## PRECISION | COMMUNICATION | ACCOUNTABILITY

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10 December 2018

Project Strategy Attention: Mr Stewart Johnson PO Box 271 SUTHERLAND NSW 1499

Dear Sir

## Re: 585–649 Mamre Road, Orchard Hills MOD5 Subdivision of Lot 7 & 9 to Lots 10, 11 & 12 Stormwater Drainage

We provide this letter in relation to the proposed MOD5 for a subdivision of Lot 7 & 9 into Lots 10, 11 & 12. Specifically this letter reviews and confirms the effect of the proposed subdivision on the as approved and constructed drainage under SSD 7173.

Reference to enclosed drawing Co12042.00-C40 shows the designed and approved drainage catchments.

The modification of Lot 7 & 9 into Lots 10, 11 & 12 will require 3.32 Ha of Lot 10 to drain to the Cat9 discharge point located on the north-west corner of Lot 10. The southern 2.039 Ha of Lot 10 and the whole of Lot 11 will be required to discharge to the Cat7 discharge point located on Distribution Drive. An easement (and associated suitably sized in-ground drainage pipe) benefiting Lot 11 through Lot 10 will be required to be provided. The proposed Lot 12 currently drains via proposed Lot 10 and will continue to do so until these lots are developed. Servicing of the developed Lot 12 is proposed through future development of Lot 1 DP1233392 to the North.

Refer **Enclosure 1** for existing estate subdivision lots, **Enclosure 2** for the proposed subdivision and **Enclosure 3** for the approved drainage catchment layouts.

It is noted that a slightly larger overall catchment drains to Cat7 than that in the original SSD 7173 designs. This has been reviewed and confirmed to operate as intended.

The sketches included as **Enclosure 2** show illustratively the future connections and how the sites are expected to be serviced (noting these are not intended as engineering drawings). It is noted there is proposed to be no amendment to the existing levels and associated contours under this application; and the site is able to drain as it currently does prior to the future developments expected for this current land subdivision. Future work under SSDA 9429 to proposed Lot 11 is as per the attached engineering drawings and includes details of the drainage arrangements for proposed Lot 11.

The catchment splits are as current; except that the split line which is currently on the Lot 7/9 boundary remain s in place centrally in proposed Lot 10; with the Lot 10 drainage discharging through Cat 7 and Cat 9 points of discharge.



Given the above catchment layouts, and associated easements are provided (as shown indicatively on the enclosed sketches), the proposed subdivision of the land will have negligible effect on the drainage and the system will operated generally as per the approved and constructed SSD7173 designs.

We trust the included information meets your current needs. Please contact the undersigned if further information is required.

Yours faithfully, COSTIN ROE CONSULTING PTY LTD

MWil

MARK WILSON MIEAust CPEng NER Director

Encl. Enclosure 1 – Existing Plan of Subdivision Enclosure 2 – Proposed subdivision Enclosure 3 - Costin Roe Consulting drawing C40.



Sheet 2 of 3 sheets

DIAGRAM A

NOT TO SCALE

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(D)

(M) 125 (N) 125 (N) 1

26

7

(3.085)

PHILIP

DRAFT

KING

DRIVE

	SCHE	DULE OF S	HORT LINE	
No.	BEARING	DISTANCE	ARC	RADIUS
I	107°18'30"	25.46		
2	107°18'30"	21.875		
3	199°53'30"	35.61	35.645	233.88
4	185°12′10″	83.84	84.3	233.89
5	264°36′50″	13.165		
6	264°36′50″	8.445		
7	353°I5'30"	25.465	25.46	392.96
8	354°03'20"	30.595	30.605	396.46
9	129°11'00"	14.40		
10	106°01'30"	16.635		
11	85°13'10″	4.68		
12	233°58'20"	28.195		
13	240°35′40″	14.065	14.115	48.005
14	91°45'20"	20.205		
15	154°02'20"	28.95		
16	161°12'10"	3.0		
17	341°02'00"	4.685		
19	299°57'20″	3.04		
20	254°58'30″	37.18		
21	210°05′40″	3.005		
22	255°00'40″	6.415		
23	255°26′40″	5.435		
24	27°32′40″	20.135		
25	(I48°2I'05")	(35.71)	51.553	18.035
26	(33°39'15")	(10.02)	10,155	17.945





4

DIAGRAM C

Registered



DMENIS		NC	),	
26/10/20	18	SEVERANCE AREA ADDED		
08/10/20	18	EASEMENTS O ADDED		
18/09/20	18	(E4) EXTENDED		
17/09/20	18	BDY LOT 10/11 AMENDED	З	
09/08/20	18	BDY LOT 11/12 AMENDED		
24/07/20	18	FOR COMMENT		
N OF Plan No.:   SUBDIVISION 73535.00   9 DP271141 VER 6   IE PARK VER 6			07	
f Survey:		weyor: GKO Sheet 1 of	1	
	210	TF		

AMENDMENTS

VERSION No



EASEMENT TO DRAIN WATER 10, 20, WIDE & VARIABLE WIDTH RIGHT OF ACCESS VARIABLE WIDTH EASEMENT FOR SERVICES VARIABLE WIDTH PROPOSED EASEMENT FOR EMERGENCY ACCESS 6 WIDE (FIRE PURPOSES) PROPOSED EASEMENT FOR ELECTRICITY PURPOSES 2 WIDE EASEMENT FOR WATER SUBDLY EASEMENT FOR WATER SUPPLY PURPOSES 3 WIDE (DP271141) EASEMENT FOR SEWERAGE PURPOSES 3, 4, 4.6 WIDE & VARIABLE WIDTH (DP271141) PROPOSED EASEMENT FOR DRAINAGE 3 WIDE

ALL DIMENSIONS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO FINAL SURVEY LOT LAYOUT AND DIMENSIONS DETERMINED FROM CONCEPT SITE PLAN PREPARED BY NETTLETON TRIBE

FUTURE CONNECTION PER LOT 1 DP1233392 **DEVELOPMENT &** INTERSECTION UPGRADE





## ENCLOSURE 3 CATCHMENT PLAN

SCALE 1:1000 AT A0 SHEET SIZE

Costin Roe Consulting

STORMWATER CATCHMENT PLAN

ISSUE B

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