### **GENERAL**

- FINAL LOCATION OF NEW DOWNPIPES TO BE DETERMINED BY
- BEFORE PROCEEDING WITH WORK BUILDER/ARCHITECT AT TIME OF CONSTRUCTION.
  THESE DRAWINGS TO BE READ IN CONJUNCTION WITH
  ARCHITECTS AND OTHER CONSULTANTS DRAWINGS. ANY DISCREPANCIES TO BE REFERRED TO THE ENGINEER
- ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH AS/NZS 3500.3:2018 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS.
- ALL DIMENSIONS AND LEVELS TO BE VERIFIED BY BUILDER ON-SITE PRIOR TO COMMENCEMENT OF WORKS. THESE DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.
- ALL SURVEY INFORMATION AND PROPOSED BUILDING AND OTHERS FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY
- WORKS SHALL BE MAINTAINED IN A STABLE CONDITION AND THAT NO PART OF THE WORKS SHALL BE OVERSTRESSED AS A RESULT OF THE CONSTRUCTION PROCEDURES OR THE APPLIED CONSTRUCTION LOADS. DURING CONSTRUCTION IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT ALL PARTS OF THE CONDITION,
- INSTALLATION, REMOVAL OF TEMPORARY WORKS, COMPLIANCE WITH RELEVANT AUTHORITY REQUIREMENTS, INCLUDE, BUT NOT BE LIMITED TO, DESIGN, CERTIFICATION, FABRICATION, TRANSPORT, CONSTRUCTION LOADING, PROJECT ENGINEER. THE TEMPORARY WORKS SHALL THE BUILDER SHALL BE RESPONSIBLE FOR ALL TEMPORARY WORKS NECESSARY TO COMPLETE THE PROJECT, NOT THE TEMPORARY ACCESS REQUIREMENTS, ETC.
- THE BUILDER SHALL NOMINATE IN THEIR TENDER A SUITABLY QUALIFIED ENGINEER (BUILDER'S ENGINEER ) REQUIRED FOR ALL TEMPORARY WORKS.
- ALL STORMWATER DRAINAGE PIPES ARE TO BE 100mm DIAMETER uPVC AT MINIMUM 1% GRADE UNLESS NOTE OTHERWISE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND WHICH MAY AFFECT/BE AFFECTED BY THIS DESIGN PRIOR TO COMMENCEMENT OF WORKS. LEVEL ALL EXISTING SERVICES OR OTHER STRUCTURES
- ALL PITS WITHIN DRIVEWAYS TO BE 150mm THICK CONCRETE OR EQUAL.
- <u>10.</u> REQUIREMENTS RELATING TO PROTECTION AGAINST ANIMAL INFESTATION (BORERS, TERMITES, ETC.). THIS SHALL INCLUDE EXTERNAL STRUCTURES (POSTS, RETAINING WALLS, THE BUILDER SHALL COMPLY WITH ALL STATUTORY
- 1 ALL LEVELS SHOWN ON THESE DRAWINGS ARE TO FINISHED SURFACE, UNLESS NOTED OTHERWISE. ALL EXISTING SURFACE LEVELS SHOWN ON THESE DRAWINGS HAVE INTERPOLATED FROM THE SURVEY. THE SURVEY LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN. BEFORE COMMENCING ANY PART OF THE WORK THE BUILDER SHALL VERIFY ALL LEVELS AND MAKE ALLOWANCE FOR ANY VARIATION.

# RAINWATER RE-USE SYSTEM NOTES

- 1. TOWNWATER CONNECTION TO RAINWATER TANK TO BE TO THE SATISFACTION OF SYDNEY WASTE. THIS MAY REQUIRE PROVISION OF:
- a. PERMANENT AIR GAP
- b. A BACKFLOW PREVENTION DEVICE.
  c. NO DIRECT CONNECTION BETWEEN TOWN WATER
- SUPPLY AND THE RAIN WATER SUPPLY.
  d. AN APPROVED STOP VALVE AND/OR PRESSURE LIMITING VALVE AT THE RAINWATER TANK.
- PROVIDE AT LEAST ONE (1) EXTERNAL HOSE COCK ON THE TOWN WATER SUPPLY FOR FIRE FIGHTING.
   PROVIDE APPROPRIATE FLOAT VALVES AND/OR SOLENOID
- 4. ALL PLUMBING WORKS ARE TO CARRIED OUT BY LICENSED PLUMBERS IN ACCORDANCE WITH AS 3500.1 NATIONAL PLUMBING AND DRAINAGE CODE.
- 5. PRESSURE PUMP ELECTRICAL CONNECTION TO BE CARRIED
- OUT BY LICENSED ELECTRICIAN.
- 6. ONLY ROOF RUN-OFF IS TO BE DIRECTED TO THE RAINWATER TANK. SURFACE WATER INLETS ARE NOT TO BE CONNECTED.
  7. PIPE MATERIALS FOR RAINWATER SUPPLY PLUMBING ARE TO BE APPROVED MATERIALS TO AS 3500 PART 1 SECTION 2 AND TO BE FOR ABOVE GROUND PIPES BY USING ADHESIVE PIPE MARKERS (MADE IN ACCORDANCE WITH AS1345). CLEARLY AND PERMANENTLY IDENTIFIED "RAINWATER". THIS MAY BE ACHIEVED FOR BELOW GROUND PIPES USING IDENTIFICATION TAPE (MADE IN ACCORDANCE WITH AS 2648) OR
- 8. EVERY RAINWATER SUPPLY OUTLET POINT AND THE RAINWATER TANK ARE TO BE LABELED "RAINWATER" ON A METALLIC SIGN IN ACCORDANCE WITH AS 1319.
- 9, ALL INLETS AND OUTLETS TO THE RAINWATER TANK ARE TO HAVE SUITABLE MEASURES PROVIDED TO PREVENT
- MOSQUITO AND VERMIN ENTRY.

  10. SYSTEM TO COMPLY WITH SYDNEY WATER REQUIREMENTS AND ANY CONDITIONS OF LOCAL COUNCIL DEVELOPMENT

### DRAINAGE NOTES

- ALL DRAINAGE LEVELS SHALL BE CONFIRMED ON SITE, PRIOR TO CONSTRUCTION COMMENCING.
- ALL PIPES WITHIN THE PROPERTY TO BE MIN. 100 DIA UPVC @ 1 % MIN. GRADE, UNO.
- ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOK" OR APPROVED EQUIVALENT GRATES: LIGHT DUTY FOR LANDSCAPED AREAS.
- 4. PITS WITHIN THE PROPERTY MAY BE CONSTRUCTED AS: - HEAVY DUTY WHERE SUBJECTED TO VEHICULAR TRAFFIC
- 1) PRECAST STORMWATER PITS
  2) CAST INSITU MASS CONCRETE
  3) CEMENT RENDERED 230mm BRICKWORK SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION
- 5. ENSURE ALL GRATES TO PITS ARE SET BELOW FINISHED SURFACE LEVEL WITHIN THE PROPERTY. TOP OF PIT RL'S ARE APPROXIMATE ONLY AND MAY BE VARIED SUBJECT TO APPROVAL OF THE ENGINEER. ALL INVERT LEVELS ARE TO BE ACHIEVED.
- 7. ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE. 6. ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
- 8. PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.

- 9 TRENCH BACK FILL IN ROADWAYS SHALL COMPRISE SHARP, CLEAN GRANULAR BACK FILL IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION TO TAMPING USING A FLAT PLATE VIBRATOR NON-TRAFFICABLE AREAS TO BE COMPACTED BY RODDING AND
- 10. WHERE A HIGH EARLY DISCHARGE (HED) PIT IS PROVIDED ALL PIPES ARE TO BE CONNECTED TO THE HED PIT, UNO.
- 11. DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.
- 12. COLORBOND OR ZINCALUME STEEL BOX GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP
- 13. EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 BEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL, UNO.
- 14. SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM. UNO.

### PIT SIZES AND DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)
UP TO 450mm	450x450
450mm TO 600mm	600x600 U.N.O
600mm TO 900mm	600x900 U.N.O
FROM 900mm	900x900 (WITH STEP IRON)

## CONCRETE PAVEMENT

- 1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- 2. PAVEMENT MATERIAL SHALL CONSIST OF APPROVED OR RIPPED SAND STONE, NATURAL GRAVEL OR FINE CRUSH AS PER THE RELENT COUNCIL AUTHORITY SPECIFICATION.
- 3. PAVEMENT MATERIAL SHALL BE SPREAD IN LAYERS NOT EXCEEDING 150 AND NOT LESS 75 COMPACTED THICKNESS.
- 4. PAVEMENT MATERIAL SHALL BE SIZED AND OF A STANDARD **OUTLINED IN AS1141.**
- 5. CRUSHED OR RIPPED SANDSTONE SHALL BE MINUS 75 NOMINAL SIZE DERIVED FROM SOUND, CLEAN SANDSTONE SHALE AND OTHER DELETERIOUS MATERIALS SHALL BE MINUS 75 NORMAL SIZE DERIVED FROM SOUND, CLEAN SANDSTONE FREE FROM OVERBURDEN, CLAY SEAMS,
- 6. PAVEMENT MATERIALS SHALL BE COMPACTED BY SUITABLE MEANS TO SATISFY THE FOLLOWING MINIMUM SPECIFICATIONS (AS PER AS1289.2)

ASPHALTIC CONCRETE 98%MOD AND SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION. BASE COURSE SUB-BASE DESCRIPTION 98%MOD 98%MOD MEDIUM DENSITY RADIO

7. TESTING FOR EACH LAYER SHALL BE UNDERTAKEN BY AN A.T.A. REGISTERED LABORATORY IN ACCORDANCE WITH AS 1289, AT NOT MORE THAN 50m INTERVALS AND A MINIMUM OF TWO PER LAYER. FURTHER FREQUENCY OF TESTING SHALL BE NO LESS THAN THAT REQUIRED BY AS3978.

## DNCRETE PAVEMENT

- SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- OTHERWISE SPECIFIED IN THE DRAWINGS. PROVIDE JOINTING AT MINIMUM 6000 MAX. INTERVALS OR AS
- STRENGTH OF 32MPa AT 28 DAYS IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION, UNO. CONCRETE SHALL COMPRISE A MIN. COMPRESSIVE
- OUTLINED IN EARTHWORKS.

  CONCRETE KERB AND GUTTER SHALL COMPRISE A MINIMUM ANY SUB-BASE MATERIAL SHALL BE COMPACTED AS
- COMPRESSIVE STRENGTH OF 25MPa, UNO.
- CONCRETE WORKS ARE TO BE CURED BY ONE OF THE
- OF 7 DAYS COMMENCING IMMEDIATELY AFTER POURING. ii) USING AN APPROVED CURING COMPOUNDED FOR A MINIMUM i) WETTING TWICE DAILY FOR THE FIRST THREE DAYS;

## PAVED AREAS NOTES

- SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- 2 MANUFACTURER'S SPECIFICATION. ALL PAVERS ARE TO BE PLACED IN ACCORDANCE WITH THE

ω

TRAFFICABLE AREAS:

- SUB-BASE TO BE 150 COMPACTED THICKNESS DGS75.
  SUB-BASE TO BE SUITABLY COMPACTED TO MEDIUM DENSITY BEDDING. SUB-BASE TO EXTEND AT LEAST 200 BEYOND PAVED SURFACE. 98% MOD. PAVERS TO BE 80 THICK INTERLOCKING PAVERS ON 50 SAND
- NON TRAFFICABLE AREAS: SUB-BASE AS PER TRAFFICABLE AREAS

#### Project

**Engineering Consultant** 

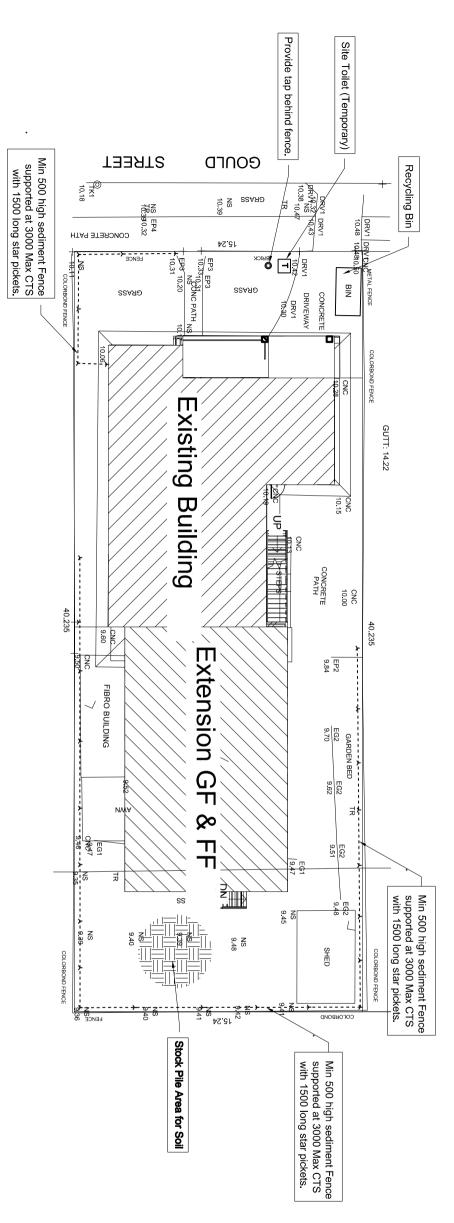
Campsie, NSW 2194 at 6 Gould Street Proposed Extension

**Engineering Solutions** 

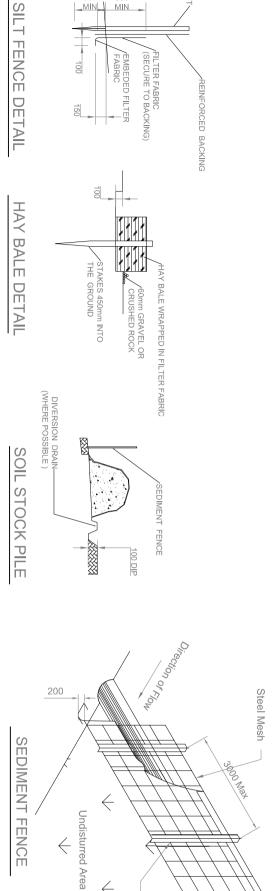
Mobile: 0434876766

GENERAL NOTES

DE2309	Project Number Approved		Scale		25/10/2023	Date
	Approved	Kevin	Drawn		RX	Design
	Revision		(	GN - 01		Drawing No.



# Erosion & Sediment Control Plan



 $\leftarrow$ 

Posts Driven 0.6m into Ground

600 Max

## **EROSION CONTROL NOTES**

- ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH "MANAGING URBAN STORMWATER, SRD EDITION" PRODUCED BY THE DEPARTMENT OF HOUSING, AND "CANTERBURY-BANKSTOWN DCP 2023"
- ALL EROSION SILTATION CONTROL DEVICES ARE TO BE PLACED PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WORKS, AND ALL SILT TRAPS ARE TO HAVE DEPOSITED SILT REMOVED REGULARLY DURING CONSTRUCTION.
- ALL TRESS ARE TO BE PRESERVED UNLESS INDICATED OTHERWISE ON THE ARCHITECTS OR LANDSCAPE ARCHITECT'S DRAWINGS. EXISTING GRASS COVER SHALL BE MAINTAINED EXPECT IN ARES CLEARED FOR BUILDINGS, PAVEMENTS, ETC.
- STABILISE/REVEGATATE ALL DISTURBED AREAS PROGRESSIVELY WHERE PRACTICAL.
- 5 INSTALL TEMPORARY SEDIMENT BARRIORS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER.
- ADDITIONAL VEHICLES MUST PARK ON ROAD NOT ON FOOTPATH. PUBLIC FOOTPATH ADJACENT TO SITE MUST NOT BE OBSTRUCTED AND MUST BE SAFE FOR PEDESTRIAN ACCESS.
- ENSURE FENCE IS KEYED AT BOTH ENDS INTO GROUND, WITH BASE TURN UPSLOPE.
- WHERE SEDIMENT FENCE IS NEAR STREET, ERECT FENCE WITHIN DEVELOPMENT SIDE OF TURF FILTER STRIPS AND PROPERTY BOUNDARY.
- SEDIMENT FENCE FILTER CLOTH TO BE FASTENED SECURELY TO WIRE FENCE WITH TIES SPACED EVERY 600MM. OVERLAP ADJOINING FILTER CLOTH BY 150MM AND FOLDING OVER.
- 10 DIVERT UPSLOPE WATER AROUND WORK SITE AND STABILISE CHANNELS.

11 LAY KREB-SIDE TURF FILTER STRIP TO TRAP EXCESS SEDIMENT.

- 12 CONTAMINATED WATER WITH SEDIMENT FROM A SEDIMENT BASIN OR EXCAVATION PIT IS TO BE FLOCCULATED/FILTERED TO LOWER SUSPENDED SOIL LOAD TO LESS THAN 50 MILLIGRAMS PER LITER.
- 13 SOIL, SAND AND GRAVEL ARE NOT TO BE STOCKPILED ON ROADWAYS OR IN DRAINAGE AREAS.
- 14 WASH AREA MUST BE SLIGHTLY DEPRESSED TO COLLECT WASTE MATERIAL.
- 15 APPLY DUST CONTROL MEASURES TO REDUCE SURFACE AND AIRBOURE MOVEMENT OF SEDIMENT.
- 16 NOT WITHSTANDING DETAILS SHOWN, IT IS THE CONTRACTOR SOLE RESPONSIBLY TO ENSURE THAT ALL SITE ACTIVITIES COMPLY WITH THE REQUIREMENTS OF THE CLEAN WATER ACT.

# **EROSIC**

**Engineering Consultant** 

500 MIN

500 MIN

(EA ID: 1380455, FIEAust CPEng NER)

Mobile: 0434876766

**ENGINEERING SOLUTIONS** 

at 6 Gould Street

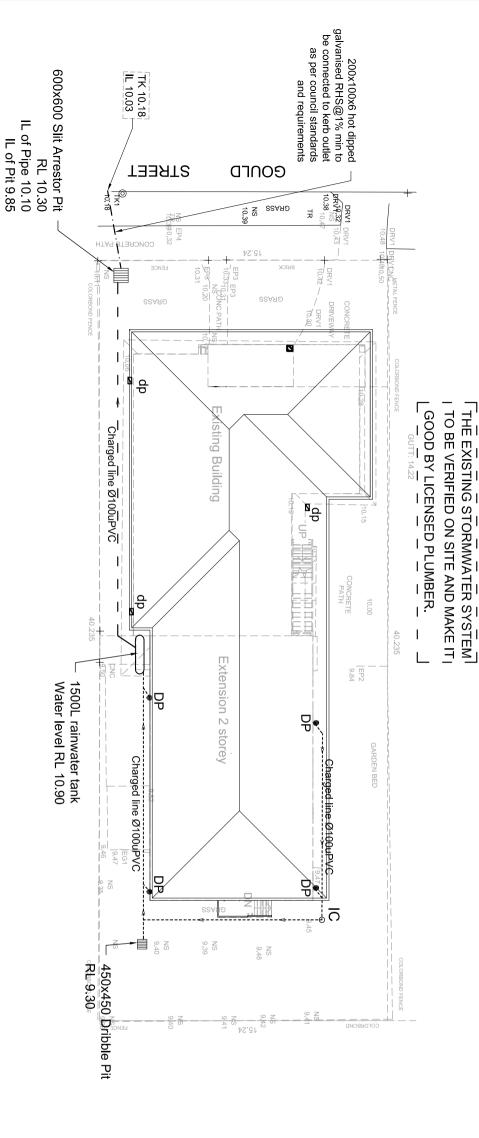
Campsie, NSW 2194

Proposed Extension

Title

$\geq$	
<u>∞</u>	
ഗ	
₹	
$\overline{\mathbb{H}}$	
=	
$\circ$	
5	
$\leq$	
Z	
9	
<u>P</u>	
$\triangleright$	
Z	

	Ź	
Project Number Approved DE2309	Scale	Date 25/10/2023
Approved	Drawn Kevin	Design RX
Revision		Drawing No. CE001



### NOTES

- ALL LINES ARE TO BE MIN. Ø100 UPVC UNLESS NOTED OTHERWISE
- IT IS THE BUILDER'S REASONABILITY PRIOR TO VERIFIED ON SITE PRIOR TO THE COMMENCEMENT LOCATE & LEVEL. OF ANY WORK ALL DESIGN LEVELS SHOWN ON PLANE SHALL BE TO THE COMMENCEMENT OF ANY EARTHWORKS. ALL EXISTING SERVICES PRIOR
- ALL PIPES TO HAVE MIN 200MM COVER IF OCATED WITHIN PROPERTY
- AS/NZ 3500.3:2021 AND COUNCIL SPECIFICATIONS ALL WORK TO BE DONE IN ACCORDANCE WITH
- SIZE, LOCATION & QUANTITY TO BE DETERMINED INDICATIVE ONLY. DOWN PIPES & FLOOR WASTE AUSTRALIAN STANDARDS. BY BUILDER & IN ACCORDANCE WITH RELEVANT LOCATION OF DOWN PIPES & FLOOR WASTES ARE
- THIS PLAN IS TO BE READ IN CONSTRUCTION WITH THE ARCHITECTURAL , LANDSCAPE AND STRUCTURAL PLANS
- REFEREED TO THE DESIGN ENGINEER FOR ANY DISCREPANCIES OR OMISSIONS SHALL BE RESOLUTION.
- ENSURE LEAF LITTER CANNOT ENTER THE DOWN ALL GUTTERS WILL BE FITTED WITH LEAF GUARDS AND SHOULD BE INSPECTED AND CLEANED TO

# STORMWATER DRAINAGE PLAN

### LEGEND:

- Ø100uPVC charged line to rainwater tank
- ျင

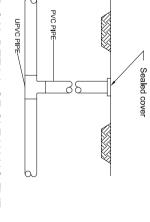
Outflow Pip

- Proposed a pit
- 200x100x6.0 RHS@1% to Kerb outlet
- Ø100uPVC over flow pipe (charged line) from rainwater tank

SL82 on top

- DP Proposed Rainwater Downpipe Ø100 uPVC
- Existing Rainwater Downpipe 100x50 colorbond
- Note: All RL and IL refer to plan
- Two ½ Brick Keepers 190 Brick wall or 150 RC wall with N12-250 Both way SILT ARRESTOR PIT 200 Inlet Pipe In Galvaized Guide Channels LYSAGHT Galvaized

  Maxmesh RH3030 Screen –Four 100 Dia Seepage Holes
  - TYPICAL DETAIL OF CLEANING EYE



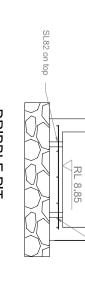
To water tank

Seepage Hole Four 100 Dia N12-250 Both way

190 Brick wall or 150 RC wall with

Screw Cap with hole

RL 9.30



### DRIBBLE PIT

### **Engineering Consultant**



(EA ID: 1380455, FIEAust CPEng NER)

Mobile: 0434876766

Project **Proposed Extension** 

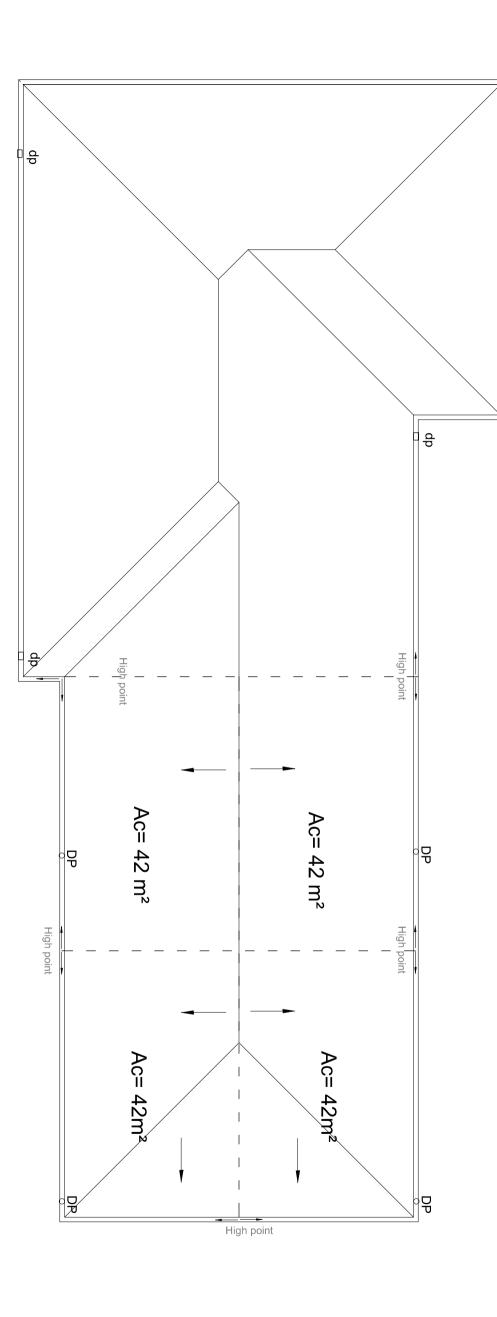
Title

at 6 Gould Street

Campsie, NSW 2194

STORMWATER DRAINAGE PLAN (Extension)

DE2309	Project Number	Scale	25/10/2023	Date
	Approved	Drawn Kevin	KX	Design
	Revision		CE001	Drawing No.



# ROOF CATCHMENT PLAN

NOTES:

1) ALL DOWN PIPES ARE Ø100 uPVC or Rectangular 100x75 U.N.O.
2) ALL GUTTERS TO BE FITTED WITH GUARD GUARD TO BUILDER'S DETAIL. THE MINIMUM EAVE GUTTER SIZE Ae = 7500 mm². U.N.O. THE MINIMUM SLOPE = 1:500.

#### LEGEND:

- DPo New proposed vertical downpipe
- dp Existing downpipe
- Flow direction

### Project

**Engineering Consultant** 

ENGINEERING SOLUTIONS
(EA ID: 1380455, FIEAust CPEng NER)

Mobile: 0434876766

Proposed Extension at 6 Gould Street Campsie, NSW 2194

Title

# ROOF CATCHMENT AND EAVE GUTTER

	<i></i>	
Project Number Approved DE2309	Scale	Date 25/10/2023
Approved	Drawn Kevin	Design RX
Revision		Drawing No. CE003

4) LOCATION OF ALL DOWNPIPES ARE INDICATIVE ONLY. DOWNPIPE LOCATION and QUANTITY TO BE DETERMINED BY BUILDER AND IN ACCORDANCE WITH RELEVENT AUSTRALIA STANDARD.

3) REFER TO ARCHITECTURAL & SURVEY PLANS FOR GROUND LEVELS AND UNDERGROUND SERVICES LINE LOCATION