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Phase 2 Residential Development of Parc Maen Hir, Letterston, Haverfordwest, Pembrokeshire SA62 5AW
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DO NOT SCALE

NOTES (CONTINUED)

ANY DISCREPANCIES IN INFORMATION CONTAINED IN THIS DRAWING & ANY PROPOSED ALTERATIONS TO ROAD ALIGNMENT OR DRAINAGE MUST BE REPORTED TO ENGINEER FOR REVISION AND AGREEMENT WITH RELEVANT AUTHORITY.

FOUL WATER & SURFACE WATER SEWER (3m MAXIMUM PIPE LENGTHS)

ALL PIPES AND FITTINGS FOR DIAMETER OF 100/110mm TO BE EITHER:

- FLOLINE EN1401 DRAINAGE SYSTEM
- HEPWORTH PLASTIDRAIN SYSTEM
- MARLEY SOLID WALL UNDERGROUND DRAINAGE PIPE SYSTEM
- OSMADRAIN BUILDING DRAINAGE SYSTEM
- POLYPIPE EN1401-1 STANDARD UNDERGROUND DRAIN SYSTEM
- OR SIMILAR APPROVED BY RELEVANT AUTHORITY AND/OR RCA

ALL PIPES AND FITTINGS FOR DIAMETERS OF 150mm - 300mm TO BE EITHER:

- MARLEY TWINWALL SYSTEM
- UPONOR ULTRA-RIB SYSTEM
- WAVIN OSMO ULTRA-RIB SYSTEM
- POLYPIPE CIVILS POLYSEWER TWINWALL SYSTEM
- OR SIMILAR APPROVED BY RELEVANT AUTHORITY AND/OR RCA

3m MAXIMUM LENGTH PVC-U PIPES INSTALLED BY BPF/PPG ACCREDITED CONTRACTOR - COPY OF CERTIFICATE REQUIRED.

USE OF DIFFERENT PIPE SUPPLIER OR SPECIFICATION MUST BE APPROVED BY STATUTORY UNDERTAKER - IF IN DOUBT ASK.

ALL PIPEWORK MANUFACTURED IN UNPLASTICIZED POLYVINYL CHLORIDE (PVC-U). PVC-U DRAINAGE SYSTEMS WITH FLEXIBLE JOINTS TO BS EN1401-1:1998, BS 4660 OR BS 5481. PVC-U PIPES INSTALLED BY BRITISH PLASTICS FEDERATION - PLASTIC PIPES GROUP - MANUFACTURER APPROVED INSTALLERS. PLEASE PROVIDE COPY OF CERTIFICATION TO RCA PRIOR TO LAYING ANY PIPEWORK.

WHEN SEWERS ARE LOCATED WITHIN A PUBLIC HIGHWAY, THE OUTSIDE OF THE SEWER SHOULD BE IN THE VEHICLE CARRIAGEWAY (NOT FOOTPATH) AND BE AT LEAST 1m AWAY FROM THE KERBLINE. THE OUTSIDE OF MANHOLE CONSTRUCTIONS SHOULD BE AT LEAST 0.5m AWAY FROM THE KERBLINE.

NOTES (CONTINUED)

PRIVATE DRAINAGE NOTES

ALL PIPEWORK SHALL BE uPVC COMPLYING WITH SEWERS FOR ADOPTION 7th EDITION, CESWI 6th EDITION AND ALL CURRENT RELEVANT BRITISH STANDARDS, BBA CERTIFICATES AND MANUFACTURERS RECOMMENDATIONS AND INSTALLED TO MEET THE SAME.

PROVIDE 150mm CONCRETE SURROUND WITH FLEXIBLE JOINTS WHERE SEWER PIPES HAVE LESS THAN 900mm COVER IN NON-ADOPTABLE TRAFFICKED AREAS. ALL OTHER DEPTH DETAILS SHALL HAVE GRANULAR PIPE BED AND SURROUND AS DETAILS IN NON-TRAFFICKED AREAS WHERE THERE IS NO RISK OF DAMAGE FROM GARDEN IMPLEMENTS (SURFACED PATHS) SHALL HAVE GRANULAR BED AND SURROUND AS DETAILS WHERE THERE IS A RISK FROM GARDEN IMPLEMENT DAMAGE AND PIPELINE HAS LESS THAN 600mm COVER PROVIDE 50mm DP CONCRETE PAVING SLAB LAID ON 75mm GRANULAR PIPE BEDDING MATERIAL ABOVE CROWN OF PIPELINE.

ALL PRIVATE PATHS ASSUMED TO FALL ON TO SOFT LANDSCAPING AREAS.

ALL CONNECTIONS WITH ADOPTABLE FOUL WATER SEWERS SHALL BE CONNECTED SOFFIT TO SOFFIT.

ALL BRANCHES INTO BUILDINGS AND TO RAINWATER GULLIES SHALL BE 100mmØ UNO.

ALLOW FOR PRECAST CONCRETE LINTELS BY STRESSLINE OR SIMILAR OVER PIPELINES THROUGH WALLS AND PIPE JOINTS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

ACO - PROVIDE A15 LOADING GRADE THRESHOLD DRAINAGE AT ALL LEVEL THRESHOLD OPENINGS BY ACO ACO OR SIMILAR APPROVED INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

CHANNEL - PROVIDE 250 LOADING GRADE DRAINAGE CHANNELS TO DRIVES / PARKING AREAS FALLING ON TO ADOPTABLE HIGHWAY AREAS BY ACO OR SIMILAR APPROVED INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

IMPORTANT

ALL FLOOR GULLIES SHALL BE RODDABLE AND ALL SOIL STACKS SHALL HAVE RODDING ACCESS FACILITY AT EACH FUTURE MAINTENANCE POINT.

NOTES (CONTINUED)

THE DEVELOPER MUST SELF-VET AND CERTIFY THAT THE DESIGN CRITERIA, MATERIAL STANDARDS AND WORKMANSHIP SPECIFICATIONS FOR THE PROPOSED POTENTIALLY ADOPTABLE SEWERS ARE IN ACCORDANCE WITH THOSE SET OUT IN "SEWERS FOR ADOPTION - A DESIGN AND CONSTRUCTION GUIDE FOR DEVELOPERS" 7th EDITION AND THE REQUIREMENTS OF THE STATUTORY UNDERTAKER DWR CYMRU WELSH WATER (DCWW) AND CONFIRM THE SAME IN WRITING TO THE ADOPTION AUTHORITY.

THE CONTRACTOR SHALL ENSURE THAT AN UP TO DATE COPY OF SEWERS FOR ADOPTION 7th EDITION TOGETHER WITH ALL ITS CURRENT DWR CYMRU WELSH WATER ADDENDUM AND WELSH GOVERNMENT MINISTERS' STANDARDS DOCUMENTS IS AVAILABLE ON SITE FOR COMPLIANCE.

THIS PROJECT HAS BEEN DESIGNED TO COMPLY WITH SEWERS FOR ADOPTION 7th EDITION AND WELSH GOVERNMENT MINISTERS' STANDARDS.

NOTES (CONTINUED)

ALL FIGURED LEVELS ARE RELATED TO LAND SURVEY DATUM AS RCA DRAWING NUMBER JOB NUMBER/01 UNLESS NOTED OTHERWISE.

ALL FIGURED DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

ALL WORKS SHALL BE IN ACCORDANCE WITH CURRENT RELEVANT SECTIONS OF:

- SPECIFICATION FOR HIGHWAY WORKS
- DESIGN MANUAL FOR ROADS AND BRIDGES
- LOCAL AUTHORITY HIGHWAY ADOPTION REQUIREMENTS
- SEWERS FOR ADOPTION 7th EDITION
- BUILDING REGULATIONS
- BRITISH STANDARDS
- NEW ROADS AND STREET WORKS ACT
- HEALTH AND SAFETY REGULATIONS
- GOOD PRACTICE

IT IS KNOWN THAT EXISTING UTILITY COMPANY UNDERGROUND SERVICES AND APPARATUS IS PRESENT WITHIN THE PROPOSED WORKS AREA THE CONTRACTOR SHOULD ALLOW FOR ALL NECESSARY INVESTIGATIVE WORK (CAT DETECTION, TRIAL HOLES, ETC.) TO DETERMINE ROUTE AND DEPTH OF ALL UNDERGROUND SERVICES TO AVOID DAMAGE AND PRESERVE SUPPLIES TO EXISTING DWELLINGS / PREMISES.

NOTES:

THE PROPERTY OF THIS DRAWING AND DESIGN IS VESTED IN ROGER CASEY ASSOCIATES AND MUST NOT BE COPIED OR REPRODUCED IN ANY WAY WITHOUT THE WRITTEN CONSENT OF ROGER CASEY ASSOCIATES.

THE CONTRACTOR IS TO CHECK ALL LEVELS AND DIMENSIONS BEFORE WORK COMMENCES, AND ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE CONSULTANTS.

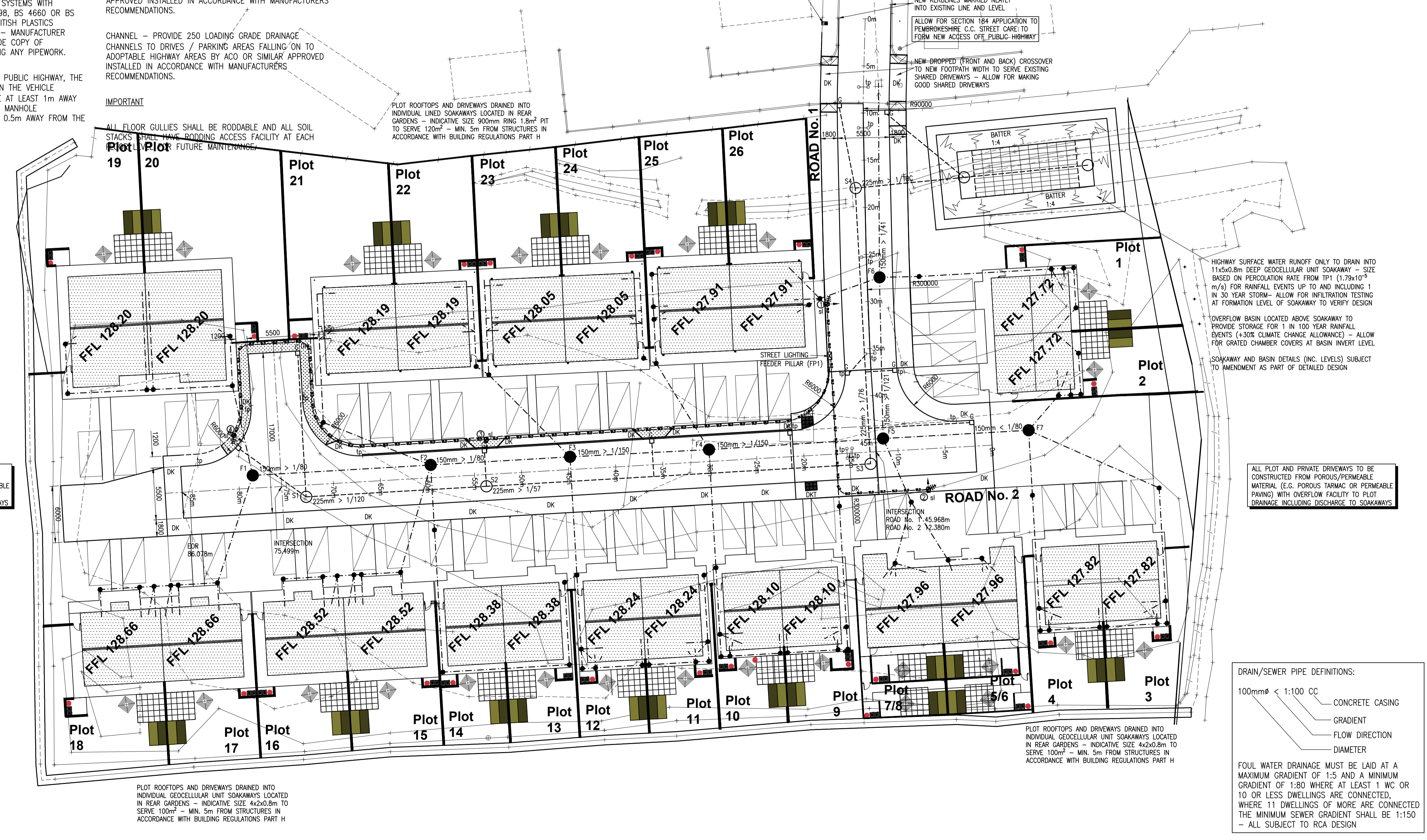
WORK TO FIGURED DIMENSIONS IN PREFERENCE TO SCALING.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER ROGER CASEY ASSOCIATES DRAWINGS AND SPECIFICATIONS AND ALL OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS RELATING TO THIS PROJECT.

KEY

- tp - CURVE TANGENT POINT
- DK - DROP KERBS
- DKT - DROP KERB CROSSING POINT WITH 6 WHOLE TACTILE PAVING SLABS TO EACH SIDE OF ROAD - TO BE MARSHALLS TACTILE BLISTER PAVING 400x400x65mm DP BUFF COLOURED OR SIMILAR APPROVED LAID ON 25mm DP CLASS 1 MORTAR (PAVING IN LIEU OF BASE AND WEARING COURSE TO FOOTPATH AREA) CROSSING POINT TO HAVE FLUSH BULLNOSED KERBS MAXIMUM STEP TO CARRIAGEWAY 6mm
- F1 - FOUL WATER SEWER
- S1 - SURFACE WATER SEWER
- YG - FOUL WATER MANHOLE AND REFERENCE
- G - SURFACE WATER MANHOLE AND REFERENCE
- PL - PLASTIC CONCRETE ENCASED YARD GULLY
- CR - PLASTIC CONCRETE ENCASED ROAD GULLY
- SL - STREET LIGHTING COLUMN
- ⊕ - STREET LIGHTING FEED PILLAR
- ⊕ - STREET LIGHTING EARTH ROD AND PIT

IMPORTANT - UNTIL TECHNICAL ACCEPTANCE AND/OR APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITY, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS & DETAILS ISSUED ARE PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO TECHNICAL ACCEPTANCE AND/OR APPROVAL BEING GIVEN, IT IS ENTIRELY AT THEIR OWN RISK. INFRASTRUCTURE SUBJECT TO A SECTION 104 ADOPTION AGREEMENT SHALL NOT BE CONSTRUCTED UNTIL SUCH TIME THAT THE SECTION 104 ADOPTION AGREEMENT HAS BEEN LEGALLY COMPLETED BETWEEN THE DEVELOPER AND THE STATUTORY UNDERTAKER



ALL PLOT AND PRIVATE DRIVEWAYS TO BE CONSTRUCTED FROM POROUS/PERMEABLE MATERIAL (E.G. POROUS TARMAC OR PERMEABLE PAVING) WITH OVERFLOW FACILITY TO PLOT DRAINAGE INCLUDING DISCHARGE TO SOAKAWAYS

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DRAIN/SEWER PIPE DEFINITIONS:

- 100mmØ < 1:100 CC - CONCRETE CASING
- GRADIENT
- FLOW DIRECTION
- DIAMETER

FOUL WATER DRAINAGE MUST BE LAID AT A MAXIMUM GRADIENT OF 1:50 AND A MINIMUM GRADIENT OF 1:80 WHERE AT LEAST 1 WC OR 10 OR LESS DWELLINGS ARE CONNECTED, WHERE 11+ DWELLINGS OF MORE ARE CONNECTED THE MINIMUM SEWER GRADIENT SHALL BE 1:150 - ALL SUBJECT TO RCA DESIGN

REV	DESCRIPTION	ISSUED BY	CHECKED BY	DATE

PLANNING

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ARCHITECT: **LEWIS PARTNERSHIP LLANELLI**

PROJECT: **RESIDENTIAL DEVELOPMENT AT PARC MAEN HIR, LETTERSTON, HAVERFORDWEST SA62 5AW**

DRAWING TITLE: **ENGINEERING SITE PLAN (DRAINAGE)**

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