NOTES:

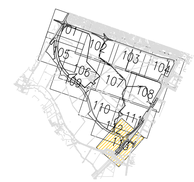
1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERING DETAILS, DRAWINGS & SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED, SIMILARLY ALL LEVELS ABOVE DATUM ARE ALSO IN METRES.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION WORKS, EXISTING LEVELS AND DIMENSIONS ARE TO BE CHECKED AND CONFIRMED ON SITE.
4. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT/ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
5. PRIOR TO CONSTRUCTION WORKS COMMENCING ON SITE, THE LOCATION OF ALL EXISTING SERVICES ARE TO BE CHECKED AND THEIR LOCATION CONFIRMED.
6. THE LOCATION OF ANY SERVICES SHOWN ON WSP DRAWINGS ARE INDICATIVE ONLY. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROVE THE POSITION/LEVEL OF ALL SERVICES WHICH WILL AFFECT THE WORKS PRIOR TO COMMENCING ANY CONSTRUCTION.
7. ANY RELOCATION/REMEDIAL WORKS REQUIRED ARE TO BE COMPLETED IN ADVANCE OF THE PROPOSED WORKS AND IN ACCORDANCE WITH THE RELEVANT STATUTORY UNDERTAKERS REQUIREMENTS.
8. ALL HIGHWAY DRAINAGE TO BE ADOPTED BY OCC WHO REQUIRE THAT ALL DRAINS BE CONSTRUCTED TO OCC STANDARDS.
9. ALL SEWERS TO BE LAID TO CLASS S BEDDING CLASSIFICATION UNLESS SPECIFIED OTHERWISE.
10. FOUL WATER SEWERS TO BE ADOPTED BY THAMES WATER UTILITIES. UNDER SECTION 104 OF THE WATER INDUSTRY ACT.

DO NOT SCALE

KEY:

- SITE BOUNDARY
- GULLY POT AND CONNECTION.
- HIGHWAY DRAINAGE CONNECTIONS
- HIGHWAY DRAINAGE
- HIGHWAY DRAINAGE MANHOLE
- FOUL WATER SEWER
- FOUL WATER MANHOLE
- EXISTING SURFACE WATER SEWER.
- FILTER DRAIN AS DRAWING No. 1903/SD/116
- SW DITCH AND FILTER DRAIN AS DRG. NO 1903/SD/038 AND 039
- SW DITCH AS DRG. NO 1903/SD/038
- PARCEL BOUNDARIES
- SURFACE DRAINAGE STUB
- FOUL DRAINAGE STUB
- WEIR WALL AND ORIFICE CONTROL STRUCTURE
- HEADWALL TYPE 2, AS DRAWING 1903/SD/116
- SINGLE PIPE CONCRETE BAGWORK HEADWALL, AS DRAWING 1903/SD/040
- PETROL INTERCEPTOR (TELEMETRY TO BE PROVIDED TO OCC SPECIFICATION)
- TP01 TRAIL PIT LOCATIONS (PELL FRISHMANN 2001)
- W-TP01 TRAIL PIT LOCATIONS (WSP 2006)
- BT DUCT AND CHAMBER
- EXISTING WATER COURSE TO BE FILLED IN
- EXISTING DITCH TO BE REGRADED
- REED BED (AS DRAWING 1903/SD/113)
- 3m MAINTENANCE STRIP WITH GEOGRID REINFORCEMENT TO OCC SPECIFICATION
- INDICATES A RESIDUAL RISK AS A WARNING.

FOR BASIN SECTIONS A–A TO G–G REFER TO DRAWING 1903/D/016



KEY PLAN

REV	DATE	BY	DESCRIPTION	CHK	APD
G	18/02/10	RJJ	DRAINAGE UPDATED IN ACCORDANCE WITH O.C.C RECOMMENDATIONS	JM/G	JM
F	27/11/09	TG	DRAINAGE UPDATED; DITCH CHANNGES ADDED	JM	JM
E	23/11/09	DP	DRAINAGE UPDATED	JM/E	JM
D	10/06/09	CC	PHASE LINES ADDED	JM/E	JM
C	06/02/09	JH	ADDED EXIST SERWICES	JM/E	JM
B	22/12/08	JH	FOR CLIENT APPROVAL	JM/E	JM
A	30/10/08	DP	FIRST ISSUE	JM	JM

DRAWING STATUS: FOR TECHNICAL APPROVAL

WSP
Mountbatten House, Basing View, Basingstoke, Hampshire RG21 4HJ
Tel: +44 (0)1256 318800 Fax: +44 (0)1256 318700
http://www.wspgroup.com

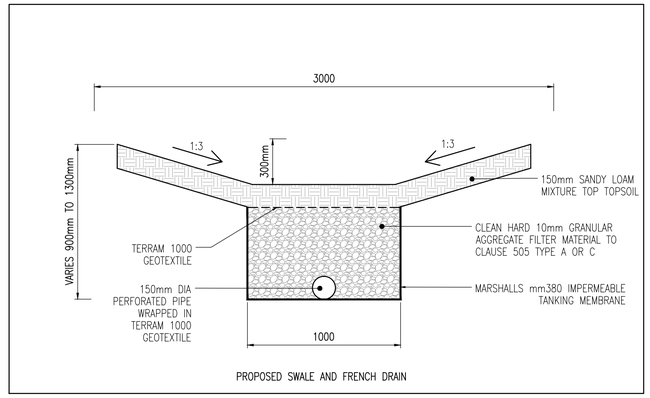
CLIENT: COUNTRYSIDE PROPERTIES

ARCHITECT:

PROJECT: SOUTH WEST BICESTER
BICESTER, OXFORDSHIRE

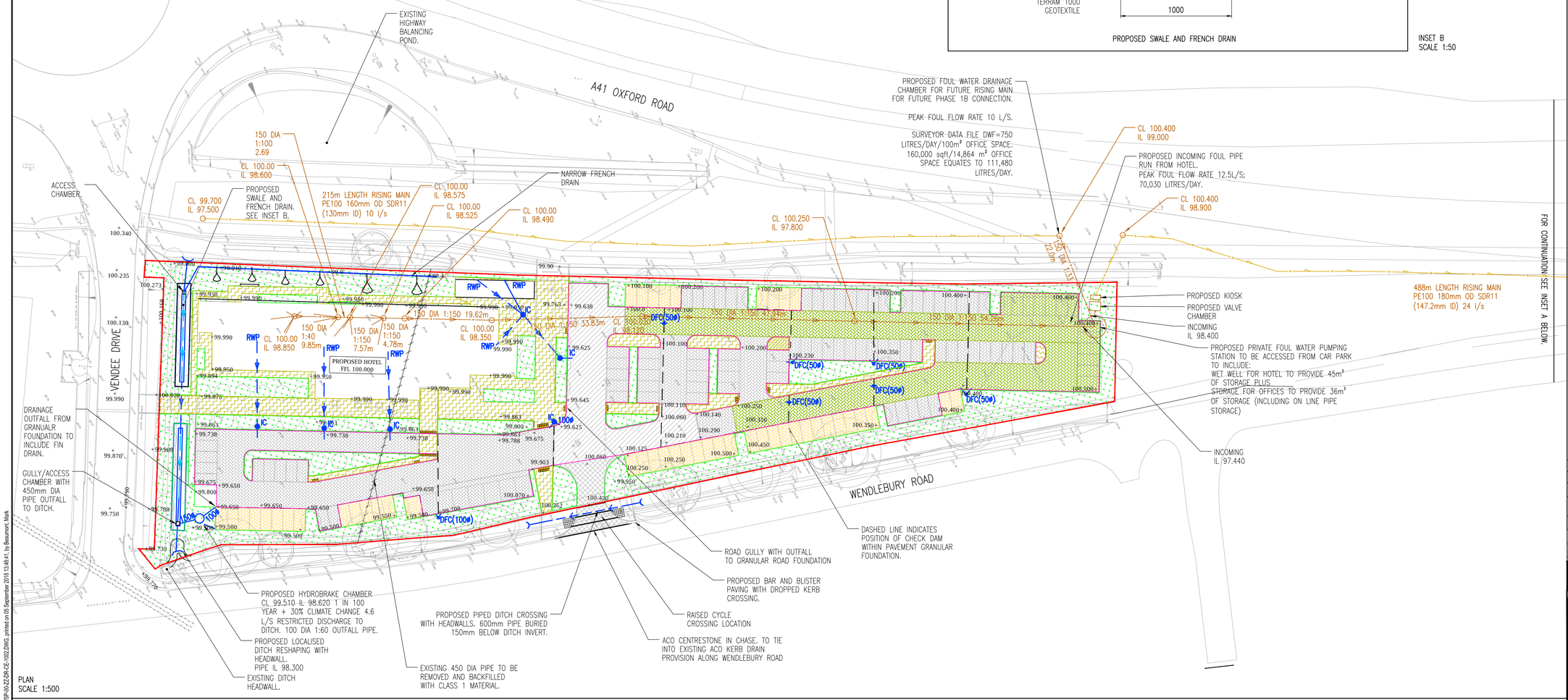
TITLE: DRAINAGE LAYOUT

SCALE @ A0:	CHECKED:	APPROVED:
1:500	JM	JM
CAD FILE: 1903-D-113	DESIGN/DRAWN: DP	DATE: OCT 2008
PROJECT No: 11011903	DRAWING No: 1903/D/113	REV: G

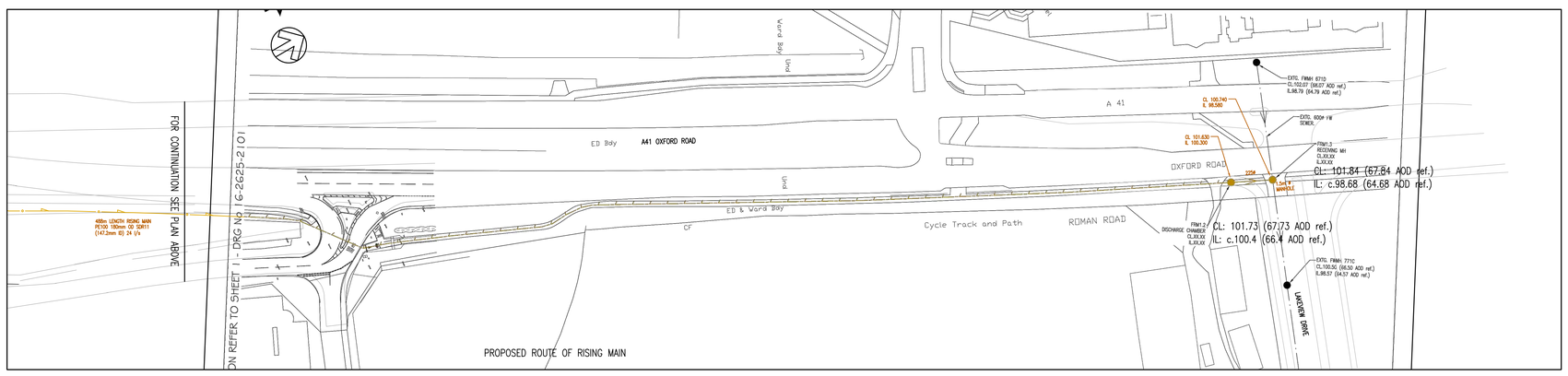


PROPOSED SWALE AND FRENCH DRAIN

INSET B
SCALE 1:50



PLAN
SCALE 1:500



INSET A
SCALE 1:1000

NOTES

DO NOT SCALE

1. ALL DIMENSIONS SHOWN ARE IN METRES UNLESS OTHERWISE STATED.

2. ALL LEVELS ARE IN METRES 34.0m ABOVE ORDNANCE DATUM.

3. THIS DRAWING IS BASED ON:

TURKINGTON MARTIN'S LANDSCAPE MASTERPLAN TM336L01 REV B. TOPOGRAPHICAL SURVEY BY TARGET SURVEYS LIMITED REFERENCE 1206/1 DATED APRIL 2015.

4. REFER TO DRAWING NUMBER 3775-WSP-00-ZZ-DR-CE-1004 FOR SECTION AND DETAILS.

KEY

- PROPOSED PRIVATE FOUL WATER DRAINAGE
- PROPOSED PRIVATE FOUL WATER RISING MAIN
- PROPOSED PRIVATE SURFACE WATER DRAINAGE
- PROPOSED PRIVATE SURFACE WATER DRAINAGE PERFORATED PIPE
- RWP — IC — PROPOSED 110mmø RAIN WATER PIPE WITH FLOW DIFFUSER CHAMBER AND DISCHARGE TO GRANULAR PAVING CONSTRUCTION.
- DFC(50mm) — PROPOSED CHECK DAM WITH ACCESS CHAMBER TO FLOW CONTROL AND ASSOCIATED PIPE SIZE FOR FLOW CONTROL
- PROPOSED CONCRETE BLOCK PAVING TO LANDSCAPE ARCHITECT DETAILS.
- PROPOSED TARMAC CONSTRUCTION WITH NORMAL CONSTRUCTION BELOW FOR JUNCTION ACCESS. SURFACE COURSE – 40mm HRA 30/14 F SURF 40/60 BINDER COURSE – 60mm AC DENSE BIN 40/60 BASE COURSE – 180mm AC32 HDM BASE 40/60 SUB-BASE – TYPE 1 6F1 CAPPONG FOR CBR 3% FOR THICKNESS & SPECIFICATION SEE OXFORDSHIRE COUNTY COUNCIL DRG. NO.HSD/700/010.
- PROPOSED PERMEABLE BLOCK PAVING ACCESS WAY CONSTRUCTION WITH PERFORATED DBM BASE TO DETAIL 3. SEE NOTE 4
- PROPOSED PERMEABLE BLOCK PAVING CONSTRUCTION CAR PARK AREAS WITH COURSE GRADED AGGREGATE BELOW TO DETAIL 2. SEE NOTE 4.
- PROPOSED PERMEABLE BLOCK PAVING CONSTRUCTION CAR PARK AREAS WITH 100mm HBM SUB-BASE AND COURSE GRADED AGGREGATE BELOW TO DETAIL 1. SEE NOTE 4.
- PROPOSED PERMEABLE BLOCK PAVING CONSTRUCTION CAR PARKING BAY OVER ROOT PROTECTION AREA TO DETAIL 6. SEE NOTE 4.
- PROPOSED SOFT LANDSCAPING NOTE: REFER TO LANDSCAPE ARCHITECT DETAILS FOR TREE PITS.
- +99.360 PROPOSED FINISHED LEVEL.
- PROPOSED HEADWALL REFER TO DETAIL ON WSP DRAWING NUMBER 3775-WSP-00-ZZ-DR-CE-1006

REV	DATE	BY	DESCRIPTION	CHK	APP
P06	24/08/2018	MM	LEVELS UPDATED TO SUIT FOUNDATION CHANGES	MP	MP
P05	09/08/2018	MM	LEVELS UPDATED	MP	MP
P04	13/02/2018	KW	UPDATED TO REVISED MASTERPLAN	MP	MP
P03	02/01/2018	MM	PIPED DITCH CROSSING SHOWN. NOTE 2 REVISED. PUMPING STATION RELOCATED.	AJG	MP
P02	18/12/2017	MH	UPDATED MASTERPLAN	MP	MP
P01	15/12/2017	MM	FIRST ISSUE	AJG	MP

DRAWING STATUS: S2 - FOR INFORMATION

wsp
Unit 9 The Chase, John Tate Road, Foxholes Business Park, Hertford, SG13 7NN, UK
T+ 44 (0) 1992 526 000, F+ 44 (0) 1992 526 001
wsp.com

CLIENT: ATLAS HOTELS GROUP

ARCHITECT: NORR

SITE/PROJECT: HOLIDAY INN EXPRESS BICESTER GATEWAY

TITLE: PAVING AND DRAINAGE STRATEGY

SCALE @ A1:	CHECKED:	APPROVED:
AS SHOWN	AJG	MB

PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70033775	MM	MM	September 18

DRAWING No: 3775-WSP-00-ZZ-DR-CE-1002 REV: P06

APPENDIX F

Greenfield Runoff Estimates

By Bailey Johnson Hayes (March 24)

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	James Griffiths
Site name:	Unit 13, Catalyst
Site location:	Bicester

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.88476° N
Longitude:	1.16968° W
Reference:	1127783749
Date:	Apr 03 2024 10:43

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 1

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	1	3
HOST class:	N/A	N/A
SPR/SPRHOST:	0.1	0.37

Hydrological characteristics

	Default	Edited
SAAR (mm):	617	619
Hydrological region:	6	6
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	0.14	2.49
1 in 1 year (l/s):	0.12	2.11
1 in 30 years (l/s):	0.33	5.72
1 in 100 year (l/s):	0.46	7.94
1 in 200 years (l/s):	0.54	9.3

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	James Griffiths
Site name:	Unit 14, Catalyst
Site location:	Bicester

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.88476° N
Longitude:	1.16968° W
Reference:	1674439407
Date:	Apr 03 2024 10:45

Runoff estimation approach

IH124

Site characteristics

Total site area (ha):	0.65

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	1	3
HOST class:	N/A	N/A
SPR/SPRHOST:	0.1	0.37

Hydrological characteristics

	Default	Edited
SAAR (mm):	617	619
Hydrological region:	6	6
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	0.09	1.62
1 in 1 year (l/s):	0.08	1.37
1 in 30 years (l/s):	0.22	3.72
1 in 100 year (l/s):	0.3	5.16
1 in 200 years (l/s):	0.35	6.05

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	James Griffiths
Site name:	Unit 15, Catalyst
Site location:	Bicester

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	51.88476° N
Longitude:	1.16968° W
Reference:	2763264215
Date:	Apr 03 2024 10:46

Runoff estimation approach

IH124

Site characteristics

Total site area (ha):	0.85

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	1	3
HOST class:	N/A	N/A
SPR/SPRHOST:	0.1	0.37

Hydrological characteristics

	Default	Edited
SAAR (mm):	617	619
Hydrological region:	6	6
Growth curve factor 1 year:	0.85	0.85
Growth curve factor 30 years:	2.3	2.3
Growth curve factor 100 years:	3.19	3.19
Growth curve factor 200 years:	3.74	3.74

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited
Q_{BAR} (l/s):	0.12	2.11
1 in 1 year (l/s):	0.1	1.8
1 in 30 years (l/s):	0.28	4.86
1 in 100 year (l/s):	0.39	6.75
1 in 200 years (l/s):	0.46	7.91

APPENDIX G

External Works & Levels / Drainage Plans & Details

By Bailey Johnson Hayes (May 24)

A1

External Works & Levels 1:500

NOTES

1. This drawing is to be read in conjunction with all relevant Architects and Bailey Johnson Hayes drawings and specifications.
2. Do not scale. Work only to figured dimensions.
3. All dimensions to be confirmed on site prior to commencement of work.
4. Proposed Site Plan from Cornish Architects:- Drawing Ref: 23022 - TP - 002 Rev -
5. Topographical Survey by MK Surveys: Drawing Ref: 33239 Rev 1
6. Soft Landscaping and Planting by Laird Bailey.
7. Tree Retention Plan & Arboricultural Survey by Tyler Grange.

CBR NOTES

1. The thickness of sub-bases described in the details on this drawing are applicable to formations with recorded CBR values of greater than 5%.
2. The following requirements are necessary for CBR's below:

   CBR (1%) - Sub-grade improvement

   CBR (2%) - Sub-grade improvement layer (May be incorporated into capping layer to provide a total layer thickness of 350mm)

   CBR (3%) - 225mm of appropriate capping material

   CBR (4%) - 150mm of appropriate capping material

3. Note: - All capping to be approved by engineer prior to works

SCALE

10m 5m 0 10m 20m 30m

Scale 1:500 @A1

LEGEND

- Proposed Building
- 180mm thk RC Yard Slab
- 80mm Permeable Block Paving
- 60mm Footpath Block Paving
- Asphalt Estate Road
- Bitmac Footways
- PRoW Grass Footpath

TOWN PLANNING

Rev	Date	Revision Description
G	09.05.24	Issued for Planning Submission
F	26.04.24	Vegetation retained + Ditches updated
E	19.04.24	Issued for Planning Submission
D	18.04.24	Site layout updated + ditches added
C	03.04.24	Issued for Approval
B	25.03.24	Updated to latest Site Layout
A	26.01.24	Site layout updated

Revision Schedule

Project Title

Catalyst Bicester Phase 4, Wendlebury Road, Bicester

Client

ALBION LAND

Drawing Title

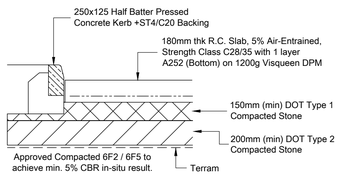
External Works & Levels

BAILEY JOHNSON HAYES
Consulting Engineers
ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL

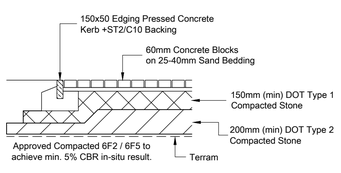
Scale	1:500 @A1
Date	22.01.24
Drawn	JNG

Drawing Number

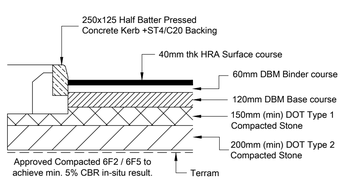
S1502-01 G



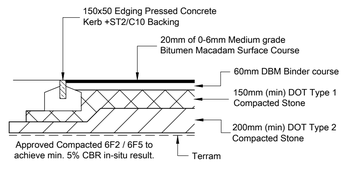
RC Yard Detail 1:25



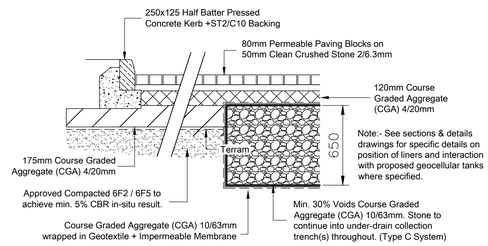
Block Footpath 1:25



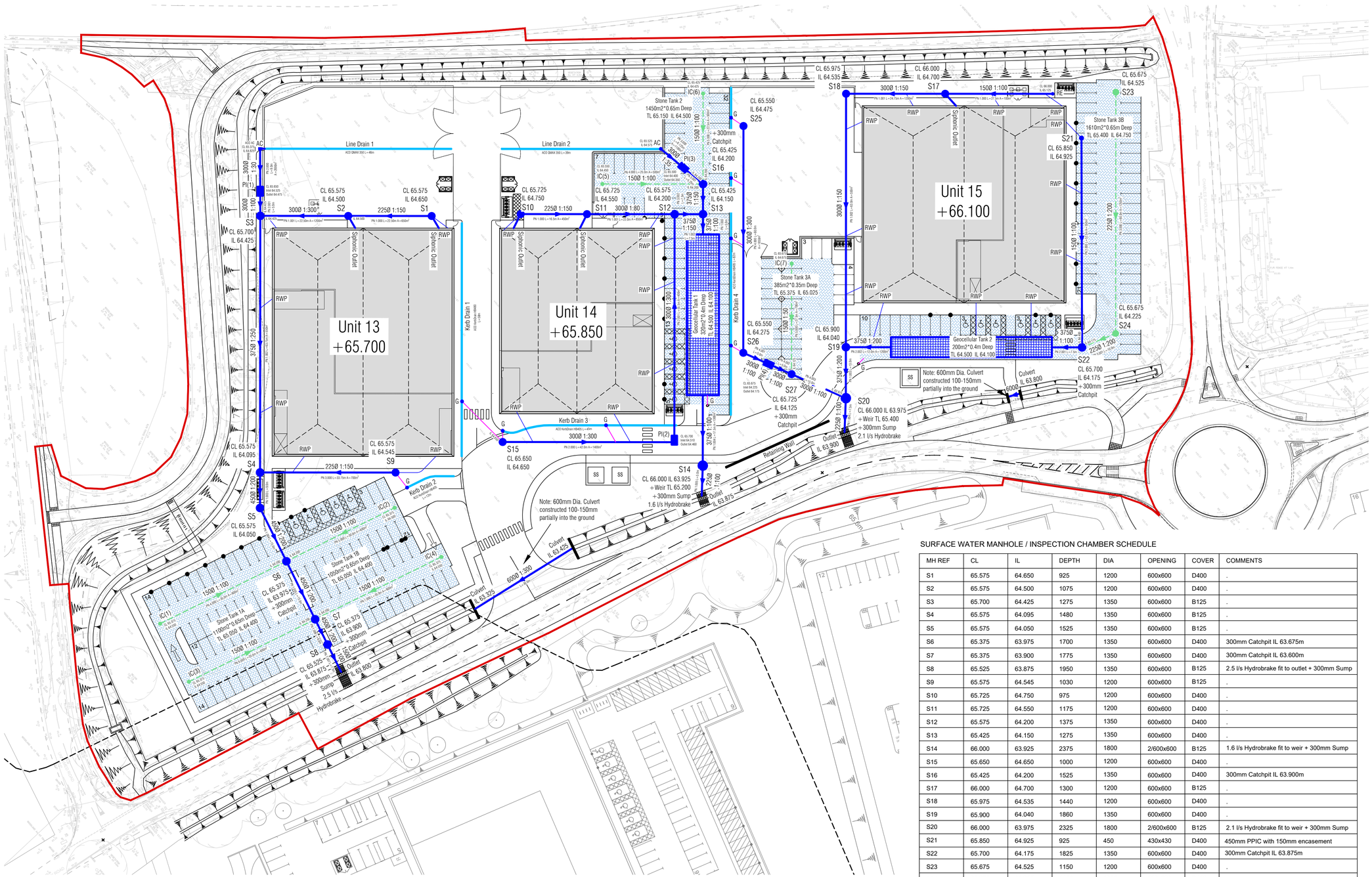
Asphalt Road 1:25



Bitmac Footpath 1:25



Permeable Block Paving 1:25



SW Drainage Layout 1:500

LEGEND

- INDICATES SURFACE WATER MANHOLES
- INDICATES SURFACE WATER PIPE RUNS
- INDICATES PERFORATED COLLECTION PIPES
- INDICATES LINEAR DRAINAGE CHANNELS
- G INDICATES ROAD GULLIES / OUTLET GULLIES
- INDICATES UNBOUND CGA STONE TANK

ALL PIPES CONNECTED DIRECTY INTO GULLIES TO BE 150MM DIAMETER (COLOURED MAGENTA ON PLAN)

Note: - See BJH Section 278 Plans & Details for the off-site highway drainage to Wendlebury Road, A41 and associated cycle/footways

CATCHMENT UNIT 13	CATCHMENT UNIT 14	CATCHMENT UNIT 15
STONE 1A - 316 m3	STONE 2 - 405 m3	STONE 3A - 60 m3
STONE 1B - 293 m3	TANK 1 - 122 m3	STONE 3B - 467 m3
		TANK 2 - 76 m3
TOTAL = 609 m3	TOTAL = 527 m3	TOTAL = 603 m3
QBAR OUTLET = 2.5 l/s	QBAR OUTLET = 1.6 l/s	QBAR OUTLET = 2.1 l/s
IMP. AREA = 0.750 ha	IMP. AREA = 0.650 ha	IMP. AREA = 0.750 ha
TOTAL = 1.000 ha	TOTAL = 0.650 ha	TOTAL = 0.850 ha

Note: - Geocellular tanks to be Hewitech Variobox or similar approved. Tank is to be provided with geotextile protection fleece, impermeable geomembrane, air vents, inlets and outlets to specalist providers details. Tank is to be installed in strict accordance with manufactures instructions. Structural integrity to be checked and approved before construction.

SURFACE WATER MANHOLE / INSPECTION CHAMBER SCHEDULE

MH REF	CL	IL	DEPTH	DIA	OPENING	COVER	COMMENTS
S1	65.575	64.650	925	1200	600x600	D400	.
S2	65.575	64.500	1075	1200	600x600	D400	.
S3	65.700	64.425	1275	1350	600x600	B125	.
S4	65.575	64.095	1480	1350	600x600	B125	.
S5	65.575	64.050	1525	1350	600x600	B125	.
S6	65.375	63.975	1700	1350	600x600	D400	300mm Catchpit IL 63.675m
S7	65.375	63.900	1775	1350	600x600	D400	300mm Catchpit IL 63.600m
S8	65.525	63.875	1950	1350	600x600	B125	2.5 l/s Hydrobrake fit to outlet + 300mm Sump
S9	65.575	64.545	1030	1200	600x600	B125	.
S10	65.725	64.750	975	1200	600x600	D400	.
S11	65.725	64.550	1175	1200	600x600	D400	.
S12	65.575	64.200	1375	1350	600x600	D400	.
S13	65.425	64.150	1275	1350	600x600	D400	.
S14	66.000	63.925	2375	1800	2/600x600	B125	1.6 l/s Hydrobrake fit to weir + 300mm Sump
S15	65.650	64.650	1000	1200	600x600	D400	.
S16	65.425	64.200	1525	1350	600x600	D400	300mm Catchpit IL 63.900m
S17	66.000	64.700	1300	1200	600x600	B125	.
S18	65.975	64.535	1440	1200	600x600	D400	.
S19	65.900	64.040	1860	1350	600x600	D400	.
S20	66.000	63.975	2325	1800	2/600x600	B125	2.1 l/s Hydrobrake fit to weir + 300mm Sump
S21	65.850	64.925	925	450	430x430	D400	450mm PPIC with 150mm encasement
S22	65.700	64.175	1825	1350	600x600	D400	300mm Catchpit IL 63.875m
S23	65.675	64.525	1150	1200	600x600	D400	.
S24	65.675	64.225	1450	1200	600x600	D400	.
S25	65.550	64.475	1075	1200	600x600	D400	.
S26	65.550	64.275	1275	1200	600x600	D400	.
S27	65.725	64.125	1900	1200	600x600	D400	300mm Catchpit IL 63.825m
IC (1)	65.375	64.550	825	450	430x430	D400	450mm PPIC with 150mm encasement
IC (2)	65.375	64.500	875	450	430x430	D400	450mm PPIC with 150mm encasement
IC (3)	65.375	64.550	825	450	430x430	D400	450mm PPIC with 150mm encasement
IC (4)	65.375	64.550	825	450	430x430	D400	450mm PPIC with 150mm encasement
IC (5)	65.550	64.450	1100	450	430x430	D400	450mm PPIC with 150mm encasement
IC (6)	65.425	64.425	1000	450	430x430	D400	450mm PPIC with 150mm encasement
IC (7)	65.675	64.675	1000	450	430x430	D400	450mm PPIC with 150mm encasement

PETROL INTERCEPTOR SCHEDULE

TANK REF	DRAIN AREA	PRODUCT	LENGTH	DIAMETER	INLET	OUTLET	COMMENTS
PI(1)	2000m2	NSBP006*	2254mm	1354mm	64.525m	64.475m	300mm Concrete Encased + Alarm
PI(2)	1400m2	NSBP006*	2254mm	1354mm	64.510m	64.460m	300mm Concrete Encased + Alarm
PI(3)	1100m2	NSBP006*	2254mm	1354mm	64.400m	64.350m	300mm Concrete Encased + Alarm
PI(4)	1850m2	NSBP006*	2254mm	1354mm	64.225m	64.175m	300mm Concrete Encased + Alarm

*Product range from Marsh Industries Hydroil Bypass Separator Range or similar approved

A1

DRAINAGE NOTES

1. This drawing is to be read in conjunction with all relevant Architects and Bailey Johnson Hayes drawings and specifications.
2. Do not scale. Work only to figured dimensions.
3. All dimensions and condition of existing drainage to have invert levels confirmed on site prior to commencement of work.
4. Proposed Site & Finishes Plan from Cornish Architects:- Drawing Ref: 23022 - TP - 002 Rev - Topographical Survey by MK Surveys: Drawing Ref: 33239 Rev 1
5. All works to Adopted Sewers to be carried out in accordance with the requirements of Sewers for Adoption in the Sewerage Sector Guidance v2.2 (2022) and the Adopting authority requirements.
6. All private drainage is to be constructed in accordance with the Building Regulations as current at construction.
7. Drains to be 'Hepworth Supersleeve' or similar approved Laid in Class S Bedding to BS 882 1983: Table 4, or to BS 8301 1985: Appendix D. 450mm Diameter Drains and above are to be Hepworth Concrete Pipes Class H or similar approved drains within the site may be different main accordance with Sewerage Sector Guidance v2.2 (2022).
8. All trenches within trafficked areas to be backfilled with 75mm down graded stone fill, placed and compacted in 150mm layers. All pipes in Roadways / Parking, less than 900mm deep to pipe crown to be encased in concrete and flexible joints provided at 3000mm centres.
9. All drains to have Class S granular bed and surround, except where:
   a) Cover beneath roads or hardstanding is less than 900mm to Pipe Crown or,
   b) Cover beneath landscaping is less than 600mm in which case Class Z (Concrete) bedding / surround is required.
10. All Manholes greater than 1.5m to soffit to be constructed in Precast Concrete Rings to BS 5911: Part 1. Rings to be bedded in sealant strips unless otherwise noted in Manhole Schedule.
11. Manholes in footpaths or landscaped areas to be backfilled with 40mm down graded stone fill, compacted in layers not exceeding 150mm thick. All manholes beneath roads and parking areas to be cased in minimum 150mm concrete surround.
12. All connections to rain water pipes to be provided with Rodding access.
13. All road gullies to be Hepworth Road Gullies, Ref 214 RGR4 with 150mm diameter outlets or similar approved. Gullies to be encased in minimum 150mm concrete.
14. Drains under buildings and within 300mm of the underside of floor slab to be encased in 150mm concrete. Casing to incorporate flexible fibre board joints at spacing's as recommended by the pipe manufacturer. Drains under buildings
15. Architect is to provide final rain water pipe positions for construction.
16. All Pipes to enter manhole with Soffits Level unless otherwise stated. See manhole details drawings for further clarity of connections.

SCALE

10m 5m 0 10m 20m 30m

Scale 1:500 @A1

TOWN PLANNING

Rev	Date	Revision Description
D	09.05.24	Issued for Planning Submission
C	26.04.24	Vegetation retained + Ditches updated
B	19.04.24	Issued for Planning Submission

Revision Schedule

Project Title
Catalyst Bicester Phase 4, Wendlebury Road, Bicester

Client
ALBION LAND

Drawing Title
SW Drainage Layout

BAILEY JOHNSON HAYES
Consulting Engineers
ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL

Scale	1:500 @A1
Date	03.04.24
Drawn	JNG
Drawing Number	S1502-02 D