



Foul Sewage and Utilities Assessment

Site at Station Road

Hayling Island, Hants



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Prepared By

.....
A P Traves
Associate Director

Opus International Consultants (UK) Ltd
Fareham Office
Modulus House, Salterns Lane
Fareham, PO16 0QS
United Kingdom

Reviewed By

.....
D L Seer

Telephone: +44 1329 822021
Facsimile: +44 1329 825274

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Contents

1	Introduction.....	1
2	Electricity	1
3	Gas	1
4	Potable Water	1
5	British Telecom	1
6	Foul Sewage	2
7	Surface Water Drainage	2

Appendices

Appendix A	Utility Information
Appendix B	Conditions & Limitations

1 Introduction

- 1.1 This report summarises the existing utilities and means of utility provision to the proposed development.
- 1.2 The related asset maps are contained in Appendix A.
- 1.3 The client's attention is drawn to the conditions and limitations contained in Appendix B.

2 Electricity

- 2.1 There are existing buried LV electricity services within Station Road. Refer to plan in Appendix A.
- 2.2 The points of proposed connection are indicated on the Plan in Appendix A new services would be brought into the site off Station Road to a new substation located at the end of the access track alongside and to the rear of plot 4 garage. From here supplies for the residential properties and the commercial units will be distributed.

3 Gas

- 3.1 The Station Road frontage contains 1 no 250mm PE LP main and 1 no 180mm PE LP main. Refer to plan in Appendix A.
- 3.2 An LP connection will be made to the existing apparatus and an LP service distributed to the residential and commercial properties. A gas governor station is not required.

4 Potable Water

- 4.1 The Station Road frontage contains 1 no 12 " water main and 1 no 4" water main. Refer to plan in Appendix A.
- 4.2 A connection will be made to the existing 12" main and distributed to the residential and commercial properties.

5 British Telecom

- 5.1 British Telecom network is present to the Station Road frontage. Refer to plan in Appendix A.

- 5.2 Connections will be made to the existing apparatus and the network service distributed to the proposed residential and commercial properties.

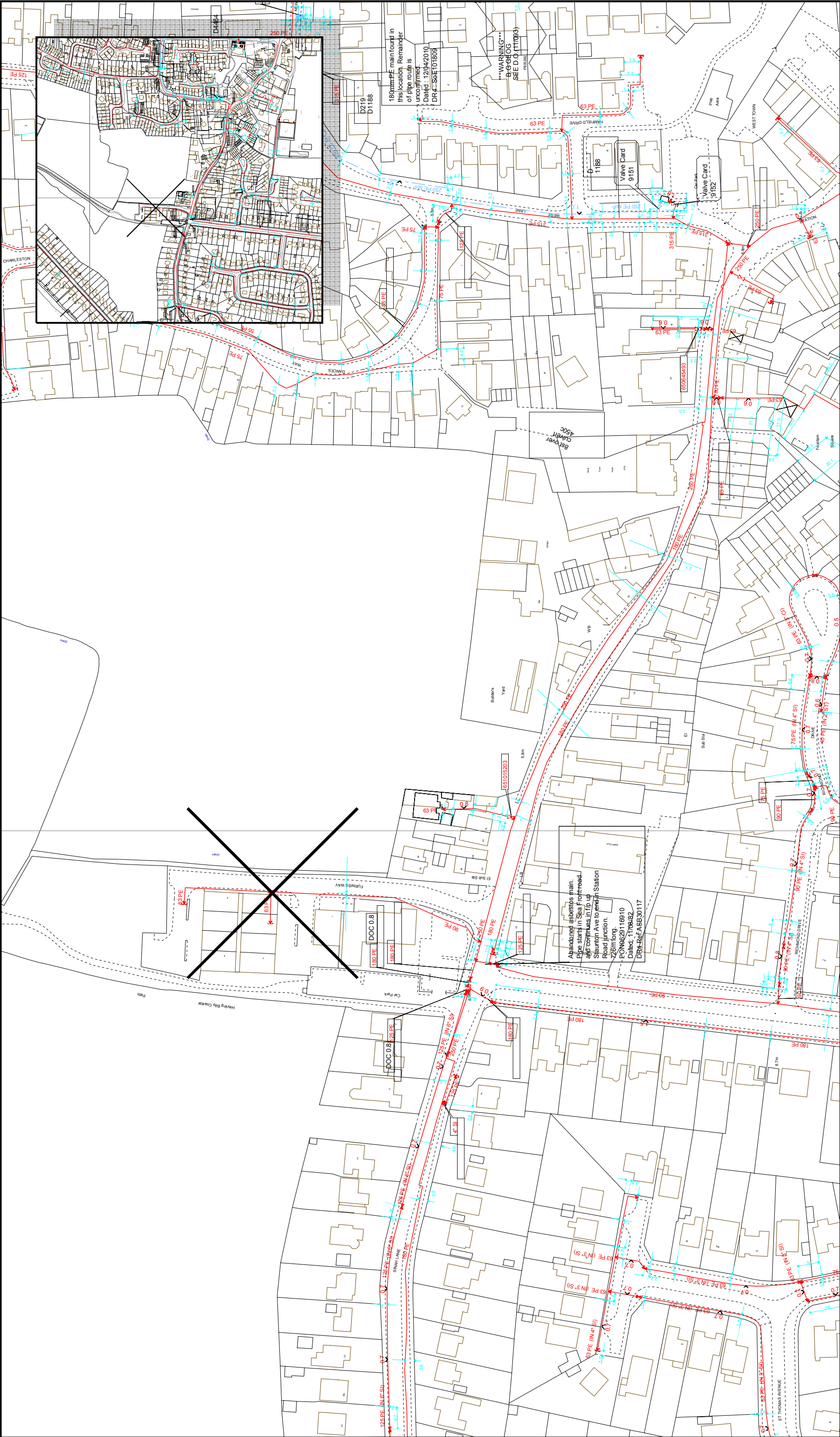
6 Foul Sewage

- 6.1 The Southern Water public foul sewer within Station road is 200mm DN. Refer to plan in Appendix A.
- 6.2 Southern Water have identified that whilst the gravity foul sewer in station Road has capacity to service the proposed development a small increase in pumping capacity at the nearby Newton Lane Pumping station will be required. A stage 1 s98 Water Industry Act requisition has been submitted to southern water for the necessary off site pumping station alterations.
- 6.3 Within the site new network of gravity foul sewers will be laid and connected to the existing public gravity foul sewer in Station Road. The indicative foul sewer network proposed is shown on the drawings contained in the Flood Risk Assessment and Drainage Strategy for the site.

7 Surface Water Drainage

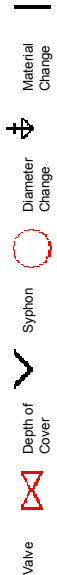
- 7.1 Surface water run off from the existing site drains to a series of surface water ditches that drain to the north. These ditches are being retained and will continue to support run-off received from other sources outside the site.
- 7.2 Run-off from within the site will drain to a series of surface water drains into a separate swale along the northern edge of the proposed development and into a new infiltration basin off the Northeast corner of the proposed housing area. There will be no increase in flows to the existing ditch network as a result of the proposed development. Reference should be made to the Flood Risk Assessment and Drainage Strategy which contains further information and drawings of the proposed arrangements.

APPENDIX A:
Utility Information



USER ID: faap0
DATE: 12 Aug 2015
EXTRACT DATE: 14 Jul 2015
MAP REF: SZ7199NW
CENTRE: 471050, 99749
SCALE: 1:1,601

- LP Mains
MP Mains
IP Mains
LHP Mains
NHP Mains

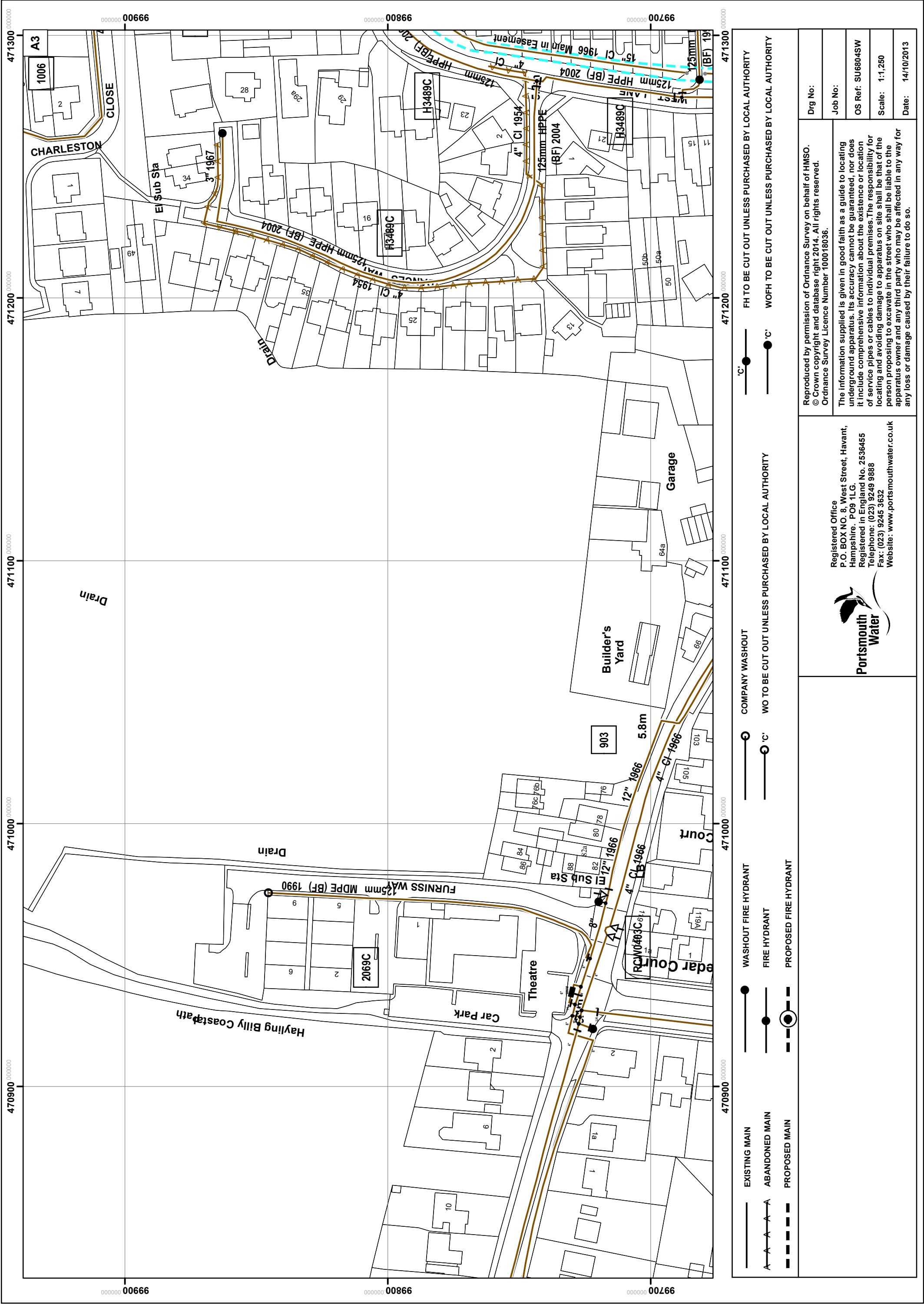


This plan shows those pipes owned by Scotia Gas Networks plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Scotia Gas Networks plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HSG47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Product: UtilityMaps
Version: 1.6.6.1
Template: 'Scotia Gas Networks (A3 Landscape)'



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Registered Office
P.O. BOX NO. 8, West Street, Havant,
Hampshire, PO9 1LG.
Registered in England No. 2536455
Telephone: (023) 9249 9888
Fax: (023) 9245 3632
Website: www.portsmouthwater.co.uk

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The information supplied is given in good faith as a guide to locating underground apparatus. Its accuracy cannot be guaranteed, nor does it include comprehensive information about the existence or location of service pipes or cables to individual premises. The responsibility for locating and avoiding damage to apparatus on site shall be that of the person proposing to excavate in the street who shall be liable to the apparatus owner and any third party who may be affected in any way for any loss or damage caused by their failure to do so.

Drg No:

Job No:

OS Ref: SU6804SW

Scale: 1:1,250

Date: 14/10/2013

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance 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.

DIAL BEFORE YOU DIG

FOR PROFESSIONAL ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS

ADVANCE NOTICE REQUIRED
(Office hours: Monday-Friday 08.00 to 17.00)

Tel: 0800 9173993
E-mail: dbyd@openreach.co.uk
Website: www.dialbeforeyoudig.com

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KEY TO BT SYMBOLS

	UNDERGROUND PLANT		POLE
	OVERHEAD PLANT		CABINET
	JOINT BOX		BURIED JOINT
	DISTRIBUTION POINT		JOINTING POST
	MANHOLE		PROPOSED U/G
	DP BOUNDARY		PROPOSED O/H
	OTHER BT BOUNDARY		PROPOSED BOX

Other proposed plant is shown using dashed lines. BT symbols not listed above may be disregarded. Existing BT plant may not be recorded. Information valid at the time of preparation.

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a BT Group business

BT Ref : LTR041531

Map Reference : (centre) SZ7107499787

Easting/Northing : (centre) 471074,99787

Issued : 12/08/2015 16:16:01

FOOTNOTE: WARNING IT IS ESSENTIAL THAT YOU CONTACT NATIONAL NETWORK HANDLING CENTRE BY EMAIL nnhc@openreach.co.uk BEFORE PROCEEDING WITH ANY WORK IN THE HATCHED AREA

NEW7



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Scale: 1:1250

Printed By: Gouri
Improvements
Requested By:

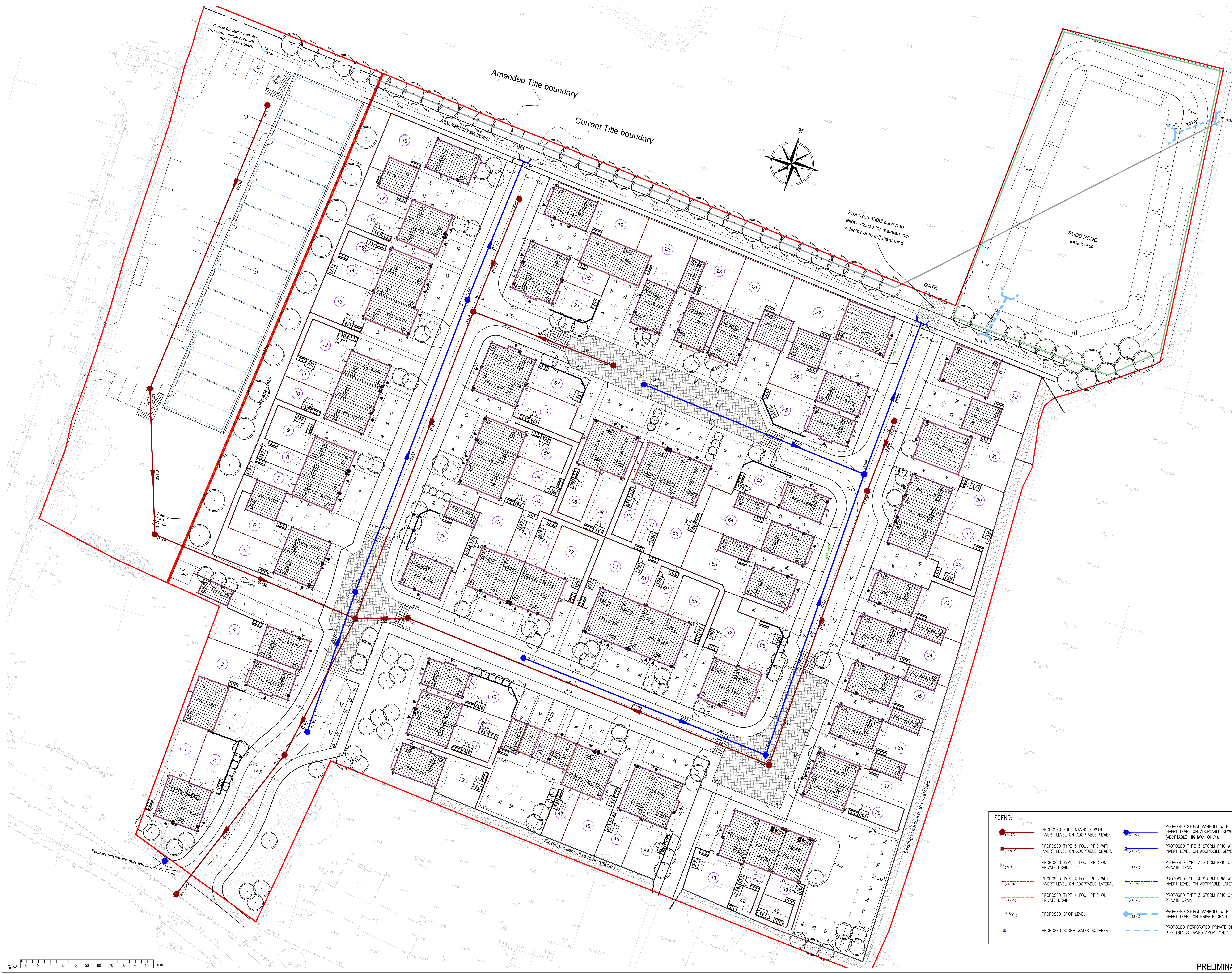
Date: 22-5-2014



Southern
Water

WARNING: BAC pipes are constructed of Bonded Asbestos Cement

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement



- STANDARD NOTES:**
- This drawing is to be read in conjunction with all other OPUS drawings, and with relevant Architects and Engineer's drawings and specifications.
 - No dimensions are to be scaled from this drawing. Values stated elsewhere in all dimensions are in millimeters and all levels are in meters from the site datum. All dimensions to be checked in situ. All details and dimensions relating to sub-contractor work must be checked and agreed between the sub-contractor or supplier and the general Contractor.
 - The electronic information from this drawing cannot be guaranteed to be dimensionally drawn. Tolerances are to be as stated in the drawing. Tolerances are to be as stated in the drawing. Tolerances are to be as stated in the drawing.
 - The main Contractor is responsible for the design of all temporary works, and is also responsible for the safe maintenance and stability of existing buildings at all times.
 - The main Contractor is responsible for the mitigation of all occurrences of ground water during the construction period.
 - Any information given regarding existing underground services is given in good faith after consultation with the relevant authority, however accuracy is not guaranteed. The main Contractor is responsible for checking all information on site prior to work commencing and taking due care and attention whilst undertaking the works.
 - The contractor must comply with all current legislation relating to Health & Safety.
- DRAINAGE NOTES:**
- All works to be constructed in strict accordance with specification of the Local Authority, BS5931:1995 & BS5931:2011.
 - All pipe runs near buildings to comply with the Building Regulations 2010 Part H11. Where a pipe is within 1m of a foundation the trench shall be filled with class GEN3 concrete up to the lowest level of the foundation. Where the trench is further than 1m from the foundation, the trench shall be filled with class GEN2 concrete to level below the lowest level for the foundations equal to the distance from the foundation less 100mm. In both cases the pipe shall be bedded and surrounded in 150mm class GEN3 concrete.
 - Where pipes, external to the structure, have a depth to surface from ground level to less than 450mm they shall have a class GEN3 concrete encasement (150mm thick).
 - Where a pipe, under a carriageway, has a depth of cover of less than 1.2m the pipe shall be laid in a class 2 bedding.
 - Where pipes are bedded and surrounded in concrete, flexible joints should be provided. Compressible boards (Bordboard or polyurethane) shall be provided at a maximum of 10m centres (bedding with pipe joints). The boards shall be set to pipe diameter and to a height and width equal to the concrete cross section. A board thickness of 18mm for pipes up to 450mm nominal diameter and 24mm for pipes over 450mm nominal diameter.
 - All private building drainage shall be constructed in strict accordance with BS5931:1.
 - Unless otherwise specified, building drainage to be 100mm internal diameter.
 - Minimum gradients for 100mm surface drainage pipes is 1:40, and 150mm is 1:100.
 - Minimum gradients for foul drainage pipes:
100mm: 1:40 where flow is less than 10l/s, or where no WCs are connected.
150mm: 1:28 where flow is 10l/s or greater, or where at least 2 WCs are connected.
200mm: 1:15 where flow is less than 50l/s, or where up to 5 WCs are connected.
300mm: 1:10 where flow is 50l/s or greater, or where 5 WCs or more WCs are connected.
 - All gullies not connected to inspection chambers are to be roddable.
 - All gully connections other than those at manholes to be made via "Y" junctions.
 - All gullies connected with pedestrian/driveway crossings to have pedestrian type gully covers.
 - All roof gully connections to be 100mm diameter.
 - All sub stacks to be fitted with air admittance valves where branch drain exceeds 12m vertical at the head of the run. Soil vent pipes located at the head of a run to be installed with roof tile vents.
 - All connections to be made from soffit to soffit.
 - Trench temporary framework is required to all excavations exceeding 1.2m depth to provide adequate support and stability at all times.
 - Sewers are to be constructed in single sections between manholes only. Trenches to be backfilled prior to excavating the succeeding sewer run.
 - All cover and concrete products to be in accordance with BS 563 for subsoils.
 - Where sewer or drains are to be abandoned they shall be removed or filled by grouting in accordance with the Civil Engineer Specification for the Water Industry 7th Edition, clause 523.

BACKGROUND IS BASED ON THE ARCHITECT'S GA DRAWING

ANY DISCREPANCIES OR UNCERTAINTIES WITH THE CONTENT OF THIS DRAWING ARE TO BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.

- LEGEND:**
- PROPOSED FOUL MANHOLE WITH INVERT LEVEL ON ADAPTABLE SEWER.
 - PROPOSED TYPE 3 FOUL PPIC WITH INVERT LEVEL ON ADAPTABLE SEWER.
 - PROPOSED TYPE 3 FOUL PPIC ON PRIVATE DRAIN.
 - PROPOSED TYPE 4 FOUL PPIC WITH INVERT LEVEL ON ADAPTABLE LATERAL.
 - PROPOSED TYPE 4 FOUL PPIC ON PRIVATE DRAIN.
 - PROPOSED SPOT LEVEL.
 - PROPOSED STORM WATER SCUPPER.
 - PROPOSED STORM MANHOLE WITH INVERT LEVEL ON ADAPTABLE SEWER.
 - PROPOSED TYPE 3 STORM PPIC WITH INVERT LEVEL ON ADAPTABLE SEWER.
 - PROPOSED TYPE 3 STORM PPIC ON PRIVATE DRAIN.
 - PROPOSED TYPE 4 STORM PPIC WITH INVERT LEVEL ON ADAPTABLE LATERAL.
 - PROPOSED TYPE 3 STORM PPIC ON PRIVATE DRAIN.
 - PROPOSED STORM MANHOLE WITH INVERT LEVEL ON PRIVATE DRAIN.
 - PROPOSED PERFORATED PRIVATE DRAIN PIPE (BLOCK PAVED AREAS ONLY).

Revision	Description	Author	Appr'd	Revision Date
P1	LAYOUT UPDATE AND DRAINAGE MODIFIED	APT		11.08.2015
P1	FIRST ISSUE	APT		04.08.2015

BARRATT HOMES

OPUS
Fareham Office
+44 1329 822021

Modulus House,
Sellers Lane, Fareham
Hampshire PO16 0QS

Drawn	Designed	Appr'd	Revision Date
CAA	CAA	APT	04.08.2015

Project No: **FA E-F1682.00** Scale: **1:250**

Project: **Station Road, Haying Island**

Sheet: **DRAINAGE STRATEGY**

Drawing No.	Sheet No.	Revision
001	1 of 1	P2

APPENDIX B:
Conditions & Limitations

OPUS**ENGINEER'S INSPECTION****CONDITIONS AND LIMITATIONS**

1. The report is a record of a visual inspection carried out by, or under the direction of a Chartered Structural Engineer and must not be misinterpreted as a Structural Survey such as would be carried out by a Chartered Surveyor. The report is not a Valuation Survey.
2. The inspection is strictly limited to the items requested and these will be detailed in Clause 1 of the report. No consideration will be given to any other aspects or parts of the building.
3. The report is confidential to the Client(s) stated in Clause 1 and has been prepared to their instructions for their own purposes only and it is not permitted to disclose this report to any other parties (except the Clients own Solicitors, Surveyors, Building Societies or Estate Agents) without the prior consent of Opus.
4. The copyright of this report remains the property of Opus.
5. No liability for the contents of this report is accepted to any parties other than the Client(s) stated in Clause 1.1. No parties other than the client stated in Clause 1.1 should rely upon this report.
6. Unless specifically stated otherwise:-
 - a) Trial holes will not be excavated prior to the preparation of the report and the depth and construction of the foundations and type of sub-soil will not be inspected.
 - b) All external observations will be carried out by eye from the ground level only. Internal inspection is made within the limits of ready accessibility and it is not normal practice to lift floor coverings or floor boards, remove fixtures, panels or plaster, or move heavy items of furniture or bulky goods or materials.
 - c) No inspection will be made of any roof voids, floor joists, wall cavities, drainage pipework or any other hidden or inaccessible parts.
 - d) No timbers will be checked for damp, rot, infestation by wood-boring insects or other defects.
 - e) It should not be construed that any parts of the construction comply with the requirements of the Building Regulations Act or standard practice either current or as current at the time of original construction. No enquiries to any Authorities will be made.
 - f) No testing or enquiries into the presence of or susceptibility to pollution, contamination, radiation, methane, radon or other gases or hazardous substances has been carried out.
7. Unless specifically stated otherwise in the report, any recommendations for works given in the report are outline only and are to be confirmed or modified as appropriate at detailed design stage.
8. Where trial holes are specifically included in our instructions the condition of the footing and the founding soil relates only to the point of excavation and does not necessarily confirm a continuation of the same conditions throughout the non-inspected areas of the structure. Whilst such trial pits will usually provide a reasonable indication as to the general state of the foundations and ground conditions, these cannot be determined with complete certainty.
9. Under the Construction (Design & Management) Regulations latest edition, the Client has obligations for ensuring Health and Safety arising from any construction work. If it is proposed to proceed with construction work based upon information or recommendations contained in this report, these regulations probably apply. Further details of any issues arising from our report or the Clients obligations generally are available on request.
10. Unless dealt with more specifically above the Association of Consulting Engineers Conditions of Engagement Short Form Agreement 2002 apply.



**Opus International Consultants (UK)
Ltd**

Modulus House, Salterns Lane
Fareham, PO16 0QS
United Kingdom

t: +44 1329 822021

f: +44 1329 825274

w: www.opusinternational.co.uk