

STORM WATER DRAINAGE PLAN

SCALE: 1:100
NOTES:

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3:2019 AND COUNCIL SPECIFICATIONS
- LOCATION OF DOWN PIPES AND FLOOR WASTES ARE INDICATIVE ONLY. DOWN PIPE AND FLOOR WASTE SIZE, LOCATION AND QUANTITY TO BE DETERMINED BY CONTRACTOR IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS
- ALL GUTTERS SHALL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO ENSURE LEAF LITTER CANNOT ENTER THE DOWN PIPES
- ALL PIPES TO BE 100ø MIN. AND ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED. PIPES TO BE LAID ON MINIMUM GRADE 1%
- MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm
- ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS
- BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL
- SILT ARRESTORS TO HAVE 900x900mm AND PITS TO HAVE 600x600 INTERNAL DIMENSIONS U.N.O
- HEAVY DUTY GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS. SURFACE FLOW TO BE DIRECTED TO ALL GRATED SURFACE INLET PITS
- PIT GRATES TO BE TYPE WELDLOK OR APPROVED EQUIVALENT. ALL TRENCH GRATES SHALL HAVE A MIN. CLEAR WIDTH OF 200mm.
- ALL PITS SHALL BE PROVIDED WITH A LOCKING CLIP AND MAINTAINED REGULARLY
- DRAINAGE PLANS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURALS AND OTHER CONSULTANT DRAWINGS. ANY DISCREPANCIES ARE TO BE REFERRED TO TCSM ENGINEERING CONSULTANTS FOR REVIEW AND DECISION
- 100mm DIAMETER SUBSOIL DRAINAGE PIPE 3000mm LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED ADJACENT TO INLET PIPES
- PROVIDE CLEANING EYES TO ALL DOWN PIPES NOT DIRECTLY CONNECTED TO PITS
- ISOLATION JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS
- STORM WATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND SATISFACTION OF LOCAL COUNCIL
- SERVICES SHOWN ON PLAN ARE INDICATIVE ONLY, EXACT DEPTH AND LOCATION TO BE CONFIRMED ON SITE. THE CONTRACTOR SHALL CARRY OUT A "DIAL BEFORE YOU DIG" APPLICATION AND ENGAGE A REGISTERED SURVEYOR TO PEG OUT ALL EXISTING SERVICES PRIOR TO ANY WORK COMMENCING ON SITE
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- IF AN EXISTING STORM WATER SYSTEM IS CONNECTED TO THE SEWER, CONTRACTOR IS TO RECTIFY THE STORM WATER DESIGN AND CREATE A NEW CONNECTION AS PER COUNCIL AND AUSTRALIAN STANDARD SPECIFICATIONS. CONTRACTOR MUST CONTACT TCSM ENGINEERING CONSULTANTS PRIOR TO THE COMMENCEMENT OF ANY WORKS
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- DOWNPIPE SPREADERS NOT TO BE USED OVER TILE ROOFS UNLESS SARKING IS PROVIDED UNDER TILES. IF REQUIRED, TILES SHOULD BE REMOVED AND ROOF SARKED AS REQUIRED BY BUILDER.

FOOTPATH REINSTATEMENT NOTES:

- REMOVE ALL SAND FILL WITHIN THE FOOTPATH AREA TO EXISTING SUBGRADE
- SUPPORT ALL AUTHORITY SERVICES TO STRUCTURAL ENGINEERS DETAILS DURING EXCAVATION
- REINSTATE FOOT PATH SUBGRADE
- THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF COMPACTION FROM A NATA REGISTERED TESTING AUTHORITY, MINIMUM THREE TESTS PER LAYER AS FOLLOWS:
 - SELECT FILL 95% MODIFIED
 - SELECT FILL (+300mm BELOW BASE COURSE) 98% MODIFIED
 - BASE COURSE 100% MODIFIED

LEGEND

- | | | | |
|--------------------------|--------------------------|-----|-----------------------|
| SW | STORMWATER DRAINAGE PIPE | eDP | EXISTING DOWNPIPE |
| RWT | PIPE TO RAINWATER TANK | eKO | EXISTING KERB OUTLET |
| OF | OVERFLOW FROM RWT | RL | PIT SURFACE LEVEL |
| AG | ø100 SUBSOIL PIPE | IL | INVERT LEVEL |
| RM | RISING MAIN | TK | TOP OF KERB |
| ESL | EXISTING STORMWATER LINE | RT | RAINWATER TANK |
| DP | PROPOSED DOWN PIPE | FF | FIRST FLUSH DEVICE |
| KO | PROPOSED KERB OUTLET | VD | VERTICAL DROP |
| CO | CLEAN OUT | VR | VERTICAL RISER |
| CONC. COVER JUNCTION PIT | | DP | DOWNPIPE SPREADER |
| GRATED INLET PIT | | RWO | RAINWATER OUTLET 300ø |
| KERB INLET PIT | | GRD | GRATED DRAIN |

DESIGN NOTES:

- THE SITE IS GOVERNED BY NORTHERN BEACHES COUNCIL.
- THE PROPOSED DEVELOPMENT IS A SINGLE DWELLING.
- THE TOTAL SITE AREA IS 1328m² (BY DP)
- THE NET INCREASE IN IMPERVIOUS AREA IS 47.60m²
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- ENSURE THAT ALL STORMWATER PIPES ARE A MINIMUM OF 600mm AWAY FROM SYDNEY WATER ASSETS (TYP).
- ALL STORMWATER PIPES ARE TO BE A MINIMUM OF 600mm CLEAR FROM EXISTING SEWER LINE (TYP).
- INSTALL CLEAR CUTS FOR INSPECTION AND MAINTENANCE PURPOSES (TYP).



TCSM ENGINEERING CONSULTANTS

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Rev.	Notes	Issued
A	ISSUED FOR APPROVAL	12.05.2023

Sheet Title
STORM WATER DRAINAGE PLAN
SHEET 1 OF 3

Sheet No. SW01 | Revision A | Drawing Status ISSUED FOR APPROVAL

Project No. 23160
Commencement Date 01.05.2023
Scale 1:100 | Size A1

Project
PROPOSED RESIDENTIAL DEVELOPMENT
Address
11B HILL STREET, WARRIEWOOD

Client
FJA DESIGNS

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LEGEND

- SW

STORMWATER DRAINAGE PIPE
- RWT

PIPE TO RAINWATER TANK
- OF

OVERFLOW FROM RWT
- AG

ø100 SUBSOIL PIPE
- RM

RISING MAIN
- ESL

EXISTING STORMWATER LINE
- DP

PROPOSED DOWN PIPE
- KO

PROPOSED KERB OUTLET
- CO

CLEAN OUT
- CONC. COVER JUNCTION PIT
- GRATED INLET PIT
- KERB INLET PIT
- eDP

EXISTING DOWNPIPE
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EXISTING KERB OUTLET
- RL

PIT SURFACE LEVEL
- IL

INVERT LEVEL
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TOP OF KERB
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FIRST FLUSH DEVICE
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VERTICAL RISER
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DOWNPIPE SPREADER
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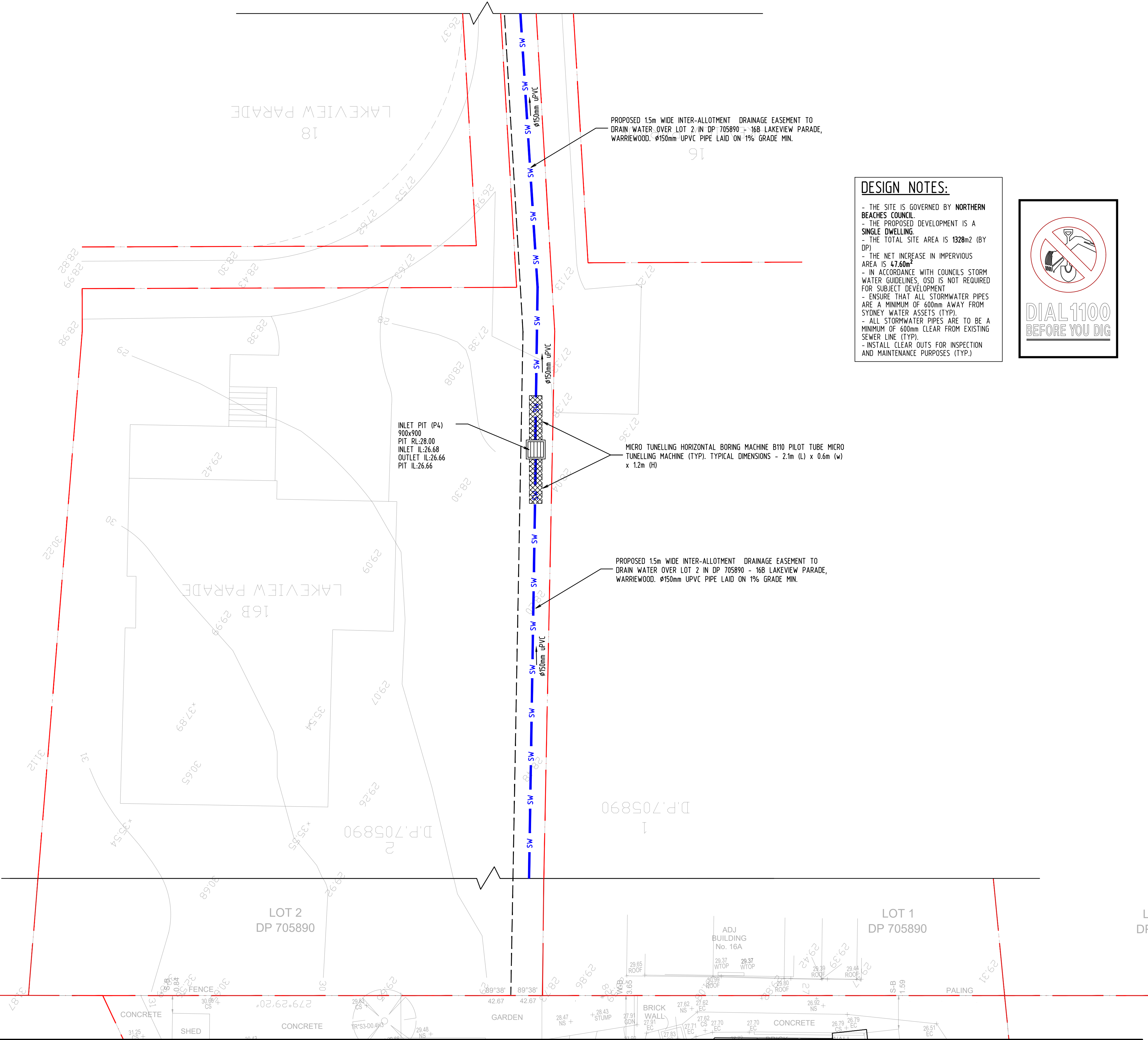
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DIAL 1100
BEFORE YOU DIG



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Rev.	Notes	Issued
A	ISSUED FOR APPROVAL	12.05.2023

Sheet Title	Project No.	Project	Client
STORM WATER DRAINAGE PLAN	23160	PROPOSED RESIDENTIAL DEVELOPMENT	FJA DESIGNS
SHEET 2 OF 3	Commencement Date	Address	
	01.05.2023	11B HILL STREET, WARRIEWOOD	
Sheet No.	Revision	Drawing Status	
SW02	A	ISSUED FOR APPROVAL	

Scale	Size
1:100	A1

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- SELECT FILL (+300mm BELOW BASE COURSE)

- BASE COURSE

95% MODIFIED

98% MODIFIED

100% MODIFIED

LEGEND

- SW

STORMWATER DRAINAGE PIPE

RWT

PIPE TO RAINWATER TANK

OF

OVERFLOW FROM RWT

AG

ø100 SUBSOIL PIPE

RM

RISING MAIN

ESL

EXISTING STORMWATER LINE

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KERB INLET PIT

eDP

EXISTING DOWNPIPE

eKO

EXISTING KERB OUTLET

RL

PIT SURFACE LEVEL

IL

INVERT LEVEL

TK

TOP OF KERB

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FIRST FLUSH DEVICE

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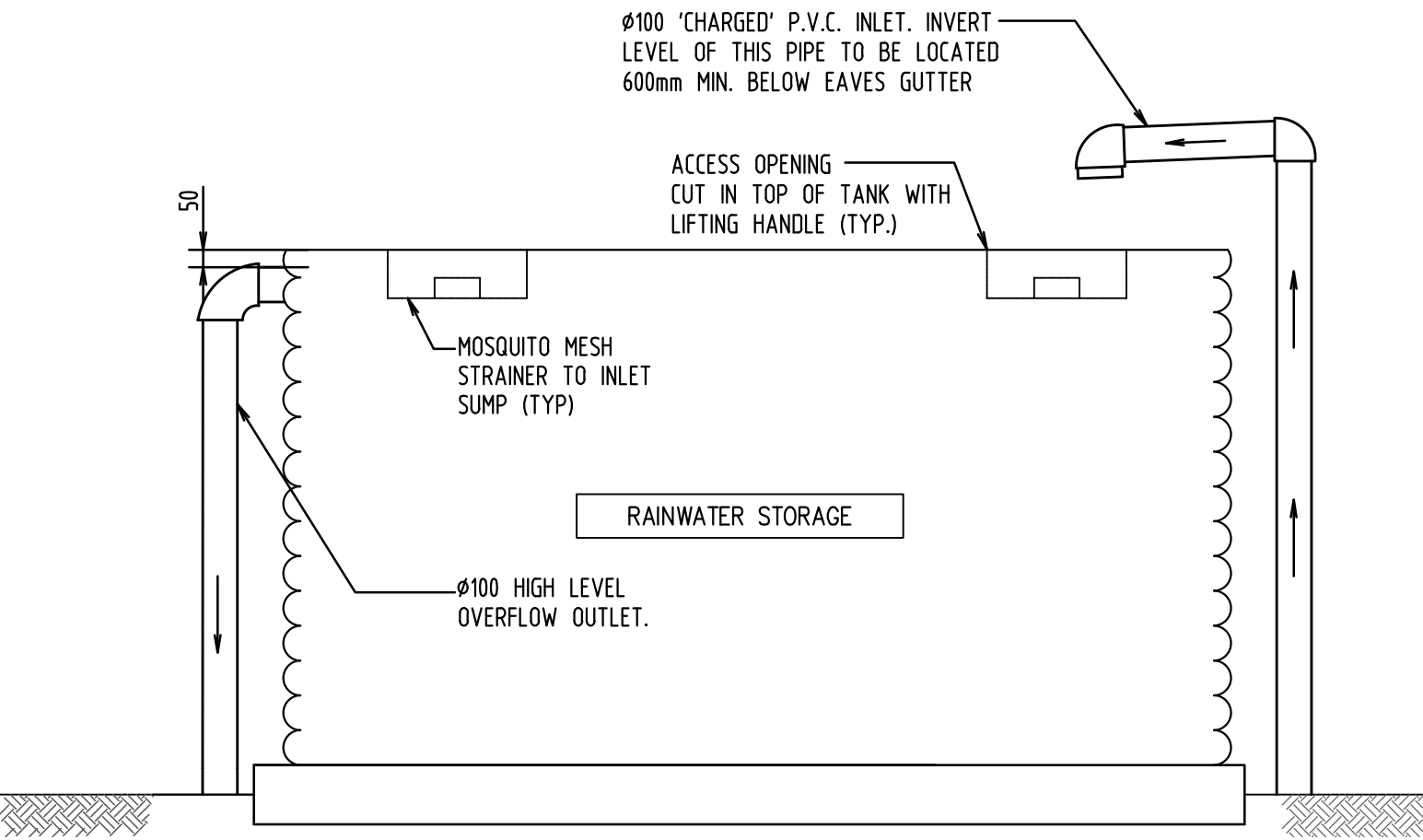
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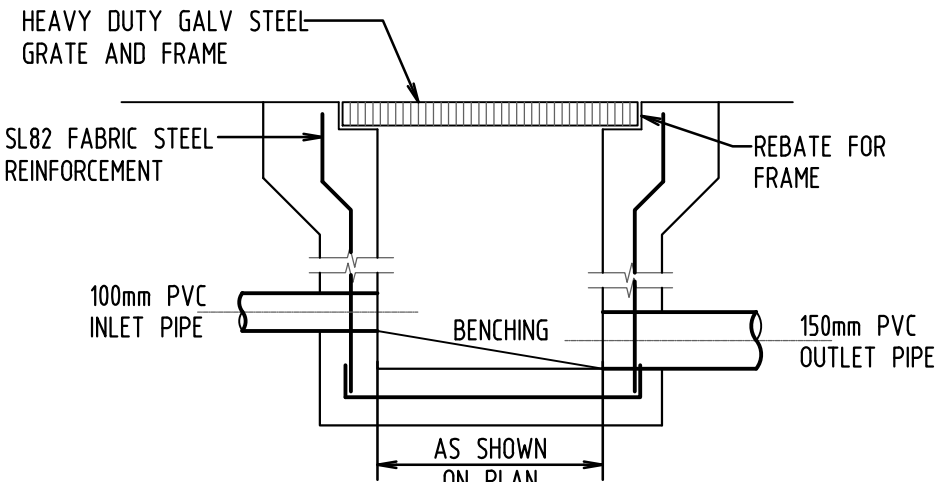
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|--|------|-------|--------|---------------------------|---------------------|---------------------|--|----------------------------------|--|-------------|--|--|--|
| <div>TCSMENGINEERING CONSULTANTS</div> <div>E: info@tcsmconsultants.com</div> <div>P: 0456 645 770</div> <div>W: www.tcsmconsultants.com</div> | Rev. | Notes | Issued | Sheet Title | | Project No. | | Project | | Client | | | |
| | | | | STORM WATER DRAINAGE PLAN | | 23160 | | PROPOSED RESIDENTIAL DEVELOPMENT | | FJA DESIGNS | | | |
| | | | | SHEET 3 OF 3 | | Commencement Date | | Address | | | | | |
| | | | | | | 01.05.2023 | | 11B HILL STREET, WARRIEWOOD | | | | | |
| | | | | | | Scale | | Size | | | | | |
| | | | | | | 1:100 | | A1 | | | | | |
| | | | | Sheet No. | Revision | Drawing Status | | | | | | | |
| | | | | SW03 | A | ISSUED FOR APPROVAL | | | | | | | |
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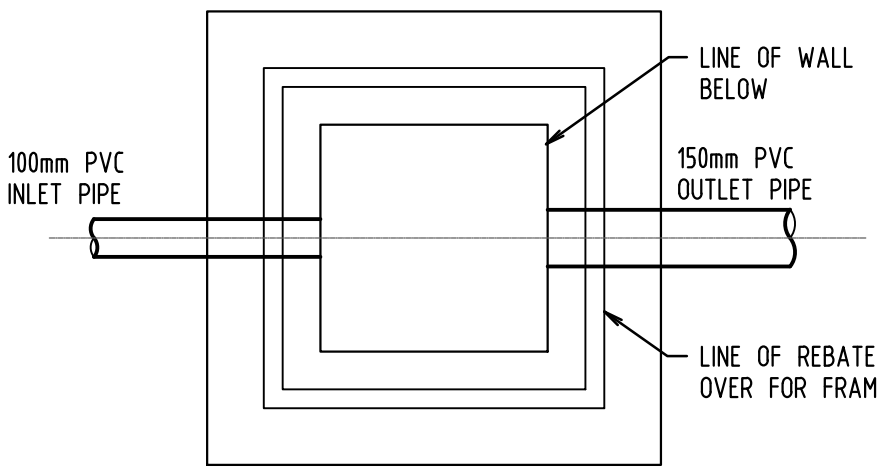
DETAIL
TYPICAL ABOVE GROUND
RAINWATER TANK
NOT TO SCALE



DETAIL
RAINWATER SIGN
SCALE 1:10

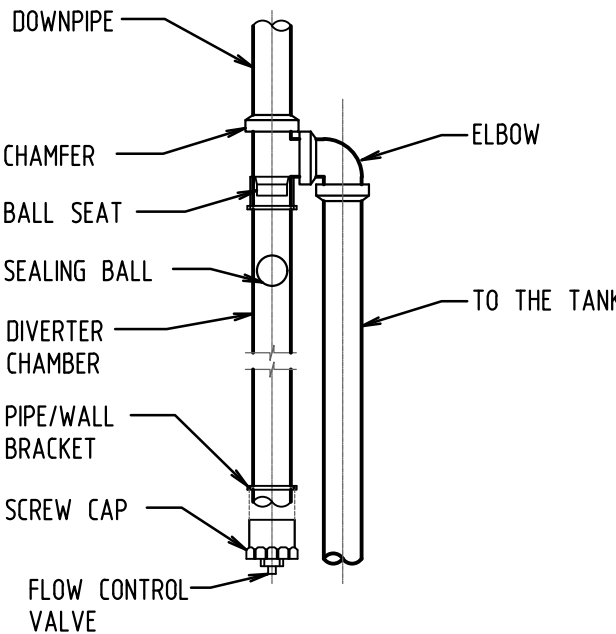


SECTION

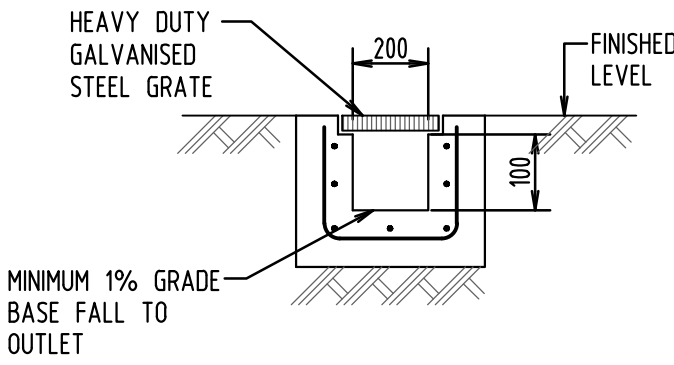


PLAN WITHOUT GRATE

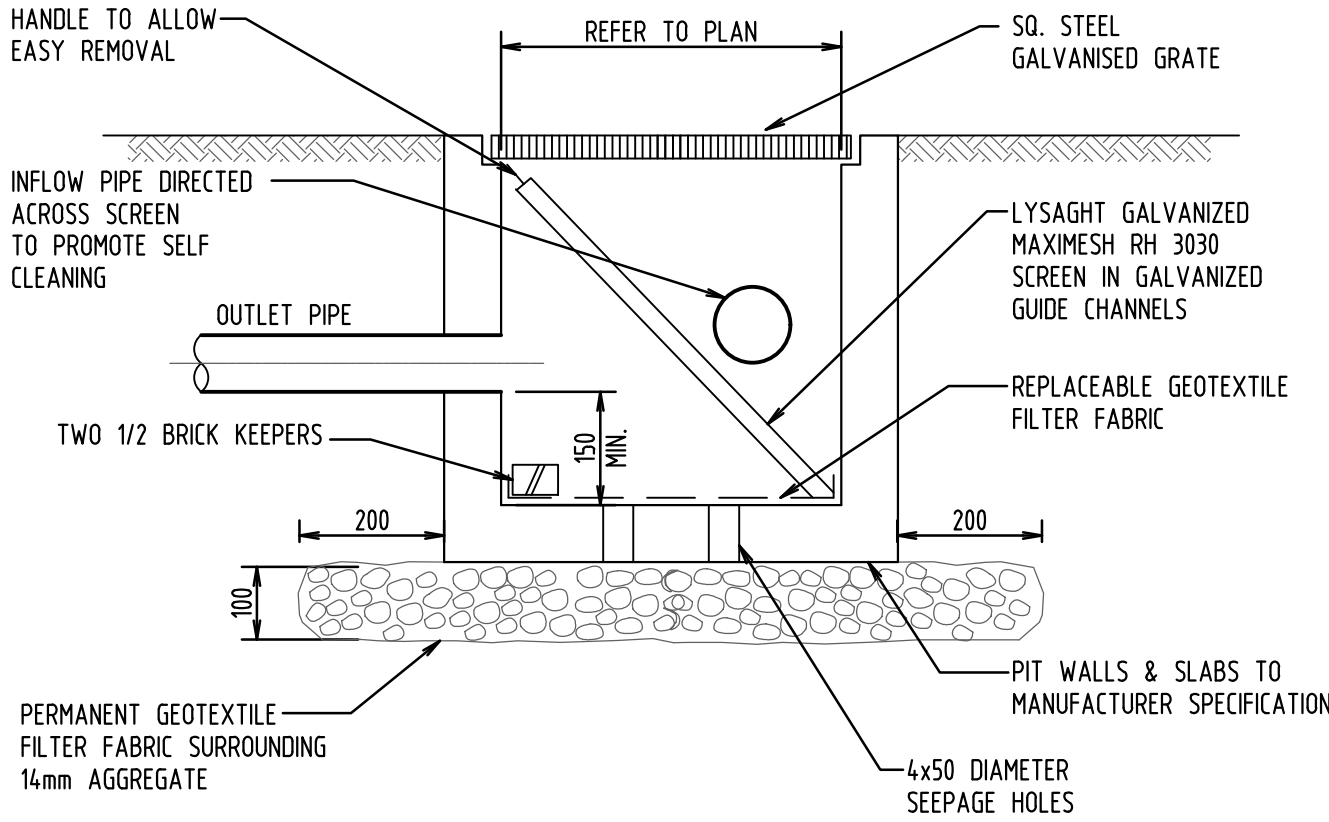
DETAIL
STORMWATER PIT
SCALE 1:20



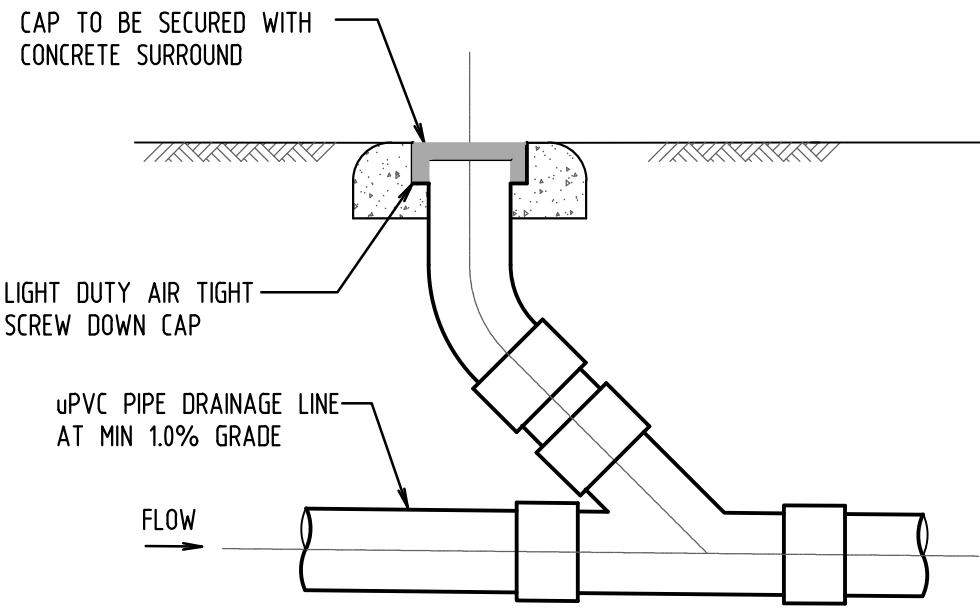
DETAIL
FIRST FLUSH DIVERTER
SCALE 1:20



DETAIL
GRATED TRENCH DRAIN
SCALE 1:20



DETAIL
SEDIMENT CONTROL PIT
SCALE 1:20



DETAIL
CLEANING EYE
SCALE 1:20

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Rev.	Notes	Issued
A	ISSUED FOR APPROVAL	12.05.2023

Sheet Title
STORM WATER DRAINAGE SECTIONS & DETAILS

Sheet No. SW04 | Revision A | Drawing Status ISSUED FOR APPROVAL

Project No. 23160
Commencement Date 01.05.2023
Scale 1:100 | Size A1

Project
PROPOSED RESIDENTIAL DEVELOPMENT
Address
11B HILL STREET, WARRIEWOOD

Client
FJA DESIGNS

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