Information Regarding Connecting to Homes and Converting Appliances

As part of the proposed Brownton Municipal Natural Gas Project, the City is proposing to extend natural gas service to properties in coordination with the initial distribution system construction. This handout outlines information regarding the connection, as well as more detailed information on installing natural gas in the building and converting appliances.

- Service from the distribution pipe to the outside of the building would be installed at no cost to property owner with the original construction if the property signs an agreement to allow the connection and also agrees to complete the internal connection by July of 2014.
- The service would extend to a wireless meter on **outside** of house or building. The meter location will be determined in the field in coordination with the property owner. The meter must be located in a manner that meets code and constructability standards, as noted in the available handouts.
- Internal conversions and piping would be the responsibility of the property owner.
- Cost of removing or mitigating LP or fuel tanks would also be the property owner's responsibility.

Local contractors have been identified and contacted regarding their qualifications, ability and desire to work with property owners. By coordinating efforts, we hope and expect that the costs may be able to be reduced for property owners. The City of Brownton is providing this information only as a service to property owners, and they do not recommend any particular contractor or take any legal responsibility for work completed for individuals engaging or utilizing these contractors. It is recommended that property owners obtain quotes and determine which contractor they believe would best serve them.

Hutchinson Plumbing & Heating	518 Hwy 7 E, Hutchinson	587-8439
TEK Mechanical Service, Inc.	220 – 5th Ave NW, Hutchinson	587-2779
B & C Plumbing	15 Monroe St SE, Hutchinson	234-6900
Plumbing & Heating by Craig Inc.	680 Hwy 7 E, Hutchinson	587-7437
Foster Mechanical Inc.	945 – 5th Ave SE, Unit 12, Hutchinson	587-4003
Mueller Sales & Service	330 10th Street East, Glencoe	864.3556
Glencoe Plumbing and Heating, Inc.	2110 9th Street East, Glencoe	864.6353

The City is also reviewing options to provide financing options for internal conversions and/or energy saving improvements. More information will be available prior to the election.

CITY OF BROWNTON
EST. 1857

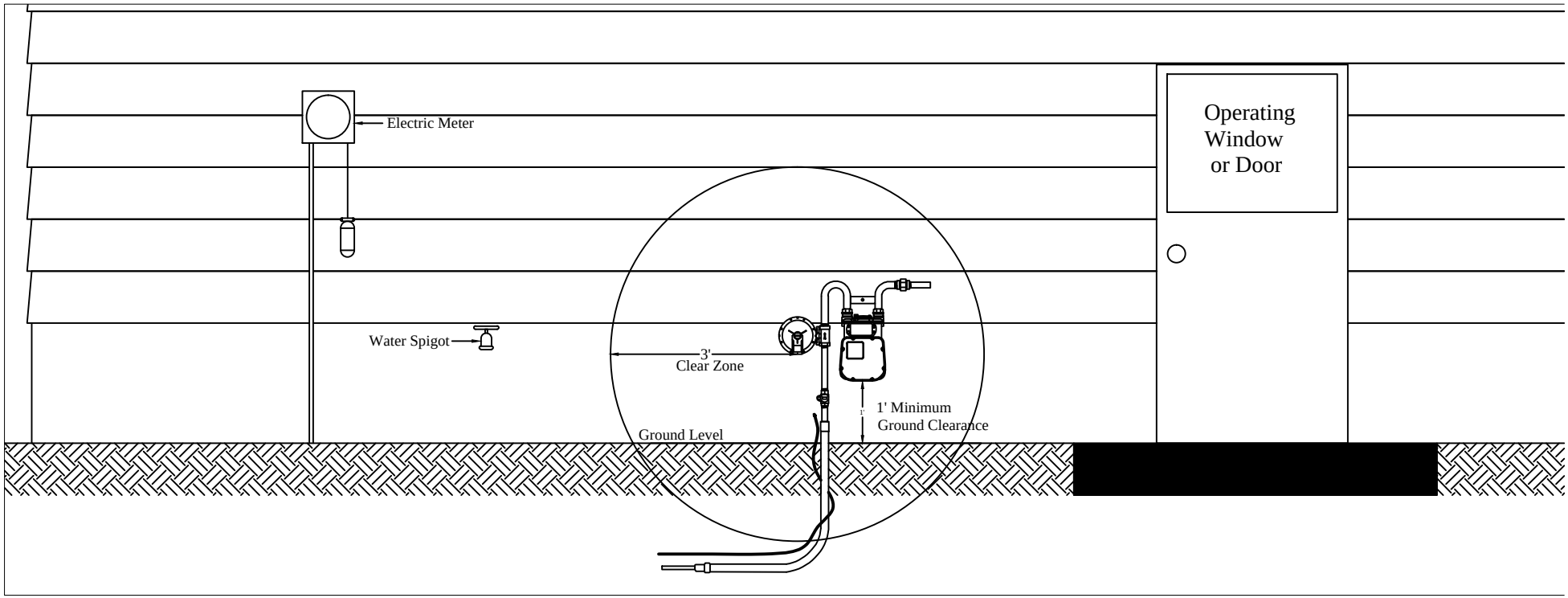
Information Related to Installing Natural Gas Piping in Residences and Converting Appliances to Operate on Natural Gas

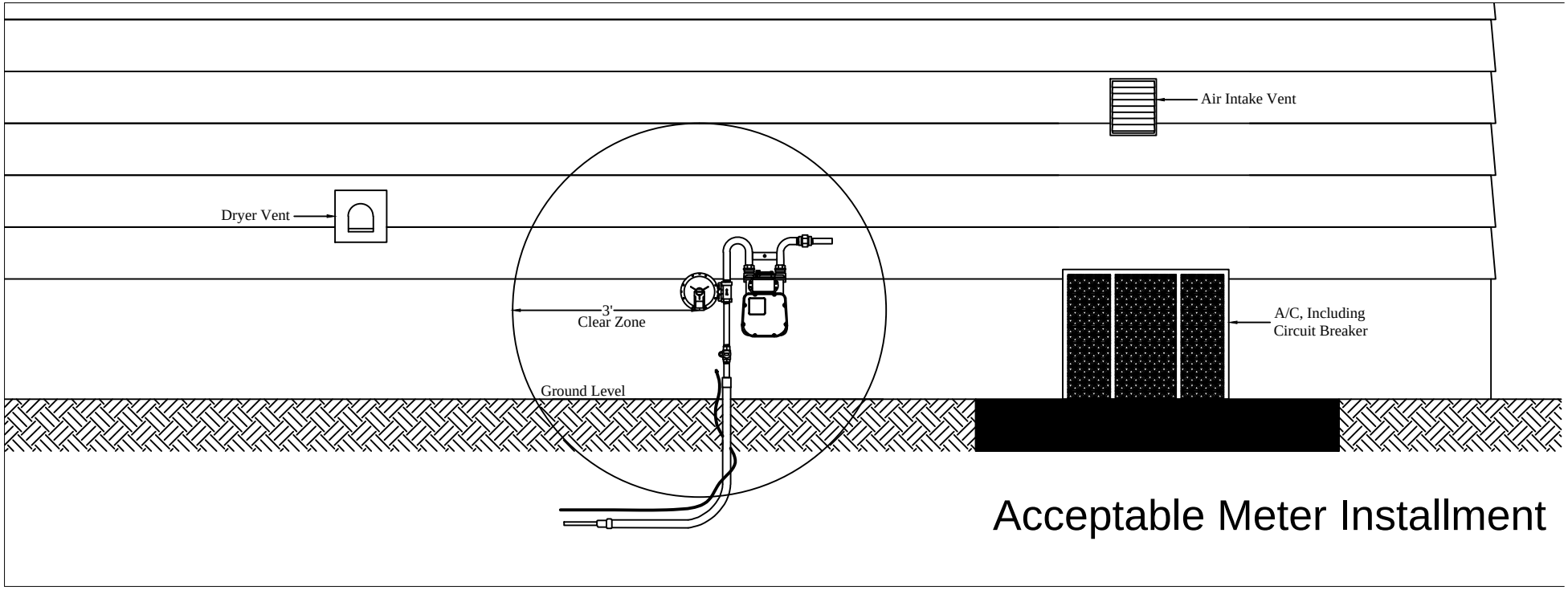
- Existing LP gas piping is in almost all cases too small to be utilized for natural gas, and new gas piping will need to be installed that is of a larger diameter than the pipe required for LP gas.
- The new piping can be of Schedule 40 steel pipe with threaded fittings, Type L rigid copper tubing with brazed fittings, Type L soft copper tubing with flared fittings, or flexible CSST (corrugated stainless steel tubing) with manufacturer-provided fittings. The latter two types of piping require the least amount of labor to install and are easier to install when obstacles and structural conditions make the installation of rigid piping more difficult.
- Most utilities will not install meters on the back sides of homes (the sides opposite the street) when their gas mains are running in the street. They will install meters on the sides of the houses, but they will not "hook" around the homes with the piping to the meter. Because most LP second-stage pressure regulators (the point of gas entrance into the house) are located on the back sides of houses, some new piping will usually need to be installed to connect to this existing piping, even in situations in which the existing pipe will work for natural gas piping.
- Whether existing gas piping is reused or new piping is installed, the piping will need to pass a pressure test and an inspection as part of this process to verify that it is leak free and properly installed.
- LP water heaters cannot be converted to natural gas. They will need to be replaced with new water heaters.
- Nearly all furnaces and boilers can be converted to natural gas from propane. Most furnaces are supplied as natural gas furnaces and converted to propane by the installer. If the original parts were saved, these can be used to convert the furnace to operate on natural gas. On newer furnaces, manufacturer-supplied conversion kits are usually available. **Only manufacturer-supplied conversion kits should be used for converting a furnace for use with a different fuel.** The cost of these kits can vary a great deal. The least expensive are less than $50 and the most expensive are over $300.
- Most dryers and ranges can be readily converted for use with LP to natural gas.

- Oil furnaces and boilers can be converted to work with gas by using conversion burners. However, in most cases the $1,200 (approx.) cost of doing this makes the purchase of whole new furnaces and boilers more common.
- If an oil furnace and boiler is replaced by an 80-84% (non-condensing) furnace or boiler, the masonry chimney will need to be lined with an aluminum liner so that the acid formed by condensation of the flue gas does not cause degradation of the masonry chimney. If 90+% (condensing) efficient furnaces or boilers are installed, they can be routed to the outside by penetrating the side wall of the house.
- Usually, existing central air conditioner cooling coils can remain in place above a furnace when replacing a furnace.
- There is presently a $150 Federal income tax credit available when a homeowner installs a 95% efficient furnace.
- If a minimal amount of new piping is required, and a furnace conversion kit is either inexpensive or not needed because parts were saved from the original conversion, and the only gas appliance is the furnace, the cost of conversion could be as little as $400. This includes making the piping changes, installing a pressure regulator, installing a conversion kit, starting the furnace to verify proper input and combustion, doing a pressure test (and inspection) on the piping, and getting a permit. If new piping is needed to a single appliance, a total cost of $750 would be more typical. If a new water heater is needed, $750 – 850 is approximately the cost of a new, standard-efficiency replacement water heater installed. If a new furnace and water heater are needed, along with piping to an existing range, dryer and fireplace, the total cost of the project could exceed $5,000.

Thanks to Hugh Foster of Foster Mechanical of Hutchinson for providing this information:

FOSTER MECHANICAL
Phone: 320-587-4003 Fax: 320-587-4450
945 5th Ave. S.E. #12 Hutchinson, MN 55350
Foster Mechanical is a Minnesota Corporation





Acceptable Meter Installment

(5)
(17)
Acceptable Meter Locations
Note: Meters are not to be installed inside a fence or adjacent to driveways