

Parcel Property

27<sup>th</sup> November 2017

WAPC Reference: 154040

Beenyup Grove, Byford

## **DRIANAGE INFORMATION SHEET FOR LOT PURCHASERS**

### **Residential Lot Soakwell Requirements**

Residential lots with front driveway access in the Beenyup Grove development are required to retain stormwater runoff generated by the development of dwellings and impervious surfaces in the front setback area within the boundary of the lot.

Figure 1 demonstrates typical arrangements for urban and suburban coded lots indicating the number and arrangement of soakwells that are required to be provided.

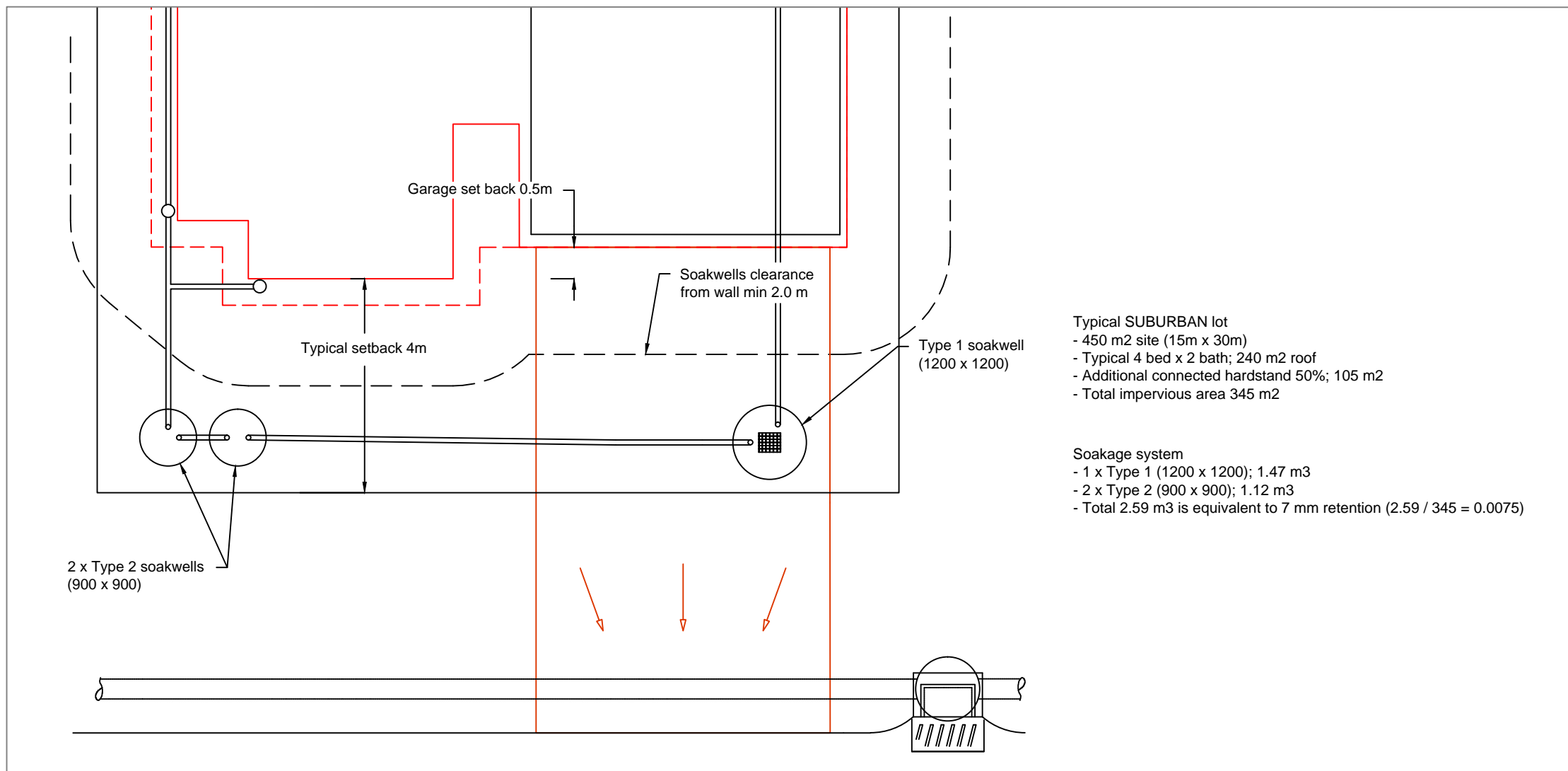
No direct connection to the road drainage system will be provided; excess stormwater runoff shall overflow from grated covers to the street drainage system via the driveway as indicated in Figure 1.

The following points are to be considered during assessment of dwellings in this estate:

- The use of soakwells to the rear of properties is not recommended;
- The use of soakwells of greater than 900 mm depth is not recommended;
- Soakwells should be sited on top of a 300 mm layer of aggregate; and,
- Soakwells should be located at least 3 m from any building and at least 0.5 m from lot boundaries.

### **Direct Lot Connections**

As soakwells will be installed, direct lot connections will not be provided for any lots.



Typical SUBURBAN lot  
 - 450 m2 site (15m x 30m)  
 - Typical 4 bed x 2 bath; 240 m2 roof  
 - Additional connected hardstand 50%; 105 m2  
 - Total impervious area 345 m2

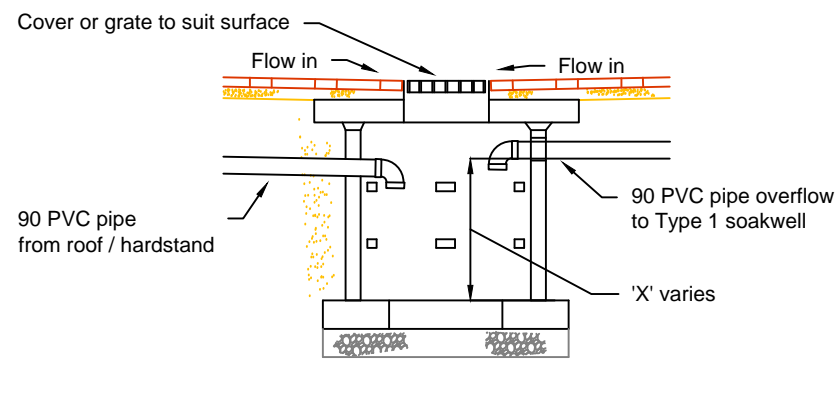
Soakage system  
 - 1 x Type 1 (1200 x 1200); 1.47 m3  
 - 2 x Type 2 (900 x 900); 1.12 m3  
 - Total 2.59 m3 is equivalent to 7 mm retention ( $2.59 / 345 = 0.0075$ )

2 x Type 2 soakwells  
(900 x 900)

Type 1 soakwell  
(1200 x 1200)

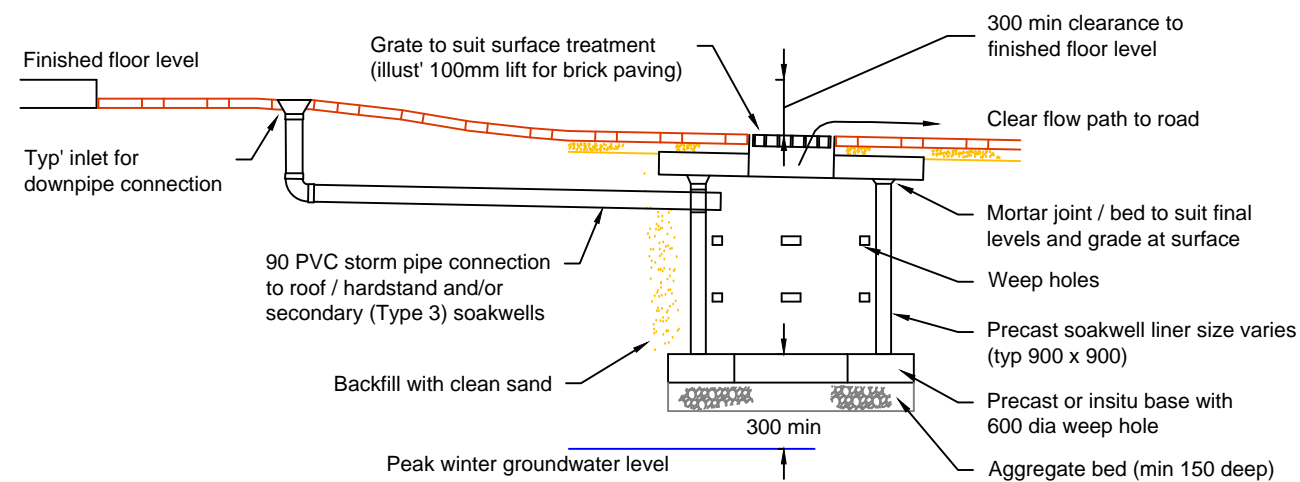
Typical arrangement on lot (Scale 1:100 @ A3)

Secondary / connected soakwells (Type 2)



Typical Soakwell Details (Scale 1:40 @ A3)

Soakwell with surface overflow (Type 1)



Retention Volumes using standard design

Soakwell Size (mm)		X	Retention storage (m3)	
Diameter	Depth		Type 1	Type 2
600	600	400	0.23	0.17
900	600	430	0.46	0.35
900	900	750	0.65	0.56
1200	1200	1000	1.47	1.24
1800	1200	1000	3.25	2.74

1. Storage to be counted for Type 2 soakwells may be increased if overflow pipe is below the invert of the site overflow level.  
 2. Typical values of "X" have been selected that align with precast outlets in typical soakwell liners. If varied then retention storage allowance should be adjusted.

# Doley Road: Urban Water Management Plan

## Figure 1: Lot retention using concrete soakwells

ISSUE	DATE	DESIGN	CHECK
A	8 Jul 2017	AN	--
DATA SOURCES Landgate Depart of Planning		A3 SCALE 1:100	
		Projection: MGA50	Datum: AHD



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