

STORMWATER MANAGEMENT PLAN

EROSION CONTROL

BEFORE EARTHWORKS CAN COMMENCE THE EROSION & SEDIMENT CONTROL MEASURES MUST BE IN PLACE.

DURING THE CONSTRUCTION PERIOD, THESE CONTROL MEASURES WILL NEED TO BE INSPECTED & MAINTAINED REGULARLY, ESPECIALLY AFTER STORM EVENTS, BY THE CONTRACTOR.

ALL WORK IS TO BE CARRIED OUT TO PREVENT EROSION, CONTAMINATION & SEDIMENTATION OF THE STORAGE SITE, SURROUNDING AREAS & DRAINAGE SYSTEMS.

MINIMIZE DISTURBED AREA COVERED WITH NATURAL VEGETATION. ONLY THOSE AREAS DIRECTLY REQUIRED FOR CONSTRUCTION ARE TO BE DISTURBED.

INSTALL EROSION/SEDIMENT CONTROL MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION OR EXCAVATION OPERATIONS.

PROVIDE SILT FENCE/STRAW BAIL BARRIERS TO THE LOW SIDE OF ALL EXPOSED EARTH EXCAVATIONS. TIE SEDIMENT FENCING MATERIAL TO CYCLONE WIRE SECURITY FENCE. SEDIMENT CONTROL FABRIC SHALL BE AN APPROVED MATERIAL (EG. HUMES PROPEX SILT STOP) STANDING 300mm ABOVE GROUND & EXTENDING 150mm BELOW GROUND.

ISOLATE EXISTING STORMWATER PITS WITH STRAW BALES OR SILT TRAPS TO FILTER ALL INCOMING FLOWS.

DO NOT STOCKPILE EXCAVATED MATERIAL ON THE ROAD WAY.

DIVERT CLEAN WATER FROM UNDISTURBED AREAS AROUND THE WORKING AREAS.

CONSTRUCTION ENTRY/EXIT SHALL BE VIA THE LOCATION NOTED ON THE DRAWING. CONTRACTOR SHALL ENSURE ALL DROPPABLE SOIL & SEDIMENT IS REMOVED PRIOR TO CONSTRUCTION TRAFFIC EXITING SITE. CONTRACTOR SHALL ENSURE ALL CONSTRUCTION TRAFFIC ENTERING AND LEAVING THE SITE DO SO IN A FORWARD DIRECTION.

TREAT THE STORMWATER RUNOFF WITH SUSPENDED SOLIDS SO THE DISCHARGE WATER QUALITY TO COUNCIL STORMWATER DRAINAGE SYSTEM HAS A MAXIMUM CONCENTRATION OF SUSPENDED SOLIDS THAT DOES NOT EXCEED 50 MILLIGRAMS PER LITRE IN ACCORDANCE WITH THE PROTECTION OF THE ENVIRONMENT OPERATION ACT (POEO 1997) AND SHALL BE APPROVED BY LOCAL COUNCIL

ADOPT TEMPORARY MEASURES AS MAY BE NECESSARY FOR EROSION & SEDIMENT CONTROL, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: –
– DRAINS: TEMPORARY DRAINS AND CATCH DRAINS.
– SPREADER BANKS OR OTHER STRUCTURES: TO DISPERSE CONCENTRATED RUNOFF.
– SILT TRAPS: CONSTRUCTION AND MAINTENANCE OF SILT TRAPS TO PREVENT DISCHARGE OF SCOURED MATERIAL TO DOWNSTREAM AREAS.

AFTER RAIN, INSPECT, CLEAN, AND REPAIR IF REQUIRED, TEMPORARY EROSION & SEDIMENT CONTROL MEASURES.

REMOVE TEMPORARY EROSION & SEDIMENT CONTROL MEASURES WHEN THEY ARE NO LONGER REQUIRED.

COMPLY WITH THE REQUIREMENTS OF LANDCOM'S MANAGING URBAN STORMWATER – SOIL AND CONSTRUCTION 'THE BLUE BOOK' LATEST EDITION

THE EROSION & SEDIMENT CONTROL PLAN PROVIDED IS ONLY INDICATIVE. THE CONTRACTOR SHOULD PREPARE A DETAILED ESCP SUITABLE FOR THE SPECIFIC SITE CONDITIONS



DIAL BEFORE YOU DIG SHOULD BE CONTACTED PRIOR TO ANY EXCAVATION ON SITE

TM: TRADE MARK OF THE ASSOCIATION OF DIAL BEFORE YOU DIG SERVICES LTD. USED UNDER LICENSE.

GENERAL NOTES

ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS, BUILDING CODE OF AUSTRALIA, NSW CODE OF PRACTICE AND THE TO THE RELEVANT SERVICE CODES.

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERRED TO THE SUPERINTENDENT FOR DECISION BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE IN MILLIMETERS (U.N.O.). DIMENSIONS SHALL NOT BE OBTAINED BY SCALING OF THESE DRAWINGS. USE FIGURED DIMENSIONS ONLY.

BENCHMARKS HAVE BEEN ESTABLISHED WHERE INDICATED ON THE DRAWINGS. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.). THE CONTRACTOR SHALL UNDERTAKE ALL NECESSARY SURVEY WORK TO ENSURE THAT THE WORKS ARE CONSTRUCTED TO DESIGN LINE AND LEVEL.

SETTING OUT DIMENSIONS AND LEVELS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR.

ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE RELEVANT SAA CODES AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SAFETY FENCES, WARNING SIGNS, TRAFFIC DIVERSIONS AND THE LIKE DURING CONSTRUCTION. ALL WORKS TO COMPLY WITH WORK HEALTH AND SAFETY REQUIREMENTS AND OTHER RELEVANT AUTHORITY SAFETY REQUIREMENTS.

NO TREES SHALL BE REMOVED, CUTBACK OR RELOCATED WITHOUT THE WRITTEN INSTRUCTION FROM THE SUPERINTENDENT.

WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS AND THESE SPECIFICATIONS.

DESIGN LEVELS GIVEN ARE TO FINISHED SURFACE LEVEL AND INCLUSIVE OF TOPSOIL. (TOPSOIL DEPTH VARIES)

THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A N.A.T.A. REGISTERED SURVEYOR.

CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.

THE LOCATIONS OF UNDERGROUND SERVICES SHOWN ON THE DRAWING HAVE BEEN PLOTTED FROM DIAGRAMS PROVIDED BY SERVICE AUTHORITIES. THIS INFORMATION HAS BEEN PREPARED SOLELY FOR THE AUTHORITIES OWN USE AND MAY NOT NECESSARILY BE UPDATED OR ACCURATE.

THE POSITION OF SERVICES AS RECORDED BY THE AUTHORITY AT THE TIME OF INSTALLATION MAY NOT REFLECT CHANGES IN THE PHYSICAL ENVIRONMENT SUBSEQUENT TO INSTALLATION.

MODULAR ENGINEERS DOES NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THE DRAWING SHOWS MORE THAN THE PRESENCE OR ABSENCE OF SERVICES, AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN FROM THE UTILITY SERVICES AUTHORITIES A CURRENT COPY OF UNDERGROUND SERVICES SEARCH FOR THE LOCATION OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF ANY WORK AND NOTIFY ANY CONFLICT WITH THE DRAWINGS IMMEDIATELY. CLEARANCE SHALL BE OBTAINED FROM THE RELEVANT REGULATORY AUTHORITY. CONTRACTOR TO KEEP COPY OF UNDERGROUND SERVICES SEARCH ON SITE AT ALL TIMES. ANY DAMAGES TO SERVICES OR SERVICES ADJUSTMENTS SHALL BE CARRIED OUT BY THE CONTRACTOR OR RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE.

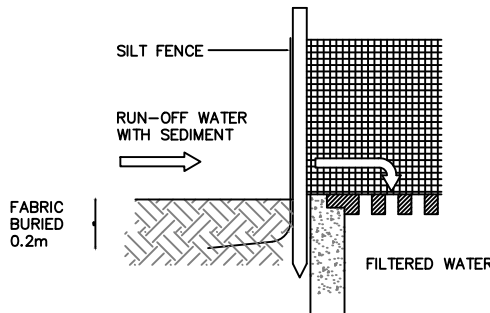
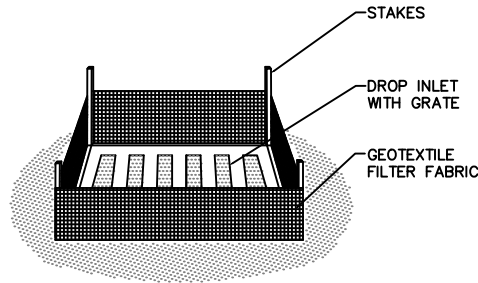
VISIT THE SITE BEFORE SUBMITTING THE FINAL TENDER PRICE TO ASSESS 'ON SITE' CONDITIONS. FAILURE TO DO SO WILL FORFEIT ANY CLAIM FOR NOT BEING AWARE OF CONDITIONS AFFECTING THE TENDER.

THE CONTRACTOR SHALL PREPARE ACCURATE WORK-AS-EXECUTED DRAWINGS FOLLOWING THE COMPLETION OF ALL WORKS.

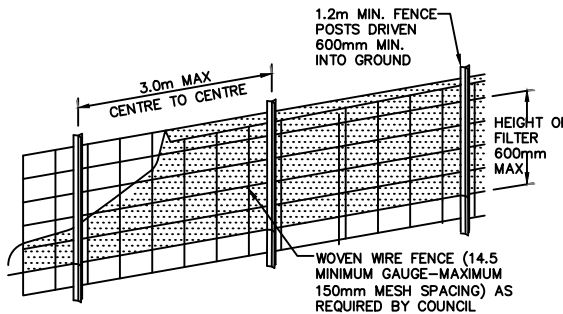
IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN PLACE & MAINTAIN TRAFFIC FACILITIES AT ALL TIMES DURING CONSTRUCTION.

| LEGEND | |
|--------|---|
| | DENOTES DOWN PIPE SPREADER |
| | DENOTES DOWN-PIPE |
| | DENOTES EXISTING DOWN-PIPE |
| | DENOTES RAINWATER HEAD WITH DOWN-PIPE |
| | DENOTES RAINWATER CHARGED LINE |
| | DENOTES STORMWATER 1% MIN. FALL GRAVITY LINE |
| | DENOTES STORMWATER SEALED CHARGE LINE |
| | DENOTES RAINWATER SEALED CHARGE LINE |
| | DENOTES ANTICIPATED ALIGNMENT OF EXISTING UNDERGROUND STORMWATER SYSTEM |
| | DENOTES SUBSOIL LINE |
| | DENOTES EXISTING STORMWATER LINE |
| | DENOTES AUTHORITY SEWER LINE |
| | DENOTES SEDIMENT FENCE |
| | DENOTES CLEAR OUT EYE POINT |
| | DENOTES SEALED CLEAR OUT EYE POINT |
| | DENOTES GRATED SURFACE INLET PIT |
| | DENOTES GRATED TRENCH DRAIN |
| | DENOTES PROPOSED SPOT LEVEL |
| | DENOTES EXISTING GRATED SURFACE INLET PIT |
| | DENOTES EXISTING JUNCTION PIT |
| | DENOTES EXISTING KERB INLET PIT |
| | DENOTES EXISTING TELSTRA PIT |
| | DENOTES EXISTING HYDRANT |
| | DENOTES EXISTING STOP VALVE |
| | DENOTES EXISTING GAS VALVE |
| | DENOTES EXISTING POWER POLE |
| | DENOTES EXISTING SEWER MANHOLE |
| | DENOTES OVERLAND FLOW PATH |

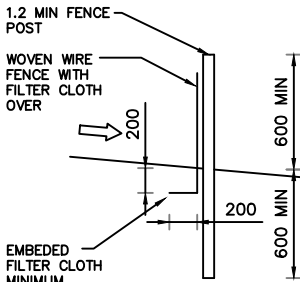
| ABBREVIATIONS | |
|---------------|--|
| Ø/DIA | DENOTES DIAMETER |
| CBR | DENOTES CALIFORNIA BEARING RATIO |
| CH | DENOTES CHAINAGE |
| CL | DENOTES CENTER LINE |
| CO | DENOTES CLEAR OUT |
| DD | DENOTES DISH DRAIN |
| DDO | DENOTES DISH DRAIN OUTLET |
| RCP | DENOTES REINFORCED CONCRETE PIPE |
| DP | DENOTES DOWNPIPE |
| ext | DENOTES EXISTING |
| FFL | DENOTES FINISHED FLOOR LEVEL |
| GTD | DENOTES GRATED TRENCH DRAIN |
| GSIP | DENOTES GRATED SURFACE INLET PIT |
| HYD | DENOTES HYDRANT |
| IJ | DENOTES ISOLATING JOINT |
| IL | DENOTES INVERT LEVEL |
| IP | DENOTES INTERSECTION POINT |
| KIP | DENOTES KERB INLET PIT |
| KO | DENOTES KERB OUTLET |
| K&G | DENOTES KERB & GUTTER |
| KR | DENOTES KERB RETURN |
| LS | DENOTES LONGITUDINAL SECTION |
| NGL | DENOTES NATURAL GROUND LEVEL |
| OFD | DENOTES OVERLAND FLOW PATH |
| OSD | DENOTES ON-SITE DETENTION |
| R | DENOTES RADIUS |
| RL | DENOTES REDUCED LEVEL |
| RW | DENOTES RETAINING WALL |
| RWT | DENOTES RAINWATER TANK |
| SJ | DENOTES SAWN CONTROL JOINT |
| SMH | DENOTES SEWER MAN HOLE |
| SW | DENOTES STORMWATER |
| SWP | DENOTES STORMWATER PIT |
| SWRM | DENOTES STORMWATER RISING MAIN |
| SV | DENOTES STOP VALVE |
| TOK | DENOTES TOP OF KERB |
| TOW | DENOTES TOP OF WALL |
| TWL | DENOTES TOP WATER LEVEL |
| TP | DENOTES TANGENT POINT |
| UPVC | DENOTES UNPLASTICISED POLYVINYL CHLORIDE |
| UNO | DENOTES UNLESS NOTED OTHERWISE |
| FF | DENOTES FIRST FLUSH DEVICE |
| TYP | DENOTES TYPICAL |



SUMP SEDIMENT TRAP
NOT TO SCALE

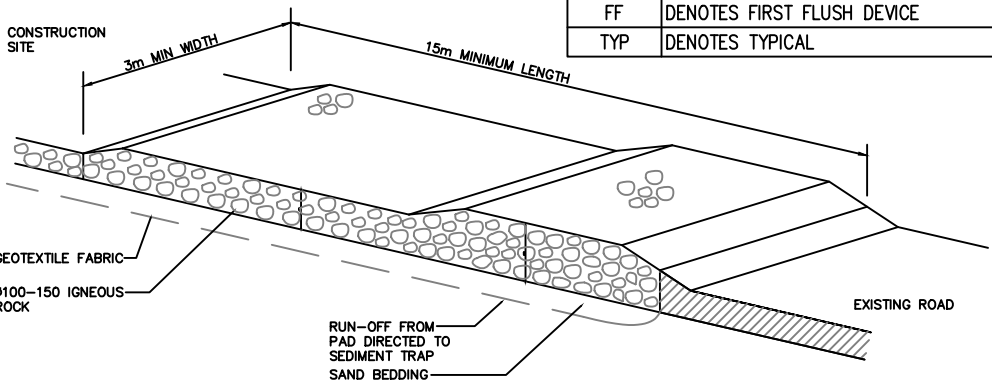


DIAGRAMMATIC VIEW



TYPICAL SECTION

SEDIMENT FENCE DETAIL
NOT TO SCALE



TEMPORARY CONSTRUCTION EXIT (RUBBLE ALTERNATIVE)
NOT TO SCALE

SIZE: A3 0 10 20 30 40 50 60 70 80 90 100 110 120

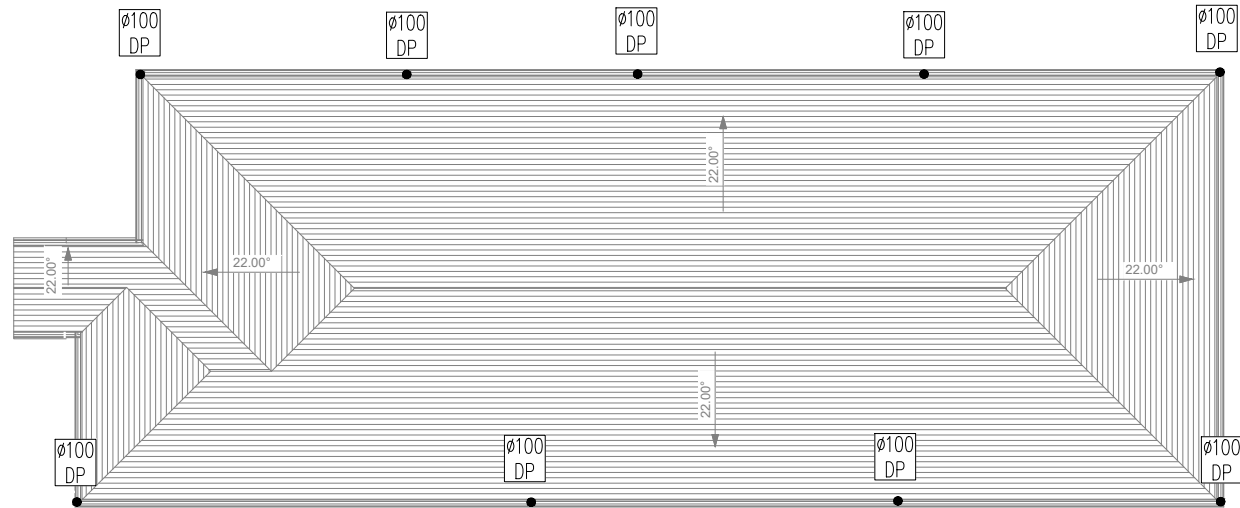
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| A | 20-02-2025 | ISSUED FOR CDC | S.R. | S.R. | MSc, BSc, MIE Aust, CP Eng, NER, NPER (No: 5358554), RPEQ (28316), PE (Victoria) No. 0007689, PDP0000072, PRE0000191, DEP0000203 | |
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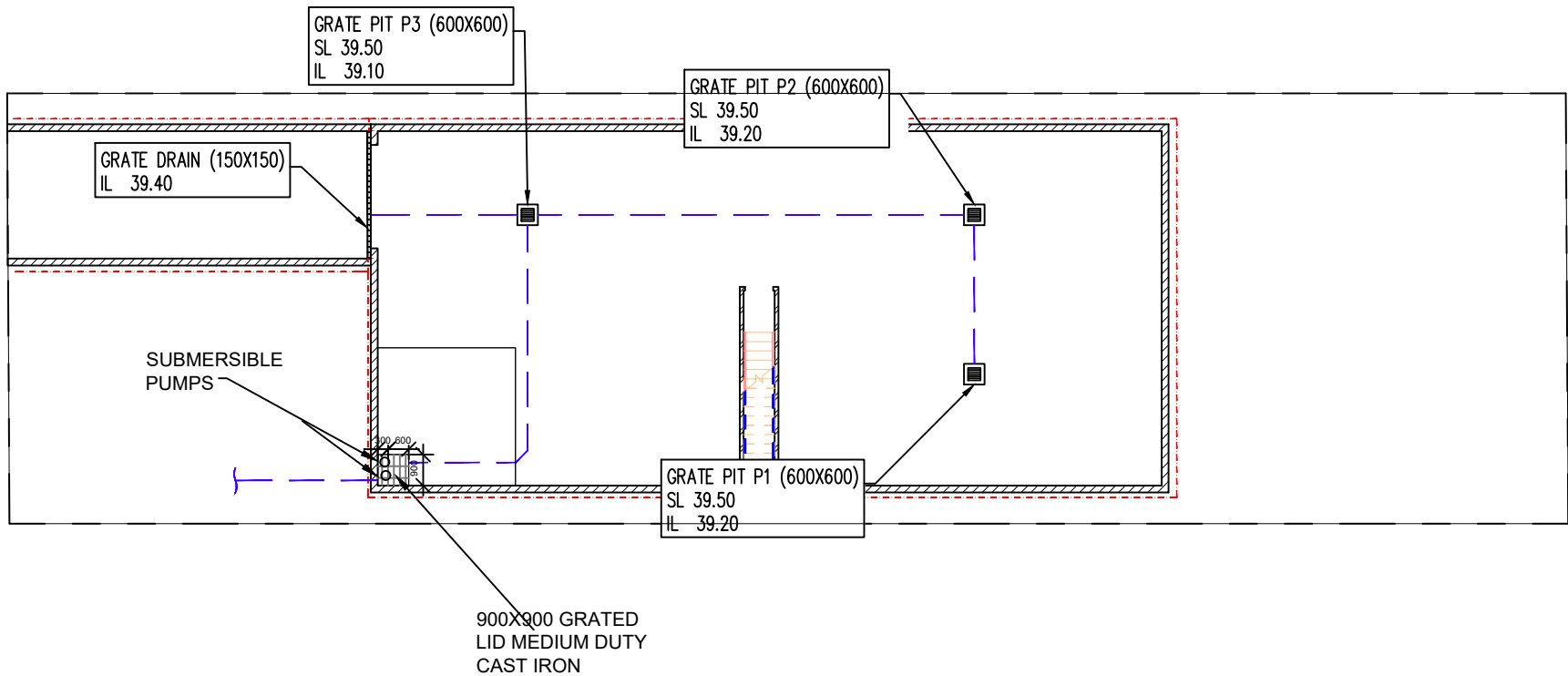
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| PROJECT TITLE : | PROPOSED CONSTRUCTION OF A SINGLE STOREY DWELLING |
| PROJECT ADDRESS : | 8 SPENCER STREET, SEFTON, NSW 2162 |
| PROJECT NO. : | STW047-2025 |
| DRAWING TITLE : | TITLE PAGE, GENERAL NOTES, AND DETAILS-1 |
| DRAWING NO. : | STW001 |
| ISSUE DATE : | 20-02-2025 |



STORMWATER ROOF PLAN
SCALE: 1:200



STORMWATER BASEMENT PLAN
SCALE: 1:200

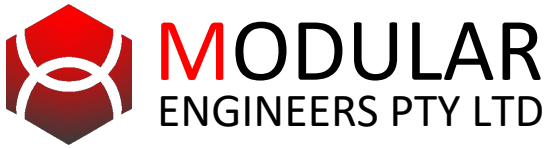
- NOTES:**
DRAINAGE
- A. ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED
 - B. 100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE
 - C. MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm
 - D. ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS
 - E. BACKFILL TRENCHES WITH COMPACTED SAND OR APPROVED AGGREGATE MATERIAL
 - F. ALL PITS TO HAVE 600x600mm INTERNAL DIMENSIONS (U.N.O.)
 - G. SILT ARRESTORS TO HAVE 900x900mm INTERNAL DIMENSIONS
 - H. HEAVY DUTY GALV. STEEL GRATES AND COVERS ARE TO BE PROVIDED IN TRAFFICABLE AREAS
 - I. HEEL & WHEELCHAIR SAFE GRATE COVERS ARE TO BE PROVIDED IN PEDESTRIAN AREAS
 - J. PIT GRATE TO BE TYPE WELDLOK OR APPROVED EQUIVALENT
 - K. ALL PITS GREATER THAN 900mm DEEP SHALL BE PROVIDED WITH A CHILD-PROOF LOCKING CLIP
 - L. ALL PITS SHALL BE MAINTAINED REGULARLY
 - M. ALL PITS TO BE BENCHED MIN. 20mm TO INVERT OF OUTLET
 - N. 100 SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK TO BE PROVIDED IN ALL LANDSCAPED AREAS & BEHIND RETAINING WALLS AND CONNECTED TO THE NEAREST STORMWATER PIT.
 - O. COMPRESSIVE STRENGTH f_c FOR CAST IN SITU CONCRETE TO BE A MINIMUM OF 20MPa AT 28 DAYS
 - P. PROVIDE CLEANING EYES TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS
 - Q. ISOLATED JOINTS TO BE PROVIDED TO ISOLATE CONCRETE PAVEMENTS FROM PITS
 - R. ALL TRENCH GRATES PROVIDED SHALL HAVE A MINIMUM CLEAR WIDTH OF 200mm
 - S. STORMWATER DRAINAGE CONNECTIONS TO THE MAIN SYSTEM SHALL BE TO THE REQUIREMENTS AND THE SATISFACTION OF LOCAL COUNCIL

- UPPER LEVEL**
- A. INSTALL 65mm uPVC SPITTER PIPES 20mm ABOVE SURFACE LEVEL FOR BALCONY AND CONCRETE ROOF AREAS TO ALLOW FOR EMERGENCY OVERFLOW INCASE OF BLOCKAGES DURING HEAVY STORMS. PLUMBER TO CONFIRM LOCATION DURING CONSTRUCTION.
 - B. BALCONY, TERRACE & CONCRETE ROOF AREAS TO BE FITTED WITH RAINWATER OUTLETS AND CONNECTED TO NEAREST DOWNPIPE WHERE REQUIRED (TYP).
 - C. DOWNPIPES (DP) SHOWN ON PLAN ARE TO BE 100mm uPVC OR 100x75 U.N.O. (TYP).
 - D. CHARGED DOWNPIPES SHOWN ON PLAN MUST BE SEWER GRADE 100mm uPVC WITH ALL JOINTS SOLVENT WELDED TO A LEVEL 1200mm ABOVE THE RAINWATER TANK INLET R.L. (TYP).
 - E. PROPOSED DOWNPIPE LOCATIONS ARE NOMINAL AND TO BE CONFIRMED DURING CONSTRUCTION (TYP).
 - F. INSTALL DOWNPIPE WITH SPREADER PIPE (SP) (IF REQUIRED) TO DISPERSE STORMWATER ONTO LOWER ROOF AREAS EFFECTIVELY.

| PIPE SCHEDULE | | | | |
|---------------|----------|-------------|----------|------------|
| TAG | SIZE | MATERIAL | GRADE | TYPE |
| A | DAI.100 | P.V.C. | MIN. 1% | GRAVITY |
| B | DAI.150 | P.V.C. | MIN. 1% | GRAVITY |
| X | DAI.100 | P.V.C. | CHARGE | TO RWT/PIT |
| D | 200X100 | GALV. STEEL | MIN. 1% | TO KERB |
| E | EXISTING | EXISTING | EXISTING | EXISTING |

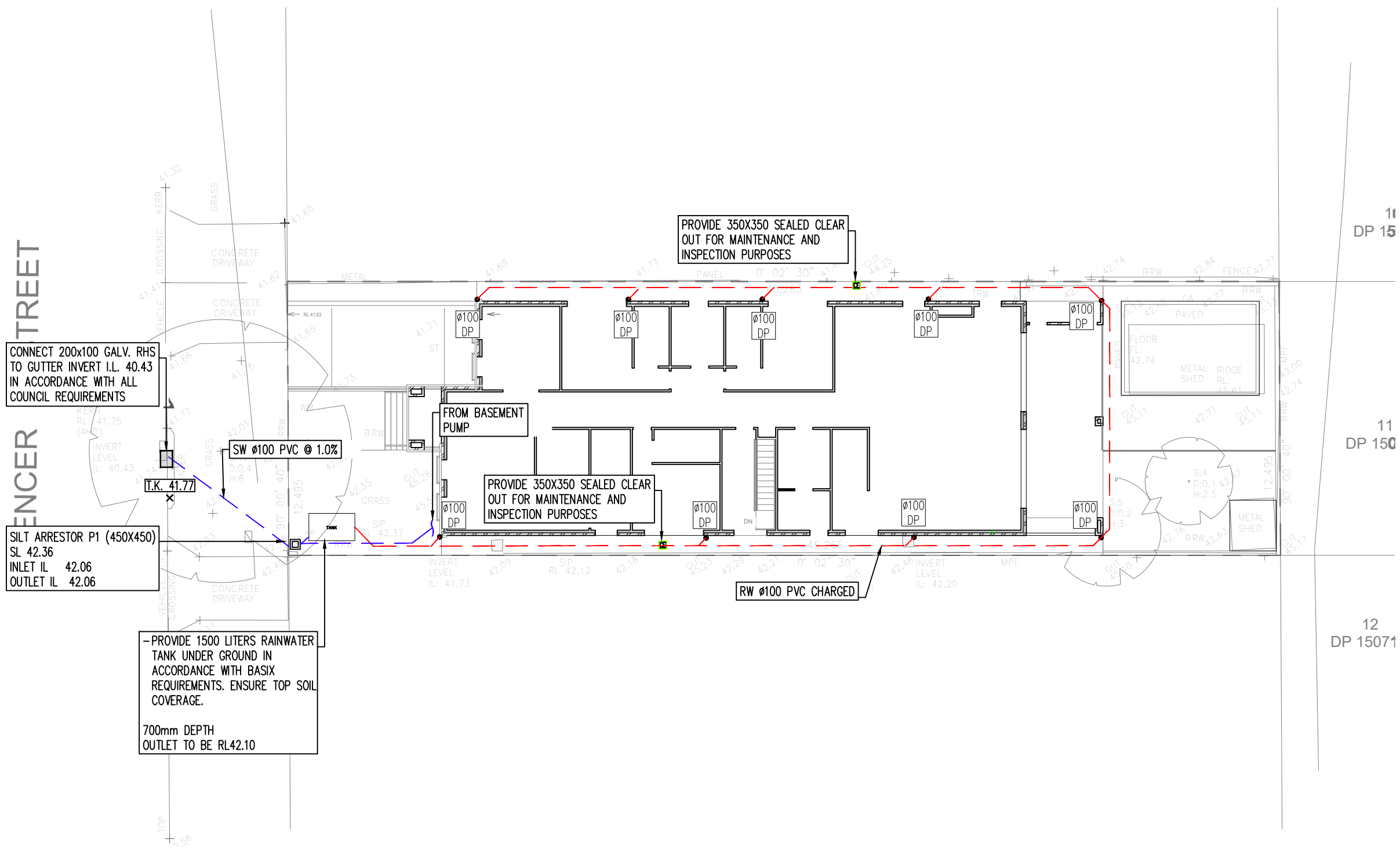
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| PROJECT ADDRESS : | 8 SPENCER STREET, SEFTON, NSW 2162 |
| PROJECT NO. : | STW047-2025 |
| DRAWING TITLE : | STORMWATER DESIGN PLANS |
| DRAWING NO. : | STW002 |
| ISSUE DATE : | 20-02-2025 |



- NOTES:**
DRAINAGE
- A. ALL PIPES TO BE LAID ON 75mm SAND BED WITH THE BARRELS FULLY SUPPORTED
 - B. 100mm AND 150mm DIAMETER PIPES TO BE LAID ON MINIMUM 1% GRADE
 - C. MINIMUM DEPTH OF COVER FOR PIPES NOT SUBJECT TO VEHICULAR LOADING TO BE 300mm
 - D. ALL DRAINAGE PIPES LAID UNDER PAVEMENT SHALL BE REINFORCED CONCRETE WITH RUBBER RING JOINTS
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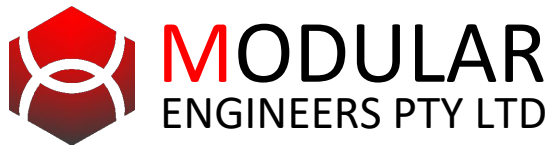
- UPPER LEVEL**
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| PIPE SCHEDULE | | | | |
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| A | DAI.100 | P.V.C. | MIN. 1% | GRAVITY |
| B | DAI.150 | P.V.C. | MIN. 1% | GRAVITY |
| X | DAI.100 | P.V.C. | CHARGE | TO RWT/PIT |
| D | 200X100 | GALV. STEEL | MIN. 1% | TO KERB |
| E | EXISTING | EXISTING | EXISTING | EXISTING |

STORMWATER FLOOR PLAN
SCALE: 1:200

SIZE: A3 0 10 20 30 40 50 60 70 80 90 100 110 120

| REVISIONS | | | | | APPROVED BY | |
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| REV. | DATE | DESCRIPTION | D.P.ENG. | DFT. | ALI AL-OBAIDI | |
| A | 20-02-2025 | ISSUED FOR CDC | S.R. | S.R. | MSc, BSc, MIEAust, CPEng, NER, NPER (No. 5358554), RPEQ(28316), PE(Victoria)No.0007689, PDP0000072, PRE0000191, DEP0000203 | |
| B | 25-02-2025 | ISSUED FOR CDC | S.R. | S.R. | | |
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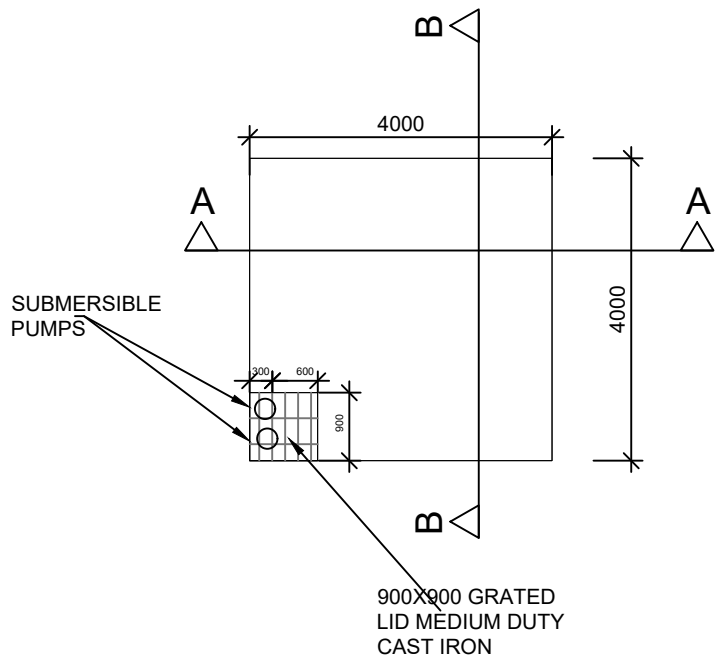
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| PROJECT ADDRESS : | 8 SPENCER STREET, SEFTON, NSW 2162 |
| PROJECT NO. : | STW047-2025 |
| DRAWING TITLE : | STORMWATER DESIGN PLANS |
| DRAWING NO. : | STW003 |
| ISSUE DATE : | 20-02-2025 |

| Type | Output | | Outlet | | Rated | | Maximum | | Weigh | Dimension | | |
|--------|--------|------|--------|--------|---------------|-----|---------|----------|-------|-----------|-------|-------|
| | | | | | Head Capacity | | Head | Capacity | | | | |
| | HP | kW | mm | Inch | M | LPM | M | LPM | | L(mm) | W(mm) | H(mm) |
| KS-03 | 1/3 | 0.25 | 40 | 1 1/2" | 3 | 130 | 8 | 180 | 9 | 188 | 141 | 305 |
| KS-04 | 1/2 | 0.4 | 50 | 2" | 5 | 150 | 8 | 220 | 11 | 208 | 140 | 359 |
| KS-05 | 1/2 | 0.4 | 50 | 2" | 5 | 160 | 10 | 260 | 14 | 230 | 156 | 375 |
| KS-08 | 1 | 0.75 | 50 | 2" | 6 | 240 | 13 | 380 | 21 | 290 | 180 | 425 |
| KS-20 | 2 | 1.5 | 80 | 3" | 10 | 300 | 16 | 600 | 31 | 278 | 182 | 475 |
| KS-30 | 3 | 2.2 | 80 | 3" | 10 | 500 | 18 | 800 | 42 | 390 | 250 | 450 |
| KS-50 | 5 | 3.7 | 100 | 4" | 10 | 800 | 21 | 1100 | 48 | 450 | 240 | 530 |
| KS-75 | 7 1/2 | 5.6 | 100 | 4" | 15 | 800 | 23 | 1300 | 60 | 550 | 310 | 590 |
| KS-100 | 10 | 7.5 | 150 | 6" | 18 | 900 | 25 | 1600 | 70 | 550 | 310 | 610 |

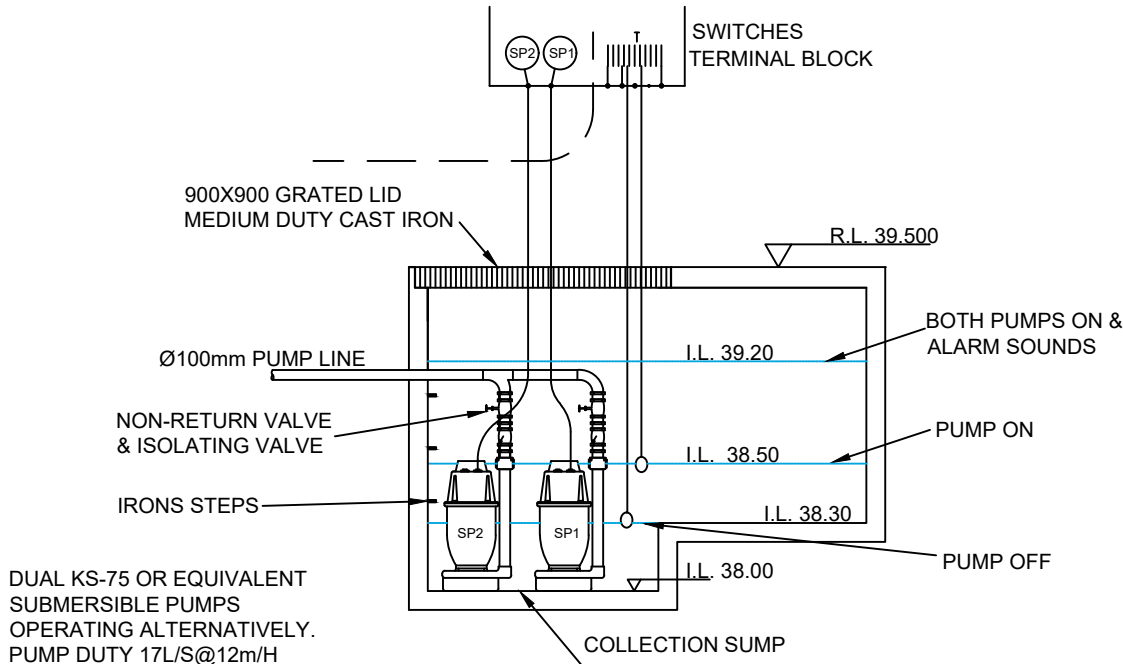
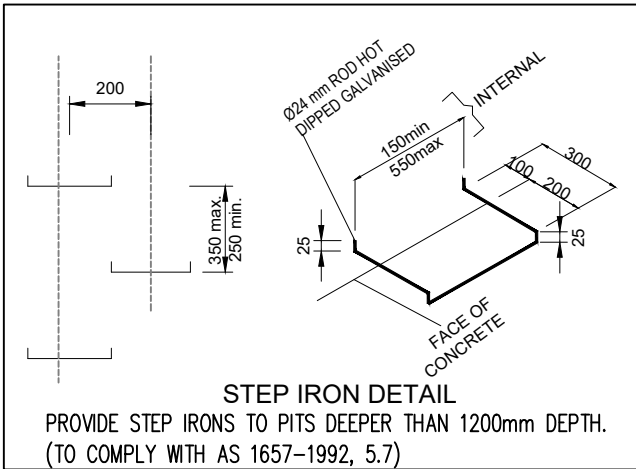
RECOMMENDED
PUMP

WARNING

PUMP OUT SYSTEM
FAILURE IN BASEMENT
WHEN LIGHT IS FLASHING
AND SIREN SOUNDING

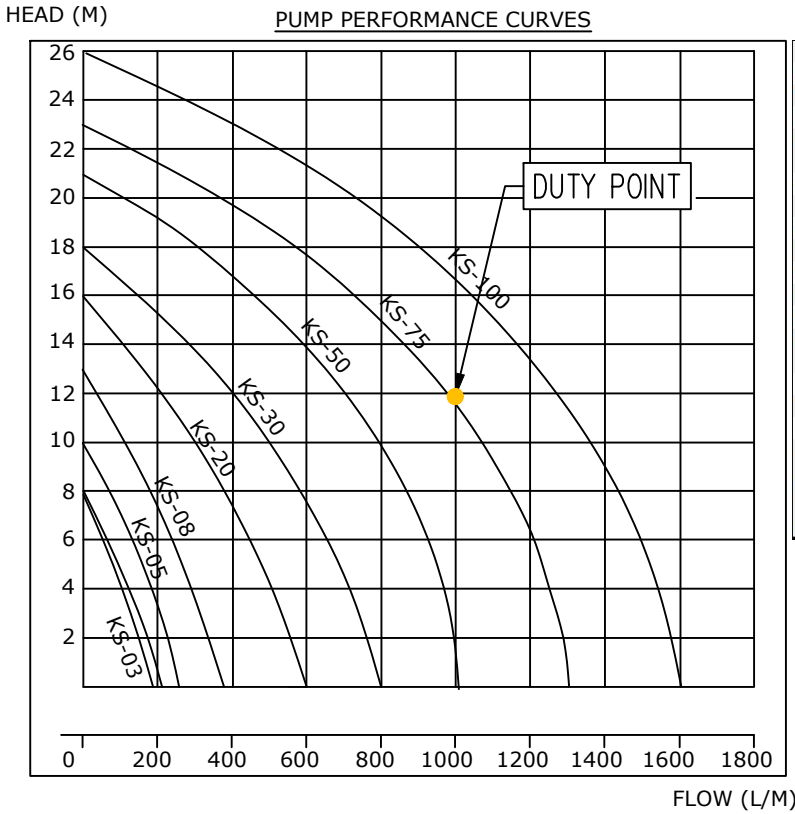


BASEMENT PUMP OUT PIT PLAN
N.T.S.



BASEMENT PUMP OUT PIT SECTION A-A
PUMPS TP BE INSTALLED AS PER MANUFACTURERS DETAILS

FOR REFERENCE ONLY



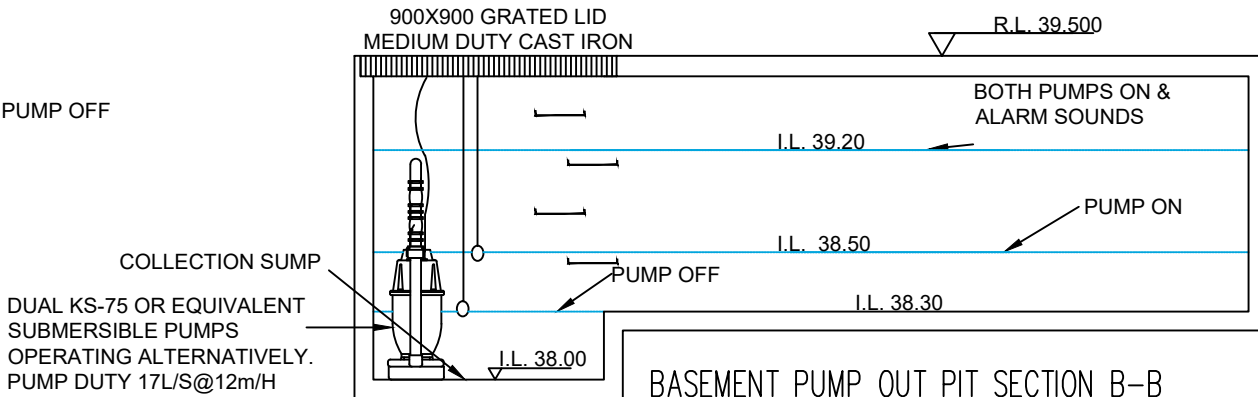
PUMP PERFORMANCE CURVES
NOT TO SCALE

| PUMP WELL CALCULATION: | | |
|---|---------|------|
| AREA DRAINING TO SUMP | 297 | m2 |
| SUMP SIZE BASED ON 1% AEP 2 HOURS STORM(I) | 36.5 | mm/h |
| C | 1 | |
| $Q = C \times I \times A$ | 3.01 | L/s |
| 3600 | | |
| VOLUME REQUIRED | 21681 | L/s |
| STORAGE PROVIDED | 21.68 | m3 |
| LENGTH | 24.00 | m3 |
| WIDTH | 4 | m |
| HEIGHT | 1.5 | m |
| PUMP OUT RATE BASED ON 1% AEP 5 MIN STORM(I) | 202 | mm/h |
| $Q = C \times I \times A$ | 16.67 | L/s |
| 3600 | | |
| THEREFORE THE MINIMUM RATE ADOPTED AS PER AS 3500.3 | 1000 | L/m |
| | 17 | L/s |
| | 1000.00 | L/m |
| THE PUMP ADOPTED IS DUAL KS-75PUMP OR EQUIVALENT TO BE INSTALLED IN SUMP AND CONNECTED TO CONTROL PANEL WHICH WILL ALLOW FOR THE PUMPS TO OPERATE ALTERNATIVELY ON HIGH LEVEL ALARMS AT 17L/s EACH AT 12m HEAD. | | |

PUMP SIGNAGE

STANDARD PUMP-OUT NOTES:

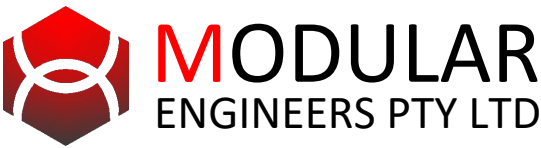
- THE PUMP-OUT SYSTEM IS DESIGNED TO WORK IN THE FOLLOWING MANNER:
1. THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE EQUAL OPERATION LOAD & PUMP LIFE.
 2. A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.
 3. A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE & DRAIN THE TANK TO THE LEVEL OF THE LOW LEVEL FLOAT.
 4. A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER PUMP THAT IS NOT OPERATING & ACTIVATE THE ALARM.
 5. AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT & A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERYBACK-UP IN CASE OF POWER FAILURE.



BASEMENT PUMP OUT PIT SECTION B-B
PUMPS TO BE INSTALLED AS PER MANUFACTURERS DETAILS
NOT TO SCALE

SIZE: A3 0 10 20 30 40 50 60 70 80 90 100 110 120

| REVISIONS | | | | | APPROVED BY | |
|-----------|------------|----------------|----------|------|--|--|
| REV. | DATE | DESCRIPTION | D.P.ENG. | DFT. | ALI AL-OBAIDI | |
| A | 20-02-2025 | ISSUED FOR CDC | S.R. | S.R. | MSc, BSc, MIEAust, CPEng, NER, NPER (No. 5358554), RPEQ(28316), PE(Victoria)No.0007689, PDP0000072, PRE0000191, DEP0000203 | |
| B | 25-02-2025 | ISSUED FOR CDC | S.R. | S.R. | | |
| | | | | | | |

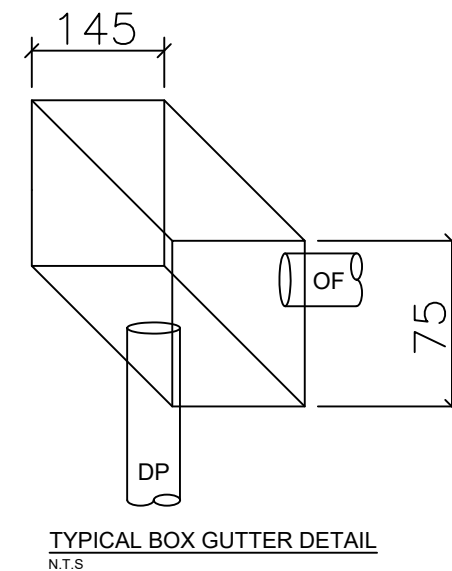


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| DRAWING TITLE : | STORMWATER DETAILS AND NOTES |
| DRAWING NO. : | STW004 |
| ISSUE DATE : | 20-02-2025 |



- | | |
|--|--|
| ① Subsoil | ⑤ Covering layer |
| ② Telescopic dome shaft | ⑥ Li-Lo Rainwater Underground Tank |
| ③ Compacted foundation | ⑦ Concrete layer for surfaces used by passenger cars |
| ④ Surrounding (round-grained gravel, max. grain size 8/16) | |



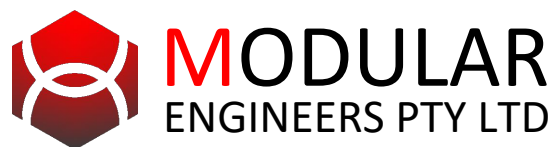
'B' x 'D'
AS PER PLAN

CONCRETE BENCHING/SHAPING TO BASE OF ALL PITS

TYPICAL SURFACE INLET PIT DETAIL

N.T.S
PITS IN NON TRAFFIC AREAS.

| | | | | | | | | | | | | | | | | | | |
|----------|------------|----------------|----------|------|---|---|----|----|----|-------------|----|----|----|----|----|-----|-----|-----|
| SIZE: A3 | | | | | | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 |
| REVISONS | | | | | | | | | | APPROVED BY | | | | | | | | |
| REV. | DATE | DESCRIPTION | D.P.ENG. | DFT. | ALI AL-OBADI | | | | | | | | | | | | | |
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