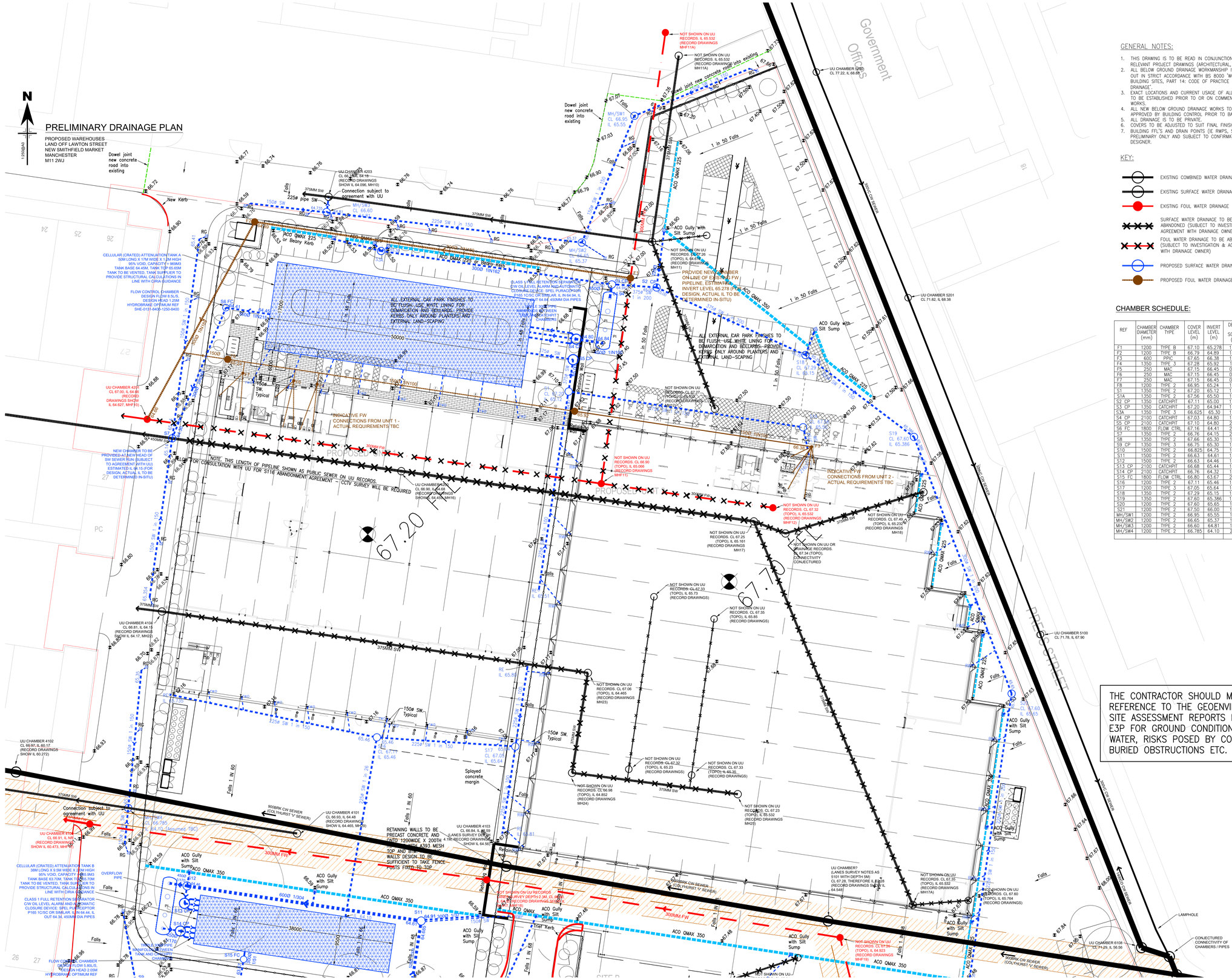
DO NOT SCALE FROM THIS DRAWING. USE GIVEN DIMENSIONS ONLY.
ALL DIMENSIONS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR.
ANY DISCREPANCIES ARE TO BE REPORTED BACK TO THE CONTRACTOR.
ANY DIMENSIONS OR DETAILS TO BE CHECKED ON SITE BY THE CONTRACTOR.
ANY DIMENSION DISCREPANCIES TO BE REPORTED BACK TO HEALEY CONSULTING PRIOR TO PROCEEDING WITH CONSTRUCTION

# PRELIMINARY DRAINAGE PLAN

PROPOSED WAREHOUSES
LAND OFF LAWTON STREET
NEW SMITHFIELD MARKET
MANCHESTER
M11 2WJ

1:250@A0




## GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT PROJECT DRAWINGS (ARCHITECTURAL, M&E ETC).
2. ALL BELOW GROUND DRAINAGE WORKMANSHIP IS TO BE CARRIED OUT IN STRICT ACCORDANCE WITH BS 8000 'WORKMANSHIP OF BUILDING SITES, PART 14: CODE OF PRACTICE FOR BELOW GROUND DRAINAGE'.
3. EXACT LOCATIONS AND CURRENT USAGE OF ALL EXISTING DRAINAGE TO BE ESTABLISHED PRIOR TO OR ON COMMENCEMENT OF ANY WORKS.
4. ALL NEW BELOW GROUND DRAINAGE WORKS TO BE INSPECTED AND APPROVED BY BUILDING CONTROL PRIOR TO BACKFILLING.
5. ALL DRAINAGE IS TO BE PRIVATE.
6. COVERS TO BE ADJUSTED TO SUIT FINAL FINISHED GROUND LEVELS.
7. BUILDING FFL'S AND DRAIN POINTS (IE RWPS, SVPS, ETC) ARE PRELIMINARY ONLY AND SUBJECT TO CONFIRMATION OF THE BUILDING DESIGNER.

## KEY:

- EXISTING COMBINED WATER DRAINAGE
- EXISTING SURFACE WATER DRAINAGE
- EXISTING FOUL WATER DRAINAGE
- SURFACE WATER DRAINAGE TO BE ABANDONED (SUBJECT TO INVESTIGATION & AGREEMENT WITH DRAINAGE OWNER)
- FOUL WATER DRAINAGE TO BE ABANDONED (SUBJECT TO INVESTIGATION & AGREEMENT WITH DRAINAGE OWNER)
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED FOUL WATER DRAINAGE

## CHAMBER SCHEDULE:

| REF | CHAMBER DIAMETER (mm) | CHAMBER TYPE | COVER LEVEL (m) | INVERT LEVEL (m) | DEPTH TO SOFFIT (m) | DEPTH TO INVERT (m) | COVER GRADE |
|---|---|---|---|---|---|---|---|
| F1 | 1200 | TYPE_B | 67.10 | 65.278 | 1.522 | 1.822 | B125 |
| F2 | 1200 | TYPE_B | 66.79 | 64.89 | 1.60 | 1.90 | B125 |
| F3 | 600 | PIPIC | 67.65 | 66.38 | 1.12 | 1.27 | B125 |
| F4 | 1350 | TYPE_3 | 67.28 | 65.92 | 1.21 | 1.36 | B125 |
| F5 | 250 | MAC | 67.15 | 66.45 | 0.60 | 0.70 | B125 |
| F6 | 250 | MAC | 67.15 | 66.45 | 0.60 | 0.70 | B125 |
| F7 | 250 | MAC | 67.15 | 66.45 | 0.60 | 0.70 | B125 |
| F8 | 1200 | TYPE_2 | 66.95 | 65.24 | 1.56 | 1.71 | B125 |
| S1 | 1350 | TYPE_2 | 67.20 | 65.12 | 1.705 | 2.08 | B125 |
| S1A | 1350 | TYPE_2 | 67.56 | 65.50 | 1.685 | 2.06 | D400 |
| S2_CP | 1350 | CATCHPIT | 67.11 | 65.00 | 1.735 | 2.11 | D400 |
| S3_CP | 1350 | CATCHPIT | 67.20 | 64.947 | 1.803 | 2.253 | D400 |
| S3A | 1350 | TYPE_3 | 66.625 | 65.30 | 1.025 | 1.325 | B125 |
| S4_CP | 2100 | CATCHPIT | 67.03 | 64.80 | 1.78 | 2.23 | B125 |
| S5_CP | 2100 | CATCHPIT | 67.10 | 64.80 | 2.22 | 2.52 | B125 |
| S6_FC | 1800 | FLOW_CTRL | 67.16 | 64.41 | 2.45 | 2.75 | B125 |
| S7 | 1350 | TYPE_2 | 66.76 | 64.15 | 2.16 | 2.61 | D400 |
| S8 | 1350 | TYPE_2 | 67.66 | 65.30 | 1.91 | 2.36 | D400 |
| S9_CP | 1350 | TYPE_3 | 66.75 | 65.30 | 1.15 | 1.45 | D400 |
| S10 | 1500 | TYPE_2 | 66.825 | 64.75 | 1.55 | 2.075 | D400 |
| S11 | 1500 | TYPE_2 | 66.63 | 64.61 | 1.42 | 2.02 | D400 |
| S12 | 1500 | TYPE_2 | 66.63 | 64.46 | 1.57 | 2.17 | D400 |
| S13_CP | 2100 | CATCHPIT | 66.68 | 65.44 | 1.27 | 1.57 | D400 |
| S14_CP | 2100 | CATCHPIT | 66.76 | 64.32 | 1.99 | 2.44 | D400 |
| S15_FC | 1800 | FLOW_CTRL | 66.80 | 63.67 | 2.83 | 3.13 | D400 |
| S16 | 1200 | TYPE_2 | 67.11 | 65.46 | 1.425 | 1.65 | D400 |
| S17 | 1200 | TYPE_3 | 67.05 | 65.64 | 1.57 | 1.41 | B125 |
| S18 | 1350 | TYPE_2 | 67.29 | 65.15 | 1.765 | 2.14 | D400 |
| S19 | 1350 | TYPE_2 | 67.60 | 65.386 | 1.914 | 2.214 | D400 |
| S20 | 1200 | TYPE_2 | 67.60 | 65.65 | 1.65 | 1.95 | D400 |
| S21 | 1200 | TYPE_2 | 67.50 | 66.00 | 1.275 | 1.50 | D400 |
| MH/SW1 | 1200 | TYPE_2 | 66.95 | 65.55 | 1.25 | 1.40 | D400 |
| MH/SW2 | 1200 | TYPE_2 | 66.65 | 65.37 | 1.055 | 1.28 | D400 |
| MH/SW3 | 1200 | TYPE_2 | 66.60 | 64.81 | 1.565 | 1.79 | D400 |
| MH/SW4 | 1200 | TYPE_2 | 66.785 | 64.10 | 2.310 | 2.685 | D400 |

## NOTES

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS, ENGINEERS, M&E CONSULTANTS AND SPECIALIST MANUFACTURERS INSTRUCTIONS ETC.

ALL DRAINAGE WORK TO BE CARRIED OUT IN ACCORDANCE WITH BSB301, BS8005 AND THE BUILDING REGULATIONS.

ALL PIPE SURROUNDS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF SEWERS FOR ADOPTION 7TH EDITION.

EXACT LOCATIONS OF FOUL OUTLETS REFER TO ARCHITECTS DRAWINGS IN CONJUNCTION WITH M&E CONSULTANTS DRAWINGS.

SURFACE WATER DRAINS SHALL COMPRISE EITHER HDPE (TO BS EN 1401-1), OR PCC (TO BS 5911) OR VC (TO BS 65 & BS EN 295)

FOUL WATER DRAINS TO BE VC (TO BS 65 / BS EN 295)

ALL YARD DRAINAGE TO HAVE PETROL/INTERCEPTOR TANKS PRIOR TO DISCHARGE INTO MAINS DRAINAGE.
PETROL INTERCEPTOR TANKS TO BE BEDDED, ENCASED, BURIED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS USING GRADE C35 (SUPHATE RESISTING) CONCRETE SURROUNDS AS PER THE MANUFACTURERS RECOMMENDATIONS.

CHANNEL DRAINS NOTED AS ACO TO BE EQUAL AND APPROVED.

ROAD GULLY OUTLET INVERT LEVELS TO BE MIN 600mm BELOW COVER LEVEL.

ROAD GULLY IRONWORKS AND CHANNEL DRAIN COVERS ARE TO BE POSITIONED TO BE 5mm PROUD OF THE SURFACE TO ENSURE THAT THERE IS NO DISCHARGE FROM THE SITE FOR RAINFALL UP TO 5mm.

ALL MANHOLE AND INSPECTION CHAMBER COVERS, FRAMES, AND ACO QMAX CHANNEL DRAINS IN HEAVILY TRAFFICKED AREAS ARE TO COMPLY WITH EITHER BS 497: PART 1 – HEAVY DUTY COVERS TO MA60 OR BS EN 124 GRADE D400

ALL FOUL DRAINAGE BRANCHES TO BE MIN 100MM I/D.

ALL S&VP STACKS TO HAVE RODDABLE ACCESS COVERS LOCATED APPROX 150mm ABOVE FINISH FLOOR LEVEL.

ALL CHANNEL DRAINAGE OUTLETS TO BE RODDABLE.

ALL DRAINAGE WITH LESS THAN 1200mm COVER TO SOFFIT OF PIPE TO HAVE 150mm THK CONCRETE ENCASEMENT.

ALL CONCRETE WITHIN GROUND TO BE SULPHATE RESISTING TO THE RECOMMENDATIONS OF THE SITE INVESTIGATION FOR THE PROJECT.

THE CONTRACTOR IS TO CONFIRM THE INVERT LEVELS OF EXISTING DRAINAGE WHICH IS TO BE USED FOR CONNECTION PRIOR TO ANY CONSTRUCTION TAKING PLACE (ie LAYING OF PIPES) AND TO ALSO HAVE CAMERA SURVEYS UNDERTAKEN TO ESTABLISH CONDITION.

MANHOLE COVER LEVELS ARE INDICATIVE/APPROX. AND MAY NEED TO BE ADJUSTED TO SUIT THE ACTUAL FINISHED LEVELS OF THE EXTERNAL AREAS. ALL MANHOLE COVERS ARE TO BE IN ACCORDANCE WITH SECTION E2.32 AND TABLE E.6 OF SEWERS FOR ADOPTION 7TH EDITION.

ALL SELECTED MATERIALS AND STANDARDS OF ALL WORKMANSHIP INCLUDING BACKFILLING AND COMPACTION, ARE TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION.

## BUILDING SIPHONIC DRAINAGE

Siphonic drainage design by Siphonic Specialist.
siphonic Specialist are to provide underground drainage pipework upto nearest manhole.
Main Contractor (M/C) to provide inlet into Manhole to cater for connection to be made by Siphonic Specialist. For size and invert level of inlet connection M/C to refer to Siphonic Specialist drawings and requirements.
Siphonic Specialist are to ensure that their underground pipework does not clash with structure, foundations or any other underground pipework such as Foul drainage etc.

## FUTURE MAINTENANCE STRATEGY

THE DEVELOPER WILL BE REQUIRED TO APPOINT A "PRIVATE MANAGEMENT COMPANY" FOR THE PURPOSES OF INSPECTION AND MAINTENANCE OF THE ON SITE DRAINAGE SYSTEM (REFER TO WATERMAN FRA FOR THE PROJECT, PAGE 19) TO INCLUDE BUT NOT LIMITED TO:
DURING THE FIRST YEAR OF OPERATION, INSPECTION SHOULD IDEALLY BE CARRIED OUT AFTER EVERY SIGNIFICANT STORM EVENT TO ENSURE PROPER FUNCTIONING OF THE DRAINAGE SYSTEM. FOLLOWING THIS, THE MINIMUM MAINTENANCE REQUIREMENTS WOULD BE AS FOLLOWS:

CHANNEL DRAINS TO BE INSPECTED AT 6 MONTH INTERVALS AND JET CLEANED WHEN DEEMED NECESSARY.
CHANNEL DRAIN SILT TRAP OUTLETS TO BE INSPECTED AT 6 MONTH INTERVALS AND SILT BASKETS TO BE CLEANED OUT AS NECESSARY

ROAD GULLIES ARE TO BE PERIODICALLY MAINTAINED, CLEANED (PUMPED FREE OF SILT) AT 12 MONTH INTERVALS.

FLOW CONTROL MANHOLE/CHAMBERS ARE TO BE INSPECTED AT 6 MONTH INTERVALS. ANY DEBRIS OR SILT IS TO BE REMOVED TO ENSURE THE FLOW CONTROL DEVICE FUNCTIONS PROPERLY.

SEPARATORS TO BE INSPECTED AT 6 MONTH INTERVALS BY APPROPRIATELY QUALIFIED/EXPERIENCED PERSONNEL TO ENSURE PROPER OPERATION OF THE UNIT.

ALL MANHOLE COVER LEVELS ARE INDICATIVE/APPROXIMATE ONLY AND MAY NEED TO BE ADJUSTED TO SUIT THE ACTUAL FINISHED LEVELS OF THE EXTERNAL AREAS

THE CONTRACTOR SHOULD MAKE REFERENCE TO THE GEOENVIRONMENTAL SITE ASSESSMENT REPORTS PREPARED BY E3P FOR GROUND CONDITIONS, GROUND WATER, RISKS POSED BY CONTAMINATION, BURIED OBSTRUCTIONS ETC.

THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER HEALEY CONSULTING DRAWINGS, THE PROJECT ARCHITECTS DRAWINGS, M&E CONSULTANTS DRAWINGS AND THE GEOTECHNICAL CONSULTANTS REPORTS

| REV | DATE | BY | DETAILS OF REVISION |
|---|---|---|---|

ARCHITECT / CLIENT
RUSSELL WBHO

PROJECT
PROPOSED NEW BUILD DEVELOPMENT
NEW SMITHFIELD MARKET
MANCHESTER

TITLE
DRAINAGE SITE LAYOUT
G.A. PLAN
SHEET 1 OF 2

DRAWN BY: P.L
DATE: 23.06.22
SCALE: 1:250
REVISION:

PROJECT No.
HC-22121-(30)-001


HEALEY CONSULTING
Brunel House
63 Dale Street
Milnrow
Rochdale
OL16 3NJ
Tel: 01706 343961
Fax: 01706 343981
email: office@healeyconsulting.co.uk


copyright: Healey Consulting


HEALEY consulting
structural engineering consultants

A0 size drawing sheet (1168mm x 807mm) scale is approx. double at A2 size