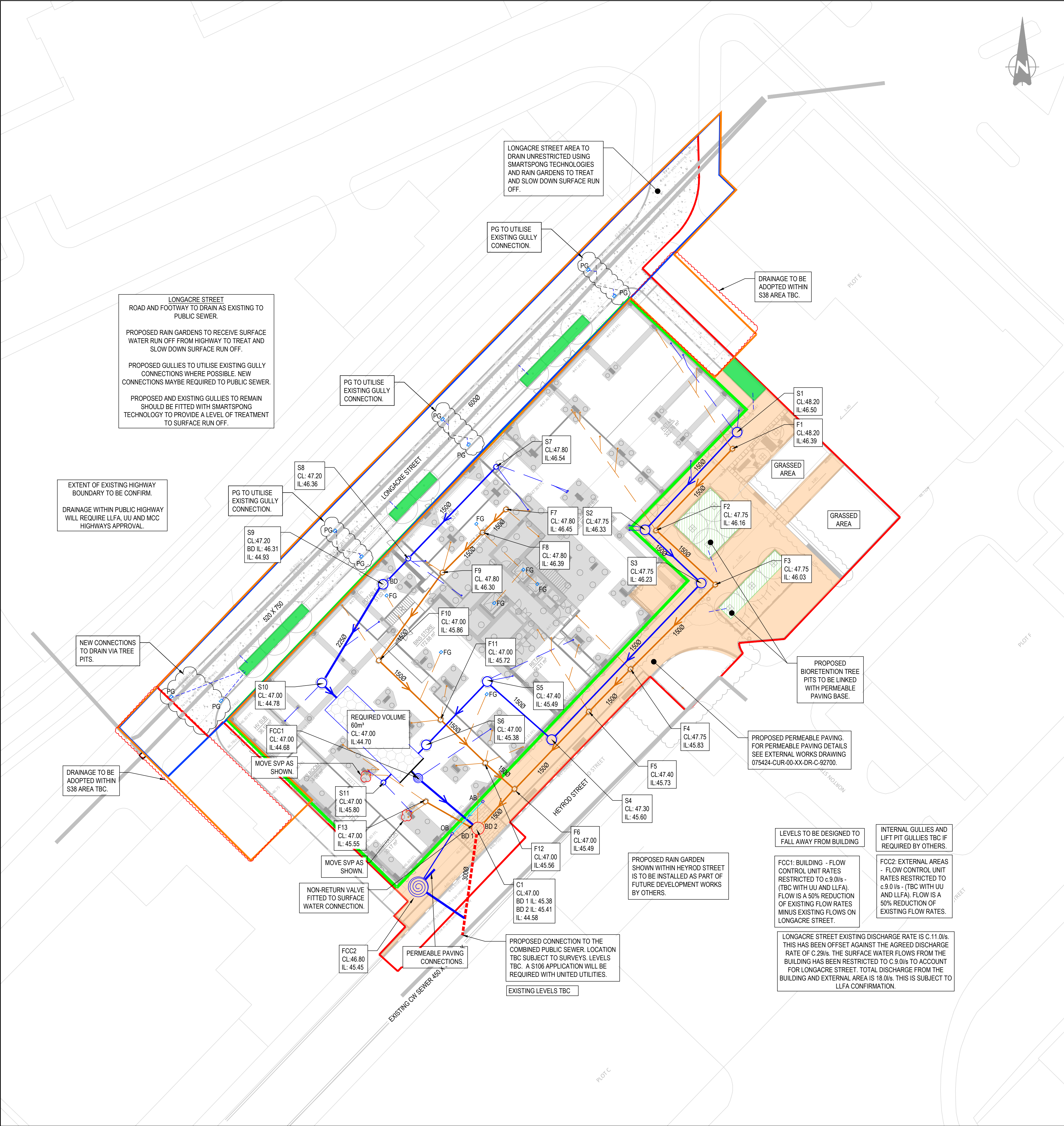




KEY:

SITE BOUNDARY

BUILDING FOOTPRINT

EXISTING INDICATIVE HIGHWAY BOUNDARY

PROPOSED HIGHWAY BOUNDARY

EXISTING COMBINED PUBLIC SEWER

PROPOSED PRIVATE COMBINED DRAIN

PROPOSED PRIVATE FOUL DRAIN

PROPOSED PRIVATE SURFACE DRAIN

PROPOSED ATTENUATION SYSTEM (TYPE TO BE CONFIRMED)

PROPOSED FLOW CONTROL CHAMBER

PROPOSED PRIVATE FOUL MANHOLE OR PPIC (REFER TO SCHEDULE)

PROPOSED PRIVATE SURFACE MANHOLE OR PPIC (REFER TO SCHEDULE)

PROPOSED AREA OF PERMEABLE PAVING.

PROPOSED ROAD GULLY

PROPOSED INTERNAL FLOOR GULLY

PROPOSED BIORETENTION TREE PIT SYSTEM

PROPOSED RAIN GARDEN

EXISTING GULLY CONNECTION (INDICATIVE) TO BE REUSED

PROPOSED OUTLET CONNECTIONS

PROPOSED RWP AND CONNECTION

PROPOSED FOUL POPUP AND CONNECTION

PROPOSED FACADE DRAIN & ACCESS/OUTLET BOX (TYPE TBC)

DESIGN PHILOSOPHY

SURFACE WATER DESIGN

AREA 1 - BUILDING FOOTPRINT IS TO BE RESTRICTED TO 50% OF EXISTING FLOWS MINUS EXISTING FLOWS FROM LONGACRE STREET.

AREA 2 - EXTERNAL AREAS WITHIN THE PLANNING BOUNDARY TO BE RESTRICTED TO 50% OF EXISTING FLOWS.

AREA 3 - LONGACRE STREET (ADOPTED HIGHWAY), UNRESTRICTED FLOW.

AREA 1:
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 30% CLIMATE CHANGE EVENT. SW FLOW RATE: 20 L/S (BASED ON MANCHESTER CITY COUNCILS GUIDANCE OF 50% REDUCTION OF EXISTING BROWNFIELD FLOWS). EXISTING FLOWS ON LONGACRE STREET (11.06l/s) HAVE BEEN OFFSET FROM AREA 1. TOTAL PROPOSED DISCHARGE RATE 8.9l/s (20l/s - 11.06l/s).
APPROXIMATE STORAGE REQUIREMENT: 60m³
OUTFALL: TO COMBINED PUBLIC SEWER ON HEYROD ST (TO BE AGREED WITH THE LLFA AND SUBJECT TO A SECTION 106 AGREEMENT)
LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED. TBC FOLLOWING FURTHER DESIGN AND SURVEY WORK.
POLLUTION TREATMENT: TBC
SUSTAINABLE DRAINAGE: CELLULAR STORAGE AND FLOW RESTRICTIONS. INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME. LLFA AND UU MAY REQUIRE TESTING TO PROVE INFILTRATION IS NOT A VIABLE OPTION.

AREA 2:
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 30% CLIMATE CHANGE EVENT. SW FLOW RATE: 8.91 L/S (BASED ON MANCHESTER CITY COUNCILS GUIDANCE OF 50% REDUCTION OF EXISTING BROWNFIELD FLOWS)
POLLUTION TREATMENT & SUSTAINABLE DRAINAGE: PERMEABLE PAVING, BIORETENTION TREE PIT SYSTEM, SMARTSPONGE TECHNOLOGY.
INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME. LLFA AND UU MAY REQUIRE TESTING TO PROVE INFILTRATION IS NOT A VIABLE OPTION.

AREA 3:
LONGACRE STREET (ADOPTED HIGHWAY), UNRESTRICTED FLOW CALCULATED AT 11.06l/s USING WALLINGFORD'S MODIFIED RATIONAL METHOD WITH AN AVERAGE RAINFALL INTENSITY OF 36mm/hr.
POLLUTION TREATMENT & SUSTAINABLE DRAINAGE: RAIN GARDEN SYSTEM AND SMARTSPONGE TECHNOLOGY.
INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME. LLFA AND UU MAY REQUIRE TESTING TO PROVE INFILTRATION IS NOT A VIABLE OPTION.

FOUL WATER DESIGN

FW PEAK FLOW RATE: 15.97 l/s BASED ON 4000L/D/D. TBC MY M&E
OUTFALL: CW SEWER ON HEYROD ST (TO BE AGREED WITH UU AND SUBJECT TO A SECTION 106 AGREEMENT).
LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED. TBC FOLLOWING FURTHER DESIGN AND SURVEY WORK.

NOTE:
CHANGE AND INCREASE IN EXTERNAL DRAINAGE RUNS ARE DUE TO THE AVOIDANCE OF INTERNAL CHAMBERS WITHIN RETAIL, RECEPTION AND AMENITY SPACE, AND THE INCREASED NUMBER OF INTERNAL POPUPS REQUIRED TO SUIT THE POTENTIAL SPLIT IN RETAIL UNITS. IF THE FINAL RETAIL UNIT REMAINS AS ONE WHOLE UNIT, THERE ARE OPPORTUNITIES TO SIMPLIFY THE PROPOSED DRAINAGE AND REDUCE THE EXTENT OF EXTERNAL RUNS.

GENERAL NOTES:

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.

2. DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF DESIGN.

3. ALL EXISTING SEWERS, CONNECTIONS, PIPE SIZES AND INVERT LEVELS TO BE CONFIRMED BY CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS TO ENSURE CONNECTIVITY. ANY VARIANCE FROM THE INFORMATION SHOWN SHOULD BE REPORTED TO THE ENGINEER FOR REVIEW.

4. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.

5. ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.

6. WHERE EXISTING DRAINAGE IS BEING USED, ALLOWANCES SHOULD BE MADE TO REMEDIATE THIS DRAINAGE IN LINE WITH AVAILABLE CCTV SURVEY INFORMATION. IF NO SURVEY IS AVAILABLE, IT IS ADVISED TO OBTAIN ONE PRIOR TO COMMENCEMENT OF WORKS.

7. ALL EXISTING SERVICES TO BE LOCATED PRIOR TO COMMENCEMENT OF ANY DRAINAGE WORKS, AND WHERE NECESSARY PROTECTION OR DIVERSIONS TO BE UNDERTAKEN TO AVOID CONFLICT WITH THE PROPOSED WORK.

8. COVER LEVELS, GULLY POSITIONS, AND BUILDINGS LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT.

9. OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE APPROVING AUTHORITY.

10. EXTERNAL AREAS ARE TO DRAIN TO PUBLIC SEWERS AT A RESTRICTED RATE USING SUDS FEATURES WHERE POSSIBLE TO SLOW DOWN AND TREAT SURFACE RUN-OFF, IN ACCORDANCE WITH THE FRA.

11. DRAINAGE SHOWN ON THIS LAYOUT IS INDICATIVE ONLY AND SUBJECT TO DETAILED DESIGN AND RELEVANT APPROVALS.

12. EXISTING DRAINAGE SHOWN IS INDICATIVE ONLY AND IS TO BE CONFIRMED.

DRAWING BASED ON:

CWC GROUND FLOOR ABOVE GROUND DRAINAGE POPUP SKETCH, DRAWING REF 2047-SK01, DATED 14.09.20.

TOPOTGRAPHICAL SURVEY BY SURVEY SYSTEMS LTD, DRAWING REFERENCE SSL-7016C-200-1:2, DATED SEPTEMBER 2018.

ARCHITECTS GROUND FLOOR GA, DRAWING REF 190002-CRL-ZZ-00-DRA-11-001, DATED 20.09.20

LANDSCAPE ARCHITECT, LEVEL 00 GA, DRAWING REF, 0799-RFM-XX-00-M2-L-0006

FOUNDATIONS LAYOUT, CURTINS, DRAWING REF STRUCTURAL PLAN-FOUNDATION GENERAL ARRANGEMENT CO-ORDS, RECEIVED 17.09.20.

P08	PERMEABLE PAVING NOTE UPDATE	15.10.21	CD	CD
P07	UPDATED FOR PLANNING	20.09.21	CS	CD
P06	MINOR UPDATES	04.11.20	CD	CD
P05	STAGE 3 DRAFT ISSUE	28.09.20	AH	CD
P04	UPDATED TO INCLUDE LATEST LANDSCAPE LAYOUT	25.06.20	CD	CD
P03	UPDATED STRATEGY AND PLANNING BOUNDARY	05/06/20	CD	CD
P02	DRAINAGE EXTENDED TO PLANNING BOUNDARY	16/04/20	CD	CD
P01	DRAFT ISSUE	01/04/20	AH	CD
Rev:	Description:	Date:	By:	Chkd:

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Status:

STAGE 3

Project:

HEYROD STREET

Dig Title:

DRAINAGE LAYOUT

Size:

Date:

Drawn By:

Designed By:

Checked By:

A1

01/04/20

AH

AH

CD

Scale: 1:250

Project No:

Originator:

Volume:

Level:

Type:

Role:

Category / Number:

Rev:

075424 - CUR - 00 - XX - DR - C - 92500 - P08

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