

CONCEPT STORMWATER DRAWINGS FOR 48-54 COURT RD, FAIRFIELD NSW 2165

SYMBOLS

RL	PIT SURFACE LEVEL
IL	INVERT LEVEL
TK	TOP OF KERB
B.O.W	BOTTOM OF WALL
T.O.W	TOP OF WALL
	STORMWATER DRAINAGE PIPE
	DOWNPIPE TO RAINWATER TANK
	OVERFLOW PIPE FROM RAINWATER TANK
	Ø100 SUBSOIL PIPE
	Ø100 SUBSOIL PIPE
	FLOOR WASTE 150X150
	FLOOR WASTE 150Ø
	RWO RAINWATER OUTLET 300Ø
	PG PLANTER GRATE
	ØDP DOWN PIPE
	ØCO CLEAN OUT
	ØIO INSPECTION OPENING
	ØVD VERTICAL DROP
	ØVR VERTICAL RISER
	CONCRETE COVER JUNCTION PIT
	GRATED INLET PIT
	WIDE GRATED DRAIN
	OVERLAND FLOW PATH
	CAST IN SLAB PIPE

AS 3500.3- TABLE 8.2
SIZE OF MINIMUM INTERNAL DIMENSIONS
FOR STORMWATER AND INLET PITS

DEPTH OF INVERT OF OUTLET	MINIMUM INTERNAL DIMENSIONS (mm)		
	RECTANGULAR WIDTH	LENGTH	CIRCULAR DIAMETER
≤600	450	450	600
>600 ≤900	600	600	900
>900 ≤1200	600	900	1000
>1200	900	900	1000



IMPORTANT:
CONTRACTOR TO OBTAIN CURRENT SET OF
"DIAL BEFORE YOU DIG" PLANS ON SITE ALL
TIMES AND PRIOR TO CONSTRUCTION WORKS

GENERAL NOTES

- IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS. ALL DESIGN LEVELS SHOWN ON PLAN SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORK.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH OTHER RELEVANT CONSULTANTS' PLANS, SPECIFICATIONS, CONDITIONS OF DEVELOPMENT CONSENT AND CONSTRUCTION CERTIFICATE REQUIREMENTS. WHERE DISCREPANCIES ARE FOUND SMART STRUCTURE AUSTRALIA MUST BE CONTACTED IMMEDIATELY FOR VERIFICATION.

STORMWATER CONSTRUCTION NOTES

- ALL STORMWATER LINES' JOINTS BE FULLY SEALED AND WATERTIGHT IN ACCORDANCE WITH AS3500.3.2021.
- ALL LINES ARE TO BE MIN. 100Ø UPVC @ MIN 1.0% GRADE UNLESS NOTED OTHERWISE.
- ALL PIPES TO HAVE MIN 200mm COVER IF LOCATED WITHIN PROPERTY.
- ALL PITS IN DRIVEWAYS BE HEAVY DUTY GRATES. DIRECT SURFACE FLOW TO ALL GRATED SURFACE INLET PITS.
- ALL WORK DO BE DONE IN ACCORDANCE WITH AS/NZ 3500.3 (CURRENT EDITION) AND COUNCIL SPECIFICATIONS.
- COUNCIL'S TREE PRESERVATION ORDER IS TO BE STRICTLY ADHERED TO. NO TREES SHALL BE REMOVED UNTIL PERMIT IS OBTAINED
- PUBLIC UTILITY SERVICES ARE TO BE ADJUSTED AS NECESSARY AT THE DEVELOPER'S EXPENSE
- LOCATION OF DOWNPIPES & FLOOR WASTES ARE INDICATIVE ONLY. DOWNPIPE & FLOOR WASTE SIZE, LOCATION & QUANTITY TO BE DETERMINED BY BUILDER & IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
- THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, LANDSCAPE AND STRUCTURAL AND ALL OTHER RELEVANT CONSULTANT'S PLANS.
- ALL RAINWATER TANKS TO BE FITTED WITH A FIRST FLUSH DEVICE TO PREVENT POTENTIAL CONTAMINANTS FROM ENTERING THE TANKS.
- ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE DESIGN ENGINEER FOR RESOLUTION.
- ANY VARIATION TO THE WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY SMART STRUCTURES AUSTRALIA PRIOR TO THEIR COMMENCEMENT
- ALL PITS OR GRATES IN TRAFFICABLE AREAS TO BE HEAVY DUTY.
- ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWNPIPES
- PROVIDE EMERGENCY OVERFLOW TO ALL PLANTER BOX AND BALCONIES.
- ALL PITS WITH DEPTH MORE THAN 900mm MUST HAVE IRON STEPS AND TO BE BENCHED AND STREAMLINED
- PROVIDE STORMWATER GRATE 200Wx200D AT THE BASE OF ALL MECHANICAL SHAFTS AND UNCOVERED STAIRS OR OPENINGS.
- ENSURE ALL DRAINAGE WORKS ARE AWAY FROM TREE ROOTS

- SERVICES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM INFORMATION SUPPLIED BY THE RELEVANT AUTHORITIES AND FIELD INVESTIGATION AND ARE NOT GUARANTEED COMPLETE NOR CORRECT. IT IS THE CLIENT AND CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PRIOR TO CONSTRUCTION.
- ALL VARIATIONS TO THE WORKS AS SHOWN ON THE APPROVED DRAWINGS ARE TO BE CONFIRMED BY SMART STRUCTURES AUSTRALIA PRIOR TO COMMENCEMENT OF WORKS.
- THE MINIMUM SIZES OF THE STORMWATER DRAINS SHALL NOT BE LESS THAN DN90 FOR CLASS 1 BUILDINGS AND DN100 FOR OTHER CLASSES OF BUILDING OR AS REQUIRED BY THE REGULATORY AUTHORITY
- ALL STORMWATER DRAINAGE PITS IN GARDEN OR TURFED AREAS TO BE FITTED WITH PERFORATED GALVANISED STEEL MESH UNDER THE LIDS TO PREVENT DEBRIS ENTERING STORMWATER NETWORK.
- ALL PITS/GRATES IN COMMON AREAS TO BE HEELPROOF TYPE.
- MAKE SMOOTH JUNCTION WITH ALL EXISTING WORK
- VEHICULAR ACCESS AND ALL SERVICES TO BE MAINTAINED AT ALL TIMES TO ADJOINING PROPERTIES AFFECTED BY CONSTRUCTION
- RAINWATER SUPPLY PLUMBING TO BE CONNECTED TO OUTLETS WHERE REQUIRED BY BASIX CERTIFICATE (BY OTHERS)
- POTABLE WATER CONNECTION TO RAINWATER TANK TO BE TO THE SATISFACTION OF THE REGULATORY AUTHORITY. THIS MAY REQUIRE PROVISION OF PERMANENT AIR GAP AND/OR BACKFLOW PREVENTION DEVICE
- PROVIDE APPROPRIATE FLOAT VALVES AND/OR SOLENOID VALVES TO CONTROL TOWN WATER SUPPLY INLET TO TANK IN ORDER TO ACHIEVE THE TOP-UP INDICATED ON THE TYPICAL DETAIL
- ALL PLUMBING WORKS ARE TO BE CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS/NZS3500.1 NATIONAL PLUMBING AND DRAINAGE CODE
- PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED OUT BY A LICENSED ELECTRICIAN
- ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK .SURFACE WATER INLETS ARE NOT TO BE CONNECTED
- PIPE MATERIALS FOR RAINWATER SUPPLY PLUMBING ARE TO BE APPROVED MATERIALS TO AS/NZS3500 PART 1 SECTION 2 AND TO BE CLEARLY AND PERMANENTLY IDENTIFIED AS 'RAINWATER'. THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE(MADE IN ACCORDANCE WITH AS2648) OR FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345)
- EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELED 'RAINWATER' ON A METALLIC SIGN IN ACCORDANCE WITH AS1319
- ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT MOSQUITO AND VERMIN ENTRY.
- PIPE INSTALLATION TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT AS3500.3 AND RELEVANT VOLUME OF NCC (NATIONAL CONSTRUCTION CODE). THIS IS CONTRACTOR'S RESPONSIBILITY TO CHECK IMPACT OF PIPE TRENCHING TO SURROUNDING STRUCTURAL AND NON STRUCTURAL ELEMENTS.
- PRESSURIZED PIPES / RISING MAINS FROM PUMP OUT TANK TO BE CONNECTED DIRECTLY AND INDEPENDENTLY TO EITHER OSD TANK OR BOUNDARY PIT AS PER DESIGN PLANS.

SUBSOIL DRAINAGE NOTES

- PROVIDE SUBSOIL DRAINS TO INTERCEPT GROUNDWATER SEEPAGE AND PREVENT WATER BUILD-UP BEHIND WALLS AND UNDER FLOORS AND PAVEMENTS. CONNECT SUBSOIL TO SURFACE DRAINS OR TO THE STORMWATER DRAINAGE SYSTEM AS APPLICABLE.
- ALL SUBSOIL PIPES SHALL BE 100MM SLOTTED CORRUGATED UPVC IN A FILTER SOCK U.N.O.
- FILTER SOCKS ARE TO BE POLYESTER PERMEABLE SOCKS CAPABLE OF RETAINING PARTICLES GREATER THAN 0.25MM IN SIZE. SECURELY FIT OR JOIN THE SOCK AT EACH JOINT.
- WHERE SUBSOIL DRAINS PASS UNDER EXTERNAL SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED UPVC SEWER GRADE PIPE IS TO BE USED.
- SUBSOIL DRAINAGE TRENCHES ARE TO BE WRAPPED WITH PERMEABLE TEXTILE FABRIC 'BIDIM A12' OR EQUIVALENT.
- TO REDUCE GROUND WATER TRACKING WITHIN STORMWATER TRENCHES INSTALL A 3M LENGTH OF SUBSOIL PIPE IN PIPE TRENCHES DRAINING IN DIRECTION OF FALL OF PIPE AND CONNECT TO DOWNSTREAM STORMWATER DRAINAGE PIT.
- SUBSOIL MINIMUM CLEARANCE DEPTHS, MEASURED TO THE CROWN OF THE PIPE, WHERE THE PIPE PASSES BELOW THE FOLLOWING ELEMENTS:

100mm BELOW FORMATION LEVEL OF THE PAVEMENT, KERB OR CHANNEL.

AT THE AVERAGE GRADIENT OF THE BOTTOM OF FOOTINGS.
- JUNCTIONS OF SUBSOIL PIPES PROVIDE TEES, COUPLINGS OR ADAPTORS IN ACCORDANCE WITH AS2439.1.
- SUBSOIL DRAINAGE TRENCHES SHALL BE A MINIMUM 300mm WIDE
- GRADE THE TRENCH FLOOR EVENLY TO THE GRADIENT OF THE PIPELINE. IF THE TRENCH FLOOR IS ROCK, CORRECT ANY IRREGULARITIES WITH COMPACTED BEDDING MATERIAL. BED PIPING ON A CONTINUOUS UNDERLAY OF BEDDING MATERIAL, AT LEAST 75mm THICK AFTER COMPACTION. LAY THE PIPE WITH ONE LINE OF PERFORATIONS AT THE BOTTOM.
- PLACE THE MATERIAL IN THE PIPE SURROUND IN LAYERS SMALLER THAN OR EQUAL TO 200MM LOOSE THICKNESS, AND COMPACT WITHOUT DAMAGING OR DISPLACING PIPING.

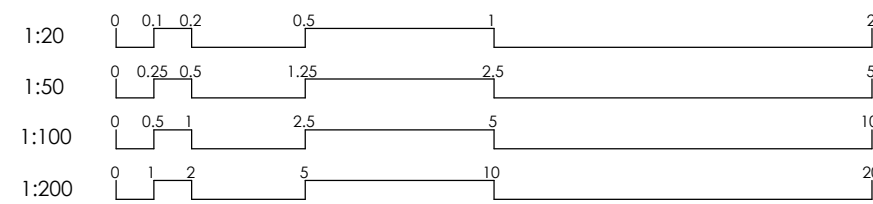
DRAWING LIST

DRAWING NUMBER	DRAWING NAME
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SW00	COVER SHEET, LEGEND & DRAWING SCHEDULE
SW01	BASEMENT 3 STORMWATER DRAINAGE PLAN
SW02	BASEMENT 2 STORMWATER DRAINAGE PLAN
SW03	BASEMENT 1 STORMWATER DRAINAGE PLAN
SW04	GROUND FLOOR STORMWATER DRAINAGE PLAN
SW05	FIRST FLOOR STORMWATER DRAINAGE PLAN
SW20	PRE AND POST DEVELOPMENT CATCHMENT PLANS
SW21	STORMWATER DRAINAGE SECTIONS AND DETAILS SHEET 1
SW25	OSD DESIGN CALCULATIONS AND DETAILS SHEET 1
SW26	OSD DESIGN CALCULATIONS AND DETAILS SHEET 2
SW30	EROSION AND SEDIMENT CONTROL PLAN AND DETAILS SHEET 1
SW31	EROSION AND SEDIMENT CONTROL PLAN AND DETAILS SHEET 2

A	ISSUED FOR D.A.	23.01.24	F.E.	K.E.	
No.	Description	Date	Issued	Checked	

SCALE BARS



CLIENT:

-

ARCHITECT:

LEVEL 33 ARCHITECTURAL DIVISION



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DRAWING TITLE

COVER SHEET, LEGEND & DRAWING SCHEDULE

SHEET NO.

SW00

REV.

A

SCALE @ A3

NTS

DATE:

18.01.24

DESIGNED:

N.E.

AUTHORISED:

K.E.

PROJECT

EVO FAIRFIELD
48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD

NORTH

PROJECT NO.

210386

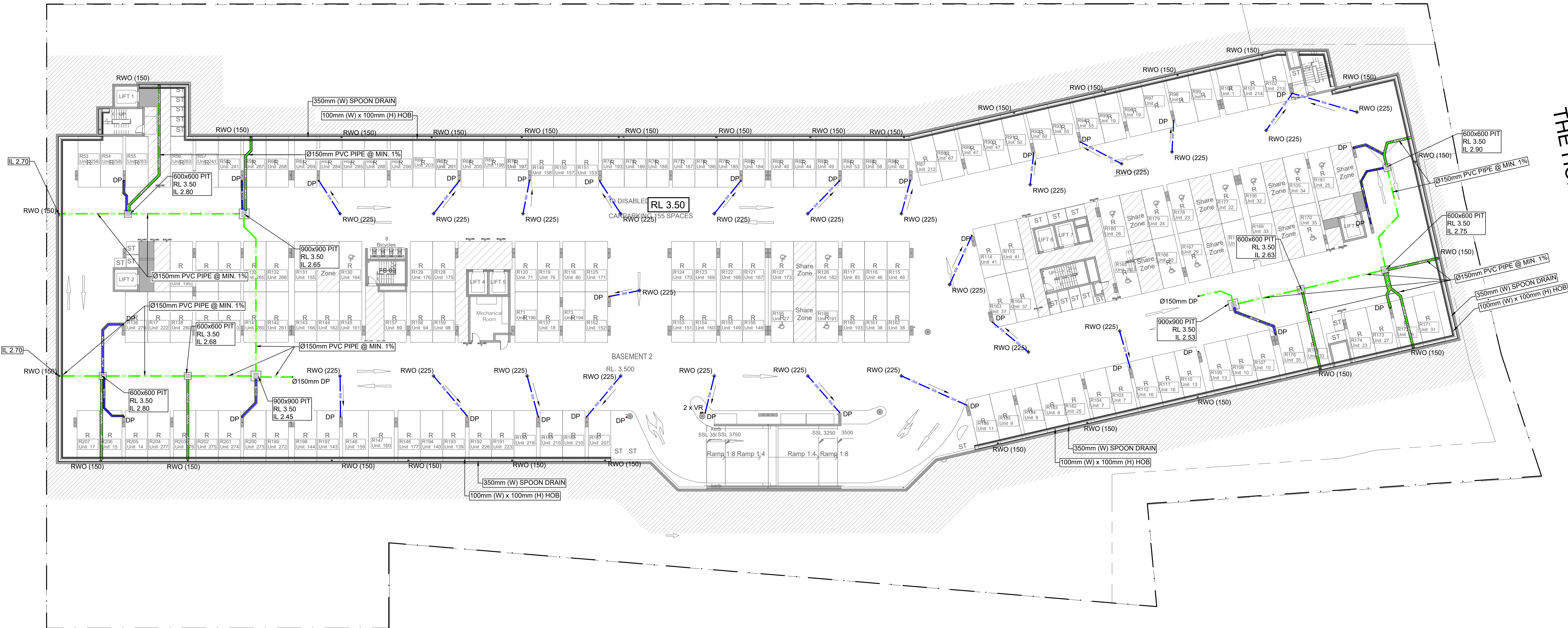
PROJECT START DATE:

OCTOBER 2021

PIPE LEGEND (U.N.O):
Ø100mm STORMWATER PIPE
Ø150mm STORMWATER PIPE
Ø225mm STORMWATER PIPE
DENOTES STORMWATER PIPE
(CAST IN SLAB)

LEGEND:
Ø150mm RWO -
Ø225mm RWO -
NOTE:
- PROVIDE OVERFLOW TO ALL PLANTERS AND BALCONIES
- ALL DP's ARE Ø100mm U.N.O.

COURT ROAD



THE HORSLEY DRIVE

BASEMENT 2 STORMWATER DRAINAGE PLAN
SCALE 1: 200

SPS 150mm Round Vari-Level Vertical Drain
100mm Outlet

Specification codes:
R150G/C (bronze grate, CI lower body) "special order"
R150N/C (nickel bronze grate, CI lower body) "special order"
R150S4/C (polished 304 stainless steel, CI lower body)
R150S/C (satin 316 stainless steel grate, CI lower body)

- Height-adjustable high-heel friendly grate assembly.
- Available in polished 304 & satin 316 stainless steel. Bronze and nickel-bronze available by special order only.
- C100A "deluxe" CI lower body with reversible clamp collar.

150mm Round

Typical Application

Height adjustment:
Min. 25mm
Max. 65mm

95mm

65mm

100mm N.B.

Membrane Range 2350

Optional Extension Piece

Optional coupling connection

Push-in connection (specify: -R)

Membrane

Tiling/Paving/Topping

Weep slots 3 x places

C100A CI lower body

*For low rate data please refer to appendix.

SPS 225mm Round Vari-Level Vertical Drain
150mm Outlet or 100mm Outlet

Specification codes:
R225N/C150 (nickel-bronze grate, CI lower body) "special order"
R225S4/C150 (Polished 304SS grate, CI lower body) "special order"
R225S/C150 (Satin 316SS grate, CI lower body)
For a 100mm outlet, use suffix "C100" not "C150"

Load Class C per AS3996-2006

High-heel friendly pattern (5.5mm gaps)

- Height-adjustable high-heel friendly grate assembly.
- Grate assembly available 316 stainless steel. Polished 304SS and nickel-bronze available only by special order.
- 150mm or 100mm Trullo CI lower body with 150mm BSP-reversible clamp collar.

225mm Round

Typical Application

Height adjustment:
Min. 30mm
Max. 75mm

88mm

88mm

150 or 100 N.B.

Integral puddle flange Ø270

**For additional height, use EP150 extension piece

Membrane

Structural

Slab

150mm outlet shown with PVC tailpiece (in-pipe connector)

100mm outlet shown with optional coupling connector

Tiling/Paving/Topping

*For low rate data please refer to appendix.

SAMPLE OF RAINWATER OUTLETS (RWO)

No.	Description	Date	Issued	Checked
A	ISSUED FOR D.A.	23.01.24	F.E.	K.E.

SCALE BARS

CLIENT:
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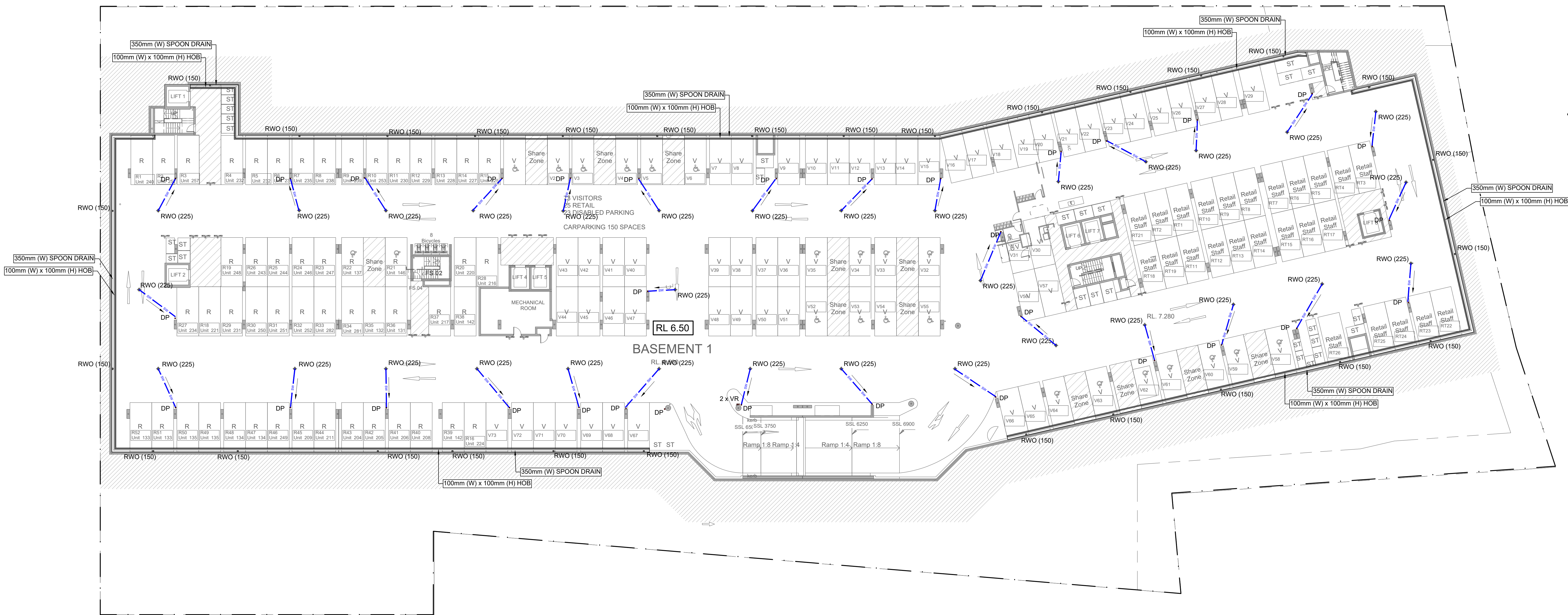
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DRAWING TITLE
BASEMENT 2 STORMWATER DRAINAGE PLAN

SHEET NO: SW02	REV. A	SCALE @ AD: 1:200
DATE: 18.01.24	DRAWN BY: N.E.	AUTHORISED: K.E.

PROJECT
EVO FAIRFIELD
48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD
PROJECT NO.
210386
PROJECT START DATE:
OCTOBER 2021

THE HORSLEY DRIVE

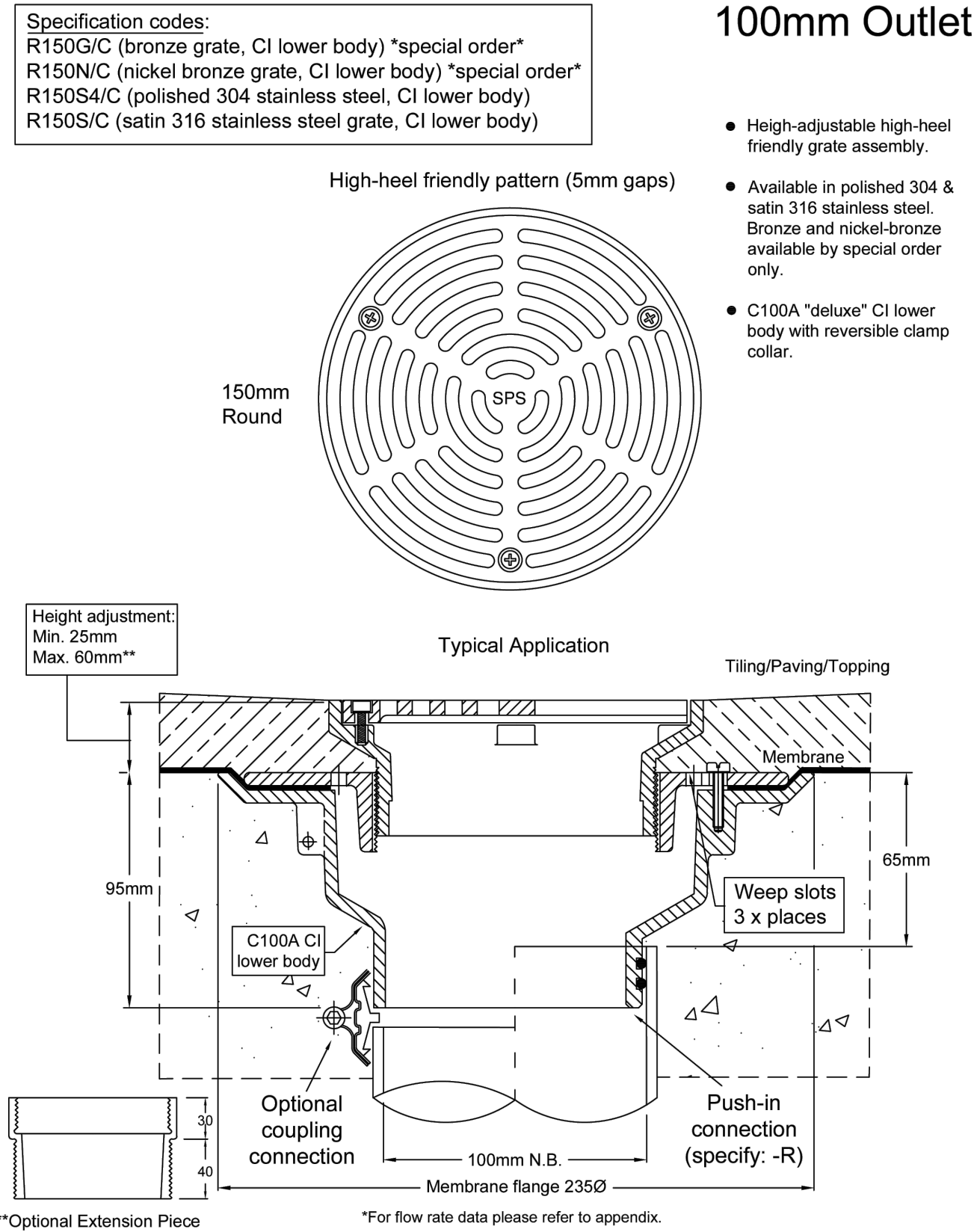


BASEMENT 1 STORMWATER DRAINAGE PLAN

SCALE 1: 200

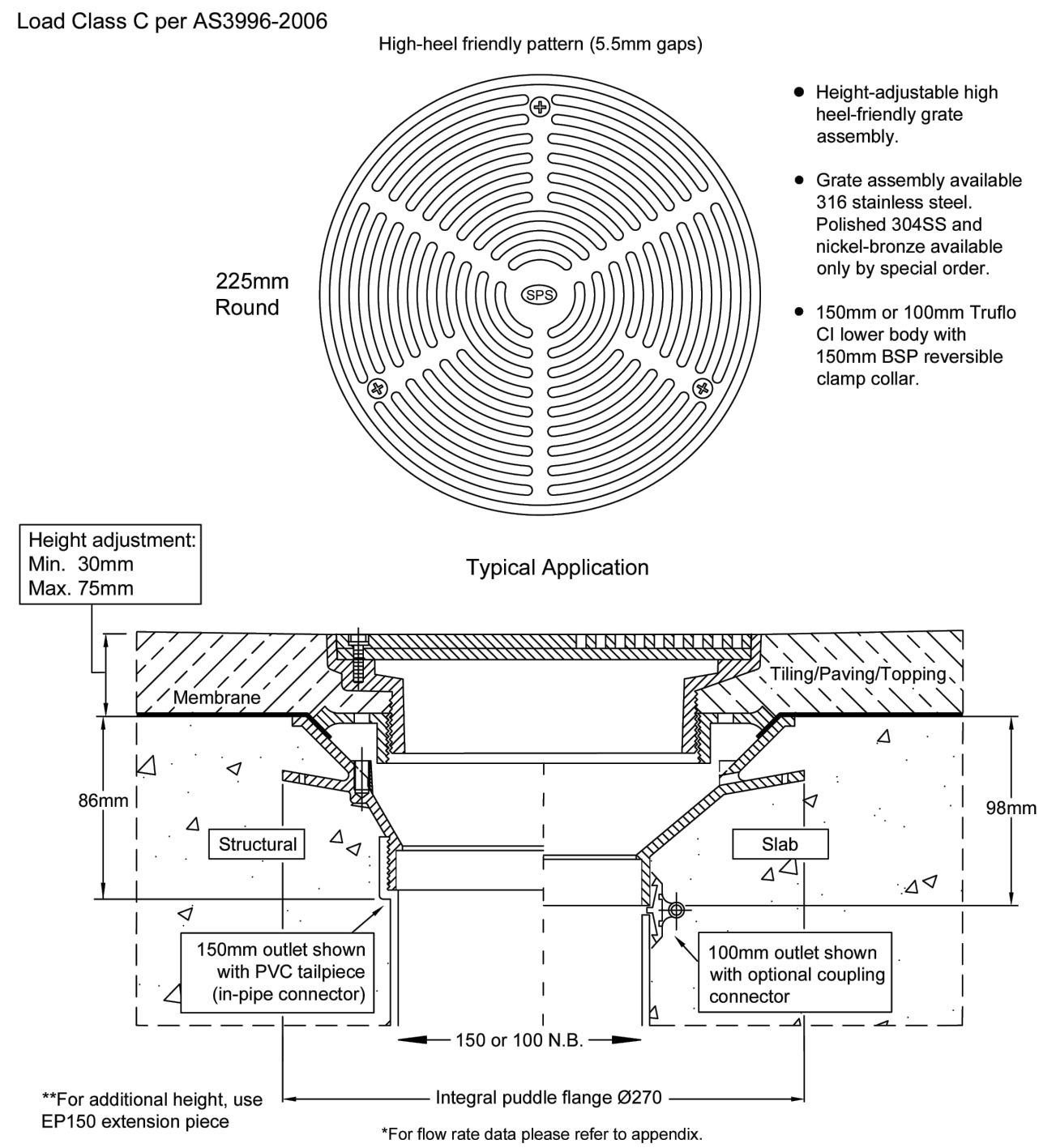
SPS 150mm Round Vari-Level Vertical Drain

Specification codes:
9652V, 9652VP, 9652VPS, 9652VPSL
100mm Outlet



SPS 225mm Round Vari-Level Vertical Drain

Specification code: R225N/C150 (nickel-bronze grate, CI lower body) *special order* R225S4/C150 (Polished 304SS grate, CI lower body) *special order*	150mm Outlet or 100mm Outlet
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SAMPLE OF RAINWATER OUTLETS (RWO)

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No.	Description	Date	K.E. Checked

SCALE BARS

Scale	0	0.5	1	2	5	10
1:20	0	0.5	1	2	5	10
1:50	0	0.25	0.5	1	2.5	5
1:100	0	0.2	1	2	5	10
1:200	0	1	5	10		

CUSTOMER:	-
ARCHITECT:	LEVEL 33 ARCHITECTURAL DIVISION

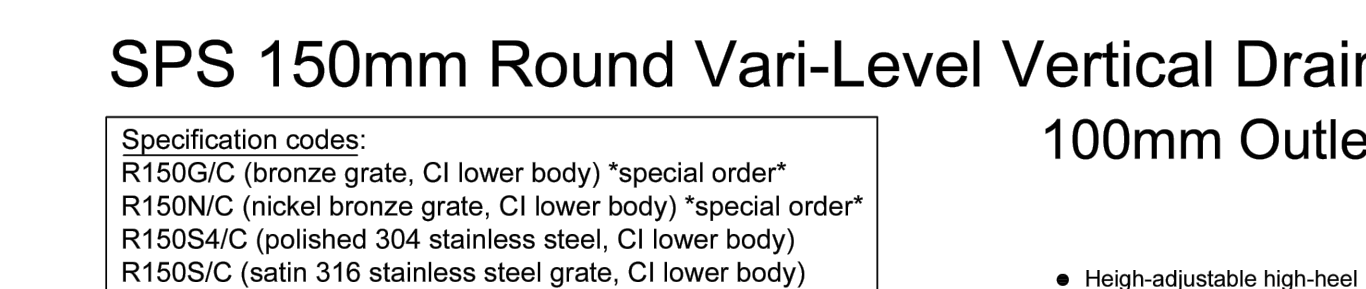
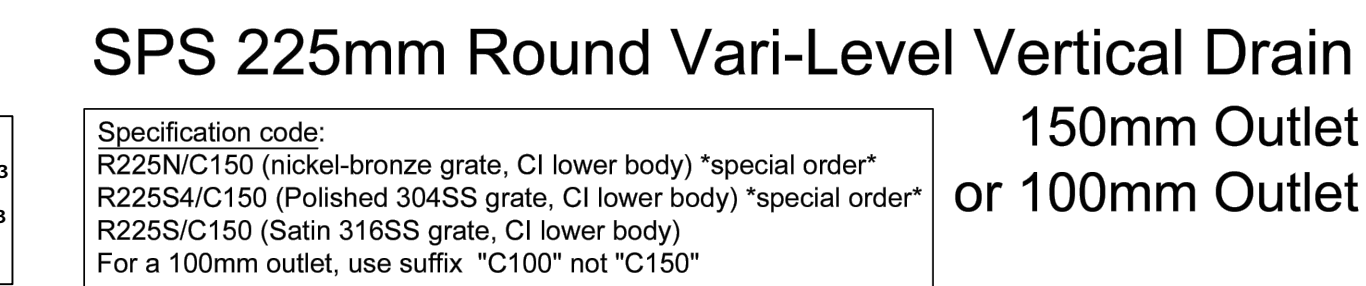
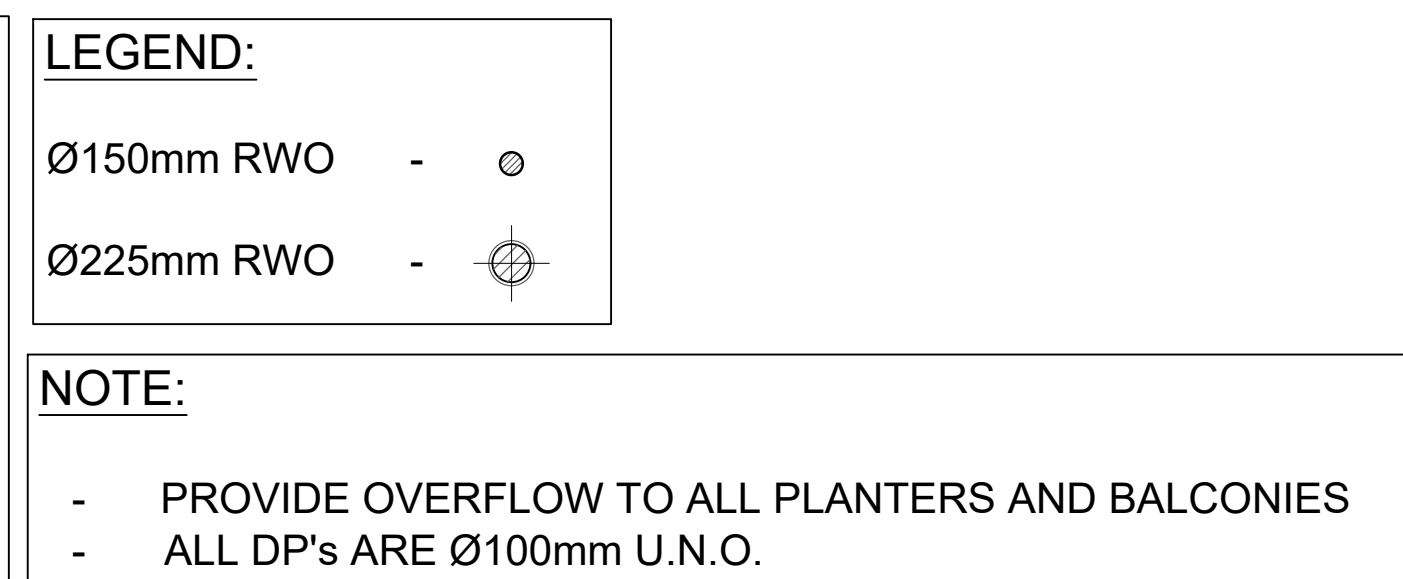


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DRAWING TITLE		
BASEMENT 1 STORMWATER DRAINAGE PLAN		
SHEET NO.	REV.	SCALE & AD.
SW03	A	1:200
DATE:	DESIGNED:	AUTHORISED:
18.01.24	N.E.	K.E.

PROJECT EVO FAIRFIELD 48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD	
NORTH 	PROJECT NO. 2110386
	PROJECT START DATE: OCTOBER 2021



FLOOD STORAGE - 2 AREA = 277.50m ² AVERAGE DEPTH OF WATER = 0.42m VOLUME PROVIDED = 116.50m ³

SCALE BARS

The scale bars are represented by horizontal lines with vertical tick marks at the ends and intermediate points. The values for each scale are as follows:

Scale	Bar 1	Bar 2	Bar 3	Bar 4
1:20	0, 0.1, 0.2	0.5	1	2
1:50	0, 0.25, 0.5	1.25	2.5	5
1:100	0, 0.5, 1	2.5	5	10
1:200	0, 1, 2	5	10	20



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DRAWING TITLE

GROUND FLOOR STORMWATER DRAINAGE PLAN

PROJECT
EVO FAIRFIELD
48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD

NORTH 	PROJECT NO.	210386
	PROJECT START DATE:	OCTOBER 202

PIPE LEGEND (U.N.O):
Ø50mm STORMWATER PIPE (CAST IN SLAB)
Ø100mm STORMWATER PIPE (CAST IN SLAB)
Ø150mm STORMWATER PIPE
Ø225mm STORMWATER PIPE
Ø300mm STORMWATER PIPE
Ø150mm OVERFLOW PIPE LINE
DENOTES Ø100mm PIPE/DP TRANSFER
DENOTES Ø65mm PIPE OVERFLOW

Ø50mm RWO

Ø225mm RWO

OVERFLOW (DOME TYPE)

Ø150mm RWO

Ø225mm RWO

OVERFLOW (DOME TYPE)

Ø150mm RWO

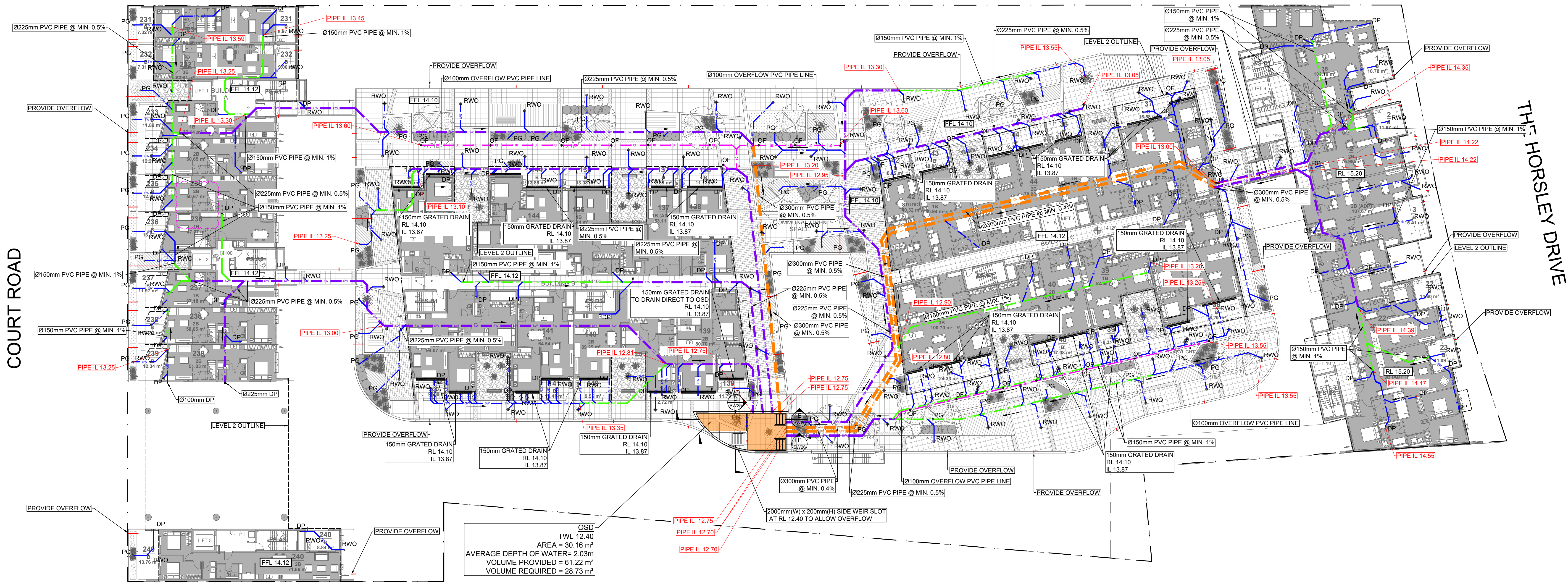
Ø225mm RWO

OVERFLOW (DOME TYPE)

REFERS TO PIPE RUN TRANSFER ON THE SOFFIT OF THIS LEVEL

PROVIDE OVERFLOW TO ALL PLANTERS AND BALCONIES

ALL DP's ARE Ø100mm U.N.O.



LEVEL 1 STORMWATER DRAINAGE PLAN
SCALE 1: 200

SPS 225mm Round Vari-Level Vertical Drain
150mm Outlet
or 100mm Outlet

Specification codes:
R225VVC1: 225mm round vari-level vertical drain, C1 lower body "special order"
R225VVC1B: 225mm round vari-level vertical drain, C1 lower body "special order"
R225VVC1C: 225mm round vari-level vertical drain, C1 lower body "special order"
For a 100mm outlet, use suffix: "C100" not "C150"

Load Class C per AS3996-2009

High heel friendly pattern (5.5mm gaps)

225mm Round

Typical Application

Height adjustable high heel friendly grate assembly

Grate assembly available in 316 stainless steel and nickel bronze (not available only by special order)

150mm or 100mm TruFlu C1 lower body with 150mm ØSD (available only by special order)

Height adjustment:
Min. 50mm
Max. 75mm

Integral profile Range 2250

**For additional heights, use EP150 extension piece

SPS 150mm Round Vari-Level Vertical Drain
100mm Outlet

Specification codes:
R150VVC1: 150mm round vari-level vertical drain, C1 lower body "special order"
R150VVC1B: 150mm round vari-level vertical drain, C1 lower body "special order"
R150VVC1C: 150mm round vari-level vertical drain, C1 lower body "special order"
R150VVC1D: 150mm round vari-level vertical drain, C1 lower body "special order"
R150VVC1E: 150mm round vari-level vertical drain, C1 lower body "special order"

High heel friendly pattern (5.5mm gaps)

150mm Round

Typical Application

Height adjustable high heel friendly grate assembly

Grate assembly available in 316 stainless steel and nickel bronze (not available only by special order)

C100A "telex" C1 lower body with 100mm ØSD (available only by special order)

Height adjustment:
Min. 50mm
Max. 60mm

Integral profile Range 2250

**For additional heights, use EP150 extension piece

Speciality Plumbing Supplies Pty Ltd
Tel: (02) 9417 1900 Fax: (02) 9417 0108 E-mail: info@spplumbing.com.au

3.09

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CLIENT:
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ARCHITECT:
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DRAWING TITLE
LEVEL 1 STORMWATER DRAINAGE PLAN

SHEET NO.	SW05	REV.	A	SCALE @ AD.	1:200
DATE	18.01.24	DRAWN BY	N.E.	AUTHORISED	K.E.

PROJECT
EVO FAIRFIELD
48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD

NORTH	PROJECT NO.	210386
PROJECT START DATE:	OCTOBER 2021	

COURT ROAD

THE HORSLEY DRIVE

PRE DEVELOPMENT CATCHMENT ANALYSIS
TOTAL AREA: 9239.05m²
IMPERVIOUS AREA: 9239.05m²

PRE DEVELOPMENT CATCHMENT PLAN
SCALE 1: 300

COURT ROAD

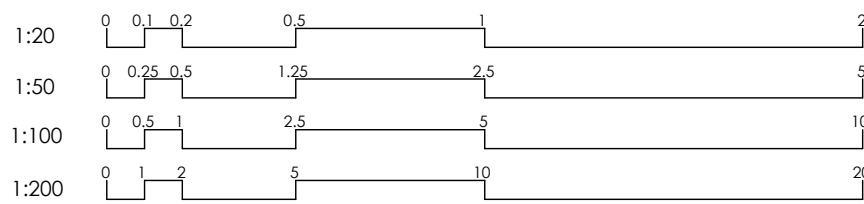
THE HORSLEY DRIVE

POST DEVELOPMENT CATCHMENT ANALYSIS
TOTAL AREA: 9239.05 m²
IMPERVIOUS AREA DRAINING TO OSD: 6078.32 m²
BYPASSING OSD: 3160.73 m²

POST DEVELOPMENT CATCHMENT PLAN
SCALE 1: 300

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SCALE BARS



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DRAWING TITLE
PRE AND POST DEVELOPMENT CATCHMENT PLANS

SHEET NO.
SW20

DATE:
18.01.24

REV.
A

DESIGNED:
N.E.

SCALE @ AS
AS SHOWN

AUTHORISED:
K.E.

PROJECT
EVO FAIRFIELD
48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD

NORTH



PROJECT NO.
210386

PROJECT START DATE:
OCTOBER 2021

PUMP SPECIFICATIONS
STANDARD PUMP-OUT NOTES

THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER -

- A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD LOW LEVEL FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMP AND TO SET 100mm ABOVE BOTTOM OF TANK TO ALLOW 100mm DEPTH OF WATER MAINTAINED AT ALL TIMES.
- A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL (I.E. 300mm ABOVE LOWER LEVEL FLOAT), WHEREBY THE PUMP WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
- A THIRD FLOAT SHALL BE SET NOT HIGHER THAN 100mm ABOVE THE INVERT OF THE INLET PIPE. THIS FLOAT SHOULD ACTIVATE THE ALARM.
- AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT ALARM AND AN AUDIBLE ALARM WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.
- THE PUMP CONTROLS SHALL BE SET UP TO ENABLE ALTERNATE PUMP OPERATION AT EACH START. IN THE EVENT A PUMP FAILS TO OPERATE WHEN THE WATER LEVEL IN THE WET WELL REACHES THE PUMP START, THE OTHER PUMP SHALL BE ACTIVATED, AND A FLASHING STROBE LIGHT ALARM INITIATED. IN THE EVENT THAT BOTH PUMPS FAIL TO OPERATE, AN AUDIBLE ALARM SHALL BE INITIATED.
- PUMPS SHALL BE FITTED WITH A GATE VALVE AND NON-RETURN VALVE ON THE DELIVERY SIDE OF EACH PUMP. THE VALVES SHOULD BE ACCESSIBLE WITHOUT HAVING TO ENTER THE WELL.

- Heavy duty submersible drainage pumps for pumping drainage and stormwater
- High efficiency pump design
- Suited to industrial and municipal applications
- Ideal for stormwater pump stations and contractor dewatering

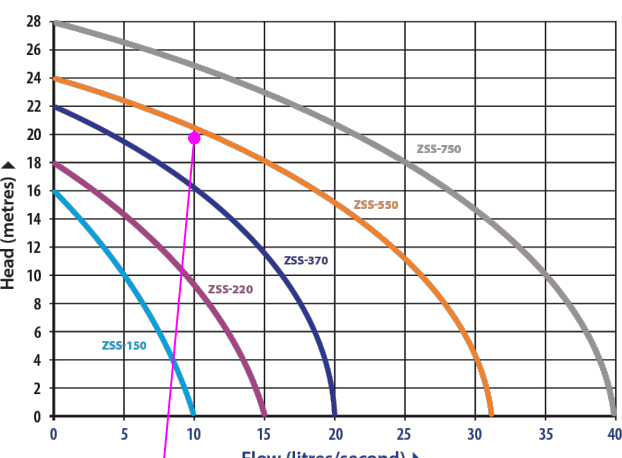
Four Models Available:

ZSS-150-3 415 volt, 1.5 kW, Manual
ZSS-220-3 415 volt, 2.2 kW, Manual
ZSS-370-3 415 volt, 3.7 kW, Manual
ZSS-550-3 415 volt, 5.5 kW, Manual
ZSS-750-3 415 volt, 7.5 kW, Manual

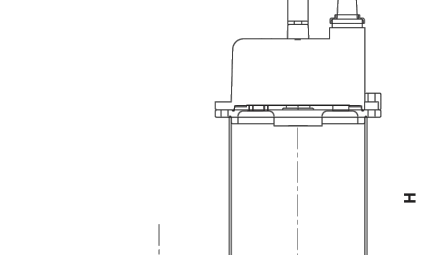
FEATURES:

- Stainless steel, cast iron industrial construction
- Stainless steel motor shaft
- Double mechanical shaft seal
- ZSS-150 suits Guide Rail Kit ZGRK-80
- ZSS-220 and ZSS-370 suit Guide Rail Kit ZGRK-80/100
- ZSS-550 and ZSS-750 suit Guide Rail Kit ZGRK-100

PUMP PERFORMANCE:

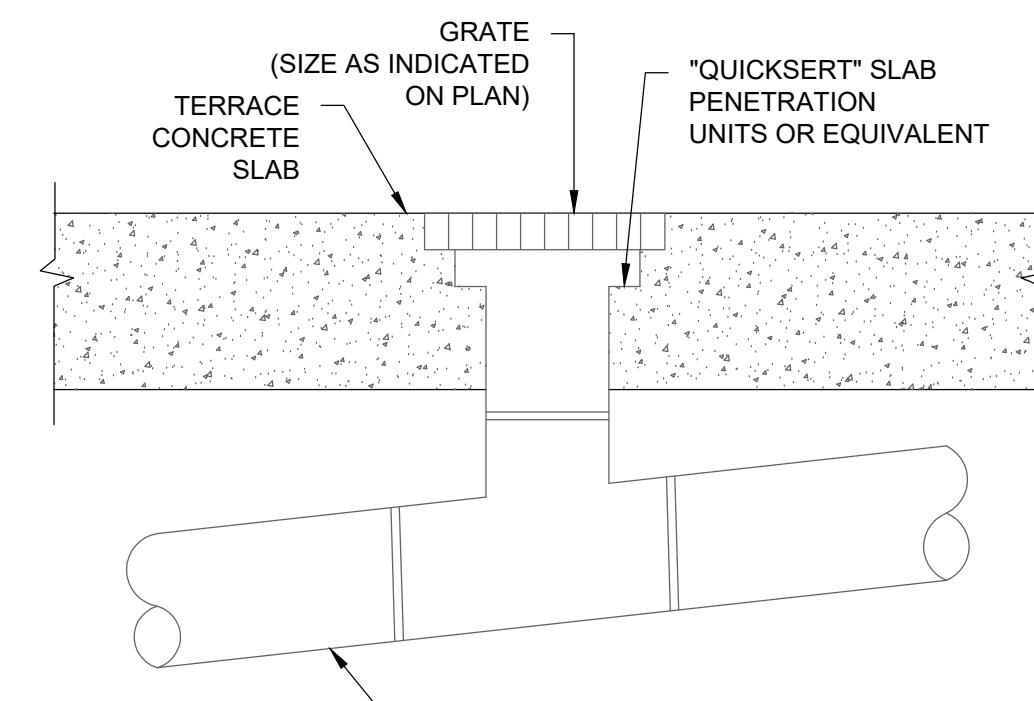


DUTY POINT FOR BASEMENTS3 PUMP-OUT

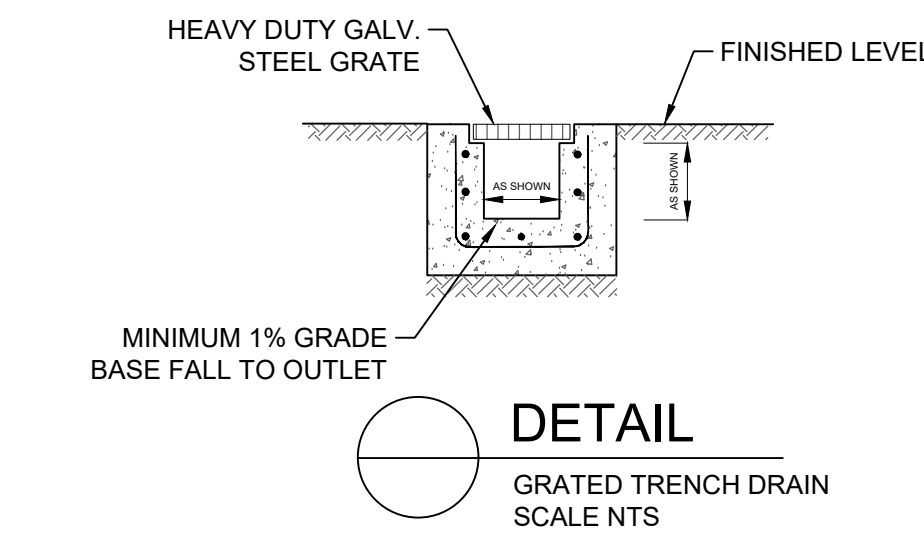


SPECIFICATION:

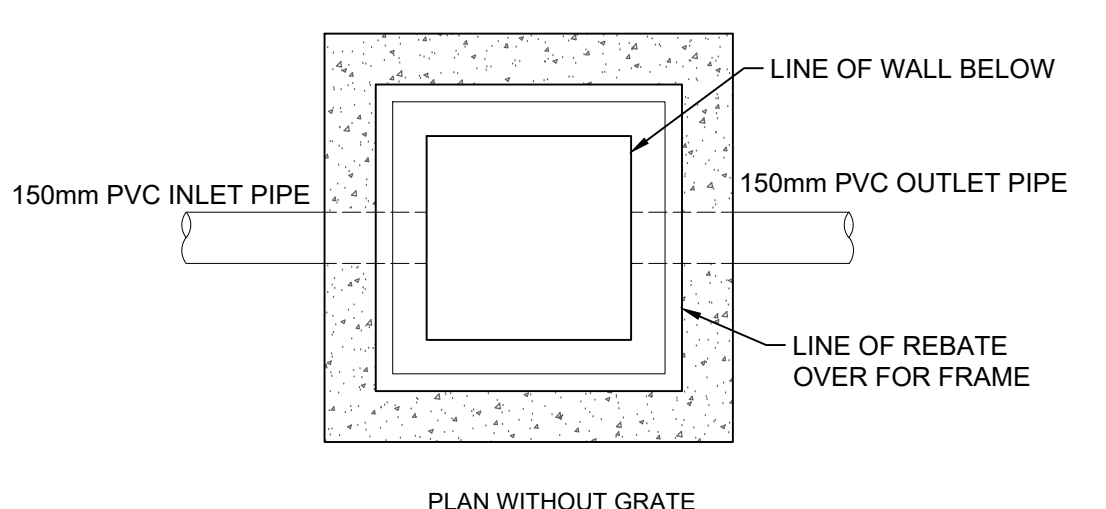
Model Name	Outlet Size	Maximum Flow-rate	Maximum Head	Motor Size	Weight	Dimensions W x D x H
ZSS-150	80 mm	10 L/sec	16 m	1.5 kW	31 kg	278 x 182 x 475 mm
ZSS-220	80 mm	15 L/sec	18 m	2.2 kW	42 kg	390 x 250 x 450 mm
ZSS-370	100 mm	20 L/sec	22 m	3.7 kW	48 kg	450 x 240 x 530 mm
ZSS-550	100 mm	31 L/sec	24 m	5.5 kW	60 kg	550 x 310 x 590 mm
ZSS-750	100 mm	40 L/sec	28 m	7.5 kW	70 kg	550 x 310 x 610 mm



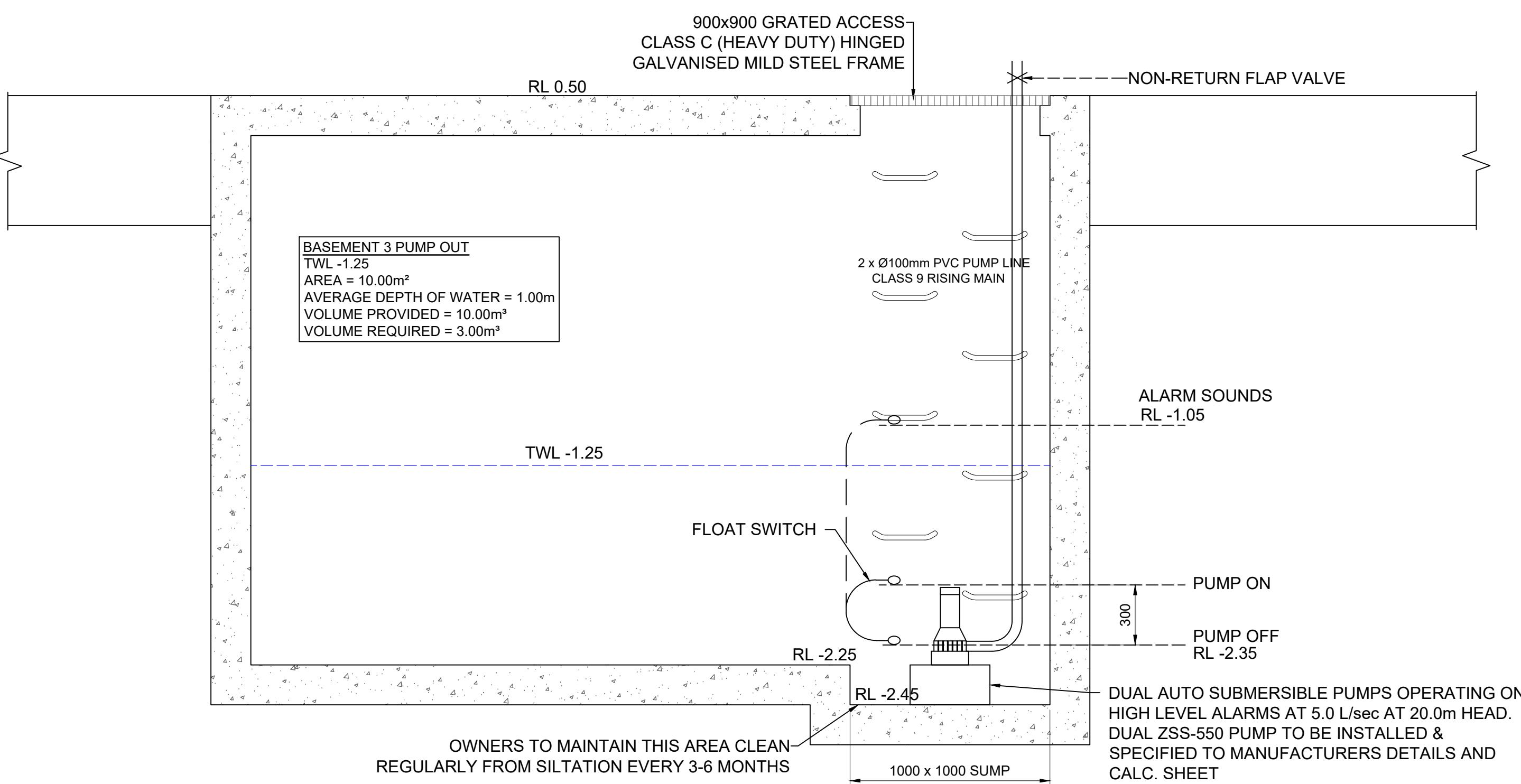
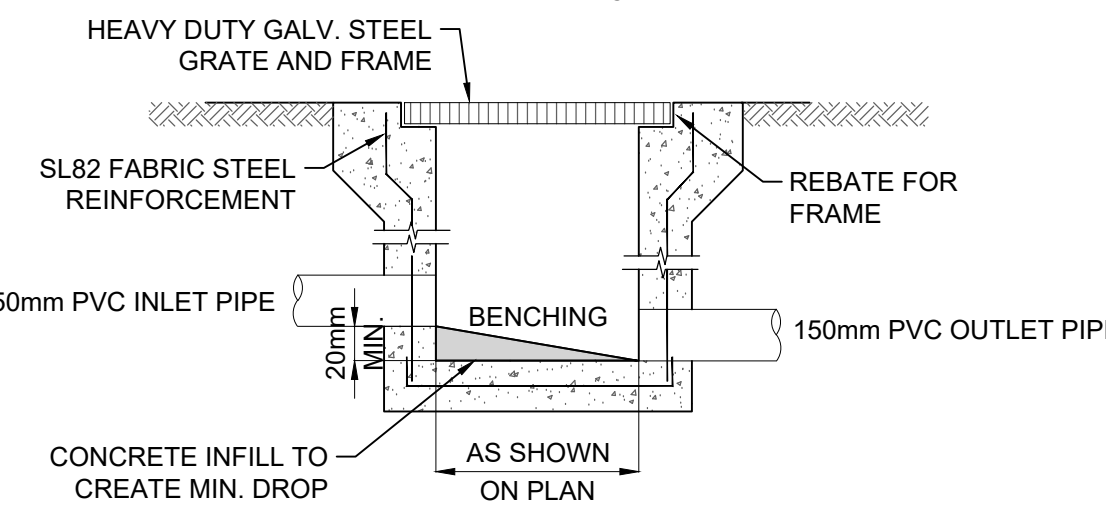
RAINWATER OUTLET DETAIL
SCALE N.T.S.



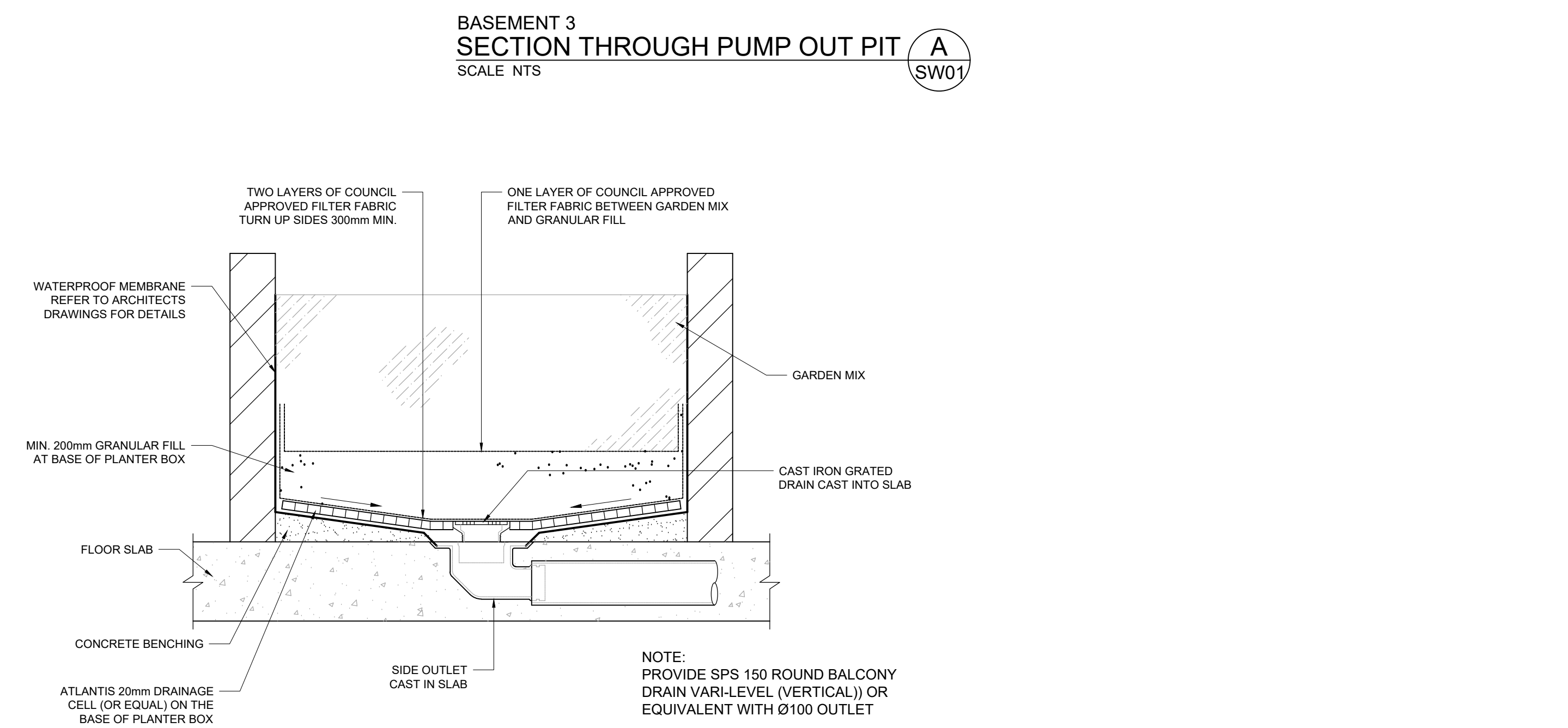
DETAIL
GRATED TRENCH DRAIN
SCALE NTS



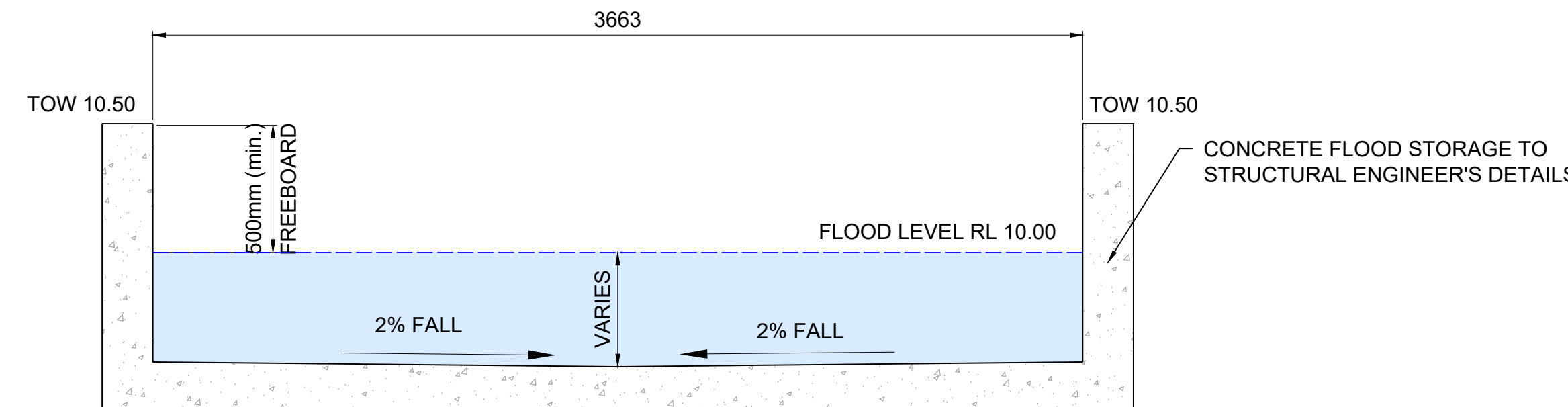
DETAIL
STORMWATER PIT
SCALE NTS



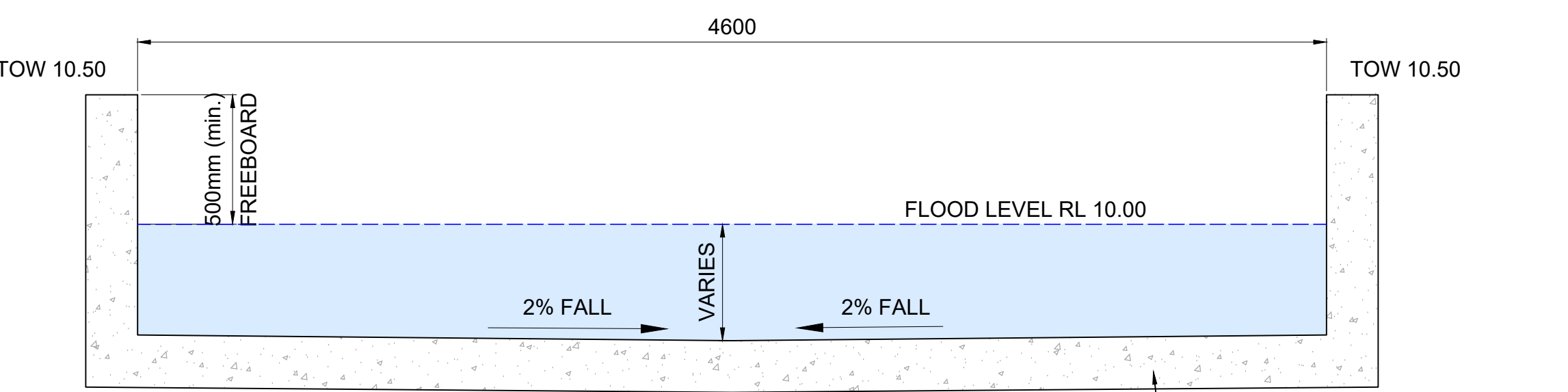
BASEMENT 3
PUMP OUT PIT PLAN VIEW
SCALE NTS



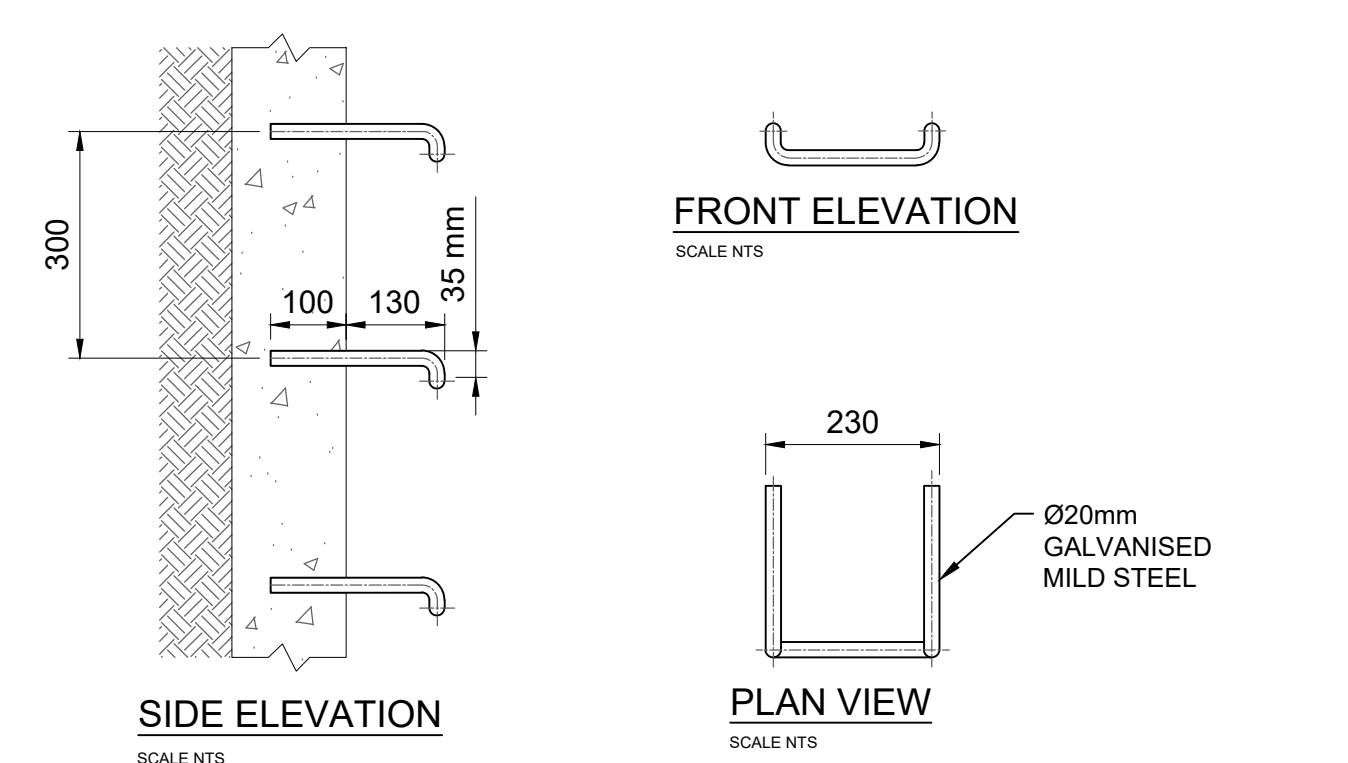
TYPICAL PLANTER BOX DETAIL
SCALE NTS



G
TYPICAL FLOOD STORAGE SECTION
SCALE: NTS

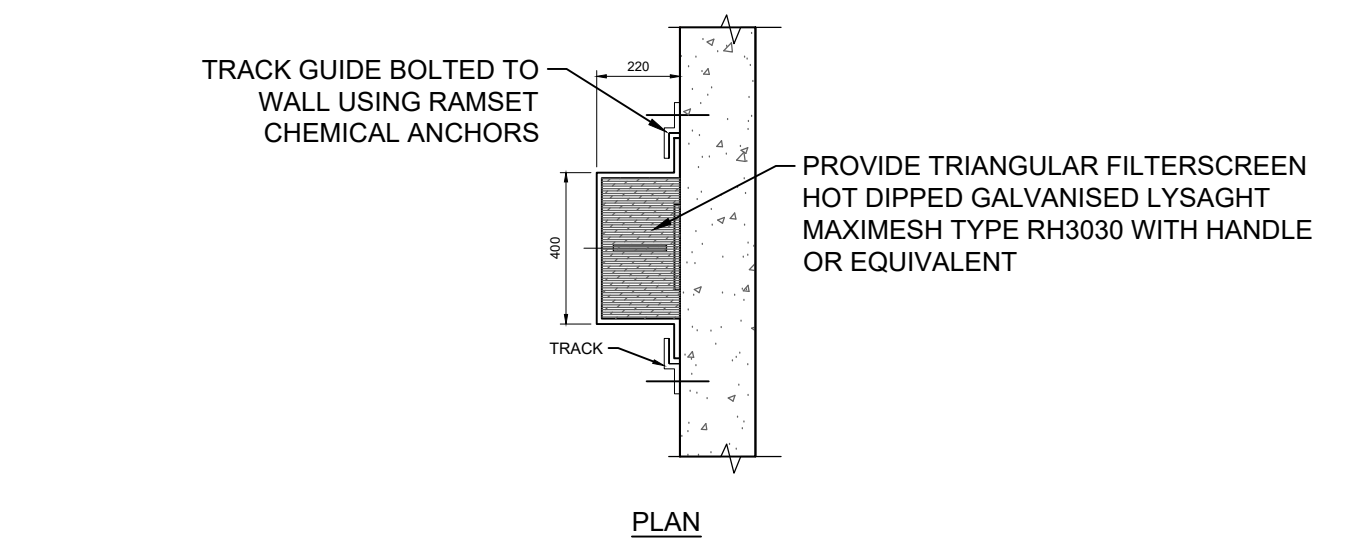


H
TYPICAL FLOOD STORAGE SECTION
SCALE: NTS

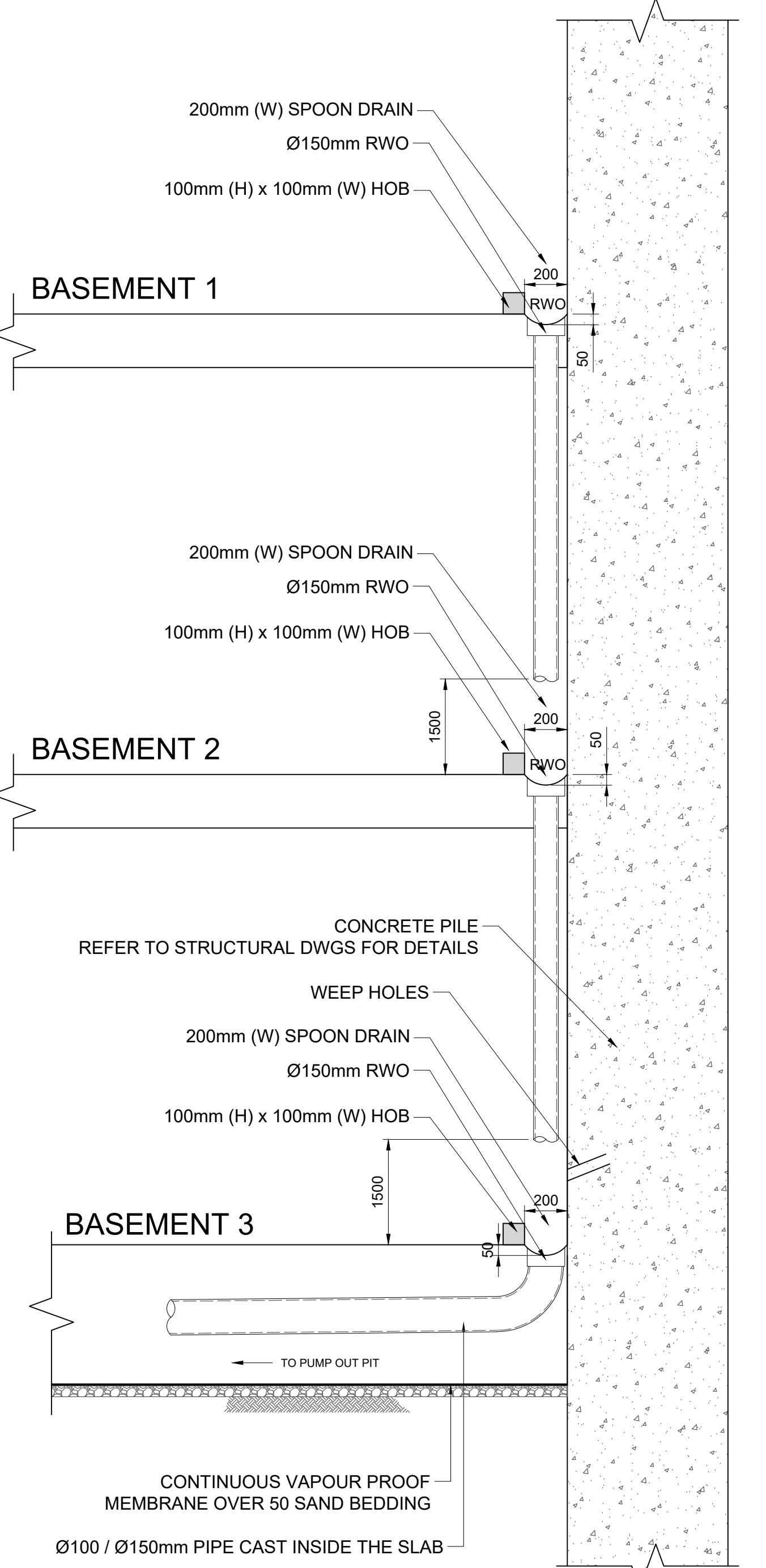


STEP IRON DETAIL
SCALE NTS

NOTE: INSTALL WHERE PITS ARE DEEPER THAN 900

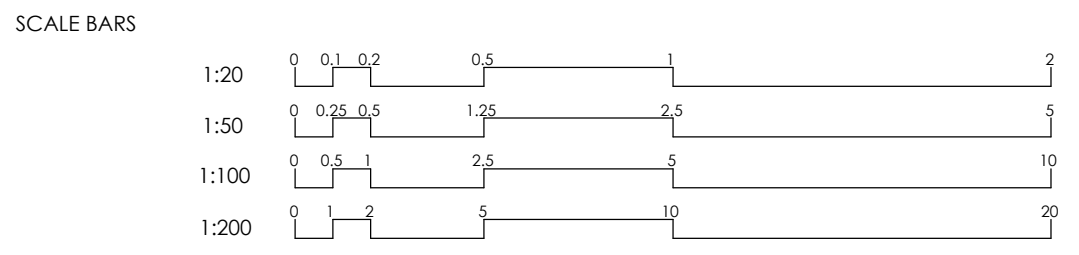


REMOVABLE FILTERSCREEN
SCALE NTS



1
TYPICAL BASEMENT SECTION
SCALE: NTS

No.	Description	Date	Issued	Checked
A	ISSUED FOR D.A.	23.01.24	F.E.	K.E.

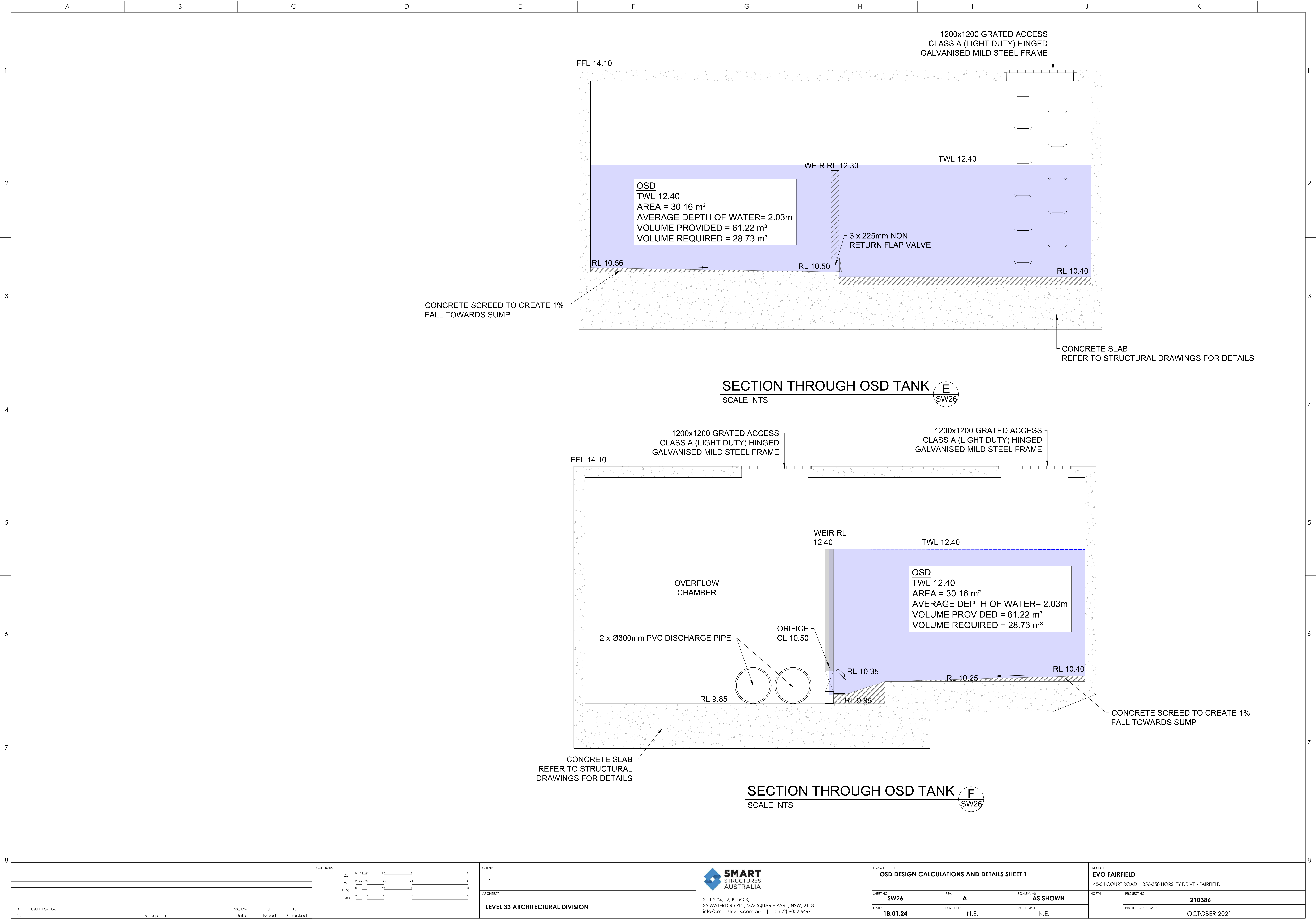


CLIENT:
-
ARCHITECT:
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DRAWING TITLE STORMWATER DRAINAGE SECTIONS AND DETAILS SHEET 1			
SHEET NO. SW21	REV. A	SCALE @ AS AS SHOWN	
DATE 18.01.24	DESIGNED: N.E.	AUTHORISED: K.E.	

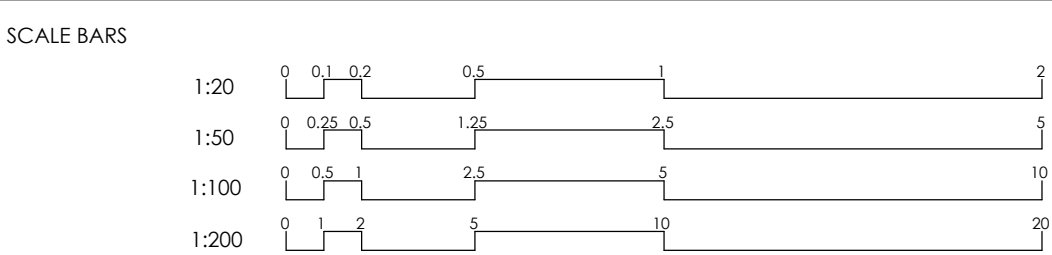
PROJECT EVO FAIRFIELD 48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD	
NORTH	PROJECT NO. 210386
	PROJECT START DATE: OCTOBER 2021



SECTION THROUGH OSD TANK **E**
SCALE NTS
SW26

SECTION THROUGH OSD TANK **F**
SCALE NTS
SW26

A	ISSUED FOR D.A.	23.01.24	F.E.	K.E.
No.	Description	Date	Issued	Checked



CUSTOMER:	-
ARCHITECT:	LEVEL 33 ARCHITECTURAL DIVISION

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DRAWING TITLE OSD DESIGN CALCULATIONS AND DETAILS SHEET 1		
SHEET NO. SW26	REV. A	SCALE @ A3 AS SHOWN
DATE 18.01.24	DESIGNED: N.E.	AUTHORISED: K.E.

PROJECT EVO FAIRFIELD 48-54 COURT ROAD + 356-358 HORSLEY DRIVE - FAIRFIELD	
NORTH	PROJECT NO. 210386
	PROJECT START DATE: OCTOBER 2021

