

Detailed Wetland Cross Section

The diagram illustrates a cross-section of a wetland basin with the following components and dimensions:

- Basin Crest:** BASIN CREST WITH FREEBOARD PROVISION (1.60)
- Basin Slope:** BASIN SLOPE GRADIENTS TO BE 1 IN 4
- Maintenance Corridor:** 3m MAINTENANCE CORRIDOR PROVIDED AROUND BASIN CREST WITH GRADIENTS NO GREATER THAN 1 IN 40
- Erosion Control Matting (Top):** EROSION CONTROL MATTING TO TERMINATE 1M FROM BASE OF BASIN. MATTING TO BE KEYED INTO SURROUNDING MATERIAL FOR ANCHORAGE AT POINT OF TERMINATION
- Erosion Control Matting (Bottom):** EROSION CONTROL MATTING TO BE PROVIDED WITHIN BASIN - ENKAMAT 7220 BY MACCAFERRI OR EQUIVALENT APPROVED PRODUCT
- Subsoil Water Travel:** CARE TO BE TAKEN TO ENSURE BASIN FORMATION CONSISTS 50-100mm OF SITE WORN MATERIAL WITH HIGH IMPERMEABILITY / CLAY CONTENT TO LIMIT SUBSOIL WATER TRAVEL
- Basin Formation:** BASIN FORMATION BELOW AQUATIC BENCH TO CONSIST OF SUBSOILS / GRAVEL ONLY
- Aquatic Bench:** 1m WIDE MIN AQUATIC BENCH TO BE MASS PLANTED, 400mm BELOW PERMANENT WATER LEVEL. WIDTH TO VARY THROUGH WETLAND TO PROVIDE A SAFETY SHELF
- Dimensions:**
 - 400mm (Freeboard above crest)
 - 400mm (Depth from crest to aquatic bench)
 - 800mm (Depth from aquatic bench to wetland base)
 - 100mm (Depth from wetland base to subsoil)
- Water Levels:**
 - MAXIMUM PERMANENT WATER LEVEL (0.00)
 - BASE OF WETLAND (-0.6 TO -1.0)
 - BASE OF WETLAND TO VARY 400mm
- Other Notes:** 100 YEAR RETURN PERIOD + CLIMATE CHANGE

Detailed Wetland Cross Section

3m MAINTENANCE CORRIDOR PROVIDED AROUND BASIN CREST WITH GRADIENTS NO GREATER THAN 1 IN 40

EROSION CONTROL MATTING TO TERMINATE 1M FROM BASE OF BASIN. MATTING TO BE KEED INTO SURROUNDING MATERIAL FOR ANCHORAGE AT POINT OF TERMINATION

EROSION CONTROL MATTING TO BE PROVIDED WITHIN BASIN - ENKAMAT 7220 BY MACCAFERRI OR EQUIVALENT APPROVED PRODUCT

CARE TO BE TAKEN TO ENSURE BASIN FORMATION CONSISTS 50-100mm OF SITE WON MATERIAL WITH HIGH IMPERMEABILITY / CLAY CONTENT TO LIMIT SUBSOIL WATER TRAVEL

BASIN SLOPE GRADIENTS TO BE 1 IN 4

100 YEAR RETURN PERIOD + CLIMATE CHANGE

1m WIDE MIN. AQUATIC BENCH TO BE MASS PLANTED, 400mm BELOW PERMANENT WATER LEVEL. WIDTH TO VARY THROUGH WETLAND TO PROVIDE A SAFETY SHELF

MAXIMUM PERMANENT WATER LEVEL (0.00)

BASE OF WETLAND (-0.6 TO -1.0)

BASIN FORMATION BELOW AQUATIC BENCH TO CONSIST OF SUBSOILS / GRAVEL ONLY

BASE OF WETLAND TO VARY 400mm

Detailed Wetland Plan (Scale 1:200)

Existing Hedge H1

Existing Hedge H6

Inlet serving eastern catchment 4500

Athlon H7C or equivalent approved

PCC Headwall

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107.00

106.200

105.800

105.550

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1. Do not scale this drawing.
2. Any dimensional discrepancies should be notified to the engineer immediately.
3. All dimensions are in millimetres - (mm) all levels are in metres - (m) and are above ordnance datum at Newlyn, Cornwall unless noted otherwise.
4. North shown indicative only.
5. This drawing is to be read in conjunction with all relevant; specifications; drawings; details and other design information.
6. All information contained in this document is copyright ©
7. Where the contractor undertakes or engages a third party to undertake temporary works design, or varies the Pell Frischmann design in any way, then the contractor will take full responsibility and liability for all design aspects, including a design risk assessment. The contractor shall inform Pell Frischmann of any proposed variances to the design.
8. Any discrepancies noted on site are to be reported to the engineer immediately.
9. Until technical approval has been obtained from the relevant authority, it should be understood that all drawings issued are preliminary and **NOT** for construction.

	Maintenance Track
	Side Slope
	Crest of Water Level
	Safety Aquatic Bench
	Submerged Flat Area
	Submerged Slope
	Wetland Bed Level

Major Contour 1.000m

Minor Contour 0.100m

Legend:

- Proposed Surface Water Network
- Headwall
- Proposed Flow control chamber (Hydrobrake or approved equivalent)
- Foul Water Network

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LAGAN HOMES

RATBY PHASE 2 RESERVED MATTERS

SECTION 104 DETAILED WETLAND PLAN

FOR APPROVAL			
	Name	Date	Status Code
Drawn	J. NICHOLSON	JAN 2025	S4
Designed	J. NICHOLSON	JAN 2025	
Eng Chk	J. NICHOLSON	JAN 2025	1:200
Approved	L. HULKA	JAN 2025	Revision P01

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