



# ***GUIDE TO NATURAL GAS SERVICING***



***FOR URBAN DEVELOPMENT***

**CALGARY & SURROUNDING AREA**

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**ATCO Gas**  


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## **INTRODUCTION**

ATCO Gas requires certain information and conditions from developers and/or their engineering consultants to provide safe, efficient, cost-effective, high-quality natural gas service to urban developments.

This publication is designed to ensure that all parties know their responsibilities in each situation. Developers, their engineering consultants and field superintendents should familiarize themselves with this information to avoid delays in obtaining service.

Section 1 *Requirements* outlines planning and installation aspects common to any type of development.

Information specific to various types of developments is categorized under their respective sections (see *Table of Contents*).

## **QUESTIONS**

**Engineering:** Questions about the engineering aspects of a project should be directed to the Manager of Calgary Engineering (see section 7 *ATCO Gas Contacts*).

**Construction:** Questions about construction should be directed to the Manager of Contract Construction (see section 7 *ATCO Gas Contacts*).

**Service Applications:** Questions about residential or commercial service applications should be directed to the appropriate Administrative Coordinator (see section 7 *ATCO Gas Contacts*).

*This revised publication has been agreed to and approved by the Urban Development Institute - Calgary.*

# 1 REQUIREMENTS

The information and requirements in this section are common to all types of developments. For specific information on various types of developments, please refer to:

Section 2	Subdivisions
Section 4	Condominium Sites
Section 5	Mobile Home Parks
Section 6	Commercial Sites

## 1.1 ENGINEERING

### 1.1.1 Materials and Information

ATCO Gas requires the following materials and information from the developer to initiate the engineering design of the project:

- Tentative legal plan
- Tentative cover sheets for the development including sidewalk, storm, sanitary and water
- Tentative construction schedule
- Digital copy of the computer base plan in Microstation (.DGN) format or in AutoCAD (.DWG) format, Ver. 2010 or earlier, set in model space, not paperspace

**Note: If all required materials are not submitted, a delay in design and/or construction is likely to result.**

### 1.1.2 Submitting Plans

If plans are being submitted to ATCO Gas for the first time, please direct them to the Manager of Calgary Engineering. The Manager will assign the project to an ATCO Gas designer. For additional requirements please refer to:

- Section 2.1 *Consultant Responsibilities* for subdivisions
- Section 4.1 *Consultant Responsibilities* for condominium sites
- Section 5.1 *Consultant Responsibilities* for mobile home parks

The Manager will advise the developer and/or the developer's consultant which designer has been assigned to the project. All future correspondence relating to the project should be directed to the designer.

Please submit initial plans with sufficient lead-time. The **minimum** design period is **twelve (12) weeks** but may vary on a project by project basis. The project will then be scheduled for construction. ATCO Gas makes every effort to meet scheduling requests, but cannot guarantee

all timelines will be met, as schedules can vary depending on factors such as weather, site conditions and existing project workloads.

If input from other departments within ATCO Gas, other ATCO companies or other external parties is required, this minimum design period may need to be increased. ATCO Gas will advise the developer or consultant if the scheduling must be adjusted.

## 1.2 CONSTRUCTION

### 1.2.1 Preconditions

The following general preconditions apply to all developments. **These preconditions must be satisfied before ATCO Gas crews will move onto a site:**

- Installation of all deep utilities and other shallow utilities must be completed. For 4-party joint trenching projects, only deep utilities must be completed as all shallow utilities (cable, electrical, telecommunications and natural gas) are installed at once. **The developer is responsible for ensuring that all deep utilities and all shallow utilities under the developer's control are installed on the proper line assignment and at the proper depths, and will be responsible for any repairs or alterations if this condition is not met.**
- A minimum separation of 2.0m between deep utilities and the gas main alignment is to be maintained and a minimum separation of 1.0m between shallow utilities and the gas main alignment is to be maintained, except in joint trench installations
- All gas main alignments are to be within 150mm of final grade and free of obstructions such as dirt piles or building materials
- All water valves and manholes must be clearly marked with marker posts
- Sufficient legal evidence (e.g. survey control point, pins, etc.) must be in place and accessible
- Paving and pouring of sidewalks, curbs and other surface improvements may precede gas main installation; however, sleeves must be provided at all road crossing locations (see section 1.2.2 *Sleeve Installation*)
- Benchmark elevations must be provided if gas main installation is to precede curb and gutter installation
- Driveways should not be installed prior to gas main installation. If a driveway must be preinstalled, a sleeve must be installed under the driveway to allow installation of the gas main, following the same guidelines as for road crossing sleeves.
- A minimum separation of 1.5m between above grade facilities such as fences, trees, power poles, etc. and the gas main alignment is preferred

## 1.2.2 Sleeve Installation

If paving and/or concrete work is to be done before gas main installation, the developer must install sleeves under the pavement/concrete for future insertion of gas mains, subject to the following conditions:

- The developer obtains, installs, marks and pays for the sleeves and their installation
- Sleeves shall be type DB2 PVC Conduit
- The size, location, length and depth of the sleeves shall be **determined in conjunction** with the ATCO Gas Distribution Design department
- For minimum depth requirements please contact the ATCO Gas Distribution Design department
- Sleeve sizes shall be determined according to the table below:

External Diameter of Gas Main (mm)	Internal Diameter of Sleeve (mm)
15.9	35
26.7	50
42.2	75
60.3	100
88.9	150
114.3	200
168.3	250
219.1	300
323.9	400

- ATCO Gas will try to accommodate paving by pre-installing steel gas mains. Where this is not possible, ATCO Gas requests that developers omit portions of the pavement/concrete to allow for open-cut installation.
- Sleeves will not be used for steel gas mains as steel pipe does not achieve adequate cathodic protection inside a sleeve
- Joints in sleeves will not protrude into the sleeve such that they will interfere with the insertion of the pipe
- The ends of the installed sleeves will be sealed to prevent the entry of water or other foreign materials into the pipe
- The ends of each sleeve will be clearly marked with 100mm square wooden posts. The above ground portion of the posts must be painted yellow to indicate that the sleeve is for a gas main.

**Note:** If sleeves are not installed to the proper depth or alignment, are too small, too large, crushed or otherwise unsuitable for use, **they will not be used**. ATCO Gas will notify the developer who will be given the following three options for installing a new sleeve:

1. ATCO Gas can open cut a trench to install the gas main. The developer will be responsible for road rehabilitation costs.
2. ATCO Gas can directionally drill the gas main at an additional cost to the developer
3. The developer can install a new sleeve at their own cost

If ATCO Gas must directionally drill underneath or cut the asphalt, the **developer will be invoiced** at the current rates for the length of drill or cut. A cold-mix patch will be placed on the ditch, and the developer will be invoiced for this at the current rates. **The developer is responsible for the permanent repair and any associated costs.**

If the developer paves the road without installing sleeves, and is unable to provide sleeves, the following conditions apply:

- The developer will cut and remove the pavement/concrete or ATCO Gas will perform the work and will invoice the developer at the current rates
- ATCO Gas will compact to municipality standards across the road
- ATCO Gas will place a cold-mix patch on the ditch and the developer will be invoiced at the current rates. If the developer wishes to make a permanent asphalt repair immediately, the developer must contact the appropriate ATCO Gas' Construction Supervisor to arrange for the omission of the temporary patch.
- ATCO Gas will backfill and compact cut sidewalks to the bottom grade of the sidewalk. **The developer is responsible for the permanent repair and any associated costs.**
- The developer will provide direct access across a road/sidewalk where a gas main is to be installed
- The developer also has the option of having ATCO Gas directionally drill the gas main; the developer will be invoiced at the current rates

### **1.2.3 Gas Main Installation Before Paving**

#### **1.2.3.1 Road Crossings**

- The developer shall maintain a minimum of 0.6m cover measured from the base of the road structure down to the top of the sleeve when the final road structure is being prepared. The final depth of the gas main shall be determined in conjunction with the ATCO Gas Distribution Design department.
- If undercutting is necessary, proper gas main exposing practices are required as follows:
  - The developer/road contractor must hand expose or hydrovac each road crossing on each side of the crossing to confirm the depth of the gas line, and must arrange for an ATCO Gas inspector to inspect the crossing location(s) and the condition of the exposed pipe before backfilling and before road construction is started
  - If undercutting is required, the developer/road contractor must also arrange for an ATCO Gas inspector to inspect the pipe after undercutting has been completed and before backfilling



- Road crossing warning signs will be installed on both sides of the road at each gas main crossing. The developer is responsible to ensure that these signs remain intact until paving is completed.
- The developer must acknowledge in writing that the above conditions will be met before shallow utility installation will commence
- **The developer will be responsible for any and all additional costs incurred by ATCO Gas if the above conditions are not adhered to**

### **1.2.3.2      *Option 1 - Within and Parallel to the Roadway before Paving (Roadway at Sub-asphalt Level)\****

- The developer shall prepare the road base to the sub-asphalt level
- The developer shall give ATCO Gas a minimum of four weeks' notice prior to the road base being completed and shall allow a sufficient window of time (assuming weather conditions are suitable for gas main installation) from the date the road base is completed for ATCO Gas to install the gas main within the roadway
- If the roadway is properly prepared to the sub-asphalt level to allow for gas main installation and the gas main alignment is free of obstructions, ATCO Gas will have the gas main installation completed within a reasonable timeframe from when the road base is completed, and will pay all associated costs of installation. This includes removal and replacement of the backfill material if original material is unsuitable for use, compaction and compaction testing (copies of compaction tests to be provided to the developer), surface gravels, membrane repair if required, and other road repairs related to the installation of the gas main.
- If the developer does not allow a timeframe that is sufficient for ATCO Gas to complete installation of the gas main prior to paving of roadway, the developer shall assume responsibility for all associated costs to repair the roadway after gas main installation
- If ATCO Gas fails to install the gas main within an appropriate timeframe through no fault of the developer, and the roadway is paved prior to gas main installation, ATCO Gas shall assume responsibility for all associated costs to repair the roadway after gas main installation

### **1.2.3.3      *Option 2 - Within and Parallel to the Roadway before Paving (Roadway at Sub-base Level)\****

- The developer shall prepare the road base to the sub-base level (prior to the installation of gravel)
- The developer must agree in writing to keep all equipment off of the gas main during (and after) installation of gravel, and to pay for the cost of an ATCO Gas inspector to be present during the entire time that gravel is being placed over the gas main (conditional upon an ATCO Gas inspector being available)

- The developer shall give ATCO Gas a minimum of four weeks' notice prior to the sub-base being completed, and shall allow a reasonable timeframe from the date the sub-base is completed for ATCO Gas to install the gas main within the roadway (i.e. gas main installation will typically be completed within four to six weeks of when the sub-base is completed)
- If the developer does not allow a timeframe that is sufficient for ATCO Gas to complete installation of the gas main prior to paving of the roadway, the developer shall assume responsibility for all associated costs to repair the roadway after gas main installation
- If ATCO Gas fails to install the gas main within an appropriate timeframe through no fault of the developer, and the road structure is prepared prior to gas main installation, ATCO Gas shall assume responsibility for all associated costs to repair the roadway after gas main installation
- ATCO Gas will provide compaction test results to the developer
- If undercutting is required after installation of the gas mains, proper gas line exposing practices are required, and the road contractor must arrange for an ATCO Gas inspector to inspect the pipe prior to and after undercutting, and before backfilling

#### **1.2.3.4      *Option 3 – Within and Parallel to Roadway (Partially Paved)***

- The developer shall prepare the road base to the sub-asphalt level, and then may pave the road **except** for where the gas line is to be located. A minimum of 0.5m on either side of the center line of the gas line assignment **must** be left unpaved.
- The developer shall give ATCO Gas a minimum of four weeks' notice prior to the road being paved on either side of the gas line assignment, and shall allow a reasonable timeframe from the date the road is paved for ATCO Gas to install the gas main within the roadway (i.e. gas main installation will typically be completed within four to six weeks of when the road is paved on either side of the gas line assignment).
- If the developer does not allow a timeframe that is sufficient for ATCO Gas to complete installation of the gas main prior to paving the roadway directly over the gas line assignment, the developer shall assume responsibility for all associated costs to repair the roadway after gas main installation.
- If ATCO Gas fails to install the gas main within an appropriate timeframe through no fault of the developer, and the road is paved directly over the gas line assignment prior to gas main installation, ATCO Gas shall assume responsibility for all associated costs to repair the roadway after gas main installation.

### **1.2.3.5 Additional Options**

- Additional options are available and should be **determined in conjunction** with the ATCO Gas Distribution Design department. Please note both the developer and ATCO Gas must agree upon the costs and conditions of each option before construction begins.

### **1.2.3.6 Lanes**

- The developer shall maintain a minimum of 0.6m cover over the gas mains while lanes are being constructed. The final depth of the gas main shall be determined in conjunction with the ATCO Gas Distribution Design department.
- If undercutting is required after installation of the gas mains, proper gas line exposing practices are required. The road contractor must arrange for an ATCO Gas inspector to inspect the pipe prior to and after undercutting, and before backfilling.

### **1.2.4 Site Not Ready**

If the developer or representative confirms that the site is ready for gas main installation, ATCO Gas crews will mobilize and move on site and commence construction. If construction cannot move forward, the developer will be contacted. If the problem cannot be resolved immediately, ATCO Gas crews will move off site. ATCO Gas will reschedule the work which may result in a delay of several weeks. **The developer will be invoiced for any additional costs incurred by ATCO Gas for downtime, mobilization and/or demobilization of ATCO Gas survey or construction crews.**

### **1.2.5 Winter Conditions**

Due to significantly higher costs, it is ATCO Gas policy to **minimize construction** during the winter construction season. Winter conditions are generally defined as a minimum of 0.3m of frozen ground, or snow cover which requires significant clearing.

Unless the shallow utilities are to be installed using joint trenching, gas mains will not be installed during the winter season unless there are a significant number of buildings at the framing stage or beyond.

### **1.2.6 Interim Heating**

When buildings within a subdivision require an interim heat source before gas mains are installed, the developer may choose to use an alternate form of energy until natural gas service is available.

## 1.2.7 Backfill and Compaction

### 1.2.7.1 Frost Free Soil Conditions

In public property, ATCO Gas backfills and compacts to municipal specifications for all shallow cuts by utility companies. Please refer to the appropriate municipality's compaction specifications.

In private property, ATCO Gas will backfill with existing fill. If additional compaction is requested, the developer will be responsible for the associated costs.

### 1.2.7.2 Frozen Soil Conditions

In existing or proposed streets, lanes or easements where the municipality is responsible for maintenance, compaction is to municipal specifications.

- All winter backfill settlements must be re-compacted as per municipal specifications within the specified timeline. Please refer to the appropriate municipality's specifications and timelines.
- New backfill material is imported if the excavated material is unsuitable for backfill

## 1.2.8 Service Line Timing and Costs

In conventional natural gas installations, service lines to each parcel or lot are installed after the foundation for each individual dwelling/building is complete. See section 3 *Joint Trench Construction* for joint trench construction installations.

After a gas service line has been applied for, a site inspection will be completed prior to installation. **Only after a satisfactory site inspection will ATCO Gas schedule the installation of a service line.** Please note additional time may be required if a main extension is necessary to service a parcel or lot.

The applicant pays for service line installations within the applicant's property. Billing for the service line installation is based on the rates in effect at the time of installation.

In the City of Calgary, application can be made at the appropriate ATCO Gas Operations Centre. For residential applications, please contact the Administrative Coordinator to determine the appropriate location (see 7 *ATCO Gas Contacts*). For commercial applications please contact the Administrative Coordinator or visit the Midnapore Operations Centre (see 7 *ATCO Gas Contacts*). Calgary home builders may apply online for homes being built in joint trench subdivisions by accessing the ATCO Gas website ([www.atcogas.com](http://www.atcogas.com)).

Further information on service line installations, including costs, is available on the ATCO Gas website.

## **1.2.9 Construction Heat**

### **1.2.9.1 Residential**

If construction heat is required for residential buildings in the City of Calgary, application can be made at the appropriate ATCO Gas Operations Centre. Please contact the Administrative Coordinator for residential applications to determine the appropriate location (see section 7 *ATCO Gas Contacts*). **Construction heat should be applied for at the time of service line application.** Applicants who qualify to apply online may specify on the application that they will require construction heat.

Specific requirements, such as two 2x8 posts installed 16-24 inches apart, must be in place and will be inspected and approved by an ATCO Gas representative before a service line and gas meter will be installed. Energy provider enrollment must also be in place. Please contact the appropriate Operations Centre for requirement details (see section 7 *ATCO Gas Contacts*).

### **1.2.9.2 Commercial**

If construction heat is required for commercial buildings in the City of Calgary, application can be made at Midnapore Operations Centre (see section 7 *ATCO Gas Contacts*).

Specific requirements, such as a concrete pad and enclosure for the gas meter, must be in place and will be inspected and approved by an ATCO Gas representative before a service line and gas meter will be installed. Energy provider enrollment must also be in place. Please contact the Midnapore Operations Centre for requirement details.

It may be necessary to install a temporary gas meter for construction heating purposes. When construction is complete, a permanent meter will be installed and any necessary alterations to the service line will be made at cost to the builder/developer.

## **1.2.10 Outside Calgary**

Not all offices process applications for new service line and construction heat requests outside the City of Calgary. Please use the office locator on the ATCO Gas website (Services → Our Service Area) and call for specific details.

### **1.2.11 Service Stubs**

If for some reason the developer requires service stubs to be extended onto the lots before the individual houses are ready (i.e. in order to pave a lane), the developer must agree ahead of time to the stub locations. It is also the developer's responsibility to ensure that the house piping allows the gas meter to be installed on the same side of the lot as the service stub. If this is not the case, **the abandonment of the existing service stub and reinstallation will be completed at the developer's expense.**

Meter locations **must** be outside and **must** be approved by ATCO Gas in the planning stages. Locations are governed by local regulations with respect to proximity to opening windows, fresh air intakes, electrical outlets, water sources, exhausts, direct vent appliances, other utility meters, etc. In addition, a **meter cannot be located** under a sundeck, porch or bay window. Driveways and carports are also **unacceptable locations**.

For further information, please see *What You Should Know About Obtaining a New Residential Natural Gas Service* (available at: <http://www.atcogas.com/Services/Documents/Obtaining-new-residential-natural-gas-service.pdf>)

## **2**            **SUBDIVISIONS**

ATCO Gas installs natural gas mains in various subdivision developments, as outlined below. Each type of development is explained in further detail in subsequent sections of the guide.

- Single family (detached and semi-detached) residential dwellings in the City of Calgary
- Multi-family (attached) residential dwellings in the City of Calgary
- Single family (detached and semi-detached) residential dwellings outside the City of Calgary
- Multi-family (attached) residential dwellings outside the City of Calgary
- Commercial subdivisions both in and outside the City of Calgary

Note: Both joint trench and gas only installations are available for each of the aforementioned development types.

For all underground residential distribution (URD) joint trench projects within the City of Calgary (including single detached, semi-detached and multi-family residential dwellings), the Shallow Utilities Joint Provisioning guidelines apply. For URD joint trench projects outside the City of Calgary, Developer Choice guidelines apply. For commercial subdivisions in and outside the City, Developer Choice guidelines apply.

Note: Feeder main extensions both in and outside the City of Calgary may be required to provide gas service to new subdivisions when no existing gas mains are present.

ATCO Gas will install mains in these developments, provided the developer:

- Legally registers individual lots and public thoroughfares
- Services the development with municipal sewer and water
- Provides suitable rights-of-way for ATCO Gas use, whether they are registered as public thoroughfares or utility rights-of-way

In addition, the requirements outlined in section 2.1 Consultant Responsibilities must also be met.

Please note: As of May 1, 2015, ATCO Gas will undertake a fixed rate approach to all developer choice joint trench construction projects (i.e. commercial sites, residential subdivisions outside the City of Calgary, etc.). ATCO Gas will contract directly with developers who require natural gas servicing via joint trench construction, rather than with the contractors who complete the work. As such, ATCO Gas will pay the developer directly for the natural gas portion of joint trench work and the developer will then be responsible for paying the contractors.

## **2.1 Consultant Responsibilities**

Upon submission of plans by the developer, ATCO Gas will indicate the proposed natural gas distribution layout and one copy of the preliminary design will be returned to the developer's engineering consultant.

It is the consultant's responsibility to review the preliminary design for:

- Possible conflicts with deep utilities and other shallow utilities
- Sleeve locations
- Driveway conflicts
- Easement requirements

Note: For URD joint trench projects within the City of Calgary, the responsibility of reviewing the preliminary design for possible conflicts with deep and other shallow utilities lies with the Enmax Power Services Corporation Project Management Consultant (as per the Shallow Utilities Joint Provisioning guidelines).

For easement requirements please contact the ATCO Gas designer to whom the project was assigned.

Subdivision changes affecting the gas main design must be brought to the attention of the ATCO Gas project designer immediately to ensure that the installation of the mains, and ultimately the gas services, is not unnecessarily delayed.

Before final plans can be issued to ATCO Gas' Construction Department, ATCO Gas requires the following materials and information from the developer:

- Final approved set of construction drawings (coversheets and profiles)
- Tentative legal plan (final changes awaiting approval)
- Tentative utility right-of-way plan (final changes awaiting approval)
- Confirmation of the installed sleeve locations on site
- A point plan, showing the individual legal pin markings

A coordinate disk containing the legal information in ASCII text file should be provided, if available.

In urban areas where the municipality does not obtain the rights-of-way on behalf of ATCO Gas, copies of the relevant signed easement agreements must be executed in the name of ATCO Gas & Pipelines Ltd.

**Failure to submit all required materials in a timely fashion may result in delays in natural gas service.**

### **3 Joint Trench Construction**

Gas mains in all new residential subdivisions in the City of Calgary (and many Towns) are installed using joint trench construction, where all shallow utilities (power, telephone, cable and ATCO Gas) are installed in one common trench at the same time. This method of installation, while more convenient for both the developer and the utility companies, requires extra communication and coordination for all parties involved.

For URD facilities in new single family dwelling and multi-family dwelling subdivisions in the City of Calgary, please refer to the Shallow Utilities Joint Provisioning Guidelines found on the Enmax Power Corporation website (Enmax Corporation, 2014). For more information on multi-family subdivisions, please refer to section 4 *Condominium Sites*.

The requirements of the developer remain the same as those outlined in section 2 *Subdivisions*, except as outlined in section 3.1 *Service Stub Locations*.

Please note: As of May 1, 2015, ATCO Gas will undertake a fixed rate approach to all developer choice joint trench construction projects (i.e. commercial sites, residential subdivisions outside the City of Calgary, etc.). ATCO Gas will contract directly with developers who require natural gas servicing via joint trench construction, rather than with the contractors who complete the work. As such, ATCO Gas will pay the developer directly for the natural gas portion of joint trench work and the developer will then be responsible for paying the contractors.

#### **3.1 Service Stub Locations**

In a joint trench construction situation, ATCO Gas will extend service stubs onto each property to be served within a subdivision. Service lines will be installed in a straight line from the service box location to the meter at the house. The developer must agree in writing to the following before ATCO Gas will install services in a subdivision:

- Meter locations and the side of the lot on which ATCO Gas' service stub is located will be predetermined. Refer to section 1.2.10 *Service Stubs* for more information on meter locations.
- If the house lines are installed such that ATCO Gas must install the service line on the opposite side of the house, the developer/builder will pay for the abandonment of the existing service stub and reinstallation of a new stub
- The developer must inform ATCO Gas of any change in lot configuration prior to installation of service stubs



- If a change in lot configuration results in service stubs having to be abandoned and new stubs installed, the developer will be responsible for all associated costs of abandonment and reinstallation of the stubs
- The properties will be unobstructed in the areas where service stubs are to be installed

For pre-serviced lots where a service stub is installed before the main:

- If a pre-service stub is damaged prior to connection to the main, the builder is responsible for the replacement costs
- The builder should be aware of whether the pre-service stub is to be connected to the main from the front or rear of the lot and is to dig a pre-service trench in the proper direction and is responsible for any damages or relocation costs
- The builder is not to extend the service trench, service line or sleeves into the utility right-of-way (URW) and will be responsible for the associated costs of excavation and damages

All the shallow utility services are installed on the same side of the house. It is the developer's responsibility to make the homebuilders in the subdivision aware of this.

- The house must be designed so that there is room on the wall to hang all the meters and still maintain the required clearances from openings. Refer to *What You Should Know About Obtaining a New Residential Natural Gas Service* for more information on clearances. This document can be found at: <http://www.atcogas.com/Services/Documents/Obtaining-new-residential-natural-gas-service.pdf>
- The service line is installed at the sub-floor stage, along with the other shallow utilities. The homebuilder must ensure that applications for gas service and the gas meter location are made early enough that ATCO Gas can schedule these installations.
- The homebuilder is responsible for exposing ATCO Gas service stubs. An ATCO Gas crew will install service lines in the same trench as the other shallow utilities once they have been installed. The homebuilder is responsible for the backfill of the service trench with suitable material (i.e. free of large rocks, garbage, etc. that could damage the gas line) once all utilities have been installed. This includes the removal of refuse from the trench before backfill.

## 4 Condominium Sites

In condominium sites, the entire gas distribution system within the property is installed, owned and operated by ATCO Gas; the service lines are paid for by the developer/owner.

**Standard condominiums** are single parcels of land in which no individual lots are sold with the condominium unit and no internal roads are registered as public thoroughfares.

**Bareland condominiums** are developments in which lots are sold with the condominium units, but no internal roads are registered as public thoroughfares. If roads are registered as public thoroughfares, the guidelines outlined in *section 2 Subdivisions* apply.

The following information applies to both standard and bareland condominiums:

- Natural gas pipelines within the condominium property are classified as "mains" and "service lines"
- The portions of the piping system that cross through more than one property within the development are known as "main" and are installed at no charge to the developer. **Registered utility rights-of-way for the mains must be provided by the developer.**
- The lateral lines extending from the gas main to the meter sets are known as "service lines". The "customer end-of-service" extends from the edge of the right-of-way to the meter. The owner is billed for this portion of the service line at the current rates.
- A separate service application must be made for each riser
- Maintaining marker posts is the responsibility of the developer. If marker posts have been removed it is the responsibility of the developer to expose the stub at their cost.
- Gas mains are normally installed with other shallow utilities in a joint trench.
  - Please note: as of June 1, 2015, for residential multi-family subdivisions within the City of Calgary please refer to the Shallow Utilities Joint Provisioning Guidelines found on the Enmax Power Corporation website (Enmax Corporation, 2014).

## 4.1 Consultant Responsibilities

In addition to the requirements given in *section 2.1 Consultant Responsibilities*, the developer must provide the following information:

- Mechanical site plan
- Electrical plan
- Building footprints and lot lines on legal plan
- Site plans indicating the location of fences, roads, sidewalks and any other aboveground permanent features
- Natural gas consumption and house-line pressure requirements
- Building floor and/or elevation plans indicating the desired meter location (See *section 4.2 Meter Locations*)
- Correct civic addressing for each unit

Upon submission of the plans by the developer, ATCO Gas will design the proposed natural gas servicing layout, and a preliminary copy of the design will be sent to the developer's engineering consultant.

Please note that the service lines are not necessarily installed at the same time as the mains. It is the developer's responsibility to ensure that services to the individual units are applied for separately. This can be done by contacting an Operations Centre, see section 7 *ATCO Gas Contacts*

The developer or developer's consultant must notify ATCO Gas **in writing** of any changes made to the design of the condominium site after the initial set of drawings is submitted, or if any change occurs in the civic addressing or unit numbering.

**Note: Since condominiums tend to have smaller distances between underground facilities, ATCO Gas strongly recommends the developer's consultant arrange a design meeting in the early stages of design with representatives from all shallow utilities present.**

## 4.2 Meter Locations

The developer's options for metering facilities are as follows:

- Individual meters grouped at a central location on each building
- Individual meter located on the outside wall of each unit

Meter locations **must** be outside and **must** be approved by ATCO Gas in the planning stages. Locations are governed by local regulations with respect to proximity to opening windows, fresh air intakes, electrical outlets, water sources, exhausts, direct vent appliances, other utility meters, etc. In addition, a **meter cannot be located** under a sundeck, porch or bay window. Driveways and carports are also **unacceptable locations**.

For further information, please refer to *What You Should Know About Obtaining a New Residential Natural Gas Service*, available at:

<http://www.atcogas.com/Services/Documents/Obtaining-new-residential-natural-gas-service.pdf>

## 4.3 Construction

In addition to the requirements given in section 2 *Subdivisions*, the developer must meet each of the following conditions:

- Prior to construction, the developer must sign a form indicating the gas line alignment is within 150 mm of final grade, and will be responsible for any damage to the gas lines or extra costs associated with service installation due to a change of grade after main installation
- The developer must mark the final grade line on the buildings

- The developer will install the house lines after the proposed meter locations have been approved on-site by an ATCO Gas Service Representative. The house line on the outside wall must have a permanent metal tag attached indicating the unit number it serves or ATCO Gas will not install a meter.
- The developer must mark all private underground utilities at least one day before ATCO Gas moves on site
- If buried shut-off valves, bent risers or pulled brackets occur after the installation of ATCO Gas facilities, ATCO Gas will not set the meter until the developer pays ATCO Gas for the damages and the damage is repaired by ATCO Gas

## **5 Mobile Home Parks**

ATCO Gas defines mobile home parks as single parcels of land where no internal roads are registered as public thoroughfares. If the road system is registered as public thoroughfares and the lots are individually registered under separate title, then the guidelines in section 2 *Subdivision* apply.

- All natural gas lines within the mobile home park are classified as "mains" and "service lines".
- The portions of the piping system that cross through more than one property within the development are known as "main" and are installed at no cost to the developer. **Registered utility rights-of-way for the mains must be provided by the developer.**
- Each lot is pre-serviced with a service line and meter post. The lateral lines extending from the gas main to the meter posts are known as "service lines". The "customer end-of-service" extends from the edge of the right-of-way to the meter post. The developer is billed for this portion of the service line at the current rates. The developer must provide final grade elevations at the meter post locations.
- A flexible hose from the meter set to the mobile home is supplied and owned by ATCO Gas, and is considered part of the meter set
- A separate service application must be made for each unit
- Locates must be completed prior to installation of the meter to confirm the main and service are not located under the modular home. If an infraction is found, the meter will not be installed until the situation is corrected at the cost of the developer.

### **5.1 Consultant Responsibilities**

In addition to the requirements given in section 2.1 *Consultant Responsibilities*, the developer must also provide the following information:

- A site plan indicating the exact location of roads, lots, meters (refer to section 5.1.2 *Meter Locations*), sidewalks and other surface features
- Electrical plan
- Civic addresses for each mobile home site

Upon submission of the plans by the developer, ATCO Gas will design the proposed natural gas servicing layout, and a preliminary copy of the design will be sent to the developer's engineering consultant.

The developer or developer's consultant must notify ATCO Gas **in writing** of any changes made to the design of the mobile home park after the initial set of drawings is submitted, or if any change occurs in the civic addressing.

It is the consultant's responsibility to:

- Note any section of the proposed pipeline route which requires special compaction, primarily in paved areas
- Examine the proposed pipeline layout for conflicts with **all** other utilities

## 5.2 Meter Locations

Meters are located on a support post adjacent to each mobile home. Meter locations **must** be outside and **must** be approved by ATCO Gas in the planning stages. Locations are governed by local regulations with respect to proximity to opening windows, fresh air intakes, electrical outlets, etc. In addition, a **meter cannot be located** under a sundeck, porch or bay window. Driveways and carports are also **unacceptable locations**.

For further information, please see *What You Should Know About Obtaining a New Residential Natural Gas Service* available at: <http://www.atcogas.com/Services/Documents/Obtaining-new-residential-natural-gas-service.pdf>

## 5.3 Construction

In addition to the requirements given in section 2 *Subdivisions*, the developer must also meet all of the following conditions:

- Upon project completion, the site developer must sign a form indicating that the gas line alignment is within 150 mm of final grade, and will be responsible for any damage to the gas lines
- The developer must mark all private underground utilities, such as irrigation or secondary lines, at least one day before ATCO Gas moves onto the site
- If buried shut-off valves, bent risers or pulled brackets occur after the installation of ATCO Gas facilities, ATCO Gas will not set the meter until the developer pays ATCO Gas for the damages and the damage is repaired by ATCO Gas

## **6 Commercial Sites**

ATCO Gas defines a commercial site as any non-residential subdivision that is not otherwise classified in sections *2 Subdivisions*, *4 Condominium Site* or *5 Mobile Home Parks*.

ATCO Gas, at its discretion, may participate in joint trench construction for commercial sites. Participation will be determined on a project by project basis.

### **6.1 Single Property**

The natural gas facilities installed on a single property are classified as "customer end-of-service" and are paid for by the owner/developer. Service line installation rates are available on the ATCO Gas Website at [www.atcogas.com](http://www.atcogas.com) (Home → Rates → Terms and Conditions → Terms and Conditions for Distribution Service Connections).

### **6.2 Bareland Commercial Development**

Bareland commercial developments are handled in the same fashion as residential bareland condominium projects. The mains will be installed at ATCO Gas' expense and corresponding easements may be required; service lines are paid for by the developer/owner.

For all other requirements please refer to sections *4.1 Engineering*, *4.2 Meter Locations* and *4.3 Construction*.

# 7

## ATCO Gas Contacts

### **Manager, Calgary Region Engineering**

ATCO Centre  
909 11 Avenue SW  
Calgary, AB T2R 1L8

Phone: (403) 245-7851  
Fax: (403) 245-7405

### **Manager, Contract Construction**

Blackfoot Operations Centre  
5757 Burbank Crescent SE  
Calgary, AB T2H 2Z4

Phone: (403) 219-8621  
Fax: (403) 245-7190

### **Customer Assistance Centre**

Phone: (403) 245-7888

### **Residential & Commercial Service Applications**

Residential (within the City of Calgary)  
Commercial (within the City of Calgary)  
Outside City of Calgary

Phone: (403) 245-7888  
Phone: (403) 245-7255  
Phone: (403) 310-5678

### **ATCO Gas Operations Centres**

Crowfoot Operations Centre  
500 Crowfoot Crescent NW  
Calgary, AB T3G 2W4

Phone: (403) 245-7050

Midnapore Operations Centre  
383 Midpark Blvd SE  
Calgary, AB T2X 3C8

Phone: (403) 254-6200

Whitehorn Operations Centre  
3055 – 37 Avenue NE  
Calgary, AB T1Y 6A2

Phone: (403) 219-8600

### **ATCO Gas Website**

[www.atcogas.com](http://www.atcogas.com)

## 8 References

Enmax Corporation. (2014). *Underground Residential Development*. Retrieved November 3, 2014, from <https://www.enmax.com/business/infrastructure/epsc/underground-residential-development>