

FACILITIES MANAGEMENT

Dr. Robert L. Yeager Health Center
50 Sanatorium Road, Building A
Pomona, New York 10970
Phone: (845) 364-2958 Fax: (845) 364-3810

Robert H. Gruffi, P.E. LEED AP
Director, Facilities Management

DATE: March 30, 2022

TO: All Bidders

FROM: Robert H. Gruffi, P.E., LEED AP
Director, Facilities Management



SUBJECT: Capital Project 4466, Building E Utility Plant Renovations and Improvements
Addendum #5- Bid Due Date and Bid Question acceptance deadline extensions,
responses to Bid Questions, and Modification of Project Specification -
(Addendum #5)

=====

ADDENDUM #5

PLEASE NOTE: The Bid Due Date and Bid Question acceptance deadline has been extended.

Sealed Bids for the above-referenced Bid Number and Title will be received until 11:00 a.m. on **Thursday, May 12, 2022** by the **Legislature of Rockland County** at its Chambers in the Allison-Parris County Office Building, 11 New Hempstead Road, New City, New York, 10956, at which time they will be publicly opened and read.

The Bid Question acceptance deadline has been extended to **April 28, 2022**

Please see the responses to the Bid Questions and Change in Project Specifications.

This Addendum is hereby included in and made part of the Contract whether or not attached thereto. All requirements of the original Specifications and Drawings shall remain in force except as noted by issued Addenda.

Please sign and return this as acknowledgement of receipt of this Addendum to the Facilities Management Office: FAX (845-364-3810) EMAIL: fmcapital@co.rockland.ny.us

Name

Company

Date

COUNTY OF ROCKLAND FACILITIES MANAGEMENT BLDG. A., 2 nd FLOOR, 50 SANATORIUM RD, POMONA, NY 10970 PHONE: 845-364-2958 / FAX: 845-364-3810		PAGE: 2
CAPITAL PROJECT NUMBER: 4466 PROJECT: Building E Utility Plant Renovations and Improvements	BID NUMBER: RFB-RC-2021-4466-001	

BID QUESTION FORM

**ALL QUESTIONS PERTAINING TO THIS SOLICITATION MUST BE
SUBMITTED IN WRITING
QUESTIONS WILL NOT BE ADDRESSED VERBALLY**

PLEASE USE THIS FORM AND EMAIL TO: FMCapital@co.rockland.ny.us

**Attention: ROBERT H. GRUFFI, P.E., LEED AP
DIRECTOR, FACILITIES MANAGEMENT**

WE WILL RESPOND AS SOON AS POSSIBLE.

Bid No. RFB-RC-2021-4466-001

Date: 3/9/2022

Contractor: KSW Mechanical LLC

Fax No. _____

Email Address: mlaytin@ksww.com

Section 220500 "Common Work Results for Plumbing", Part 3.08 "Cutting & Patching", Paragraph A., states that all cutting and patching required for piping, etc., passing through walls, floors, and roof shall be provided by the General Contractor under this contract unless otherwise noted.

"Appendix C - Supplemental General Conditions", under F/P/I breakout states "Cutting, Chasing & rough patching" & "Finish Patching" is to be "Provided" under the Mechanical/Plumbing contractor.

Please clarify which contract is responsible for cutting, patching and finish patching for the proposed Mechanical/ Plumbing work.

"Appendix C serves as a supplement to the base Specification and shall supersede. Responsibility of each trade should be followed as outlined in the matrix. -Facilities Management 3.30.2022"

CONTRACTOR'S REPRESENTATIVE Michael Laytin (718) 340-1415

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Email Address:	mlaytin@ksww.com

Appendix C - Supplemental General Conditions for item "Site Utilities - Water and Fire Service Hot Box", shows a symbol "P" under Mechanical/ Plumbing. After reviewing the plans I do not see a note that shows a "Hot Box" to be installed. Please clarify if a "Hot Box" is expected to be installed under the Mech/ Plumbing Contract.

Answer:

There is no hot box included in the scope of work.

3/21/22

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Is including a manufacturer listed in the specifications (but not the one on the schedule) considered an "alternate" per Addendum 1? Meaning, will they need to be called out in the bid and will their submittal need to be included in the bid package?

ANSWER:

Schedules list the basis of design manufacture. The specification list alternative manufactures that manufacture similar products. Products by alternate manufactures would be considered a substitution and subject to the requirements of the addendum and Supplemental General Conditions

3/21/22

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Contractor: KSW Mechanical LLC

Fax No. (718) 361-5210

Email Address: mlaytin@ksww.com

Please provide details showing the steel angle iron support connections inside the chimney.

Has the old liner been tested for asbestos?

Answer:

The County is in the process of having the inside of the chimney tested.

Refer to the Addendum for chimney support requirements

3/25/22

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What is the height of the existing masonry chimney?

Answer:

The overall height of the chimney is approximately 60' .

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The chimney specification indicates guy wires. The spec, however, requires a "self-supporting prefabricated metal chimney, flue, breaching extension" which appears contradictory to the use of guy wires. Guy wires are also not shown on the detail. Please confirm they are not required.

Answer:

Specification section 235100 Breeching chimney and Stacks, section 1.2C indicates that the final stack design is a delegated design. depending on manufactures requirements Guy wires may be required.

3-23-22

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4.235100, 2.2, B -Requires all combustion duct to be single wall spiral duct but the plans show it all as rectangular. Please confirm which is required.

Answer

Drawing M2.1 indicates (3) 28x18 OAI ducts that serve (3) boilers each. Branch ductwork from these (3) OAI plenum down to each boiler shall be spiral round duct in accordance with drawing M6.1 equipment note #2

3/23/22

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There does not appear to be a specification for the type of single wall SS flue riser in the existing chimney. It is only stated as "stainless". Please provide additional details on the material and construction.

Answer:

Refer to Addendum #6

3/23/22

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A 25 year chimney warranty is not typically offered or available. Please confirm requirement.

Answer:

Provide Extended Warren of 15 years

3/23/22

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Addendum #5

March 25, 2022

Drawings

1. Drawing M0.1 - Design Intent Notes.

Paragraph 3 shall be amended to include the following text.

"The contractor shall provide an add alternate price for temporary heating and a separate alternate price for temporary cooling. Temporary heating/cooling pricing shall include lump sum pricing for equipment set up start, power piping controls and all labor and material. It shall include unit pricing on a monthly basis for operation. Fuel oil for the temporary heating plant shall be connected to the existing plant fuel tank. The owner will pay for fuel. The alternate pricing shall include (8) eight months of heating and (6) six month of cooling plant cost. "

2. Drawing M6.1 - Delete Equipment Note #2
3. Drawing M 7.2 Detail #5 Chimney liner Riser shall be replaced with the attached detail.

Specifications

1. Specification Section 235100 BREECHING CHIMNEYS AND STACKS – shall be replaced with the attached revised specification section.

SECTION 235100 - BREECHINGS, CHIMNEYS, AND STACKS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:

- 1. Listed special gas vents.
- 2. Outside air intake ducts.
- 3. Listed building-heating-appliance chimneys, and boiler breeching
- 4. Draft control damper and remote terminal panel

- B. Product Data: Submit product data for all of the following:

- 1. Listed special gas vents.
- 2. Outside air intake ducts.
- 3. Listed building-heating-appliance chimneys, and boiler breeching
- 4. Draft control damper and remote terminal panel

- C. Shop Drawings and Delegated-Design Submittals: For vents, breechings, chimneys, and stacks. Include plans, elevations, sections, details, and attachments to other work.

- 1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, methods of field assembly, components, hangers, and location and size of each field connection.
- 2. All products shall comply with design loads, include calculations required for selecting restraints and structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- 3. **The inner diameter of the flue system shall be verified by the manufacturer's venting computations. The computations used shall be technically sound, follow ASHRAE calculation methods and shall incorporate the specific flow characteristics of the inner pipe. The contractor shall furnish the exact operating characteristics of all equipment to the factory representative. Flue gas velocity shall not exceed the manufactures maximum requirement or 1000 ft/min. The required draft shall be .1" min at the farthest appliance connected.**
- 4. The manufacturer shall provide "to scale" drawings depicting the actual layout. The prefabricated flue system shall be installed as designed by the manufacturer and in accordance with the terms of the manufacturer's warranty and in conjunction with sound engineering practices
- 5. Submit full draft calculations for review and approval this shall include velocity in each section.
- 6. Submit field verified plan view layout for coordination review and approval.
- 7. Submit riser diagram for review and coordination.
- 8. Submittals will not be approved, released or accepted until draft calculations and field verified dimensional drawings are submitted, reviewed and accepted by the Engineer.

1.3 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain listed system components through one source from a single manufacturer.
- B. Welding: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code--Steel," for hangers and supports and AWS D9.1/D9.1M, "Sheet Metal Welding Code," for shop and field welding of joints and seams in vents, breechings, and stacks.

Addendum #5

CAPITAL PROJECT 4466
BUILDING E UTILITY PLANT
RENOVATION & IMPROVEMENTS
DR. ROBERT L. YEAGER HEALTH CENTER

- C. Certified Sizing Calculations: Manufacturer shall certify venting system sizing calculations.

1.5 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.
- B. Coordinate installation of roof curbs, equipment supports, and roof penetrations. These items are specified in Section 077200 "Roof Accessories."

1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of venting system that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, structural failures caused by expansion and contraction.
1. Warranty Period: All products shall have a minimum 15 year extended warranty from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 LISTED SPECIAL GAS VENTS, (DOMESTIC CONDENSING HOT WATER HEATERS)

- A. Basis-of-Design Product: The basis of design shall be Security Chimney model SSID. Subject to review and approval by the engineer and compliance with the contract documents, provide the product indicated or a comparable product by one of the following alternate manufactures:
1. ENERVEX.
 2. Heat Fab
 3. Metal-Fab, Inc.
 4. Selkirk Inc.; Selkirk Metalbestos
- B. Description: Double-wall metal vents tested according to UL 1738 and rated for 480 deg F continuously, with positive or negative flue pressure complying with NFPA 211. And ULC - S636
- C. Construction: Inner shell and outer jacket separated by at least a 1" inch high-temperature, ceramic-fiber insulation.
- D. Inner Shell: ASTM A 959, Type 29-4C stainless steel.
- E. Outer Jacket: **Aluminized steel or type 441 stainless**
- F. Assembly shall be made by joining stacked sections with factory supplied high temperature sealant and overlapping "V" bands on interior section. With Vitron O ring gaskets. Exterior sections shall be made by joining stacked sections with high temperature joint cement and continuous welded joint grinded to a smooth finish.
- G. Breeching lengths thru exterior wall, or roof in same construction as for flue and in diameter as shown on the drawings with a minimum penetration of 6 inches into the space. Connections to equipment and balance of breeching shall be done with provisions for expansion/contraction at the engine, boilers, etc. and along entire length of run.
- H. Where exposed outside the building, the outer jacket shall be factory painted with heat resistant paint such as Rust-Down Series 4200 or 4300. Color as selected by Architect.
- I. Accessories: Tees, elbows, increasers, draft-hood connectors, terminations, adjustable roof flashings, storm collars, support assemblies, thimbles, firestop spacers, and fasteners; fabricated from similar materials and designs as vent-pipe straight sections; all listed for same assembly.
1. Termination: Stack cap designed to exclude minimum 90 percent of rainfall.
 2. Termination: Round chimney top designed to exclude minimum 98 percent of rainfall.
 3. Termination: Exit cone with drain section incorporated into riser.
 4. Smoke tight cleanout sections.
 5. Gasket material for cleanout door and caps, high temperature ceramic fiber rope; joint cement, acid resistant cement; sealant - Type VII as/07900.
 6. Footing connectors and bracing, design and number as per manufacturers' requirements and as required by construction conditions
 7. Provide base supports, wall supports and guides.
 8. Provide expansion segments as required.

9. Riser drain with valve
 10. Wall thimble
 - J. Provide a prefabricated metal chimney, flue, breeching extensions and accessories arranged and sized as indicated on the drawings. Provide connections for boilers, domestic hot water heater and generator exhaust as indicated.
 - K. Applications;
 1. The domestic hot water heaters shall use double wall with 1" air space. Model SSD
- 2.2 OUTSIDE AIR INTAKE DUCTWORK
- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Spot – Spiral pipe.
 2. United McGill
 3. R.L. Craig Company
 4. US Duct.
 - B. Outside air intake ductwork and fittings for all gas-fired direct venting condensing & non-condensing appliance shall be single-wall spiral round galvanized steel. All ductwork and accessories shall be 4-ply spiral lock seam meeting ASTM A-653. All duct connections shall be made with a double legged EPDM gasket creating an airtight connection meeting ASTM a-653. Single-wall duct gauge shall be selected for positive, or negative pressure SMACNA leak class 3, and up to 10" WC with a minimum gauge of 24. The product is rated for zero clearance to combustibles. Provide straight sections, elbows, offsets, connection adapters, wall sleeves, and screened terminations.
- 2.3 LISTED BUILDING-HEATING-APPLIANCE: (DUAL FUEL BOILER BREECHING AND CHIMNEY).
- A. Basis-of-Design Product: The basis of design shall be ENERVEX Power Stack. Subject to review and approval by the engineer and compliance with the contract documents, provide the product indicated or a comparable product by one of the following alternate manufactures:
 - B. Security Chimney – Secure Stack Pro
 1. Heat-Fab, Inc. – Saf – T-vent Plus
 2. United McGill Uni-Stack, 1402
 3. Metal-Fab, Inc. IPC-2
 4. Selkirk Inc.; Metalbestos Metal Bestos IPS C-2.
 - C. Boiler Breeching shall be double wall with 1" insulation – EPS-1
 - D. Chimney riser shall be single wall - EPS
 - E. Description: Double-wall metal vents tested according to UL 103 and UL 959 and rated for 1400 deg F continuously, or 1800 deg F for 10 minutes; with positive or negative flue pressure complying with NFPA 211.
 - F. Construction: Inner shell and outer jacket separated by at least a 1-inch annular space filled with high-temperature, ceramic-fiber insulation. For lining applications inside existing masonry chimneys the annular space insulation may be omitted.
 - G. Inner wall: Fully welded ASTM A 666, type 316 -PCM stainless steel, or AL 29 4C stainless steel. Minimum .048" thick
 - H. Outer Jacket: Type 304 polished stainless steel.
 - I. Flue sections shall be circular with internal and external diameters as indicated on the drawings.
 - J. The chimney system sections and fittings shall be joined by clamping a U Band over the mating male-female flanges of adjacent components. The male flange connection shall have an integrated graphite seal. Silicone gaskets and silicone sealant at section joints are not acceptable. All joints shall have male-female connections; chimney systems without male-female connections are not acceptable. All tees shall be lateral (45°) tees; boot tees and 90° tees are not acceptable.
 - K. Breeching lengths thru exterior wall, or roof in same construction as for flue and in diameter as shown on the drawings with a minimum penetration of 6 inches into the space. Connections to equipment and balance of breeching shall be done with provisions for expansion/contraction at the engine, boilers, etc. and along entire length of run.
 - L. Where exposed outside the building, the outer jacket shall be factory painted with heat resistant paint such as Rust-Down Series 4200 or 4300. Color as selected by Architect.

- M. Accessories: Tees, elbows, increasers, draft-hood connectors, terminations, adjustable roof flashings, storm collars, support assemblies, thimbles, firestop spacers, and fasteners; fabricated from similar materials and designs as vent-pipe straight sections; all listed for same assembly. Including;
1. Smoke tight cleanout sections.
 2. Gasket material for cleanout door and caps, high temperature ceramic fiber rope; joint cement, acid resistant cement; sealant - Type VII as/07900.
 3. Footing connectors and bracing, design and number as per manufacturers' requirements and as required by construction conditions.
 4. Spark arrester. (generator exhaust)
 5. Provide air pollution control test ports, gas sampling platforms, and the like as required to complete the installation.
 6. Provided an explosion relief valve in accordance with NFPA 37 requirements for engine exhaust. (generator exhaust)
 7. **Provide extra heavy, base supports, wall supports and guides by the manufacturer.**
 8. Provide expansion segments as required.
 9. Termination stack cap designed to exclude minimum 90 percent of rainfall
 10. Provide riser drains with valve
 11. Barometric damper at each appliance.
- N. Provide and support prefabricated metal chimney, flue, breeching extensions and accessories arranged and sized as indicated on the drawings. Provide connections for boilers, domestic hot water heater. Provide supplemental steel as required for supports.

2.4 GUYING AND BRACING MATERIALS

- A. Cable: Three galvanized, stranded wires of the following thickness:
1. Minimum Size: 1/4 inch in diameter.
 2. For ID Sizes 4 to 15 Inches: 5/16 inch.
 3. For ID Sizes 18 to 24 Inches: 3/8 inch.
 4. For ID Sizes 27 to 30 Inches: 7/16 inch.
 5. For ID Sizes 33 to 36 Inches: 1/2 inch.
 6. For ID Sizes 39 to 48 Inches: 9/16 inch.
 7. For ID Sizes 51 to 60 Inches: 5/8 inch.
- B. Pipe: Three galvanized steel, NPS 1-1/4.
- C. Angle Iron: Three galvanized steel, 2 by 2 by 0.25 inch.

2.5 DRAFT CONTROL DAMPER SYSTEM

- A. Basis-of-Design Product: The draft control damper system shall be manufacturer by US Draft Co. of Fort Worth, Texas; listed to UL/ULC378. Subject to review and approval by the Engineer and compliance with requirements of the contract documents, provide the product indicated on Drawings or a comparable product by an alternate manufacture:
- B. The draft control damper system shall consist of a US Draft Co. Remote Terminal Unit, Model RTU1, and one or more US Draft Co. Connector Draft Systems, Model CDS2. The CDS2(s) shall be self-contained, fully-factory assembled and wired for ease of installation. The draft control damper system shall consist of the following equipment and features:
1. Model RTU1 remote terminal unit shall be capable of connecting up to six CDS2's. The RTU1 shall be capable of adjusting each connected CDS2's settings remotely. The RTU1 shall communicate to the BMS or a cellular network to send notifications building maintenance. The RTU1 shall feature a full color 7" touchscreen user interface. Provide three remote terminal units for this project. Connect 3 boilers each panel.
 2. Model SB single-blade damper with a positive seal corrosion-resistant FKM gasket (as defined by ASTM D1418); the gasket cannot be riveted or screwed to damper's blade. The damper's blade and housing shall be 316L stainless steel with an integrated test port. The damper's bearings shall be sealed 1/2" graphite. The damper shall be equipped with a 24V rotary fast-acting actuator with a two second 0-90 degree span. The damper shall fail in the closed position.

3. Model CDS2 constant pressure controller with a bi-directional pressure differential transducer capable of measuring pressures +/- 0.75" W.C.; unidirectional systems shall not be approved. The controller shall include an integrated feedback signal to confirm damper-actuator functionality. The system shall provide both a high and low- pressure alarm to ensure safe performance; a single alarm point will not be accepted. The system's controller shall include a trial phase to allow appliance to purge prior to operation. Provide one damper at the outlet of each boiler typical for 9 boilers
- C. The CDS2(s) shall be installed at locations as indicated on the drawings and in accordance with manufacturer's listing and instructions. The RTU1 shall be located as shown on the drawings.
- D. A factory-authorized startup technician shall ensure proper electrical and control connections prior to operation. The set points shall be provided by the appliance manufacturer.
- E. Contractor shall install any structural, mechanical, and electrical connections as designed by the manufacturer and in accordance with the terms of the manufacturer's warranties.
- F. Follow all pertinent national, state, and/or local codes where applicable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of work.
 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 APPLICATION

- A. Listed Special Gas Vent: Condensing gas appliances.
- B. Listed Building-Heating-Appliance Chimneys: Dual-fuel boilers, oven vents, and exhaust for engines. Fireplaces and other solid-fuel-burning appliances.

3.3 INSTALLATION GENERAL:

- A. Installations shall be made in accordance with the Specifications of the Underwriters' Laboratories, Inc. and those of the manufacturer, by the manufacturer of an authorized and experienced installer approved by the manufacturer and the Architect.
- B. Chimney shall be set plumb to within 1 inch in 60 feet. Where applicable, grout base plate with non-shrink grout.
- C. Required welding shall be accomplished by certified welders.
- D. Furnish clean out at the ends of headers and drain at the base of risers. Provide temperature plug at the outlet of each boiler.
- E. Provide patching of existing brick chimney at breeching penetration with new brick and mortar to match existing construction. Seal breeching with high temperature cement at penetration.
- F. All connection from appliances to main breeching shall be made with 45 deg laterals fittings.
- G. The contractor shall coordinate the installation of the new chimney liners with the manufacture requirements for supports and guides. Provide supplemental support and guides at intervals as required by the manufacture.
- H. The contractor shall be responsible for providing access into the existing masonry chimney to perform the installation of new boiler chimneys. Coordinate with the general contractor. Cut openings number and size to be determined in the field. Patch openings to match existing construction.

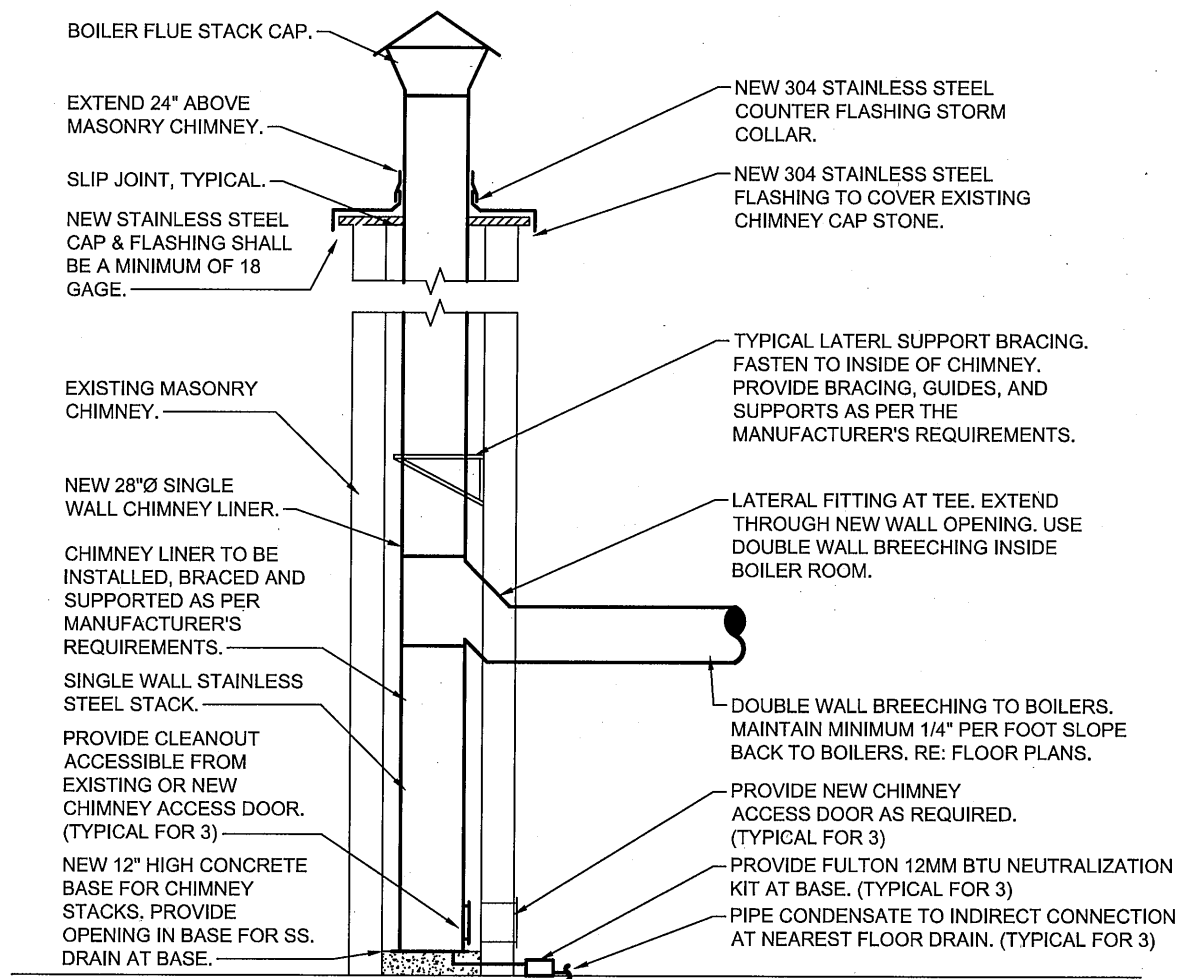
3.4 INSTALLATION OF LISTED VENTS BREECHING AND CHIMNEYS

- A. Locate to comply with minimum clearances from combustibles and minimum termination heights according to product listing or NFPA 211, whichever is most stringent.
- B. Seal between sections of positive-pressure vents and grease exhaust ducts according to manufacturer's written installation instructions, using sealants recommended by manufacturer.
- C. Support vents at intervals recommended by manufacturer to support weight of vents and all accessories, without exceeding appliance loading. Install guide and support wire as per the manufacturer's recommendations.
- D. Slope breechings down in direction of appliance, with condensate drain connection at lowest point piped to nearest drain.
- E. Lap joints in direction of flow.
- F. Connect base section to foundation using anchor lugs of size and number recommended by manufacturer.
- G. Join sections with acid-resistant joint cement to provide continuous joint and smooth interior finish.
- H. Erect stacks plumb to finished tolerance of no more than 1 inch out of plumb from top to bottom.
- I. Provide a 1" drain line at the bottom of each stack as recommended by the manufacturer with a valve. Pipe to floor drain.
- J. Stack shall extend to the bottom of the existing chimney. Support with a stand above the floor of the chimney and at intervals up the chimney.

3.5 CLEANING

- A. After completing system installation, including outlet fittings and devices, inspect exposed finish. Remove burrs, dirt, and construction debris and repair damaged finishes.
- B. Clean breechings internally, during and after installation, to remove dust and debris. Clean external surfaces to remove welding slag and mill film. Grind welds smooth and apply touchup finish to match factory or shop finish.
- C. Provide temporary closures at ends of breechings, chimneys, and stacks that are not completed or connected to equipment.
- D. The existing masonry chimney shall be brushed and vacuumed clean including all debris at the base prior of the chimney prior to installation of new chimney stack. Inspect the inside of the existing chimney and provide a written report of condition including any defects, cracks or structural problems with the masonry structure to the engineer, owner.

END OF SECTION 235100



CHIMNEY LINER RISER
SCALE: NONE

NOTES:
1. ARRANGEMENT IS TYPICAL FOR ALL (3) CHIMNEY STACKS.