

January 30, 2019

Subject: ITB #1583-B: Fire Stations 2 & 4 Construction - Addendum #1

Gentlemen/Ladies:

Below, please find responses to questions, clarification, or additional information for the above referenced invitation to bid. You will need to consider this information when preparing your bid.

1. **When does the county anticipate construction starting on both fire stations?**
As soon as possible; pending Board of Commissioners approval with signed contract(s). That should translate into within 60-90 days.
2. **The PEMB purlin span shown for the living quarters is approximately 46lf. There needs to be another frame in this space as the purlins cannot span the 46ft. Would it be possible to have another column and frame at Frame line 7.**
There are no spans at 46'. Please review the plans provided.
The PEMB package per the general contractor that are based on the bid documents will be required to support the building as drawn and meet specifications provided. The PEMB package approved will be designed by the PEMB provider.
3. **Can you clarify the laundry equipment to be provided by the GC. There is a Circul Air Hose Drying Cabinet shown but no specifications. Are we to price that and the Shultz compressor as well?**
See specification manual for items to be provided by owner.
*****See attached information for the Circul Air Hose Drying Cabinet for Station 4.**
The items mentioned are still required for Station 4.
4. **Can you clarify the thickness of the heavy duty concrete paving and the light duty concrete paving?**
*****See attached updated Civil Page C12 for Station 2 – concrete clarification.**
5. **Will the retention pond fencing and dumpster enclosure be in the site contractor's scope on Fire Station #4?**
Retention pond fencing is currently installed. Contractor will be responsible for dumpster enclosure.
6. **Please clarify whether all civil work is included in the Invitation to Bid.**
The scope for Station 2 and Station 4 have been outlined in the specification manual and the bid documents.

- 7. What are the allowances?**
Refer to the specification manual and Division 00 of the project manual.
- 8. Is irrigation included in the Landscape Allowance? What is included in the landscape allowance?**
No decision has been made concerning landscaping. Assume the fine grading is included as part of the landscape allowance. Erosion control and stabilization are not included in the landscape allowance.
- 9. Will there be a landscaping scope of work?**
See question #8 above
- 10. Are the meters already in?**
The meters have been installed at Station 4. The meters have not been installed at Station 2.
- 11. Are there any trees to be removed?**
The site at Station 4 has been prepped for a building structure and no other trees are to be removed. Station 2 will have some tree removal, refer to the civil drawings sheet C-2 for details.
- 12. Will civil drawings be included in Addendum 1 (e.g. concrete paving, sidewalks, striping, etc.)? Are there any details that would provide additional clarity?**
Both Station 2 and Station 4 have civil drawings submitted as part of the bid documents.
- 13. Are there any building permit fees or testing costs to be included in the bids?**
The county will be responsible for testing costs but the general contractor with coordinate testing. There are not building permit fees.
- 14. Will alternatives to brand names be acceptable?**
See specification manual for acceptable alternatives. Once the bid has been awarded alternates can be proposed from the selected contractor per the project manual Section 01 60 00.
- 15. Will we be expected build both Fire Stations simultaneously?**
Yes.
- 16. Will award be made on best value; that is base bid plus selected alternates?**
The contract will be awarded based on the county's decision and the Bid Evaluation conditions outlined in the Project Manual.
- 17. Will there be fees for taps into water lines?**
Fees already paid for Station 4, Fayette County Fire will pay any fees for Station 2.
- 18. For Fire Station 2, is the decel lane asphalt or concrete?**
GDOT does not require a deceleration lane. There is no deceleration lane on the civil drawings for Station 2 as we are not getting a new driveway permit from GDOT.

19. Are the buildings pre-engineered

Yes.

20. Is the roof pre-engineered

Yes.

21. Are both buildings metal structures?

Yes.

22. Are there any wood trusses?

No.

23. Is the system fully sprinkled?

Yes.

24. Is there an attic space?

No.

25. Is the septic work done at Fire Station 4?

Yes.

26. On the bid form, do we need to quote a completion date?

Yes. Section 00 42 13 page 1 and 2.

27. Will you accept other vendors, besides what is listed, for the bi-fold doors and the metal building and doors?

No alternate for the bi-fold manufacturer Door Engineering. The bi-fold doors and its surrounding structural support has been designed for these specific doors.

*****See specifications attached for Door engineering**

For the metal building and doors, as is customary with "or equal" specifications when they are listed as such, bidders may base these portions of their bids on equal options at their own risk. The architect will verify the suitability of the proposed equal options at the time of shop drawing review and base the decision on the contracted specifications and constructions documents.

28. Are you requiring a full time superintendent on each site simultaneously?

If awarded both projects, the county will allow one superintendent for both sites. The county also has the right to demand additional supervision if at any time the quality of work and supervision is not acceptable.

29. Fire Station 4, does the whole site have gravel on it?

See specification manual for site narrative.

30. Fire Station 4, will the stone base for the concrete paving be installed?

See specification manual for site narrative.

31. Will there be eight inches of concrete paving for both stations?

Yes, see civil drawings for concrete paving thicknesses.

32. At Fire Station 4, will the site contractor be gone or will he be available to do repair work?

The site contractor for Station 4 will have completed their contract and will not be available for any additional site work.

33. Where will the formal bid opening be?

The bid opening will be at 140 Stonewall Avenue West, Suite 210 at 3pm. The location for dropping off bids has not changed. The drop off location is still 140 Stonewall Avenue, Suite 204 Purchasing. Bids must be received and date stamped by the due time and date in Suite 204.

34. If bid amounts are submitted on time, can flexibility be permitted in turning in the subcontractor detail amounts?

The pricing information required in the Invitation to Bid must all be included in your bid package, and submitted by the due date and time. This includes:

- Base Bid Summary for: Fayette County Fire Station No. 4 (1748.00)
- Base Bid Summary for: Fayette County Fire Station No. 2 (1852.00)
- Total Bid Summary for: Fayette County Fire Station No. 2 and Station No. 4
- Document 00 42 13 – Bid Form
- 1.4 Schedule of Alternates

It is not planned to ask for additional pricing details that are not required in the Invitation to Bid.

Received by (Name): _____ Company _____

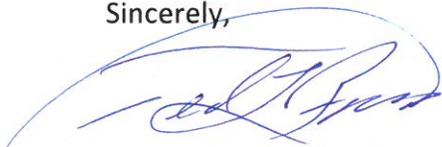
Note: If this addendum is not returned to the Fayette County Purchasing Department or if it is returned not signed, responding individuals, companies or other organizations will still be responsible for the requirements of this addendum and the specifications or changes herein.

The opening date for this ITB has not changed. **The opening time and date are 3pm on Thursday, February 7, 2019.** Bids must be received by the Purchasing Department at the address above, Suite 204, at or before the opening date and time.

Questions regarding this solicitation will be accepted until 3pm, Wednesday, January 30, 2019. After that, we will not be able to respond to any inquiries about this project.

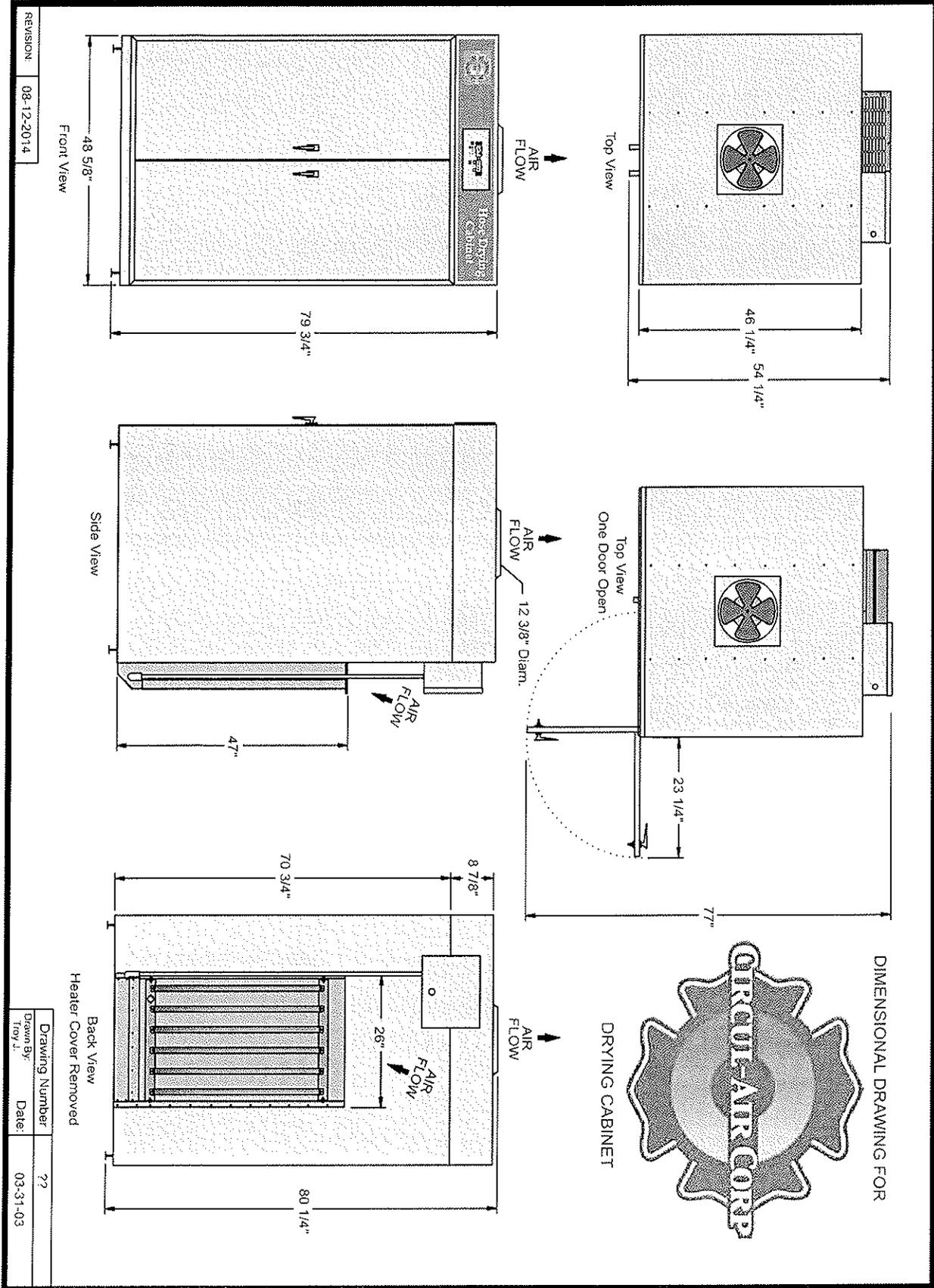
If you have questions, please contact Natasha Duggan, Contract Administrator at (770) 305-5150 fax (770) 719-5534 or email at nduggan@fayettecountyga.gov.

Sincerely,



Ted L. Burgess
Director of Purchasing

Circul Air Corporation



REVISION: 08-12-2014

Drawing Number: ??
 Drawn By: Troy J.
 Date: 03-31-03

Circul Air Corporation

TEMPERATURE RISE

Temperature elevation within cabinets in the drying period is moderate due to cooling effect of wet hose or wet clothing on the pre-heated air. Average rise during the cycle is only about 10° F to 15° F; maximum about 25° over ambient (room) temperature. The high rate of air changes (5 to 6 a minute) with controlled heat input provides an ideal drying rate. Keep doors closed while hose is drying.

VENTILATION

1. Unless the moist air leaving the dryer is exhausted from the room it will increase the ambient relative humidity. Thus, the wet air around the hose dryer is re-circulated and the drying rate retarded. We recommend installation of a duct from the top of the hose dryer to the exterior of your building. **Remember . . . you can't dry hose or fire clothing with wet air . . . get it out of the room and out of the building.**
2. Adequate ventilation **MUST** be provided for all Circul-Air Hose Dryer Installations - It is as essential for Circul-Air Hose Dryers as it is for any domestic or commercial clothes dryer, and even more so. The moisture laden air from the dryer must be expelled from the room and building to prevent its re-circulation into the back of the hose dryer or to create condensation, and to assure optimum drying time. It is as important to good performance as is the loosening of the hose coils when placing them into the hose dryer to avoid contact between wet jackets.
3. The drying process is, accelerated evaporation. The hose dryer speeds the process by its programmed balance between temperature rise and the rate of air changes (approximately 6 times per minute). Proper ventilation does the rest.
4. The exhaust orifice at the top center of the hose dryer is round (12 3/8" in diameter). **Never:** apply screws directly into the blow-

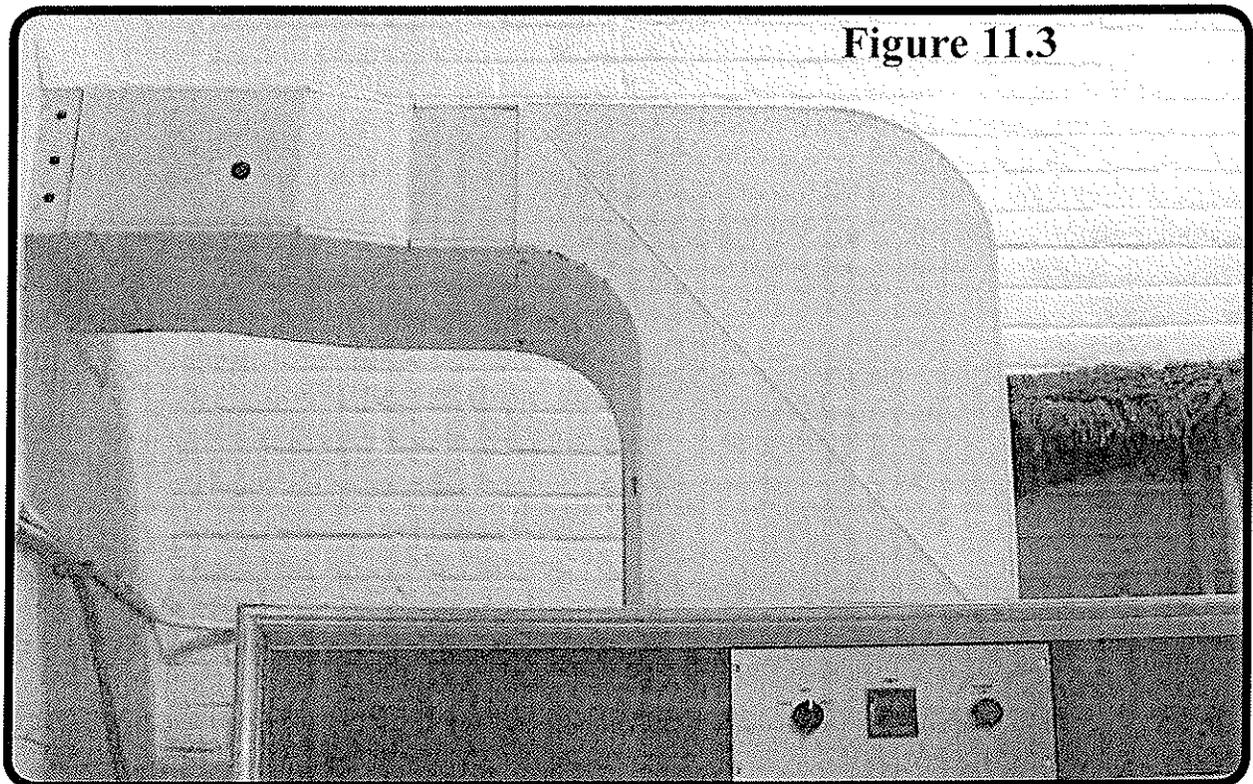
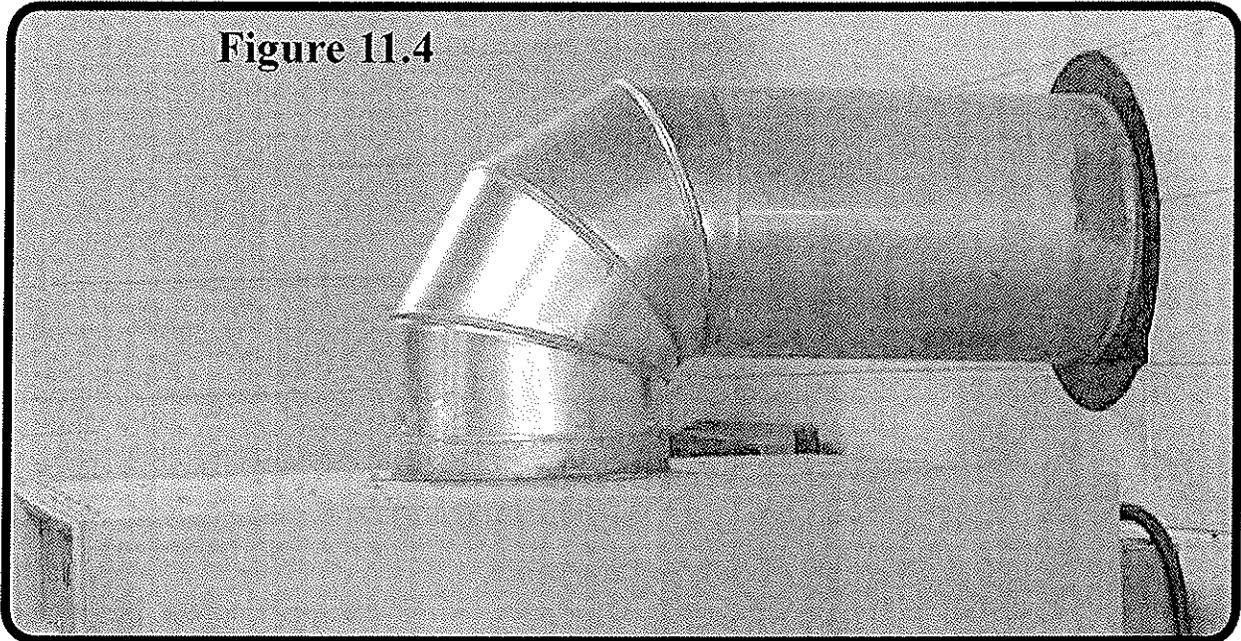


Figure 11.3

Figure 11.4

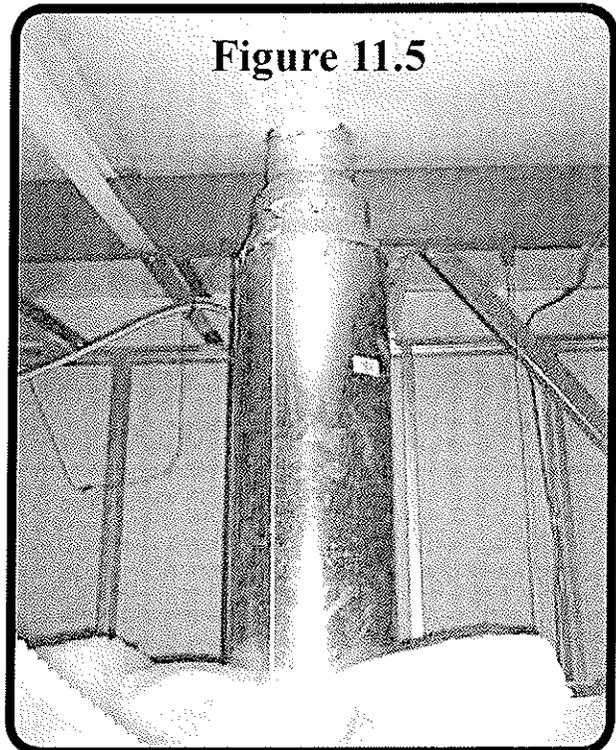


er exhaust orifice, because the penetration of the screws may hit or stop the fan blades from turning causing the fuse to blow when hose dryer is operating. We Recommend a 14" round duct be used. If a rectangular, square or larger round duct is preferred, an adapter can be attached to the top of the hose dryer to fit the desired size and shape of the duct. Our lab tests have shown that when such rectangular ducts are employed they should not have less than 8" x 16" of final free airflow from the building in order to provide satisfactory airflow. For an example of a the square venting duct for your hose dryer see **Figure 11.3.** (on the previous page) For an example of a 14" round duct with a flange installed onto the hose dryer top see **Figure 11.4.**

5. Figure 11.5 shows how not to vent you Circul-Air Hose Dryer. as you can see in this photo they have reduced the size of the duct work twice and in doing so they has change the performance of the hose dryer and increase the drying time exponentially. Avoid this at times.
6. The ideal hose dryer installation - simple and very efficient - is to locate the hose

dryer against an exterior wall. This involves only a short duct with a 90° elbow and a self-closing louvered shutter. **AVOID long ducts whenever possible;** long vertical or horizontal stacks require booster or roof vent fans at points of discharge to balance the airflow of approximately 900 CFM per Hose Dryer.

Figure 11.5



Circul Air Corporation

7. Where two or more hose dryers are vented through a common duct, the roof fan should be controlled by a variable speed switch (2 or 3 speed) to limit the airflow when only one hose dryer is in use.

HUMIDITY:

In certain areas where the relative humidity is constantly high, use of **de-humidifiers in the drying room is recommended**. They need not be connected to the hose dryers, as any reduction in the moisture content of the air prior to its introduction into the hose dryer will benefit its performance. In SPECIAL HOSE ROOMS, where hose is washed, dried and stored, we definitely recommend that humidity control equipment be installed.

SERVICE AND OPERATING SUGGESTIONS FOR CIRCUL-AIR DRYING CABINET

Efficient operation of your Circul-Air Hose Drying Cabinet depends upon a good installation and proper usage. We suggest you read carefully the plate mounted on the inside of the left-hand door of your hose dryer. Make sure it is operated at proper voltage and on the proper phase service (single phase or three phase).

Several factors affect the drying rate and we list them here. All are important and within your control:

- 1 **Proper ventilation** to exhaust the moisture laden air from the room after it leaves the hose dryer.
- 2 **Adequate thermal rise** within the hose dryer.

3 **Relative humidity** in the room where the hose dryer is installed.

4 **Loosening of hose coils** to permit free circulation of fresh air between jacket coils. (See Photo 12.1.4)

5 **Leveling the hose dryer** to prevent any air leaks around doors resulting from torsion.

VENTILATION:

Unless the moist air leaving the hose dryer is exhausted from the room it will, in turn, increase the ambient relative humidity in the room. Thus, the wet humid air around the hose dryer is then reintroduced into the hose dryer and the drying rate is retarded. Thus, we recommend either a duct from the top of the hose dryer to the exterior of your building or, at least, a vent fan in the wall, ceiling or roof above it. A duct is recommended unless there is absolutely no way it can be done. If the duct goes through the roof or the venting through a wall is a distance of 10 feet or greater from the hose dryer or the use of multiple bends in the ducting it is recommended that a booster fan be installed at the point of exit from the building to offset the pressure loss.

THERMAL RISE:

High temperatures are neither required nor desirable, and cannot, in fact, be generated in the hose dryer. A mild temperature rise is necessary for a reasonably fast drying rate. The heater output is engineered to give a 10 to 25 degree rise when the hose dryer cabinet is empty. The wet hose lowers this temperature at the beginning of the drying cycle. The drying rate is fastest when room (ambient) temperature is moderate and relative humidity is low. Hose dryers function slowly in unheated or poorly heated buildings and in areas of high humidity.



A SENNECA COMPANY

SECTION 08 35 00 – FOLDING DOORS AND GRILLES

F-SERIES: FF300 SPECIFICATIONS

Four-Fold Door Systems

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes Four-Fold metal doors with surface mounted tube frames.
- B. Operation of Four-Fold metal doors includes overhead mounted electro-mechanical operators.

1.3 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product Data for each type of product specified consisting of manufacturer's technical Product Data and installation instructions for each type of door required, including data substantiating that products comply with requirements.
- C. Submittal Drawings showing fabrication and installation of Four-Fold metal doors including plans, elevations, sections, details of components, hardware, operating mechanism, and attachments to the other units of Work. Include wiring diagrams for coordination with electrical trade.
- D. Reference list including (5) successful installations of this type of door within the past two (2) years.

1.4 QUALITY ASSURANCE

- A. Doors shall be designed to withstand external or internal horizontal wind loads of **(25)** pounds minimum per square foot. The maximum allowable deflection shall not exceed 1/120 of the span. Fiber stresses in main members shall be limited to 27,000 pounds per square inch. Steel frames shall be designed in accordance with the AISC "Steel Construction Manual".

- B. Door manufacturer shall have at least 10 years experience in manufacturing door type specified.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store delivered materials and equipment in dry locations with adequate ventilation, free from dust and water, and so as to permit access for inspection and handling.
- B. Handle materials carefully to prevent damage.

1.6 WARRANTY

- A. The door manufacturer shall provide a written standard limited warranty for material and workmanship.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Four-Fold industrial metal doors manufactured by Door Engineering and Manufacturing, 400 Cherry Street, Kasota, MN 56050, (800)-959-1352 or equal products by other manufacturers approved in advance.

FF300 Series: Glazed

2.2 MATERIALS

- A. Steel Tube: ASTM A513 and ASTM A500/A500M
- B. Steel Sheets: Steel sheets of commercial quality, complying with ASTM A1011/A1011M hot-rolled steel sheet.
- C. Hardware: Manufacturer's standard components.
- D. Fasteners: Zinc-coated steel.

2.3 FOUR-FOLD DOORS

- A. Construction: Door framing shall be minimum 11-gauge structural steel tube with 14-gauge steel sheet on the exterior and interior faces. Sheeting shall be formed on the vertical edges with no visible welds on the interior or exterior panel faces. All frames and framing members shall be true to dimension and square in all directions, and no door shall be bowed, warped, or out of line, in the vertical or horizontal plane of the door opening by more than 1/8 inch in 20 feet. Exposed welds and welds which interfere with the installation of various parts shall be ground smooth and flush.
- B. Surface Mounted Tube Frame: Supply pre-hung tube frame system constructed of minimum TS6x4x0.25, designed to anchor to masonry wall construction or

weld to steel structure. All hinges, track supports and operator supports shall be factory attached. (See structural drawings for information).

- C. Factory finish: Door Panels and Tube Frames shall be finished with manufacturer's standard PPG Spectracron epoxy primer and polyurethane top coat. Customer to select from Manufacturer's standard color chart or furnish sample to match.
 - 1. Operator and operating hardware shall be powder-coated manufacturer's standard gray.
- D. Hardware: Hardware shall include guide tracks and brackets, trolleys, center guides, not less than three pairs of jamb and fold hinges per opening, and all bolts, nuts, fasteners, etc. necessary for complete installation and operation.
 - 1. All hardware, including hinges and trolleys, shall be bolted to the panel for easy removal for service or panel replacement.
 - 2. Doors up to 16' wide and under 30psf windload shall require no floor mounted supports, guides or tracks.
 - 3. Top tracks shall be adjustable on the end track hangers to allow for adjustment of the door panels in the open position and easily replaceable without removal of the door framing or operators.
- E. Hinges: Jamb hinges shall be dual shear and have two thrust bearings and two needle bearings. Fold hinges shall be stainless steel and be dual shear with two thrust bearings. All bearings shall be completely concealed within the hinge barrel and include grease zerks. All hinge pins shall be minimum 3/4" diameter hardened steel.
- F. Hinge Guards: Provide plastic guards at jamb hinges to prevent access through hinge space.
- G. Weatherstripping: Material shall be adjustable and readily replaceable and provide a substantially weather-tight installation. Weatherstripping at center shall be 1/16" cloth inserted neoprene and include no exposed fasteners on the exterior face of the panel. Weatherstripping at sill shall include two 1/16" cloth inserted neoprene sweeps with an aluminum retainer. The retainer shall be attached to the door with adhesive.
- H. Perimeter Weatherstripping: Provide jamb and head weatherstripping of 1/16" cloth-inserted neoprene bulb (or closed cell neoprene).
- I. Vision Panels: Provide 1" insulated, tempered, vision panels of the size, shape and location as noted on the drawings.

2.4 OPERATOR

- A. Each Four-Fold door shall be operated by an overhead mounted electro-mechanical drive unit designed for high cycle operation. Operator consists of an electric motor, gear reducer, and rotating drive arm. The door shall be operated with connecting rods attached to the rotating drive arm on the operator and to

control arms attached to the jamb door section and to the door lintel. The connecting rods shall be positive drive, keeping the door under firm control at all times. The connecting rods shall be fitted with spherical bearings and control arms shall be equipped with oil impregnated bronze bearings on polished shafts.

- B. Operator shall be instantly reversible, open and close rapidly and start and stop gradually. Operator shall be adjustable to allow door to fully clear the opening. Operator shall automatically lock the door in the closed position. Operator shall be equipped with disengaging mechanism to convert to manual operation.
- C. Electric motor shall be of sufficient size to operate doors under normal operating conditions at no more than 75 percent of rated capacity. The motor shall be wound for three phase 208/230/480 VAC, 60 Hertz operation.
- D. Electric Controls: Controls shall be furnished by the door manufacturer and shall be complete for each door, and built in accordance with the latest NEMA standards. **Incoming electrical shall be (Choose One): 208/230VAC 3-phase per electrical drawings.**
 - 1. Control panel assemblies shall be UL listed as per NFPA70.
 - 2. Controls shall include a programmable logic controller with digital message display or LED indicators. Controller shall include programmable close timers and programmable inputs/outputs.
 - 3. Controls shall include a variable frequency drive with independent adjustment of the opening and closing speeds.
 - 4. Enclosures shall be NEMA 4 with disconnect switch.
 - 5. Pushbuttons (interior) for each door shall have one (1) momentary pressure three-button push-button station marked "OPEN", "CLOSE" and "STOP". Push button enclosure shall be NEMA 4.
 - 6. Limit switches shall be provided to stop the travel of the door in its fully open or fully closed position.
 - 7. Safety edges: Provide 4-wire fail-safe electric safety edges on leading edge of all doors to reverse door upon contact with obstruction.
 - 8. Photo eyes: Provide (1) exterior, jamb mounted, light Curtain type photo eyes, NEMA 4 rated. Photo eye shall cover from floor level to 72" above floor.
 - 9. Presence Sensor: Provide (1) interior, overhead mounted, presence sensor with pre-open and pre-close safety fields. Sensor shall be LZR-Widescan or equal.
 - 10. Radio controls: Provide one (1) radio receiver and (1) single button remotes per door. Remotes to open and close doors with single button.

11.Timer Activation Loop Detectors (fire station applications):
Provide "pulse on exit type" loop detector to activate auto close timer once loop has been activated and cleared, include hand/auto switch to deactivate timer. G.C. to coordinate installation of preformed loop with installer prior to exterior apron being poured.

12.Warning Horn/Strobe: Provide warning light and strobe. Include outputs PLC to allow for activation while door is in motion both opening and closing, along with activation prior to closing. Include programmable "delay-to-close" timer which activates the warning horn for a set time, prior to the door closing.

13. Wiring: Door manufacturer shall supply controls and components only. Electrical contractor shall install controls and furnish and install conduits and wiring for jobsite power and control wiring.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install Four-Fold metal doors in strict accordance with the approved drawings by qualified door erection crews. All door openings shall be completely prepared by the general contractor prior to the installation of the doors. Permanent or temporary electric wiring shall be brought to the door opening before installation is started and shall be completed so as not to delay the inspection test.
- B. Doors shall be set plumb, level, and square, and with all parts properly fastened and mounted. All moving parts shall be tested and adjusted and left in good operating condition.

3.2 ADJUSTING AND CLEANING

- A. Inspection of the doors and a complete operating test will be made by the installer in the presence of the general contractor or architect as soon as the erection is complete. Any defects noted shall be corrected. After door approval in the above test, the general contractor must assume the responsibility for any damage or rough handling of the doors during construction until the building is turned over to the owner and final inspection is made.
- B. Clean surfaces and repaint abraded or damaged finished surfaces to match factory-applied finish.

END OF SECTION