

Gas Safety Management Plan (Section A)

Tiverton JCC ACF ATC

16/04/2025

Produced to meet the requirements of the Gas Safety (Installation and Use) Regulations 1998

(Gas Safety Management Plan (Section B) covers the requirements of the Gas Safety (Management) Regulations 1996

ESTABLISHMENT KEY PERSONALITIES (GAS) CONTACTS

Role	Name	Tel No.	Email
Head of	Brig (Retd) Neville	01823 217930	wx-ce@rfca.mod.uk
Establishment	Holmes		
Establishment's	Lee S Davis	01392 307006	wx-dev-cqm@rfca.org.uk
SHEF			
Establishments	Andy Pritchard	07388949747	wx-dev-acoy@rfca.org.uk
4C's Coordinator			
Senior DIO Estate	Mark Cubitt	07955 280440	wx-est-hd@rfca.mod.uk
Representative or			
Equivalent			
Site DIO Estate	Kelvin Walker	07508 130359	wx-est-mgr2@rfca.mod.uk
Representative or			
Equivalent			
MMO Site Manager	Andy Pritchard	07388949747	wx-dev-acoy@rfca.org.uk
or equivalent			
Gas Safety Manager	Justin Westcott	07793222820	Justin.Westcott@vivodefence.com
(GSM)	Justin Westcott	01133222020	Justin. VV Catcotile, VIV Ode lence. Com
Gas Responsible			
Person (GRP)	Riona Moroney	07854053184	Riona.moroney@vivodefence.com

The Content of this Gas Safety Management Plan (GSMP) have been Approved by the Gas Safety Manager:

Signature: JP Westcott	Date: 16/04/2025
------------------------	------------------

Authorisation for Implementation

The content and format of this GSMP has been agreed and authorised for implementation by Defence Infrastructure Organisation Technical Services Principal Gas Engineer (DIO TS PGE) and a unique reference number has been generated to support this.

Approved – J Obbard PGE – 26th January 2024

The Content of this GSMP have been agreed by the Senior DIO Estate Representative or Equivalent and future works following the findings will be supported:

Signature:	M Cubitt	Date:	24/04/2025
------------	----------	-------	------------

The content of this GSMP have been agreed by the Head of Establishment and future works following the findings will be supported

Signature:	N Holmes	Date:	24/4/2025	

Establishment: Tiverton JCC ACF ATC

REVIEWS AND AMMENDMENTS

GSMPs are 'living documents' that should be subject to continual review and updating as required. Although the level of attention required will vary considerably depending on the size and complexity of each site, GSMPs should be reviewed at least once per quarter by the GRP, unless otherwise agreed by the PGE. Although it is likely that changes are not required at each review, the date of review and any changes made should be indicated on the tables below. The review of the GSMP will include a site visit to ensure that the site and the content of the GSMP remain valid. The reviews and amendments made will be deleted during the DIO TS three yearly review when the GSMP is re-authorised by the PGE.

Date	Page No.	Amendment
21/06/2022	All	Initial Development
27/03/2023	8 &	Added Gas Network Drawing Details, Icon and Drawing
	Annexes	
27/06/2023	N/A	No Amendments Required
18/09/2023	ii & 1	Updated HoE Details, 4c's and Site Manager
12/12/2023	N/A	No Amendments Required
30/03/2024	ii & 1	Updated HoE and SHEF, 4c's Details
15/06/2024	N/A	No Amendments Required
30/09/2024	ii & 2	Updated HoEstates Details
18/10/2024		GSM re-authorisation (previously authorised 29/12/2023)
19/02/2025	ii	Update GSM & GRP Contact details
19/02/2025	All	Update literature to reflect Vivo as MMO.
16/04/2025	Sec 2, 3	Document update to remove reference to MoD network – This is an installation pipework site only

Date	Reviewed by	Authorised by	Comments
20/12/2022	M Fenwick	N King	Initial Review
27/03/2023	M Fenwick	M Fenwick	Quarterly Review
27/06/2023	M Fenwick	M Fenwick	Quarterly Review
18/09/2023	M Fenwick	M Fenwick	Quarterly Review
12/12/2023	M Fenwick	N King	Annual Review
30/03/2024	M Fenwick	M Fenwick	Quarterly Review
15/06/2024	M Fenwick	M Fenwick	Quarterly Review
30/09/2024	M Fenwick	M Fenwick	Quarterly Review
18/10/2024	Neville King	Neville King	GSM re-authorisation
19/02/2025	R Moroney	R Moroney	Quarterly Review
16/04/2025	J Westcott	J Westcott	Initial Review/Approval

Establishment: Tiverton JCC ACF ATC

FORWARD

MOD, as a gas conveyor within Great Britain, has submitted an Exemplar Gas Safety Case (MOD GSC) to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). Maintenance Management Organisations (MMO's) are engaged who have the overall contractual responsibility to operate and maintain the gas network assets under their Contract, including the management of the safe flow of gas within the system and the provision of an emergency service. The MOD delegate specific duties to the MMO but accountability for gas safety on each site rests with the Head of Establishment.

Whilst gas downstream of the Emergency Control Valve (ECV) fall outside of the scope of (GS(M)R) similar criteria as those referred to above must be accommodated within an appropriate management system. The specific criteria required to adequately manage gas infrastructure downstream of the ECV are described in the Gas Safety (Installation and Use) Regulations 1998 (GS(IU)R).

The MOD GSC considers all parts of the MOD estates gas supply system that forms part of the gas supply network. This includes all parts of the MOD gas network from the Bulk Primary Meter Installation to the individual gas appliances and the safe release of the products of combustion. The MOD GSC considers primarily those matters that relate to the management of the safe flow of gas within the system and the provision of an emergency service for all aspects of the gas system.

Following initial approval of the Gas Safety Management Plans (GSMPs) by the DIO Principal Gas Engineer (PGE), the Gas Safety Manager (GSM) is required to reapprove this GSMP annually. GSMPs must be submitted to DIO PGE every three years for authorisation.

GSMP Section A document contains site specific details of the establishments utilisation infrastructure to assist with measures to ensure compliance with the GS(IU)R for installation pipework and associated components.

GSMP Section B documents contain site specific details and arrangements as a direct annex to the MOD GSC in line with the Gas Safety (Management) Regulations 1996 (GS(M)R).

GSMP Section C document contains site specific details and requirements of the establishment's LPG networks.

Although the legal status of this document applies in the UK only, the MOD apply the same requirements to the management of gas on its overseas estate, in accordance with the currently published Secretary of State's Health and Safety policy statement.

Contents

ES	TABLIS	HMENT KEY PERSONALITIES (GAS) CONTACTS	!
RE	VIEWS	AND AMMENDMENTS	।।।
FC	RWAR	D	. IV
1	THE	DUTY HOLDER AND ESTABLISHMENT LEVEL KEY PERSONALITIES	1
	1.1.	GAS SAFETY CASE DUTY HOLDER	1
	1.2.	DIO TECHNICAL SERVICES PRINCIPAL GAS ENGINEER (PGE)	1
	1.3.	ESTABLISHMENT PERSONALITIES	1
	1.4.	MAINTENANCE MANAGEMENT ORGANISATION (MMO)	2
	1.5.	ADDITIONAL GAS CONTACTS.	2
2	SITE	SPECIFIC DETAILS	4
	2.1	SITE OVERVIEW.	4
	2.2	NATURAL GAS	4
	2.3	LPG GAS.	
	2.4	EXTERNAL INSTALLATION PIPEWORK.	
	2.5	DETAILS OF BUILDINGS SERVED.	
	2.6	ADDITIONAL DETAILS OF BUILDINGS BEING SERVED	5
3	MET	TER DETAILS	7
	3.1	PRIMARY METER DETAILS	7
	3.2	UTILISATION METER DETAILS. (METERS SUPPLIED DIRECTLY FROM THE MOD GAS NETWORK)	7
4	DIA	GRAMS AND DRAWINGS	8
	4.1	LINE DIAGRAMS FOR BUILDING(S) INTERNAL GAS INSTALLATION PIPEWORK	8
	4.2	ADDITIONAL DRAWINGS.	8
5	GAS	INCIDENTS	9
	5.1	SITE REPORTING PROCEDURES FOR DEALING WITH GAS INCIDENTS	9
6	GAS	EQUIPMENT	.10
	6.1	EQUIPMENT LIST	
	6.2	ADDITIONAL EQUIPMENT INFORMATION	.10
7	ANN	NEXES	.11

1 THE DUTY HOLDER AND ESTABLISHMENT LEVEL KEY PERSONALITIES

1.1. Gas Safety Case Duty Holder.

The duty holder for the MOD Gas Safety Case is the Permanent Under Secretary for Defence (PUS). However, day to day responsibility for the preparation and maintenance of the document is delegated to the DIO TS Head of Engineering and Construction, who also has the responsibility for managing the system in accordance with the Safety Case. PUS delegates maintenance responsibility to the Top-Level Budget Holders (TLB's), to manage safety of the gas network. The TLB's utilise MOD Contracts i.e. MMOs who have responsibility for maintaining the gas network on behalf of the MOD.

Name: Permanent Under Secretary

Address: Main Building

Horse Guards Parade

Whitehall London SW1A 2HB

1.2. DIO Technical Services Principal Gas Engineer (PGE).

The PGE assumes the role of Senior Authorising Authority which is a term used within the MOD to recognise the authority of the person responsible for overseeing the appointment of, and auditing Authorising Engineers (AEs). For Gas the AEs are replaced by Gas Safety Managers (GSMs).

Name: Jeremy Obbard

Address: DIO HQ

Whittington Barracks

Lichfield WS14 9TJ 07748 903260

2: 07748 903260

1.3. Establishment Personalities.			
Name of Establishment:	Tiverton JCC ACF ATC		
Establishment Address:	Tiverton JCC AC	CF ATC	
	King Street		
	Tiverton		
	Devon		
	EX16 5JJ		
Head of Establishment (HoE)	Name:	THE TIME THE MILES WIBE	
	Position:		
(This is the most senior MOD	Organisation:	Wessex Reserve Forces' and Cadets'	
person identified, by the chain		Association	
of command, as responsible	Address:	Mount House	
for the establishment. The		Mount Street	
HoE holds accountability for		Taunton	
ensuring site compliance with		Somerset	
the requirements of GSMR		TA1 3QE	
and the MOD GSC, including		04000 047000 07050 055047	
this GSMP.)	2 :	01823 217930 or 07850 655017	
Conjet DIO representative or	⊠: Name:	wx-ce@rfca.mod.uk Mark Cubitt	
Senior DIO representative or equivalent	Position:		
equivalent		Wessex Reserve Forces' & Cadets' Association	
(This may be the SEFM, but	Organisation:	Mount House	
will vary depending on the	Address:	***************************************	
contract this establishment	Addiess.	Taunton	
falls under)	Somerset		
		TA1 3QE	
		07955 280440	
	☎:	wx-est-hd@rfca.mod.uk	
	⊠:		

1.4. Maintenance Management Organisation (MMO).				
The MMO for this e	establishment is:	VIVO Defence		
Gas Emergency Helpdesk (Typically, MMO Helpdesk) (24 Hours)	Organisation:	VIVO Helpdesk Helpdesk 25 Goodlass Road Hunts Cross		
Note: Please do not contact the general public National Gas Emergency Service for suspected gas escapes on		Liverpool L24 9HJ		
RFCA infrastructure.	2 :	0800 030 9320		
Gas Safety Manager (GSM)	Name: Organisation: Address: ■: ⊠:	Justin Westcott VIVO Defence Services Building 003 CTCRM Lympstone NR Exmouth Devon EX8 5AR		
	23.	Justin.Westcott@vivodefence.com		
Gas Responsible Person (GRP)	Name: Organisation: Address:	Riona Moroney		
	☆ :	07845053184 Riona.Moroney@vivodefence.com		

1.5. Additional Gas Contacts.			
RFCA National Gas	☎:	VIVO Helpdesk	
Emergency Centre		Helpdesk	
(24 Hours)		25 Goodlass Road	
		Hunts Cross	
Note: Please do not contact		Liverpool	
the general public National		L24 9HJ	
Gas Emergency Service for			
suspected gas escapes on			
RFCA infrastructure.		0800 030 9320	
Gas Supplier	Organisation:	Totalenergies Gas & Power	
	Address:	55-57 High Street	
		Redhill	
		Surrey	
	_	RH1 1RX	
		01737 275 746	
	⊠:	gp.redhill.ccs@totalenergies.com	

Establishment: Tiverton JCC ACF ATC

,		<u></u>
LPG Supplier	Organisation: Address:	Not Applicable, no bulk LPG on site.
Meter Asset Manager (MAM)	Organisation: Address: ■: ⊠:	Energy Assets Ltd 6 Almondvale Business Park Almondvale Way Livingston EH54 6GA 0800 001 4310 box.ngm.meteringdataenquries@nationalgrid .com
National Gas Emergency Centre (24 Hours)	2 :	VIVO Helpdesk Helpdesk 25 Goodlass Road Hunts Cross Liverpool L24 9HJ 0800 030 9320

2 SITE SPECIFIC DETAILS

2.1 Site Overview.

A brief description of the establishment and its current use. This should include how many separate sites are present and the number of buildings being supplied by gas.

Tiverton JCC ACF ATC is a single site establishment with two buildings on site supplied with gas direct from the EGDN network via two MAM owned and operated gas meters and regulators. The Joint Cadet Centre is occupied by the Devon ACF A Company HQ, Devon ACF Tiverton detachment and 1079 (Tiverton) Squadron of the ATC.

The main building is used for office space with the adjoined second building used for Workshops, stores and the drill hall.

The site is generally unmanned day to day but can have around 30 people on site for parades or events.

2.2 Natural Gas.

A brief description of the natural gas installations, including how many MOD networks are present, the number of buildings each MOD network supplies and how many buildings are supplied direct from the EGDN. This should also include any demarcations in place between stakeholders and responsibilities.

The two gas supplies to Tiverton JCC ACF ATC are fed direct from the EGDN low pressure (LP) network.

Main Building

The main building (Offices) gas meter enters the wall mounted GRP gas meter box via a 20mm PE riser. The gas pipework continues through the EGDN ECV and single stream MAM owned and operated gas meter and regulator.

Single Supply Meter 001 – Elster BK-G4M 6m3/hr S/N – G4 K0023825 14 01 MPRN – 4250552600.

The gas pipe work exits the meter in 22mm copper and drops directly into the ground and enters the building below ground.

The gas pipework rises from below the floor into the cupboard below the stairs and reduces to 15mm copper. The gas then enters a tee section with one outlet continuing to the Kitchen cupboard in 15mm copper, through a manual isolation valve and increasing to 22mm copper for the last metre to feed the Combi Boiler.

The second tee outlet runs into the kitchen and ends at the old cooker bayonet fitting which is no longer in use.

Appliance – Baxi Duotec Combi 24 HE A. The total load on this installation is 24 KW. There is only copper pipework on this installation.

Building 2

The EGDN network enters the brick built external Bulk Fiscal Meter house via a 63mm PE riser and transitions to 2" Steel and runs through the 2" EGDN ECV before reducing to 1" steel on the meter inlet. The gas then continues through the single stream MAM owned and operated gas meter and regulator. The gas exits the meter in 1" steel to feed installation pipework.

The gas pipework increases to 2" steel pipe before running through the meter outlet valve, exiting the meter house and dropping below ground.

Establishment: Tiverton JCC ACF ATC

There is a short section of 4 metres of below ground pipe where the gas passes under the driveway and a total of 26 metres of above ground 2" steel. The buried material is thought to be 2" steel and the above ground section is 2" steel.

There is no utilisation gas meters on this site.

The pipework is thought to have been installed in the early 1990's.

The total load on the bulk fiscal meter is 120 KW.

Bulk Fiscal Meter 001 – Elster BK-G10M 16m3/hr S/N – M016 K05876 14 D6 MPRN – 67753605

The gas enters building 2 via a 2" steel high level above ground entry. The installation pipework is 21 mbar.

The gas continues in 2" steel through the workshops and comes to a tee section. The first tee outlet feeds the plant room in 2" steel. The gas travels through a fire free fall valve and to a manual appliance isolation valve. The boiler is this plant room has been condemned due to obsolete parts and requires capping from the gas supply.

The second tee section reduces to 22mm copper and runs through the drill hall, offices and stores before terminating at an isolated manual isolating valve that is capped on the outlet.

Appliance - De Dietrich UTG 309-F Heating Boiler

The total load on this installation is 120 KW.

There is steel and copper pipework on this installation.

2.3 LPG Gas.

A brief description of the LPG installations, including how many compounds are at the establishment, condition and make up of each compound, the number and size (kg) of vessels in each compound, the number of LPG MOD networks, the number of buildings supplied from the LPG MOD networks, how many buildings are supplied direct and not from an LPG MOD network. Details of the LPG pipework after the first stage regulator up to the building(s).

Note: The demarcation agreement between the LPG supplier and the MOD has been agreed and the MOD take responsibility from the outlet of the first stage regulator. The LPG supplier is responsible for the vessel, vessel associated components (excluding any earth bonding) pipework up to and including the first stage regulator.

No LPG on this establishment

2.4 External Installation Pipework.

A brief description of the external installation pipework (above or below ground) on each building. This is from the ECV to where it enters the building(s), the material, diameter, lengths, supports, conditions etc.

2.5 Details of buildings served.

A list of the buildings being supplied by gas via an MOD network, LPG compound or directly from the EGDN and the usage of the gas (catering, hot water, heating, fire training, etc) at the building.

Ser	Building Number	Building description	Supplied by	Gas usage		
1	Main Building	Offices, Kitchen	EGDN Network	Heating and Hot Water		
2	Building 2	Workshops, Classrooms, Stores, Drill Hall	EDGN Network	Heating		

2.6 Additional details of buildings being served.

Commercial in Confidence

Unique Document Reference: WX86-A-20240126 Issued by DIO TS PGE Establishment: Tiverton JCC ACF ATC

Any additional detail about a building that may be required or useful in an emergency or requires more details than captured above.
NOTE: This section is to be used to capture the Service Family Accommodation (SFA) properties where it is not practical to fit above.
N/A

Establishment: Tiverton JCC ACF ATC

3 METER DETAILS

3.1	Primary	Motor	Dotaile
J. I	FIIIIIaiv	weter	Details.

The following table describes the basic arrangement of the primary meter installation(s). (These are the responsibility of the MAM)

NOTE: More detail on the primary meters that supply MOD networks can be seen in the GSMP part B.

meter install	ations:	2						
	Supplying		Incoming	Outlet pipeline				
MPRN	network ID	location	tier – HP,	P tier – HP, IP, MP, LP	Pressure (mbar)	Material	Diameter (mm)	Max Flow (M³ hr)
	or Bldg number)		IP, MP, LP		, ,		, ,	
4250552600	Main Building	External Wall Mounted GRP Meter Box on Front of Building	LP	LP	21	Copper	22	6
3810006	MoD Network 001	External Brick Built Meter Box at Front of Main Building Next to Drive	LP	LP	21	steel	50	16
	MPRN 4250552600	MPRN (MOD network ID or Bldg number) 4250552600 Main Building 3810006 MoD Network	MPRN Supplying (MOD network ID or Bldg number) 4250552600 Main External Wall Mounted GRP Meter Box on Front of Building 3810006 MoD External Brick Built Meter Box at Front of Main Building	MPRN (MOD network ID or Bldg number) 4250552600 Main Building Meter Box on Front of Building 3810006 MoD Network Box at Front of Main Building Supplying Incoming pressure tier – HP, IP, MP, LP External Wall Mounted GRP Building LP External Brick Built Meter Box at Front of Main Building	MPRN (MOD network ID or Bldg number) 4250552600 Main Building Meter Box on Front of Building 3810006 MoD Network Box at Front of Main Building Supplying (MOD location pressure tier – HP, IP, MP, LP IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP P tier – HP, IP, MP, LP LP LP LP LP	MPRN (MOD network ID or Bldg number) 4250552600 Main Building Meter Box on Front of Building 3810006 MoD Network Box at Front of Main Building Supplying (MOD location pressure tier – HP, IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP, MP, LP P tier – HP, IP, MP, LP IP D 21	MPRN (MOD network ID or Bldg number) 4250552600 Main Building Meter Box on Front of Building 3810006 MoD Network Box at Front of Main Building Supplying (MOD location pressure tier – HP, IP, MP, LP P tier – HP, IP, MP, LP IP LP 21 Steel	MPRN (MOD network ID or Bldg number) 4250552600 Main Building Meter Box on Front of Building 3810006 MoD Network Box at Front of Main Building Supplying (MOD location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location pressure tier – HP, IP, MP, LP location location location pressure tier – HP, IP, MP, LP location location location pressure tier – HP, IP, MP, LP location location location pressure tier – HP, IP, MP, LP location location location pressure tier – HP, IP, MP, LP location location location location pressure tier – HP, IP, MP, LP location

3.2 Utilisation Meter Details. (meters supplied directly from the MOD gas network)

The following table describes the basic arrangement of the utilisation meter installation(s). (These are the responsibility of the MOD)

Number of utilisation meter installations: N/A - No MoD Network on Site Inlet pipeline Outlet pipework Being supplied from Pressure Max Flow Meter Name / ID P tier -Material P tier -Pressure Material Diameter Diameter (MOD network ID) HP, IP, HP, IP, $(M^3 hr)$ (mbar) (mm) (mbar) (mm) MP, LP MP, LP

Establishment: Tiverton JCC ACF ATC

4 DIAGRAMS AND DRAWINGS

4.1 Line diagrams for building(s) internal gas installation pipework.

This section is to contain line diagrams for building internal installation pipework and associated components. This diagram should be fixed to the building at a practical and accessible location as well as within any associated document centres. It may be embedded as a PDF to this document for online use.

NOTE: Drawings are only required for commercial installations or for installation in commercial settings (non-domestic use). This may mean more installations than listed in IGEM/UP/2 Edition 3 (4.2.14), depending on the installations intended use.

Drawing N	Number	Building	Comments
WX86-A-A3		Main Building	Not to Scale Gas Line Drawing
WX86-A-A3		Building 2	Not to Scale Gas Line Drawing
			WX86-A-A3.pdf

4.2 Additional drawings.

This section is to contain any additional drawings that may be required or may be of benefit to this GSMP or emergency procedures.

Golvii of efficigency proc	cuules.	
Drawing Number	Building	Comments
WX86-B-A1	Sitewide	Site pipework Layout Drawing
		WX86-B-A1.pdf

Establishment: Tiverton JCC ACF ATC

5 GAS INCIDENTS

5.1 Site reporting procedures for dealing with gas incidents.

This section is to contain the establishment's site-specific procedure for dealing with reports of gas incidents with regards the external installation pipework, internal installation pipework and equipment. Details of all individuals with responsibilities under this procedure should be included.

Procedure for an incident involving the gas installations on site:

- Call VIVO Helpdesk on 0800 030 9320, open 24 hours per day.
- The EGDN shall attend and make safe a gas incident.
- DNV Gas Responsible Person shall be informed immediately by the Vivo Helpdesk.

Establishment: Tiverton JCC ACF ATC

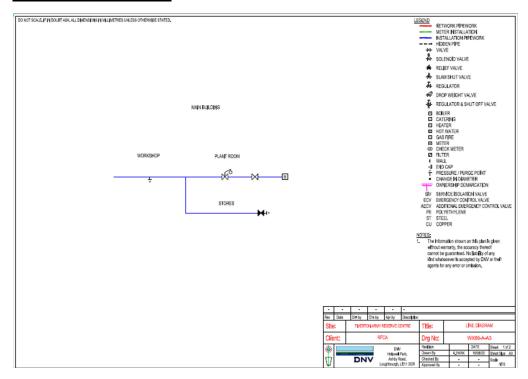
6 GAS EQUIPMENT

Building	Equipment	Equipment type	Serial Number	Appliance kW rating	Flue classification	Comments
number	location	(make, model)	0.4.40.0007	100	0 5	
Main Building	Plant Room	De Dietrich UTG 309-F Heating Boiler	8116-9097	120	Open Flue	
Main Building	Caretakers Flat	Baxi Duotech Combi 24 HE A Combi Boiler	BT G084140219CC	24	Room Sealed	
	nal equipment info to contain any add		ormation that may be re	quired or may be of benefit to this	s GSMP or emergency pro	ocedures.
lot Applicable						
• • •						

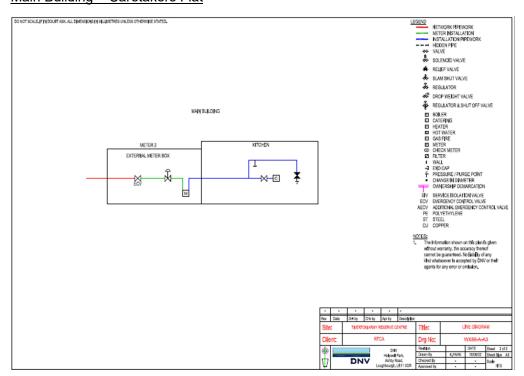
7 ANNEXES

Gas Line Drawing

Main Building Plant Room



Main Building - Caretakers Flat



Site Gas Pipework Layout Drawing

