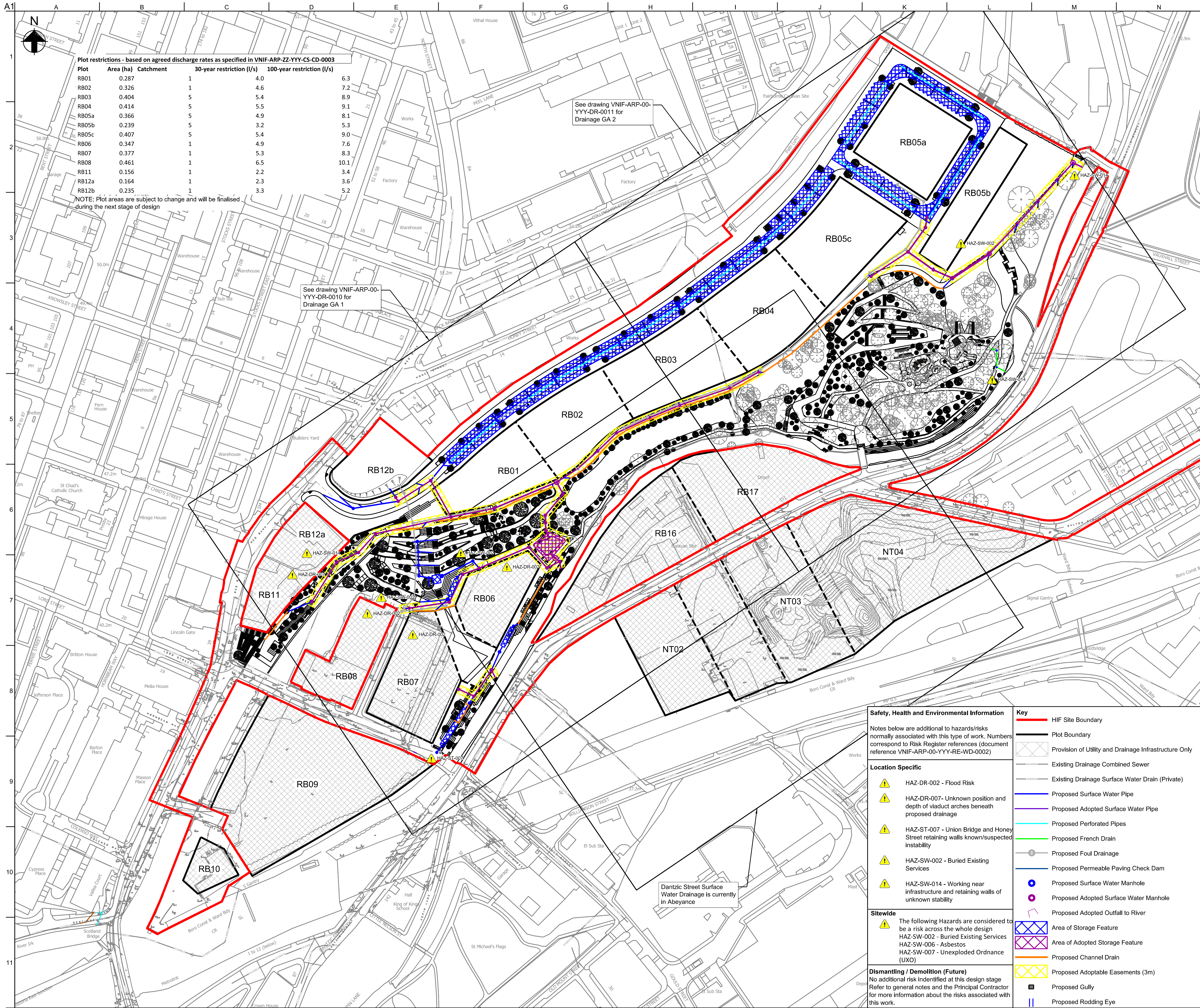




Plot restrictions - based on agreed discharge rates as specified in VNIF-ARP-ZZ-YYY-CS-CD-0003

Plot	Area (ha)	Catchment	30-year restriction (l/s)	100-year restriction (l/s)
RB01	0.287	1	4.0	6.3
RB02	0.326	1	4.6	7.2
RB03	0.404	5	5.4	8.9
RB04	0.414	5	5.5	9.1
RB05a	0.366	5	4.9	8.1
RB05b	0.239	5	3.2	5.3
RB05c	0.407	5	5.4	9.0
RB06	0.347	1	4.9	7.6
RB07	0.377	1	5.3	8.3
RB08	0.461	1	6.5	10.1
RB11	0.156	1	2.2	3.4
RB12a	0.164	1	2.3	3.6
RB12b	0.235	1	3.3	5.2

NOTE: Plot areas are subject to change and will be finalised during the next stage of design

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 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
 - Existing Drainage layout based on the following information:
 - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
 - For the Infrastructure Specification refer to VNIF-ARP-ZZ-YYY-SP-C-0001.
 - This drawing should be read with reference to Arup's full WS4 drawings and specifications.
 - Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.
- | Located Service Classification | Certainty/Risk |
|---|----------------|
| Type A Verification - Visual Identification | High |
| Type B Detection - Typically GPR and EMI techniques are used | Medium |
| Type C Site reconnaissance - Physical surface features identified | Low |
| Type D Desktop utility records search | Very Low |
- Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.
- A connection point has been provided for each plot within the HIF Boundary at a minimum depth of 2.0m to plot level (assuming FFL will be 0.5m above plot levels) as agreed with WSP.
 - Drainage construction materials:
 - Drainage pipes - Polypropylene and PVC in accordance with BS 13476
 - Manholes - Precast Concrete
 - Inspection Chambers - Polypropylene in accordance with BS 7158
 - As RB09/10 are outside the HIF Red Line Boundary, it has been agreed that a connection to the River Irk will be provided/constructed as part of the Plot construction. Discharge rates have been agreed as part of the HIF delivery.
 - For all schedules, refer to drawings VNIF-ARP-00-YYY-DR-CD-0009 and VNIF-ARP-00-YYY-DR-CD-0054.
 - For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.

P03	01/02/22		DH	RG	RG	—
P04	17/02/22	Amended for Planning Comments	DH	DH	RG	—
P05	28/02/22		DH	DH	RG	—
P06	21/03/22	Updated for Costing	ES	RG	RG	—
P07	04/04/22	Updated for Costing	DH	DH	RG	—
P08	14/07/22	WS4 Issue to BAM	DH	DH	RG	—
P09	08/08/22	Issued for Technical Approval	ES	DH	RG	—
P10	10/10/22	Full WS4 Issue	ES	DH	RG	—
P11	20/10/22	Issued for Full WS4	ES	DH	RG	—
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG
Rev	Date	Description	By	Chkd	Appd	Auth

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6th Floor 3 Piccadilly Place
Manchester M1 3BN
Tel +44 161 228 2331 Fax +44 161 228 6879
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Project Title
Victoria North HIF Infrastructure & Enabling Works

Drawing Title
Proposed Site Wide Surface Water Drainage
General Arrangement

Scale at A1		1:1250		Arup Job No		282022-00		
Role		Civil - Drainage						
Suitability		A - Fit for Construction						
Rev	C01	By	ES	Chkd	DH	Appd	RG	HG
		Date	19/10/22	Date	20/10/22	Date	20/10/22	
		31/10/22						
Name								
VNIF - ARP- 00 - YYY - DR - CD - 0002								
Project		Originator	Volume	Location	Type	Role	Number	

Safety, Health and Environmental Information

Notes below are additional to hazards/risks normally associated with this type of work. Numbers correspond to Risk Register references (document reference VNIF-ARP-00-YYY-RE-WD-0002)

Location Specific

- HAZ-DR-002 - Flood Risk
- HAZ-DR-007 - Unknown position and depth of viaduct arches beneath proposed drainage
- HAZ-ST-007 - Union Bridge and Honey Street retaining walls known/suspected instability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability

Sitewide

The following Hazards are considered to be a risk across the whole design

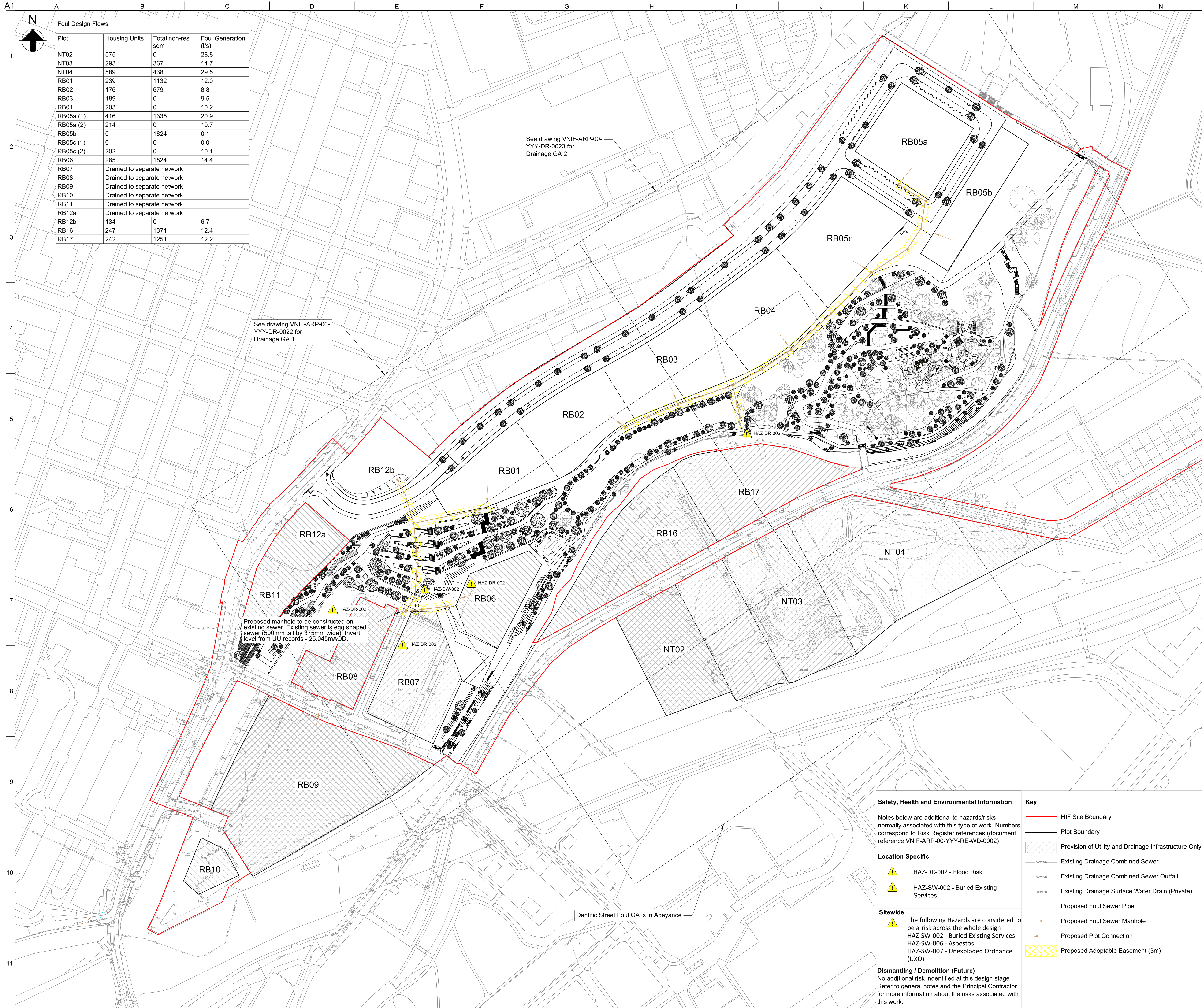
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

Dismantling / Demolition (Future)

No additional risk identified at this design stage. Refer to general notes and the Principal Contractor for more information about the risks associated with this work.

Key

- HIF Site Boundary
- Plot Boundary
- Provision of Utility and Drainage Infrastructure Only
- Existing Drainage Combined Sewer
- Existing Drainage Surface Water Drain (Private)
- Proposed Surface Water Pipe
- Proposed Adopted Surface Water Pipe
- Proposed Perforated Pipes
- Proposed French Drain
- Proposed Foul Drainage
- Proposed Permeable Paving Check Dam
- Proposed Surface Water Manhole
- Proposed Adopted Surface Water Manhole
- Proposed Adopted Outfall to River
- Area of Storage Feature
- Area of Adopted Storage Feature
- Proposed Channel Drain
- Proposed Adoptable Easements (3m)
- Proposed Gully
- Proposed Rodding Eye



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 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
 - Existing Drainage layout based on the following information:
 - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
 - For the Infrastructure Specification refer to VNIF-ARP-ZZ-YYY-SP-C-0001.
 - This drawing should be read with reference to Arup's full WS4 drawings and specifications.
 - Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.
- Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.
- A connection point for foul water has been provided for each plot within the HIF Boundary at a minimum depth of 1.5m to plot level (assuming FFL will be 0.5m above plot level) as agreed with WSP.
 - Drainage construction materials:
 - Drainage pipes - Vitrified Clay in accordance with BS EN 295
 - Manholes - Precast Concrete
 - Inspection Chambers - Polypropylene in accordance with BS 7158
 - For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.
 - For all schedules, refer to drawing VNIF-ARP-00-YYY-DR-CD-0017.
 - Foul rates and pipe sizing has been based upon FEC document "Redbank - Incoming Water Flowrates" - dated 12-05-22
 - Foul drainage runs have been designed to not exceed 75% capacity as stated in the DCG to provide capacity for further future provisions.

P01	26/08/21		AS	AS	AS	---
P02	17/12/21		DH	RG	RG	---
P03	01/02/22		DH	RG	RG	---
P04	17/02/22	Amended for Planning Comments	DH	DH	RG	---
P05	04/04/22	Updated for Costing	DH	DH	RG	---
P06	14/07/22	WS4 Issue to BAM	DH	DH	RG	---
P07	08/08/22	Issued for Technical Approval	ES	DH	RG	---
P08	10/10/22	Full WS4 Issue	ES	DH	RG	---
P09	20/10/22	Issued for Full WS4	ES	DH	RG	---
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG
Rev	Date	Description	By	Chkd	Appd	Auth

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6th Floor 3 Piccadilly Place
Manchester M1 3BN
Tel +44 161 228 2331 Fax +44 161 228 6879
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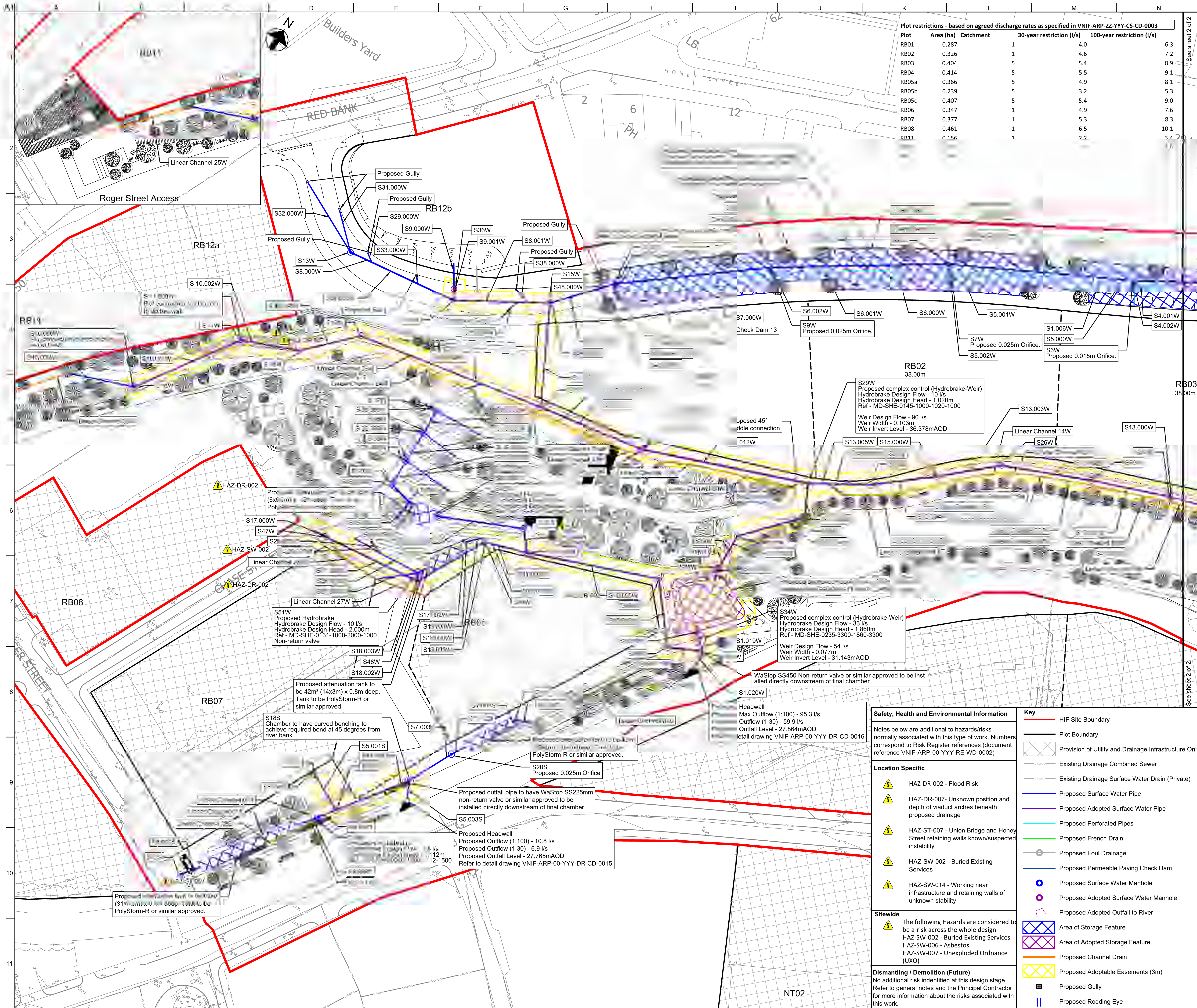
Client



Project Title
Victoria North HIF Infrastructure & Enabling Works

Drawing Title
Proposed Foul Drainage
General Arrangement

Scale at A1		1:1250		Arup Job No		282022-00					
Role		Civil - Drainage									
Suitability		A - Fit for Construction									
Rev	C01	By	ES		Chkd	DH		Appd	RG		HG
		Date	19/10/22		Date	20/10/22		Date	20/10/22		
		31/10/22									
Name											
VNIF - ARP - 00 - YYY - DR - CD - 0003											
Project		Originator	Volume	Location	Type	Role	Number				



Plot restrictions - based on agreed discharge rates as specified in VNIF-ARP-ZZ-YYY-CS-CD-0003				
Plot	Area (ha)	Catchment	30-year restriction (l/s)	100-year restriction (l/s)
RB01	0.287		1	4.0
RB02	0.326		1	4.6
RB03	0.404		5	5.4
RB04	0.414		5	5.5
RB05a	0.366		5	4.9
RB05b	0.239		5	3.2
RB05c	0.407		5	5.4
RB06	0.347		1	4.9
RB07	0.377		1	5.3
RB08	0.461		1	6.5
RB11	0.156		1	2.2

Notes

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 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.

1. Publicly Available Data - Information:
 Publicly available data was obtained by Atkins dated

6. Provided information on approval letter is (b)(4) ARP-ZZ-YYY-SP-C-
(b)(4)

Downloaded at 11:41 13 November 2015

For further details
or underground utility



Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.

8. A connection point has been provided for each plot within the HIF Boundary at a minimum depth of 2.0m to plot level (assuming FFL will be 0.5m above plot levels) as agreed with WSP.

9. Drainage construction materials:

- Drainage pipes - Polypropylene and PVC in accordance with BS 13476
- Manholes - Precast Concrete
- Inspection Chambers - Polypropylene in accordance with BS 7158

10. As RB09/10 are outside the HIF Red Line Boundary, it has been agreed that a connection to the River Irk will be provided/constructed as part of the Plot construction. Discharge rates have been agreed as part of the HIF delivery.

11. For all schedules, refer to drawings VNIF-ARP-00-YYY-DR-CD-0009 and VNIF-ARP-00-YYY-DR-CD-0054.

12. For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.

P02	01/02/22		DH	RG	RG	—
P03	17/02/22	Amended for Planning Comments	DH	DH	RG	—
P04	28/02/22		DH	DH	RG	—
P05	21/03/22	Updated for Costing	ES	RG	RG	—
P06	05/04/22	Updated for Costing	DH	DH	RG	—
P07	14/07/22	WS4 Issue to BAM	DH	DH	RG	—
P08	08/08/22	Issued for Technical Approval	ES	DH	RG	—
P09	10/10/22	Full WS4 Issue	ES	DH	RG	—
P10	20/10/22	Issued for Full WS4	ES	DH	RG	—
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG
Rev	Date	Description	By	Chkd	Appd	Auth

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6th Floor 3 Piccadilly Place
Manchester M1 3BN
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Client



Scale at A1 1:500 | Arup Job No 282022-00

Role	Civil - Drainage
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Suitability A - Fit for Construction

Rev	By ES	Chkd DH	Appd BG	HG
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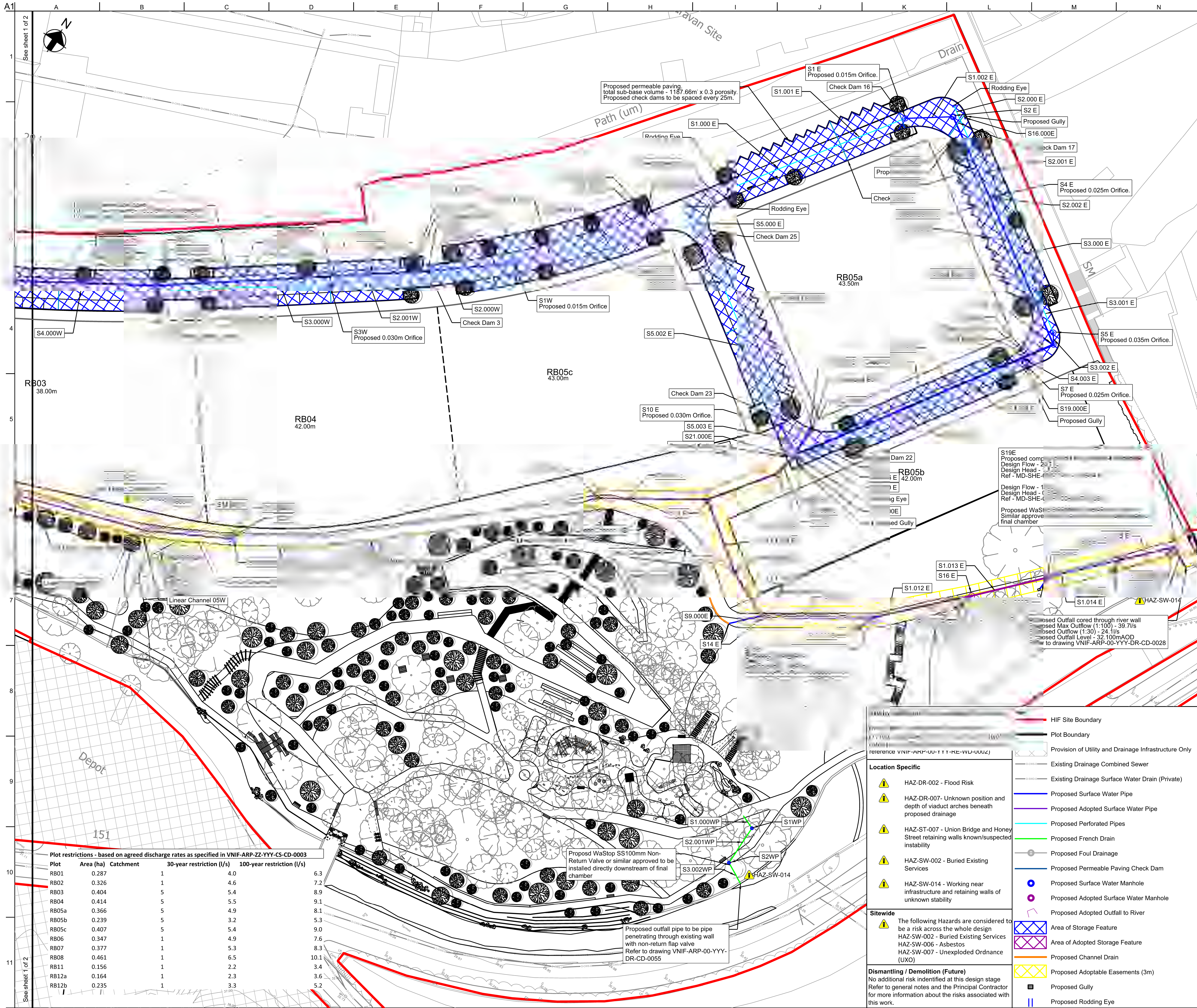
C01	Date	Date	Date	
	10/10/22	00/10/22	00/10/22	01/10/22

Name _____

Project : Originator : Volume : Location : Type : Role : Number

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 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
 - Existing Drainage layout based on the following information:
 - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
 - For the Standard Drainage Specification refer to the "Design and Construction Guidance for foul and surface water sewers offered for adoption" - Rev 2.1 - dated 25th May 2021.
 - This drawing should be read with reference to Arup's full WS4 drawings and specifications.
 - Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.

Located Service Classification		Consistency	
Type A Verification - Visual identification	Visual	Consistent	Consistent
Type B Detection - Typically GPR and PLS techniques are used	Visual	Consistent	Consistent
Type C Site Investigation - Physical surface features identified	Visual	Consistent	Consistent
Type D Desktop utility records search	Visual	Consistent	Consistent

- Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.
- A connection point has been provided for each plot within the HIF Boundary at a minimum depth of 2.0m to plot level (assuming FFL will be 0.5m above plot levels) as agreed with WSP.
 - Drainage construction materials:
 - Drainage pipes - Polypropylene and PVC in accordance with BS 13476
 - Manholes - Precast Concrete
 - Inspection Chambers - Polypropylene in accordance with BS 1758
 - As RB09/10 are outside the HIF Red Line Boundary, it has been agreed that a connection to the River Irk will be provided/constructed as part of the Plot construction. Discharge rates have been agreed as part of the HIF delivery.
 - For all schedules, refer to drawings VNIF-ARP-00-YYY-DR-CD-0009 and VNIF-ARP-00-YYY-DR-CD-0054.
 - For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.

P02	01/02/22		DH	RG	RG	---
P03	17/02/22	Amended for Planning Comments	DH	DH	RG	---
P04	28/02/22		DH	DH	RG	---
P05	21/03/22	Updated for Costing	ES	RG	RG	---
P06	05/04/22	Updated for Costing	DH	DH	RG	---
P07	14/07/22	WS4 Issue to BAM	DH	DH	RG	---
P08	08/08/22	Issued for Technical Approval	ES	DH	RG	---
P09	10/10/22	Full WS4 Issue	ES	DH	RG	---
P10	20/10/22	Issued for Full WS4	ES	DH	RG	---
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG
Rev	Date	Description	By	Chkd	Appd	Auth

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Client

Scale at A1 1:500 Anup Job No 282022-00

Role Civil - Drainage

Suitability A - Fit for Construction

Rev	By	ES	Chkd	DH	Appd	RG	HG
C01	Date	19/10/22	Date	20/10/22	Date	20/10/22	31/10/22

Name VNIF - ARP - 00 - YYY - DR - CD - 0011

Project	Originator	Volume	Location	Type	Role	Number
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Plot restrictions - based on agreed discharge rates as specified in VNIF-ARP-ZZ-YYY-CS-CD-0003					
Plot	Area (ha)	Catchment	30-year restriction (l/s)	100-year restriction (l/s)	
RB01	0.287	1	4.0	6.3	
RB02	0.326	1	4.6	7.2	
RB03	0.404	5	5.4	8.9	
RB04	0.414	5	5.5	9.1	
RB05a	0.366	5	4.9	8.1	
RB05b	0.239	5	3.2	5.3	
RB05c	0.407	5	5.4	9.0	
RB06	0.347	1	4.9	7.6	
RB07	0.377	1	5.3	8.3	
RB08	0.461	1	6.5	10.1	
RB11	0.156	1	2.2	3.4	
RB12a	0.164	1	2.3	3.6	
RB12b	0.235	1	3.3	5.2	

Location Specific

- HAZ-DR-002 - Flood Risk
- HAZ-DR-007 - Unknown position and depth of viaduct arches beneath proposed drainage
- HAZ-ST-007 - Union Bridge and Honey Street retaining walls known/suspected instability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability

Sitewide

The following Hazards are considered to be a risk across the whole design

- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

Dismantling / Demolition (Future)

No additional risk identified at this design stage

Refer to general notes and the Principal Contractor for more information about the risks associated with this work.

- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

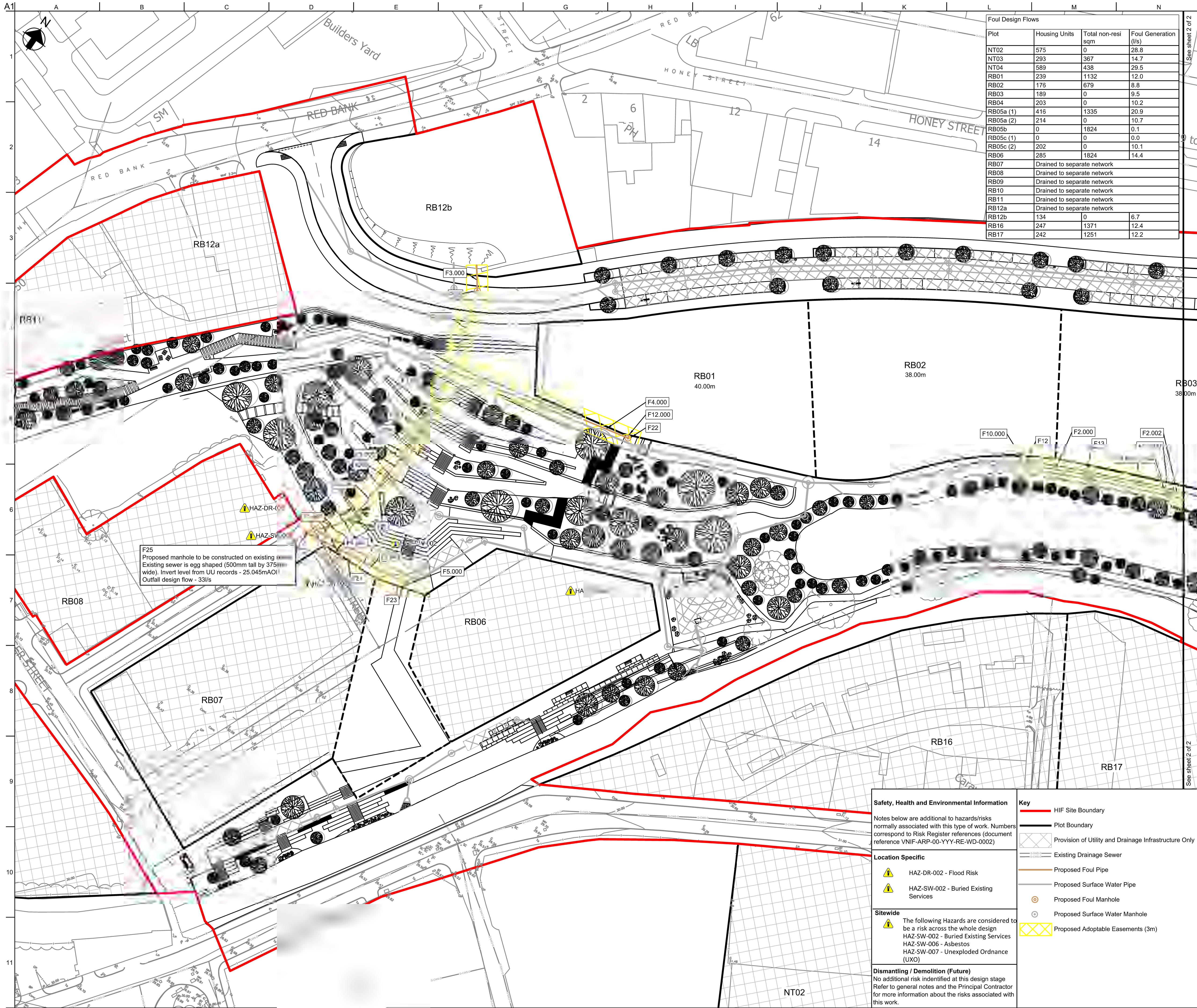
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- HAZ-ST-007 - Union Bridge and Honey Street retaining walls known/suspected instability

- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

- HAZ-DR-002 - Flood Risk
- HAZ-DR-007 - Unknown position and depth of viaduct arches beneath proposed drainage
- HAZ-ST-007 - Union Bridge and Honey Street retaining walls known/suspected instability

- HAZ-SW-014 - Working near infrastructure and retaining walls of unknown stability
- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)



Foul Design Flows			
Plot	Housing Units	Total non-resi sqm	Foul Generation (l/s)
NT02	575	0	28.8
NT03	293	367	14.7
NT04	589	438	29.5
RB01	239	1132	12.0
RB02	176	679	8.8
RB03	189	0	9.5
RB04	203	0	10.2
RB05a (1)	416	1335	20.9
RB05a (2)	214	0	10.7
RB05b	0	1824	0.1
RB05c (1)	0	0	0.0
RB05c (2)	202	0	10.1
RB06	285	1824	14.4
RB07	Drained to separate network		
RB08	Drained to separate network		
RB09	Drained to separate network		
RB10	Drained to separate network		
RB11	Drained to separate network		
RB12a	Drained to separate network		
RB12b	134	0	6.7
RB16	247	1371	12.4
RB17	242	1251	12.2

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 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
 - Existing Drainage layout based on the following information:
 - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
 - For the Infrastructure Specification refer to VNIF-ARP-ZZ-YYY-SP-C-0001.
 - This drawing should be read with reference to Arup's full WS4 drawings and specifications.
 - Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.

Located Service Classification	
Type A Verification - Visual identification	Category 1
Type B Detection - Typically GPR and DMR techniques are used	Category 2
Type C Site reconnaissance - Physical surface features identified	Category 3
Type D Drilling/utility records search	Category 4

- Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.
- A connection point for foul water has been provided for each plot within the HIF Boundary at a minimum depth of 1.5m to plot level (assuming FFL will be 0.5m above plot level) as agreed with WSP.
 - Drainage construction materials, unless otherwise stated:
 - Drainage pipes - Vitrified Clay in accordance with BS EN 295
 - Manholes - Precast Concrete
 - Inspection Chambers - Polypropylene in accordance with BS 7158
 - For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.
 - For all schedules, refer to drawing VNIF-ARP-00-YYY-DR-CD-0017.
 - Foul rates and pipe sizing has been based upon FEC document "Redbank - Incoming Water Flowrates" - dated 12-05-22
 - Foul drainage runs have been designed to not exceed 75% capacity as stated in the DCG to provide capacity for further future provisions.

Rev	Date	Description	By	Chkd	Appd	Auth
P01	14/07/22	WS4 Issue to BAM	DH	DH	RG	---
P02	08/08/22	Issued for Technical Approval	ES	DH	RG	---
P03	10/10/22	Full WS4 Issue	ES	DH	RG	---
P04	20/10/22	Issued for Full WS4	ES	DH	RG	---
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG

ARUP

6th Floor 3 Piccadilly Place
Manchester M1 3BN
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Safety, Health and Environmental Information

Notes below are additional to hazards/risks normally associated with this type of work. Numbers correspond to Risk Register references (document reference VNIF-ARP-00-YYY-RE-WD-0002)

Location Specific

- HAZ-DR-002 - Flood Risk
- HAZ-SW-002 - Buried Existing Services

Sitewide

The following Hazards are considered to be a risk across the whole design

- HAZ-SW-002 - Buried Existing Services
- HAZ-SW-006 - Asbestos
- HAZ-SW-007 - Unexploded Ordnance (UXO)

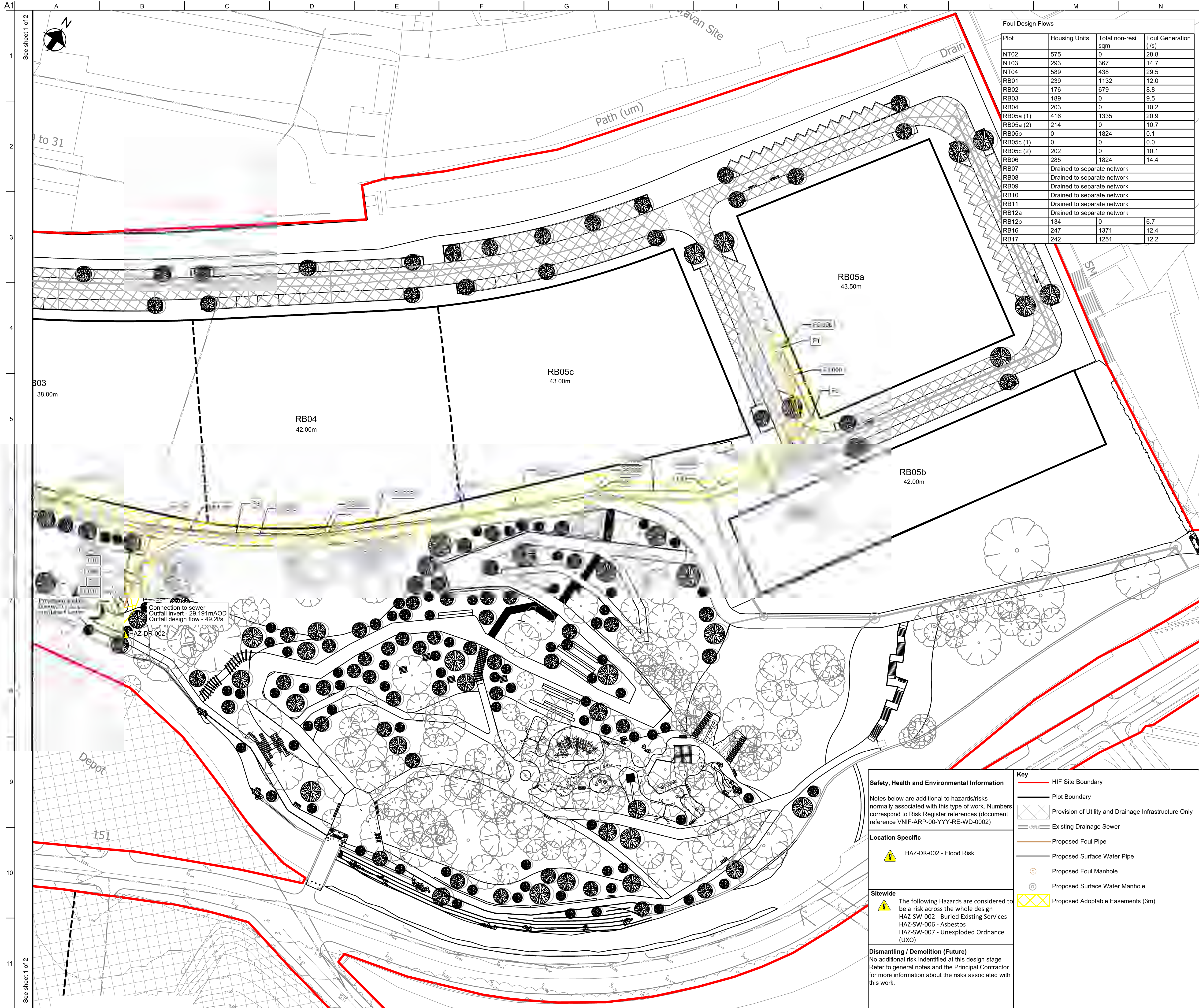
Dismantling / Demolition (Future)

No additional risk identified at this design stage. Refer to general notes and the Principal Contractor for more information about the risks associated with this work.

Key

- HIF Site Boundary
- Plot Boundary
- Provision of Utility and Drainage Infrastructure Only
- Existing Drainage Sewer
- Proposed Foul Pipe
- Proposed Surface Water Pipe
- Proposed Foul Manhole
- Proposed Surface Water Manhole
- Proposed Adoptable Easements (3m)

Scale at A1 1:500		Anup Job No 282022-00				
Role Civil - Drainage						
Suitability A - Fit for Construction						
Rev C01	By ES	Chkd DH	Appd RG	HG 31/10/22		
	Date 19/10/22	Date 20/10/22	Date 20/10/22			
Name VNIF - ARP- 00 -YYY- DR - CD - 0022						
Project	Originator	Volume	Location	Type	Role	Number



Foul Design Flows			
Plot	Housing Units	Total non-resi sqm	Foul Generation (l/s)
NT02	575	0	28.8
NT03	293	367	14.7
NT04	589	438	29.5
RB01	239	1132	12.0
RB02	176	679	8.8
RB03	189	0	9.5
RB04	203	0	10.2
RB05a (1)	416	1335	20.9
RB05a (2)	214	0	10.7
RB05b	0	1824	0.1
RB05c (1)	0	0	0.0
RB05c (2)	202	0	10.1
RB06	285	1824	14.4
RB07	Drained to separate network		
RB08	Drained to separate network		
RB09	Drained to separate network		
RB10	Drained to separate network		
RB11	Drained to separate network		
RB12a	Drained to separate network		
RB12b	134	0	6.7
RB16	247	1371	12.4
RB17	242	1251	12.2

- Notes**
- All dimensions are in mm, all levels in mAOD, unless specified otherwise.
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 - Layout is based on:
 - Landscape Architect masterplan drawing VNIF-PLA-ZZ-YYY-DR-L-1011 Rev P06 dated 04/08/2022 by Planit.
 - Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
 - Existing Drainage layout based on the following information:
 - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
 - For the Infrastructure Specification refer to VNIF-ARP-ZZ-YYY-SP-C-0001.
 - This drawing should be read with reference to Arup's full WS4 drawings and specifications.
 - Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.

Located Service Classification	
Type A Verification - Visual identification	Certainty/Risk
Type B Detection - Typically GPR and EMI techniques are used	Certainty/Risk
Type C Site reconnaissance - Physical surface features identified	Certainty/Risk
Type D Desktop utility records search	Certainty/Risk

- Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.
- A connection point for foul water has been provided for each plot within the HIF Boundary at a minimum depth of 1.5m to plot level (assuming FFL will be 0.5m above plot level) as agreed with WSP.
 - Drainage construction materials, unless otherwise stated:
 - Drainage pipes - Vitrified Clay in accordance with BS EN 295
 - Manholes - Precast Concrete
 - Inspection Chambers - Polypropylene in accordance with BS 7158
 - For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.
 - For all schedules, refer to drawing VNIF-ARP-00-YYY-DR-CD-0017.
 - Foul rates and pipe sizing has been based upon FEC document "Redbank - Incoming Water Flowrates" - dated 12-05-22
 - Foul drainage runs have been designed to not exceed 75% capacity as stated in the DCG to provide capacity for further future provisions.

Rev	Date	Description	By	Chkd	Appd	Auth
P01	14/07/22	WS4 Issue to BAM	DH	DH	RG	---
P02	08/08/22	Issued for Technical Approval	ES	DH	RG	---
P03	10/10/22	Full WS4 Issue	ES	DH	RG	---
P04	20/10/22	Issued for Full WS4	ES	DH	RG	---
C01	31/10/22	Issued for Full WS4	ES	DH	RG	HG

ARUP

6th Floor 3 Piccadilly Place
Manchester M1 3BN
Tel +44 161 228 2331 Fax +44 161 228 6879
www.arup.com

Client



Scale at A1		1:500		Anup Job NO		282022-00	
Role		Civil - Drainage					
Suitability		A - Fit for Construction					
Rev		By		Chkd		Appd	
C01		ES		DH		RG	
		Date 19/10/22		Date 20/10/22		Date 20/10/22	
						31/10/22	
Name		VNIF - ARP - 00 - YYY - DR - CD - 0023					
Project		Originator		Volume		Location	
				Type		Role	
						Number	

Safety, Health and Environmental Information

Notes below are additional to hazards/risks normally associated with this type of work. Numbers correspond to Risk Register references (document reference VNIF-ARP-00-YYY-RE-WD-0002)

Location Specific

HAZ-DR-002 - Flood Risk

Siteside

The following Hazards are considered to be a risk across the whole design
HAZ-SW-002 - Buried Existing Services
HAZ-SW-006 - Asbestos
HAZ-SW-007 - Unexploded Ordnance (UXO)

Dismantling / Demolition (Future)

No additional risk identified at this design stage
Refer to general notes and the Principal Contractor for more information about the risks associated with this work.

Key

- HIF Site Boundary
- Plot Boundary
- Provision of Utility and Drainage Infrastructure Only
- Existing Drainage Sewer
- Proposed Foul Pipe
- Proposed Surface Water Pipe
- Proposed Foul Manhole
- Proposed Surface Water Manhole
- Proposed Adoptable Easements (3m)