

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.
 - 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 UP 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.
 - PROVIDE STEP UP TO TANKS AND PITS GREATER THAN 1000 DEEP. PERMANENTLY FIXED BY DRILLING AND EPOXY GROUTING. SPACED VERTICALLY AT 300CTS WITH ALTERNATE RUNGS OFFSET 200mm.
 - 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 COUNCIL'S 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. 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**
- RAINWATER TANKS ARE TO BE SIZED AND CONNECTED TO SERVICES SPECIFIED IN THE BASIX REPORT AND INSTALLED IN ACCORDANCE WITH MANUFACTURERS 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.
 - 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.
 - 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 ABSORBENT 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
INV.	INVERT LEVEL (PIPE / PIT)		200 WIDE x 100 DEEP HOT DIP GALV. GRATED BOX DRAIN

B	OSD ADDED - GARAGE FFL	M.S	13/09/22
A	ORIGINAL ISSUE	M.S	23/08/22

HYDRAULIC DETAIL PLAN

CLIENT:	SARA & RICHARD CRAMPTON
ADDRESS:	LOT 20 (NO. 28) ETHEL STREET, BALGOWLAH
COUNCIL:	NORTHERN BEACHES
SCALE:	A1 - 1:100, A3 - 1:200
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