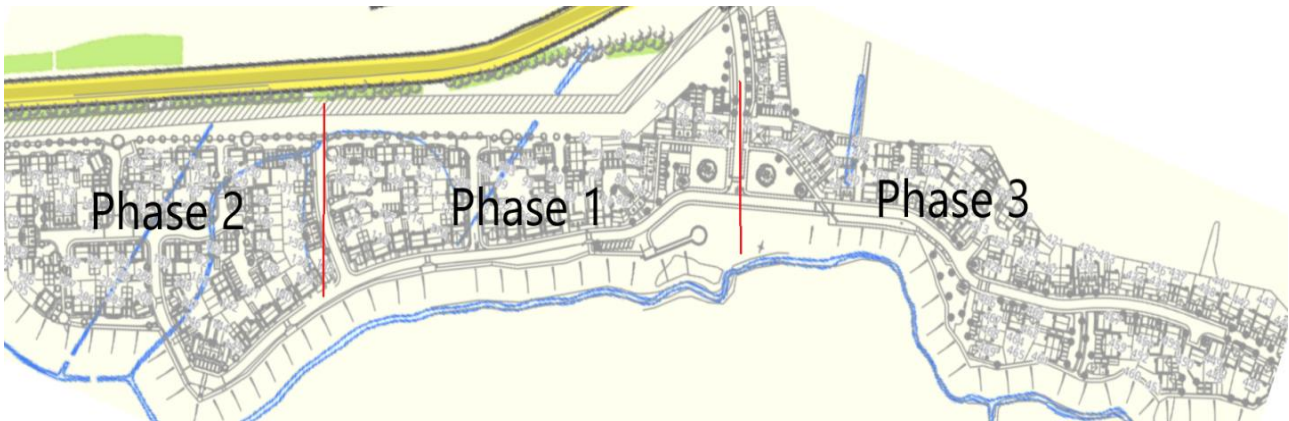


## 1. Summary

At the above site, GTC has experienced damaged service terminations, but has identified all remain at risk due to ongoing ground settlement. To ensure we are compliant with our obligations under the Electricity, Safety, Continuity and Quality Regulations (ESQCR) 2002, we are proposing to install a non-standard service termination arrangement on all affected plots.

## 2. Background

The site build commenced in 2014 by Persimmon Homes split over three phases. In 2017 when phase two commenced, we identified there were issues with ground settlement on phase one. As a result, the then installer decided to retrospectively install a service joint and coil of 35mm<sup>2</sup> service cable immediately beneath the meter boxes on both phases. However, this contingency has proved unsuccessful due to external factors such as inconsistently compressed ground, heavily compacted driveways, cleated hockey sticks and solid core service cable, which is unable to sufficiently flex thereby resulting in damage at service termination positions.



*Figure 1: Site drawing.*

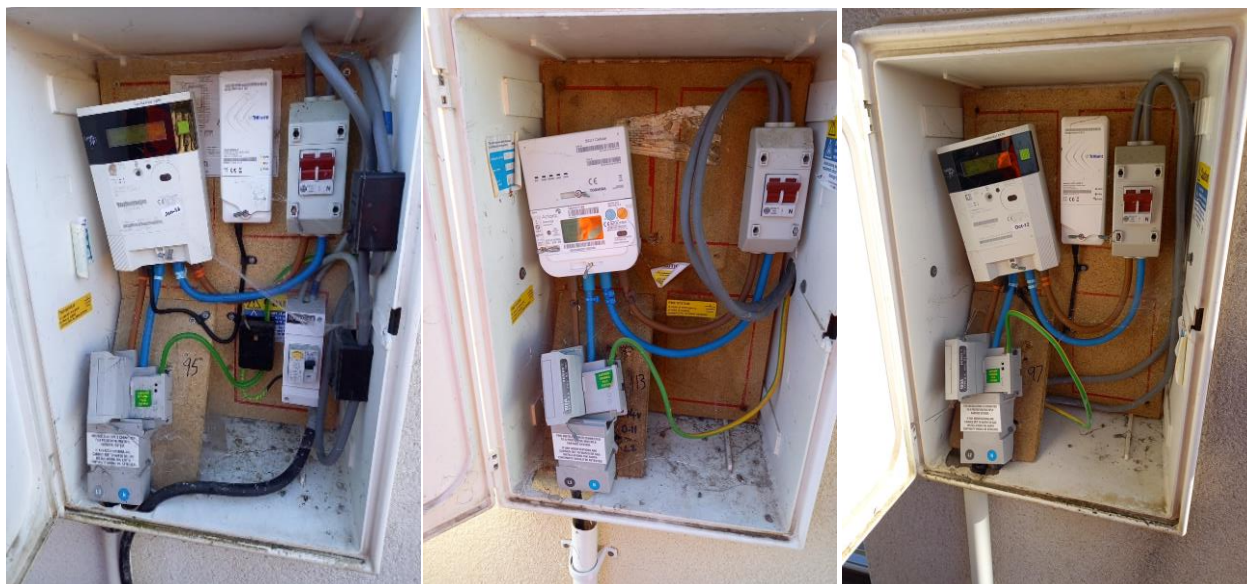


*Figure 2: Service joint and coil of 35mm<sup>2</sup> service cable.*



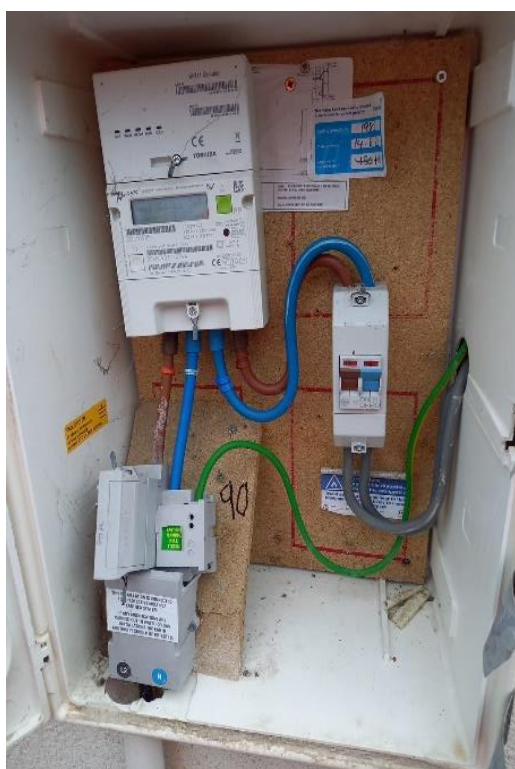
### 3. GTC Response

GTC subsequently received calls from concerned customers reporting the damages. Therefore, we mobilised, undertook a full site survey, and found other service terminations in an unsatisfactory state, with live 100amp cutouts and meters pulled away from the meter box backboard.



*Figure 3: Examples of the meters pulled away from the backboard due to tension on the service cables through settlement.*

To ensure our equipment remained safe and operable for customers, we performed an immediate intervention to affected plots as a temporary fix, whilst pursuing a permanent enduring solution, to ensure we remain compliant with ESQCR's by providing our customers with safe and secure electricity supply.



*Figure 4.1: Plot 90 before intervention.*



*Figure 4.2: Plot 90 post intervention*





We have reviewed the energy providers who supply electricity to phases one and two; there are nine suppliers as detailed below:

- TILL (British Gas) 49 Plots
- MRCY (Octopus Energy) 29
- EOND (E. ON) 14
- EDFE (EDF Energy) 9
- OVOE (OVO Energy) 7
- BGAS (British Gas) 2
- GESL (So Energy) 1
- REGE (Octopus Energy) 5
- BNRG (Utility Warehouse) 1
- SPOW (ScottishPower) 2

*Data correct when reported 08/05/2024.*

#### 4. Contingency Plans Considered

1. Replace the whole service and provide some excess length within the metering housing – **Dismissed.**  
There would be major disruption to the residents due to the need for further excavation and reinstatement of their driveways.
2. Additional metering housing – **Dismissed.**  
The building regulations restrict the number of metering housings in one wall to two.
3. Box beneath the metering housing – **Dismissed.**  
An additional box on the side of the house causing disruption to residents, especially as in many locations there is insufficient space beneath the meter box to locate an additional box.
4. Above ground vertical LV service joint with service cable coiled inside the metering housing – **Recommended.**

#### 5. Recommended Contingency Plan

The proposed plan will consist of the following:

- Cut existing cable below housing and install a new section of cable using a vertical LV straight joint.
- Slide over a piece of white 40mm tube to protect the joint and new section of cable beneath the meter box.
- The additional section of service cable will be a loop inside the meter box, connected to the cutout. The looped cable will provide a contingency for future movement and eliminate the risk of service disconnection.
- Apply a notice/warning sticker to inform third parties of the non-standard orientation.

*Figure 5 below is an example which has been trialled within a controlled environment with extreme simulated movement.*



**Figure 5: Trialled solution**

Figure 6 is the detailed drawing of the settlement kit:

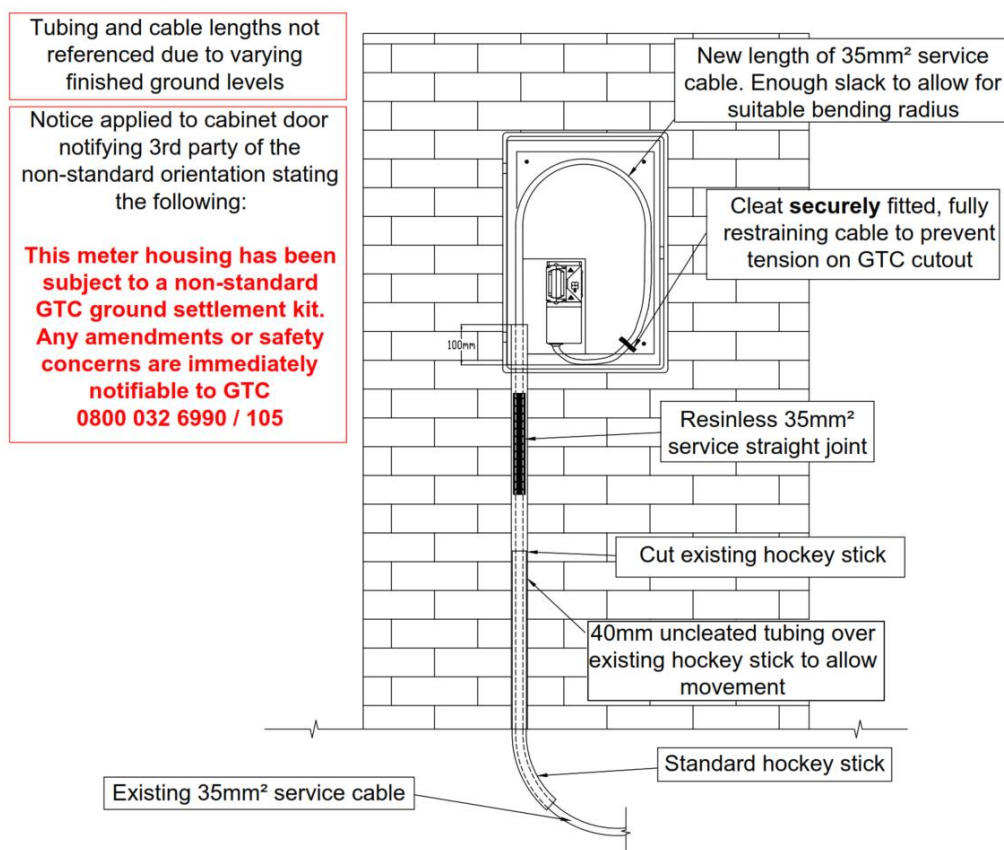


Figure 6: Drawing, settlement kit

Note – There may be deviation on the orientation, depending on presence of unauthorised third-party equipment.

## 6. Conclusion

GTC were advised of the ground settlement issue during 2017, and a contingency plan was put in place to mitigate the effects of this on all 119 plots. This contingency plan approach began to fail in October 2023, when we received a report that further settlement had affected our equipment giving rise to concern.

Therefore, following an extensive site review, we confirmed a further intervention and more permanent solution was required. In total four solutions were considered, with only one proving viable and practical taking into consideration resident disruption and safety. The solution as detailed previously in “Section 5” is the best solution, one GTC believes will withstand any future movement and remaining safe.

GTC are proposing to install the solution during September, which will be completed by GTC approved contractors with no involvement required from the retrospective supplier, who will as a result incur no costs.

Please can we ask a suitable representative sign and return this document to confirm receipt:

Company: \_\_\_\_\_ Position: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_