



- Notes:
- All information provided on this drawing is intended for preliminary engineering appraisal purposes only. NOT FOR CONSTRUCTION
 - The drawing is based upon limited information provided. As such, it is advised that detailed discussions should be undertaken with relevant bodies e.g. Local Highway Authority, Local Sewerage Undertaker, Local SuDS Adoption Body etc in order to ascertain the acceptability of the proposals.
 - All drainage/SuDS information is indicative only. Subject to detailed design.
 - Infiltration testing will be required in order to ascertain the feasibility of soakaways and alternative infiltration measures, and to determine attenuated storage requirements.
 - Additional site investigation of the existing surface water drainage network is required in order to calculate pre-development flowfield discharge rates. It is assumed that proposed site discharge rates will be restricted to pre-development flowfield rates with an allowance for betterment included. All to be agreed with the local SAB.
 - Additional site investigation required in order to confirm whether there is a requirement for clean capping to gardens. This may affect proposed development levels somewhat.

- KEY
- Proposed Ground Level
 - Masonry Retaining Wall (Height Indicated)
 - Exposed Facing Brickwork (Height Indicated)
 - 1 in 2 max Embankment
 - Finished Floor Level
 - Steps (No. Indicated)
 - Existing Foul Water Drain/Sewer
 - Domestic storm water drainage
 - Silt trap (on outlet from permeable pavements)
 - Type 4 SW Inspection Chamber
 - Type 3 SW Inspection Chamber
 - Domestic storm water drainage (Adoptable SAB)
 - Silt trap (on outlet from permeable pavements SAB)
 - Type 4 SW Inspection Chamber (Adoptable SAB)
 - Type 3 SW Inspection Chamber (Adoptable SAB)
 - Storm Water Manhole (Adoptable SAB)
 - Highway Drain (Adoptable 5.38)
 - Highway Drain Manhole (Adoptable 5.38)
 - Highway Gully & 150# Connection (Adoptable SAB)
 - Foul Water Drain (Non-Adoptable)
 - Type 4 FW Inspection Chamber (Non-Adoptable)
 - Type 3 FW Inspection Chamber (Non-Adoptable)
 - Foul Water Sewer (Adoptable)
 - Type 4 FW Inspection Chamber (Adoptable)
 - Type 3 FW Inspection Chamber (Adoptable)
 - Foul Water Manhole (Adoptable)
 - Porous asphalt driveway
 - Rain Garden to provide interception and treatment
 - Swale and linear SuDS basins to provide interception, treatment and storage of highway runoff
 - Water Butt
 - GreenBlue Urban SuDSPod o.s.a to intercept and attenuate roof runoff where appropriate
 - Land drainage and catchpit
 - Existing tree root protection area
 - Marshalls Eden Kerb Highway outlet to Linear SuDS Basin

EXISTING & PROPOSED SURFACE WATER DISCHARGE RATES

Note: NPT SAB have requested that proposed development discharge rates be restricted to the pre-development flowfield rate and not the pre-development flowfield rate. Therefore, the proposed discharge rate will be restricted to the pre-development flowfield rate for all storms up to and including the 100 year +40% storm event.

Pre-development Greenfield Catchment Area = 1.396ha

Based on the site area minus proposed site area contributing to runoff as per pre-development scenario (see above)

Allowable Greenfield Runoff Rates (1.396ha)

Other	= 25.0 l/s
1 in 1yr	= 21.9 l/s
1 in 30yr	= 44.4 l/s
1 in 100yr	= 54.5 l/s

Rates calculated using HR Wallingford 'Greenfield runoff rate estimator'

Post Development

Approx Impermeable Area = 0.781ha

Post Development peak flow rate

1 in 1yr	= 24.9 l/s (+3.0 l/s)
1 in 30yr	= 24.9 l/s (-19.5 l/s)
1 in 100yr	= 25.0 l/s (-25.5 l/s)
1 in 100yr +40%	= 25.0 l/s

Discharge Volume (100yr 36mins)

*Post Dev - 1 in 100yr (36mins) = 496.7m³

Total Volume +/- = +197.7m³ *Note: All flows restricted to pre-development flowfield rate. Therefore, discharge volumes are provided for information only.

SuDS Measures

The above post-development flow rates are based on a traditional piped system with a 5 minute concentration time. However, all runoff is to be conveyed to pass through a SuDS feature which will further reduce the above discharge rates and volume.

The SuDS components will effectively increase concentration time, reduce flow velocities and rates, and providing significant volume losses through evaporation and evapotranspiration.

Losses are difficult to quantify and will vary depending on plant species, level of saturation and varied ground conditions across the site.

Issues

169.6m

Status:

APPROVAL

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rev G H I J

date Mar 2025 May 2025 May 2025 July 2025

description Highway barriers updated. Linear SuDS ponds updated; additional levels and land drainage added to rear of plots 3 to 33. Minor alterations to site layout; Plots 1 & 2 relocated, plot handings generally revised. Levels and land drainage to rear boundaries of plots 3 to 42. revised; heavy outlets to linear basin indicated; Proposed discharge rates updated.

by RMJ RMJ RMJ RMJ

rev K

date July 2025

description Minor layout changes incorporated; deceleration lane adj site access to be omitted/replaced by footway; forward visibility splay added at bend opposite pumping station; vehicular crossovers added.

by RMJ

Drawn: RMJ

Checked: RMJ

Date: Nov. 2024

Scale: 1:250 @ A0

Client: Bluefield Land

Project: Cwmgor, Ammanford

Title: Engineering Layout - Sheet 1 of 2

Ref: 2625-505-1

Rev: K

spring design

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