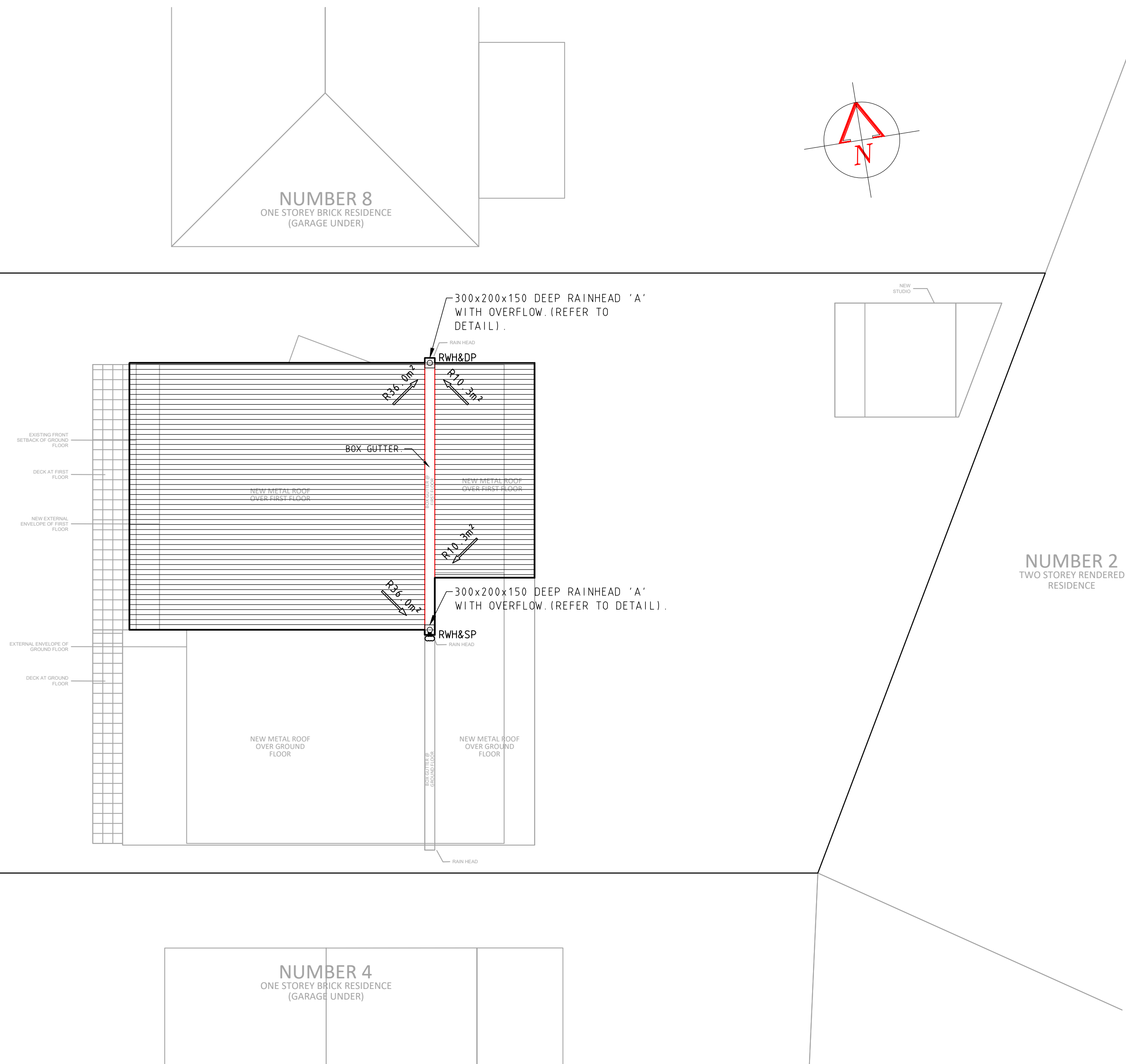
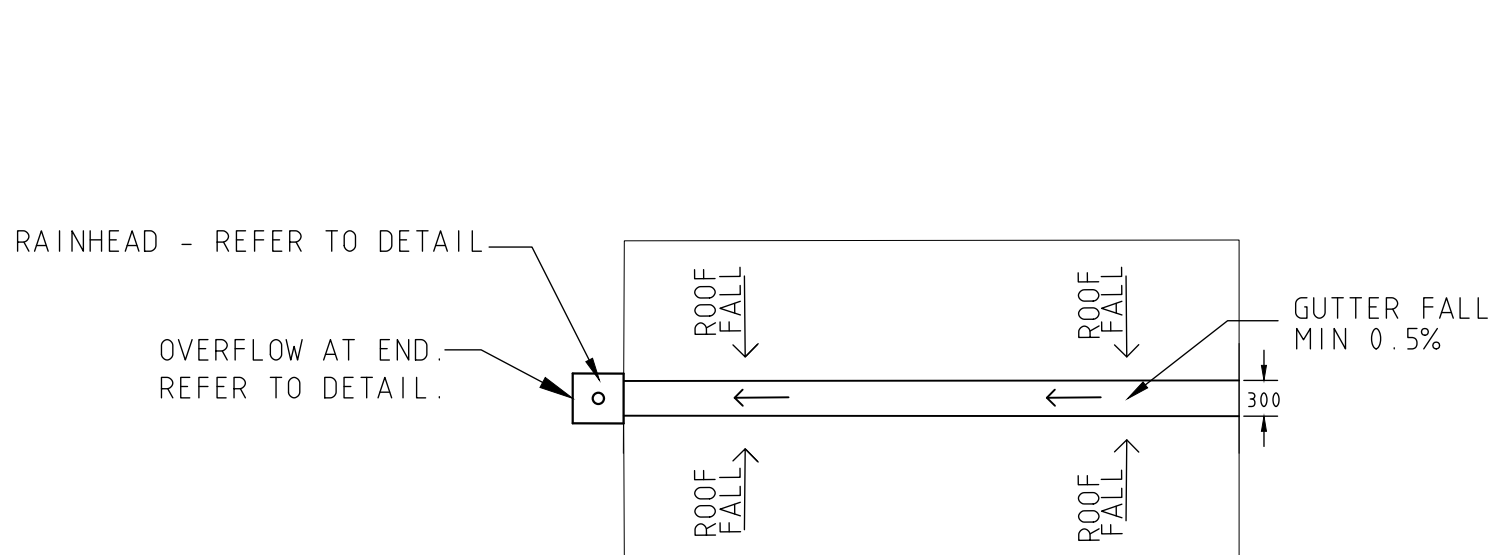




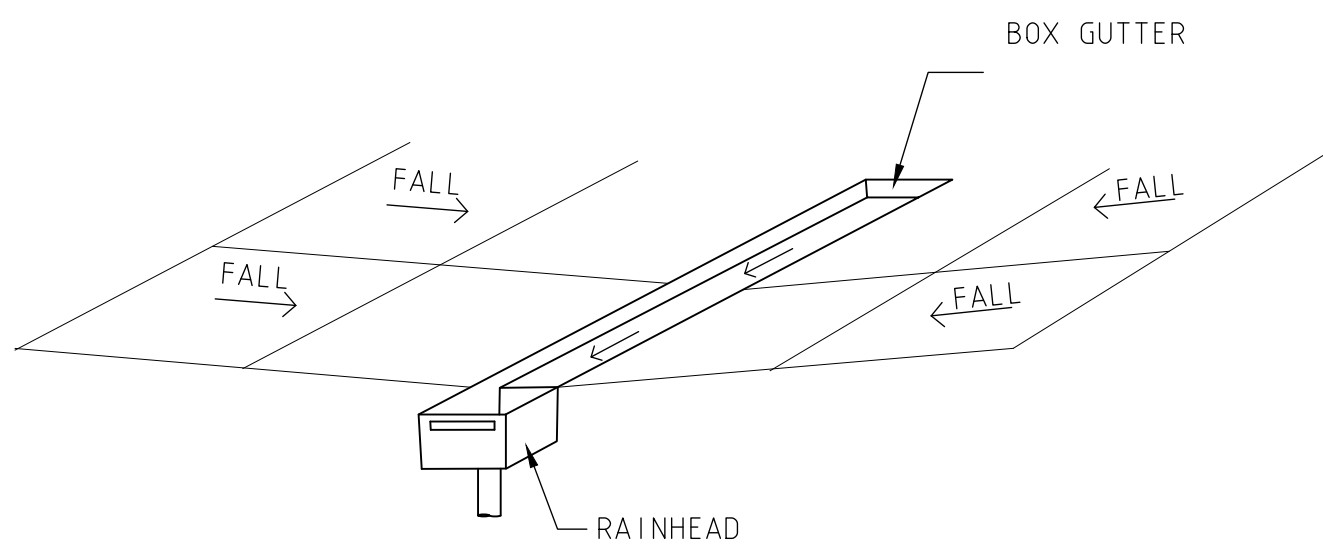
FIRST FLOOR ROOF – GENERAL DRAINAGE LAYOUT

(SCALE 1:100)



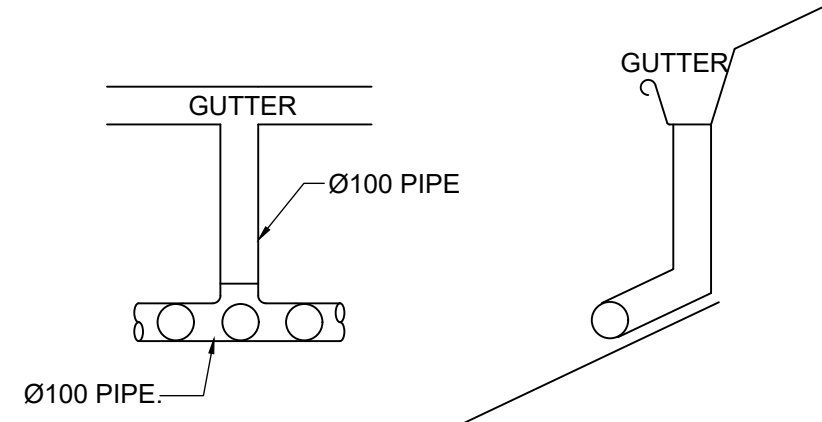
BOX GUTTER
PLAN VIEW

NTS



BOX GUTTER
ISOMETRIC VIEW

NTS



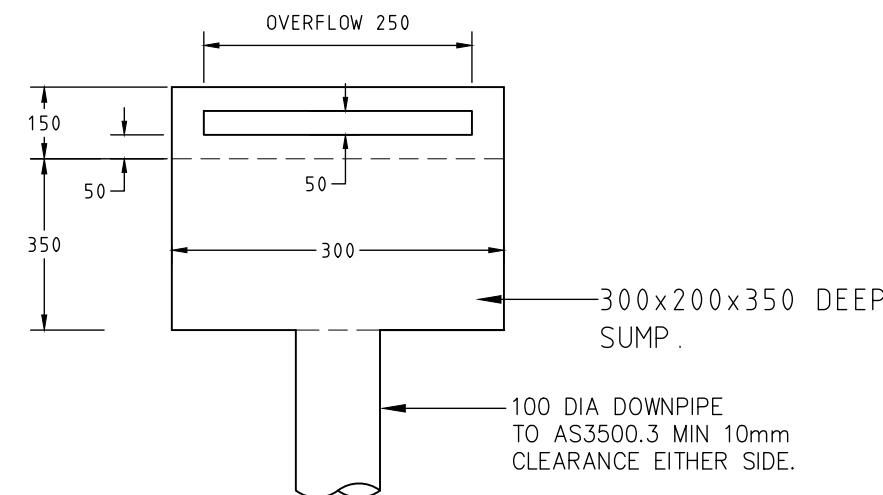
TYPICAL DETAIL OF
DOWNPIPE SPREADER

N.T.S



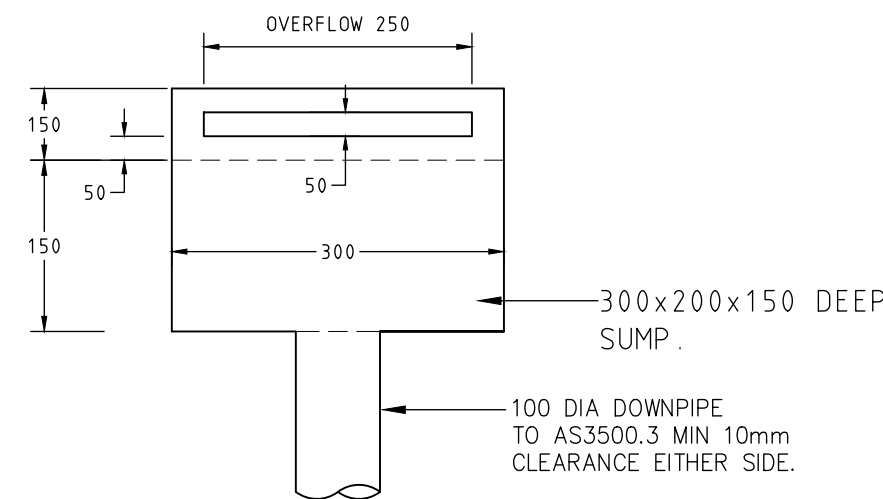
BOX GUTTER
DETAIL

NTS



BOX GUTTER HEAD (RWH) 'A'
FRONT VIEW DETAIL

N.T.S



BOX GUTTER HEAD (RWH) 'A'
FRONT VIEW DETAIL

N.T.S

GENERAL NOTES:

1. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH NORTHERN BEACHES CITY COUNCIL'S STORMWATER, DETENTION & SEDIMENT CODE
2. THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE OR ADJUST IF NECESSARY.
3. THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJOINING LANDS WITHOUT THE PERMISSION OF THE SUPERINTENDENT.
4. ALL NEW WORKS SHALL MAKE SMOOTH CONNECTION TO EXISTING CONDITIONS.
5. ALL IMPORTED FILL SHALL BE APPROVED BY THE COUNCIL. THE FILL SHALL BE PLACED IN NOT MORE THAN 300mm LAYERS AND SHALL BE COMPACTED TO AT LEAST 98% STANDARD COMPACTION TO COUNCIL'S SPECIFICATION.
6. PROVIDE VEHICULAR CROSSING TO COUNCIL'S SPECIFICATION IN KERB WHERE SHOWN (IF APPLICABLE).
7. THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.
8. ALL IMPORTED FILL TO BE USED TO SUPPORT GROUND SLABS SHALL BE COMPACTED TO A MINIMUM LEVEL OF COMPACTION OF 98% OF MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN $\pm 2\%$ OF OPTIMUM (AS1289.5.1:1).
9. STEP IRONS AT 300mm CENTRES & TO COUNCIL'S SPECIFICATIONS SHALL BE PROVIDED WHERE PITS ARE DEEPER THAN 1000mm
10. ALL DOWNPIPES ARE SHOWN DIAGRAMATICALLY. POSITION OF DOWNPIPES SHALL BE CONFIRMED ON SITE
11. EXISTING LEVELS AND SERVICE DEPTH AND LOCATION TO BE CHECKED PRIOR TO CONSTRUCTION.

SEDIMENT & EROSION CONTROL

1. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO THE COUNCIL'S SPECIFICATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND DURING CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN A SATISFACTORY WORKING ORDER DURING THE CONSTRUCTION PERIOD. INSPECTIONS OF THESE DEVICES SHALL BE CARRIED OUT AFTER EACH STORM. REPAIRS AND/OR DE-CLOGGING SHALL BE CARRIED OUT TO ENSURE PROPER OPERATION OF THE DEVICE
3. PROVIDE TEMPORARY CONSTRUCTION EXIT TO SHAKE OFF SITE MATERIALS FROM EXITING VEHICLES AND SHALL CONSIST OF A PAD OF COURSE CRUSHED ROCK (75mm TO 150mm RANGE) HAVING A MINIMUM DEPTH OF 200mm, A MINIMUM LENGTH OF 25m AND 3.5m WIDE OR 'CATTLE GRID' SYSTEM.
4. THE GULLY PITS SHALL BE PROTECTED IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS
5. THE GRATED SURFACE PITS SHALL BE PROTECTED IN ACCORDANCE TO COUNCIL'S REQUIREMENTS

STORMWATER DRAINAGE NOTES:

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH ASINZS 3500.3:2018 "STORMWATER DRAINAGE" & ASINZS 3500.3.2:1998 "STORMWATER DRAINAGE-ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE REFERRED TO THE ENGINEER FOR APPROVAL.

BOX COLORBOND OR ZINCALUME STEEL GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP UNO.

EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL UNO.

MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500.

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH).

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.

FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES TO BUILDER'S DETAIL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

DP = Ø100 OR 100 X 75 RECTANGULAR DOWN PIPE, UNO.

FO = Ø150 FLOOR OUTLET

GSIP = SURFACE INLET PIT (NO LINTEL)

100 (c) = Ø100 CHARGED LINE

IP = Ø100 INSPECTION POINT

SP & DP = RAINWATER SPREADER & DOWNPIPE

XXXX = PROPOSED FINISHED SURFACE LEVEL

EXTREME CARE SHALL BE TAKEN WHEN DOING WORK NEAR EXISTING PIT/STRUCTURES AND UNDERGROUND CABLES.

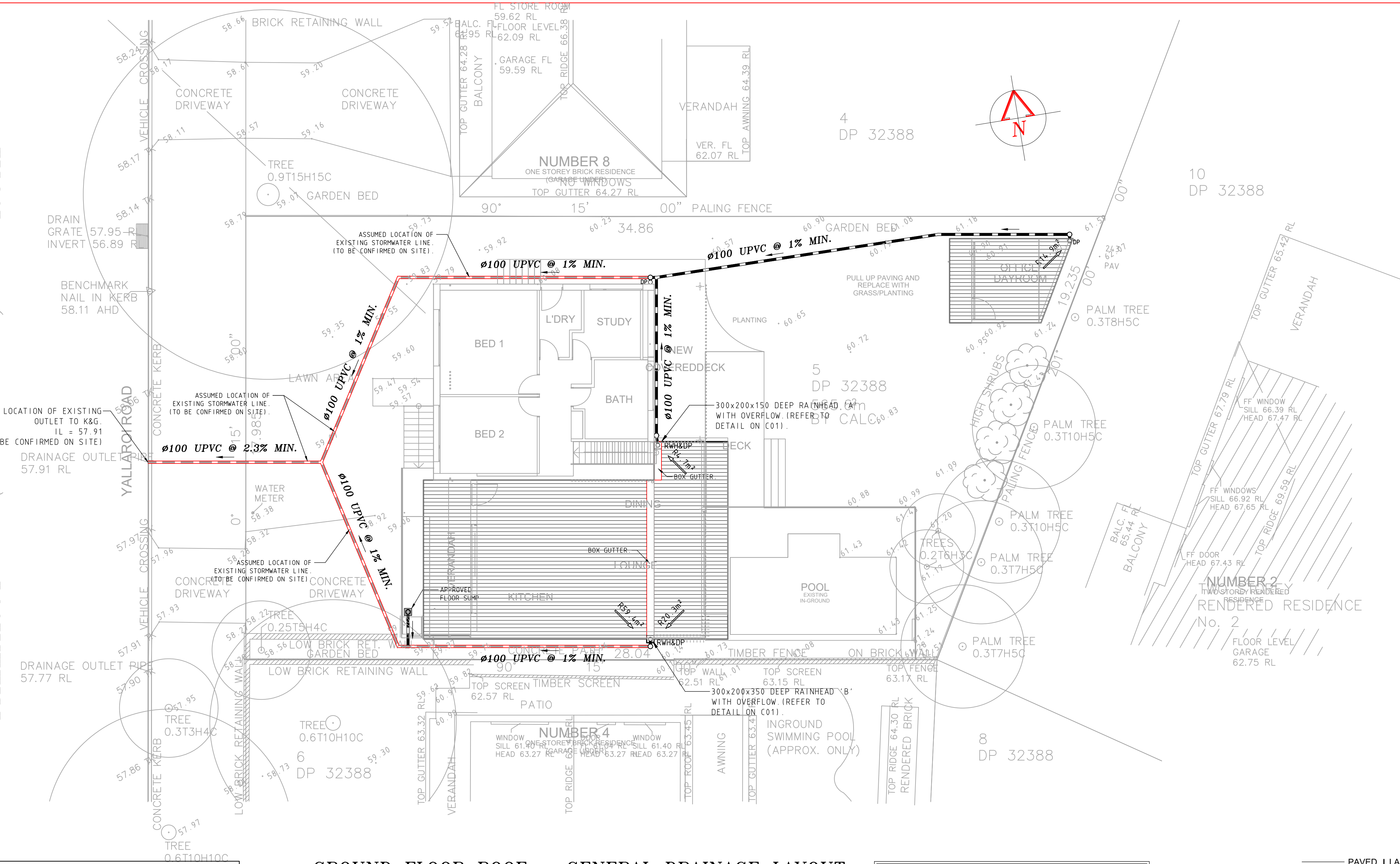
LOCATION & DEPTH OF ALL UNDERGROUND CABLES & SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION. CONTACT 'DIAL BEFORE YOU DIG' ON 1100



			DRAWN BY: EK	ENGINEER: EK
			DATE: 11/10/2021	
A	11/10/2021	FOR CONSTRUCTION	SCALE: AS SHOWN ON A1	SHEET No:
ISSUE	DATE	REVISIONS:	JOB NO: 211044	C01

(A1)

YALLAROI ROAD (15.34 M WIDE)



GROUND FLOOR ROOF - GENERAL DRAINAGE LAYOUT (SCALE 1:100)



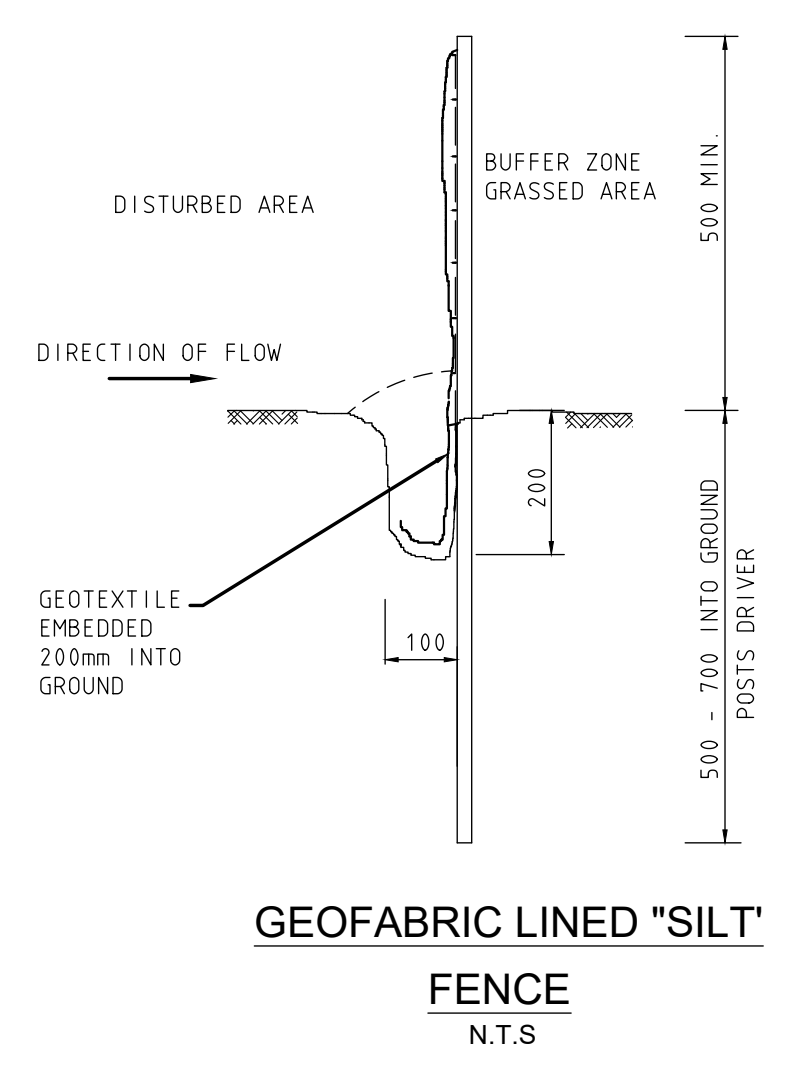
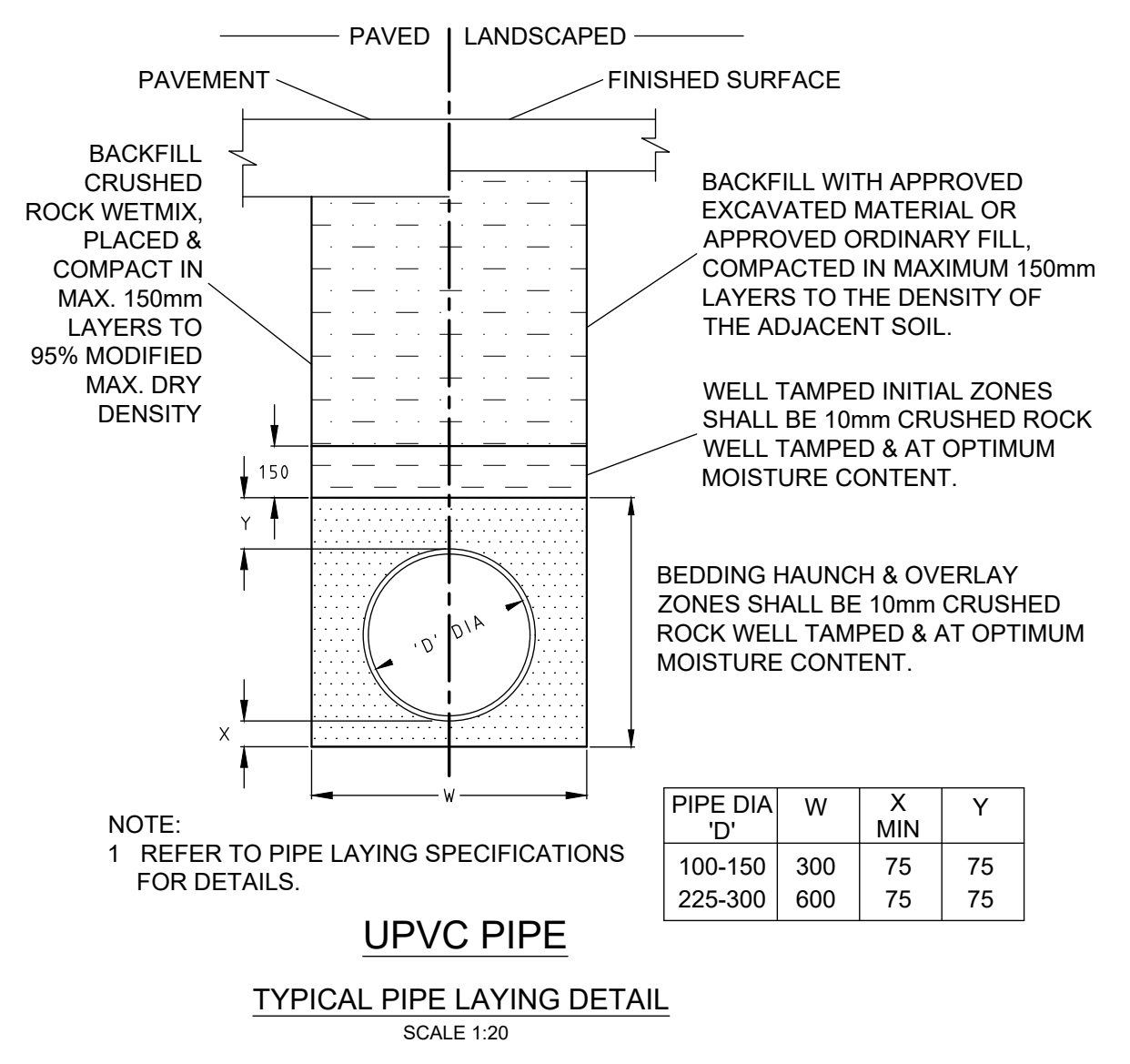
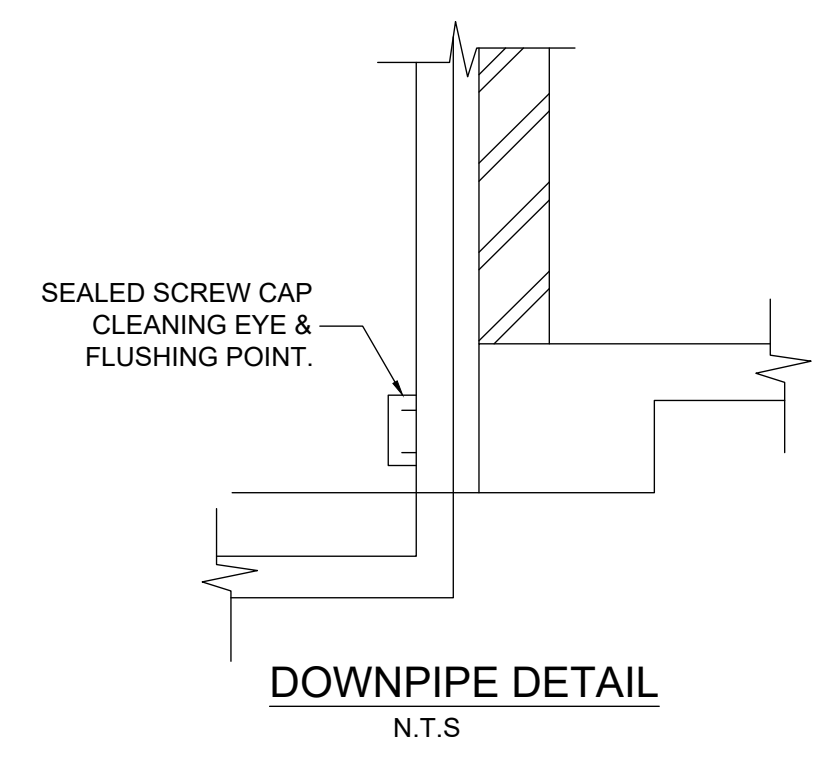
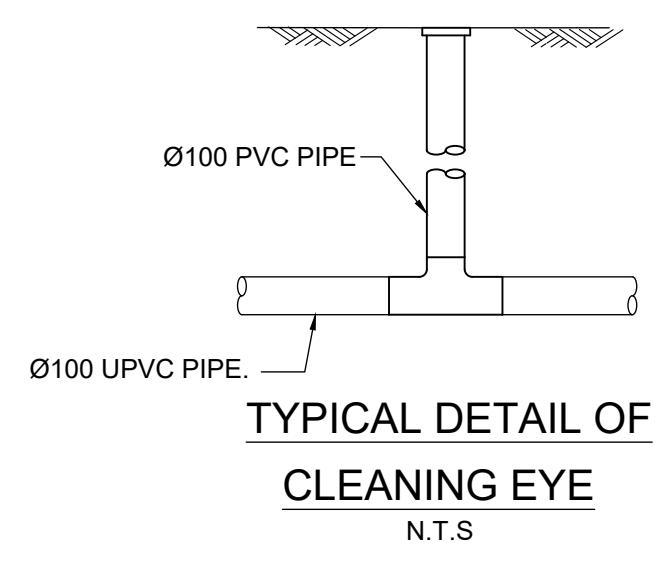
NOTATION:	
	PROPOSED DRAINAGE LINE
	EXISTING DRAINAGE LINE

NOTE:
PORTIONS OF THE EXISTING STORMWATER DRAINAGE LINES MAY BE RETAINED IF THEY HAVE BEEN INSPECTED & VERIFIED TO BE IN PROPER WORKING ORDER.

JOB ADDRESS : 6 YALLAROI ROAD, NARRAWEENA
A.R.I. IN YEARS : 20
TIME OF CONC. : 5min
RAINFALL INTENSITY : 201mm/hr (OBTAINED FROM B.O.M. ON 11/10/2021)
MANNINGS ROUGHNESS : 0.01 "n" UPVC

DRAINAGE CALCULATIONS

L I N	IN No.	LET - Type	AREA m²	RUNOFF COEF. "C"	INLET IMP AREA	DISC "Q" l/s	SIDE Lin	LINE - Area	TOT. IMP. AREA	DESIGN "Q" l/s	DIA mm	PIPE GRADE %	NOM. CAP. l/s	REMARKS
1	1	DP	79.7	0.95	75.7	4.2	SP	46.3	119.7	6.7	100.0	1.0	6.7	ROOF AREA CONNECT TO LINE 4
2	1	DP	4.7	0.95	4.5	0.2			4.5	0.2	100.0	1.0	6.7	ROOF AREA CONNECT TO LINE 3
3	1	DP	14.9	0.95	14.2	0.8			14.2	0.8	100.0	1.0	6.7	ROOF AREA
	2	LINE 2	4.5	1.00	4.5	0.2			18.8	1.0	100.0	1.0	6.7	ROOF AREA
	3	DP	46.3	0.95	44.0	2.5			62.6	3.5	100.0	1.0	6.7	ROOF AREA CONNECT TO LINE 4
4	1	LINE 1	119.7	1.00	119.7	6.7			119.7	6.7	100.0	1.0	6.7	ROOF AREA
	2	LINE 3	62.6	1.00	62.6	3.5			182.3	10.2	100.0	2.3	10.2	ROOF AREA CONNECT TO K&G



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W: gilconeng.com ABN: 73 931 889 644

CLIENT: BEN & FRANCINE BALESTRIERI
PROJECT: PROPOSED ALTERATIONS & ADDITIONS AT 6 YALLAROI ROAD, NARRAWEENA

APPROVED:

ADAM GILLETT
B.ENG (Hons), M.I.E. AUST.

DRAWING TITLE: DRAINAGE LAYOUT PLAN & DETAILS

A	11/10/2021	FOR CONSTRUCTION
ISSUE	DATE	REVISIONS:

DRAWN BY: EK	ENGINEER: EK
DATE: 11/10/2021	
SCALE: AS SHOWN ON A1	SHEET No: C02
JOB NO: 211044	