Siphon pits and valve pits pipework are to be removed as part of the demolition works and pits to be backfilled in accordance with the PWI.

Unrecorded live services may be present on site.

Below ground gasholder demolition works include dewatering, desludging, removal of steelwork, removal of associated redundant pipework/interceptors/sparge units and siphons.

The Contractor shall provide 24 hour security to the site during the works.

Any fencing removed to facilitate the works shall be reinstated upon completion to match original unless otherwise agreed with the Project Manager.

The Contractor shall refer to the Isolation Certificates contained in the Site Information.

Gasholders were purged of gas and were noted as free venting.

The Contractor shall prepare and agree an Environmental Management Plan for the project, including a programme of environmental monitoring. Background monitoring to be undertaken prior to commencement of works.

The Contractor shall maintain 24 hour access to the operational NGG compound, PRS and district governor.

A dumpling survey of Gasholder No.1 and No.2 has been undertaken. A copy of the survey report is included in the Site Information.

Paint, holder water, ecology and asbestos surveys have been undertaken. Reports are included within the Site Information.

Infilling the below ground gasholders will be undertaken under a separate contract following the completion of dismantling and demolition works, however, the Contractor is required to ensure that the site is left safe and secure. This will include the installation of appropriate fencing around the gasholders. The specification is to be agreed with the Project Manager. However, notwithstanding the above, should the Contractor identify any specific engineering concerns due to leaving two empty gasholders the Project Manager shall be informed as soon as practicable.

NGG PRS, district governor and overhead gas mains remain live and operational. The Contractor shall liaise with NGG regarding protection measures.

SERVICES AND OTHER LOCATIONS SHOWN ARE APPROXIMATE AND TO BE USED FOR INDICATIVE PURPOSES ONLY. NOT ALL SERVICES SHOWN ON STATUTORY PLANS OUTSIDE OF SITE BOUNDARY ARE SHOWN.

N

Railway

MP 24

The Contractor's attention is drawn to the presence of an approximately 2 m high brick retaining wall. The Contractor shall undertake an assessment of the capacity of the wall to withstand surcharge loads during demolition and shall apply a suitable standoff for plant and materials if required.

Extent of NGG Depot and Access Route

Mast

Steel Frame

ENTEC IP

I/P Gas

ENTEC MP

Track

Below ground gas mains

St Michael's Church

Neighbouring church - Grade II Listed Building

Car Park

NGG offices and depot. NGG receive large deliveries to this area. 24 hour access required. Contractor to liaise with NGG.

Office

Tank

ENTEC HP

H/P Gas

The Contractor's attention is drawn to the limited access around Gasholder No.1.

The Contractor's attention is drawn to the presence of an approximately 2 m high concrete retaining wall.

The Contractor's attention is drawn to the presence of hydrocarbon staining around the edge of the gasholder.

Gasholder No.1 noted to be oil filmed during its operation. Heavy black filming oil noted to be present. Oil staining around holder also noted to be present.

Gasholder No.1
(4 lift, column guided, below ground, 65.5 m diameter, 12.815 m deep)

Position as shown in Entec drawings

Holder Overflow

ENTEC HP/IP GAS

ENTEC AG GAS

PRS/Gas Valve Compound

The Contractor's attention is drawn to the presence of a live NGG PRS. 24 hour access required. Contractor to liaise with NGG regarding any protection measures required during the works.

The Contractor's attention is drawn to the live overhead gas main passing above the access to the NGG office/depot. Clearance is limited to below approximately 4.3 m. The Contractor shall assess and confirm overhead clearance limits and liaise with NGG regarding any protection measures required during the works.

Single Storey Former Steam Boiler House Building
Single storey brick built with flat felt/asphalt roof.
Asbestos containing materials are present (a demolition/refurbishment asbestos survey has been undertaken and the report is included in the Site Information).
Following asbestos removal the building is to be demolished/dismantled to ground level.
Ground floor slab is to remain in-situ.
"Non-Standard" Hazards
1. Potential presence of asbestos containing materials.
2. Potential contamination of underlying soils
3. Unknown stability of boiler pipework within the building, including the chimney present on the roof of the building. Large cracks also apparent on the building brickwork.

The Contractor's attention is drawn to the presence of the brick boundary wall, approximately 1 m of which is retained above the level of the public footpath (outside the site boundary). The Contractor shall undertake an assessment of the capacity of the wall to withstand surcharge loads during demolition and shall apply a suitable standoff for plant and materials if required.

Lych Gate

Assumed drainage

Holder Overflow

Cable

LP

Separator

Extent of NGG Depot and Access Route

Siphon pits and valve pits pipework. Any resultant voids to be infilled.

Chain link fencing

The Contractor's attention is drawn to the drainage exit point.

The Contractor's attention is drawn to areas of dense vegetation.

Palisade fencing

The Contractor's attention is drawn to the presence of concrete walls.

The Contractor's attention is drawn to the live overhead gas main passing above the access to the Gasholder No.1. Clearance is limited to below approximately 3.5 m. The Contractor shall assess and confirm overhead clearance limits and liaise with NGG regarding any protection measures required during the works.

Separator

Holder Overflow

Methane Extraction Tank

Gasholder No. 2
(4 lift, spiral guided, below ground, 46.4 m diameter, 10.759 m deep)

Gasholder No. 2 noted to be oil filmed during its operation. No filming oil noted to be present.

Roof of Gasholder No.2 noted to be significantly distorted

Siphon pit

The Contractor's attention is drawn to the drainage exit point.

The Contractor's attention is drawn to the above ground sparge unit located outside the gasholder compound.

The Contractor's attention is drawn to the brick retaining wall currently surrounding Gasholder No.2. The Contractor shall undertake an assessment of the capacity of the wall to withstand surcharge loads during demolition and shall apply a suitable standoff for plant and materials if required.

Above ground sparge unit to be demolished to ground level and seal any openings remaining. Any resultant voids to be infilled.

The Contractor's attention is drawn to the change in level between Gasholder No.2 and the surrounding area.

The Contractor's attention is drawn to the limited access around Gasholder No.2.

The Contractor's attention is drawn to current access restrictions to Gasholder No.2. The area immediately surrounding Gasholder No.2 is currently limited to pedestrian access via steps. There is no current vehicular access.

The Contractor's attention is drawn to the presence of electricity sub-stations. 24 hour access required. Contractor to liaise with NGG regarding any protection measures required during the works.

0 10 20 30 40 50m

LEEMING GROVE

Residential properties

SAUNBY CLOSE

RAGLAN CLOSE

BYRON STREET

UR DRIVE

BANKS ROAD

MP GAS

ENTEC MP

Gas conditioning unit

Below ground gas mains

The Contractor's attention is drawn to the live NGG district governor. 24 hour access required. Contractor to liaise with NGG regarding any protection measures required during the works.

El Sub Sta

Approximate location of above ground pipework

The Contractor's attention is drawn to shared access with NGG. The access is in frequent use and must be maintained at all times.

Site Access

The Contractor's attention is drawn to areas of dense vegetation.

Banks Road Primary School

HOLDER SUPPLY

Note: The current landholding boundaries are pre the transfer of surplus land. It is assumed that once the land transfer process has been completed Gasholder No.1 and No.2 compounds will be under the ownership of National Grid Property Holdings Ltd.

Legend

- National Grid Property Holdings Ltd. site boundary
- Land to be transferred to NGPH ownership
- Land retained by NGG
- Existing Structures
- Fence
- Structures to be demolished
- Historical structures c.1904-1975 (approximate positions of possible foundations, overlaid from Entec 2003 report; additional structures overlaid from Landmark Envirocheck report ref. 53908985_1_1, 2014)

Services (surveyed on site, JVS 2014)

- Gas (overhead)
- Gas (pressure as noted, depth in mm)
- Gas (redundant)
- Gas marker / Gas valve
- Electricity (below ground)
- Electricity (below ground, presumed dead)
- Electricity (above ground, approximate position)
- Unknown

John Vincent Surveys, Survey ref. GARGAS, April 2014

Services (overlaid from servicesplans)

- Telecoms (U/G) / Telecoms (O/H)
- Electricity (HV) / Electricity (LV)
- Combined Sewer
- Water Main
- Gas (LP) / Gas (IP)
- Gas (MP) / Gas (HP)
- Surface Drainage
- Holder Drainage

BT Openreach ref.Arkadin ref. GWB194115, 05.03.2014
United Utilities servicesplan, ref. 13/10/10564, 03/03/2014
National Grid Gas servicesplan ref. NW_TW_ZZ_SWW_066229, 28.01.2014
National Grid PLC, Drainage plan ref. NW-GARSTON-001, 02/04/2008

Services (overlaid from Entec Site Layout, 2003)

- Electricity (LV)
- Electricity (HV)
- Gas - MP/IP/HP (as labelled) / Gas - LP
- Gas - above-ground pipework
- Telecoms
- Combined sewer / Drainage
- Water main

Entec UK Limited *Installation Report/Drawing 3: Existing Services*, February 2003
Entec UK Limited *- Environmental Assessment of Former Gasworks, Garston (Interpretive)*, January 2003

Note:
Locations shown are overlaid from relevant site plans and reports (see references below). All locations shown are approximate and are to be used for indicative purposes only.

Reference:
Basegeo detail from Promap OS (*Ber courtesy of National Grid*)
Entec UK Limited *- Environmental Assessment of Former Gasworks, Garston (Interpretive)*, January 2003

NOTES:

1. The drawing is to be read in conjunction with the Project Works Information (PWI) and all other relevant documentation.
2. All work to be carried out in accordance with current British Standards and Codes of Practice.
3. It is the Contractor's responsibility to ensure that the site is left safe and secure at the end of each working day.
4. The Contractor's attention is drawn to the proximity of the structure(s) to the site access road/neighbouring properties/other site users and the implementation of measures to control dust and noise is considered imperative. The Contractor is required to submit his proposals in this regard prior to commencement of works, in accordance with the Specification and PWI.
5. The Contractor is to submit his proposal for any phasing of the Works to the Project Manager for comment prior to the commencement of works.
6. The Contractor is to satisfy himself that all services to the structure(s) have been terminated prior to commencement of works.
7. The exposed ends of existing drains, sewers, gas mains, ducts and/or pipelines shall be sealed and the position recorded in accordance with the PWI and Specification. Before sealing any drains, etc, the Contractor shall take all reasonable actions and enquiries to ensure that the services are redundant. Appropriate care shall be taken during any grouting or sealing operations not to cause any blockage to adjoining live drains, sewers, pipelines or ducts.
8. A refurbishment/demolition asbestos survey of the structure(s) to be demolished has been conducted and the results are included with the Site Information. The Contractor shall arrange for a suitably licensed and approved Specialist Asbestos Removal Contractor to undertake the removal of all identified areas of asbestos containing material prior to the commencement of demolition works, in accordance with the relevant asbestos regulations, PWI and the Specification, and shall give all notices in connection therewith. In the event of material suspected to be asbestos being encountered during demolition, whether foreseen or unforeseen, work shall be suspended in the area and an exclusion zone established until the material has been tested to confirm or otherwise the presence of asbestos and, if found to be asbestos containing, the material removed in accordance with the requirements of this clause,
9. Hazards relating to specific buildings have been identified on this drawing. Other site specific hazards are noted in the PWI. The Contractor should also consider general hazards related to demolition works.
10. Where the drawing identifies a requirement for new security fencing to be erected following demolition, the fencing shall comply with the requirements of BS1722-1: 1999. The foundations for the fence are to be designed by the Contractor to include for adjacent services and wind loadings.
11. All structures are to be demolished to ground level only, unless noted otherwise.
12. Any voids or pits left on completion of demolition works are to be backfilled to ground level, in accordance with the PWI and Specification.
13. The Client's aim is to maximise the recovery of demolition materials, by the recycling of demolition arisings, including concrete, masonry, metal, wood, plastic and glass, and the recovery of building elements, such as steel beams, roof tiles, and sanitary ware. The Contractor is to undertake a Pre-Demolition Audit (based on the ICE Demolition Protocol) during the Tender Phase and to prepare and to submit to the Project Manager a plan for material recovery and agree a Demolition Recovery Index for the project prior to the commencement of demolition works.
14. All dewatering activities are to be undertaken in accordance with the requirements of NGPH document 'Minimum Operating Standards for Gasholder Dewatering' (NGPH, 2008).
15. The Contractor shall implement sufficient measures to ensure that utilities are not damaged during the works. Written consent may be required from appropriate utility companies if service routes are to be temporarily or permanently disturbed or re-routed.
16. Adequate measures are to be taken to ensure that underground utilities crossing site access points are protected from disturbance during the course of the works. Protection measures may include placement of road plates or similar.
17. The Contractor shall prepare a secure compound to house the equipment required for the dewatering works. The treatment compound shall be secured with temporary Heras fencing as a minimum.
18. All water treatment and liquid storage containers shall be located in a watertight bunded area within the treatment compound. The volume of each bund shall be a minimum of 110 % of the volume of the single largest storage tank to be contained within it (making due allowance for the volume occupied by additional plant and storage within the bund).
19. A sump shall be installed within the base of each bunded area to facilitate rainwater removal and recovery of any spilt liquids.
20. Surface water drains located within work areas shall be protected against uncontrolled discharges. Additionally, there should be no discharges across the surface of the site.
21. The Contractor shall identify an appropriate discharge point to foul sewer and shall confirm the capacity and condition of the selected disposal route prior to the start of dewatering activities.
22. The water treatment plant shall be designed and have sufficient safety controls to minimise the potential for an uncontrolled release of treated or un-treated gasholder water. Suitable sample points shall be installed as near as practicable to the point of discharge from the dewatering plant and the point of discharge to foul sewer.
23. Potentially relevant site specific hazards are shown on this drawing. The Contractor shall also consider other general hazards related to the works.

JOB NO.: 51453-04
FORMER GASWORKS, BANKS ROAD, GARSTON

NATIONAL GRID PROPERTY HOLDINGS LIMITED

DEMOLITION PLAN

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DRAWN BY	STATUS	PASSED	ORIGINAL	DATE	SCALE	ISSUING OFFICE
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