Tony McLain Architects

Wastewater Assessment:
Proposed Horse Stables,
113 Orchard Street, Warriewood, NSW

martens consulting engineers

ENVIRONMENTAL

WATER

WASTEWATER

GEOTECHNICAL

CIVIL

PROJECT MANAGEMENT

P2108165JR03V01
July 2023

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1 Overview

1.1 Background

Martens & Associates (MA) has prepared this wastewater assessment to support a development application (DA) for the construction of new horse stables at 113 Orchard Street, Warriewood, NSW ('the site'). This report provides a preliminary assessment of onsite wastewater management requirements for a new reticulated sewer connection proposed for the site.

1.2 Development Proposal

Based on correspondence with the client, it is our understanding that the proposed development will involve:

- Demolition of existing dwelling and construction of new dwelling.
- Construction of a new horse arena located in the eastern portion of the site.
- Construction of a horse stable for up to four horses with associated yards and amenities.
- Construction of paddocks upslope (west) of the proposed stables.
- Wastewater to be directed to a reticulated sewer via a new connection to Banksia Parade, located approximately 80 m east of the site.

Proposed development plans prepared by Tony McLain Architects (2021) are provided in Attachment B.

2 Site Description

2.1 Summary

A summarised site description is provided in Table 1 and site plan is provided in Map 01 (Attachment A).

Table 1: Site description summary.

Item	Description / Detail
Site address	113 Orchard Street, Warriewood, NSW.
Lot/DP[1]	Lot 6 DP749791.
Local Government Area (LGA) [1]	Northern Beaches Council (NBC).
Current land use[1]	RU2 Rural Landscape.
Proposed development	Demolition of existing dwelling and construction of new dwelling (not considered in this wastewater assessment). Construction of new horse stables, arena and paddocks.
Site description	The site is a rural lot with an existing dwelling, grassed landscaped areas and bushland.
Surrounding land uses	The site is bordered by bushland to the west, bushland and rural lots to the north and south and Orchard Street and residential lots to the east.
Topography	Site slopes range between 55% in the western portion of the site and 19% near the lower southeast portion of the site with an easterly aspect. Site elevation is approximately 18 mAHD near the southeast boundary, rising to 43 mAHD near the central west portion of the site (Source: Axiom Surveying, 2018). A survey map showing the topography of the site is presented in (Attachment C).
Expected Geology and Soils	The Sydney 1:100,000 Geological Series Sheet 9130 (1983) identifies the site as Hawkesbury Sandstone from the Wianamatta Group, consisting of medium to coarse grained quartz sandstone, very minor shale and laminate lenses. The NSW Environment and Heritage eSPADE website identifies the site as having soils from the Warriewood landscape consisting of deep well sorted, sandy humus podzols and dark, mottled siliceous sands, overlying acid peats in depressions with deep podzols and pale siliceous sands on sandy rises.

Note:

1. NSW Planning Portal

2.2 Site Investigations

MA completed the following site investigations on November 24, 2021:

- Walkover inspection to assess existing site conditions, local topography, geology, soil characteristics, hydrology and vegetation.
- Excavation and logging of four boreholes using hand operated hydraulic push tube to a maximum depth of 1.0 m below ground level (mbgl).
- Collection of representative soil samples from boreholes for future reference.

Borehole logs are provided in Attachment D.

3 Wastewater Assessment

3.1 Existing Wastewater system

The site currently has an existing dwelling on the site, with a septic tank and absorption trenches. At the time of inspection, that system appeared to be functioning suitably with no odours nor pooling of water observed.

It is proposed that the existing wastewater system will be removed along with the existing dwelling demolition, and the new dwelling will be serviced by directing sewage to a reticulated sewer system.

3.2 Proposed Wastewater Management System

The new wastewater treatment system (via reticulated sewer) is proposed to manage wastewater from all development elements, including:

- The new dwelling to be constructed.
- Toilet for stable users.
- Urine from horses in stables, although majority will be absorbed by bedding material (i.e., hay / straw).

The proposed wastewater treatment will include connection of the above systems to a reticulated authority sewer main. From Client correspondence, it is understood that the closest available connection point is located on Banksia Parade, approximately 80 m east of the site.

4 Construction requirements

Proposed construction of the new waste infrastructure is summarised as follows:

- Construction of new waste infrastructure and pumps to suit the installed rising main infrastructure and to facilitate pumping of generated wastewater to the reticulated sewer main.
- Connection of new dwelling and stable wastewater infrastructure to the proposed new system.
- Construction of a new rising main to the reticulated authority sewer main. The location of the sewer main connection would likely be on Banksia Parade, located approximately 80 m to the east of the site.

Proposed sewer rising main infrastructure layout provided by the Client is shown in Attachment E. Attached plans indicate a rising main pathway running through the northern portion of 111, 111A, 109 and 109A Orchard Street.

Any connection with existing sewer infrastructure will have to be constructed in accordance with Sydney Water requirements.

5 References

Australian / New Zealand Standard 1547 (2012), *On-site domestic wastewater management.*

Axiom Surveying (2018) Plan showing Detail and Levels over Lot 6 in DP749791 Being No. 113 Orchard Street, Warriewood, For Design Purposes and to Support a Development Application.

Pennsylvania State University (PSU) (2000) *Horse stable manure management.*

NSW Department of Primary Industries (1983) - *Sydney 1:100,000 Geological Series Sheet 9130*.

Tony McLain (2021) *Pre-DA Site Plan - Proposed Horse Arena and Facilities and Additions to Existing Dwelling. Lot 6 DP749791. 113 Orchard St., Warriewood*.

6 Attachment A: Mapset and Figures

Map	Title
Map 01	Site Location Map

0 10 20 30 40 50 m

1:1000 @ A3

Viewport

Source of Aerial Photo: Nearmap.

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Map Title / Figure:
Site Location Map

Map 01	Map
113 Orchard Street, Warriewood, NSW.	Site
Wastewater Assessment	Project
	Sub-Project
Tony Mclain Architects	Client
18/02/2022	Date

Project No: P2108165 Map Set: MS02-R01 EPSG: 28356

Legend

- Site Boundary
- Indicative Borehole Locations
- Contour Interval (2m)
- Cadastre

BH103
BH104
BH101
BH102

0 10 20 30 40 50 m

1:1000 @ A3

Viewport

Source of contour lines: ELVIS Lidar.
Source of Aerial Photo: Nearmap.

Project No: P2108165 Map Set: MS02-R01 EPSG: 28356

Map Title / Figure:

Borehole Location Map

Map 02	Map
113 Orchard Street, Warriewood, NSW.	Site
Wastewater Assessment	Project
	Sub-Project
Tony Mclain Architects	Client
18/02/2022	Date

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7 Attachment B: Development Plans

NEW DRIVEWAY AND PARKING
COMPACTED ROAD BASE
TO ENGINEERS DETAILS

PARKING & TURNING

HAY STORE

NEW SCREEN PLANTING

DRIVEWAY

DRYING COURT

TULLIPAN PROJECT HOME

POOL 4 X 2.5

BERM

RL 24.5

SCREEN PLANTING
TO 4 metres
incorporate existing trees

GABION RETAINING WALL
TO ENGINEERS DETAILS
SEE GEOTECHNICAL REPORT

47.000

FETTLER

20.000

NEW SEPARATE
SEWER LINE TO
SERVICE BUILDING

HORSE ARENA
50m X 20m
RL 24.50

50.000

PADDOCK 1

HORSE PATH

PADDOCK 3

PADDOCK 2

PADDOCK 4

YARD
RL 29.0

YARD
RL 28.0

STABLE A

STABLE B

STABLE C

STABLE D

RAMP

YARD
LEVEL 7 X 9
RL 28.8

DISABLE WC

WASH BAY
RL 24.8

FEED ROOM

TACK ROOM

TREATMENT TANK

MANURE STORE

NEW SCREEN PLANTING

ORCHARD STREET

TIMBER DECK

KEY

- EXISTING VEGITATION - UNBUILT ON AREA WITHIN BOUNDARIES
- NEW SCREEN PLANTING
- ARENA, DAY YARDS, TOP PADDOCKS
- ACCESS DRIVE
- HORSE PATH
- NEW STRUCTURES

CHECK TREE POSITIONS NEAR TO FACILITIES
REPORT ANY DISCREPANCIES TO ARCHITECT
BEFORE COMMENCING CONSTRUCTION

- EXISTING TREE CANOPY
- TREE PROTECTION ZONE IMPORTANT TREES
- TREE PROTECTION ZONE LESS IMPORTANT TREES
- TREE TO BE REMOVED
- XXX NEW LEVEL
- CUT BERM MAXIMUM 30° SLOPE
- GABION RETAINING WALL
- 1800 HIGH TIMBER FENCE
- RETAINING WALL

True North

SITE PLAN

SCALE 1:200 AT A1
SITE AREA 9766m2

Revision	Date	Remarks
J	11.5.23	FOR DA

Revision	Date	Remarks

Project

PROPOSED HORSE ARENA AND AND FACILITIES AND ADDITIONS TO EXISTING DWELLING

LOT 6 DP749791

Address

113 Orchard St, Warriewood

Title

SITE PLAN DA

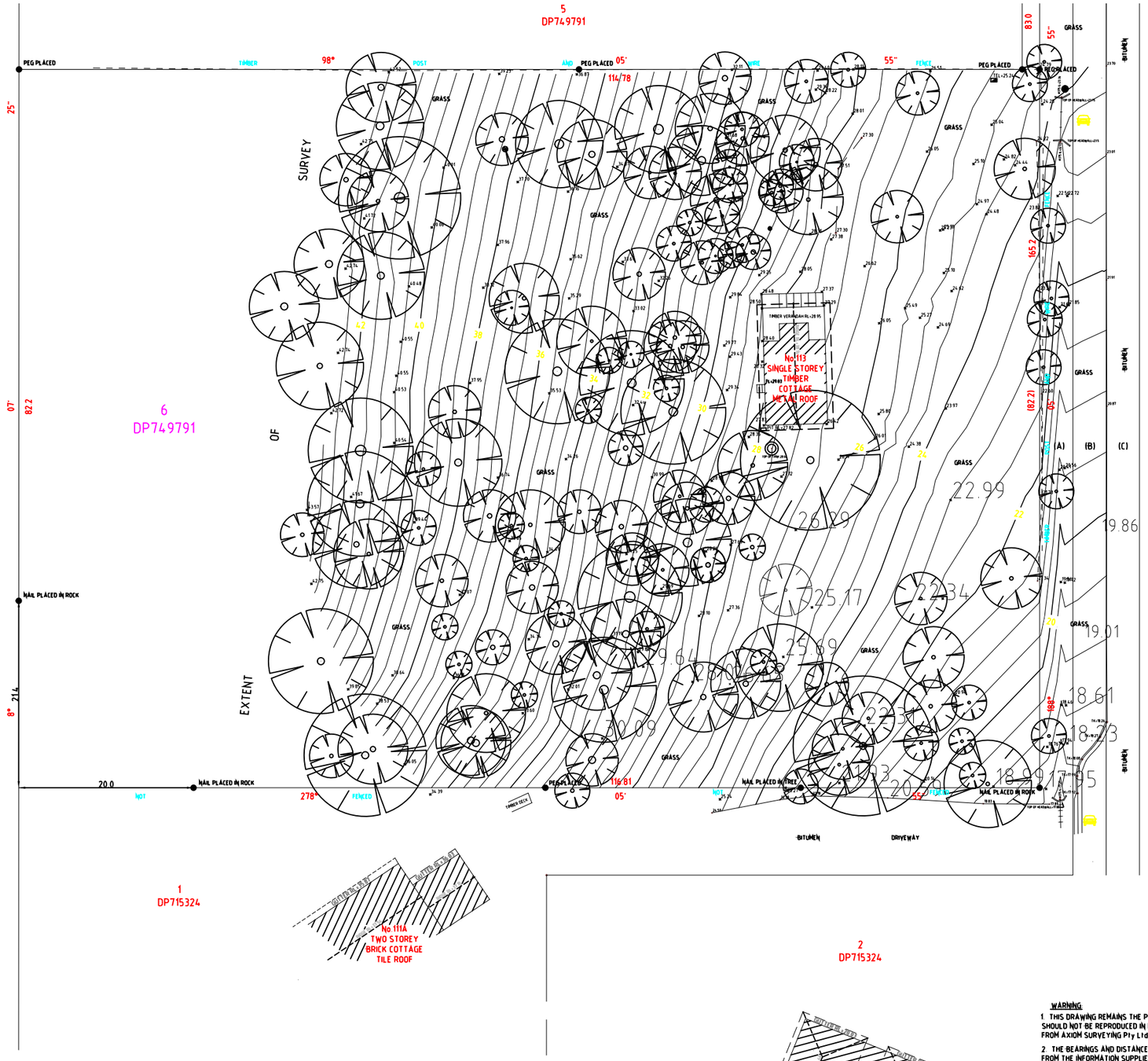
Tony McLain Architect (Reg. No. 4291)
Tel 98108631
Mob 0402223665
mclaintony@gmail.com

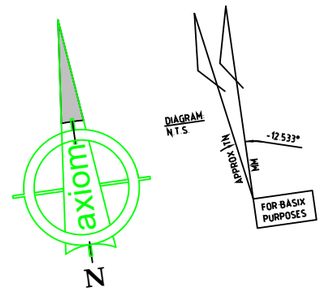
Scale 1:200 @ A1	Date MAY 2023	
Project No. 1826	Drawing No. 01	Rev. J

8 Attachment C: Survey Plan

A1

L.G.A. : NORTHERN BEACHES
PARISH : NARRABEEN
COUNTY : CUMBERLAND





DIAL 1100
BEFORE YOU DIG
www.1100.com.au

AREA LOT 6
VIDE DP 749791: 9766 m²
BY CALC : 9765 m²

ORIGIN OF LEVELS :
PM 55214 RL=25.74 (AHD) FOUND NEAR THE END OF ORCHARD STREET AND LOT 702

ACCURACY OF ORIGIN : ± 0.001m

(A) RIGHT OF CARRIAGEWAY, EASEMENT FOR SERVICES & EASEMENT TO DRAIN WATER 3.805 WIDE & 10 WIDE
(B) RIGHT OF CARRIAGEWAY, EASEMENT FOR SERVICES & EASEMENT TO DRAIN WATER 3.81 WIDE
(C) EXISTING RIGHT OF CARRIAGEWAY 3.81 WIDE VIDE AD794085, EXISTING RIGHT OF CARRIAGEWAY 3.81 WIDE VIDE AD794084 & EASEMENT FOR ACCESS 3.81 WIDE

WARNING

1. THIS DRAWING REMAINS THE PROPERTY OF AXIOM SURVEYING Pty Ltd AND SHOULD NOT BE REPRODUCED IN PART OR IN WHOLE WITHOUT WRITTEN CONSENT FROM AXIOM SURVEYING Pty Ltd
2. THE BEARINGS AND DISTANCES OF THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE INFORMATION SUPPLIED BY THE DEPARTMENT OF LANDS AND THEREFORE THE DIMENSIONS, AREA AND LOCATION OF EASEMENTS ARE SUBJECT TO A FINAL SURVEY
3. VISIBLE SERVICES ONLY HAVE BEEN SHOWN WHICH WERE VISIBLE AT THE TIME OF SURVEY. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION, THE RELEVANT AUTHORITIES SHOULD BE CONTACTED TO LOCATE ANY POTENTIAL UNDERGROUND SERVICES WHICH MAY BE PRESENT.
4. THE CONTOUR INTERVAL IS 0.5 m
5. THE RIDGE HEIGHTS, ROOF LINE, WINDOWS AND GUTTER HEIGHTS HAVE BEEN LOCATED BY INDIRECT MEANS AND ARE APPROXIMATE ONLY.
6. PRIOR TO ANY CONSTRUCTION WORK AN ACCURATE BOUNDARY SURVEY SHOULD BE CONDUCTED AND MARKS PLACED TO DEFINE THE POSITION OF ANY NEW CONSTRUCTION
7. THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN WHICH ARE NOT TO BE REMOVED

LEGEND

- POWER POLE
- ELECTRICAL PILLAR
- POWER LIGHT POLE
- LIGHT POLE
- HYDRANT
- WATER METER
- STOP VALVE
- GAS METER
- GAS DIRECTION MARKER
- SEWER MANHOLE
- STREET SIGN
- PRAM CROSSING
- VEHICLE CROSSING
- WATER MAIN
- TELSTRA PIT
- SEWER LAMPHOLE
- STORMWATER GRATE
- SURFACE INLET PIT
- LINTEL-KERB INLET PIT WITH GRATE
- CLOTHES LINE
- TREE: Ø DIAMETER S SPREAD
- E — OVERHEAD ELECTRICITY LINE
- T — OVERHEAD TELECOM LINE
- S — SEWER LINE

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c/- PO Box 1100, SUTHERLAND NSW 1499
MOB 0420 333 279
Email: davidr@axiomsurveying.com.au

PLAN SHOWING DETAIL & LEVELS OVER LOT 6 IN DP749791 BEING No.113 ORCHARD STREET WARRIEWOOD, FOR DESIGN PURPOSES AND TO SUPPORT A DEVELOPMENT APPLICATION

JOB No. 2987	YOUR REF:		
DRAWING No. 2987CO	CLIENT: JILL HUNTER		
SCALE: 1:250 (A1)	SURVEYED K.D.	DRAWN K.D.	
DATUM:AHD	DATE: 16.02.2018	DATE: 22.02.2018	
SHEET: 1 OF 1			

Rev.	Amendments	Date

D.R.

9 Attachment D: Borehole Logs

CLIENT	Tony Mclain Architects		COMMENCED	24/11/2021	COMPLETED	24/11/2021	**REF BH101**
PROJECT	Wastewater Assessment		LOGGED	RM	CHECKED	GT	Sheet 1 OF 1
SITE	113 Orchard Street, Warriewood, NSW.		GEOLOGY	Hawkesbury Sandstone	VEGETATION	Grass	PROJECT NO. P2108165
EQUIPMENT		Hydraulic push tube	LONGITUDE		RL SURFACE	28.1 m	DATUM AHD
EXCAVATION DIMENSIONS		⌀100 mm x 1.00 m depth	LATITUDE		ASPECT	East	SLOPE 20 - 30%

Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS / ASCS CLASSIFICATION	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		Not Encountered	0.2	28.10	0.0-0.1/S/1 D 0.00-0.10 m			SP	Sand LOAM; dark grey / brown.			RESIDUAL SOIL
				0.20 27.90				CL	Sandy CLAY LOAM; brown / grey; moderate structure.			
			0.4		0.3-0.4/S/1 D 0.30-0.40 m							
			0.6	*0.60* 27.50				CL	Light CLAY; pale brown; moderate structure.			
			0.8		0.8-0.9/S/1 D 0.80-0.90 m							
				0.90 27.20					Trace sandstone / ironstone gravels.			
			1.0	*1.00*					Hole Terminated at 1.00 m			1.00: Hand push tube refusal on extremely low strength standstone.
			1.2									
			1.4									

EXCAVATION LOG TO BE READ IN CONJUCTION WITH ACCOMPANYING REPORT NOTES AND ABBREVIATIONS

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Phone: (02) 9476 9999 Fax: (02) 9476 8767
mail@martens.com.au WEB: http://www.martens.com.au

Engineering Log - BOREHOLE

CLIENT	Tony Mclain Architects		COMMENCED	24/11/2021	COMPLETED	24/11/2021	**REF BH102**
PROJECT	Wastewater Assessment		LOGGED	RM	CHECKED	GT	Sheet 1 OF 1
SITE	113 Orchard Street, Warriewood, NSW.		GEOLOGY	Hawkesbury Sandstone	VEGETATION	Grass	PROJECT NO. P2108165
EQUIPMENT		Hydraulic push tube	LONGITUDE		RL SURFACE	28 m	DATUM AHD
EXCAVATION DIMENSIONS		Ø100 mm x 1.00 m depth	LATITUDE		ASPECT	East	SLOPE 20 - 30%

Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS / ASCS CLASSIFICATION	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		Not Encountered	0	28.00				SP	Sand LOAM; dark grey / brown.			RESIDUAL SOIL
				0.15 27.85				CL	Sandy CLAY LOAM; brown / grey; moderate structure.			
			0.2									
				0.40 27.60				CL	Light CLAY; pale brown; moderate structure.			
			0.4									
			0.6									
			0.8									
			1.0	*1.00*					Hole Terminated at 1.00 m (Target depth reached)			
			1.2									
			1.4									

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Engineering Log - BOREHOLE

CLIENT	Tony Mclain Architects		COMMENCED	24/11/2021	COMPLETED	24/11/2021	**REF BH103**
PROJECT	Wastewater Assessment		LOGGED	RM	CHECKED	GT	Sheet 1 OF 1
SITE	113 Orchard Street, Warriewood, NSW.		GEOLOGY	Hawkesbury Sandstone	VEGETATION	Grass	PROJECT NO. P2108165
EQUIPMENT		Hydraulic push tube	LONGITUDE		RL SURFACE	39.4 m	DATUM AHD
EXCAVATION DIMENSIONS		Ø100 mm x 0.90 m depth	LATITUDE		ASPECT	East	SLOPE 20 - 30%

Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS / ASCS CLASSIFICATION	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		Not Encountered	0.2	39.40	0.0-0.1/S/1 D 0.00-0.10 m			SP	Sand LOAM; dark grey / brown.			RESIDUAL SOIL
				0.20								
				39.20				CL	Sandy CLAY LOAM; brown / grey; moderate structure.			
				0.30								
				39.10				CL	Light CLAY; pale brown; moderate structure.			
			0.4									
					0.5-0.6/S/1 D 0.50-0.60 m							
			0.6									
			0.8									
				0.90					Hole Terminated at 0.90 m (Target depth reached)			
			1.0									
			1.2									
			1.4									

EXCAVATION LOG TO BE READ IN CONJUCTION WITH ACCOMPANYING REPORT NOTES AND ABBREVIATIONS

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Engineering Log - BOREHOLE

CLIENT	Tony Mclain Architects		COMMENCED	24/11/2021	COMPLETED	24/11/2021	**REF BH104**
PROJECT	Wastewater Assessment		LOGGED	RM	CHECKED	GT	Sheet 1 OF 1
SITE	113 Orchard Street, Warriewood, NSW.		GEOLOGY	Hawkesbury Sandstone	VEGETATION	Grass	PROJECT NO. P2108165
EQUIPMENT		Hydraulic push tube	LONGITUDE		RL SURFACE	39 m	DATUM AHD
EXCAVATION DIMENSIONS		Ø100 mm x 0.80 m depth	LATITUDE		ASPECT	East	SLOPE 20 - 30%

Drilling					Sampling		Field Material Description					
METHOD	PENETRATION RESISTANCE	WATER	DEPTH (metres)	DEPTH RL	SAMPLE OR FIELD TEST	RECOVERED	GRAPHIC LOG	USCS / ASCS CLASSIFICATION	SOIL/ROCK MATERIAL DESCRIPTION	MOISTURE CONDITION	CONSISTENCY DENSITY	STRUCTURE AND ADDITIONAL OBSERVATIONS
PT		Not Encountered	0.2	39.00				SP	Sand LOAM; dark grey / brown.			RESIDUAL SOIL
				0.20 38.80				CL	Sandy CLAY LOAM; brown / grey; moderate structure.			
			0.4	*0.30* 38.70				CL	Light CLAY; pale brown; moderate structure.			
			0.6									
			0.8	*0.80*					Hole Terminated at 0.80 m (Target depth reached)			
			1.0									
			1.2									
			1.4									

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Engineering Log - BOREHOLE

10 Attachment E: Proposed Reticulated Sewer Connection Design

A1

DEVELOPER CONTRACT PLAN

NOTES :-

1. WATER SERVICE COORDINATOR: MGP BUILDING & INFRASTRUCTURE SERVICES
   Suite 203/18 Aquatic Drive Frenchs Forest NSW 2086 T 9451 7555

   FOR ANTHONY SIMPSON PH: 0423 305 931
2. DESIGN & FINAL PLANS PREPARED BY: MGP BUILDING & INFRASTRUCTURE SERVICES
   Suite 203/18 Aquatic Drive Frenchs Forest NSW 2086
3. THE WORKS & MATERIAL ARE IN ACCORDANCE WITH THE SEWER RETICULATION CODE OF AUSTRALIA (WSA 02-2002-2.3) INCLUDING THE SYDNEY WATER SUPPLEMENT & APPENDICES.
4. ALL LOTS WERE VACANT AT TIME OF SURVEY.
5. ALL STRUCTURES TO BE CONSTRUCTED TO PROPOSED FINISHED SURFACE LEVELS.
6. PIPES TO BE CONCRETE ENCASED SHOWN ACCORDINGLY:
7. TRENCHES IN ROADWAYS TO BE BACKFILLED WITH STABALISED SAND OR AS DIRECTED BY THE ROAD AUTHORITY.
8. BUILDING ADJACENT TO SEWER. CONDITIONS APPLY. REFER TO "TECHNICAL GUIDELINES BUILDING OVER AND ADJACENT TO PIPE ASSETS AUGUST 2021"
9. ALL LEVELS ELECTRONICALLY GENERATED. NO LEVEL BOOK AVAILABLE.
10. SERVICES SHOWN ARE INDICATIVE ONLY. A CURRENT SERVICES SEARCH & SITE CHECK OF ALL EXISTING SERVICES (INCLUDING 'POT-HOLEING') WILL BE NECESSARY PRIOR TO COMMENCEMENT OF THE WORK & APPROPRIATE PROCEDURES, PRECAUTIONS & CARE TAKEN WHEN WORKING IN CLOSE PROXIMITY OF THESE SERVICES.
11. INSTALLED FITTINGS ARE TO BE LEFT EXPOSED UNTIL SURVEYED FOR WORK AS CONSTRUCTED LOCATIONS & REVIEW BY WATER SERVICE COORDINATOR. ALL SURVEY LOCATIONS TO BE PROVIDED TO WATER SERVICE COORDINATOR
12. MEASURES TO PROTECT THE ENVIRONMENT ARE DETAILED IN THE REVIEW OF ENVIRONMENTAL FACTORS (REF) REPORT
13. SILT STOP FENCING OR STRAW BALE FILTERS TO BE INSTALLED DOWN SLOPE OF ALL WORKS PRIOR TO ANY CONSTRUCTION ACTIVITY. EFFECTIVELY MAINTAINED & REMOVED ONLY AFTER THE AREA HAS BEEN SATISFACTORLY REVEGITATED
14. THE MINIMUM NUMBER OF FIELD COMPACTION TESTS REQUIRED TO SATISFY THE SEWERAGE CODE OF AUSTRALIA ARE:
    PIPE EMBEDMENT ZONE: 1 TRENCH FILL ZONE - TRAFFICABLE: TBC
    TRENCH FILL ZONE - NON TRAFFICABLE: TBC
15. FOR PROPERTY CONNECTION POINTS (P.C.P.) WITH A * SYMBOL, REFER TO THE LONG SECTION FOR CHAINAGE & INVERT INFORMATION.
16. CONTRACTOR TO PROVIDE SURVEY MARK-UP OF AS INSTALLED WORKS TO BE USED FOR WORK AS CONSTRUCTED PLAN. SURVEY TO BE PREPARED BY REGISTERED SURVEYOR
17. PRIOR TO COMMENCEMENT OF WORK CONSTRUCTOR TO UNDERTAKE NECESSARY INVESTIGATIONS TO ENSURE EXISTING STRUCTURES ARE NOT IMPACTED BY PROPOSED WORKS.
18. GDA2020
19. ⊕ THE EXISTING CUSTOMER DRAIN LINE FOR No. [IF REQUIRED] TO BE RECONNECTED TO THE NEW SEWER. THIS CONNECTION MUST BE CARRIED OUT BY A LICENSED DRAINER & INSPECTED BY A FAIR TRADING NSW PLUMBING & DRAINAGE INSPECTOR.
20. MH CLASS D TRAFFICABLE LID OR MH CLASS B NON-TRAFFICABLE LID REQUIRED

DEEMED TO COMPLY :-

14. THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SYDNEY WATER DEEMED TO COMPLY GUIDELINES AND DETAILS.
15. CONSTRUCTOR SHALL HAVE A COPY OF THE CURRENT SYDNEY WATER DEEMED TO COMPLY DRAWINGS REFERENCED BELOW AT ALL TIMES & THE DESIGN PLANS SHALL BE READ IN CONJUNCTION WITH THE RELEVANT DEEMED TO COMPLY DETAIL.
16. REFER DTC-2203 - DN1050 MAITENANCE HOLES - CAST IN-SITU PLAIN WALL CONCRETE 18/03/15 ISSUE B
17. REFER DTC-2000 - MAINTENANCE HOLES CONSTRUCTION NOTES 18/03/15 ISSUE C
18. REFER DTC-2220 - MAINTENANCE HOLES - DETAIL SHEET 1 18/03/15 ISSUE D
19. REFER DTC-2221 - MAINTENANCE HOLES - DETAIL SHEET 2 01/03/13 ISSUE B
7. REFER DTC-2222 - MAINTENANCE HOLES - DETAIL SHEET 3 18/03/15 ISSUE C

0 10 20 30 40 50 METRES

PLAN DRAWN DATE: 11/04/23 VERSION: 1.0 SHEET 1 OF 1 SHEETS

PLAN TO BE READ IN CONJUNCTION WITH CURRENT SYDNEY WATER STANDARDS
SYDNEY WATER CORPORATION

PRIOR TO COMMENCEMENT OF EXCAVATION FOR PROPOSED AND EXISTING SERVICES CONTACT :-

DIAL BEFORE YOU DIG		Ph. 1100
ELECTRICITY	Ausgrid	Ph. 4951 0899
GAS	Jemena	Ph. 131909
TELECOMMUNICATIONS	Telstra	Ph. 1800653935
	NBN	Ph. 1800626329

GIVING AT LEAST 48 HOURS NOTICE.

UTILITIES

TYPE	DATE	REF.	TYPE	DATE	REF.
SEWER: S S	06/04/23	33963918			
GAS: G(MP) G(MP)	06/04/23	33963918			
ENERGY AUST: E E	06/04/23	33963918			
TELSTRA: TEL TEL	06/04/23	33963918			
WATER: DN100 Water	06/04/23	33963918			

WORK AS CONSTRUCTED CERTIFICATION

DEVELOPER

WATER SERVICE CO-ORDINATOR

CONSTRUCTOR

COMPLETED W.A.C. PREPARED

DESIGNER

I CERTIFY THAT THE WORKS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE WORK AS CONSTRUCTED DRAWINGS.

PIPE SCHEDULE

SIZE DN	TYPE	CLASS	LENGTH	PIPE JOINING METHOD / NOTES
150	U.P.V.C.	SN8	79.60	RRJ

DESIGN HEAD m

NO BOUNDARY TRAPS REQUIRED.

AUSTRALIAN HEIGHT DATUM

SCALES

PLAN 1:500 SECTION HOR. 1:500 VERT. 1:125

CROSS SECTIONS — NATURAL

LENGTHS, DEPTHS & LEVELS ARE IN METRES.

NO AMENDMENTS ARE TO BE MADE TO THIS PLAN WITHOUT REFERENCE TO SYDNEY WATER. THIS PLAN IS NOT NECESSARILY UP TO DATE OR CORRECT AND SYDNEY WATER ACCEPTS NO RESPONSIBILITY.

U.B. DIRECTORY 138 A10 41st Edition

SHEET 1 OF 1 File No. N/A

SYDNEY WATER CORPORATION

Case No. TBC

SEWERAGE
DRAINS TO TBC