

ONSITE DETENTION SYSTEM - SUMMARY NOTES NORTHERN BEACHES COUNCIL

STORMWATER CONTROL ZONE ZONE 1 RESIDENTIAL DENSITY SUB-ZONE ZONE 4 TOTAL SITE AREA 411.2 m^2 PRE DEVELOPMENT IMPERVIOUS AREA 255.1 m^2 62% POST DEVELOPMENT IMPERVIOUS AREA $245.7 \,\mathrm{m}^{-2}$ DECREASE IN IMPERVIOUS AREA -9.4 m^2

SECTION 9 - ONSITE STORMWATER MANAGEMENT

DESIGN IS IN ACCORDANCE WITH SECTION 5.1 OF COUNCIL "WATER MANAGEMENT FOR DEVELOPMENT POLICY" MPERVIOUS PERCENTAGE IS LESS THAN 60% \$ SITE FALLS TO STREET - OSD IS NOT REQUIRED

STORMWATER NOTES

- 1 ALL PIPES TO BE 100mm & SEWER GRADE UPVC UNLESS NOTED OTHERWISE. 2 - ALL PIPES TO BE UPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE
- 3 ALL PIPES TO BE LAID AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- 4 ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO
- 100% S.M.D.D. BELOW PAVEMENTS.

(NO COMPACTION REQUIRED BELOW LANDSCAPING)

COVER TO SURFACE FROM TOP OF PIPE TO BE AS PER AS3500. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY

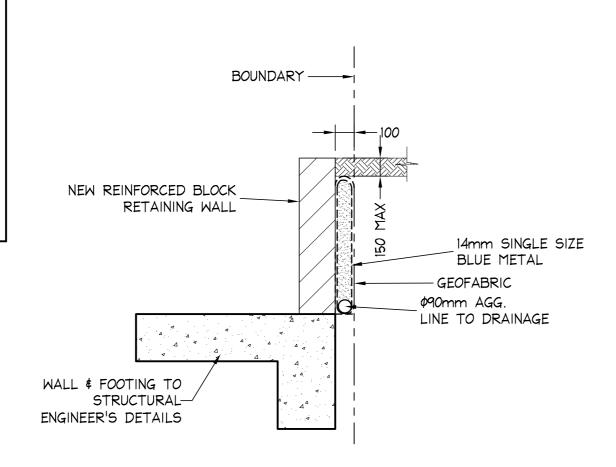
METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.

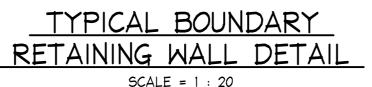
- 5 DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
- 6 PROVIDE CLEANING EYES AT ALL DOWNPIPES.

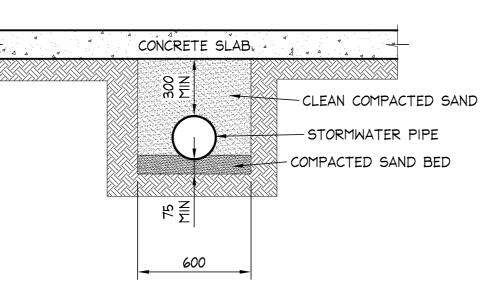
AND SPECIFICATIONS.

- 7 ALL PITS TO BE PRECAST, PREFORMED OR HDPE, IN ACCORDANCE WITH LOCAL COUNCIL SPECIFICATIONS.
- 8 ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
- 9 ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS
- 10 PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION. 11 - ALL LEVELS SHOWN ARE TO AHD
- 12 ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR
- FROM TREE ROOT SYSTEMS. 13 - ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO UPVC.
- 14 ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2021 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE. AND ALL WORKS TO BE IN ACCORDANCE WITH AS 3500-2012 NATIONAL

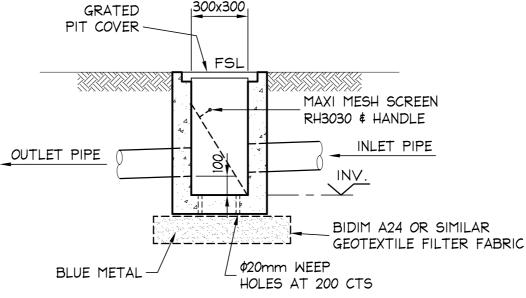
PLUMBING DRAINAGE CODE PART 5 - HOUSING INSTALLATIONS.





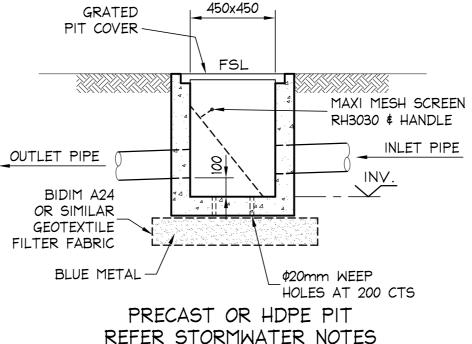


TYPICAL TRENCHING DETAIL SCALE = 1 : 20



PRECAST OR HDPE PIT REFER STORMWATER NOTES

300x300 PIT DETAIL

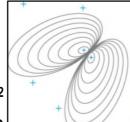


450x450 PIT DETAIL

SCALE = 1 : 20

Peninsula Consultina

PO Box 6491,



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PROPOSED WORKS at: 10 WILLIAM STREET FAIRLIGHT for: MR \$ MRS YOUNG

CONCEPT STORMWATER MANAGEMENT PLAN & DETAILS

22-0823

NOTES:

ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK 2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER

TO DRAWING NUMBER: SOI.

DOCUMENT CERTIFICATION

Date: NOV. 2022 Bruce Lewis

(Principal : Peninsula Consulting Engineers) BE(Civil), CPEng, MIEAust., NPER. Institute of Engineers Membership No. 879131

7-11-2022 FOR COUNCIL SUBMISSION P2 | DRAFT 3-11-2022 Date: Amendment:

Engineers Ph: 0424 253 818 Fax: (02) 9982 4722 E : bruce@peninsulaconsulting.com.au A.B.N. 60 493 390 399

Drawing No:

1.31 21.1 500 201 4600 100X50 or 90dia mm^2 New Gutters similar to existing - Quad 6000 Area All underground Pipes to be 100 Dia Sewer Grade PVC UNO All Gutters to be graded at 1 in 500 to Downpipes GUTTER CALCULATIONS Drawing Title:

PARAPET

Northern Beaches Council [Region 3]

10 William Street Fairlight

Alterations & Additions

On Site Drainage Calculations

Under Northern Beaches Council Conditions, "Water Management for Development Policy" revised 26/02/2021

As Post Development Impervious Percentage is less than 60% - OSD is NOT required for Region 3

ON SITE DRAINAGE CALCULATIONS

Gutter

Slope

steeper

than

1 in

500

500

500

500

500

500

500

500

200

500

500

500

Area A_c

 m^2

17.8

22.9

22.9

22.9

16.8

13.7

17.8

14.1

NA

21.0

21.1

21.0

Gutter Calculations -20 yr & 100 yr ARI Storm

Northern Beaches Council

Alterations & Additions

10 William Street Fairlight

from

Council

Appendix 12

mm/hr

201

201

201

201

201

201

201

201

270

201

201

201

411.2

218.2

58%

-17

Roofs

Side & Rear Paving

Total Impervious

Percent Impervious

From

Figure

5.6.4.1.a

gutter

area reqd

mm²

4200

5400

5400

5400

4000

3500

4200

3700

4500

4600

4500

Downpipe

From

Table 5.6.4.7.1

size regd

mm

100X50 or 90dia

Front Paving

ALTERNATE

POSITION

THROUGH

PARAPET

OF DP/RWH

WITH 200x100 OPENING

RAINHEAD

-BOX GUTTER

SECTION

Area Calculation - Existing

 m^2

180.6 53.5

21

255.1

62%

Flow in

Box Gutters

L/sec

2.5

- OVERFLOW

200x100 DEEP

25mm BELOW SOFFIT OF

BOX GUTTER

- ROOF

BOX GUTTER -

for Region 3 - Southern Catchments - Section 9.3.3.2 & Section 5.1 applies

Area Calculation - Proposed

to AS 3500.2 - 2021 & AS 3500.5 2012 & NCC 2021

slope

factor

From

Fig 5.6.3.2

1.31

1.31

1.31

1.31

1.01

1.01

1.31

1.31

NA

1.31

1.31

1.31

Horizontal

Area A_h

13.6

17.5

17.5

17.5

16.6

13.6

13.6

10.8

33.3

16

16.1

16

16.1

218.2

Site Area

Roofs

Rear Pergola

Front Paving

Total Impervious

Refer Part 4.3.2.2

Eaves

& Box

Gutters

EXDP1

EXDP2

DP3

DP4

DP5

DP6

DP7

DP8

RWH/DP9

DP10

DP11

DP12

DP13

total

Box Gutter to Detail

SP1 & SP2 to be 90 dia

Percent Impervious

Additional Impervious

Property drains toward street

SHEETING

CROSS SECTION RWH

TYPICAL RAIN HEAD DETAIL

SCALE = 1 : 20

SCALE = 1 : 20