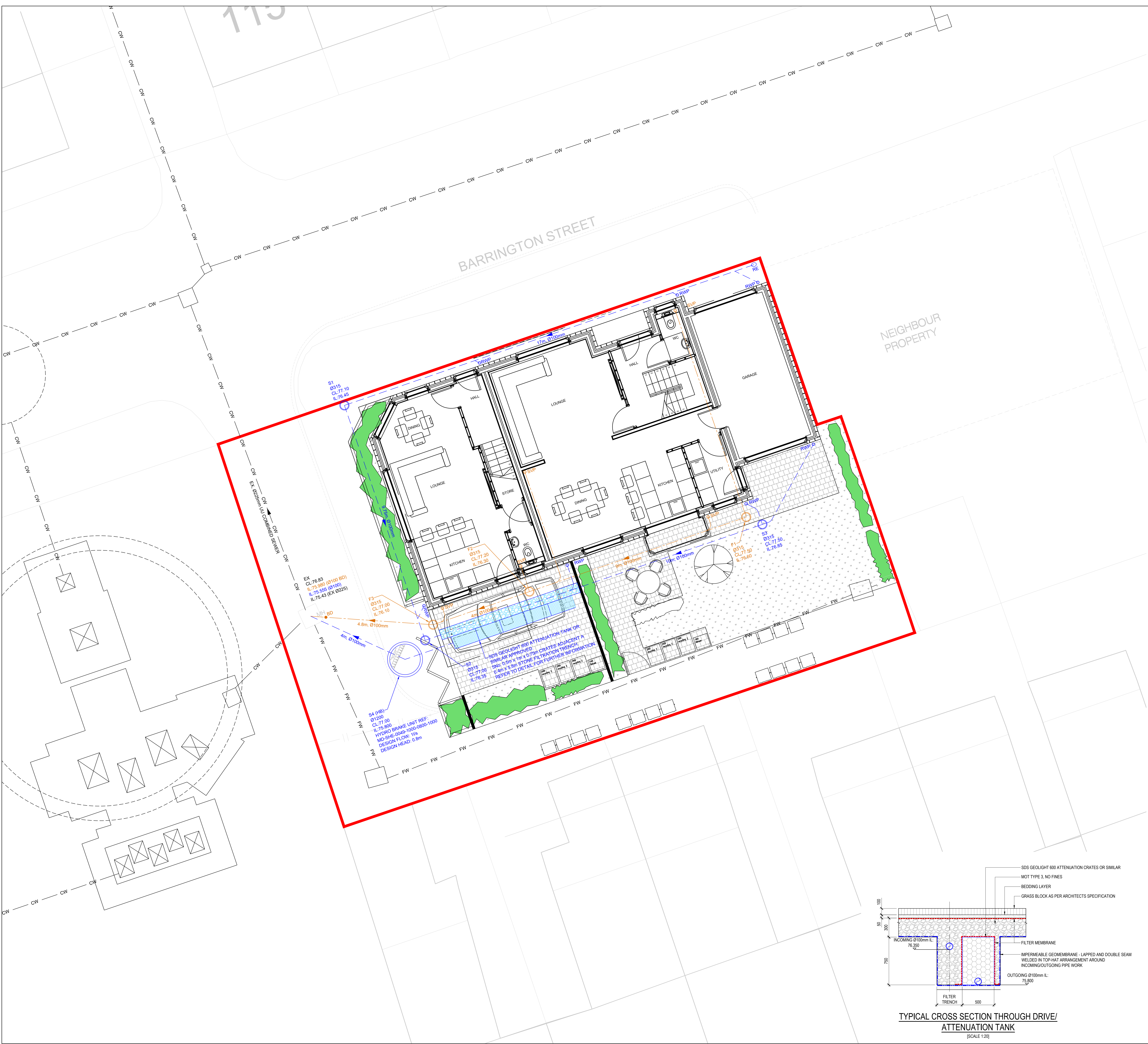




DRAINAGE NOTES

EXISTING DRAINAGE IS SHOWN INDICATIVE ONLY AND BASED UPON UNITED UTILITIES SEWER RECORDS.

IT IS RECOMMENDED THAT A CCTV SURVEY IS UNDERTAKEN PRIOR TO CONSTRUCTION TO DETERMINE THE EXACT LOCATION, DEPTH AND CONDITION OF ALL EXISTING DRAINAGE INFRASTRUCTURE IN THE VICINITY OF THE PROPOSED DEVELOPMENT.

THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE EXACT LOCATION AND DEPTH OF ALL EXISTING DRAINAGE PRIOR TO CONSTRUCTION AND PROVIDE ADEQUATE PROTECTION DURING THE CONSTRUCTION WORKS.

ALL NEW MANHOLE LEVELS ARE INDICATIVE ONLY AND BASED UPON THE EXISTING TOPOGRAPHICAL SURVEY INFORMATION. THE ARCHITECT IS RESPONSIBLE FOR CONFIRMING ALL COVER AND EXTERNAL FINISHED GROUND LEVELS PRIOR TO CONSTRUCTION.

ALL RAINWATER PIPES ARE SHOWN INDICATIVE ONLY AND ARE SUBJECT TO CONFIRMATION BY ARCHITECT PRIOR TO CONSTRUCTION.

ALL SVP & WASTEWATER COLLECTION POINTS ARE SHOWN INDICATIVE ONLY AND ARE SUBJECT TO CONFIRMATION BY ARCHITECT/M&E ENGINEER PRIOR TO CONSTRUCTION.

THE PROPOSED DRAINAGE DESIGN SHOWN IS INDICATIVE ONLY AND IS SUBJECT TO APPROVAL BY UNITED UTILITIES PRIOR TO CONSTRUCTION. ANY WORKS UNDERTAKEN PRIOR TO THE RECEIPT OF APPROVAL FROM UU IS UNDERTAKEN AT THE CONTRACTORS OWN RISK.

LEGEND

- CW EXISTING UNITED UTILITIES COMBINED WATER SEWER
- FW EXISTING UNITED UTILITIES FOUL WATER SEWER
- PROPOSED PRIVATE FOUL DRAIN
- PROPOSED PRIVATE SURFACE WATER DRAIN
- DENOTES CELLULAR ATTENUATION TANK
- DENOTES 0.4m (W) STONE FILTRATION
- BD DENOTES EXTERNAL BACKDROP
- RWP DENOTES RAINWATER PIPE

GENERAL NOTES

DO NOT SCALE FROM THIS DRAWING WORK TO FIGURED DIMENSIONS ONLY.

NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS ALLOWED WITHOUT PRIOR PERMISSION IN WRITING.

ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND THE SPECIFICATION.

THE CONTRACTOR SHALL INCORPORATE ALL THE REQUIREMENTS OF THE PRE-TENDER STAGE HEALTH AND SAFETY PLAN.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH TYPICAL DRAINAGE DETAIL DRAWINGS.

THE CONTRACTOR IS RESPONSIBLE FOR CHECKING INVERT LEVELS AND POSITIONS OF ALL EXISTING DRAINS, SEWERS, INSPECTION CHAMBERS AND MANHOLES SHOWN ON THIS DRAWING IMMEDIATELY ON SITE ESTABLISHMENT. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER IMMEDIATELY.

WHERE THE NEW SITE DRAINAGE CONNECTS IN TO EXISTING MANHOLES IN CARRIAGEWAYS AND/OR EXISTING ADOPTED SEWERS, THE CONTRACTOR IS RESPONSIBLE FOR ALL LIAISON WITH THE RELEVANT STATUTORY UNDERTAKER AND LOCAL AUTHORITY WITH REGARD TO ROAD CLOSURES, TRAFFIC MANAGEMENT, PERMITS TO WORK, SUBMISSION OF CONTRACTORS METHOD STATEMENTS AND RISK ASSESSMENTS AND OTHER DOCUMENTATION AND CORRESPONDENCE ASSOCIATED WITH THE SITE STAGE (PART 2) ELEMENT OF THE WORKS.

ROCKER PIPES TO BE PROVIDED AT ALL CONCRETE CASED INTERFACES.

THE CONTRACTOR IS TO PROVIDE ADEQUATE PROTECTION TO MAINTAIN MINIMUM COVER TO DRAINS DURING THE CONSTRUCTION PERIOD.

COVER LEVELS ON THIS DRAWING ARE APPROXIMATE AND INDICATIVE ONLY. ARCHITECT TO CONFIRM COVER LEVELS TO ALL MANHOLES AND GULLIES PRIOR TO CONSTRUCTION.

THE LAYOUT OF DRAINAGE ON THIS DRAWING IS INDICATIVE ONLY. ARCHITECT TO CONFIRM EXACT LOCATION OF MANHOLES AND GULLIES PRIOR TO CONSTRUCTION.

UNO. ALL DRAINAGE GOODS & FITTINGS TO BE:-

UPTO 3000 (AND INCLUDING) TO BE TWINWALL STRUCTURED PLASTIC PIPES APPROVED BY THE ENGINEER OR SUPERLEVE VITRIFIED CLAY PIPES.

ABOVE 3000 TO BE CONCRETE BY STANTON BONNA OR SIMILAR.

ALL COVERS AND RODDING ACCESS POINTS TO BE SEALED AND SCREWED TIGHT.

ALL PIPEWORK TO BE INSTALLED WITH SOFFITS LEVEL (E.G. AT CHANGES IN PIPE SIZE) U.N.O.

ON COMPLETION OF DRAINAGE WORKS, THE NEW DRAINAGE SYSTEM IS TO BE THOROUGHLY CLEANED AND A CCTV SURVEY CARRIED OUT TO CONFIRM NO CONSTRUCTION DEBRIS OR BLOCKAGES REMAIN.

CONNECTIONS TO CARRIER DRAINS ARE TO BE 'Y' JUNCTIONS.

ALL PRIVATE DRAINAGE IS TO COMPLY WITH BS EN 752 AND BUILDING REGS. PART H.

PIPE GRADIENTS SHOWN ARE INDICATIVE MINIMUMS.

MANHOLES:

ALL PROPOSED NEW MANHOLES TO BE PRECAST RING MANHOLES TYPE B UNLESS NOTED OTHERWISE. INTERNAL DIAMETERS OF MANHOLES TO BE 1050mm WHERE DEPTH TO PIPE SOFFIT IS LESS THAN 1.5m. AND 1200mm Ø ELSEWHERE UNLESS NOTED OTHERWISE. IC - DENOTES POLYPROPYLENE INSPECTION CHAMBER BY 'HEPWORTH' OR SIMILAR APPROVED. INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

MANHOLE COVERS:

CARRIAGEWAYS GENERAL - EN124 CLASS D400

CARRIAGEWAYS WITHIN 0.5m OF KERB - EN124 CLASS C250

SLOW MOVING HOV (2M) - EN 124 CLASS B125 SLOW MOVING

GLV (10) - EN 124 CLASS B125 SLOW MOVING PRIVATE CARS - EN124 CLASS B125

INTERNAL - JONES OF OSWESTRY - SUPRASTEEL DOUBLE SEALED WITH NEOPRENE GASKET AND COVER GREASE OR SIMILAR APPROVED.

REFER TO ARCHITECTS DRAWINGS FOR DETAILS OF ANY MANHOLE COVERS WHICH REQUIRE INSET PANELS.

SUBJECT TO APPROVAL FROM THE LOCAL AUTHORITY & UNITED UTILITIES

P03	09.11.23	DB	OUTFALL LEVELS CONFIRMED	JNL
P02	26.07.23	DB	REVISED TO SUIT FRMT COMMENTS	JNL
P01	24.05.23	DB	PRELIMINARY ISSUE	JNL
REV	DATE	NAME	REVISION	REV CHECK



Consulting Structural & Civil Engineers

TITLE: PROPOSED DRAINAGE GA

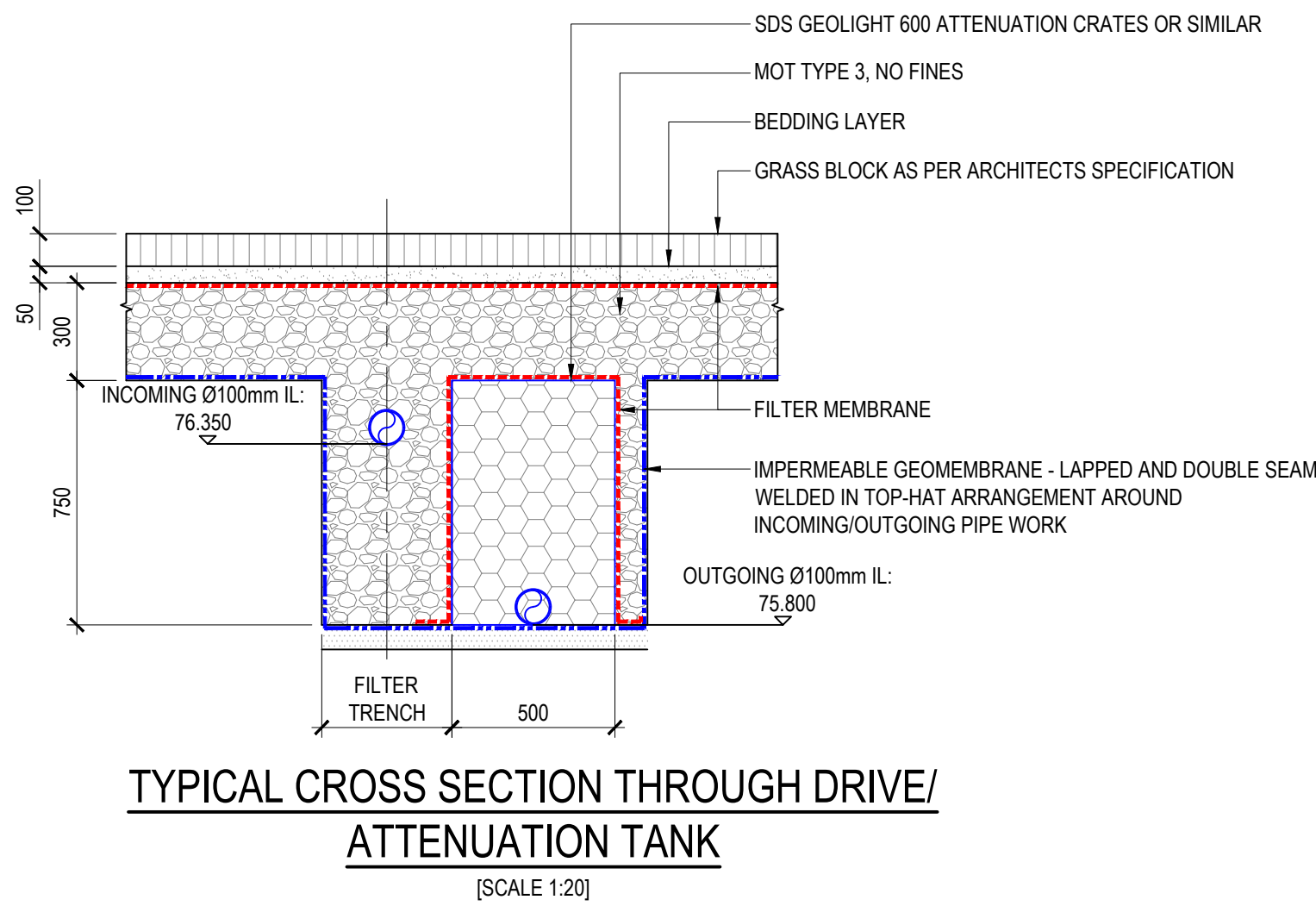
PROJECT: 113-117 NORTH ROAD, MANCHESTER

CLIENT: BRINDLE & YAM SOLICITORS

DRAWN AT: OFFICE	DRAWN BY: DB	C.A.D.
SCALE: 1:100 @ A0	DATE: JAN 2023	CHECKED BY: JNL
CONTRACT NO: 23282	DRAWING NO: 1001	

RESIDUAL RISK REGISTER -

- REFER TO WMIL CIVIL / STRUCTURAL DESIGN RISK REGISTER IN ADDITION TO THE HAZARDOUS / RISKS NORMALLY ASSOCIATED WITH THIS TYPE OF WORKS INDICATED ON THIS DRAWING. NOTE THE FOLLOWING:-
- CONTRACTOR TO SCAN FOR SERVICES & CLEARLY MARK AT GROUND LEVEL PRIOR TO COMMENCEMENT OF EXCAVATION.
 - 'UNKNOWN' SERVICES TO BE TESTED TO SEE IF LIVE PRIOR TO COMMENCEMENT OF EXCAVATION.



TYPICAL CROSS SECTION THROUGH DRIVE/ ATTENUATION TANK (SCALE 1:20)