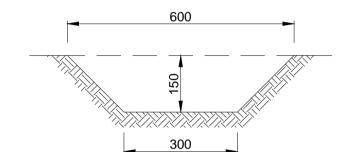


ABOVE GROUND DETENTION

REQUIRED VOLUME = 6.9m³

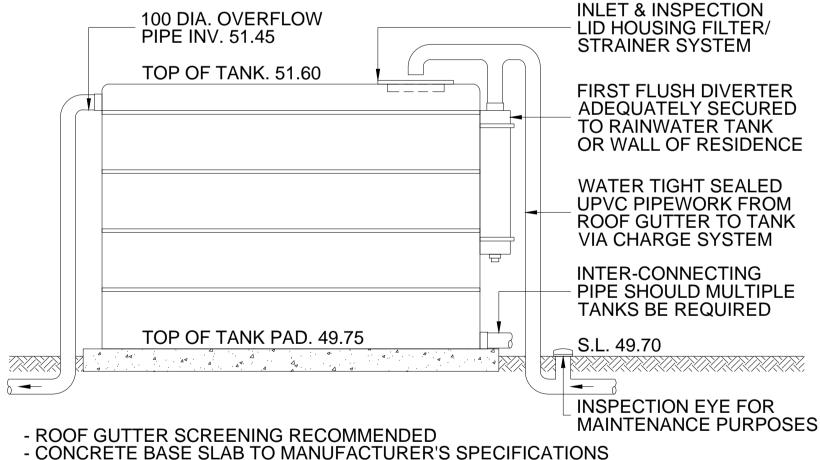
AREA = 24.9m² x 0.30 MIN.

VOLUME PROVIDED = 7.4m³



 PROVIDE GRASSED, PEBBLED OR SIMILAR WITH A DISHED PROFILE
 ENSURE NO FLOATABLE MATERIAL IS PLACED IN FLOWPATH (CHIPBARK ETC.)

TYPICAL SWALE



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

TYPICAL ABOVE GROUND RAINWATER TANK

DWELLING A & B

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.

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 COUNCILS SPECIFICATIONS.

- 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 ACCORDANCI WITH AUSTRALIAN STANDARDS AND COUNCILS SPECIFICATIONS.
- ALL PIPES, JOINTS, VALVES, SUB-SOIL DRAINS ETC. SHALL CONFORM AND BE PLACED BACK FILLED TO THE RELEVANT AUSTRALIAN STANDARDS.
- ALL BALCONIES AND ROOFS ARE TO INCORPORATE A SAFETY OVERFLOW.
- SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS AND EMBANKMENTS, AND CONNECTED TO THE STORM WATER DRAINAGE SYSTEM.
- THE NUMBER AND LOCATION OF DOWNPIPES ARE INDICATIVE ONLY AND ARE TO BE LOCATED BY THE BUILDER IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.

RELOCATING YARD PITS TO SUIT FINAL LANDSCAPING IS PERMITTED. ADDING OR DELETING PITS SHALL BE SUBJECT TO DESIGN ENGINEERS APPROVAL.
PROVIDE STEP IRONS TO TANKS AND PITS GREATER THAN 1000 DEEP, 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.
NOT WITHSTANDING THE EXTENT OF THE DRAINAGE SHOWN ON THIS DRAWING, ADDITIONAL WORK OR MEASURES MAY BE REQUIRED SHOULD UNDISCLOSED FEATURES OR ALTERED SITE CONDITIONS WARRANT IT.
ADEQUATE EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE INSTALLED ON THE INSIDE OF SITE FENCING PRIOR TO SITE WORKS AND ADEQUATELY CLEANED AND MAINTAINED FOR THE DURATION OF WORKS.
ALL DISTURBED AREAS ARE TO BE STABILISED UPON THE COMPLETION OF BUILD DESCRIPTION.

ADEQUATELY CLEANED AND MAINTAINED FOR THE DURATION OF WORKS.

- ALL DISTURBED AREAS ARE TO BE STABILISED UPON THE COMPLETION OF BUILDING WORKS. AREAS OUTSIDE THE SUBJECT PROPERTY MUST BE RESTORED TO ITS ORIGINAL CONDITION, TO COUNCILS SATISFACTION.

- BARE SURFACES SHALL BE KEPT MOIST TO REDUCE DUST LEVELS IF REQUIRED.

- KEEP FOOTPATH RESERVE FREE OF CONSTRUCTION MATERIAL AND WASTE BINS.

- ALL PROPOSED STRUCTURES SUCH AS RETAINING WALLS, DETENTION, ABSORPTION, AND RAINWATER TANKS BUILT ADJACENT TO OR OVER EASEMENTS & SEWERS ARE TO BE CONSTRUCTED TO RELEVANT AUTHORITY REQUIREMENTS.

- NO SEWER VENTS, GULLY PITS OR SIMILAR ARE TO BE LOCATED BELOW THE MAXIMUM WATER SURFACE LEVEL IN DETENTION BASINS.

- ANY FENCES THAT MAY DIVERT OVERLAND FLOWS IS TO BE RAISED 100mm.

- ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION.

BUILDER/SUB-CONTRACTORS ARE TO BE IMPLEMENTED DURING CONSTRUCTION. NO WORK IS TO COMMENCE UNTIL SUPERVISOR/BUILDER HAS IDENTIFIED AND APPROPRIATELY ACTED ON ANY POTENTIAL HAZARDS.

- CONFINED SPACES SIGNAGE IS TO BE INSTALLED IN ACCESSIBLE UNDERGROUND TANKS TO WORK COVER SPECIFICATIONS.

- DRIVEWAY CROSSING IS INDICATIVE ONLY AND SHALL BE CONSTRUCTED TO COUNCIL SPECIFICATIONS.

RAINWATER TANK: IF REQUIRED

- ALL PIPE WORK IS TO BE UNDERTAKEN BY LICENSED PLUMBER. A FIRST FLUSH DEVICE MUST FITTED WHERE APPROPRIATE.

- THE TANK SHOULD BE PRE-FABRICATED, STRUCTURALLY SOUND AND DESIGNED FOR HYDROSTATIC AND BUOYANCY FORCES WHERE APPROPRIATE.

- 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

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.

- ANY APPROPRIATE BACK FLOW PREVENTION MEASURES ARE TO BE INSTALLED AND MAINTAINED TO PREVENT CONTAMINATION OF WATER SUPPLY.

- ANY PUMP AND ELECTRICAL CONNECTION ARE TO BE INSTALLED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND SATISFY STATUTORY NOISE LEVELS.

- 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 STORM WATER LINES ARE CHARGED INTO THE RAINWATER TANK PROVIDE CLEANING EYES TO BASE OF DOWN PIPES AND ENSURE DOWNPIPES ARE WATERTIGHT SEALED TO GUTTER LEVEL.

PROVIDE CLEANING EYES TO BASE OF DOWN PIPES AND ENSURE DOWNPIPI ARE WATERTIGHT SEALED TO GUTTER LEVEL.
- RAINWATER TANK LOCATION IS INDICATIVE ONLY AND MAY BE SUBJECT TO RELOCATION DEPENDANT ON PREVAILING SITE CONDITIONS.
- WHERE PIPES ARE EXPOSED TO DIRECT SUNLIGHT THEY ARE TO BE ADEQUATELY PROTECTED FROM UV RADIATION.

_	STORMWATER LINES	S.L.	FINISHED SURFACE LEVEL
	DOWNPIPE LOCATION	—s—	APPROX. SEWER LOCATION
	INVERT LEVEL (PIPE / PIT)		200 WIDE x 100 DEEP HOT DIP

A ORIGINAL ISSUE T.N 29/04/20

HYDRAULIC DETAIL PLAN

MR & MRS SCATURCHIO

ADDRESS: LOT 17, SEC. 1 (NO. 27)
HOPE STREET, SEAFORTH

COUNCIL: MANLY

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

SHEET NO:

JOB NO:

CLIENT:

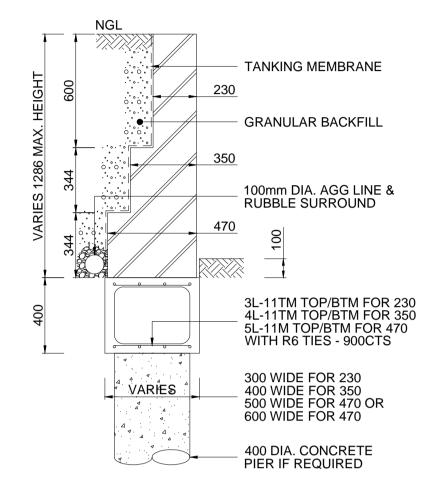






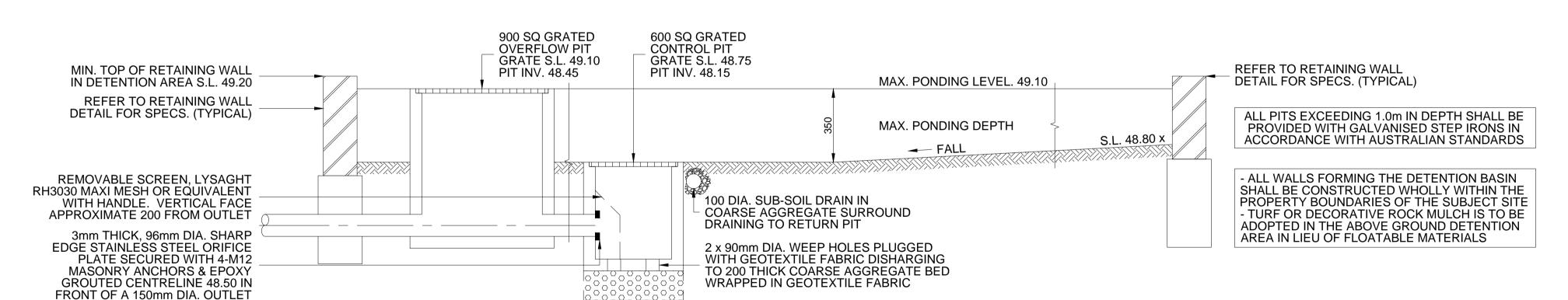
89786PB

PO BOX 91 KINGSGROVE NSW 2208 Level 2, 103 VANESSA ST KINGSGROVE NSW 2208 PTY LTD PH: (02) 9554 9311 FAX: (02) 9554 9764 EMAIL: admin@rafzan.com.au



WHERE THE RETAINING WALL IS LOCATED WITHIN THE ZONE OF INFLUENCE OF ANY PROPOSED RESIDENCE, DRIVEWAY, POOL OR OTHER PROPOSED OR EXISTING STRUCTURE, THEY ARE TO BE STRUCTURALLY ASSESSED & OR CONSTRUCTED TO ENSURE NO ADDITIONAL LOADS ARE APPLIED TO THE RETAINING WALL

TYPICAL RETAINING WALL



ABOVE GROUND DETENTION

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

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 - 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 CRAFED BITS BY SITE BE CRAFE.

- ALL LOCALISED SURFACE RON 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 COUNCILS SPECIFICATIONS. - ALL PIPES, JOINTS, VALVES, SUB-SOIL DRAINS ETC. SHALL CONFORM AND BE PLACED BACK FILLED TO THE RELEVANT AUSTRALIAN STANDARDS.
- ALL BALCONIES AND ROOFS ARE TO INCORPORATE A SAFETY OVERFLOW.
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- ANY DETENTION SYSTEM SHALL IF REQUIRED BY COUNCIL HAVE A PERMANENT MARKER PLATE FIXED IN A PROMINENT POSITION TO COUNCIL REQUIREMENTS.

- NOT WITHSTANDING THE EXTENT OF THE DRAINAGE SHOWN ON THIS DRAWING,

ADDITIONAL WORK OR MEASURES MAY BE REQUIRED SHOULD UNDISCLOSED FEATURES OR ALTERED SITE CONDITIONS WARRANT IT.

- ADEQUATE EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE INSTALLED ON THE INSIDE OF SITE FENCING PRIOR TO SITE WORKS AND ADEQUATELY CLEANED AND MAINTAINED FOR THE DURATION OF WORKS.

- ALL DISTURBED AREAS ARE TO BE STABILISED UPON THE COMPLETION OF BUILDING WORKS. AREAS OUTSIDE THE SUBJECT PROPERTY MUST BE RESTORED TO ITS ORIGINAL CONDITION, TO COUNCILS SATISFACTION.

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- ANY FENCES THAT MAY DIVERT OVERLAND FLOWS IS TO BE RAISED 100mm. ALL SITE SAFETY MEASURES AND WORK METHOD STATEMENTS PREPARED BY

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RAINWATER TANK: IF REQUIRED - RAINWATER TANKS ARE TO BE SIZED AND CONNECTED TO SERVICES SPECIFIED IN THE BASIX REPORT AND INSTALLED IN ACCORDANCE WITH

MANUFACTURES SPECIFICATIONS. - ALL PIPE WORK IS TO BE UNDERTAKEN BY LICENSED PLUMBER. A FIRST FLUSH DEVICE MUST FITTED WHERE APPROPRIATE. - THE TANK SHOULD BE PRE-FABRICATED, STRUCTURALLY SOUND AND DESIGNED FOR HYDROSTATIC AND BUOYANCY FORCES WHERE APPROPRIATE.
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- ANY PUMP AND ELECTRICAL CONNECTION ARE TO BE INSTALLED BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND SATISFY STATUTORY NOISE LEVELS. 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 STORM WATER LINES ARE CHARGED INTO THE RAINWATER TANK PROVIDE CLEANING EYES TO BASE OF DOWN PIPES AND ENSURE DOWNPIPES ARE WATERTIGHT SEALED TO GUTTER LEVEL

RAINWATER TANK LOCATION IS INDICATIVE ONLY AND MAY BE SUBJECT TO

RELOCATION DEPENDANT ON PREVAILING SITE CONDITIONS.
- WHERE PIPES ARE EXPOSED TO DIRECT SUNLIGHT THEY ARE TO BE ADEQUATELY PROTECTED FROM UV RADIATION. STORMWATER LINES S.L. FINISHED SURFACE LEVEL DOWNPIPE LOCATION ——S— APPROX. SEWER LOCATION

200 WIDE x 100 DEEP HOT DIP GALV. GRATED BOX DRAIN

A ORIGINAL ISSUE T.N 29/04/20

HYDRAULIC DETAIL PLAN

MR & MRS SCATURCHIO CLIENT:

ADDRESS: LOT 17, SEC. 1 (NO. 27) HOPE STREET, SEAFORTH COUNCIL: MANLY

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

SHEET NO:

89786PB JOB NO:





PTY LTD PH: (02) 9554 9311 FAX: (02) 9554 9764 ABN: 35 04 047 466 PO BOX 91 KINGSGROVE NSW 2208 Level 2, 103 VANESSA ST KINGSGROVE NSW 2208 EMAIL: admin@rafzan.com.au