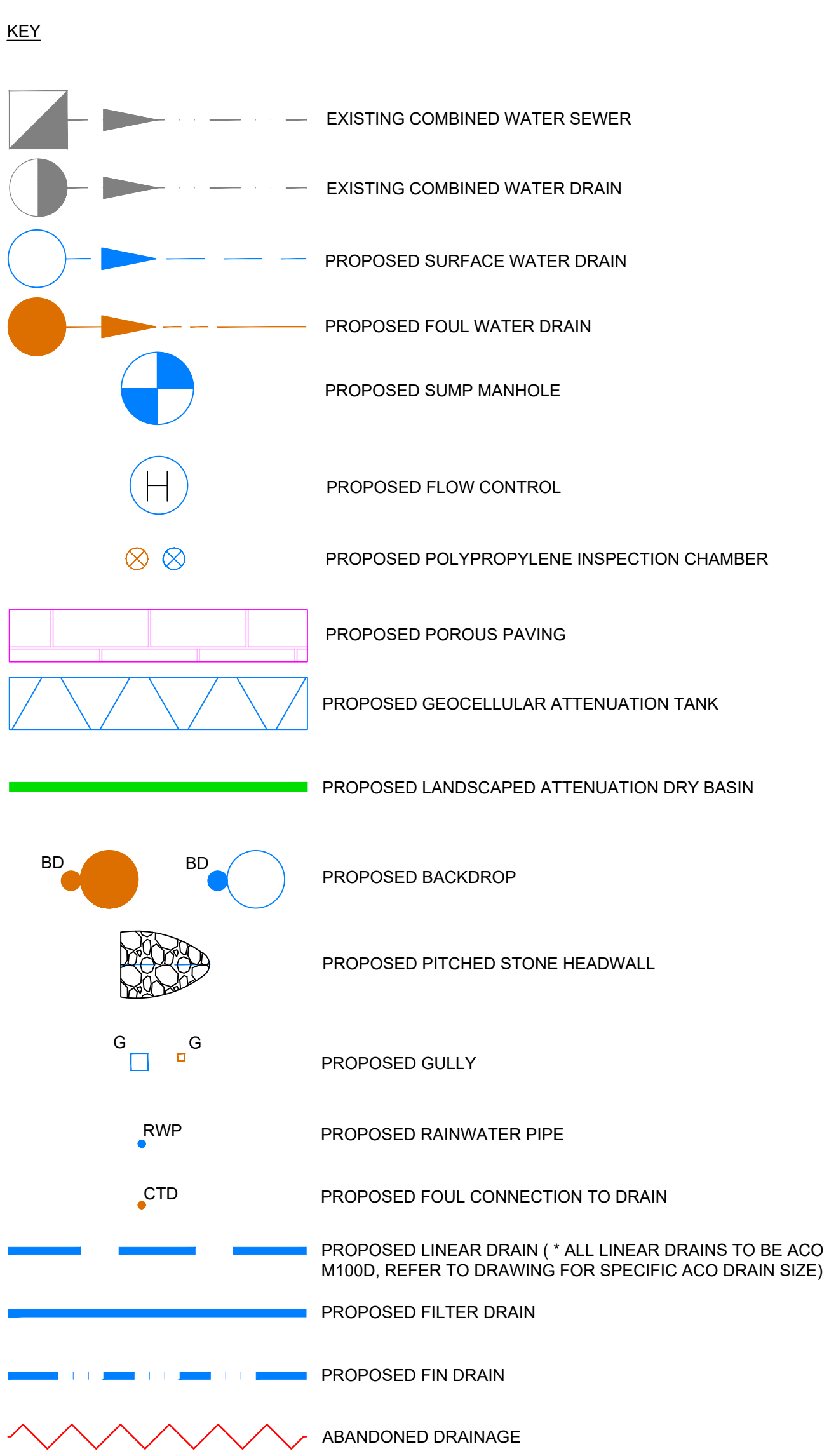
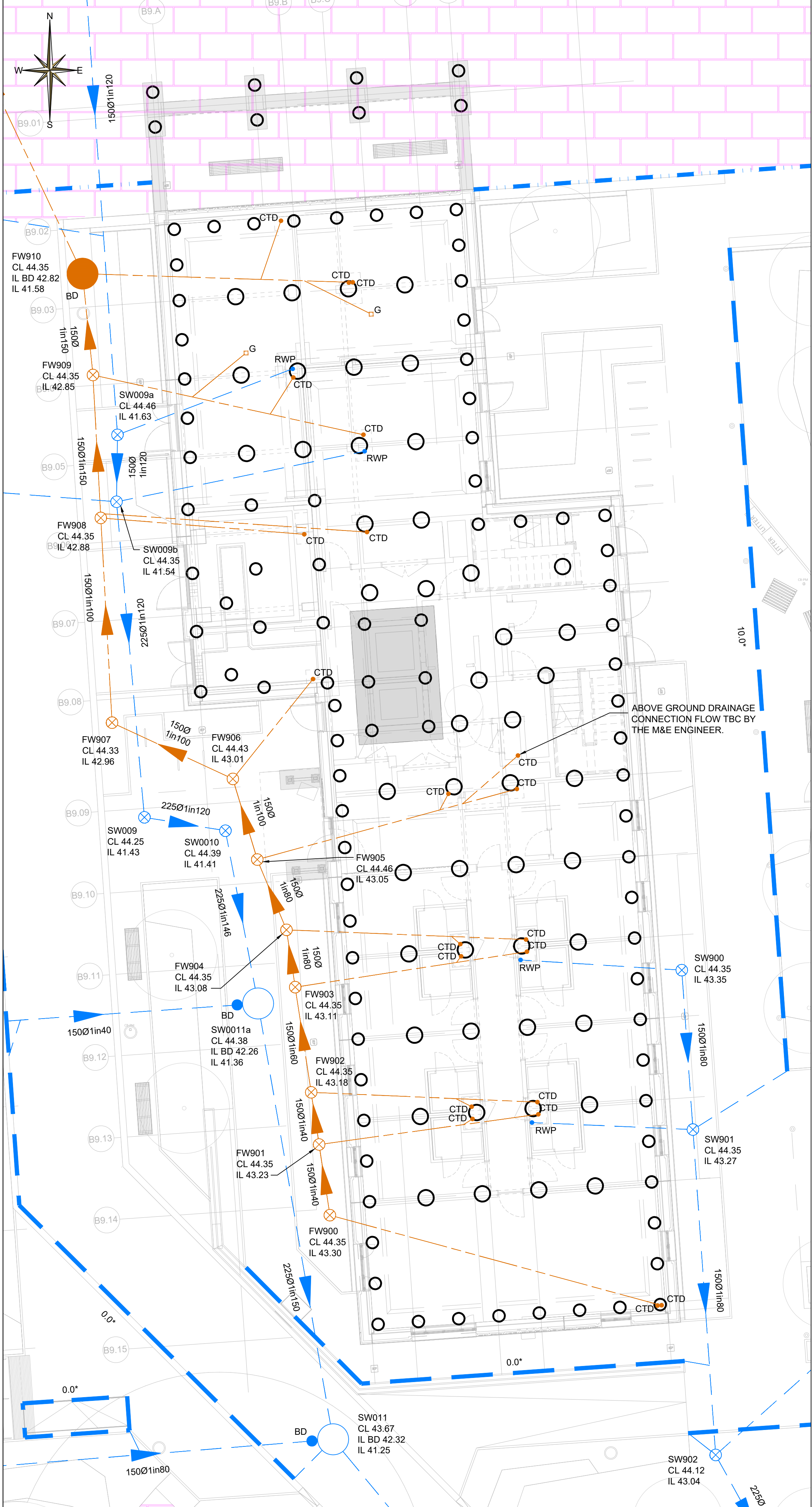
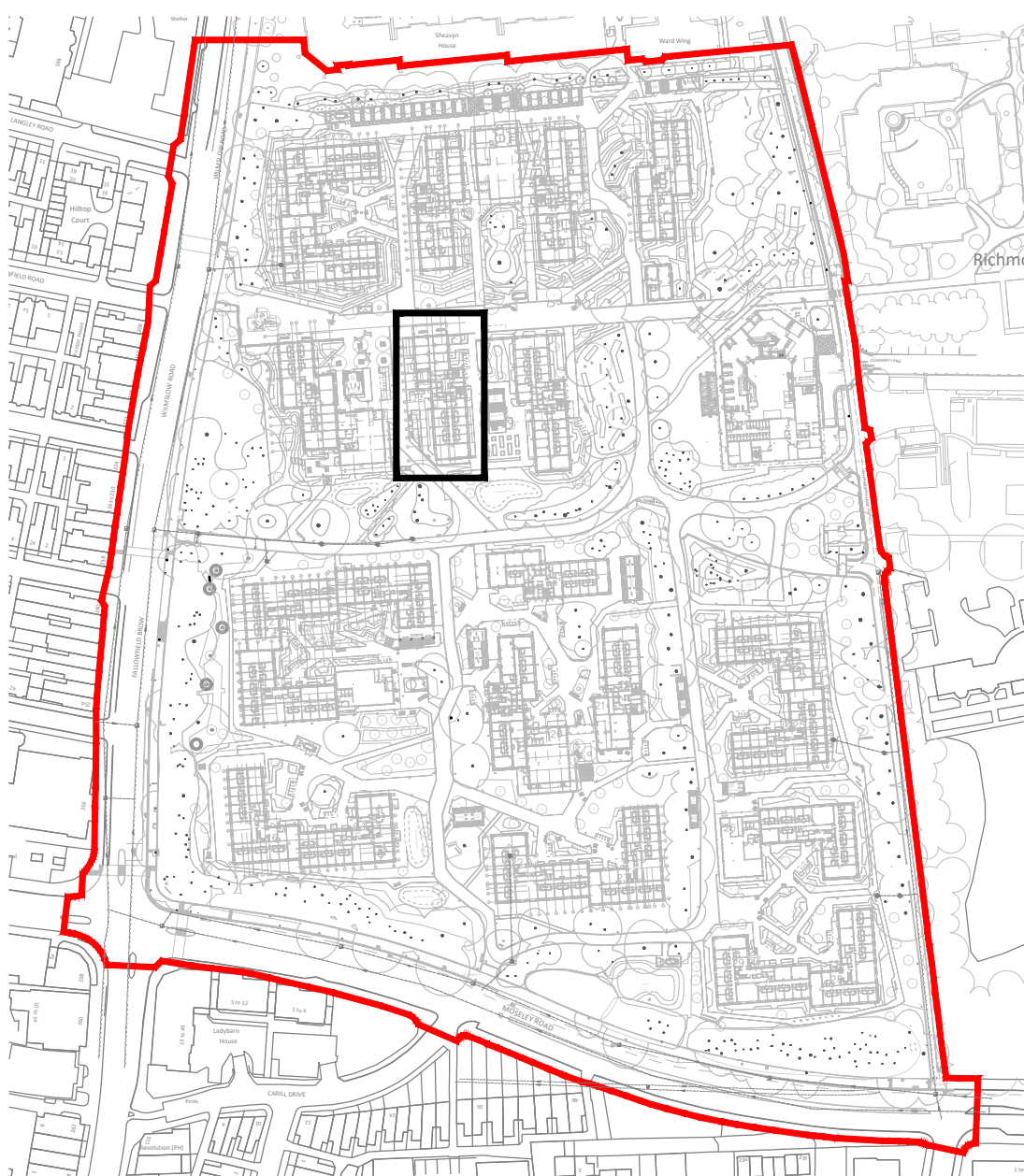




NOTE
PROPOSED LINEAR DRAINS LOCATIONS ARE SUBJECT TO CHANGE UPON CONFIRMATION OF FINAL EXTERNAL LEVELS DESIGN.



NOTES

1. TO BE READ IN CONJUNCTION WITH ALL RELEVANT KENNEDY REDFORD DRAWINGS AND SPECIFICATIONS.
2. TO BE READ IN CONJUNCTION WITH EXTERNAL ARCHITECTURAL, MEP, AND LANDSCAPE DESIGN DRAWINGS.
3. ALL DIMENSIONS ARE IN m UNLESS STATED OTHERWISE.
4. ANY DISCREPANCIES IN THE DESIGN INFORMATION OR CONDITIONS FOUND ON SITE SHOULD BE RAISED TO THE ENGINEER IMMEDIATELY.
5. REFER TO THE MANUFACTURER'S INSTALLATION GUIDANCE FOR ALL SPECIFIED PRODUCTS.
6. SHOULD THIS DRAWING BE NEEDED FOR COSTING YOU MUST CONTACT KENNEDY REDFORD IN THE FIRST INSTANCE TO DISCUSS UNKNOWNNS AND ASSUMPTIONS MADE AT THIS STAGE.
7. THIS DRAWING IS BASED ON THE LANDSCAPE ARCHITECT'S PROPOSED LANDSCAPE GA, DRAWING NO. UMRF-LAP-XX-00-DR-L-00002. REV P10.
8. THIS DRAWING IS BASED ON THE MECHANICAL ENGINEERING SERVICES ABOVE GROUND DRAINAGE LEVEL 00 POP UP LAYOUT BY CAD21, DRAWING NO. UMRF-SME-ZF09-00-SK-M-52001. REV P02.
9. ALL EXISTING SERVICES TO BE LOCATED PRIOR TO THE COMMENCEMENT OF ANY DRAINAGE WORKS WHERE NECESSARY PROTECTION OR DIVERSIONS TO BE UNDERTAKEN TO AVOID CONFLICT WITH THE PROPOSED WORKS.
10. THE ENTIRE PROPOSED DRAINAGE SYSTEM AND ANY PART OF THE EXISTING DRAINAGE SYSTEM TO BE RETAINED AS PART OF THE NEW SCHEME SHALL BE CLEANED AND INSPECTED. ANY STRUCTURAL DEFECTS SHALL BE REPAIRED USING APPROPRIATE AND APPROVED MEANS CONTRACTOR TO ARRANGE ALL SEWERS AND DRAINS TO BE FLUSHED OUT BEFORE FINAL CCTV SURVEY IS CARRIED OUT ON COMPLETION OF WORKS.
11. NO CONNECTION TO BE MADE TO THE PUBLIC SEWER UNTIL APPROVAL HAS BEEN RECEIVED FROM THE UNITED UTILITIES AND MANCHESTER CITY COUNCIL.
12. EXISTING SEWER AND DRAINAGE LOCATIONS, LEVELS AND DIMENSIONS TO BE CONFIRMED BY CONTRACTOR ON SITE, PRIOR TO WORK COMMENCING. DRAINAGE LAYOUT AND LEVELS SUBJECT TO CHANGE UNTIL EXISTING SEWERS/DRAINAGE HAVE BEEN SURVEYED.
13. ALL REDUNDANT EXISTING DRAINAGE TO BE GRUBBED UP OR GROUTED, ANY EXISTING LIVE DRAINAGE SHOULD BE REPORTED TO THE ENGINEER AND RECONNECTED.
14. ANY EXISTING DRAINAGE WHICH BECOMES UNDER TRAFFICKED AREAS IN THE NEW SCHEME SHOULD BE SUBJECT TO THE FOLLOWING REMEDIALS/REVISIONS. WHERE DEPTH OF COVER IS LESS THAN 1200mm, THE EXISTING PIPEWORK SHALL BE EXPOSED & SURROUNDED WITH 150mm CONCRETE SURROUND. WHERE THE EXISTING MANHOLE COVER & FRAME IS NOT AS MANHOLE DETAIL A OR B, OR TO BS497 GRADE A, OR EN124 CLASS D, THEN IT SHOULD BE CHANGED FOR SUCH.
15. EXISTING CHAMBERS BEING CONNECTED INTO SHALL BE INSPECTED BY CONTRACTOR. CHAMBER BENCHING/ACCESS TO BE MODIFIED TO PROVIDE SAFE ACCESS. NEW CHAMBER WILL BE REQUIRED IF THERE IS INSUFFICIENT ROOM FOR NEW CONNECTION.
16. PRIVATE DRAINS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS PART H, BS EN 18933 AND BS EN 752.
17. ALL MANHOLE LEVELS ARE APPROXIMATE ONLY AND MAY NEED TO BE ADJUSTED TO TIE IN TO SURROUNDING LEVELS.
18. ROCKER PIPES ARE REQUIRED AT ALL CONNECTIONS WITH STRUCTURES.
19. ALL MANHOLE AND PIPE POSITIONS ARE APPROXIMATE.
20. ALL MANHOLE SIZES ARE 1200Ø UNLESS INDICATED OTHERWISE.
21. ALL INSPECTION CHAMBER SIZES ARE 450Ø UNLESS INDICATED OTHERWISE.
22. ALL PIPES TO BE LAID SOFFIT TO SOFFIT UNLESS INDICATED OTHERWISE.
23. ALL PPICS MORE THAN 1.2m DEEP TO BE FITTED WITH A REDUCER RING.
24. PROPOSED PIPEWORK WITH LESS THAN THE FOLLOWING DEPTHS TO SOFFIT REQUIRES A CONCRETE SURROUND:
 - 1.2m IN ROADS AND OTHER TRAFFICKED AREAS
 - 0.9m UNDER LIGHTLY TRAFFICKED FOOTPATHS
 - 0.6m IN LANDSCAPE AREAS
25. RECYCLED MATERIAL MAY BE USED AS REPLACEMENT BACKFILL MATERIAL WITHIN PIPE TRENCHES PROVIDED IT IS SUITABLY SCREENED, GRADED AND CRUSHED, TO SHW SERIES 600.
26. PIPE TRENCHES TO HAVE SELECTED BACKFILL AS DUG MATERIAL FREE FROM VEGETABLE MATTER, RUBBISH, FROZEN SOIL & MATERIAL RETAINED ON 40mm SIEVE. TO BE COMPACTED IN 100mm LAYERS BY HAND.
27. WHERE PROPOSED DRAINS ARE WITHIN THE LOADING ZONE OF INFLUENCE OF PROPOSED FOUNDATIONS, THE FOUNDATIONS SHALL BE TAKEN DEEPER TO BELOW THE DRAINS OR THE DRAIN SHOULD BE PROTECTED WITH A FULL CONCRETE SURROUND.
28. ALL BENDS IN PIPEWORK SHALL BE LONG RADIUS AND BEDDED IN CONCRETE.
29. SETTING OUT OF RAINWATER PIPES, WASTEWATER CONNECTIONS AND POPUP POSITIONS OF ABOVE GROUND DRAINAGE BY OTHERS.
30. ALL UNDERSLAB FOUL PIPES TO BE 100mmØ LAID AT 1:40 GRADIENT OR STEEPER U.N.O.
31. AT LEAST ONE SOIL PIPE AT THE HEAD OF EACH FLOW RUN SHALL VENT TO THE ATMOSPHERE.
32. REFER TO THE MAINTENANCE SCHEDULE FOR THE ONGOING MAINTENANCE REQUIREMENTS AND FREQUENCY ON THE DRAINAGE SYSTEM.
33. SURFACE WATER ATTENUATION PROVIDED WITHIN POROUS PAVING CONSTRUCTION. IN THE EVENT POROUS PAVING IS REMOVED, ALTERNATIVE ATTENUATION MUST BE PROVIDED.
34. ALL PROPOSED TREES TO HAVE APPROPRIATE TREE BARRIERS TO ENSURE ROOTS ARE DIRECTED AWAY FROM DRAINAGE. A SEWER OR LATERAL DRAIN SHOULD NOT BE LOCATED CLOSER TO TREES/BUSHES/SHRUBS THAN THE CANOPY WIDTH AT MATURE HEIGHT, EXCEPT WHERE SPECIAL PROTECTION MEASURES ARE PROVIDED. A TREE SHOULD NOT BE PLANTED DIRECTLY OVER SEWERS OR WHERE EXCAVATION ONTO THE SEWER WOULD REQUIRE REMOVAL OF THE TREE.
36. MANHOLE COVERS AND FRAMES SHALL BE TO BS EN 124 AND SHALL BE KITEMARKED. COVERS AND FRAMES SHALL BE HEAVY DUTY D400 IN CARRIAGEWAYS AND VEHICULAR AREAS AND MEDIUM DUTY B125 IN FOOTWAYS AND SOFT LANDSCAPING. IN BLOCKED/CONCRETE PAVED AREAS COVERS SHALL BE RECESSED FABRICATED STEEL. ALL RECESSED COVERS SHALL IN ACCORDANCE WITH THE FACTA ASSOCIATION GRADINGS.
37. MANHOLE COVERS IN PAVED AREAS TO HAVE COVER & FRAME ORIENTATED 'SQUARE' WITH PAVING TO MINIMISE CUT SLABS OR BLOCKS.
38. MANHOLE COVERS AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124, HAVE MINIMUM 600 X 600 CLEAR OPENINGS OR LARGER AS SPECIFIED IN APPROVED DOCUMENT PART H OR SEWERAGE SECTOR GUIDANCE.
39. PIPE CONNECTIONS NOT TO INSPECTION CHAMBERS SHALL BE VIA PREFORMED OBLIQUE JUNCTIONS SWEEPED IN THE DIRECTION OF FLOW.
40. ALL FOUL WATER COVERS TO BE SEALED.
41. LINEAR DRAIN AND GULLY LOCATIONS ARE SHOWN INDICATIVELY.
42. ALL CHANNEL DRAINAGE TO HAVE SILT BUCKETS ON OUTLETS.
43. * ALL LINEAR DRAINS TO BE ACO M100D, REFER TO DRAWING FOR SPECIFIC ACO DRAIN SIZE.
44. ALL ROAD GULLIES ARE TO BE TRAPPED AND RODDABLE.
45. ALL GULLY LEADS TO BE 150mm DIAMETER.
46. GULLY GRATES AND FRAMES SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN124 AND BE OF A NON-ROCKING DESIGN WITH CAPTIVE HINGE ACCESS AND BE KITEMARKED. LOAD CLASS D400 FOR ROADS REGULARLY CARRYING FAST MOVING HEAVY VEHICLES. CLASS C250 TO BE USED IN LESSER TRAFFICKED AREAS EG. ESTATE ROADS, CUL-DE-SACS, RESIDENTIAL CAR PARKING AREAS ETC.
47. CONTRACTOR TO APPLY FOR SEWER PERMITS AND ROAD OPENING PERMITS AS NECESSARY FROM THE APPROPRIATE AUTHORITIES, PRIOR TO COMMENCING WORKS.
48. THE CONTRACTOR SHALL ALLOW FOR ALL TRAFFIC MANAGEMENT IN CONNECTION WITH ROAD AND SEWER WORKS.
49. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY WORKS AND CONSTRUCTION PROCEDURES.
50. CONTRACTOR TO INCLUDE FLEXIBLE JOINTS & LINTELS WHERE DRAINAGE IS CROSSING FOUNDATIONS.

C01	23.01.26	CONSTRUCTION ISSUE	N.R	J.H	P.V
P01	20.06.25	FIRST ISSUE	N.R	R.B	J.H
REV	DATE	DESCRIPTION	DRN	CHK	APR
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 Kennedy Redford MANAGING VISION					
CLIENT					
					
PROJECT NAME					
UoM RESIDENCES DBFO					
DRAWING TITLE					
PROPOSED DRAINAGE LAYOUT BLOCK 9					
DATE	SCALE	SHEET SIZE	REV		
20.06.25	1:100	A1	C01		
DRAWING STATUS					
FOR CONSTRUCTION					
DRAWING NUMBER					
UMRF-KRD-ZF09-XX-DR-C-00500					