

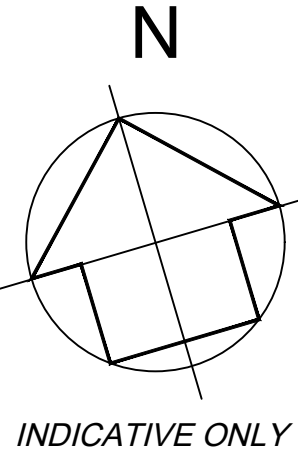
DRAINAGE LEGEND

EXISTING FEATURES

- EXISTING SURFACE WATER DRAIN AND MANHOLE TO BE RETAINED
- EXISTING FOUL WATER DRAIN AND MANHOLE TO BE RETAINED
- EXISTING FOUL/SURFACE/COMBINED WATER DRAIN AND MANHOLE TO BE ABANDONED. CONTRACTOR TO CONFIRM THAT NO LIVE CONNECTIONS REMAIN. PIPES TO BE FULLY REMOVED.
- EXISTING UNKNOWN DRAIN/UTILITY AND MANHOLE WHICH REQUIRES FURTHER INVESTIGATION

PROPOSED FEATURES

- SURFACE WATER DRAIN
- RODDING EYE
- RAINWATER PIPE - REFER TO PUBLIC HEALTH ENGINEERS/ARCHITECTS DRAWINGS FOR DETAILS
- STORM WATER MANHOLE TYPE D
INTERNAL DIMENSIONS 450mm MINIMUM
DEPTH FROM COVER TO SOFFIT OF PIPE UP TO 3m
RESTRICT ACCESS TO Ø350 IF DEPTH FROM COVER TO SOFFIT OF PIPE IS LESS THAN 1m
(MAX PIPE DIAMETER 150mm 450/475/50)
(MAX PIPE DIAMETER 225mm 600/600)
- STORM WATER FILTER MANHOLE
- STORM WATER SOAKAWAY / ATTENUATION TANK
GL = GROUND LEVEL
TOTL = TOP OF TANK LEVEL
BOTL = BOTTOM OF TANK LEVEL
- PIPE DETAIL: Ø, LENGTH, GRADIENT,
- MANHOLE REFERENCE:
COVER LEVEL,
INVERT LEVEL,
SUMP INVERT LEVEL,
MH TYPE,
CATCHPIT MANHOLE (IF REQUIRED),
COVER GRADE
- FOUL WATER DRAIN
- ABOVE GROUND FOUL WATER CONNECTION - REFER TO PUBLIC HEALTH ENGINEERS/ARCHITECTS DRAWINGS FOR DETAILS
- FOUL WATER MANHOLE TYPE D
INTERNAL DIMENSIONS 450mm MINIMUM
DEPTH FROM COVER TO SOFFIT OF PIPE UP TO 3m
RESTRICT ACCESS TO Ø350 IF DEPTH FROM COVER TO SOFFIT OF PIPE IS LESS THAN 1m
(MAX PIPE DIAMETER 150mm)
- MANHOLE REFERENCE:
COVER LEVEL,
INVERT LEVEL,
MH TYPE,
COVER GRADE



NOTES:

- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT AND ENGINEERING DETAILS, DRAWINGS AND SPECIFICATIONS.
- ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT AND/OR ENGINEER IMMEDIATELY, SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
- ANY WORKS ASSOCIATED WITH THE HIGHWAY/EXTERNAL WORKS INCLUDING HIGHWAY DRAINAGE, SHALL BE IN ACCORDANCE WITH THE HIGHWAY'S AGENCY 'MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, VOL. 1' (MCHW), UNLESS OTHERWISE SPECIFIED.
- FOR CONSTRUCTION DETAILS REFER TO THE RELEVANT BAKER AND ASSOCIATES (BAK) DRAWING NUMBERS LISTED ON THE DRAWING ISSUE SHEET.
- ALL DRAINAGE WORKS SHOULD COMMENCE AT THE PROPOSED DOWNSTREAM CONNECTION POINT. THE WORKS CONTINUING UPSTREAM FOLLOWING CONFIRMATION OF THE TIE-IN INVERT LEVELS TO THE ENGINEER. CONNECTIONS TO MANHOLES OR LARGER SIZED PIPES ETC. SHOULD BE SOFFIT TO SOFFIT UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. IF THIS IS NOT POSSIBLE INFORM THE ENGINEER IMMEDIATELY.
- COVER LEVELS SHOWN ARE APPROXIMATE. COVERS AND FRAMES SHALL BE SET TO FINISHED GROUND LEVELS AND FALLS.

DRAINAGE NOTES

- ROAD GULLY PIPES ARE TO BE 150mm DIA. WITH CONCRETE SURROUND AND FLEXIBLE JOINTS. ALL OTHER UN-REFERENCED PIPES ARE ASSUMED TO BE 100mm DIA.
 - FW MIN GRADIENT - 1 IN 40 (100 DIA) NO W/C'S CONNECTED
 - FW MIN GRADIENT - 1 IN 150 (150 DIA) MIN 5 W/C'S CONNECTED
 - SW MIN GRADIENT - 1 IN 100 (100 DIA)
 - SW MIN GRADIENT - 1 IN 150 (150 DIA)
- ALL GULLIES SHALL BE FITTED WITH GRADE D400 GRATINGS AND FRAMES TO BS EN124, UNLESS OTHERWISE STATED.
- IN ORDER TO MAINTAIN THE SATISFACTORY FUNCTIONING OF SURFACE WATER SEWERS, ALL ROAD AND YARD GULLIES ARE TO BE "TRAPPED".
- ALL NON ADOPTABLE LATERALS BENEATH THE HIGHWAY SHALL BE BACK FILLED WITH A TYPE 1 GRANULAR MATERIAL AS CL 8/5 (MCHW) APPROVED BY THE ENGINEER.
- ALL PRIVATE DRAINAGE TO BE IN ACCORDANCE WITH THE BUILDING REGULATIONS APPROVED DOCUMENT PART-H, AND TO THE SATISFACTION OF THE BUILDING CONTROL INSPECTOR.
- WHERE DRAINS PASS THROUGH FOUNDATIONS OR CONNECT TO MANHOLES, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED TO FORM A ROCKER PIPE IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED.
- SHALLOW PRIVATE DRAINS MAY REQUIRE PROTECTION USING CLASS 'Z' CONCRETE SURROUND OR PAVING SLABS BRIDGING THE TRENCH SUBJECT TO THE NHBC INSPECTOR'S REQUIREMENTS.
- WHERE DRAINAGE RUNS PASS CLOSE TO BUILDINGS OR THEIR INVERT LEVELS ARE BELOW FOUNDATION LEVEL, THEN THE TRENCHES ARE TO BE BACK FILLED IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED.
- REFERENCE SHOULD BE MADE TO THE STRUCTURAL ENGINEERS DESIGN FOR ALL ASPECTS OF FOUNDATION DETAIL AND CONSTRUCTION.
- THE CONTRACTOR IS TO KEEP A RECORD OF ANY VARIATIONS MADE ON SITE, INCLUDING THE RELOCATION OF SEWERS OR DRAINS, SO THAT AN AS CONSTRUCTED DRAWING CAN BE PREPARED UPON COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHOULD CHECK ALL DIMENSIONS ON SITE. NO DIMENSIONS ARE TO BE SCALED FROM THESE DRAWINGS.
- IT IS THE CONTRACTORS/SUBCONTRACTORS RESPONSIBILITY TO ENSURE COMPLIANCE WITH THE CURRENT BUILDING REGULATIONS AND CODES OF PRACTICE.
- STUB CONNECTIONS TO ADOPTABLE MANHOLES SHALL BE MADE FROM VITRIFIED CLAY AND CONSIST OF TWO ROCKER PIPES LAID AT THE SAME GRADIENT AS THE UP OR DOWNSTREAM PIPE.
- ALL DOWNPIPES ARE TO BE SEALED, IE CONNECTED DIRECTLY TO THE STORMWATER DRAIN. ACCESS POINTS TO BE PROVIDED 1m ABOVE GROUND LEVEL FOR EXTERNAL RWPS AND 1m ABOVE FFL FOR INTERNAL RWPS.
- UNLESS OTHERWISE NOTED OR SIMILAR APPROVED CHANNEL DRAINS TO BE ACO MULTI DRAIN WITH A15 GRATING IN PEDESTRIAN AREAS, C250 IN CAR PARKS AND D400 IN CARRIAGEWAYS. SLOTTED CHANNEL TO BE USED FOR AREAS WITH FALLS < 1:15 MESH GRATINGS TO BE USED WHERE FALLS > 1:15.
- GULLY AND CHANNEL DRAIN POSITIONS ARE LIABLE TO AMENDMENT WHEN THE DESIGN LEVELS HAVE BEEN DETERMINED.
- MODULAR GEOCELLULAR STORAGE/SOAKAWAY SYSTEM TO CONFORM TO CIRIA C793 THE SUDS MANUAL, C688 STRUCTURAL DESIGN OF MODULAR GEOCELLULAR DRAINAGE TANKS & C686 SITE HANDBOOK FOR THE CONSTRUCTION OF SUDS. THE MANUFACTURER SHOULD PROVIDE A COMPLETE SET OF INDEPENDENT TEST RESULTS FOR A PROPOSED SYSTEM INCLUDING, AS A MINIMUM, STRESS/STRAIN CURVES FOR VERTICAL AND LATERAL COMPRESSION, AND CREEP TESTS UNDER SUSTAINED LONG-TERM LOADS. A BBA CERTIFICATE IS NOT INDEPENDENT TEST DATA.
- ALL REDUNDANT DRAINAGE TO BE ABANDONED ONCE THE CONTRACTOR HAS SATISFIED HIMSELF THAT NO CONNECTIONS REMAIN LIVE. REDUNDANT DRAINAGE TO BE GRUBBED OUT.
- ALL BELOW GROUND CONCRETE TO ACCORD WITH BS5328:1997 SULPHATE CLASS TBA.

RL 55.59



CAR PARK DRAINAGE TO BE CONNECTED TO NEW TANK, UNLESS SERVED BY AN EXISTING SOAKAWAY 5m FROM ANY STRUCTURE, IS PRESENT.

SW 01.00
ATTENUATION TANK USING CELLULAR STORAGE DESIGNED FOR 1:100 YEAR RETURN PERIOD PLUS 40% ADDITIONAL STORAGE TO ALLOW FOR CLIMATE CHANGE
CL. 49.710-49.620
TOTL: 48.970
BOTL: 48.170
SIZE: 20.0mx4.5m(90.0m²)x0.80m DP
36.000m³ STORAGE
34.200m³ WATER STORAGE (95% VOIDS)
MIN 650mm COVER
TANK REQUIRES VENTILATION
DETAILS TBC BY MANUFACTURER



IMPORTANT NOTE: CAUTION
ALL INFORMATION SHOWN ON THIS DRAWING FOR UNDERGROUND SERVICES/STATORY UNDERTAKERS' PLAN IS APPROXIMATE AND IS PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY. IT SHOULD NOT BE RELIED ON FOR EXCAVATION OR ANY OTHER WORKS PURPOSES AND CONTRACTORS MUST SATISFY THEMSELVES OF THEIR LOCATIONS PRIOR TO THE COMMENCEMENT OF WORKS.

0 1 2 3 4 5 6
SCALE @ A1 1:100
SCALE @ A3 1:200
METRES

P02	25/07/24	TANK POSITION REVISED	SB
P02	23/05/24	UPDATED TO SUIT COMMENTS	SB
P01	26/01/24	FIRST ISSUE	SB
REV	DATE	DESCRIPTION	ISSUED
CLIENT			
ARCHITECT			
FIELDING ARCHITECTURE			
PROJECT TITLE			
LAUREN HOUSE 6 BEECHPARK AVENUE MANCHESTER, M22 4BL			
DATE OF FIRST ISSUE		SCALE @ A1	SCALE @ A3
JAN 2024		1:100	1:200
PROJECT TECHNICIAN / ENGINEER		PROJECT LEAD ENGINEER	
J.MARSH		S.BAKER	
DRAWING TITLE			
PROPOSED BELOW GROUND DRAINAGE LAYOUT ATTENUATION TANK			
			
w: www.Baker-AssociatesLtd.co.uk e: enquires@Baker-AssociatesLtd.co.uk t: 023 8129 0229		Wessex House Upper Market Street Eastleigh Hampshire SO50 9FD	
DRAWING NUMBER			
P2095-BAK-XX-XX-DR-C-0502			
PROJECT STATUS			REVISION
S2 SUITABLE FOR INFORMATION			P03