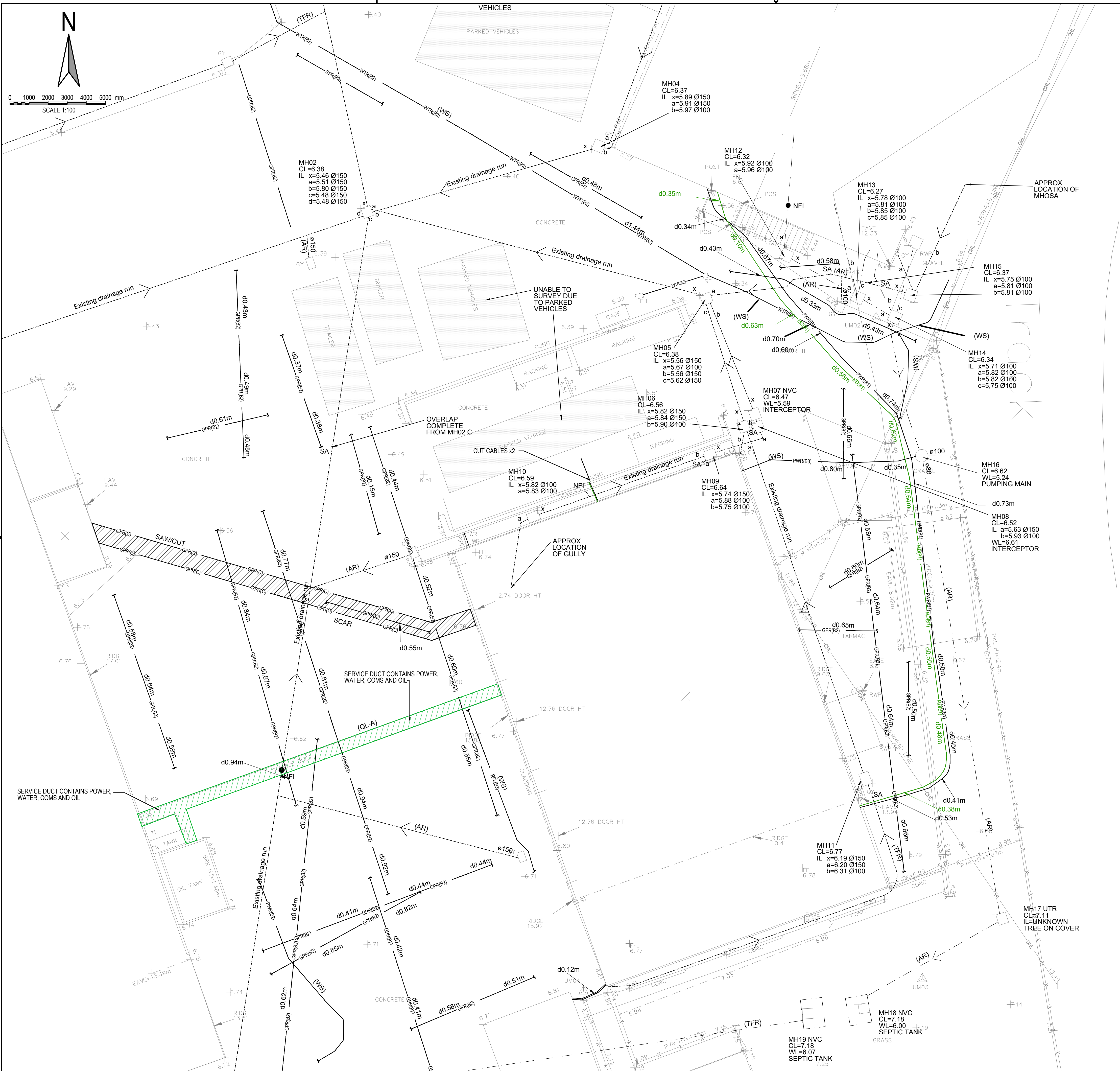




- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
  - ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
  - DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
  - ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
  - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
  - EXISTING SERVICES HAVE NOT BEEN SHOWN BUT ARE PRESENT - THE CONTRACTOR IS TO LIAISE WITH ALL STATUTORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORKS.
  - TEMPORARY WORKS DESIGN BY OTHERS.
  - DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- DRAINAGE NOTES:**
- MH COVERS AND FRAMES TO CONFORM TO BS EN 124:  
- HIGHWAYS AND FOOTWAYS TO FRONT OF BUILDINGS (D400)
  - TYPE S BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE Z BEDDING AND SURROUND ARE TO BE USED:  
  
- HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, DEPTH LESS THAN 1.2m.
  - ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED BY THE ENGINEER AND LOCAL AUTHORITY. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DISTRESS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER.
  - THE GRADIENTS INDICATED AGAINST THE DRAIN RUNS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN FOR EACH MANHOLE OR OTHER INDICATED POSITION.
  - ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION.
  - ALL NON ADOPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE.
  - ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER UNLESS OTHERWISE NOTED.
  - PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DETAILS DRG 14995/C501.

- SERVICES NOTES**
- THE SIZE AND LOCATION OF SERVICES SHOWN ON THIS DRAWING ARE INDICATIVE ONLY AND SHOULD BE CONFIRMED ON SITE PRIOR TO ANY EXCAVATION WORKS.
  - MULTIPLE CABLE LINES ARE GRAPHICAL REPRESENTATION OF OVERALL THICKNESS - DO NOT COUNT.
  - ALL GIVEN DEPTHS ARE TO THE CENTRE OF THE UTILITY AND ARE RELATIVE TO GROUND LEVEL AT THE TIME OF SURVEY.
  - EVERY EFFORT HAS BEEN MADE BY UTILMAP LTD TO PROVIDE ACCURATE INFORMATION. THOUGH, ALL SERVICES, LEVELS AND CRITICAL DIMENSIONS SHOULD BE FIELD VERIFIED BY THE CLIENT BEFORE UNDERTAKING ANY WORKS.
  - PLEASE CONTACT UTILMAP LTD, TO CONFIRM THAT THE LATEST REVISION IS BEING USED.
  - ANY QUESTIONS PLEASE CONTACT UTILMAP LTD.

**GROUND RADAR**

The material surrounding and particularly above buried services can effect whether the services can be resolved using GPR. Reinforced concrete, buried metallic objects, the presence of moisture or clay and changes in the material construction can lead to poor data resolution.

As we have no information with respect to the material overlaying any services the GPR method can only give a guaranteed accuracy of 50% Depth, results using GPR are typically accurate to within 10% with a horizontal accuracy of 150mm. These figures will vary as the velocity of the ground is assumed at 80m/s. The results of the GPR survey should be treated with caution as there is no guarantee that any service shown actually exists, only a possibility that something can be seen on the records.

**GPR REFLECTIONS**

|                                                                                                                                                                                         |            |             |          |          |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|----------|----------|-------------------|
|                                                                                                                                                                                         |            |             |          |          |                   |
| 01                                                                                                                                                                                      | RGP        | LR          | MJ       | 05.12.22 | PRELIMINARY ISSUE |
| rev.                                                                                                                                                                                    | drawn      | chd.        | LR       | approved | description       |
| Client                                                                                                                                                                                  |            |             |          |          |                   |
| MID & WEST WALES FIRE SERVICE                                                                                                                                                           |            |             |          |          |                   |
| Project                                                                                                                                                                                 |            |             |          |          |                   |
| EARLSWOOD CFBT FACILITY<br>BRITON FERRY<br>SA11 2JT                                                                                                                                     |            |             |          |          |                   |
| Title                                                                                                                                                                                   |            |             |          |          |                   |
| EXISTING SERVICES LAYOUT                                                                                                                                                                |            |             |          |          |                   |
| ValeConsultancy<br>CONSULTING CIVIL & STRUCTURAL ENGINEERS<br>29 Bocam Park, Old Field Road, Pencoed, Bridgend CF35 5LJ.<br>Phone: 01656 863794 Email: enquiries@vale-consultancy.co.uk |            |             |          |          |                   |
| date                                                                                                                                                                                    | drawn      | checked     | approved |          |                   |
| 05.12.22                                                                                                                                                                                | RGP        | LR          | MJ       | 05.12.22 | 05.12.22          |
| scale @ A1                                                                                                                                                                              |            | project no. |          |          |                   |
| 1:100                                                                                                                                                                                   |            | 14995       |          |          |                   |
| status                                                                                                                                                                                  | drw. no.   |             |          |          | rev.              |
| P                                                                                                                                                                                       | 14995_C101 |             |          |          | 01                |