



KEY

- SITE BOUNDARY
- EXISTING SURFACE WATER DRAIN
- EXISTING FOUL WATER DRAIN
- EXISTING DRAINAGE TO BE ABANDONED BY GRUBBING UP.
- PROPOSED SURFACE WATER DRAINAGE
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER PPIC (POLYPROPYLENE INSPECTION CHAMBER)
- PROPOSED SURFACE WATER DRAINAGE CHANNEL. ALL OUTLET PIPES TO BE 1500.
- RG
- PROPOSED FOUL WATER DRAINAGE
- PROPOSED FOUL WATER PPIC (POLYPROPYLENE INSPECTION CHAMBER)
- EXCEEDANCE OVERLAND FLOW ROUTE

THIS DRAWING SHOULD NOT BE SCALED. DIMENSIONS TO BE VERIFIED ON SITE. ANY DISCREPANCIES SHOULD BE REFERRED TO THE ENGINEER PRIOR TO WORK COMMENCING.

- NOTES**
- ROOF DRAINAGE SYSTEM - TRADITIONAL**
- ASSUMED TRADITIONAL RAINWATER PIPE ROOF DRAINAGE SYSTEM.
 - ALL RWP POSITIONS SHOWN INDICATIVELY. TO BE CONFIRMED BY THE ARCHITECT AND/OR MSE ENGINEER.
 - ALL RWP CONNECTIONS TO BE 1500 UNLESS NOTED OTHERWISE.
- PETROL/OIL INTERCEPTOR**
- ALL PETROL/OIL INTERCEPTORS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.
 - ALL INTERCEPTORS TO BE FITTED WITH HIGH LEVEL EXCESS OIL AND SILT PROBE.
 - CONTROL PANEL, FLASHING BEACON AND SIREN TO BE PROVIDED WITH CONTROL PANEL LOCATED WITHIN OFFICE ACCOMMODATION. ROUTE OF DUCTING BETWEEN CONTROL PANEL AND INTERCEPTOR TO BE DETERMINED BY OTHERS.
 - VENT PIPE TO BE PROVIDED FROM PETROL/OIL INTERCEPTOR INTO ADJACENT LANDSCAPED AREA.
- VORTEX FLOW CONTROL**
- VORTEX FLOW CONTROL REQUIRED TO RESTRICT SURFACE WATER RUN-OFF TO THE PRE-DETERMINED MAXIMUM DISCHARGE RATE SHOWN ON THE DRAWING.
 - FLOW CONTROL TO BE DESIGNED BY SUPPLIER TO MEET THE MAXIMUM DISCHARGE RATE AND HEAD SHOWN ON THE DRAWING.
 - DETAILS OF FLOW CONTROL DEVICE TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO WORKS COMMENCING ON SITE.
 - BYPASS/RAIN DOWN VALVE TO BE PROVIDED TO ALLOW DRAIN DOWN OF ATTENUATION TANK IN THE EVENT OF FLOW CONTROL DEVICE FAILURE/BLOCKAGE. OPERATING ROD TO BE POSITIONED IN MANHOLE TO ALLOW OPERATION FROM GROUND LEVEL.
- SURFACE WATER ATTENUATION TANK**
1. A SURFACE WATER ATTENUATION TANK IS REQUIRED TO ACHIEVE THE RESTRICTED RUN-OFF RATE NOTED ON THE DRAWING.
 2. ATTENUATION TANK TO BE DESIGNED BY SPECIALIST SUB-CONTRACTOR BASED ON THE DESIGN INTENT SHOWN ON THE DRAWING.
 3. ATTENUATION TANK TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS, INCLUDING BACKFILL IMMEDIATELY ABOVE THE TANK.
 4. GENERAL FILL OVER THE ATTENUATION TANK TO BE PLACED AND COMPACTED IN ACCORDANCE CLAUSE 02 OF THE SPECIFICATION FOR HIGHWAY WORKS (SHW) SERIES 600. METHOD OF COMPACTION SHALL BE BASED ON THE MATERIAL BEING PLACED AND SHALL BE CLASSIFIED IN ACCORDANCE WITH THE REQUIREMENTS OF TABLE 6.1.
 5. MATERIAL TO BE PLACED AND COMPACTED USING METHOD COMPACTION WITH LAYER THICKNESS AND NUMBER OF PASSES SELECTED USING TABLE 6.4.
 6. PLATE LOAD TESTING TO BE UNDERTAKEN ABOVE TANK, AT FORMATION LEVEL, TO CONFIRM MINIMUM CBR OF 5%.
 7. THE CONTRACTOR SHALL PROVIDE SITE SPECIFIC DRAWINGS FOR THE CELLULAR TANK FOR PRICE APPROVAL PRIOR MANUFACTURE.
 8. ATTENUATION STRUCTURE DESIGN
 - THE MANUFACTURER SHALL PROVIDE STRUCTURAL CALCULATIONS IN ACCORDANCE WITH CIRIA DOCUMENT C886 (SITE USE = LOW SPEED ROADS <15mph), INCLUDING LATERAL LOADS. DESIGNED FOR THE MAXIMUM AND MINIMUM DEPTHS OF COVER.
 - MAXIMUM DEPTH OF COVER = 1315mm
 - MINIMUM DEPTH OF COVER = 1200mm
 - FACTOR OF SAFETY (F.O.S.) FOR MATERIALS = 2.75, UNLESS SUBSTANTIATED BY THE SUPPLIER IN WHICH A F.O.S. OF 1.5 MAY BE APPROPRIATE.
 - A MAXIMUM COEFFICIENT OF FRICTION OF 80° SHALL BE USED IN THE DESIGN OF THE TANK FOR THE BACKFILL MATERIAL.
 - THE DESIGN LIFE OF THE ATTENUATION SYSTEM SHALL BE 50 YEARS. THE MANUFACTURER SHALL ADVISE OF ANY ONGOING MAINTENANCE.
 9. CONSIDERATION SHALL BE GIVEN TO THE INSTALLATION PROGRAMME FOR THE ATTENUATION TANK AS CONSTRUCTION PLANT TRAFFICKING OVER THE TANKS MAY BE LIMITED. TANK MANUFACTURER TO ADVISE OF CONSTRUCTION TRAFFIC LIMITS OVER ATTENUATION TANK FOLLOWING INSTALLATION.
 10. NO SITE RUN-OFF SHOULD BE PASSED THROUGH THE CELLULAR ATTENUATION TANK FOLLOWING INSTALLATION.

- GRAVITY DRAINAGE OUTFALL**
- IT IS ASSUMED THAT A GRAVITY DRAINAGE OUTFALL INTO THE EXISTING SEWER, DRAIN OR WATERCOURSE IS AVAILABLE.
 - THE LOCATION, SIZE AND DEPTH OF THE EXISTING DRAIN/SEWER/DITCH SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO ANY WORKS COMMENCING ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - SHOULD THE GRAVITY CONNECTION NOT BE POSSIBLE THEN A PACKAGE PUMP STATION MAY BE REQUIRED.
- DRAINAGE NOTES**
1. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT PARTS OF BS EN 752 DRAINS AND SEWER SYSTEMS OUTSIDE BUILDINGS, THE CURRENT BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFICATIONS AND REQUIREMENTS.
 2. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINS/SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 3. EXISTING DRAINAGE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM THE DRAINAGE SURVEY UNDERTAKEN BY GP DRAIN SURVEYS DATED 15.09.25.
 4. THE PROPOSED DRAINAGE AND PROPOSED FLOW RATE IS DESIGNED TO BE IN ACCORDANCE WITH PLANNING APPROVED RIVIO FLOOD RISK & DRAINAGE STRATEGY REPORT DATED SEPTEMBER 2021.

PO2	17.11.25	S5, S6 & SEPARATOR REPOSITIONED.	SLT
PO1	13.11.25	PRELIMINARY ISSUE.	SLT
REV	DATE	DESCRIPTION	BY

PROJECT

SPA FIELDS SLAITWAITE HD7 5BB

TITLE

PROPOSED DRAINAGE LAYOUT

CLIENT

DM TEXTILES MACHINERY

CONSULTING CIVIL & STRUCTURAL ENGINEERS

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STATUS

PRELIMINARY

DESIGNED BY	SLT	CHECKED BY	AF	HJCE REF.	8839
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