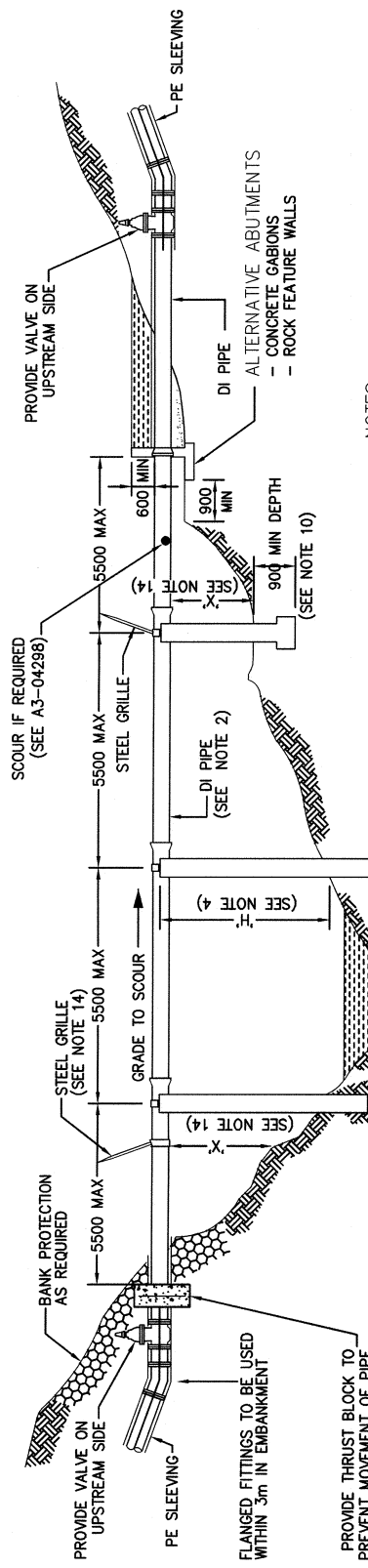




NOTES:

1. ALL DIMENSIONS IN MILLIMETRES.
2. DI PIPE (P315) REQUIRED FOR EXPOSED SECTIONS. SCL PIPE WITH RRI MAY BE USED AS AN ALTERNATIVE.
3. MINIMUM SIZE OF PIPE AS AQUEDUCT SHALL BE DN 150.
4. MAXIMUM HEIGHT "H" OF CONCRETE PIER:
- IN FLOOD CONDITIONS, SEE TABLE FOR MAXIMUM HEIGHT.
- IN NO FLOOD CONDITIONS, 5 000 MAX.
- WHERE AQUEDUCT NEEDS TO BE HIGHER, SPECIFIC DESIGN CALCULATIONS TO BE CARRIED OUT.
5. CONCRETE TO BE CLASS S25.
6. REINFORCEMENT DETAILS TO BE AS SPECIFIED IN DESIGN DRAWINGS. COVER TO REINFORCEMENT 65 MIN.
7. STRAPS TO BE GRADE 316 STAINLESS STEEL. PLACE 3 THICK x 100 WIDE EPDM RUBBER INSERTION AROUND PIPE TO PROTECT PIPE FROM DAMAGE BY CONCRETE OR STRAP.
8. UNLESS OTHERWISE SPECIFIED IN DESIGN DRAWINGS, NO ADDITIONAL PROTECTION/COATING TO BE PROVIDED EXCEPT TO MAKE AQUEDUCT PIPES MORE ENVIRONMENTALLY ACCEPTABLE.
9. CYLINDRICAL PIERS (ø 600 MIN) OR EQUIVALENT ARE AN ACCEPTABLE ALTERNATIVE.
10. DEPTH OF PIERS IN SOIL TO BE SPECIFIED IN THE DESIGN DRAWINGS, BUT NOT LESS THAN 900.
11. TYPE AND SIZE OF PIER TO BE SPECIFIED IN DESIGN DRAWINGS.
12. PIERS WITHOUT FOOTINGS TO BE CONSTRUCTED IN ACCORDANCE WITH METHODS SPECIFIED IN DESIGN DRAWINGS.
13. ASSEMBLE JOINTS WITH SPIGOT END WITHDRAWN 5 TO 10 FROM BACK OF SOCKET TO ACCOMMODATE EXPANSION AND CONTRACTION RESULTING FROM TEMPERATURE FLUCTUATIONS.
14. PROVIDE STEEL GRILLES WHERE THE VERTICAL DISTANCE "X" EXCEEDS 1800. GRILLE TO BE CLAMPED ON TIGHTLY TO PREVENT MOVEMENT. SEE A3-04302.

TYPICAL (DI) AQUEDUCT

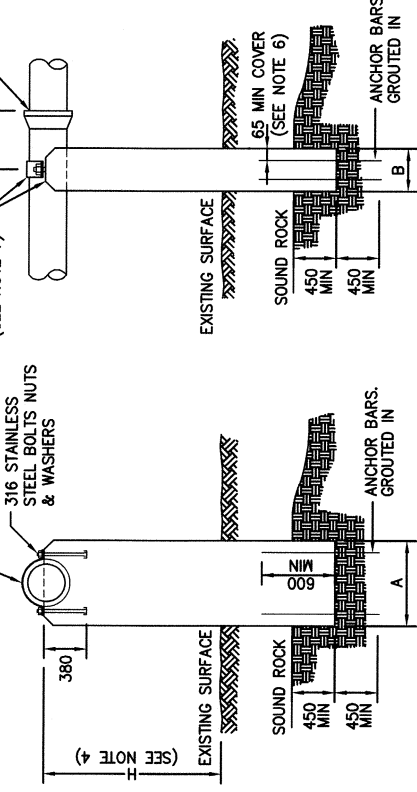
PIERS NOT TO BE PLACED IN DRY WEATHER FLOW CHANNELS

STRAPS 3 THICK x 100 WIDE MIN FORMED TO SUIT. (SEE NOTE 7)

STRAPS AND EPDM RUBBER RING JOINT (SEE NOTE 13)

316 STAINLESS STEEL BOLTS NUTS & WASHERS

DIMENSIONS FOR PIERS (SEE NOTES 4 & 9)			
NOMINAL SIZE DN	PIER		HEIGHT "H" MAX
	A	B	
150	450	300	2700
200	600	300	2100
250	600	300	2100
300	750	300	1800
375	750	450	1800
450	915	450	1800
500	915	450	1800
600	1070	450	1800
750	1200	450	1800



DETAIL OF CONCRETE PIER
(SEE NOTE 9)

MRC STANDARD DRAWINGS SUPERCEDES WSAA STANDARD DRAWINGS

C 5/5		AMEND MRC STAN.	JC	DRAWING FILE NAME M:\Engineering Services\Technical Services\Design\Projects\Standard drawings\Mackay Water\WSAA MRC\WAT CODE\A3-04301B		COMMERCIAL SERVICES		Mackay REGIONAL COUNCIL	
B	MAY08	MODIFIED TO MRC STD	SLR	SURVEY N/A	WSAA NO. WAT-1310	EXECUTIVE MANAGER MACKAY WATER & WASTE RPEQ 7506		STANDARD DRAWINGS AERIAL CROSSINGS	
A	OCT07	T'SFER TO MRC TBLOCK	SLR	DATE OF LAST EDIT May 21, 2009	WATER SERVICES ASSOCIATION of Australia	JASON DEVITT 22 MAY09 DATE		AQUEDUCT	
0		WSAA ORIG.		LEVEL DATUM A.H.D.				WATER MAINS	
NO.	DATE	DESCRIPTION	APPVD.	MERIDIAN	MGA-55	JOB No		SHEET 1 OF 1	