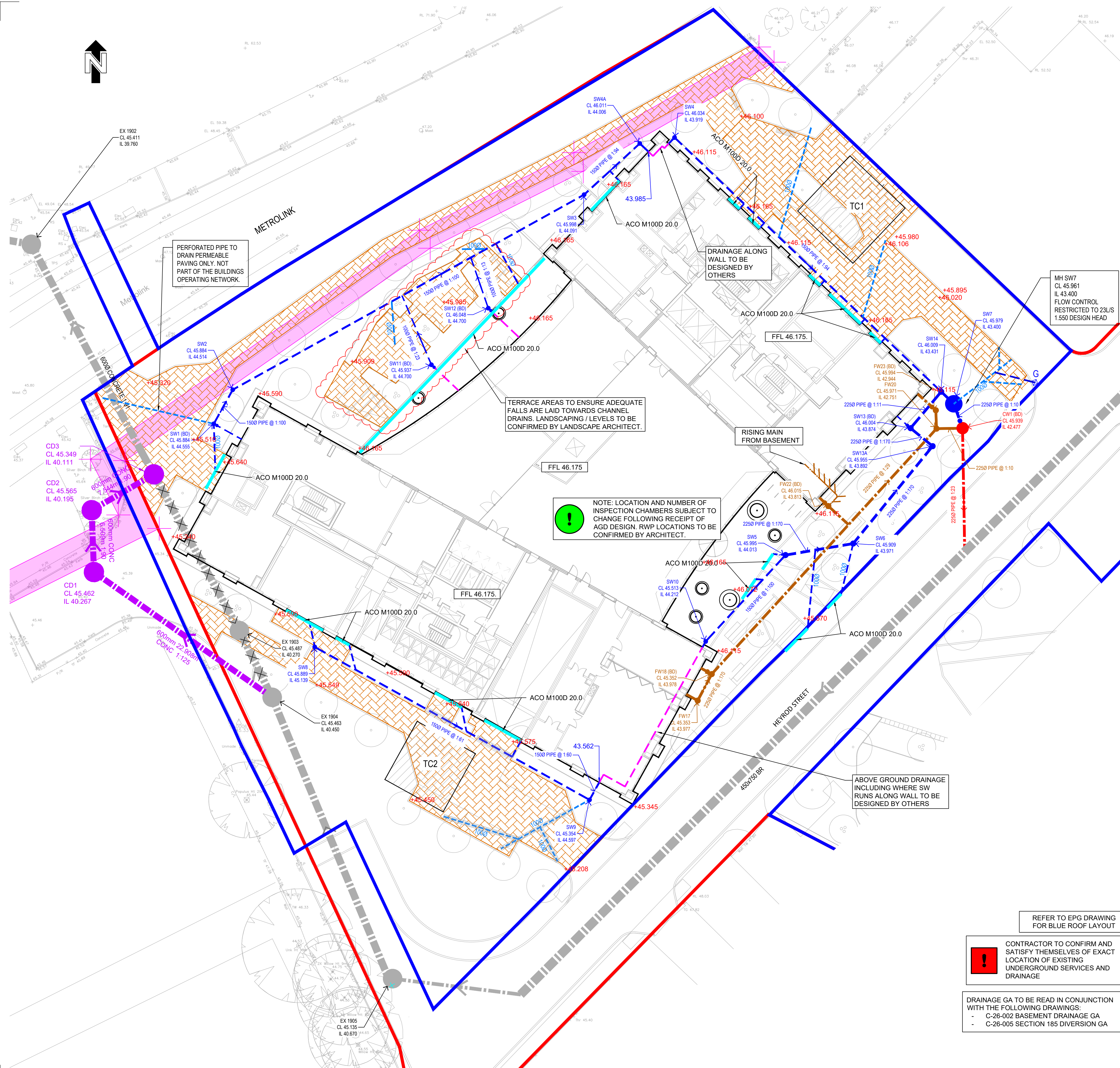




LEGEND

PLANNING BOUNDARY

FUTURE OWNERSHIP BOUNDARY

PROPOSED COMBINED SEWER

EXISTING COMBINED SEWER TO BE REMOVED

PROPOSED COMBINED SEWER DIVERSION

PROPOSED FOUL DRAIN (TYPICALLY 1500 UNLESS NOTED OTHERWISE)

PROPOSED RISING MAIN

PROPOSED SUFACE DRAIN TO RE-ENTER THE BUILDING (DESIGNED BY M&E)

PROPOSED FOUL PRECAST CONCRETE MANHOLE

PROPOSED FOUL POLYPROPYLENE INSPECTION CHAMBER

PROPOSED SURFACE WATER PRECAST CONCRETE MANHOLE

PROPOSED SURFACE WATER POLYPROPYLENE INSPECTION CHAMBER

PROPOSED SURFACE WATER DRAIN

DRAINAGE CHANNEL

PERMEABLE PAVING (TYPE C)

PROPOSED PERFORATED PIPE

TFL RETAINING WALL SAFEGUARD AREA

PROPOSED LEVELS (BY OTHERS)

PROPOSED CONCRETE SLAB PIPE PROTECTION

DENOTES BACKDROP

- DRAINAGE NOTES:
1.

ALL WORKS TO BE CONDUCTED IN STRICT ACCORDANCE WITH SPECIFICATION OF THE LOCAL AUTHORITY, BS8301 1985 & BSEN 752-1.
2.

ALL PIPE RUNS NEAR BUILDINGS TO COMPLY WITH THE BUILDING REGULATIONS 2002 PART H1. WHERE A PIPE IS WITHIN 1M OF A FOUNDATION THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE UP TO THE LOWEST LEVEL OF THE FOUNDATION. WHERE THE TRENCH IS FURTHER THAN 1M FROM THE FOUNDATION, THE TRENCH SHALL BE FILLED WITH CLASS GEN3 CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE FOUNDATION EQUAL TO THE DISTANCE FROM THE FOUNDATION LESS 150M. IN BOTH CASES THE PIPE SHALL BE BEDDED AND SURROUNDED IN 150M THICK CLASS GEN3 CONCRETE.
3.

WHERE PIPES, EXTERNAL TO THE STRUCTURES, HAVE A DEPTH TO SOFFIT FROM GROUND LEVEL OF LESS THAN 600mm THEY SHALL HAVE A CLASS GEN3 CONCRETE ENCASEMENT (1500mm THICK).
4.

WHERE A PIPE, UNDER A CARRIAGEWAY, HAS A DEPTH OF COVER OF LESS THAN 1.2m THE PIPE SHALL BE LAID IN A CLASS Z BEDDING.
5.

WHERE PIPES ARE BEDDED AND SURROUNDED IN CONCRETE, FLEXIBLE JOINTS SHOULD BE PROVIDED. COMPRESSIBLE BOARDS (FIBREBOARD OR POLYSTYRENE) SHALL BE PROVIDED AT A MAXIMUM OF 8M CENTRES COINCIDING WITH PIPE JOINTS. THE BOARDS SHALL BE PRE-CUT TO PIPE DIAMETER AND TO A HEIGHT AND WIDTH EQUAL TO THE CONCRETE CROSS SECTION. A BOARD THICKNESS OF 18mm FOR PIPES UP TO 450M NOMINAL DIAMETER AND 36mm FOR PIPES OVER 450M NOMINAL DIAMETER.
6.

ALL PRIVATE BUILDING DRAINAGE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH BSEN 752-1.
7.

UNLESS OTHERWISE SPECIFIED, BUILDING DRAINAGE TO BE 150mm INTERNAL DIAMETER.
8.

MINIMUM GRADIENT FOR Ø100mm SURFACE DRAINAGE PIPES IS 1:60, AND Ø150mm IS 1:100.
9.

MINIMUM GRADIENTS FOR FOUL DRAINAGE PIPES:
Ø100mm: 1:40 WHERE FLOW IS LESS THAN 1L/S, OR WHERE NO WCS ARE CONNECTED.
Ø100mm: 1:80 WHERE FLOW IS 1L/S OR GREATER, OR WHERE AT LEAST 1NO. WC IS CONNECTED.
Ø150mm: 1:135 WHERE FLOW IS LESS THAN 5L/S, OR WHERE UP TO 5NO. WCS ARE CONNECTED.
Ø150mm: 1:150 WHERE FLOW IS 5L/S OR GREATER, OR WHERE 5NO. OR MORE WCS ARE CONNECTED
10.

ALL GULLIES NOT CONNECTED TO INSPECTION CHAMBERS ARE TO BE RODDABLE.
11.

ALL GULLY CONNECTIONS OTHER THAN THOSE AT MANHOLES TO BE MADE VIA 'Y' JUNCTIONS.
12.

GULLIES COINCIDENT WITH PEDESTRIAN DRIVE CROSSINGS TO HAVE PEDESTRIAN TYPE GULLY COVERS.
13.

ALL ROAD GULLY CONNECTIONS TO BE 150mm DIAMETER AND ANY GULLY CONNECTIONS SUBJECT TO TRAFFIC LOADING TO HAVE CLASS Z BEDDING & SURROUND
14.

ALL STUB STACKS TO BE FITTED WITH AIR ADMITTANCE VALVES WHERE BRANCH DRAIN EXCEEDS 12m EXCEPT AT THE HEAD OF THE RUN. SOIL VENT PIPES LOCATED AT THE HEAD OF A RUN TO BE INSTALLED WITH ROOF TILE VENT.
15.

ALL CONNECTIONS TO BE MADE FROM SOFFIT TO SOFFIT UNLESS WERE NOTED OTHERWISE.
16.

ALL MANHOLES SHALL BE WATERTIGHT.
17.

TRENCH TEMPORARY FORMWORK IS REQUIRED TO ALL EXCAVATIONS EXCEEDING 1.2m DEPTH TO PROVIDE ADEQUATE SUPPORT AND STABILITY AT ALL TIMES.
18.

SEWERS ARE TO BE CONSTRUCTED IN SINGLE SECTIONS BETWEEN MANHOLES ONLY. TRENCHES TO BE BACKFILLED PRIOR TO EXCAVATING THE SUCCEEDING SEWER RUN.
19.

ALL CONCRETE AND CONCRETE PRODUCTS TO BE IN ACCORDANCE WITH BRE 363 FOR SULPHATES.

REFER TO EPG DRAWING FOR BLUE ROOF LAYOUT

CONTRACTOR TO CONFIRM AND SATISFY THEMSELVES OF EXACT LOCATION OF EXISTING UNDERGROUND SERVICES AND DRAINAGE

DRAINAGE GA TO BE READ IN CONJUNCTION WITH THE FOLLOWING DRAWINGS:
- C-26-002 BASEMENT DRAINAGE GA
- C-26-005 SECTION 185 DIVERSION GA

Notes

• THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATIONS.

• IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE. DIMENSIONS MUST NOT BE SCALED FROM THIS DRAWING. ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT IN WRITING.

• ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

• ALL LEVELS ARE IN METRES, UNLESS NOTED OTHERWISE.

GENERAL NOTES

1. THE WORKS SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, NATIONAL BUILDING SPECIFICATION (NBS) AND SEWERS FOR ADOPTION, 7TH EDITION & VOLUME 1 OF THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS...

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS, ARCHITECTS DRAWINGS, MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.

3. THE LOCATION, LINE & LEVEL OF ALL KNOWN EXISTING BURIED SERVICE MAINS AND DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE & LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE MAINS / DRAINAGE INSTALLATIONS.

4. THE CONTRACTOR MUST COMPLY WITH ALL CURRENT LEGISLATION RELATING TO HEALTH & SAFETY.

5. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY WORKS, AND IS ALSO RESPONSIBLE FOR THE SAFE MAINTENANCE AND STABILITY OF EXISTING BUILDINGS AT ALL TIMES.

6. THE MAIN CONTRACTOR IS RESPONSIBLE FOR THE MITIGATION OF ALL OCCURRENCES OF GROUND WATER DURING THE CONSTRUCTION PERIOD.

7. THE CONTRACTOR SHALL MAKE ALLOWANCE FOR RAISING / LOWERING ALL EXISTING ACCESS COVERS & FRAMES TO SUIT NEW FINISHED LEVELS.

8. CONTRACTOR TO CONFIRM THE CONDITION OF THE EXISTING PIPES BEFORE REUSE. ANY PIPES THAT ARE BROKEN SHOULD BE LINED, REPAIRED OR REPLACED. ANY PIPES THAT ARE BLOCKED SHOULD BE CLEARED.

9. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED UPON COMPLETION OF THE WORKS. ALL SURFACE MARKINGS DAMAGED BY THE WORKS SHALL BE FULLY REINSTATED.

10. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED OF OFF SITE.

11. ALL LEVELS ARE TO ORDNANCE DATUM.

12. CONTRACTOR TO CONFIRM THE LOCATION AND LEVEL OF ALL SERVICES, PRIOR TO COMMENCEMENT OF WORKS.

13. CONTRACTOR TO CONFIRM THE CONNECTION TO EXISTING NETWORKS IS VIABLE, PRIOR TO COMMENCEMENT OF WORKS.

DRAINAGE NOTES:

20. WHERE SEWER OR DRAINS ARE TO BE ABANDONED THEY SHALL BE REMOVED OR INFILLED BY GROUTING IN ACCORDANCE WITH THE CIVIL ENGINEER SPECIFICATION FOR THE WATER INDUSTRY 7TH EDITION, CLAUSE 5.2.3.

21. SEWERS MUST HAVE 6M CLEARANCE FROM TREES AND 3m FROM SHRUBS - AS PER SEWERS FOR ADOPTION 6TH EDITION FIGURE 2.3.

22. EXTERNAL RAIN WATER PIPES TO HAVE ACCESS POINTS 1m ABOVE GROUND LEVEL. (REFER TO DETAIL WITHIN CONSTRUCTION DETAILS)

23. ALL DRAINAGE TO BE CCTV SURVEYED FOLLOWING CONSTRUCTION

24. REFER TO SPECIFICATION FOR DETAILS OF PIPE BEDDING BENEATH / ADJACENT TO FLOOR SLAB & FOUNDATIONS.

F13 14.08.25 BM

EXTENT OF PERMEABLE PAVING AMENDED TO MATCH THE LANDSCAPE LAYOUT

GB

F12 07.08.25 BM

ACO CHANNELS UPDATED TO SUIT COMMENT FROM LANDSCAPE ARCHITECT.

GB

F11 12.06.25 HD

FINAL ISSUE

BM

C13 11.06.25 BM

ACO CHANNEL DRAIN SPECIFICATION ADDED.

CH

C12 09.06.25 BM

CHANNEL DRAINS UPDATED TO SUIT LATEST LANDSCAPE ARCHITECTS PLAN

CH

C11 16.04.25 BM

CHANNEL DRAINS ADDED.

GB

C10 03.04.25 BM

UPDATED TO SUIT LATEST LANDSCAPING PLAN. GULLY ADDED TO ACCESS ROAD

GB

C09 21.02.24 BM

SW7 FLOW RATE AMENDED. SW11 & SW12 MOVED.

GB

C08 08.02.24 BM

DRAINAGE UPDATED TO SUIT AS BUILT POSITION OF CW1.

GB

Rev

Date

By

Description

Appd

FINAL ISSUE

APEX CONSULTING ENGINEERS

Apex Consulting Engineers is the trading name of Tier Consult (SV) Limited

www.apexconsulting.co.uk | 0114 241 9360

Client

group

OLYMPIAN

Architected

DAY ARCHITECTURAL

Project

THE FAIRFAX, MANCHESTER

Title

DRAINAGE GENERAL ARRANGEMENT

Scale

1:200 @A1

Drawn

SB

Checked

DB

Revision

F13

Oct '21

895

C-26-001

A1