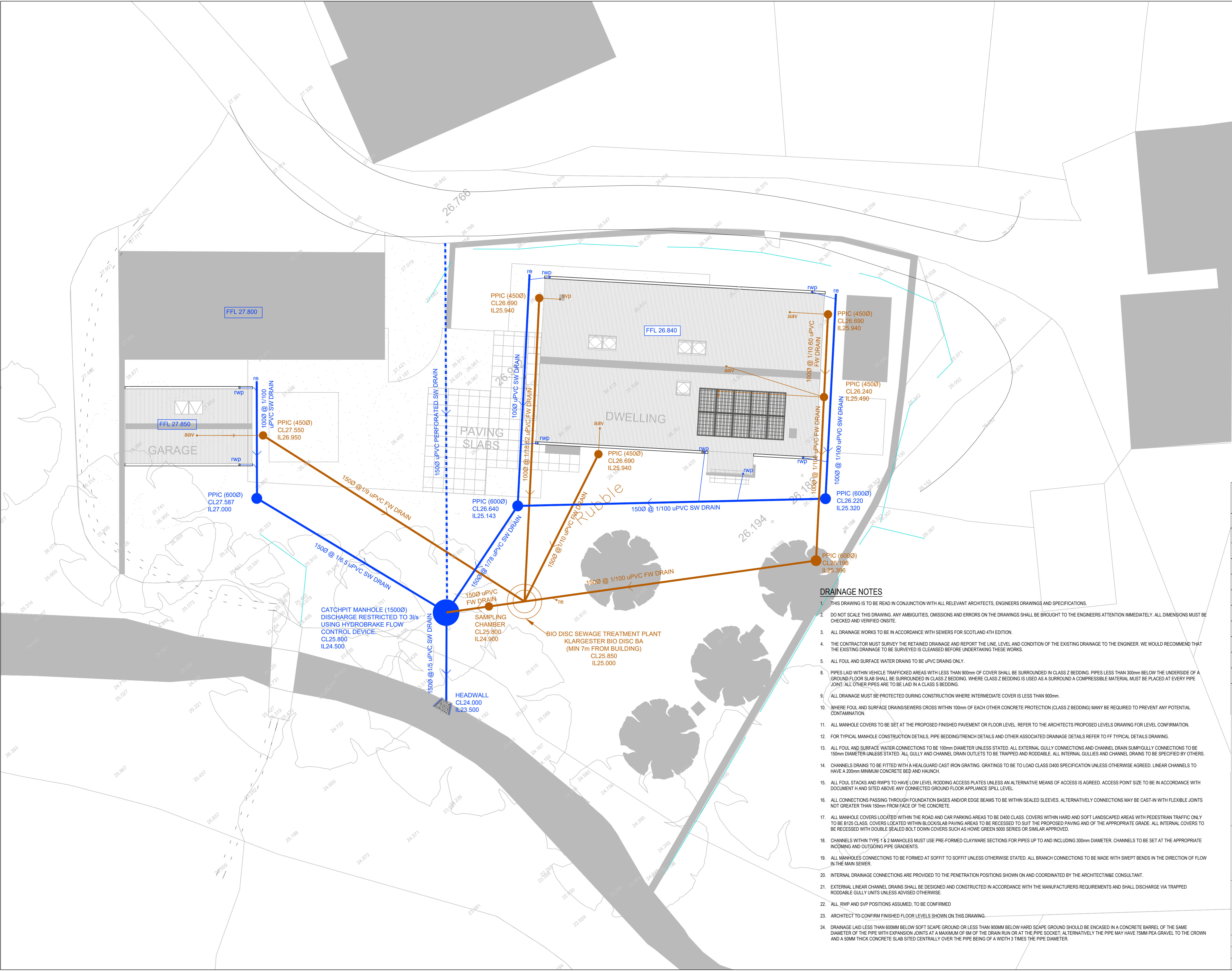




- LEGEND
- SITE BOUNDARY
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED SURFACE WATER PIPE
- PPIC

PROPOSED POLYPROPYLENE INSPECTION CHAMBER - SW
- PPIC

PROPOSED POLYPROPYLENE INSPECTION CHAMBER - FW
- FMH

PROPOSED FOUL WATER MANHOLE
- PROPOSED FOUL WATER PIPE
- EXFMH

EX FOUL WATER MANHOLE (SCOTISH WATER)
- EX FOUL WATER PIPE (SCOTISH WATER)
- EXSMH

EX SURFACE WATER MANHOLE (SCOTISH WATER)
- EX SURFACE WATER PIPE (SCOTISH WATER)
- PROPOSED PERFORATED PIPE

RESIDUAL RISKS

J	GENERAL AMENDMENTS	AJ	JJ	24/07/23
I	AMENDED COVER LEVELS	AJ	JJ	24/11/23
H	AMENDMENTS TO LEVELS	AJ	JJ	11/11/23
G	AMENDED ARCHITECTS LAYOUT	AJ	JJ	23/08/23
F	GENERAL AMENDMENTS	AJ	JJ	11/08/23
E	REVISED SVP AND AAV LOCATIONS	AJ	JJ	21/07/23
D	REVISED ARCHITECTS LAYOUT	AJ	JJ	02/07/23
C	REVISED ARCHITECTS LAYOUT	AJ	JJ	19/03/24
B	AMENDMENT TO FFL	AJ	JJ	04/10/23
A	TOPOGRAPHICAL SURVEY & FFL ADDED	AJ	JJ	12/08/23
REV	DESCRIPTION	DRAWN	APPROVED	DATE

STATUS

PLANNING

FLOOD FLOW LTD

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Client

GRAHAM WALKER

Project

TIGH AN UILLT
INVERAE FARM ROAD
MINARD, PA32 8YF

Title

DRAINAGE LAYOUT

Drawn	AJ	Checked	JJ	Drawing number	23129-001	J
Date	16/05/23	Date	16/05/23			
Scale	1:100		A1			

DRAINAGE NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON THE DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED AND VERIFIED ONSITE.
- ALL DRAINAGE WORKS TO BE IN ACCORDANCE WITH SEWERS FOR SCOTLAND 4TH EDITION.
- THE CONTRACTOR MUST SURVEY THE RETAINED DRAINAGE AND REPORT THE LINE, LEVEL AND CONDITION OF THE EXISTING DRAINAGE TO THE ENGINEER. WE WOULD RECOMMEND THAT THE EXISTING DRAINAGE TO BE SURVEYED IS CLEANSSED BEFORE UNDERTAKING THESE WORKS.
- ALL FOUL AND SURFACE WATER DRAINS TO BE uPVC DRAINS ONLY.
- PIPES LAID WITHIN VEHICLE TRAFFICKED AREAS WITH LESS THAN 900mm OF COVER SHALL BE SURROUNDED IN CLASS Z BEDDING. PIPES LESS THAN 300mm BELOW THE UNDERSIDE OF A GROUND FLOOR SLAB SHALL BE SURROUNDED IN CLASS Z BEDDING. WHERE CLASS Z BEDDING IS USED AS A SURROUND A COMPRESSIBLE MATERIAL MUST BE PLACED AT EVERY PIPE JOINT. ALL OTHER PIPES ARE TO BE LAID IN A CLASS S BEDDING.
- ALL DRAINAGE MUST BE PROTECTED DURING CONSTRUCTION WHERE INTERMEDIATE COVER IS LESS THAN 900mm.
- WHERE FOUL AND SURFACE DRAINS/SEWERS CROSS WITHIN 100mm OF EACH OTHER CONCRETE PROTECTION (CLASS Z BEDDING) MANY BE REQUIRED TO PREVENT ANY POTENTIAL CONTAMINATION.
- ALL MANHOLE COVERS TO BE SET AT THE PROPOSED FINISHED PAVEMENT OR FLOOR LEVEL. REFER TO THE ARCHITECTS PROPOSED LEVELS DRAWING FOR LEVEL CONFIRMATION.
- FOR TYPICAL MANHOLE CONSTRUCTION DETAILS, PIPE BEDDING/TRENCH DETAILS AND OTHER ASSOCIATED DRAINAGE DETAILS REFER TO FF TYPICAL DETAILS DRAWING.
- ALL FOUL AND SURFACE WATER CONNECTIONS TO BE 100mm DIAMETER UNLESS STATED. ALL EXTERNAL GULLY CONNECTIONS AND CHANNEL DRAIN SUMPGULLY CONNECTIONS TO BE 150mm DIAMETER UNLESS STATED. ALL GULLY AND CHANNEL DRAIN OUTLETS TO BE TRAPPED AND RODDABLE. ALL INTERNAL GULLIES AND CHANNEL DRAINS TO BE SPECIFIED BY OTHERS.
- CHANNELS DRAINS TO BE FITTED WITH A HEAL GUARD CAST IRON GRATING. GRATINGS TO BE TO LOAD CLASS D400 SPECIFICATION UNLESS OTHERWISE AGREED. LINEAR CHANNELS TO HAVE A 200mm MINIMUM CONCRETE BED AND HAUNCH.
- ALL FOUL STACKS AND RWPS TO HAVE LOW LEVEL RODDING ACCESS PLATES UNLESS AN ALTERNATIVE MEANS OF ACCESS IS AGREED. ACCESS POINT SIZE TO BE IN ACCORDANCE WITH DOCUMENT H AND SITED ABOVE ANY CONNECTED GROUND FLOOR APPLIANCE SPILL LEVEL.
- ALL CONNECTIONS PASSING THROUGH FOUNDATION BASES AND/OR EDGE BEAMS TO BE WITHIN SEALED SLEEVES. ALTERNATIVELY CONNECTIONS MAY BE CAST-IN WITH FLEXIBLE JOINTS NOT GREATER THAN 150mm FROM FACE OF THE CONCRETE.
- ALL MANHOLE COVERS LOCATED WITHIN THE ROAD AND CAR PARKING AREAS TO BE D400 CLASS. COVERS WITHIN HARD AND SOFT LANDSCAPED AREAS WITH PEDESTRIAN TRAFFIC ONLY TO BE B125 CLASS. COVERS LOCATED WITHIN BLOCK/SLAB PAVING AREAS TO BE RECESSED TO SUIT THE PROPOSED PAVING AND OF THE APPROPRIATE GRADE. ALL INTERNAL COVERS TO BE RECESSED WITH DOUBLE SEALED BOLT DOWN COVERS SUCH AS HOWE GREEN 5000 SERIES OR SIMILAR APPROVED.
- CHANNELS WITHIN TYPE 1 & 2 MANHOLES MUST USE PRE-FORMED CLAYWARE SECTIONS FOR PIPES UP TO AND INCLUDING 300mm DIAMETER. CHANNELS TO BE SET AT THE APPROPRIATE INCOMING AND OUTGOING PIPE GRADIENTS.
- ALL MANHOLES CONNECTIONS TO BE FORMED AT SOFFIT TO SOFFIT UNLESS OTHERWISE STATED. ALL BRANCH CONNECTIONS TO BE MADE WITH SWEEPED BENDS IN THE DIRECTION OF FLOW IN THE MAIN SEWER.
- INTERNAL DRAINAGE CONNECTIONS ARE PROVIDED TO THE PENETRATION POSITIONS SHOWN ON AND COORDINATED BY THE ARCHITECT/MAE CONSULTANT.
- EXTERNAL LINEAR CHANNEL DRAINS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS AND SHALL DISCHARGE VIA TRAPPED RODDABLE GULLY UNITS UNLESS ADVISED OTHERWISE.
- ALL RWP AND SVP POSITIONS ASSUMED, TO BE CONFIRMED
- ARCHITECT TO CONFIRM FINISHED FLOOR LEVELS SHOWN ON THIS DRAWING.
- DRAINAGE LAID LESS THAN 600mm BELOW SOFT SCAPE GROUND OR LESS THAN 900mm BELOW HARD SCAPE GROUND SHOULD BE ENCASED IN A CONCRETE BARREL OF THE SAME DIAMETER OF THE PIPE WITH EXPANSION JOINTS AT A MAXIMUM OF 6M OF THE DRAIN RUN OR AT THE PIPE SOCKET. ALTERNATIVELY THE PIPE MAY HAVE 75mm PEA GRAVEL TO THE CROWN AND A 50mm THICK CONCRETE SLAB SITED CENTRALLY OVER THE PIPE BEING OF A WIDTH 3 TIMES THE PIPE DIAMETER.