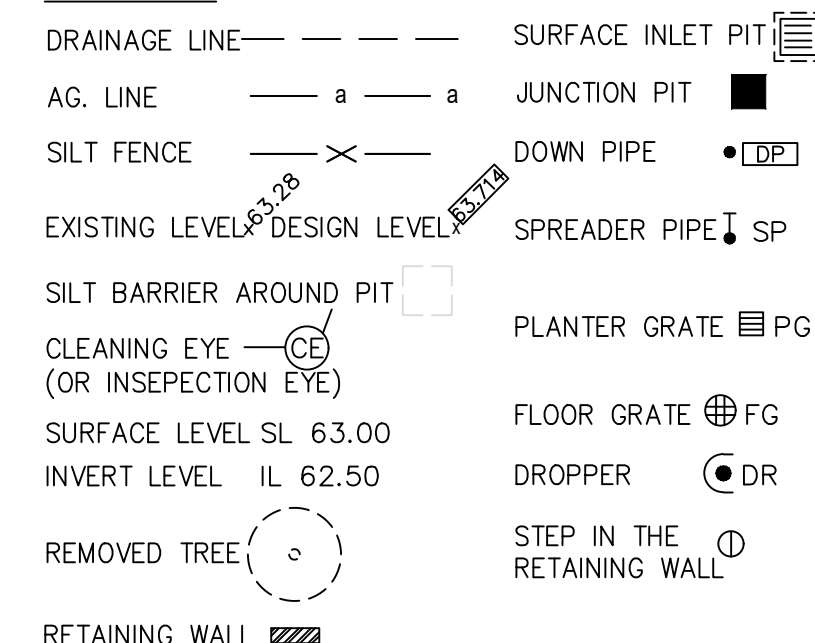
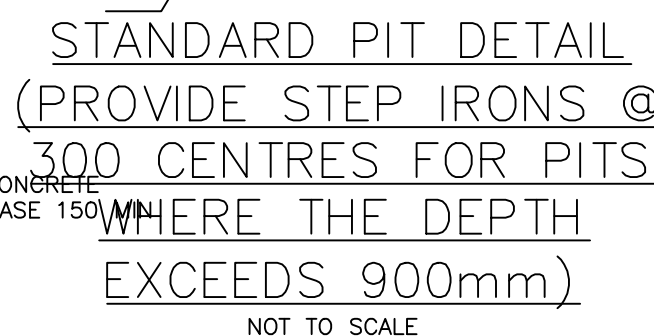
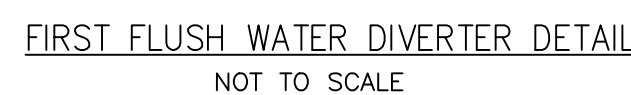
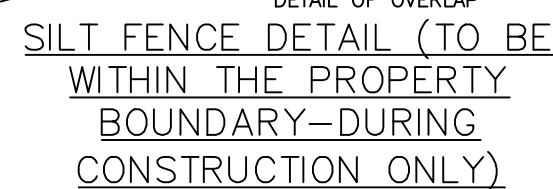
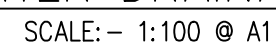
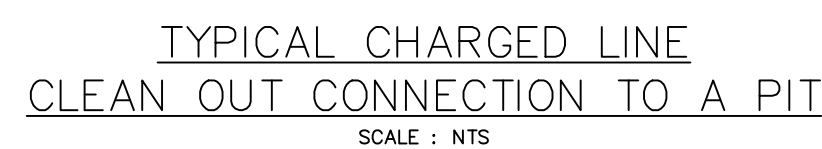




- | OSD CALCULATION (FORMER WARRINGAH COUNCIL POLICY) | |
|---|---------|
| 1 | 2017/18 |
| 2 | 2018/19 |
| 3 | 2019/20 |
| 4 | 2020/21 |
| 5 | 2021/22 |
| 6 | 2022/23 |
| 7 | 2023/24 |
| 8 | 2024/25 |
| 9 | 2025/26 |
| 10 | 2026/27 |
| 11 | 2027/28 |
| 12 | 2028/29 |
| 13 | 2029/30 |
| 14 | 2030/31 |
| 15 | 2031/32 |
| 16 | 2032/33 |
| 17 | 2033/34 |
| 18 | 2034/35 |
| 19 | 2035/36 |
| 20 | 2036/37 |
| 21 | 2037/38 |
| 22 | 2038/39 |
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| 24 | 2040/41 |
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| 79 | 2095/96 |
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| 81 | 2097/98 |
| 82 | 2098/99 |
| 83 | 2099/00 |
| 84 | 2100/01 |
| 85 | 2101/02 |
| 86 | 2102/03 |
| 87 | 2103/04 |
| 88 | 2104/05 |
| 89 | 2105/06 |
| 90 | 2106/07 |
| 91 | 2107/08 |
| 92 | 2108/09 |
| 93 | 2109/10 |
| 94 | 2110/11 |
| 95 | 2111/12 |
| 96 | 2112/13 |
| 97 | 2113/14 |
| 98 | 2114/15 |
| 99 | 2115/16 |
| 100 | 2116/17 |
| 101 | 2117/18 |
| 102 | 2118/19 |
| 103 | 2119/20 |
| 104 | 2120/21 |
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| 133 | 2149/50 |
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| 135 | 2151/52 |
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| 138 | 2154/55 |
| 139 | 2155/56 |
| 140 | 2156/57 |
| 141 | 2157/58 |
| 142 | 2158/59 |
| 143 | 2159/60 |
| 144</ | |

1. TOTAL SITE AREA = 728.60m^2
2. TOTAL PROPOSED IMPERVIOUS AREA = 380m^2
3. PERCENTAGE IMPERVIOUS AREA = $\frac{380}{728.60} \times 100 = 53\%$
4. OSD IS REQUIRED FOR THIS SITE.
5. STORAGE REQUIRED = $0.0728 \times 200 = 14.56\text{m}^3$
6. ALLOWABLE DISCHARGE = $0.0728 \times 400 = 29.12 \text{ L/S}$
7. VOLUME OF THE RWT = 3.0m^3
8. RAINWATER TANK REQUIRED AS PER BASIX = 3000L
9. OSD VOLUME PROVIDED = $(14.56 - 3.0) = 11.56\text{m}^3$
10. TOTAL VOLUME OF OSD AND RAIN WATER TANK = 15.0m^3
11. USE 2Nr 5000 RAIN WATER TANK AND 1Nr 5000L OSD TANK
12. THE OSD HAS BEEN DIVIDED AS TWO SYSTEMS AS FOLLOWS:
 - 12.1. COLLECT ALL THE BACKYARD TO THE UNDERGROUND 5000L OSD AT THE BACKYARD
 - 12.2. COLLECT ALL THE ROOF AND CONNECT IT TO 2Nr 5000L RAINWATER TANK AS OSD AND RAINWATER TANK.

RAINWATER TANK NOTES:

CAPACITY
EACH RAINWATER TANK HAVE A CAPACITY AS MARKED IN THE PLAN.

RAINWATER CONNECTION
TANK WATER WILL BE PLUMBED TO ALL TOILETS,AN OUTLET IN THE LAUNDRY FOR WASHING MACHINES AND ALL OUTDOOR WATERING AS PER BASIS REQUIREMENT.

FIRST FLUSH
"FIRST FLUSH" DEVICE WILL BE FITTED TO REMOVE SURFACE CONTAMINATION.

NO 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,TAR,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 MOTORIZED 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
THE WILL BE INSTALLED BY A LICENSED PLUMBER IN ACCORDANCE WITH SYDNEY WATER REQUIREMENTS AND "THE" NEW 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:

1. ALL WORKS TO BE CONSTRUCTED TO THE REQUIREMENTS AND SATISFACTION OF THE NORTHERN BEACHES COUNCIL.
2. 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.
3. THE DRAINAGE CONTRACTOR IS TO LOCATE AND RELOCATE AS NECESSARY ALL SERVICES ON SITE.
4. THE DRAINER IS TO LOCATE ALL LEVELS ON THE SITE PRIOR TO COMMENCING CONSTRUCTION.
5. SILT FENCE IS TO BE ERECTED PRIOR TO COMMENCING WORK. FENCE TO BE MAINTAINED IN WORKING ORDER DURING THE TIME OF CONSTRUCTION.
6. W.A.E. DRAWING BY A REGISTERED SURVEYOR IS REQUIRED PRIOR TO CERTIFICATION OF DRAINAGE.
7. U.N.O. ALL DOWN PIPES ARE TO BE 100mm
8. U.N.O. ALL PIPES TO BE 100mm CLASS "SH" WITH 1:MIN SLOPE.
9. ALL THE RETAINING WALLS TO STRUCTURAL ENGINEERS DESIGN AND SHOULD BE WITHIN THE SITE BOUNDARY.
10. ALL DOWN PIPES TO BE 100mm BUT NOT TO GO OUTSIDE THE WATER TANK SHALL BE CHARGED LINES AND SOLVENT WELD JOINTED.
11. PROVIDE O.C MARKINGS SUCH AS PER THE DETAILS GIVEN.

				DESIGN BY:	VNK CONSULTING PTY LTD PO BOX 9118 Harris Park NSW 2150 Mobile: 0401 132 386 Email: VNKCONSULTING@GMAIL.COM	Drawing Title: STORMWATER DRAINAGE LAYOUT PLAN	DESIGNED	NL	Project: PROPOSED DWELLING 1 PAINTERS PARADE DEE WHY NSW 2099	Ref No.	011021—01
							DRAWN	KN		Issue:	A
				PRINCIPAL ENGINEER:	LOGAN N LOGESWARAN		DATUM	AHD			
A	01.10.2021	ISSUED FOR DA APPROVAL	KN	QUALIFICATIONS:	BscEng, MEng, MEngStud, M.ASCE, MIEAust, CPEng, NER		DATE	01.10.2021			SHEET 1 of 1
Issue	Date	Description	BY								