



MILLFIELD WORKS, GRANGEFIELD ROAD, STOCKTON-ON-TEES

PRELIMINARY UTILITIES ASSESSMENT Final Report v1.0

May 2018

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Report Title: **Millfield Works, Grangefield Road, Stockton-on-Tees**
Preliminary Utilities Assessment
Final Report v1.0

Client: T J Thomson and Son Ltd

Date of Issue: 17 May 2018

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Associate Director

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1 INTRODUCTION

1.1 PURPOSE OF REPORT

Weetwood Services Ltd ('Weetwood') has been instructed by T J Thomson and Son Ltd to undertake a Preliminary Utilities Assessment (PUA) in association with the proposed redevelopment of the former Millfield Works, Grangefield Road, Stockton-on-Tees.

1.2 UTILITY PROVIDERS

The regional Distribution Network Operators (DNOs) for the area are as follows:

Gas	Northern Gas / GTC
Electricity	Northern Powergrid / GTC
Telecommunications	BT Openreach / Virgin Media
Potable Water	Northumbrian Water Ltd
Wastewater	Northumbrian Water Ltd

1.3 LIMITATIONS

The scope of this assessment is limited to a desktop study and is reliant on information received from third parties. The accuracy of information received from third parties cannot be guaranteed and Weetwood accepts no liability for errors or omissions in the supplied data.

The information provided does not replace a requirement for a legal land search to be undertaken to identify land ownership, covenants, rights of way, wayleaves, easements, and rights under Acts of Parliament.

The exact location and depth of services described in this report should be verified by survey/investigation at early design stage and prior to the commencement of any works on site.

1.4 STRUCTURE OF THE REPORT

The report is structured as follows:

- Section 1** Introduction and report structure
- Section 2** Provides background information relating to the development site and the development proposals
- Section 3** Provides an overview of the existing utility assets within/adjacent to the site and any diversions/easements required
- Section 4** Presents a summary of key findings

2 SITE DETAILS AND PROPOSED DEVELOPMENT

2.1 SITE DESCRIPTION

The former Millfield Works is located at Ordnance Survey National Grid Reference NZ 437 191, as shown in **Figure 1**.



Figure 1: Site Location

2.2 EXISTING AND PROPOSED DEVELOPMENT

The 19.9 ha site is currently occupied by a former scrap metal merchant and processing facility (the Millfield Works). The industrial warehouses and former railway lines utilised for the transportation of materials on and off site have recently been demolished/removed; the main office buildings are still erect. The western, north-western and southern portions of the site comprise of dense vegetation and trees.

The development proposals (**Appendix A**) entail the demolition of the remaining office buildings and the erection of up to 600 residential dwellings with means of site access. The area of dense vegetation and trees to the west of the site will remain as existing.

The proposed primary access is off Grangefield Road via the existing works entrance, with two potential secondary access points (pedestrian, cycle and emergency vehicles only) off Riley Street and Britannia Road.

3 EXISTING UTILITIES SURVEY

Utility asset records (**Appendix A**) were obtained from statutory undertakers in March/April 2018 in order to identify the type and approximate location of existing below and above ground infrastructure within the site and surrounding area as discussed further in the following sections of this report.

The exact location, depth, size and materials of the individual services will need to be verified at the detailed design stage.

3.1 GAS

Northern Gas Networks (NGN) and GTC utility records indicate that the following services are located within/adjacent to the site boundary:

On-Site

- NGN: A 90 mm Polyethylene (PE) low pressure (LP) gas main in the south-western portion of the site along the primary access route into the site off Grangefield Road. The gas main is indicated to be abandoned.

Off-Site

- NGN: A network of LP gas mains within the roads surrounding the site, including Grangefield Road, Riley Street and Britannia Road.
- GTC: LP and intermediate pressure (IP) gas mains in some residential areas to the east, west and south of the site; however, no gas mains are located within 250 m of the site.

3.2 ELECTRICITY

Northern Powergrid (NP) and GTC utility records indicate that the following services are present within/adjacent to the site boundary:

On-Site

- NP: A high voltage (HV) cable between Grangefield Road and Dovecot Street, crossing the site via the public footpath in the southern portion of the site between Light Pipe Hall Road/Tynedale Street and the railway line.
- NP: HV 11 kilovolts (kV) cables within the south-western portion of the site; the mains are indicated to be abandoned.
- NP: Low voltage (LV) cables are serving the buildings adjacent to Grangefield Road.
- NP: 4 no. electricity sub-stations on-site; one within the south-western portion of the site; two to the south adjacent to the footpath crossing the site between Light Pipe Hall Road and the railway line, and one to the north of the site adjacent to the dismantled railway lines. These are expected to have been decommissioned.
- It is unclear from the plans whether the cables are overhead or underground cables.

Off-Site

- NP: LV cables along Grangefield Road, Light Pipe Hall Road and Wrensfeld Road. The plans do not cover the southern portion of the site, Dunmail Road or Britannia Road to the north/north-east of the site.

- GTC: LV cables to the south of the site; however no cables are located within 200 m of the site.

3.3 TELECOMMUNICATIONS

Openreach (BT) and Virgin Media (VM) utility records indicate that the following services are present within/adjacent to the site boundary:

On-Site

- BT: Ducts serving the buildings adjacent to Grangefield Road.
- VM: A duct serving the building to the south of the site adjacent to Light Pipe Hall Road.

Off-Site

- BT: Ducts, poles and joint boxes along all roads adjacent to the site boundary, including Grangefield Road, Riley Street and Britannia Road.
- VM: Ducts along all roads adjacent to the site boundary, including Grangefield Road, Light Pipe Hall Road, Riley Street and Britannia Road.

3.4 WATER

Northumbrian Water Ltd (NWL) utility records indicate that the following services are present within/adjacent to the site boundary:

On-Site

- A 12" diameter Cast Iron (CI) water main along the public footpath between Light Pipe Hall Road/Tynedale Street and the railway line.
- 6" diameter Cast Iron Cement Lined (CICL) private water mains towards the south of the site adjacent to Tynedale Street.

Off-Site

- Water mains of various diameters (3" to 6") along all roads adjacent to the site boundary, including Grangefield Road, Riley Street and Britannia Road.

3.5 WASTEWATER

NWL utility records indicate that the following services are present within/adjacent to the site boundary:

On-Site

- A 525 mm and a 1200 mm x 800 mm diameter public combined sewer flow in a northerly direction to the west of Lustrum Beck. However, no public foul water infrastructure is indicated to be located within the development platform (land east of Lustrum Beck).

Off-Site

- Public combined sewers along all roads adjacent to the site boundary, including Grangefield Road and Riley Street.

3.6 DIVERSIONS, EASEMENTS AND RIGHTS OF WAY

NWL and NP should be consulted to determine the required easement either side of the water main and electricity cable located along the public footpath between Light Pipe Hall Road/Tynedale Street and the railway line.

LV mains, telecommunication ducts and private water mains serving the existing buildings along Grangefield Road, in addition to the abandoned electricity and gas mains, are expected to be removed as and when the remainder of the site is demolished. As such, diversions and/or easements are not expected to be required.

Due care and appropriate work methods should be exercised during construction of any site access routes, due to the presence of gas, electricity, water, wastewater and telecommunication mains located at the proposed access points off Grangefield Road, Riley Street and Britannia Road. The same applies to any proposed excavation works on-site where private services may be/are installed.

4 SUMMARY

This PUA has been prepared on behalf of T J Thomson and Son Ltd and relates to the proposed redevelopment of the former Millfield Works, Grangefield Road, Stockton-on-Tees.

Asset records have been obtained from the relevant utility service providers for the site and surrounding area in order to identify the extent of existing utilities infrastructure any potential constraints in respect of the proposed development and, where necessary, inform the masterplan.

The key findings and constraints are summarised as follows:

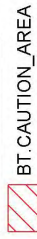
- The following apparatus are located on-site:
 - LV electricity cables and telecommunication ducts serve the buildings adjacent to Grangefield Road and Light Pipe Hall Road.
 - A 12" diameter water main and a HV electricity cable in the public footpath between Light Pipe Hall Road/Tynedale Street and the railway line.
 - Private water mains to the south of the site adjacent to Tynedale Street.
 - A 525 mm and 1200 mm x 800 mm diameter public combined sewer to the west of Lustrum Beck. However, no public foul water infrastructure is indicated to be located within the development platform (land east of Lustrum Beck).
 - HV 11 kV electricity mains within the south-western portion of the site; the mains are indicated to be abandoned.
 - 4 no. electricity substations within central and southern portions of the site; these are expected to have been decommissioned.
- Consultation with NWL (water) and NP (electricity) is required to determine the required easements for on-site apparatus.
- Due care and appropriate work methods should be exercised during construction of any site access routes, due to the presence of gas, electricity, water, wastewater and telecommunication mains located at the proposed access points off Grangefield Road, Riley Street and Britannia Road. The same applies to any proposed excavation works on-site in case private services are installed

APPENDIX A:

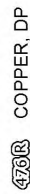
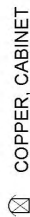
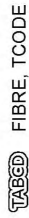
Utility Asset Records

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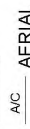
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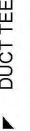
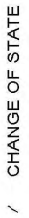
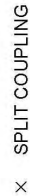
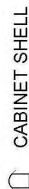
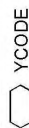
DUCT



PROPOSED



STRUCTURE



PROPOSED



Other proposed plant is shown using dashed lines.

BT symbols not listed above may be disregarded.

IMPORTANT WARNING:
Information regarding the location of BT apparatus is provided for guidance only and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus, which may exist at various depths and may deviate from the marked route.

Existing BT plant may not be recorded. Information valid at time of preparation.

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C08848 - 04/04/18

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CAUTION AREA

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
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
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
 CABINET SHELL


 SPLIT COUPLING

 POLE

 KIOSKS

 MANHOLE


 JOINTBOX

 CHANGE OF STATE

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 MANHOLE

 JOINTBOX

 DUCT TEE

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
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CAUTION AREA

 BT CAUTION AREA

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 TUNNEL


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PROPOSED


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 DUCT


STRUCTURE


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 CABINET SHELL


 SPLIT COUPLING

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
 CHANGE OF STATE

 DUCT TEE

PROPOSED

 MANHOLE

 JOINTBOX

 DUCT TEE

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CAUTION AREA



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Road, Stockton-On-Tees

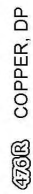
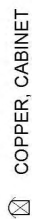
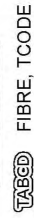
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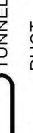
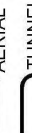
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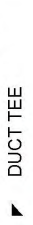
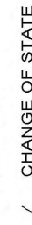
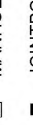
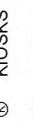
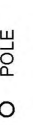
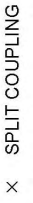
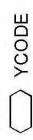
DUCT



PROPOSED



STRUCTURE



PROPOSED



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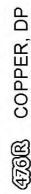
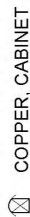
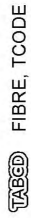
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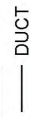
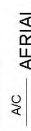
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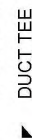
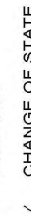
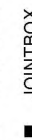
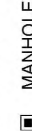
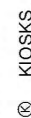
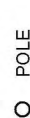
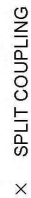
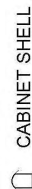
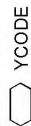
DUCT



PROPOSED



STRUCTURE



PROPOSED



Other proposed plant is shown using dashed lines.

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IMPORTANT WARNING:
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Existing BT plant may not be recorded. Information valid at time of preparation.

CLICK BEFORE YOU DIG
FOR PROPOSED WORKS, PLEASE CONTACT THE APPROPRIATE
TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING
LOCATE AND MARKING SERVICE
email ebv@openreach.co.uk
ADVANCE NOTICE REQUIRED
(Other than for Manhole, Entry 08.06.17.00)



PLANT INFORMATION REPLY

C08948 Map 6 - 04/04/18
Grangefield Road, Stockton-On-Tees, TS19 0AA

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443800

443900

519000

519000

519100

519100

443800

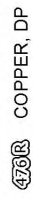
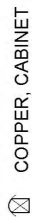
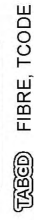
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Legend

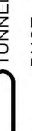
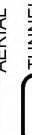
CAUTION AREA



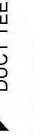
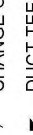
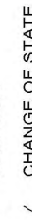
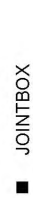
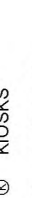
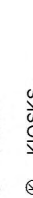
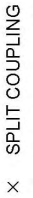
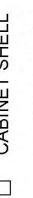
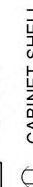
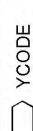
EQUIPMENT



DUCT



STRUCTURE



Other proposed plant is shown using dashed lines.

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Information valid at time of preparation.
CLICK BEFORE YOU DIG
FOR PROPOSED WORKS, PLEASE CONTACT BT FIRST
TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING
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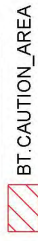
PLANT INFORMATION REPLY

C08948 Map 7 - 04/04/18
Grangefield Road, Stockton-On-Tees, TS19 0AA

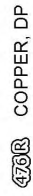
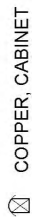
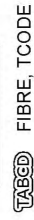


Legend

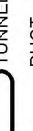
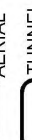
CAUTION AREA



EQUIPMENT



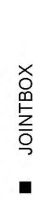
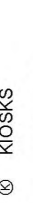
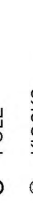
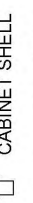
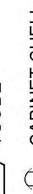
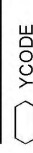
DUCT



PROPOSED



STRUCTURE



PROPOSED



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CLICK BEFORE YOU DIG
FOR PROPOSED PLANT AND EQUIPMENT, AND TO ADVISE BT OF ANY
TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING
LOCATE AND MARKING SERVICE
email btvc@openreach.co.uk
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PLANT INFORMATION REPLY

C08848 Map 8 - 04/04/18

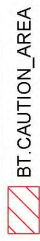
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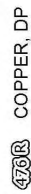
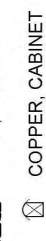
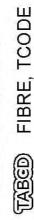
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Legend

CAUTION AREA



EQUIPMENT



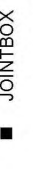
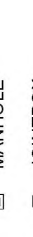
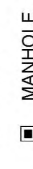
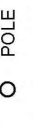
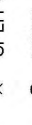
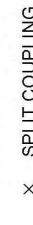
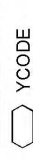
DUCT



PROPOSED



STRUCTURE



PROPOSED



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email btv@openreach.co.uk
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