



OPERATION AND MAINTENANCE REQUIREMENTS FOR ATTENUATION STORAGE TANKS

MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
REGULAR MAINTENANCE	INSPECT & IDENTIFY ANY AREAS THAT ARE NOT OPERATING CORRECTLY. IF REQUIRED, TAKE REMEDIAL ACTION	MONTHLY FOR 3 MONTHS THEN ANNUALLY
	REMOVE DEBRIS FROM THE ATTACHMENT SURFACE (WHERE IT MAY CAUSE RISK TO PERFORMANCE)	MONTHLY
	REMOVE SEDIMENT FROM PRE-TREATMENT ROAD GULLIES & SILT TRAP MANHOLE	MONTHLY FOR 3 MONTHS THEN ANNUALLY OR AS REQUIRED
REMEDIATION ACTIONS	REPAIR/REHABILITATE INLETS, OUTLETS, OVERFLOWS & VENTS	AS REQUIRED
MONITORING	INSPECT/CHECK ALL INLETS, OUTLETS, VENTS & OVERFLOWS TO ENSURE THAT THEY ARE IN GOOD CONDITION & OPERATING AS DESIGNED	ANNUALLY
	CCTV SURVEY INSIDE OF TANK FOR SEDIMENT BUILD-UP & REMOVE IF NECESSARY	AFTER CONSTRUCTION, 1 YEAR, & THEN EVERY 5 YEARS OR AS REQUIRED

KEY:

- SW000 CL: IL: 1500, X_m @ 1:X SURFACE WATER MH & DRAINAGE RUN
- FW000 CL: IL: 1500, X_m @ 1:X FOUL WATER MH & DRAINAGE RUN
- EX SW CL: IL: XXØ, X_m @ 1:X EXISTING SURFACE WATER MH & DRAINAGE RUN
- EX FW CL: IL: 1500, X_m @ 1:X EXISTING FOUL WATER MH & DRAINAGE RUN
- SW ACO CHANNEL SURFACE ACO CHANNEL
- SURFACE GULLY
- SURFACE RODDING EYE
- RAINWATER PIPE
- SOIL VENT PIPE
- FLOOD ROUTE
- FLOOD ROUTE FOR STORM EVENTS IN EXCESS OF 1 IN 100 YEARS + 40% CLIMATE CHANGE
- PROPOSED BANKING
- PROPOSED LEVELS
- PROPOSED GRADIENTS
- EXISTING BOUNDARY LEVELS

DO NOT SCALE, IF IN DOUBT ASK, DO NOT INTERROGATE CAD BASE

DRAINAGE NOTES:

- THIS DRAWING HAS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS AND SPECIFICATIONS.
- FOR DRAINAGE DETAILS REFER TO DRAWING P15598-501.
- FOR LOCATION OF ALL R.W.P.'s & INTERNAL POP-UP'S REFER TO ARCHITECTS DRAWING. ALL DOWN PIPES TO BE FITTED WITH ACCESS HANDHOLES ABOVE F.F.L. OR GROUND LEVEL.
- ALL GULLY CONNECTIONS TO BE 1500 U.N.O. ALL S.V.P. CONNECTIONS TO BE MINIMUM 1000 OR TO MATCH S.V.P. DOWNPIPE IF GREATER. ALL R.W.P. CONNECTIONS TO BE 1500 OR TO MATCH R.W.P. DOWNPIPE.
- ALL PIPES UP TO 4500 TO BE UPVVC PIPES. PIPES GREATER THAN 4500 TO BE CONCRETE.
- PIPES UNDER ROADS HAVING 1200mm OR LESS COVER ARE TO BE ENCASED IN CONCRETE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- MANHOLE COVER LEVELS ARE INDICATIVE AND SHOULD BE SET TO SUIT FINISHED ROAD LEVEL AND CAMBER.
- ALL EXTERNAL MANHOLES WITHIN ROADS TO BE FITTED WITH LOADCLASS D400 COVERS U.N.O. ALL EXTERNAL MANHOLES WITHIN SOFT LANDSCAPING TO BE FITTED WITH LOADCLASS B125 COVERS U.N.O. ALL IN ACCORDANCE WITH BS EN 124:2015 (ALL PARTS).
- INVERT LEVELS OF EXISTING DRAINS AND MANHOLES TO BE CONFIRMED ON SITE PRIOR TO COMMENCING OPERATIONS. NO EXISTING SEWER MANHOLE TO BE OPENED OR ENTERED WITHOUT THE PERMISSION OF THE LOCAL AUTHORITY DRAINAGE DEPARTMENT AND THE ATTENDANCE OF SEWER PERSON AS REQUIRED.
- DRAINAGE DESIGN AND INSTALLATION TO BE TO THE SATISFACTION OF THE LOCAL BUILDING CONTROL DEPARTMENT AND TO COMPLY WITH BS EN 752:2017, BS EN 1610:2015, BS EN 12056-1:2000, BS EN 12056-2:2000 AND BS EN 12056-3:2000.
- ADOPTABLE DRAINAGE WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF 'SEWERS FOR ADOPTION'.
- ALL SUDS COMPONENTS TO BE MAINTAINED IN ACCORDANCE WITH CIRIA C 768.
- SURFACE WATER ATTENUATION GRATES TO BE WAVIN AQUACELL PLUS OR SIMILAR APPROVED. TO BE INSTALLED IN LINE WITH MANUFACTURERS SPECIFICATION.

SURFACE WATER ATTENUATION

PROPOSED IMPERMEABLE AREA: 870m² (0.087 Ha)
 SITE AREA: 920m² (0.092 Ha)
 EXISTING IMPERMEABLE AREA: 850m² (0.085 Ha)
 EXISTING SURFACE WATER RUN-OFF: 2.78x10.085x50 = 11.8L/S - 30% = 8.3L/S
 DISCHARGE RATE: 8.3L/S
 CELLULAR TANK DIMENSIONS: 6m x 4.5m x 0.8m x 0.95 = 20.5m³
 STORM EVENT: 1 IN 100YR + 40% CLIMATE CHANGE

CDM NOTES

- ACCESS AND EGRESS TO THE SITE FROM BUSY ROAD.
- POTENTIAL GROUND INSTABILITY IN DEEP EXCAVATIONS
- NO HEAVY PLANT OR STOCK PILES PERMITTED OVER OR WITHIN 3m OF THE CONSTRUCTED TANK
- TANK TO BE FULLY PROTECTED FROM SILT AND DEBRIS INGRESS DURING CONSTRUCTION, AND TO BE INSPECTED AND MAINTAINED DURING OPERATION AS DETAILED ABOVE
- TANKS NOT DESIGNED TO RESIST UPLIFT UNTIL FULLY BACKFILLED
- EXISTING SERVICES IDENTIFIED ON SITE
- ADEQUATE SEGREGATION HOARDING REQUIRED TO SEPARATE PUBLIC FROM THE CONSTRUCTION SITE
- ADEQUATE MEASURES REQUIRED TO CONTROL NOISE, DUST, FUMES & VIBRATION
- POTENTIAL HOT SPOT CONTAMINATION DUE TO PREVIOUS SITE USE
- COMBINED DRAINAGE CONNECTION INTO EXISTING SEWERS IN THE HIGHWAY - ADEQUATE RAMS AND SITE CONTROL REQUIRED.

REFER TO DESIGNERS HAZARD ASSESSMENTS FOR FURTHER DETAILS.

REV.	DATE	REVISION	BY	CHK
-	-	FIRST ISSUE	PH	NB

Euro Garages Ltd

Proposed Convenience Store
 Solihull High Street, Shirley

Drainage Layout Plan

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PLANNING

DATE CREATED:	Dec. 21'	SCALE:	1:100 @ A1
CONTRACT No:	P15588	DRAWING No:	500
REV:	-		

OFF SITE CONNECTION

DRAINAGE CCTV SURVEY TO CONFIRM THE PRESENCE OF ON SITE CONNECTION TO THE EXISTING PUBLIC FOUL AND SURFACE WATER SEWER NETWORK. TAIL TO BE RE-USED IF FOUND TO BE OF SUFFICIENT DEPTH.

ALLOW FOR NEW CONNECTION TO EXISTING PUBLIC FOUL/SURFACE SEWER UNDER SECTION 106. CCTV DRAINAGE SURVEY TO CONFIRM WHETHER EXISTING SITE CONNECTIONS CAN BE UTILISED.

FFL: 144.52

SVP POSITIONS ARE INDICATIVE. EXACT POSITIONS TO BE CONFIRMED BY THE ARCHITECT - FOUL DRAINAGE RUN AMENDED TO SUIT.