

JAMES BELL

PROPOSED DEVELOPMENT

40 PINE STREET MANLY NSW

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OWNER: The owner is responsible for maintenance of building and site. Refer to the CSIRO 'Guide to Home Owners on Foundation Maintenance and Performance'.

JAMES BELL



PROPOSED DEVELOPMENT
AT
40 PINE STREET
MANLY, NSW

COVER SHEET & DRAWING LIST

SCALE

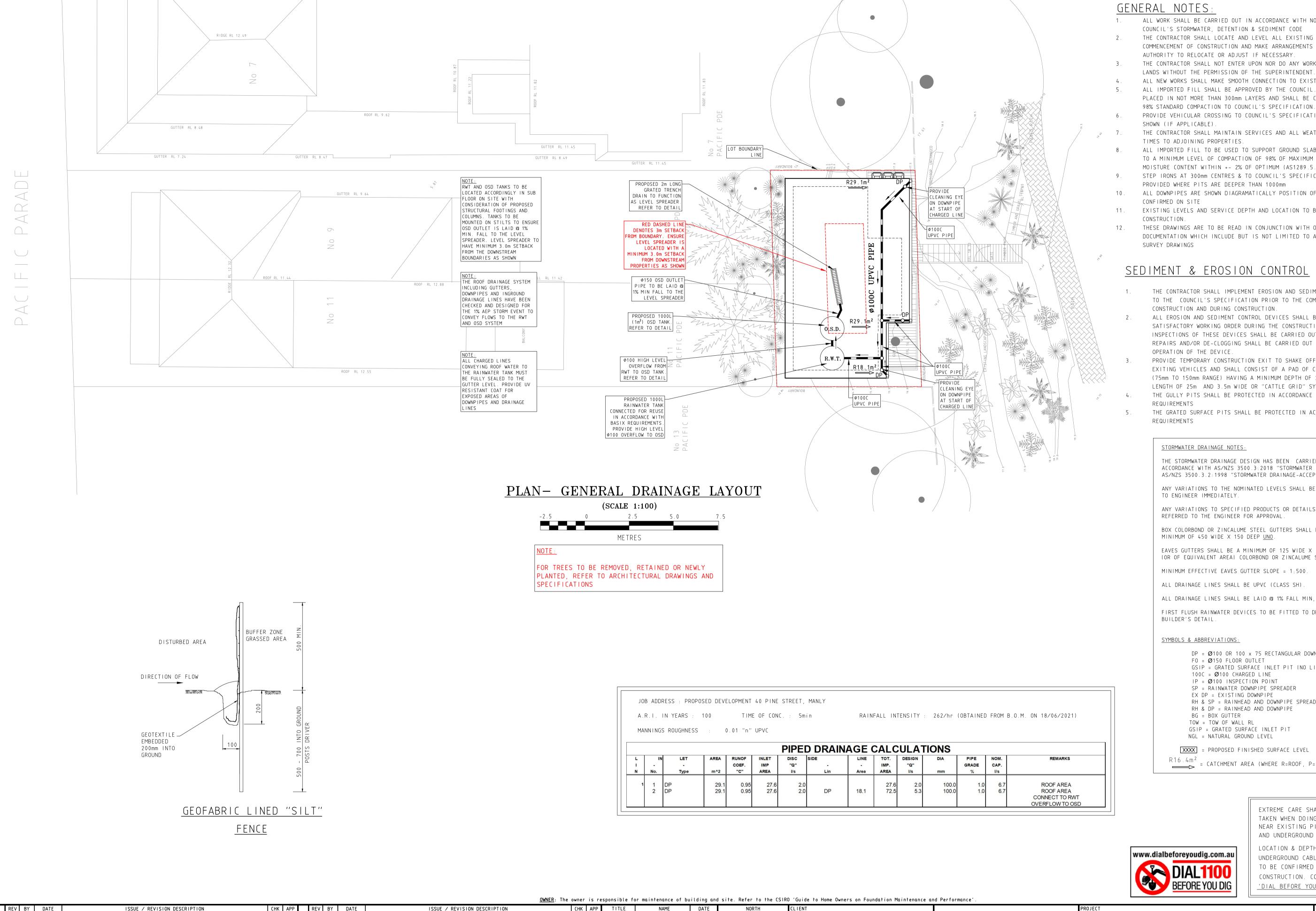
N/A

STRUCTERRE JOB No.

3.21.3215.3

DRAWING REF. No.

REV



ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH NORTHERN BEACHES COUNCIL'S STORMWATER, DETENTION & SEDIMENT CODE

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.

THE CONTRACTOR SHALL NOT ENTER UPON NOR DO ANY WORK WITHIN ADJOINING

LANDS WITHOUT THE PERMISSION OF THE SUPERINTENDENT. ALL NEW WORKS SHALL MAKE SMOOTH CONNECTION TO EXISTING CONDITIONS.

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

PROVIDE VEHICULAR CROSSING TO COUNCIL'S SPECIFICATION IN KERB WHERE

THE CONTRACTOR SHALL MAINTAIN SERVICES AND ALL WEATHER ACCESS AT ALL TIMES TO ADJOINING PROPERTIES.

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 +- 2% OF OPTIMUM (AS1289.5.1.1)

STEP IRONS AT 300mm CENTRES & TO COUNCIL'S SPECIFICATIONS SHALL BE PROVIDED WHERE PITS ARE DEEPER THAN 1000mm

ALL DOWNPIPES ARE SHOWN DIAGRAMATICALLY POSITION OF DOWNPIPES SHALL BE CONFIRMED ON SITE

EXISTING LEVELS AND SERVICE DEPTH AND LOCATION TO BE CHECKED PRIOR TO

THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH OTHER CONSULTANTS DOCUMENTATION WHICH INCLUDE BUT IS NOT LIMITED TO ARCHITECTURAL AND

SEDIMENT & EROSION CONTROL

THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES TO THE COUNCIL'S SPECIFICATION PRIOR TO THE COMMENCEMENT OF

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

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.

THE GULLY PITS SHALL BE PROTECTED IN ACCORDANCE WITH COUNCIL'S

THE GRATED SURFACE PITS SHALL BE PROTECTED IN ACCORDANCE TO COUNCIL'S

STORMWATER DRAINAGE NOTES:

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

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED

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

BOX COLORBOND OR ZINCALUME STEEL GUTTERS SHALL BE A

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.

SYMBOLS & ABBREVIATIONS:

 $DP = \emptyset 100 \text{ OR } 100 \times 75 \text{ RECTANGULAR DOWN PIPE. UNO.}$

FO = Ø150 FLOOR OUTLET GSIP = GRATED SURFACE INLET PIT (NO LINTEL)

100C = \emptyset 100 CHARGED LINE

 $IP = \emptyset 100 INSPECTION POINT$

SP = RAINWATER DOWNPIPE SPREADER EX DP = EXISTING DOWNPIPE

RH & SP = RAINHEAD AND DOWNPIPE SPREADER RH & DP = RAINHEAD AND DOWNPIPE

BG = BOX GUTTER

TOW = TOW OF WALL RLGSIP = GRATED SURFACE INLET PIT

NGL = NATURAL GROUND LEVEL

XXXX = PROPOSED FINISHED SURFACE LEVEL

= CATCHMENT AREA (WHERE R=ROOF, P=PAVED, L=LANDSCAPED

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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

PROPOSED DEVELOPMENT ΑТ

40 PINE STREET MANLY, NSW

AS SHOWN IN A TRUCTERRE JOB No. 3.21.3215.

ISSUED FOR DA TM GP A TM 02/07/202 MINOR AMENDMENTS T . MAHMUD DESIGNER 22/06/202 TM GP B TM 20/07/202 MINOR AMENDMENTS 22/06/202 ENG. CHECK T.MAHMUD

AUTHORISED BY: GERVASE PURICH
FIEAUST (PENG NER BPB RBP RPEQ JAMES BELL

consulting Structerre Consulting Engineers (NSW) Pty Ltd (ACN 131 748 260)

SUITE 1, LEVEL 2, 42 BIRNIE AVENUE, LIDCOMBE NSW 2141 TORMWATER DRAINAGE PLAN, NOTES, DETAILS & CALCULATIONS DRAWING REF. No. EL (02) 9475 3000 FAX (02) 9646 2311 EMAIL: sydney@structerre.com.a

PRE DEVELOPMENT:

IMPERVIOUS AREA

 $= 0.0 \,\mathrm{m}^2$ EXISTING ROOF

= 21.4m² (EXPOSED ROCK AND RETAINING WALLS) EXISTING PAVEMENT

TOTAL IMPERVIOUS AREA = $21.4m^2$ FRACTION IMPERVIOUS = 22.0%

<u>BYPASS</u>: <u>POST - DEVELOPMENT</u> IN OSD:

IMPERVIOUS AREA

 $= 0.0 \, \text{m}^2$ = 76.2 m^2 = 76.2 m^2 PROPOSED ROOF PROPOSED PAVE = 7.5 m^2 = 0.0 m^2 = 7.5m² (TIMBER DECKING CONSIDERED IMP. FOR CONSERVATIVE

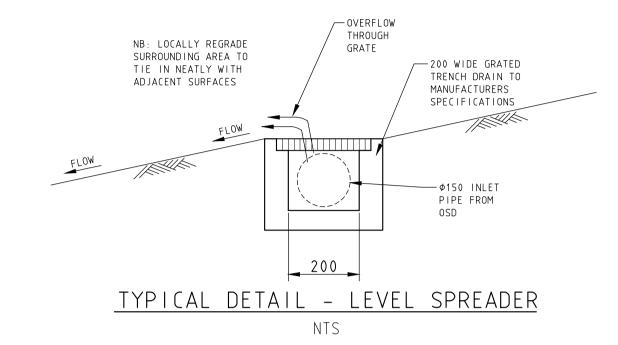
CALCULATION APPROACH) TOTAL IMP. AREA = 83.7m^2 = 76.2m^2 (100.0%) = 7.5m² (32.3%)

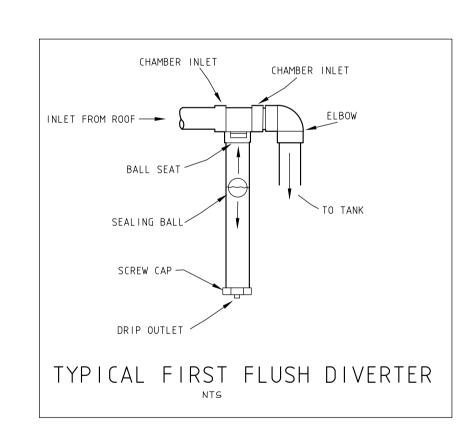
FRACTION IMP. = 84.2%

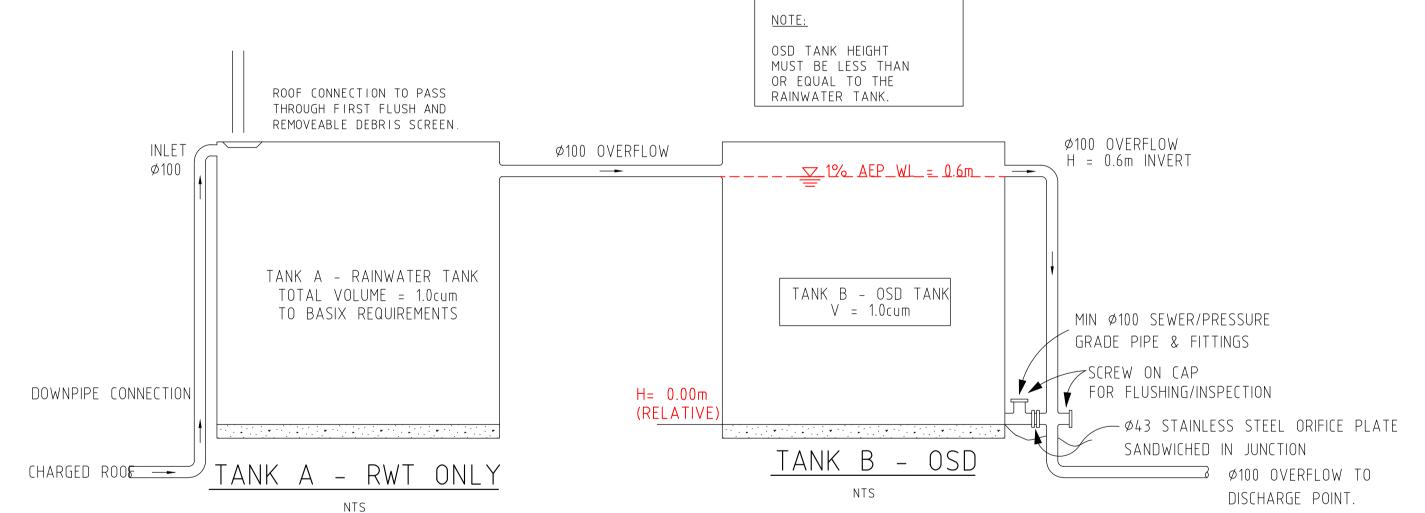
= 15.7m² (67.7%) LANDSCAPE AREA = 15.7m^2 = 0.0m^2 (0%) = 99.4 m^2 = 76.2 m^2 TOTAL AREA = 23.2m²

DRAINS OUTPUT SUMMARY - ILSAX METHOD

TOTAL SITE DISCHARGE (L/SEC)														
AEP	PRE DEV TOTAL SITE DISCHARGE (L/S)	OSD ORIFICE DISCHARGE (L/S)	OSD OVERFLOW (L/S)	OSD VOLUME REQUIRED (M3)	TOTAL BYPASS (L/S)	POST DEV TOTAL SITE DISCHARGE								
20%	2	2	0	0.4	1	2								
5%	4	2	0	0.6	1	3								
1%	5	3	0	0.9	1	4								







TANK BASE TO BE ELEVATED ABOVE GROUND TO ACHIEVE FALL TO LEVEL SPREADER. MOUNT TANKS TO APPROVED METAL STILTS OR SIMILAR AS REQUIRED

OSD STORAGE VOLUME = 1.0cum NOTE: OSD STORAGE VOLUMES ARE MINIMUM AND MAY BE INCREASED TO SUIT MANUFACTURERS STANDARD TANK SIZES. HEIGHTS (H) SHOWN ARE RELATIVE, MEASURED FROM THE INVERT OF THE OUTLET PIPE FROM THE OSD TANK

ON-SITE DETENTION

DETAILS

•	and	Performance'.
		Structerre Consulting Engineers (NSW) Pty Ltd (ACN 131 748 260)

PROPOSED DEVELOPMENT ΑТ 40 PINE STREET MANLY, NSW

OSD ORIFICE PLATE DETAIL

N.T.S

STRUCTERRE JOB No. 3.21.3215. DRAWING REF. No.

STAINLESS STEEL PLATE MIN. 5mm THICK

ø100 OUTLET PIPE

∠ Ø43 ORIFICE

<u>ER</u> :	The o	wner	is r	responsible	for	maintenance	of t	building (and site	. Refer	to th	e CSI	10 'Gui	de to	o Home	Owners	on	Foundation	Maintenance	and	Performance'.	

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OSD & DRAINAGE DETAILS AND CALCULATIONS