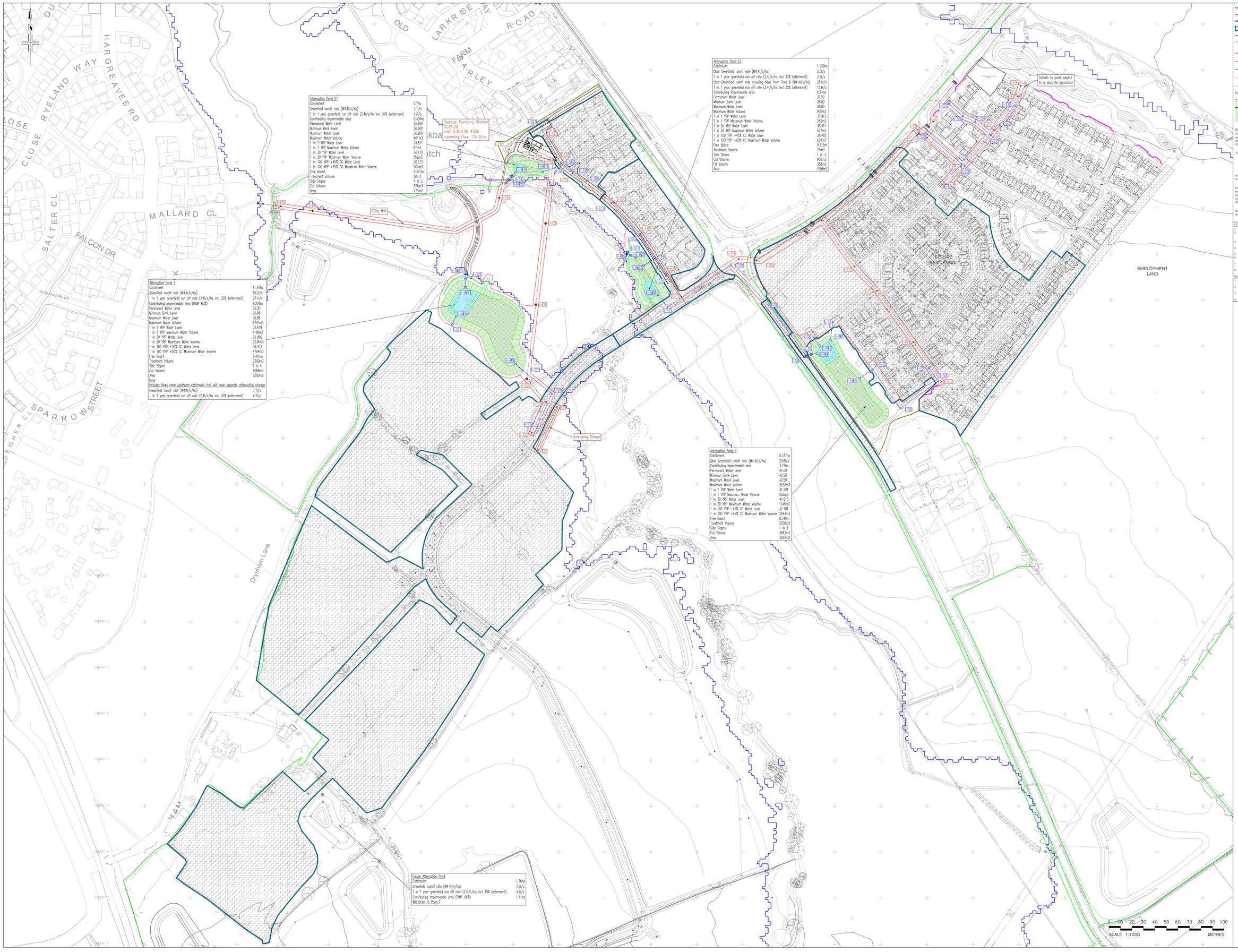

Attenuation Pond E1	
Catchment	0.7ha
Greenfield runoff rate (Ø4.4l/s/ha)	3.1l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	1.9l/s
Contributing Impermeable area	0.434ha
Permanent Water Level	35.600
Minimum Bank Level	36.900
Maximum Water Level	36.900
Maximum Water Volume	461m3
1 in 1 1YR Water Level	35.871
1 in 1 1YR Maximum Water Volume	61m3
1 in 30 1YR Water Level	36.178
1 in 30 1YR Maximum Water Volume	152m3
1 in 100 1YR +45% CC Water Level	36.573
1 in 100 1YR +45% CC Maximum Water Volume	304m3
Free Board	0.327m
Treatment Volume	30m3
Side Slopes	1 in 3
Cut Volume	876m3
Area	717m2

Attenuation Pond E2	
Catchment	1.139ha
Qbar Greenfield runoff rate (Ø4.4l/s/ha)	5.0l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	2.7l/s
Qbar Greenfield runoff rate including flows from Pond B (Ø4.4l/s/ha)	28.6l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	15.6l/s
Contributing Impermeable area	0.84ha
Permanent Water Level	37.50
Minimum Bank Level	38.80
Maximum Water Level	38.80
Maximum Water Volume	905m3
1 in 1 1YR Water Level	37.913
1 in 1 1YR Maximum Water Volume	262m3
1 in 30 1YR Water Level	38.317
1 in 30 1YR Maximum Water Volume	522m3
1 in 100 1YR +45% CC Water Level	38.485
1 in 100 1YR +45% CC Maximum Water Volume	638m3
Free Board	0.315m
Treatment Volume	74m3
Side Slopes	1 in 3
Cut Volume	903m3
Fill Volume	358m3
Area	1508m2

Attenuation Pond F	
Catchment	11.41ha
Greenfield runoff rate (Ø4.4l/s/ha)	50.2l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	27.1l/s
Contributing Impermeable area (PIMP 65%)	6.278ha
Permanent Water Level	35.30
Minimum Bank Level	36.88
Maximum Water Level	36.88
Maximum Water Volume	6741m3
1 in 1 1YR Water Level	35.619
1 in 1 1YR Maximum Water Volume	1168m3
1 in 30 1YR Water Level	35.956
1 in 30 1YR Maximum Water Volume	2534m3
1 in 100 1YR +50% CC Water Level	36.473
1 in 100 1YR +50% CC Maximum Water Volume	4784m3
Free Board	0.407m
Treatment Volume	2200m3
Side Slopes	1 in 4
Cut Volume	9086m3
Area	5350m2
Note	
Includes flows form upstream catchment that will have separate attenuation storage	
Greenfield runoff rate (Ø4.4l/s/ha)	7.7l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	4.2l/s

Attenuation Pond B	
Catchment	5.337ha
Qbar Greenfield runoff rate (Ø4.4l/s/ha)	23.6l/s
Contributing Impermeable area	3.77ha
Permanent Water Level	41.00
Minimum Bank Level	42.50
Maximum Water Level	42.50
Maximum Water Volume	3535m3
1 in 1 1YR Water Level	41.291
1 in 1 1YR Maximum Water Volume	558m3
1 in 30 1YR Water Level	41.613
1 in 30 1YR Maximum Water Volume	1245m3
1 in 100 1YR +45% CC Water Level	42.181
1 in 100 1YR +45% CC Maximum Water Volume	2643m3
Free Board	0.319m
Treatment Volume	2200m3
Side Slopes	1 in 3
Cut Volume	3842m3
Area	3052m2

Future Attenuation Pond	
Catchment	1.76ha
Greenfield runoff rate (Ø4.4l/s/ha)	7.7l/s
1 in 1 year greenfield run off rate (2.4l/s/ha incl 30% betterment)	4.2l/s
Contributing Impermeable area (PIMP 65%)	1.11ha
Will Drain to Pond F	

Key

- Redline boundary
- Flood Zone 3
- Surface Water Catchment
- Foul Sewer Subject to a Separate Application
- Surface Water Sewer Subject to a Separate Application
- Proposed Foul Sewer
- Proposed Foul Rising Main
- Proposed Surface Water Sewer
- Proposed Foul Spur
- Proposed Surface Water Spur

Pond

- Bank Slope 1 in 3
- Aquatic Bench (0-0.2m deep)
- Vegetated base
- Permanent Water (max 1.0m deep, 1:3 slopes)

Note

The proposed Drainage System shown is indicative and is subject to the development of the Masterplan for the site and also the detailed design in accordance with the appropriate standards and approval from the relevant authorities.

To reduce the size of attenuation features the use of;

Swales,
Filter Drains,
Permeable Paving or
Bioretention features

may be considered provided the attenuation volumes are maintained in the overall system.

Flows from the development will be restricted to Qbar for all events above the 1 year and up to and including the 100 year with a 45% allowance for climate change for the 100 year event. 30% betterment has been applied to the 1 year discharge rate.

An allowance of 10% for Urban Creep has been applied to residential curtilages

GENERAL NOTES

1. Do not scale.
2. The contractor is to check and verify all buildings and site dimensions and levels, including sewer invert levels, before works start on site. The contractor is to comply in all aspects with the current building legislation, British standards, building regulations etc.
3. Positions of existing services/statutory undertakers apparatus adjacent to or crossing proposed excavations are to be checked by the contractor prior to starting work.
4. This drawing is to be read in conjunction with the relevant architectural and other drawings, engineering details, specification and any structural, geotechnical or other specialist document provided.
5. Any anomaly or contradiction between any of the above is to be reported to Persimmons engineer.
6. This drawing is schematic for clarity only, positions of pipe runs and manholes may vary on site due to site conditions.
7. The compaction of unbound materials shall be in accordance with MCHW Volume 1 Clause 803, table 8/1.
8. The compaction of bituminous material shall be in accordance with MCHW Volume 1 Clause 903 and BS 594987.

ROAD AND SEWER ADOPTION NOTES

1. All works for adoption under a section 38 agreement shall be carried out in accordance with Wiltshire County Councils requirements and to the approval of the area highway authority.
2. All works for adoption under a section 104 agreement shall be carried out to the Water UK document "Sewage Sector Guidance Appendix C" and the Water Authorities requirements.
3. Streetlighting positions to be pegged on site and agreed by the local authority prior to erection commencing.
4. Residential downstream adoptable manholes to have temporary debris screens.

J 17.04.26 Manholes 14 & 15 moved
H 05.03.26 Emergency spillway added, pond freeboard shown
G 13.02.26 Area of grassed base added to ponds B & F
F 23.07.25 Updated to include Pond F
E 24.04.25 Updated to suit 30% betterment
D 03.01.25 Extent revised.
C 31.03.25 Pumping station revised, redline revised
B 29.07.24 Pond 2 added, pumping station moved, sewers updated to suit
A 01.08.23 Drawing updated to suit client comments
Revisions

Project: Ashton Park
Infrastructure Drainage

Client: Persimmon Together, we make your home / Barratt Redrow

Drawing: General Arrangement

Scale: 1:1000 @ A0
Date: October 2024
Drawn by: acm

Drawing No: 566-ID-P-100
Rev: J

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Drg.Status: PLANNING