



# CASTLE MOUNTAIN RESORT

Proposed Natural Gas System Project  
Jan 26, 2018

# WHAT ARE THE BENEFITS OF NATURAL GAS?

- It's a clean energy
  - Natural Gas emits fewer greenhouse gas emissions than other fossil fuels and 16% less CO<sub>2</sub> emissions than propane.
  - If Castle Mountain Resort switches from propane to natural gas, it would be the equivalent of removing 20 passenger cars from the road each year.
- It's safe
  - Natural gas is lighter than air and quickly dissipates if released, making it one of the safest fuels for heating your home.

# WHAT ARE THE BENEFITS OF NATURAL GAS?

- It's reliable
  - ATCO has been warming communities in Alberta for over 100 years, and we are the province's largest distributor of natural gas. We serve more than 1.1 million customers in nearly 300 communities, including the residents and business of Calgary and Edmonton.
- It's abundant and affordable
  - Due to its abundance in Alberta, natural gas is more affordable than other forms of heating for homes and commercial use.
  - The average Castle Mountain resident will save approximately \$467 annually.
- It's versatile
  - In addition to heating your home, natural gas can fuel a variety of appliances such as ranges, dryers, fireplaces, water heaters and barbeques.

# WHY WORK WITH ATCO?

- ATCO's Distribution Division is a regulated utility that must follow the requirements and standards set out by the Alberta Utilities Commission (AUC).
- ATCO staff is on call 24/7 to respond to your customer service needs in the unfortunate event of a loss of service, gas odor, suspected carbon monoxide problem or appliance safety concern, at no extra cost.
- Our regular inspection of the natural gas system helps to prevent leaks and ensure integrity.
- In the event of a natural disaster, such as a forest fire, ATCO will take steps to ensure the natural gas system is safe, and does not compound the effects of the disaster.
- Future growth of ATCO's natural gas system will not affect the rates or service for existing customers.

## WHAT IS THE AUC?

- ✓ The AUC regulates the utilities sector to protect social, economic and environmental interests in Alberta. It ensures Albertans receive safe and reliable service at just and reasonable rates.
- ✓ The AUC provides the framework and formula for determining the rates customers can be charged and has final approval of these rates.



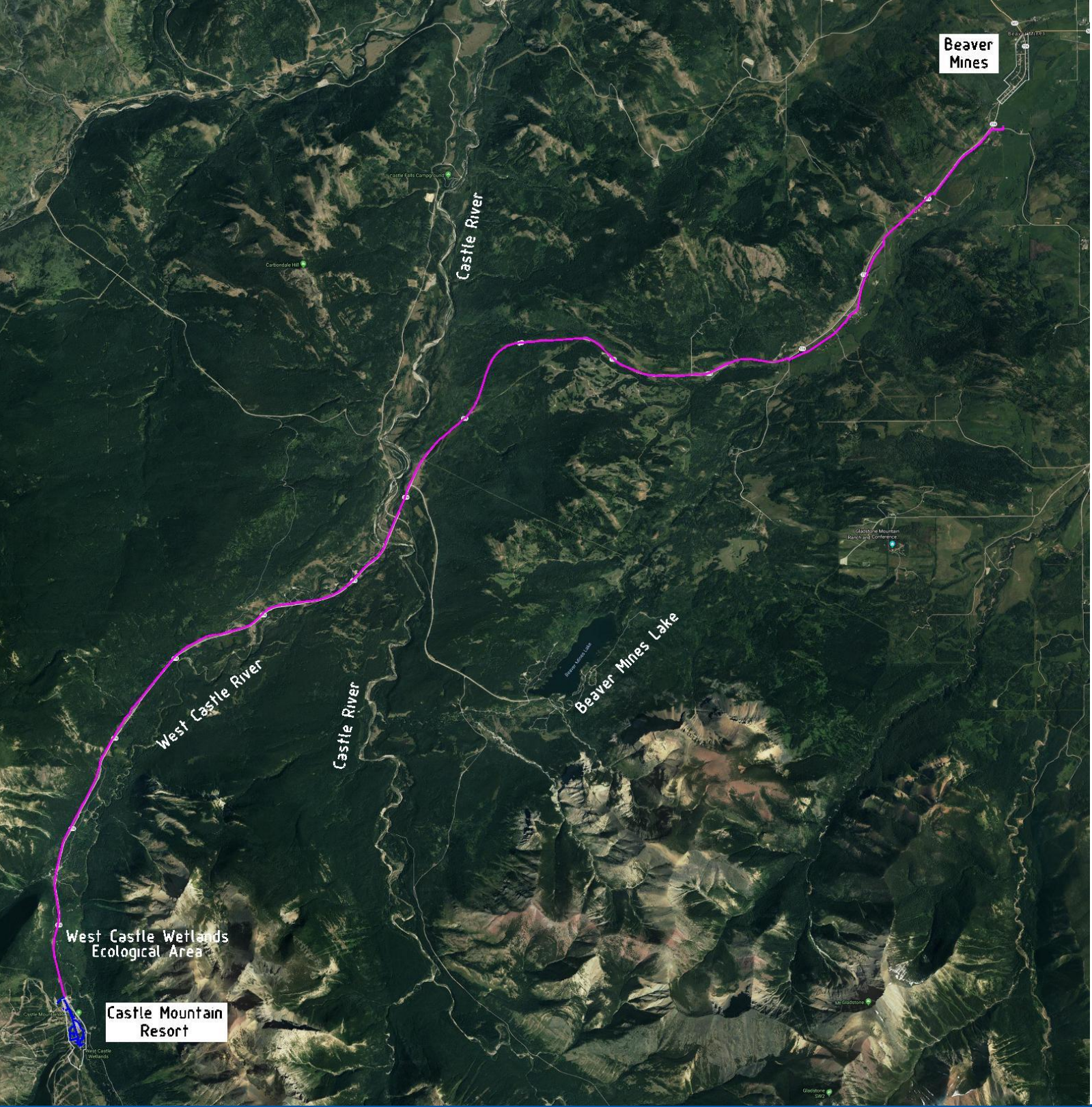
# WHAT IS THE SCOPE OF THE ATCO PROJECT?

ATCO is proposing the following developments to Castle Mountain Resort's existing infrastructure:

- Upgrade the high pressure (HP) station located in Beaver Mines.
- Upgrade 7.5km of existing facilities from 26mm (3/4") polyethylene (PE) pipe to 114mm (4") PE.
- Install approximately 17.5km of 114mm (4") PE pipe to Castle Mountain Resort.
- Locate, survey and pressure test the existing Castle Mountain Resort propane system and convert the system to natural gas.
- Remove all current meter sets and exchange for ATCO meter sets.

# PROPOSED PIPELINE ROUTE

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- Proposed 25km of 114mm PE pipe to be installed from Beaver Mines to Castle Mountain Resort.
- Castle Mountain Resort propane system to be converted to natural gas.

Satellite Map Source: Google Maps

# WHAT ARE THE TIMELINES FOR THIS PROJECT?

#1.

Coordination for the highway upgrade, water line and gas system is in progress.

#2.

The highway paving would commence in Spring 2018.

Note: the gas main through ecological reserve is planned to be installed in the road prior to paving.

#3.

The design, planning and approvals would take approximately 6 – 12 months.

#4.

The construction phase of this project would take a minimum of 5 months.

# CONVERSION OF APPLIANCES FROM PROPANE TO NATURAL GAS

- A full conversion of appliances from propane to natural gas will need to be completed.
- Residents will have the option to select the contractor of their choice for appliance conversions.
- ATCO staff completed a preliminary assessment of a number of units on January 13<sup>th</sup> and 20<sup>th</sup> to get an idea of the types and quantities of appliances.
  - Staff was able to access approximately 50% of the residential units located at the resort.
  - Solutions will need to be determined on a case-by-case basis for each unit. \*
- ATCO in partnership with Castle continues to investigate all options for cost effective conversion.

\*Note: some appliances, such as hot water tanks, may not be able to be converted and would need to be replaced.



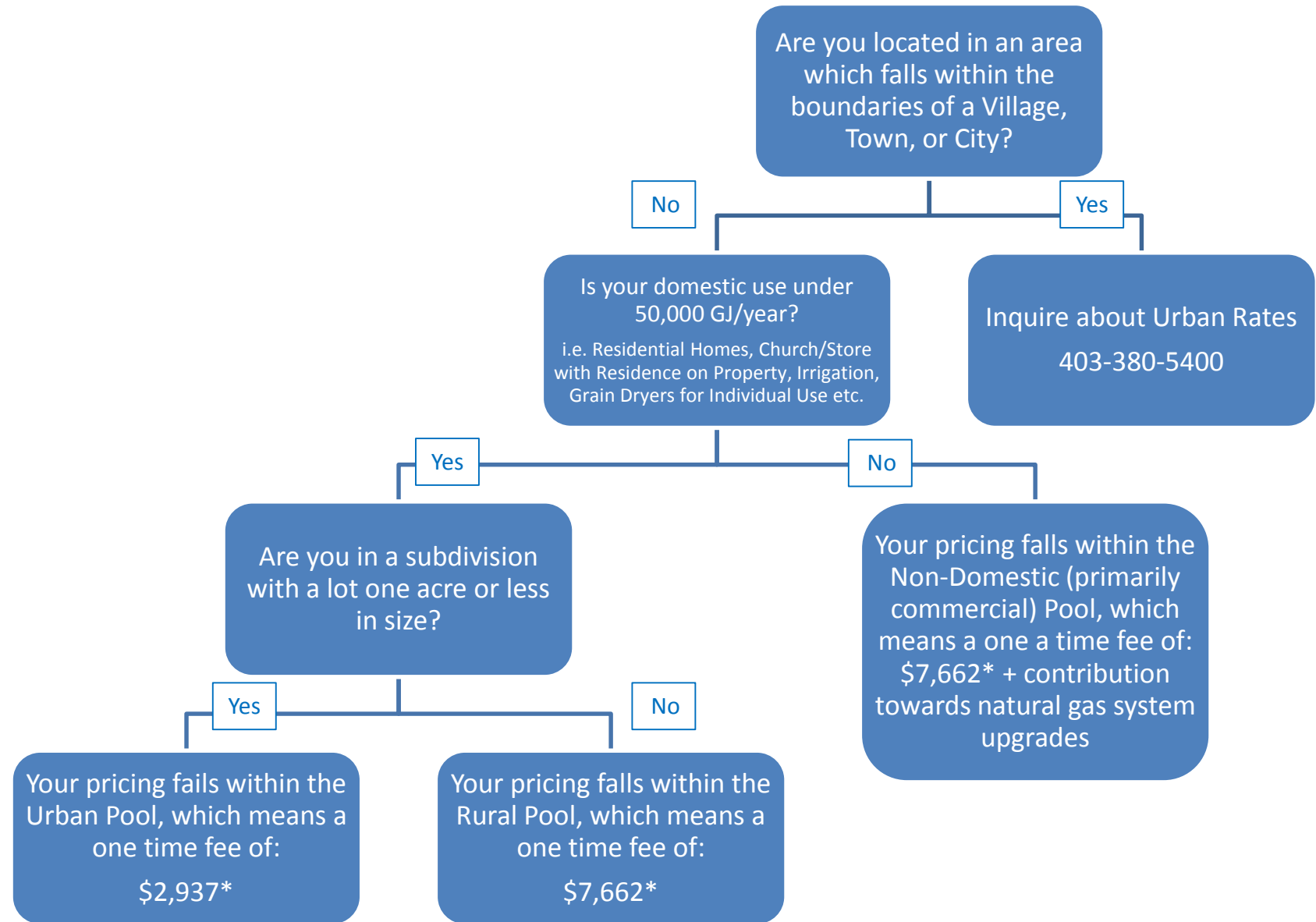
# Costing and Pricing

# UNDERSTANDING PRICING

Each new customer that wants to connect to the ATCO natural gas system will need to pay a one time connection fee. The fees quoted here are at today's rate, but may fluctuate over time.\*

In order to determine the cost to the customer a few simple questions need to be answered – see the chart.

\*Note: any new customers after the natural gas conversion will be responsible to pay the pricing rate in effect at the time of their application.



\* All prices are subject to GST.

\* The Alberta Utility Commission (AUC) provides the framework and formula to calculate this basic rate, and has final approval of the rate.

# CASTLE MOUNTAIN PROJECT COST BREAKDOWN

- The following is an estimated breakdown of the costs required to complete the proposed project for Castle Mountain:

	<b>Cost</b>
Total Residential Urban Pool Charge	\$370,000
+ Total Commercial Contribution	\$112,000
- Sale Price of the Current Propane System	(\$156,000)
<b>= Castle Mountain Contribution</b>	<b>\$326,000</b>
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Total Estimated Project Cost	\$1,168,000
- Castle Mountain Contribution	(\$326,000)
<b>= ATCO Contribution</b>	<b>\$842,000</b>

# COST SAVINGS OF NATURAL GAS?

2015-2016 Average Residential Usage	January	February	March	April	May	June	July	August	September	October	November	December	Total
Consumption (L Propane)	67	49	94	58	40	0	0	0	18	36	107	148	618
Equivalent Consumption (GJ Natural Gas)	2	1	2	1	1	0	0	0	0	1	3	4	16
Propane Bill	\$29.96	\$21.97	\$41.94	\$25.96	\$17.97	\$0.00	\$0.00	\$0.00	\$7.99	\$15.98	\$54.92	\$74.50	\$291.18
Total Natural Gas Bill	\$39.14	\$34.56	\$42.80	\$36.80	\$34.34	\$29.41	\$30.22	\$30.22	\$31.67	\$34.91	\$44.14	\$48.30	\$436.49
Cost Savings (Losses)	-\$9.18	-\$12.59	-\$0.86	-\$10.84	-\$16.36	-\$29.41	-\$30.22	-\$30.22	-\$23.68	-\$18.93	\$10.78	\$26.20	-\$145.31

2015-2016 Average Residential Usage	January	February	March	April	May	June	July	August	September	October	November	December	Total
Consumption (L Propane)	400	303	291	199	120	68	43	42	96	127	272	469	2429
Equivalent Consumption (GJ Natural Gas)	10	8	7	5	3	2	1	1	2	3	7	12	62
Propane Bill	\$178.59	\$135.28	\$129.57	\$88.17	\$53.63	\$30.22	\$19.09	\$18.72	\$42.69	\$56.75	\$137.63	\$236.29	\$1,126.63
Total Natural Gas Bill	\$80.75	\$67.83	\$67.15	\$51.00	\$42.09	\$37.72	\$34.89	\$35.38	\$41.91	\$46.91	\$66.44	\$87.55	\$659.63
Cost Savings (Losses)	\$97.84	\$67.46	\$62.42	\$37.17	\$11.54	-\$7.51	-\$15.80	-\$16.66	\$0.78	\$9.83	\$71.19	\$148.74	\$467.00

2015-2016 Average Residential Usage	January	February	March	April	May	June	July	August	September	October	November	December	Total
Consumption (L Propane)	1012	869	905	761	640	622	457	479	663	591	913	1218	9130
Equivalent Consumption (GJ Natural Gas)	26	22	23	19	16	16	12	12	17	15	23	31	232
Propane Bill	\$451.34	\$387.44	\$403.41	\$339.51	\$285.58	\$277.60	\$203.70	\$213.69	\$295.57	\$263.62	\$463.29	\$612.53	\$4,197.27
Total Natural Gas Bill	\$157.02	\$143.05	\$146.49	\$113.77	\$93.07	\$107.41	\$80.14	\$89.10	\$116.02	\$107.92	\$154.02	\$179.10	\$1,487.12
Cost Savings (Losses)	\$294.32	\$244.38	\$256.92	\$225.73	\$192.52	\$170.19	\$123.56	\$124.59	\$179.55	\$155.70	\$309.27	\$433.42	\$2,710.15



# EXCELLENCE

## ... the Heart and Mind of ATCO

“Going far beyond the call of duty. Doing more than others expect. This is what excellence is all about.

It comes from striving, maintaining the highest standards, looking after the smallest detail and going the extra mile.

Excellence means caring. It means making a special effort to do more.”

**Ron Southern**

**Founder, ATCO**