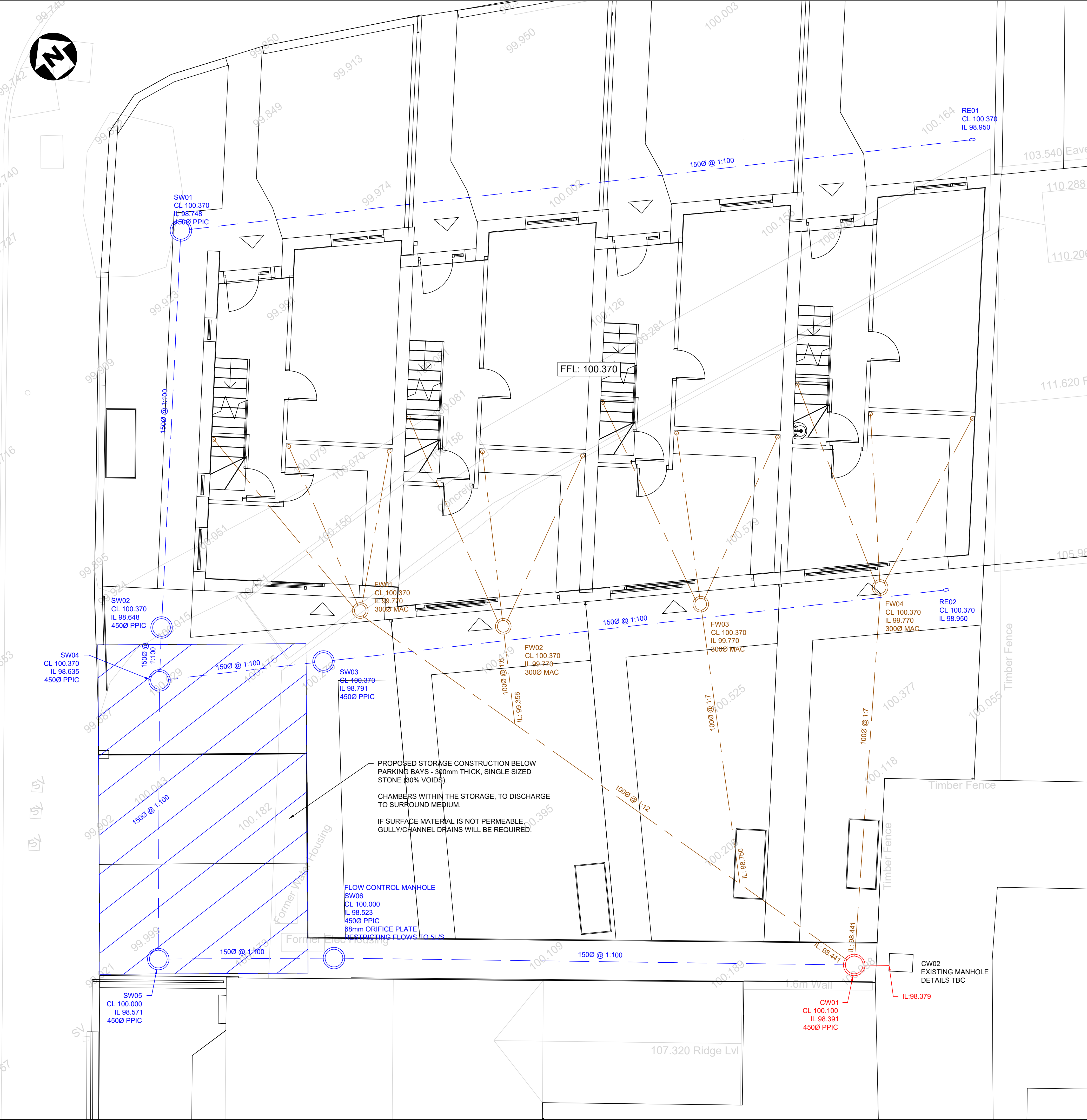




MAINTENANCE OF THE BELOW GROUND DRAINAGE SYSTEM

THE BELOW GROUND FOUL AND SURFACE WATER DRAINAGE PROPOSALS INDICATED ARE RELATIVELY TRADITIONAL IN NATURE, AND SHOULD PROVIDE YEARS OF RELATIVELY LOW MAINTENANCE OPERATION IN RELATION TO THE ANTICIPATED LIFESPAN OF THE PROPOSED DEVELOPMENT.

IN LINE WITH CURRENT GOOD PRACTICE:-

- ANY GULLIES AND LINEAR DRAINAGE CHANNELS SHOULD BE INSPECTED AND / OR CLEANED OUT AT 6 MONTHLY INTERVALS.
- INSPECTION CHAMBERS, MANHOLES, CATCHPITS, ETC. SHOULD BE INSPECTED AT 6 MONTHLY INTERVALS TO ENSURE THAT THE PIPEWORK AND INFILTRATION DEVICES ASSOCIATED WITH THEM ARE OPERATING EFFECTIVELY.
- THE FLOW CONTROL CHAMBER HAS A 68mm ORIFICE, WHICH WILL BE SUBJECT TO BLOCKAGE. THIS CHAMBER MUST BE INSPECTED AT 3 MONTH INTERVALS AND IF ANY FLOODING DOES OCCUR, THIS SHOULD BE THE FIRST THING TO CHECK.

ANY PROBLEMS HIGHLIGHTED BY THESE INSPECTIONS WILL NEED TO BE INVESTIGATED, POSSIBLY BY CCTV SURVEY, TO CONFIRM THE NATURE OF THE PROBLEM AND TO ALLOW IT TO BE REMEDIED IN A TIMELY MANNER.

IT IS UNDERSTOOD THAT THE MONITORING AND ROUTINE MAINTENANCE OF THE BELOW GROUND DRAINAGE SYSTEM WILL BE CARRIED OUT BY THE OCCUPIER'S MAINTENANCE STAFF WITH ADDITIONAL HELP PROVIDED BY EXTERNAL SPECIALIST DRAINAGE PROFESSIONALS BROUGHT IN AS REQUIRED.

SURFACE WATER DRAINAGE STRATEGY

THE PROPOSED DEVELOPMENT IS TO BE DRAINED VIA SEPARATE FOUL AND SURFACE WATER DRAINAGE SYSTEMS.

THE SURFACE WATER DRAINAGE PROPOSALS HAVE BEEN DESIGNED IN ACCORDANCE WITH BS EN 752-4 AND THE BUILDING REGULATIONS APPROVED DOCUMENT H (2010), WHICH INDICATES THE FOLLOWING HIERARCHY FOR THE DISPOSAL OF SURFACE WATER DRAINAGE FROM DEVELOPMENT SITES:-

- DISCHARGE VIA INFILTRATION;
- DISCHARGE TO WATERCOURSE;
- DISCHARGE TO SEWER.

THESE OPTIONS ARE DISCUSSED IN FURTHER DETAIL BELOW.

SURFACE WATER DISCHARGE VIA INFILTRATION
WHILST AN INTRUSIVE SITE INVESTIGATION IS YET TO BE COMPLETED AT THE SITE, IT IS ASSUMED THAT INFILTRATION IS NOT VIABLE.

SURFACE WATER DISCHARGE VIA WATERCOURSE
GIVEN THE ABOVE IT WOULD NEXT TO LOOK AT THE NEAREST WATERCOURSE, HOWEVER THERE ARE NO WATERCOURSES WITHIN A REASONABLE DISTANCE TO THE SITE WITHIN THE CLIENTS CONTROL.

SURFACE DISCHARGE VIA THE PUBLIC SEWERAGE SYSTEM
GIVEN THE ABOVE IT IS NECESSARY TO DISCHARGE THE SURFACE WATER RUNOFF FROM THE PROPOSED DEVELOPMENT TO THE PUBLIC DRAINAGE SYSTEM. THIS WILL BE VIA A COUPLE OF EXISTING MANHOLES IN THE ACCESS ROAD AT THE REAR OF THE PROPERTY. DETAILS OF THE DEPTHS ARE UNKNOWN, HOWEVER A VISUAL INSPECTION WAS CARRIED OUT AND THE DEPTH WAS ESTIMATED AT 1.5 - 2.0m DEEP. AN ON SITE INVESTIGATION WILL BE NEEDED TO CONFIRM THE EXACT DEPTH.

IN LINE WITH MODERN DESIGN STANDARDS FOR SURFACE WATER DRAINAGE SYSTEMS, THE PROPOSALS HAVE BEEN FORMULATED TO ENSURE THERE WILL BE:-

- NO SURCHARGING OF SEWERS FOR THE CRITICAL 1 IN 1 YEAR STORM EVENT.
- NO SURFACE FLOODING FOR THE CRITICAL 1 IN 30 YEAR EVENT.
- NO SURFACE FLOODING THAT MAY AFFECT BUILDINGS ON OR OFF SITE FOR THE CRITICAL 1 IN 100 YEAR EVENT INCLUDING A 40% CLIMATE CHANGE ALLOWANCE.

DUE TO THE LOW AREA OF THE PROPOSED SITE AND THE PREVIOUS USE BEING MOSTLY LANDSCAPING, THE NEED FOR A LOW DISCHARGE RATE (5l/s) MEANS A 49mm DIAMETER ORIFICE PLATE HAS BEEN USED TO RESTRICT THE WATER. THIS IS MORE LIKELY TO BLOCK, HOWEVER THE MEANS OF CONVEYANCE MEANS IT IS STILL A LOW PROBABILITY. IT CAN BE FURTHER REDUCED IF THE PARKING BAYS ARE PERMEABLE AS THE MAIN CAUSE OF BLOCKAGE IS DUE TO LEAVES ENTERING THE SYSTEM VIA GULLIES/CHANNEL DRAINS.

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.

FOR DETAILS OF MATERIALS AND WORKMANSHIP REFER TO THE SPECIFICATION.

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 WML CONSULTING IMMEDIATELY.

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.

U.N.O. ALL DRAINAGE GOODS & FITTINGS TO BE SUPERSLEVE VITRIFIED CLAY PIPES OR EQUIVALENT.

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

SETTING OUT OF ALL INTERNAL GULLY / PLUMBING CONNECTIONS TO BE COORDINATED BETWEEN THE SERVICE ENGINEERS AND THE ARCHITECT.

ALL INTERNAL GULLIES, PLUMBING CONNECTIONS, SOIL STACKS, SVPS AND ALL OTHER CONNECTIONS OF FOUL AND SURFACE WATER DRAINS TO BELOW GROUND TO BE FITTED WITH ACCESSIBLE RODDING POINTS ABOVE SLAB LEVEL.

ALL SURFACE WATER CONNECTIONS TO BE 150mm DIAMETER AT MINIMUM FALLS OF 1:100 UNLESS NOTED OTHERWISE.

ALL FOUL WATER CONNECTIONS TO BE 100mm DIAMETER AT MINIMUM FALLS OF 1:40 UNLESS NOTED OTHERWISE.

ALL CONNECTIONS TO BE MADE IN ACCORDANCE WITH STANDARD DETAIL DRAWINGS.

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.

MANHOLE COVERS IN VEHICULAR AREAS TO BE EN124 CLASS D400, IN NON - VEHICULAR AREAS TO BE EN124 CLASS C250

PRELIMINARY DRAWING

T02	UPDATED TO MCC COMMENTS	06.04.23	RPH	NG
T01	UPDATED TO NEW FFL & UU DISCHARGE RATE	29.11.22	RPH	NG
Rev.	Amendment	Date	By	Chkd

Project

MOSS LANE MANCHESTER

Client

Title

DRAINAGE DESIGN GA

WML Job No.	Drawn	Checked	Date	Scale
10417	RPH	NG	01.11.22	1:50@A1
WML CONSULTING Civil, Structural & Geotechnical Engineers No 5 Oak Green Earl Road Stanley Green Business Park Cheshire SK9 6QL Tel 0181 482 0600 Fax 0181 486 8210 e-mail info@wmlconsulting.com www.wmlconsulting.com				
Drawing No.				
Project	Originator	Volume	Level	Type
10417	WML	ZZ	XX	DR
				C
				1000
				T01