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DO NOT SCALE



**PERMEABLE SURFACE DRIVE AND PARKING AREAS WITH CLEAN STONE SUB BASE STORAGE LAYER FULLY LINED TO ACT AS A STORAGE TANK WITH GEOMEMBRANE WITH OUTLET FLOW CONTROLLED BY 20mm DIAMETER ORIFICE PLATE
1:100+40% FLOW RATE = 0.8 LITRES/SECOND**

NEW PTP ASSUMED TO PROVIDE 95% PHOSPHATE REMOVAL EFFICIENCY

NEW PTP TO SERVE REPLACEMENT DWELLING

SAMPLING CHAMBER DOWNSTREAM OF NEW PTP

LOW RISK ROOF WATER TO DISCHARGE INTO CLEAN STONE SUB BASE LAYER OF PERMEABLE SURFACE DRIVE AND PARKING AREAS

PROPOSED 3 BEDROOM REPLACEMENT DWELLING

FB

FENCE LINE

ASSUMED LOCATION OF EXISTING DISCHARGE TO BE RENEWED AS PART OF REPLACEMENT DWELLING CONSTRUCTION WORKS

TREATED EFFLUENT AND SURFACE WATER DRAINAGE FLOWS COMBINE FOR DISCHARGE VIA EXISTING DISCHARGE TO WATERCOURSE / RIVER

EDGE OF FLOOD ZONE 2

EXISTING 2 BEDROOM COLT BUNGALOW DEMOLISHED

EDGE OF FLOOD ZONE 2

EDGE OF FLOOD ZONE 2

Llyn Carn

Consider Phosphate Loading for Betterment/Neutrality	
Existing dwelling (2 Bedrooms) drained by existing Septic Tank	
Existing phosphate level (mg P/l)	11.60
Daily foul water discharge (litres)	750.00
Annual foul water discharge (litres)	273,937.50
Total phosphate discharge per annum (mg)	3,177,675.00
Proposed dwelling (3 Bedrooms) drained by new PTP	
Proposed phosphate level (mg P/l)	9.70
Daily foul water discharge (litres)	750.00
Annual foul water discharge (litres)	273,937.50
Total phosphate discharge per annum (mg)	2,657,193.75
Conclusion	
Reduction in phosphate discharge per annum (mg)	-520,481.25
Percentage change in phosphate discharge (%)	-16.38%
Phosphate level based on Natural England, Nutrient Generic Methodology, Nov. 2022. Part 1.3.E 11.6 mg P/l for septic tanks and 9.7 mg P/l for PTPs.	
Daily Flow based on https://www.gov.uk/government/publications/sewage-discharges-calculator-for-domestic-properties	

NOTES:

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WORK TO FIGURED DIMENSIONS IN PREFERENCE TO SCALING.

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PROJECT:

REPLACEMENT DWELLING AT Llyncam, Llanfihangel Bryn Pabuan, BULTH WELLS, POWYS LD2 3SE

DRAWING TITLE:

PROPOSED FW & SW DRAINAGE SITE PLAN

DRAWING STATUS:

PLANNING

ORIGINAL DRAWING A3

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