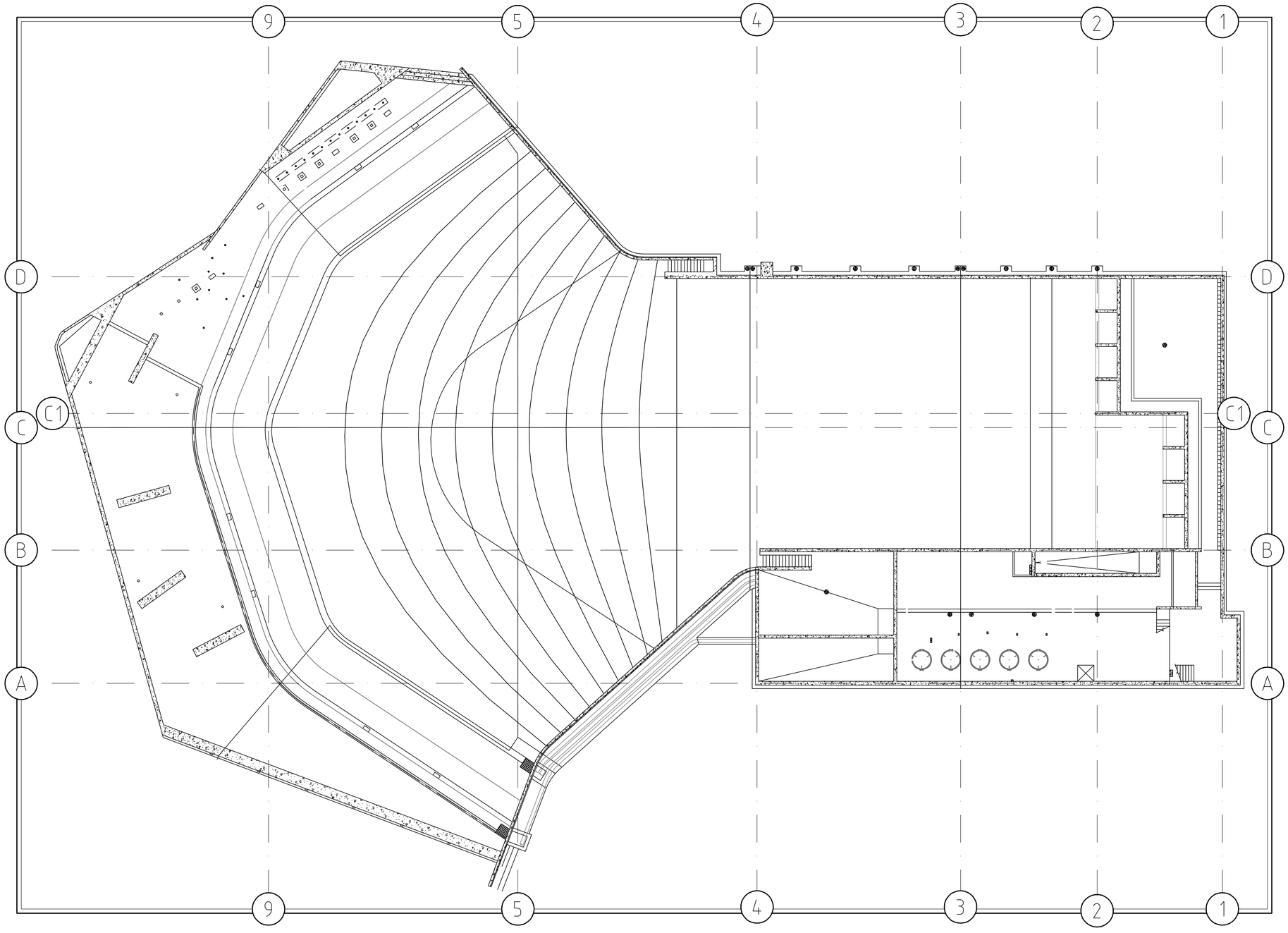
DARWIN CITY WATERFRONT DEVELOPMENT

Wave Pool Water Treatment



Drawing No	Title	Revision
PWT-S-00	Cover Page	D
PWT-S-01	Wave Pool Water Treatment Schematic	D
PWT-S-02	Wading Pool Water Treatment Schematic	E
PWT-S-03	Plantroom Layout- Sht 1	F
PWT-S-04	Plantroom Layout- Sht 2	D
PWT-S-05	Cast In Items	E
PWT-S-06	Details- Sht 1	F
PWT-S-07	Details- Sht 2	E
PWT-S-08	Details- Sht 3	D
PWT-S-09	Details- Sht 4	E
PWT-S-010	Pool Piping	D
PWT-S-011	Pool Piping Details	C
PWT-S-012	Typical Details	C

Head Contractor

SITZLER

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Aquatic Engineer

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Filtration Sub-contractor

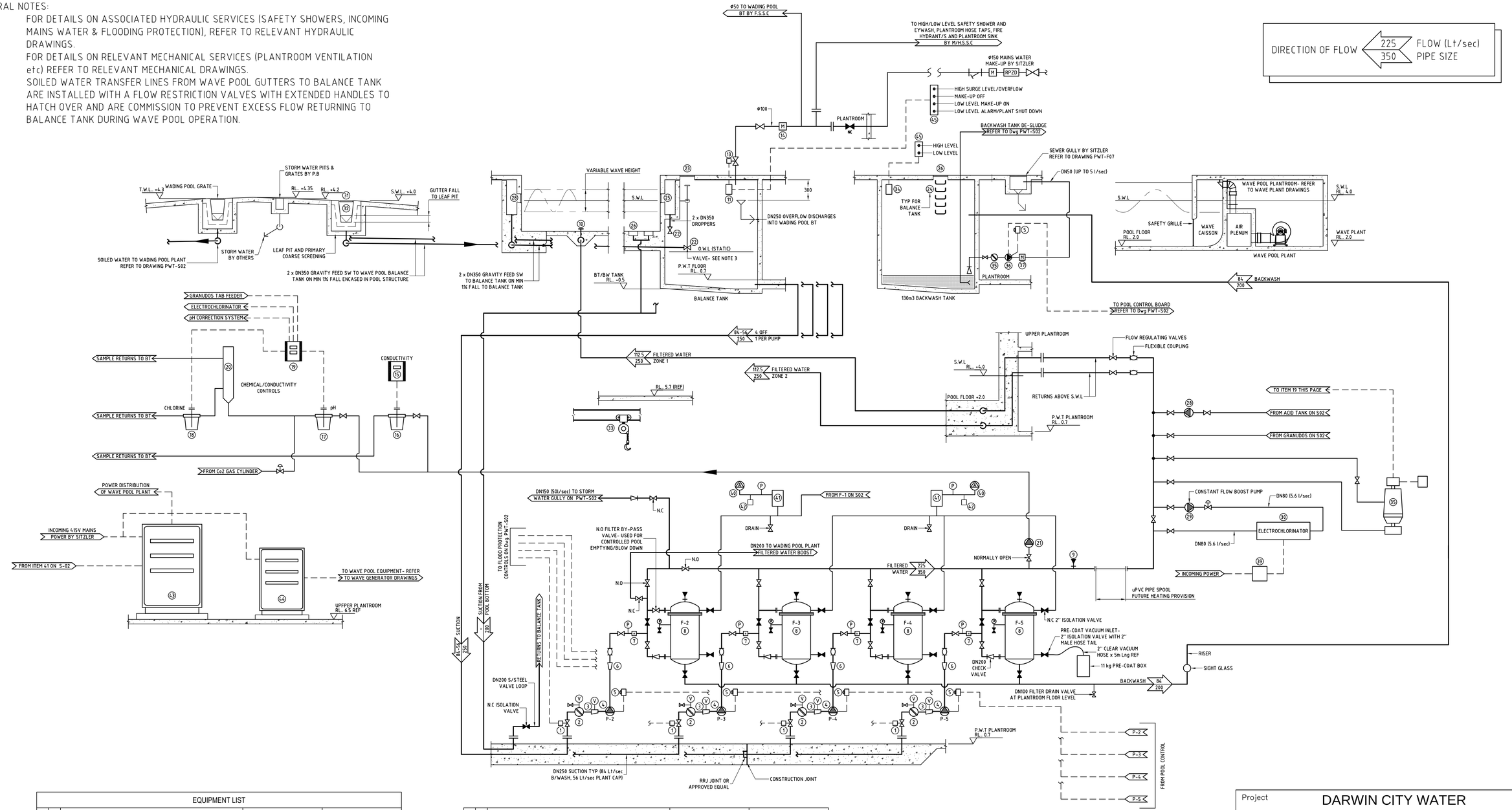
TRISLEY HYDRAULIC SERVICES Pty Ltd

20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

DES.	DRN. PB	CHK.	APP.	
DATE	DATE 20/06/07	DATE	DATE	
FILE	DISK	DRAWING No.	REV.	A1
PLT.	SCALE 1:200	PWT-S-00	D	

GENERAL NOTES:

1. FOR DETAILS ON ASSOCIATED HYDRAULIC SERVICES (SAFETY SHOWERS, INCOMING MAINS WATER & FLOODING PROTECTION), REFER TO RELEVANT HYDRAULIC DRAWINGS.
2. FOR DETAILS ON RELEVANT MECHANICAL SERVICES (PLANTROOM VENTILATION etc) REFER TO RELEVANT MECHANICAL DRAWINGS.
3. SOILED WATER TRANSFER LINES FROM WAVE POOL GUTTERS TO BALANCE TANK ARE INSTALLED WITH A FLOW RESTRICTION VALVES WITH EXTENDED HANDLES TO HATCH OVER AND ARE COMMISSION TO PREVENT EXCESS FLOW RETURNING TO BALANCE TANK DURING WAVE POOL OPERATION.



EQUIPMENT LIST				
MK. No.	QTY.	DESCRIPTION	MAKE/MODEL/PART No.	INSTALLING CONTRACTOR
1	4	250 AUTO ISOLATION VALVE (FLOOD PROTECTION) c/w MANUAL OVER RIDE	SH	F.S.S.C
2	4	500 x 250/250 PRE-PUMP STRAINER	FULFAB	F.S.S.C
3	4	250 x 200 ECCENTRIC PUMP CONNECTOR c/w 40 BSP SOCKET	FULFAB	F.S.S.C
4	4	RECIRCULATION PUMP- CPR 200 x 150-250 (22kW)	PACIFICHEM	F.S.S.C
5	5	REMOTE PUMP STARTER (ONE FOR WASTE WATER PUMP ITEM 36)	NHP	F.S.S.C
6	4	200 x 150 CONCENTRIC PUMP CONNECTOR	FULFAB	F.S.S.C
7	4	NO FLOW SWITCH- PUMP RUNNING SIGNAL	KELCO F25	F.S.S.C
8	4	60m2 PRE-COAT FILTER	ATLAS PCT 600	F.S.S.C
9	5	AIR VENT VACUUM BREAKER	SPIRAX	F.S.S.C
10	144	ADJUSTABLE FILTERED WATER NOZZLES	HAYWARD	F.S.S.C
11	1	BALANCE TANK ULTRASONIC LEVEL SENSOR	BURKERT	F.S.S.C
12		NOT USED		
13	1	PILOT OPERATED VALVE- POOL WATER MAKE-UP	ALLIED PUMPS	F.S.S.C
14	1	WATER METER- TOTALIZER	AMIAD	F.S.S.C
15	1	CONDUCTIVITY METER/DISPLAY	PROMINENT	F.S.S.C
16	1	SAMPLE CELL- CONDUCTIVITY	PROMINENT	F.S.S.C
17	1	SAMPLE CELL- pH	PROMINENT	F.S.S.C
18	1	SAMPLE CELL- CHLORINE	PROMINENT	F.S.S.C
19	1	WATER CHEMISTRY CONTROL BOARD- pH & CHLORINE	PROMINENT	F.S.S.C
20	1	DEGASSING MANIFOLD (ELECTOCHLORINATION)	PROMINENT	F.S.S.C
21	1	SAMPLE WATER BOOST PUMP	PROMINENT	F.S.S.C
22	4	ø350 FLOW RESTRICTING VALVES, EXTENDED HANDLES	SH	F.S.S.C

MK. No.	QTY.	DESCRIPTION	MAKE/MODEL/PART No.	INSTALLING CONTRACTOR
23	3	600 x 600 LOCKABLE DECK HATCHES	FULFAB	F.S.S.C
24	2	SETS BALANCE/BACKWASH TANK STEP IRONS/LADDER OP EQUAL	AMYROO	F.S.S.C
25	20	SCUPPER GRATE c/w CAST-IN FRAME	FULFAB	F.S.S.C
26	4	600 x 600 MAIN DRAIN FRAME AND GRATES	FULFAB	F.S.S.C
27	1	CALCIUM HYPOCHLORITE TABLET FEEDER c/w INTERNAL PUMP	GRUNFOS	F.S.S.C
28	1	ACID DOSE PUMP- 27 Lt/hr	PROMINENT	F.S.S.C
29	1	ELECTROCHLORINATOR BOOST PUMP	PROMINENT	F.S.S.C
30	1	ELECTROCHLORINATOR	PROMINENT- OxiMax MC8000	F.S.S.C
31	1	SET 600 WIDE WET DECK TRACK & GRATING SYSTEM APPROX. 80.0m Lng	WATERZONE	F.S.S.C
32	1	SET REMOVABLE LEAF PIT SCREENS	FULFAB	F.S.S.C
33	1	16.6m Lng FILTER SERVICE MONORAIL AND LIFTING TACKLE- S.W.L 3.0 TONNE	REFER TO SPECIFICATION	M.H.S.S.C
34	1	BACKWASH TANK ULTRASONIC LEVEL SENSOR	BURKERT	F.S.S.C
35	1	ø300 BAG FILTER	ATLAS	F.S.S.C
36	1	WASTE WATER DISCHARGE PUMP	PACIFICHEM	F.S.S.C
37	1	WATER METER- TOTALIZER	AMIAD	F.S.S.C
38		NOT USED		
39	1	ELECTROCHLORINATR POWER SUPPLY/CONTROLS	PROMINENT	F.S.S.C
40	2	AIR BLOWER- PRE-COAT EDUCTION/AIR VACUUM SYSTEM	ESAM	F.S.S.C
41	2	AIR FILTER	FULFAB	F.S.S.C
42	2	VACUUM RELIEF VALVE	FULFAB	F.S.S.C
43	1	POOL CONTROL BOARD	CVP ELECTRICAL	F.S.S.C
44	1	WAVE GENERATOR CONTROL BOARD	MURPHY WAVE	F.S.S.C
45	2	BALANCE AND BACKWASH TANK LEVEL INDICATION	BURKERT	F.S.S.C

WAVE POOL TECHNICAL DATA	
SURFACE AREA (m2)	2500
DEPTH (m)	1.03
VOLUME (M3)	2580
TURN OVER (hrs)	3.18
PLANT CAPACITY (m3/hr)	810 (225 l/sec)
FILTER AREA (m2)	240
No FILTERS/AREA (m2)	4 x 60
FILTER RATE (m3/hr/m2)	<3.4
BACKWASH RATE (m3/hr/m2)	5
BACKWASH FLOW (l/sec)	84
WASH WATER CONSUMPTION	10.0m3
TOTAL WASH WATER CONSUMPTION	40.0m3
BACKWASH DURATION (min)	2
MEDIA CHARGE/FILTER (kgs)	33
MEDIA CHARGE BASED ON A MAXIMUM DOSE RATE OF 0.55kgs/m	

REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
E	PB	25/05/09	AS INSTALLED- VALVE IN MAKE-UP ADDED	-	-
D	PB	19/05/09	AS INSTALLED	-	-
C	PB	08/10/07	FOR CONSULTANT APPROVAL	-	-
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
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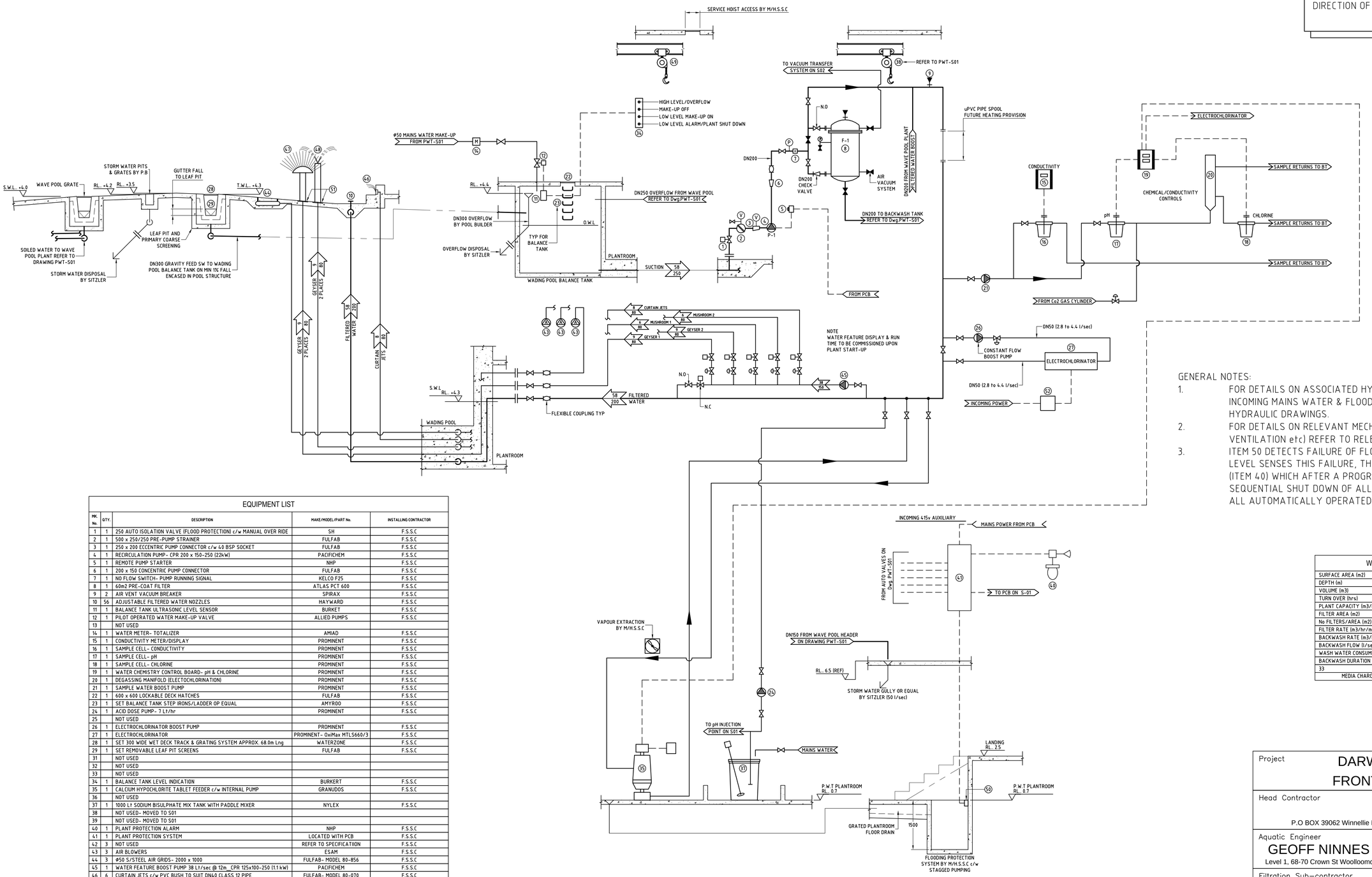
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Title
WAVE POOL WATER TREATMENT SCHEMATIC

DES.	DRN. PB	CHK.	APP.
DATE	DATE 25/07/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE NTS	PWT-S-01	E

A1

DIRECTION OF FLOW 84 / 200 — FLOW (Lt/sec) / PIPE SIZE



GENERAL NOTES:

1. FOR DETAILS ON ASSOCIATED HYDRAULIC SERVICES (SAFETY SHOWERS, INCOMING MAINS WATER & FLOODING PROTECTION), REFER TO RELEVANT HYDRAULIC DRAWINGS.
2. FOR DETAILS ON RELEVANT MECHANICAL SERVICES (PLANTROOM VENTILATION etc) REFER TO RELEVANT MECHANICAL DRAWINGS.
3. ITEM 50 DETECTS FAILURE OF FLOODING PROTECTION SYSTEM. IF ITEM 50 LEVEL SENSES THIS FAILURE, THE SYSTEM SHALL INITIATE AN ALARM (ITEM 40) WHICH AFTER A PROGRAMMABLE TIME WILL INITIATE A SEQUENTIAL SHUT DOWN OF ALL POOL PLANT, INCLUDING CLOSURE OF ALL AUTOMATICALLY OPERATED VALVES.

EQUIPMENT LIST

MK No.	QTY.	DESCRIPTION	MAKE/MODEL/PART No.	INSTALLING CONTRACTOR
1	1	250 AUTO ISOLATION VALVE (FLOOD PROTECTION) c/w MANUAL OVER RIDE	SH	F.S.S.C
2	1	500 x 250/250 PRE-PUMP STRAINER	FULFAB	F.S.S.C
3	1	250 x 200 ECCENTRIC PUMP CONNECTOR c/w 40 BSP SOCKET	FULFAB	F.S.S.C
4	1	RECIRCULATION PUMP- CPR 200 x 150-250 (22kW)	PACIFICHEM	F.S.S.C
5	1	REMOTE PUMP STARTER	NHP	F.S.S.C
6	1	200 x 150 CONCENTRIC PUMP CONNECTOR	FULFAB	F.S.S.C
7	1	NO FLOW SWITCH- PUMP RUNNING SIGNAL	KELCO F25	F.S.S.C
8	1	60m2 PRE-COAT FILTER	ATLAS PCT 600	F.S.S.C
9	2	AIR VENT VACUUM BREAKER	SPIRAX	F.S.S.C
10	56	ADJUSTABLE FILTERED WATER NOZZLES	HAYWARD	F.S.S.C
11	1	BALANCE TANK ULTRASONIC LEVEL SENSOR	BURKET	F.S.S.C
12	1	PILOT OPERATED WATER MAKE-UP VALVE	ALLIED PUMPS	F.S.S.C
13		NOT USED		
14	1	WATER METER- TOTALIZER	AMIAD	F.S.S.C
15	1	CONDUCTIVITY METER/DISPLAY	PROMINENT	F.S.S.C
16	1	SAMPLE CELL- CONDUCTIVITY	PROMINENT	F.S.S.C
17	1	SAMPLE CELL- pH	PROMINENT	F.S.S.C
18	1	SAMPLE CELL- CHLORINE	PROMINENT	F.S.S.C
19	1	WATER CHEMISTRY CONTROL BOARD- pH & CHLORINE	PROMINENT	F.S.S.C
20	1	DEGASSING MANIFOLD (ELECTOCHLORINATION)	PROMINENT	F.S.S.C
21	1	SAMPLE WATER BOOST PUMP	PROMINENT	F.S.S.C
22	1	600 x 600 LOCKABLE DECK HATCHES	FULFAB	F.S.S.C
23	1	SET BALANCE TANK STEP IRONS/LADDER OP EQUAL	AMYROD	F.S.S.C
24	1	ACID DOSE PUMP- 7 Lt/hr	PROMINENT	F.S.S.C
25		NOT USED		
26	1	ELECTROCHLORINATOR BOOST PUMP	PROMINENT	F.S.S.C
27	1	ELECTROCHLORINATOR	PROMINENT- OxiMax MTLS660/3	F.S.S.C
28	1	SET 300 WIDE WET DECK TRACK & GRATING SYSTEM APPROX. 68.0m Lng	WATERZONE	F.S.S.C
29	1	SET REMOVABLE LEAF PIT SCREENS	FULFAB	F.S.S.C
31		NOT USED		
32		NOT USED		
33		NOT USED		
34	1	BALANCE TANK LEVEL INDICATION	BURKERT	F.S.S.C
35	1	CALCIUM HYPOCHLORITE TABLET FEEDER c/w INTERNAL PUMP	GRANUDOS	F.S.S.C
36		NOT USED		
37	1	1000 Lt SODIUM BISULPHATE MIX TANK WITH PADDLE MIXER	NYLEX	F.S.S.C
38		NOT USED- MOVED TO S01		
39		NOT USED- MOVED TO S01		
40	1	PLANT PROTECTION ALARM	NHP	F.S.S.C
41	1	PLANT PROTECTION SYSTEM	LOCATED WITH PCB	F.S.S.C
42	3	NOT USED	REFER TO SPECIFICATIION	F.S.S.C
43	3	AIR BLOWERS	ESAM	F.S.S.C
44	3	ø50 S/STEEL AIR GRIDS- 2000 x 1000	FULFAB- MODEL 80-856	F.S.S.C
45	1	WATER FEATURE BOOST PUMP 38 Lt/sec @ 12m_CPR 125x100-250 (11 kW)	PACIFICHEM	F.S.S.C
46	6	CURTAIN JETS c/w PVC BUSH TO SUIT DN40 CLASS 12 PIPE	FULFAB- MODEL 80-070	F.S.S.C
47	2	PEDESTAL MOUNTED SPRAY BALL WATER FEATURE	FULFAB- MODEL 80-281	F.S.S.C
48	2	GEYSER WATER FEATURE	FULFAB- MODEL 80-159	F.S.S.C
49	1	6.7m Lng SERVICE MONORAIL AND LIFTING TACKLE- S.W.L 3.0 TONNE	REFER TO SPECIFICATIION	M/H.S.S.C
50	1	LEVEL SENSOR (PLANT PROTECTION)	BURKERT	F.S.S.C
51	4	UNIVERSAL BASE PLATES	FULFAB- MODEL 80-100	F.S.S.C
52	1	ELECTROCHLORINATOR POWER SUPPLY/CONTROLS	PROMINENT	F.S.S.C

WADING POOL TECHNICAL DATA

SURFACE AREA (m2)	470
DEPTH (m)	0.2
VOLUME (m3)	94
TURN OVER (hrs)	0.45
PLANT CAPACITY (m3/hr)	210 (58 l/sec)
FILTER AREA (m2)	60
No FILTERS/AREA (m2)	1 x 60
FILTER RATE (m3/hr/m2)	3.5
BACKWASH RATE (m3/hr/m2)	5
BACKWASH FLOW (l/sec)	84
WASH WATER CONSUMPTION	10.0m3
BACKWASH DURATION (min)	2
33	45
MEDIA CHARGE BASED ON A MAXIMUM DOSE RATE OF 0.55kgs/m	

REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
E	PB	19/05/09	AS INSTALLED	-	-
D	PB	08/10/07	FOR CONSULTANT APPROVAL	-	-
C	PB	23/08/07	BRANCH LINE SIZE CHANGE TO FEATURES	-	-
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
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Title
WADING POOL WATER TREATMENT SCHEMATIC

DES.	DRN. PB	CHK.	APP.
DATE	DATE 25/07/07	DATE	DATE
FILE	DISK	DRAWING No.	REV. / A1
PLT.	SCALE NTS	PWT-S-02	E

BLOWERS TO AIR GRIDS IN WADING POOL

3 x DN50 AIR LINES FROM BLOWERS TO WADING POOL RUN THRU BALANCE TANK HARD UNDER ROOF SLAB- AIR LOOP.

DN200 FROM MAIN DRAINS ENCASED IN PLANTROOM FLOOR SLAB

FLEXIBLE COUPLING

ISOLATION VALVE

WAVE POOL BALANCE TANK

S/STEEL VALVE LOOP

DRAIN GUARD- SEE DETAIL ON PWT-S-09

FLEX COUPLING

ISOLATION VALVE

DN250

SUPPORT POST 'MK B' 2 PLACES

SUPPORT POST 'MK A' 6 PLACES

3 GASKET

225 550 322 3000 3000 536

GRID LINE 3 CONSTRUCTION JOINT

NOM ϕ1190

1000 Lt ACID TANK

200 Lt ACID TANK

600mm HIGH x 150 Thk CONCRETE WALL- REFER TO GNFP STRUCTURAL DRAWINGS

VAPOUR EXTRACTION BY OTHERS

BT FLOOR RL -0.3

FALL

FALL

FALL

ACID PUMP - WADING POOL

ACID PUMP - WAVE POOL

BACKWASH TANK

ACID PUMP - CHLORINATORS

PLANTROOM FLOOR RL 0.7

CHEMICAL CONTROLS

200 200 200

1 1/2" SPARE SOCKET

2" SOCKET- ELECTROCHLORINATOR RETURN

uPVC PIPE SPOOL - FUTURE HETING PROVISION

2" SOCKET ELECTROCHLORINATOR TAKE OFF

200 200 200

1/1/2" SPARE SOCKET

WAVE I

1730

RRJ JOINT AT CONSTRUCTION JOINT

1250

5500

DN250 SUCTION

DN250 SUCTION

DN200 BACKWASH AT HIGH LEVEL

FEATURES PUMP

TO FEATURE PUMP

DN250 SUCTION

DN200 WADING POOL FILTERED WATER BOOST

VAC TRANSFER STARTER AND PUMP ISO SWITCH (ON COMMON POST)

DN200 WADING POOL FILTERED WATER

1390 REF

TIFT

PVC

300

1714

PUMP ISOLATION SWITCH (TYP)

DN350 WAVE POOL FILTERED WATER

DN150

135

308

CHECK VALVE

440

2020

132

200

845

MONORAIL BY OTHERS

F-1 ATLAS PCT 600

F-2 ATLAS PCT 600

F-3 ATLAS PCT 600

F-4 ATLAS PCT 600

F-5 ATLAS PCT 600

DN100 BACKWASH DRAIN VALVE

SIGHT GLASS

SIGHT GLASS

RISER

WADING POOL BALANCE TANK

2000

178 REF

DN50 AIR

AIR FILTER

2.2kW BLOWER- VACUUM TRANSFER. SEE DETAIL ON S07

2.2kW BLOWER- VACUUM TRANSFER. SEE DETAIL ON S07

VAC TRANSFER STARTER

2300 2700 TYP 900 REF

REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-
D	PB	17/10/07	AIR LINES RUN IN BT FOR AIR LOOP	-	-
C	PB	12/09/07	WADING POOL FW LINE REVISED REVISED TO ENGINEERS INSTRUCTION	-	-
F	PB	19/05/09	AS INSTALLED	-	-
E	PB	14/12/07	LEVELS IN B/W TANK AMMENDED	-	-

Project: DARWIN CITY WATER FRONT DEVELOPMENT

Head Contractor: SITZLER
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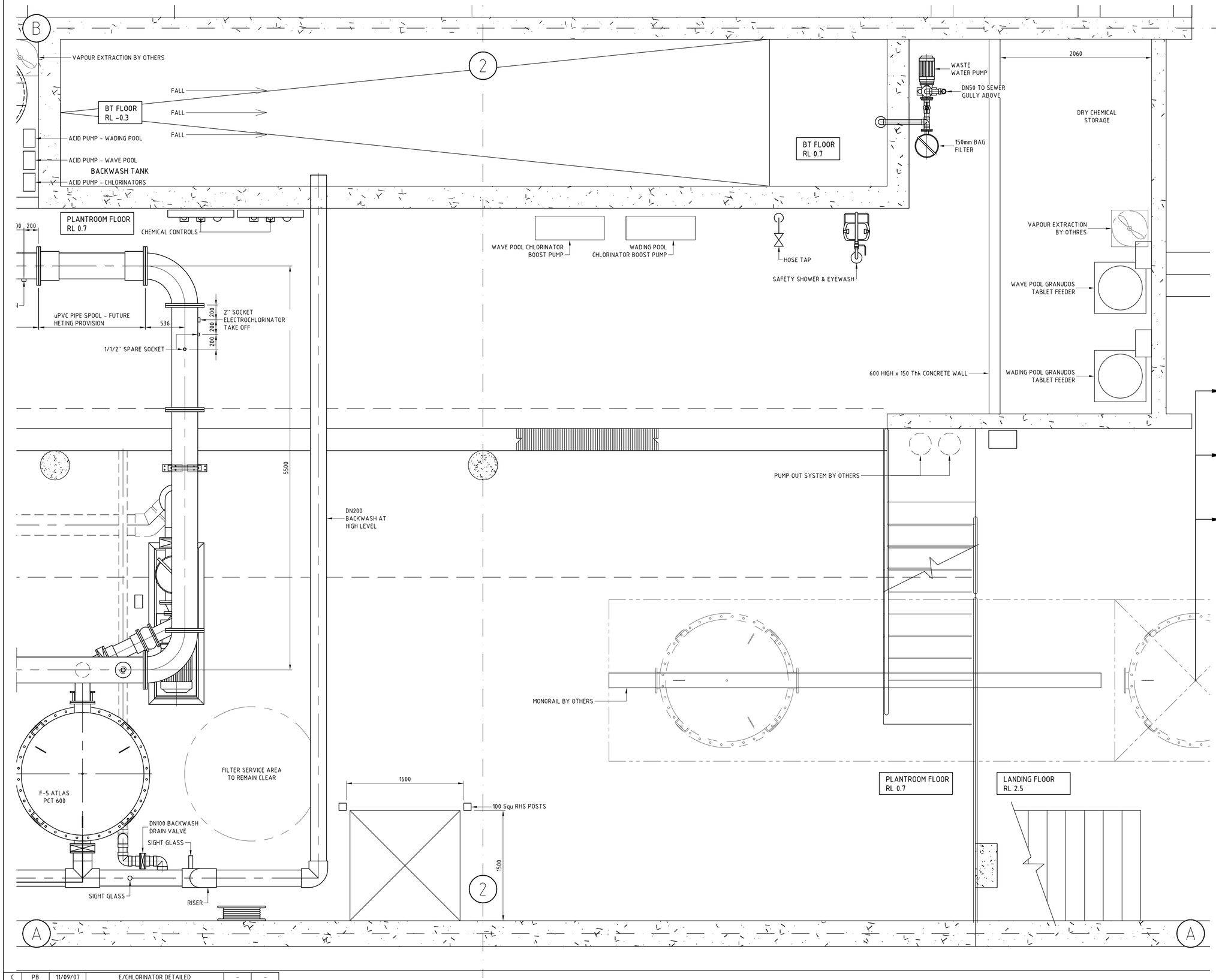
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Title: PLANTROOM LAYOUT- Sht 1

DES.	DRN. PB	CHK.	APP.
DATE	DATE 20/06/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE 1:25	PWT-S-03	F

A1



REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
C	PB	11/09/07	E/CHLORINATOR DETAILED	-	-
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-
D	PB	19/05/09	AS INSTALLED	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
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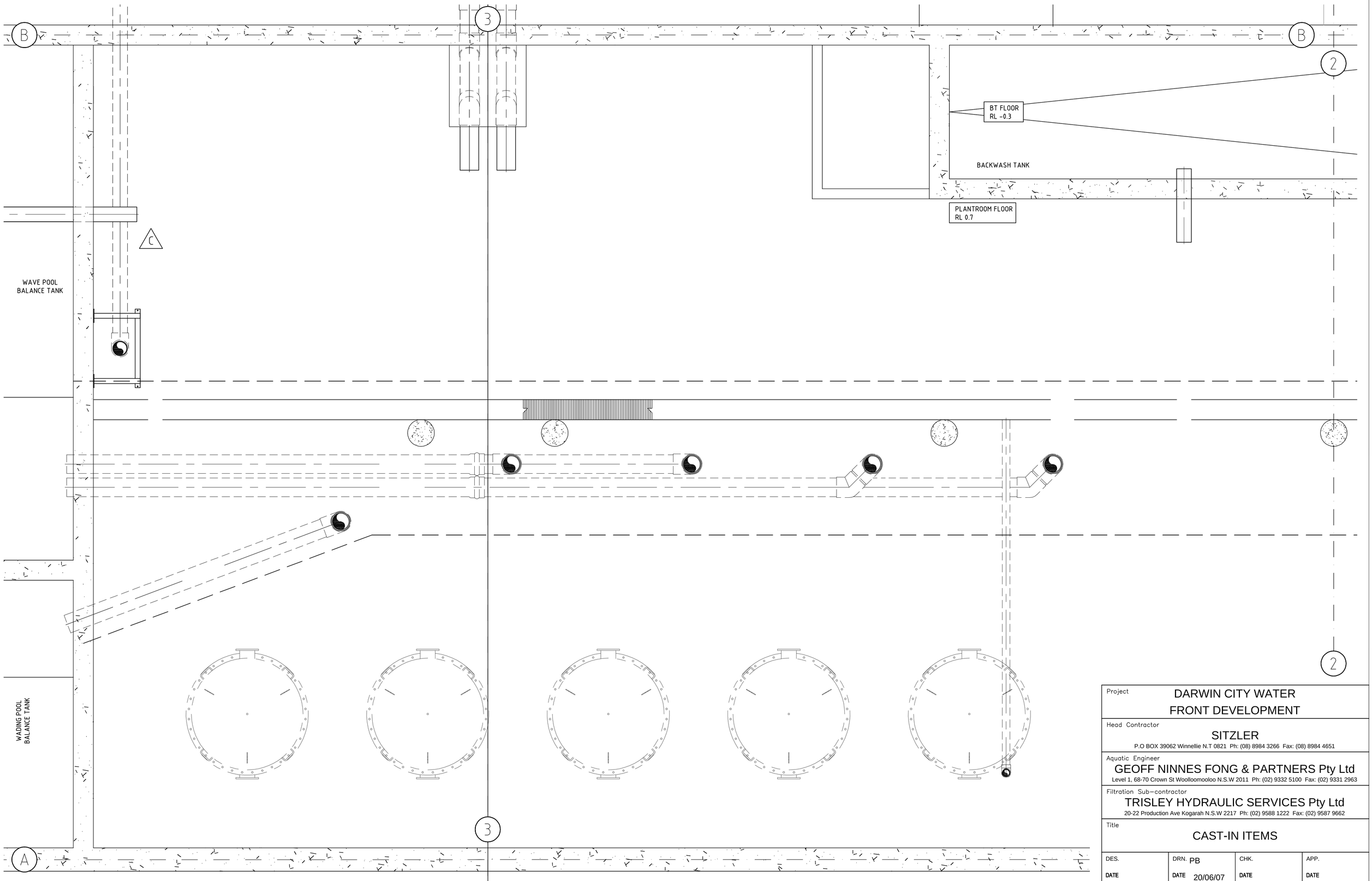
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Filtration Sub-contractor
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Title
PLANTROOM LAYOUT- Sht 2

DES.	DRN. PB	CHK.	APP.
DATE	DATE 20/06/07	DATE	DATE

FILE	DISK	DRAWING No.	REV.	
PLT.	SCALE 1:25	PWT-S-04	D	A1



REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
C	PB	11/09/07	WADING POOL FW LINE REROUTED	-	-
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-
E	PB	19/05/09	AS INSTALLED	-	-
D	PB	14/12/07	LEVELS INB/W TANK AMMENDED	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
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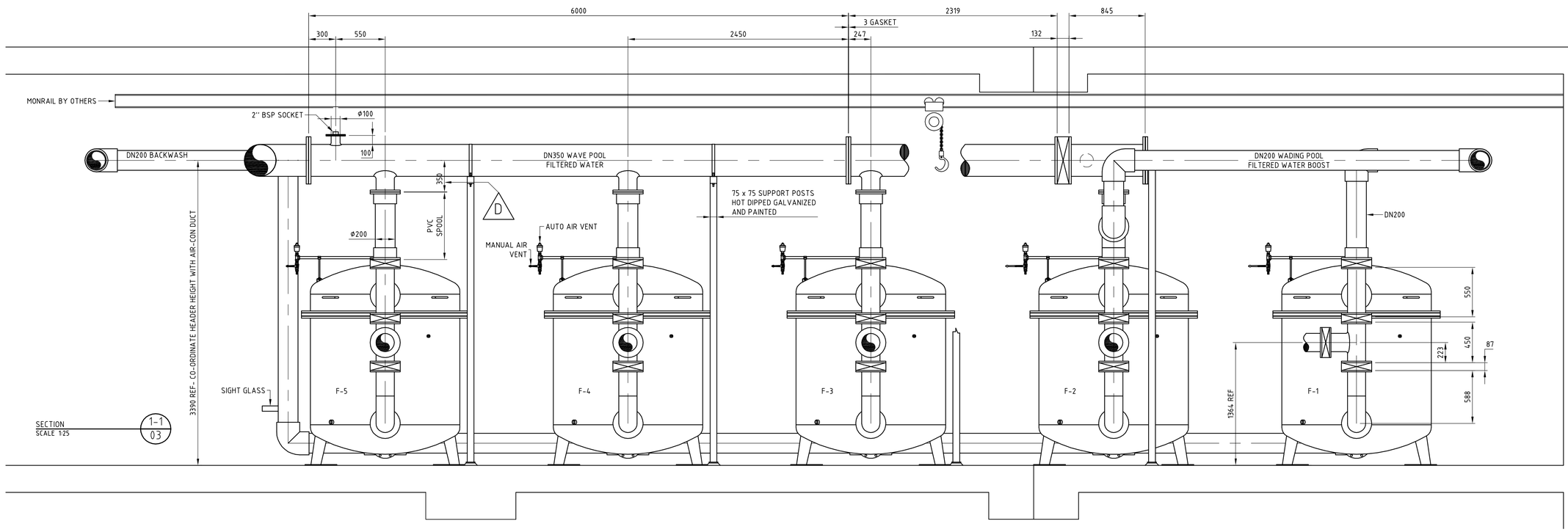
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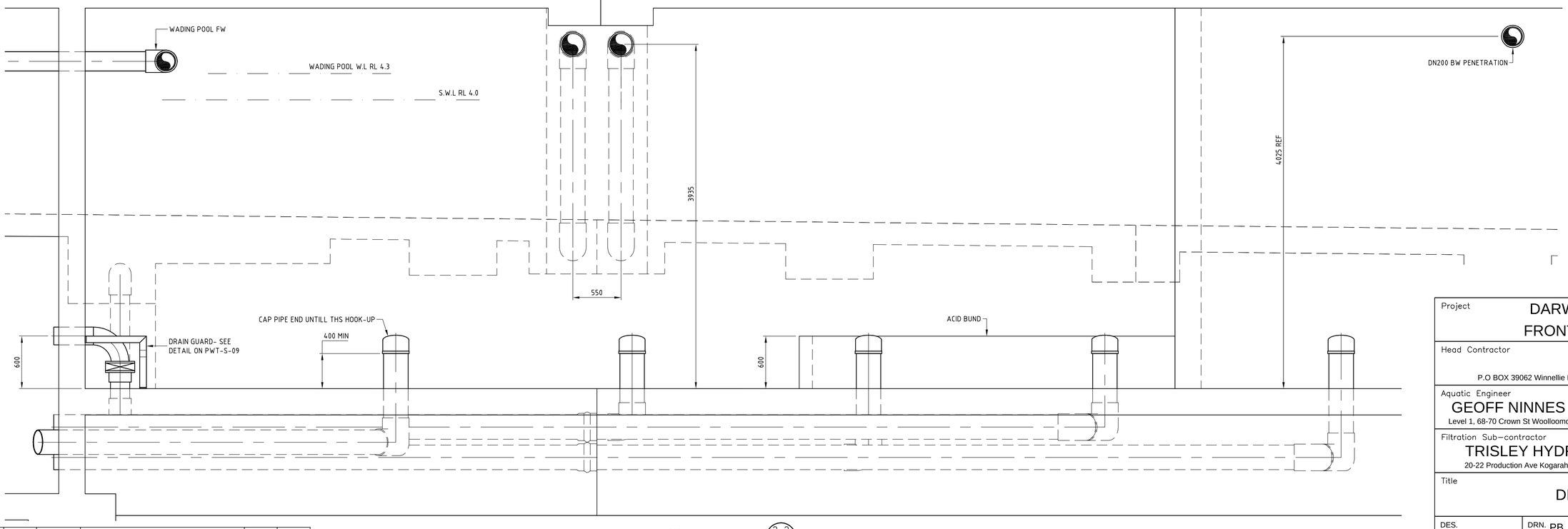
Filtration Sub-contractor
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20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

Title
CAST-IN ITEMS

DES.	DRN. PB	CHK.	APP.
DATE	DATE 20/06/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE 1:25	PWT-S-05	E

A1





REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
F	PB	19/05/09	AS INSTALLED	-	-
E	PB	14/12/07	PAINTING NOTE TO POSTS ADDED	-	-
D	PB	22/10/07	DIM REVISED- 400 to 350	-	-
C	PB	11/09/07	WADING POOL FW LINE REROUTED	-	-
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-
A	PB	20/06/07	APPROVAL	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

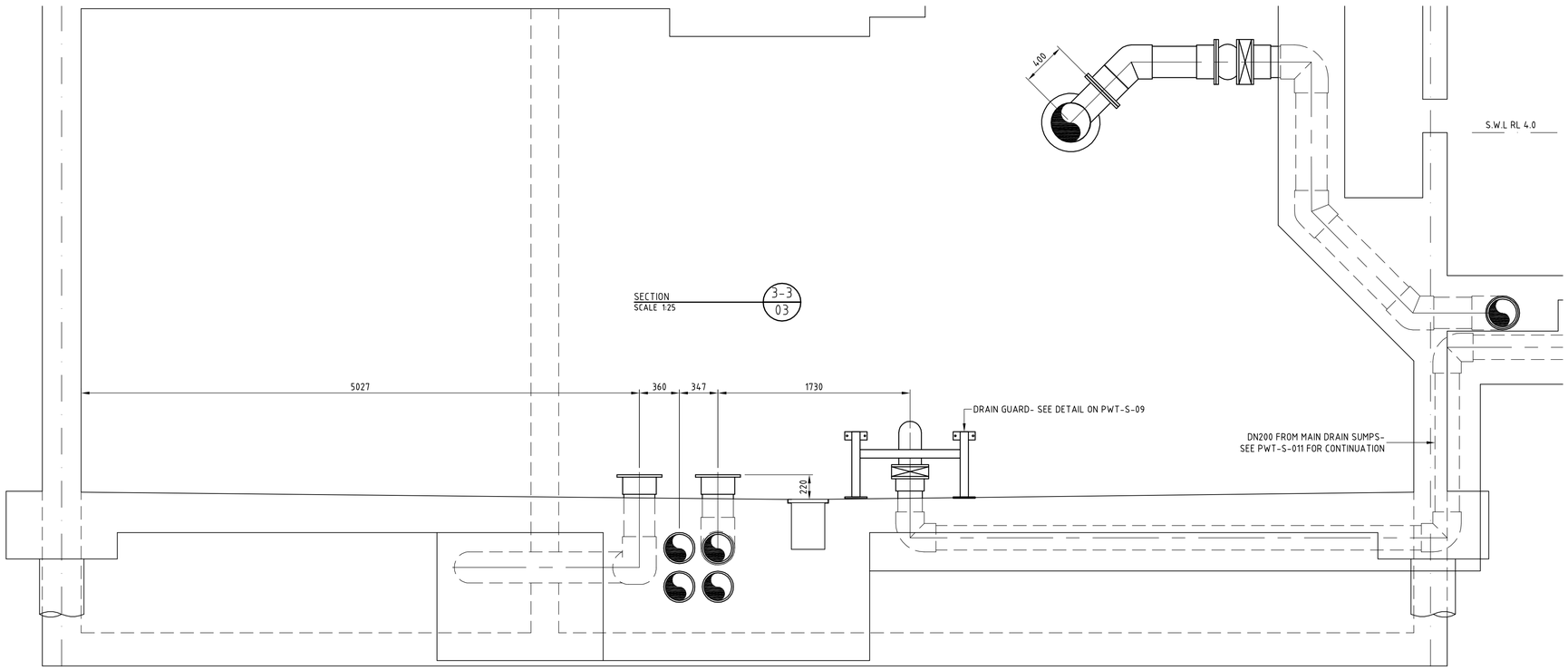
Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

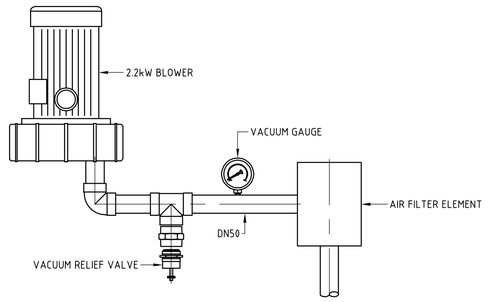
Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

Title
DETAILS- Sht 1

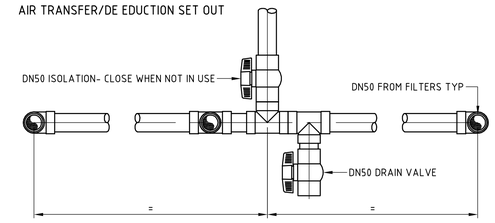
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DATE	PB DATE 20/06/07	DATE	DATE

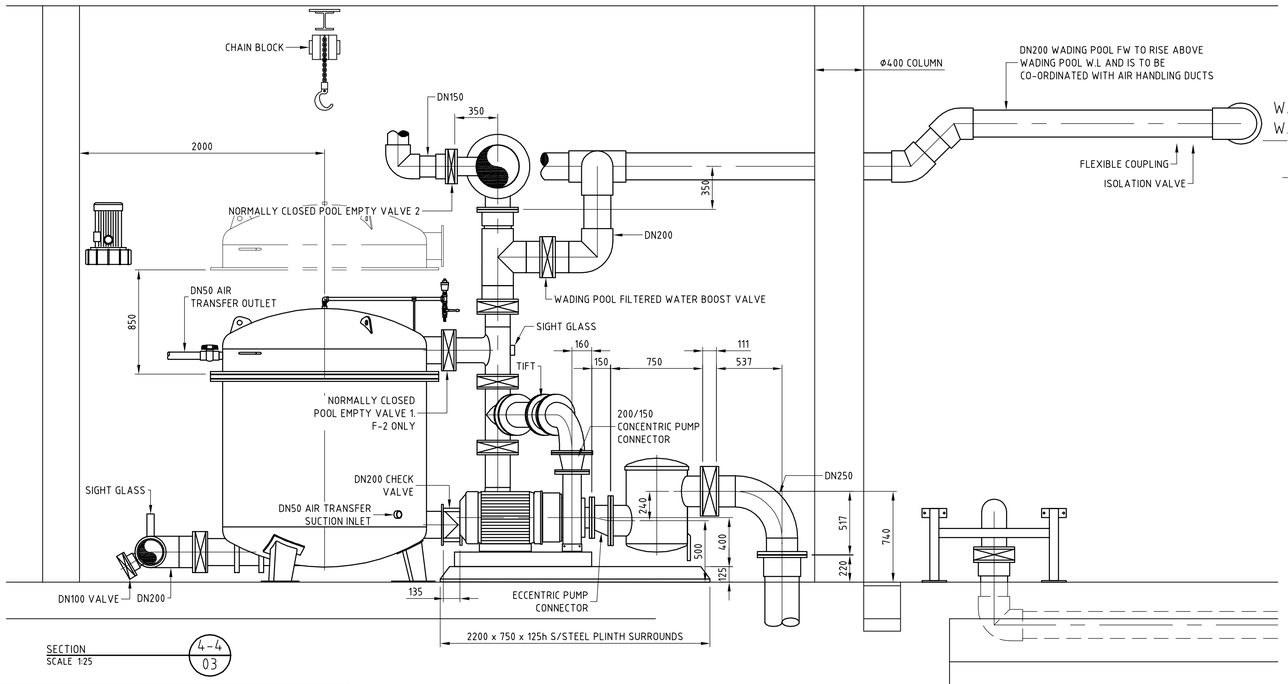
FILE	DISK	DRAWING No.	REV.	
PLT.	SCALE 1:25	PWT-S-06	F	A1

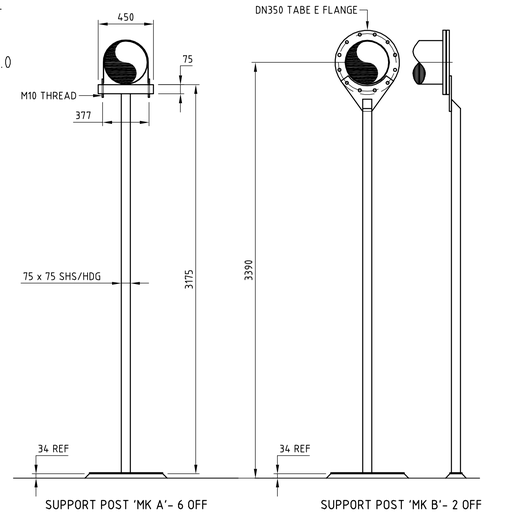


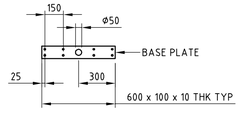


AIR TRANSFER/DE EDUCTION SET OUT









REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.	REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
C	PB	12/09/07	WADING POOL FW LINE REVISED REVISED TO ENGINEERS INSTRUCTION	-	-						
B	PB	14/08/07	REVISED TO R.T INSTUCTION	-	-						
A	PB	20/06/07	APPROVAL	-	-	E	PB	19/05/09	AS INSTALLED	-	-
						D	PB	14/12/07	PAINTING NOTE TO POSTS ADDED	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

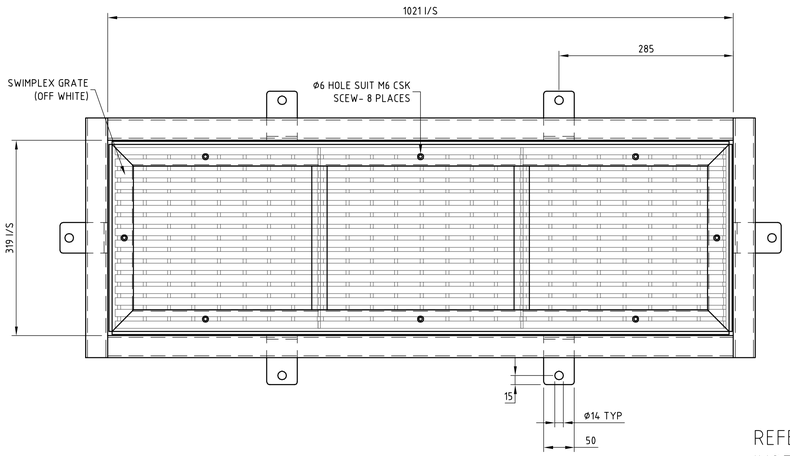
Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

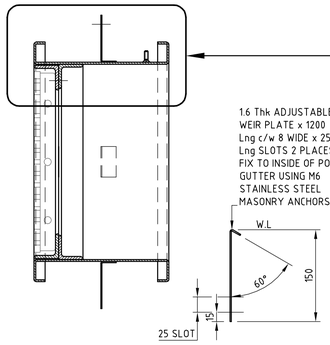
Title
DETAILS- Sht 2

DES.	DRN. PB	CHK.	APP.
DATE	DATE 20/06/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE 1:25	PWT-S-07	E

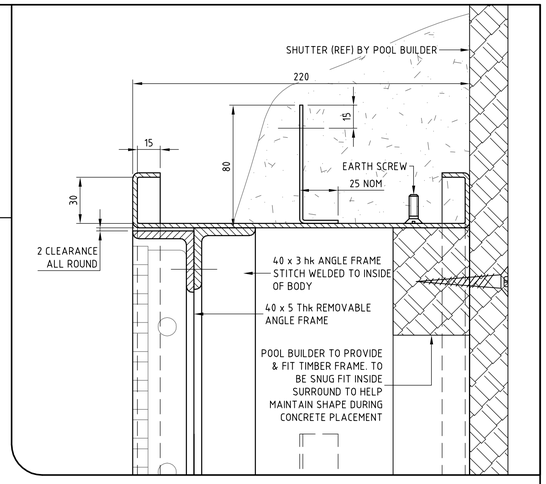
A1



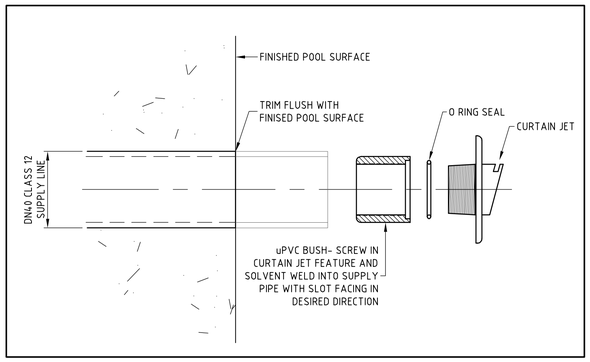
SCUPPER GRATES- 20 PLACES
GRADE 316L STAINLESS STEEL



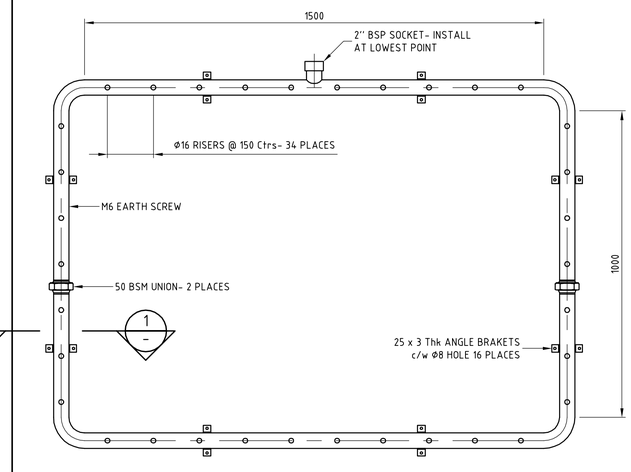
REFER TO PWT-S-09 FOR
INSTALLED SCUPPER
GRATE/BAFFLE DETAILS (C)



NOTE
CAP ALL SUPPLY LINES DURING CONSTRUCTION AND UNTIL FINAL INSTALLATION TO PREVENT INGRESS OF FOREIGN MATTER INTO PIPE.



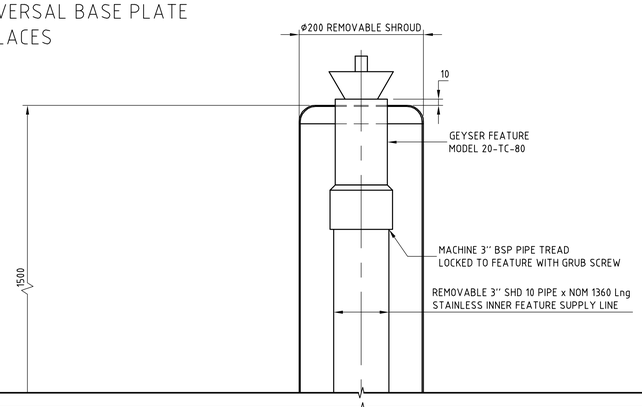
CURTAIN JETS- 6 PLACES

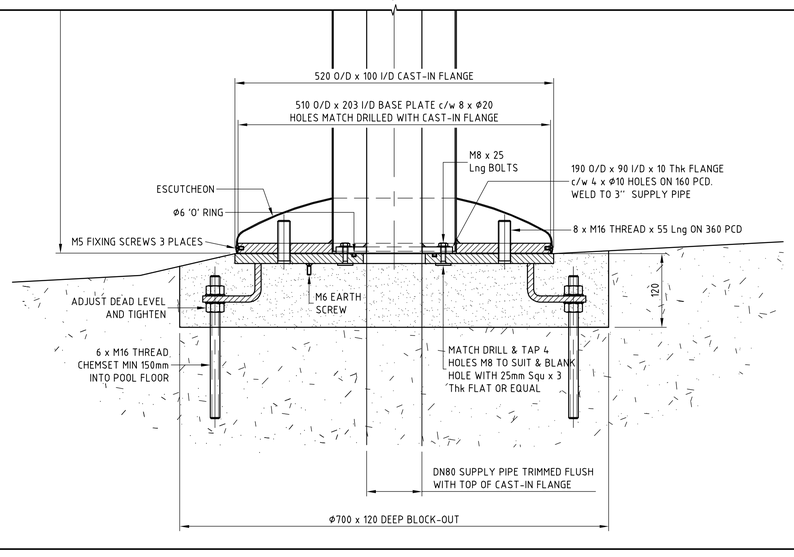


Ø50 AIR GRIDS- 3 PLACES

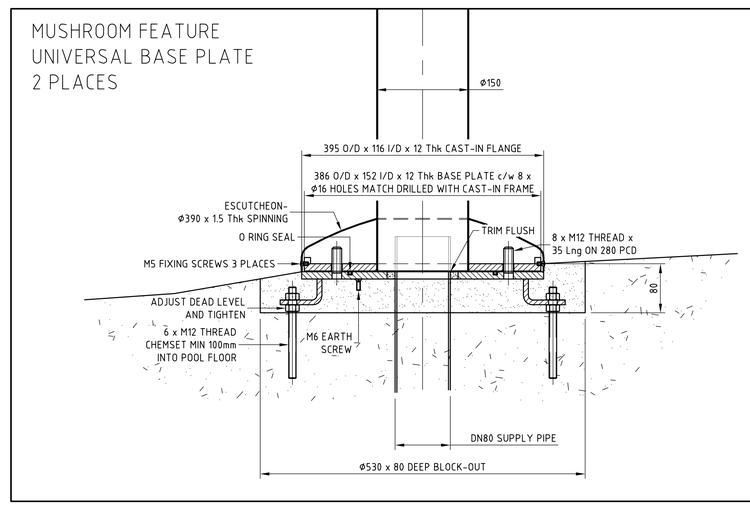
NOTE:
TYPICAL WATER FEATURE FINISH- SATIN POLISHED WITH
CLEAR NYCOTE LACQUER FINISH

GEYSER FEATURE &
UNIVERSAL BASE PLATE
2 PLACES

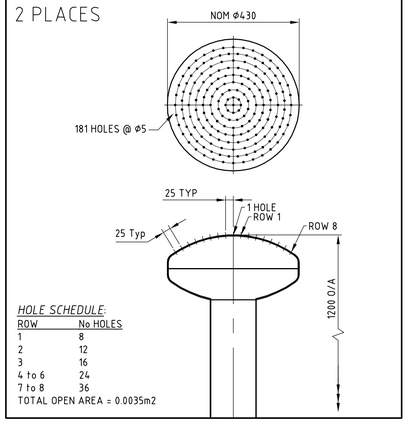




MUSHROOM FEATURE
UNIVERSAL BASE PLATE
2 PLACES



MUSHROOM FEATURE
2 PLACES



HOLE SCHEDULE:

ROW	No HOLES
1	8
2	12
3	16
4 to 6	24
7 to 8	36

TOTAL OPEN AREA = 0.0035m2

REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
D	PB	19/05/09	AS INSTALLED	-	-
C	PB	20/03/09	NOTE ADDED TO SCUPPER DETAIL	-	-
B	PB	03/10/07	FEATURES DETAILED FOR MANUFACTURE	-	-
A	PB	20/06/07	INITIAL ISSUE- FOR APPROVAL	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

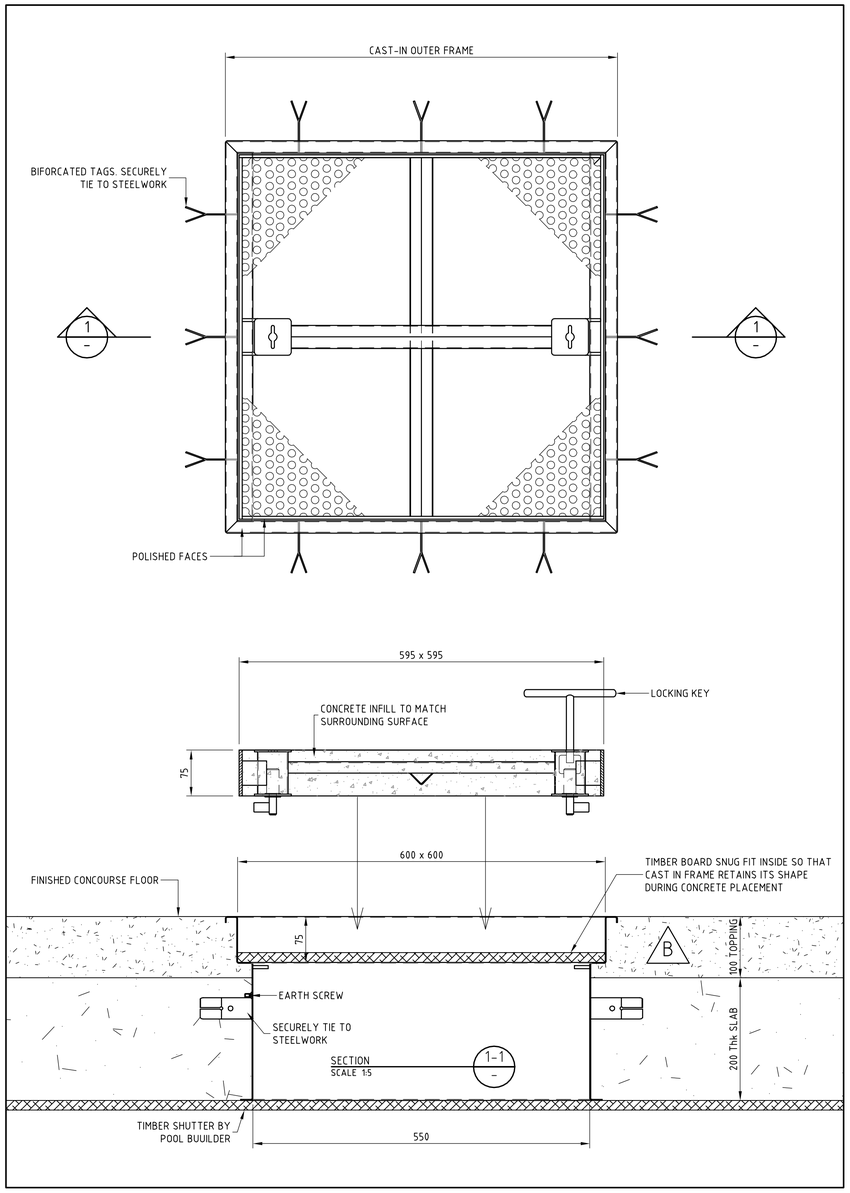
Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

Title
DETAILS- Sht 3

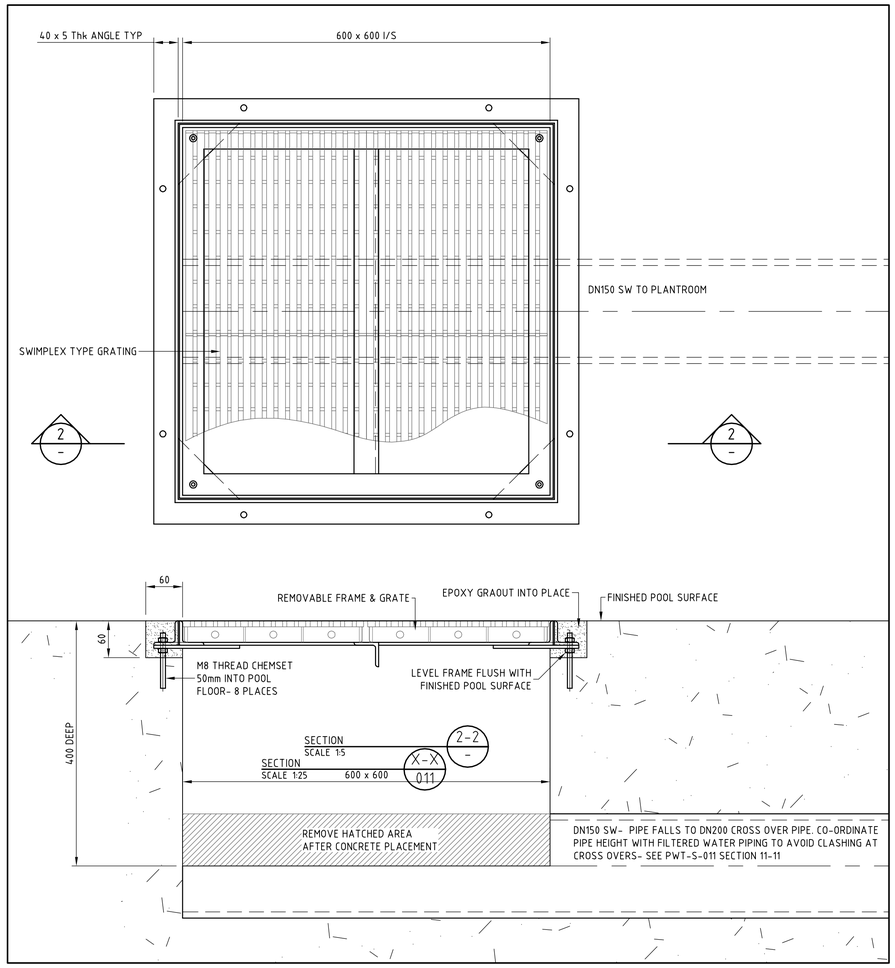
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DATE	DATE 20/06/07	DATE	DATE

FILE	DISK	DRAWING No.	REV.	
PLT.	SCALE Noted	PWT-S-08	D	A1

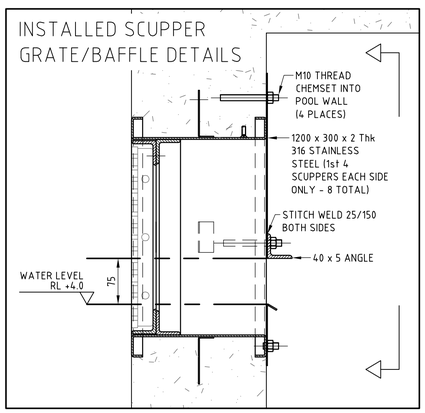
REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
A	PB	20/06/07	INITIAL ISSUE- FOR APPROVAL	-	-
B	PB	12/09/07	DRAIN GUARD DETAILED REVISED TO ENGINEERS INSTRUCTION	-	-
C	PB	03/10/07	NOTES ADDED TO LEAF SCREENS	-	-
D	PB	20/03/09	INSTALLED SCUPPER GRATE/BAFFEL DETAILED LEAF SCREEN DETAIL MOVED TO PWT-S-012	-	-
E	PB	19/05/09	AS INSTALLED	-	-

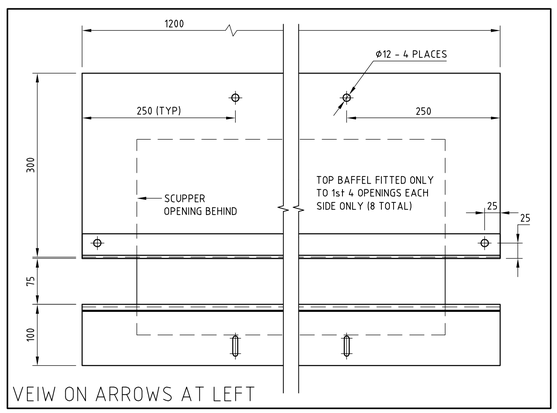


LOCKABLE DECK HATCHES-
6 PLACES

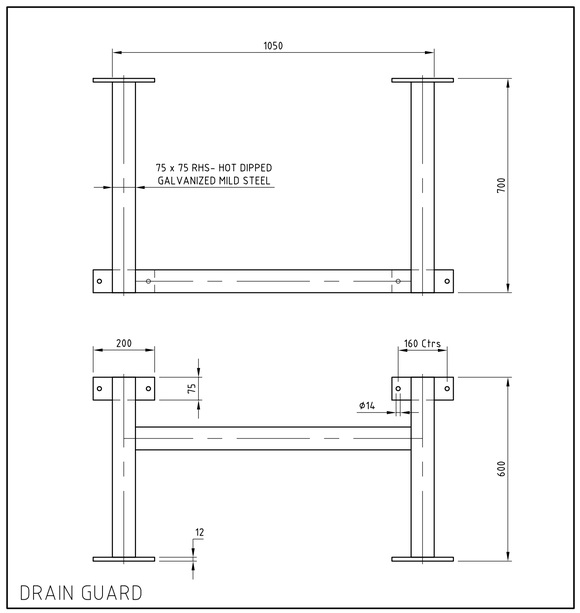


MAIN DRAIN FRAME & GRATES-
4 PLACES





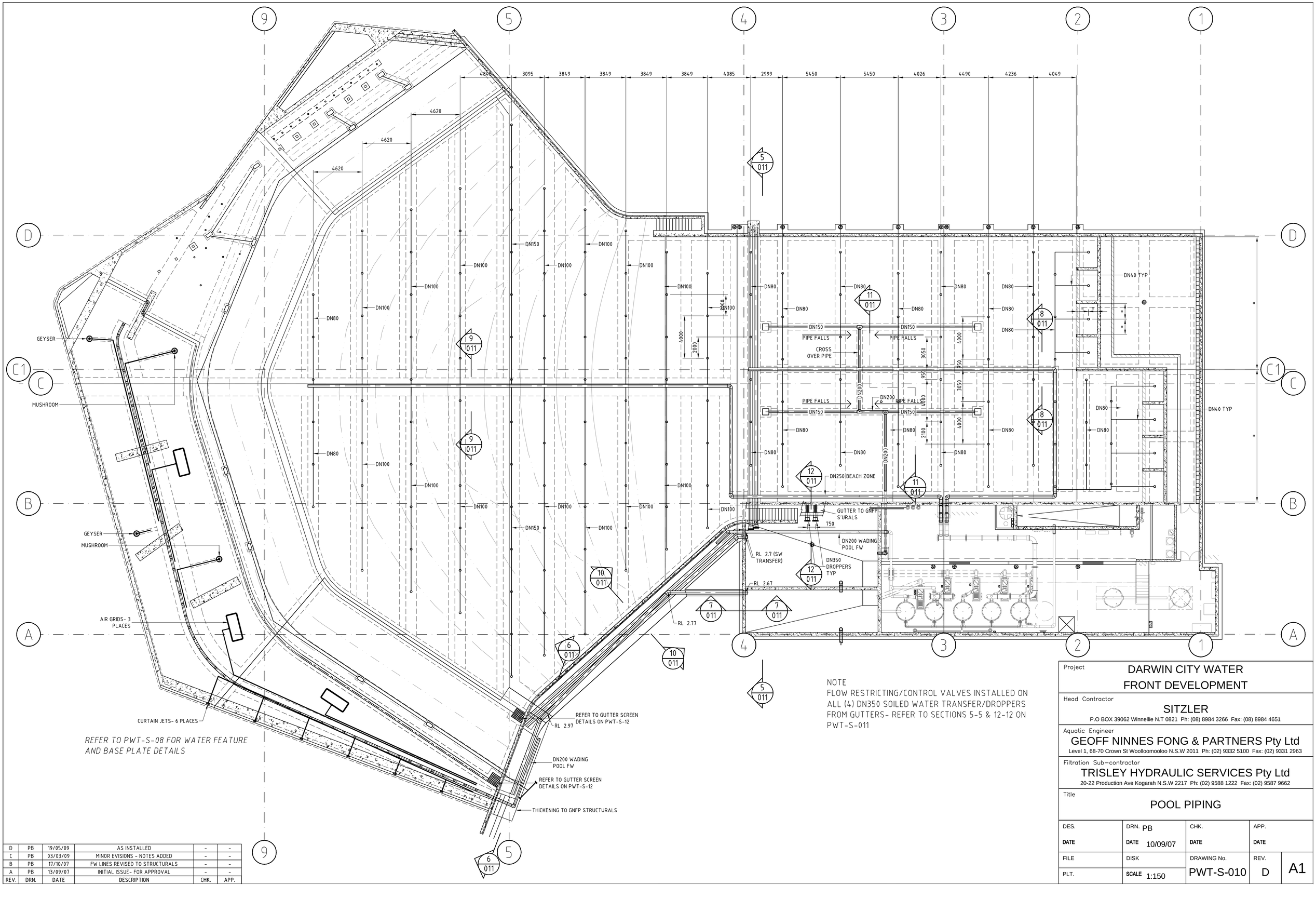
VEIW ON ARROWS AT LEFT



DRAIN GUARD

Project	DARWIN CITY WATER FRONT DEVELOPMENT
Head Contractor	SITZLER P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651
Aquatic Engineer	GEOFF NINNES FONG & PARTNERS Pty Ltd Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963
Filtration Sub-contractor	TRISLEY HYDRAULIC SERVICES Pty Ltd 20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662
Title	DETAILS- Sht 4

DES. DATE	DRN. PB DATE 20/06/07	CHK. DATE	APP. DATE	
FILE	DISK	DRAWING No.	REV.	A1
PLT.	SCALE Noted	PWT-S-09	E	



REFER TO PWT-S-08 FOR WATER FEATURE AND BASE PLATE DETAILS

NOTE
FLOW RESTRICTING/CONTROL VALVES INSTALLED ON ALL (4) DN350 SOILED WATER TRANSFER/DROPPERS FROM GUTTERS- REFER TO SECTIONS 5-5 & 12-12 ON PWT-S-011

REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
D	PB	19/05/09	AS INSTALLED	-	-
C	PB	03/03/09	MINOR EVISIONS - NOTES ADDED	-	-
B	PB	17/10/07	FW LINES REVISED TO STRUCTURALS	-	-
A	PB	13/09/07	INITIAL ISSUE- FOR APPROVAL	-	-

Project
DARWIN CITY WATER FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

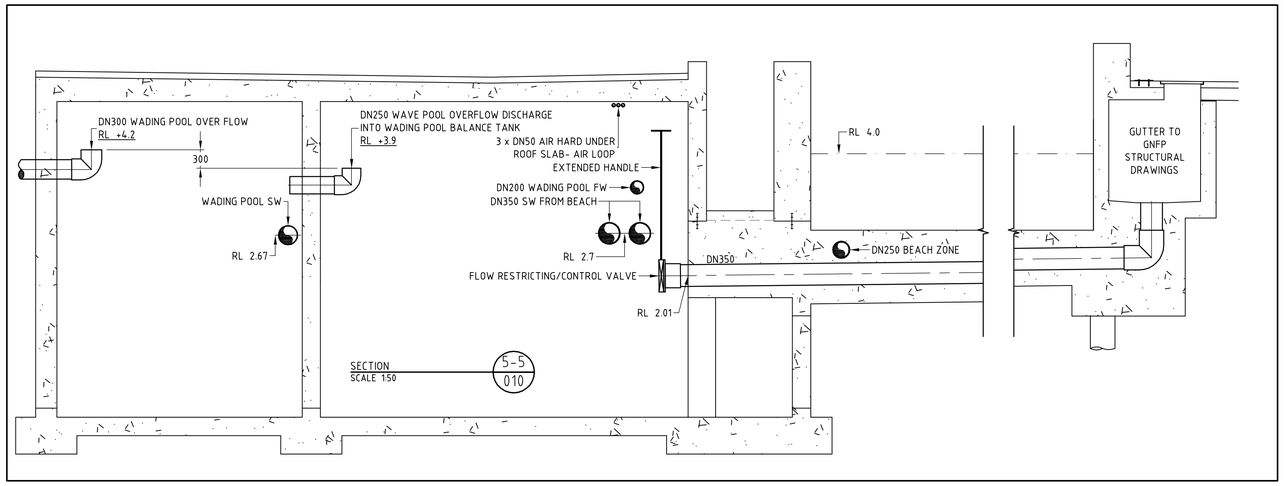
Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

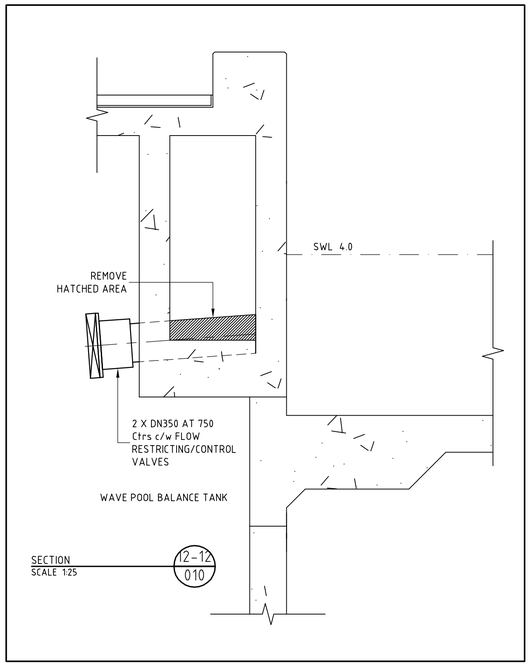
Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

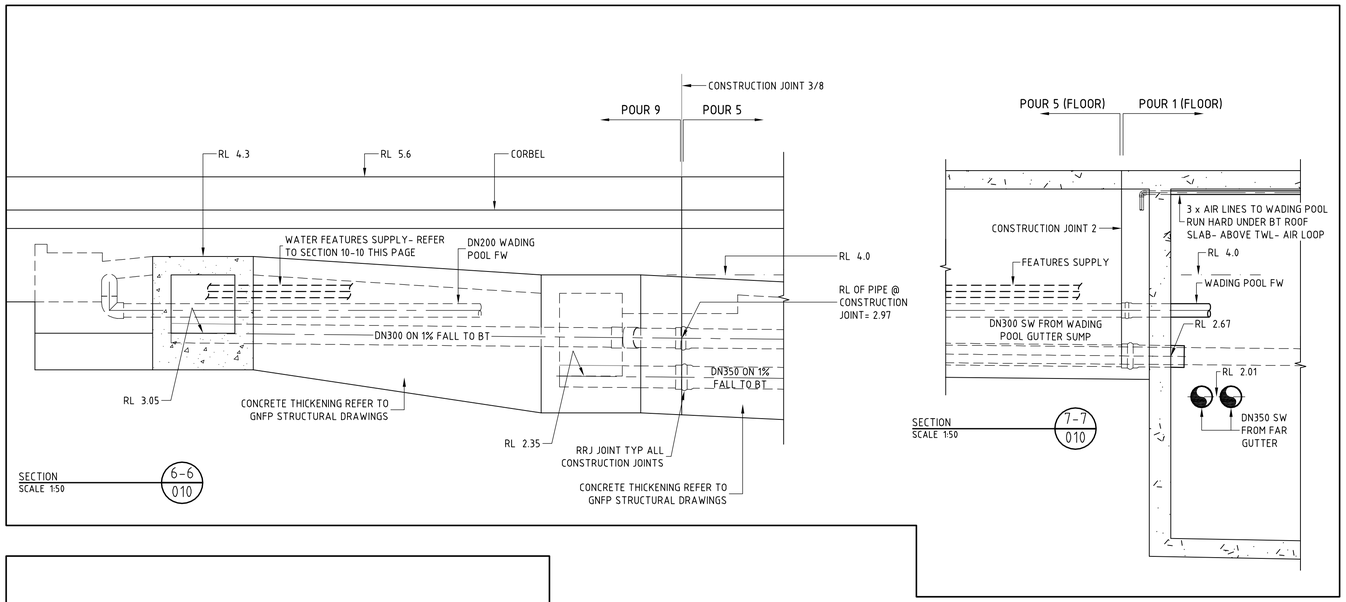
Title
POOL PIPING

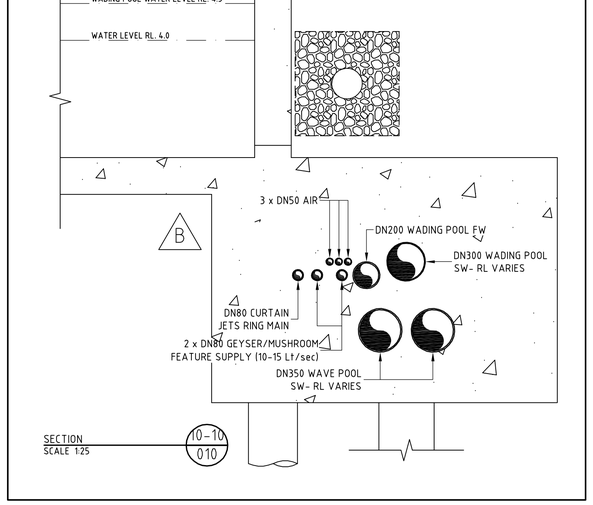
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DATE	DATE 10/09/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE 1:150	PWT-S-010	D

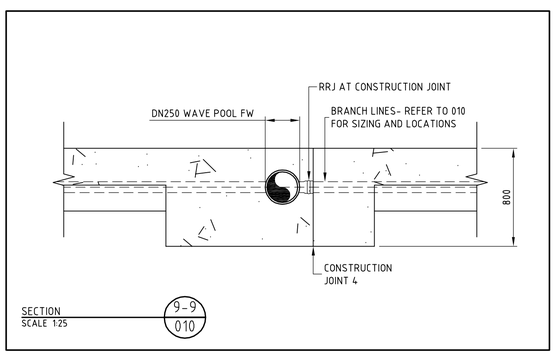
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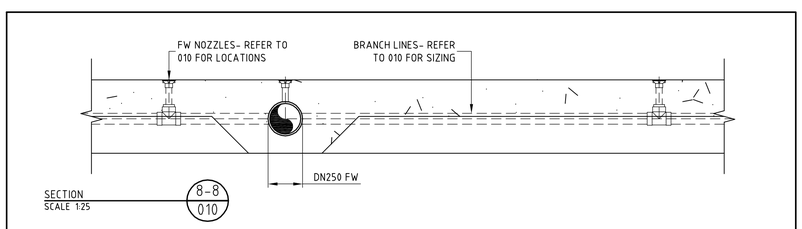


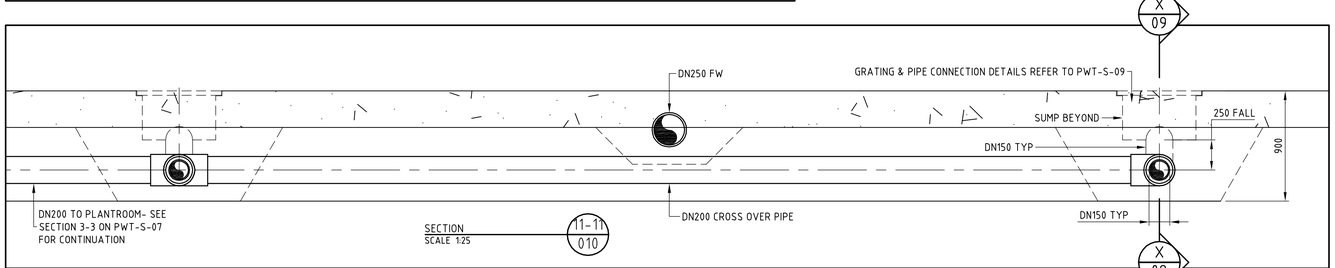












REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
C	PB	19/05/09	AS INSTALLED	-	-
B	PB	03/10/07	FEATURE SUPPLY PIPES REVISED	-	-
A	PB	13/09/07	INITIAL ISSUE- FOR APPROVAL	-	-

Project
DARWIN CITY WATER
FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

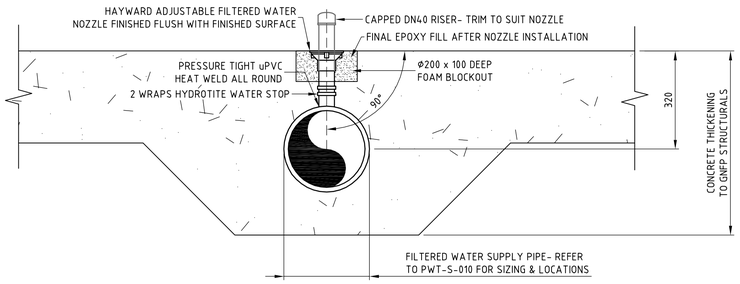
Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

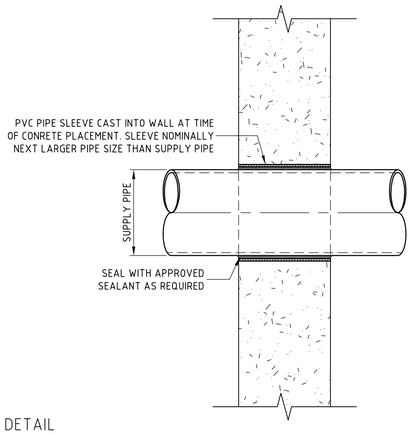
Title
POOL PIPING DETAILS

DES.	DRN. PB	CHK.	APP.
DATE	DATE 10/09/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE Noted	PWT-S-011	C

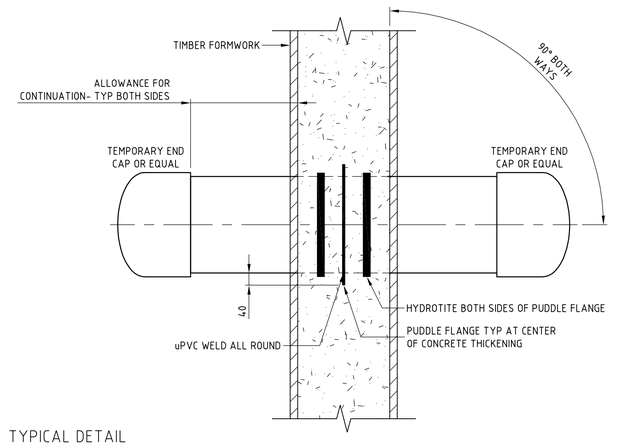
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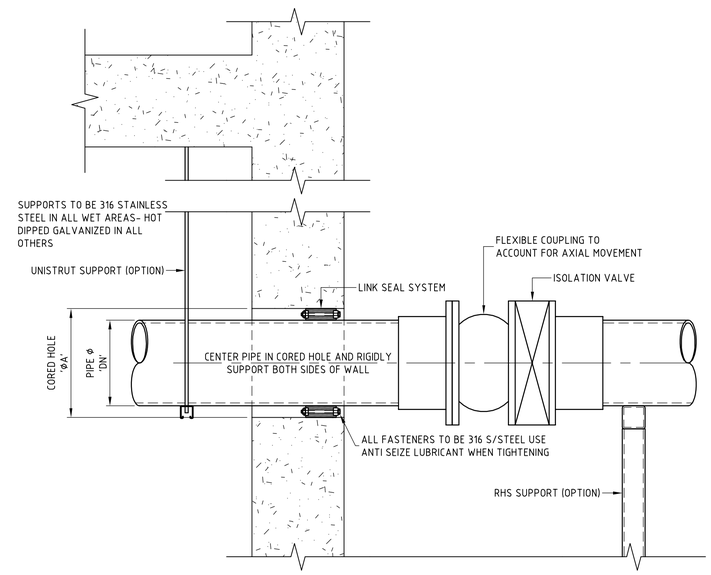
TYPICAL DETAIL
FILTERED WATER RETURN NOZZLE



TYPICAL DETAIL
PIPE PASSING THRU NON WATER RETAINING STRUCTURES



TYPICAL DETAIL
PIPE PASSING THRU WATER RETAINING STRUCTURES (CAST-IN)

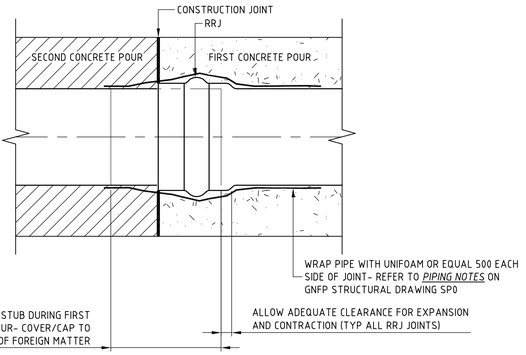


TYPICAL DETAIL
PIPE PASSING THRU WATER RETAINING STRUCTURES (CORED HOLE/LINK SEAL)

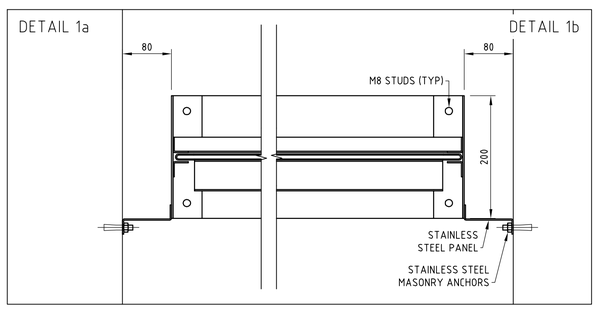
PIPE 'DN'	CORED HOLE 'ΦB'	LINK SEAL SIZE	No. LINKS per SEAL
100 (4")	6"	LS-315	10
150 (6")	8"	LS-315	15
200 (8")	10"	LS-475	12
250 (10")	14"	LS-475	14
300 (12")	16"	LS-475	17
350 (14")	18 (14")	LS-360	24

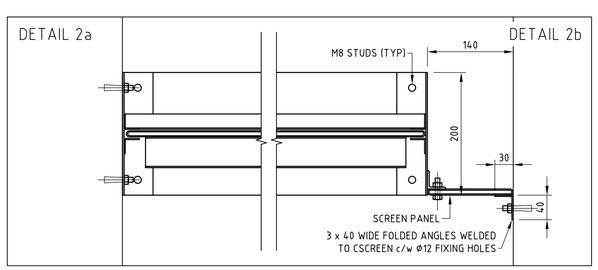
NOTE, DN350 STC

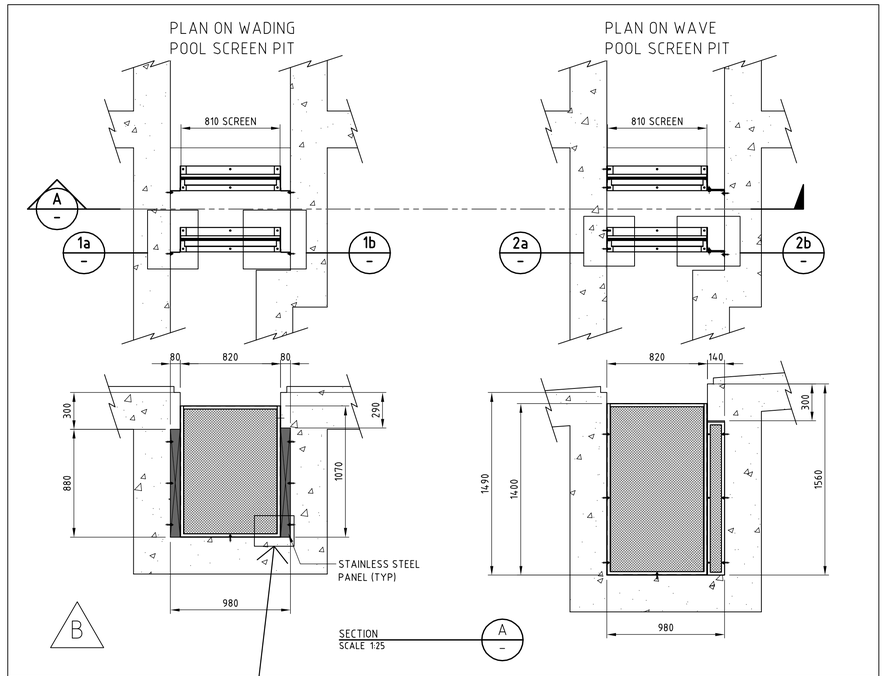
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH NOTES ON GNFP STRUCTURAL DRAWING SP0



TYPICAL DETAIL
PIPE PASSING THRU CONSTRUCTION JOINTS







REV.	DRN.	DATE	DESCRIPTION	CHK.	APP.
C	PB	19/05/09	AS INSTALLED	-	-
B	PB	02/04/09	GUTTER SCREEN DETAIL ADDED (FROM PWT-S-09)	-	-
A	PB	13/09/07	INITIAL ISSUE- FOR APPROVAL	-	-

Project
DARWIN CITY WATER FRONT DEVELOPMENT

Head Contractor
SITZLER
P.O BOX 39062 Winnellie N.T 0821 Ph: (08) 8984 3266 Fax: (08) 8984 4651

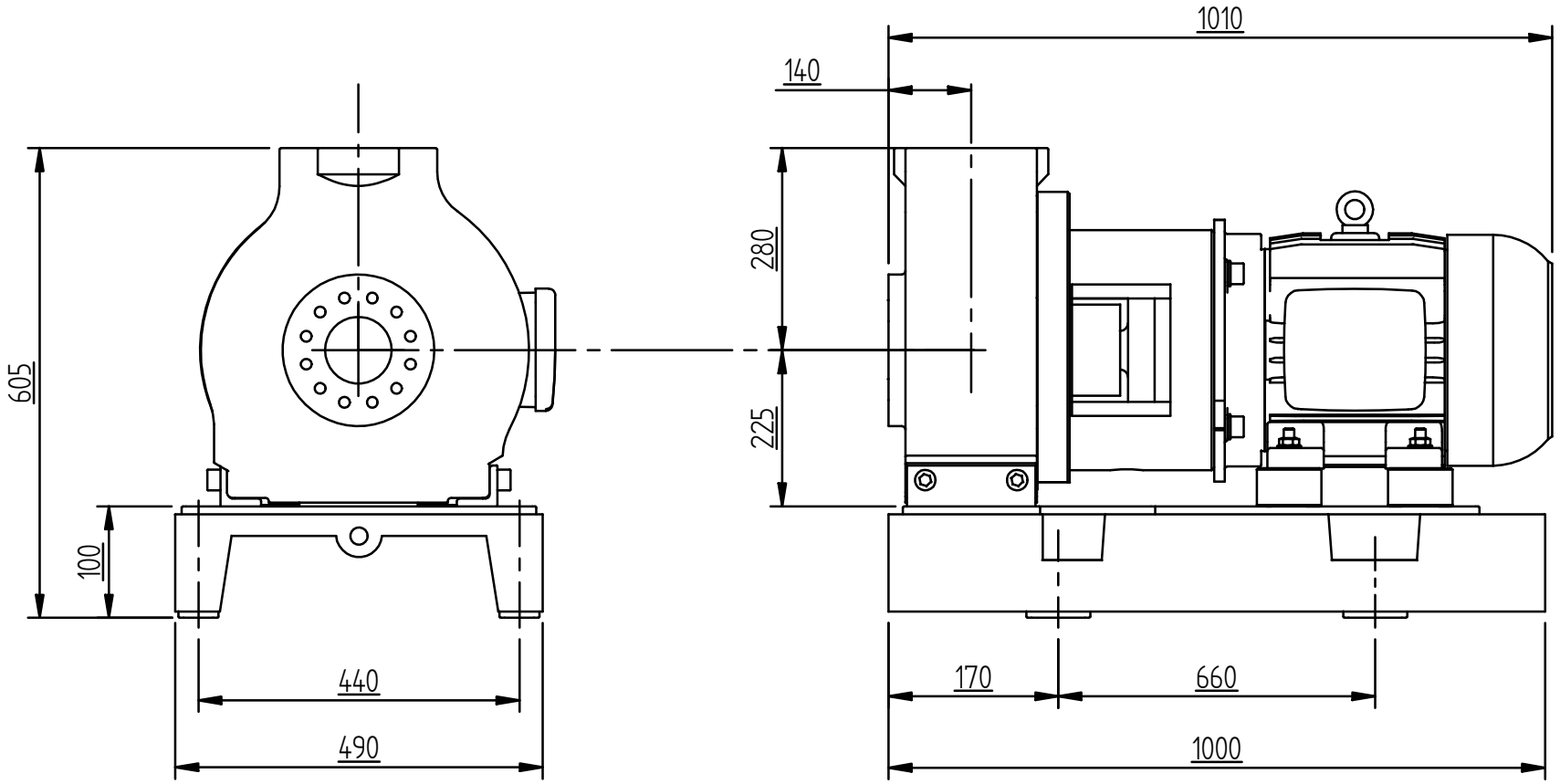
Aquatic Engineer
GEOFF NINNES FONG & PARTNERS Pty Ltd
Level 1, 68-70 Crown St Woolloomooloo N.S.W 2011 Ph: (02) 9332 5100 Fax: (02) 9331 2963

Filtration Sub-contractor
TRISLEY HYDRAULIC SERVICES Pty Ltd
20-22 Production Ave Kogarah N.S.W 2217 Ph: (02) 9588 1222 Fax: (02) 9587 9662

Title
TYPICAL DETAILS

DES.	DRN. PB	CHK.	APP.
DATE	DATE 10/09/07	DATE	DATE
FILE	DISK	DRAWING No.	REV.
PLT.	SCALE NTS	PWT-S-012	C

A1

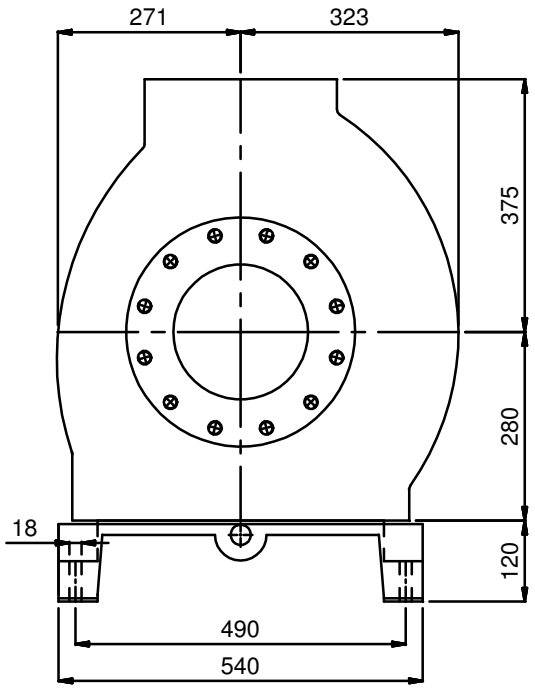


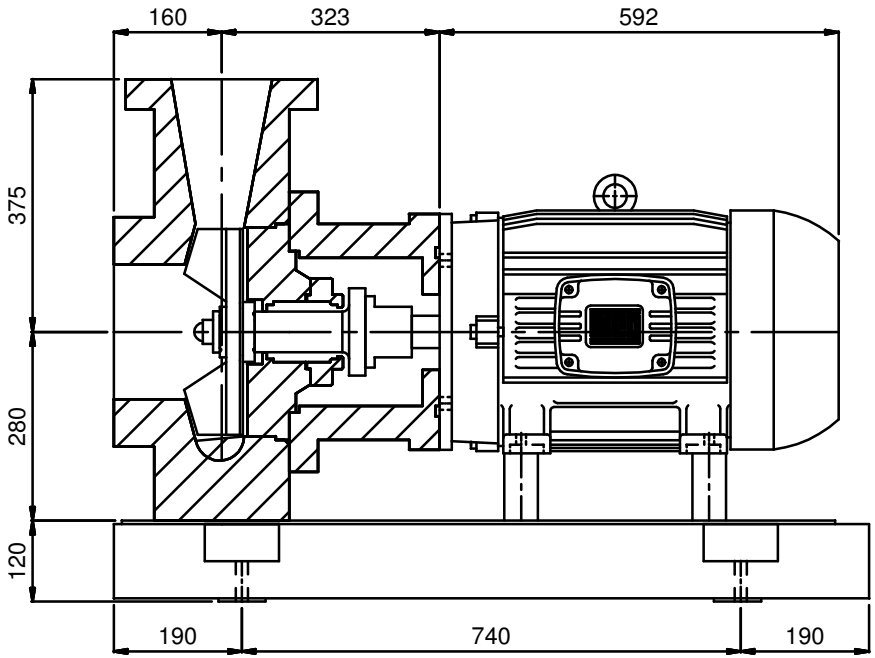
MODEL	**CRP125 x 100 - 250CCH**			
SUCTION	125mm	DIN2533 PN16	**POWER**	11kW
DISCH.	100mm	DIN2533 PN16	**RPM**	1460
WEIGHT	250kg		**BASE**	CRP #5

PACIFICHEM PUMPS

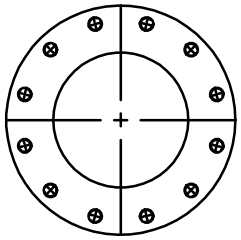
TOTAL PUMP SOLUTIONS AUSTRALIA PTY LTD

PO BOX 438 ALTONA, VICTORIA 3018, AUSTRALIA
TEL. +61 3 9395 4186 FAX. +61 3 93954186

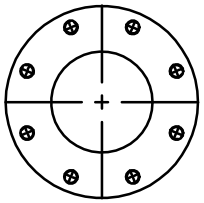




200mm
SUCTION
BS4504
TABLE 16



150mm
DELIVERY
BS4504
TABLE 16



PACIFICHEM PUMPS

TOTAL PUMP SOLUTIONS AUSTRALIA PTY LTD

PO BOX 438 ALTONA, VICTORIA 3018, AUSTRALIA
TEL. +61 3 9395 4186 FAX. +61 3 93954186

This Drawing is the property of Corro Pump Manufacturing cc and may not be passed on to any third party without their prior consent

200-150-250 PUMP WITH 22 kW 4 POLE
MOTOR AND ADAPTOR ON SIZE 6 CORRO BASE

01 of 01

FILENAME 200-150-250 22kW 4 POLE BASE 6 SHT

	NAME	DATE	SCALE			REV
DRAWN			1:11	A4	0000-0000	01
CHKD						