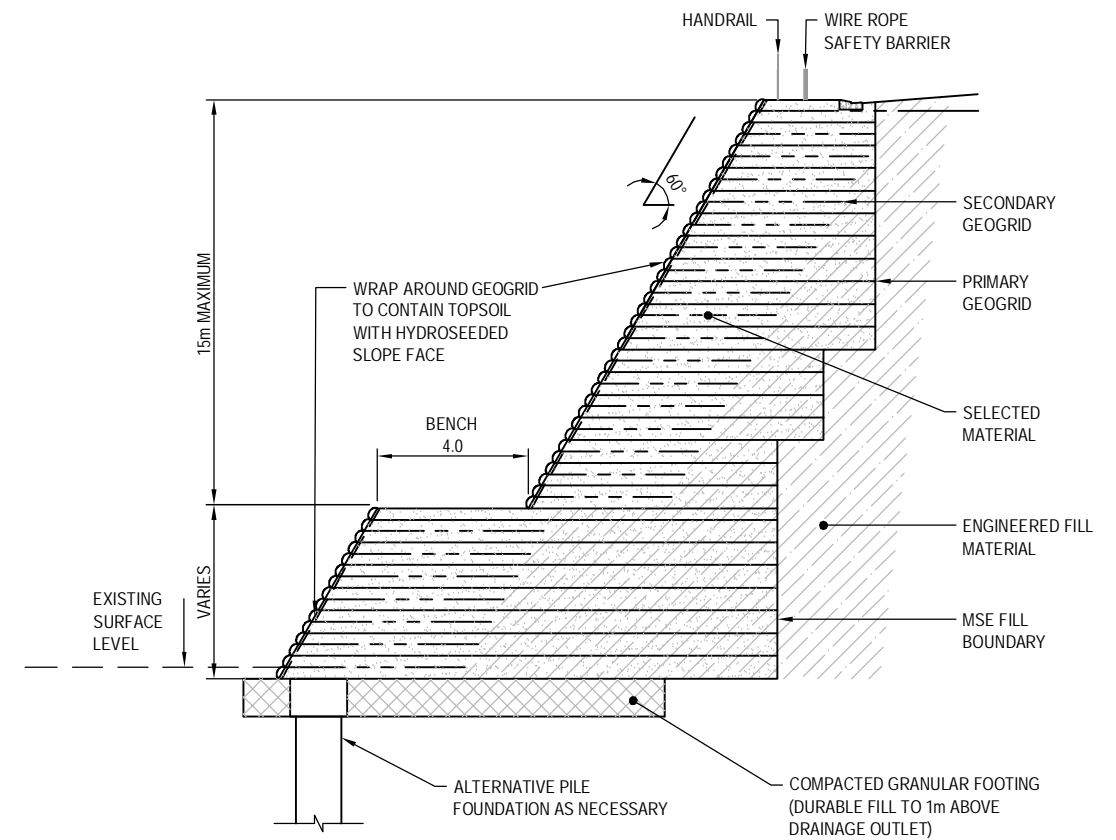
B TYPICAL FILL EMBANKMENT OVER NORTHLAND ALLOCHTHON
SCALE - 1:100m @ A3 SIZE



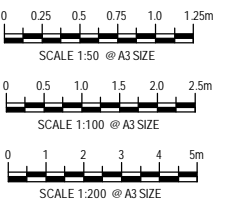
C TYPICAL FILL EMBANKMENT OVER PAKIRI FORMATION
SCALE - 1:100m @ A3 SIZE



D TYPICAL MSE SLOPE (UP TO 45°)
SCALE - 1:100m @ A3 SIZE



E TYPICAL MSE SLOPE (45° TO 60°)
SCALE - 1:200m @ A3 SIZE



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

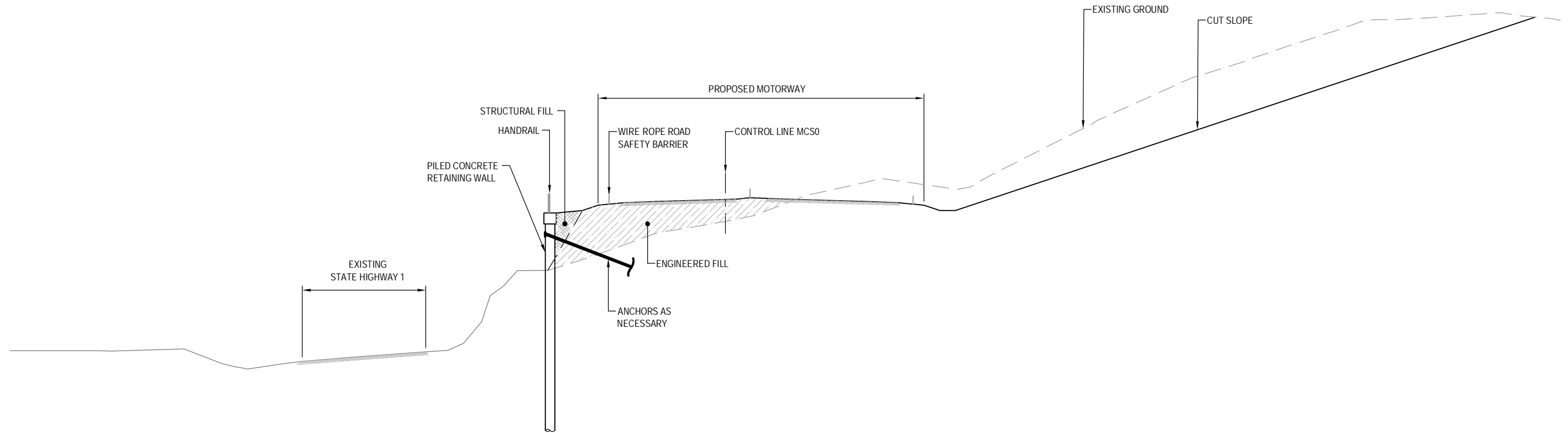


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

TYPICAL CROSS SECTIONS AND DETAILS			
SHEET 5 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-215	AMD 0

S:\Further North - PAA3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-211_R-216.dwg Plot Date: 19 August, 2013 - 9:53 AM



TYPICAL DETAIL - PILED CONCRETE RETAINING WALL
HUNGRY CREEK (APPROX. CH 60025 TO 60125)
SCALE - 1:400m @ A3 SIZE



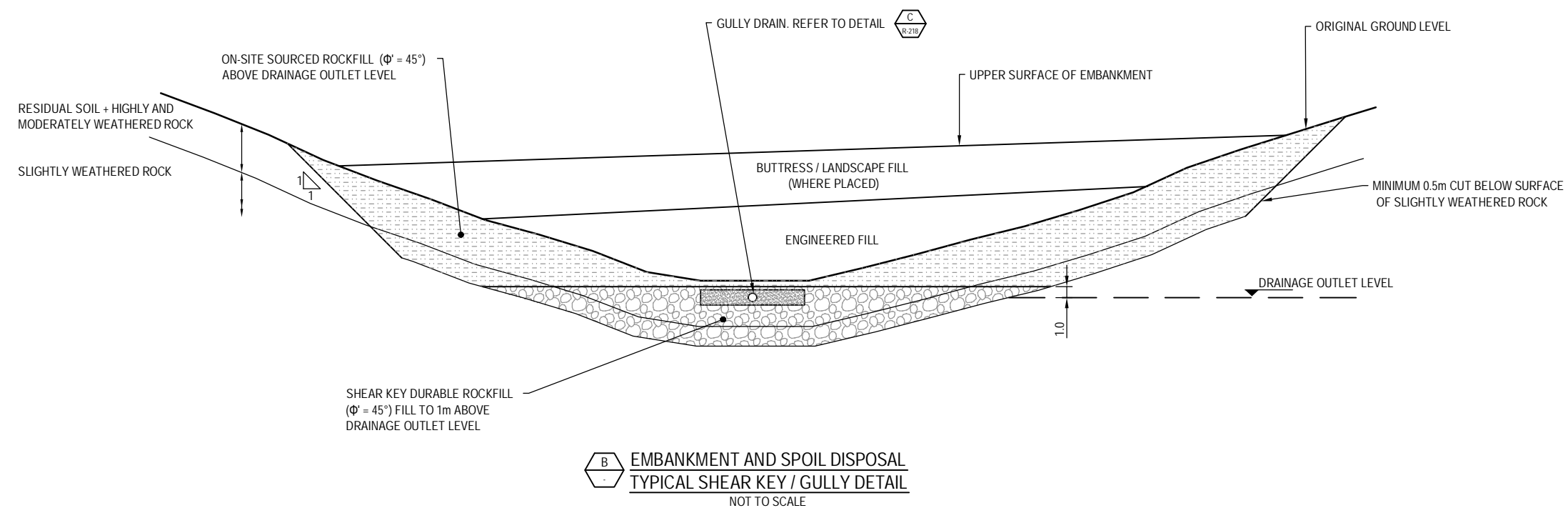
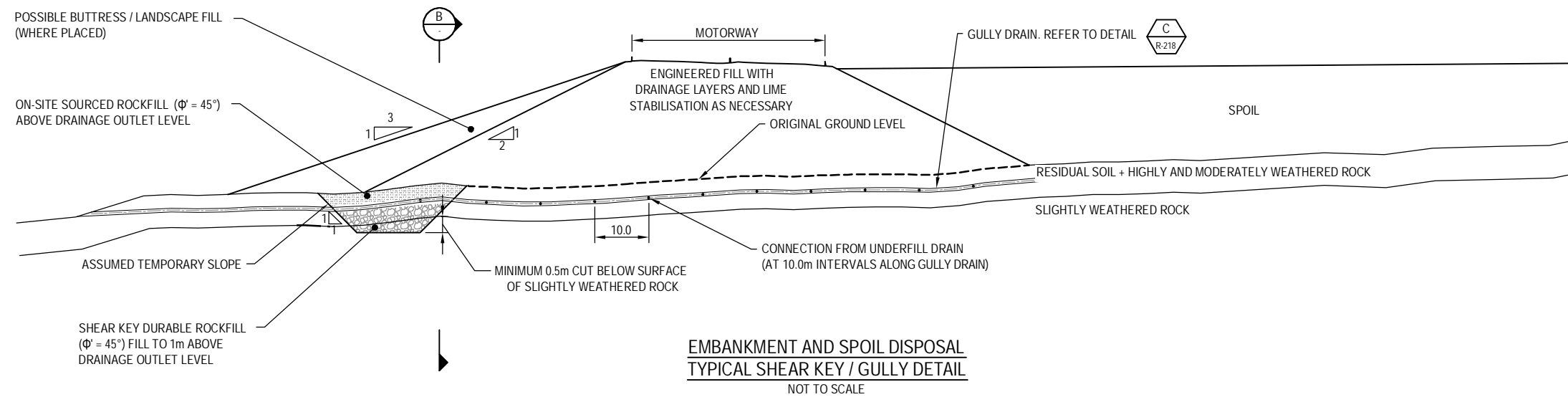
AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT



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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

TYPICAL CROSS SECTIONS AND DETAILS			
SHEET 6 OF 8			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-216	AMDT 0



0	30/08/13	DJW	MRH	TI	ISSUED FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT



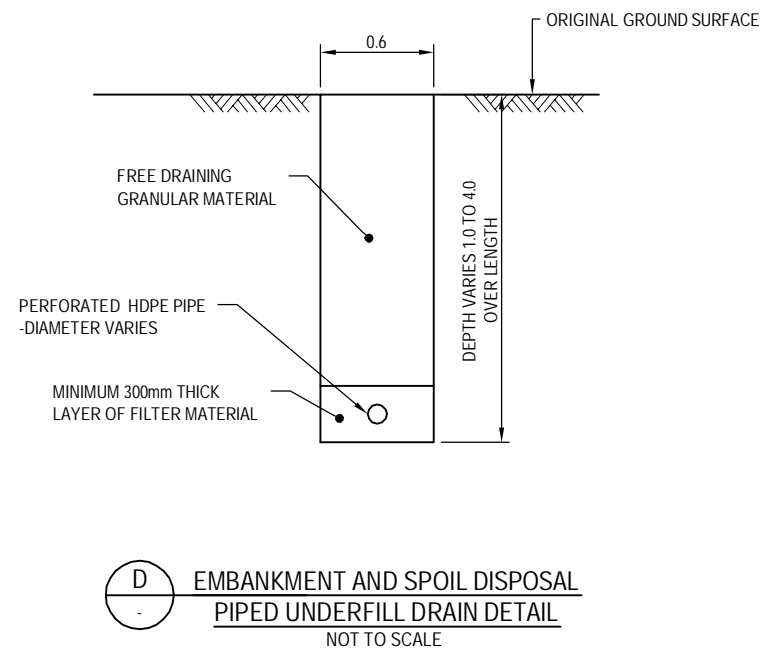
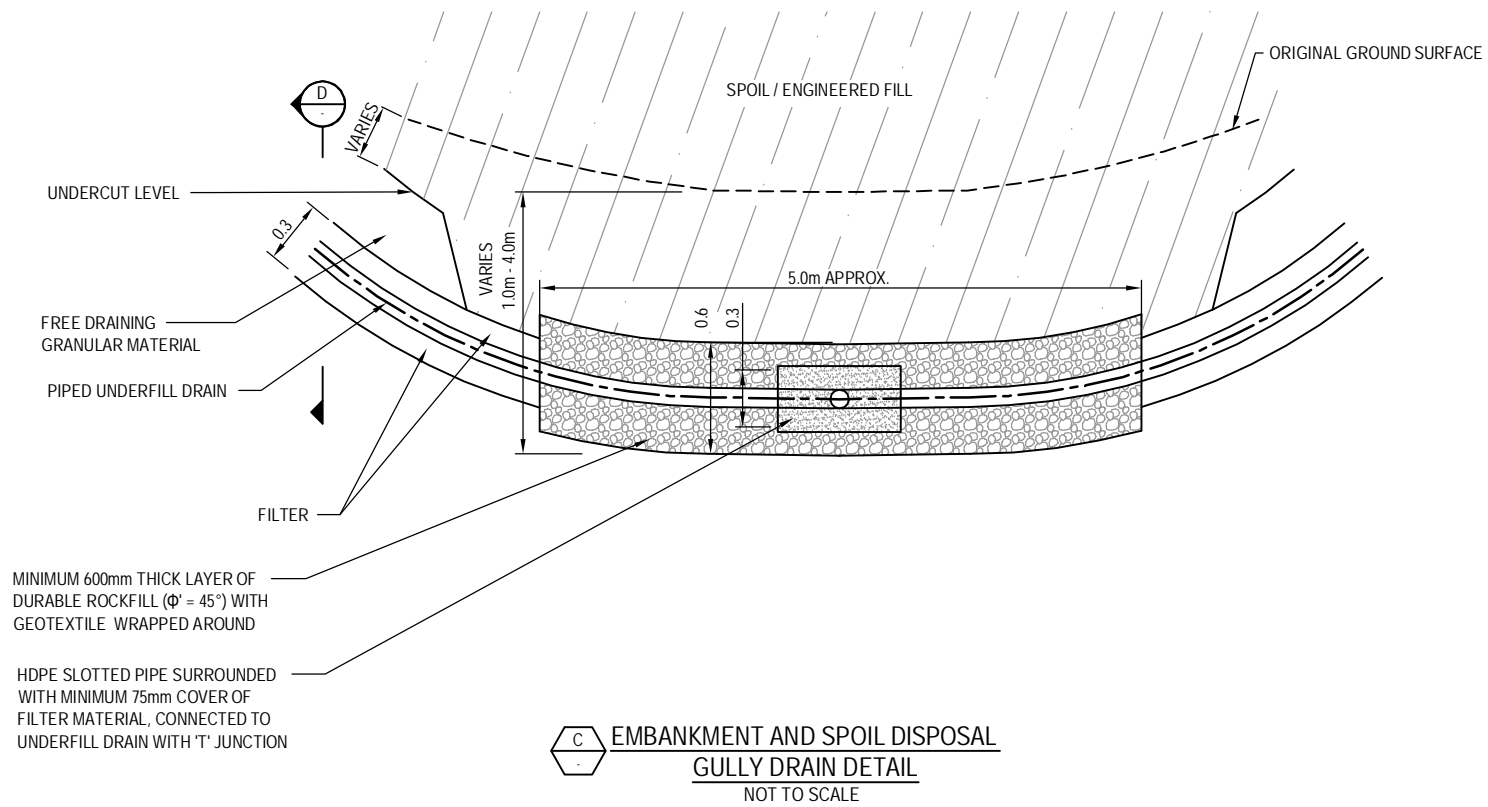
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVAL			
DRAWN SP/AN	DRAFTING CHECK OJH	REVIEWED DISCIPLINE MANAGER	APPROVED ALLIANCE MANAGER
DESIGNED OJH	DESIGN REVIEW D3/W	MRH	TI

TYPICAL CROSS SECTIONS AND DETAILS
SHEET 7 OF 8

SCALE	CONTRACT No	DRAWING No	AMDT
NOT TO SCALE	PA3748	R-217	0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CA00 Drawings\R-217_R-218.dwg Plot Date: 20 August, 2013 - 12:42 PM



0	30/08/13	DJW	MRH	TI	ISSUED FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

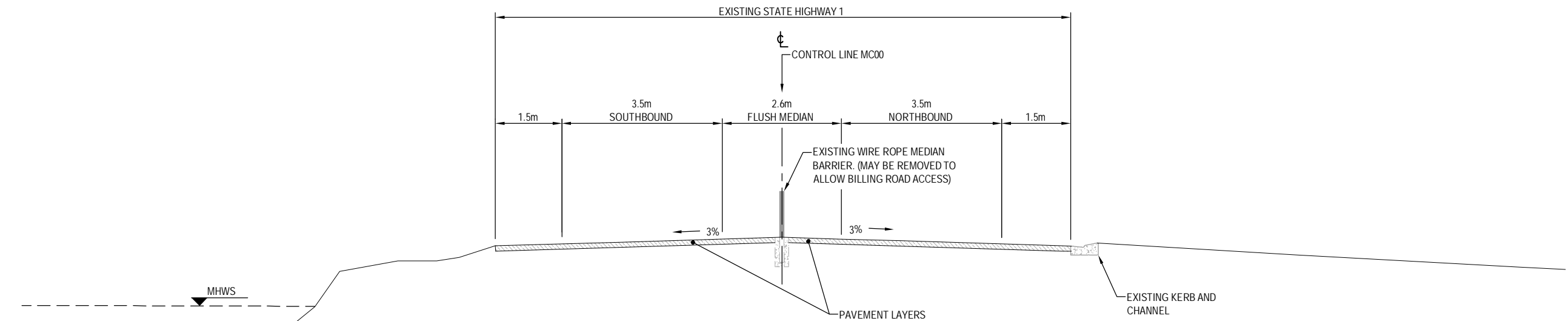


DISCLAIMER
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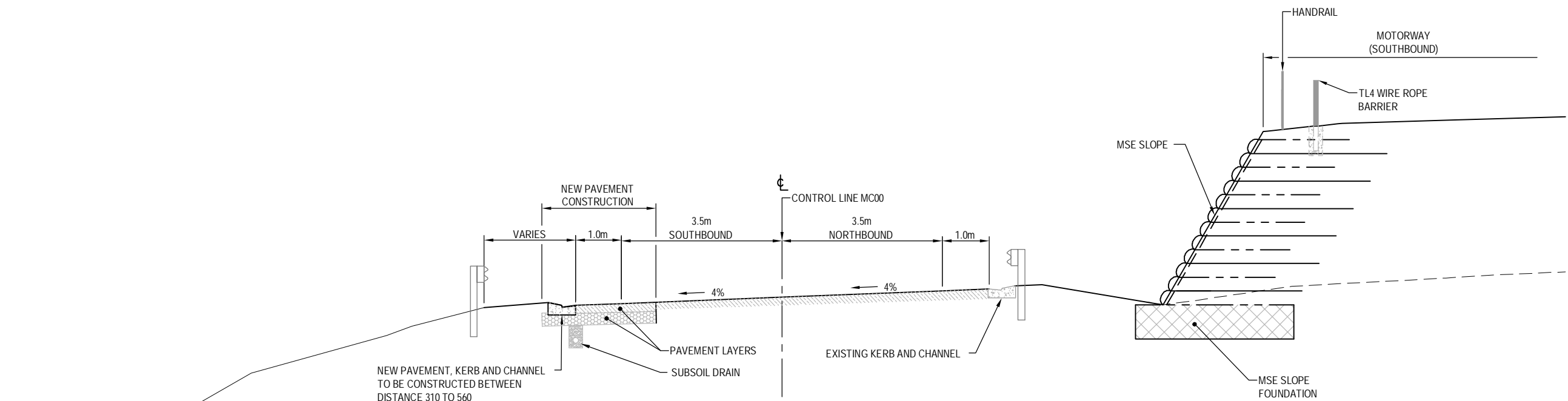
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP/AN	DRAFTING CHECK OJH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED OJH	DESIGN REVIEW DJW		

TYPICAL CROSS SECTIONS AND DETAILS SHEET 8 OF 8			
SCALE NOT TO SCALE	CONTRACT No PA3748	DRAWING No R-218	AMDT 0

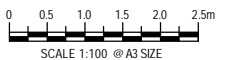
S:\Further North - PAA3300 Design\300.5 Technical\01-Drawing Production\CAAD Drawings\R-221_R-228.dwg Plot Date: 18 August, 2013 - 3:31 PM



A TYPICAL SECTION - NORTH OF TITFORDS BRIDGE
SCALE - 1:100m @ A3 SIZE



B WAIWERA TWO WAY LINK
ON EXISTING OFF RAMP - TYPICAL SECTION
SCALE - 1:100m @ A3 SIZE



AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

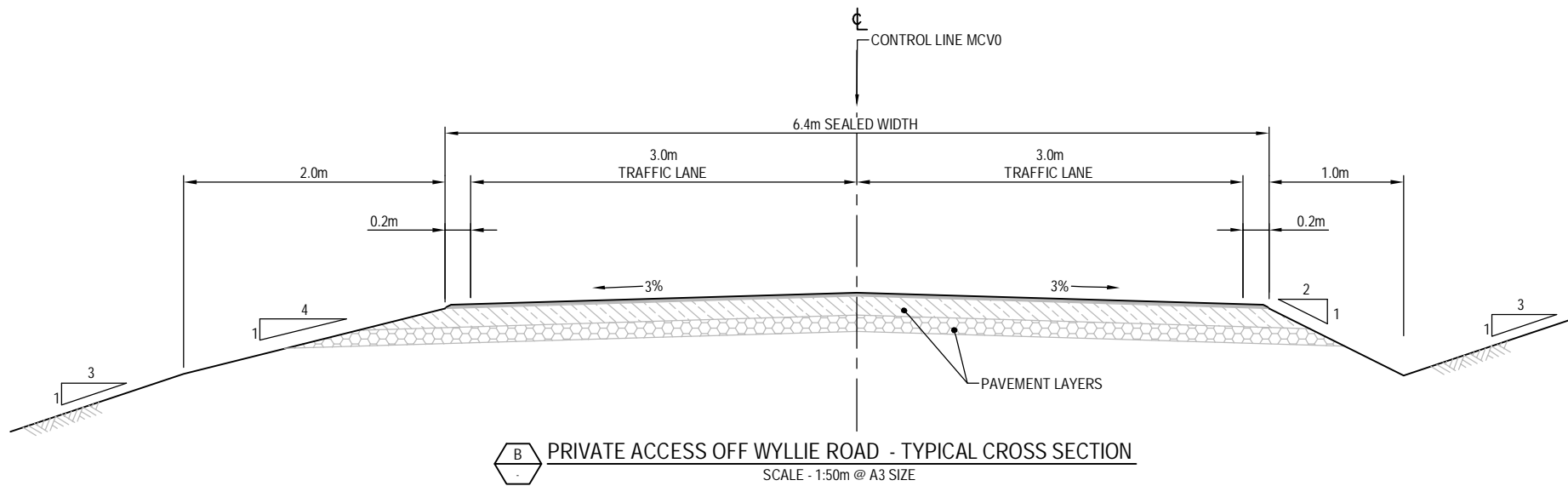
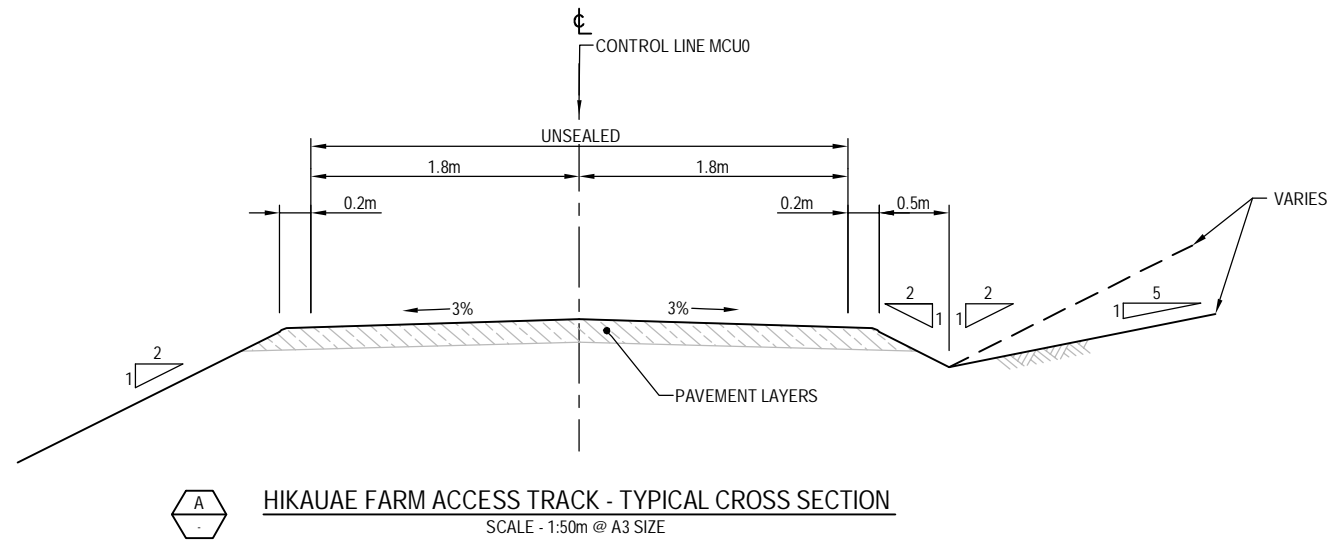


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

WAIWERA LINK TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-221	AMDT 0

C:\CAD\Temp\AcPublish\952\13-221_R-228.dwg Plot Date: 17 August, 2013 - 4:37 PM



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AMD	DATE	DESIGN REVIEW	REV'D D. MGR	APP'D A. MGR	PURPOSE OF ISSUE / AMENDMENT

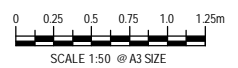
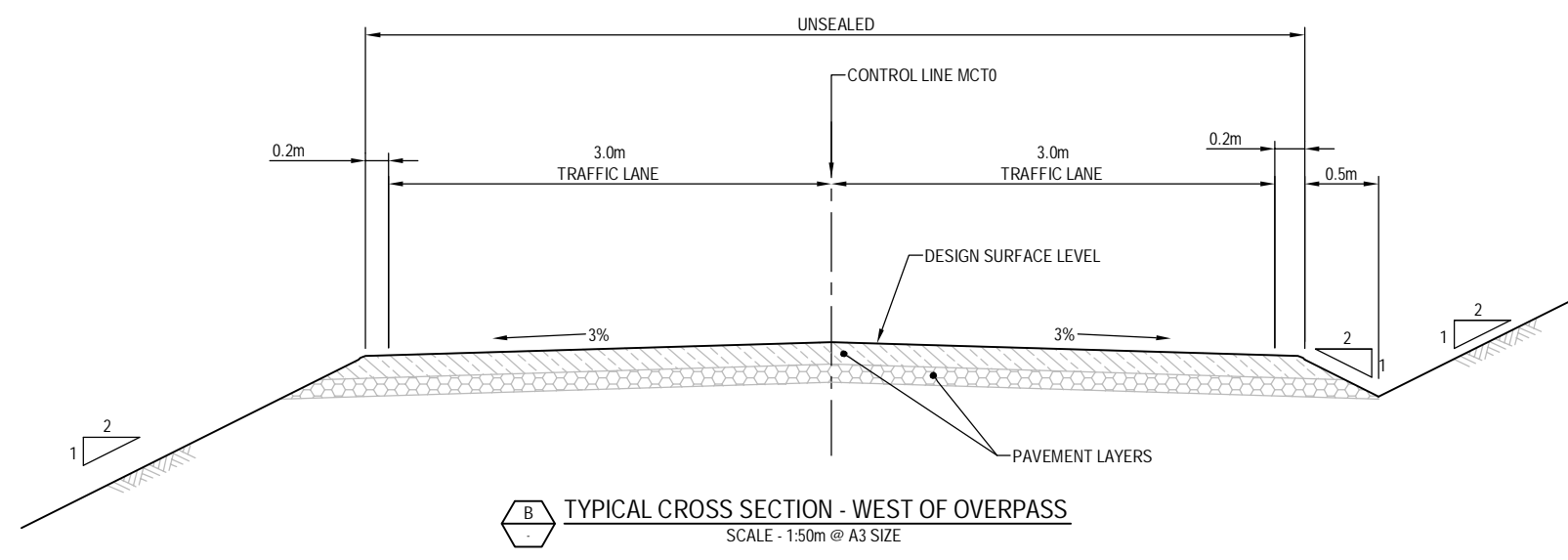
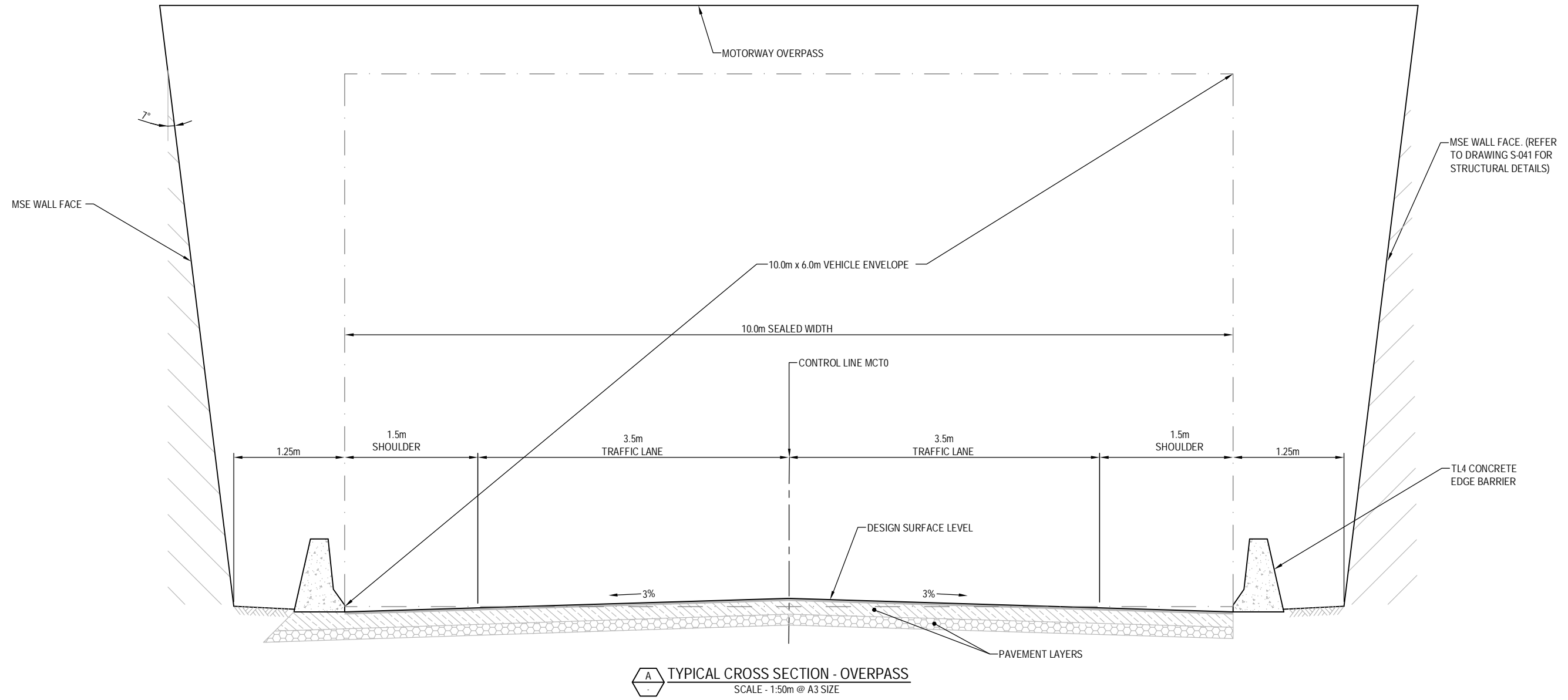


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

PRIVATE ACCESS ROADS TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-222	AMDT 0

S:\Further North - PAA3300 Design\3300.5 Technical\01-Drawing Production\CADD Drawings\R-221_R-228.dwg Plot Date: 18 August, 2013 - 3:32 PM



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REV'D. MGR	APP'D. A. MGR	PURPOSE OF ISSUE / AMENDMENT

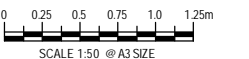
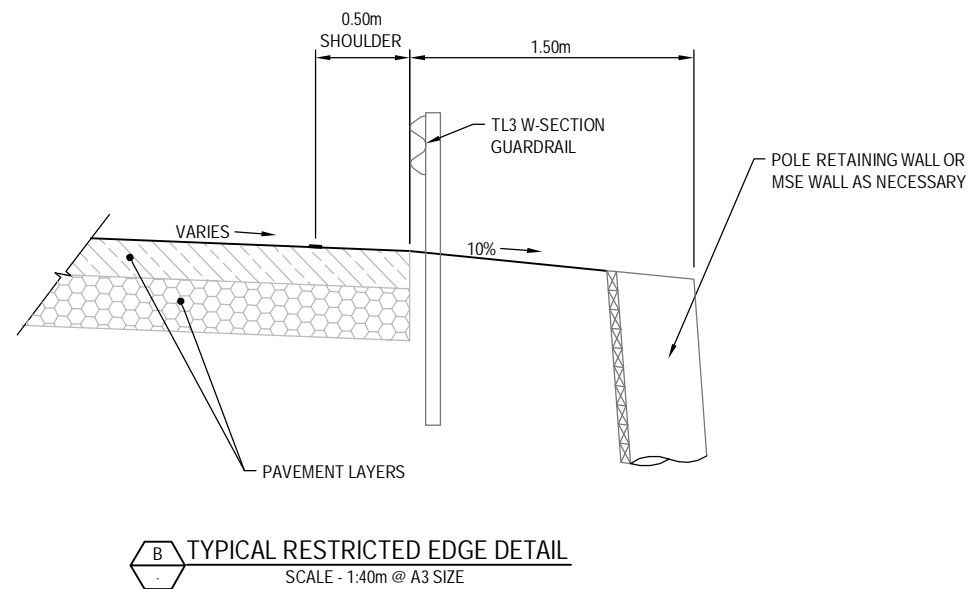
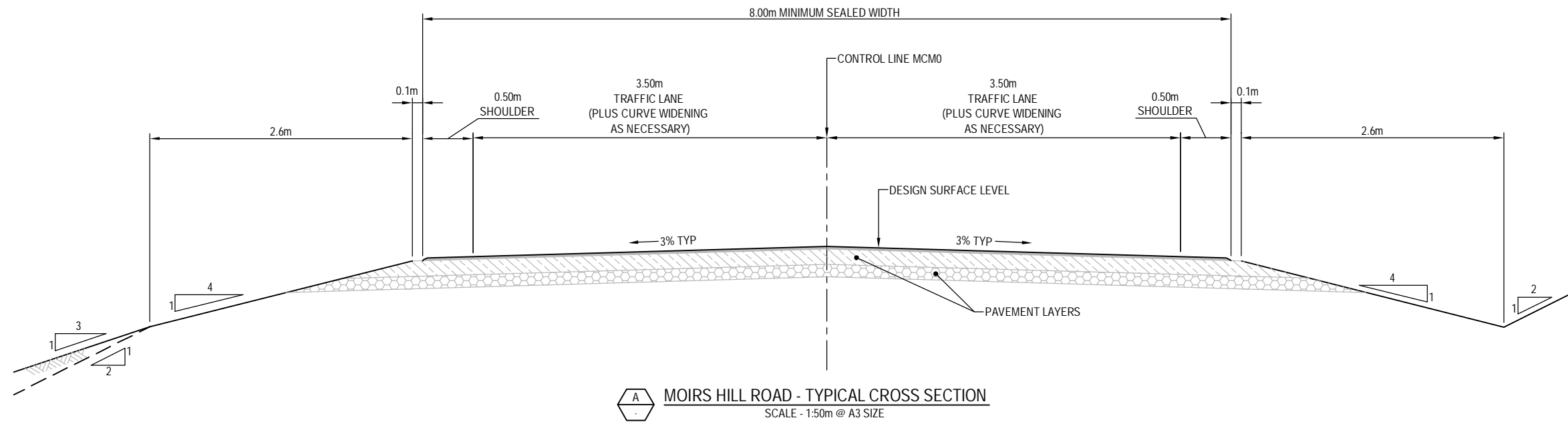


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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

WATSON ROAD (PRIVATE) TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-223	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD\Drawings\R-221_R-228.dwg Plot Date: 19 August, 2013 - 11:30 AM



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD. A. MGR	PURPOSE OF ISSUE / AMENDMENT
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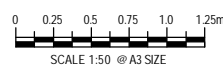
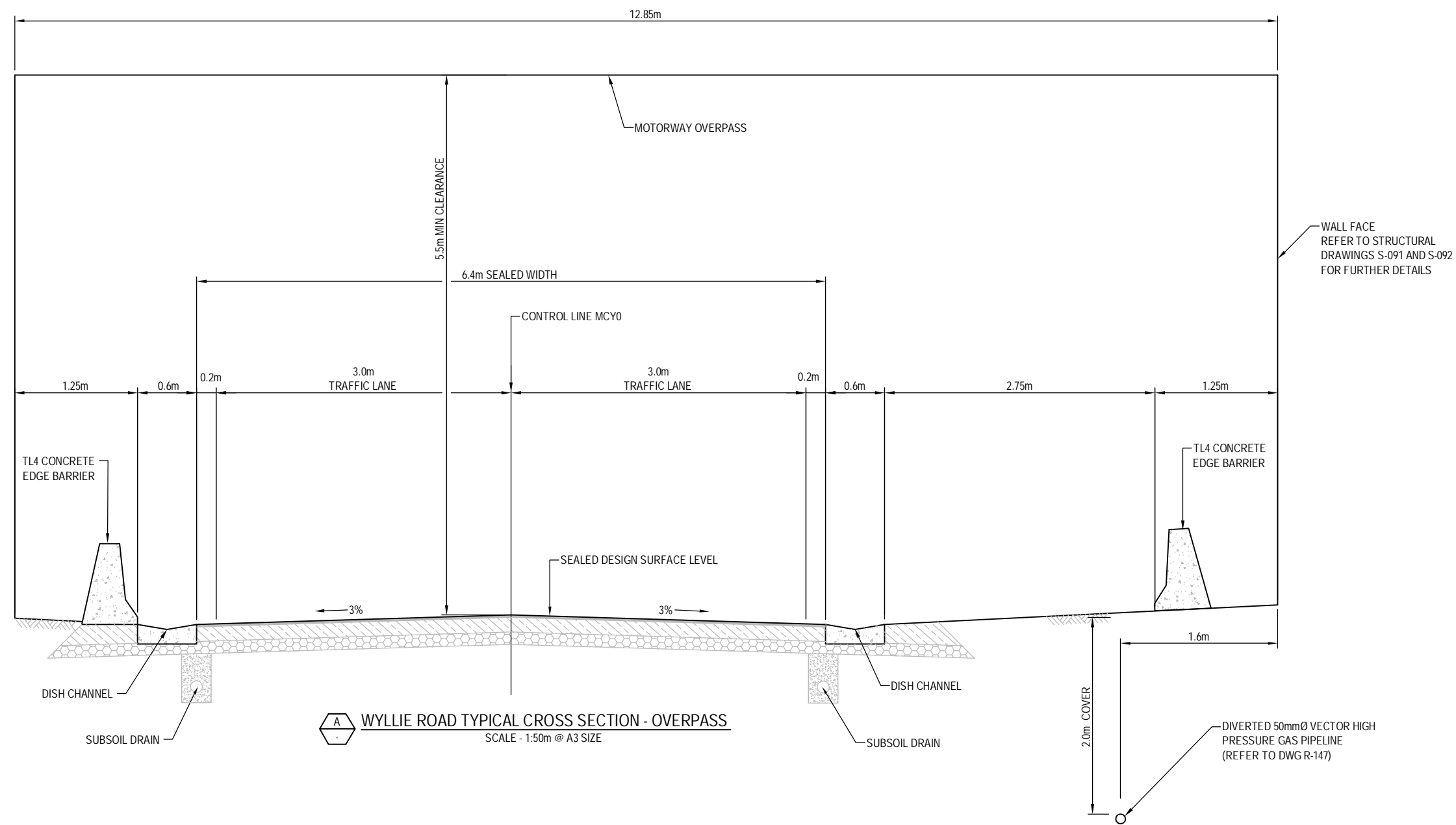


DISCLAIMER
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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

MOIRS HILL ROAD TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-224	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD Drawings\A-221_R-228.dwg Plot Date: 18 August, 2013 - 3:34 PM



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
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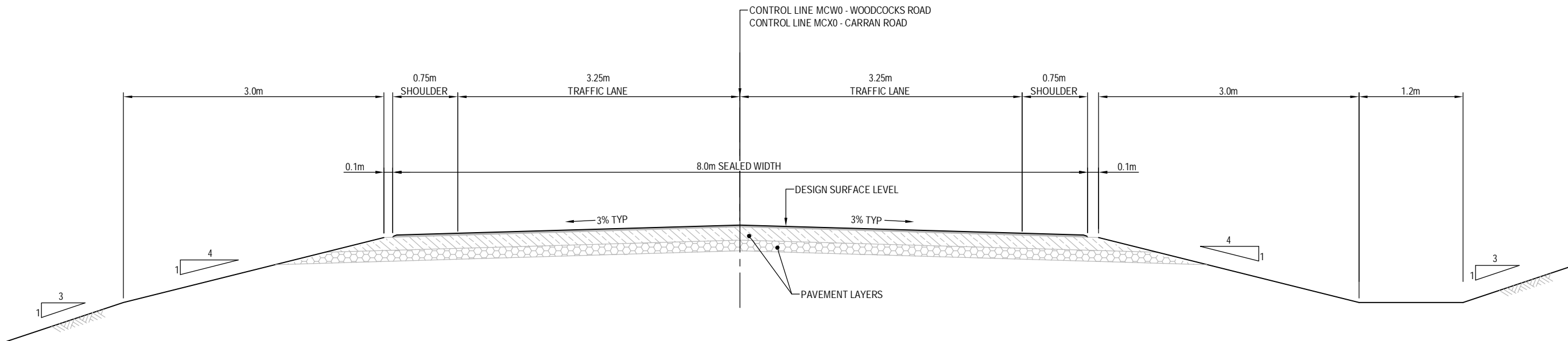


DISCLAIMER
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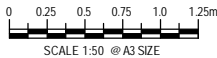
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

WYLLIE ROAD TYPICAL CROSS SECTION			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-225	AMDT 0

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WOODCOCKS ROAD & CARRAN ROAD - TYPICAL CROSS SECTION
SCALE - 1:50m @ A3 SIZE



0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT
AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT

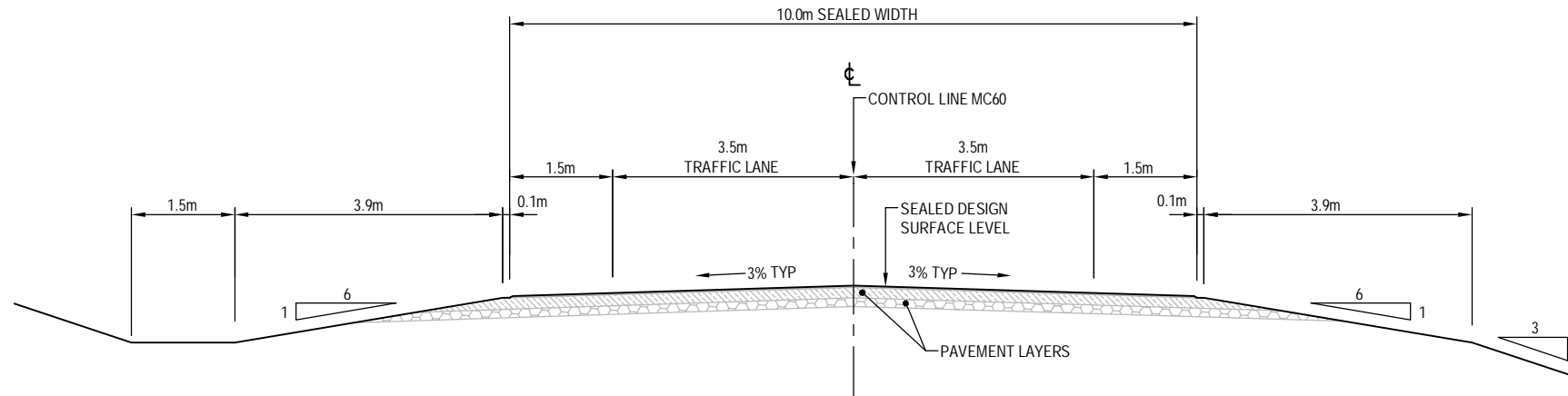


DISCLAIMER
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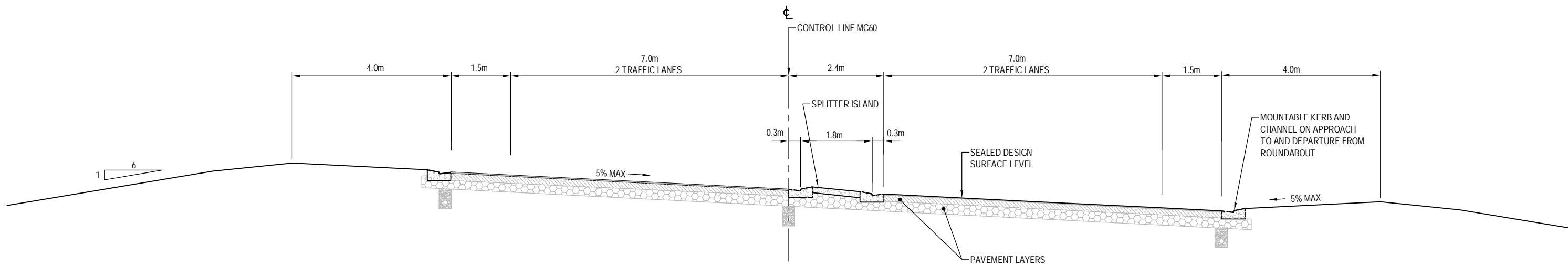
ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

WOODCOCKS ROAD / CARRAN ROAD TYPICAL CROSS SECTION			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-226	AMDT 0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CAAD Drawings\A-221_A-228.dwg Plot Date: 18 August, 2013 - 3:39 PM



A NORTHERN LINK TO WHANGAREI - TWO TRAFFIC LANES
SCALE - 1:100m @ A3 SIZE



B NORTHERN LINK TO WHANGAREI - FOUR TRAFFIC LANES
SCALE - 1:100m @ A3 SIZE



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT

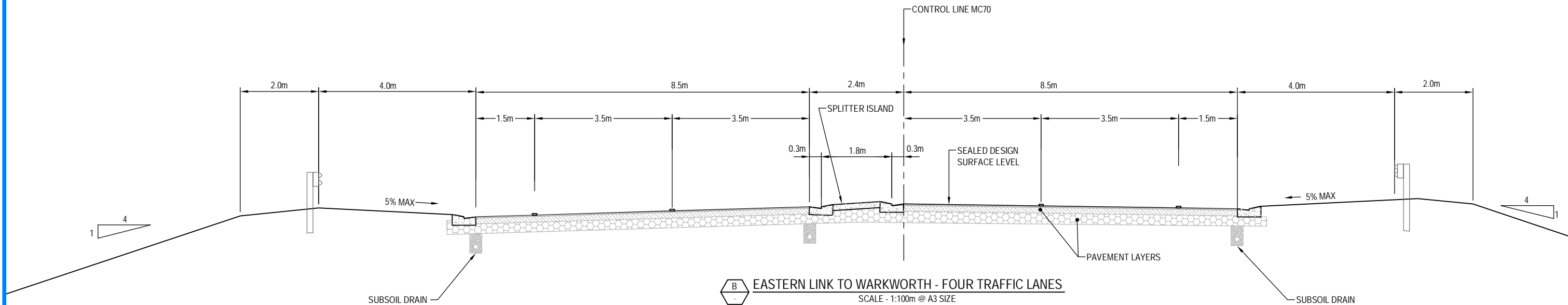
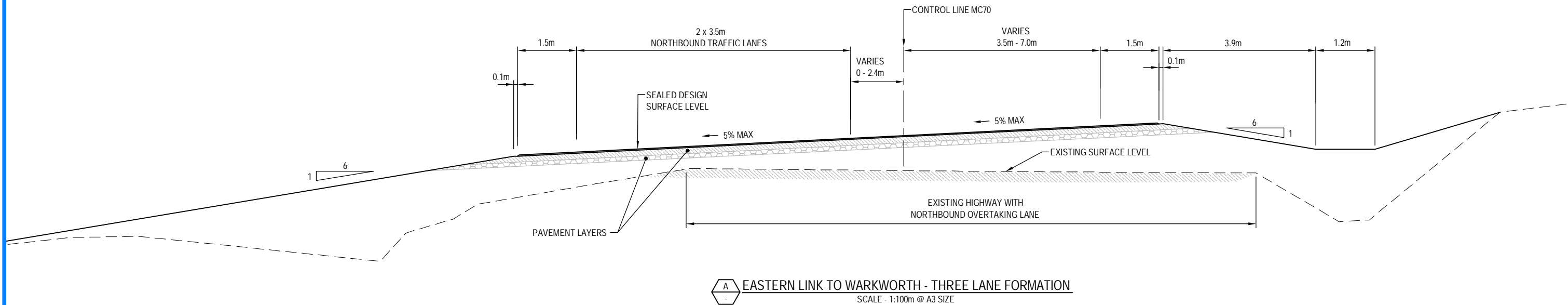


DISCLAIMER
The information shown on this drawing is solely for the purposes of supporting RMA applications for statutory approvals. All information shown is subject to review for compliance with approved consents and the outcomes of final design.

ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

NORTHERN LINK TO WHANGAREI TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-227	AMD 0

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0	30/08/13	RET	MRH	TI	ISSUE FOR NOR / CONSENT



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ARA TŪHONO - PŪHOI TO WELLSFORD			
PŪHOI TO WARKWORTH - FOR RMA APPROVALS			
DRAWN SP / AN	DRAFTING CHECK IH	REVIEWED DISCIPLINE MANAGER MRH	APPROVED ALLIANCE MANAGER TI
DESIGNED IH	DESIGN REVIEW RET		

EASTERN LINK TO WARKWORTH TYPICAL CROSS SECTIONS			
SCALE AS SHOWN	CONTRACT No PA3748	DRAWING No R-228	AMD 0