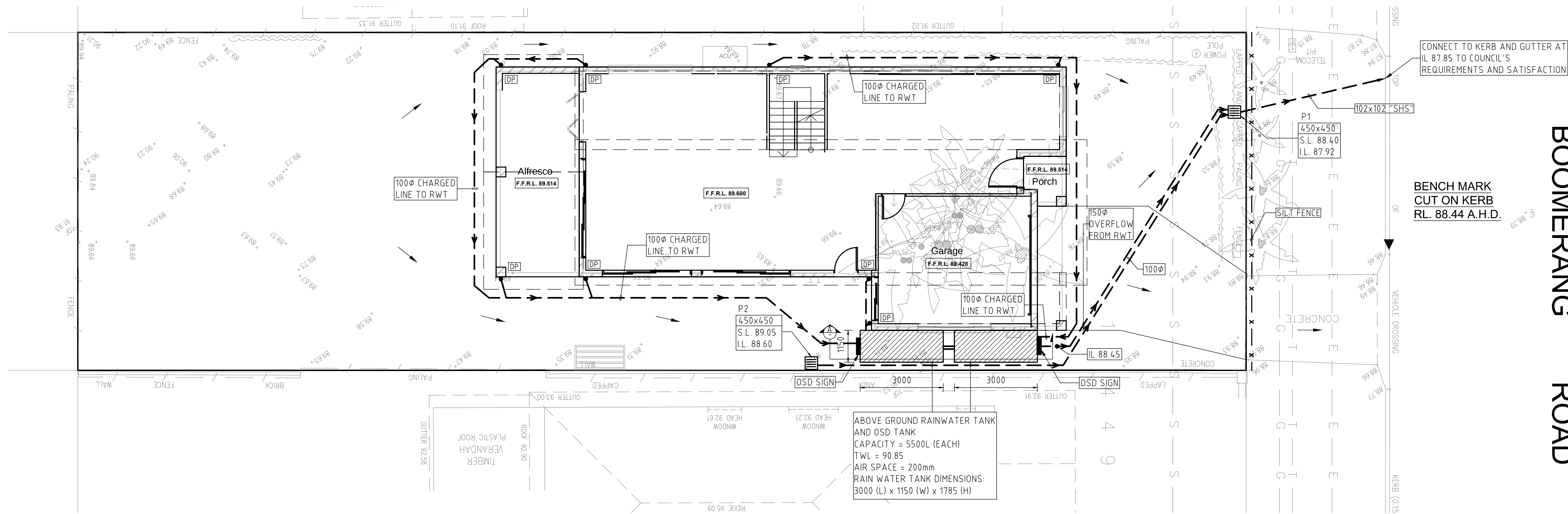
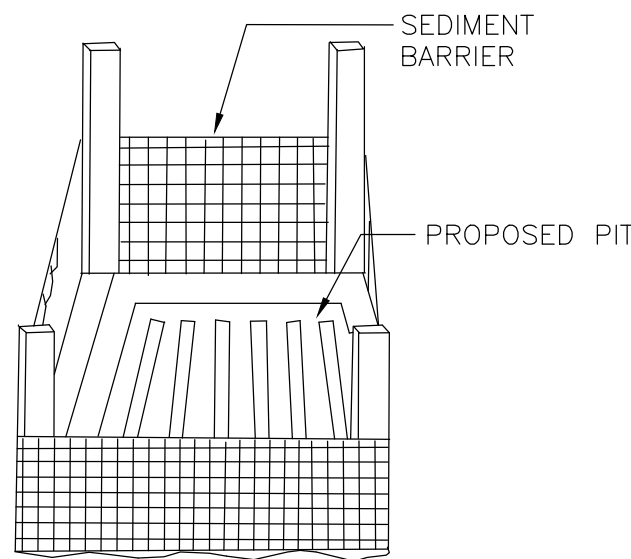




BOOMERANG ROAD

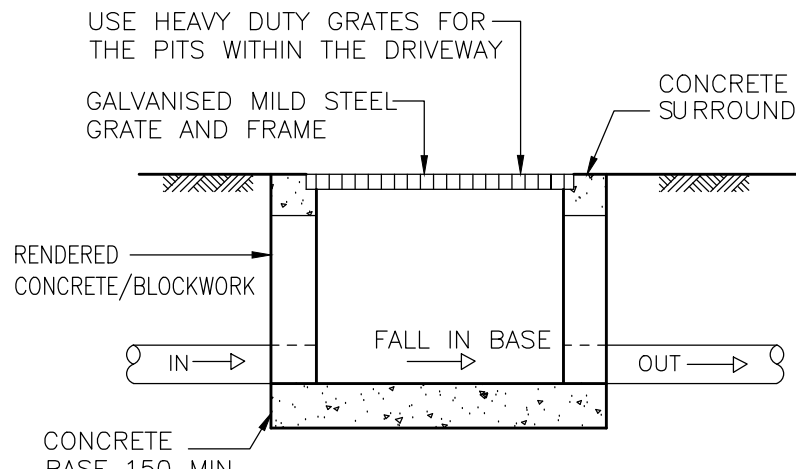
STORMWATER DRAINAGE LAYOUT PLAN

SCALE:- 1:100 @ A1



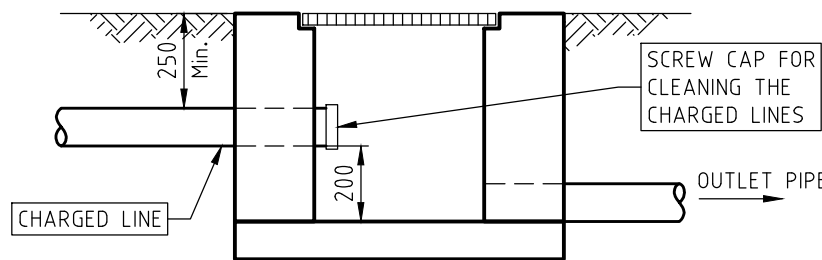
SEDIMENT BARRIER AROUND STORMWATER PIT (DURING CONSTRUCTION)

NOT TO SCALE

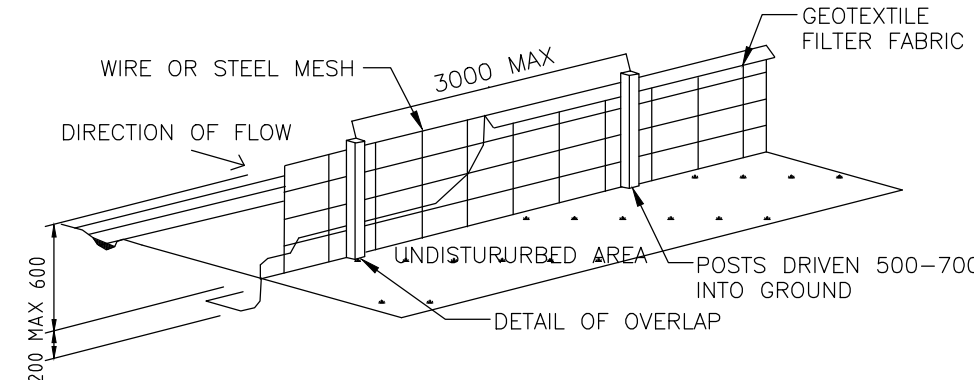


STANDARD PIT DETAIL (PROVIDE STEP IRONS @ 300 CENTRES FOR PITS WHERE THE DEPTH EXCEEDS 900mm)

NOT TO SCALE



TYPICAL CHARGED LINE CLEAN OUT CONNECTION TO A PIT NOT TO SCALE



SILT FENCE DETAIL (TO BE WITHIN THE PROPERTY BOUNDARY -DURING CONSTRUCTION ONLY) NOT TO SCALE

RAINWATER TANK NOTES:

- CAPACITY
RAINWATER TANK HAS A CAPACITY AS MARKED IN THE PLAN.
- RAINWATER CONNECTION:
TANK WATER WILL BE PLUMBED TO ALL OUTDOOR WATERING, ALL TOILETS AND LAUNDRY ROOM AS PER BASIX REQUIREMENT (TO BE RE-CONFIRMED FROM BASIX REPORT).
- FIRST FLUSH:
"FIRST FLUSH" DEVICE WILL BE FITTED TO REMOVE SURFACE CONTAMINATION.
- NON DRINKING:
TANK WATER WILL NOT BE CONNECTED TO DRINKING OR BATHING WATER OUTLETS.
- FULLY ENCLOSED:
TANKS WILL BE FULLY ENCLOSED AND SEALED TO PREVENT ACCESS BY MOSQUITOES.
- NON REFLECTIVE FINISH:
TANKS SURFACES WILL HAVE NON REFLECTIVE FINISH.
- WARNING LABELS:
A LABEL WILL BE AFFIXED TO THE TANKS WARNING THAT WATER IS NOT TO BE CONSUMED AND RAINWATER SIGNAGE WILL BE PLACED ABOVE ALL TANK WATER OUTLETS.
- ROOFING MATERIALS:
THE ROOF SURFACE FROM WHICH RAINWATER IS BEING DRAWN WILL NOT CONTAIN LEAD,ASBESTOS OR PAINTS
- BASE:
TANKS WILL BE BUILT ON A SELF SUPPORTING BASE (ABOVE GROUND TANKS ONLY)
- WATER PRESSURE:
TANKS WILL BE FITTED WITH SMALL MOTORISED PUMP TO PROVIDE ACCEPTABLE WATER PRESSURE.
- PUMP NOISE:
PUMP WILL BE DESIGNED AND LOCATED NOT TO CAUSE A NOISE DISTURBANCE TO NEIGHBOURS (GENERALLY NOT 5 dBA ABOVE BACKGROUND NOISE)
- INSTALLATION:
WILL BE INSTALLED BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS AND THE "NSW CODE OF PRACTICE PLUMBING AND DRAINAGE
- BACK FLOW PREVENTION:
A BACK FLOW PREVENTION DEVICE WILL BE PROVIDED AT THE MAINS WATER METER
- DUAL SUPPLY:
A TRICKLE TOP-UP SYSTEM WILL BE PROVIDED AT THE MAINS WATER.
- BACK UP SUPPLY:
A BACK UP SUPPLY OF MAINS WATER WILL BE PROVIDED IN EVENT OF FAILURE OR MAINTENANCE.
- ANAEROBIC ZONE:
WATER WILL BE DRAWN FROM ABOVE THE ANAEROBIC ZONE OF TANKS.
- TANK CONSTRUCTION:
TANKS WILL BE STRUCTURALLY SOUND AND CONSTRUCTED IN ACCORDANCE WITH AS/NZ3500.1.2-1998 NATIONAL PLUMBING AND DRAINAGE-WATER SUPPLY-ACCEPTABLE SOLUTIONS.
- AIR GAP:
TANKS WILL BE PROVIDED WITH AN AIR GAP IN ACCORDANCE WITH AS/NZ 3500.1.2 AND AS2845.2
- ON GOING MAINTENANCE:
TANKS WILL BE WELL KEPT AND MAINTAINED BY THE OWNER.

NOTES:

- ALL WORKS TO BE CONSTRUCTED TO THE REQUIREMENTS AND SATISFACTION OF NORTHERN BEACHES COUNCIL DCP.
- PRIOR TO COMMENCEMENT OF ANY SITE WORKS, THE BUILDING CONTRACTOR/PLUMBER HAS TO EXPOSE ALL SERVICES IN THE FULL WIDTH OF THE FOOTPATH TO ENSURE THERE ARE NO OBSTRUCTIONS IN THE LINE OF THE DRAINAGE DISCHARGE PIPE.
- THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
- THE BUILDER IS TO VERIFY ALL LEVELS ON THE SITE PRIOR TO COMMENCING CONSTRUCTION.
- SILT FENCE IS TO BE ERECTED PRIOR TO COMMENCING WORK. FENCE TO BE MAINTAINED IN WORKING ORDER DURING THE TIME OF CONSTRUCTION.
- W.A.E. DRAWING BY A REGISTERED SURVEYOR IS REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE.
- U.N.O. ALL DOWN PIPES ARE TO BE 1000.
- U.N.O. ALL PIPES TO BE "1000" CLASS "SH" WITH 1% MIN SLOPE.
- ALL THE RETAINING WALLS TO STRUCTURAL ENGINEERS DETAIL AND SHOULD BE WITHIN THE SITE BOUNDARY.
- ALL THE DOWN PIPES FROM THE ROOF GUTTER TO RAINWATER TANK SHALL BE CHARGED LINES AND SOLVENT WELD JOINTED.

LEGEND

- DRAINAGE LINE --- -- -- SURFACE INLET PIT [Symbol]
- AG. LINE --- a --- a JUNCTION PIT [Symbol]
- SILT FENCE [Symbol] DOWN PIPE [Symbol]
- EXISTING LEVEL [Symbol] DESIGN LEVEL [Symbol] SPREADER PIPE [Symbol]
- SILT BARRIER AROUND PIT [Symbol]
- CLEANING EYE (OR INSPECTION EYE) [Symbol]
- SURFACE LEVEL SL 45.50 FLOOR GRATE [Symbol]
- INVERT LEVEL IL 45.00 DROPPER [Symbol]
- REMOVED TREE [Symbol]
- STEP IN THE RETAINING WALL [Symbol]

CAUTION:

ALL THE LEVELS AND DIMENSIONS ARE CRITICAL. PLEASE FOLLOW THE SW PLAN FOR CONSTRUCTION TO AVOID FINAL CERTIFICATION DELAY. IF YOU SEE SOMETHING NOT CORRECT OR NOT SUITED FOR SITE PLEASE CONTACT THE STORMWATER ENGINEER FOR CLARIFICATION AND FURTHER DIRECTIONS.

NOTE:

THE SURFACE INLET PITS SHALL BE HEAVY DUTY PLASTIC PITS IF IT IS LESS THAN 400mm DEEP.

NOTE:

PROVIDE FLOOR GRATES (1000) FOR THE FIRST FLOOR BALCONIES (DO NOT CONNECT TO THE RAINWATER TANK)

NOTE:

PRIOR TO CONSTRUCTION THE BUILDER IS TO COORDINATE ALL THE PLANS (ARCHITECTURE PLAN, LANDSCAPE PLAN, STRUCTURAL ENGINEER'S PLAN AND THE STORMWATER PLAN) TO MAKE SURE ALL THE DESIGN LEVELS, DOWNPIPE LOCATIONS AND THE FLOOR LEVELS ARE SAME IN ALL THE PLANS.

NOTE:

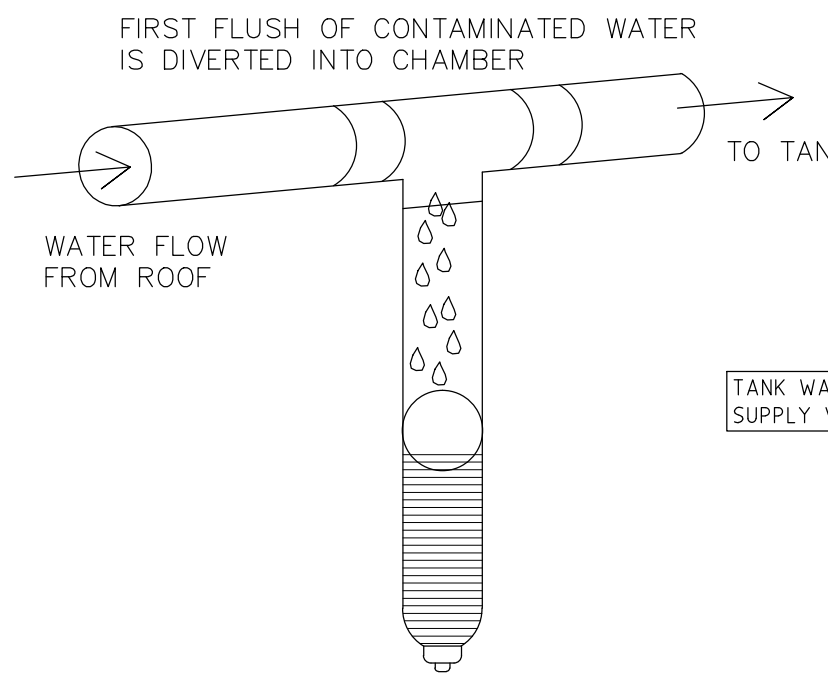
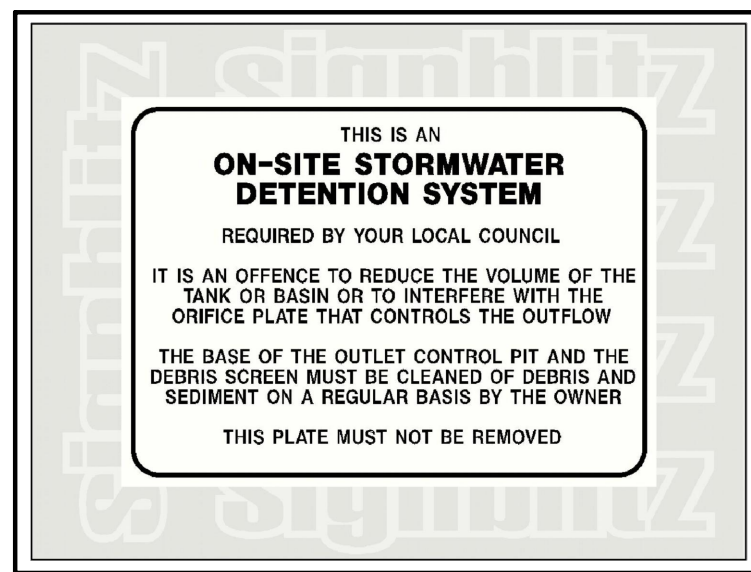
THE PIT SURFACE LEVELS AND THE TOP OF RETAINING WALLS SHALL BE RE-CONFIRMED AT SITE

NOTE:

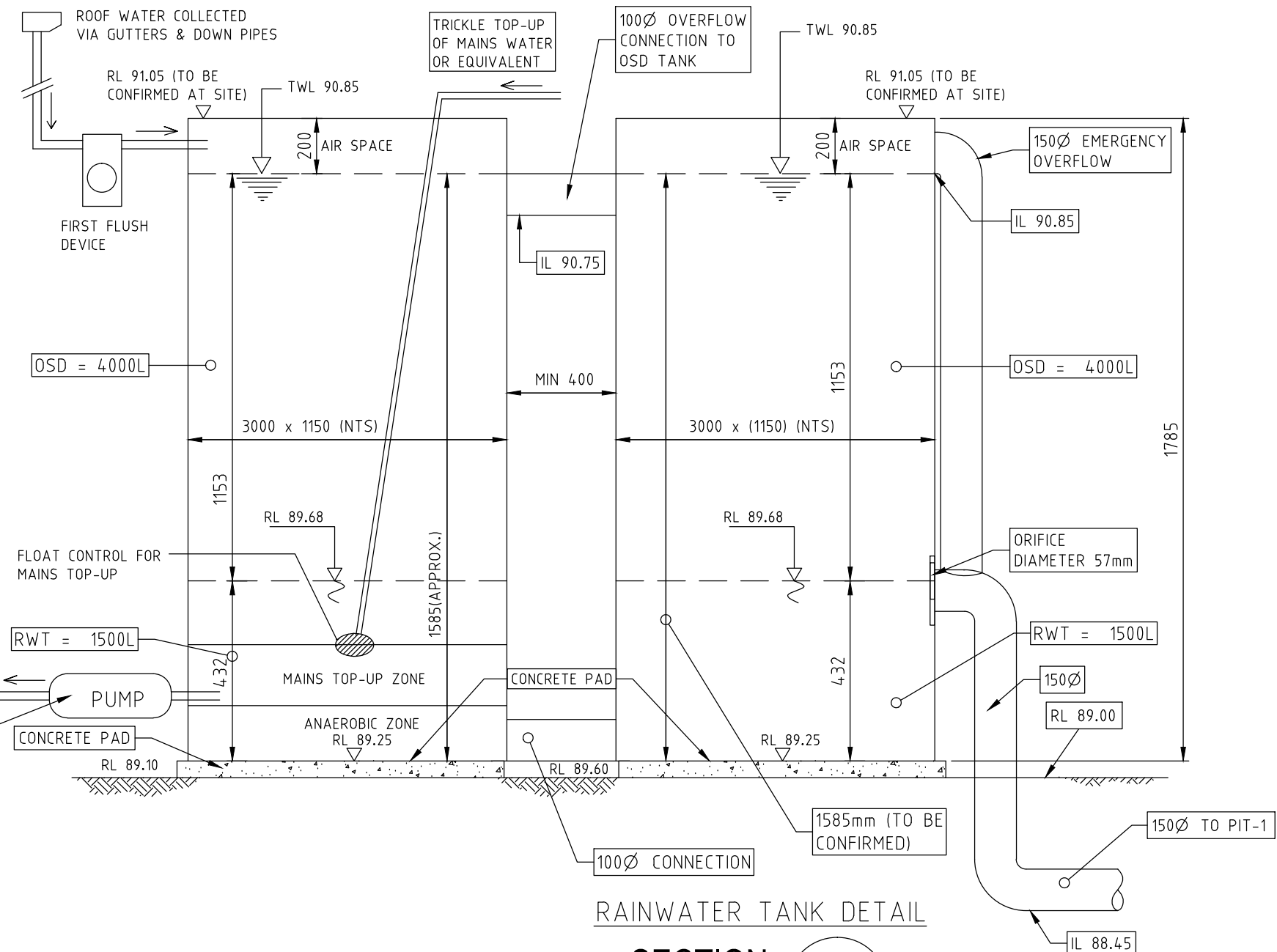
CLEAN OUT LINES FROM THE CHARGED LINES TO BE CONNECTED TO THE NEAREST PITS WITH END CAP AT THE PIT END

OSD CALCULATION (FORMER WARRINGAH COUNCIL POLICY)

- TOTAL SITE AREA = $514.40m^2 > 450.0m^2$
- TOTAL PROPOSED IMPERVIOUS AREA = $250m^2$
- PERCENTAGE IMPERVIOUS AREA = $\frac{250}{514.40} \times 100 = 49\%$
- OSD IS REQUIRED FOR THIS SITE.
- STORAGE REQUIRED = $0.0514 \times 200 = 10.28m^3$
- ALLOWABLE DISCHARGE = $0.0514 \times 400 = 20.56 L/S$
- ROOF CATCHMENT AREA TO RAINWATER TANK = $182m^2$
- ALLOWABLE DISCHARGE FROM OSD = $\frac{20.56}{514.40} \times 182 = 7.27 L/S$
- MAXIMUM HEIGHT TO ORIFICE CENTRE = 1.15m
- ORIFICE DIAMETER = 57mm
- VOLUME OF THE RWT = 3000L
- RAINWATER TANK REQUIRED AS PER BASIX = 3000L
- OSD VOLUME PROVIDED = $(10.28 - 2.20) = 8.0m^3$
- TOTAL VOLUME OF OSD AND RAIN WATER TANK = $10.50m^3$
- USE 2Nr 5500 RAIN WATER TANK.



FIRST FLUSH WATER DIVERTER DETAIL NOT TO SCALE



RAINWATER TANK DETAIL

SECTION A

SCALE NTS

			DESIGN BY:	VNK CONSULTING PTY LTD PO BOX 9118 Harris Park NSW 2150 Mobile: 0401 132 386 Email: VNKCONSULTING@GMAIL.COM	Drawing Title:		DESIGNED	NL	Project:	Ref No.
			PRINCIPAL ENGINEER:	LOGAN N LOGESWARAN			DRAWN	AJ	PROPOSED DWELLING LOT 21 (No. 35) BOOMERANG ROAD COLLAROY PLATEAU NSW 2097	160621-01
			QUALIFICATIONS:	BscEng, MEng, MEngStud, M.ASCE, MIEAust, CPEng, NER			DATUM	AHD		Issue:
							DATE	16.06.2021		C
C	23.06.2021	RE-ISSUED FOR DA APPROVAL	AJ							
B	21.06.2021	RE-ISSUED FOR DA APPROVAL	AJ							
A	16.06.2021	ISSUED FOR DA APPROVAL	AJ							
Issue	Date	Description	BY							SHEET 1 of 1