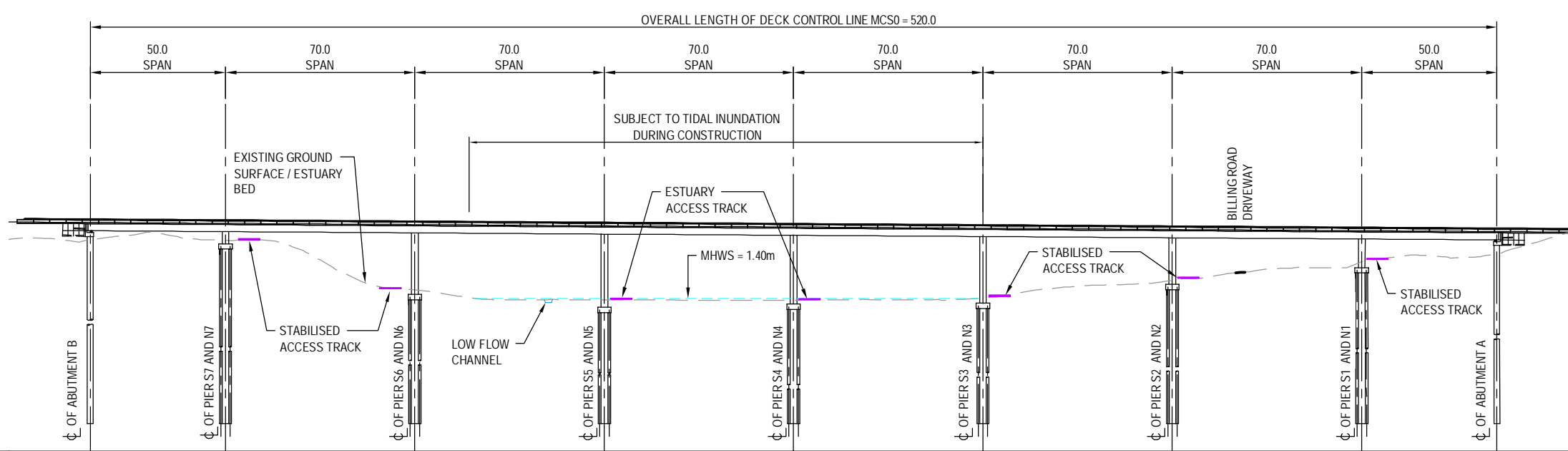


PLAN

SCALE 1:2000 @ A3 SIZE

KEY

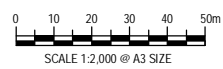
- STABILISED ACCESS TRACK (ON GROUND OUTSIDE TIDAL EXTENTS)
- ESTUARY ACCESS TRACK. REFER TO DWG ES-072 FOR DETAILS
- LOW LEVEL CHANNEL
- TEMPORARY BAILEY BRIDGE OVER EXISTING CHANNEL MIN 0.5m ABOVE MHWS
- CIS INDICATIVE LOCATIONS
- TEMPORARY PUMP TO DISCHARGE TO CHEMICALLY TREATED DEB OR CIS FOR EACH EXCAVATION



- NOTES**
- FOR GENERAL ARRANGEMENT OF STRUCTURE, REFER TO DRAWING S-021.
 - FOR GENERAL NOTES AND LEGEND REFER TO DRAWING ES-001

DESIGN SURFACE LEVEL	29.523	29.393	29.264	29.134	29.004	28.875	28.745	28.615	28.486	28.356	28.226	28.097	27.967	27.837	27.708	27.578	27.448	27.319	27.189	27.059	26.930	26.800	26.670	26.541	26.411	26.282	26.152	26.022	25.893	25.763	25.633	25.504	25.374									
EXISTING SURFACE LEVEL	23.638	22.932	25.612	23.148	23.332	18.284	7.827	4.474	1.694	0.855	0.768	0.867	0.697	0.697	0.707	0.858	0.790	0.865	2.746	5.475	6.434	8.046	10.430	12.535	12.609	16.370	16.770	17.746	23.751	28.294	30.184	31.518	34.979									
CHAINAGE	-64640.000	-64624.422	-64620.000	-64600.000	-64582.422	-64580.000	-64570.000	-64560.000	-64540.000	-64520.000	-64500.000	-64480.000	-64460.000	-64440.000	-64430.000	-64420.000	-64400.000	-64380.000	-64360.000	-64340.000	-64320.000	-64300.000	-64290.000	-64280.000	-64260.000	-64240.000	-64220.000	-64200.000	-64180.000	-64160.000	-64155.975	-64150.000	-64140.000	-64120.000	-64113.975	-64100.000	-64080.000	-64071.975	-64060.000	-64040.000	-64020.000	-64000.000

LONGITUDINAL SECTION ON CONTROL STRING MCS0
 HORIZONTAL SCALE 1:2000 @ A3
 VERTICAL SCALE 1:2000 @ A3



S:\Further North - PAA\330 Design\330 5 Technical\01-Drawing Production\CADD Drawings\ES-071_ES-072.dwg Plot Date: 20 August, 2013 - 2:23 PM

AMT	DATE	DESIGN REVIEW	REVD. D. MGR.	APPD. A. MGR.	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	GR	MW	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.

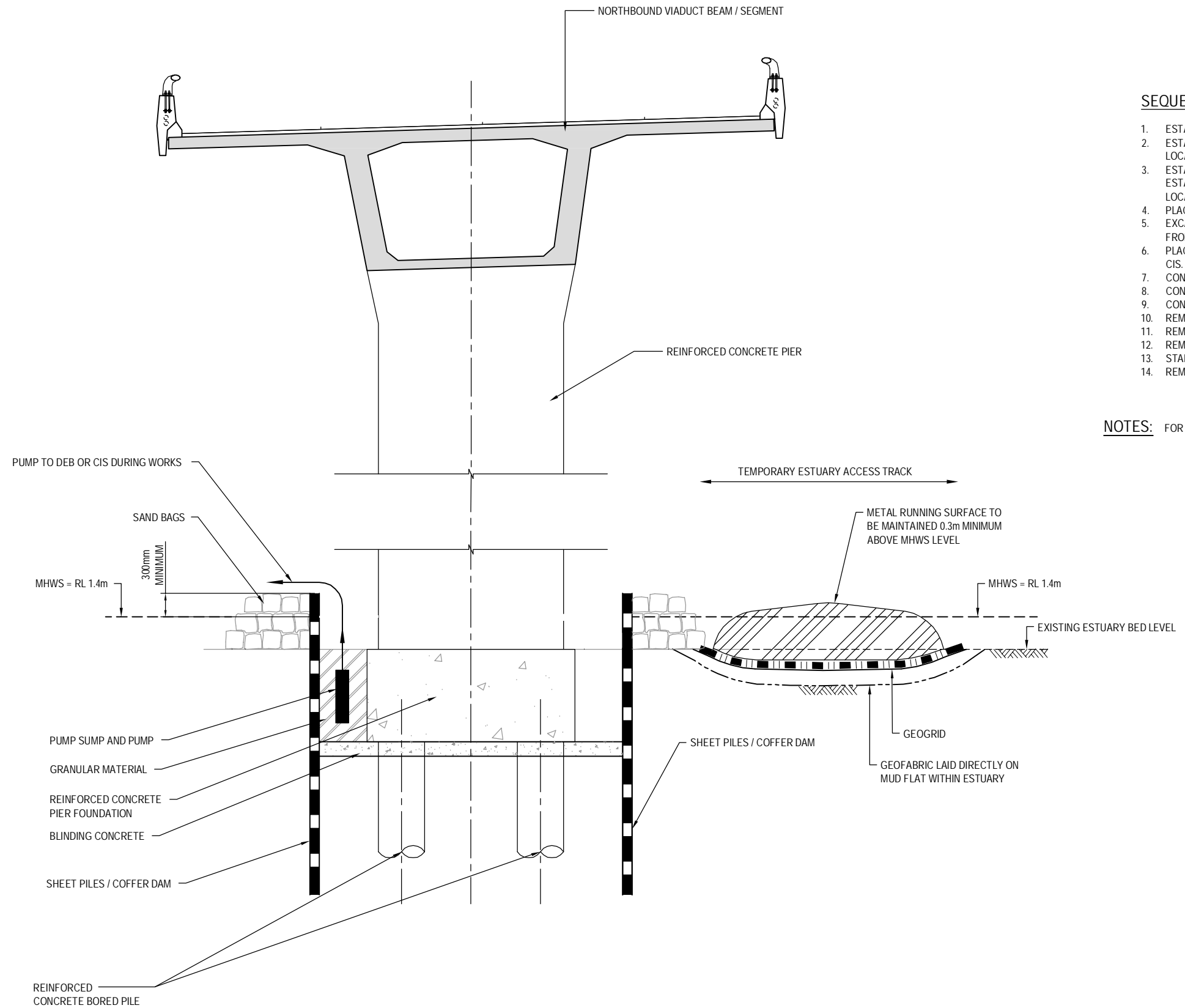
ARA TŪHONO - PŪHOI TO WELLSFORD
 PŪHOI TO WARKWORTH - FOR RMA APPROVALS

DRAWN: SP / AN	DRAFTING CHECK: TC	REVIEWED DISCIPLINE MANAGER: MW	APPROVED ALLIANCE MANAGER: TI
DESIGNED: TC	DESIGN REVIEW: GR		

CONSTRUCTION WATER MANAGEMENT CONCEPT PLAN - OKAHU VIADUCT METHODOLOGY SHEET 1 OF 2

SCALE: AS SHOWN	CONTRACT No: PA3748	DRAWING No: ES-071	AMT: 0
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S:\Further North - PA3300 Design\3005 Technical\01-Drawing Production\CADD Drawings\ES-071_ES-072.dwg Plot Date: 20 August, 2013 - 5:17 PM



SEQUENCE

1. ESTABLISH EROSION AND SEDIMENT CONTROL (NOT SHOWN).
2. ESTABLISH TEMPORARY STABILISED ACCESS TRACK TO PIER LOCATIONS SEQUENTIALLY FROM NORTH SIDE OF ESTUARY.
3. ESTABLISH STREAM CROSSING - BAILEY BRIDGE AND ESTABLISH TEMPORARY ESTUARY ACCESS TRACK TO PIER LOCATIONS WITHIN TIDAL EXTENTS SEQUENTIALLY.
4. PLACE SHEET PILE COFFER DAM AND SAND BAGS.
5. EXCAVATE INSIDE THE COFFER DAM, SPOIL TO BE REMOVED FROM SITE TO TIP.
6. PLACE PUMP AND PUMP WATER FROM EXCAVATION TO DEB OR CIS.
7. CONSTRUCT REINFORCED CONCRETE PILES.
8. CONSTRUCT REINFORCED CONCRETE PIER FOUNDATION.
9. CONSTRUCT REINFORCED CONCRETE PIERS.
10. REMOVE PUMP.
11. REMOVE COFFER DAM.
12. REMOVE ALL TEMPORARY ACCESS TRACKS.
13. STABILISE DISTURBED EARTHS.
14. REMOVE ESC ONCE THE AREA IS STABILISED.

NOTES: FOR GENERAL NOTES AND LEGEND REFER TO DRAWING ES-001

A OKAHU VIADUCT - CONCEPTUAL PIER AND FOUNDATION CONSTRUCTION
ES-071 SCALE 1:100 @ A3 SIZE



AMD	DATE	DESIGN REVIEW	REVD D. MGR	APPD A. MGR	PURPOSE OF ISSUE / AMENDMENT
0	30/08/13	GR	MW	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 TC	REVIEWED DISCIPLINE MANAGER MW	APPROVED ALLIANCE MANAGER TI
DESIGNED TC	DESIGN REVIEW GR		

CONSTRUCTION WATER MANAGEMENT CONCEPT PLAN - OKAHU VIADUCT METHODOLOGY SHEET 2 OF 2			
SCALE AS SHOWN	CONTRACT No. PA3748	DRAWING No. ES-072	AMDT 0