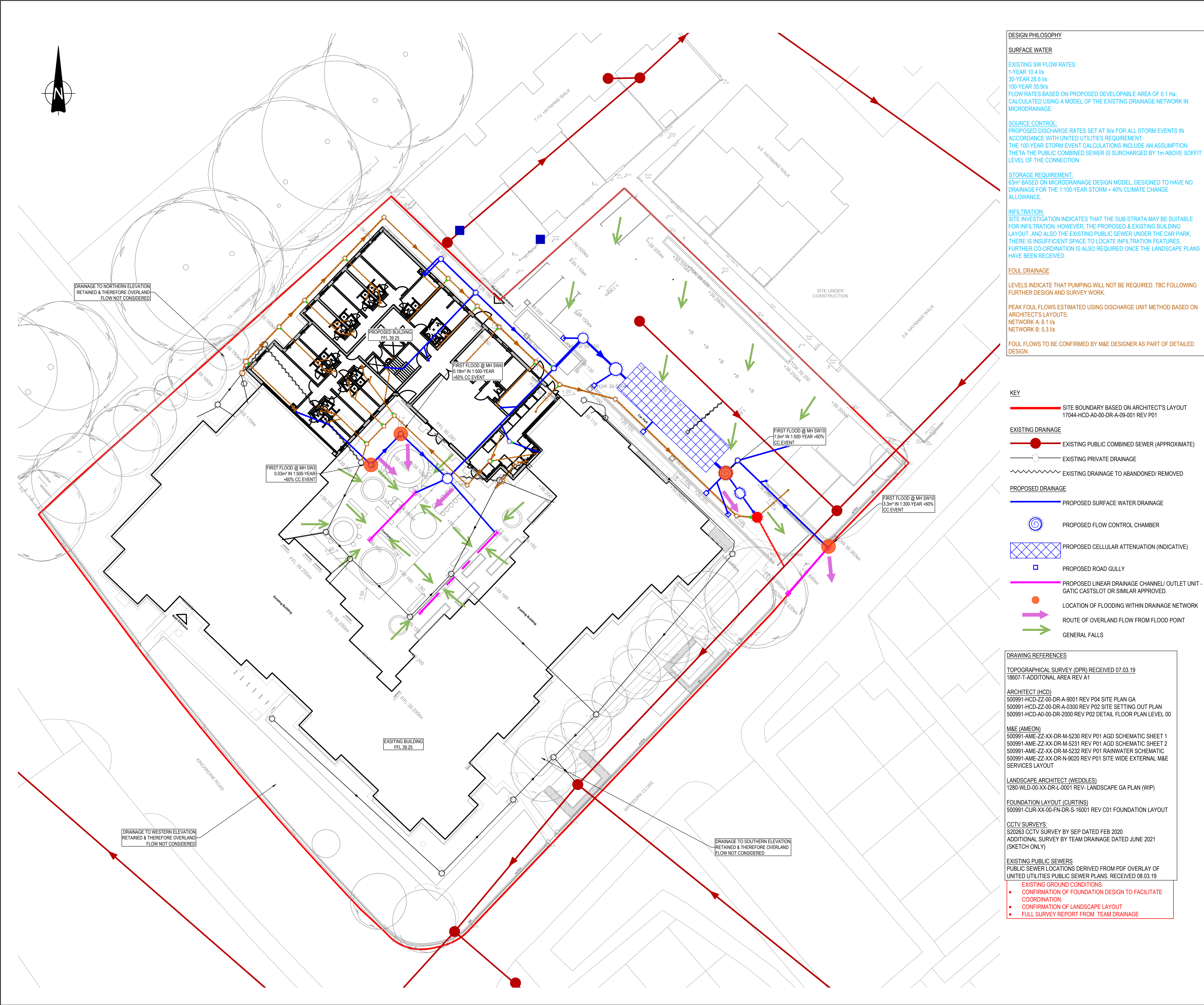




DESIGN PHILOSOPHY

SURFACE WATER

EXISTING SW FLOW RATES:
1-YEAR 10.4 l/s
30-YEAR 28.6 l/s
100-YEAR 35.5 l/s
FLOW RATES BASED ON PROPOSED DEVELOPABLE AREA OF 0.1 Ha;
CALCULATED USING A MODEL OF THE EXISTING DRAINAGE NETWORK IN MICRODRAINAGE

SOURCE CONTROL:
PROPOSED DISCHARGE RATES SET AT 5l/s FOR ALL STORM EVENTS IN ACCORDANCE WITH UNITED UTILITIES REQUIREMENT:
THE 100-YEAR STORM EVENT CALCULATIONS INCLUDE AN ASSUMPTION THAT THE PUBLIC COMBINED SEWER IS SURCHARGED BY 1m ABOVE SOFFIT LEVEL OF THE CONNECTION.

STORAGE REQUIREMENT:
63m³ BASED ON MICRODRAINAGE DESIGN MODEL, DESIGNED TO HAVE NO DRAINAGE FOR THE 1:100-YEAR STORM + 40% CLIMATE CHANGE ALLOWANCE.

INFILTRATION:
SITE INVESTIGATION INDICATES THAT THE SUB-STRATA MAY BE SUITABLE FOR INFILTRATION. HOWEVER, THE PROPOSED & EXISTING BUILDING LAYOUT, AND ALSO THE EXISTING PUBLIC SEWER UNDER THE CAR PARK, THERE IS INSUFFICIENT SPACE TO LOCATE INFILTRATION FEATURES. FURTHER CO-ORDINATION IS ALSO REQUIRED ONCE THE LANDSCAPE PLANS HAVE BEEN RECEIVED.

FOUL DRAINAGE

LEVELS INDICATE THAT PUMPING WILL NOT BE REQUIRED. TBC FOLLOWING FURTHER DESIGN AND SURVEY WORK.

PEAK FOUL FLOWS ESTIMATED USING DISCHARGE UNIT METHOD BASED ON ARCHITECT'S LAYOUTS:
NETWORK A: 6.1 l/s
NETWORK B: 5.3 l/s

FOUL FLOWS TO BE CONFIRMED BY M&E DESIGNER AS PART OF DETAILED DESIGN.

- KEY**
- SITE BOUNDARY BASED ON ARCHITECT'S LAYOUT 17044-HCD-A0-00-DR-A-09-001 REV P01
 - EXISTING DRAINAGE
 - EXISTING PUBLIC COMBINED SEWER (APPROXIMATE)
 - EXISTING PRIVATE DRAINAGE
 - EXISTING DRAINAGE TO ABANDONED/ REMOVED
 - PROPOSED DRAINAGE
 - PROPOSED SURFACE WATER DRAINAGE
 - PROPOSED FLOW CONTROL CHAMBER
 - PROPOSED CELLULAR ATTENUATION (INDICATIVE)
 - PROPOSED ROAD GULLY
 - PROPOSED LINEAR DRAINAGE CHANNEL/ OUTLET UNIT - GATIC CASTSLOT OR SIMILAR APPROVED.
 - LOCATION OF FLOODING WITHIN DRAINAGE NETWORK
 - ROUTE OF OVERLAND FLOW FROM FLOOD POINT
 - GENERAL FALLS

DRAWING REFERENCES

TOPOGRAPHICAL SURVEY (DPR) RECEIVED 07.03.19
18607-T-ADDITIONAL AREA REV A1

ARCHITECT (HCD)
500991-HCD-ZZ-00-DR-A-9001 REV P04 SITE PLAN GA
500991-HCD-ZZ-00-DR-A-0300 REV P02 SITE SETTING OUT PLAN
500991-HCD-A0-00-DR-2000 REV P02 DETAIL FLOOR PLAN LEVEL 00

M&E (AMEON)
500991-AME-ZZ-XX-DR-M-5230 REV P01 AGD SCHEMATIC SHEET 1
500991-AME-ZZ-XX-DR-M-5231 REV P01 AGD SCHEMATIC SHEET 2
500991-AME-ZZ-XX-DR-M-5232 REV P01 RAINWATER SCHEMATIC
500991-AME-ZZ-XX-DR-N-9020 REV P01 SITE WIDE EXTERNAL M&E SERVICES LAYOUT

LANDSCAPE ARCHITECT (WEDDLES)
1280-WLD-00-XX-DR-L-0001 REV- LANDSCAPE GA PLAN (WIP)

FOUNDATION LAYOUT (CURTINS)
500991-CUR-XX-00-FN-DR-S-16001 REV C01 FOUNDATION LAYOUT

CCTV SURVEYS:
S20263 CCTV SURVEY BY SEP DATED FEB 2020
ADDITIONAL SURVEY BY TEAM DRAINAGE DATED JUNE 2021 (SKETCH ONLY)

EXISTING PUBLIC SEWERS
PUBLIC SEWER LOCATIONS DERIVED FROM PDF OVERLAY OF UNITED UTILITIES PUBLIC SEWER PLANS. RECEIVED 08.03.19

EXISTING GROUND CONDITIONS.
• CONFIRMATION OF FOUNDATION DESIGN TO FACILITATE COORDINATION.
• CONFIRMATION OF LANDSCAPE LAYOUT
• FULL SURVEY REPORT FROM TEAM DRAINAGE

GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DESIGN BASED ON TOPOGRAPHICAL SURVEY AND CCTV SURVEY INFORMATION AVAILABLE AT THE TIME OF DESIGN.
- 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.
- 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.
- ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.
- 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.
- 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.
- ALL RAINWATER AND FOUL POP UPS LOCATIONS AND SIZES INDICATIVE ONLY AND TO BE CONFIRMED BY THE ARCHITECT AND M&E ENGINEER.
- COVER LEVELS, GULLY POSITIONS, AND BUILDINGS LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT.
- ALL PIPE DIAMETERS GIVEN ARE NOMINAL INTERNAL PIPE DIAMETERS. THESE ARE TO BE CONFIRMED ONCE A DETAILED CAPACITY CHECK HAS BEEN UNDERTAKEN AT A LATER DESIGN STAGE.
- OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE APPROVING AUTHORITY.

P02	AMENDED IN LINE WITH UPDATED LA PLAN & LLFA	30/09/21	ATL	ATL
P01	ISSUED FOR DISCHARGE OF CONDITION	05/07/21	ATL	ATL
Rev:	Description:	Date:	By:	Chkd:



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Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kentish • Leeds • Liverpool • London • Manchester • Nottingham

Status:

APPROVAL

Project:

KINCARDINE COURT

Orig Title:

OVERLAND FLOW PLAN

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	05/07/21	ATL	ATL	CG

Scale:	1:200
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Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
072071	CUR	00	XX	DR	C	90002	P02