


SYMBOLS & NOTATIONS

- GENERAL: UNLESS NOTED OTHERWISE**
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER WORKING DRAWINGS, SPECIFICATIONS AND ANY OTHER WRITTEN INSTRUCTIONS ISSUED DURING CONSTRUCTION. ALL DISCREPANCIES AND VARIATIONS SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
 - DURING CONSTRUCTION THE STRUCTURE AND ANY ADJACENT STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.
 - DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE DRAWING. ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORKS.
 - THE CONTRACTOR IS RESPONSIBLE TO ESTABLISH THE LOCATION SIZE AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS.
 - ALL STORMWATER PIPES TO BE 100 DIA UPVC AT 1% MINIMUM FALL.
 - ALL LOCALISED SURFACE RUN OFF IS TO BE DIRECTED TOWARDS SUMPS AND GRATED PITS BY SITE RE-GRADE.
 - ALL PITS OTHER THAN SILT ARRESTOR AND CONTROL PITS ARE TO BE ADEQUATELY BENCHED TO ENSURE SELF CLEANING.
 - ALL GRATED BOX DRAINS, GRATES AND SOLID COVERS ARE TO BE CONSTRUCTED OF THE APPROPRIATE CLASS AND MATERIALS IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND COUNCIL SPECIFICATIONS.
 - ALL PIPES, JOINTS, VALVES, SUB-SOIL DRAINS ETC. SHALL CONFORM AND BE PLACED BACK FILLED TO THE RELEVANT AUSTRALIAN STANDARDS.
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 - RELOCATING YARD PITS TO SUIT FINAL LANDSCAPING IS PERMITTED. ADDING OR DELETING PITS SHALL BE SUBJECT TO DESIGN ENGINEERS APPROVAL.
 - PROVIDE STEEP FRAMES TO TANKS AND PITS GREATER THAN 900mm SHALL BE PERMANENTLY FIXED BY DRILLING AND EPOXY GROUTING. SPACED VERTICALLY AT 300CTS WITH ALTERNATE RUNGS OFFSET 200mm.
 - GRATES AND FRAMES TO TANKS AND PITS GREATER THAN 900mm SHALL BE ADEQUATELY HINGED AND CHILDPROOFED.
 - ANY DETENTION SYSTEM SHALL IF REQUIRED BY COUNCIL HAVE A PERMANENT MARKER PLATE FIXED IN A PROMINENT POSITION TO COUNCIL REQUIREMENTS.
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 - ALL PIPE WORK IS TO BE UNDERTAKEN BY LICENSED PLUMBER. A FIRST FLUSH DEVICE MUST FITTED WHERE APPROPRIATE.
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 - ANY INLET MUST BE SCREENED TO PREVENT ENTRY OF FOREIGN MATTER AND MOSQUITO BREEDING. TANKS AND ASSOCIATED STRUCTURES ARE TO BE CHILDPROOFED.
 - RAINWATER TANKS AND FITTINGS INSTALLED OVER OR IMMEDIATELY ADJACENT TO A WATER MAIN, SEWER MAIN OR EASEMENT, MUST CONFORM TO THE RELEVANT AUTHORITY REQUIREMENTS.
 - THE CLIENT IS RESPONSIBLE FOR THE MAINTENANCE OF THE RAINWATER TANK, ASSOCIATED DEVICES AND THE WATER SUPPLY AREA, SUCH AS ROOF GUTTERS, IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
 - THE RAINWATER TANK, PIPELINES, TANK OUTLETS, VALVE ETC SHALL BE CLEARLY, PERMANENTLY AND APPROPRIATELY MARKED AND LABELLED.
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 - ENSURE ADEQUATE SEPARATION TO PARALLEL POTABLE WATER SUPPLY LINES.
 - ONLY COLLECT RAINWATER FROM ROOFS AND ASSOCIATED SURFACES CONSTRUCTED FROM NON ASBESTOS AND OTHER APPROPRIATE MATERIALS.
 - WHERE STORMWATER LINES ARE CHARGED IN THE RAINWATER TANK PROVIDE CLEANING EYES TO BASE OF DOWN PIPES AND ENSURE DOWNPIPES ARE WATER TIGHT SEALED TO GUTTER LEVEL.
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—	STORMWATER LINES	S.L.	FINISHED SURFACE LEVEL
○	DOWNPIPE LOCATION	—S—	APPROX. SEWER LOCATION
INV.	INVERT LEVEL (PIPE / PIT)		200 WIDE x 100 DEEP HOT DIP GALV. GRATED BOX DRAIN

HYDRAULIC DETAIL PLAN

CLIENT: MR & MRS KASMAR

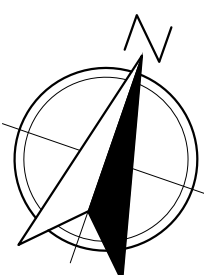
ADDRESS: LOT 3 (NO. 54) YARRABIN STREET, BELROSE

COUNCIL: NORTHERN BEACHES

SCALE: A1 - 1:100, A3 - 1:200

SHEET NO: 1

JOB NO: 95572M



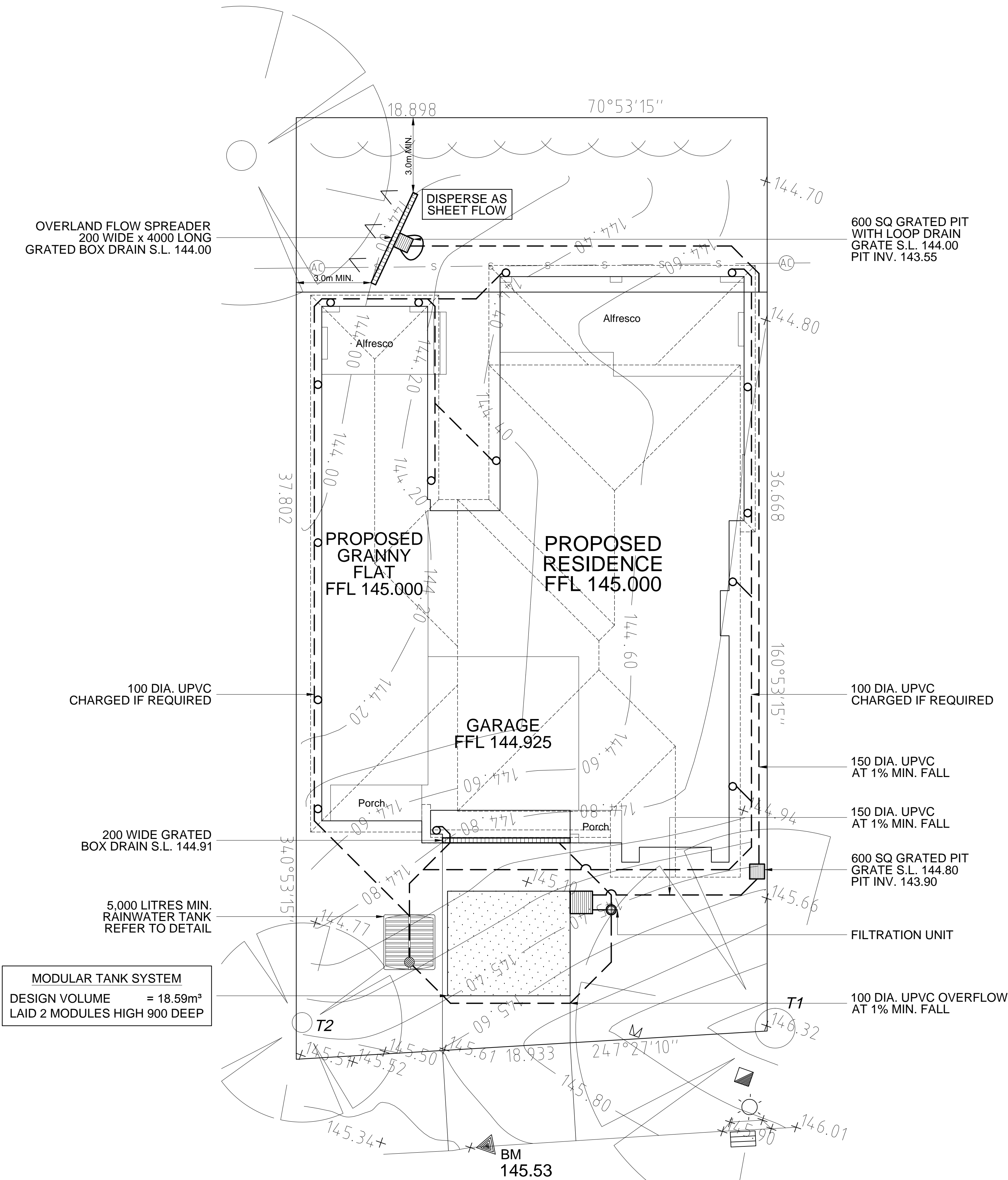
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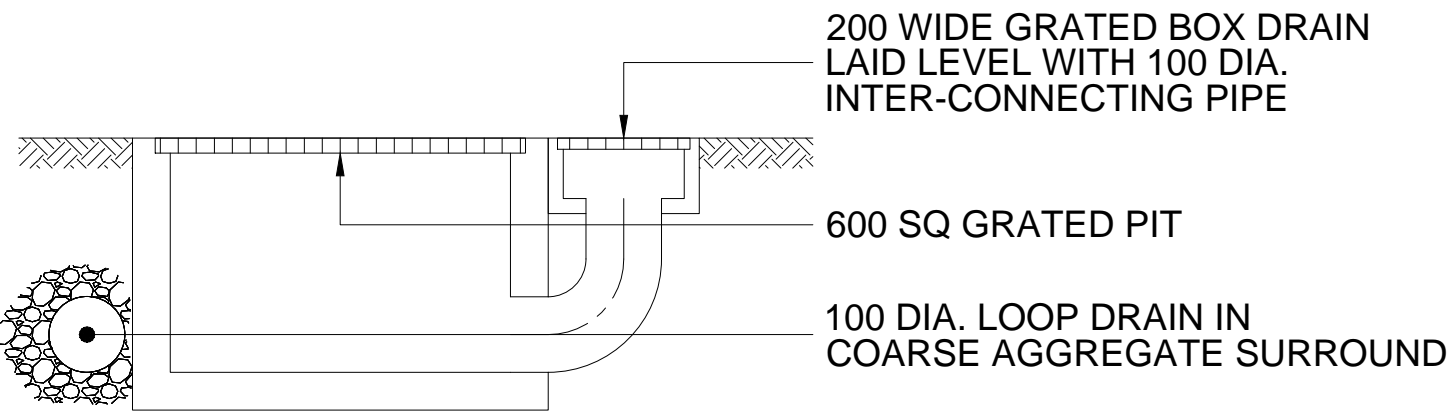
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NOTE

DESIGN GUTTERS / DOWNPIPES FOR 5 MINUTE 1 IN 100 YEAR STORM. MAX. AREA TO SINGLE DOWNPIPE = 20m². FROM CHARTS PROVIDE STRAMIT QUAD 125 GUTTER (125WIDE x 70 HIGH) OR EQUIVALENT 90mm DIA. DOWNPIPES. LOCATION & NUMBER OF DOWNPIPES TO BE STRICTLY ADHERED TO

CALCULATIONS	
SITE AREA	= 704.0m²
DETENTION REQUIREMENT	= 23.2m³
BASIX REQUIREMENT	= 5.0m³
MAX. 50% ALLOWABLE OFFSET	
OFFSET 5.0m³ RAINWATER TANK	
ADJUSTED DETENTION	= 18.2m³

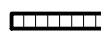


GRATED PIT & LEVEL SPREADER

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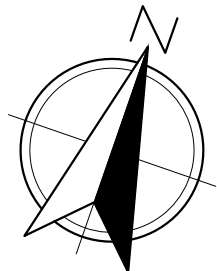
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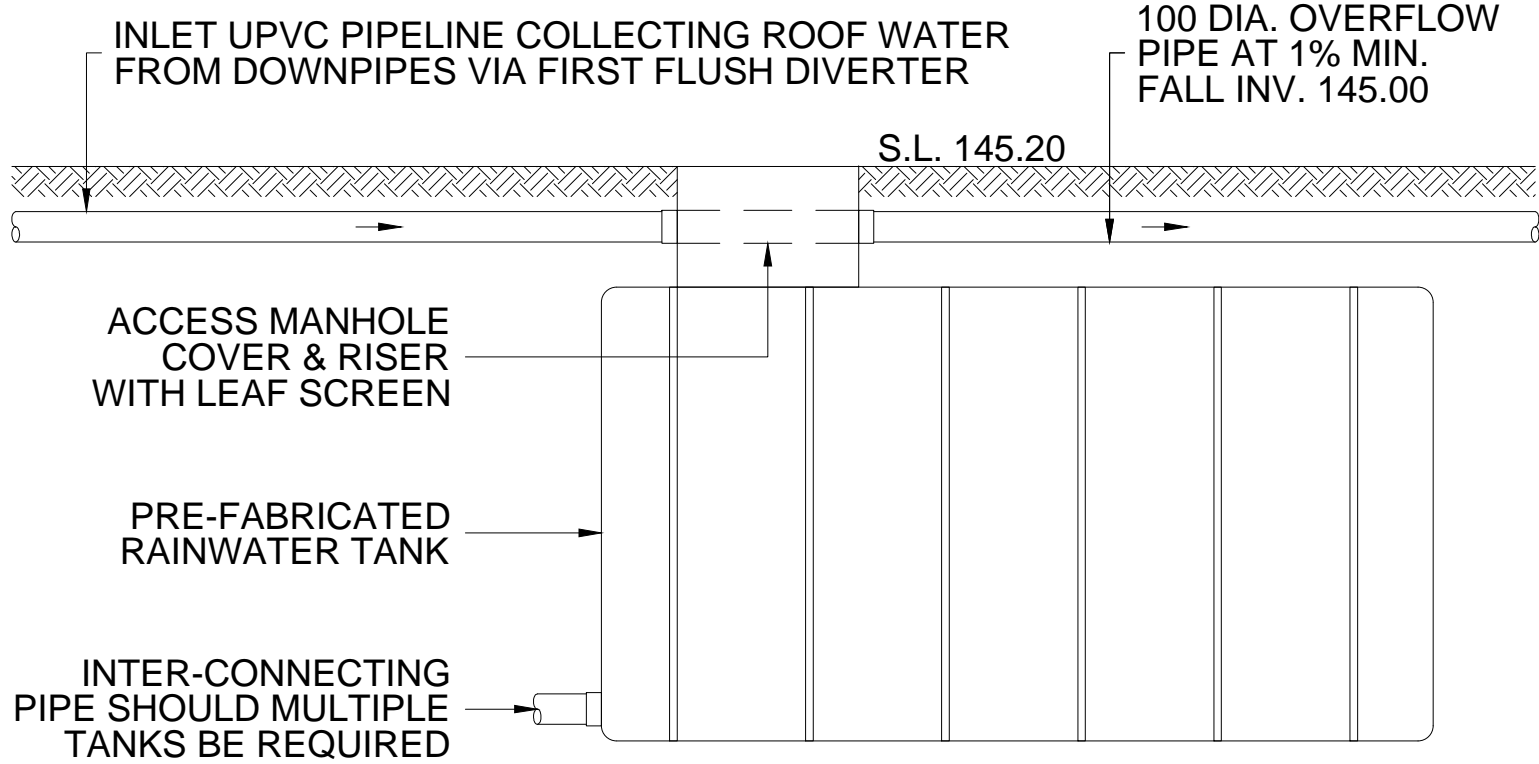


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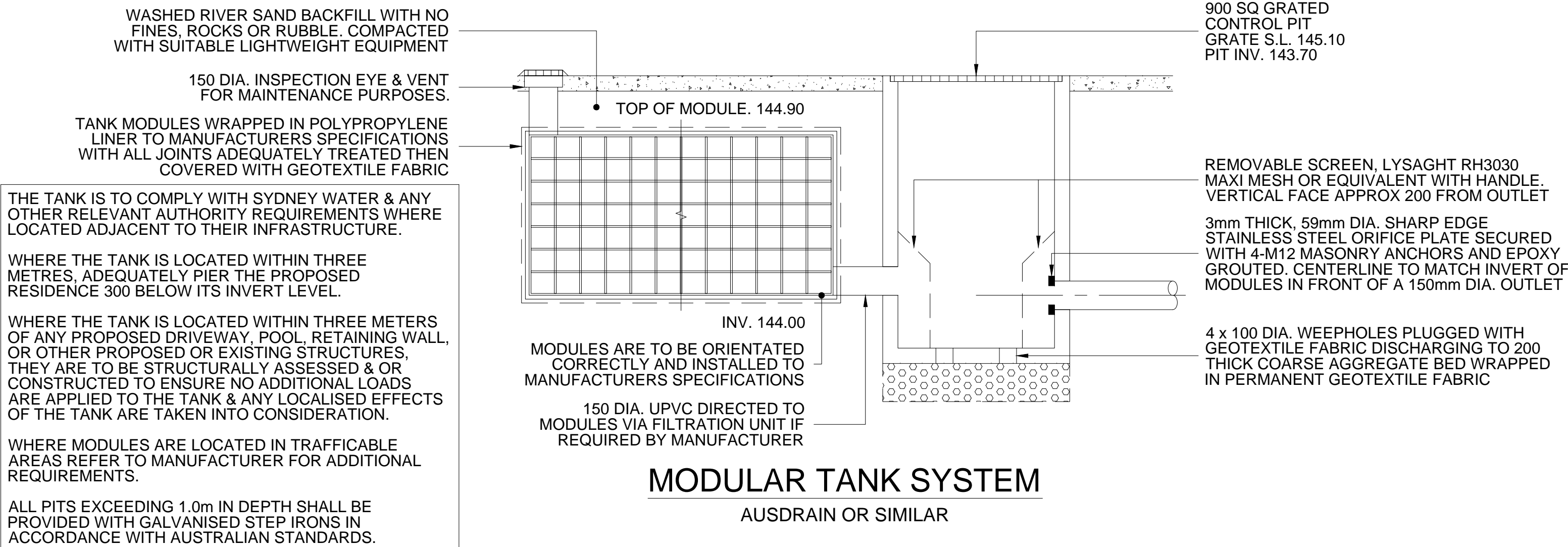
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- ROOF GUTTER SCREENING RECOMMENDED
- VOLUME IS EXCLUSIVE OF AIRSPACE ABOVE OVERFLOW PIPE INVERT
- U.N.O TANK SIZE & CONNECTED SERVICES BE IN ACCORDANCE WITH BASIX REPORT

TYPICAL BELOW GROUND RAINWATER TANK



MODULAR TANK SYSTEM

AUSDRAIN OR SIMILAR