

| DRAINAGE STRUCTURE TABLE |             |              |                 |                       |                      |                             |                                                                                                                        |
|--------------------------|-------------|--------------|-----------------|-----------------------|----------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------|
| REF                      | COVER LEVEL | INVERT LEVEL | STRUCTURE DEPTH | STRUCTURE DESCRIPTION | COVER STRENGTH CLASS | LOCATION                    | NOTES                                                                                                                  |
| COM1                     | 46.277m     | 44.200m      | 2.077           | 1.50 m Ø PCC MH       | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| COM2                     | 46.204m     | 43.250m      | 2.954           | 1.50 m Ø PCC MH       | D400                 | EXTERNAL - ADOPTED HIGHWAY  |                                                                                                                        |
| PF1                      | 46.633m     | 46.038m      | 0.595           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF2                      | 46.692m     | 45.311m      | 1.380           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF4                      | 47.097m     | 46.460m      | 0.637           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF5                      | 46.991m     | 45.168m      | 1.823           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PF6                      | 46.684m     | 46.089m      | 0.595           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PF7                      | 46.695m     | 45.017m      | 1.677           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PF8                      | 46.776m     | 44.800m      | 1.976           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PF9                      | 45.971m     | 45.376m      | 0.595           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF11                     | 45.953m     | 45.114m      | 0.840           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF14                     | 46.143m     | 44.500m      | 1.643           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF15                     | 45.970m     | 45.520m      | 0.450           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PF50                     | 46.676m     | 46.076m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   | OFFLINE STRUCTURE                                                                                                      |
| PF51                     | 46.688m     | 46.088m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   | OFFLINE STRUCTURE                                                                                                      |
| PF52                     | 47.088m     | 46.488m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF53                     | 46.965m     | 46.365m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF54                     | 46.907m     | 46.307m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF55                     | 46.791m     | 46.191m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF56                     | 46.248m     | 45.648m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF57                     | 46.141m     | 45.541m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF58                     | 46.141m     | 45.541m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF59                     | 46.141m     | 45.541m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF60                     | 46.141m     | 45.541m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     | OFFLINE STRUCTURE                                                                                                      |
| PF61                     | 45.979m     | 45.379m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   | OFFLINE STRUCTURE                                                                                                      |
| PS1                      | 46.605m     | 46.005m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS2                      | 46.872m     | 45.721m      | 1.151           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS3                      | 46.466m     | 45.866m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE DRIVEWAY |                                                                                                                        |
| PS4                      | 46.761m     | 45.508m      | 1.253           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE DRIVEWAY |                                                                                                                        |
| PS5                      | 46.990m     | 46.430m      | 0.560           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS6                      | 46.826m     | 45.429m      | 1.397           | WAVIN RANGE 450 PPIC  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS7                      | 46.221m     | 44.552m      | 1.668           | 1.20 m Ø PCC MH       | D400                 | EXTERNAL - PRIVATE CAR PARK | 500mm SUMP TO BE PROVIDED BELOW SPECIFIED INVERT LEVEL                                                                 |
| PS8                      | 46.422m     | 44.468m      | 1.954           | 1.20 m Ø PCC MH       | D400                 | EXTERNAL - PRIVATE CAR PARK | 500mm SUMP TO BE PROVIDED BELOW SPECIFIED INVERT LEVEL                                                                 |
| PS9                      | 46.655m     | 44.402m      | 2.253           | 1.20 m Ø PCC MH       | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PS10                     | 47.130m     | 46.530m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS11                     | 46.627m     | 44.318m      | 2.308           | 1.20 m Ø PCC MH       | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PS12                     | 46.186m     | 45.586m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PS13                     | 46.237m     | 45.248m      | 0.989           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS13A                    | 46.209m     | 45.614m      | 0.595           | PPIC                  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PS13B                    | 46.142m     | 45.464m      | 0.678           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS14                     | 46.065m     | 45.387m      | 0.678           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS15                     | 46.167m     | 45.200m      | 0.967           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS16                     | 46.010m     | 45.102m      | 0.908           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS17                     | 45.995m     | 45.395m      | 0.600           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS18                     | 45.906m     | 44.826m      | 1.080           | PPIC                  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS19                     | 45.958m     | 44.550m      | 1.408           | WAVIN RANGE 600 PPIC  | B125                 | EXTERNAL - PRIVATE GARDEN   |                                                                                                                        |
| PS20                     | 45.406m     | 44.339m      | 1.067           | WAVIN RANGE 600 PPIC  | B125                 | EXTERNAL - PRIVATE PATH     |                                                                                                                        |
| PS21                     | 46.354m     | 44.292m      | 2.062           | 1.80 m Ø PCC MH       | B125                 | EXTERNAL - PRIVATE GARDEN   | FLOW CONTROL MANHOLE - REFER TO FLOW CONTROL MFR REQUIREMENTS FOR ADDITIONAL SUMP REQUIREMENTS. ALLOW FOR 750 SQ COVER |

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH  
SUTCLIFFE DRAINAGE PLAN REF:

- 33029-SUT-ZZ-XX-DR-C-6201 - P03

CONTRACTOR TO CHECK BOTH THIS DRAWING AND THE ABOVE LISTED DRAWING ARE BOTH THE CURRENT REVISION PRIOR TO USING THIS INFORMATION.

IF ANY MANHOLES INDICATED ON THE DRAINAGE PLAN ARE  
NOT LISTED ON THIS DRAWING, PLEASE CONTACT SUTCLIFFE

|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
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| <b>GENERAL NOTES</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 1.                                                                                                                                                                                                                              | THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL AND ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 2.                                                                                                                                                                                                                              | ALL WORKS TO BE CARRIED OUT IN STRICT ACCORDANCE WITH THE ENGINEER'S SPECIFICATIONS, RELEVANT BRITISH STANDARDS AND WHERE APPLICABLE LOCAL AUTHORITIES REQUIREMENTS.                                                                                 |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>SEWERS FOR ADOPTION</b>                                                                                                                                                                                                      |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 3.                                                                                                                                                                                                                              | ALL MAIN SEWERS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION GUIDANCE FOR FOUL AND SURFACE WATER SEWERS OFFERED FOR ADOPTION AND UNITED UTILITIES STANDARD DETAILS.                                                              |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 4.                                                                                                                                                                                                                              | ALL PIPES TO BE MARKED WITH BSI KITE MARK WHERE APPLICABLE.                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 5.                                                                                                                                                                                                                              | ALL DRAINAGE UNDER VERGES WITH LESS THAN 800MM OF COVER AND DRAINAGE UNDER THE HIGHWAY WITH LESS THAN 1200mm OF COVER WILL REQUIRE 150mm THICK CONCRETE BED AND SURROUND.                                                                            |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 6.                                                                                                                                                                                                                              | ALL PIPES TO HAVE CLASS 'S' GRANULAR SURROUND WITH BEDDING FACTOR OF 2.2 UNLESS STATED OTHERWISE ON THE LONGITUDINAL SECTIONS AND TO BE CLASS 2 SULPHATE RESISTANT. GRANULAR MATERIAL FOR SURROUND TO BE EITHER 10, 14 OR 20mm NOMINAL SINGLE SIZED. |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 7.                                                                                                                                                                                                                              | STONE BACKFILL IS REQUIRED TO ALL SEWER TRENCHES UNDER VEHICULAR AREAS. AS DUG MATERIAL MAY BE USED ON OTHER AREAS SUBJECT TO THE WRITTEN APPROVAL OF THE DRAINAGE AUTHORITY.                                                                        |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 8.                                                                                                                                                                                                                              | ALL CONCRETE PRODUCTS MANUFACTURED OR CAST INSITU TO BE SULPHATE RESISTANT UNLESS PROVED OTHERWISE BY SITE INVESTIGATION OR SUBSEQUENT TESTING.                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 9.                                                                                                                                                                                                                              | SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES, WHERE IT IS NOT POSSIBLE TO ACHIEVE THIS CLEARANCE CONCRETE BED AND SURROUND IS REQUIRED.                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 10.                                                                                                                                                                                                                             | THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTIONS AND BENDS.                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 11.                                                                                                                                                                                                                             | MANHOLE COVERS MUST HAVE A MINIMUM CLEAR OPENING OF 600MM AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS. SOME MANHOLES MAY REQUIRE DOUBLE COVER ACCESS, REFER TO MANHOLE SCHEDULES TO CONFIRM SIZES.                       |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 12.                                                                                                                                                                                                                             | FILL SURROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF UNITED UTILITIES BEFORE ANY SEWER WORKS ARE CARRIED OUT.                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 13.                                                                                                                                                                                                                             | ADAPTABLE SEWERS SHOULD BE A MINIMUM OF 1m AND MANHOLES 0.5m FROM KERB FACES AND SERVICE MARGINS. ANY LAND DRAIN OR WATERCOURSE ON SITE TO BE DIVERTED SO AS NOT TO PASS UNDER PROPOSED BUILDING.                                                    |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 15.                                                                                                                                                                                                                             | DIVERSION TO BE INSPECTED ON SITE BY LOCAL AUTHORITY.                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 16.                                                                                                                                                                                                                             | ALL GULLIES TO BE PROTECTED FROM SILT DURING THE CONSTRUCTION PROCESS WITH A LAYER OF HESSIAN SHEETING PLACED UNDER THE GULLY GRATING. THE HESSIAN SHALL BE CLEANED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD                                |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 17.                                                                                                                                                                                                                             | ALL LIVE CONNECTIONS IDENTIFIED IN THE CCTV SURVEY, MUST BE RE-PIPED TO THE DIVERTED SEWER.                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 18.                                                                                                                                                                                                                             | ALL ABANDONMENTS MUST BE WITNESSED BY A UU REPRESENTATIVE FOR THE STATUS OF THE PIPE TO BE CHANGED ON THE PUBLIC SEWER RECORDS. MINIMUM 72 HOURS NOTICE WILL BE PROVIDED.                                                                            |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 19.                                                                                                                                                                                                                             | METHOD OF SEWER ABANDONMENT SHALL BE BY GRUBBING UP AND REPLACING PIPE TRENCHES WITH APPROVED SUITABLY COMPACTED BACKFILL.                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 20.                                                                                                                                                                                                                             | CONNECTIONS OF SEWERS TO BE ABANDONED TO THE LIVE SEWERS SHALL BE CAPPED TO THE APPROVAL OF THE UNITED UTILITIES REPRESENTATIVE.                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 21.                                                                                                                                                                                                                             | PIPE MATERIALS INDICATED ON THIS DRAWING ARE AS REQUIRED BY UNITED UTILITIES. ALTERNATIVE MATERIALS TO THOSE LISTED ON THIS DRAWING MAY BE OFFERED TO UNITED UTILITIES FOR APPROVAL.                                                                 |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>EXISTING SERVICE DIVERSIONS</b>                                                                                                                                                                                              |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 22.                                                                                                                                                                                                                             | PRIOR TO CONSTRUCTION THE CONTRACTOR IS TO ENSURE THAT:                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| A)                                                                                                                                                                                                                              | NO PROPOSED DRAINAGE CLASHES WITH ANY OF THE EXISTING SERVICES.                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| B)                                                                                                                                                                                                                              | ANY NEW HIGHWAY WORKS DO NOT ADVERSELY AFFECT THE COVER TO EXISTING SERVICES BELOW THE RELEVANT MINIMUM COVER REQUIREMENTS.                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 23.                                                                                                                                                                                                                             | THE CONTRACTOR IS TO ALLOW FOR THIS PROVISION WITHIN THE TENDER SUM.                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| 24.                                                                                                                                                                                                                             | THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVAL FOR ANY SERVICE DIVERSIONS REQUIRED TO FACILITATE THE PROPOSED WORKS.                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
|                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| P01                                                                                                                                                                                                                             | <b>PRELIMINARY DRAWING</b>                                                                                                                                                                                                                           | 21.06.23                                                                                                                                                                                                                                                                                                                                                                | CR | SB       |
| Rev                                                                                                                                                                                                                             | Description                                                                                                                                                                                                                                          | Date                                                                                                                                                                                                                                                                                                                                                                    | By | Chkd     |
| Drawing Status                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>PRELIMINARY DRAWING</b>                                                                                                                                                                                                      |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
|  <b>Sutcliffe</b><br><small>Limited Head Office<br/>0151 227 5355<br/><a href="http://www.sutcliffe.co.uk">www.sutcliffe.co.uk</a></small> |                                                                                                                                                                                                                                                      | <small>Structural &amp; Civil Engineering<br/>Geotechnical &amp; Environmental Investigation<br/>Building Surveying<br/>Pre Planning Services</small><br><small>Head Office Office<br/>0151 671 1160<br/>0151 671 1161</small><br><small>Local Office<br/>020 804 6020</small><br> |    |          |
| Client                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>WYTHENSRAW COMMUNITY HOUSING</b>                                                                                                                                                                                             |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| Project                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>THE ENTERPRISE CENTRE<br/>BENCHILL ROAD<br/>MANCHESTER</b>                                                                                                                                                                   |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| Drawing Title                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| <b>MANHOLE TABLE</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| Date                                                                                                                                                                                                                            | Drawn By                                                                                                                                                                                                                                             | Checked By                                                                                                                                                                                                                                                                                                                                                              |    |          |
| 05.06.24                                                                                                                                                                                                                        | CR                                                                                                                                                                                                                                                   | SB                                                                                                                                                                                                                                                                                                                                                                      |    |          |
| Scale at A1                                                                                                                                                                                                                     | Project Number                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
|                                                                                                                                                                                                                                 | 33029                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                         |    |          |
| Sheet Number                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    | Revision |
| 33029-SUT-ZZ-XX-DR-C-6202                                                                                                                                                                                                       |                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |    | P01      |