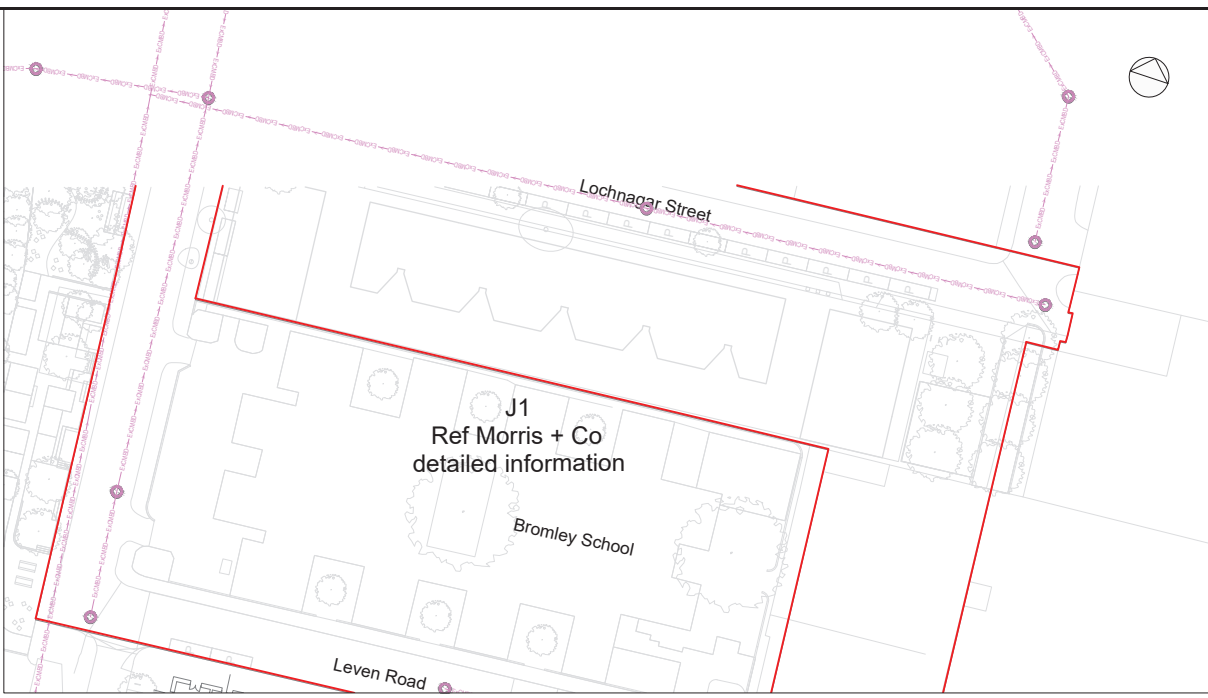
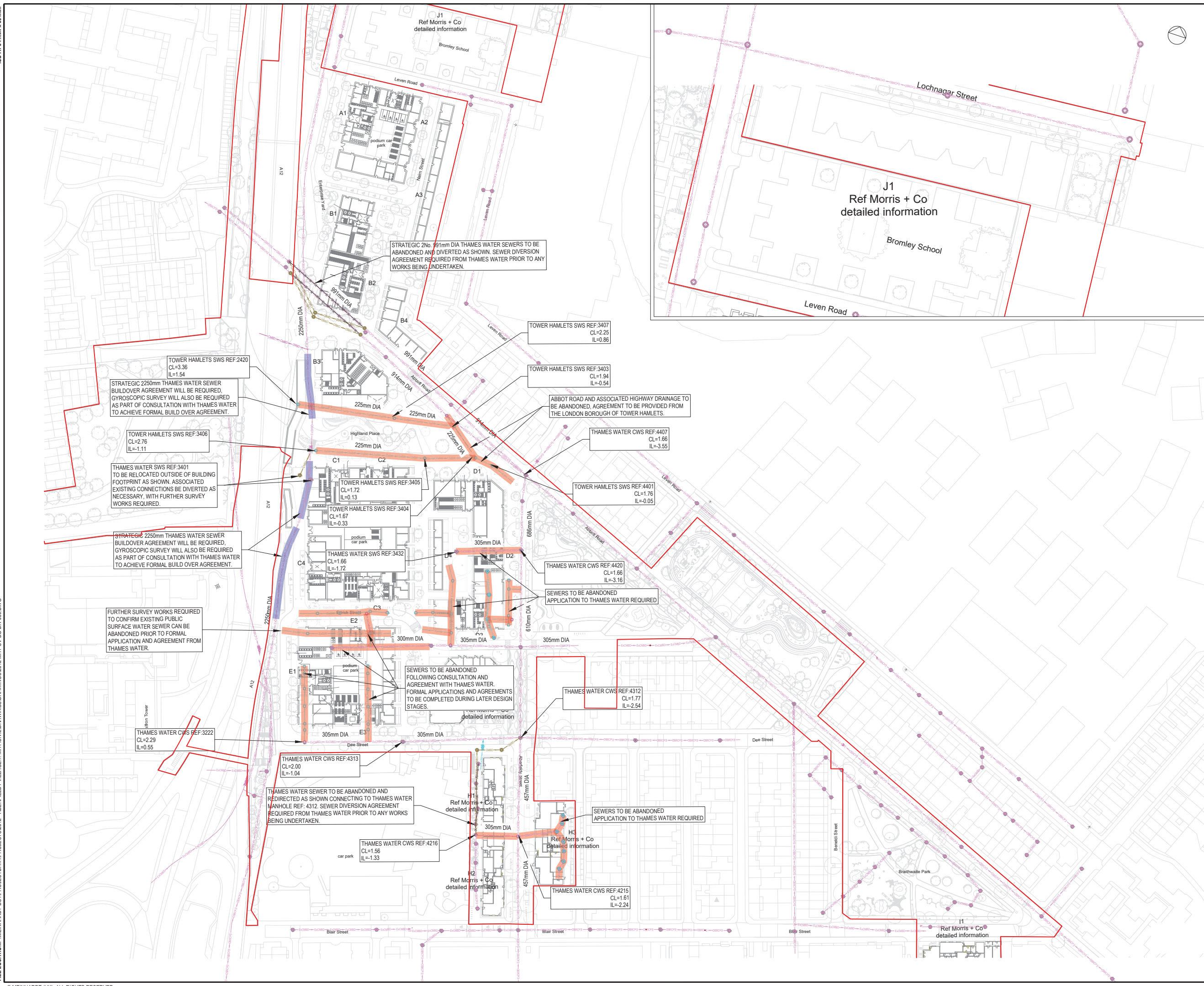


DATE: 06/03/2022
 FILE LOCATION: \\MEINHARDT-DC\PROJECTS\2812 - ABERFELDY VILLAGE\1. MHT\CIVILDRAWINGS\DRAWINGS\2812.MHT-CV-BG-DR-050.DWG



ISSUED FOR INFORMATION

REV	DESCRIPTION	BY	DATE
P01	STAGE 2 ISSUE	LH	20/08/21
P02	DRAFT STAGE 2 - ISSUED FOR PLANNING	LH	17/09/21
P03	ISSUED FOR PLANNING	LB	14/10/21
P04	REVISED PLANNING ISSUE	LB	08/03/22

- NOTES:**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS FOR INFORMATION ONLY.
 - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND CONSULTANTS DRAWINGS AND SPECIFICATIONS.
 - THIS DRAWING IS BASED ON:
 - THAMES WATER ASSET RECORDS DATED NOVEMBER 2020
 - LEVITT BERNSTEIN ARCHITECTURAL MASTERPLAN 3663 - 100A - Proposed LGF Plan - Scenario A - P10, DATED: 10/08/21
 - TOPOGRAPHICAL & UTILITIES COMBINED SURVEY FULL SITE V2

KEY:

- SITE BOUNDARY
- EXISTING SURFACE WATER SEWER
- EXISTING COMBINED WATER SEWER
- PROPOSED COMBINED WATER SEWER
- EXISTING SURFACE WATER MANHOLE
- EXISTING COMBINED WATER MANHOLE
- PROPOSED COMBINED WATER MANHOLE
- SEWER TO BE ABANDONED
- SEWER TO BE PASSED THROUGH STRATEGIC THAMES WATER SEWER BUILD OVER AGREEMENT
- SEWER TO BE DIVERTED & ABANDONED

CDM RESIDUAL CIVIL / STRUCTURAL DESIGN RISKS



PROJECT
ABERFELDY VILLAGE MASTERPLAN

CLIENT
ECOWORLD

TITLE
THAMES WATER SEWER ABANDONMENT AND BUILD OVER MAP

DISCIPLINE	SCALE
CIVIL	1:1000
DRAWN	DESIGNED
LH	LH
CHECKED	APPROVED
LB	CM
DRAWING No	ISSUE
2812-MHT-CV-BG-DR-050	P04

ISO A1 841mm x 594mm
DATE: 14/10/2021
FILE LOCATION: \\MEINHARDT-DC\PROJECTS\2812 - ABERFELDY VILLAGE\1 - MHT\CIVIL\DRAWINGS\2812\MHT-CV-RF-DR-101.DWG



ISSUED FOR INFORMATION

REV	DESCRIPTION	BY	DATE
P01	STAGE 2 ISSUE	LH	20/09/21
P02	DRAFT STAGE 2+ FOR PLANNING	LH	17/09/21
P03	ISSUED FOR PLANNING	LB	14/10/21

- NOTES:**
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 - THIS DRAWING IS FOR PLANNING PURPOSES.
 - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND CONSULTANTS DRAWINGS AND SPECIFICATIONS.
 - THIS DRAWING IS BASED ON:
 - LEVITT BERNSTEIN ARCHITECTURAL MASTERPLAN DWG REF: 3663 - 130 - Proposed Roof plan - Scenario A - P6.
 - MORRIS AND COMPANY ROOF PLANS A303-MCO-BF-R1-DR-A-01122, A303-MCO-BH-R1-DR-A-01138 & A303-MCO-BI-R1-DR-A-01158.

NOTE:
A 50% REDUCTION IN BLUE/GREEN ROOF PLAN AREA IS APPLIED WHERE ROOF PLANT AREAS ARE UNKNOWN. THIS REDUCTION IS EXCLUDING PODIUM BLUE ROOF AREAS.

- KEY:**
- PROPOSED PODIUM DECK BLUE ROOF AREA
 - PROPOSED BLUE OR GREEN ROOF AREA
 - PROPOSED BLUE ROOF AREA

CDM RESIDUAL CIVIL / STRUCTURAL DESIGN RISKS



PROJECT
ABERFELDY VILLAGE
MASTERPLAN

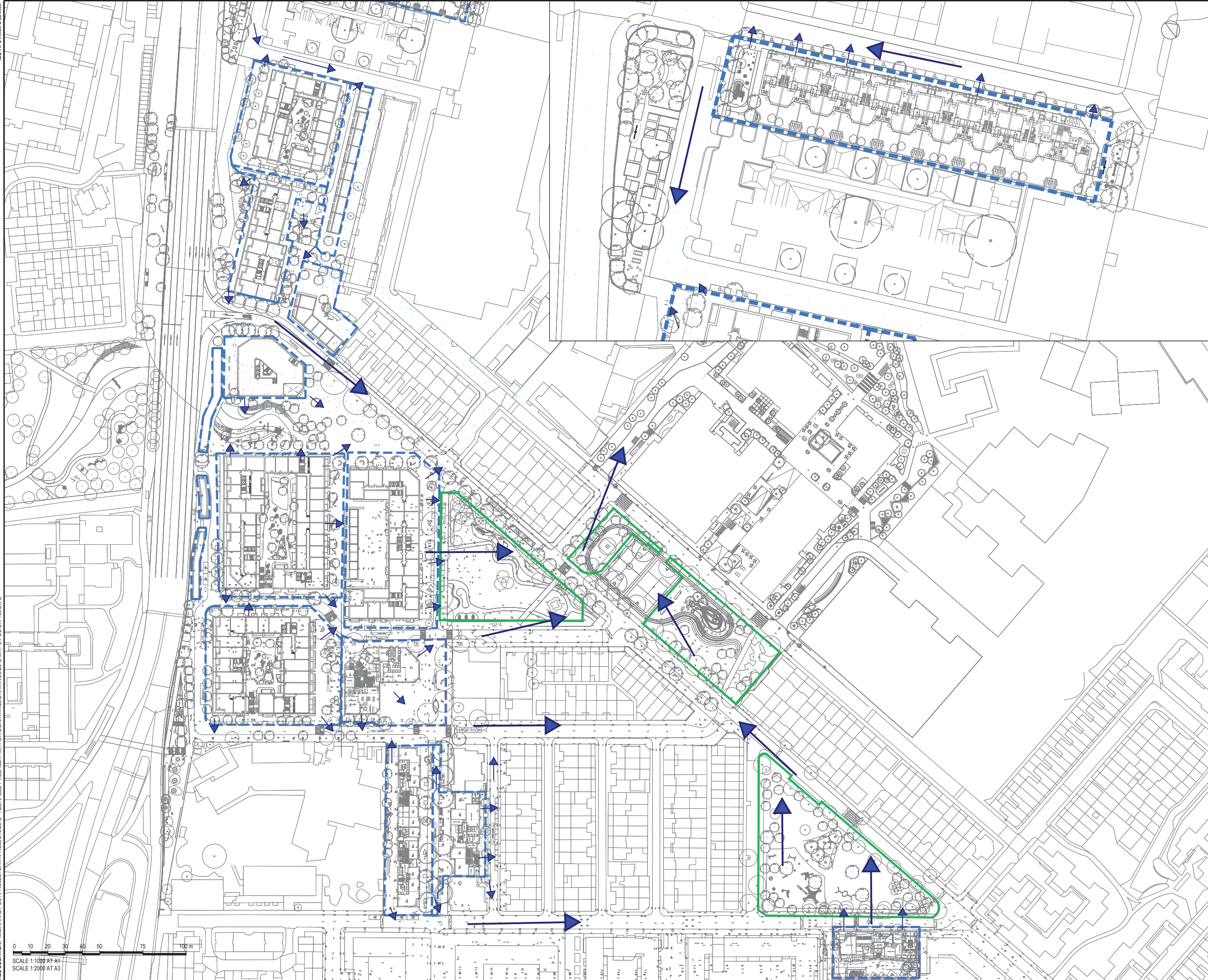
CLIENT
ECOWORLD

TITLE
ROOF MASTERPLAN

DISCIPLINE	SCALE
CIVIL	1:1000
DRAWN	DESIGNED
LH	LH
CHECKED	APPROVED
LB	CM
DRAWING No	ISSUE
2812-MHT-CV-BG-DR-101	P03

ISO A1 841mm x 594mm

DATE: 10/02/2022
FILE LOCATION: \\MEINHARDT-DC\PROJECTDATA\PROJECTS\2812 - ABERFELDY VILLAGE\1. MHT\CIVILDRAWINGS\DRAWINGS\2812.MHT-CV-BG-DR-109.DWG



FOR INFORMATION ONLY

REV	DESCRIPTION	BY	DATE
P01	FOR INFORMATION ONLY	SA	14.02.22
P02	REVISED ISSUE	LB	01.04.22

- NOTES:**
- DO NOT SCALE FROM THIS DRAWING
 - ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - THIS DRAWING IS FOR INFORMATION ONLY.
 - DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND CONSULTANTS DRAWINGS AND SPECIFICATIONS.
 - PERMEABLE PAVING TO BE UTILIZED IN PRIVATELY MANAGED PUBLIC SPACE WHERE FEASIBLE.
 - THIS DRAWING IS BASED ON:
- LEVITT BERNSTEIN ARCHITECTURAL MASTERPLAN 3663 - 100A - Proposed LGF Plan - Scenario A - P10, DATED: 10/08/21
- TOPOGRAPHICAL & UTILITIES COMBINED SURVEY FULL SITE V2

- KEY:**
- PROPOSED BLOCK BOUNDARY
 - PROPOSED GREEN SPACE BOUNDARY
 - ➔ OVERLAND FLOW ROUTE

CDM RESIDUAL CIVIL / STRUCTURAL DESIGN RISKS



PROJECT
ABERFELDY VILLAGE

CLIENT
ECOWORLD

TITLE
OVERLAND FLOW ROUTES

DISCIPLINE	SCALE		
CIVIL	1:1000		
DRAWN	DESIGNED	CHECKED	APPROVED
SA	LB	LB	GB
DRAWING No 2812-MHT-CV-BG-DR-109			ISSUE P02

Appendix D – Tower Hamlets SUDS Proforma

1. Project & Site Details	Project / Site Name (including sub-catchment / stage / phase where appropriate)	Aberfeldy Village
	Address & post code	Poplar Riverside, Aberfeldy Village, E14, London
	OS Grid ref. (Easting, Northing)	E 538365
		N 181398
	LPA reference (if applicable)	
	Brief description of proposed work	The Aberfeldy Village Masterplan aims to deliver, up to 1628 new homes, new workspace, a new high street, new and improved open space and the pedestrianisation of the A12 Abbott Road
	Total site Area	91000 m ²
	Total existing impervious area	37000 m ²
	Total proposed impervious area	32000 m ²
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	no
	Existing drainage connection type and location	Traditional piped system, multiple connection points
	Designer Name	Luke Boustead
Designer Position	Senior Engineer	
Designer Company	Meinhardt	

2. Proposed Discharge Arrangements	2a. Infiltration Feasibility		
	Superficial geology classification	Alluvium - Clay, Silt, S	
	Bedrock geology classification	London Clay Formation	
	Site infiltration rate	1.12x10 ⁻⁴ and 2.55x10 ⁻⁴	m/s
	Depth to groundwater level	m below ground level	
	Is infiltration feasible?	No	
	2b. Drainage Hierarchy		
		Feasible (Y/N)	Proposed (Y/N)
	1 store rainwater for later use	N	N
	2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N
	3 attenuate rainwater in ponds or open water features for gradual release	N	N
	4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y
5 discharge rainwater direct to a watercourse	N	N	
6 discharge rainwater to a surface water sewer/drain	N	N	
7 discharge rainwater to the combined sewer.	Y	Y	
2c. Proposed Discharge Details			
Proposed discharge location	locations to Thames Water public combine		
Has the owner/regulator of the discharge location been consulted?	Thames Water. Response received confirm		

3a. Discharge Rates & Required Storage				
	Greenfield (GF) runoff rate (l/s)	Existing discharge rate (l/s)	Required storage for GF rate (m ³)	Proposed discharge rate (l/s)
Qbar	22.4	 	 	
1 in 1				22.4
1 in 30				23.4
1 in 100				24.4
1 in 100 + CC	 	 		25.4
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Vortex Flow control (Hydro-Brake or similar)		
3c. Proposed SuDS Measures				
	Catchment area (m ²)	Plan area (m ²)	Storage vol. (m ³)	
Rainwater harvesting	0	 	0	
Infiltration systems	0	 	0	
Green roofs	7000	3500	335	
Blue roofs	11000	6500	620	
Filter strips	0	0	0	
Filter drains	0	0	0	
Bioretention / tree pits	3500	730	0	
Pervious pavements	0	0	0	
Swales	0	0	0	
Basins/ponds			0	
Attenuation tanks	48334	 	2715	
Total	69834	10730	3670	

4a. Discharge & Drainage Strategy		Page/section of drainage report
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results		Section 2.1.3
Drainage hierarchy (2b)		Section 2.1.3
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location		Appendix B
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations		Appendix C
Proposed SuDS measures & specifications (3b)		Throughout report
4b. Other Supporting Details		Page/section of drainage report
Detailed Development Layout		Appendix B
Detailed drainage design drawings, including exceedance flow routes		Appendix B
Detailed landscaping plans		Appendix E
Maintenance strategy		Section 2.5
Demonstration of how the proposed SuDS measures improve:		Section 2
a) water quality of the runoff?		Section 2.1.5
b) biodiversity?		Section 2.1.6
c) amenity?		Section 2.1.6

1. Project & Site Details	Project / Site Name (including sub-catchment / stage / phase where appropriate)	Uplands Business Park (outline site)		
	Address & post code	Blackhorse Ln, London E17 5QN		
	OS Grid ref. (Easting, Northing)	E 535695		
		N 189846		
	LPA reference (if applicable)			
	Brief description of proposed work	Redevelopment of Uplands business park into light industry and residential flats		
	Total site Area		39000 m ²	
	Total existing impervious area		39000 m ²	
	Total proposed impervious area		39000 m ²	
	Is the site in a surface water flood risk catchment (ref. local Surface Water Management Plan)?	No		
	Existing drainage connection type and location	Pumped/gravity connection to sewer under Goldsmith Street		
	Designer Name	Luke Boustead		
	Designer Position	Senior Engineer		
Designer Company	Meinhardt			

2. Proposed Discharge Arrangements	2a. Infiltration Feasibility			
	Superficial geology classification	Alluvium - Clay, Silt, S		
	Bedrock geology classification	London Clay		
	Site infiltration rate	1.12x10	m/s	
	Depth to groundwater level	m below ground level		
	Is infiltration feasible?	No		
	2b. Drainage Hierarchy			
		<i>Feasible (Y/N)</i>	<i>Proposed (Y/N)</i>	
	1 store rainwater for later use	N	N	
	2 use infiltration techniques, such as porous surfaces in non-clay areas	N	N	
	3 attenuate rainwater in ponds or open water features for gradual release	N	N	
	4 attenuate rainwater by storing in tanks or sealed water features for gradual release	Y	Y	
	5 discharge rainwater direct to a watercourse	Y	Y	
	6 discharge rainwater to a surface water sewer/drain	N	N	
	7 discharge rainwater to the combined sewer.			
	2c. Proposed Discharge Details			
	Proposed discharge location	public surface water sewer under Goldsmith Street		
Has the owner/regulator of the discharge location been consulted?	Yes			

3a. Discharge Rates & Required Storage				
	Greenfield (GF) runoff rate (l/s)	Existing discharge rate (l/s)	Required storage for GF rate (m ³)	Proposed discharge rate (l/s)
Qbar	6.5	 	 	
1 in 1				6.5
1 in 30				6.5
1 in 100				6.5
1 in 100 + CC	 	 		6.5
Climate change allowance used		40%		
3b. Principal Method of Flow Control		Vortex flow control		
3c. Proposed SuDS Measures				
	Catchment area (m ²)	Plan area (m ²)	Storage vol. (m ³)	
Rainwater harvesting	0	 	0	
Infiltration systems	0	 	0	
Green roofs	0	0	0	
Blue roofs	0	0	1998	
Filter strips	0	0	0	
Filter drains	0	0	0	
Bioretention / tree pits	0	0	0	
Pervious pavements	0	0	0	
Swales	0	0	0	
Basins/ponds	0	0	0	
Attenuation tanks	0	 	3162	
Total	0	0	5160	

4a. Discharge & Drainage Strategy		Page/section of drainage report
Infiltration feasibility (2a) – geotechnical factual and interpretive reports, including infiltration results		Detailed in section 8.2
Drainage hierarchy (2b)		Detailed in section 8.2
Proposed discharge details (2c) – utility plans, correspondence / approval from owner/regulator of discharge location		Detailed in section 8.2
Discharge rates & storage (3a) – detailed hydrologic and hydraulic calculations		Detailed in section 8.2 and Appendix
Proposed SuDS measures & specifications (3b)		Detailed in section 8.2
4b. Other Supporting Details		Page/section of drainage report
Detailed Development Layout		Detailed in Appendix
Detailed drainage design drawings, including exceedance flow routes		Detailed in Appendix
Detailed landscaping plans		Detailed in Appendix
Maintenance strategy		Detailed in Section 9
Demonstration of how the proposed SuDS measures improve:		Detailed in section 8.2
a) water quality of the runoff?		
b) biodiversity?		
c) amenity?		

Appendix E – Architects Plans