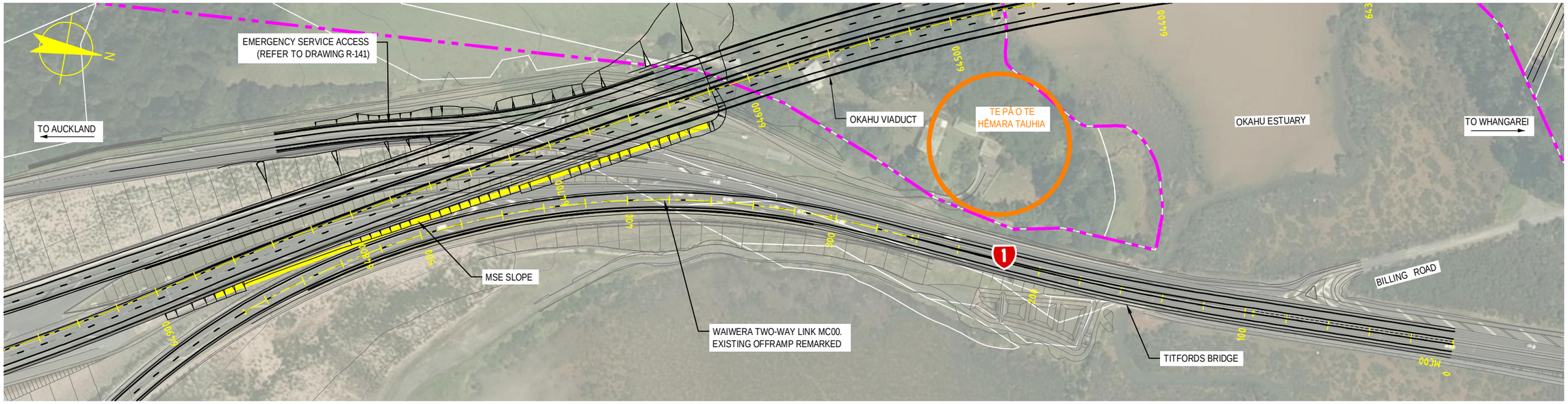
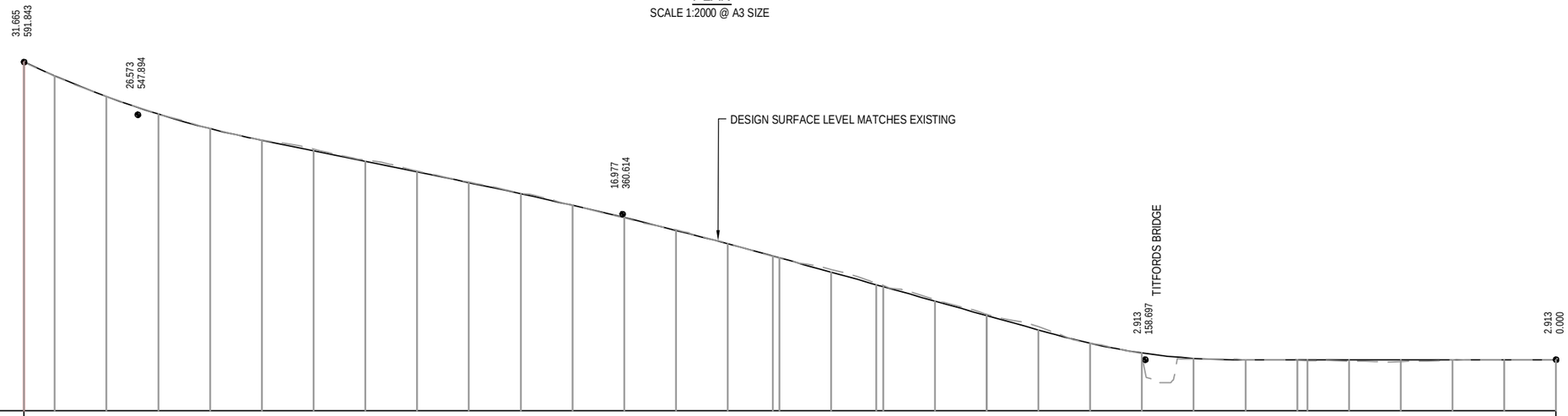


PLAN

SCALE 1:2000 @ A3 SIZE



DATUM= -2.000

DESIGN SURFACE LEVEL	31.665	30.344	28.348	26.646	25.238	24.119	23.094	22.069	21.044	20.018	18.950	17.825	16.643	15.404	14.107	12.754	11.362	9.969	8.576	7.183	5.790	4.488	3.565	3.043	2.913	2.913	2.913	2.913	2.913	2.913	2.913
EXISTING SURFACE LEVEL	31.665	30.307	28.352	26.644	25.249	24.130	23.255	22.215	21.145	20.066	18.977	17.815	16.598	15.464	14.145	12.724	11.629	10.092	8.706	7.307	6.096	4.520	3.488	2.971	2.902	2.856	2.784	2.725	2.904	2.898	2.913
CHAINAGE	591.843	580.000	560.000	540.000	520.000	500.000	480.000	460.000	440.000	420.000	400.000	380.000	360.000	340.000	320.000	302.583 300.000	280.000	262.583 260.000	240.000	220.088	200.000	180.000	160.000	140.000	120.000	100.000 96.088	80.000	60.000	40.000	20.000	0.000
HORIZONTAL DATA	R=-393.655 L=289.250																CL=40.000		D=42.560		R=1175.000 L=123.945						D=96.088				
VERTICAL DATA	K=13.601 L=87.897				P=5.124% L=78.884					K=-70.000 L=128.896								P=6.965% L=102.643					K=10.000 L=69.653				P=0.000% L=123.870			
SUPERELEVATION	4.00%																													
	4.00%																							3.00%		3.00%				

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

0 10 20 30 40 50m
SCALE 1:2,000 @ A3 SIZE

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

FURTHER NORTH

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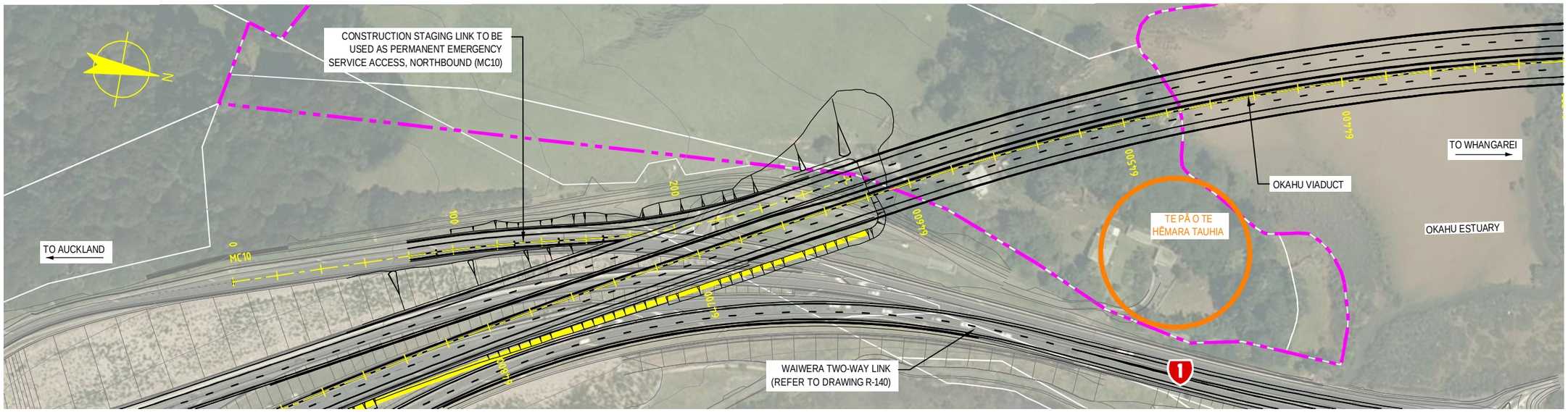
ARA TŪHONO - PŪHOI TO WELLSFORD
PŪHOI TO WARKWORTH - FOR RMA APPROVALS

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

WAIWERA TWO-WAY LINK MC00
PLAN AND LONGITUDINAL SECTION

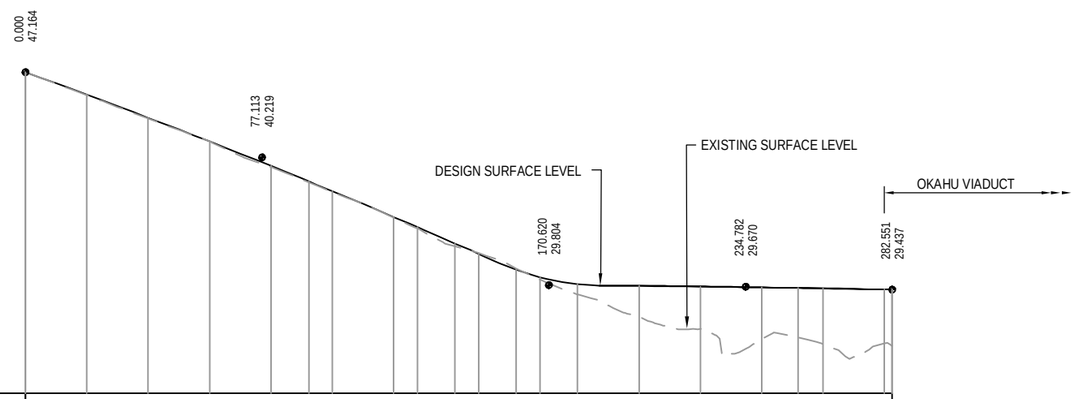
SCALE	CONTRACT No	DRAWING No	AMDT
AS SHOWN	PA3748	R-140	0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD\Drawings\R-140_R-141.dwg Plot Date: 18 August , 2013 - 3:02 PM



PLAN

SCALE 1:2000 @ A3 SIZE



DESIGN SURFACE LEVEL	47.164	45.335	43.451	41.511	39.517	37.467	35.361	33.201	31.042	29.866	29.740	29.685	29.618	29.539	29.449	29.437		
EXISTING SURFACE LEVEL	47.164	45.279	43.383	41.507	39.435	37.390	35.308	32.961	31.162	29.032	27.223	26.229	25.378	24.993	25.042	24.837		
CHAINAGE	0.000	20.000	40.000	60.000	80.000	92.361	100.000	120.000	127.697	140.000	147.697	160.000	167.697	180.000	200.000	220.000	240.000	251.871	260.000	280.000	282.551

HORIZONTAL DATA: D=92.361; R=500.000 L=35.335; CL=20.000; CL; R=-350.000 L=84.174; D=30.680

VERTICAL DATA: K=-72.348 L=154.227; K=3.000 L=32.787; K=-342.089 L=95.537

SUPERELEVATION: 3.00%; 3.00%

LONGITUDINAL SECTION ON CONTROL STRING MC10

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

0 10 20 30 40 50m
SCALE 1:2,000 @ 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

FURTHER NORTH

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ARA TŪHONO - PŪHOI TO WELLSFORD

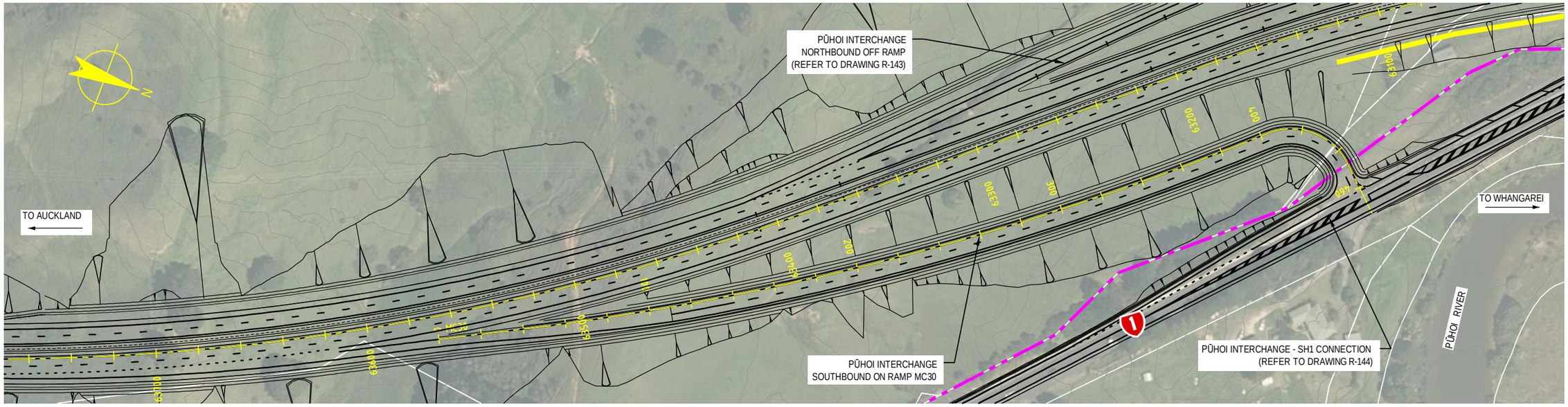
PŪHOI TO WARKWORTH - FOR RMA APPROVALS

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

JOHNSTONE'S HILL
EMERGENCY SERVICE ACCESS MC10
PLAN AND LONGITUDINAL SECTION

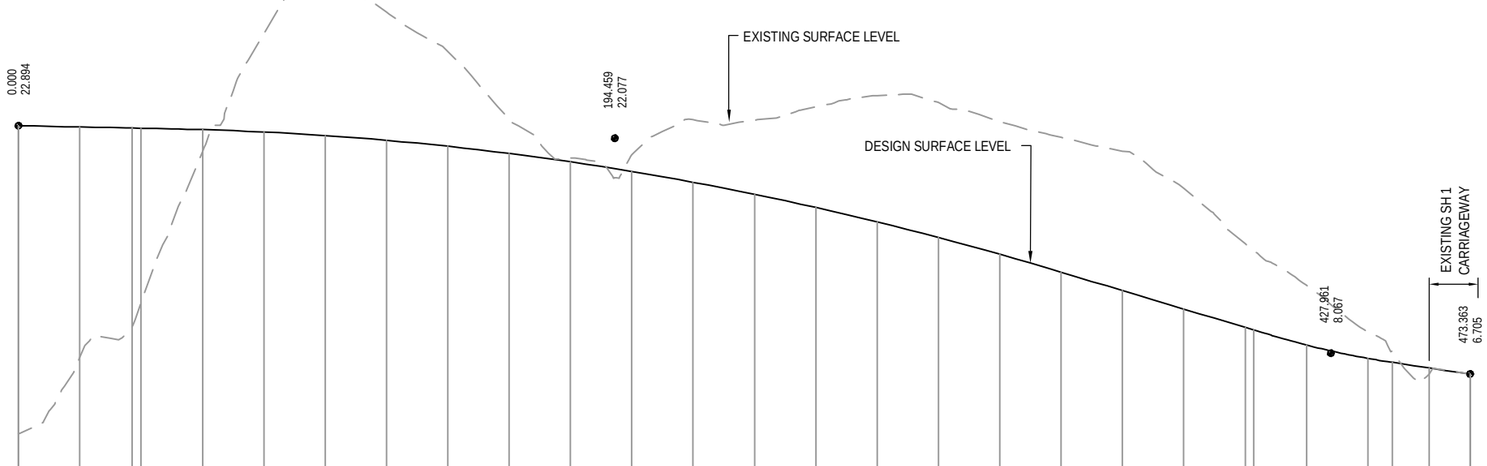
SCALE	CONTRACT No	DRAWING No	AMDT
AS SHOWN	PA3748	R-141	0

S:\Further North - PAA\300 Design\300.5 Technical\01-Drawing Production\CADD\Drawings\R-140_R-141.dwg Plot Date: 18 August , 2013 - 3:02 PM



PLAN

SCALE 1:2000 @ A3 SIZE



DATUM= 0.000

DESIGN SURFACE LEVEL	22.894	22.810	22.726	22.636	22.482	22.250	21.939	21.550	21.082	20.536	19.911	19.209	18.427	17.567	16.629	15.612	14.517	13.345	12.145	10.945	9.745	8.596	7.727	7.106	6.705
EXISTING SURFACE LEVEL	2.813	7.770	11.369	21.212	28.867	32.593	30.296	27.737	23.300	20.799	20.978	23.283	23.224	24.112	24.852	24.407	23.175	22.141	21.241	18.817	15.202	12.491	9.467	6.701	6.685
CHAINAGE	0.000	20.000	37.061 40.000	60.000	80.000	100.000	120.000	140.000	160.000	180.000	200.000	220.000	240.000	260.000	280.000	300.000	320.000	340.000	360.000	380.000	400.000 402.940	420.000	440.000	447.939	460.000	473.363

HORIZONTAL DATA: D=37.061; R=-1350.000 L=365.778; R=30.000 L=45.100; D=25.423

VERTICAL DATA: P=-0.420% L=52.169; K=-51.000 L=284.580; P=-6.000% L=71.712; K=13.000 L=39.000; L=25.902; P=-3.000%

SUPERELEVATION: 3.00%; 3.00%

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 10 20 30 40 50m
SCALE 1:2,000 @ 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

FURTHER NORTH

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ARA TŪHONO - PŪHOI TO WELLSFORD

PŪHOI TO WARKWORTH - FOR RMA APPROVALS

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

PŪHOI INTERCHANGE
SOUTHBOUND ON RAMP MC30
PLAN AND LONGITUDINAL SECTION

SCALE	CONTRACT No	DRAWING No	AMDT
AS SHOWN	PA3748	R-142	0

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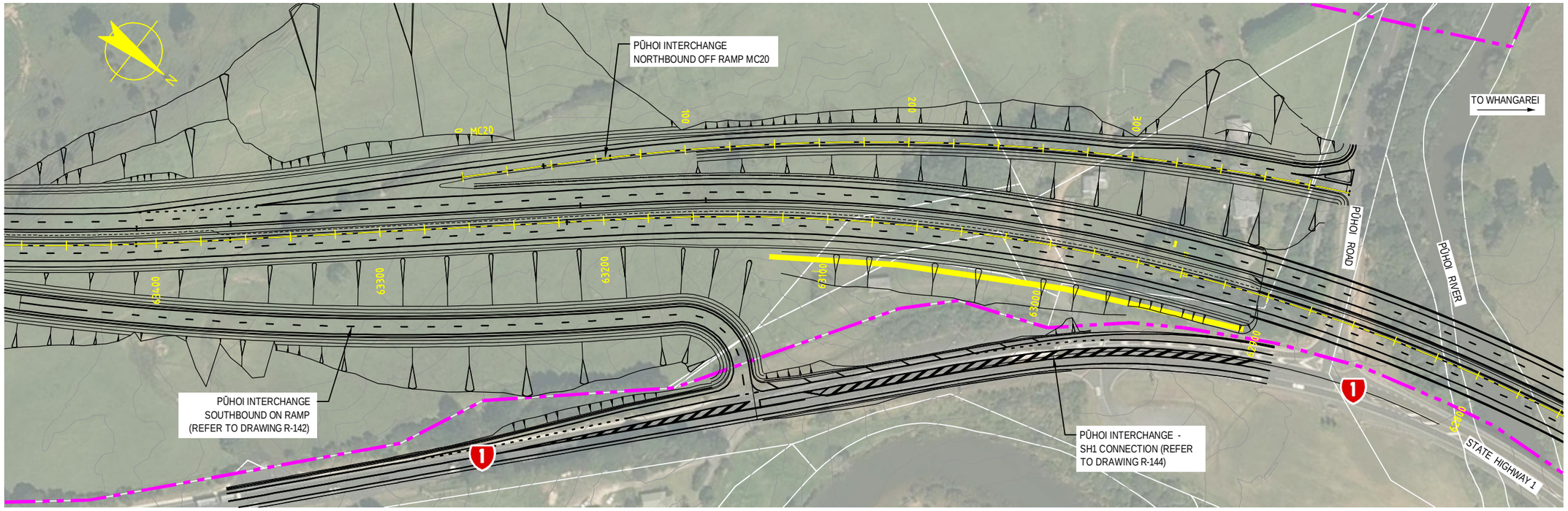
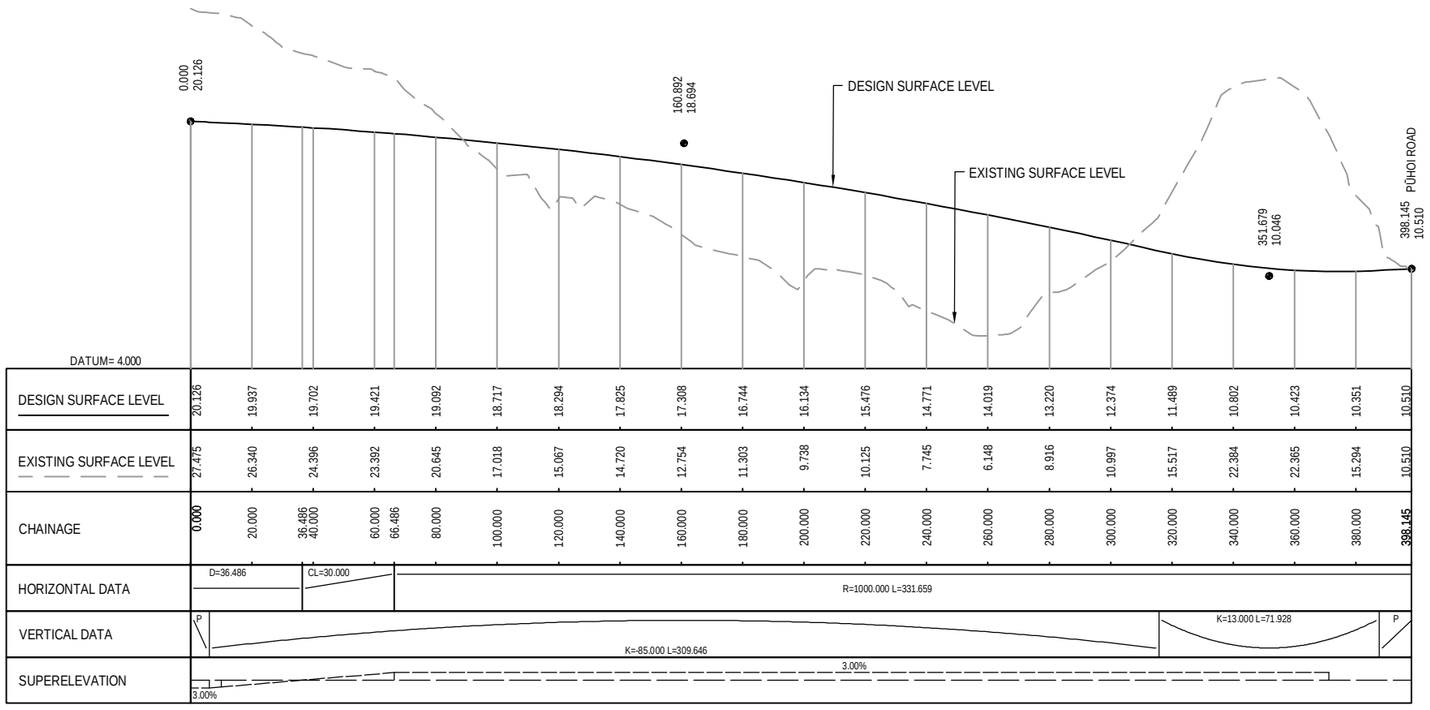


PLAN

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 10 20 30 40 50m
SCALE 1:2,000 @ 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

FURTHER NORTH

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ARA TŪHONO - PŪHOI TO WELLSFORD

PŪHOI TO WARKWORTH - FOR RMA APPROVALS

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

PŪHOI INTERCHANGE
NORTHBOUND OFF RAMP MC20
PLAN AND LONGITUDINAL SECTION

SCALE	CONTRACT No	DRAWING No	AMDT
AS SHOWN	PA3748	R-143	0

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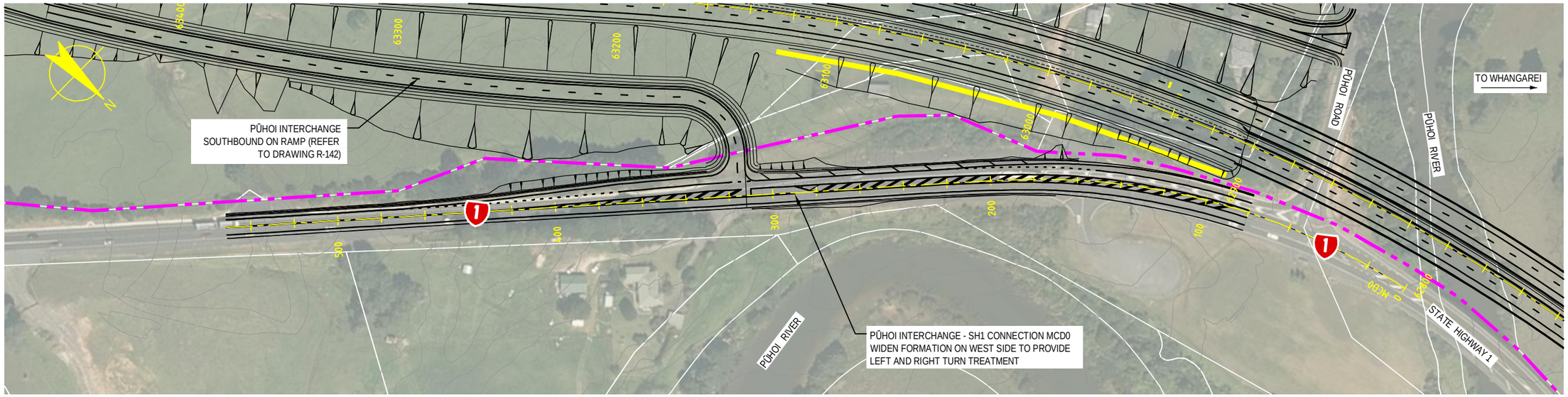
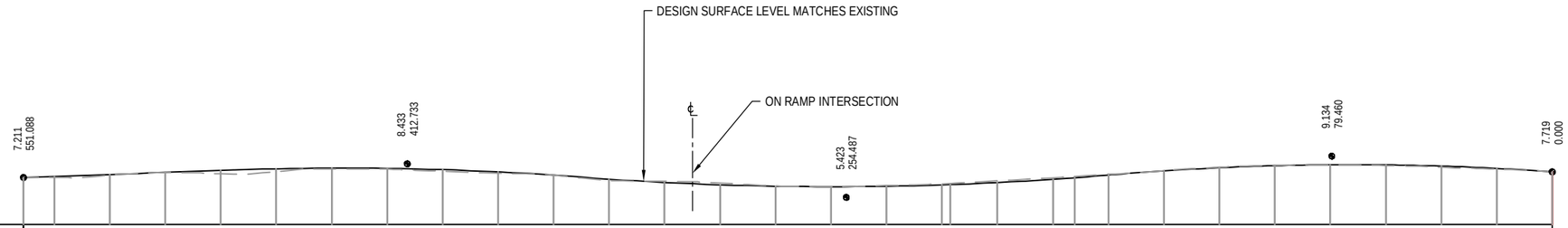


PLAN

SCALE 1:2000 @ A3 SIZE



DATUM= 3.000

DESIGN SURFACE LEVEL	7.211	7.309	7.486	7.662	7.839	7.989	8.053	8.028	7.914	7.711	7.419	7.061	6.765	6.553	6.425	6.382	6.422	6.547	6.756	7.049	7.427	7.807	8.089	8.272	8.358	8.346	8.235	8.026	7.719
EXISTING SURFACE LEVEL	7.211	7.212	7.426	7.685	7.549	7.739	7.971	7.961	7.770	7.605	7.419	6.913	6.860	6.712	6.443	6.379	6.483	6.636	6.911	7.192	7.497	7.827	8.135	8.313	8.358	8.291	8.132	7.974	7.719
CHAINAGE	551.088	540.000	520.000	500.000	480.000	460.000	440.000	420.000	400.000	380.000	360.000	340.000	320.000	300.000	280.000	260.000	240.000	220.000 217.079	200.000	180.000	172.079	160.000	140.000	120.000	100.000	80.000	60.000	40.000	20.000	0.000
HORIZONTAL DATA	D=334.009																	CL=45.000			R=-301.314 L=172.079									
VERTICAL DATA	P=-0.884% L=75.678				K=-45.000 L=125.355							K=47.521 L=191.136										K=-40.741 L=158.919								
SUPERELEVATION	4.46%																													

LONGITUDINAL SECTION ON CONTROL STRING MCD0

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

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

0 10 20 30 40 50m
SCALE 1:2,000 @ 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

FURTHER NORTH

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ARA TŪHONO - PŪHOI TO WELLSFORD

PŪHOI TO WARKWORTH - FOR RMA APPROVALS

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

PŪHOI INTERCHANGE
STATE HIGHWAY 1 CONNECTION MCD0
PLAN AND LONGITUDINAL SECTION

SCALE	CONTRACT No	DRAWING No	AMDT
AS SHOWN	PA3748	R-144	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