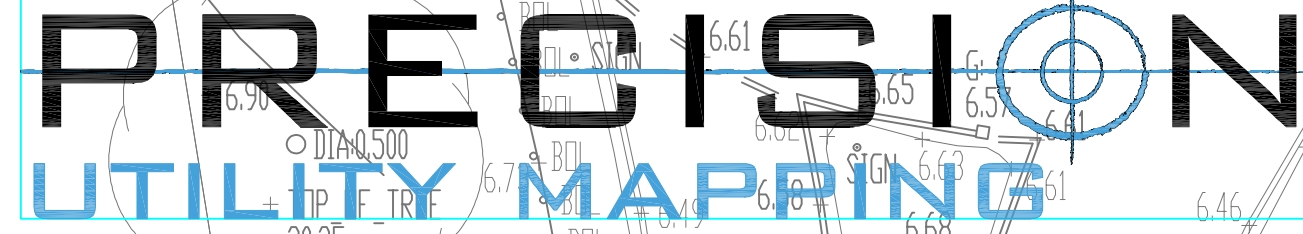


# C.2     Utility Survey









|     |                           |      |                          |
|-----|---------------------------|------|--------------------------|
| KV  | MARKER POST (TELECOM)     | CHT  | OVERHEAD CABLE (TELECOM) |
| KW  | MARKER POST (WATER)       | CO   | OUTLET PIPE              |
| P   | MILE POST                 | P    | POST                     |
| S   | MILE STONE                | Ph   | PARCH SENCH              |
| L   | NAME PLATE                | PCox | POST BOX                 |
| SA  | OUTSIDE SURVEY AREA       | PC   | PEDESTRIAN CROSSING      |
| SEM | C/S BENCH MARK            | PE   | POLYETHYLENE             |
| GP  | OVERGROUND PIPE           | PF   | PITCH FIBER              |
| HCU | OH CABLE (UNIDENTIFIED)   | PI   | PILE                     |
| HE  | OVERHEAD CABLE (ELECTRIC) | PM   | MOVEMENT DETECTOR        |
| HP  | OVERHEAD CANTYRY          | Pnd  | PUMP MOTOR DRIVE         |
| HG  | OVERHEAD PIPE             | PR   | PETROL / DIESEL PUMP     |
|     |                           | PR   | PIPE RISER               |

|     |                       |     |                       |
|-----|-----------------------|-----|-----------------------|
| S4  | STYLE                 | TL  | TRAFFIC LIGHT         |
| S5  | STRUCTURE TOP LEVEL   | TP  | TELEGRAPH POLE        |
| S6  | STUMP (TREE)          | Tq  | TRIAL PIT             |
| SP  | STAND PIPE            | T   | THROUGH               |
| SPD | STOP POST             | UTG | UNABLE TO FIND        |
| SW  | SWAY WIRE             | UTF | UNABLE TO GAIN ACCESS |
| SW  | SWITCH MARK           | UTL | UNABLE TO JET         |
| SVP | SC6 VENT PIPE         | UTR | UNABLE TO RUDY        |
| TBM | TEMPORARY BENCH MARK  | UTS | UNABLE TO SURVEY      |
| TCS | TELEPHONE CALL BOX    | UTV | UNABLE TO TRACE       |
| TEL | TELECOM CHAMBER COVER | VC  | VENTROUS CLAY         |
| TFR | TAKEN FROM RECORDS    | VV  | VENT PIPE             |
| TH  | THRESHOLD LEVEL       | VR  | VAPOUR RECOVERY       |


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|---|---|---|
| <p>ATION FOR<br/>N ALLOWES FOR A<br/>THE COLOUR<br/>EN USED ON<br/>RESULTS.</p> |  | <p>M4P - EML SEARCH TRANSECT AT 2m INTERVALS. GPR SURVEY GRID AT 0.5m INTERVALS. POST PROCESSING OF GPR DATA.</p> |
| <p>GPR50055</p>   |  | <p>M4P - EML SEARCH TRANSECT AT 2m INTERVALS. GPR SURVEY GRID AT 1m INTERVALS. POST PROCESSING OF GPR DATA.</p>   |
| <p>Tribute Rts</p>  |  | <p>M2P - EML SEARCH TRANSECT AT 5m INTERVALS. GPR SURVEY GRID AT 2m INTERVALS. POST PROCESSING OF GPR DATA.</p>   |
|   |  | <p>M1P - EML SEARCH TRANSECT AT 10m INTERVALS. GPR SURVEY AS APPROPRIATE OF GPR DATA.</p>                         |

|  |                |           |
|--|----------------|-----------|
| INTERVALS - TRACED AT 3m<br>INTERVALS, GPR MARK-UP | Drawn          | C. Daus   |
| INTERVALS - TRACED AT 1m<br>INTERVALS, GPR MARK-UP | Dwg check      | K. Sheehy |
| INTERVALS - TRACED AT 2m<br>INTERVALS, GPR MARK-UP | Scale at A0    | 1:200     |
| INTERVALS - TRACED AT 5m<br>DATE, GPR MARK-UP ON   | Drawing Number | PUM-108   |

| ELECTROMAGNETIC DETECTION | GROUND PENETRATING RADAR | TOTAL STATION | GPS/GNSS    |
|---------------------------|--------------------------|---------------|-------------|
| Vibrac v100 S             | IS Opera Duo             |               | Trimble Rb6 |

|   |   |  |
|---|---|--|
| M2P - EML SEARCH TRANSECT AT 5m INTERVALS - TRACED AT 2m INTERVALS. GPR SURVEY GRID AT 2m INTERVALS OR HIGHER DENSITY ARRAY. POST PROCESSING OF GPR DATA. |  | M2 - EML SEARCH TRANSECT AT 5m INTERVALS. GPR SURVEY GRID ON SITE. |
| M1P - EML SEARCH TRANSECT AT 10m INTERVALS - TRACED AT 5m INTERVALS. GPR SURVEY AS APPROPRIATE. POST PROCESSING OF GPR DATA.                              |  | M1 - EML SEARCH TRANSECT AT 10m INTERVALS. GPR SURVEY ON SITE.     |

01 - EML SEARCH TRANSECT AT 10m INTERVALS - TRACED AT 5m  
INTERVALS. GPR SURVEY AS APPROPRIATE. GPR MARK-UP ON  
ON SITE.

|                |            |
|----------------|------------|
| 1:200          | Complete   |
| Drawing Number |            |
| PLM 10801      | UL DB 0001 |

PUM-10801-U-DR-0001-Draft

- ### SUB-SURFACE KEY

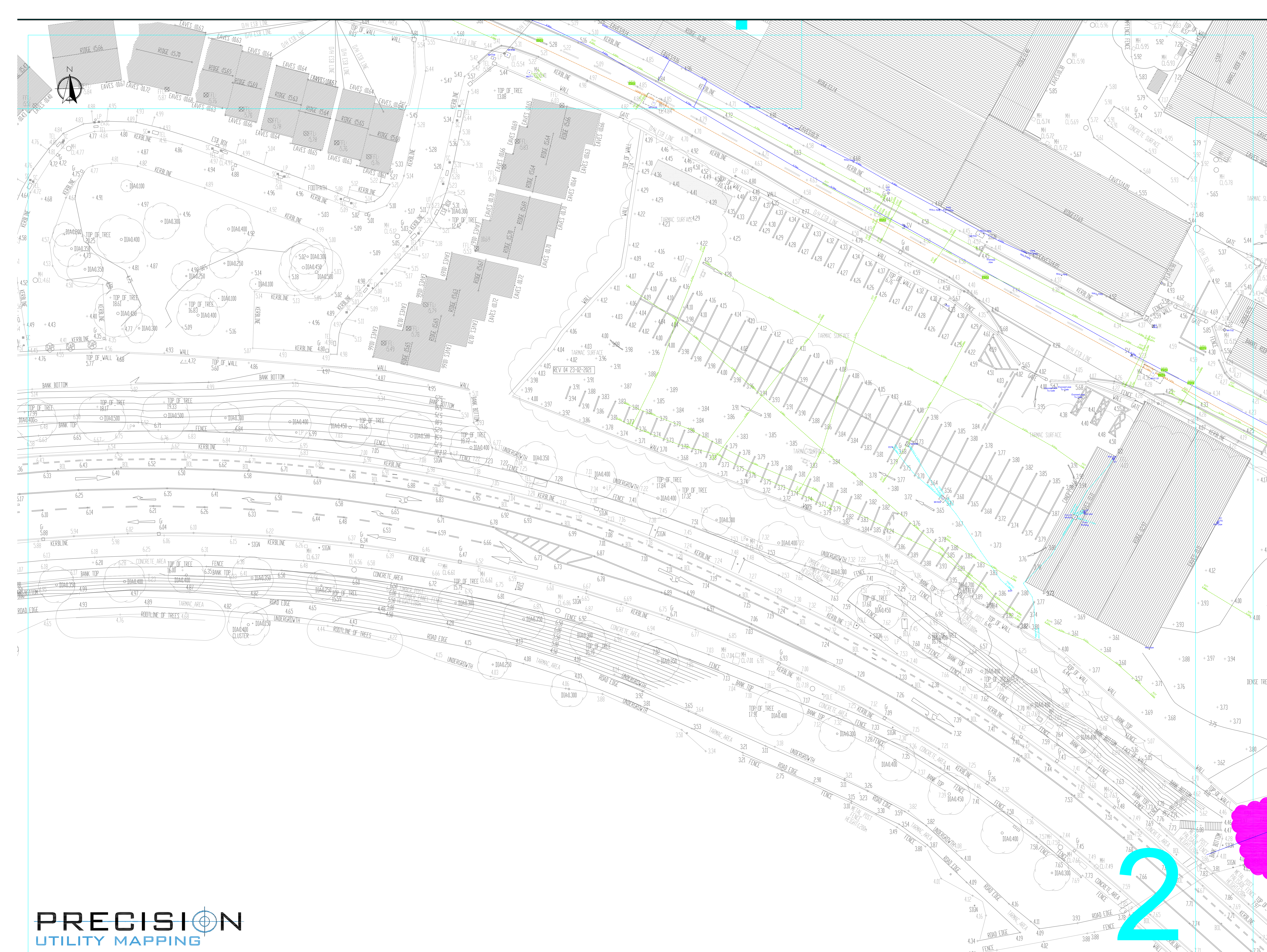
- |       |   |
|-------|---|
| (A)   | HORIZONTAL AND VERTICAL POSITION VERIFIED VISUALLY<br>(Accuracy: Horizontal $\pm 22\text{mm}$ ; Vertical $\pm 20\text{mm}$ )  |
| (B1F) | HORIZONTAL AND VERTICAL POSITION DETECTED BY MULTIPLE MEASUREMENTS WITH POST-PROCESSING OF GPS DATA<br>(Estimated Accuracy: $\pm 150\text{mm}$ OR $\pm 15\%$ of detected depth) |
| (B1)  | HORIZONTAL AND VERTICAL POSITION DETECTED BY MULTIPLE MEASUREMENTS<br>(Estimated Accuracy: $\pm 150\text{mm}$ OR $\pm 15\%$ of detected depth)                                  |
| (B2F) | HORIZONTAL AND VERTICAL POSITION DETECTED VIA POST-PROCESSING OF GPS DATA<br>(Estimated Accuracy: $\pm 200\text{mm}$ OR $\pm 40\%$ of detected depth)                           |
| (B2)  | HORIZONTAL AND VERTICAL POSITION DETECTED BY A SINGLE MEASUREMENT<br>(Estimated Accuracy: $\pm 250\text{mm}$ OR $\pm 40\%$ of detected depth)                                   |
| (C3F) | HORIZONTAL POSITION DETECTED VIA POST-PROCESSING GPS DATA<br>(Estimated Accuracy: $\pm 300\text{mm}$ in the Horizontal; Depth is undefined)                                     |
| (C3)  | HORIZONTAL POSITION DETECTED BY A SINGLE METHOD<br>(Estimated Accuracy: $\pm 300\text{mm}$ in the Horizontal; Depth is undefined)   |
| (A)   | A fully segment which is supported to exist has not been detected and is not measured.  |

**PRECISION**  
UTILITY MAPPING

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Mungret  
Limerick  
Ireland  
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Utility Survey  
Sheet 1 of 4





Notes

1. Topographical information has been taken from drawing '1885-20-04-20', some information may have been removed for clarity. Please refer to original drawing for full details.
2. This drawing should be read in conjunction with the utility survey report.
3. All depths are taken to top of service, unless "L" is indicated, in this instance the depth is to the invert of the pipe. This is for drainage pipes of manholes only.
4. As this is a non-intrusive survey only, all utilities should be visually verified by safe digging practices to confirm depths and horizontal survey.
5. Non-intrusive surveys cannot guarantee every possible service under the ground is located. Care must be taken when site works are planned as some services may not be locatable through non-intrusive methods may exist on site.

**DISCLAIMER**

This drawing and information contained within is issued in confidence and is the copyright of Precision Utility Mapping. If the topographical information or base map data has been supplied by a Third Party, Precision Utility Mapping is not liable for any inaccuracies contained therein. If inaccuracies to supplied mapping have been identified and Precision Utility Mapping have not been commissioned to correct inaccuracies these will be highlighted in the accompanying report. Disclosure of this information to Third Parties and unauthorised copying or replication of this data without approval is forbidden.

The data presented in this drawing have been collected using a combination of the following: consultation of utility asset information, visual survey & inspection of manholes and inspection chambers; electromagnetic location techniques; ground penetrating radar, and, where applicable, trial hole excavations. These methods may have been employed in conjunction with other methods of location for Underground Utility Detection, Verification and Location using the search methodologies indicated below and described in the accompanying report. This drawing should be used in conjunction with the accompanying report, which details the limitations of these techniques and any hindering factors encountered during this survey.

Unless otherwise stated, all utilities shown on this plan have been surveyed using approved detectors and the connections between inspection chambers, if unable to be detected, are generally assumed to be direct unless there are indications to the contrary. The detection confidence for each utility segment is depicted in line with the PAS128 scheme outlined below. Information depicted as QL-C or QL-D cannot be guaranteed as it is based on historic utility records which can be inaccurate and incomplete.

The utility routes depicted may reflect the routes of multiple cables or pipes. It is not always possible to differentiate between buried construction features, utilities and other subsurface linear features therefore it is possible that some features shown are not utility related, and due to the limitations of electromagnetic techniques all utility identifications should be treated with caution and verified prior to use during design/building works.

If the location or depth of utilities and features is of particular importance to a project then it is recommended that discussions are held with Precision Utility Mapping regarding any possible limitations or anomalies.

Please note that not all buried pipes, cables and ducts can be detected and mapped in consideration of their depth, location, material type, geology and proximity to other utilities. Even an appropriate and professionally executed survey may not be able to achieve a 100% detection rate. Where an area of utilities is likely to affect client project requirements, it is strongly recommended that a PAS228 Quality Level A verification survey is carried out.

No utility mapping survey can be considered a 100% accurate depiction of the sub-surface environment, and the use of these drawings does not remove the responsibility of the client for safe digging techniques at all times. Any excavations undertaken on site are to be in accordance with HSA Code of Practice for Avoiding Danger from Underground Services 2016.

## SUB-SURFACE KEY

| SYMBOL | DESCRIPTION   | UNIT   |
|--------|---|--------|
|        | CHIMNEY HEATING AND POWER   |        |
|        | DISTRICT HEATING  |        |
|        | DRAINAGE CHANNEL 1"   |        |
|        | DRAINAGE FOUL   |        |
|        | DRAINAGE SURFACE  |        |
|        | DRAINAGE UNDER FLOOR  |        |
|        | 7 FLOW DIRECTION INDICATED BY ARROW (IN CASE OF FLOODING)                             |        |
|        | ELECTRIC:   |        |
|        | ELECTRIC 12V  |        |
|        | ELECTRIC 11V  |        |
|        | ELECTRIC STREET LIGHTING  |        |
|        | GAS   |        |
|        | GAS/FUEL PIPELINE   |        |
|        | STREET FURNITURE CABLES   |        |
|        | TELEPHONE   |        |
|        | TELEPHONE - FIBRE OPTIC   |        |
|        | TELEPHONE - BT  |        |
|        | TELEPHONE - UNDER MEDIA   |        |
|        | TELECOM   |        |
|        | TRAFFIC CONTROL   |        |
|        | WATER   |        |
|        | UNIDENTIFIED UTILITY  |        |
|        | UNIDENTIFIED CABLES   |        |
|        | UNIDENTIFIED DUCTS DUCT   |        |
|        | OPTIC/LINEAR FEATURE  |        |
|        | ENL. LINEAR FEATURE   |        |
|        | UPPER AREA & MINORITY   |        |
|        | UPPER AREA & MINORITY - REPAIR  |        |
|        | CHIMNEY EXTENTS   |        |
|        | MEASURED DEPTH ROLL TO PERPENDICULAR  | 0.05m  |
|        | INVERT LEVEL TO PERPENDICULAR CABLE (TO ITS ORIGIN)                                   | 8.1234 |
|        | SOFTY LEVEL TO (10% DATUM)  | 0.0467 |
|        | COVER LEVEL OF PERFECTION CHIMNEY (TO ITS DATUM)                                      | 0.1836 |
|        | DIAMETER OF PERFECTION IN MILLIMETERS<br>(E.G. - BELOW GROUND LEVEL)                  | 1000   |
|        | AREA INABLE TO BE SURVEYED DUE TO SURFACE OBSTRUCTIONS, VEGETATION OR ACCESS PROBLEMS |        |
|        | STREET SURFACE SURFACE  |        |
|        | EXTENT OF SURVEY - BOUNDARY   |        |

UTILITY CONFIDENCE LEVELS (Listed from High to Low)

(A) HORIZONTAL AND VERTICAL POSTION DETECTED VISUALLY  
(Accuracy: Horizontal <25mm) (Vertical<40mm)

(B1) HORIZONTAL AND VERTICAL POSTION DETECTED BY MULTIPLE METHODS  
(WITH POST PROCESSING OF GPR DATA)  
(Estimated Accuracy: <150mm OR 15% of detected depth)

(B1) HORIZONTAL AND VERTICAL POSTION DETECTED BY MULTIPLE METHODS  
(Estimated Accuracy: <150mm OR 15% of detected depth)

(B2) HORIZONTAL AND VERTICAL POSTION DETECTED VIA POST-PROCESSED GPR  
(Estimated Accuracy: <200mm OR 40% of detected depth)

(B2) HORIZONTAL AND VERTICAL POSTION DETECTED BY A SINGLE METHOD  
(Estimated Accuracy: <200mm OR 40% of detected depth)

(B3) HORIZONTAL POSTION DETECTED VIA POST-PROCESSED GPR  
(Estimated Accuracy: <200mm in the Horizontal - Depth is undefined)

(B3) HORIZONTAL POSTION DETECTED BY A SINGLE METHOD  
(Estimated Accuracy: <200mm in the Horizontal - Depth is undefined)

(A) A utility segment which is suspected to exist but has not been detected and is therefore not in our measured model. (Accuracy: undefined)

|     |          |       |                  |      |      |
|-----|----------|-------|------------------|------|------|
| 01  | 24/09/21 | C.D.  | SURVEY COMPLETED | K.S. | J.M. |
| Rev | Date     | Drawn | Description      | Chkd | Appd |

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|        |               |
|--------|---------------|
| Client | Limerick 2030 |
|--------|---------------|

Title

Cleeves

Utility Survey  
Sheet 2 of 4



|                           |            |      |              |            |      |
|---------------------------|------------|------|--------------|------------|------|
| Surveyor                  | K. Beirne  | K.B. | Eng check    | —          | —    |
| Drawn                     | C. Daus    | C.D. | Coordination | —          | —    |
| Dwg check                 | K. Sheehan | K.S. | Approved     | J. Markham | J.M. |
| Scale at A0               | Status     |      | Rev          |            |      |
| 1:200                     | Complete   |      | 01           |            |      |
| Drawing Number            |            |      |              |            |      |
| PUM-10801-U-DR-0001-Draft |            |      |              |            |      |

[illegible]

## PAS128 SURVEY METHODOLOGY KEY

THIS SURVEY HAS BEEN CARRIED OUT IN ACCORDANCE WITH THE PAS128 SPECIFICATION FOR UNDERGROUND UTILITY DETECTION, VERIFICATION & LOCATION. THE SPECIFICATION ALLOWS A RANGE OF TECHNIQUES AND METHODS OF VARYING INTENSITY TO BE DEPLOYED. THE COLOUR CODED SCHEME INDICATES WHERE DIFFERENT SURVEY METHODOLOGIES HAVE BEEN USED ON SITE, AND THE LIST BELOW IDENTIFIES EQUIPMENT USED TO OBTAIN THE SURVEY RESULTS. NB: PLEASE SEE ACCOMPANYING REPORT FOR FULL DETAILS.

| ELECTROMAGNETIC DETECTION | GROUND PENETRATING RADAR | TOTAL STATION | GPS/GNSS   |
|---------------------------|--------------------------|---------------|------------|
| Viewer v.0.0.3            | IDS Opera Dao            |               | Trimble Rb |
|                           |                          |               |            |
|                           |                          |               |            |

|   |   |                |                           |      |              |            |      |
|---|---|----------------|---------------------------|------|--------------|------------|------|
|  MIP - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS OR HIGH DENSITY ARRAY. POST PROCESSING OF GPR DATA. |  M1 - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS. GPR MARKUP ON SITE. | Drawn          | C. Daus                   | C.D. | Coordination | -          | -    |
|  MIP - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS OR HIGH DENSITY ARRAY. POST PROCESSING OF GPR DATA. |  M2 - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS. GPR MARKUP ON SITE. | Dwg check      | K. Sheehan                | K.S. | Approved     | J. Markham | J.M. |
|  MIP - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS OR HIGH DENSITY ARRAY. POST PROCESSING OF GPR DATA. |  M2 - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS. GPR MARKUP ON SITE. | Scale of A0    | Status                    |      |              | Rev        |      |
|  MIP - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS OR HIGH DENSITY ARRAY. POST PROCESSING OF GPR DATA. |  M1 - EML SEARCH TRAVELED AT 2N INTERVALS - TRACED AT 15N INTERVALS. GPR SURVEY COVERED AT 2N INTERVALS. GPR MARKUP ON SITE. | 1:200          | Complete                  |      |              | 01         |      |
|  MIP - EML SEARCH TRAVELED AT 1N INTERVALS - TRACED AT 5N INTERVALS. GPR SURVEY AS APPROPRIATE. POST PROCESSING OF GPR DATA.                                 |  M1 - EML SEARCH TRAVELED AT 1N INTERVALS - TRACED AT 5N INTERVALS. GPR SURVEY AS APPROPRIATE. GPR MARKUP ON SITE.           | Drawing Number | PUM-10801-U-DR-0001=Draft |      |              |            |      |

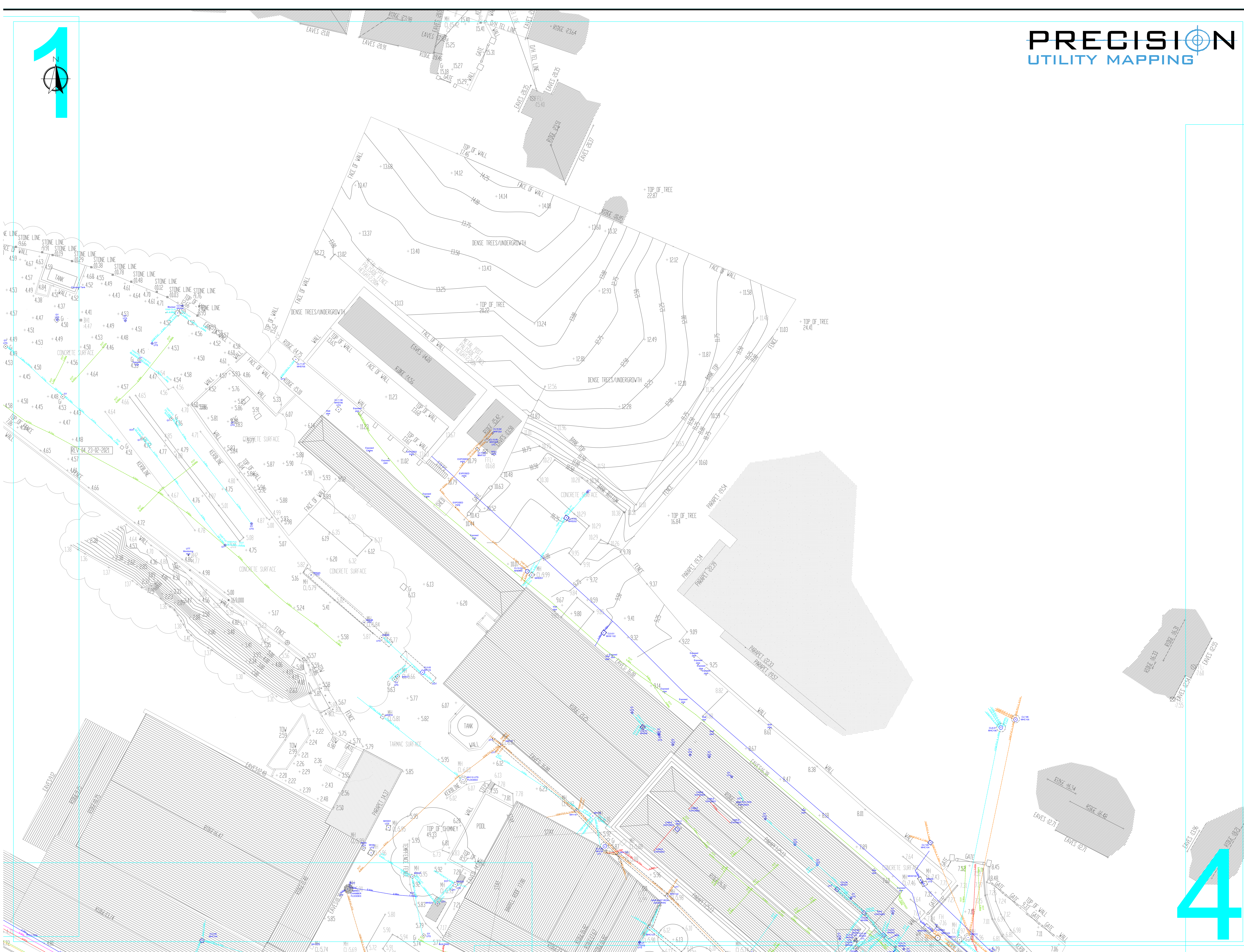




# 3

[illegible]





# PRECISION

## UTILITY MAPPING

- Notes
- Topographical information has been taken from drawing 18885-200-04 2D, some information may have been removed for clarity. Please refer to original drawing for full details.
  - This drawing should be read in conjunction with the utility survey report.
  - All depths are taken to top of service, unless "T.L." is indicated, in this instance the depth is to the invert of the pipe. This is for drainage pipes at manholes only.
  - As this is a non-intrusive survey only, all utilities should be visually verified by safe digging practices to confirm depths and alignments of survey.
  - Non-intrusive surveys cannot guarantee every possible service under the ground is located. Care must be taken when site works begin, as services that are not locatable through non-intrusive methods may exist on site.

**DISCLAIMER**

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The data presented in this drawing have been collected using a combination of the following: consultation of utility asset information, visual survey & inspection of manholes and inspection chambers, electromagnetic location techniques, ground penetrating radar, and, where applicable, trial hole excavations. These techniques have been deployed in accordance with the BS 5419 Specification for Underground Utility Detection, Verification and Location using the search methodologies indicated below and described in the accompanying report. This drawing should be used in conjunction with the accompanying report which details the limitations of these techniques and any hindering factors encountered during this survey.

Unless otherwise stated, all utilities shown on this plan have been surveyed using approved detectors and the connections between inspection chambers, if unable to be detected, are generally assumed to be direct unless there are indications to the contrary. The detection confidence for each utility segment is depicted in line with the PAS128 scheme outlined below. Information depicted as QL-C or QL-D cannot be guaranteed as it is based on historic utility records which can be inaccurate and incomplete.

The utility routes depicted may reflect the routes of multiple cables or pipes. It is not always possible to differentiate between buried construction features, utilities and other subsurface linear features therefore it is possible that some features shown are not utility routes, and due to the limitations of electromagnetic techniques, all utility identifications should be treated with caution and verified prior to use during design/building works.

If the location or depth of utilities and features is of particular importance to a project, then it is recommended that discussions are held with Precision Utility Mapping regarding any possible limitations or anomalies.

Please note that not all buried pipes, cables and ducts can be detected and mapped in consideration of their depth, location, material type, geology and proximity to other utilities. Even an appropriate and professionally executed survey may not be able to achieve a 100% detection rate. Where an area of utility mapping is key to affect client project requirements, it is strongly recommended that a PAS128 Quality Level A verification survey is carried out.

No utility mapping survey can be considered a 100% accurate depiction of the sub-surface environment, and the use of these drawings does not remove the requirement for the use of safe digging techniques at any excavations undertaken on site or to be in accordance with HSA Code of Practice for Avoiding Danger from Underground Services 2016.

| SUB-SURFACE KEY  |       |
|--|-------|
| COMBINED HEATING AND POWER   |       |
| DISTRICT HEATING   |       |
| DRAINAGE COMBINED  |       |
| DRAINAGE DUCT  |       |
| DRAINAGE SURFACE   |       |
| DRAINAGE UNIDENTIFIED  |       |
| ELECTRIC   |       |
| ELECTRIC LV  |       |
| ELECTRIC MV  |       |
| ELECTRIC STREET LIGHTING   |       |
| GAS  |       |
| GAS PIPES  |       |
| STREET FURNITURE CABLES  |       |
| TELECOMS   |       |
| TELECOMS - FIBRE OPTIC   |       |
| TELECOMS - ST  |       |
| TELECOMS - VIRGIN MEDIA  |       |
| TELECOMS   |       |
| TRAFFIC CONTROL  |       |
| WATER  |       |
| UNIDENTIFIED UTILITY   |       |
| UNIDENTIFIED CABLES  |       |
| UNIDENTIFIED EMPTY DUCT  |       |
| GPR LINEAR FEATURE   |       |
| ESL LINEAR FEATURE   |       |
| GPR AREA ANOMALY   |       |
| GPR AREA ANOMALY - RESUR   |       |
| CHAMBER EXTENTS  |       |
| MEASURED DEPTH BSL TO PRECALCULATED  | 6.60m |
| INVERT LEVEL OF PRECALCULATED (TO OS DATUM)  | 6.12m |
| SOFFIT LEVEL (TO OS DATUM)   | 6.45m |
| COVER LEVEL OF INSPECTION CHAMBER (TO OS DATUM)                                      | 6.78m |
| DIAMETER OF PRECAULC MANHOLE   | 1000  |
| (BSL - BELOW GROUND LEVEL)   |       |
| AREA UNABLE TO BE SURVEYED DUE TO SURFACE OBSTRUCTIONS, VEGETATION OR LACK OF ACCESS |       |
| TRENCH/SCAR - SURFACE SCAR   |       |
| EXTENT OF SURVEY - BOUNDARY  |       |

| UTILITY CONFIDENCE LEVELS (Listed from High to Low) |   |
|---|---|
| (A)   | HORIZONTAL AND VERTICAL POSITION VERIFIED VISUALLY (Accuracy: Horizontal <20mm, Vertical <40mm)   |
| (B1F)   | HORIZONTAL AND VERTICAL POSITION DETECTED BY MULTIPLE METHODS WITH/POST PROCESSING OF GPR DATA (Estimated Accuracy: <100mm OR <15% of detected depth) |
| (B1)  | HORIZONTAL AND VERTICAL POSITION DETECTED BY MULTIPLE METHODS (Estimated Accuracy: <100mm OR <15% of detected depth)                                  |
| (B2F)   | HORIZONTAL AND VERTICAL POSITION DETECTED VIA POST-PROCESSED GPR (Estimated Accuracy: <100mm OR <15% of detected depth)                               |
| (B2)  | HORIZONTAL AND VERTICAL POSITION DETECTED BY A SINGLE METHOD (Estimated Accuracy: <100mm OR <15% of detected depth)                                   |
| (B3F)   | HORIZONTAL POSITION DETECTED VIA POST-PROCESSED GPR (Estimated Accuracy: <100mm in the Horizontal - Depth is undefined)                               |
| (B3)  | HORIZONTAL POSITION DETECTED BY A SINGLE METHOD (Estimated Accuracy: <100mm in the Horizontal - Depth is undefined)                                   |
| (B4)  | A utility segment which is suspected to exist but has not been detected and is therefore shown as an assumed route (Accuracy: Undefined)              |

|     |          |       |                  |      |      |
|-----|----------|-------|------------------|------|------|
| 01  | 11/10/21 | C.D.  | SURVEY COMPLETED | K.S. | J.M. |
| Rev | Date     | Drawn | Description      | Chkd | Appd |

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Mungret  
Limerick  
Ireland  
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|                |   |        |              |            |      |
|----------------|---|--------|--------------|------------|------|
| Client         | Limerick 2030                             |        |              |            |      |
| Title          | Cleaves<br>Utility Survey<br>Sheet 4 of 5 |        |              |            |      |
| Surveyor       | K. Berne                                  | K.B.   | Eng check    | -          | -    |
| Drawn          | C. Daus                                   | C.D.   | Coordination | -          | -    |
| Dwg check      | K. Sheehan                                | K.S.   | Approved     | J. Markham | J.M. |
| Scale at A0    | 1:200                                     | Status | Complete     | Rev        | 01   |
| Drawing Number | PUM-10801-U-DR-0001-01                    |        |              |            |      |

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