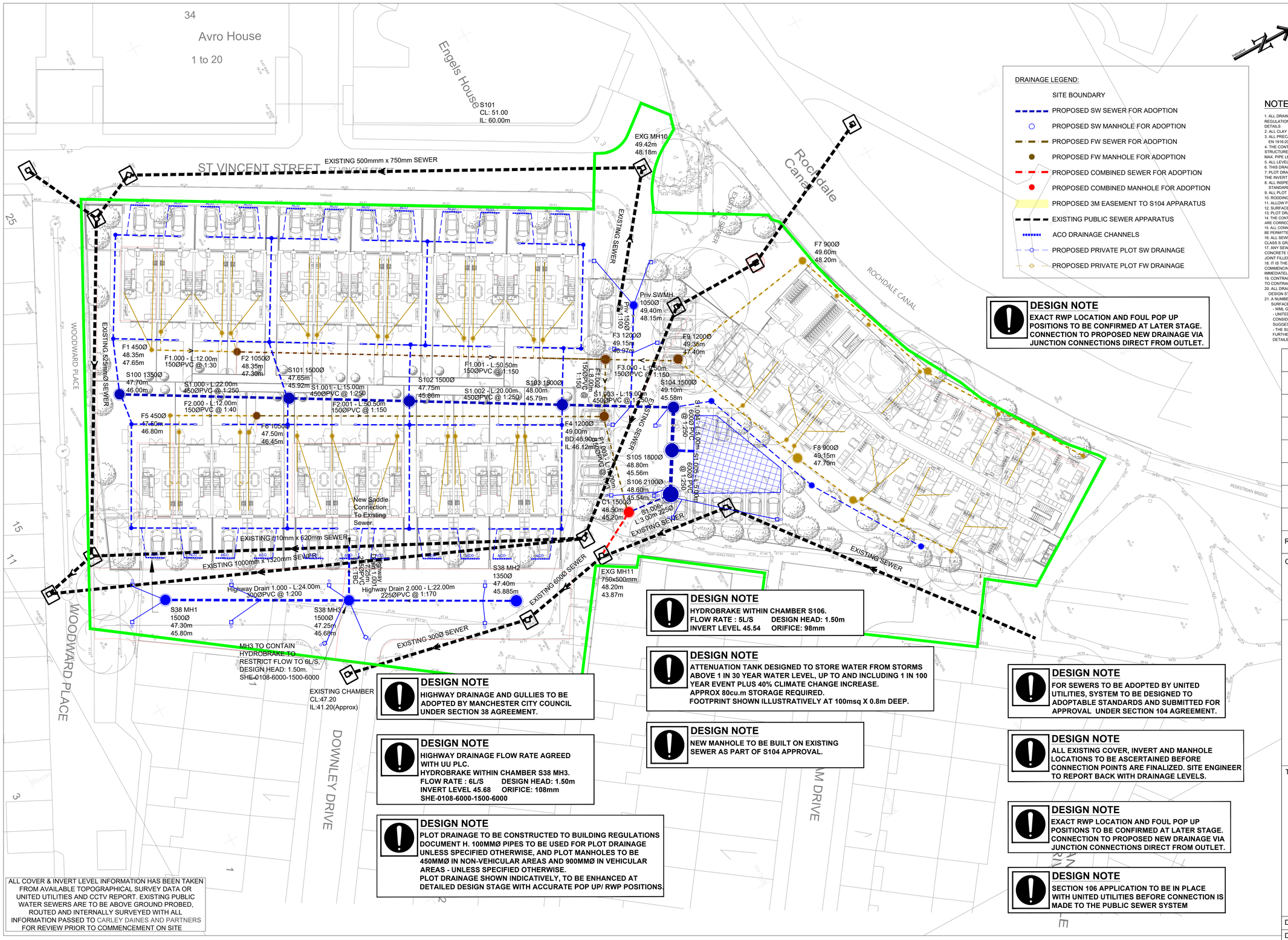

SITE LOCATION

DOWNLEY DRIVE,
ANCOATS,
MANCHESTER.
M4 7JY.
EASTINGS: 385350;
NORTHINGS: 398720.

DRAINAGE LEGEND:

- SITE BOUNDARY
- PROPOSED SW SEWER FOR ADOPTION
- PROPOSED SW MANHOLE FOR ADOPTION
- PROPOSED FW SEWER FOR ADOPTION
- PROPOSED FW MANHOLE FOR ADOPTION
- PROPOSED COMBINED SEWER FOR ADOPTION
- PROPOSED COMBINED MANHOLE FOR ADOPTION
- PROPOSED 3M EASEMENT TO S104 APPARATUS
- EXISTING PUBLIC SEWER APPARATUS
- ACO DRAINAGE CHANNELS
- PROPOSED PRIVATE PLOT SW DRAINAGE
- PROPOSED PRIVATE PLOT FW DRAINAGE

NOTES

1. ALL DRAINAGE WORKS HAVE BEEN DESIGNED AND ARE TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS DOCUMENT H & "SEWERS FOR ADOPTION 6TH EDITION" SUPPLEMENT GUIDELINES AND STANDARD DETAILS
2. ALL CLAY PIPE WORK SHALL BE EXTRA STRENGTH CLAYWARE TO B.S EN 295:1991 PART 1
3. ALL PRECAST CONCRETE PIPEWORK SHALL BE TO THE CLASS STATED ON THE DRAWINGS IN ACCORDANCE WITH B.S EN 1916:2002. ALL MANHOLES AND CHAMBERS SHALL BE TO BS EN 1917:2002
4. THE CONTRACTOR MAY ELECT TO USE REINFORCED PVC PIPES AS COVERED BY B.S 4660:2000 & B.S EN 1401-1: STRUCTURED WALL UPVC PIPES TO COMPLY WITH WIS 4-35-01. (BY PRIOR AGREEMENT WITH ADOPTING AUTHORITY) MAX. PIPE LENGTH TO BE 3.0M
5. ALL LEVELS RELATE TO TOPOGRAPHICAL SURVEY DATUM
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS
7. PLOT DRAINAGE CONNECTIONS TO SEWERS MUST BE 150MM DIAMETER AND UNLESS OTHERWISE STATED LAID TO THE INVERT SHOWN.
8. ALL INSPECTION CHAMBERS TO BE 450mm DIAMETER POLYPROPYLENE WITH A MAXIMUM DEPTH OF 1200mm FOR THE STANDARD UNIT & A MAXIMUM DEPTH OF 3000mm WHEN A 350mm REDUCING RING IS USED.
9. ALL PLOT DRAINAGE RUNS TO BE 100mm DIAMETER AT A NOMINAL FALL OF 1:80 UNLESS NOTED OTHERWISE.
10. RODDING EYES AT START OF EACH DRAINAGE RUN.
11. ALLOW FOR 5.0M OF "ACO" DRAINAGE CHANNEL PER PROPERTY AT HIGHWAY BOUNDARY.
12. SURFACE WATER FROM PLOT PARKING AREAS MUST NOT DISCHARGE ONTO THE HIGHWAY.
13. PLOT DRAINAGE RUNS TO BE KEPT WITHIN THE CURTILAGE OF THE PLOT THEY SERVE WHEREVER POSSIBLE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ANY EXISTING INVERT LEVELS INDICATED ON DRAWINGS ARE CORRECT BEFORE THE WORKS ARE COMMENCED.
15. ALL CONNECTIONS TO ADOPTABLE SEWERS SHALL BE MANUFACTURED JUNCTION PIPES. SADDLE CONNECTIONS WILL NOT BE PERMITTED, UNLESS SPECIFIED.
16. ALL SEWERS FOR ADOPTION WITH GREATER THAN 1.20M COVER IN ROADS OR 0.9M COVER IN FIELDS SHALL HAVE CLASS S GRANULAR BED AND SURROUND.
17. ANY SEWER WITH LESS THAN 1.2M COVER IN ROADS OR 0.9M COVER IN FIELDS SHALL HAVE A MINIMUM OF 150MM STA CONCRETE SURROUND. FLEXIBILITY SHALL BE MAINTAINED BY THE PROVISION OF FLEXCELL OR SIMILAR APPROVED JOINT FILLER BREAKS IN THE CONCRETE SURROUND AT EACH PIPE JOINT.
18. IT IS THE RESPONSIBILITY FOR THE CONTRACTOR TO CHECK ALL ONSITE EXISTING GROUND LEVELS PRIOR TO COMMENCING AND IF THERE ARE ANY DISCREPANCIES THE CONTRACTOR MUST REPORT TO THE ENGINEER IMMEDIATELY
19. CONTRACTOR TO CONFIRM THE COVER LEVEL, INVERT LEVEL & MANHOLE SIZE FOR THE EXISTING MANHOLE PRIOR TO CONTRACT START DATE.
20. ALL DRAINAGE SHOWN IN THIS DRAWING IS BASED ON ESTIMATES AND IS ALL SUBJECT TO A FURTHER DETAILED DESIGN STAGE AND IS SUBJECT TO CHANGE.
21. A NUMBER OF ASSUMPTIONS HAVE BEEN MADE IN REGARDS TO THE DISCHARGE METHOD OF SURFACE WATER.
    - WML GROUND REPORT SUGGESTS INFILTRATION MAY BE POSSIBLE DUE TO LOW GROUND CONTAMINATION.
    - UNITED UTILITIES AND LOCAL AUTHORITY SUGGEST INFILTRATION SHOULD BE THE FIRST METHOD OF DISCHARGE CONSIDERED, AND THIS STANCE WILL ONLY CHANGE SUBJECT TO PERCOLATION AND CONTAMINATION RESULTS SUGGESTING OTHERWISE.
    - THE SIZE OF SOAKAWAY PIT HAS BEEN SIZED VIA SOFTWARE USING ESTIMATED AND STANDARD FIGURES, A FURTHER DESIGN WILL BE CARRIED OUT FOLLOWING TESTING WITH SITE SPECIFIC VALUES ALONG WITH THE DETAILED DESIGN.

DESIGN NOTE
EXACT RWP LOCATION AND FOUL POP UP POSITIONS TO BE CONFIRMED AT LATER STAGE. CONNECTION TO PROPOSED NEW DRAINAGE VIA JUNCTION CONNECTIONS DIRECT FROM OUTLET.

DESIGN NOTE
HYDROBRAKE WITHIN CHAMBER S106.
FLOW RATE : 5L/S DESIGN HEAD: 1.50m
INVERT LEVEL 45.54 ORIFICE: 98mm

DESIGN NOTE
ATTENUATION TANK DESIGNED TO STORE WATER FROM STORMS ABOVE 1 IN 30 YEAR WATER LEVEL, UP TO AND INCLUDING 1 IN 100 YEAR EVENT PLUS 40% CLIMATE CHANGE INCREASE.
APPROX 80cu.m STORAGE REQUIRED.
FOOTPRINT SHOWN ILLUSTRATIVELY AT 100msq X 0.8m DEEP.

DESIGN NOTE
NEW MANHOLE TO BE BUILT ON EXISTING SEWER AS PART OF S104 APPROVAL.

DESIGN NOTE
HIGHWAY DRAINAGE AND GULLIES TO BE ADOPTED BY MANCHESTER CITY COUNCIL UNDER SECTION 38 AGREEMENT.

DESIGN NOTE
HIGHWAY DRAINAGE FLOW RATE AGREED WITH UU PLC.
HYDROBRAKE WITHIN CHAMBER S38 MH3.
FLOW RATE : 6L/S DESIGN HEAD: 1.50m
INVERT LEVEL 45.68 ORIFICE: 108mm
SHE-0108-6000-1500-6000

DESIGN NOTE
PLOT DRAINAGE TO BE CONSTRUCTED TO BUILDING REGULATIONS DOCUMENT H. 100MMØ PIPES TO BE USED FOR PLOT DRAINAGE UNLESS SPECIFIED OTHERWISE, AND PLOT MANHOLES TO BE 450MMØ IN NON-VEHICULAR AREAS AND 900MMØ IN VEHICULAR AREAS - UNLESS SPECIFIED OTHERWISE.
PLOT DRAINAGE SHOWN INDICATIVELY, TO BE ENHANCED AT DETAILED DESIGN STAGE WITH ACCURATE POP UP/ RWP POSITIONS.

DESIGN NOTE
FOR SEWERS TO BE ADOPTED BY UNITED UTILITIES, SYSTEM TO BE DESIGNED TO ADOPTABLE STANDARDS AND SUBMITTED FOR APPROVAL UNDER SECTION 104 AGREEMENT.

DESIGN NOTE
ALL EXISTING COVER, INVERT AND MANHOLE LOCATIONS TO BE ASCERTAINED BEFORE CONNECTION POINTS ARE FINALIZED. SITE ENGINEER TO REPORT BACK WITH DRAINAGE LEVELS.

DESIGN NOTE
EXACT RWP LOCATION AND FOUL POP UP POSITIONS TO BE CONFIRMED AT LATER STAGE. CONNECTION TO PROPOSED NEW DRAINAGE VIA JUNCTION CONNECTIONS DIRECT FROM OUTLET.

DESIGN NOTE
SECTION 106 APPLICATION TO BE IN PLACE WITH UNITED UTILITIES BEFORE CONNECTION IS MADE TO THE PUBLIC SEWER SYSTEM

ALL COVER & INVERT LEVEL INFORMATION HAS BEEN TAKEN FROM AVAILABLE TOPOGRAPHICAL SURVEY DATA OR UNITED UTILITIES AND CCTV REPORT. EXISTING PUBLIC WATER SEWERS ARE TO BE ABOVE GROUND PROBED, ROUTED AND INTERNALLY SURVEYED WITH ALL INFORMATION PASSED TO CARLEY DAINES AND PARTNERS FOR REVIEW PRIOR TO COMMENCEMENT ON SITE

AS BUILT ISSUE

REV.	DATE	DESCRIPTION
H	05/03/24	DRAWING CONFIRMED AS AS-BUILT LEVEL.
G	31/01/24	APARTMENT BLOCK UPDATED.
F	01/08/23	SADDLE CONNECTION PROPOSED FOR DISCHARGE OF HIGHWAY DRAINAGE.
E	28/06/23	HIGHWAY DRAINAGE REVISED - RESUBMITTED FOR UNITED UTILITIES APPROVAL
D	02.09.22	CONSTRUCTION ISSUE
C	04/07/22	SITE BOUNDARY ADDED IN GREEN AS PER S104 DRAWING REQUIREMENTS.
B	06/05/22	GULLIES ADDED TO CAR PARK AREA, AND GULLIES AND HIGHWAY DRAIN IN NEW ROAD.
A	08/04/22	DESIGN PROGRESSED TO DETAILED DESIGN STAGE TO ACCOMPANY S104 DRAWINGS

CLIENT

GREAT PLACES
BUTTRESS ARCHITECTS

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Consulting Civil and Structural Engineers

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E-mail mail@carleydaines.co.uk

TITLE

DOWNLEY DRIVE
ANCOATS, MANCHESTER

PROPOSED DRAINAGE
STRATEGY DRAWING

Drawn	A. MULLIGAN	Checked	D. MIDDLETON
Date	24/09/2021	Date	24/09/2021
Scale	1:250 @ A1		
Drawing No.	20-B-12490-200		H