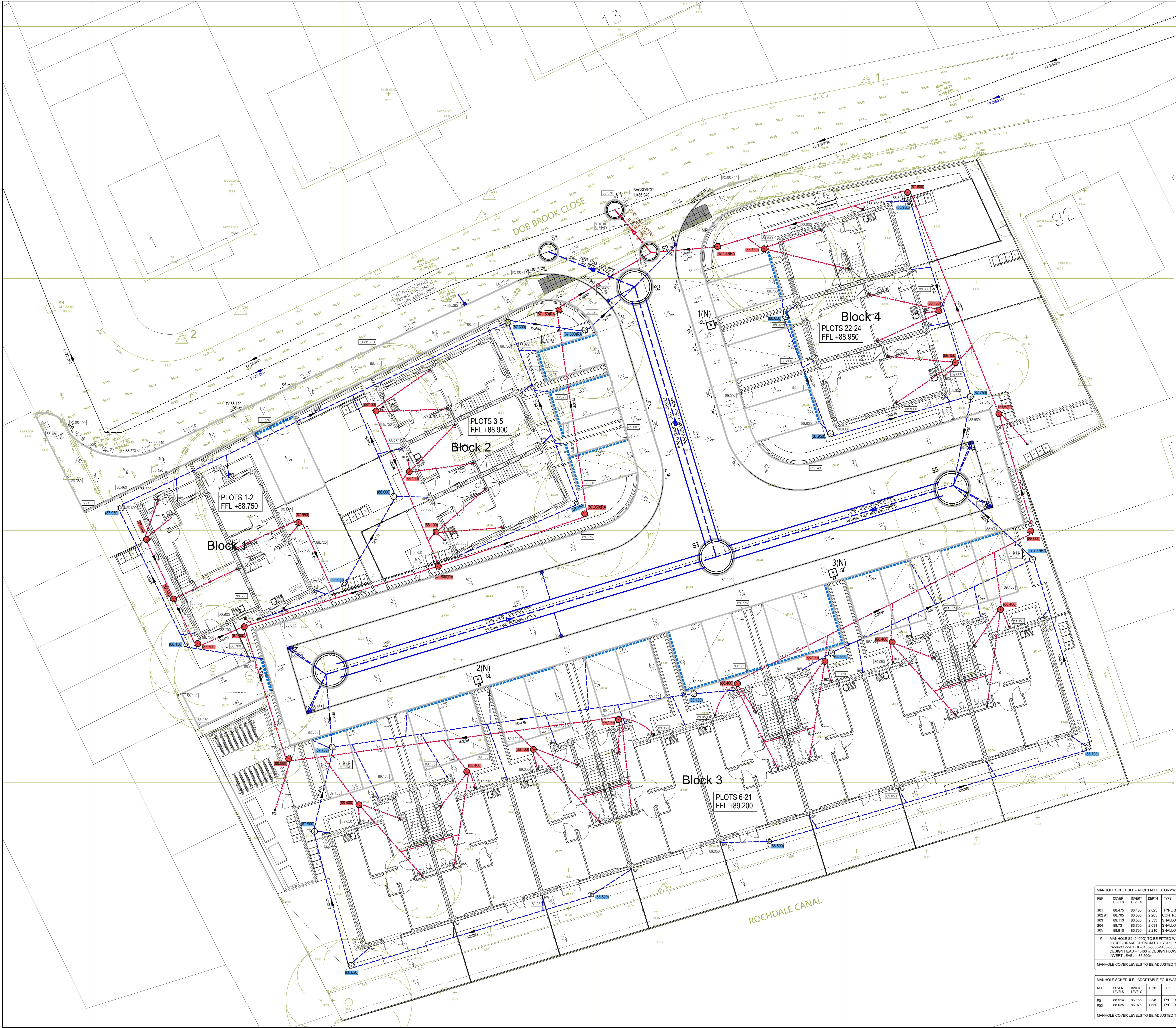




ACCESS FITTINGS/CONNECTIONS

STORMWATER	RV ■ RAINWATER PIPE (UNO)	FG ■ FLOOR GULLY
	RG ■ ROAD GULLY	BIG ■ BACK INLET GULLY
	VG ■ YARD GULLY	SP ■ SOL PIPE
	VE ■ ROOFING DRAIN	SP ■ SOL RAIN PIPE
	■ LINEAR DRAINAGE	WO ■ WASTE OUTLET
	■ OUTFALL UNIT	

RVW indicates INTERNAL ROADABLE ACCESS TO BE PROVIDED

EXISTING SERVICES

2.1 SERVICE MEDIA INDICATED IS BASED ON INFORMATION AVAILABLE TO DATE & IS REPRODUCED IN GOOD FAITH. NO RESPONSIBILITY CAN BE ACCEPTED FOR THE LOCATION OF UNKNOWN SERVICES NOT INDICATED.

2.2 STATUTORY SERVICES INDICATED (PRIOR TO ANY WORKS TAKING PLACE) ARE FOR INFORMATION PURPOSES ONLY AND MUST BE CONFIRMED.

2.3 IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT EXISTING SERVICES MEDIA AFFECTED BY THE PROPOSED WORKS.

2.4 ANY EXISTING DRAINAGE ON SITE IS TO BE INVESTIGATED/SURVEYED AND AS FOUND TO BE NECESSARY EITHER MAINTAINED, DIVERTED OR ABANDONED (SUBJECT TO APPROVAL OF THE SEWERAGE UNDERTAKER).

PRIVATE DRAINAGE

3.1 VITRIFIED CLAY DRAINAGE GOODS TO BE HEPWORTH SUPERLEVEE OR SIMILAR TO BS EN 295-1. PLASTIC DRAINAGE GOODS TO BE HEPWORTH PLASTIC/REINFORCED OR SIMILAR STRENGTH CLASS & BEING TO BE AS INDICATED ON THE TYPICAL DRAINAGE DETAILS DRAWING.

3.2 DRAINAGE BENEATH SOFT LANDSCAPING WITH LESS THAN 600mm COVER TO BE CONCRETE ENCASED. DRAINAGE BENEATH ASPHALT/ROADS WITH LESS THAN 150mm COVER TO BE CONCRETE ENCASED.

3.3 DRAINS WHICH ARE CONCRETE ENCASED TO HAVE 180mm FIBREGLASS OR POLYSTYRENE JOINTS AT 5m (MAX) CENTRES.

3.4 ALL NEW HOUSING TO BE PILE FOUNDATIONS WITH ALL PILE DEPTHS GREATER THAN ALLOWED DRAINAGE.

3.5 ALL SURFACE WATER DRAINS TO BE MINIMUM 100mm DIA AT MINIMUM 1:100 GRADIENT UNO. ALL FOUL WATER DRAINS TO BE MINIMUM 100mm DIA AT MINIMUM 1:40 GRADIENT UNLESS A TOLERANCE IS LOCATED UPSTREAM WHERE MINIMUM GRADIENT SHOULD BE 1:80.

3.6 COVER LEVELS ARE APPROXIMATE AND TO BE VERIFIED ON SITE.

3.7 INTERNAL INSPECTION CHAMBERS TO BE PROVIDED WITH DOUBLE SEAL AIR TIGHT OPEN DOWN COVERS.

3.8 POLYPROPYLENE (PP) TO INCLUDE 100mm MINIMUM CONCRETE SURROUND WHEN LOCATED IN HARSH STANDINGS (SEE DETAILS).

3.9 PP/Cs DEEPER THAN 1.2m TO HAVE REDUCED ACCESS (RA COVER-3500).

ADAPTABLE DRAINAGE (UNITED UTILITIES)

4.1 ALL ADAPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SERVICES OFFERED FOR ADOPTION UNDER THE CODE FOR ADOPTION AGREEMENTS FOR WATER AND SEWERAGE COMPANIES (CURRENTLY IN DRAFT) AND THE CODE FOR ADOPTION AGREEMENTS FOR BRITISH EUROPEAN STANDARDS AND UNITED UTILITIES REQUIREMENTS.

4.2 THIS DRAWING TO BE READ IN CONJUNCTION WITH THE FOLLOWING UNITED STANDARD DETAILS >

- STN010001A - DETAIL 1 - MANHOLE TYPE 1
- STN010001B - DETAIL 2 - MANHOLE TYPE 2
- STN010001C - DETAIL 3 - MANHOLE TYPE 4
- STN010001D - DETAIL 4 - MANHOLE TYPE 4
- STN010001E - FLOW CONTROL MANHOLE
- STN010001F - EXTERNAL BACKCROP DETAIL
- STN010001G - PIPE BEDDING DETAIL
- STN010001H - VARIABLE MANHOLE FEATURES
- STN010001I - HEADWALL TYPE 1 DETAIL
- STN010001J - HEADWALL TYPE 2 DETAIL

4.3 MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS 4000 TO BS EN 124 WITH 100mm DEEP FRAME.

4.4 COVER SLABS MUST CARRY THE 80 Kt MARK. WHERE THE CLEAR OPENING OF THE MANHOLE PRODUCT IS DIFFERENT TO THAT OF THE COVER AND FRAME A LOAD BEARING SLAB SHALL BE FITTED ABOVE THE COVER SLAB TO BRING THE SIZE DOWN TO 600mm x 600mm. PLEASE REFER TO CONCRETE PIPES SYSTEM ASSOCIATION (CPSA) TECHNICAL BULLETIN AUTUMN 2004 FOR KITEMARKED COVER SLAB OPENING SIZES.

GENERAL

1:62 (4.33) PROPOSED LEVELS
1:50 PROPOSED HARDSTANDING GRADIENTS
1:100 SLOPE CHANGE (in RIDGE, VALLEY or FOLD)
1:47.14 (46.95) ROAD CENTRE LINE AND CHANGING

MANHOLE SCHEDULE - EXISTING ADOPTED

REF	COVER LEVELS	INVERT LEVELS	DEPTH
EX MH1	88.020	85.500	2.520
EX MH2	88.230	85.380	2.850
EX MH3	88.250	85.340	2.910
EX MH4	88.430	86.055	2.375
EX MH5	88.420	86.385	2.035
EX MH6	88.520	86.380	2.140
EX MH7	88.500	86.840	1.660
EX MH8	88.450	86.850	1.600

MANHOLE SCHEDULE - ADOPTABLE STORMWATER

REF	COVER LEVELS	INVERT LEVELS	DEPTH	TYPE	MH DMS	COVER SLAB	COVER FRAME	COVER GRADE	EASTING	NORTHING
S01	88.475	86.450	2.025	TYPE B	1200 DIA	750x600	600x600	D400	388336.305	400702.116
S02 #1	88.765	86.500	2.265	CONTROL	2400 DIA	1200x675	1200x675	D400	388343.154	400689.333
S03	89.113	86.580	2.533	SHALLOW	2400 DIA	750x600	600x600	D400	388340.625	400677.900
S04	88.731	86.700	2.031	SHALLOW	2400 DIA	750x600	600x600	D400	388318.682	400689.907
S05	88.910	86.700	2.210	SHALLOW	2400 DIA	750x600	600x600	D400	388366.340	400681.330

#1 MANHOLE S2 (2400mm) TO BE FITTED WITH HYDRO-BRAKE OPTIMUM BY HYDRO INTERNATIONAL & DISK PENSTOCK
Product Code: SHF-6700-6000-140-0000
DESIGN HEAD = 1.40m, DESIGN FLOW = 5.0 l/s
INVERT LEVEL = 86.500m

MANHOLE COVER LEVELS TO BE ADJUSTED TO THE IN WITH NEW SITE LEVELS.

MANHOLE SCHEDULE - ADOPTABLE FOUWATER

REF	COVER LEVELS	INVERT LEVELS	DEPTH	TYPE	MH DMS	COVER SLAB	COVER FRAME	COVER GRADE	EASTING	NORTHING
F01	88.514	86.165	2.349	TYPE B	1200 DIA	750x600	600x600	D400	388341.576	400705.442
F02	88.625	86.975	1.650	TYPE B	1200 DIA	750x600	600x600	D400	388344.315	400702.120

MANHOLE COVER LEVELS TO BE ADJUSTED TO THE IN WITH NEW SITE LEVELS.

NOTES

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALIST DRAWINGS & SPECIFICATIONS.

2. WORK TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT GOOD PRACTICE, BUILDING REGULATIONS AND SUBSIDIARY AMENDMENTS. THE PROJECT SPECIFICATION, RELEVANT BRITISH STANDARDS AND CODES OF PRACTICE, MATERIALS AND COMPONENTS TO BE SUITABLE FOR THEIR INTENDED USE.

3. FOR SETTING OUT REFER TO ARCHITECTS DRAWINGS.

4. EXISTING SERVICES

5. PRIVATE DRAINAGE

6. ADAPTABLE DRAINAGE (UNITED UTILITIES)

7. MANHOLE SCHEDULE - EXISTING ADOPTED

8. MANHOLE SCHEDULE - ADOPTABLE STORMWATER

9. MANHOLE SCHEDULE - ADOPTABLE FOUWATER

10. MANHOLE COVER LEVELS TO BE ADJUSTED TO THE IN WITH NEW SITE LEVELS.

REVISIONS

NO	DATE	BY	DESCRIPTION
E	04/10/2021	JSD	PLP 1 DRIVE MOVED TO REAR.
D	26/09/21	JSD	KIRBY OUTSIDE PLOT 1 ALTERED TO COORDINATE WITH CHINESE DRAWING.
C	09/05/21	JSD	GROUND LEVELS AROUND APARTMENT BLOCK LOWERED 50mm TO MATCH SETBACK & BACK OF FOOTWAY.
B	24/05/21	JSD	S2 COVER CHANGED TO 1200mm F2 UPDATED TO 1200 DIA (SAME CENTRE POINT), PLOTS 5-7 AND BACK OF ADJACENT FOOTWAY LOWERED BY 50mm. FOUL DRAINAGE RELOCATED AROUND PLOTS.
A	26/04/21	JSD	F2 UPDATED. S4, S5 & F2 POSITIONS ADJUSTED TO SUIT 120 MANHOLE DETAILS.

PURPOSE OF ISSUE

PURPOSE OF ISSUE: PRELIMINARY

CLIENT

PLP CONSTRUCTION LTD

PROJECT

SITE OFF DOB BROOK CLOSE
NEWTON HEATH
MANCHESTER

TITLE

EXTERNAL WORKS G.A. FOUL
SURFACE WATER DRAINAGE

DATE NO.

J072 / 101 E

SCALE

1:100 A0

DATE

APR 2021

REVISION

DRAWING NOT TO BE SCALED

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