



Operation & Maintenance Manuals Volume 3 As Constructed Drawings

Wacol WRP

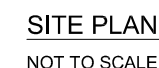
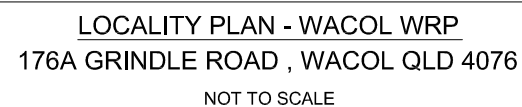


Contents

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A	Equipment List
B	Instrument List
C	Valve List
D	Design report
E	Functional Specification



Tenix Drawings As Constructed Mechanical



EXISTING SCREEN BUILDING

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: _____ DATE: _____
 NAME of SIGNATORY: JEAN MARC LAURILARD
 RPEQ No. or LICENCE: 13594
 COMPANY NAME: TENIX
 START DATE: _____ FINISH DATE: 01.10.2013



K.VAHEESAN		ORIGINAL SIGNED
NAME	SIGNATURE	DATE
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		



AS CONSTRUCTED

[illegible]

DRAWING INDEX


TENIX DRAWING NUM BER	QUU DRAWING NUM BER	DESCRIPTION
GENERAL DRAWINGS		
300832-G-DWG-0001	486/5/5-0173-001	COVER SHEET
300832-G-DWG-0002	486/5/5-0173-002	DRAWING INDEX
300832-G-DWG-0003	486/5/5-0173-003	GENERAL NOTES
300832-G-DWG-0004	486/5/5-0173-004	GENERAL NOTES AND TIE POINT SCHEDULE
PROCESS & INSTRUMENTATION		
300832-I-DWG-5002	486/5/5-0173-010	TENIX P&ID LEGEND
300832-I-DWG-5003	486/5/5-0173-011	QUU P&ID LEGEND
300832-I-DWG-5004	486/5/5-0173-012	WASHWATER SUPPLY SYSTEM
300832-I-DWG-5005	486/5/5-0173-013	POTABLE WATER SUPPLY SYSTEM
300832-I-DWG-5006	486/5/5-0173-014	SCREENINGS ROOM WASH PRESS Nos. 1, 2 & 3
300832-I-DWG-5007	486/5/5-0173-015	SCREENINGS ROOM VENTILATION SYSTEM
300832-I-DWG-5008	486/5/5-0173-016	INLETWORKS SCREEN No. 3
MECHANICAL DRAWINGS		
300832-M-DWG-7000	486/5/5-0173-020	FLOWMETER SUPPORT DETAILS
300832-M-DWG-7001	486/5/5-0173-021	PIPE / LCS SUPPORT No. 1 & 2 DETAILS
300832-M-DWG-7002	486/5/5-0173-022	STEP & BAFFLE PLATE DETAILS
300832-M-DWG-7003	486/5/5-0173-023	PIPE SUPPORT No. 3 DETAILS
PIPING DRAWINGS		
300832-P-DWG-6002	486/5/5-0173-032	EXISTING SCREEN BUILDING ROOF SLAB PLAN & SECTIONS
300832-P-DWG-6003	486/5/5-0173-033	EXISTING SCREEN BUILDING ROOF DRAINAGE ELEVATIONS
300832-P-DWG-6004	486/5/5-0173-034	EXISTING SCREEN BUILDING ROOF DRAINAGE ELEVATIONS
300832-P-DWG-6005	486/5/5-0173-035	EXISTING SCREEN BUILDING ROTARY SCREEN LAYOUT PLAN
300832-P-DWG-6006	486/5/5-0173-036	EXISTING SCREEN BUILDING ROTARY SCREEN LAYOUT SECTIONS
300832-P-DWG-6007	486/5/5-0173-037	EXISTING SCREEN BUILDING WASH PRESS LAYOUT PLAN
300832-P-DWG-6008	486/5/5-0173-038	EXISTING SCREEN BUILDING WASH PRESS LAYOUT SECTION
300832-P-DWG-6009	486/5/5-0173-039	EXISTING SCREEN BUILDING WASH PRESS LAYOUT SECTIONS
300832-P-DWG-6010	486/5/5-0173-040	EXISTING SCREEN BUILDING WASH PRESS LAYOUT SECTIONS
300832-P-DWG-6011	486/5/5-0173-041	TYPICAL WASH PRESS LAYOUT SECTION
300832-P-DWG-6012	486/5/5-0173-042	DRUM SCREEN ASSEMBLY
300832-P-DWG-6013	486/5/5-0173-043	VENTILATION ARRANGEMENT
300832-P-DWG-6014	486/5/5-0173-044	WASH PRESS INLET HOPPER ASSEMBLY
300832-P-DWG-6015	486/5/5-0173-045	EXISTING SCREEN BUILDING SERVICES LAYOUT PLAN
CIVIL & STRUCTURAL DRAWINGS		
300832-S-DWG-3000	486/5/5-0173-050	STANDBY DIESEL GENERATOR & ELECTRICAL PIT FOOTING DETAILS

TENIX DRAWING NUM BER	QUU DRAWING NUM BER	DESCRIPTION
ELECTRICAL DRAWINGS		
300832-E-DWG-8000	486/5/5-0173-060	STANDBY DIESEL GENERATOR & ELECTRICAL PIT LOCATION & DETAILS
300832-E-DWG-8001	486/5/5-0173-061	EXISTING SCREENINGS BUILDING MCC SDSB
300832-E-DWG-8002	486/5/5-0173-062	GEN. ARR. INLET VALVE NO. 3 MOTOR STARTER CUBICLE MCC SDSB
300832-E-DWG-8003	486/5/5-0173-063	GEN. ARR. FOUL AIR FAN NO. 3 MOTOR STARTER CUBICLE MCC SDSB
300832-E-DWG-8004	486/5/5-0173-064	GEN. ARR. INLET VALVE NO. 3 MOTOR STARTER CUBICLE MCC SDSB
300832-E-DWG-8005	486/5/5-0173-065	GEN. ARR. ROTARY DRUM SCREENS LOCAL CONTROL STATIONS
300832-E-DWG-8006	486/5/5-0173-066	GEN. ARR. SCREW WASH PRESS LOCAL CONTROL PANELS
300832-E-DWG-8010	486/5/5-0173-070	SINGLE LINE DIAGRAM NEW EQUIPMENT ADDED
300832-E-DWG-8011	486/5/5-0173-071	NEW CONTROL CABLE TERMINATION SCHEDULE AND LCS WIRING
300832-E-DWG-8012	486/5/5-0173-072	NEW CONTROL CABLE TERMINATION SCHEDULE AND LCS WIRING
300832-E-DWG-8013	486/5/5-0173-073	NEW CONTROL CABLE TERMINATION SCHEDULE AND LCS WIRING
300832-E-DWG-8014	486/5/5-0173-074	NEW CONTROL CABLE TERMINATION SCHEDULE AND LCP WIRING
300832-E-DWG-8020	486/5/5-0173-080	SCREENINGS MCC POWER CIRCUITS
300832-E-DWG-8021	486/5/5-0173-081	DRUM SCREEN NO. 3 CONTROL CIRCUITS AND SOFT STARTER
300832-E-DWG-8022	486/5/5-0173-082	DRUM SCREEN NO. 3 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8023	486/5/5-0173-083	FOUL AIR FAN NO. 3 CONTROL CIRCUITS
300832-E-DWG-8024	486/5/5-0173-084	FOUL AIR FAN NO. 3 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8025	486/5/5-0173-085	INLET VALVE NO. 3 CONTROL CIRCUITS
300832-E-DWG-8026	486/5/5-0173-086	INLET VALVE NO. 3 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8027	486/5/5-0173-087	SCREW WASH PRESS NO. 1 LOCAL CONTROL PANEL
300832-E-DWG-8028	486/5/5-0173-088	SCREW WASH PRESS NO. 1 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8029	486/5/5-0173-089	SCREW WASH PRESS NO. 2 LOCAL CONTROL PANEL
300832-E-DWG-8030	486/5/5-0173-090	SCREW WASH PRESS NO. 2 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8032	486/5/5-0173-092	SCREW WASH PRESS NO. 3 CONTROL CIRCUITS AND PLC I/O
300832-E-DWG-8033	486/5/5-0173-093	WASH WATER PUMPS LOCAL CONTROL PANEL
300832-E-DWG-8034	486/5/5-0173-094	WASH WATER PUMPS CONTROL CIRCUITS AND PLC I/O

AS CONSTRUCTED DETAILS

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SIGNED: DATE:
NAME of SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013




TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-G-DWG-0002
REV. 2
DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 01.10.13

K.VAHEESAN ORIGINAL SIGNED
NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)



B01.10.13AS CONSTRUCTEDSBYVW13594

A13.05.13DRAWING INDEX REVISEDRSJML1068AHDESIGN W.O. No. 300832

O23.04.13FOR CONSTRUCTIONRSJML1068AHCONSTRUCTION W.O. No. BW 70146-WD16

No. DATEAMENDMENTDRAFTEDDESIGNEDRPEQ NO. APPROVEDFUNDED BY Q.U.U. (✓)EXTERNAL ()Q.U.U. FILE No. 185/255/863/49

DRAFTEDORIGINAL SIGNED S.BAYAN 01.10.13ORIGINAL SIGNED Y.WU 01.10.13

DRAFTING CHECKORIGINAL SIGNED J.LAURILLARD 01.10.13

CAD FILEORIGINAL SIGNED J.LAURILLARD 13549 01.10.13DESIGN CHECKR.P.E.Q. No. DATE

ORIGINAL SIGNED Y.WU 01.10.13

ORIGINAL SIGNED M.LESKE 01.10.13

APPROVED BY (CONSULTANT) SIGNATURE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
DRAWING INDEX

SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.
486/5/5-0173-002 B

AS CONSTRUCTED

Q-Pulse Id TMS377

Active 22/11/2013

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GENERAL

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
- MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES OF PRACTICE, AUSTRALIAN STANDARDS AND STATUTORY AUTHORITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF EXISTING SERVICES PRIOR TO COMMENCEMENT OF THE WORK.
- REFER TO STRUCTURAL DRAWINGS FOR ALL STRUCTURAL DETAILS.
- ALL PIPING AND PRESSURE PIPELINES SHALL BE SUBJECT TO ACCEPTANCE TESTS AS PER WACOL SPECIFICATION.
- ALL FABRICATED ITEMS TO BE FREE FROM BURRS AND SHARP EDGES.

PIPES AND FITTINGS

- ALL PIPE LENGTHS SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO ORDERING AND ALL LEVELS SHALL BE CONFIRMED ON SITE DURING CONSTRUCTION.
- DUCTILE IRON (DI) PIPES AND FITTINGS SHALL BE COMPLIANT WITH WS-SPEC SECTION SP2. DI PIPES AND FITTINGS SHALL BE RRJ DICL MIN CLASS PN35 TO AS/NZS 2280 - DUCTILE IRON PIPES AND FITTINGS, UNLESS NOTED OTHERWISE. PIPES CAST INTO CONCRETE SHALL BE POWER-TOOL CLEANED TO AS1627. BURIED DI PIPES AND FITTINGS SHALL BE WRAPPED WITH POLYETHYLENE SLEEVING.
- PVC PRESSURE PIPES AND FITTINGS SHALL BE COMPLIANT WITH WS-SPEC, SECTION SP4. uPVC SHALL BE RRJ, MIN CLASS PN16 SERIES 2. PVC PIPES AND FITTINGS SHALL BE STORED PROTECTED FROM SUNLIGHT. THE CONTRACTOR SHALL PROVIDE PROTECTION FOR THE PIPES AND FITTINGS FROM UV LIGHT AND DAMAGE. ALL EXPOSED PVC PIPEWORK SHALL BE PAINTED TO PROTECT IT FROM UV LIGHT USING A WATER BASED ACRYLIC PAINT.
- FLANGES SHALL BE DRILLED TO AS4087, FIGURE B5, FOR DICL AND FIG B7 FOR STEEL PIPE PN16. MATING PIPE FLANGES SHALL BE DRILLED TO SUIT THE SPECIFIED DRILLING OF THE ADJOINING VALVE OR EQUIPMENT. RAISED FACE FLANGES SHALL BE MATED WITH RAISED FACE FLANGES. FLAT FACED FLANGES SHALL BE MATED WITH FLAT FACED FLANGES. UNIFLANGES SHALL ONLY BE USED WITH PRIOR WRITTEN APPROVAL OF COUNCIL.
- ANTI-SEIZE PASTE SHALL BE APPLIED TO ALL THREADS.
- MAXIMUM JOINT DEFLECTIONS ARE 3 DEGREES FOR DICL PIPELINES. DEFLECTIONS ARE TO BE CARRIED OUT ONLY AFTER THE JOINT HAS BEEN MADE.
- UNRESTRAINED DISMANTLING JOINT TO SPECIFICATION WSA PS - 311 MECHANICAL COUPLINGS, UNRESTRAINED. WATER INDUSTRY STANDARD WSA 105 - 2006 (ISSUE 4) INDUSTRY STANDARD FOR UNRESTRAINED MECHANICAL COUPLINGS. PRESSURE CLASS SHALL BE PN 16. BODY COMPONENTS: DUCTILE IRON (STEEL TO EN 10025, FE430A). USE SS 316 BOLTS AND NUTS, FLANGED TO AS 4087 FIG B5. EPOXY RESIN TO WIS 4-52-01 INTERNALLY AND EXTERNALLY, SEALING RING EPDM RUBBER TO BS 2494: 1990, TYPE W.
- ALL STEEL PIPES MANUFACTURED IN ACCORDANCE WITH AS 1579 UNLESS NOTED OTHERWISE.
- STEEL PIPES AND FITTINGS SHALL BE COMPLIANT WITH WS-SPEC SECTION SP1. STEEL PIPE TO BE COATED WITH FUSION BONDED POLYETHYLENE COATING IN ACCORDANCE WITH AS 4321 AND PIPE LINING TO BE CEMENT MORTAR LINED IN ACCORDANCE WITH AS 1281.
- ALL BOLTS, NUTS AND WASHERS TO BE GRADE 316 PROPERTY CLASS 50 STAINLESS STEEL UP TO DN800 FLANGES. FOR DN900 CLASS 16 FLANGES THE STUD BOLTS WILL BE GRADE 316 PROPERTY CLASS 80 STAINLESS STEEL. ONE WASHER ON THE BOLT AND ONE WASHER ON THE NUT SIDE TO BE FITTED. A MINIMUM OF 2-4 THREADS IS TO BE PROTRUDING THE NUT SIDE AFTER TIGHTNING.
- ALL BURIED BOLTS AND FLANGES SHALL BE WRAPPED IN PETROLEUM MASTIC AND TAPE, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION. OVERLAP FACTORY PIPE COATING BY 150mm. CARRY OUT ONLY AFTER SATISFACTORY COMPLETION OF HYDRAULIC TESTING
- ALL BURIED PIPEWORK OUTSIDE CHAMBERS ENCASED IN CONCRETE TO BE BITUMEN TAPE WRAPPED.
- ALL EXPOSED CONCRETE CORNERS TO BE CAST WITH 20x20mm CHAMFER.
- DIMENSIONS OF ALL STEEL PIPE FITTINGS AND LEVELS TO BE CHECKED AND VERIFIED ON SITE PRIOR TO ORDERING OR MANUFACTURING OF ANY MATERIAL.
- CONTRACTOR TO LIAISE WITH AUTHORITY REGARDING ALLOWABLE DOWN-TIME AND PROGRAM WORK ACCORDINGLY
- CONTRACTOR TO LIAISE WITH OTHER CONTRACTORS INSTALLING OTHER SERVICES AND PROGRAM WORK ACCORDINGLY
- STAINLESS STEEL CLAMP SHALL BE DOUBLE PART WITH FLANGED OFFTAKE TO WSA PS-313 AND AS 1481-1999. ALLOWABLE OPERATING PRESSURE PN16, FLANGES SHALL COMPLY TO AS 4087-2004. THE CLAMP SHALL CONSIST OF A STAINLESS STEEL BAND AND CLAMPING SYSTEM FULLY LINED WITH AN INTEGRAL ELASTOMERIC GASKET.
- PE PIPES SHALL BE COMPLIANT WITH WS-SPEC SECTION SP6. PE PIPES SHALL BE PE80B OR PE100 POLYMER MATERIAL. MINIMUM PRESSURE CLASS PN16. ELECTROFUSION OR BUTT FUSION JOINED.
- ALL ABOVE GROUND HDPE PIPES SHALL BE PE100 SDR13.6. MINIMUM PRESSURE CLASS PN12.5. ALL BELOW GROUND HDPE PIPES SHALL BE PE100 SDR13.6. MINIMUM PRESSURE CLASS PN12.5.
- ALL ABOVE GROUND SS PIPES & FITTINGS SHALL BE TO ASTM A312 316L SS & ANSI/ASME B36.19. SS PIPES DN50 OR BELOW TO BE SCHEDULE 40. SS PIPES ABOVE DN50 TO BE SCHEDULE 10.

STRUCTURAL STEEL

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH A.S. 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE THE SPECIFICATION.
- ALL STEEL SHALL BE IN ACCORDANCE WITH AS 3678, AS 3679 OR AS 1163
- MINIMUM PLATE THICKNESS TO BE 10mm UNO. PROVIDE ALL CLEATS AND DRILL HOLES FOR FIXINGS, WHETHER OR NOT DETAILED ON THE DRAWINGS, TO THE APPROVAL OF THE ENGINEER. THIS INCLUDES ALL ARCHITECTURAL FIXINGS WHICH ARE NOT NECESSARILY SHOWN ON THE STRUCTURAL ENGINEERS DRAWINGS.
- ALL WELDS TO BE IN ACCORDANCE WITH AS 1554 : ALL WELDS TO BE CATEGORY SP UNO. ALL BUTT WELDS TO BE FULL PENETRATION UNO. ALL FILLET WELDS TO BE 6 CONTINUOUS ELECTRODES TO BE CLASSIFICATION E41XX EXTENT OF WELDS INSPECTION : VISUAL 100% NON-DESTRUCTIVE 0%
- REFER TO AISC 'STANDARDISED STRUCTURAL CONNECTIONS FOR DESIGNATION AND DETAILS OF CONNECTIONS. BOLT TYPE AND TIGHTENING PROCEDURE ARE DESIGNATED : NUMBER, SIZE - STRENGTH GRADE / TIGHTENING PROCEDURE STRENGTH GRADE 4.6 TO BE COMMERCIAL BOLTS TO AS 1111 STRENGTH GRADE 8.8 TO BE HIGH STRENGTH STRUCTURAL BOLTS, NUTS AND WASHERS TO AS 1252. TIGHTENING PROCEDURES : S - 'SNUG TIGHT' TB - BEARING MODE JOINT, BOLTS FULLY TENSIONED IN ACCORDANCE WITH AS 1511 TF - FRICTION MODE JOINT, BOLTS FULLY TENSIONED IN ACCORDANCE WITH AS 1511
- E.G. 4M24 - 8.8 / TB 4 OFF 24 DIAMETER METRIC HIGH STRENGTH STRUCTURAL BOLTS FULLY TENSIONED IN A BEARING MODE.
- ALL BOLTS TO BE M20 - 4.6 / S. UNO ALL BOLTS, NUTS AND WASHERS TO BE HOT DIP GALVANISED, UNO.
- CONTACT SURFACES FOR BOLTED CONNECTIONS USING 8.8 / TF PROCEDURE NOT TO BE PAINTED AND TO BE PREPARED AS SPECIFIED.
- THE CONTRACTOR SHALL PREPARE WORKSHOP DRAWINGS AND SUBMIT THREE COPIES OF EACH FOR STRUCTURAL ENGINEER'S REVIEW OF GENERAL COMPLIANCE WITH THE DESIGN CONCEPT. FABRICATION SHALL NOT COMMENCE UNTIL THE SHOP DRAWINGS HAVE BEEN REVIEWED.
- SURFACE TREATMENT OF STEELWORK : REFER SPECIFICATION
- HOLES SHALL NOT BE MADE THROUGH THE BOTTOM FLANGE OF ROLLED STEEL PURLINS FOR THE SUPPORT OF HOOK BOLTS OR CEILING SUSPENSION SYSTEMS. ALL NECESSARY HOLES SHALL BE MADE THROUGH THE CENTRAL THIRD OF THE WEB.
- DISSIMILAR METALS TO BE SEPARATED USING A RECOGNISED COMMERCIAL SYSTEM.
- ALL HOT DIPPED GALVANISING TO BE IN ACCORDANCE WITH AS 4680.

STAINLESS STEEL

- ALL STAINLESS STEEL PLATE (SS) AND STRUCTURAL ELEMENTS SHALL BE GRADE 316 UNLESS NOTED OTHERWISE.
- ALL WELDS SHALL BE 6mm CONTINUOUS FILLET WELD, UNLESS NOTED OTHERWISE.
- WELDING OF STAINLESS STEEL INCLUDING CLEANING, PICKLING AND PASSIVATION SHALL COMPLY WITH AS1554 06 AND AWRA 16 TECHNICAL NOTE - WELDING OF STAINLESS STEEL - DECEMBER 1985.
- ALL STAINLESS STEEL BOLTS AND WASHERS ARE TO BE GRADE 316. ALL NUTS ARE TO BE GRADE 316 STAINLESS STEEL.

VALVES

- ALL VALVES SHALL BE FLANGED TO AS4087, FIGURE B5 FOR DICL AND FIGURE B7 FOR MSCL PIPE CONNECTION UNLESS NOTED OTHERWISE.
- RESILIENT SEATED GATE VALVE FOR WATER SUPPLY. APPLICABLE STANDARDS AND SPECIFICATIONS: AS 2638.2 : 2006 GATE VALVES FOR WATER WORKS PURPOSES - RESILIENT SEATED WSA PS - 260 GATE VALVES RESILIENT SEATED WSA PS - 261 GATE VALVES, METAL SEATED WSA PS - 262 EXTENSION SPINDLES FOR GATE VALVES WSA PS - 312 FLANGE GASKETS AND O-RINGS

RSV SHALL BE COMPLIANT WITH WS-SPEC SECTION SP-21. MINIMUM PN16 PRESSURE CLASS. SLUICE VALVE SHALL BE CLOCKWISE CLOSING WITH NON-RIISING SPINDLES AND FBE COATED (LINING & COATING TO AS 4158). BURIED SLUICE VALVES SHALL BE ACTUATED BY A VALVE KEY, CONSTRUCTED WITH AN EXTENSION SPINDLE , SUPPLIED WITH VALVE CAP AS PER AS2638.2 FIG. 3.4, CAST IRON COVER, MARGIN SETT AND MARKER POST.
- BUTTERFLY VALVE FOR WATER SUPPLY. SPECIFICATION WSA PS - 263 BUTTERFLY VALVES. COMPLIANT TO AS 4795:2006 (AND AS 4795:2002) BUTTERFLY VALVES FOR WATERWORKS PURPOSES. ANTI CLOCKWISE CLOSING, FUSION BONDED EPOXY COATING TO AS/NZS 4158, 316 SS DISC AND STEM. BFV SHALL BE SUPPLIED WITH INPUT STOP BOX AND TORQUE LIMITER. FLANGES AND DRILLING TO AS 4087 FIGURE B5 OR AS2129 TABLE D, AS 4020 COMPLIANT. ROTORK ACTUATORS TO BE SUPPLIED WHERE INDICATED ON DRAWINGS AND AS PER MANUFACTURER'S INSTALLATION GUIDE
- RESILIENT SEATED SWING CHECK VALVE FOR WATER SUPPLY. NON-RETURN VALVES SHALL BE OF THE RESILIENT SEATED DISK TYPE COMPLYING WITH WSA PS-264 NON-RETURN (REFLUX) VALVES, AS 4794-2001 NON-RETURN VALVES - SWING CHECK AND TILTING DISC. SWING CHECK VALVES ARE MADE OF DUCTILE IRON AND PROTECTED WITH FUSION BONDED EPOXY COATING ELECTROSTATICALLY APPLIED INTERNALLY AND EXTERNALLY IN COMPLIANCE WITH AS/NZS 4158.
- RPZ (REDUCED PRESSURE ZONE) VALVE TO COMPLY WITH AS 2845-1986 & AS 3500.1-2003.

THRUST BLOCKS

- THRUST BLOCKS SHALL BE CONSTRUCTED AT ALL BENDS, TEES BLANK ENDS AND FITTINGS IN ACCORDANCE WITH STANDARD THRUST BLOCK DRAWING. CONSTRUCT THRUST BLOCKS AND ANCHORAGE BLOCKS USING CLASS N25-20mm CONCRETE POURED AGAINST UNDISTURBED GROUND AT THE BOTTOM AND SIDES OF THE TRENCH
- A PROTECTIVE MEMBRANE (HEAVY DUTY POLYETHYLENE SHEETING) TO PROTECT ABRASIVE DAMAGE TO THE WATER MAIN SHOULD BE PROVIDED BETWEEN THE PIPE (IRRESPECTIVE OF THE PIPE MATERIAL) AND THE CONCRETE ANCHOR AND THRUST BLOCKS.
- DO NOT COVER JOINTS WITH CONCRETE. LEAVE SUFFICIENT SPACE AT FLANGED JOINTS FOR FUTURE DISMANTLING OF JOINTS

NOTES:

- REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- REFER TO CONTRACT No. BW70146-WD16 FOR COATING, PAINTING AND ALL RELEVANT SPECIFICATIONS.
- ALL DRAWINGS ARE COMPILED FORM SITE MEASUREMENTS PROVIDED BY TENIX SITE STAFF.

AS CONSTRUCTED

No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED
A	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML
O	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH

FUNDING	
DESIGN W.O. No.	300832
CONSTRUCTION W.O. No.	BW 70146-WD16
FUNDED BY Q.U.U. (✓) EXTERNAL ()	

DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13
DRAFTING CHECK	ORIGINAL SIGNED Y.WU 01.10.13
CAD FILE	550173003.dwg
Q.U.U. FILE No.	185/255/663/49

ORIGINAL SIGNED Y.WU	01.10.13
DESIGN	R.P.E.Q. No.
ORIGINAL SIGNED J.J.AURILLARD	13594 01.10.2013
DESIGN CHECK	R.P.E.Q. No. DATE

ORIGINAL SIGNED	
M.LESKE	01.10.2013
APPROVED BY (CONSULTANT)	SIGNATURE DATE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
GENERAL NOTES

SHEET No.	OF
QUEENSLAND URBAN UTILITIES DRAWING No.	AMEND.
486/5/5-0173-003	A

AS CONSTRUCTED DETAILS	
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.	
SIGNED:	DATE:
NAME of SIGNATORY:	JEAN MARC LAURILLARD
RPEQ No. or LICENCE:	13594
COMPANY NAME:	TENIX
START DATE:	FINISH DATE: 01.10.2013

	
TENIX DRAWING No.	REV.
300832-G-DWG-0003	1
DESIGN: Y.WU	DRAWN: S.BAYAN
APPROVED: M.LESKE	CHECK: J.J.AURILLARD
DATE: 01.10.13	

K.VAHEESAN	ORIGINAL SIGNED	
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QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		
		

TIE POINT SCHEDULE

P&ID	TP No.		Type	Dimensions	Flange Type
300832-I-DWG-5008	1	Drum screen inlet	Flange	600NB	AS2129 PN16
300832-I-DWG-5008	2	Solid discharge	Flange	480 x 380	10 x 12NB holes
300832-I-DWG-5008	3	External pipe	Thread	40 mm	BSP connections
300832-I-DWG-5008	4	Intenral pipe	Thread	40 mm	BSP connections
300832-I-DWG-5008	5	Foul air	Flange	8 x 14NB equi space on 265 PCD	Custom
300832-I-DWG-5008	6	H2S condensate	Pipe	50 mm	N/A
300832-I-DWG-5004	7	Service Water	Flange	100 NB	AS2129 PN16
300832-I-DWG-5004	8	Service Water	Flange	114 OD	Victaulic
300832-I-DWG-5004	9	Service Water	Flange	114 OD	Victaulic
300832-I-DWG-5004	10	Service Water	Open pipe to drain	25NB	N/A
300832-I-DWG-5004	11	Service Water	Open pipe to drain	25NB	N/A
300832-I-DWG-5004	12	Service Water	Thread	40	Union
300832-I-DWG-5005	13	Potable Water	Flange	100 NB	ISO 7005 PN16
300832-I-DWG-5008	14	Raw Sewage	Flange	600NB	AS2129 PN16
300832-I-DWG-5008	15	Foul air	Pipe	200	nil
300832-I-DWG-5006	16	Floor drain	grating	300	N/A
300832-I-DWG-5006	17	Floor drain	grating	300	N/A
300832-I-DWG-5006	18	Floor drain	grating	300	N/A
300832-I-DWG-5008	19	Foul air	Thread	50	N/A
N/A	20	Roof top to GT No.2	Pipe	300 NB	N/A
300832-I-DWG-5008	21	RDS discharge	Open pipe	1125 OD	
300832-I-DWG-5004	22	Effluent water	PE pipe	25	N/A

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME of SIGNATORY: JEAN MARC LAURILARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013



TENIX DRAWING No.		REV.
300832-G-DWG-0004		1
DESIGN: Y.WU	DRAWN: S.BAYAN	CHECK: J.LAURILARD
APPROVED: M.LESKE		DATE: 01.10.2013

K.VAHEESAN ORIGINAL SIGNED
NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)

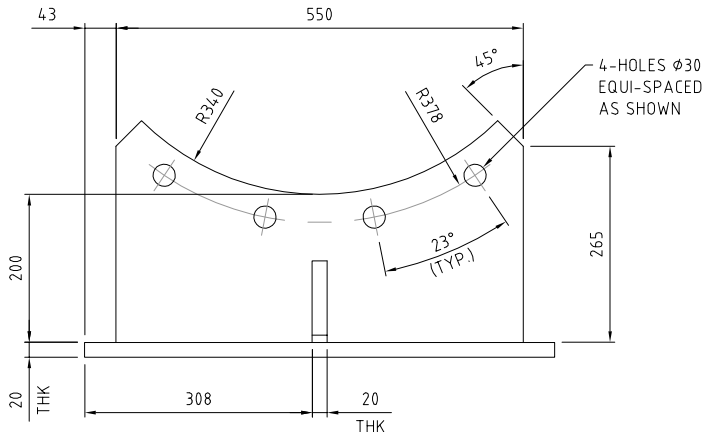
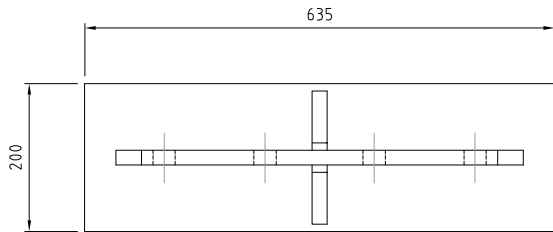


AS CONSTRUCTED

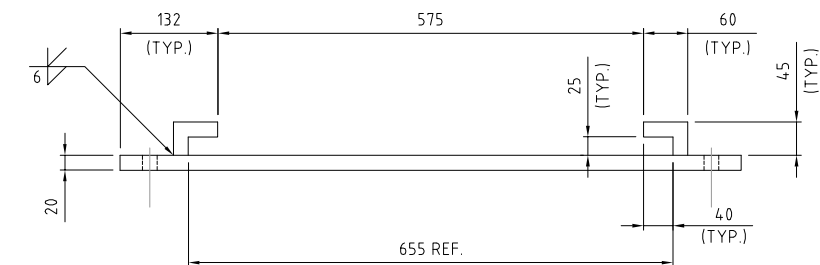
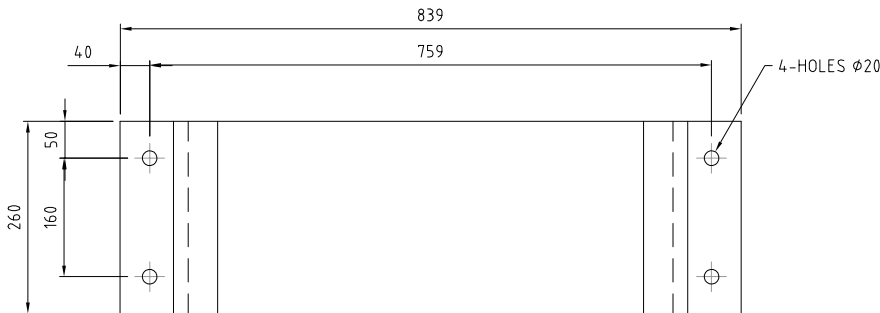
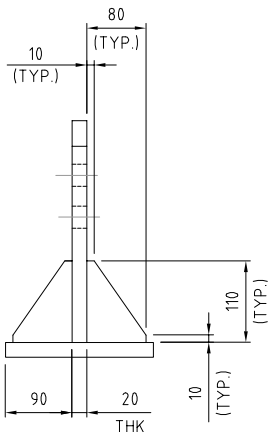
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDING	FUNDED BY	Q.U.U. FILE No.	ORIGINAL SIGNED	DATE	ORIGINAL SIGNED	DATE	ASSET/PROJECT	DRAWING TITLE	SHEET No.	OF	QUEENSLAND URBAN UTILITIES DRAWING No.	AMEND.
A	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG JML	DESIGN W.O. No.	300832	DRAFTING CHECK	ORIGINAL SIGNED S.BAYAN	01.10.13	ORIGINAL SIGNED Y.WU	01.10.13	DESIGN	WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE	VALVE & TIE POINT SCHEDULES			
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No.	BW 70146-WD16	CAD FILE	ORIGINAL SIGNED J.LAURILARD	01.10.13	DESIGN CHECK	13594	13594	01.10.13	486/5/5-0173-004			A
			DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()		Q.U.U. FILE No.	185/255/663/49		APPROVED BY (CONSULTANT)							

NOTES:

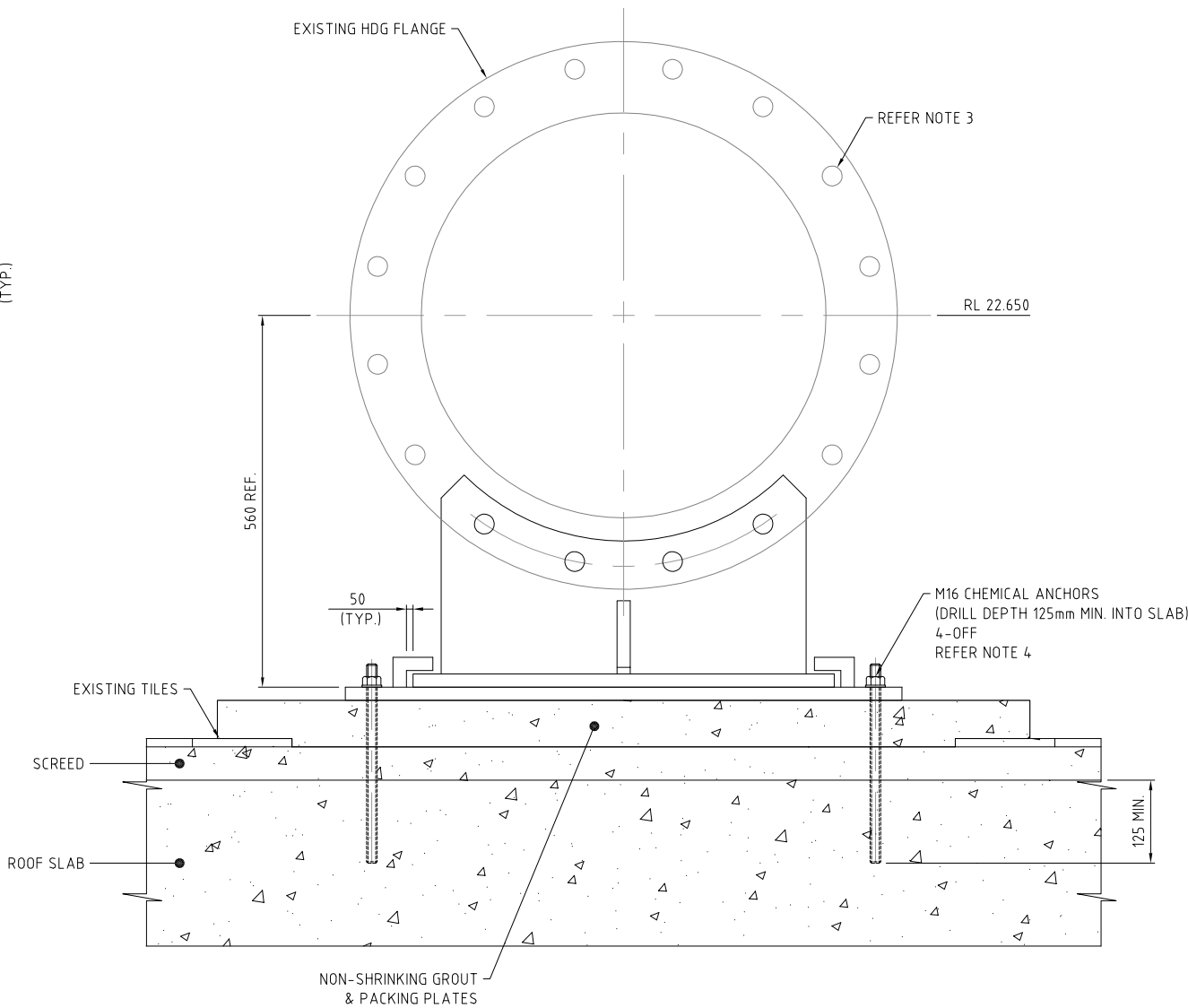
- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
- 3. BOLTS ARE 20mm LONGER TO COMPENSATE FOR THE THICKNESS OF THE SUPPORT.
- 4. ALL CHEMICAL ANCHORS AS PER "RAMSET" SPECIFICATION.
- 5. FOR DIMENSIONS DETERMINING FABRICATION SIZES REFER QUU DWG. 3022/1500-24/5.



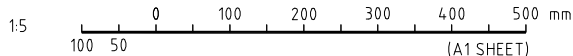
FLOWMETER SUPPORT
MATERIAL: HDG PLATE
QTY: 1-OFF
SCALE 1:5



SUPPORT BASE PLATE
MATERIAL: HDG
QTY: 1-OFF
SCALE 1:5



SECTION B
SCALE 1:5
FLOWMETER SUPPORT ASSEMBLY
QTY: 1-OFF



AS CONSTRUCTED

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME of SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

Tenix
TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-M-DWG-7000 REV. 1

DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 01.10.13

K.VAHEESAN ORIGINAL SIGNED

NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)



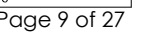
SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.
486/5/5-0173-020 A

No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDING	DRAFTED	DESIGNED	RPEQ NO.	APPROVED
A	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	DESIGN W.O. No. 300832	ORIGINAL SIGNED S.BAYAN 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	01.10.13	ORIGINAL SIGNED
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	DRAFTING CHECK 550173020.dwg	ORIGINAL SIGNED J.LAURILLARD 13549 01.10.13	DESIGN CHECK R.P.E.Q. No. DATE	APPROVED BY (CONSULTANT) SIGNATURE
							FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No. 185/255/863/49			

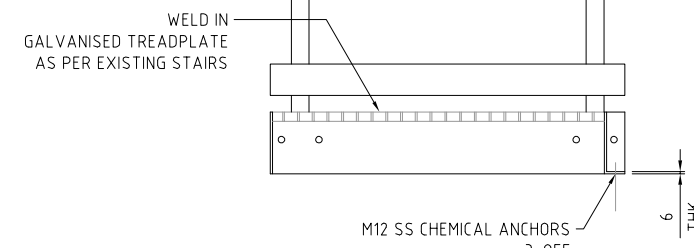
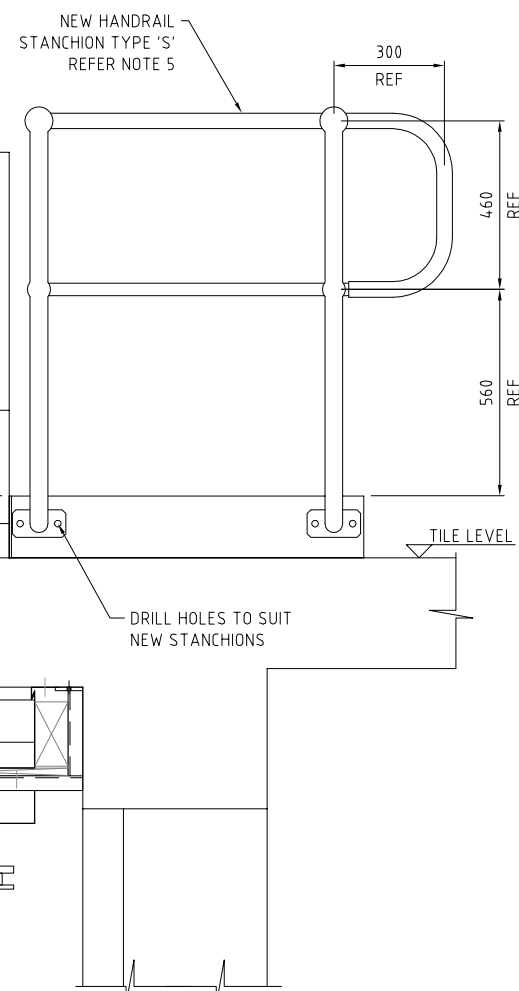
ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
FLOWMETER SUPPORT DETAILS

A vertical number line with tick marks labeled A, B, C, D, E, F, G, H, I, and J. A black triangle points to the tick mark labeled F.



1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
3. GOING & RISE OF EXISTING STAIRWAY TO COMPLY WITH AS1657.
4. REFER DWG. 486/5/5-0173-033 FOR BOX GUTTER DETAILS.
5. HANDRAIL AND STEP PLATFORM COMPLY TO AS1657.



STEP
MATERIAL: MILD STEEL HOT DIPPED GALVANISED
SCALE 1:5



Q-Pulse Id TMS377



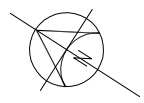
-
- A vertical timeline with labels A through J. A black arrow points to the label F.

[illegible]

1





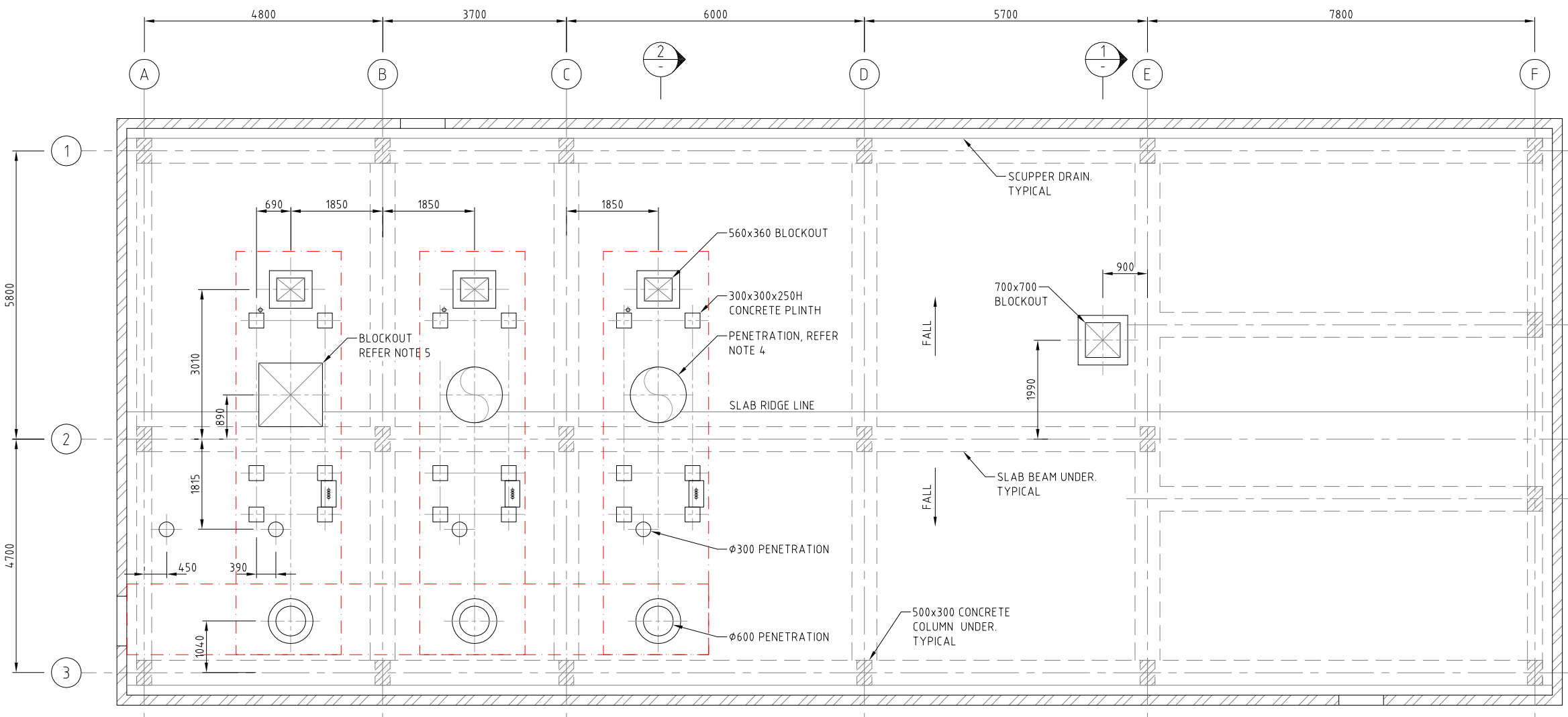


NOTES:

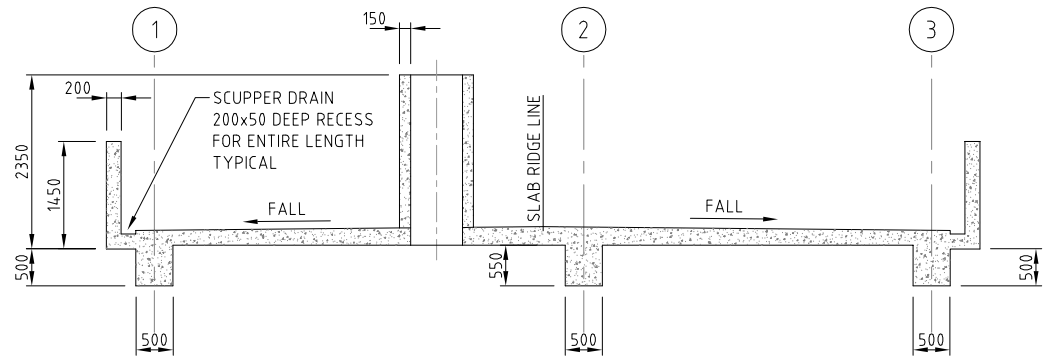
- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
- 3. SETOUT DIMENSIONS TAKEN FROM QUU DWG. 3022/420-1, 3022/420-2 & 3022/430-4.
- 4. QUU DWG. 3022/430-4 SHOWS PENETRATION FOR Ø600 OUTLET PIPE WITH REINFORCED SURROUND.
QUU DWG. 3022/420-2 SHOWS PENETRATION FOR Ø1040 OUTLET PIPE.
- 5. QUU DWG. 3022/430-4 SHOWS PENETRATION FOR Ø600 OUTLET PIPE WITH REINFORCED SURROUND.
SITE INSPECTION INDICATES SQUARE PENETRATION, SIZE T.B.C.
- 6. QUU DWG. 3022/430-4 SHOWS SLAB THICKNESS OF 200 MIN./250 MAX.
- 7. MAX WATER SURCHARGE IS 4mm-REFER TO WACOL AS CONSTRUCTED DESIGN REPORT PREPARED BY TENIX ON 02/10/2013.

LEGEND

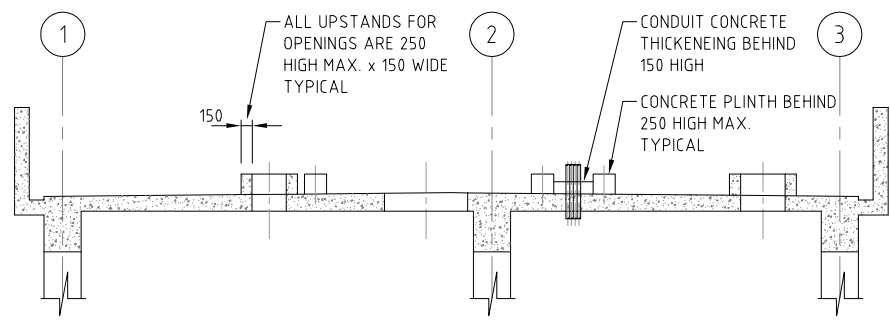
[Red dashed box] DENOTES EQUIPMENT LOAD AREA (REFER DESIGN REPORT FOR INFORMATION)



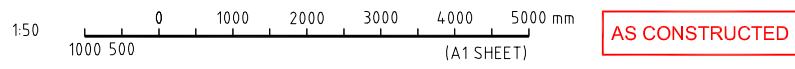
PLAN
SCALE 1:50



SECTION 1
SCALE 1:50



SECTION 2
SCALE 1:50



FUNDING					DRAFTED		ORIGINAL SIGNED		ORIGINAL SIGNED	
A	01.10.13	AS CONSTRUCTED	SB	YW	738	ORIG. DB	DESIGN W.O. No.	300832	Y.WU	01.10.13
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No.	BW 70146-WD16	D.BROWN	01.10.13
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ No.	APPROVED	FUNDED BY Q.U.U. (✓)	EXTERNAL ()	Q.U.U. FILE No.	185/255/663/49

ASSET/PROJECT WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE			DRAWING TITLE EXISTING SCREEN BUILDING ROOF SLAB PLAN & SECTIONS		
SHEET No. OF			QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.		
486/5/5-0173-032			A		

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:

NAME of SIGNATORY: DENIS BROWN

RPEQ No. or LICENCE: 738

COMPANY NAME: TENIX

START DATE: FINISH DATE: 01.10.2013

TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-P-DWG-6002

DESIGN: D.BROWN | DRAWN: S.BAYAN | CHECK: D.BROWN

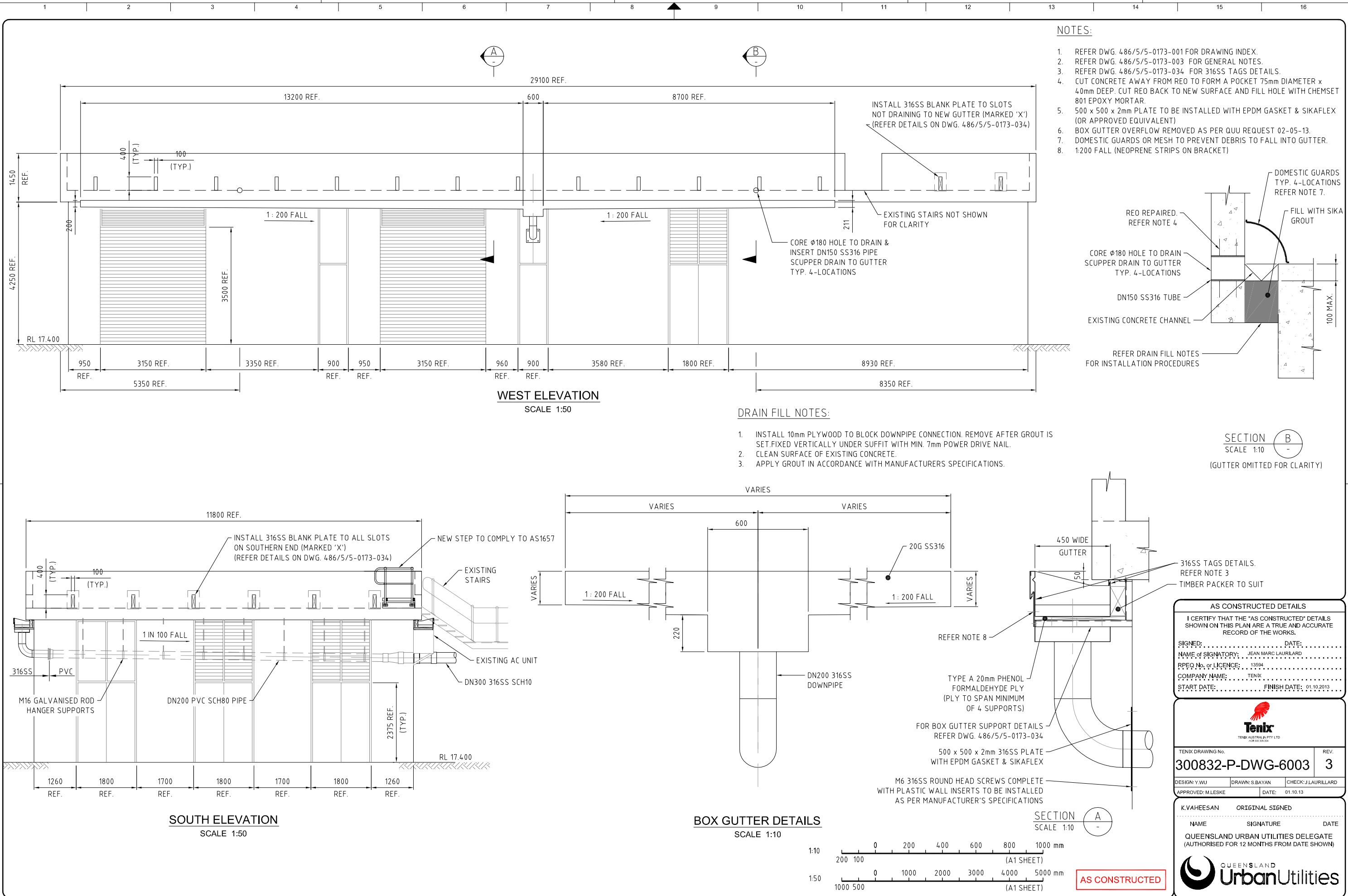
APPROVED: M.LESKE | DATE: 01.10.13

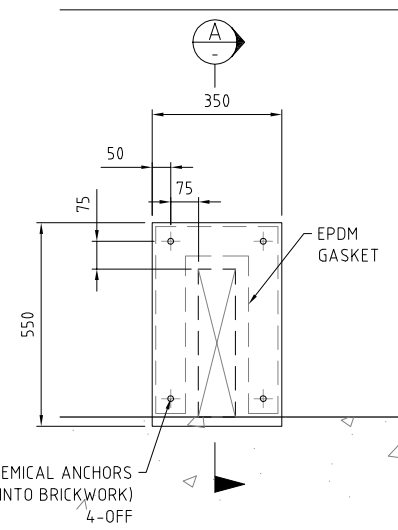
REV. 1

K.VAHEESAN ORIGINAL SIGNED

NAME SIGNATURE DATE

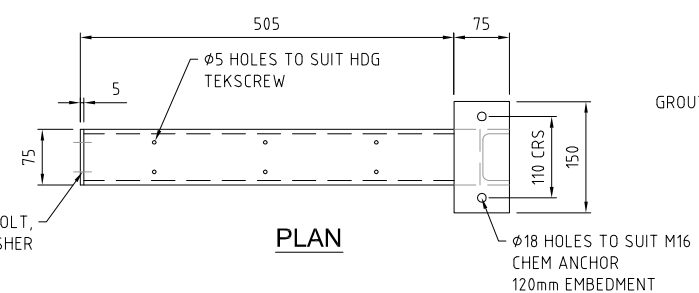
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)





BLANK PLATE DETAILS

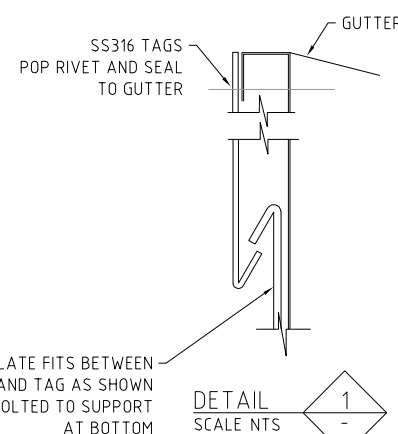
6mm SS316 PLATE
SCALE 1:10



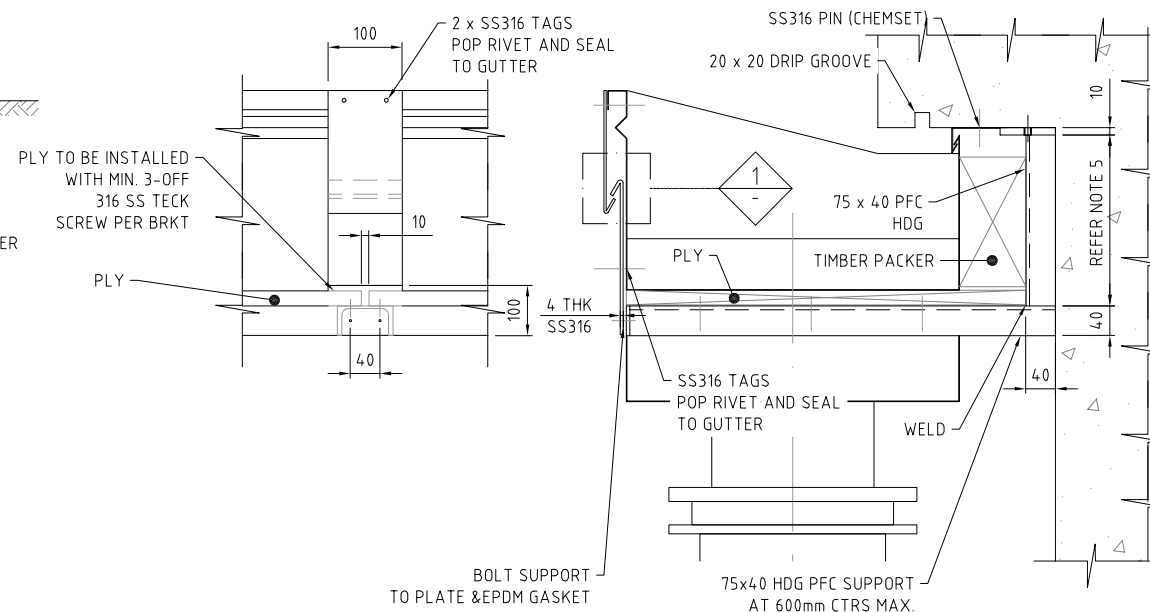
PLAN

SECTION
SCALE 1:10

-



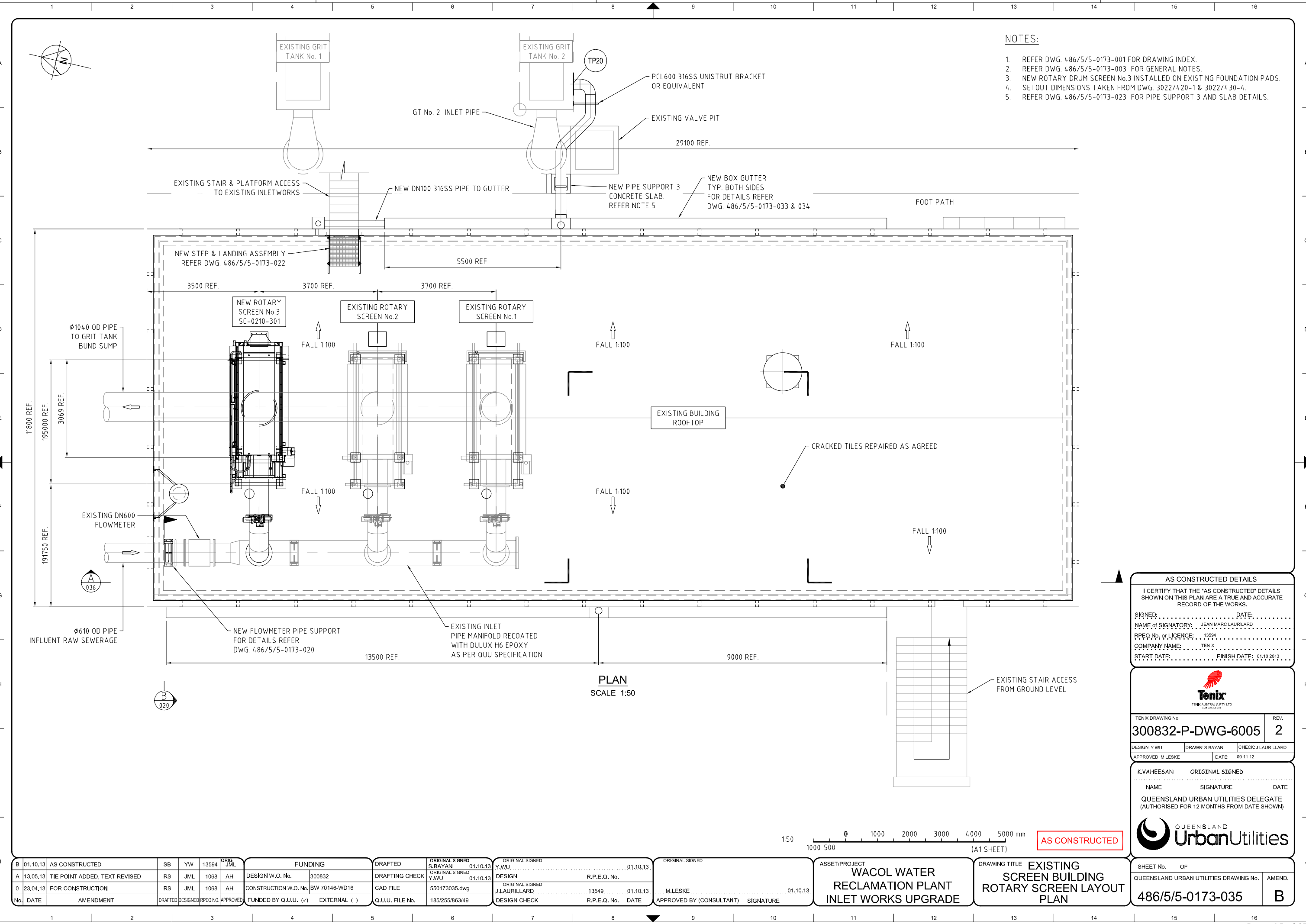
DETAIL
SCALE NTS



AS CONSTRUCTED

SHEET No. OF	
QUEENSLAND URBAN UTILITIES DRAWING No.	AMEND.
486/5/5-0173-034	C

AT-SHEET 17																
C	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG JML	FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED M.LESKE 01.10.13	ASSET/PROJECT WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE	DRAWING TITLE EXISTING SCREEN BUILDING ROOF DRAINAGE ELEVATIONS	SHEET No. OF QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/5-0173-034	AMEND. C
B	13.05.13	ELEVATION AND TEXT REVISED	RS	JML	1068	AH	DESIGN W.O. No. 300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU 01.10.13	DESIGN R.P.E.Q. No.						
A	03.05.13	DETAIL ADDED AND NOTE REVISED	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	CAD FILE	550173034.dwg	ORIGINAL SIGNED J.LAURILLARD 13549 01.10.13	DESIGN R.P.E.Q. No. DATE					
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ.No.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No.	185/255/863/49							



- NOTES:
- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
 - 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
 - 3. NEW ROTARY DRUM SCREEN No.3 INSTALLED ON EXISTING FOUNDATION PADS.
 - 4. SETOUT DIMENSIONS TAKEN FROM DWG. 3022/420-1 & 3022/430-4.
 - 5. REFER DWG. 486/5/5-0173-023 FOR PIPE SUPPORT 3 AND SLAB DETAILS.

PLAN
SCALE 1:50

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME OF SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

TENIX
TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-P-DWG-6005 REV. 2

DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 09.11.12

K.VAHEESAN ORIGINAL SIGNED

NAME SIGNATURE DATE

QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)



B	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML
A	13.05.13	TIE POINT ADDED, TEXT REVISED	RS	JML	1068	AH
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED

FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13
DESIGN W.O. No.	300832	DRAFTING CHECK	550173035.dwg	13549	01.10.13
CONSTRUCTION W.O. No.	BW 70146-WD16	CAD FILE	185/255/663/49		
FUNDED BY Q.U.U. (✓)	EXTERNAL ()	Q.U.U. FILE No.			

ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED J.LAURILLARD 01.10.13	ORIGINAL SIGNED M.LESKE 01.10.13
DESIGN	DESIGN CHECK	APPROVED BY (CONSULTANT)
R.P.E.Q. No.	R.P.E.Q. No.	SIGNATURE

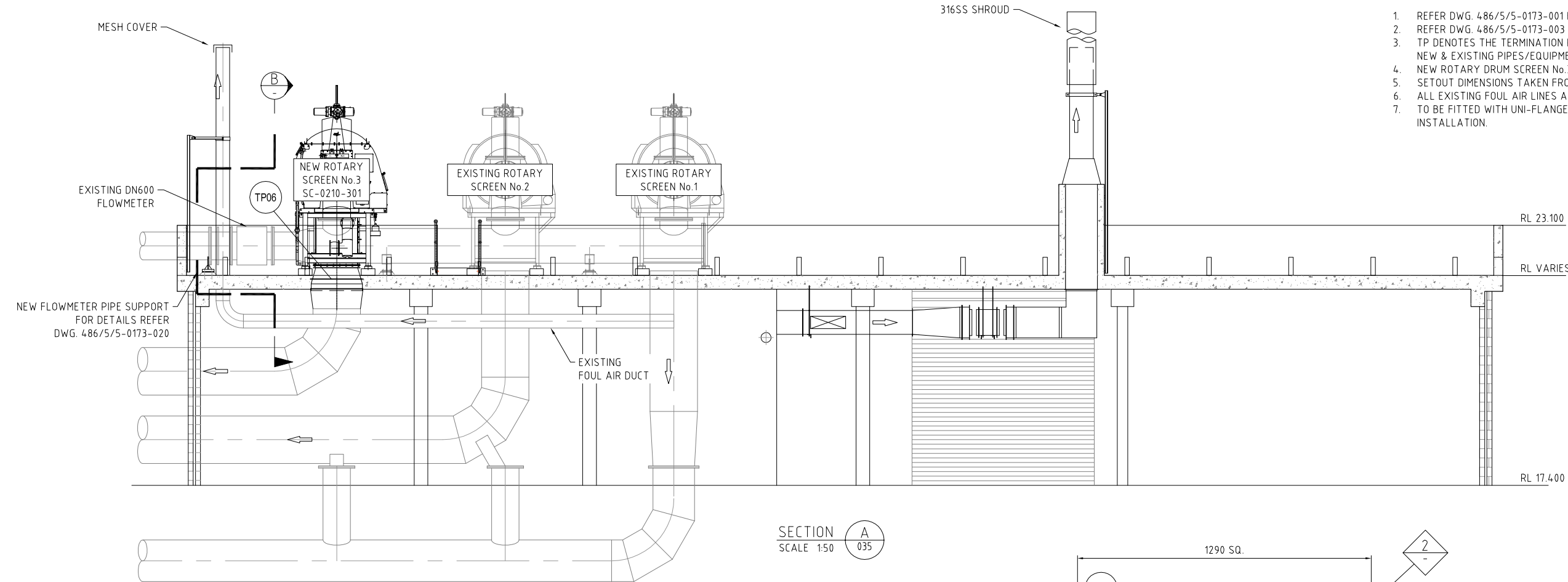
ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
EXISTING SCREEN BUILDING ROTARY SCREEN LAYOUT PLAN

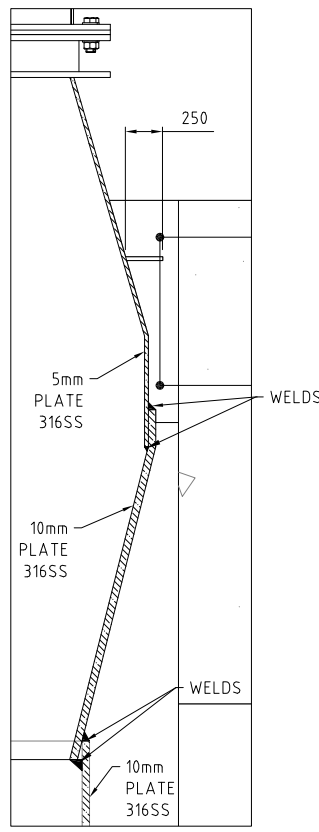
SHEET No.	OF	AMEND.
QUEENSLAND URBAN UTILITIES DRAWING No.		
486/5/5-0173-035		B

NOTES:

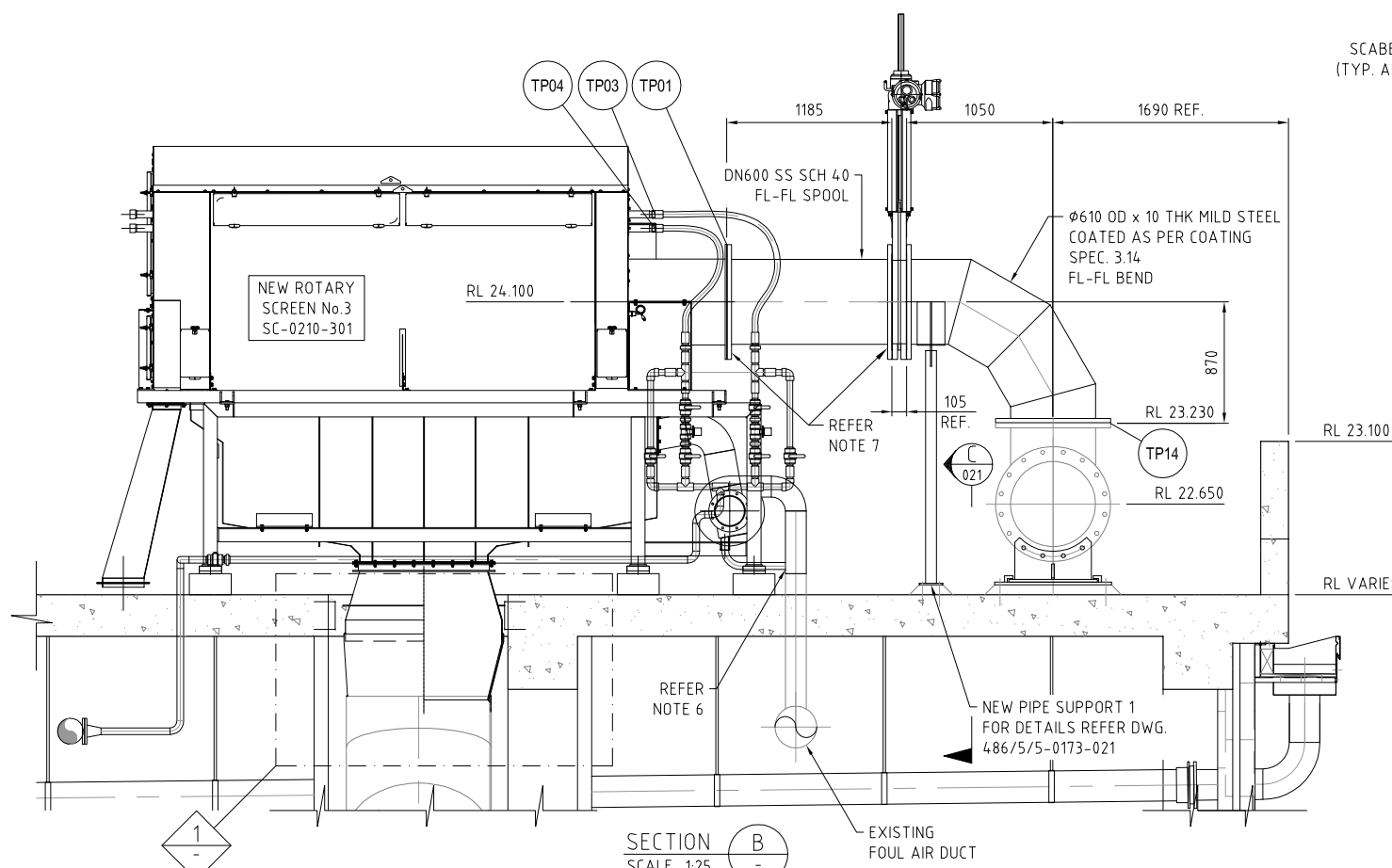
1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
3. TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.
4. NEW ROTARY DRUM SCREEN No.3 INSTALLED ON EXISTING FOUNDATION PADS.
5. SETOUT DIMENSIONS TAKEN FROM DWG. 3022/420-2 & 3022/1500-24/4.
6. ALL EXISTING FOUL AIR LINES ARE CONNECTED TO THE FAN DISCHARGE PIPE. TO BE FITTED WITH UNI-FLANGE & TIE BARS TO MATCH EXISTING INSTALLATION.
- 7.



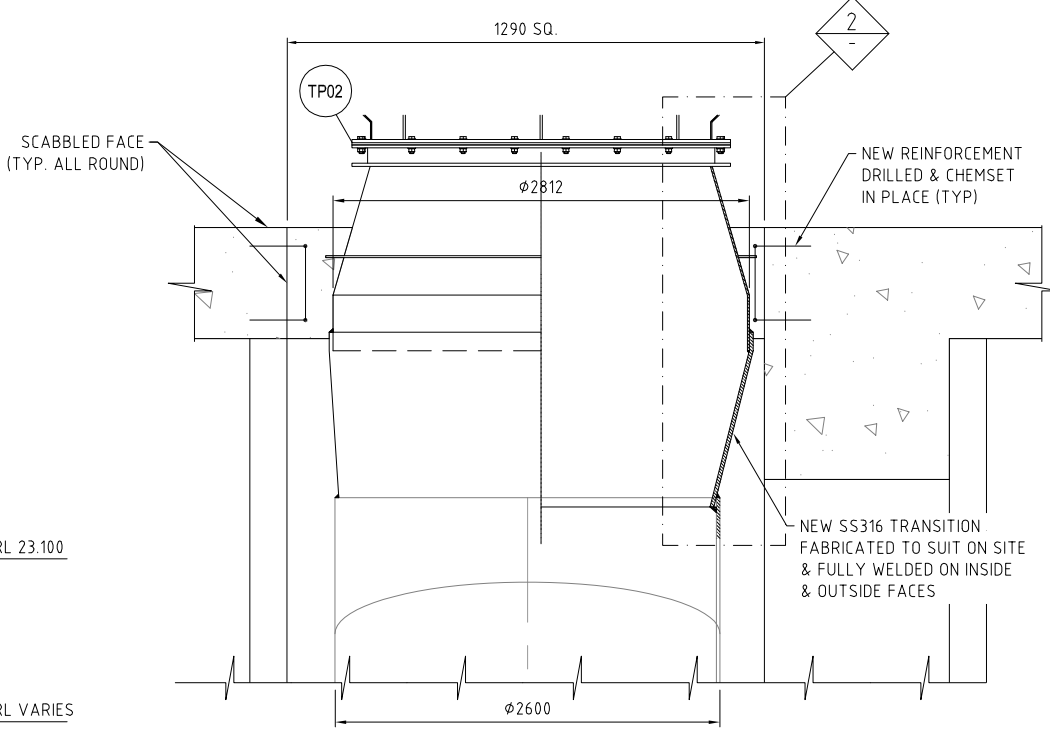
SECTION A
SCALE 1:50



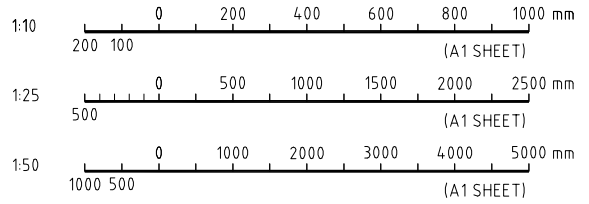
DETAIL 2
SCALE 1:5



SECTION B
SCALE 1:25



DETAIL 1
SCALE 1:10

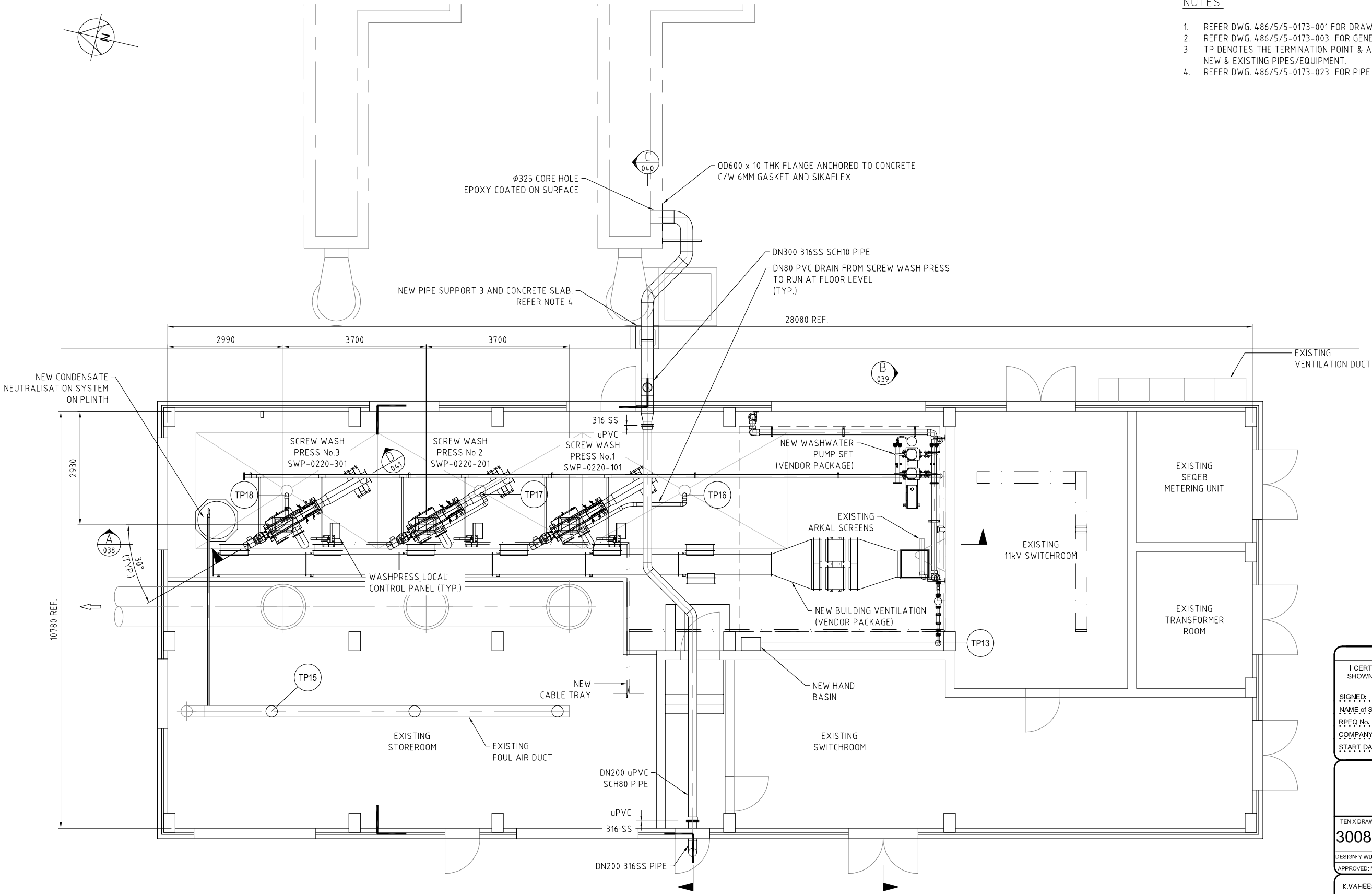


AS CONSTRUCTED

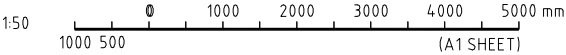
C 01.10.13 AS CONSTRUCTED		SB	YW	13594	ORIG. JML	FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED 01.10.13	ASSET/PROJECT		DRAWING TITLE		SHEET No. OF	
B 13.05.13 TERM. POINTS ADDED, TEXT REVISED		RS	JML	1068	AH	DESIGN W.O. No. 300832		DRAFTING CHECK		DESIGN		WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE		EXISTING SCREEN BUILDING ROTARY SCREEN LAYOUT SECTIONS		3	
A 03.05.13 COWL DELETED, LUGS & NOTES ADDED		RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16		CAD FILE		DESIGN CHECK		QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/5-0173-036		AMEND. C	
No. DATE		AMENDMENT		DRAFTED DESIGNED RPEQ NO. APPROVED		FUNDED BY Q.U.U. (✓) EXTERNAL ()		Q.U.U. FILE No.		185/255/663/49		DATE		01.10.13			

NOTES:

- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
- 3. TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.
- 4. REFER DWG. 486/5/5-0173-023 FOR PIPE SUPPORT 3 AND SLAB DETAILS.




PLAN
SCALE 1:50



AS CONSTRUCTED

B	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN	01.10.13	Y.WU	ORIGINAL SIGNED	01.10.13	ORIGINAL SIGNED	
A	13.05.13	TIE POINT ADDED, TEXT REVISED	RS	JML	1068	AH	DESIGN W.O. No.	300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU	01.10.13	DESIGN	R.P.E.Q. No.			
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No.	BW 70146-WD16	CAD FILE	550173037.dwg		J.LAURILLARD	13549	01.10.13	M.LESKE	01.10.13
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓)	EXTERNAL ()	Q.U.U. FILE No.	185/255/863/49		DESIGN CHECK	R.P.E.Q. No.	DATE	APPROVED BY (CONSULTANT)	SIGNATURE

AS CONSTRUCTED DETAILS			
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.			
SIGNED:	DATE:		
NAME of SIGNATORY:	JEAN MARC LAURILLARD		
RPEQ No. or LICENCE:	13594		
COMPANY NAME:	TENIX		
START DATE:	FINISH DATE:	01.10.2013	



TENIX AUSTRALIA PTY LTD
ACN 000 000 004

TENIX DRAWING No. 300832-P-DWG-6007

REV. 2


DESIGN: Y.WU DRAWN: S.BAYAN CHECK: L.LAURILLARD

APPROVED: M.LESKE DATE: 01.10.13

K.VAHEESAN ORIGINAL SIGNED

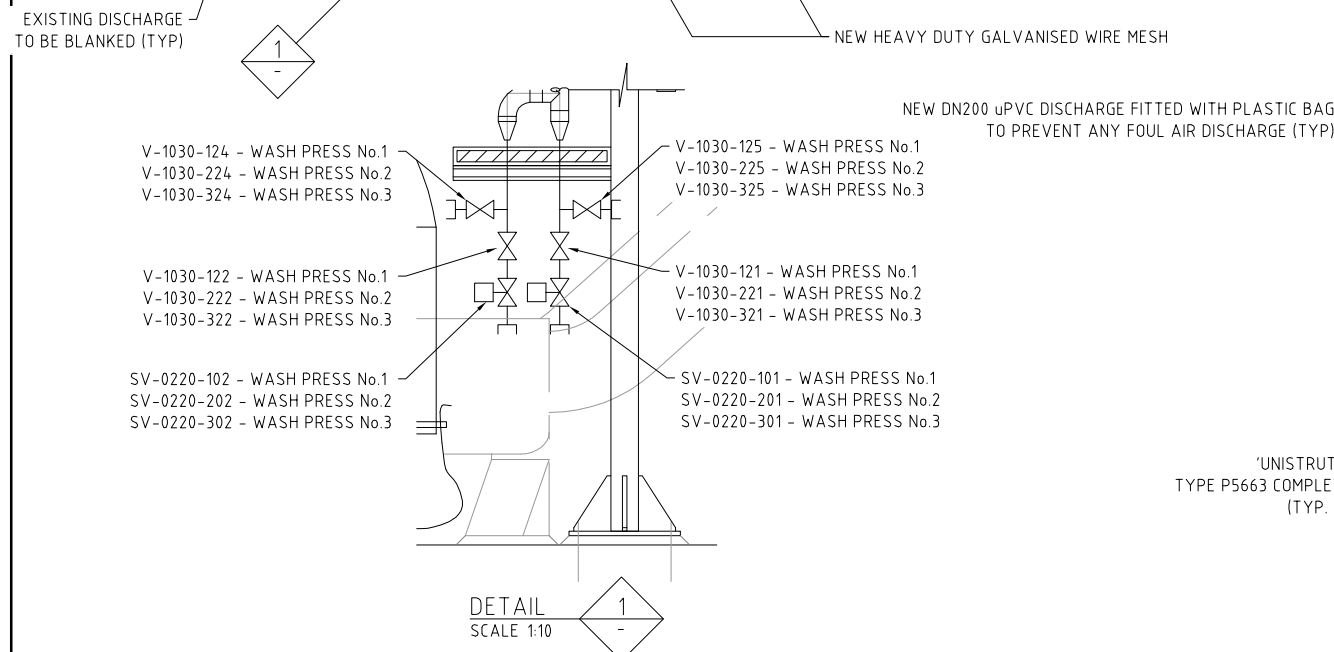
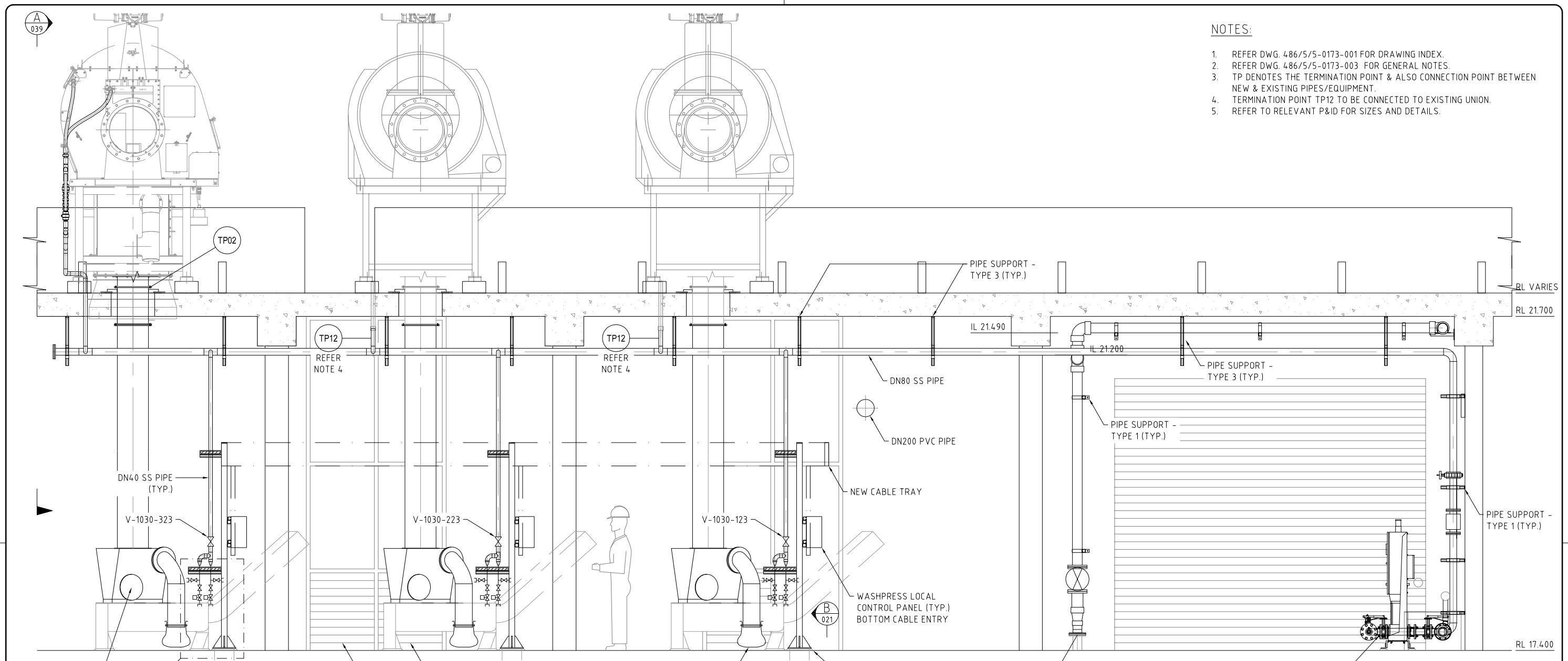
NAME SIGNATURE DATE

QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)

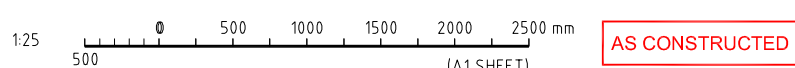
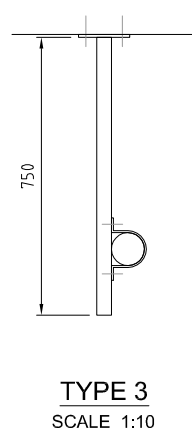
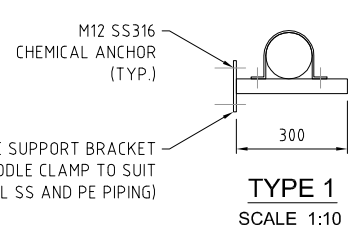


NOTES:

- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
- 3. TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.
- 4. TERMINATION POINT TP12 TO BE CONNECTED TO EXISTING UNION.
- 5. REFER TO RELEVANT P&ID FOR SIZES AND DETAILS.



SECTION A
SCALE 1:25



C 01.10.13 AS CONSTRUCTED		SB	YW	13594	ORIG. JML	FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ORIGINAL SIGNED Y.WU 01.10.13	ASSET/PROJECT	DRAWING TITLE	SHEET No. OF
B 13.05.13 TIE POINT ADDED		RS	JML	1068	AH	DESIGN W.O. No. 300832		DRAFTING CHECK	ORIGINAL SIGNED Y.WU 01.10.13	DESIGN	R.P.E.Q. No.		WACOL WATER	EXISTING SCREEN BUILDING	QUEENSLAND URBAN UTILITIES DRAWING No.
A 03.05.13 TEXT REVISED		RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16		CAD FILE	550173038.dwg	J.LAURILLARD 13549 01.10.13		M.LESKE 01.10.13	RECLAMATION PLANT	WASH PRESS LAYOUT SECTION	AMEND.
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No.	185/255/863/49	DESIGN CHECK	R.P.E.Q. No.	DATE	APPROVED BY (CONSULTANT) SIGNATURE	INLET WORKS UPGRADE	486/5/5-0173-038
															C

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME OF SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-P-DWG-6008 REV. 3

DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 01.10.13

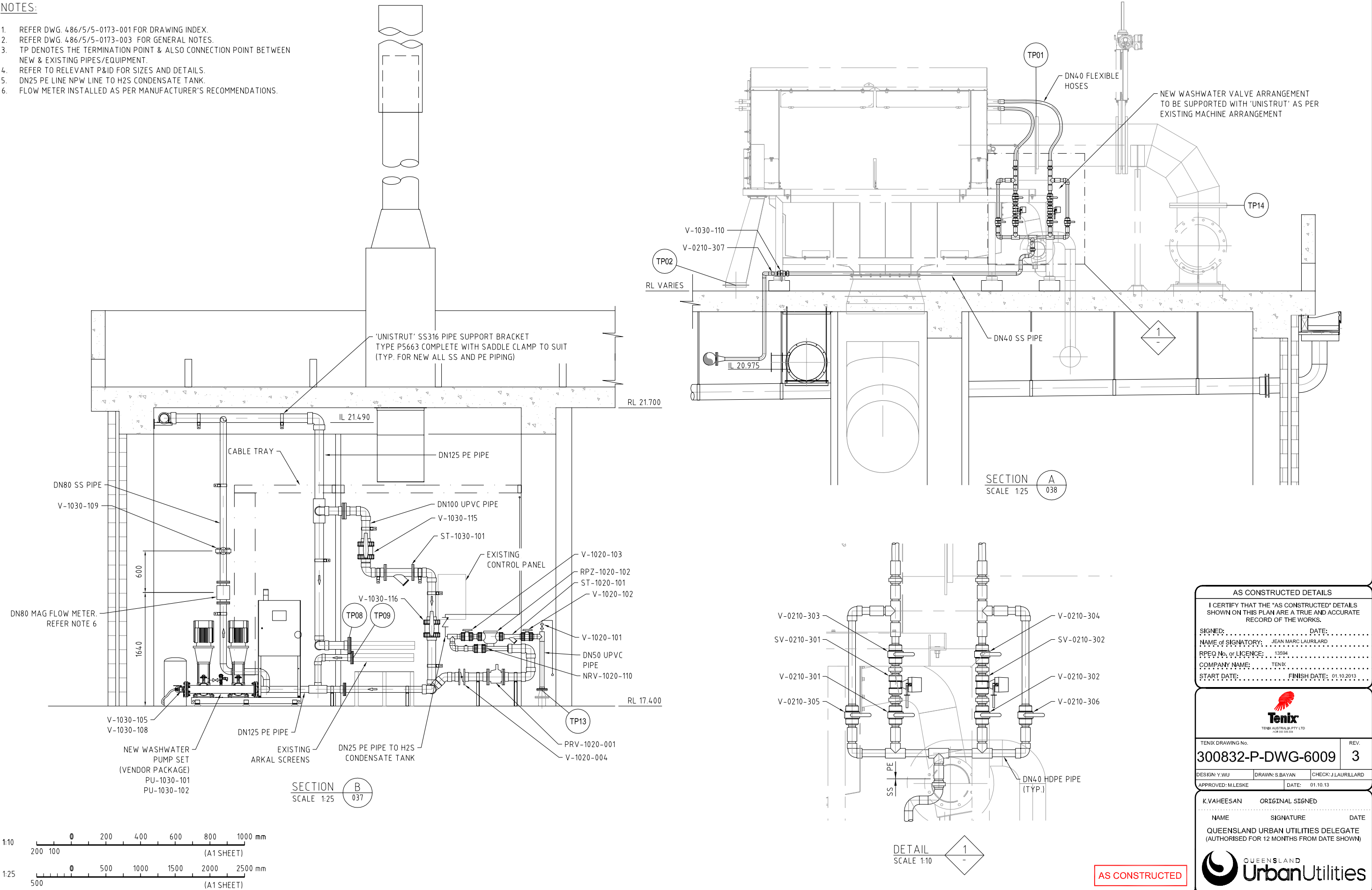
K.VAHEESAN ORIGINAL SIGNED
NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)

QUEENSLAND UrbanUtilities

SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/5-0173-038 AMEND. C

NOTES:

- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
- 3. TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.
- 4. REFER TO RELEVANT P&ID FOR SIZES AND DETAILS.
- 5. DN25 PE LINE NPW LINE TO H2S CONDENSATE TANK.
- 6. FLOW METER INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS.



AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME OF SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

Tenix
TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No. 300832-P-DWG-6009 REV. 3

DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 01.10.13

K.VAHEESAN ORIGINAL SIGNED

NAME SIGNATURE DATE

QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)

Queensland UrbanUtilities

SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.

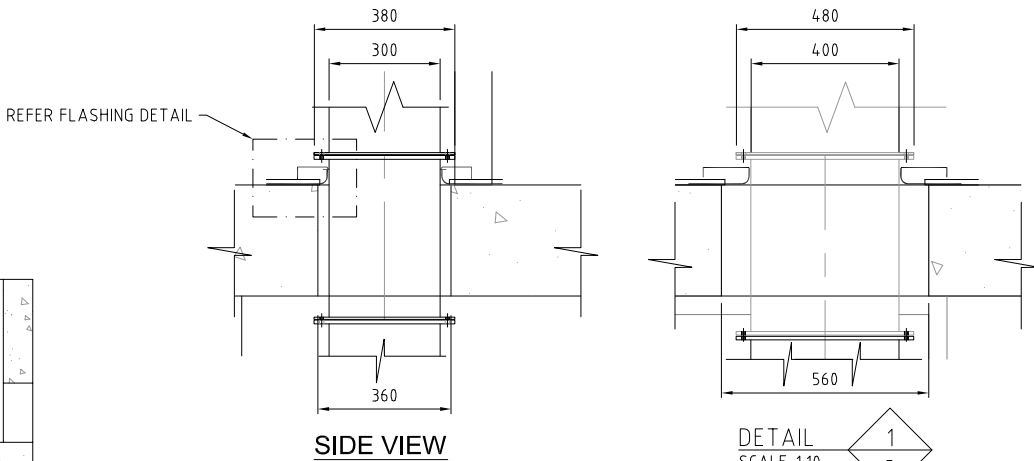
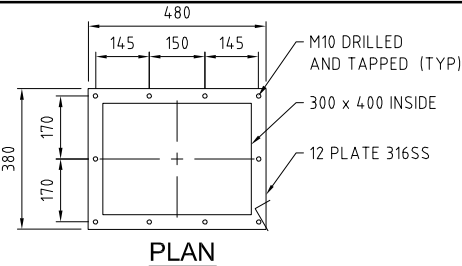
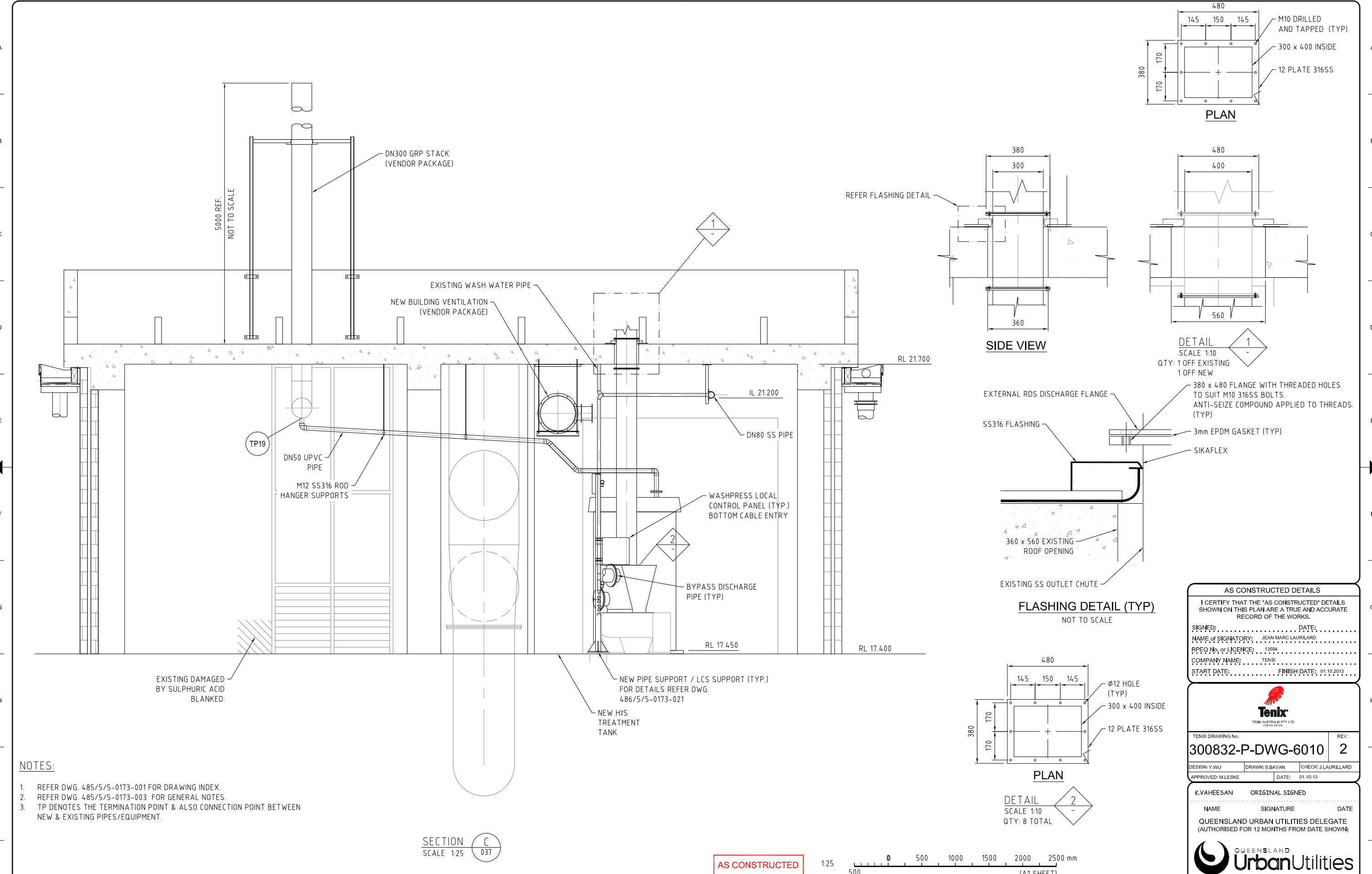
486/5/5-0173-039 C

C	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	FUNDING	DRAFTED	ORIGINAL SIGNED S.BAYAN 01.10.13	Y.WU 01.10.13	ORIGINAL SIGNED	01.10.13
B	13.05.13	TIE POINT ADDED	RS	JML	1068	AH	DESIGN W.O. No. 300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU 01.10.13	DESIGN	R.P.E.Q. No.	01.10.13
A	03.05.13	COWL DELETED, BOX GUTTER REVISED	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	CAD FILE	550173039.dwg	ORIGINAL SIGNED J.LAURILLARD 01.10.13	13549	01.10.13
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No.	185/255/663/49	DESIGN CHECK	R.P.E.Q. No.	DATE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

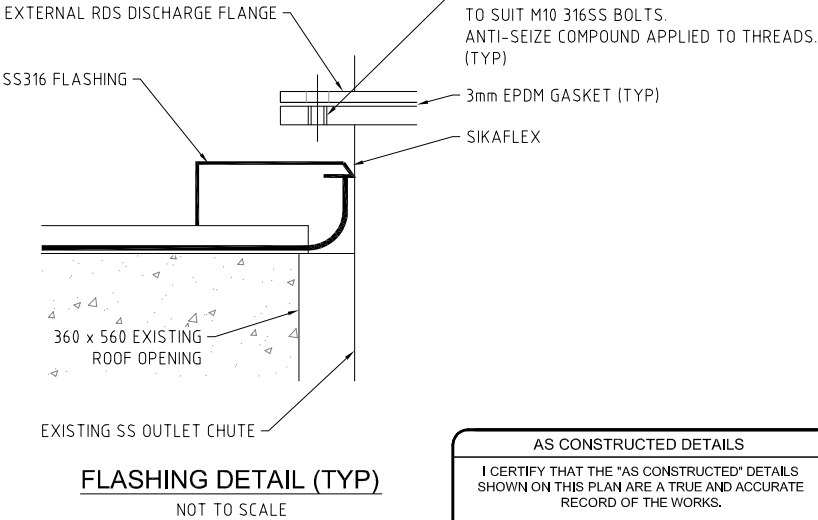
DRAWING TITLE
EXISTING SCREEN BUILDING WASH PRESS LAYOUT SECTIONS

AS CONSTRUCTED

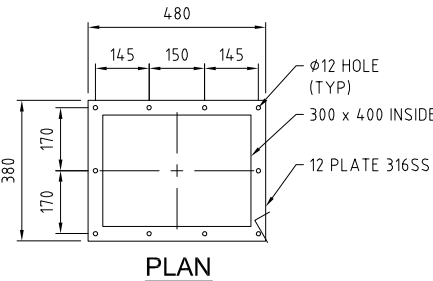


SIDE VIEW

DETAIL
SCALE 1:10
QTY: 1 OFF EXISTING
1 OFF NEW



FLASHING DETAIL (TYP)
NOT TO SCALE



DETAIL 2
SCALE 1:10
QTY: 8 TOTAL

- NOTES:
- REFER DWG. 485/5/5-0173-001 FOR DRAWING INDEX.
 - REFER DWG. 485/5/5-0173-003 FOR GENERAL NOTES.
 - TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.

SECTION C
SCALE 1:25

AS CONSTRUCTED

1:25 0 500 1000 1500 2000 2500 mm
(A1 SHEET)

B	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	FUNDING	DRAFTED	ORIGINAL SIGNED S.BAYAN	01.10.13	Y.WU	ORIGINAL SIGNED	01.10.13	ORIGINAL SIGNED	01.10.13
A	03.05.13	COWL DELETED, NOTE ADDED	RS	JML	1068	AH	DESIGN W.O. No. 300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU	01.10.13	DESIGN	R.P.E.Q. No.	DESIGN	R.P.E.Q. No.	01.10.13
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	CAD FILE	550173040.dwg		J.LAURILLARD	13549	01.10.13	M.LESKE	01.10.13
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No.	185/255/663/49		DESIGN CHECK	R.P.E.Q. No.	DATE	APPROVED BY (CONSULTANT)	SIGNATURE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
EXISTING SCREEN BUILDING WASH PRESS LAYOUT SECTIONS

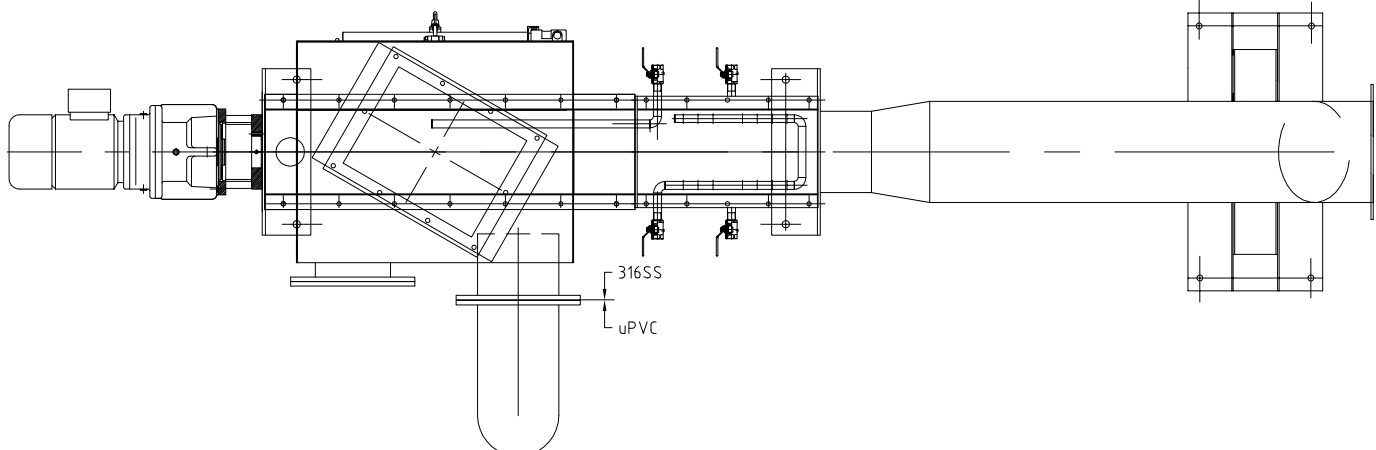
AS CONSTRUCTED DETAILS
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.
SIGNED: DATE:
NAME of SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

Tenix
TENIX AUSTRALIA PTY LTD
ACR 000 000 004
TENIX DRAWING No. 300832-P-DWG-6010
REV. 2
DESIGN: Y.WU
DRAWN: S.BAYAN
CHECK: J.LAURILLARD
APPROVED: M.LESKE
DATE: 01.10.13
K.VAHEESAN ORIGINAL SIGNED
NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE
(AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)

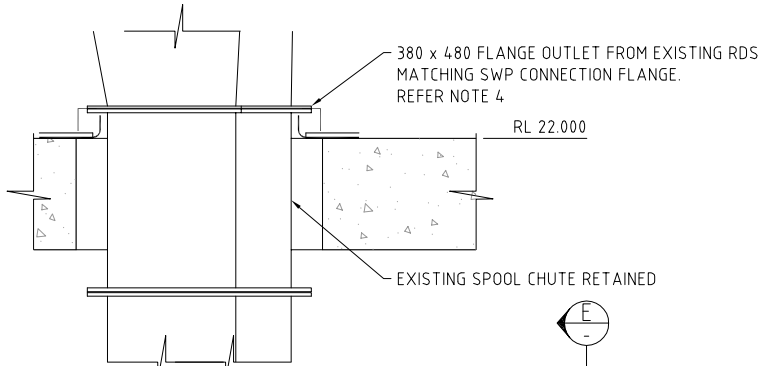
Queensland UrbanUtilities
SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. 486/5/5-0173-040
AMEND. B

NOTES:

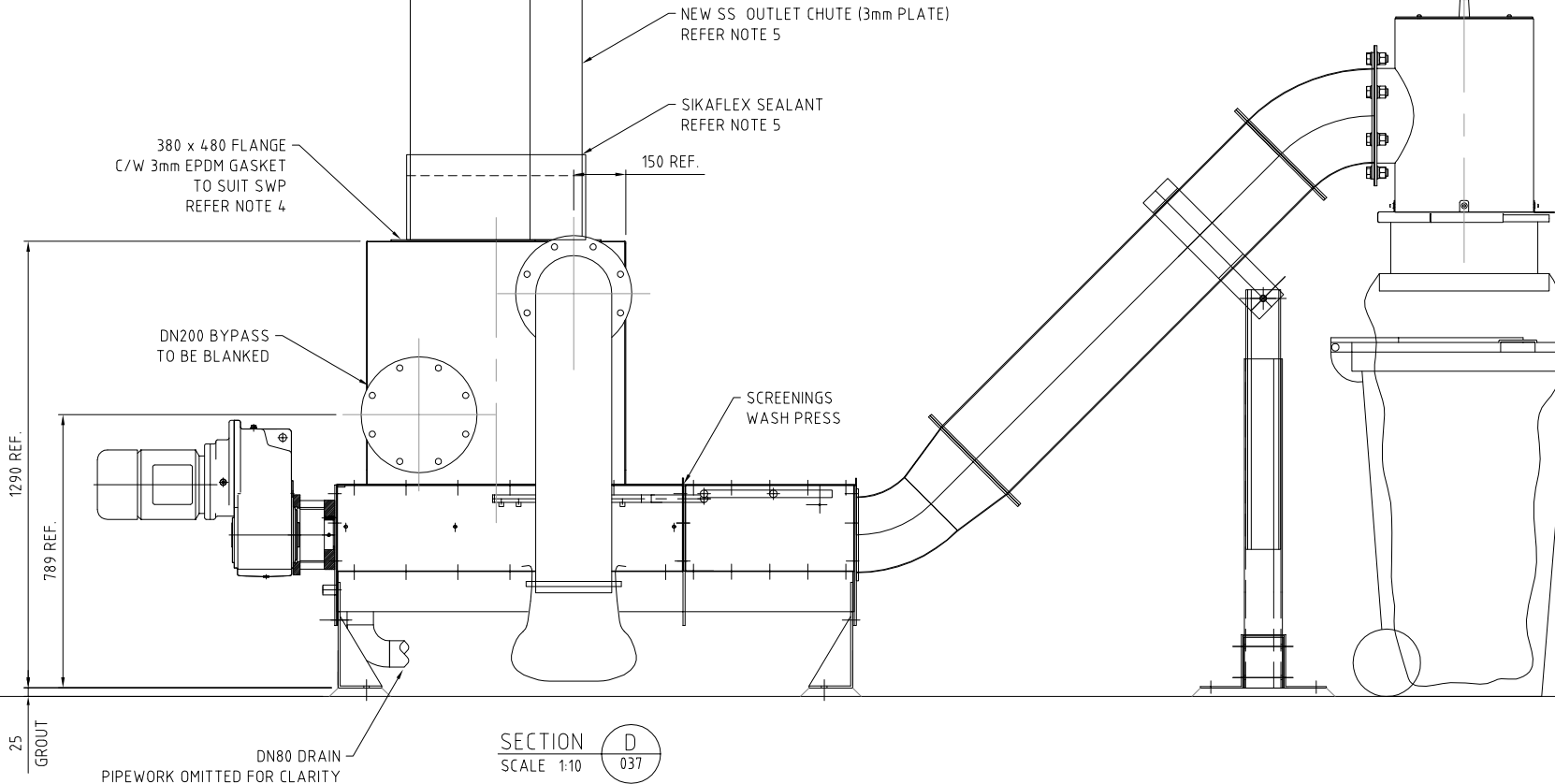
- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
- 2. REFER DWG. 486/5/5-1073-003 FOR GENERAL NOTES.
- 3. DRAIN TO BE PIPED TO NEAREST FLOOR DRAIN.
- 4. REFER DWG. 486/5/5-1073-040 FOR RDS AND SWP FLANGE DETAILS.
- 5. NEW DISCHARGE CHUTE TO BE MANUFACTURED IN TWO PARTS WITH 380 x480 FLANGES.
- 6. PLASTIC BAG TO PREVENT FOUL AIR CONTAMINATION.



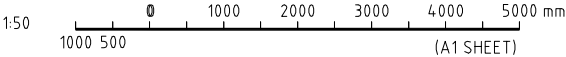
PLAN
(LONGPAC SYSTEM NOT SHOWN FOR CLARITY)



SECTION D
SCALE 1:10
(TYP. 3-PLACES)



SECTION E
SCALE 1:10
(TYP. 3-PLACES)



B	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	FUNDING	DRAFTED	ORIGINAL SIGNED S.BAYAN	01.10.13	Y.WU	ORIGINAL SIGNED	01.10.13	ORIGINAL SIGNED	01.10.13	ASSET/PROJECT	WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE	DRAWING TITLE	TYPICAL WASH PRESS LAYOUT SECTION
A	13.05.13	PLAN, BAG & NOTES ADDED/REVISED	RS	JML	1068	AH	DESIGN W.O. No. 300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU	01.10.13	J.J.AURILLARD	DESIGN	R.P.E.Q. No. 13549	01.10.13	M.LESKE	01.10.13			
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	CAD FILE	550173041.dwg			DESIGN CHECK	R.P.E.Q. No. 13549	01.10.13					
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓) EXTERNAL ()	Q.U.U. FILE No.	185/255/663/49			DESIGN CHECK	R.P.E.Q. No.	DATE	APPROVED BY (CONSULTANT)	SIGNATURE			

AS CONSTRUCTED DETAILS		
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.		
SIGNED:	DATE:	
NAME of SIGNATORY:	JEAN MARC LAURILLARD	
RPEQ No. or LICENCE:	13594	
COMPANY NAME:	TENIX	
START DATE:	FINISH DATE: 01.10.2013	

TENIX DRAWING No. 300832-P-DWG-6011			REV. 2
DESIGN: Y.WU	DRAWN: S.BAYAN	CHECK: J.J.AURILLARD	
APPROVED: M.LESKE	DATE: 01.10.13		

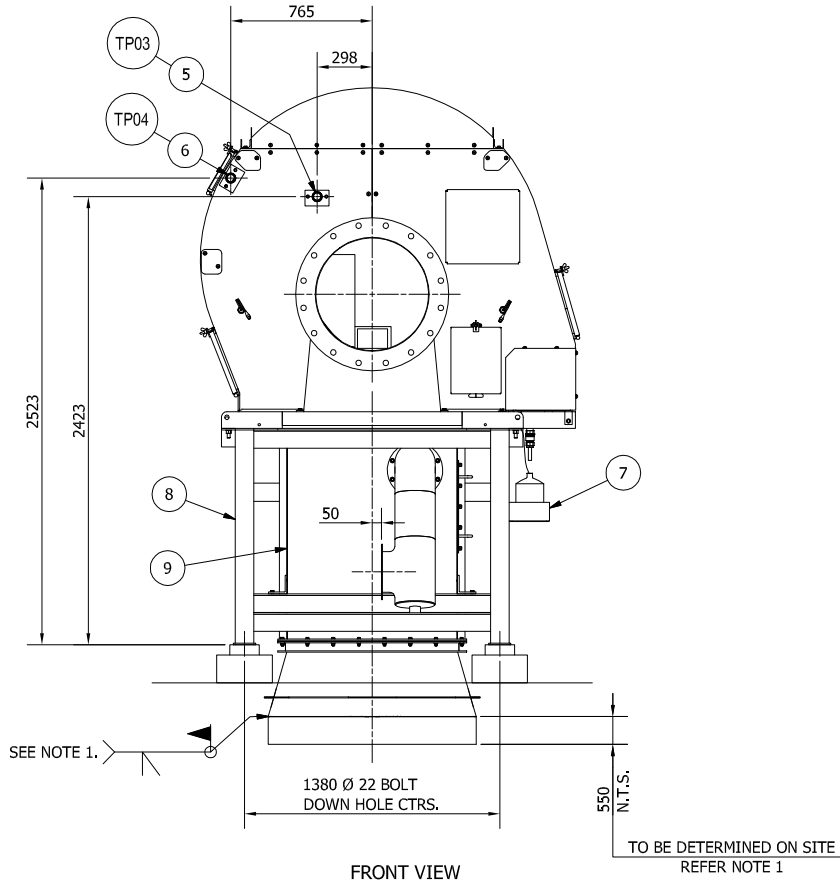
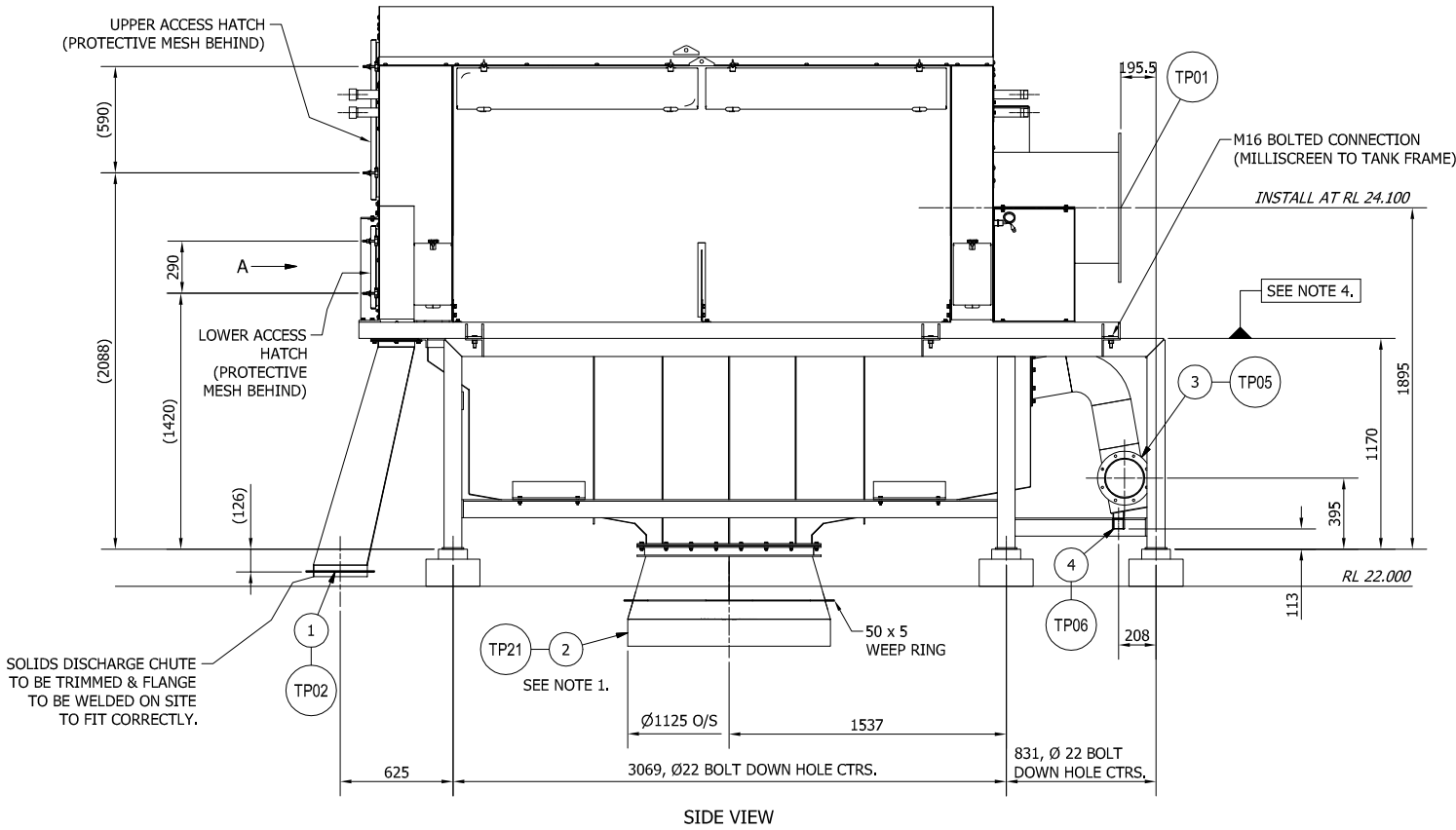
K.VAHEESAN	ORIGINAL SIGNED	
NAME	SIGNATURE	DATE
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		
QUEENSLAND UrbanUtilities		

SHEET No. 486/5/5-0173-041	OF	AMEND. B
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NOTE
THIS DRAWING IS A COPY
OF A VENDOR DRAWING
AS SUPPLIED BY JOHN SCREENS.
FOR INFORMATION PURPOSES ONLY.

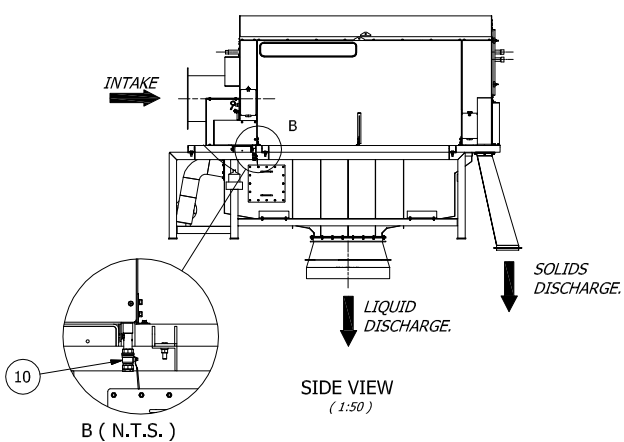
NOTES:

1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
3. TP DENOTES THE TERMINATION POINT & ALSO CONNECTION POINT BETWEEN NEW & EXISTING PIPES/EQUIPMENT.

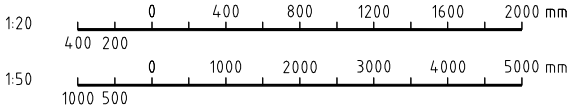


NOTES:

1. ITEM 1 TO BE MANUFACTURED TO DIMENSION "X" (OPEN GAP BETWEEN EXISTING PIPE WORK & TRANSITION PIECE) AFTER INSTALLATION OF LIQUID DISCHARGE TANK.
2. ESTIMATED WEIGHT OF 15/27U MILLISCREEN: 1950 kg DRY.
3. ESTIMATED WEIGHT OF LIQUID DISCHARGE TANK & SUPPORT FRAME: 1000 kg DRY.
4. USE "SIKAFLEX" SEALANT TO SEAL MILLISCREEN BASEFRAME TO TANK FRAME ON INSTALLATION.



10	OIL TRAY RELEASE VALVE	BALL VALVE WITH PLUG	316 SS
9	LIQUID DISCHARGE TANK	3mm SHEET	316 SS
8	SUPPORT FRAME	100 x 100 x 10 RHS	316 SS
7	OIL DRIP TRAY RESERVOIR BRACKET		316 SS
6	EXTERNAL SPARGE CONNECTION	40NB BSP NIPPLE	316 SS
5	INTERNAL SPARGE CONNECTION	40NB BSP NIPPLE	316 SS
4	FOUL AIR DRAIN SOCKET	50NB BSP SOCKET	316 SS
3	FOUL AIR FLANGE	6mm PLATE FLANGE DRILLED TO 8 x Ø14 EQUI SPACED ON 265 PCD.	316 SS
2	LIQUID DISCHARGE RING	5mm PLATE	316 SS
1	SOLIDS DISCHARGE CHUTE	2mm SHEET	316 SS
ITEM	DESCRIPTION	RAW MATERIAL SIZE	MATERIAL SPEC.



AS CONSTRUCTED

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME of SIGNATORY: JEAN MARC LAURILLARD
RPEQ No. or LICENCE: 13594
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013



TENIX DRAWING No. 300832-P-DWG-6012 REV. 1
DESIGN: Y.WU DRAWN: S.BAYAN CHECK: J.LAURILLARD
APPROVED: M.LESKE DATE: 01.10.13

K.VAHEESAN ORIGINAL SIGNED
NAME SIGNATURE DATE
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)



SHEET No. OF
QUEENSLAND URBAN UTILITIES DRAWING No. AMEND.
486/5/5-0173-042 A

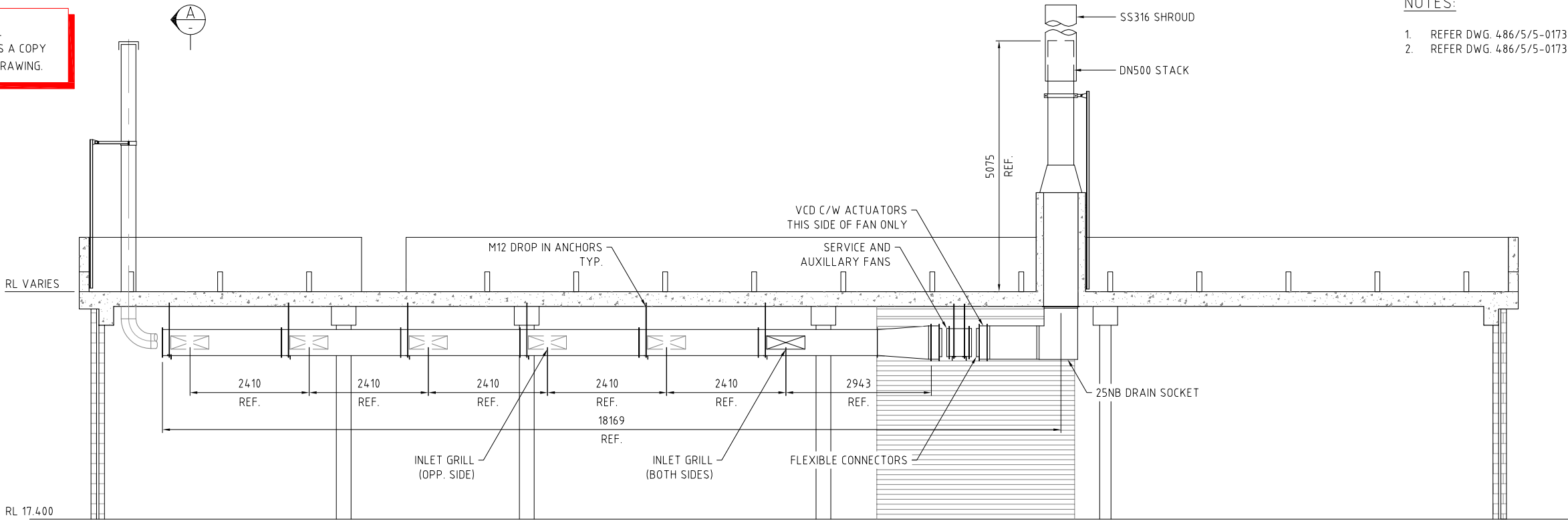
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	APPROVED	FUNDING	FILE No.	DATE	APPROVED	SIGNATURE
A	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	DESIGN W.O. No.	300832	ORIGINAL SIGNED S.BAYAN	01.10.13
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No.	BW 70146-WD16	ORIGINAL SIGNED Y.WU	01.10.13
							DRAFTED	550173042.dwg	ORIGINAL SIGNED J.LAURILLARD	01.10.13
							CAD FILE	185/255/863/49	DESIGN CHECK	R.P.E.Q. No.
							FUNDED BY Q.U.U. (✓) EXTERNAL ()		APPROVED BY (CONSULTANT)	DATE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

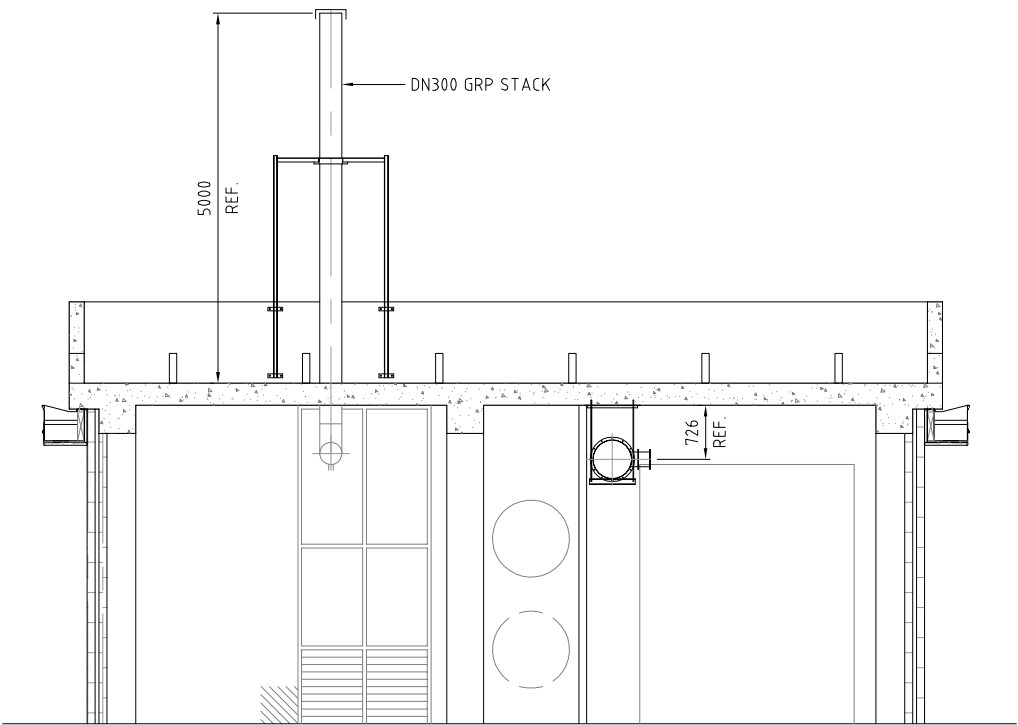
DRAWING TITLE
DRUM SCREEN ASSEMBLY

NOTE
THIS DRAWING IS A COPY
OF A VENDOR DRAWING.

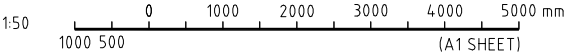
- NOTES:
1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.



VENTILATION ARRANGEMENT
SCALE 1:50



SECTION A
SCALE 1:50





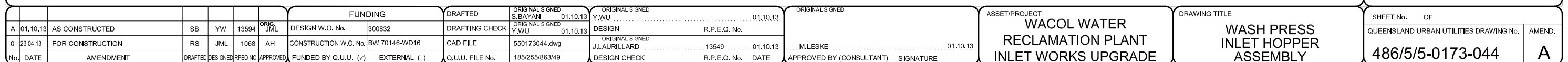
AS CONSTRUCTED

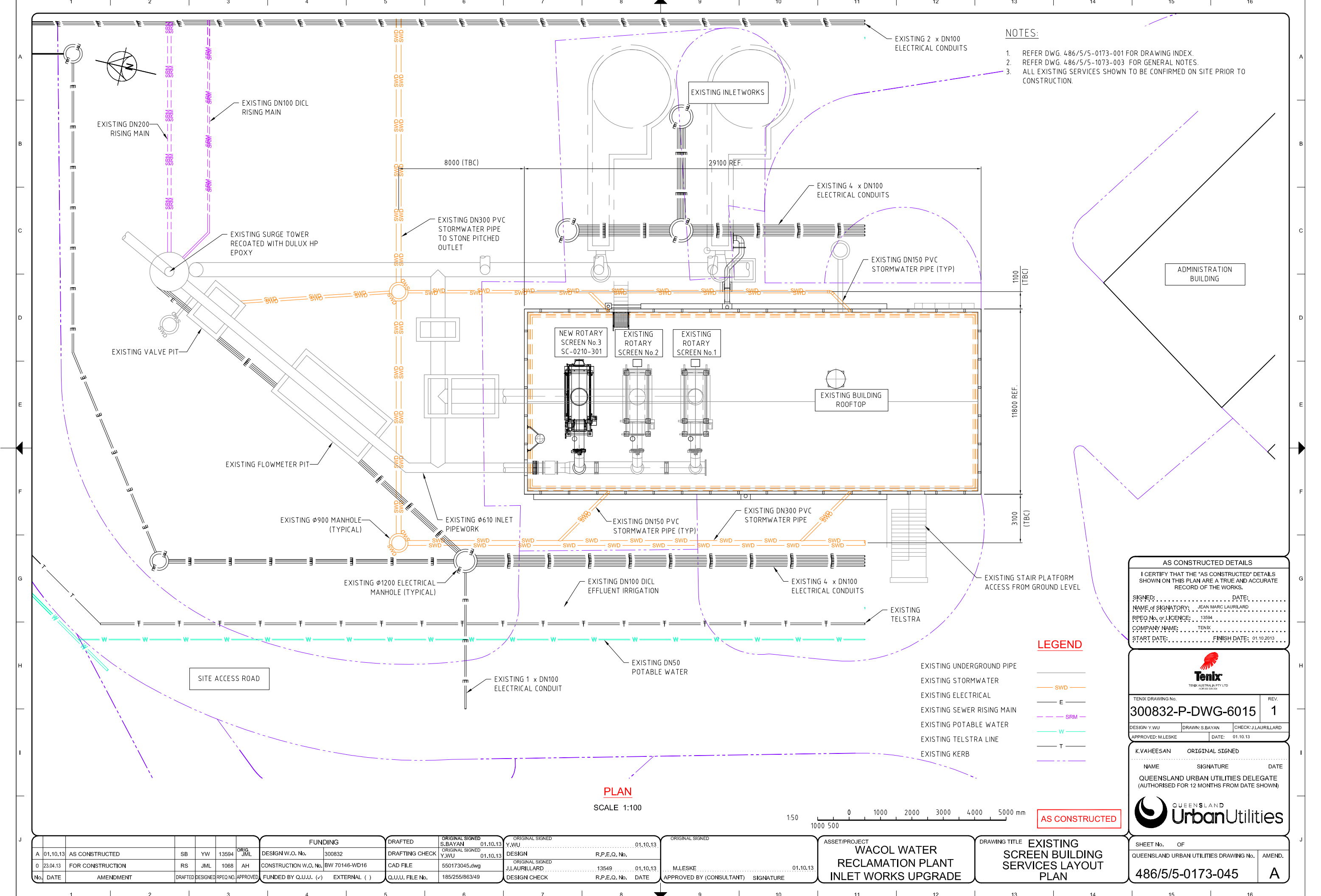
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ No.	APPROVED	FUNDING	DRAFTED	DESIGNED	RPEQ No.	APPROVED
B	01.10.13	AS CONSTRUCTED	SB	YW	13594	ORIG. JML	FUNDING	DRAFTED	DESIGNED	RPEQ No.	APPROVED
A	03.05.13	COWL DELETED	RS	JML	1068	AH	DESIGN W.O. No. 300832	DRAFTING CHECK	DESIGNED	RPEQ No.	APPROVED
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No. BW 70146-WD16	CAD FILE	DESIGNED	RPEQ No.	APPROVED
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ No.	APPROVED	FUNDING	DRAFTED	DESIGNED	RPEQ No.	APPROVED
							FUNDED BY Q.U.U. (✓) EXTERNAL ()				
							Q.U.U. FILE No.				
							185/255/863/49				

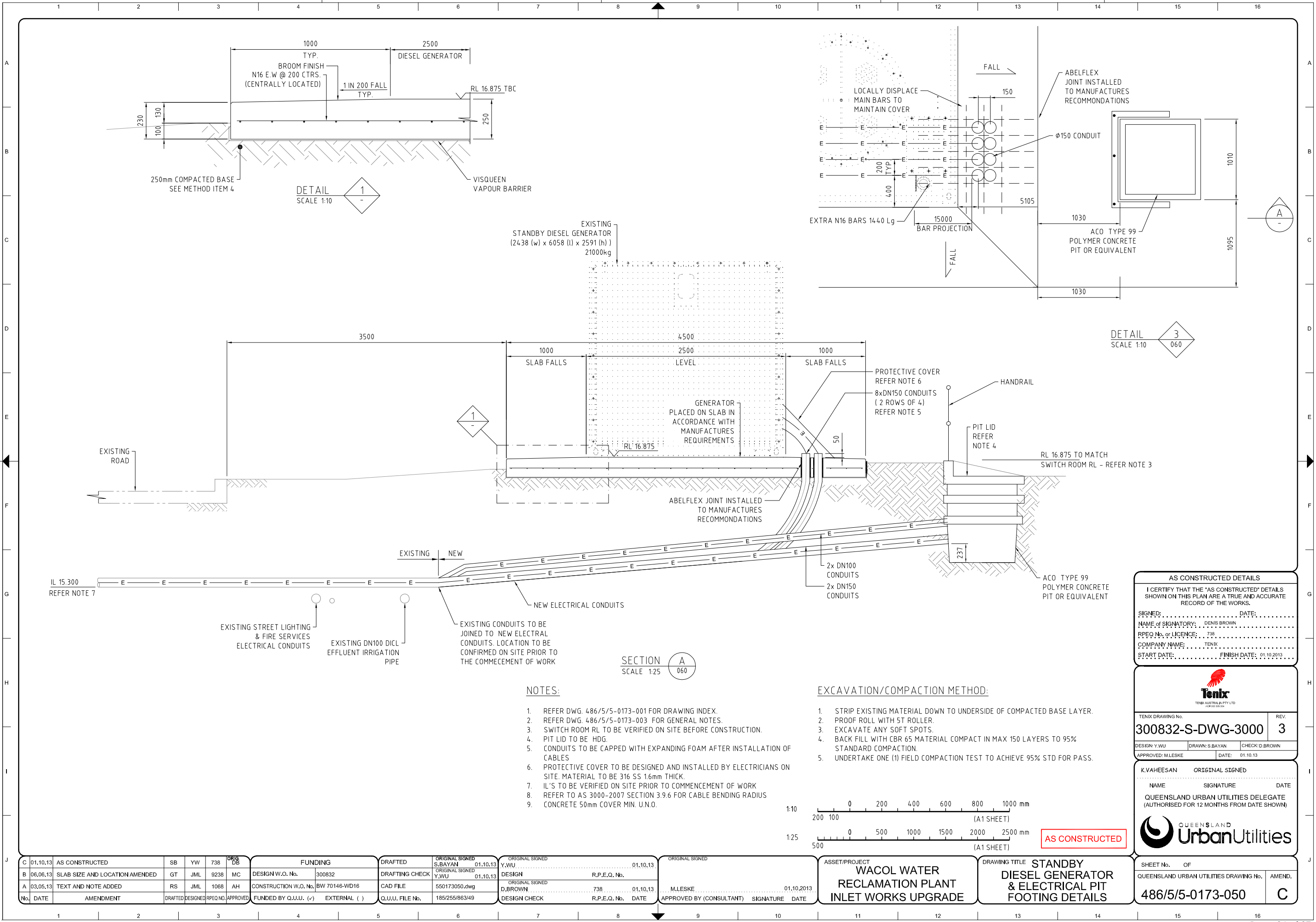
ASSET/PROJECT
WACOL WATER
RECLAMATION PLANT
INLET WORKS UPGRADE

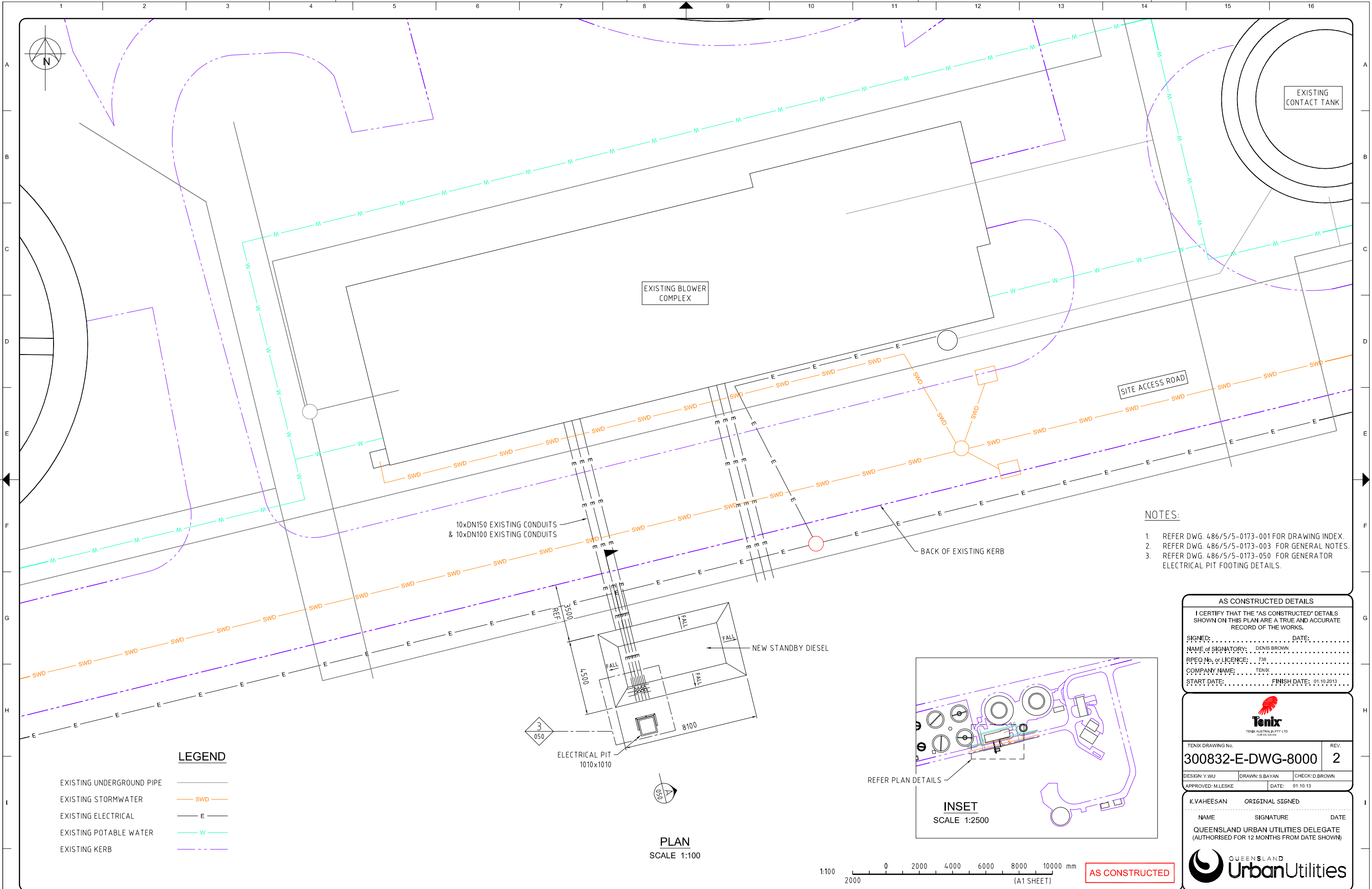
DRAWING TITLE
VENTILATION
ARRANGEMENT

AS CONSTRUCTED DETAILS		
I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.		
SIGNED:	DATE:	
NAME of SIGNATORY: JEAN MARC LAURILLARD	RPEQ No. or LICENCE: 13594	
COMPANY NAME: TENIX	START DATE:	
FINISH DATE: 01.10.2013		
		
TENIX DRAWING No. 300832-P-DWG-6013		
DESIGN: Y.WU	DRAWN: S.BAYAN	CHECK: L.LAURILLARD
APPROVED: M.LESKE	DATE: 01.10.13	
K.VAHEESAN ORIGINAL SIGNED		
NAME	SIGNATURE	DATE
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		
		
SHEET No. OF	AMEND.	
486/5/5-0173-043	B	









- NOTES:
- 1. REFER DWG. 486/5/5-0173-001 FOR DRAWING INDEX.
 - 2. REFER DWG. 486/5/5-0173-003 FOR GENERAL NOTES.
 - 3. REFER DWG. 486/5/5-0173-050 FOR GENERATOR ELECTRICAL PIT FOOTING DETAILS.

AS CONSTRUCTED DETAILS

I CERTIFY THAT THE "AS CONSTRUCTED" DETAILS SHOWN ON THIS PLAN ARE A TRUE AND ACCURATE RECORD OF THE WORKS.

SIGNED: DATE:
NAME OF SIGNATORY: DENIS BROWN
RPEQ No. or LICENCE: 738
COMPANY NAME: TENIX
START DATE: FINISH DATE: 01.10.2013

TENIX

TENIX AUSTRALIA PTY LTD
ACR 000 000 004

TENIX DRAWING No.	REV.	
300832-E-DWG-8000	2	
DESIGN: Y.WU	DRAWN: S.BAYAN	CHECK: D.BROWN
APPROVED: M.LESKE	DATE: 01.10.13	

K.VAHEESAN ORIGINAL SIGNED

NAME	SIGNATURE	DATE
QUEENSLAND URBAN UTILITIES DELEGATE (AUTHORISED FOR 12 MONTHS FROM DATE SHOWN)		



SHEET No.	OF
QUEENSLAND URBAN UTILITIES DRAWING No.	AMEND.
486/5/5-0173-060	B

LEGEND

- EXISTING UNDERGROUND PIPE
- EXISTING STORMWATER
- EXISTING ELECTRICAL
- EXISTING POTABLE WATER
- EXISTING KERB

- SWD
- E
- W

B	01.10.13	AS CONSTRUCTED	SB	YW	738	ORIG DB	FUNDING		DRAFTED	ORIGINAL SIGNED S.BAYAN	01.10.13	ORIGINAL SIGNED Y.WU	01.10.13	ORIGINAL SIGNED Y.WU	01.10.13	ORIGINAL SIGNED
A	06.06.13	PIT & SLAB LOCATION AMENDED	GT	JML	9238	MC	DESIGN W.O. No.	300832	DRAFTING CHECK	ORIGINAL SIGNED Y.WU	01.10.13	DESIGN	R.P.E.Q. No.			
0	23.04.13	FOR CONSTRUCTION	RS	JML	1068	AH	CONSTRUCTION W.O. No.	BW 70146-WD16	CAD FILE	550173060.dwg		ORIGINAL SIGNED D.BROWN	738	01.10.13	M.LESKE	01.10.2013
No.	DATE	AMENDMENT	DRAFTED	DESIGNED	RPEQ NO.	APPROVED	FUNDED BY Q.U.U. (✓)	EXTERNAL ()	Q.U.U. FILE No.	185/255/863/49		DESIGN CHECK	R.P.E.Q. No.	DATE	APPROVED BY (CONSULTANT)	SIGNATURE

ASSET/PROJECT
WACOL WATER RECLAMATION PLANT INLET WORKS UPGRADE

DRAWING TITLE
STANDBY DIESEL GENERATOR & ELECTRICAL PIT LOCATION & DETAILS