Ľ	AND SEWERAGE DESIGN AN					November 2013				
		C Manufacturer / Supplier	D Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	QUU	K Unitywater
odu eed imn	Requirements WSAA Product Specifications are available from w cts may be sourced from alternative Suppliers than to be read in conjunction with the relevant clauses a under the service provider's names cells that are be by SP'. Contact the service provider to determine	those listed provided that the pr of the SEQ versions of the WSA blank indicate that the product list	oducts are manufactured A Codes (e.g. Water Sup sted on that row are acce	by a Manufacturer whose oply Code Clause 3.1.1; Se ptable to the service provid	Project Specific Requirements". The name, and the products' trade name, ewerage Code Clause 10.6; Pressure	appear on the list.				
N	RAGE PIPES AND FITTING	GS - NON PRESS	URE			1				1
	230 4.1 - Plain Wall 4.2 - Elastomeric Seal 4.3 - Stiffness as per 230.2.(c) or as required by SP 4.3 - RRJ @ SBR & EPDM	lplex Vinidex Tyco Promains	DWV PIPE DWV SEWER D-FLO Micron Pipelines	DN 100 150 225 300 375 DN 100 - DN 300	Plain wall only accepted	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	Use is subject to acceptance by SP	DN100 at SN10, DN150 and larger at SN and Fittings at SN8 minimum
ər	211 4.1 - PN12 4.2 - Deep Sewers or Minimum Cover 4.3 - Standard Packaging & Delivery 4.4 - Series 1 4.5 - RRJ @ SBR & EPDM	lplex Vinidex Tyco		DN 150 225 300		Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP	Mandatory for sewers deeper than 3 metre and for sewers with minimum cover All details to be confirmed with SP
	240 4.1 - Type B - ID Series 4.2 - SN10,000 4.3 - RRJ @ SBR & EPDM	Vinidex Iplex	SewerPRO SewerMAX	DN 150 - 900 DN 225 - 600					NOT ACCEPTED BY SP	
	207 4.1 - Minimum PN8 SDR21 PE100 4.2 - Gravity Sewer fully welded 4.3 - Pipes lengths for DN160 and larger with coils accepted for DN110 4.4 - External colour light grey Solid or Striped with Internal colour white or light colour, see POP203 4.5 - PE100 only	lplex Vinidex PPI Tyco Poly Pipe	POLIplex Sewertech Hi-Vis SewerFlex	DN 110 160 250 315 400 500 630 800 1000 1200		NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	PE is mandatory pipe for reticulation sewers, PE is preferred pipe for larger sewers	
	208 4.1 - PN10 preferred 4.2 - Electrofusion - long socket type 4.3 - Couplings, Saddles, Adaptors, Elbows, Fabricated Sediment Trap and Sweep Junctions 4.4 - Bolting Flanges not required. 4.5 - Elastomeric Seals not permitted And Electrofusion fitting Standards AS4129, EN1519-1, EN12201, EN13244-4	George Fischer Philmac Plasson Iplex Vinidex	Lightfit			NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
	208 Refer above and Hydrophilic seals both sides of puddle flange	Vinidex Iplex				NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
	231 4.1 - DN100/150 Crushing Strength 34, DN225 and larger Class 160 4.2 - Sp-Soc and Sleeve Coupling 4.3 - All seal materials accepted	Hepworth Steinzeug Keramo Naylor/Rocla	Supersleeve Keramo Denlok	DN 100-1200					Use is subject to acceptance by SP May only be used as jacking pipes	Use is subject to acceptance by SP
g	201 4.1 - Sp-Soc ends to serve PVC-U DWV pipe 4.2 - Refer Standard drawings 4.3 - Standard RRJ for accept PVC-U DWV pipe 4.4 - SBR & EPDM	Bundaberg Metal Ind. NIBF Tyco							Use is subject to acceptance by SP	NOT ACCEPTED BY SP
ling	235 4.1 - Need for adaptor bushes where difference between OD of pipe and ID of coupling greater than 16mm 4.2 - Metal band and bolts shall be min SS316	Flex-Seal	Flex-Seal	Up to DN600						
Non	270 4.1 - PN16 4.2 - All pipe materials except PE 4.3 - Long Series 4.4 - Straight Soc-Soc 4.5 - Stepped coupling require SP approval 4.6 - Flange end not used 4.7 - SBR & EPDM And SS316 bolts, nuts and washers	Tyco Crevet AVK Viking Johnson Derwent Promains	Gibault Ezigib & Varigib Gibault & Universal Gibault & Universal MaxiFit, QuickFit DEKS FLEXI-GIB	DN 80 to 600					Use of DEKS FLEXI-GIB is subject to acceptance by SP	
	233 4.1 - Class 4 4.2 - Bends not permitted 4.3 - In corrosive soils coat external face with 250 micron DFT High Build Epoxy 4.4 - Lifting holes not permitted 4.5 - 2.0mm PE sheet Factory cast-in liner with Invert overlapped but not welded 4.6 - No additional cover 4.7 - SBR & EPDM	Rocla Humes							Use is subject to acceptance by SP	Use is subject to acceptance by SP
_	No WSA-PS 4.1 - Class to suit design 4.2 - Bends not permitted 4.3 - Compliance with ASTM D 6783, DIN 54815- 1 and DIN 54815-2 4.4 - SBR and EPDM Sewer Pipe and Jacking Pipe approved	lplex Global Pipe	Meyer pipe Al Watani	DN 200 to 2600					Use is subject to acceptance by SP	Use is subject to acceptance by SP Coupling Grade 316 Stainless Steel (min.
	2055 4.1 - PN1 4.2 - SN10,000 minimum 4.3 - Bends Tupiere Y-niere Saddles	lplex Global Pipe Promains	Flowtite HOBAS Superlit	DN 300 - 2400 DN 300 - DN 3000	Sewer Pipe	Use is subject to acceptance by SP	Use is subject to acceptance by SP Flowtite - open cut only			
	4.3 - Bends, T-piece, Y-piece, Saddles, Reducers, Flanges and MH Couplings 4.4 - Soc-Sp RRJ 4.5 - Standard Glass 4.6 - SBR & EPDM	Global Pipe Promains	Hobas Superlit	DN up to 3000 DN 400 - DN 1400	Jacking pipes	Use is subject to acceptance by SP	Use is subject to acceptance by SP Hobas - Coupling Grade 316 Stainless Steel (min.) for Pipe Jacking			

Q WATER SUPP	PLY AND SEWERAGE DESIGN AN	ND CONSTRUCTION				November 2013				PRODUCTS AND MATERIA
Product	B WSAA Product Specification No. with Service Provider Specific	C Manufacturer / Supplier	D Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	QUU	K Unitywater
Manufacturer/Supplier Pr Size Range Size ranges n Blank Cells In the five col	Requirements ttion WSAA Product Specifications are available from v roducts may be sourced from alternative Suppliers than need to be read in conjunction with the relevant clauses lumns under the service provider's names cells that are tance by SP ² . Contact the service provider to determine	those listed provided that the pro- of the SEQ versions of the WS/ blank indicate that the product li	roducts are manufactured AA Codes (e.g. Water Sup isted on that row are acce	d by a Manufacturer whose pply Code Clause 3.1.1; Se eptable to the service provid	Project Specific Requirements". The name, and the products' trade name ewerage Code Clause 10.6; Pressure	, appear on the list.				
Category: SE	WERAGE PIPES AND FITTING	GS - NON PRESS	URE			1		1	1	1
PVC-U pipe and fittings - DWV system	230 4.1 - Plain Wall 4.2 - Elastomeric Seal 4.3 - Stiffness as per 230.2.(c) or as required by SP 4.3 - RRJ @ SBR & EPDM	lplex Vinidex Tyco Promains	DWV PIPE DWV SEWER D-FLO Micron Pipelines	DN 100 150 225 300 375 DN 100 - DN 300	Plain wall only accepted	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	DN100 at SN6 minimum, DN150 and larger at SN8 and Moulded Fittings at SN6 minimum	Use is subject to acceptance by SP	DN100 at SN10, DN150 and larger at SN8 and Fittings at SN8 minimum
PVC-U Pressure pipe Sew using Std DWV Junctions		lplex Vinidex Tyco		DN 150 225 300		Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP	Mandatory for sewers deeper than 3 metre and for sewers with minimum cover All details to be confirmed with SP
Polypropylene (PP) pipe	240 4.1 - Type B - ID Series 4.2 - SN10,000 4.3 - RRJ @ SBR & EPDM	Vinidex Iplex	SewerPRO SewerMAX	DN 150 - 900 DN 225 - 600					NOT ACCEPTED BY SP	
PE pipe - NuSewers	207 4.1 - Minimum PN8 SDR21 PE100 4.2 - Gravity Sewer fully welded 4.3 - Pipes lengths for DN160 and larger with coils accepted for DN110 4.4 - External colour light grey Solid or Striped with Internal colour white or light colour, see POP203 4.5 - PE100 only	lplex Vinidex PPI Tyco Poly Pipe	POLiplex Sewertech Hi-Vis SewerFlex	DN 110 160 250 315 400 500 630 800 1000 1200		NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	PE is mandatory pipe for reticulation sewers, PE is preferred pipe for larger sewers	
PE fittings	208 4.1 - PN10 preferred 4.2 - Electrofusion - long socket type 4.3 - Couplings, Saddles, Adaptors, Elbows, Fabricated Sediment Trap and Sweep Junctions 4.4 - Bolting Flanges not required. 4.5 - Elastomeric Seals not permitted And Electrofusion fitting Standards AS4129, EN1519-1, EN12201, EN13244-4	George Fischer Philmac Plasson Iplex Vinidex	Lightfit			NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
PE MH connectors	208 Refer above and Hydrophilic seals both sides of puddle flange	Vinidex Iplex				NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
VC pipe	231 4.1 - DN100/150 Crushing Strength 34, DN225 and larger Class 160 4.2 - Sp-Soc and Sleeve Coupling 4.3 - All seal materials accepted	Hepworth Steinzeug Keramo Naylor/Rocla	Supersleeve Keramo Denlok	DN 100-1200					Use is subject to acceptance by SP May only be used as jacking pipes	Use is subject to acceptance by SP
DI IO bends or X Drop fitti	201 4.1 - Sp-Soc ends to serve PVC-U DWV pipe 4.2 - Refer Standard drawings 4.3 - Standard RRJ for accept PVC-U DWV pipe 4.4 - SBR & EPDM	Bundaberg Metal Ind. NIBF Tyco							Use is subject to acceptance by SP	NOT ACCEPTED BY SP
Metal-banded flexible cou	235 4.1 - Need for adaptor bushes where difference between OD of pipe and ID of coupling greater than 16mm 4.2 - Metal band and bolts shall be min SS316	Flex-Seal	Flex-Seal	Up to DN600						
DI mechanical couplings - End Thrust Restraint	270 4.1 - PN16 4.2 - All pipe materials except PE 4.3 - Long Series 4.4 - Straight Soc-Soc 4.5 - Stepped coupling require SP approval 4.6 - Flange end not used 4.7 - SBR & EPDM And SS316 bolts, nuts and washers	Tyco Crevet AVK Viking Johnson Derwent Promains	Gibault Ezigib & Varigib Gibault & Universal Gibault & Universal MaxiFit, QuickFit DEKS FLEXI-GIB	DN 80 to 600					Use of DEKS FLEXI-GIB is subject to acceptance by SP	
Reinforced Concrete pipe	233 4.1 - Class 4 4.2 - Bends not permitted 4.3 - In corrosive soils coat external face with 250 micron DFT High Build Epoxy 4.4 - Lifting holes not permitted 4.5 - 2.0mm PE sheet Factory cast-in liner with Invert overlapped but not welded 4.6 - No additional cover 4.7 - SBR & EPDM	Rocla Humes							Use is subject to acceptance by SP	Use is subject to acceptance by SP
Polycrete pipe	No WSA-PS 4.1 - Class to suit design 4.2 - Bends not permitted 4.3 - Compliance with ASTM D 6783, DIN 54815-1 1 and DIN 54815-2 4.4 - SBR and EPDM Sewer Pipe and Jacking Pipe approved	lplex Global Pipe	Meyer pipe Al Watani	DN 200 to 2600					Use is subject to acceptance by SP	Use is subject to acceptance by SP Coupling Grade 316 Stainless Steel (min.
	2055 4.1 - PN1 4.2 - SN10,000 minimum 4.3 - Bends, T-piece, Y-piece, Saddles,	lplex Global Pipe Promains	Flowtite HOBAS Superlit	DN 300 - 2400 DN 300 - DN 3000	Sewer Pipe	Use is subject to acceptance by SP	Use is subject to acceptance by SP Flowtite - open cut only			
GRP pipe and Fittings	4.5 - Berius, i - piece, sadules, Reducers, Flanges and MH Couplings 4.4 - Soc-Sp RJ 4.5 - Standard Glass 4.6 - SBR & EPDM	Global Pipe Promains	Hobas Superlit	DN up to 3000 DN 400 - DN 1400	Jacking pipes	Use is subject to acceptance by SP	Use is subject to acceptance by SP Hobas - Coupling Grade 316 Stainless Steel (min.) for Pipe Jacking			

November 2013

	A	В	С	D	E	F	G	Н	I	J	К
1	Product	WSAA Product Specification No. with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
18	Knife gate valve	266 4.1 - PN16 4.2 - Wafer or Lugged 4.3 - Clockwise closing, rising spindle	Keystone Challenger		Up to DN600	Stainless Steel 316			Use is subject to acceptance by SP		
19											
20											

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SEQ WATER SUPPL	Y AND SEWERAGE DESIGN A	ND CONSTRUCTIO	N CODE			November 2013			ACCEPTED CIVIL	PRODUCTS AND MATERIA
A	B WEAA Droduct Constitution No.	С	D	E	F	G	Н	I	J	К
Product	WSAA Product Specification No. with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
Category: SEW	ERAGE PIPES AND FITTIN	GS - PRESSURE								
PVC-M pipe	209 4.1 - PN16 4.2 - Sewer Rising main 4.3 - Series 2 only 4.4 - Cream refer POP203 4.5 - SBR & EPDM	lplex Vinidex Tyco Promains	BLUERHINO Hydro TUF-FLO Micron Pipelines	DN 100 150 200 225 250 300 & 375 DN 100 - DN 300					Use is subject to acceptance by SP	NOT ACCEPTED BY SP
PVC-O pipe	210 4.1 - PN16 4.2 - MRS400 or MRS450 4.3 - Sewer Rising main 4.4 - Series 2 only, Cream refer POP203 4.5 - SBR & EPDM	lplex Vinidex Promains	ApolloBLUE Supermain Micron Pipelines	DN 100 150 200 225 250 300 & 375 DN 100 - DN 375				Use is subject to acceptance by SP	NOT ACCEPTED BY SP	Use is subject to acceptance by SP
24		Тусо	Tytonxcel	DN 250 - 750 (not 225)	PN20				NOT ACCEPTED BY SP	PN20 NOT ACCEPTED BY SP
25		Тусо Тусо	Tytonxtreme		PN20 for corrosive flows				NOT ACCEPTED BY SP	PN20 NOT ACCEPTED BY SP
26		Crevet	Tytonxcel	DN 100 150 250 300	PN35				Use is subject to acceptance by SP	Restraint joint seals not suitable for: PN20 pipe;
27	200 and WSAA TN6 4.1 - All Pressure Classes - see Column G	Тусо	Tytonxtreme	375 450 500 600 & 750 (not 225)	PN35 for corrosive flows				Use is subject to acceptance by SP	Aboveground applications; Combining joint restraint and thrust blocks; Epoxy or fusion coated spigots (incl
28 DI pipe	4.2 - Seal Coat not required for Sewerage 4.3 - Cement Mortar Linings - see Column G	Тусо	Tytonxcel	_	Flange Class	Cement Mortar lining of any type is not permitted within 5.0 meters of the HGL at	Cement Mortar lining of any type is not permitted within 5.0 meters of the HGL at	Cement Mortar lining of any type is not permitted within 5.0 meters of the HGL at	Use is subject to acceptance by SP	Tytonextreme pipe); Other manufacturers sockets or other pipe materials.
29	 4.4 - All fittings to be Fusion Bonded Polymeric Coated 4.5 - Restraint Joint Seals by approval 4.6 - SBR and EPDM 	Тусо	Tytonxtreme	DN 100 150 250 300 375 450 500 600 & 750 (not 225)	Flange Class for corrosive flows	pump stop. Alternative non-corrosive lining or pipe and fittings required.	pump stop. Alternative non-corrosive lining or pipe and fittings required.	pump stop. Alternative non-corrosive lining or pipe and fittings required.	Use is subject to acceptance by SP	Cement mortar lining of any type is not permitted at locations where there is a potential of the pipe lining in contact with air/gas continuously or intermittently. At such locations, non-corrosive pipes or metal pipes with non-corrosive linings shall be used. All linings of pipes and fittings at such locations shall be non-corrosive.
DI fittings	201 4.1 - Soc-Soc & Sp-Sp & FI-FI & FI-Soc/Sp 4.2 - Standard and PN16 fittings 4.3 - Restraint Joint Seals by approval 4.4 - SBR & EPDM	Tyco Crevet Vinidex Derwent Gillies DN100 & DN150	Superlink	up to DN 750 (not 225)	Thermal bonded polymeric coating is the standard material in WSA PS 201 and WSA PS212					Restraint joint seals not suitable for: PN20 pipe; Aboveground applications; Combining joint restraint and thrust blocks; Epoxy or fusion coated spigots (incl Tytonextreme pipe); Other manufacturers sockets or other pipe materials. Use of Restrained Joint Rubber Rings (Tyton-lok) subject to acceptance by SP
Bolts	No WSA-PS Refer Standard Drawing SEQ-WAT-1313-1 etc.				316 Stainless steel bolts	Refer Standard Drawing	Refer Standard Drawing	Refer Standard Drawing	SS316	Grade 316 Stainless Steel (min.)
Flange 316 SS off-take clamps 32	313 4.1 - Type F and R 4.2 - DN size as required 4.3 - Offtake size as required	Crevet Tyco	Wang	Offtake DN 100 to 300	Min. PN16, Approved on DI and CI host pipes only, to Pipe manufacturers specifications	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP		
Metal-banded flexible couplings 33	235 4.1 - Need for adaptor bushes where difference between OD of pipe and ID of coupling greater than 16mm 4.2 - Metal band and bolts shall be min SS316	Flex-Seal	Flex-Seal	Up to DN600		Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP
DI mechanical couplings - No End Thrust Restraint	270 4.1 - PN16 4.2 - All pipe materials except PE 4.3 - Long Series 4.4 - Straight Soc-Soc 4.5 - Stepped coupling require SP approval 4.6 - Flange end not used 4.7 - SBR & EPDM And SS316 bolts, nuts and washers	Tyco Crevet AVK Viking Johnson Derwent Promains	Gibault Ezigib & Varigib Gibault & Universal Gibault & Universal MaxiFit, QuickFit DEKS FLEXI-GIB	DN 80 to 600					Use of DEKS FLEXI-GIB is subject to acceptance by SP	
DI mechanical fittings - End Thrust Restraint (Gripper Type) 35	271 for DI, 245 for PE 4.1 - PN16 4.2 - DI and PE 4.3 - Short and Long Series 4.4 - Straight and Stepped and Flange Adaptor 4.5 - All DN Range options 4.6 - Flange Figure as specified with SS316 bolts, nuts and washers 4.7 - SBR & EPDM & Nitrile And SS316 bolts, nuts and washers	1- Hawle (Hygrade) 2- AVK 3- Viking Johnson 4- +GF+	1- System 2000 for PE 1- Synoflex PN16 Restraint for AC, PVC, DICL, SCL, PE 2- Supa Plus Restraint for PE 3- Aquafast and Aquagrip Restraint for PE 4- Multi/ joint 3000 Plus restraint type for AC, PVC, DI, SCL, PE	DN 50-300					The use of Synoflex, AquaFast or AquaGrip is subject to acceptance by SP	
DI flanged telescopic flexible fitting	No WSA-PS Aligned to WSA_PS 201 and 270 with Flanges to AS 4087 Figure B5 To comply with WSA PS-201S when published	Hawle (Hygrade) Vario WSA PA 12/09	Vario	DN50 - DN200					Use is subject to acceptance by SP	
Dismantling joints for Flange Pipe and Fittings	201 4.1 - FI-FI for DJ & FI/Sp for UniFlange 4.2 - Thrust type and non-thrust type minimum PN16 4.3 - Thrust Restraint by Fitting 4.4 - SBR & EPDM	Tyco Viking Johnson			Thrust type and non-thrust type are Flanged to AS4087 PN16. SS316 bolts, nuts and washers. Larger sizes of UniFlange shall be assessed for available Fitting PN vs Pipeline Test Head.					

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A	В	С	D	E	F	G	н	I	J	К
Product	WSAA Product Specification No. with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
PE pipe	207 4.1 - PN16 4.2 - Sewer Rising main 4.3 - Coil pipe permitted up to DN125 with Pipe lengths for larger DN 4.4 - Cream refer POP203 4.5 - PE100 only	lplex Vinidex PPI Tyco Poly Pipe	POLIplex Sewertech Hi-Vis SewerFlex	DN 40 50 63 90 125 180 250 315 355 450 630 800		Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP	PE is preferred pipe material	PE is preferred pipe material
PE pipe installed by directional drilling	y 207 Refer above. Install with SS316 tracer wire	lplex Vinidex PPI		DN 40 50 63 90 125 250 315 355 450 630 800	PE100 Min. SDR 9 unless specified. "Pipe wall thickness to be designed for installation forces"	Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP		
PE fittings	208 4.1 - PN16 4.2 - Electrofusion and Mechanical 4.3 - Bends, Tees, Flange stubs 4.4 - Full Face Flanges to AS/NZS 4087 Fig B5 4.5 - SBR & EPDM	George Fischer Philmac Plasson			Electrofusion couplings to be long socket type	Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP		
41	208 4.1 - PN16 4.2 - Electrofusion and Mechanical	Plasson (Vinidex)			Full face, SS backing ring. AS/NZS 4087 Table B7, Saddles and bends to WSAA 98/50	Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP		UW accepts stub flanges
PE flanges	4.3 - Bends, Tees, Flange stubs 4.4 - Full Face Flanges to AS/NZS 4087 Fig B5 4.5 - SBR & EPDM	lplex		Up to DN355	Full bore connections	Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP		
43	216 4.1 - PN16 4.2 - PE Flange	Vinidex/Rodney	Maxi Stub	Up to DN355		Use is subject to approval by SP	Use is subject to approval by SP	Use is subject to approval by SP		
Steel pipe	 203 4.1 - MPa 1.6 minimum 4.2 - DN by Design subject to SP approval 4.3 - Seal Coat not required 4.4 - Sintakote minimum for above ground 4.5 - Joint requirements by Design 4.6 - Cathodic Protection by design 4.7 - Standard pressure tests 4.8 - Sintakote minimum 4.10 - Sintakote minimum 	Тусо	Sintapipe	DN 324 - 813	RRJ unless otherwise approved	Use is subject to approval by SP DN610 minimum size	Use is subject to approval by SP DN610 minimum size	Use is subject to approval by SP DN610 minimum size	Use is subject to acceptance by SP	Use is subject to acceptance by SP
Resilient seated ga thermal bonded po coating. 45		AVK Hawle Tyco Challenger AVFI Promains	Series 55 & 57 E 2 Series 500 BETTA	Up to DN600 DN 100 - DN 375	For PE pipes PE gripper Sluice Valves by Hawle E2 System 2000 or AVK Supa Plus Coupling Series 01/70 or equal Sluice Valves with PE stubs for electrofusion acceptable Some valves may do not need by- pass (check with SEQ SPs)				Use of Challenger, BETTA and AVFI RSVs is subject to acceptance of SP	Use of BETTA Valve is subject to acceptance by SP
Ball Valves	274 4.1 - PN16 4.2 - Body material: 316 stainless steel 4.3 - Clockwise closing	Тусо		Up to DN50	BSPT threaded connections					
GRP Pipe and Fitti	205S 4.1 - PN16 4.2 - SM10,000 minimum 4.3 - Standard DI Fittings 4.4 - Sp-Sp & RRJ Coupling 4.5 - Standard Glass 4.6 - SBR & EPDM	lplex Global Pipe Promains	Flowtite HOBAS Superlit	DN 300 - 2400 DN 300 - DN 3000	DI Fittings to WSA PS 201 for Tees and Bends			Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP Coupling - Grade 316 Stainless Steel (min.)
48		<u> </u>							ļ	
49										

November 2013

25	Q WATER SUPPLY	AND SEWERAGE DESIGN AN	-	-	-		November 2013	•			PRODUCTS AND MATERIA
1	A Product	B WSAA Product Specification No. with Service Provider Specific Requirements	C Manufacturer / Supplier	D Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	ουυ	K Unitywater
50		RAGE MISCELLANEOUS	ITEMS								
51	Maintenance structure covers, frames and risers	290 4.1 - DN600 4.2 - Round Solid Top (Conc Infill - QUU only) Watertight Type 'd' 4.3 - 600mm Clear Opening 4.4 - Class B and Class D 4.5 - Rocking of cover in frame not permitted 4.6 - Lifting Key as per Standard Drawings 4.7 - Markings to AS3996 Clause 1.6 (a) to (f). 4.8 - No Hinge 4.9 - Standard Packaging and Delivery 4.10 - QUU require QUU cast in as per Standard Drawings 4.11 - Standard Coating 4.12 - Bolt down for Surcharge and overland flow areas, 4 x M8 (min) SS316 Bolts	Gatic/Milne East Jordan (Havestock) Webforge Tellam Durham Hygrade			Refer Standard Drawings. Covers with another Service Provider's name not accepted. Use of Square and Rectangular Covers and Frames subject to SP approved based on Design needs	Concrete Infill Covers NOT ACCEPTED BY SP	Concrete Infill Covers NOT ACCEPTED BY SP	Concrete Infill Covers NOT ACCEPTED BY SP		Concrete Infill Covers NOT ACCEPTED BY SP
52	Maintenance hole lightweight composite lids and frames (non-corrosive)		Terra Firma			Class D	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP
53	Maintenance hole covers			MC1000	DN900	Class C Fabricated S/Steel grade 316 ring				Use is subject to acceptance by SP	
54	Step irons	314 4.1 - Single Step 4.2 - Comlies with Figure 5.10 of AS1657 4.3 - Steel bar internal with Plastic encapsulation or SS316 4.4 - Plastic encapsulation or SS316 4.5 - No reflectors required 4.6 - No other safety devices required	Miyama/Nextep Amyroo C & C Plastics/Havestock Industrial Steps & Ladders	Miyama Amyroo Posistep Sure-Step		M053	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		NOT ACCEPTED BY SP
55		315 4.1 - Type D - Fixed Ladder with two Stiles 4.2 - FRP, SS316, Galvanised Steel or Aluminium 4.3 - 250mm to 300mm from top of Stile to first	Miyama/Nextep	Miyama		Fibre reinforced plastics (yellow). Brackets to be SS316 Min. Clearances for Rung Type Ladders as per AS1657 Fixed Platforms, Walkways, Stairways and Ladders - Design and Installation	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		NOT ACCEPTED BY SP
56	Ladders	rung 4.4 - 250mm to 300mm from bottom of Stile to first rung 4.5 - Reflectors optional 4.6 - 150mm from CL of rung to MH wall	Industrial Steps & Ladders	Add-A-Step		Revised installation procedure WSAA Product Update 1-2011, Subject to WSAA appraisal 5/11 and WSAA Product Alert 1-2010	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		NOT ACCEPTED BY SP
57		4.7 - Mounting brackets at 1800 centres max4.8 - Colour as per material4.9 - SS316 brackets and fasteners	Galvanised Steel, Refer to Standard Drawings				NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP
58		4.9 - 55516 Diackets and lasteners	Stainless Steel or Aluminium, refer to Standard Drawings				NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		Use is subject to acceptance by SP
59	Maintenance Shaft PVC	321 4.1 - Inlet and Outlet at DN150 to DN225 4.2 - Max depth 4.0 meters FSL to Top of Pipe 4.3 - Configurations as shown in Standard drawings 4.4 - Inlet and Outlet Sewer connection RRJ 4.5 - Cap as shown in Standard Drawings 4.6 - Connect to PCV-U DWV pipe	Aymroo SMS	Aymroo SMS # MS3 DN150 Only	DN225 PVC-U Riser Shaft					NOT ACCEPTED BY SP	
60	Maintenance Shafts PE	322 4.1.a - Inlet and Outlet at DN150 to DN225 for PVC RIGSS 4.1.b - Inlet and Outlet at DN160 to DN250 for PE Nusewer 4.2 - Max depth 5.0 meters FSL to Invert of Pipe 4.3 - Configurations as shown in Standard drawings 4.4.a - Inlet and Outlet PVC Sewer connection RRJ 4.4.b - Inlet and Outlet PE Sewer connection Electrofusion 4.5 - Cap as shown in Standard Drawings	Smartstream	Poo-Pit		RIGSS DN225 PVC riser shaft. Nusewer fully welded with DN250 PE risers and sewer stubs.	Approved for DN 150 to DN225 RIGSS only. Refer Standard Drawing SEQ-SEW-1314- Set for other approved PE MS and MH options	Approved for DN 150 to DN225 RIGSS only. Refer Standard Drawing SEQ-SEW-1314- Set for other approved PE MS and MH options	Approved for DN 150 to DN225 RIGSS only. Refer Standard Drawing SEQ-SEW-1314- Set for other approved PE MS and MH options		
61	Maintenance Shaft	330 4.1 - DN600 4.2 - DN150 and DN225 4.3 - Ribbed Wall 4.4 - Rubber Ring Joints 4.5 - Conc surround no internal Lid 4.6 - DI MH cover and frame	lplex	EZIpit PA 09/01		Refer Standard Drawings	Approved for DN 150 to DN225 RIGSS only Base is single DN size	Approved for DN 150 to DN225 RIGSS only Base is single DN size	Approved for DN 150 to DN225 RIGSS only Base is single DN size	NOT ACCEPTED BY SP	
	Polypropylene	330 4.1 - DN600 4.2 - DN150 4.3 - Ribbed Wall 4.4 - Rubber Ring Joints 4.5 - Conc surround no internal Lid 4.6 - DI MH cover and frame	SMS	SMS PA 09/08 parts 0 to 5 Code : MS1 Code : MS2 Code : MS5		Refer Standard Drawings	Approved for DN 150 RIGSS only	Approved for DN 150 RIGSS only	Approved for DN 150 RIGSS only	NOT ACCEPTED BY SP	
63	Pre-cast Maintenance Holes	323 4.1a - DN1000 minimum MH 4.1b - DN600 minimum MS 4.2 - Configurations as per Standard Drawings 4.3 - No step irons or ladders 4.4 - Elastomeric and Butyl rubber seals accepted 4.5 - Standard aggregates no additional cover 4.6 - No special treatments 4.7 - Base format as per SEQ SP approval 4.8 - Configurations as per Standard Drawings	Humes Rocla Everhard Tellam		MH and MS DN150 and DN225 sewers	Refer Standard Drawings Use for larger Sewer DN's and MH diameters is subject to acceptance by SP	DN600 Pre-cast pre-benched Channel base and Bowl base Maintenance shafts approved as shown in Standard Drawings		Use of MS is subject to acceptance by SP	NOT ACCEPTED BY SP	Humes and Rocla pre-cast MHs accepted Everhard and Tellam MHs NOT ACCEPTED BY SP & Use of MS is subject to acceptance by SP

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	LT AND SEWERAGE DESIGN AN			_	_	November 2013			1	PRODUCTS AND MATERIA
A Product	B WSAA Product Specification No. with Service Provider Specific Requirements	C Manufacturer / Supplier	D Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	J QUU	K Unitywater
Vent poles	325 Project Specific outcome Product Appraisal Report PA 0906 for RPC	1- RPC Technologies 2- Ingal EPS			Refer Standard Drawings Tapered, Galvanised, height as design preferred colour: heritage or mist green	Accepted option is RPC for a GRP pole @ designed height	Accepted option is RPC for a GRP pole @ designed height	Accepted option is RPC for a GRP pole @ designed height	1- RPC Use is subject to acceptance by SP 2- Ingal EPS -Accepted height 12.0m	1- RPC Use is subject to acceptance by SP 2- Ingal EPS-Use Accepted - Min Height 6.0m
Valve box and cover C.I. & D.I.	No WSA-PS Refer details on SEQ-WAT-1305-1 and SEQ- WAT-1305-2	Tyco NIBF Gatic/Milne Tellam			Refer Water Code Standard Drawings for approved Valve Box and Cover					
Loose PE sleeving to DI pip	Pe 320 Cream Colour to POP203	Tyco Crevet	BLUEBOSS Cream		Mandatory sleeving to all DI pipe	Gravity pipe Grey colour Pressure pipe Cream colour	Gravity pipe Grey colour Pressure pipe Cream colour	Gravity pipe Grey colour Pressure pipe Cream colour		
Crushed Rock Embedment Material	351 4.1 - Single sized 4.2 - Nominal 5 or 7mm									
Concrete-Normal Class	357 4.1 - As follows N20 Thrust Blocks N25 for reinforced embedment 4.2 - Slump as required for placement									
Concrete-Special Class	358 4.1 - S40 with Fly Ash/Type GP Portland Cement ratio of 0.25 to 0.30. 4.2 - Slump as required for placement 4.3 - Standard aggregate at 20mm					Cast in-situ MH's Refer details on Standard Drawings Concrete N32 minimum	Cast in-situ MH's Refer details on Standard Drawings Concrete N32 minimum	Cast in-situ MH's Refer details on Standard Drawings Concrete N32 minimum	Calcareous aggregates shall be used Admixtures shall be non-chloride type	
Gas release valves	275 Refer Appendix B of AS4883 Size of Valve - DN50 BSP, DN50 to DN200 Flanged. Class of valve - PN16 Type of Port - Full and Reduced port Type of Valve - As per design needs Hydraulic Data - By design to AS4883 Appendix B	ARI Flow control Bermad Vent-O-Mat Odour Technologies AVFI	Vinloc-Smartvalve ARV-3-N	DN 50 - 200	PN16, Anti Slam as required, Thermal bonded polymeric coating or 316 Stainless steel	The use of Valmatic Gas Valve is subject to acceptance by SP	The use of Valmatic Gas Valve is subject to acceptance by SP	The use of Valmatic Gas Valve is subject to acceptance by SP	See SEQ-SPS-1605-1 for a standard setup. The use of Valmatic Gas Valve and AVFI Gas Release Valve is subject to acceptance by SP	
Non-retum valves - Swing check with counterweight lever arm	264 Refer Appendix B of AS4794 a) Class - PN16 min - Size by Design b) Medium - Sewage c) Installation - Horizontal d) Spindle - Extended e) Lever and Counterweight minimum with switches and indicators by Design j) Flanged to AS 4087 Figure B5	Valvco Tyco AVK Dobbie Dico Challenger Valves	Valvco Valmatic Swing- flex. Challenger (RSSC)	DN 50 - 900 DN 80 - DN375	MIN. PN16, Thermal bonded polymeric coating	GCCC only accepts Non-Return Valves with Lever arm and Counterweight - Lever to directly control swing check for open and close CHALLENGER NOT ACCEPTED BY SP	SP only accepts Non-Return Valves with Lever arm and Counterweight - Lever to directly control swing check for open and close CHALLENGER NOT ACCEPTED BY SP	Use is subject to acceptance by SP	Use of Challenger Check Valve is subject to approval by SP	UW prefers non-return valves without counterweight lever arms. Refer item (e) of the Product Specification column. One piece NBR Nylon Reinforced Steel disc
PVC-U Fabricated Fittings Fibreglass reinforced PVC Type 'D' junctions & fittings	230 4.1 - Plain Wall only 4.2 - Solvent Cement joints for Fabricated assemblies with Elastomeric Seal on Fitting Socket Ends 4.3 - Pipe DN100 @ SN6 min and Pipe DN150 and larger SN8 min. Fittings SN6 min 4.3 - RRJ @ SBR & EPDM	Vinidex Iplex Fabfit M.E. Christensen	Deep Sewer Junction & Reinforced Fittings	DN 100-300	DWV uPVC Moulded Fitting reinforced to SEQ Standards. Type D Junction from moulded fittings welded and fibreglass wrapped. 45 Deg Oblique Jn and Property Connection bends fibreglass wrapped. Fabricator has Certification to Section 6 of AS/NZS 1260 and fittings fiberglass wrapped as shown on the drawings SEO-SEW-1104-1 and SEQ-SEW-1105-1.				NOT ACCEPTED BY SP	
PVC-U SN8 long radius ben	236 1 - SN8 minimum 2.1 - DN150 only, 3.0 meter radius as a formed bend with standard socket and spigot RRJ ends. No ovality variation permitted. 2.2 - DN225 only, 3.0 meters radius preferred, ds spigot spigot ends as a formed bend or as a fabricated bend with 7.5 degree segments with minimum 100mm segment length on inside springline 2.3 - All long radius bends by Certified fabricators to AS/INZS 1260 Section 6 3 - SBR & EPDM	Vinidex Iplex Tri Underground Fabfit M.E. Christensen	Long radius 3000mm bends	DN150 as bent pipe & DN225 as bent or fabricated pipe	AS/NZS 1260 SN8 DN150 Bends available from 5Deg to 45Deg. DN225 and larger individually fabricated to 45Deg.		Use is subject to acceptance by SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP	
Detectable marker tape	318 4.1 - Tape/Product Colour - Drinking Water = Blue preferred (Green accepted via SP approval). Non-Drinking Water = Purple. Sewerage = Cream 4.2 - Message = " Caution PRODUCT Buried Below " 4.3 - SS 316 tracer wire 4.4 - See 4.1 above	Boddington Tapex								UW accepts only blue detectable marker tape for drinking water
Security fencing				AS1725.1 Chain Link Fabric Fencing-powder coated black		Fence details generally to GCCC Standard Drawing 05-05-004	Fence details generally to GCCC Standard Drawing 05-05-004	Fence details generally to GCCC Standard Drawing 05-05-004		
B Hydrophilic Seal			Hydrotite							

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SEQ WATER SUPP	PLY AND SEWERAGE DESIGN AN					November 2013			-	PRODUCTS AND MATERIA
A	B WSAA Product Specification No.	С	D	E	F	G	Н		J	К
Product	with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
77 Category: WA	ATER SUPPLY PIPES - PRESS	SURE								
PVC-M pipe	209 4.1 - PN16 4.2 - Drinking Water 4.3 - Series 2 only 4.4 - Blue 4.5 - SBR & EPDM	lplex Vinidex Tyco Promains	Reiber Blue Hydro Blue Tuf-Flo Micron Pipelines	DN 100 to DN 300 DN 100 - DN 300	Series 2 PN16, Min SN 10 Reiber ring accepted				Use of Micron Pipe is subject to approval by SP	NOT ACCEPTED BY SP
PVC-O pipe	210 4.1 - PN16 4.2 - MRS400 or MRS450 4.3 - Water main 4.4 - Series 2 only, Blue for Drinking Water and Purple for No-Drinking Water refer POP203 4.5 - SBR & EPDM	lplex Vinidex Promains	Apollo Blue Supermain Micron Pipelines	DN 100 to DN 300 DN 100 - DN 375	Series 2 PN16, Min SN 10 MRS400 or MRS450			Use is subject to acceptance by SP	NOT ACCEPTED BY SP	
80	200 and WSAA TN6 4.1 - All Pressure Classes - see Column G 4.2 - Cement Mortar Lining	Тусо	Tytonxcel	DN 225 - 750	PN 20	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	NOT ACCEPTED BY SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP
81	4.3 - All fittings to be Fusion Bonded Polymeric Coated 4.4 - Restraint Joint Seals by approval 4.5 - SBR and EPDM	Tyco lplex/Crevet	Tytonexcel Irontite	Up to DN 750	PN 35	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coating required for all sizes	Seal coat on pipes >= 450 Seal Coat requirement is dependant on water quality
DICL pipe		Тусо	Flange Class	Up to DN 750	Flange Class	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP	Seal coat on pipes >= 450 PN20 - Use is subject to acceptance by SP		Seal coat on pipes >= 450 Restraint joint seals not suitable for: PN20 pipe; Aboveground applications; Combining joint restraint and thrust blocks; Epoxy or fusion coated spigots (incl Tytonextreme pipe); Other manufacturers sockets or other pipe materials.
SCL pipe	203 4.1 - MPa 1.6 minimum 4.2 - DN by Design subject to SP approval 4.3 - Seal Coat required for DN450 and larger 4.4 - Sintakote minimum for above ground 4.5 - Joint requirements by Design 4.6 - Cathodic Protection by design 4.7 - Standard pressure tests 4.8 - Sintapipe lining option 4.9 - SBR & EPDM 4.10 - Sintakote minimum	Тусо	Sintakote	OD 114, 168, 219, 257, 273, 324 to 2159.	Minimum thickness DN100 - 4.8mm, >DN100 - 5mm	Accepted for sizes >DN 600	Accepted for sizes >DN 600	Accepted for sizes >DN 600		Seal Coat requirement is dependant on water quality
PE pipe	A 10 - Stintavter Infinition 207 4.1 - PN16 SDR11 PE100 4.2 - Drinking and Non-Drinking Water 4.3 - Pipes lengths for DN160 and larger and coils accepted for DN110 and smaller 4.4 - Mains Colour Blue Solid for Drinking Water and Purple solid for Non-Drinking Water Service pipe Black with Blue Stripes for Drinking Water and Purple solid for Non-Drinking Water, refer POP203. 4.5 - PE100 only	lplex Vinidex PPI Cromford Poly Pipe Tyco	ldenti-pipe Advantage/TYCO10	OD 25 32 63 90 125 180 250 315 355 450 630 800	PE100 PN16 Blue colour - solid or striped for drinking water Purple colour - solid for non-drinking water	1 - Used as Water Service pipe at DN25 and DN32 recommend PE80B pipe (DN50 and DN63 by GCCC) 2 - Used as Drinking Water main at DN63 and DN110 in Dual Water Supply 3 - Used as A+ Non Drinking Water main for Cul-de-sac terminal end at DN63 in Dual Water Supply 4 - Used as Drinking Water main for Cul-de- sac terminal end at DN63 in traditional Drinking Water Reticulation		Use is subject to acceptance by SP	Preferred pipe material for single and dual water supply system Either solid or striped colours are permitted for single and/or dual water supply systems.	
Copper pipe 85	214 4.1 - Annealed for all pipe 4.2 - Natural pipe colour	Port Kembla Copper				Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP		Use is subject to acceptance by SP
86	205 4.1 - DN300 and larger 4.2 - PN16 minimum	lplex	Flowtite	DN 300 - 900						
GRP Pipe and Fittings	4.2 - FN 10,000 minimum 4.4 - Standard bend forms permitted 4.5 - Sp-Sp RRJ Coupling and FI Joints	Global Pipe	Hobas	200 - 200	SN10000, PN16	Use is subject to acceptance by SP DI Fittings preferred	Use is subject to acceptance by SP DI Fittings preferred	Use is subject to acceptance by SP DI Fittings preferred	Use is subject to acceptance by SP	Use is subject to acceptance by SP
88	4.5 - SBR & EPDM 4.7 - Standard Glass	Promains	Superlit	DN300 - DN 3000						
89										
90									I	

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EQ WATER SUPPL	Y AND SEWERAGE DESIGN AN	ND CONSTRUCTIO		-	-	November 2013				PRODUCTS AND MATER
Product	B WSAA Product Specification No. with Service Provider Specific Requirements	C Manufacturer / Supplier	Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	ουυ	K Unitywater
Category: WAT	ER SUPPLY FITTINGS - PR	ESSURE	1	I						I
		Тусо	Auslite	DN 100 & 150	Light weight fittings Thermal bonded polymeric coating					Use of Restrained Joint Rubber Rings
DI bends	201 4.1 - Soc-Soc & Sp-Sp & FI-FI 4.2 - Standard and PN16 fittings 4.3 - Restraint Joint Seals by SP approval 4.4 - SBR & EPDM	Tyco Crevet Vinidex Derwent	Superlink	DN up to 750	All DI to be wrapped Thermal bonded polymeric coating All DI to be wrapped					(Tyton-lok) subject to acceptance by S
DI tapers, tees & branches	201 4.1 - Soc-Soc/Soc & Sp-Sp/Sp & FI-FI/FI & Soc- Soc/FI & Sp-Sp/FI 4.2 - Standard and PN16 fittings 4.3 - Restraint Joint Seals by SP approval	Gillies DN100 & DN150 Tyco Crevet Vinidex Derwent Gillies DN100 & DN150	Superlink	DN up to 750	Thermal bonded polymeric coating All DI to be wrapped					Use of Restrained Joint Rubber Rings (Tyton-lok) subject to acceptance by S
DI mechanical couplings - Nor End Thrust Restraint	4.4 - SBR & EPDM 270 4.1 - PN16 4.2 - All pipe materials except PE 4.3 - Long Series 4.4 - Straight Soc-Soc 4.5 - Stepped coupling require SP approval 4.6 - Flange end not used 4.7 - SBR & EPDM And SS316 bolts, nuts and washers	Tyco Crevet AVK Viking Johnson Derwent Promains	Gibault Ezigib & Vari-Gib Gibault & Universal Multigib Gibault & Universal MaxiFit, QuickFit DEKS FLEXI-GIB	DN up to 750 DN 80 to 600	Long type All DI to be wrapped				Use of DEKS FLEXI-GIB is subject to acceptance by SP	
DI mechanical couplings - End Thrust Restraint (Gripper Type)	271 4.1 - PN16 4.2 - DI 4.3 - Short and Long Series 4.4 - Straight and Stepped and Flange Adaptor 4.5 - All DN Range options 4.6 - Flange Figure as specified with SS316 bolts, nuts and washers 4.7 - SBR & EPDM & Nitrile And SS316 bolts, nuts and washers	1- Hawle (Hygrade) 2- +GF+	1- Synoflex PN16 Restraint coupling for AC, PVC, DICL, SCL 2- Multi/ joint 3000 Plus restraint type for AC, PVC, DICL, SCL	DN 50-300					The use of Synoflex is subject to acceptance by SP	
DI flanged telescopic flexible fitting	No WSA-PS Aligned to WSA_PS 201 and 270 with Flanges to AS 4087 Figure B5 To comply with WSA PS-201S when published	Hawle (Hygrade) Vario WSA PA 12/09	Vario	DN50 - DN200					Use is subject to acceptance by SP	
Pretapped connectors	201 4.1 - Soc-Soc only 4.2 - Standard and PN16 fittings 4.3 - Restraint Joint Seals by approval 4.4 - SBR & EPDM DN100 to DN150 with 4 x 20BSP tappings at 2 per side and DN200 to DN300 1 x 50BSP	Tyco Crevet Vinidex	Readytap Pretapped Superlink	DN 100 to 300 DN 100 & 150 DN 100 & 150	Thermal bonded polymeric coating					
1	tapping	4N Products & Stockbrands	Supertap	DN 100 & 150	Only used on Series 2 PVC pipe Not suitable for DI pipe		Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	
Flange 316 SS off-take clamps	313 4.1 - Type F and Type R subject to pipe material 4.2 - Pipe DN by SP approval 4.3 - Off-take DN by approval	Crevet Tyco	Wang	Offtake DN 100 to 300	Min. PN16, Approved on DI and CI	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP		
	260 4.1 - PN16	AVK	Series 57 (light type only with DN100 & 150) Series 36/80 Series 01/71 Series 55	Up to DN400 Up to DN150 Up to DN150 DN450 to 600	Anchor legs approved PE Pipe ended approved Gripper ends approved					
Resilient seated gate valves, thermal bonded polymeric	4.2 - All End configurations accepted 4.3 - Integral By-pass on DN450 and larger 4.4 - Gear Box on DN600 and larger 4.5 - Clockwise for opening	Hawle (Hygrade)	E 2 FL Ends E.2 System 2000 A Valve FL & E-F Ends	DN 50 - 200 DN 50 - 300 DN80 - 200	WSAA Appraisal 04/03 WSAA Appraisal 06/07			Use is subject to acceptance by SP		
coating.	4.6 - No requirement for spindle cap colour 4.7 - Extension Spindle to WSA PS - 262 4.8 - Spindle Cap	Тусо	Series 500 Auslite Bayard	Up to DN600 DN 80, 100 & 150 DN 50 - 200	Anchor Legs approved With PE pipe tails approved					
1	4.9 - SBR & EPDM	Challenger	RSGV	Up to DN600					Use is subject to acceptance by SP	
		AVFI Promains	BETTA	DN100 - DN375					Use is subject to acceptance by SP	Use is subject to secondarias by CD
Hydrants	267 4.1 - DN80 and DN100 Flanges	AVK Tyco Gatic/Milne Toowoomba Foundry Promains	Series 30/00 non-swab and 30/10 for swab Sureflow swab and non- swab See AVK BETTA	DIVIOU - DIV375	Removable Top Cap & Internal Assembly. Thermal bonded polymeric coating. Purple body and lug for recycled water.	DN80 Flange to A.S.4087 Fig B5 Purple Body and Lug for A+ Recycled water Swabbing type at main ends refer SEQ- WAT-1302-1	DN80 Flange to A.S.4087 Fig B5 Swabbing type at main ends refer SEQ- WAT-1302-1	DN80 Flange to A.S.4087 Fig B5 Swabbing type at main ends refer SEQ- WAT-1302-1	Use is subject to acceptance by SP Swash type with DN100 flange to AS 4087 Fig B5 or B7. 100mm hydrant riser shall be used. For PE system, additional to DN125, a DN90 PE riser may be used with Plasson slotted flange adaptor set Use of Betta hydrant is subject to acceptance by SP	Use is subject to acceptance by SP All new hydrants are to be 100 mm with removable top cap and internal assembl All new hydrants shall be Swash Type I FBE coated. All new hydrants shall hav 100 mm flanges, 100 mm risers and spri heads.
Valve box & cover C.I.	No WSA-PS Refer details on SEQ-WAT-1305-1 and SEQ- WAT-1306-1	Tyco NIBF (Iplex) Tellam			Bitumen coated to AS 3750.4					
Hydrant box & cover C.I.	No WSA-PS Refer details on SEQ-WAT-1305-1 and SEQ- WAT-1306-1	Gatic/Iplex Tyco NIBF (Iplex) Tellam Gatic/Iplex			Bitumen coated to AS 3750.4					
Valve & hydrant boxes (recycled plastics) & DI Cover	No WSA-PS s Refer details on SEQ-WAT-1305-1	Tyco Crevet Vinidex			Non-trafficable location only. H - Hydrants V - Valves AV - Air valve	Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1, SEQ-NDW- 2122-1 and SEQ-NDW-2125-2	Coloured to SEQ-WAT-1300-1 and SEC NDW-2209-1
Plastic surround to valve/hydrant boxes	No WSA-PS For sizes refer details on SEQ-WAT-1306-1	Repeat Plastics				Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1 and SEQ- NDW-2309-1	Coloured to SEQ-WAT-1300-1, SEQ-NDW- 2122-1 and SEQ-NDW-2125-2	Coloured to SEQ-WAT-1300-1 and SEC NDW-2209-1
Valve extension spindles	262 4.1 - DN100 to DN525/600 4.2 - Length by Design 4.3 - Bitumen coated Spindle support with bearing at 1 per installation minimum and at 1.8m max spacings	Tyco NIBF (lplex) Forge Bros (Vinidex) Challenger			AS2638 Compliant	Use of Challenger extension valve is subject to acceptance by SP	Use of Challenger extension valve is subject to acceptance by SP	Use of Challenger extension valve is subject to acceptance by SP	Use of Challenger extension valve is subject to acceptance by SP	Use of Challenger extension valve is subject to acceptance by SP

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A	В	С	D	E	F	G G	Н	<u> </u>	J	KODUCIS AND MATER
Product	WSAA Product Specification No. with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
Flanges MS	204 - Flanges 4.1 - PN16 minimum 4.2 - DN by Design subject to SP approval 4.3 - Flanged 4.4 - Seal coating for DN450 and larger 4.5 - Sintakote minimum for above ground 4.6 - Flanged at PN16 minimum 4.7 - Cathodic Protection by design 4.8 - Sintapipe lining option 4.9 - SBR & EPDM 4.10 - Sintakote minimum	Tyco NIBF (lplex)			Class 16 Thermal bonded polymeric coating					
Flange gaskets and 'O' rings	312 4.1 - PN16 min or as per Design 4.2 - Gasket as Standard with O-ring for required steel flanges 4.3 - Types WA, WC and WG subject to fluid needs 4.4 - DN as per design 4.5 - Hardness as per range in Table 2 of WSA 109-2011 4.6 - Thickness of 3.0mm at PN16 and 1.5mm at PN35									
Bolts	No WSA-PS Refer details on SEQ-WAT-1313-1				316 Stainless steel bolts					
PE mechanical compression fittings for Small Diameter Water Service pipes	208 Up to DN63 2.(a) - AS/NZS4129 or EN 1254 acceptable Certification 4.1 - PN16 minimum 4.2 - Mechanical Polyethylene or Copper Alloy both with approved Plastic grippers/olives/thimbles 4.3.1 - Transition - PE to Male R thread to AS ISO 7.1 or Female Rp thread to AS ISO 7.1 4.3.2 - Coupling - PE to PE 4.4 - Flange not used 4.5 - SBR & EPDM	George Fischer Philmac Plasson Elster TOF Talbot Alprene		Up to DN63	PN16			Use of Elster fittings accepted. Use of fittings (other than Elster) subject to acceptance by SP		
8	208 DN63 and larger to Clause 208.2.(a) and to EN 1254, EN 12201 or EN 13244 as acceptable Certification.	Plasson (Vinidex)		Coupler up to DN710		Accepted for DN63 and DN 110	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110		
PE Fittings – couplings, tees, bends, elbows/adjustable end caps, saddles, reducers of ror mains and large service	4.4 DNI40 minimum	George Fischer	ELGEF Plus Draw - Lock		Comply with AS4129, PN16, Electrofusion fittings to be long type	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110		
pipes	Face Flange Adaptor, Coupler PE to PE, Service Tapping, Tees, Bends 4.4 - AS 4087 compatibility for mating flange 4.5 - SBR & EPDM	Cromford	Fusion Provida	Up to DN355		Accepted for DN63 and DN 110	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110		
1	208 DN63 and larger 2.(a) - AS/NZ54129 or EN 12201, EN 13244 or EN 14525 acceptable Certification 4.1 - PN16 minimum	Plasson (Vinidex)		DN90 hydrant fittings	Full face, SS backing ring. AS/NZS 4087 Table B7, Saddles and bends to WSAA 98/50					
PE flanges	4.2 - Electrofusion or Butt Weld 4.3 - Full Face Flange Adaptor with SS316 backing ring 4.4 - AS 4087 "Figure" compatibility for mating flange 4.5 - Refer "Flange Gaskets and 'O' Rings" above	lplex		Up to DN355	Full face full bore connections	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	U	nitywater accepts both full face and st flanges
3	216 4.1 - PN16 minimum 4.2 - Butt Weld pipe joint with Full Face Flange Adaptor with SS316 backing ring and AS 4087 "Figure" compatibility for mating flange	Vinidex/Rodney	Maxi Stub	Up to DN355	Full face full bore connections					
4	245	Hawle (Hygrade)	System 2000 Synoflex	Up to DN630						
DI Restraint fittings (for PE) - couplings, flange adaptors,	Joining to PE Pipe only 2.(a) - EN 12201, EN 13244 or EN 14525 acceptable Certification 2.(b) - Plastic fittings not permitted	+GF+	Multi/Joint 3000	Up to DN355	Restraint type, Flange adaptor up to DN355 shall be full bore connection				The use of Synoflex, AquaFast or AquaGrip is subject to acceptance by SP	
tees, bends, end caps	4.1 - PN16 4.2 - SBR & EPDM seal options with AS 4087 "Figure" compatibility for mating flange with WSA	AVK	Supa Plus	Up to DN315	Divisoo shali be full bore connection				is subject to acceptance by SP	
7	PS 312 gasket	Viking Johnson (Philmac)	AquaFast AquaGrip	Up to DN630						

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	Α	В	С	D	E	F	G	Н	I	J	К
Prod	duct	WSAA Product Specification No. with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
PE sc	cour Tees	216 4.1 - PN16 minimum 4.2 - Electrofusion/Butt Weld pipe joint with Full Face Flange Adaptor with SS316 backing ring and AS 4087 "Figure" compatibility for mating flange on outlet	Vinidex/Rodney Kingston Bridge/Iplex			Comply with AS4129	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
Air val	lives	265 Appendix B AS 4956 Size - DN20 and Larger Class - PN16 Type of Port - Full and Reduced Port Type of Valve - As per Design Hydraulic Data - As per Design Materials - DN20 and DN25 permitted with Plastic body. All other sizes End Connections - BSP Threaded or AS 4087 Flange with "Figure" compatibility to mating Flange	ARI Flow control Bermad Vent-O-Mat AVFI	DAV-MH	DN 50 - 200	PN16, Double Orifice as required, Thermal bonded polymeric coating	DN40 and DN50 BSP threaded to have Brass base	DN40 and DN50 BSP threaded to have Brass base	DN40 and DN50 BSP threaded to have Brass base	Use is subject to acceptance by SP	
Non-re	return valves	264 Refer Appendix B of AS4794 a) Class - PN16 min Size - By Design b) Medium - Water c) Installation - Horizontal d) Spindle - Extended e) Lever and Counterweight minimum with switches and indicators by Design j) Flanged to AS 4087 Figure B5	Valvco Dobbie Dico AVK Challenger Valves	Valmatic Swing-flex Challenger (RSSC)	DN 50 - 900 DN 80 - DN 375	Thermal bonded polymeric coating	Only use valves with capacity for lever arm to open and close the valve AVK and Dobbie Dico are acceptable CHALLENGER NOT ACCEPTED BY SP	Only use valves with capacity for lever arm to open and close the valve AVK and Dobbie Dico are acceptable CHALLENGER NOT ACCEPTED BY SP	Use is subject to acceptance by SP	Use of Challenger Check Valve is subject to approval by SP	UW prefers non-return valves without counterweight lever arms. Refer item (e) of the Product Specification column. One piece NBR Nylon Reinforced Steel disc
Press	sure reducing valves	268 See Appendix B of AS5081:2008	Bermad Singer Plasson C-valve Dorot 300 Series		DN 40 - 900	Min PN16, Thermal bonded polymeric coating				The use is subject to acceptance by SP	Plasson C-valve preferred by Unitywater
		268 See Appendix B of AS5081:2008	Bermad Singer		DN 40 - 900	Min PN16, Thermal bonded polymeric coating				The use is subject to acceptance by SP	
PE Fle 133 as pue	lex Restraint Fitting (used iddle flange)		+GF+		Up to DN1600	E-F type follow manufacturer's requirements.	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
	antling joints for Flange and Fittings	201 4.1 - FI-FI for DJ & FI/Sp for UniFlange 4.2 - Thrust type and non-thrust type minimum PN16 4.3 - Thrust Restraint by Fitting 4.4 - SBR & EPDM	Tyco Viking Johnson			Thrust type and non-thrust type are Flanged to AS4087 PN16. SS316 bolts, nuts and washers. Larger sizes of UniFlange shall be assessed for available Fitting PN vs Pipeline Test Head.					
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Product	B WSAA Product Specification No. with Service Provider Specific Requirements	C Manufacturer / Supplier	Trade Name	E Size Range	F Specified Requirements / Minimum Class	G Gold Coast City Council	H Logan City Council	Redland City Council	ע טט	K Unitywater
Category: WA	TER SERVICES			•	1		•	1		
7 Tapping bands for DI & PVC	310 4.1 - DN100 to DN300	Tyco Gatic/Milne RMC Elster			Gunmetal - Positive stops	SP USE ONLY	SP USE ONLY	SP USE ONLY		
pipes	WSA Appraisal 06/03	4N Products & Stockbrands	4N	DN 100, 150, 200	Positive stops, coloured blue	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	Use is subject to acceptance by SP		
19 Tapping bands for PE -	327 4.1 - Pipe DN63 and larger (see WSA PS 207 above) - Off-take ID 20mm minimum 4.2 - PN16 4.3 - Without electrical Isolation	Gatic/Milne Elster		DN63-DN315 DN63	Gunmetal - Positive stops For renewal only	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		NOT ACCEPTED BY SP
mechanical	4.4 - Female Rp thread to AS ISO 7.1 WSA Appraisal 06/03	4N Products & Stockbrands	4N	DN 63, 90, 125 & 180	Positive stops, coloured black For renewal only	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	Use is subject to acceptance by SP		
1 Tapping saddle for PE -	329 329.2.(a) - EN Standards accepted 4.1 - Pipe DN63 and larger (see WSA PS 207 above) - Off-take ID 20mm minimum	Plasson (Vinidex) George Fischer		DN 63, 90, 125 & 180	Comply with AS4129	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110		
electrofusion	 4.2 - PN16 4.3 - Without electrical Isolation 4.4 - Combined Saddle and Outlet off-take with integral cutter/shut off 	Cromford	Fusion Provida	Up to DN250	PN16	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110	Accepted for DN63 and DN 110		
Ferrules - TPFNR Bonnet Ferrule Cocks 3	No WSA-PS 1 - Compliance with AS 4020, DR to AS 2345, AS 3718 and AS 3688. 2 - PN16 with ability for under pressure tapping 3 - Male R thread to AS ISO 7.1 4 - Outlet fitting PE to WSA PS 207 or Copper to WSA PS 214 5 - DN50 to include 90 degree bend with union connection to AS3688 at outlet	Gatic/Milne Elster RMC			Dezincification resistant material and comply with AS/NZS 3688	SP USE ONLY	SP USE ONLY	SP USE ONLY		
Ball valves - Water Service	274 274.2(a) - Compliance with AS 4796, AS 3688 and DR AS 5830.1 274.2.(b) - Plastic not permitted 4.1 - PN16 minimum 4.2 - Water Supply Property Service 4.3 - DR Copper Alloy 4.4 - Male R thread to AS ISO 7.1 or Female Rp thread to AS ISO 7.1 4.5 - 90 Degree closure with 38mm handle for maintap and 50mm handle for meter. Meter ball valve with Locking open/close function	Gatic/Milne Elster RMC TOF			Dezincification resistant material and comply with AS/NZS 3688	Accepted for DN20 & DN 25	Accepted for DN20 & DN 25	Accepted for DN20 & DN 25		
Union stopcock	No WSA-PS 1 - Compliance with AS 4020, DR to AS 2345, AS 3718 and AS 3688. 2 - PN 16 3 - Male R thread to AS ISO 7.1 or Female Rp thread to AS ISO 7.1 4 - Watermark acceptance	Gatic/Milne Elster RMC			25 mm Dezincification resistant material and comply with AS/NZS 3688	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		
Transition couplers	208 Up to DN63 2.(a) - EN 1254 acceptable Certification 4.1 - PN16 minimum 4.2 - Mechanical Polyethylene or Copper Alloy both with approved Plastic grippers/olives/thimbles 4.3.1 - Transition - PE to Male R thread to AS ISO 7.1 or Female Rp thread to AS ISO 7.1 4.3.2 - Coupling - PE to PE not used 4.4 - Flange not used 4.5 - SBR & EPDM	Plasson +GF+			PE to BSP connections					
Meters - 20 mm (direct metering applications	No WSA-PS 1 - NSC/NMI Pattern Approved 2 - AS 3565.1 Certified	Elster Metering RMC Itron	V100 (PSM-T) MRP, Endurance multijet TD8		Purple body for non-drinking water Accuracy Class 2	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP	Use of V200 is permitted. V100 is only accepted for above ground installation. MRP shall only be installed horizontally.	V100 is preferred with Accuracy Ratio 315
Meters - 25 mm (direct metering applications	No WSA-PS 1 - AS 3565.1 Certified 2 - Integral Strainer	Elster Metering RMC	V100 (PSM-T) MRP		Purple body for non-drinking water Accuracy Class 2	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP		V100 is preferred with Accuracy Ratio 315
Meters - 32 & 40 mm (direct metering applications	No WSA-PS 1 - AS 3565.1 Certified 2 - Integral Strainer 3 - Std Thread for attachment of a AS3565.1 (clause 2.6 (DR) Copper Alloy Oval Flange with two Bolts 4 - Colour and Check Valve requirements as per SEQ-SP requirements	Elster Metering RMC	V100 (PSM-T) MRP		Purple body for non-drinking water Accuracy Class 2	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP		V100 is preferred with Accuracy Ratio 315
Meters - 50 mm and larger (direct metering applications		ltron Elster RMC ABB Sensus	Woltex H4000 Helix Arad Aquamaster Meistream		Purple body for non-drinking water Accuracy Class 2	Meter brand and model subject to acceptance by SP Magflow meters not accepted.	Meter brand and model subject to acceptance by SP	Meter brand and model subject to acceptance by SP		
Electromagnetic Flowmeters (both direct metering and su metering applications)	s No WSA-PS ub- 1- Flange to AS4087 Figure 5 2- PN16	Refer to Electrical IPAM List	Refer to Electrical IPAM List	1		Refer to Electrical IPAM List	Refer to Electrical IPAM List	Refer to Electrical IPAM List	Refer to Electrical IPAM List	Refer to Electrical IPAM List

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Answer of the second		with Service Provider Specific	C Manufacturer / Supplier	D Trade Name	Size Range		G Gold Coast City Council	H Logan City Council	Redland City Council	QUU	K Unitywater
Investigation	Meters - 20 mm	1 - NSC/NMI Pattern Approved 2 - AS 3565.1 Certified 3 - Integral Strainer 4 - Std Tail Nut with gasket 5 - Colour and Check Valve requirements as per	RMC	MRP, Endurance multijet			RMC - MRP & PD, Elster - V100, Actaris -	RMC - MRP & PD, Elster - V100, Actaris -	RMC - MRP & PD, Elster - V100, Actaris -	V100 is only accepted for above ground installation.	V100 is preferred with Accuracy Ratio 315
Number of a list state for each or and the state of each or and t		1 - AS 3565.1 Certified 2 - Integral Strainer 3 - Std Tail Nut with gasket 4 - Colour and Check Valve requirements as per					Elster V100, RMC WM252 PD, Actaris	Elster V100, RMC WM252 PD, Actaris	Elster V100, RMC WM252 PD, Actaris		V100 is preferred with Accuracy Ratio 315
Notice in the second		1 - AS 3565.1 Certified 2 - Integral Strainer 3 - Std Thread for attachment of a AS3565.1 Clause 2.6 (DR) Copper Alloy Oval Flange with two Bolts 4 - Colour and Check Valve requirements as per									V100 is preferred with Accuracy Ratio 315
Model Processing Model Processing <t< td=""><td></td><td>1 - AS 3565.1 Certified 2 - Std integral Round Flange as per AS3565.1 Clause 2.5 to AS4087 Figure B5 with four Bolts 3 - Colour and Check Valve requirements as per</td><td>Elster RMC ABB</td><td>H4000 Helix Arad Aquamaster</td><td></td><td></td><td>SP</td><td>SP</td><td>SP</td><td></td><td></td></t<>		1 - AS 3565.1 Certified 2 - Std integral Round Flange as per AS3565.1 Clause 2.5 to AS4087 Figure B5 with four Bolts 3 - Colour and Check Valve requirements as per	Elster RMC ABB	H4000 Helix Arad Aquamaster			SP	SP	SP		
List of symptom List of sy	(AMR) Systems		Epitomy Halytech Utiligy				Hard-wired systems only				
Image: second	Meter boxes - 20 mm	 Lids Virgin HDPE with Box Virgin and/or regrind HDPE I Lid in Box at Class A to AS 3996 Lid shall have a slip resistant pattern that is certified to AS/NZS4586 for Table 2 (Class W) and Table 5 (Classification R11). Lids shall snap-lock into the box and shall include a metal device for Location and a separate 2mm Galvanised Chain or 2mm SS304 wire rope fixed to the lid and box. The Lid shall have moulded on it's upper surface Water Meter and shall be coloured as 			368 long x 271 wide	Blue, Black or Green meter box lids	Draper and Everhard	Draper and Everhard	Draper and Everhard	NOT ACCEPTED BY SP	Purple lid for non-drinking water meter box Black or green lid for drinking water meter box Blue lid not permitted
Image index defector inex 1: Single Check value to ASN2S 246.1; Tyco DN100 & DN150 Mode SLO3: Single check defector inextor NOT ACCEPTED BY SP NOT ACCEPTED BY SP NOT ACCEPTED BY SP 2065077 for 100mm and 2065078 for 150mm 20 Duble detector inex value NW SA-PS Tyco DN400, S.0100, 8.150 Cla-Val DN40, 50, 100 & 150 Cla-Val Use is subject to acceptance by SP Use is subject to ac		 Lids Virgin HDPE with Box Virgin and/or regrind HDPE I Lid in Box at Class A to AS 3996 Lid shall have a slip resistant pattern that is certified to AS/NZS4586 for Table 2 (Class W) and Table 5 (Classification R11). Lids shall snap-lock into the box and shall include a metal device for Location and a separate 2mm Galvanised Chain or 2mm SS304 wire rope fixed to the lid and box. The Lid shall have moulded on it's upper surface Water Meter and shall be coloured as 			492 long x 271 wide	Blue, black or green box lid	Draper and Everhard	Draper and Everhard	Draper and Everhard	Solid purple lid with non-drinking water symbol and lettering for non-drinking water meters. Black or blue lid for drinking water meters.	Purple lid for non-drinking water meter box Black or green lid for drinking water meter box Blue lid not permitted
Reduce pressure zone device No WSA-PS Listen zone zone device Install approved pre-assembled boxes as per SEQ-WAT-1106 set Use is subject to acceptance by SP See Unitywater Sub-Trechnical Spect Sub-Meter Sub-Trechnical Spect Sub-Me		1 - Single Check valve to AS/NZS 2845.1	Тусо		DN100 & DN150		NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	2065077 for 100mm and 2065078 for	
Pre-assembled dual meter boxes 1 - Approved Supplier Assembles as per SEQ- SP requirements 1 - Approved Supplier Assembles as per SEQ- SP requirements 1 - Approved Supplier Assembles as per SEQ- SP requirements 1 - Approved Supplier Assembles as per SEQ- SP requirements 1 - Approved Supplier Assembles as per SEQ- SP requirements 1 - Approved Supplier Assembles as per SEQ- SP requirements Use is subject to acceptance by SP Tellam Use is subject to acceptance by SP Use is subject to acceptance by SP Sub-meter assembles No WSA-PS 1 - Approved Supplier Assembles as per SEQ- SP requirements No WSA-PS Install approved Supplier Assembles as per GCCC Sub-Meter Guideline Install approved Supplier Assembles		No WSA-PS		Cla-Val	DN40, 50, 100 & 150		Use is subject to acceptance by SP				
Sub-meter assemblies 1 - Approved Supplier Assemblies as per SEQ- SP requirements Lister Tellam DN20 Drinking or Non-drinking Install approved sub-meter assemblies as per GCCC Sub-Meter Guideline Install approved sub-meter assemblies as subMetering Accepted items for external attachment to meter assemblies :		1 - Approved Supplier Assemblies as per SEQ-			DN20	or				Use is subject to acceptance by SP	Use is subject to acceptance by SP
1 - Certified to AS/NZS 2845.1 2 - Non-Testable assembles 3 - PN16 and Flanged to AS4087 Figure B5 Tyco DN40 and Larger 4 - Ductile Iron body with AS4158 coating and lining or SS316 body or SS304 body if SS316 Tyco Backflow prevention device No MSA_PS LW Gemmell	Sub-meter assemblies	1 - Approved Supplier Assemblies as per SEQ-			DN20	Drinking or Non-drinking				Use is subject to acceptance by SP	See Unitywater Sub-Metering Policy Technical Specification
	Dual Check valves for Meter assemblies	No WSA-PS 1 - Certified to AS/NZS 2845.1 2 - Non-Testable 3 - PN16 and Flanged to AS4087 Figure B5 4 - Ductile fron body with AS4158 coating and lining or SS316 body or SS304 body if SS316					attachment to meter assembly :	attachment to meter assembly :	attachment to meter assembly :	Use is subject to acceptance by SP	
AND ADD ADD ADD ADD ADD ADD ADD ADD ADD	Backflow prevention device 4 (RPZ)	No WSA_PS AS2845	RMC	RP03						Any brand with ISO Type 5 product certification to AS2845 is accepted	UW prefers RP03 RPZ

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<u> </u>	WSAA Product Specification No.	<u> </u>		-		· · · · ·		·	,	
Product	with Service Provider Specific Requirements	Manufacturer / Supplier	Trade Name	Size Range	Specified Requirements / Minimum Class	Gold Coast City Council	Logan City Council	Redland City Council	QUU	Unitywater
Category: WAT	ER SUPPLY MISCELLANE	OUS ITEMS								
Detectable marker tape	318 4.1 - Tape/Product Colour - Drinking Water = Blue preferred (Green accepted via SP approval). Non-Drinking Water = Purple. Sewerage = Cream 4.2 - Message = " Caution PRODUCT Buried Below " 4.3 - SS 316 tracer wire 4.4 - See 4.1 above	Boddington Tapex Gemmell								UW accepts only blue detectable marker tape for drinking water
Loose PE sleeving to DI pipe	320 Colours are Blue for Drinking Water and Purple for Non Drinking Water to POP203	Tyco Crevet	BLUEBOSS blue		Mandatory sleeving to all DI pipe					
PVC - M conduits	209 4.1 - PN12 4.2 - Water Service Conduit 4.3 - Series 1 SCJ 4.4 - White for Water Conduit 4.5 - SCJ only	Vinidex Iplex Tyco	Hydro S1		PN12 Series 1					UW requires uPVC PN9 series 1 with solvent weld joint- Refer drawing SEQ-WAT 1108-1.
Embedment material - crushed rock	351 4.1 - Single sized. 4.2 - Nominal 5 or 7mm									
Embedment material - recycled concrete	366 4.1 - Single sized 10mm nominal 4.2 - Moisture Content by design	Queensland Recycling				NOT ACCEPTED BY SP	NOT ACCEPTED BY SP	NOT ACCEPTED BY SP		NOT ACCEPTED BY SP
Bedding sand	AS/NZS 2566.2 Table G3 for sand.					Main pipe use is subject to acceptance by SP Service pipe use mandatory	Main pipe use is subject to acceptance by SP Service pipe use mandatory	Main pipe use is subject to acceptance by SP Service pipe use mandatory		
Concrete	357 4.1 - N20 for Thrust Blocks and Unreinforced embedment. N25 for reinforced embedment 4.2 - Slumps as required for placement				Normal class					
Security fencing				AS1725.1 Chain Link Fabric Fencing-powder coated black		Fence details generally to GCCC Standard Drawing 05-05-004	Fence details generally to GCCC Standard Drawing 05-05-004	Fence details generally to GCCC Standard Drawing 05-05-004	Use is subject to acceptance of SP	
5 Plastic marker post	1- Comply with Main Roads specification MRS11.14	Park International			As per SEQ-WAT-1300-2					
7										
8										
⁹ Category: EME	RGENCY STORAGE CHAM	BERS		From 4.0m - 1.0						
10		Envirotank Pty Ltd	Envirotank - Water/Wastewater Tank	From 4.8m x 1.2m dia. (5kl) to 16.4m x 3.0m dia. (110kl)	Fibreglass construction	Use Accepted - 30 Year Warranty	Use Accepted - 30 Year Warranty	Use Accepted - 30 Year Warranty	Use is subject to acceptance by SP	Use Accepted - 30 Year Warranty
Underground Storage Chamber		Rocla Humes	Concrete Detention System	Conc. Box units (2.4m modules) Conc. Pipe units (2.44m modules)		GCCC accepts only PE lined Pipe	GCCC accepts only PE lined Pipe	GCCC accepts only PE lined Pipe		UW accepts only PE lined Pipe
12			Plastic Detention System 'Plastream'	1.5m to 2.25m dia (10kl to 250kl)	PE spirally wound steel-reinforced pipe	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	Use is subject to acceptance by SP	NOT ACCEPTED BY SP
44										
5										