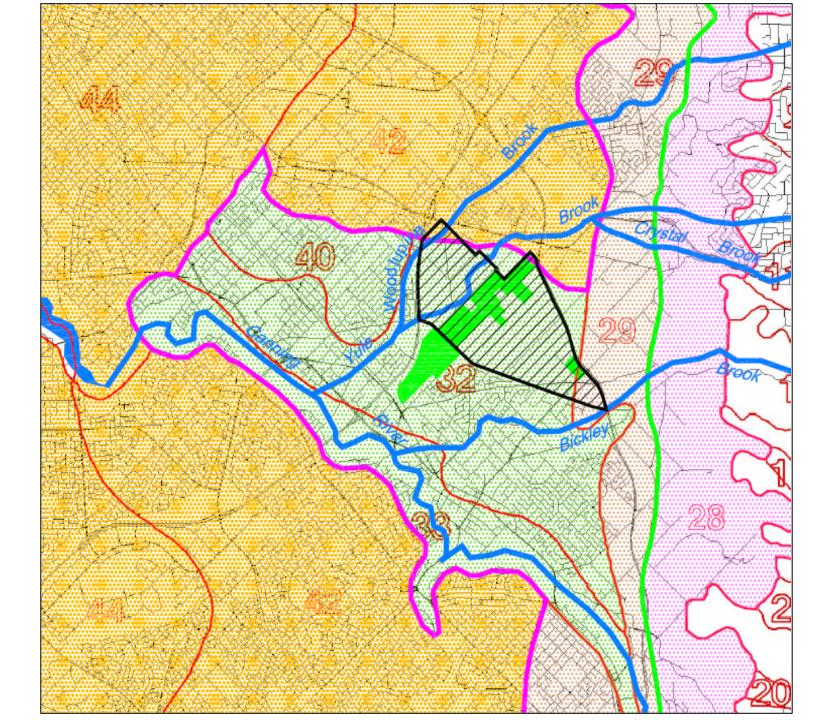


#### VEGETATION COMPLEXES

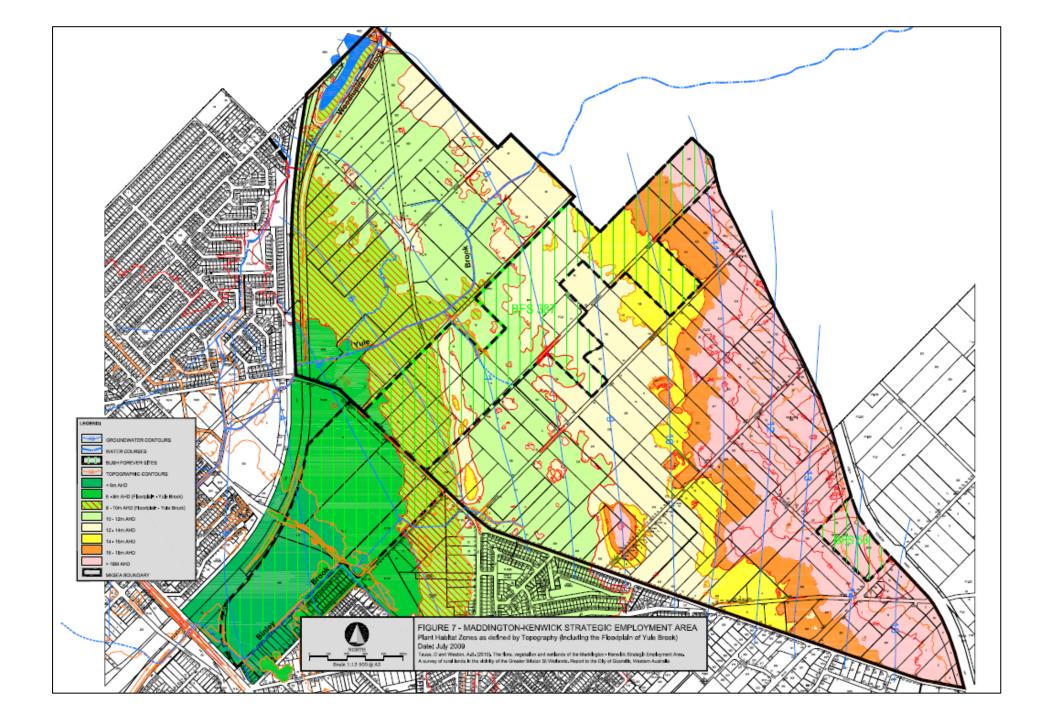
DARL	NG PLATEAU				
28	Daring Scarp Complex				
SWAN COASTAL PLAIN					
29	Forrestfleld Complex				
	(Rldge HIII Shelf)				
32	Gulldford Complex				
33	Swan Complex				
40	Cannington Complex				
42	Southern River				
	Complex				
44	Bassendean Complex				
	- Central and South				











The Registered Aboriginal Heritage
Site 4342 location is currently
isolated from the natural heritage,
other indigenous sites and
recreation areas that we have tried
to group together into the Yule
Brook Regional Park (draft name)
proposal area





# Decision process for stormwater management in Western Australia

November 2017

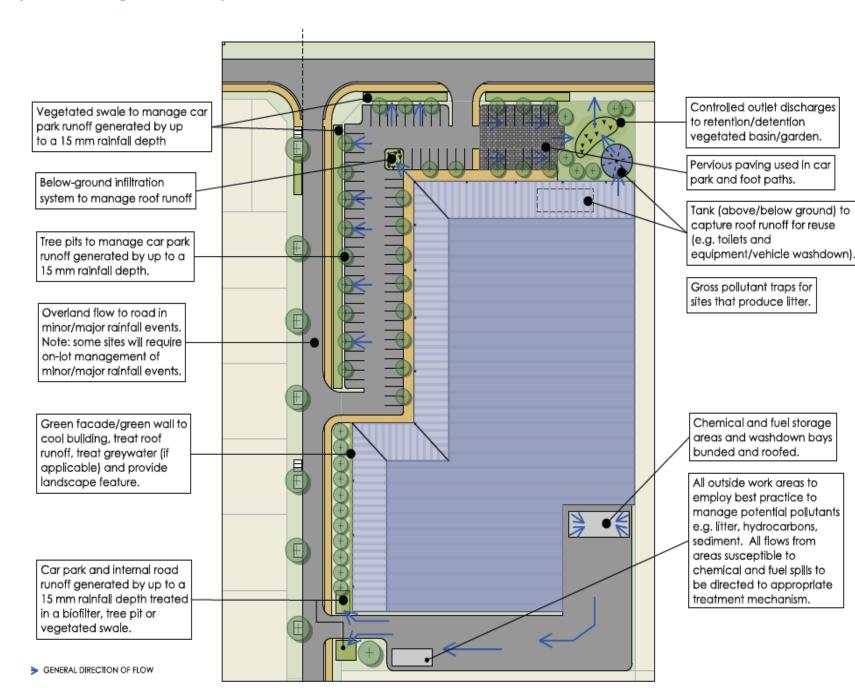


### Example management options for commercial/industrial lots – small rainfall event runof

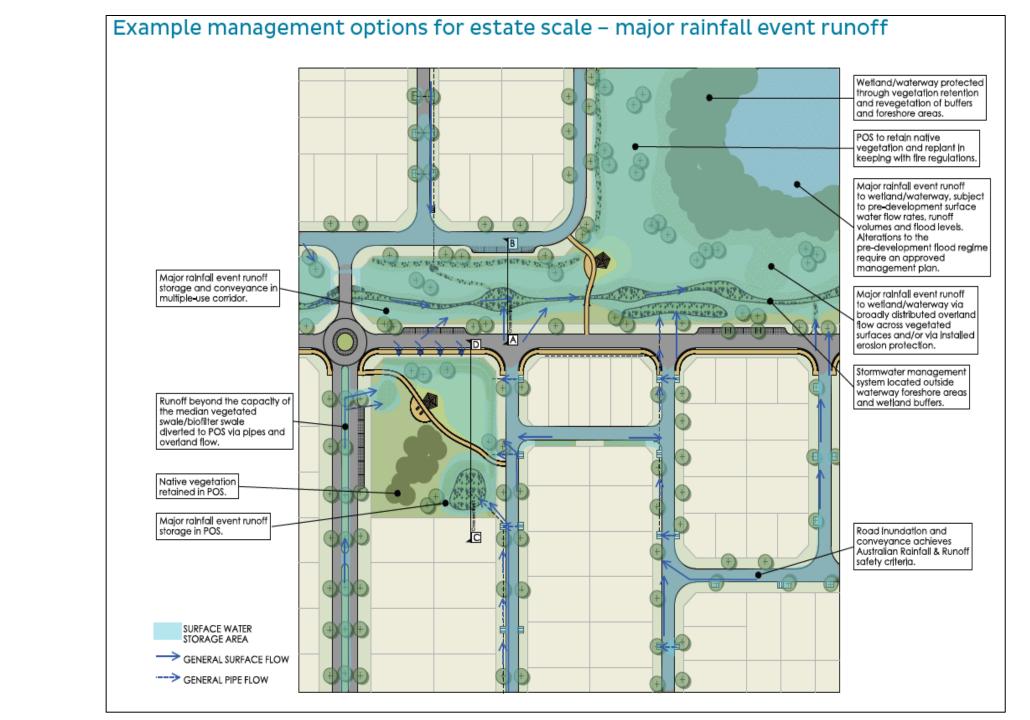
## Structural Items within industrial lot.

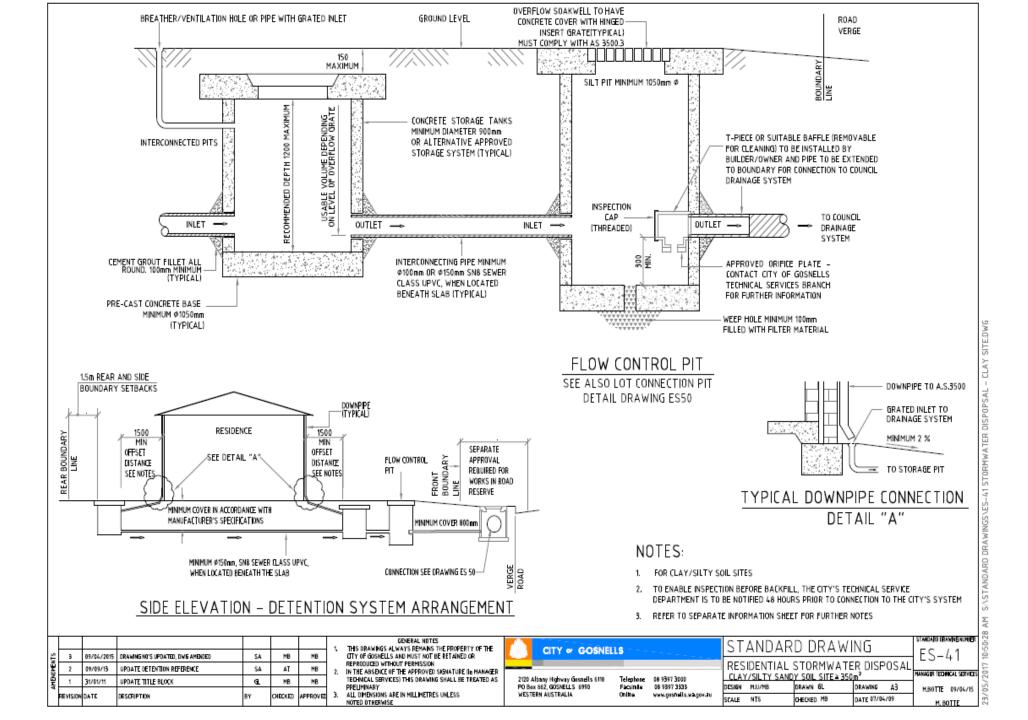
- 1.Below ground infiltration system to manage roof run off
- 2. Tree pits
- 3. Overland flow to road.
- 4. Green façade/green wall to treat roof run off and cool building and so reduce heat radiation.
- 5. Carpark and internal road run off treated in a biofilter
- 6. Vegetated swales, basins and rain gardens.
- 7. Rainwater tank(s).
- 8. Pervious paving.
- 9. Gross pollutant traps
- 10. A bunded and roofed chemical and fuel storage area and wash down bays.
- 11. All flows from areas susceptible to pollutant spills directed into a special treatment site.

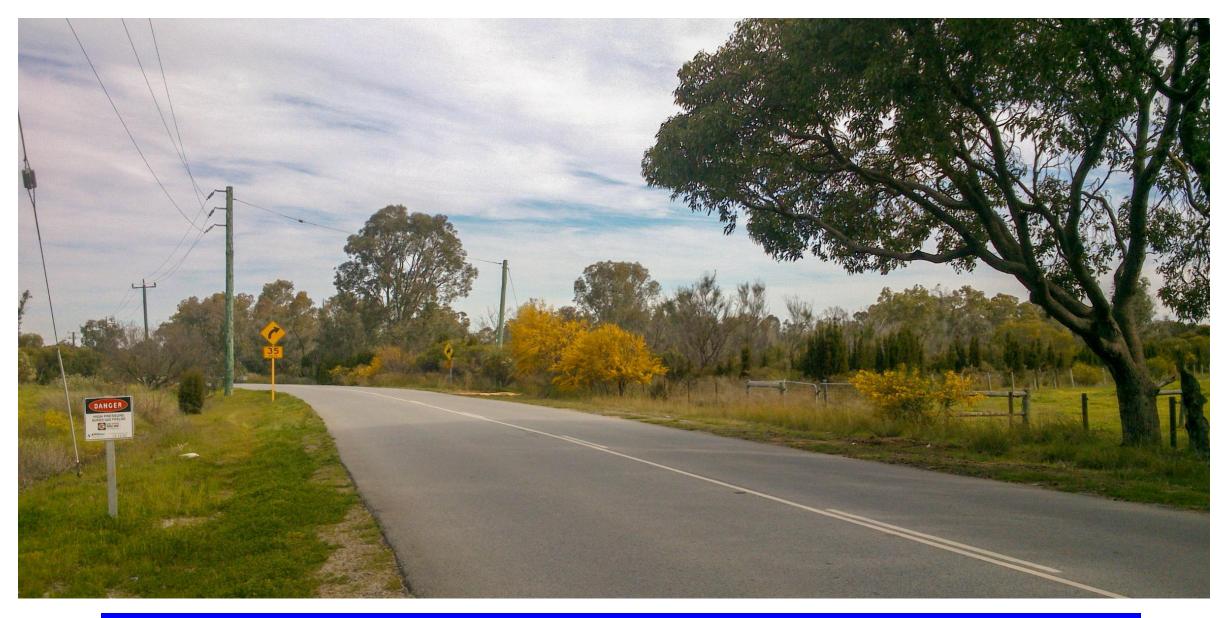
Emerge: No structural water treatment on site (education only)



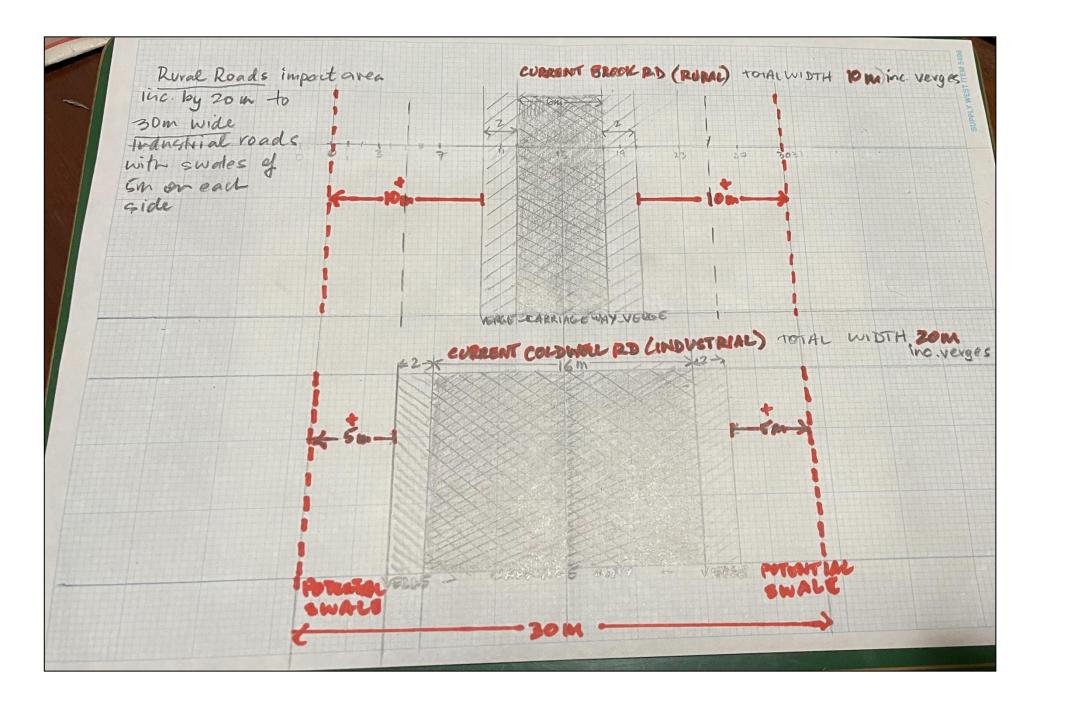
#### Example management options for estate scale – small rainfall event runoff Wetland/waterway. Note: Surface water is not present in some wetland types. Regular tree pits to manage Wetland/waterway protected road runoff generated by up through vegetation retention and revegetation of buffers to 15 mm rainfall depth. and foreshore areas. Groundwater treated before POS to retain native entering subsoil system e.g. vegetation and replant in amended soils/filter media. keeping with fire regulations. Small vegetated swale to Stormwater management manage road runoff system located outside of generated by up to 15 mm waterway foreshore areas rainfall depth. and wetland buffers. Multiple-use corridor to Living stream/vegetated swale connect green spaces and to provide habitat and water provide opportunity for quality treatment through overland flow and water overland flow. treatment. Concentrated flows from road Pervious paving used to discharged through kerb opening with erosion create more areas for infiltration. protection. Median and POS vegetated swale/biofilter swale to Subsoil and piped flow outlet to biofilter/ constructed manage road runoff generated wetland for treatment. by up to 15 mm rainfall depth. Road runoff directed to POS Vegetated swale on and landscaped verges, non-active frontage for medians and roundabouts via direct road runoff. flush kerbs or kerb openings. Side entry pits linked to Native vegetation plpe network. retained in POS. Infiltration cells/leaky side Biofilter/constructed wetland entry pits/tree pits. for treatment of piped road runoff generated by up to 15 mm rainfall depth and See lot diagrams for small groundwater subsoil outlet. rainfall event management on SURFACE WATER STORAGE AREA → GENERAL SURFACE FLOW GENERAL PIPE FLOW

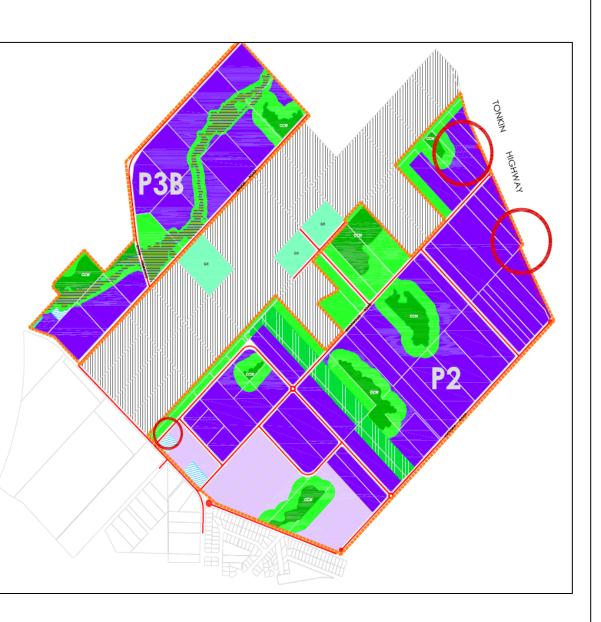






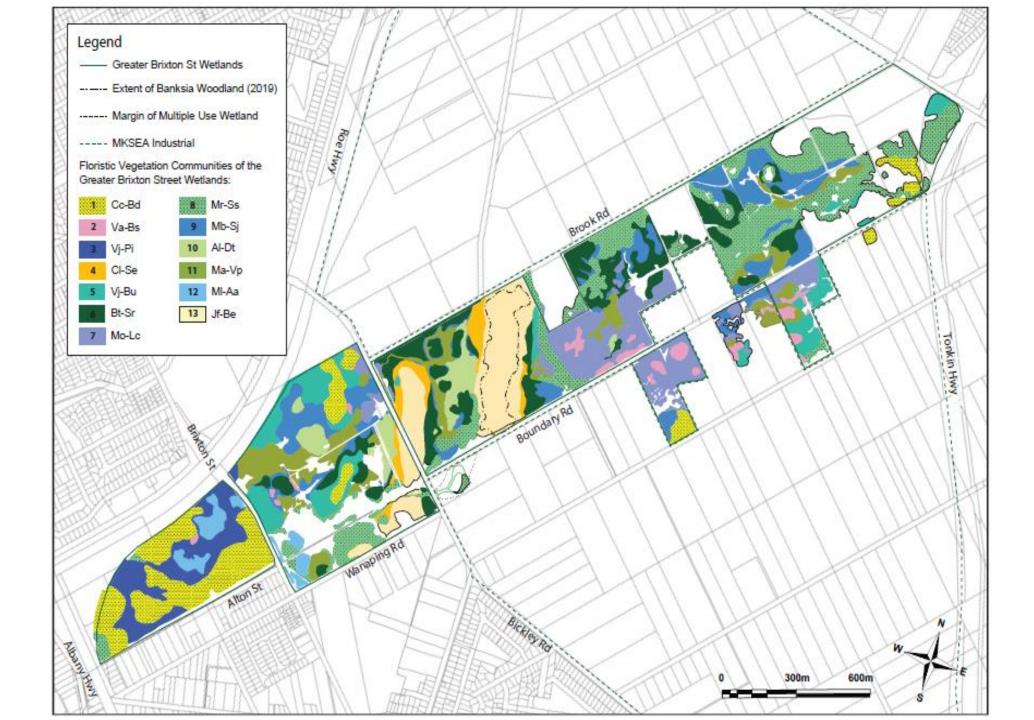
Grove Rd on approach to Yule Brook crossing 6m wide, sealed carriage way, typical of rural roads through the GBSW and surrounds. The Muchea Limestone TEC is in the CCW on RHS just beyond the wattles. A very dangerous road





## Impact on vegetation in GBSW & adjacent CCWs from road upgrades and proposed new roadside works in Structure Plan.

toauside works in Structure		Bi	And Provide Services	TOTAL (b. )
Location	L (length)	Direct impact on native	Indirect impact on	TOTAL (ha )
	of road	vegetation (ha)	native vegetation	
	(m)		(ha)	
Impact on GBSW		Native vegetation to be	Native vegetation	
Impact on other e.g., CCW		cleared, road upgrade	adjacent to works	
		(width of 20m inc. 10m	(L x 50) ha	
		wide swale) ( L x 20) ha		
Brook Rd CoG	1184	2.3680	5.9200	8.288
MKSEA Precinct 2				
Brook Rd CoK MKSEA	326	0.6520	1.6300	2.282
Precinct 3C cumulative				
Boundary Rd, Brentwood Rd,	1895	0.2600	9.5659	9.8259
and new roads proposed.				
MKSEA Precinct 2				
Bickley Rd (Brook Rd to Wanaping	642	1.2840	3.2100	4.494
Rd) work on ABR side of road				4.434
only. MKSEA Precinct 2				
Bickley Rd (Brook Rd to	642		3.2100	3.2100
Wanaping Rd) no work on				
Wanaping Block side - only				
indirect impact.				
Not in MKSEA				
Bickley Rd (CCW 15983)	102	0.2040	0.5100	0.714
MKSEA Precinct 2				
Victoria Rd CCW 8046	153		0.7650	0.7650
immediately adj. to MUC works				
MKSEA Precinct 2				
Grove Rd to Brook Rd vegetation	107		0.5350	0.5350
in CCW 7635 (west side road) no				0.5550
direct clearing on this side of				
road in ML TEC				
MKSEA Precinct 3B				
Grove Rd to Brook Rd vegetation	208	0.2080	1.0400	1.2480
in Yule Bk floodplain (east side of				
road) inc by 10m width on east				
side only (no swale) MKSEA				
Precinct 3B				
Total Impact	5,259 m	4.976 ha	26.3859 ha	31.3619 ha
P2, 3B and 3C				
1 2, 55 dila 50				





BUSINESS AS USUAL----- OPEN ALL HOURS ----- 100% BUFFER FREE!

No-Snooze for Wicked T Fauna! Pollution Guarantee - Direct to TEC! Prescription-Kill -- T Flora Bargains! HazMat Warehouse Specials!





