PROPOSED RESIDENCE AT LOT 9, 7 DOUGLAS STREET, EARLWOOD

GENERAL

- These drawings shall be read in conjunction with all architectural and other consultants drawings and specifications and with such other written instructions and sketches as may be issued during the course of the Contract. Any discrepancies shall be referred to the Superintendent before proceeding with any related works. Construction from these drawings, and their associated consultant's drawings is not to commence G1 until approved by the Local Authorities
- G2 All materials and workmanship shall be in accordance with the relevant and current Standards Australia codes and with the By-Laws and Ordinances of the relevant building authorities except where varied by the project specification.
- G3 All set out dimensions shall be obtained from Architect's and Engineer's details. All discrepancies shall be referred to the Architect and Engineer for decision before proceeding with related work.
- During construction the structure shall be maintained in a stable condition and no part shall be overstressed Temporary bracing shall be provided by the builder/subcontractor to keep the works and excavations stable at all times. G4
- G5 Unless noted otherwise levels are in metres and dimensions are in millimetres.
- G6 The alignment and level of all services shown are approximate only. The contractor shall confirm the position and level of all services prior to commencement of construction. Any damage to services shall be rectified at the contractors expense.
- G7 Any substitution of materials shall be approved by the Engineer and included in any tender.
- G8 All services, or conduits for servicing shall be installed prior to commencement of pavement construction. Subsoil drainage, comprising 100 agriculture pipe in geo-stocking to be placed as shown and as may be directed by the superintendent. Subsoil drainage shall be constructed in accordance with the relevant local authority construction specification. G9
- C10 The structural components detailed on these drawings have been designed in accordance with the relevant Standards Australia codes and Local Government Ordinances for the following loadings. Refer to the Architectural drawings for proposed floor usage. Refer to drawings for live loads and superimposed dead

DRAINAGE NOTES

- D1 All drainage levels to be confirmed on site, prior to any construction commencing.
- D2 All pipes within the property to be a minimum of 100 dia upvc @ 1% minimum grade, uno.
- D3 All pits within the property are to be fitted with "weldlok" or approved equivalent grates:
 Light duty for landscaped areas
 Heavy duty where subjected to vehicular traffic
- D4 All pits within the property to be constructed as one of the following:) Precast stormwater pits) Cast insitu mass concre 3) Cement rendered 230mm brickwork subject to the relevant local authority construction specification.
- D5 Ensure all grates to pits are set below finished surface level within the property. Top of pit RL's are approximate only and may be varied subject to approval of the engineer. All invert levels are to be achieved.
- D6 Any pipes beneath relevant local authority road to be rubber ring jointed RCP, uno.
- D7 All pits in roadways are to be fitted with heavy duty grates with locking bolts and continuous hinge D8
- Provide step irons to stormwater pits greater than 1200 in depth.
- Trench back fill in roadways shall comprise sharp, clean granular back fill in accordance with the relevant local authority specification to non-trafficable areas to be compacted by rodding and tamping using a flat locat where the start of the start D9
- D10 Where a high early discharge (hed) pit is provided all pipes are to be connected to the hed pit, uno
- D11 Down pipes shall be a minimum of dn100 sw grade upvc or 100 x100 colorbond/zincalume steel, uno. D12 Colorbond or zincalume steel box gutters shall be a minimum of 450 wide x 150 deep.
- D13 Eaves gutters shall be a minimum of 125 wide x 100 deep (or of equivalent area) colorbond or zincalume steel, uno
- D14 Subsoil drainage shall be provided to all retaining walls & embankments, with the lines feeding into the stormwater drainage system, uno.

EROSION AND SEDIMENT CONTROL NOTES

- These notes are to be read in conjunction with erosion and sediment control details in this drawing set.
- The contractor shall implement all soil erosion and sediment control measures as necessary and to the satisfaction of the relevant local authority prior to the commencement of and during construction. No disturbance to the site shall be permitted other than in the immediate area of the works and no material shall be removed from the site without the relevant local authority approval. All erosion and sediment control devices to be installed and maintained in accordance with standards outlined in nsw department of housing's "managing urban stormwater soils and constructions". E2
- Place straw bales length wise in a row as parallel as possible to the site contours, uno. Bale ends to be tightly butted. Bales are to be placed so that straws are parallel to the row. Bales are to be placed 1.5m to 2m downshops from the toe of the disturbed batter, uno. E3
- Council approved filter fabric to be entrenched 150mm deep upslope towards disturbed surface. Fabric to be a minimum SF2000 or better. Fix fabric to posts with wire ties or as recomended with manufacturer's specifications. Pabric joints to have a minimum of 150mm overlap. Wire to be strung between posts with filter fabric overlap to prevent sagging. F4
- Stabalised entry/exit points to remain intact until finished driveway is complete. Construction of entry/exit points to be maintained and repaired as required so that it's function is not compromised. Construction of entry/exit point to be in accordance with the detail contained within this drawing set. E5
- E6 All drainage pipe inlets to be capped until: ted d protected with silt barrier
- E6 Provide and maintain silt traps around all surface inlet pits until catchment is revegetated or paved.
- The contractor shall regularly maintain all erosion and sediment control devices and remove accumulated silt from such devices such that more than 60% of their capacity is lost. All the silt is to be placed outside the limit of works. The period for maintaining these devices shall be at least until all disturbed areas are revegetated and further as may be directed by the superintendent or council. E7
- E8 The contractor shall implement dust control by regularly wetting down (but not saturating) disturbed area Topsoil shall be stripped and stockpiled outside hazard areas such as drainage lines. This topsoil shall be respread later on areas to be revegetated and stabilised only, (i.e. all lootpaths, batters, she regarding areas, basins and catchrains). Topsoil shall not be respread on any other areas unless specifically instructed by the superintender. If they are to remain for longer than one month stockpiles shall be protected from erosite by covering them with a mulch and hydroseeding and, If necessary, by locating baths or drains downstream the superintender of the stockpiles and the stockpiles areas and and the stockpiles areas and the stockpiles with the stock of the stockpiles are stockpiles and the stockpiles with the stock of the stockpiles are stockpiles and the stockpiles areas and the stockpiles and the stockpiles are stockpiles are stockpiles and the stockpiles and the stockpiles areas and the stockpiles areas and the stockpiles areas and the stockpiles and the stockpiles areas and the stockpiles and the stockpiles areas and the stockpiles areas and the stockpiles areas and the stockpiles and the stockpiles areas and the stockpiles and the stockpiles areas and the stockpiles areas and the stockpiles areas and the stockpiles and the stockpiles areas an E9
- of a stockpile to retard silt laden runoff E10 Lay 300 wide minimum turf strip on 100 topsoil behind all kerb and gutter with 1000 long returns every 6000 and around structures immediately after backfilling as per the relevant local authority specification.
- E11 The contractor shall grass seed all disturbed areas with an approved mix as soon as practicable after completion of earthworks and regrading.
- E12 Revegetate all trenches immediately upon completion of backfilling.
- E13 When any devices are to be handed over to council they shall be in clean and stable condition

STANDARD LINE TYPES AND SYMBOLS PROPOSED KERB & GUTTER _____ EXISTING KERB & GUTTER PROPOSED BELOW GROUND PIPELINE PROPOSED SUSPENDED PIPELINE EXISTING PIPELINE SUBSOIL DRAINAGE LINE ____ PROPOSED KERB INLET PIT EXISTING KERB INLET PIT -8-PROPOSED JUNCTION OR INLET PIT EXISTING JUNCTION OR INLET PIT DESIGN CENTRELINE EXISTING EDGE OF BITUMEN TELECOMUNICATION CONDUIT GAS MAIN WATER MAIN SEWER MAIN UNDERGROUND ELECTRICITY CABLES PERMANENT MARK & S.S.M. Δ Δ BENCH MARK, SURVEY STATION



LEGEN	ND		
AHD AG	Australian height datum Ag-pipe (Sub soil drainage)	SS SU	Stainless steel Box gutter sump
BG	Average recurrence interval Box Gutter	TNU	Top of wall
BWI	Bottom water level	II/S	Linderside of slab
CI	Cover level	VG	Vally outter
02	Clean out inspection opening	UNO	Unless noted otherwise
DCP	Discharge control pit	0.10	
DP	Down pipe		
DRP	Dropper pipe		
EBG	Existing box gutter		
EDP	Existing down pipe		
EEG	Existing eaves gutter		
EG	Eaves gutter		
FRC	Fiber reinforced concrete		
FW	Floor waste		
GD	Grated drain		
GSIP	Grated surface inlet pit		
HED	High early discharge		
HP	High point of gutter		
IL	Invert level		
10	Inspection opening		
O/F	Overflow		
OSD	On-site detention		
PSD	Permissible site discharge		
PI	Pipe 1 Reinforced concrete pipe		
DUC	Remoted concrete pipe		
RI	Reduced level		
RRI	Rubber ring joint		
RRT	Rainwater re-use tank		
RWH	Rain water head		
RWO	Rain water outlet		
SLAP	Sealed lid access pit		
SP	Spreader pipe		
SPR	Spreader		

RECOMMENDED MAINTENA	NCE SCHED	ULE	
DISCHARGE CONTROL PIT (DCP)	FREQUENCY	RESPONSIBILITY	PROCEDURE
Inspect flap valve and remove any blockage.	Six monthly	Owner	Remove grate. Ensure flap valve moves freely and remove any blockages or debris.
Inspect screen and clean.	Six monthly	Owner	Revove grate and screen if required and clean it.
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate & screen to inspect orifice. see plan for location of dcp.
Inspect dcp sump & remove any sediment-sludge.	Six monthly	Owner	Remove grate and screen. Remove sediment/sludge build-up and check orifice and flap valve clear.
Inspect grate for damage or blockage.	Six monthly	Owner	Check both sides of grate for corrosion, (especially corners and welds) damage or blockage.
Inspect return pipe from storage and return any blockage.	Six monthly	Owner	Remove grate and screen. ventilate underground storage if present. open flap valve and remove any blockages in return line. Check for sludge/debris on upstream side of return line.
Inspect outlet pipe and remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and screen. ventilate underground storage if present. Check orifice and remove any blockages in outlet pipe. Flush outlet pipe to confirm it drains freely. Check for sludge/debris on upstream side of return line.
Check fixing of step irons is secure.	Six monthly	Maintenance Contractor	Remove grate and ensure fixings secure prior to placing weight on step iron.
Inspect overflow weir & remove any blockage.	Six monthly	Maintenance Contractor	Remove grate and open cover to ventilate underground storage if present. ensure weir clear of blockages.
Empty basket at overflow weir (if present).	Six monthly	Maintenance Contractor	Remove grate and ventilate underground storage chamber if present. Empty basket, check fixings secure and not corroded.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance Contractor	Remove grate and screen. ensure plate mounted securely, tighten fixings if required. seal gaps as required.
Check attachment of screen to wall of pit.	Annually	Maintenance Contractor	Remove grate and screen. ensure screen fixings secure. repair as required.
Check screen for corrosion.	Annually	Maintenance Contractor	Remove grate and examine screen for rust or corrosion, especially at corners or welds.
Check attachment of flap valve to wall of .	Annually	Maintenance Contractor	Remove grate. Ensure fixings of valve are secure.
Check flap valve seals against wall of pit.	Annually	Maintenance Contractor	Remove grate. fill pit with water and check that flap seals against side of pit with minimal leakage.
Check any hinges of flap valve move freely.	Annually	Maintenance Contractor	Remove grate. Test valve hinge by moving flap to full extent.
Inspect dcp walls (internal and external, if appropriate) for cracks or spalling.	Annually	Maintenance Contractor	Remove grate to inspect internal walls. Repair as required. Clear vegetation from external walls if necessary and repair as required.
Check step irons for corrosion.	Annually	Maintenance Contractor	Remove grate. Examine step irons and repair any corrosion or damage.
Check orifice diameter correct and retains sharp edge.	Five yearly	Maintenance Contractor	Compare diameter to design (see work-as- executed) and ensure edge is not pitted or damaged.
STORAGE			
Inspect & remove any blockage of orifice.	Six monthly	Owner	Remove grate and screen. remove sediment/sludge build-up.
Check orifice diameter correct and retains sharp edge.	Six monthly	Owner	Remove blockages from grate and check if pit blocked.
Inspect screen and clean.	Six monthly	Owner	Remove debris and floatable material likely to be carried to grates.
Check attachment of orifice plate to wall of pit (gaps less than 5 mm).	Annually	Maintenance	Remove grate to inspect internal walls. repair as required. clear vegetation from external walls if necessary and repair as required.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Compare actual storage available with work-as executed plans. If volume loss is greater than 5%, arrange for reconstruction to replace the volume lost. Council to be notified of the proposal.
Check attachment of screen to wall of pit.	Five yearly	Maintenance Contractor	Check along drainage lines and at pits for subsidence likely to indicate leakages.

DESCRIPTION



NOTE: BUILDER/PLUMBER TO INVESTIGATE SITE CONDITIONS, CONFIRM STORMWATER CONNECTION HEIGHT LEVELS AND LOCATION TO ENSURE CONSISTENCY WITH THE DESIGN. ANY DISCREPANCIES OR CONFLICTS WHICH MAY AFFECT THE PROPOSED DESIGN TO BE REPORTED TO THE ENGINEER <u>PRIOR</u> TO THE COMMENCEMENT OF CONSTRUCTION.

NOTE: DO NOT SCALE OFF DRAWINGS. REFER TO	А	09.06.22
ARCHITECTURAL PLANS. VERIFY DIMENSIONS ON SITE	REV	DATE

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PROP AT LOT 9, 7 [

OPOSED RESIDENCE 9. 7 DOUGLAS STREET, EARLWOOD	JOB NUMBER: 220369	DWG NUMBER: C00.01	ORIGINAL SIZE: A3
FOR FOWLER HOMES	DESIGNED BY: O.G.	DATE: MAY 2022	$\langle \rangle$
GENERAL NOTES	DRAWN BY: J.W.	SCALE: N.T.S	\checkmark



- DENOTES SEDIMENT FENCE

-				COPYRIGHT All rights reserved.	EngineeringStudio	PROPOSED RESIDENCE AT LOT 9, 7 DOUGLAS STREET, EARLWOOD	JOB NUMBER: 220369	DWG NUMBER: C01.01	ORIGINAL SIZE: A3
NOTE: BUILDER/PLUMBER TO INVESTIGATE SITE CONDITIONS, CONFIRM STORMWATER CONNECTION HEIGHT LEVELS AND LOCATION TO ENSURE	_		+	These drawings, plans and specifications and the copyright are the property of Engineering Studio and must not be used, reproduced or	Civil & Shuctural	FOR FOWLER HOMES	DESIGNED BY: O.G.	DATE: MAY 2022	$\langle \rangle$
CONSISTENCY WITH THE DESIGN. ANY DISCREPANCIES OR CONFLICTS WHICH MAY AFFECT THE PROPOSED DESIGN TO BE REPORTED TO THE ENGINEER <u>PRIOR</u> TO THE COMMENCEMENT OF CONSTRUCTION.	A 09. REV D	0.06.22 ISSUED FOR APPROVAL DESCRIPTION	J.W. BY	copied wholly or in part without he written permission of Engineering Studio.	Phone: (02) 8020 2980 Postal Address Email: info@engineeringstudio.com.au Web: www.engineeringstudio.com.au BAULKHAM HILLS NSW 2153	SEDIMENT & EROSION CONTROL PLAN	DRAWN BY: J.W.	SCALE: 1:200 U.N.O	1 > 1



OSED RESIDENCE	JOB NUMBER:	DWG NUMBER:	ORIGINAL SIZE:
	220369	C01.02	A3
DR FOWLER HOMES	DESIGNED BY: O.G.	DATE: MAY 2022	$\langle \rangle$
MENT & EROSION	DRAWN BY:	SCALE:	\checkmark
NTROL DETAILS	J.W.	1:20 U.N.O	





STORMWA	TER DESIGN SUMMARY	
COUNCIL: CAN	TERBURY- BANKSTOWN COUNCIL	
(CANTERBURY	WARD) N STORM	– 219 mm/h
20 YEAR, 5 MIN	ISTORM	= 174 mm/h
TOTAL SITE AF	REA	$= 582.40 \text{ m}^2$
PROPOSED RC		$= 222.50 \text{ m}^2$
TOTAL IMPERVIOUS P	/IOUS SITE AREA	$= 91.37 \text{ m}^2$ $= 313.87 \text{ m}^2$
IMPERVIOUS S	ITE PERCENTAGE	= 53.9%
100 % PROPOS		L RAINWATER
BOUNDARY SIL	_T ARRESTOR PIT. PIT SURCHARGE	DIRECTED TO
EXISTING COU	NCIL TRUNK DRAINAGE SYSTEM VIA	A GRAVITY IN
	ETENTION DESIGN SUMM	
ON-SITE DETE	NTION NOT REQUIRED FOR PROPOS DEVELOPMENT WITH AN ACCUMULA	SED SINGLE
IMPERVIOUS A	REA LESS THAN 70% IN ACCORDAN	CE WITH CITY
STORIVIVA	IER DRAINAGE NUTES	
	GE LINES SHALL BE UPVC (CLASS SH	1)
- ALL DRAINAG	GE LINES SHALL BE LAID @ 1% FALL	MIN, U.N.O.
- FIRST FLUSH	RAINWATER DEVICES TO BE FITTE	D TO
- MINIMUM FF	NES TO BUILDER'S DETAIL, TYPICAL FECTIVE FAVES GUTTER SLOPE = 11	500 U N O
- MINIMUM EF	FECTIVE EAVES GUTTER SIZE = 580	0 mm²
LEGEND		
<i>\</i> ⁶	Ø90 OR 100 x 50 RECTANGULAR D PIPE, U.N.O.	NWC
*	INSPECTION POINT	
Ŷ	LOWER ROOF EAVES GUTTER	
VG	VALLEY GUTTER	
ه ш	RAINWATER SPREADER	
¢Φ	FIRST FLUSH RAINWATER DEVICE BUILDERS DETAIL	то
(c)	CHARGED PIPE	
	PROPOSED BELOW GROUND PIPE	LINE
	EXISTING PIPELINE	
	PROPOSED SURFACE INLET PIT	
$\Rightarrow \Rightarrow \Rightarrow \Rightarrow$	OVERLAND FLOW PATH	

OSED RESIDENCE	JOB NUMBER: 220369	DWG NUMBER: C02.01	ORIGINAL SIZE: A3
DR FOWLER HOMES	DESIGNED BY: O.G.	DATE: MAY 2022	\bigwedge
ATER DRAINAGE PLAN	DRAWN BY: J.W.	SCALE: 1:200 U.N.O	\bigtriangledown





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ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.	ISIONS ON SITE	REV	DATE	DESCRIPTION	BY	pormocion of Engineering ordere.	Web: www.engineeringstudio.com.au BAULKHAM HILLS NSW 2153	

OSED RESIDENCE	JOB NUMBER: 220369	DWG NUMBER: C02.03	ORIGINAL SIZE: A3	
OR FOWLER HOMES	DESIGNED BY: O.G.	DATE: MAY 2022	\bigcirc	
ATER DETAILS SHEET 2	DRAWN BY: J.W.	SCALE: 1:20 U.N.O		