

**SAU #30 - LACONIA SCHOOL DISTRICT  
ADMINISTRATIVE OFFICE HEATING SYSTEM UPGRADES  
LACONIA, NH**

Issued by:

Rist-Frost-Shumway Engineering, P.C.  
Consulting Engineers,  
71 Water Street  
Laconia, New Hampshire 03246  
(603) 524-4647

This Addendum forms part of the Contract Documents and modifies the original Specifications and Drawings dated June 8, 2015.

This Addendum consists of 2 page(s) of modifications to the Contract Documents, including the following attachments:

Specifications:	General:	01210
	Mechanical:	15410
Sketches:	Plumbing:	SKP1

## QUESTIONS & ANSWERS

Q1. The supplemental conditions section talks about an allowance on the bid form as an alternate for hazardous materials abatement for the roof, but I cannot find this anywhere on the actual form or referenced on the drawings. I do see the specification sections #01210 and 07534 referenced on the Table of Contents, but I could not locate them on the FTP site. My question is if this is a mistaken carryover from another project or if this is part of the scope of work for the boiler replacements and should be included in our bid?

**A1. See information provided in Addendum No. 1.**

Q2. Will the building be occupied during the heating system renovation or will it be vacant?

**A2. Occupied. District will coordinate with your efforts.**

Q3. Is it true that the electrical power wiring be provided by the SAU# and the mechanical contractor is to provide control wiring only?

**A3. Correct.**

Q4. Are there other acceptable control providers other than Control Technologies or Siemens? I was contacted by Basix Automation, and they claim to be an approved vendor also.

**A4. See information provided in Addendum No. 1.**

Q5. Is wire-mold acceptable to install the remote mounted thermostats?

**A5. Acceptable.**

## **SPECIFICATIONS**

### **TABLE OF CONTENTS**

- 1. DELETE EPDM Roofing** section reference from the Table of Contents.

### **CONTRACT FORM**

- Bid Form - See revised Bid Form attached.
- Article 3 - Schedule of Work:
  - REVISE completion date to October 15, 2015.
- Supplemental Conditions:
  - REVISE Item #3 to the following:

“A cash allowance has been included on the Bid Form as an Alternate for any hazardous material abatement which may be required.”

### **GENERAL**

- SECTION 01210 - ALLOWANCES:**
  - ADD this section to the existing Bid Documents Package.

### **MECHANICAL**

- SECTION 15410 - PLUMBING PIPING**
  - ADD Section 15410 to the existing Bid Documents package.

## **DRAWINGS**

### **PLUMBING**

- SKETCH SKP1 - BASEMENT PLUMBING PLAN AND GAS SERVICE DETAIL**
  - ADD Sketch SKP1 to the existing bid documents package.

**END ADDENDUM NO. 1**

**PART 1 – GENERAL**

## 1.01 SUMMARY

- A. This Section consists of:
1. General provisions for allowances.
  2. Description of cash allowances.

## 1.02 GENERAL PROVISIONS

- A. Work performed on an allowance basis shall be included in the Base Bid - Stipulated Sum or in a Bid Alternate as specified. Whenever the actual cost is more than or less than the allowance, the Contract shall be adjusted accordingly by Change Order. Procedures for submitting and handling Change Orders are included in the General Conditions.
- B. Except as otherwise specified herein, or under individual specification Sections, the allowance shall include the cost of all materials and equipment required, delivered and installed, less any applicable trade discount and plus all applicable taxes.
- C. Cash allowance provisions:
1. Costs included in cash allowances: All costs of work to Contractor or subcontractor, including overhead and profit.
  2. Architect responsibilities:
    - a. Consult with Contractor in consideration and selection of products and suppliers.
    - b. Prepare Change Order.
  3. Contractor Responsibilities:
    - a. Assist Architect in selection of products and suppliers.
    - b. Obtain proposals from suppliers and offer recommendations.
    - c. On notification of selection by Architect execute purchase agreement with designated supplier.
    - d. Arrange for and process shop drawings, product data and samples. Arrange for delivery.
    - e. Promptly inspect Products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.
  4. Funds will be drawn from Cash Allowances only by Change Order.

1.03 CASH ALLOWANCES DESCRIPTION

A. Cash Allowance 1 - \$5,000 - Hazardous Material Abatement:

1. Costs to be included in Base Bid - Stipulated Sum and not included in allowance:
  - a. Product handling at the site, including unloading, uncrating, and storage.
  - b. Protection of products from elements and from damage and labor for installation and finishing.

**PART 2 – PRODUCTS**

Not Used.

**PART 3 – EXECUTION**

Not Used.

End of Section

**PART 1 – GENERAL**

## 1.01 WORK INCLUDED

- A. Pipe and pipe fittings.
- B. Plumbing valves.
- C. Gas piping.

## 1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary General Conditions and other Division 1 Specification sections, apply to work of this Section.
- B. All related Specification sections shall be used in conjunction with this Section.

## 1.03 REGULATORY REQUIREMENTS

- A. Perform Work in accordance with the 2009 International Plumbing Code, as adopted and amended by the New Hampshire Plumbing Board.
- B. Conform to NFPA 54 for gas piping.

## 1.04 QUALITY ASSURANCE

- A. Valves: Manufacturer's name and pressure rating marked on valve body.
- B. Welding Materials and Procedures: Conform to ASME Code and applicable state labor regulations.
- C. Welders Certification: In accordance with ANSI/ASME Sec 9.

## 1.05 SUBMITTALS

- A. Submit product data under provisions of Section 15010.
- B. Include data on pipe materials, pipe fittings, valves, and accessories.
- C. Submit a plumbing piping schedule identifying the description of service, location of service (identified if buried), the proposed pipe material with associated size for each service, and the proposed fittings and joints for each service.
- D. Include welders' certification of compliance with ANSI/ASME Sec. 9.

## 1.06 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data under provisions of Section 15010.
- B. Maintenance Data: Include installation instructions, spare parts lists, exploded assembly views.

## **PART 2 – PRODUCTS**

### 2.01 FLANGES, UNIONS, AND COUPLINGS

- A. Pipe Size 2-Inches and Under:
  - 1. Ferrous pipe: 150 psig malleable iron threaded unions.
  - 2. Copper tube and pipe: 150 psig bronze unions with soldered joints.
- B. Pipe Size Over 2-Inches:
  - 1. Ferrous pipe: 150 psig forged steel slip-on flanges; 1/16-inch thick preformed neoprene gaskets.
  - 2. Copper tube and pipe: 150 psig slip-on bronze flanges; 1/16-inch thick preformed neoprene gaskets.
- C. Dielectric Connections: Union with galvanized or plated steel threaded end, copper solder end, water impervious isolation barrier.

### 2.02 NATURAL GAS PIPING, FITTINGS, AND VALVES ABOVE GRADE

- A. Steel Pipe: ASTM A53 or A106 seamless, Schedule 40 black.
  - 1. Fittings: ASME B16.3, malleable iron, or ASTM A234, forged steel welding type.
  - 2. Joints: ANSI B31.1 welded or threaded in accordance with NFPA 54.
  - 3. Valves: Ball or plug U.L. listed for service and pressure as applicable.
    - a. Ball valves up to and including 2 inches: Bronze two-piece body, chrome plated ball, blowout proof stem, 25% reinforced TFE or Delrin seats, 250 psi LP gas - UL listed, 125G-AGA-B16.33 rated.
    - b. Plug valves 2½" and larger: Gray iron, two-bolt cover Type 350 psig, flanged, ANSI Class 125 Rockwell Fig. 143 or equal.
  - 4. Flanges, unions, and couplings:
    - a. Unions: UP to and including 2-inch, 150 lb. malleable iron or 150 lb. flat faced slip-on welded.

- b. Flanges: 2½-inch and larger, 150 lb. ANSI/ASME B16.1 flat faced slip-on or weldneck.
  - c. Couplings: Up to and including 2-inch, 150 or 300 lb. malleable iron threaded.
- 5. Flange gaskets, full face metal or metal-jacketed asbestos conforming to NFPA 54.
  - 6. Thread compound shall be resistant to the action of liquefied petroleum gas or to any other chemical constituents of the gas to be conducted through the piping.

### 2.03 NATURAL GAS PIPING, BURIED

- A. Steel Pipe: ASTM A53 or A106 seamless, Schedule 40 black, polyethylene jacketed.
  - 1. Fittings: ASTM A234, forged steel welding type, with AWWA C105 polyethylene jacket or double layer, half-lapped 10 mil polyethylene tape.
  - 2. Joints: ANSI B31.1, welded.

## **PART 3 – EXECUTION**

### 3.01 PREPARATION

- A. Ream pipe and tube ends. Remove burrs. Bevel plain end ferrous pipe.
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

### 3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Provide non-conducting dielectric connections wherever joining dissimilar metals.
- C. Route piping in orderly manner and maintain gradient.
- D. Install piping to conserve building space and not interfere with use of space.
- E. Group piping whenever practical at common elevations.
- F. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- G. Provide clearance for installation of insulation and access to valves and fittings.
- H. Where pipe support members are welded to structural building framing, scrape, brush clean, and apply one coat of zinc rich primer to welding.

I. Prepare pipe, fittings, supports, and accessories not prefinished, ready for finish painting. Refer to Section 09900.

J. Install valves with stems upright or horizontal, not inverted.

### 3.03 APPLICATION

A. Install unions downstream of valves and at equipment or apparatus connections.

B. Install ball valves for shut-off and to isolate equipment, part of systems, or vertical risers.

C. Install ball valves for throttling, bypass, or manual flow control services.

D. Install other valve types and piping specialties as indicated on the Drawings.

### 3.04 SERVICE CONNECTIONS

A. Connect to natural gas utility outside of building where indicated on the Drawings.

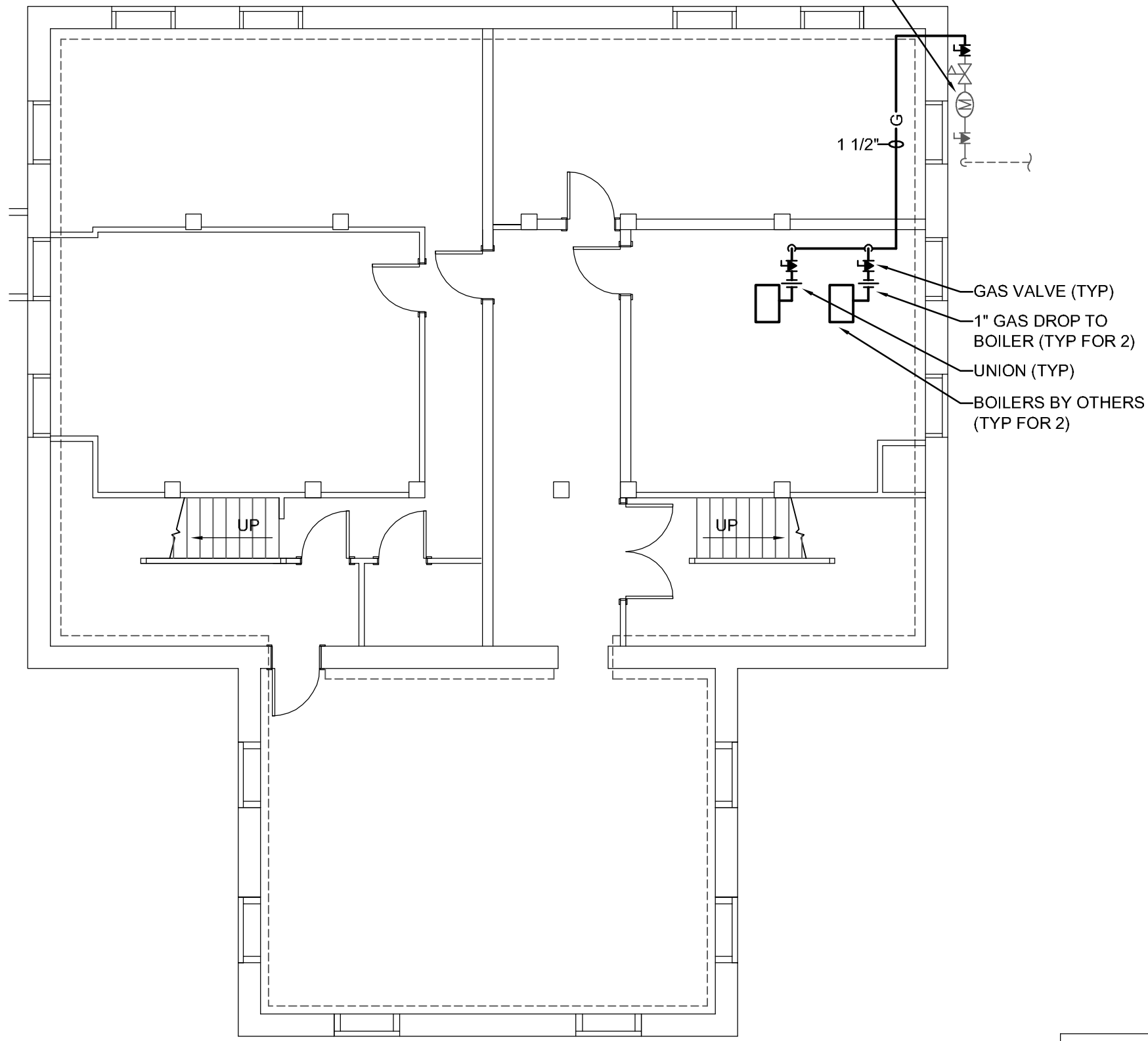
### 3.05 TESTING

A. All natural gas piping shall be tested in accordance with NFPA 54 and the City of Laconia's requirements

End of Section

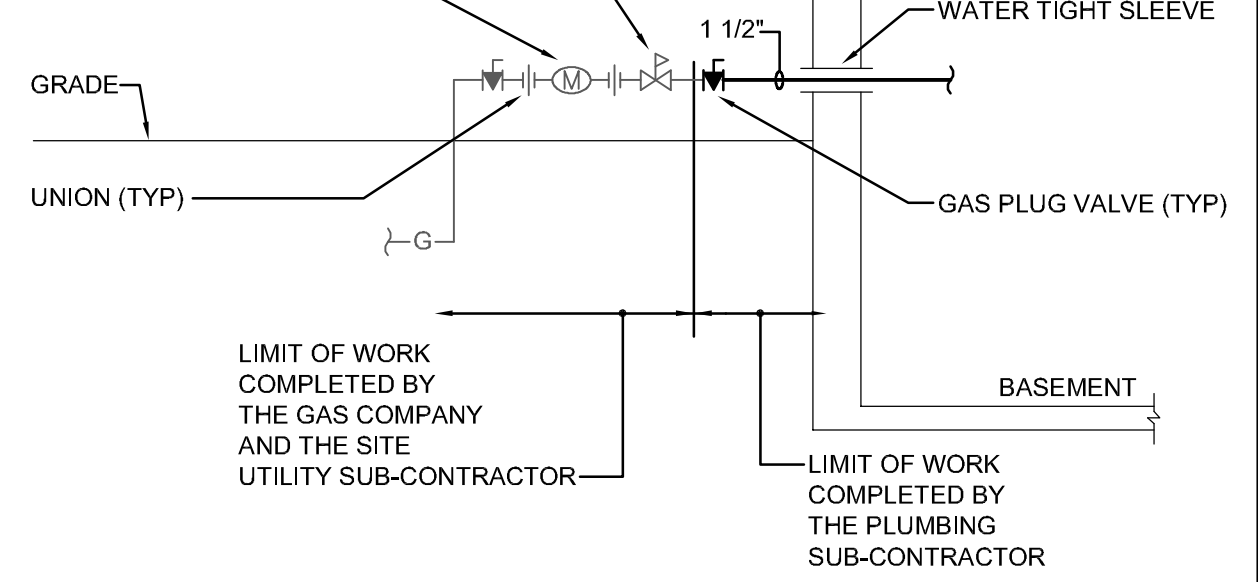


NATURAL GAS SERVICE  
REFER TO DETAIL FOR  
ADDITIONAL INFORMATION



REGULATOR SHALL BE LOCATED  
10'-0" FROM ANY FRESH AIR  
INTAKE. COORDINATE WITH  
MECHANICAL SUB-CONTRACTOR

GAS METER AND REGULATOR  
BY LIBERTY UTILITIES. SET  
REGULATOR OUTLET TO 7"  
WATER COLUMN



1 NATURAL GAS SERVICE DETAIL  
NTS

**BASEMENT PLAN**  
1/8"=1'-0"

**RFS**  
engineering

Rist Frost Shumway  
Engineering, P.C.  
71 Water St  
Laconia, NH 03246  
P: 603.524.4647  
F: 603.528.7653  
www.rfsengineering.com

**SAU #30**  
**HEATING SYSTEM REPLACEMENT**  
LACONIA, NEW HAMPSHIRE  
BASEMENT PLUMBING PLAN AND GAS SERVICE DETAIL

Drawn By	A. GRAY
Checked By	S. BELIVEAU
Date	09 JUNE, 2015
Project No.	7841.001
Scale	AS NOTED
Dwg. Ref.	-
Dwg. Number:	<b>SKP1</b>