

**McCann**  
and partners

Consulting Engineers

# **Channel View, Cardiff**

## **Residential Development**

**Existing Utility Infrastructure Report - Gas,  
Water Electricity and Telecoms**

## SECTION 1 INTRODUCTION

1.01	Introduction	1
------	--------------	---

## SECTION 2 SITE PLAN

2.01	Satellite Images (Courtesy of Google Earth)	1
2.02	Site Masterplan (Courtesy of Powell Dobson Architects)	2

## SECTION 3 EXISTING SERVICES OVERVIEW

3.01	Existing Services Overview	3
------	----------------------------	---

## SECTION 4 EXISTING SERVICES - DIVERSIONS

4.01	Gas	4
4.02	Water	7
4.03	Electrical	8
4.04	Telecoms	14

## SECTION 5 NEXT STEPS

5.01	Next Steps	17
------	------------	----

## SECTION 6 RESPONSIBILITY MATRIX

6.01	Responsibility Matrix	18
------	-----------------------	----

### **Appendices**

Appendix A Statutory Authority Information

Appendix B Gwalia Survey Map

Appendix C Existing Survey Overlaid onto Proposed Site plan.

Channel View, Cardiff  
Existing Infrastructure Report - Gas, Water Electricity and  
Telecoms

<b>Report Type/Status:</b>	Information
Report issue:	First
Project Number:	6731
File Number:	6731-MCP-V1-ZZ-RP-ME-2006
Originator:	Chris Morgan
Title:	Director
Originator:	Graham Carr
Title:	Mechanical Associate
Checked By:	Chris Morgan
Approved By:	Matthew Williams
Date:	2nd February 2021

Prepared by:  
McCann & Partners  
Faraday House  
Terra Nova Way  
Penarth Marina  
Cardiff  
CF64 1SA  
T: 029 2035 2450  
F: 029 2035 2451  
E: office@mccannp.com

## **SCHEDULE OF AMENDMENTS**

<b>Date</b>	<b>Revision</b>	<b>Page No.</b>	<b>Detail of Revision</b>

## SECTION 1 INTRODUCTION

### 1.01 Introduction

This report provides the status of existing Gas, Water, Electricity and Telecoms Utilities on the Channel View Development at Cardiff and outlines the requirements for any diversions and new connections to the proposed development. The site currently has existing residential properties which are to be demolished to allow for the new development to be constructed.

The utility providers which have been contracted as part of this initial review are:

- Electricity - Western Power Distribution
- Gas - Wales and West Utilities
- Water - Dwr Cymru Welsh Water
- Telecoms - BT Openreach

A below ground services survey has been conducted by Gwalia in November 2020, details of which are described herein.

## SECTION 2 SITE PLAN

### 2.01 Satellite Images (Courtesy of Google Earth)

The images below show the current and proposed channel view development site plans.



**2.02 Site Masterplan (Courtesy of Powell Dobson Architects)**

---



## SECTION 3 EXISTING SERVICES OVERVIEW

### 3.01 Existing Services Overview

From reviewing the utility maps provided by WPD, WWU, DCWW and BT Openreach, and the Gwalia Survey information.

The site currently has existing below ground gas, water, electricity and telecom services in the areas of the new development which currently serve the existing properties.

The site currently has a large amount of existing services, specifically running down Channel View Road, which is the main access road for all the properties on the development.

Isolations and/or diversions will be required as part of the ongoing design development of the project, with new applications to be made for new supplies to the existing buildings.



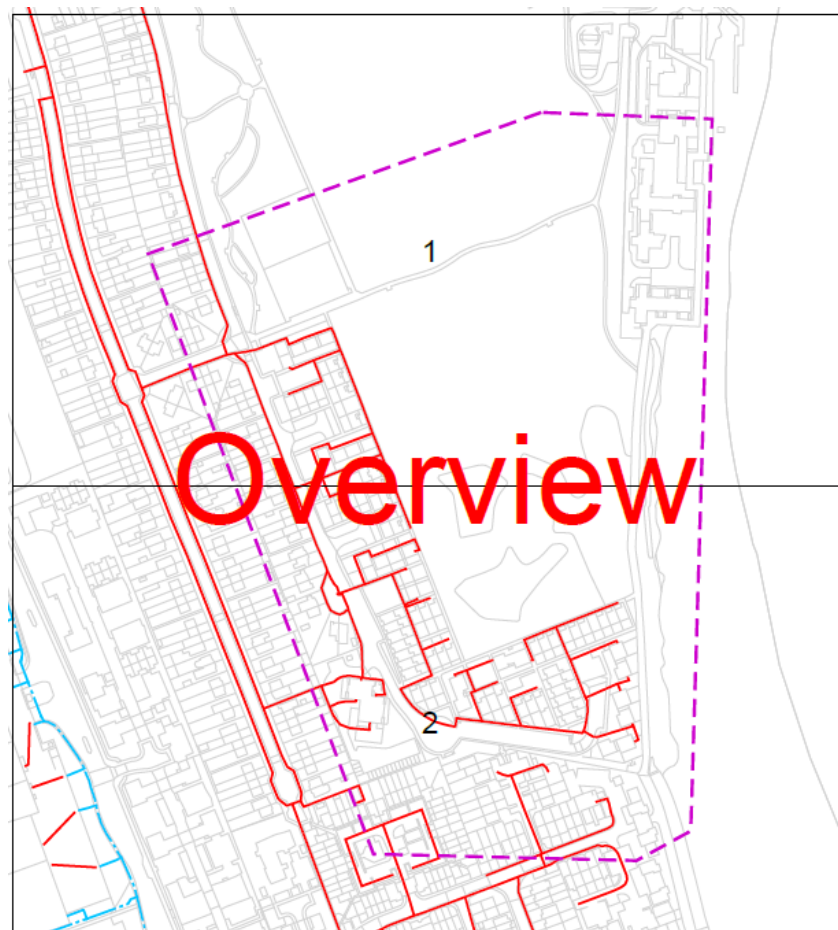


SECTION 4 **EXISTING SERVICES - DIVERSIONS**

**4.01 Gas**

Below is a copy of the existing Wales and West Utilities (WWU) gas network infrastructure map identifying the existing underground services on, and in the vicinity of the Channel View Development.

As can be seen from the map below there is existing gas infrastructure which runs down Channel View Road and branches off to run behind the existing properties. The gas main is shown to run down the footpath of Channel View Road on the opposite side to the development. This may impact on the final road and landscape design, further investigation required with the Design Team and WWU to ensure the existing mains are at the correct depth.



WWU Network Map

Note: The above map is limited only to these services installed and owned by Wales and West Utilities.

The accuracy of record maps can not be guaranteed, and we would therefore recommend an underground utilities survey be carried out to accurately identify the quantity and position of the underground services.



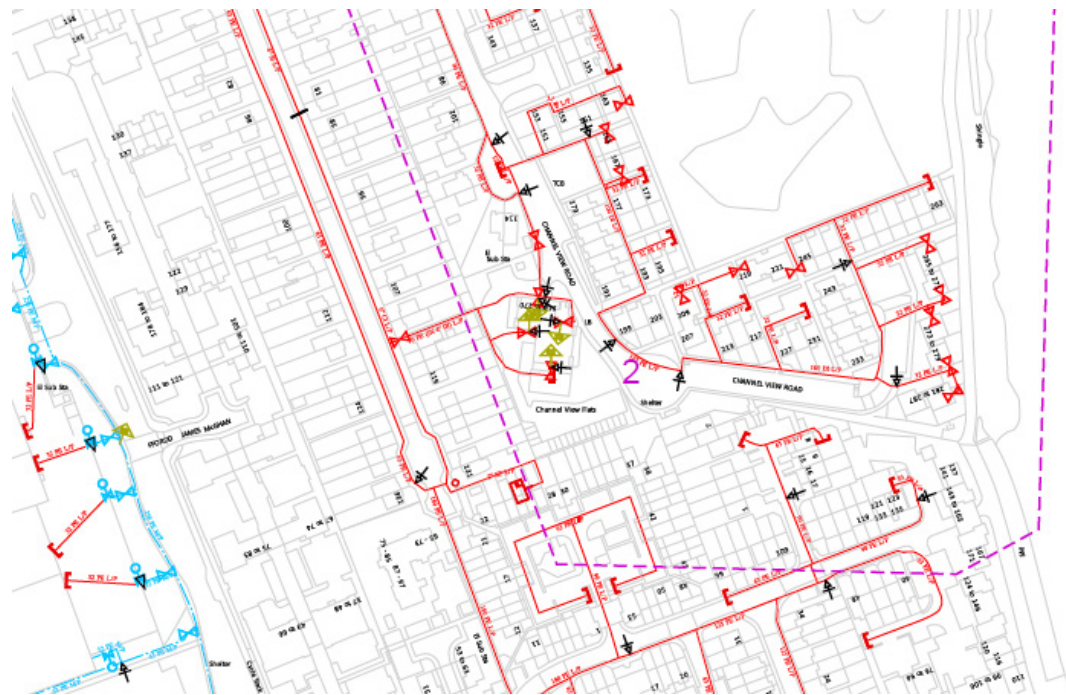
### **Northern Boundary**

A low pressure gas main is shown branching off the main infrastructure in Channel View Road at the north end of the site and runs behind the existing properties. The gas main and connections to existing properties will need to be disconnected from the main infrastructure in Channel View Road by Wales and West Utilities. The works will need to take phasing into account.



### **Channel View Road**

A low pressure gas main is shown branching off the main infrastructure in Channel View Road at the south end of the site and runs around the side roads between the existing properties. The gas main and connections to existing properties will need to be disconnected from the main infrastructure in Channel View Road by Wales and West Utilities. The works will need to take phasing into account.



## 4.02 Water

Below is a copy of the existing Dwr Cymru Welsh Water water network infrastructure map identifying the existing underground services on, and in the vicinity of the development.

As can be seen from the map below there is existing water infrastructure which runs down Channel View Road. The water main is shown to run down the footpath of Channel View Road on the opposite side to the development. This may impact on the final road and landscape design, further investigation required with the Design Team and DCWW to ensure the existing mains are at the correct depth.

A water main is shown to branch off the main infrastructure at the north and south ends of the site to serve the existing properties with a water main running along the footpath on the development side of Channel View Road and around the side roads to serve the existing properties and fire hydrants. The water main and connections to existing properties will need to be disconnected from the main infrastructure in Channel View Road by DCWW. The works will need to take phasing into account.

The main infrastructure currently extends as far as Channel View Flats on Channel View Road. The water main will need to be taken back to No. 114 to suit the changes in road layout on the development.



DCWW Network Map

Note: The above map is limited only to these services installed and owned by Dwr Cymru Welsh Water.

The accuracy of record maps can not be guaranteed and we would therefore recommend an underground utilities survey be carried out to accurately identify the quantity and position of the underground services.

#### 4.03 Electrical

##### **Overview**

Below is a copy of the existing Western Power Distribution (WPD) electricity network infrastructure map identifying the existing underground services on, and in the vicinity of, the development.

As can be seen from the map below, there are several existing electricity cables, both HV and LV which run through the site. The vast majority of these cables are in Channel View Road, which then branch off to serve individual properties. These are described in more detail in the following pages.

WPD Network Map (obtained from <http://wpd.beforeudig.co.uk>)



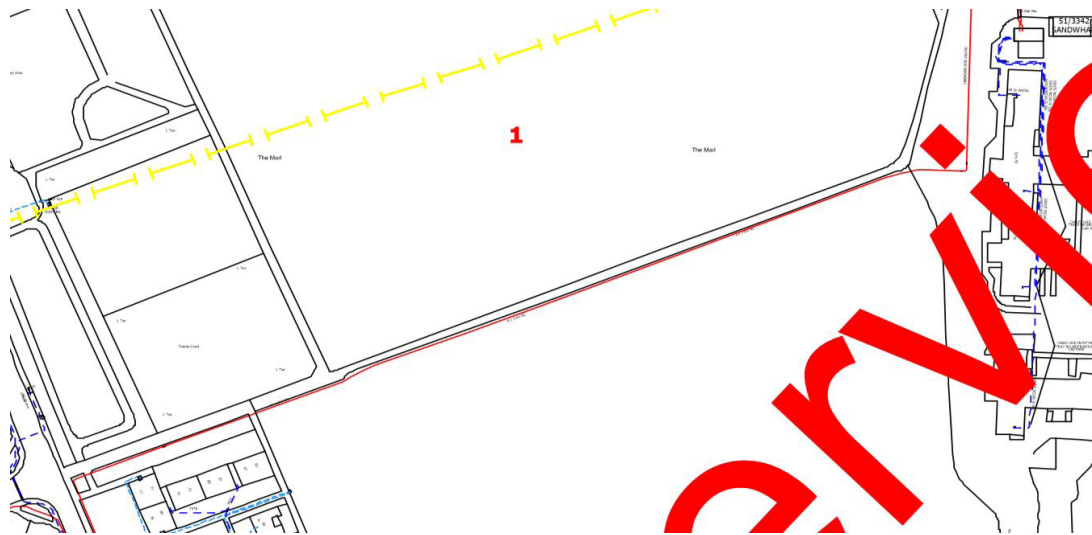


### **Northern Boundary**

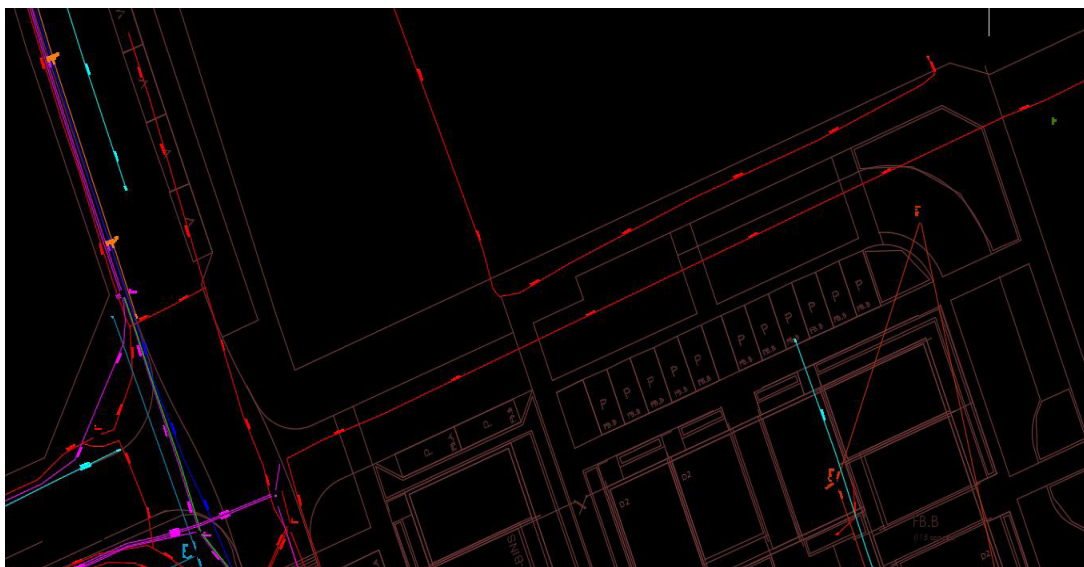
There is an existing WPD HV cable running along the Northern boundary of the site, from East to West as shown below.

This cable is on the boundary of the site and avoids the new properties and gardens, but may impact on the final road and landscape design, to ensure the existing cables are at the correct depth.

Further investigation required with the Design Team and WPD.



The below image shows the cables described above overlaid on the current proposed site plan.



### **Channel View Road**

Existing WPD HV and LV cables currently exist within the existing Channel View Road.

These cables serve properties at the Southern end of the site.

The Northern section of Channel View Road is not changing in layout. Therefore it may be possible for the existing buried services to remain. However the levels of the services will need to be reviewed to ensure the services are at the correct depth, particularly if there are to be any changes in levels.

This will also need to be reviewed with the service provider.



Note: The above map is limited only to these services installed and owned by Western Power Distribution.

The cables at the Northern end of Channel View Road are likely not to read diverting. However the depths will need to be reviewed against any change in surface levels to ensure the cables are at adequate depths.



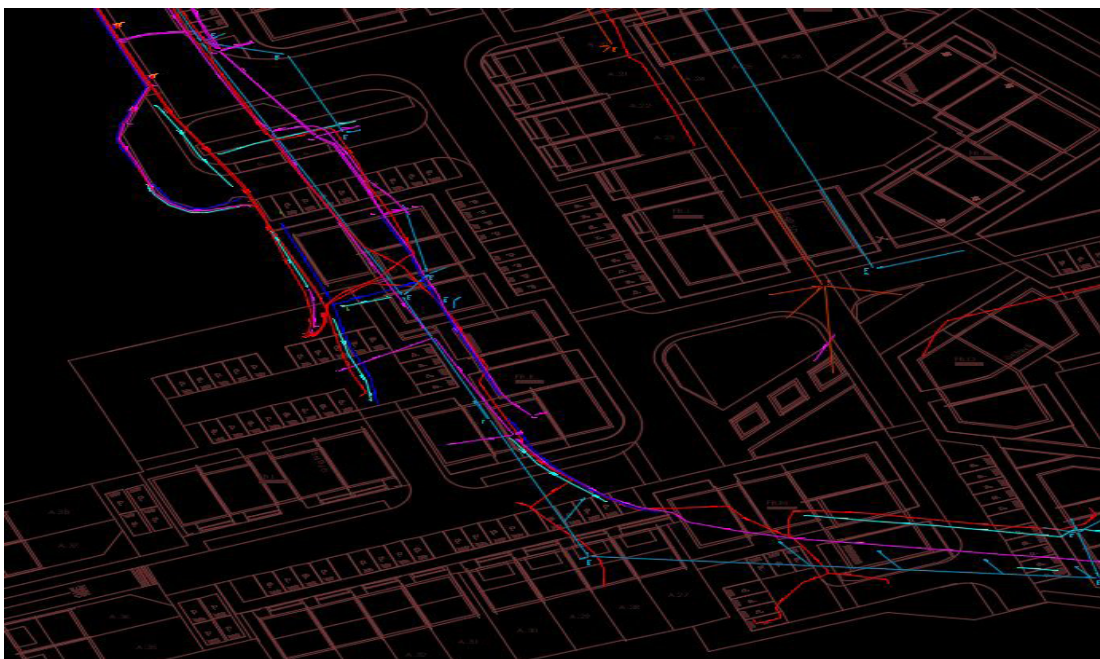


The Southern end of channel View Road is being amended, and therefore the existing services, as shown below will need to be diverted as these now clash with the new development.

Some of the services will be isolated as part of the demolition works, and wont require diverting. This is to be further developed as part of the ongoing design.



The image below shows this section of the development overlaid onto the new proposed layout, demonstrating the clashes with the new development.



At the Southern end of the site, existing services serving existing properties, will clash with the new development. Many of these services will be isolated as part of the phase 1 works.





## 4.04 Telecoms

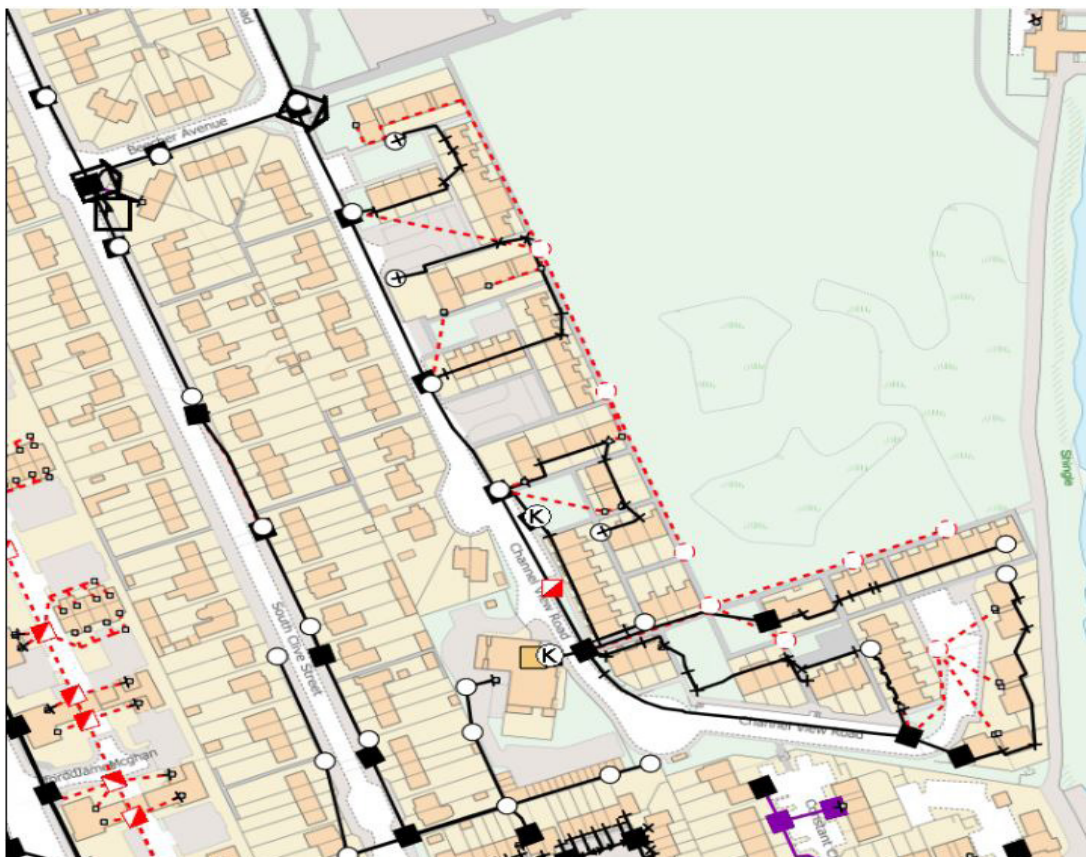
### Overview

Below is copy of the existing Openreach Telecoms Network Map identifying the existing underground services on, and in the vicinity of, the development.

As can be seen from the map below there is an existing Telecoms network in the vicinity of the site, running both above and below ground.

These services will need to be diverted, and/or isolated as part of the on-going design development of the scheme.

Openreach Network Map (Obtained from <http://www.swns.bt.com/pl/mbe>)



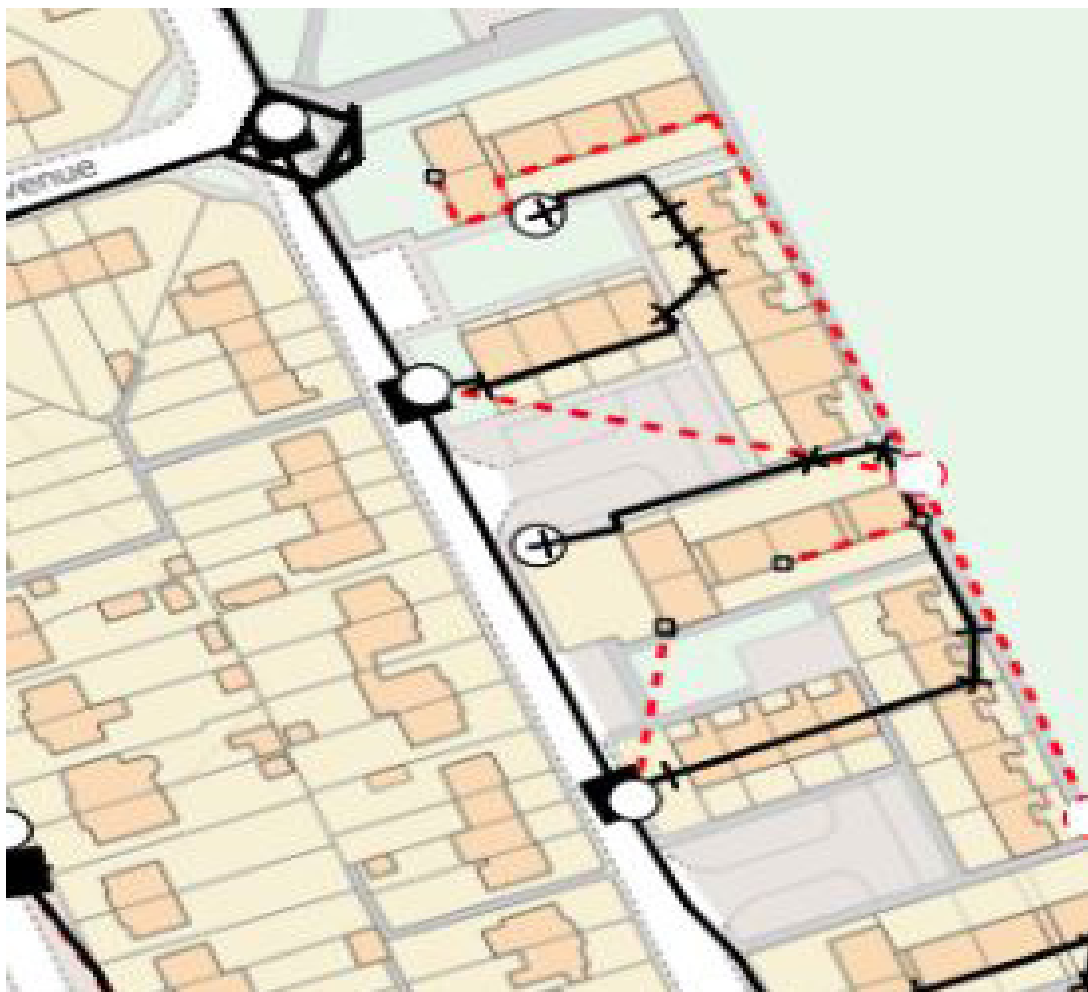
Note: The above map is limited only to these services installed and owned by Openreach.

The accuracy of records maps can not be guaranteed, and we would therefore recommend an underground utilities survey be carried out to accurately identify the quantity and positioning of all underground services.

### **Channel View Road**

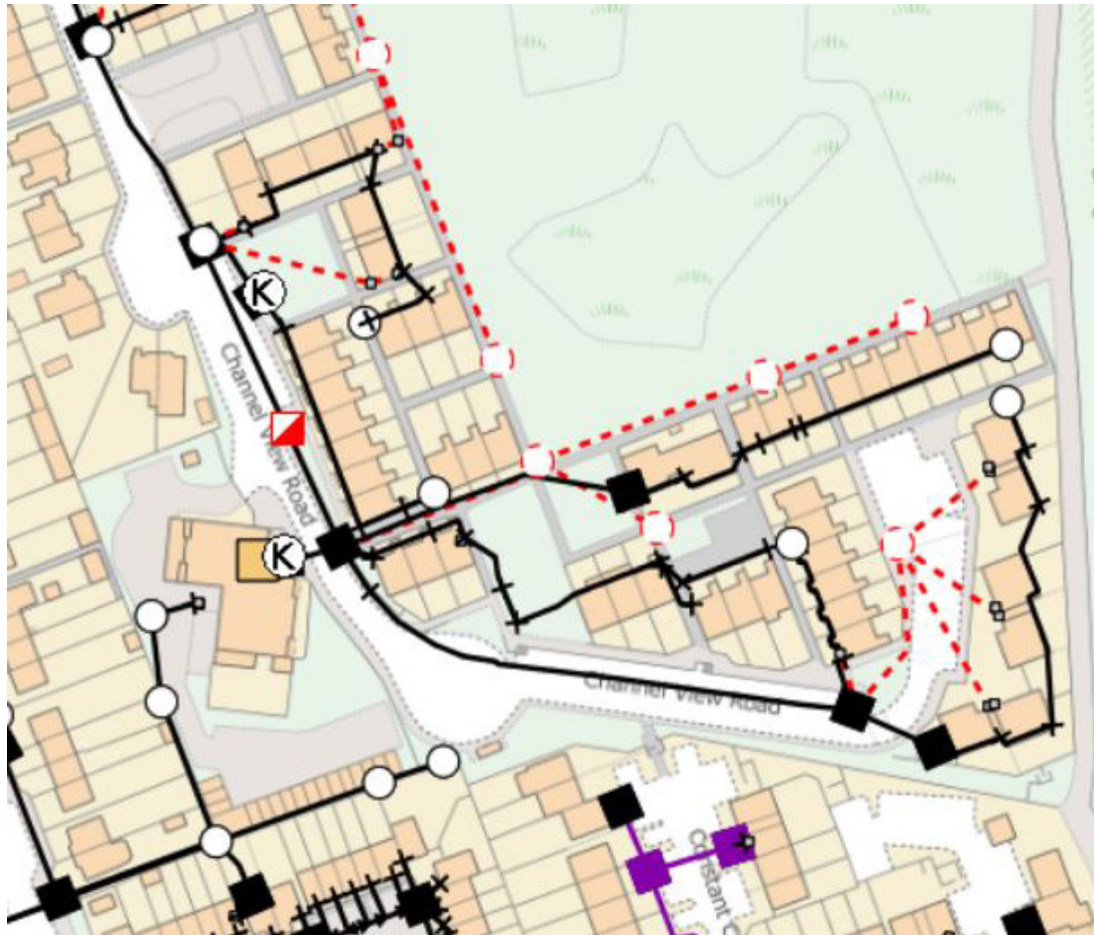
Telecoms Services run down existing Channel View Road below ground, with above ground poles to serve existing properties.

Similarly to the WPD cables, some of the below ground telecoms cables at the Northern end of Channel View Road may not require diverting as may be utilised for the future development. The above ground poles will be isolated and removed as required to suite the demolition plans.



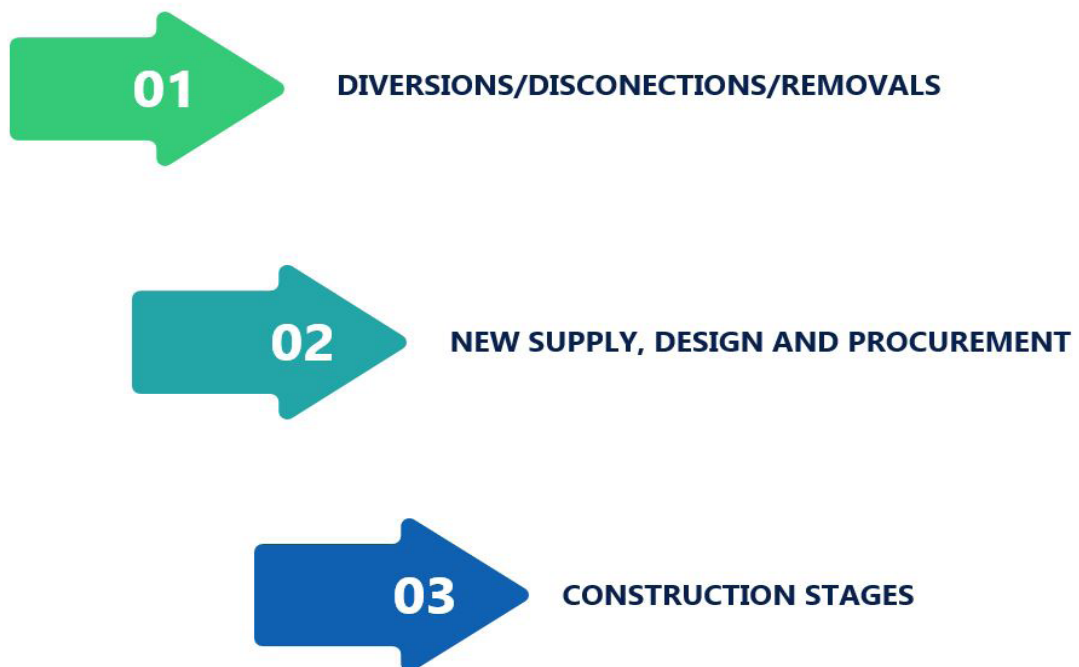
At the Southern end of the development, the existing Channel View Road is being amended, all of the existing telecom services will need to be isolated and/or diverted to suit the proposed development.

This will be ongoing as part of the schemes design development.



## SECTION 5 NEXT STEPS

### 5.01 Next Steps



#### **Diversion/Disconnection/Removal of Existing Infrastructure**

Agree diversions / disconnection / removal of existing infrastructure requirements with Utility companies whilst maintaining uninterrupted services where required.

Complete application forms and supporting information.

Review proposals to ensure compliance with Project objectives.

#### **New Supply Design & Procurement**

Scheme Design.

Assess diversified load requirements as appropriate.

Apply for and agree preferred phased points of connection to existing utility networks.

Evaluate detailed route planning and design.

Negotiate and agree optimum servicing/metering strategy.

Prepare design drawings and specification of the site-wide services system for approvals, tender and construction.

#### **Construction Stage**

Manage and co-ordinate the Pre-construction process and design approvals.

In conjunction with the project engineers, review and co-ordinate the Infrastructure design.

Review, agree and monitor the programme for the works

Manage adoption of assets by the appointed distribution company.

SECTION 6 **RESPONSIBILITY MATRIX**

**6.01 Responsibility Matrix**

	Client / Client Representative	Consulting Engineer	Contractor	Client / Client Representative	Consulting Engineer	Contractor	Client / Client Representative	Consulting Engineer	Contractor	Client / Client Representative	Consulting Engineer	Contractor
Temporary Supplies			X			X			X			X
Installation Specification		X			X				X			X
Maximum demand and Capacity Calculations			X			X			X			X
Liaison with Utility Companies			X			X			X			X
Record Drawings			X			X			X			X
Combined Site Services installation drawings Scale		X			X			X			X	
Location of existing services Using Utilities Maps		X			X			X			X	
Survey of Existing Services			X			X			X			X
Meter Installation Date Agreement	X		X				X		X	X		X
Confirmation of Shipper / Meter Operator	X							X		X		
Site Supervision			X			X			X			X
Site Attendance Date Agreement			X			X			X			X
Ground Work Provision (Ducts)			X			X			X			X
Payment of Quotation									X			
Quotation Request		X			X			X			X	
Quotation Reference		X			X			X			X	
Provider												
Utility	Electricity			Telecoms			Gas			Water		



## **Appendices**

Appendix A - Statutory Authority Information

Appendix B - Gwalia Survey MAP

Appendix C - Existing Survey Overlaid onto Proposed Site Plan

**Appendix A**  
Statutory Authority Information

**Appendix B**  
Gwalia Survey MAP

## Appendix C

Existing Survey Overlaid onto Proposed Site Plan

**McCann**  
and partners

Consulting Engineers

Cardiff Office:  
Faraday House  
Terra Nova way  
Penarth marina  
Cardiff  
CF64 1SA  
T: 029 2035 2450  
F: 029 2035 2451  
E: [office@mccannp.com](mailto:office@mccannp.com)

Swansea Office:  
Suite 2  
Vivian Court, New Mill Court  
Swansea Enterprise Park  
Swansea  
SA7 9FG  
T: 01792 794285  
F: 01792 701330  
E: [swanseaoffice@mccannp.com](mailto:swanseaoffice@mccannp.com)

**[mccannp.com](http://mccannp.com)**