

Nitrogen Budget Calculation

Planning Application Reference No.	App/20/00881
Site Name:	Coach House, 14 New England Road, Epsworth, PO10 7JS
Additional Information:	
Date:	Tuesday, 3 March 2020

Stage 1	
Calculate total Nitrogen in kg per year delivered from the development that would exit the Wastewater Treatment Works (WWTW) into Solent catchments after treatment	
Step 1	Calculate additional population
	Enter the number of units proposed
	240
	Enter population increase per housing unit
	2.40
	Total net population increase generated by the development
	110
Step 2	Calculate wastewater volume generated by the development
	Enter generation per person per day
	114
	Total wastewater volume generated by the development (litres per day)
	12,540
Step 3	Confirm receiving WWTW and permit limit
	Select the wastewater treatment works the development will connect to
	Westerham Treatment Works (permit limit) (mg per lit)
	12.0
	Westerham Treatment Works (discharge limit) (mg per lit)
	17.0
Step 4	Calculate total nitrogen in kg per year discharged by the WWTW
	Deduct acceptable nitrogen loading in wastewater (mg per lit)
	25.0
	Total nitrogen discharged by WWTW (mg per lit)
	6,500.0
	Total nitrogen discharged by WWTW (kg per day)
	0.00015
	Total nitrogen discharged by WWTW (kg per year)
	7.4

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Stage 3	
Calculate nitrogen load for the non-built land uses proposed for the development site	
Step 1 Identify proposed land uses of the development site	
Enter the total urban area to be created (ha) (aerial)	0.04
Enter the total designated open space (ha) (aerial)	0.00
Enter the total natural reserve area to be created (ha) (aerial)	0.00
Enter the total woodland area to be created (ha) (aerial)	0.00
Enter the total amenity area to be created (ha) (aerial)	0.00
Enter the total community food growing (all) (aerial) area to be created (ha) (aerial)	0.00
Check to help ensure that sum total of proposed land uses equals nitrogen in Stage 2	0.04
Step 2 Calculate total nitrogen load from proposed land uses	
Total nitrogen load from future land uses (kg per year)	0.57

Stage 4	
Calculate the net change in Nitrogen load from the proposed development	
Step 1 Identify Nitrogen load from wastewater (Stage 3)	
Nitrogen loading wastewater treatment (kg per year)	2.41
Step 2 Calculate net change in Nitrogen load from land use changes	
Total nitrogen load from future land uses (kg per year)	0.00
Step 3 Calculate total Nitrogen budget for the development site	
Nitrogen budget for the site (kg per year)	2.41
Step 4 Calculate precautionary buffer if Nitrogen budget exceeds zero	
Precautionary Nitrogen buffer (kg per year)	0.48
Total Nitrogen budget for the proposed development (kg per year)	
	2.9

Development will generate additional Nitrogen - Mitigation is required with your Local Planning Authority for advice on next steps

Please liaise