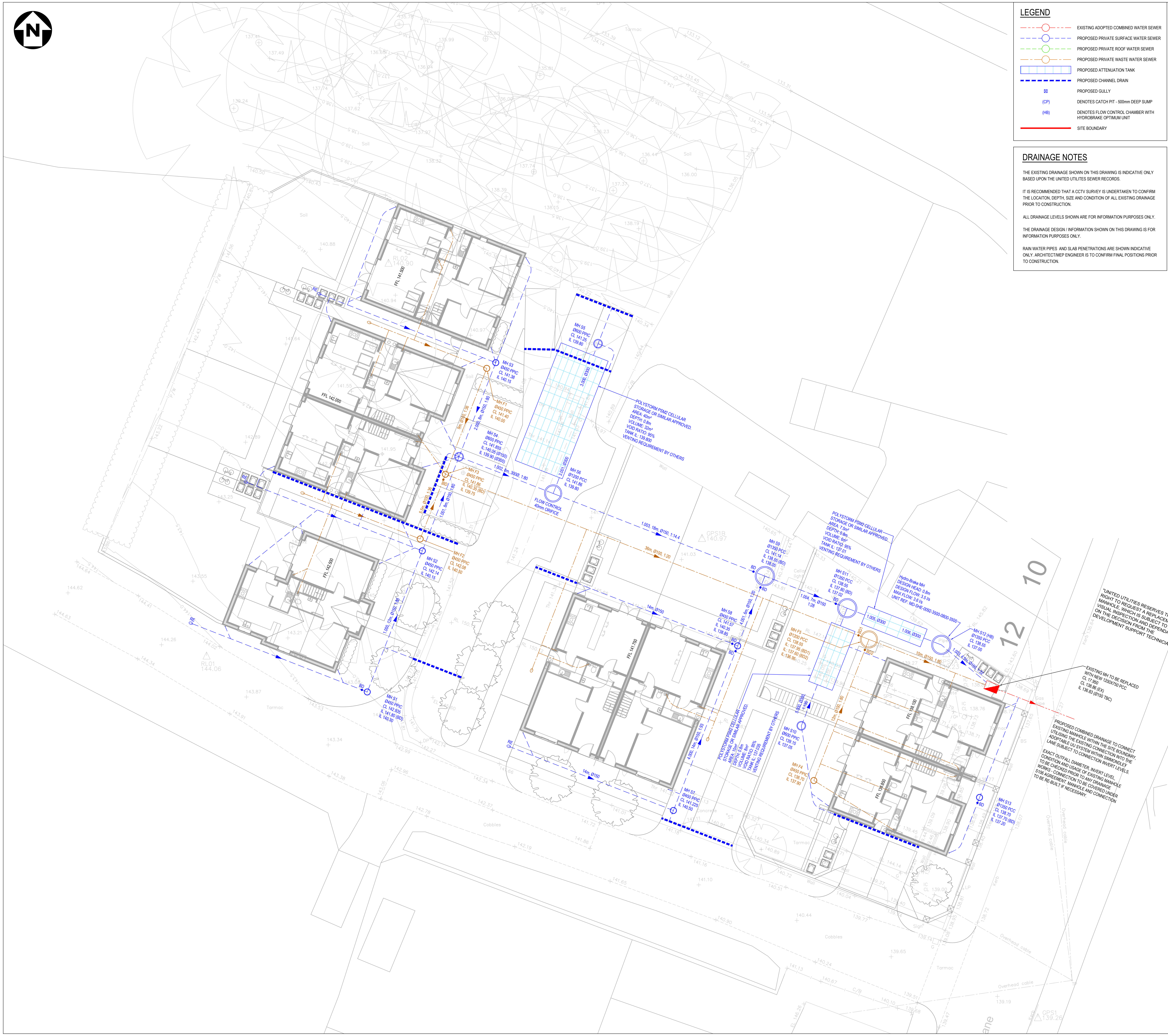

"UNITED UTILITIES RESERVES THE RIGHT TO REQUEST A REPLACEMENT MANHOLE, WHICH IS SUBJECT TO A VISUAL INSPECTION AND DEPENDANT ON THE DECISION FROM THE DEVELOPMENT SUPPORT TECHNICIAN."

PROPOSED COMBINED DRAINAGE TO CONNECT EXISTING MANHOLE WITHIN THE SITE BOUNDARY, UTILISING THE EXISTING CONNECTION INTO THE ADOPTABLE UU SYSTEM WITHIN SIMMONDLEY LANE SUBJECT TO CONNECTION INVERT LEVELS.

EXACT OUTFALL DIAMETER, INVERT LEVEL, CONDITION AND USAGE OF EXISTING MANHOLE TO BE CHECKED PRIOR TO ANY DRAINAGE WORKS - CONNECTION TO BE COVERED UNDER S106 AGREEMENT. MANHOLE AND CONNECTION TO BE RE-BUILT IF NECESSARY.

LEGEND

—○—	EXISTING ADOPTED COMBINED WATER SEWER
—○—	PROPOSED PRIVATE SURFACE WATER SEWER
—○—	PROPOSED PRIVATE ROOF WATER SEWER
—○—	PROPOSED PRIVATE WASTE WATER SEWER
▦	PROPOSED ATTENUATION TANK
▬ ▬ ▬	PROPOSED CHANNEL DRAIN
⊠	PROPOSED GULLY
(CP)	DENOTES CATCH PIT - 500mm DEEP SUMP
(HB)	DENOTES FLOW CONTROL CHAMBER WITH HYDROBRAKE OPTIMUM UNIT
▬	SITE BOUNDARY

DRAINAGE NOTES

THE EXISTING DRAINAGE SHOWN ON THIS DRAWING IS INDICATIVE ONLY BASED UPON THE UNITED UTILITES SEWER RECORDS.

IT IS RECOMMENDED THAT A CCTV SURVEY IS UNDERTAKEN TO CONFIRM THE LOCAITON, DEPTH, SIZE AND CONDITION OF ALL EXISTING DRAINAGE PRIOR TO CONSTRUCTION.

ALL DRAINAGE LEVELS SHOWN ARE FOR INFORMATION PURPOSES ONLY.

THE DRAINAGE DESIGN / INFORMATION SHOWN ON THIS DRAWING IS FOR INFORMATION PURPOSES ONLY.

RAIN WATER PIPES AND SLAB PENETRATIONS ARE SHOWN INDICATIVE ONLY. ARCHITECT/MEP ENGINEER IS TO CONFIRM FINAL POSITIONS PRIOR TO CONSTRUCTION.

SURFACE WATER DRAINAGE STRATEGY

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:-

1. DISCHARGE VIA INFILTRATION;
2. DISCHARGE TO WATERCOURSE;
3. DISCHARGE TO SEWER.

THESE OPTIONS ARE DISCUSSED IN FURTHER DETAIL BELOW.

SURFACE WATER DISCHARGE VIA INFILTRATION

FROM THE INFORMATION AVAILABLE TO DATE, IT WOULD APPEAR THAT THE GROUND CONDITIONS AT THE SITE ARE COHESIVE (GLACIAL TILL), HENCE THE USE OF INFILTRATION / SOAKAWAY TECHNIQUES IS CONSIDERED TO NOT BE FEASIBLE.

SURFACE WATER DISCHARGE VIA WATERCOURSE

THERE ARE NO EXISTING WATERCOURSES IN THE VICINITY OF THE SITE. ON THIS BASIS, IT IS CONSIDERED NOT FEASIBLE TO DISCHARGE THE SURFACE WATER RUNOFF FROM THE PROPOSED DEVELOPMENT TO AN EXISTING WATERCOURSE.

SURFACE WATER DISCHARGE TO EXISTING UU SEWER

IT IS PROPOSED THAT SURFACE WATER COLLECTED FROM ROOFS AND HARD PAVING WILL DISCHARGE VIA A NEW DRAINAGE SYSTEM CONNECTING INTO THE EXISTING PUBLIC COMBINED SEWER WITHIN SIMMONDLEY LANE VIA THE EXISTING CONNECTION, SUBJECT TO DEPTH AND CONDITION.

THE DRAINAGE STRATEGY PUT FORWARD IN THIS DOCUMENT IS BASED ON THE ASSUMPTION THAT SURFACE WATER DISCHARGE IS ALLOWED TO PASS INTO THE EXISTING PUBLIC COMBINED SEWER WITHIN SIMMONDLEY LANE AT A RESTRICTED RATE OF 5 l/s. DUE TO SITE LEVELS SURFACE WATER WILL BE ATTENUATED IN BOTH A OVERSIZED PIPED SYSTEM TO THE SIDE AND REAR OF PLOTS 1 & 2 AND A GEOCELL CRATE SYSTEM WITHIN THE PARKING AREA TO PLOTS 5-8.

THE CONNECTION INVERT LEVEL AND CONDITION OF THE EXISTING MANHOLE AND CONNECTION PRIOR ARE TO BE IDENTIFIED AND SURVEYED PRIOR TO DETAILED DESIGN.

THE HYDROBRAKE FLOW CONTROL UNIT WILL RESTRICT ALL FLOWS FROM THE HOUSING DEVELOPMENT WITH THE OVERSIZED PIPED SYSTEM AND GEOCELL CRATE ATTENUATION PROVIDING STORAGE TO ACCOMMODATE THE 1 in 100yr + 40% CC STORM EVENT.

ROOF WATER CAPTURED BY NEW MANHOLE S13 IS TO BE CONNECTED DIRECTLY INTO THE EXISTING UU COMBINED SEWER. THE PASSABLE FLOW RATE HAS BEEN CALCULATED TO BE 0.9 l/s BASED UPON A 50mm/Hr RAINFALL INTENSITY.

TO COMPENSATE FOR THIS FLOW THE PROPOSED HYDROBRAKE HAS BEEN DESIGNED TO LIMIT THE REMAINDER OF THE SITE TO 3.9 l/s TO ENSURE THAT THE COMBINED FLOW LEAVING THE SITE IS NOT GREATER THAN 5 l/s TOTAL.

FOUL WATER DESIGN

IT IS PROPOSED THAT FOUL WATER COLLECTED FROM THE DWELLING WILL DISCHARGE VIA A NEW DRAINAGE SYSTEM CONNECTING INTO THE EXISTING PUBLIC COMBINED SEWER WITHIN SIMMONDLEY LANE VIA THE EXISTING CONNECTION, SUBJECT TO DEPTH AND CONDITION.

LEVEL ASSUMPTIONS

DUE TO THE SURVEY NOT HAVING DRAINAGE INVERT LEVELS, WE HAVE CALCULATED THESE INVERT LEVELS IN CONJUNCTION WITH THE SITE INFORMATION RECEIVED. ALL EXISTING DRAINAGE ACCEPT THE CONNECTION FROM THE SITE INTO SIMMONDLEY LANE WILL BE REMOVED OR GRUBBED UP.

THE SITE FALLS TOWARDS THE NORTHERN AND EASTERN BOUNDARIES, WE HAVE HAD TO ASSUME A CONNECTION LEVEL INTO THE COMBINED DRAIN WHICH IS SUBJECT TO SURVEYED LEVELS. IT IS ALSO WORTH NOTING TO GET COVER IN THE DRIVEWAY AND AROUND THE PLOTS THE FW SEWERS WILL BE LAID AT MINIMUM GRADIENTS TO ACHEIVE SELF-CLEANSING AND MAY NEED TO BE ENCASED IN CONCRETE WHERE COVER IS REDUCED.

GENERAL NOTES

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 WML DRAINAGE DETAIL DRAWINGS 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.

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.

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

COVER LEVELS ON THIS DRAWING ARE FOR INFORMATION PURPOSES ONLY.

THE LAYOUT OF DRAINAGE ON THIS DRAWING IS FOR INFORMATION PURPOSES ONLY.

U.N.O SURFACE WATER DRAINAGE PIPES OVER Ø100mm TO BE TWIN WALLED STRUCTURED PLASTIC APPROVED BY THE ENGINEER.

U.N.O FOUL WATER DRAINAGE PIPES TO BE SUPERSLEVE VITRIFIED CLAY PIPES OR SIMILAR.

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

ALL INTERNAL MANHOLE COVERS TO BE DOUBLE SEALED, LOCKABLE AND RECESSED TO ACCEPT FLOOR FINISHES WHERE APPLICABLE.

SETTING OUT OF ALL INTERNAL GULLY/PLUMBING CONNECTIONS TO BE CO-ORDINATED 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 100mm DIAMETER AT MINIMUM FALLS OF 1:80 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.

FOR DETAILS OF GREASE TRAP/MACERATOR REQUIREMENTS ASSOCIATED WITH KITCHENS REFER TO SERVICE ENGINEER.

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 ARE INDICATIVE MINIMUMS.

SURFACE CHANNEL DRAINS TO BE ACO MULTIDRAIN OR SIMILAR.

MANHOLES:

ALL PROPOSED NEW MANHOLES TO BE PRECAST RING MANHOLES TYPE B UNLESS NOTED OTHERWISE. INTERNAL DIAMETERS OF MANHOLES TO BE 1050Ømm 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 HGV [38t] - EN 124 CLASS B125 SLOW MOVING
GLV [10t] - 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.

Rev.	Amendment	Date	By	Chkd
P06	REVISED TO SUIT CONTRACTOR COMMENTS.	01.11.23	DB	MS
P05	REVISED TO SUIT SITE LAYOUT AMENDMENTS.	17.10.23	DB	MS
P04	SCALE BAR ADDED.	24.08.23	MS	NG
P03	DRAINAGE STRATEGY ADDED.	28.08.23	RH	NG
P02	PLOTS 1-2 FFL'S UPDATED AND SURFACE WATER DRAINAGE DETAILS ADDED.	12.07.23	RH	NG
P01	PRELIMINARY ISSUE.	06.07.23	RH	NG

SUBJECT TO APPROVAL FROM
LOCAL PLANNING AUTHORITY
AND UNITED UTILITIES

PRELIMINARY

0 1 2 3 4 5 6 7
SCALE IN METRES 1:100

Project
THE PEAKS

CLIENT
MELLOR HOMES

Title
PROPOSED DRAINAGE GA

Drawn	Checked	Date	Scale
DB	MS	OCT 2023	1:100 @ A0

WML CONSULTING
Chartered Civil and Structural Engineers

No.8 Oak Green
Earl Road
Stanley Green Business Park
Cheadle Hulme
Cheshire SK8 6QL
Tel 0161 482 0600
Fax 0161 486 9210
e-mail info@wmlconsulting.com
www.wmlconsulting.com

Project		Originator		Volume		Level		Type		Role		Number	Rev
10547	-	WML	-	ZZ	-	XX	-	DR	-	C	-	1003	P06