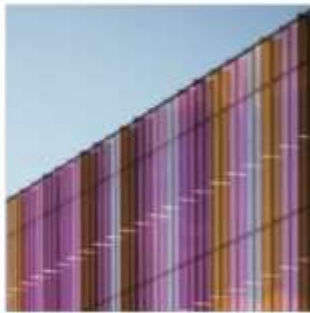


PIXB – Barnsley (Dearne Valley)

Drainage Statement

Doc Ref: 15196-BKP-XX-XX-RP-C-0001

Date: 18.06.2024



boothking



CONTENTS		Page No.	Rev. Date
1.0	INTRODUCTION & SCOPE		
1.1	Scope	2	
2.0	EXISTING SITE		
2.1	Location	2	
2.2	Existing Foul Network	3	
2.3	Existing Surface Water Network	3	
2.4	Flooding	3	
3.0	PROPOSED SITE		
3.1	Proposal	4	
3.2	Proposed Foul Network	4	
3.3	Proposed Surface Water Network	5	
 APPENDICES			
A	ARCHITECTS PROPOSALS		
B	EXISTING SITE TOPOGRAPHICAL & SERVICES LAYOUT		
C	YORKSHIRE WATER DRAWINGS		
D	PROPOSED DRAINAGE LAYOUT		
 REVISIONS			
-	First Issue		18.06.24

1.0 INTRODUCTION & SCOPE

1.1 – Scope

Our client Whitbread PLC has requested Booth-King Partnership Ltd. to undertake a scheme drainage design and provide this drainage statement for the purposes of planning permission with Barnsley Council for a conversion of the existing public house/restaurant space to a smaller breakfast room and an additional 24No. new bedrooms. Refer to Appendix A for Architects outline proposal.

2.0 EXISTING SITE

2.1 – Location

The site is located off the A6195 at Wath Road roundabout, address Premier Inn Barnsley (Dearne Valley) Meadowgate, Dearne Valley Pkwy Wombwell, Barnsley S73 0UN. The site covers an area of approximately 0.8ha with existing restaurant shown in blue on Figure 1 below.



Figure 1.
Existing Site

2.2 – Existing Foul Network

The existing foul network for the hotel is private and falls under gravity to the north of the site. The majority of the network appears to be 100-150mm UPVC or Vitrified clay (VC) pipes, noted brown on Figure 2. below. There is an existing pump on site to the east, noted red below, which serves the most recent extension, this is assumed to tie into the existing private section of gravity sewer. The existing foul levels on site are shallow at between 0.6-1.2m deep. The foul exits the site into the 225mm diameter VC Yorkshire Water sewer on Meadowgate. Refer to Appendix B for existing site survey with drainage layout and Appendix C for Yorkshire Water drawing.



Figure 2.
Sewer connection point

2.3 – Existing Surface Water

The existing surface water network for the hotel appears to be 150-225mm UPVC pipes that fall under gravity to the east of the site, it is assumed to be unattenuated and discharges to the 600mm diameter Yorkshire water drain under Meadowgate.

2.4 – Flooding

From review of the government flood maps there is no noted residual risk of flooding on site from either surface, river or coastal water. The site is noted within flood zone 1 and is low risk of potential flooding.

3.0 – SITE DRAINAGE PROPOSALS

3.1 – Proposal

It is proposed to alter the buildings internal layout and replace the current restaurant/public house space with a smaller breakfast room and create an additional 24No. bedrooms as per Architect’s proposals provided in Appendix A.

3.2 – Proposed Foul Network

It is proposed to reuse existing pop-up positions within the current layout where possible. Where required a new gravity foul network system will be installed for the newly converted rooms, the runs will be kept to a minimum depth and concrete encased (where required). Due to site drainage levels, it is not possible to run to the existing lines with suitable falls. As such a new pump station with 24hr storage will be provided for 21No. bedrooms, this will be designed by a specialist manufacturer and a suitable alarm system will be tied to the hotel telemetry. Refer to Appendix D for foul drainage proposals.

With reference to British Water Flows and Loads 4, flows for the additional rooms and decreased restaurant size will reduce site peak foul discharge from 1.49 l/s to 1.40 l/s total.

British Water - Flows and Loads 4				
	Rooms (2 person)	No.	FLOW (L)	
Hotel - Total - EXISTING				
Hotel Guests (3*)	63	126	250	31500
Hotel full time day staff		4	90	360
Hotel part time staff		8	45	360
Restaurant (full meals) covers twice per day	200	2	30	12000
Drinkers (allow)	200	1	12	2400
Toilets (WC) per use - allow 1 per cover	200	2	10	4000
Toilets (Urinal) per use, allow 2 per drinker	200	2	5	2000
Restaurant full time day staff (per day)		8	90	720
Restaurant part time staff (per day)		8	45	360
			Total	53700 litre/day
			Peak flow (total/10hr/60/60)	1.49 l/s
			Average flow (total/24hr/60/60)	0.62 l/s
Hotel - Total - PROPOSED				
Hotel Guests (3*)	87	174	250	43500
Hotel full time day staff		5	90	450
Hotel part time staff		10	45	450
Restaurant - Breakfast/lunch only	61	2	30	3660
Drinkers (allow)	61	1	12	732
Toilets (WC) per use - allow 1 per cover	61	1	10	610
Toilets (Urinal) per use, allow 2 per drinker	61	2	5	610
Restaurant full time day staff (per day)		4	90	360
Restaurant part time staff (per day)		4	45	180
			Total	50552 litre/day
			Peak flow (total/10hr/60/60)	1.40 l/s
			Average flow (total/24hr/60/60)	0.59 l/s

From the above, the development will not alter or cause any additional flows to the current network. Other than local authority approvals, no further permissions will be sought.

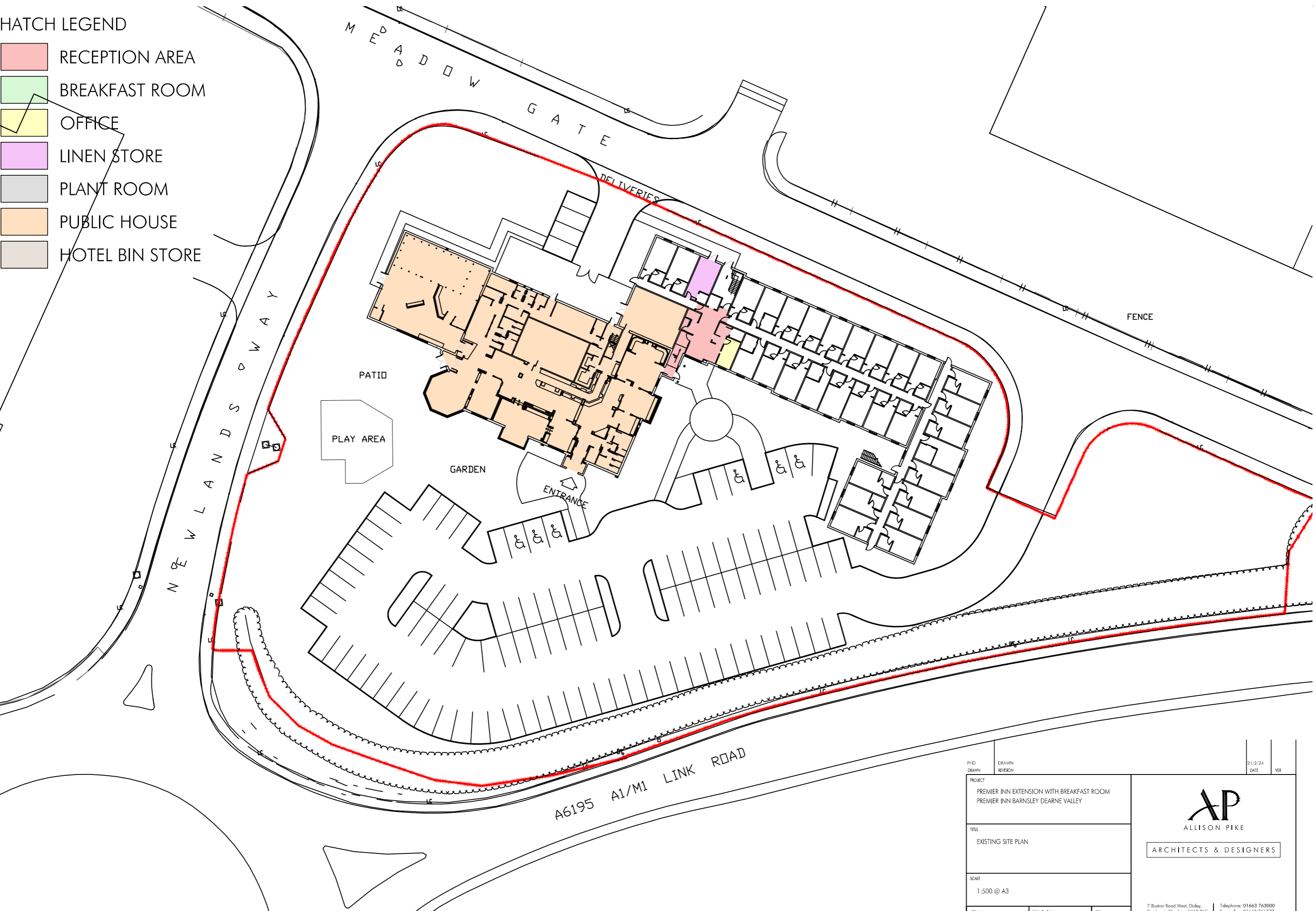
3.3 – Proposed Surface Water


There will be no change to the existing building size, the hotel or the car park areas. The external slabbed patio and kids play area to what was the restaurant will be removed and reverted back to landscaping. As such the existing surface water system on site will remain generally remain unaltered, and surface water flows from site will be nominally reduced.

APPENDIX A
ARCHITECTS OUTLINE PROPOSALS

HATCH LEGEND

- RECEPTION AREA
- BREAKFAST ROOM
- OFFICE
- LINEN STORE
- PLANT ROOM
- PUBLIC HOUSE
- HOTEL BIN STORE




PROJECT	PREMIER INN EXTENSION WITH BREAKFAST ROOM PREMIER INN BARNSELY DEARNE VALLEY		DATE	21/2/24	VER
TITLE	EXISTING SITE PLAN				
SCALE	1:500 @ A3				
JOB No	DRAWING No	REV	7 Buxton Road West, Disley, Stockport, Cheshire, SK12 2AE Telephone: 01663 763000 Facsimile: 01663 766772 Website: www.allisonpike.com Email: studio@allisonpike.com		
PI1104	SK1		© Allison Pike Partnership Limited		

HATCH LEGEND

- RECEPTION AREA
- BREAKFAST ROOM
- OFFICE
- LINEN STORE
- PLANT ROOM
- PUBLIC HOUSE
- HOTEL BIN STORE

OPTION C
 EXISTING HOTEL
 2 Storeys 63 Bedrooms
 PROPOSED EXTENSION
 2 Storey 24 Bedroom Extension
 With Solus 2.0 Restaurant (68 covers)
 Net Gain 24 Bedrooms
 Total Bedrooms 87 Bedrooms
 Existing Car Park = 107
 Proposed Car Park = 107
 Land Register Plan Received Yes
 Existing Floor Plans Yes
 Existing Site Plan Yes

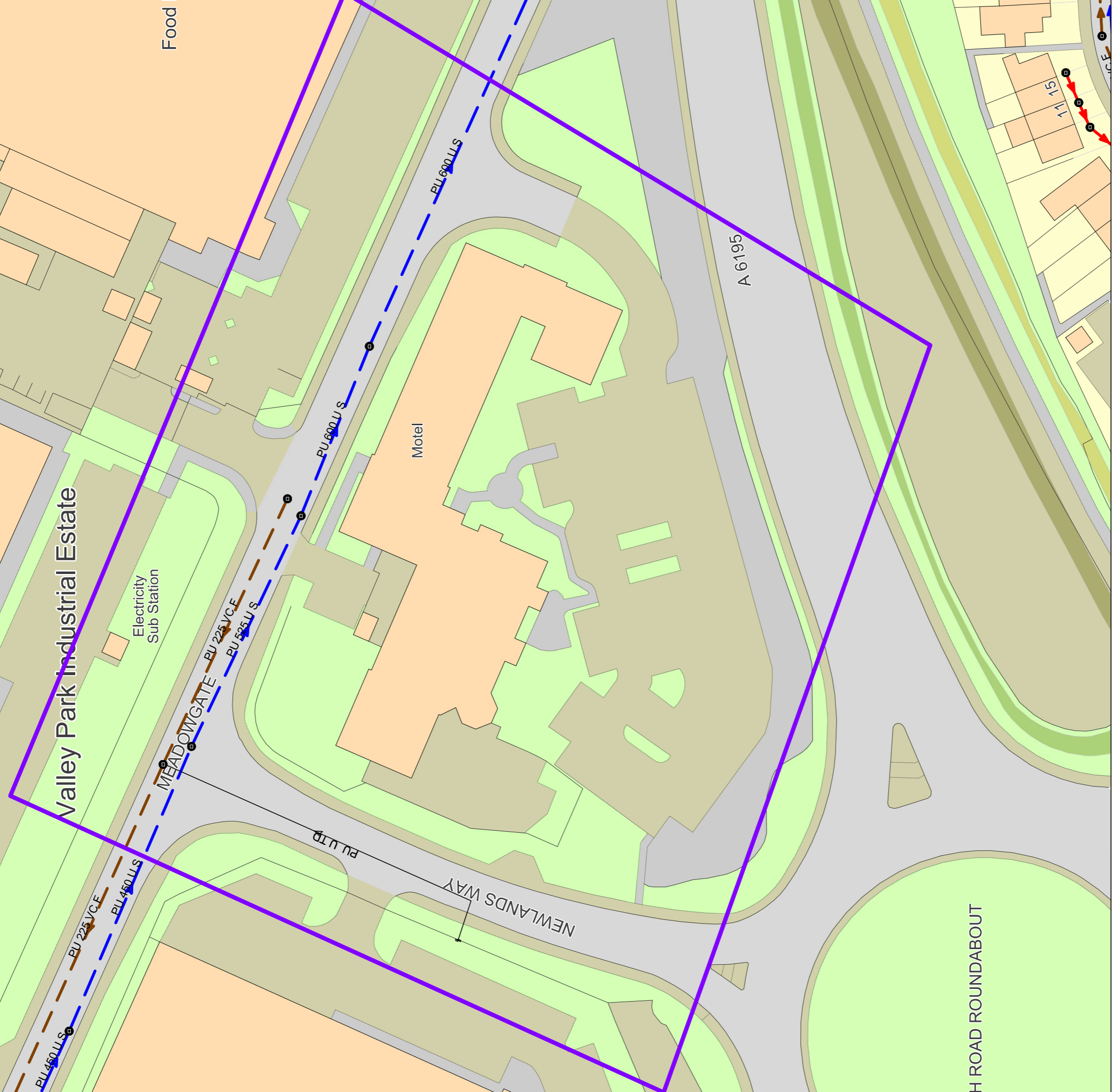


PHD PI104 DRAWN	REV A: ACCESS TO BEDROOMS UPDATED FOLLOWING PSO COMMENTS DRAWN REVISION	12/6/24 21/2/24 DATE	VER
PROJECT PREMIER INN EXTENSION WITH BREAKFAST ROOM PREMIER INN BARNESLEY DEARNE VALLEY			
TITLE PROPOSED SITE PLAN OPTION C			
SCALE 1:500 @ A3			
JOB No PI1104	DRAWING No SK301	REV A	7 Buxton Road West, Disley, Stockport, Cheshire, SK12 2AE Telephone: 01663 763000 Facsimile: 01663 766772 Website: www.allisonpike.com Email: studio@allisonpike.com © Allison Pike Partnership Limited

APPENDIX B
EXISTING SITE TOPOGRAPHICAL & SERVICES LAYOUT

APPENDIX C
YORKSHIRE WATER DRAWINGS

Valley Park Industrial Estate



Public Waste Water Network 08/05/2024 10:11:16 OS Grid Coordinates: 441265 : 402223 Map Name : SE4102SW svcGISSafeMovePD

H ROAD ROUNDABOUT

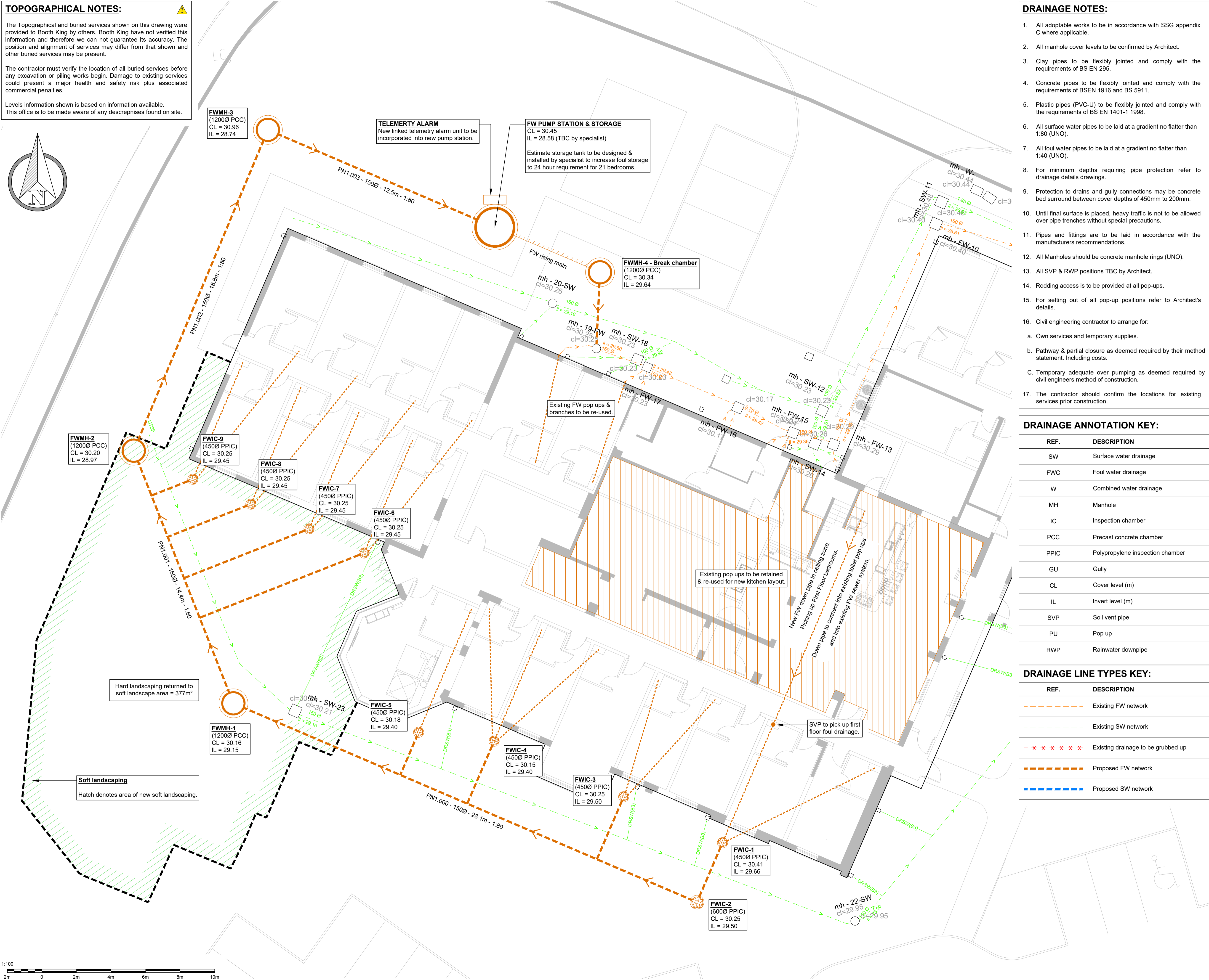
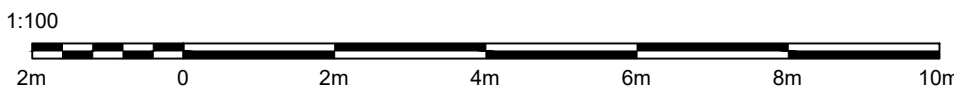
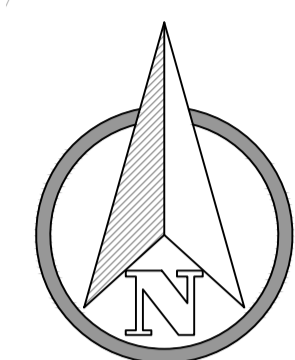
APPENDIX D
PROPOSED DRAINAGE LAYOUT

TOPOGRAPHICAL NOTES:

The Topographical and buried services shown on this drawing were provided to Booth King by others. Booth King have not verified this information and therefore we can not guarantee its accuracy. The position and alignment of services may differ from that shown and other buried services may be present.

The contractor must verify the location of all buried services before any excavation or piling works begin. Damage to existing services could present a major health and safety risk plus associated commercial penalties.

Levels information shown is based on information available. This office is to be made aware of any discrepancies found on site.



DRAINAGE NOTES:

- All adoptable works to be in accordance with SSG appendix C where applicable.
- All manhole cover levels to be confirmed by Architect.
- Clay pipes to be flexibly jointed and comply with the requirements of BS EN 295.
- Concrete pipes to be flexibly jointed and comply with the requirements of BSEN 1916 and BS 5911.
- Plastic pipes (PVC-U) to be flexibly jointed and comply with the requirements of BS EN 1401-1 1998.
- All surface water pipes to be laid at a gradient no flatter than 1:80 (UNO).
- All foul water pipes to be laid at a gradient no flatter than 1:40 (UNO).
- For minimum depths requiring pipe protection refer to drainage details drawings.
- Protection to drains and gully connections may be concrete bed surround between cover depths of 450mm to 200mm.
- Until final surface is placed, heavy traffic is not to be allowed over pipe trenches without special precautions.
- Pipes and fittings are to be laid in accordance with the manufacturers recommendations.
- All Manholes should be concrete manhole rings (UNO).
- All SVP & RWP positions TBC by Architect.
- Rodding access is to be provided at all pop-ups.
- For setting out of all pop-up positions refer to Architect's details.
- Civil engineering contractor to arrange for:
 - Own services and temporary supplies.
 - Pathway & partial closure as deemed required by their method statement, including costs.
 - Temporary adequate over pumping as deemed required by civil engineers method of construction.
- The contractor should confirm the locations for existing services prior construction.

DRAINAGE ANNOTATION KEY:

REF.	DESCRIPTION
SW	Surface water drainage
FWC	Foul water drainage
W	Combined water drainage
MH	Manhole
IC	Inspection chamber
PCC	Precast concrete chamber
PPIC	Polypropylene inspection chamber
GU	Gully
CL	Cover level (m)
IL	Invert level (m)
SVP	Soil vent pipe
PU	Pop up
RWP	Rainwater downpipe

DRAINAGE LINE TYPES KEY:

REF.	DESCRIPTION
---	Existing FW network
---	Existing SW network
- * * * * *	Existing drainage to be grubbed up
---	Proposed FW network
---	Proposed SW network

NOTES:

- Do not scale from this drawing.
- This drawing is copyright and is sent to you in confidence. It must not be copied, used or disclosed, in whole or in part, to third parties without written permission. It remains the property of Booth King Partnership Ltd. (BKPL) and must be returned on request.
- This drawing is to be read in conjunction with all relevant contractual documents.
- Anyone using this drawing must be aware of their legal duties under the CDM Regulations 2015, refer to the HSE website for further information. BKPL are not Principal Designers.
- All dimensions shown on this drawing are in millimeters unless noted otherwise.
- If the Contractor consider that they do not have sufficient information to safely complete the works detailed on this drawing, they should contact the Engineer.
- This document uses revision codes in accordance with ISO EN 19650: P, Preliminary (non-contractual) - review, comment or approval. C, Contractual - Approved for stage completion.
- This document uses status codes in accordance with ISO EN 19650: Work in progress: S0 - WIP Shared (non-contractual); S1 - Coordination, S2 - Information, S3 - Review, S4 & S5 - Approval. Published (contractual); A1, A2, etc. (where "n" relates to the project stage)
- This document uses project stages in accordance with the IStructE Structural Plan of Work 2020: 2 - Concept, 3 - Coordination, 4 - Technical Design, 4.5 - Production Design, 5 - Construction, 6 - Handover.
- Only documents with a revision code C# (where '#' relates to a revision number) and status code A5 are suitable for construction. Documents with status code A6 indicate final construction ONLY. Any deviations to that which is on site is not the liability of BKPL.

C01	19.06.24	STAGE 3 - PLANNING APPROVAL	CM
REV.	DATE	REVISION DETAILS	INITIALS
CURRENT DRAWING REVISION CHECKED BY			SP
CURRENT DRAWING REVISION APPROVED BY			SP

DRAWING STATUS:	PROJECT STAGE:
A3	STAGE 3

boothking
PARTNERSHIP LIMITED

CONSULTING CIVIL & STRUCTURAL ENGINEERS
www.booth-king.co.uk office@booth-king.co.uk

RAMSBOTTOM | **MANCHESTER** | **EDINBURGH**
Tel: 01706 822 022 | Tel: 0161 694 7087 | Tel: 0131 229 1547

PROJECT: **Premier Inn Extension
Barnsley Dearne Valley**

TITLE: **Proposed Drainage GA**

SCALE (A1)	AUTHOR	DATE	REVISION	BKPL No.
1:100	CM	June 24	C01	15196

DRAWING REF: **15196-BKP-XX-XX-DR-C-0511**