

2018-02-08

**REQUEST FOR QUOTATION
RFQ #04 (2018-01)
GENERATOR INSTALLATION
AFRICAN RAINFOREST PAVILION
ADDENDUM # 2**

This addendum shall be incorporated into, and form part of RFQ #04 (2018-01) and take precedence over all requirements of the previously issued bid documents including plans. This addendum must be signed by the bidder (signing officer) in the appropriate space and must be attached to the Form for submission by the bidder. This Addendum consists of four (4) pages and the documents listed below.

1. Addendum #1 from Virtual Engineers:

Please see the attached Addendum 1 from Virtual Engineers, which responds to RFIs from bidders.

2. Clarification: Existing Generator Removal:

The existing generator is to be removed and disposed of by the successful bidder. The Toronto Zoo does not have engineered drawings of the existing stairs or hoisting device available for review. The method of removal including engineering review if required is the responsibility of the successful bidder. Generator removal to be quoted as an additional price to the base bid. See pricing form attached.

3. Clarification: 1600A Circuit Breaker:

Photos have been attached showing empty section where the new 1600A breaker is to be installed.

4. Clarification: Duct Bank and Raceway Lengths

Include cost for complete installation in your lump sum price as per the nominal lengths supplied on Virtual Engineers' Addendum #1 attached. Increases or decreases to these distances will be by unit rate. See attached unit rate price form.

5. Clarification: Spoils from Excavation:

Materials can be staged in a location near the construction site. Clean fill can be disposed of on Toronto Zoo property in an area designated by the Toronto Zoo. The designated area will most likely be in parking lot #4, on the east side of Meadowvale Ave near Zoo Rd.

6. Outage Times:

The maximum allowable duration for any power interruption to the African Rainforest Pavilion is 1.5 hours. Power interruptions shall be scheduled for a start time immediately following the Zoo's closing time on any given day. The Zoo's hours of operation are as follows:

Jan 1 – Mar 9: 9:30am to 4:30pm daily

Mar 10 – Mar 18: 9:00am to 6:00pm daily

Mar 19 – May 4: 9:30am to 4:30pm weekdays, 9:30am to 6:00pm weekends/holidays

May 5 – Sept 3: 9:00am to 7:00pm

- 7. Add: Unit Pricing & Additional Price Form (attached)**
- 8. Closing date:**
Previous date – **Thursday 2018-02-15 by 1200 hours (noon), local time**
Revised date – **Tuesday 2018-02-20 by 1200 hours (noon), local time**
- 9. Delete Submission Label**
- 10. Replace with Submission Label (Rev 1)**

Receipt of the Addendum shall be acknowledged as part of your submission.

The Board of Management of the Toronto Zoo reserves the right to reject any or all Quotations or to accept any quotation, should it deem such action to be in its interests.

If you have any queries regarding this matter, please contact Mr. Peter Vasilopoulos, Supervisor, Purchasing & Supply, at 416-392-5916.

Yours truly,

Peter Vasilopoulos
Supervisor, Purchasing & Supply

I/we hereby acknowledge receipt of this addendum and make allowance in my bid.

Signed (Must be Signing Officer of Firm)

Name of Firm

Date

SUBMISSION LABEL (REV 1)

This address label should be printed and affixed to the front of your sealed tender, quotation and proposal envelope/package submission. Toronto Zoo will not be held responsible for envelopes and packages that are not properly labelled or submitted to an address other than the one listed on this label.

Vendor Name _____

**RFQ #04 (2018-01) – GENERATOR INSTALLATION – AFRICAN RAINFOREST PAVILION
Due Date: Tuesday, 2018-02-20, 1200 hours (noon, local time)**

TO BE RETURNED TO

**TORONTO ZOO
C/O SUPERVISOR, PURCHASING & SUPPLY
ADMINISTRATIVE SUPPORT CENTRE
361A OLD FINCH AVE.
TORONTO, ONTARIO
M1B 5K7**

4.2 UNIT PRICES

DESCRIPTION To provide all labour, tools, materials and equipment necessary to add or deduct the following items as specified in the quotation documents, drawings & specifications of the RFQ package.	Price complete, excluding HST	
	Add	Deduct
Duct bank from proposed generator location to manhole	\$ /m	\$ /m
Duct bank from manhole to electrical room exterior wall	\$ /m	\$ /m
Raceway from electrical room exterior wall to distribution panel	\$ /m	\$ /m
Raceway from existing switchgear to distribution panel	\$ /m	\$ /m
Raceway from distribution panel to motor control centre	\$ /m	\$ /m

4.3 ADDITIONAL PRICE

DESCRIPTION The additional pricing is the increase in bulk quotation price if the item is included in the overall scope of work.	Price complete, excluding HST
To provide all labour, tools, materials and equipment necessary to remove the existing generator as specified in the quotation documents, drawings & specifications of the RFQ package.	\$

ADDENDUM

This Addendum has been issued for RFQ 04 (2018-01) and is to be read in conjunction with the drawings and specifications, and to be part of the tender documents.

Question 1:

Division 26 Section 232716 ATS/DP Combination Unit does not specify Distribution Section or Approved Manufactures.

Answer to Question 1:

The specifications for the distribution panel begin on page 9 of referenced specification document. Vendors and/or manufacturers shall be selected by the Contractor and submitted for consideration.

Question 2:

E-01 Note 7 Says to reuse feeders depending on length inside panel. As this is an engineered project with a competitive bid process we must receive clear instruction. We have no way of determining length of conductors in Panel from the site visit. Please identify clearly as what are requirements of base bid. Reusing vs. Replacing is considerably different.

Answer to Question 2:

Price for feeder replacement and allowance credit for re-use.

Question 3:

Please note the equipment being replaced is shown in the same location as existing equipment. Please clarify what the allowable Shutdown times are for the various parts of the project.

Answer to Question 3:

Provide shutdown requirements for equipment replacement.

Question 4:

Please provide detailed Mechanical Drawing and Scope for the Generator Removal so we can obtain pricing for required Mechanical Disconnects and removals as required.

Answer to Question 4:

These drawings are not available. Please see attached photograph with highlighted items to be removed and capped. Anchor bolts in concrete base to be cut and ground flush with surface.

Question 5:

Please note all drawings provided are noted N.T.S. We would need at Minimum the Site Plan E03 To Scale of Duct Banks and Electrical Room Area's Layout.

Answer to Question 5:

Estimated linear distances are as follows:

1. Duct bank distance from proposed generator location to manhole: 30.2 metres
2. Duct bank distance from manhole to electrical room exterior wall: 8.75 metres
3. Raceway distance from electrical room exterior wall to distribution panel: 5 metres
4. Raceway distance from existing switchgear to distribution panel: 10 metres
5. Raceway distance from distribution panel to motor control centre: 20 metres

Please include cost/rebate per metre for distances above.

Question 6:

Specification for Fixtures

Answer to Question 6:

See answer to question 8.

Question 7:

Please clarify who is supplying;

1600A Breaker for Existing main distribution panel
1600A ATS
1600A 480V Distribution panel
500A 480V MCC Panel
100A 208/120V Panel at Genset Area

Answer to Question 7:

This is the responsibility of the contactor. Please see RFQ04, paragraph 3.1 SCOPE OF WORK, item 1: "Supply all labour, tools, materials and equipment to complete the work as outlined in the quotation documents, drawings and specifications."

Question 8:

Please provide;
Details of pull/Junction box at detail 03/E03
Mounting frame requirement for 100A Panel at Gen set.
Outdoor Lighting Pole & Bracket Details.
Pedestal details for Duplex Receptacle at get set (genset?) area, pedestal is made of pipe or angle iron.

Answer to Question 8:

Panel mounting (frame or otherwise) shall be to the discretion of the contractor. Outdoor light poles and duplex receptacle pedestals can be off-the-shelf units suitable for the application.

Question 9:

Please also provide shipping split for Genset.

Answer to Question 9:

Generator set shipping details: 1 SDMO 400KW Canopy Genset Unit on a large fuel tank, etc., S/N #17013142, 237 in. (length) X 144 in. (width) X 134 in. (height), 23,540 lbs.

Question 10:

As per discussion during tender site meeting final location of the generator was unknown, as discussed could you please provide drawing with marked up measurements from electrical room wall to new generator location.

Answer to Question 10:

See answer to question 5

Question 11:

Could you please specify if the existing generator is to be turned over to the owner or if it is to be disposed of by the contractor, if turned over will it remain in its current location or to be relocated somewhere on the property. If contractor is responsible for removal could you please specify the requirements for the demolition (concrete pad removed? floor painting where pad was, NG supply cut & capped in room etc.)

Answer to Question 11:

See answer to question 4 for remediation.

Question 12:

Could you please specify who is responsible for the cost associated with placing the new generator (i.e crane, manpower etc.) if owner is responsible is the contractor required to have staff onsite to assist with placement?

Answer to Question 12:

This is the responsibility of the contactor (see answer to question 7).

Question 13:

Could you please confirm if it would be acceptable to have the DP & ATS as two separate units opposed to one combination unit?

Answer to Question 13:

Separate DP and ATS shall be acceptable only if space allows without violating ESA installation codes

Question 14:

Could you please provide specific requirements for the new 1600A breaker (kA rating, LSI/LSIG etc.).

Answer to Question 14:

The new 1600A circuit breaker shall match the existing switchgear's main circuit breaker nameplate rupture capacity of 75kAIC.

Question 15:

Specification notes that all spoils from excavation can remain on site, please specify where spoils are to be dumped.

Answer to Question 15:

Please see RFQ04, paragraph 3.1 SCOPE OF WORK, clause 8

Question 16:

Could you please clarify the voltage of equipment, E-01 SLD indicated existing main distribution panel is 480V, new ATS is 208V, new DP is 480V & MCC 480V. Specification for new equipment notes 208V.

Answer to Question 16:

The electrical distribution system voltage is 208/120VAC, 60Hz, 3-phase, 4-wire plus ground. All new electrical equipment shall be rated at this voltage or higher.

Question 17:

Could you please clarify if there is requirement for the following, as found in the DP/ATS spec: "these specs describe requirements for a complete power conditioning and distribution system, supplying computer grade power to sensitive loads. The specified system shall provide isolation*, distribution, control, and monitoring of AC power."

Answer to Question 17:

Change clause: Distribution Panel item 1.1.1: "These specifications describe requirements for a complete power conditioning and distribution system, supplying computer grade power to sensitive loads. The specified system shall provide isolation*, distribution, control, and monitoring of AC power. It shall include all equipment to properly interface the AC power source to the intended load.
" to read as follows:

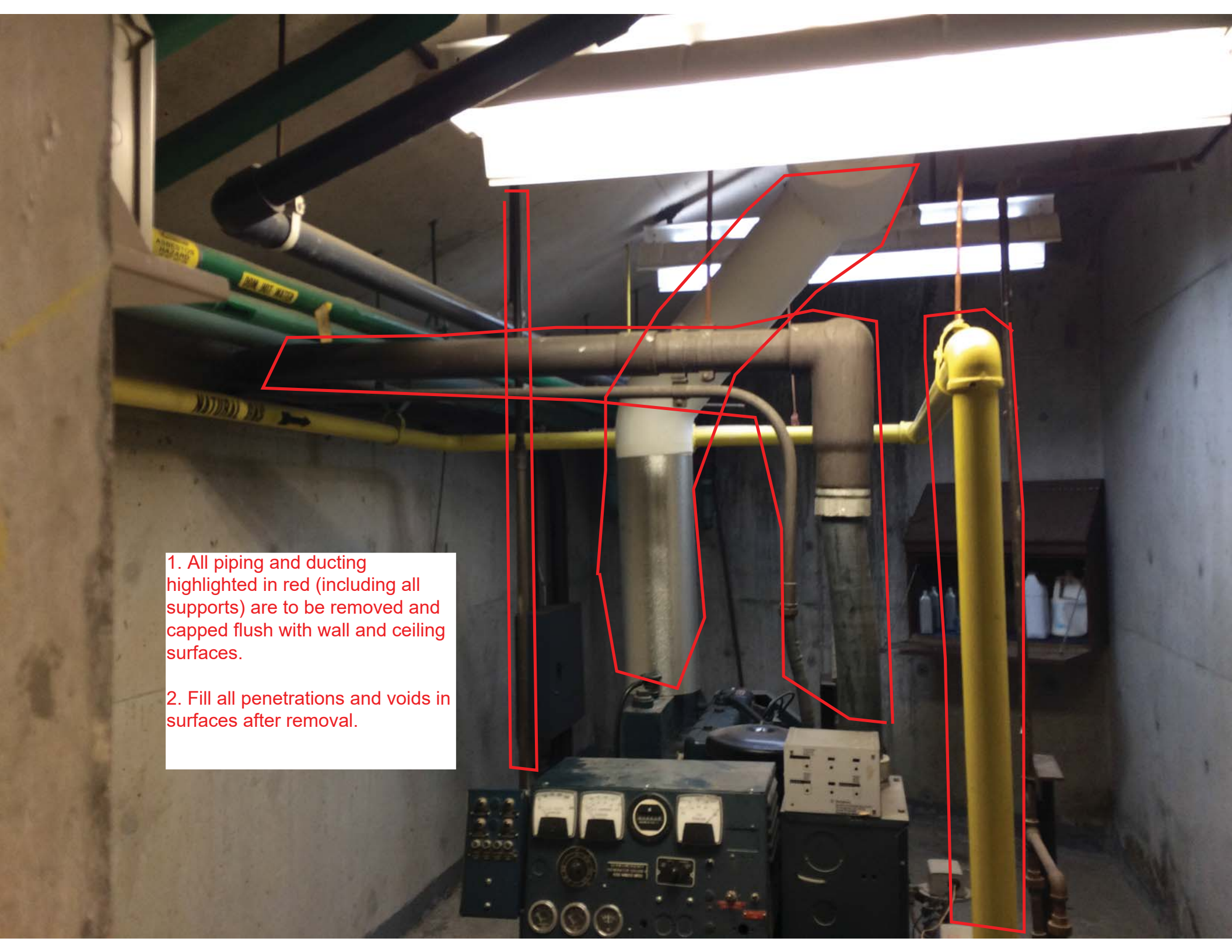
"These specifications describe requirements for a distribution panel. The specified system shall provide isolation and distribution of AC power. It shall include all equipment to properly interface the AC power source to the intended load."

Question 18:

Please specify the following for all the new equipment: Al or Cu bus , Sp proof? , Kaic ratings etc.

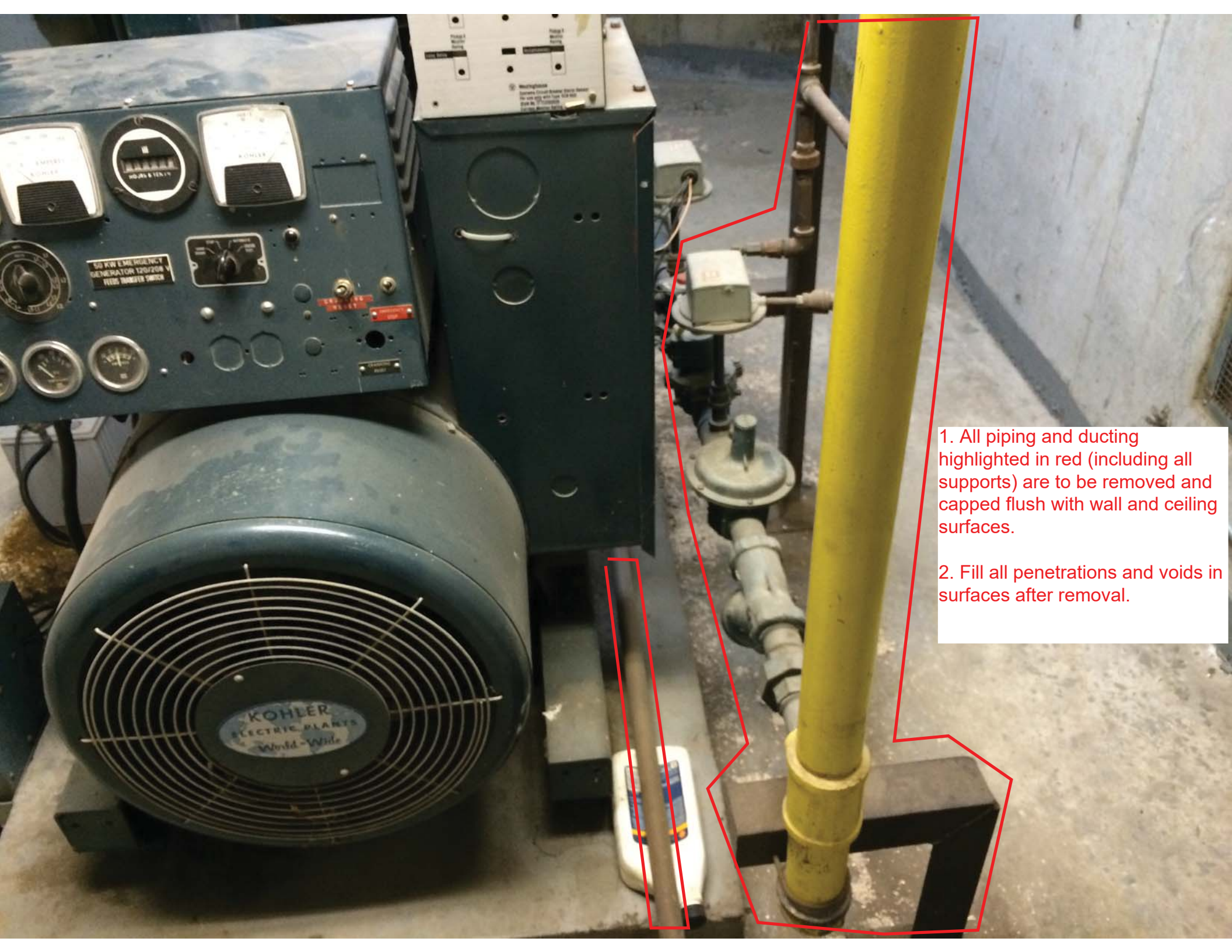
Answer to Question 18:

Tin-plated aluminum or copper bus bars are acceptable



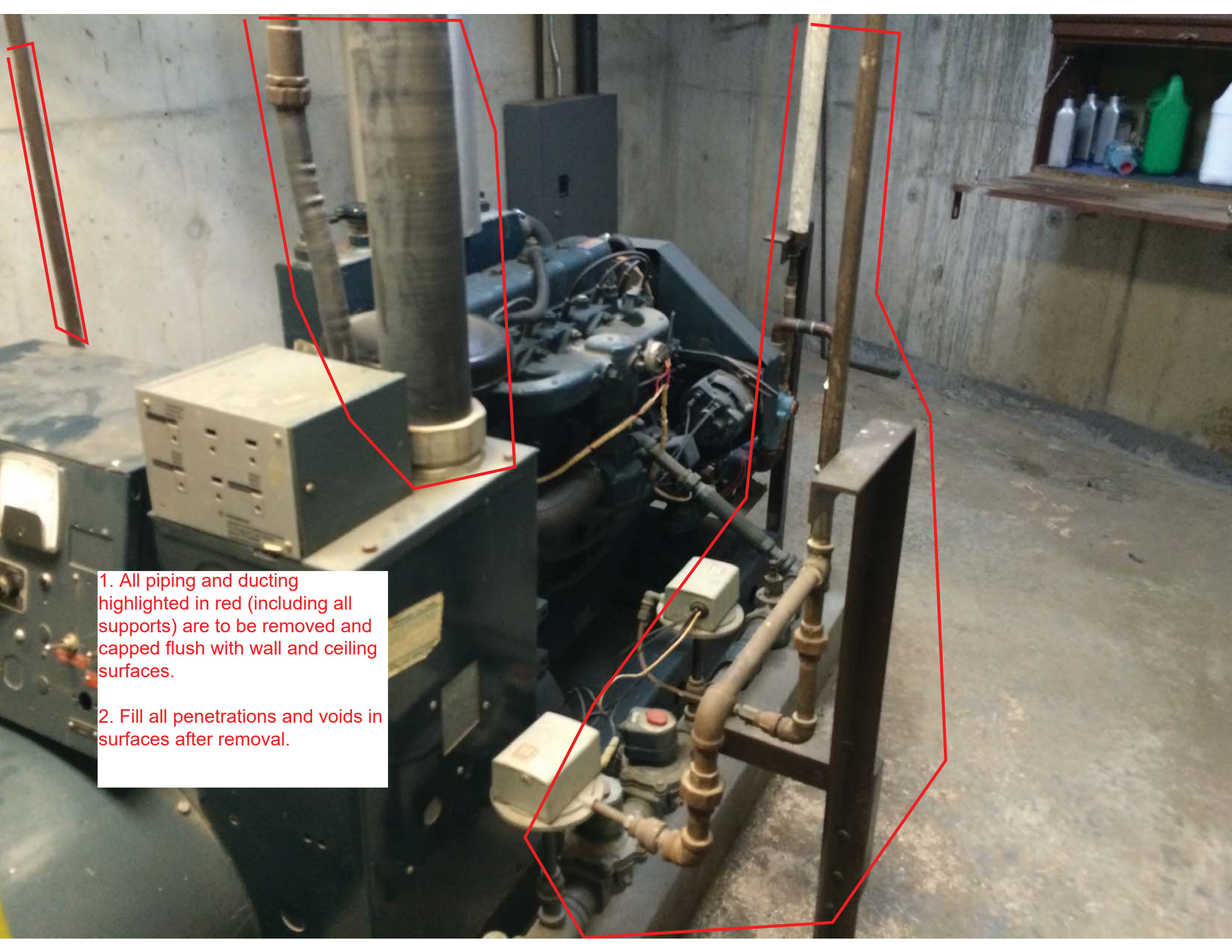
1. All piping and ducting highlighted in red (including all supports) are to be removed and capped flush with wall and ceiling surfaces.

2. Fill all penetrations and voids in surfaces after removal.



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END OFADDENDUM

1600A BREAKER – EMPTY SECTION PHOTOS



