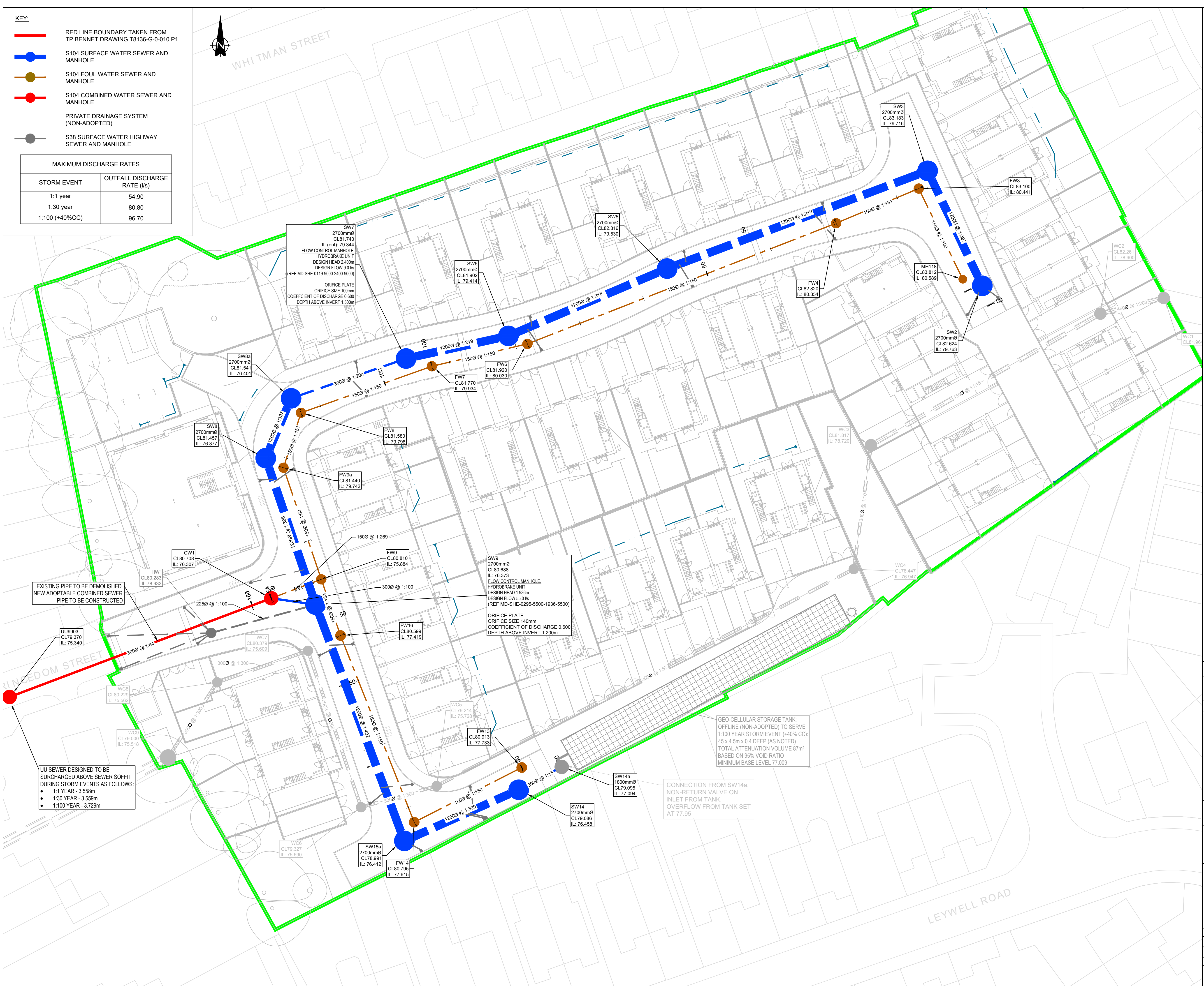


- KEY:
- RED LINE BOUNDARY TAKEN FROM TP BENNET DRAWING T8136-G-0-010 P1
 - S104 SURFACE WATER SEWER AND MANHOLE
 - S104 FOUL WATER SEWER AND MANHOLE
 - S104 COMBINED WATER SEWER AND MANHOLE
 - PRIVATE DRAINAGE SYSTEM (NON-ADOPTED)
 - S38 SURFACE WATER HIGHWAY SEWER AND MANHOLE

MAXIMUM DISCHARGE RATES	
STORM EVENT	OUTFALL DISCHARGE RATE (l/s)
1:1 year	54.90
1:30 year	80.80
1:100 (+40%CC)	96.70



WHITMAN STREET



1. GENERAL NOTES
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - DO NOT SCALE THIS DRAWING. ALL DETAILS AND DIMENSIONS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.
 - ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE INFRASTRUCTURE
- EXISTING SEWERAGE INFRASTRUCTURE, GROUND FLOOR PENETRATION AND FLOW RATES ADVISED BY OTHERS. NO GUARANTEE CAN BE GIVEN AS TO ACCURACY OR COMPLETENESS.
 - INVERT LEVELS, DIMENSIONS AND LOCATIONS OF EXISTING SEWERS AND MANHOLES AFFECTING THE WORKS TO BE VERIFIED AND ASSESSED FOR SUITABILITY PRIOR TO COMMENCEMENT, PARTICULARLY AT POINTS OF CONNECTION.
 - FLOWS AND LEVELS IN EXISTING SEWERS, LAND DRAINS AND WATERCOURSES TO BE MAINTAINED THROUGHOUT THE CONTRACT.
 - NO EXISTING SEWERS TO BE ABANDONED WITHOUT ENGINEER'S APPROVAL.
 - EXISTING SEWERS TO BE ABANDONED ARE TO BE 'GRUBBED UP' IN ACCORDANCE WITH THE SPECIFICATION.
 - IF APPLICABLE, SURFACE WATER DRAINAGE INFRASTRUCTURE DESIGNED TO ACCOMMODATE TEMPORARY DIVERSIONS (COMBINED DRAINAGE) TO BE CLEANED AND MADE SUITABLE FOR SURFACE WATER ONLY AFTER TEMPORARY DIVERSIONS ARE ABANDONED

- PIPES AND MANHOLES
- ALL INVERT LEVELS OF EXISTING FOUL AND SURFACE WATER SYSTEMS ARE TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY ON SITE DRAINAGE WORKS. ANY DISCREPANCY IN LEVELS IS TO BE REPORTED IMMEDIATELY TO CURTINS CONSULTING LIMITED
 - ALL SEWERS, UNLESS AGREED OTHERWISE STATED, SHALL BE: 150MM DIA TO BE VITRIFIED CLAY, 225MM DIA TO BE VITRIFIED CLAY, 300MM DIA TO BE VITRIFIED CLAY, 375MM DIA AND GREATER TO BE CLASS 120 CONCRETE PIPES.
 - FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE
 - ALL BRANCH CONNECTIONS TO BE MADE WITH SWEPT BENDS IN THE DIRECTION OF FLOW IN THE MAIN SEWER.
 - ALL PIPES ARE TO BE SOLID WALL PIPES UNLESS OTHERWISE NOTED AS PERFORATED.
 - ALL MANHOLE COVERS AND FRAMES TO BE DOUBLE SEALED AND LOCKABLE.
 - MANHOLE COVERS AND FRAMES TO BE BS EN 124, SIZES AND GRADES AS INDICATED ON MANHOLE SCHEDULE.
 - ALL PIPES TO HAVE CLASS 'S' GRANULAR BED AND SURROUND UNLESS OTHERWISE STATED. BEDDING AND BACKFILL MATERIALS TO CONFORM TO THE REQUIREMENTS OF WS 4-08-02 (TABLE A2), WHERE DEPTH OF COVER TO TOP OF SEWER IS LESS THAN 1.2M IN HIGHWAYS AND VERGES (OR LESS THAN 0.9M IN NON-VEHICULAR ACCESSED AREAS), THEN A CLASS 'Z' BEDDING TO BE USED.
 - ALL SEWER TRENCHES AND BRANCH CONNECTIONS TO BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NOT EXCEEDING 225MM UNCONSOLIDATED THICKNESS THEN FULLY COMPACTED.
 - ADOPTABLE SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS.
 - PLASTIC CHANNEL SECTIONS WILL NOT BE PERMITTED WITHIN MANHOLE CHAMBERS. CLAYWARE CHANNELS SHALL BE USED WITHIN MANHOLES FOR PIPE SIZES UP TO AND INCLUDING 300MM DIAMETER.
 - THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION IN THEM MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE THE CONNECTION AND BENDS.

- S104 AGREEMENT DRAWING PACKAGE:
- 074747-CUR-00-XX-DR-D-95500 S104 AGREEMENT LAYOUT
 - 074747-CUR-00-XX-DR-D-95560 LAND REGISTRY PLAN
 - 074747-CUR-01-XX-DR-D-95561 SURFACE WATER LONG SECTIONS
 - 074747-CUR-01-XX-DR-D-95562 COMBINED & FOUL WATER LONG SECTIONS
 - 074747-CUR-01-XX-DR-D-95570 1:20 MANHOLE DETAIL SHEET 1 OF 5
 - 074747-CUR-01-XX-DR-D-95571 1:20 MANHOLE DETAIL SHEET 2 OF 5
 - 074747-CUR-01-XX-DR-D-95572 1:20 MANHOLE DETAIL SHEET 3 OF 5
 - 074747-CUR-01-XX-DR-D-95573 1:20 MANHOLE DETAIL SHEET 4 OF 5
 - 074747-CUR-01-XX-DR-D-95574 1:20 MANHOLE DETAIL SHEET 5 OF 5
 - 074747-CUR-01-XX-DR-D-95575 FLOW CONTROL MANHOLE DETAILS
 - 074747-CUR-01-XX-DR-D-95580 NETWORK CATCHMENTS LAYOUT

- DRAWING BASED ON:
- TOPOGRAPHICAL SURVEY: 19104_01 BY LOY SURVEYS APRIL 2017
 - POST DEMOLITION TOPOGRAPHICAL SURVEY BY SITE SURVEYING SERVICES sss-9984 FEB 2022
 - TREE SURVEY P.846:17 13 REV -
 - CCTV SURVEY BY LAYER SURVEYS LTD LATEST ISSUE 10.07.21
 - ARCHITECTS DRAWINGS T8136-G-0-010 T2 - RECEIVED 04-10-21

P03	DRAINAGE LAYOUT UPDATED	17.06.22	TK	ATL
P02	UPDATED IN LINE WITH UU COMMENTS	31.01.22	ATL	MW
P01	FIRST ISSUE	17.09.21	TH	RH
Rev:	Description:	Date:	By:	Chkd:

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Status:

APPROVAL

Project:

MOSTON CAMPUS

Orig Title:

SECTION 104
DRAINAGE LAYOUT

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	17.09.21	TH	RH	AL
Scale:	1:250			
Project No:	Originator:	Zone:	Level:	Type:
074747 - CUR - 00 - ZZ - DR - C - 95500	-P03			