Drainage Key
150Ø 1:100
1.001
Proposed Adoptable Surface Water Sewer
Adoptable Surface Water Manhole
Proposed Headwall
Proposed Highway Drain
Proposed Perforated Pipe
SANG Network Pipe
Modelling Pipe
Indicative Layout of Existing Drainage
Proposed Below Ground Storage Tank
Proposed Rain Garden
Northern Ditch
Pond Wet Area
3.5m Watercourse Buffer Zone
5.0m Watercourse Buffer Zone
Overland Flow Routes
Proposed Detention Basin
Proposed Strategic Swale
Indicative Location of Existing Watercourse
Site Boundary
Indicative location of existing outfall from northern ditch. Exact line, location and level to be confirmed on site.
Vortex flow control chamber to restrict flows to 3.7 l/s in the 1 in 100 year plus 45% climate change event. CL: 108.900 AOD IL: 107.165 AOD
Cellular Storage Area: 40m² Depth: 0.8m 95% Porosity Storage Volume: 30.4m³ Invert Level: 107.175 Top of cells level: 107.975
Cellular Storage Area: 142.5m² Depth: 1.2m 95% Porosity Storage Volume: 162.45m³ Invert Level: 107.175 Top of cells level: 108.375
Vortex flow control chamber to restrict flows to 1.0 l/s in the 1 in 100 year plus 45% climate change event. CL: 110.678 AOD IL: 108.339 AOD
Cellular Storage Area: 115m² Depth: 1.2m 95% Porosity Storage Volume: 131.1m³ Invert Level: 107.950 Top of cells level: 109.150
Vortex flow control chamber to restrict flows to 1.0 l/s in the 1 in 100 year plus 45% climate change event. CL: 111.605 AOD IL: 109.825 AOD
Vortex flow control chamber to restrict flows to 1.0 l/s in the 1 in 100 year plus 45% climate change event. CL: 113.650 AOD IL: 111.585 AOD
Cellular Storage Area: 141.75m² Depth: 1.2m 95% Porosity Storage Volume: 161.60m³ Invert Level: 111.60 Top of cells level: 112.800
Vortex flow control chamber to restrict flows to 1.8 l/s in the 1 in 100 year plus 45% climate change event. CL: 115.376 AOD IL: 113.308 AOD
Cellular Storage Area: 71.25m² Depth: 1.2m 95% Porosity Storage Volume: 81.23m³ Invert Level: 113.320 Top of cells level: 114.52
Cellular Storage Area: 129m² Depth: 0.8m 95% Porosity Storage Volume: 98.04m³ Invert Level: 109.625 Top of cells level: 110.425
Vortex flow control chamber to restrict flows to 5 l/s in the 1 in 100 year plus 45% climate change event. CL: 112.429 AOD IL: 109.735 AOD
2.675m³ of flooding on manhole S21 that will be contained within the kerbs before re-entering the drainage network.
1.603m³ of flooding on manhole S49 that will be contained within the kerbs before re-entering the drainage network.
Cellular Storage Area: 60.75m² Depth: 1.2m 95% Porosity Storage Volume: 69.26m³ Invert Level: 109.95 Top of cells level: 111.15
3.539m³ of flooding on manhole S36 that will be contained within the kerbs before re-entering the drainage network.
S34 - New Manhole on existing sewer CL: 112.20 IL: 110.50 (Assumed TBC)
Vortex flow control chamber to restrict flows to 8.2 l/s in the 1 in 100 year plus 45% climate change event. CL: 112.40 AOD IL: 110.70 AOD
Pond - Attenuation Basin Base IL of attenuation: 110.850m AOD Depth: 1.5m Top of Bank: 112.35m AOD Approximate Volume: 598.246m³
Pond - Permanent Wet Feature Approximate Area: 244.226m² Proposed Depth: 0.6m (over-dig from base of attenuation)
Headwall outlet from pond
Enhanced Swale Swale Depth: 0.5m Variable granular depth with 300Ø perforated pipe below swale base.
Enhanced Swale Swale Depth: 0.5m Variable granular depth with 375Ø perforated pipe in 3.5m wide granular trench below swale base.
Vortex flow control chamber to restrict flows to 3.5 l/s in the 1 in 100 year plus 45% climate change event. CL: 117.70 AOD IL: 115.90 AOD
Attenuation basin Storage Volume: 195.59m³ Depth: 1m Freeboard: 0.3m Base of Pond: 116.65 Top of bank: 117.65 Top of water level: 117.35
Granular Blanket (Above Cellular Storage) Area: 125m² Depth: 0.3m 30% Porosity
Cellular Storage Area: 165m² Depth: 0.8m 95% Porosity Storage Volume: 125.4m³ Invert Level: 115.545 Top of cells level: 116.345
Indicative levels of new proposed highway drainage manhole.
New proposed highway drainage manhole to be constructed on existing pipe. Exact lcoation to be confirmed.
Approximate invert level at outfall 108.20. Existing headwall outfall invert level to be confirmed.
HDMH 1 CL: 112.500 IL: 111.150
Existing Lagoon Outfall Maximum discharge rate: 12.7 l/s
Indicative Layout of Existing Watercourse Scale 1:1000
S55 CL: 108.900 IL: 107.165
S56 CL: 107.00 IL: 106.72
S46 CL: 109.141 IL: 107.51
S79 CL: 109.447 IL: 107.615
S54 CL: 109.078 IL: 107.30
S45 CL: 109.940 IL: 108.040
S53 CL: 110.678 IL: 107.939
S78 CL: 110.884 IL: 109.384
S44 CL: 112.040 IL: 109.24
S52 CL: 111.153 IL: 109.625
S50 CL: 111.897 IL: 110.085
S43 CL: 112.226 IL: 109.495
S51 CL: 111.605 IL: 109.825
S49 CL: 113.650 IL: 111.585
S61 CL: 112.018 IL: 110.277
S42 CL: 112.429 IL: 109.735
S41 CL: 112.511 IL: 109.95
S40 CL: 112.703 IL: 110.90
S48 CL: 113.713 IL: 112.31
S47 CL: 115.376 IL: 113.308
S12 CL: 115.425 IL: 114.00
S38 CL: 112.130 IL: 109.935
S60 CL: 112.839 IL: 111.414
S21 CL: 113.888 IL: 112.373
S39 CL: 112.964 IL: 111.539
S11 CL: 115.756 IL: 114.452
S80 CL: 116.900 IL: 115.125
S37 CL: 112.230 IL: 110.115
S23 CL: 113.950 IL: 112.158
S10 CL: 117.239 IL: 114.57
S9 CL: 117.694 IL: 114.71
S20 CL: 116.311 IL: 114.804
S8 CL: 117.866 IL: 114.83
S36 CL: 111.999 IL: 110.385
S35 CL: 112.691 IL: 110.675
S76 CL: 108.03 IL: 107.65
S25 CL: 114.622 IL: 111.927
S7 CL: 117.900 IL: 115.02
S68 CL: 120.822 IL: 118.65
S67 CL: 119.10 IL: 118.80
S24 CL: 115.186 IL: 113.386
S13 CL: 119.967 IL: 118.671
S66 CL: 119.15 IL: 118.85
S33 CL: 112.40 IL: 110.70
S32 CL: 112.35 IL: 110.85
S58 CL: 112.70 IL: 111.30
S26 CL: 114.517 IL: 111.779
S6 CL: 117.647 IL: 115.135
S15 CL: 117.417 IL: 116.168
S65 CL: 119.20 IL: 118.90
S70 CL: 112.35 IL: 111.000
S30 CL: 114.469 IL: 111.69
S16 CL: 117.281 IL: 116.01
S5 CL: 117.327 IL: 115.23
S64 CL: 119.25 IL: 118.95
S69 CL: 112.900 IL: 111.500
S59 CL: 114.480 IL: 112.349
S19 CL: 116.80 IL: 115.375
S3 CL: 117.65 IL: 115.35
S63 CL: 119.30 IL: 119.00
S71 CL: 113.074 IL: 111.224
S31 CL: 113.313 IL: 111.10
S75 CL: 114.083 IL: 112.658
S29 CL: 114.722 IL: 112.655
S27 CL: 116.342 IL: 114.849
S57 CL: 117.70 IL: 115.50
S14 CL: 119.55 IL: 117.36
S2 CL: 119.125 IL: 115.82
S18 CL: 117.65 IL: 115.545
S72 CL: 112.709 IL: 111.295
S73 CL: 112.674 IL: 111.35
S17 CL: 117.469 IL: 116.044
S28 CL: 115.008 IL: 113.352
S1 CL: 120.28 IL: 116.55
S74 CL: 112.582 IL: 111.60
S77 CL: 118.52 IL: 117.00
S62 CL: 118.52 IL: 117.12
Frog Hollow
Thornhill
Grinstead Wood House
Long Meadow
Beechcombe
White
Pond

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:–

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Notes:

1. This drawing presents the site drainage layout for the proposed development at West Hoathly Brickworks Sharpthorne.
2. This drawing is to be read in conjunction with all relevant Engineer's and Architect's drawings and specifications.
3. This drawing is to be printed in COLOUR.
4. Figures quoted next to manholes / rodding eyes are cover & invert level, in Meters AOD.
5. This preliminary design is for planning purposes. It excludes details of the plot drainage road and parking drainage connections.
6. All drainage design is subject to technical approval, no connections shall be made to any public sewers without written consent from the drainage authority. All adoptable drainage to be constructed in conjunction with Design and Construction Guidance (Water UK)
7. All branch drains, or connections, are to discharge to the collectors obliquely, and in the direction of the main flow.
8. All high void ratio attenuation units to be installed strictly in accordance with manufacturer's requirements.
9. For guidance on types and distances of proposed trees away from adoptable sewers refer to Design and Construction Guidance Section B5.1.10 & 11 and B7.6.

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
P03	17.08.2023	Updated to latest site layout and LLFA comments.	AM	AM	CM
P02	21.07.2023	Updated to latest site layout and LLFA comments.	AH	AM	CM
P01	23.03.2023	FIRST ISSUE	JC	AM	CM

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Client
ASHILL REGEN

Project Title
WEST HOATHLY BRICKWORKS
SHARPTHORNE

Status
PRELIMINARY

Drawing Title
PROPOSED DRAINAGE
STRATEGY

Drawn	Date	Checked	Date	Approved	Date
EE	21.12.22	CM	21.12.22	AM	21.12.22

Scale	Orig Size	Dimensions
1:500	A1	M

Project No.
134285

Drawing File
134285 RSK-ZZ-XX-DR-C-3001 Site Drainage.dwg

Drawing No. / Rev.

Project	Orig.	Vol./Sys.	Lev./Loc.	Type	Role	Draw. No.	Rev.
134285	RSK	ZZ	ZZ	DR	C	3001	P03

Scale 1:500
0 5 10 15 20 25m