City of Grand Island

Tuesday, January 28, 2020

Council Session

Item G-4

#2020-19 - Approving Bid Award - Bottom Ash & Boiler Industrial Cleaning at Platte Generating Station - Spring 2020 Outage

Staff Contact: Tim Luchsinger, Stacy Nonhof

Council Agenda Memo

From: Timothy G. Luchsinger, Utilities Director
Stacy Nonhof, Interim City Attorney

Meeting Date: January 28, 2020

Subject: Bottom Ash and Boiler Industrial Cleaning – Spring 2020 Outage

Presenter(s): Timothy G. Luchsinger, Utilities Director

Twice a year, the Platte Generating Station has a maintenance outage to repair, maintain and clean the unit and its many components. The boiler, spray dry absorber, fabric filter, cooling tower and duct work accumulate fly ash and slag from the combustion byproducts, lime ash from the Air Quality Control System operation and debris from the cooling water system that must be cleaned out with vacuum trucks. The Bottom Ash system tanks and lines and the Air Heater must be cleaned with high pressure water lances. In addition to maintaining performance, removal of the ash deposits also allows an inspection of the equipment surfaces and components.

The next outage is scheduled for March of this year. Specifications were developed by the plant maintenance staff for the removal of ash deposits throughout the boiler, bulk vacuuming of the associated ductwork and hoppers, and high pressure water wash of the bottom ash system and Air Heater.

Discussion

The specifications for the Bottom Ash and Boiler Industrial Cleaning-Spring 2020 Outage were advertised and issued for bid in accordance with the City Purchasing Code. Bids were publicly opened on January 7, 2020. Specifications were sent to eight potential bidders and responses were received as listed below. The engineer's estimate for this project was $140,000.

Bidder	Bid Amount
W-S Industrial Services, Inc. – Council Bluffs, Iowa	$ 99,789.03
Meylan Enterprises, Inc. – Omaha, Nebraska	$106,162.71
ExPro Services, Inc. – St. Louis, Missouri	$124,523.70

The bids were reviewed by Utility Engineering staff. The bid from W-S Industrial did not include the required bid submittals and a post bid, follow up submittal reflected that their

bid did not provide adequate man hours and equipment to cover the specified schedule and scope of work. Their bid was therefore rejected.

The bid from Meylan Enterprises, Inc., had minor mathematical errors that were corrected using the information provided in the bid, resulting in an additional cost of $490.20, for a total adjusted bid of $106,652.91; otherwise, the bid from Meylan Enterprises, Inc., is compliant with specifications and less than the engineer's estimate.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the bid of Meylan Enterprises, Inc., of Omaha, Nebraska, as the low responsive bidder, with a bid in the amount of $106,652.91.

Sample Motion

Move to approve the bid in the amount of $106,652.91 from Meylan Enterprises, Inc., for the Bottom Ash and Boiler Industrial Cleaning – Spring 2020 Outage.

CITY OF GRAND ISLAND

Stacy Nonhof, Purchasing Agent

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BID OPENING

BID OPENING DATE: **January 7, 2020 at 2:15 P.M.**

FOR: **Bottom Ash & Boiler Industrial Cleaning – Spring 2020 Outage**

DEPARTMENT: **Utilities**

ESTIMATE: **$140,000.00**

FUND/ACCOUNT: **520**

PUBLICATION DATE: **December 12, 2019**

NO. POTENTIAL BIDDERS: **6**

SUMMARY

Bidder: **W-S Industrial Services, Inc.**
Council Bluffs, IA
Bid Security: **Merchants Bonding Company**
Exceptions: **None**

Bid Price:	**Air Heater Wash**	**Vacuum Services**	**Hydro-blast Services**
Material:	**$19,500.00**	**$13,241.00**	**$13,650.00**
Labor:	**$12,496.00**	**$16,970.00**	**$16,970.00**
Sales Tax:	**$ 2,399.70**	**$ 2,265.83**	**$ 2,296.50**
Base Bid:	**$34,395.70**	**$32,476.83**	**$32,916.50**
Total Bid:	**$99,789.03**		

Bidder: **Expro Services, Inc.**
St. Louis, MO
Bid Security: **The Guarantee Company of North America**
Exceptions: **None**

Bid Price:	**Air Heater Wash**	**Vacuum Services**	**Hydro-blast Services**
Material:	**$44,412.00**	**$19,948.00**	**$18,496.00**
Labor:	**$ 7,140.00**	**$16,320.00**	**$ 9,520.00**
Sales Tax:	**$ 3,866.40**	**$ 2,720.10**	**$ 2,101.20**
Base Bid:	**$55,418.40**	**$38,988.10**	**$30,117.20**
Total Bid:	**$124,523.70**		

Bidder:	**Meylan Enterprises, Inc.**
	Omaha, NE
Bid Security:	**Universal Surety Company**
Exceptions:	**None**

Bid Price:	**Air Heater Wash**	**Vacuum Services**	**Hydro-blast Services**
Material:	**$25,045.00**	**$12,655.00**	**$21,510.00**
Labor:	**$ 7,524.00**	**$21,534.00**	**$10,488.00**
Sales Tax:	**$ 2,442.68**	**$ 2,564.18**	**$ 2,339.85**
Base Bid:	**$34,848.83**	**$36,582.23**	**$34,237.86**
Total Bid:	**$106,162.71**		

cc: Tim Luchsinger, Utilities Director
Jerry Janulewicz, City Administrator
Stacy Nonhof, Purchasing Agent
Karen Nagel, Utility Secretary
Pat Gericke, Utilities Admin. Assist.
Patrick Brown, Finance Director
Darrell Dorsey, PGS Plant Supt.

P2169

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BID SPECIFICATION PACKAGE

for

BOTTOM ASH AND BOILER INDUSTRIAL CLEANING – SPRING 2020 OUTAGE

C 128641

Bid Opening Date/Time

Tuesday, January 7, 2020 @ 2:15 p.m.
City of Grand Island, City Hall
100 East 1st Street, P.O. Box 1968
Grand Island, NE 68802-1968

Contact Information

Darrell Dorsey, PGS Plant Superintendent
City of Grand Island – Utilities Department
Platte Generating Station
308/385-5496

Date issued: Wednesday, December 11, 2019

ADVERTISEMENT TO BIDDERS
FOR
BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE
FOR
CITY OF GRAND ISLAND, NEBRASKA

Sealed bids for Bottom Ash and Boiler Industrial Cleaning-Spring 2020 Outage will be received at the office of the City Clerk, 100 E. First Street, P.O. Box 1968, Grand Island, Nebraska 68802, until Tuesday, January 7, 2020 at 2:15 p.m. local time, FOB the City of Grand Island, freight prepaid. Bids will be publicly opened at this time in the Grand Island City Hall City Clerk's Office located on 1st floor of City Hall. Submit an original and three copies if submitting by mail. Bid package and any Addendas are also available on-line at http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar under the bid opening date and "Click here for bid document link" through QuestCDN. Submitting through QuestCDN requires one original document of the bid to be uploaded. Bids received after the specified time will be returned unopened to sender.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Successful bidder shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

Each bidder shall submit with the bid a certified check, a cashiers' check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashiers' check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered.** Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids, to waive irregularities therein, and to accept whichever bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw his/her bid for a period of thirty (30) days after date of bid opening.

RaNae Edwards, City Clerk

Advertised

(All bids must be submitted on this form)

BOTTOM ASH AND BOILER INDUSTRIAL CLEANING
SPRING 2020 OUTAGE
BID DATA FORM

CITY OF GRAND ISLAND
GRAND ISLAND, NE

The undersigned Bidder, having examined all specifications and other bidding documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the specified materials and equipment, hereby proposes to provide all necessary supervision, materials, equipment, and labor to provide industrial cleaning services, consisting of an air heater wash, high pressure water blasting and line moling in the bottom ash system and vacuum cleaning throughout Platte Generating Station FOB the City of Grand Island, freight prepaid, at the following price:

ITEM DESCRIPTION	Air Heater Wash (Firm fixed pricing)	Vacuum Services (Lump sum-T&M)	Hydro-blast Services (Lump sum-T&M)
Material	$_____	$_____	$_____
Labor	$_____	$_____	$_____
Applicable Sales tax*	$_____	$_____	$_____
Base Bid	$_____	$_____	$_____

Total Base Bid $ _____

*** If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due. The State of Nebraska Department of Revenue has determined that building cleaning and maintenance services are taxable on both materials and labor.**

☐ EXCEPTIONS: By checking this box, Bidder acknowledges there are Exceptions or Clarifications noted to the bid, and those exceptions are fully explained on a separate sheet, clearly marked, and attached to the Bid Data Form.

☐ By checking this box, Bidder acknowledges the specified completion date of the project is **April 30, 2020.**

_____
Bidder Company Name Date

_____
Company Address City State Zip

_____
Print Name Signature

Email:_____ Telephone No._____

According to Nebraska Sales and Use Tax Requirements, Section 1-017, Contractors, check which option you have selected to file with the Nebraska Department of Revenue:

Option 1 (Section 1-017.05)_____ Option 2 (Section 1-017.06)_____ Option 3 (Section 1-017.07)_____

If the Nebraska sales and use tax election is not filed or noted above, the contractor will be treated as a retailer under Option 1 for sales and use tax purposes.

☐ By checking this box, Bidder acknowledges that Addenda Number(s) _____ were received and considered in Bid preparation.

If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

CHECKLIST FOR BID SUBMISSION
FOR
BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE

Bids must be received by the City Clerk before *2:15 p.m. on Tuesday, January 7, 2020*.

The following items must be completed for your bid to be considered.

- ❑ Submittal of bid documents:
  - ❑ **Option 1 – Mailing**: A signed original and three (3) copies of the bidding documents. Failure to submit the correct number of copies may result in your bid not being considered.
    - ❑ Note: Your certified check, cashiers check or bid bond should be clearly marked in a separate envelope attached to the signed original bid.

  - ❑ **Option 2 – QuestCDN (online)**: Purchase the bid specification through QuestCDN. Upload the signed original of the Bid Data Form, along with any supporting material required to meet the bid specification through QuestCDN. Upload your bid bond online through QuestCDN. *Bidders using Certified check or Cashiers' Check must mail said check to the office of the City Clerk no later than the scheduled bid opening date and time and clearly marked with the project name.*

- ❑ Bidders must complete and sign the Bid Data Form provided in these Documents. All blank spaces must be filled in. Bidders shall acknowledge receipt of any Addenda information on the Bid Data Form.
- ❑ A certified check, cashiers' check or bid bond in a separate envelope attached to the **outside of the envelope containing the original bid**. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened.
- ❑ Selection of Nebraska Sales Tax Option.
- ❑ A reference list of at least three (3) projects of similar scope and complexity.
- ❑ A summary of the experience of the Job Superintendent proposed for this project.
- ❑ If alternative cleaning methods are proposed, other than as generally described herein, full and complete descriptions with separate pricing for the optional utilization of such proposed methods, including references where the system has successfully been used.
- ❑ A copy of your OSHA compliant Confined Space Procedure and Respiratory Protection Procedure, and proof that workers have successfully completed respiratory fit testing and pulmonary function testing and have been trained for confined space entry.
- ❑ Air Heater Wash: Firm lump sum fixed pricing; firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
- ❑ Vacuum/Hydro-blasting: Firm lump sum time and material pricing; firm unit pricing in case adjustments are necessary, and breakout of sales tax pricing.
- ❑ A proposed schedule.
- ❑ A detailed breakdown of the individual bid amounts in the same format as will be used for daily time sheets and final billing.
- ❑ Acknowledgment of Addenda Number(s) _____.

Please check off each item as completed to ensure compliance. If you have any questions, please feel free to contact our office prior to the bid opening date/time.

INSTRUCTIONS TO BIDDERS

1. GENERAL INFORMATION.

   The following instructions outline the procedure for preparing and submitting Bids. Bidders must fulfill all requirements as specified in these Documents.

2. TYPE OF BID.

   Bidders shall be required to submit prices for all items listed in the Bid Data Form.

3. PREPARATION OF BIDS.

   Bidders shall use only the Bid Data Form provided in these Documents. All blank spaces in the Bid Data Form must be filled in, preferably in BLACK ink, in both words and figures where required. No changes to the wording or content of the forms is permitted. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures.

   Prices stated shall be f.o.b. with freight and full insurance paid by Bidder, to the job site located in Grand Island, Nebraska.

   The Bidder shall acknowledge receipt of all Addenda in the Bid Data Form. Bids received without acknowledgement or without the Addendum enclosed will be considered informal.

   Individual unit pricing as listed on the Bid Data Form or supplied as supplemental information may be deemed proprietary information and not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

4. SUBMISSION OF BIDS.

   All Bids must be submitted intact with the correct number of copies no later than the time prescribed, at the place, and in the manner set forth in the ADVERTISEMENT FOR BIDS. Bids must be made on the Bid Data Form provided herein. Each Bid mailed must be submitted intact in a sealed envelope, so marked as to indicate its contents without being opened, and delivered in person or addressed and mailed in conformance with the instructions in the ADVERTISEMENT FOR BIDS.

5. BID SECURITY.

   Bids must be accompanied by cash, a certified check, or cashier's check drawn on a bank which is insured by the Federal Deposit Insurance Corporation, or a bid bond issued by a Surety authorized to issue such bonds in the state where the Work is located, in the amount of 5 percent of the bid amount payable to OWNER. This bid security shall be given as a guarantee that the Bidder will not withdraw their Bid for a period of thirty (30) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish a properly executed Performance Bond and Payment Bond, each in the full amount of the Contract price, within the time specified.

The Attorney-in-Fact that executes this bond on behalf of the Surety must attach a notarized copy of his/her power of attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond. Where State Statue requires, certification by a resident agent shall also be provided.

6. RETURN OF BID SECURITY.

Within fifteen (15) days after the award of the Contract, the OWNER will return the bid securities to all Bidders whose Bids are not to be further considered in awarding the Contract. All other retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than Bidders' bonds and guarantees which have been fortified, will be returned to the respective Bidders whose Bids they accompanied.

7. BASIS OF AWARD.

The award will be made by the OWNER on the basis of the Bid from the lowest responsive, responsible Bidder which, in the OWNER's sole and absolute judgment will best serve the interest of the OWNER. All Bids will be considered on the following basis:

Delivery time
Bid price
Cost of installation
Suitability to project requirements
Conformance with the terms of the Bid Documents
Responsibility and qualification of Bidder

The OWNER reserves the right to reject all Bids, or any Bid not in conformance with the intent of the Bid Documents, and to waive any informalities and irregularities in said Bids.

8. EXECUTION OF CONTRACT.

The successful Bidder shall, within fifteen (15) days after receiving notice of award, sign and deliver to the OWNER the Contract hereto attached together with the acceptable bonds as required in these Bid Documents. Within fifteen (15) days after receiving the signed Contract with acceptable bond(s) from the successful Bidder, the OWNER's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

9. PERFORMANCE AND PAYMENT BONDS.

The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of one (1) year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his/her power-of-attorney as evidence of his/her authority to bind the Surety on the date of execution of the bond.

10. TIME OF COMPLETION.

The time of completion of the Work to be performed under this Contract is the essence of the Contract. The time allowed for the completion of the Work is stated in the Bid Data Form.

11. GRATUITIES AND KICKBACKS.

City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

12. FISCAL YEAR.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **[SUCCESSFUL BIDDER]**, hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE;* and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.
2. City of Grand Island's Specification for this project.
3. [NAME OF SUCCESSFUL BIDDER] bid signed and dated [DATE OF BID].

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **[DOLLAR AMOUNT] ($00.00)** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II; payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

	Air Heater Wash (Firm fixed pricing)	Vacuum Services (Lump sum-T&M)	Hydro-blast Services (Lump sum-T&M)
Material	$_____	$_____	$_____
Labor	$_____	$_____	$_____
Applicable Sales tax*	$_____	$_____	$_____
Base Bid	$_____	$_____	$_____

Total $ .00

Contractor Tax Option _____. The State of Nebraska Department of Revenue has determined that building cleaning and maintenance services are taxable on both materials and labor.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Invoices can to be presented hard copy or via e-mail to billing@giud.com. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE.

ARTICLE V. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Platte Generating Station, and complete the work on or before ***April 30, 2020***.

ARTICLE VI. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this Contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in

hiring or any other employment practice on the basis, of race, color, religion, sex, national origin, age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

[SUCCESSFUL BIDDER]

By_____ Date _____

Title_____

CITY OF GRAND ISLAND, NEBRASKA

By_____ Date _____
Mayor

Attest:_____
City Clerk

The Contract is in due form according to law and hereby approved.

_____ Date _____
Attorney for the City

CITY OF GRAND ISLAND

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REQUEST FOR BIDS - GENERAL SPECIFICATIONS

The Bid shall be in accordance with the following and with all attached BID DATA and DETAILED SPECIFICATIONS.

All prices are to be furnished and installed FOB, Grand Island, Nebraska. **All prices shall be firm, and shall include all sales and use taxes as lawfully assessed under laws and regulations of the State of Nebraska.** * If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due.

Mailed bids shall include the following on the **outside** of the mailing envelope: **"Bottom Ash and Boiler Industrial Cleaning-Spring 2020 Outage".** All bids submitted by mail must include **an original and three copies** of the bid. The bid specification and on-line bidding forms are also available at http://www.grand-island.com/business/bids-and-request-for-proposals/bid-calendar under the bid opening date and "Click here for bid document link" through QuestCDN. If submitting through QuestCDN, **one** original document of the bid is required to be uploaded. No verbal bids will be considered. All sealed bids are due no later than Tuesday, **January 7, 2020 at 2:15 p.m. local time**. to:

Mailing Address: City Clerk
City Hall
P. O. Box 1968
Grand Island, NE 68802-1968

Street Address: City Clerk
City Hall
100 E. First Street
Grand Island, NE 68801

Bids will be opened at this time in the City Hall City Clerk's Office located on 1st floor of City Hall. Any bid received after the specified date will not be considered.

Bids will be evaluated by the Purchaser based on price, schedule, quality, adherence to schedule, plan and specifications, economy and efficiency of operation, experience and reputation of the bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S.73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. Contractor shall maintain a drug free workplace policy. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

The equipment and materials must be new, the latest make or model, unless otherwise specified. Prior to approving the invoice for payment, the City reserves the right to thoroughly inspect and test the equipment to confirm compliance with specifications. Any equipment or material which does not meet the City's requirements will be returned at vendor's expense for correction. The invoice will be paid after approval at the next regularly scheduled City Council meeting and occurring after departmental approval of invoice; the City Council typically meets the second and fourth Tuesday of each month. Invoices must be received well in advance of Council date to allow evaluation and processing time.

Each bidder shall submit with the bid a certified check, a cashier's check, or bid bond payable to the City of Grand Island in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the Bidder and the entering into a contract within fifteen (15) days at the bid price if accepted by the City. **Your certified check, cashier's check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information and correct number of copies in clearly marked and separate envelopes will result in your bid not being opened or considered.** Only surety companies authorized to do business in the State of Nebraska may issue bid bonds.

Successful bidder shall comply with the City's insurance requirements; performance and payment bonds are required for this project as outlined in the Detailed Specifications and Instructions to Bidders. All bids shall be valid for at least thirty (30) working days after the bid deadline for evaluation purposes.

All bids must be on the bid form and must be signed and dated to be accepted. If exceptions and/or clarifications are noted to the bid, those exceptions must be fully explained on a separate sheet, clearly marked, and included with the Bid. Any changes that are found made to the original bid specification, other than Owner generated Addendums, would result in your bid not being considered. Please contact Darrell Dorsey at 308-385-5495, for questions concerning this specification.

BOTTOM ASH AND BOILER INDUSTRIAL CLEANING
SPRING 2020 OUTAGE

DETAILED SPECIFICATION

SCOPE: The Contractor shall provide all necessary supervision, materials, equipment, and labor to provide industrial cleaning services at the Platte Generating Station (PGS). This scope will generally consist of an air heater wash, high pressure water blasting and line moling in the bottom ash system and vacuum cleaning throughout the power station.

This contract will be awarded to a single prime Contractor for the full scope of services. The Contractor shall provide a qualified Superintendent who shall be responsible for coordinating all aspects of the specified scope of work, including coordination of all work provided by such subcontractors as may be utilized by the prime Contractor and coordination with other work in progress performed by PGS and such other contractors as may be on site.

DESCRIPTION: The Platte Generating Station is located at 1035 W. Wildwood Drive, two (2) miles south of Grand Island, Nebraska. The plant entrance is located two (2) miles south of U.S. Highway 34 and 1 ½ miles east of U.S. Highway 281.

The Unit 1 steam generator is a tangential fired, natural circulation, superheat/reheat, pulverized coal-fired boiler manufactured by ABB-CE (CE Contract No. 13477). The steam generator produces 765,000 lb/hr (MCR) of steam at 1000 F and 1800 psi which is delivered to a 100,000 kw steam turbine. The unit uses Powder River Basin Coal from various mines in the basin.

Vacuum Services:

Precipitator Vacuum Cleaning
The Contractor shall vacuum all accumulated ash and media from the precipitator, precipitator hoppers, gas outlet and inlet flue areas, and other areas of work performed by the Contractor as described herein and dispose into on-site disposal areas. Any ash which is spilled by the Contractor onto the precipitator building floor or surrounding areas shall be fully cleaned by the Contractor. There are clean-out taps connected to the precipitator hoppers and ash removal lines.

Ductwork Vacuum Cleaning
Vacuum work in the ducts shall generally consist of removing all ash from all boiler hot air ducts and boiler gas ducts, including:

- Air heater air side exit through wind box, to each aux air corner duct, and through each horizontal duct to up to the vertical drop for each mill.
- The economizer ash hoppers and economizer gas exit duct work to each of four (4) precipitator inlet ducts and inlet nozzles up to the zig zag inlet distribution plates.
- Precipitator outlet plenum to air heater gas inlet.
- Air heater gas outlet hoppers.
- Flue gas exit duct from the ID fan to the SDA.
- One (1) SDA Hopper
- Flue gas duct from the SDA to the Fabric Filter.
- Six (6) fabric filter Hoppers.

- Fly ash collects on the gas distribution devices, perforated plates and zig zag plates within the inlet and exit transition sections of the precipitator and accumulates on the sloped floors. Whereas all of the distribution plates must be blast cleaned, the contractor shall be responsible for staging and coordinating the vacuum work in these areas accordingly. The inlet and outlet transitions shall have all ash removed and the gas passages of the distribution plates shall be 100% opened and free of ash accumulations.

Additional Vacuum Cleaning Areas

Additional wet and dry vacuum efforts typically occur during the outage, such as:

- Boiler Penthouse floors and dead air spaces in the upper boiler arch.
- The cooling tower basin will be cleaned and washed down by plant personnel and the wastewater vacuumed out by the Contractor.
- The bottom ash sump pit will be vacuumed out to remove all slag build up from the pit.
- The blowdown tank will be power washed and vacuumed out.
- Wet vacuum may be needed to assist with the cleaning of the settling tanks

Deslagging of Finishing Superheater and Horizontal Superheater

During the last boiler inspection, areas of the finishing superheat assemblies showed partial ash build up along in the upper portion of the middle third of the elements. The upper horizontal superheat assemblies also showed partial ash build up within and between the assemblies in the forward, middle third of the section.

The contractor shall use manual rodding to remove all material from these elements. This work must be coordinated with others on site so that no others are in the boiler during this cleaning. This will require the Contractor to coordinate with the Owner in determining a specific time to perform the work. The owner will have scaffolding installed half way up the Finishing SH elements by a separate contractor. The cleaning contractor shall provide all required tooling for performing the rodding. One end of the tool shall have a cross member to prevent the tool from falling between the tubes. Such work shall be executed so as to avoid any and all physical damage to the boiler tubes, attachments and other unit components

All materials shall be captured immediately below the sections being cleaned through the use of wire mesh to prevent the waste material from migrating to other areas of the boiler. All waste material shall be removed by the Contractor though manual removal and vacuum. This shall include removal of all material from the economizer hoppers and main boiler slag tank.

Photos and a drawing of these two areas are provided for reference.

77-1 5/8” OD SH Vert Rear Super Heat Assemblies
86- 1 ¾” OD SH Horiz Rear Upper Assemblies

The Contractor shall be responsible for compliance with all safety requirements related to any and all aspects of this work, including but not limited to, worker safety, transportation, recordkeeping and documentation, permits and notifications, storage and disposal. The contractor shall coordinate all such efforts with plant personnel and other work in progress.

SDA and Swirler Vane Wash

The Spray Dry Absorber and three Swirler Vanes at the top of the SDA periodically get plugged up with lime ash. The Contractor’s hydro blast crew will be tasked with hydro-jetting those vanes. Plant crews will be tasked with fire hosing the inside of the SDA vessel to remove lime ash from the walls. The plant will have a dumpster with a liner located at the bottom of the SDA to catch lime ash and water from these cleaning processes. The Contractor shall vacuum all lime ash and water from the dumpster for disposal on site.

Hydro-blasting Services:

The hydro-blasting work areas generally consists of the below listed items. Each area shall be inspected and determined if cleaning is needed by plant personnel.

- Settling and surge and pump manifolds on top of dewatering bins.
- Upper, middle, and lower dewatering bin screens and tank walls.
- Drip pans at bottom of both bins.
- Lower dewatering legs.
- Bottom ash hopper fluting lines.
- Bottom ash hopper water boxes.
- Slope flush headers to bottom ash hoppers.
- Fan room drains out to manhole.
- Bottom ash floor drains to manhole.
- Mechanical exhauster room drain.
- Low pressure ash sluice line suction and supply lines from pump to building, header at bottom of boiler on seal trough, and before seal trough.
- Surge and settling tank sludge return in bottom ash building.
- Flushing header at the bottom of the boiler.
- Blow down tank drain header to manhole.
- Floor drains that are plugged.
- Bottom ash sluice line drain to bottom ash sump.
- Air heater hot side gas hoppers to manhole (which will need to be done before water blasting air heater).
- Manhole by precipitator transformers to surge tank overflow manhole.
- Mechanical exhauster room floor drain to bottom ash drains.
- Dewatering bin drain lines.
- Slope nozzle legs if needed (both hoppers).
- Lime auger drop chutes

Swirler Vane Wash

The Spray Dry Absorber and three Swirler Vanes at the top of the SDA periodically get plugged up with lime ash. The Contractor's hydro blast crew will be tasked with manually hydro-jetting those vanes and the transition duct above the vanes with lower pressure hand held wands. Access to the vanes is through the SDA inlet duct at the top of the SDA. The plant will have a dumpster with a liner located at the bottom of the SDA to catch lime ash and water from the cleaning process.

Tools needed for all of the hydroblast work include but are not limited to:

- A minimum of two High pressure, high volume water pumps and blasting systems capable of a minimum 20 gpm at 20,000 psi and of a minimum 100gpm at 10,000 psi, BJV blasting nozzles, 1" pipe nozzle, 6" pipe nozzle, 200' of blasting hose, supply hose from truck to foot pedal, and shot gun blaster.
- Rodding equipment suitable for removal of the ash and slag in designated areas.

The Contractor's pumping equipment shall have the full pressure and flow capabilities required to provide an effective cleaning of the dewatering bins and other hard ash buildups.

Air Heater Wash:

The Contractor shall clean all hot, intermediate, and cold end heat transfer (basket) surfaces with high pressure water top down wash, so that all ash deposits are removed. The interior air heater structure, to include the housing, sides, and bottom, shall be water blasted also. The air heater will undergo a full, thorough inspection and maintenance after the wash, requiring all surfaces to be cleaned and free of ash.

A 36-hour period from 7am April 29, 2020 to 7pm April 30, 2020 for set up, wash, rinse and tear down is anticipated. The owner shall install scaffolding as required by the Contractor, requiring that the Contractor identify the specific scaffolding requirements by the Morning of April 27, 2020. Any additional hydro equipment required for the air heater wash shall be mobilized by April 28, 2020. All equipment must be removed from the boiler area and either taken off site or relocated to another area of the plant site by 7pm April 30, 2020 in that another contractor will be mobilizing their equipment to that area the following morning for work in the air heater. It is required that bare metal cleanliness is obtained without damage to the baskets or the housing. All wastewater will be removed by drains and directed to the onsite waste pond.

The air heater is a vertical post, rotary regenerative air heater, air-to-flue gas heat exchanger manufactured by Ljungstrom Air Preheater Company, Model# 27-VI-90 serial # 6765. manufactured by ABB-CE, Contract No. 13477. It is located in the flue gas path between the precipitator and the induced draft fan, and in the air path between the forced draft fan and wind boxes.

Additional specifications are as follows:

Heating element hot end	#24 gauge, 42” deep
Heating element intermediate	#24 gauge, 36” deep
Heating element cold end	#18 gauge, 12” deep
Radial seals hot end	#16 gauge low alloy
Radial seals cold end	#16 gauge stainless steel
Diameter	29’- 6”
Rotating speed w/ electric motor	1 – 1.5 rpm
Rotating speed w/ air drive	Variable, approx. 0.5 rpm
Height above grade elevation	Approximately 53’

Drawings of the Air Heater arrangement are available for review at the Platte Generating Station office.

The cleaning process shall be continued without interruption so that ash doesn’t solidify.

It is expected that the drain lines from the two air heater hoppers will plug-up. The Contractor shall include the work to water blast clean the drains from the air heater hoppers to the first manhole. All the piping is 10” diameter. Approximately 20 feet of piping exists, on each drain, between the hopper outlets and where they wye. A common pipe, approximately 85’ long, exists between this wye and the terminal manhole.

Electrical power and water (150psi hydrant) are available at the plant site.

The Contractor shall provide all hoses, fittings, adequate standby equipment, and spare parts. Bids shall detail these provisions.

REQUIREMENTS: If the Contractor proposes alternative cleaning methods for consideration by the Owner other than as generally described herein for any portion of the work, full and complete descriptions **must be included with the bid** with separate pricing for the optional utilization of such proposed methods. References where the system has successfully been used must be included.

Bidder is solely responsible for obtaining any and all clarifications to this specification as may be required for the Bidder to submit an accurate and complete bid proposal.

NOTE: No ash or diesel fuel will be permitted to be spilled on equipment, structures, plant site grounds, or roads. The contractor shall maintain its equipment in top working condition to eliminate fluid leaks and equipment breakdowns that could delay the progress of the work. The contractor is responsible for having on site the capability to take any and all extraordinary measures to fully contain and clean up any and all leaks from the contractor's equipment as well as to implement any and all necessary repairs to equipment as required to eliminate and avoid such leaks from further occurrence. The Contractor is responsible for clean up of all spilled ash and any diesel fuel spilled from equipment fueling operations. Upon completion, the Contractor shall leave the premises in a neat and clean condition with respect to his own operation.

Contractor will coordinate closely with PGS personnel on execution of all phases of the work and all safety requirements, including but not limited to:

- Provide information on all employees arriving at PGS
- Lock Out/Tag Out
- Confined Space Entry
- PGS Equipment Operation, such as fans and dampers
- Scheduling sequence of work scope items and related plant system preparations for work execution
- Inspections of completed work

QUALIFICATIONS: The Contractor shall be a firm specializing in the provision of services as outlined within this scope for large-scale utility precipitators and boilers used in the electric power industry. The Contractor shall substantiate its experience through the submittal of three (3) similar projects' **reference list with the bid**. The Contractor will be expected to perform the work without the assistance of Platte Generating Station personnel or tools, and comply with plant safety regulations and equipment lockout/tag out procedures.

SUPERINTENDENT: The Contractor shall provide well qualified supervisor(s) and a Job Superintendent who will fully direct all field operations for the duration of the project, serve as liaison to the Owner's designated representatives, be fully authorized to make any and all decisions affecting the work in the field and coordinate activities between the Contractor and its subcontractors, if any. A summary of the experience of the Superintendent proposed for this project shall be **provided with the bid**.

INSPECTION: All work performed by the contractor will be inspected by the owner's designated representative or other assigned plant personnel upon notification by the Contractor that the contractor considers that portion of the work completed. The Contractor will be required to re-clean any areas in which bare metal cleanliness was not achieved or ash accumulations remain.

SCHEDULES: The PGS 2020 Spring Outage schedule is currently April 23, 2020 through May 7, 2020. Though these dates are fairly firm, they remain subject to change based upon changing conditions relative to the needs of the Grand Island Utility, schedule coordination with other outage work, as well due as outside influences typical of the industry. The overall schedule as related to this base work scope is currently estimated to be executed as follows:

4/23/2020	PGS unit is scheduled to be taken off-line at approximately 10am
4/24/2020	Precipitator is released 24 to 30 hours after the unit is removed from service. Mobilize Vacuum equipment for work to begin morning of 4/25/2020. Mobilize high pressure water hydro-blasting equipment for work to begin 4/25/2020

4/25/2020	Set up vacuum equipment and begin Vacuum work at cooling tower and accessible boiler areas after 10am. Begin vacuuming precipitator hoppers and designated areas. Set up hydro blasting equipment and hydro blast (2) bottom ash bins.
4/26/2020	Continue with Precipitator Hopper Vacuum work. Dry Vac the duct from the SDA Outlet to the Fabric Filter Inlets and designated areas Hydroblast clean bottom ash system lines
4/27/2020	Dry Vac Precipitator Outlet duct and designated areas. Wet vac under SDA hopper for SDA wash and swirler vane wash. Hydroblast SDA swirler vanes and Slaking system tanks and chutes.
4/28/2020	Rod out and dry vac the Finishing Superheat section of the boiler tubes. Wet vac support on hydroblast work. Hydroblast Settling tank, Surge Tank, Blowdown Tank, drains and lines Hydroblast work to be completed and equipment torn down and all lockout/tag outs and confined space entry permits cleared by the end of the day shift 4/28/2020. All vacuum work to be completed and equipment torn down for demobilization and all lockout/tag outs and confined space entry permits cleared by the end of the day shift 4/28/2020.
4/29/2020-4/30/2020	Set up and perform Air Heater Wash and Rinse on a double shift basis with completion and teardown for demobilization by end of the day shift 4/30/2020.
5/1/2020	Work by Others

To accomplish all vacuum work in the time available, two (2) vacuum trucks will be required, working simultaneously during the outage from 4/25/2020 – 4/28/2020, on the 12 hour day shifts only, for a total of forty eight (48) vacuum crew/equipment service hours on each of the two trucks.

To accomplish all hydro blasting work in the time available, contractor will use one of the two (2) pump systems at any given time, depending on requirements, during the outage from 4/25/2020 through 4/28/2020, on the 12 hour day shifts only, for a total of forty-eight (48) Hydro crew/equipment service hours.

To accomplish Air Heater cleaning work in the time available, contractor will use one of the two (2) pump systems and Air heater Cleaning equipment during the outage from 7am 4/29/2020 through 7pm 4/30/2020, on the 12 hour day and night shifts, for a total of thirty-six (36) Hydro crew/equipment service hours.

SAFETY: The Contractor is an Independent Contractor required to follow their OSHA regulations for work in areas that are contaminated with fly ash and for areas that may be considered as confined spaces. NOTE: All contractors must submit **with the bid** a copy of their OSHA compliant Confined Space Procedure and Respiratory Protection Procedure. The Contractor will be required to provide proof that workers have successfully completed respiratory fit testing and pulmonary function testing and have been trained for confined space entry.

The Contractor shall be responsible for compliance with all safety practices as required by the regulatory agencies governing the Contractor's operations as well as any and all safety requirements of the Contractor's

organization and shall submit historical evidence of such compliance. All personnel working on site will be required to participate in the plant's safety orientation prior to performing any work on site at PGS.

The plant has an equipment lockout/tag out procedure to prevent the unauthorized starting of motors and the unauthorized movement of valves and dampers. The Contractor is required to use the procedure and add its own locks/tags on top of the plant lock/tags if required. *Removal of plant locks/tags is not allowed and is cause for removal from the plant site.*

OWNER PROVISIONS: Platte Generating Station (PGS) will provide:

- An owner's designated representative for on-site coordination with PGS.
- Safety orientation for all contractor employees as related to PGS site safety considerations.
- Dumpsters for trash and debris.
- Portable toilet facilities with hand wash stations.
- Potable water source for contractor's drinking water containers.
- Designated contractor parking on site.
- Electrical service connections for job trailers and equipment.
- The bottom ash system will be open and inspected by plant personnel for contractor to clean.

SITE ENTRY: There is no separate contractor entrance at the Platte Generating Station. There is one gate with a card access security system and the Contractor may request to use access cards to gain entry rather than request entry and exit each trip. There is a $25.00 charge for all access cards that are not returned.

SERVICE RATES: The Contractor **shall include in the Bid**:

Air Heater Wash

A firm, lump sum fixed price for air heater cleaning services including any and all costs associated with the air heater water blast services portion of the work including, but not limited to, all expenses, equipment, travel and mileage, per diems, labor, mobilization and demobilization, setup and teardown of equipment, subcontractors, tooling and sundries.

Vacuum

A lump sum, time and material, not to exceed price for two (2) vacuum trucks working simultaneously for forty eight (48) service hours each including any and all costs associated with the Vacuum Cleaning Services portion of the work including, but not limited to, all expenses, equipment, travel and mileage, per diems, labor, mobilization and demobilization, subcontractors, set up and tear down of equipment, supplies and sundries. Daily Time Sheets and job logs must be completed to accurately document the service hours. Separate T&M costs shall be provided that represents the variable cost adjustment for more or fewer service hours from the base 48 hours.

Hydro blasting

A lump sum, time and material, not to exceed price based on forty eight service (48) hours of all inclusive water blasting services including any and all costs associated with the High Pressure water blast cleaning and line cleaning portion of the work including, but not limited to, all expenses, equipment, travel and mileage, per diems, labor, mobilization and demobilization, subcontractors, supplies and sundries. Daily Time Sheets and job logs must be completed to accurately document the service hours. Separate T&M costs shall be provided that represents the variable cost adjustment for more or fewer service hours from the base 48 hours.

Bid Detail Submittal

In addition, the bidder shall submit separate detailed breakdowns of the individual bid amounts in the same format as will be used for daily time sheets and ultimately for final billing. The bidder may use the attached spreadsheet format or their own comparable format for the bid detail submittal.

The Air Heater Wash is a firm bid and will not be adjusted for final billing other than for delays caused by the owner.

Mobilization and demobilization charges for the vacuum and hydroblast services as submitted with the bid detail will be considered firm and will not be adjusted for final billing.

No adjustments will be made for personnel downtime, or equipment downtime resulting from the contractors own scheduling of personnel and equipment, breakdowns or servicing of equipment.

No adjustments will be made for additional labor, equipment or expenses incurred in the performance of the specified base scope of work as submitted in the bid detail.

T&M Rates

The Bid shall also include, as a separate T&M rate attachment, firm unit pricing for all labor, equipment, sundries **and expenses reflecting the charges to be used in billing the T&M portions of the work as well as for making any** adjustments that may be required for new work scope additions, additional services other than what is required in this specification or reductions in the same.

Terms and Conditions

Provide all other proposed terms and conditions which will be in effect during the performance of the work as a separate attachment **with the bid**. Any exceptions the bidder wishes to take regarding the Owners specifications and contract documents must be submitted **with the bid**, and noted on the Bid Data Form.

Time is of the essence in the evaluation of proposals, the execution of contract documents and/or issuance of a Purchase Order for the execution of the work. Submittal of proposals that include terms and conditions unacceptable to the Owner, or that lack the information and clarity required by these specifications may be subject to rejection at the sole discretion of the Owner.

A single contract will be awarded for all work included in this specification.

Time and Material Accounting

Contractor shall be required to maintain accurate job logs and daily time sheets detailing all work performed and expenses incurred **in the same format as the bid detail submittal**. Daily time sheets shall identify all individuals by name, craft and all hours worked on each portion of the work. Such job logs and time sheets shall accurately account for all man-hours with clear separation and identification of Time, Equipment and Material as required accounting for the actual Vacuum and Hydro-blasting service hours and expenses.

The timesheets/logs shall clearly detail the specific work that was accomplished during the shift. These sheets will be presented to the Owner's representative on a daily basis for review with the Contractor. The Owners representative will sign these documents as a record of receipt and review only. Any corrections that need to be made to such signed documents shall be implemented upon the discovery of the error and both parties shall initial the change made on the form. These records will then serve as record of the work performed and a basis for determining the final billing.

The Platte Generating Station is NOT tax exempt and is subject to 7.5% sales tax. See the Nebraska Department of Revenue web site at www.revenue.state.ne.us for contractor's tax information.

PERFORMANCE AND PAYMENT BONDS: The successful Bidder shall file with the OWNER Performance and Payment Bonds in the full amount (100 percent) of the Contract price, as security for the faithful performance of the Contract and the payment of all persons supplying labor and materials for the Work under this Contract, and to cover all guarantees against defective workmanship or materials, or both, for a period of 1 year after the date of final acceptance of the Work by the OWNER. The Surety furnishing these bonds shall have a record of service satisfactory to the OWNER, be authorized to do business in the State where the OWNER's project is located and shall be named on the current list of approved Surety Companies, acceptable on Federal bonds as published by the Audit Staff, Bureau of Accounts, U.S. Treasury Department.

The Attorney-in-Fact (Resident Agent) who executes these bonds on behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond.

INSURANCE: The Contractor shall comply with the attached City's insurance requirements.

CONTACT: Questions regarding this specification may be directed to Darrell Dorsey at the Platte Generating Station, telephone (308) 385-5492.

DRAWINGS & SITE INFORMATION: A selection of various drawings have been provided with the bid package for reference only. Additional drawings are available for review at Platte Generating Station office. The Contractor is responsible for making such pre-bid site visits as required to obtain additional details for bidding and execution of the work and for clarification of any questions or concerns the bidder may have related to the work scope and site conditions.

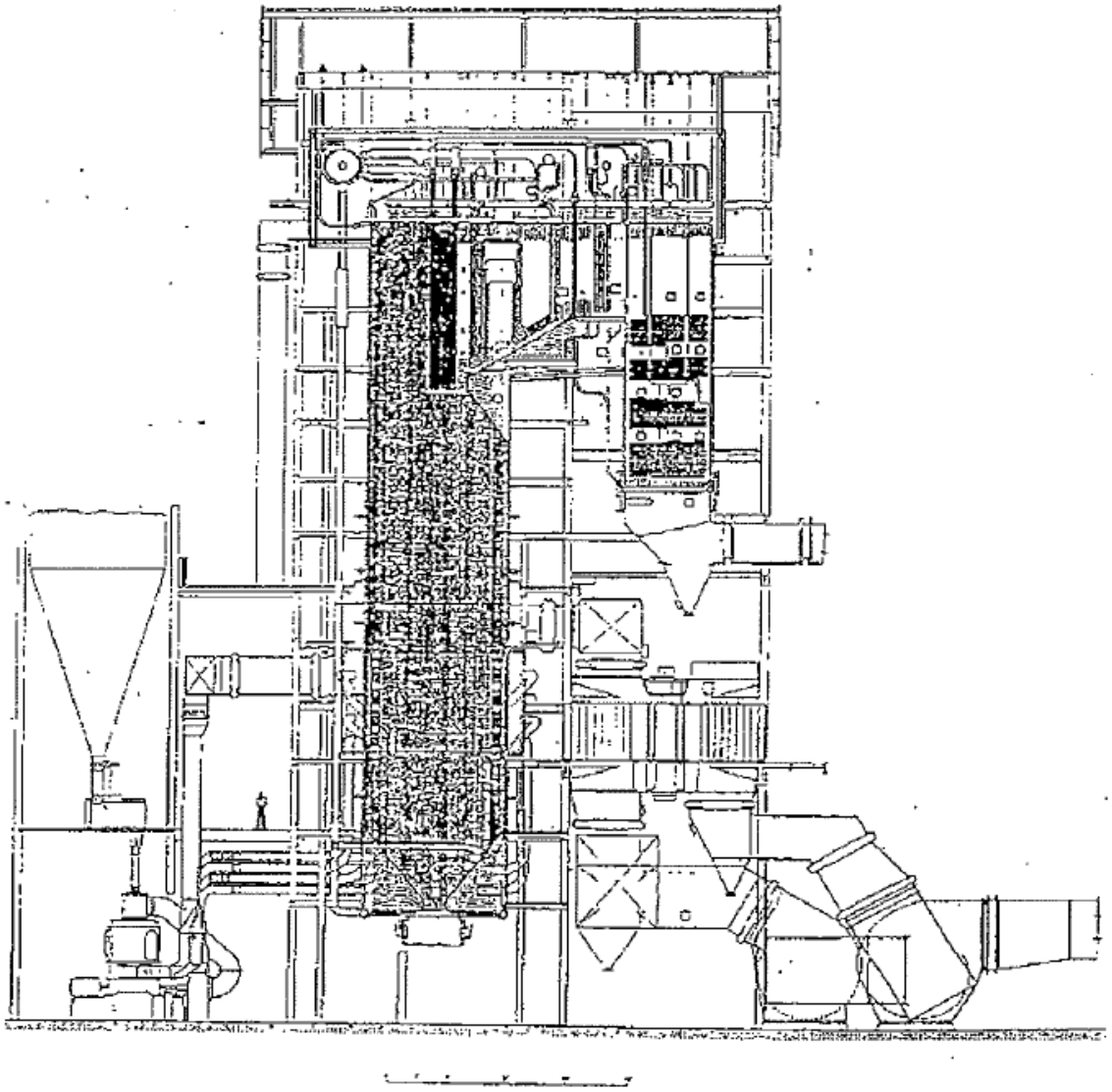
ATTACHMENTS:

Figure 1	56-107 Inlet	56-109 Outlet
51-001 Boiler Side View	51-251 Air Heater GA	51-1199 Air Heater Rotor Assy
SDA Inlet Duct	SDA Inlet Elevation	SDA Outlet to FF
SDA To FF	FF Inlet	2020 detail bid_timesheet data

Grand Island Utilities Department Platte Generating Station

Figure #1

Drawing No. 40-195 Cont. 13477



MINIMUM INSURANCE REQUIREMENTS
CITY OF GRAND ISLAND, NEBRASKA

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the Bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve Bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation	Statutory Limits
Employers Liability	$100,000 each accident
	$100,000 each employee
	$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$ 500,000 Combined Single Limit

3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$ 500,000 each occurrence
	$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage	$1,000,000 each occurrence
	$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

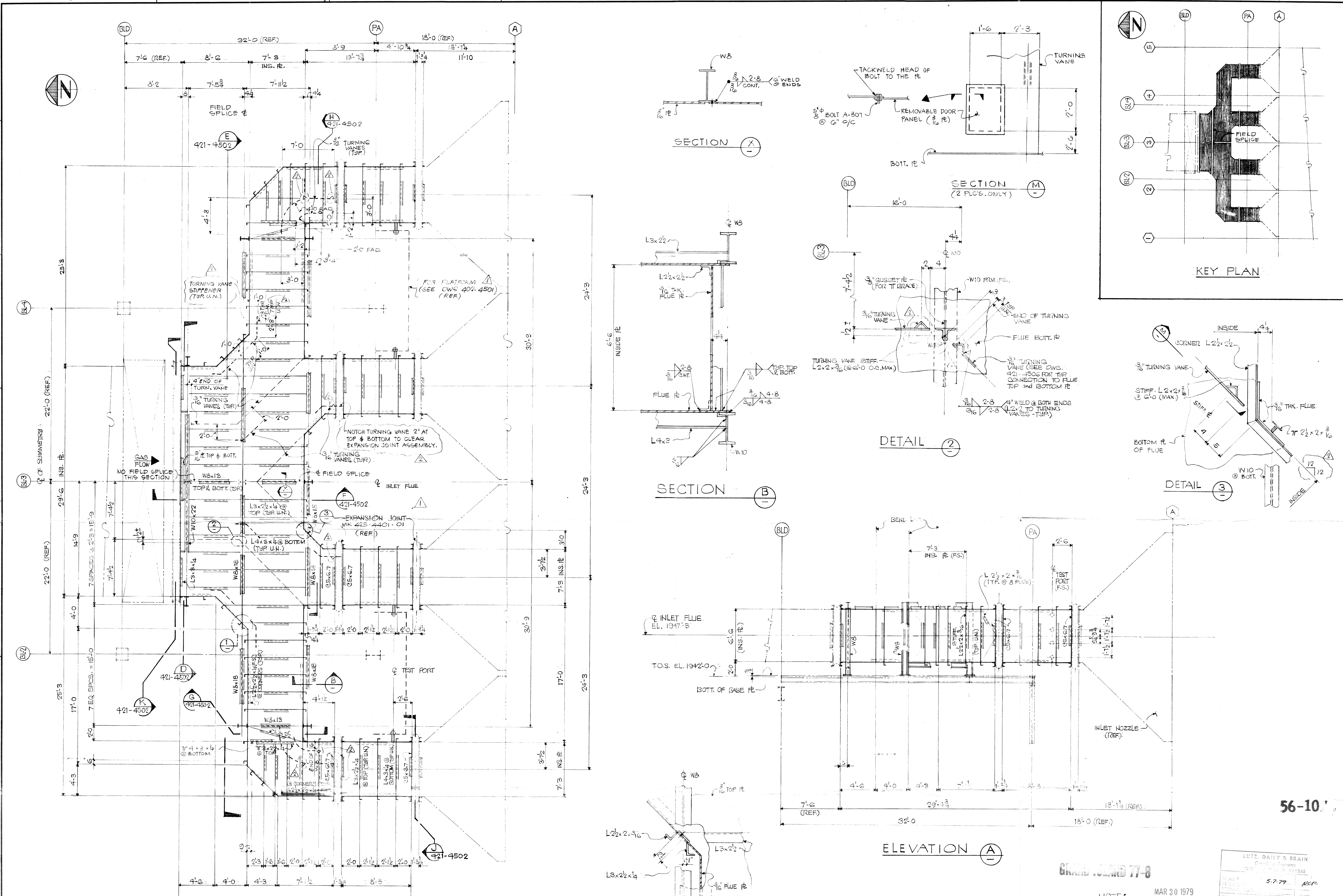
The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract**. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Bidder cannot have the "endeavor to" language stricken, the Bidder may elect to provide a new certificate of insurance every thirty (30) days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.**



4. FOR BASE PLATE DETAILS AND LOCATIONS SEE DWG. 421-4503.

NOTE:

1. FOR GENERAL NOTES SEE DWG. 421-4506.
2. ALL SECTIONS FROM FIELD SPLICE TO FIELD SPLICE SHALL BE SHOP ASSEMBLED. SECTIONS SHALL BE ADEQUATELY BRACED AND SUPPORTED BY THE FABRICATOR FOR SHIPPING AND ERECTION.
3. SEE KEY PLAN FOR SECTIONS TO BE SHOP ASSEMBLED.

GRAND ISLAND 77-8

MAR 30 1979

56-10

LUTZ, DAILY & BRAIN Consulting Engineers 5-7-79 NCF

*Approved for Compliance with Engineers Plans and Specifications. Approval does not void any part of contract or guarantee data or quantities or dimensions.

REV.	DATE	PURPOSE OF ISSUE	APP	APP	APP
0	1-19-79	FOR CUSTOMER APPROVAL	DCE		
A		FOR BID ONLY	ALS		

DRAWING RELEASE RECORD

REV.	DATE	REVISED BY	CKD. BY	ENG. APP.	DESCRIPTION
1	2-27-79	RV	DCE	DCE	INDICATED PLATF DWG REF. & EXP JT. MK.(REF.)
2	3-23-79	CS	DCE	DCE	ADDED TURNING VANE STIFF'R. & AS MARKED 2

DRAWN BY	R.V.NICOLAS	7-20-78
ENGINEER	AL, S. / DCE	1-17-79
CHECKED BY	NO	11-29-78
CHIEF ENG.	FBA	3/8/79
PROJ. ENG.		

WESTERN PRECIPITATION DIVISION
JOY MANUFACTURING COMPANY
LOS ANGELES, CALIF. U.S.A.
MONTREAL LONDON SYDNEY JOHANNESBURG

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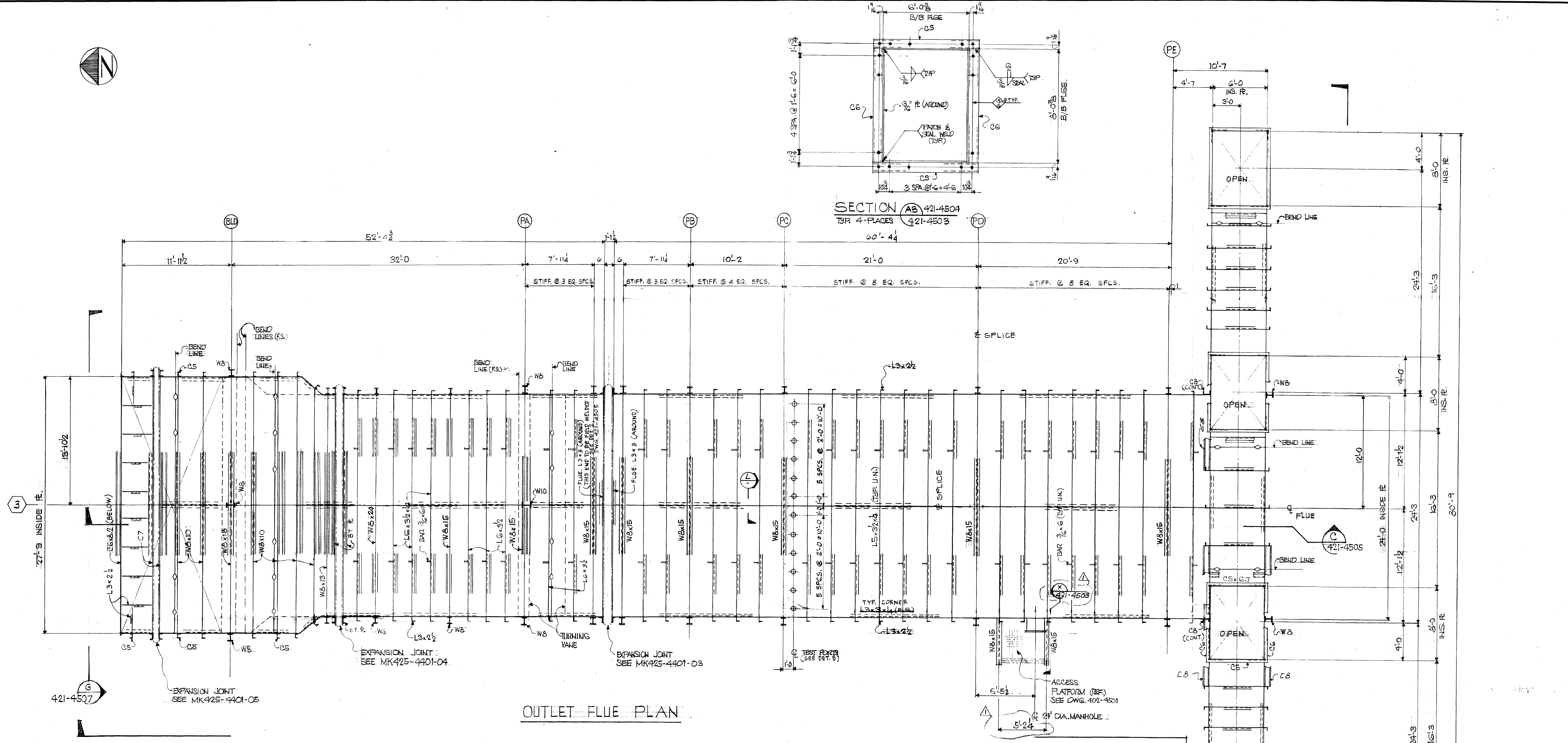
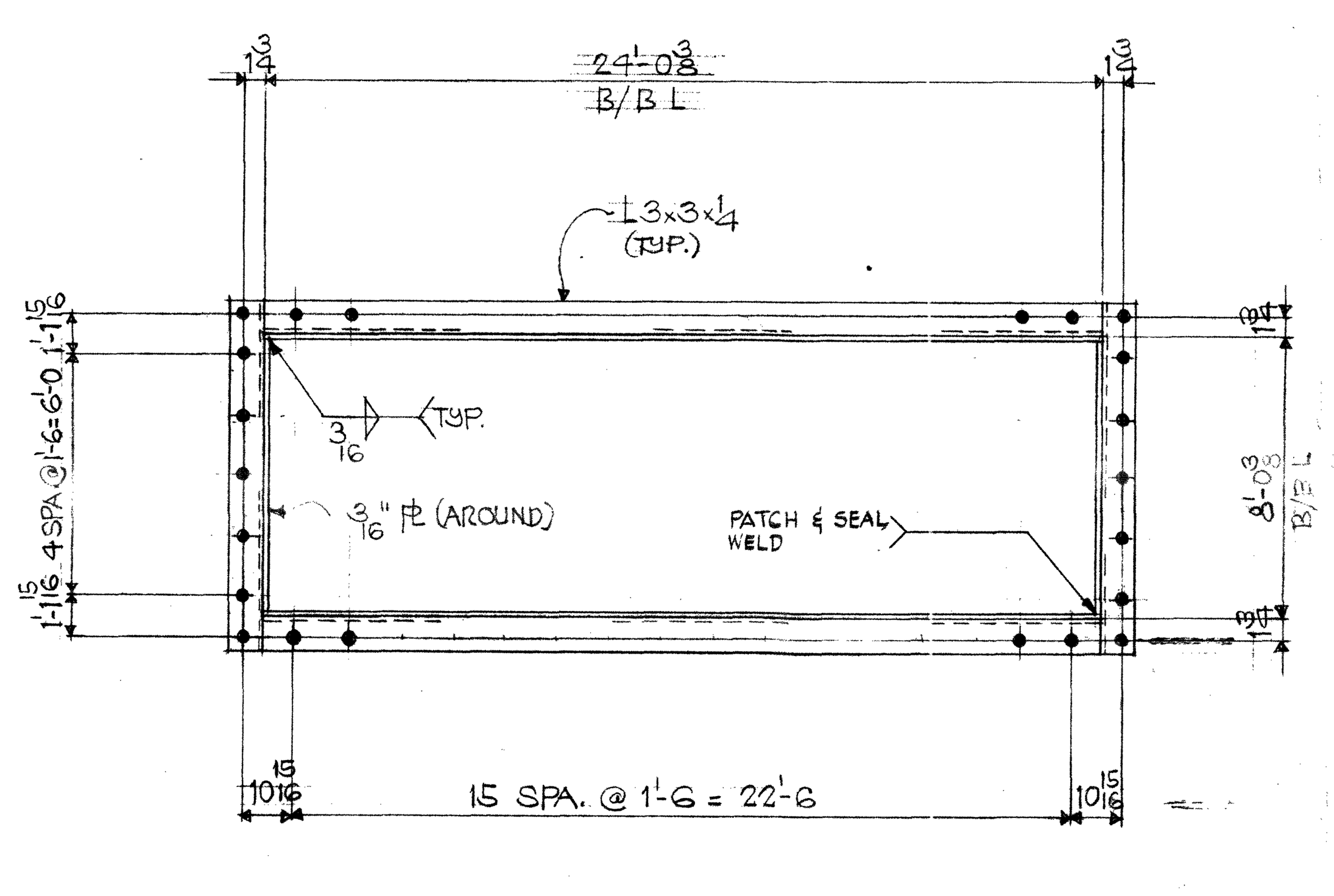
LUTZ, DAILY and BRAIN
CITY OF GRAND ISLAND, NEBRASKA
PLATTE GENERATING STATION
INLET FLUE ASSY.
PLAN, SECT., DETAIL and ELEV.

SCALE: NONE
CONTRACT NO.: 0-78-005-17
DRAWING NO.: 421-4501
REV. 2

10/77 DIETERICH-POST 6531-B

Page 26 of 38





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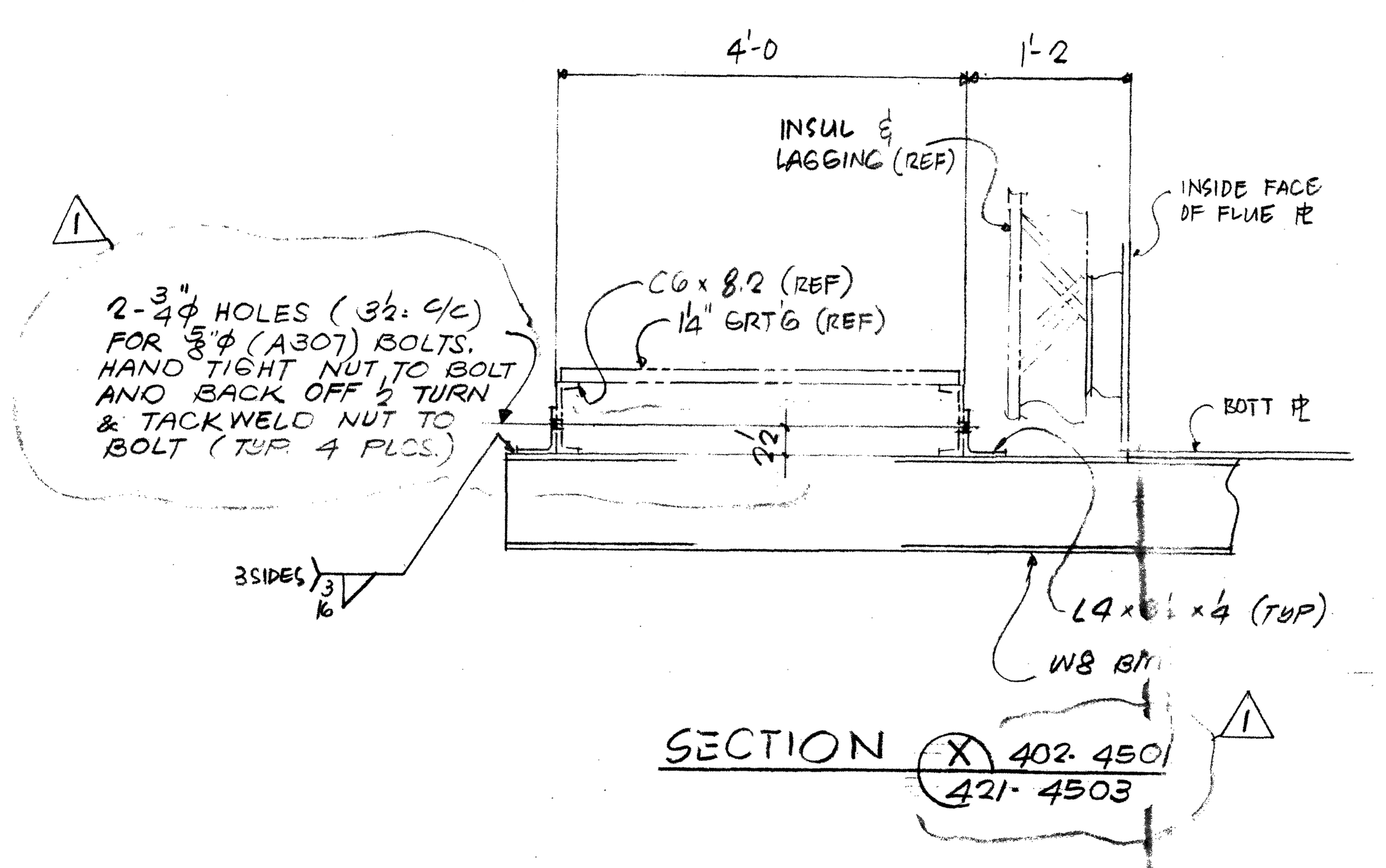

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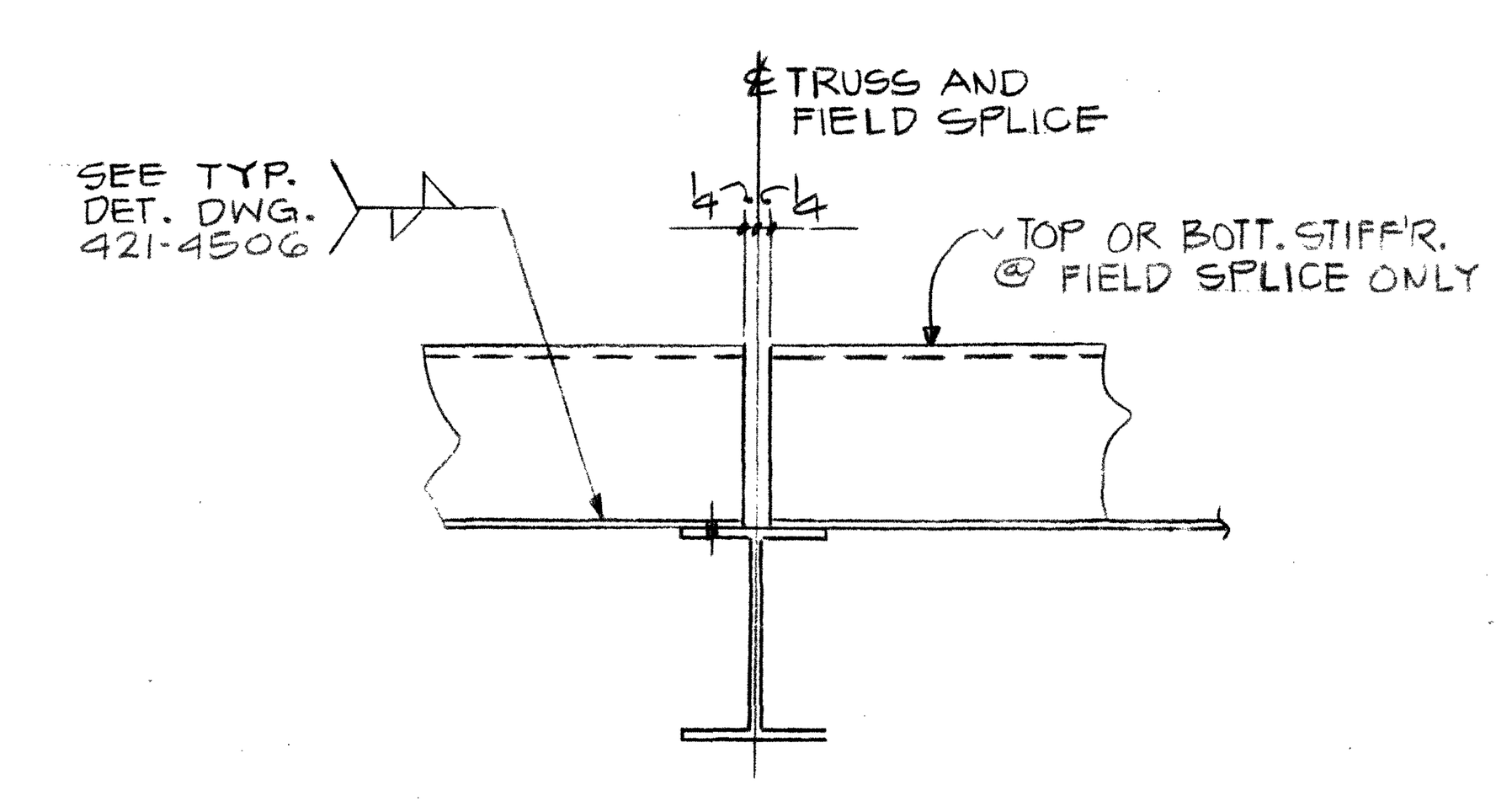

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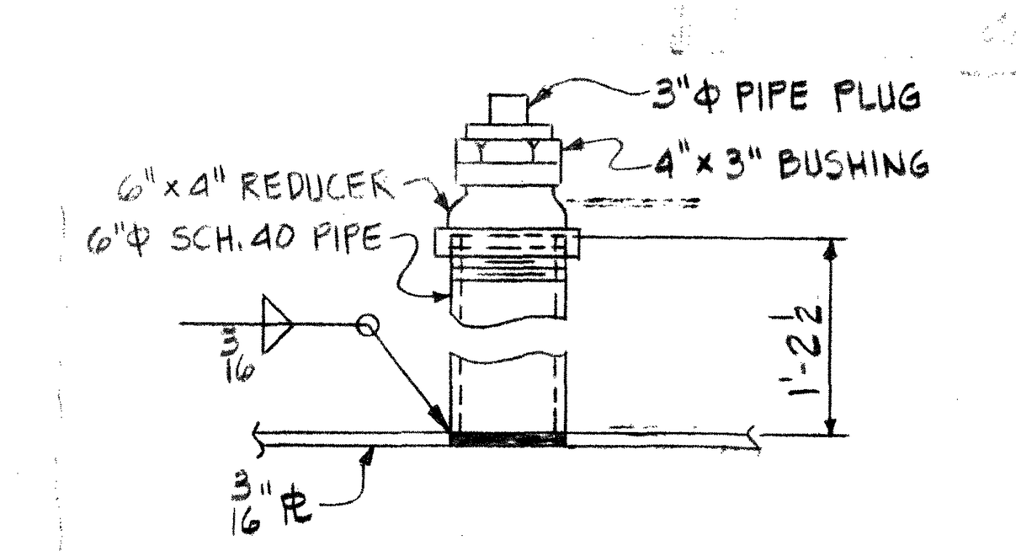


DETAIL 5

56-109

LUTZ, DAILY & BRAIN
Consulting Engineers
SHAWNEE ... KANSAS
APPROVED *
APPROVED AS NOTED
RETURNED FOR CORRECTION
4-26-79 BY ICZ
* Approved for Compliance with Engineers Plans and Specifications. Approval does not void any part of contract or guarantee detailed quantities or dimensions.

NOTE:

1. FOR GENERAL NOTES & TYPICAL DETAILS OF FLUE SEE DWG. 421-4506.
2. FOR BASE PLATE DETAILS SEE DWG. 421-4509.

GRAND ISLAND 77-8

MAR 22 1979

REV.	DATE	PURPOSE OF ISSUE	APP	APP	APP
0	1-19-79	FOR CUSTOMER APPROVAL	DCE		
		FOR BID ONLY	AL. S.		

DRAWING RELEASE RECORD

REV.	DATE	REVISED BY	CKD. BY	ENG. APP.	DESCRIPTION
1	2-27-79	RV.	DCE	DCE	REV'D SECT. "X" AS SHN. & CHG'D. DIM. 5'-2 TO 5'-2 1/4

DRAWN BY	R.V. NICOLAS	11-21-78
ENGINEER	AL. S. / DCE	1-17-79
CHECKED BY	NO	12-29-78
CHIEF ENG.	J.H.A.	3/8/79
PROJ. ENG.		

WESTERN PRECIPITATION DIVISION
JOY MANUFACTURING COMPANY
LOS ANGELES, CALIF. U.S.A.
MONTREAL LONDON SYDNEY JOHANNESBURG

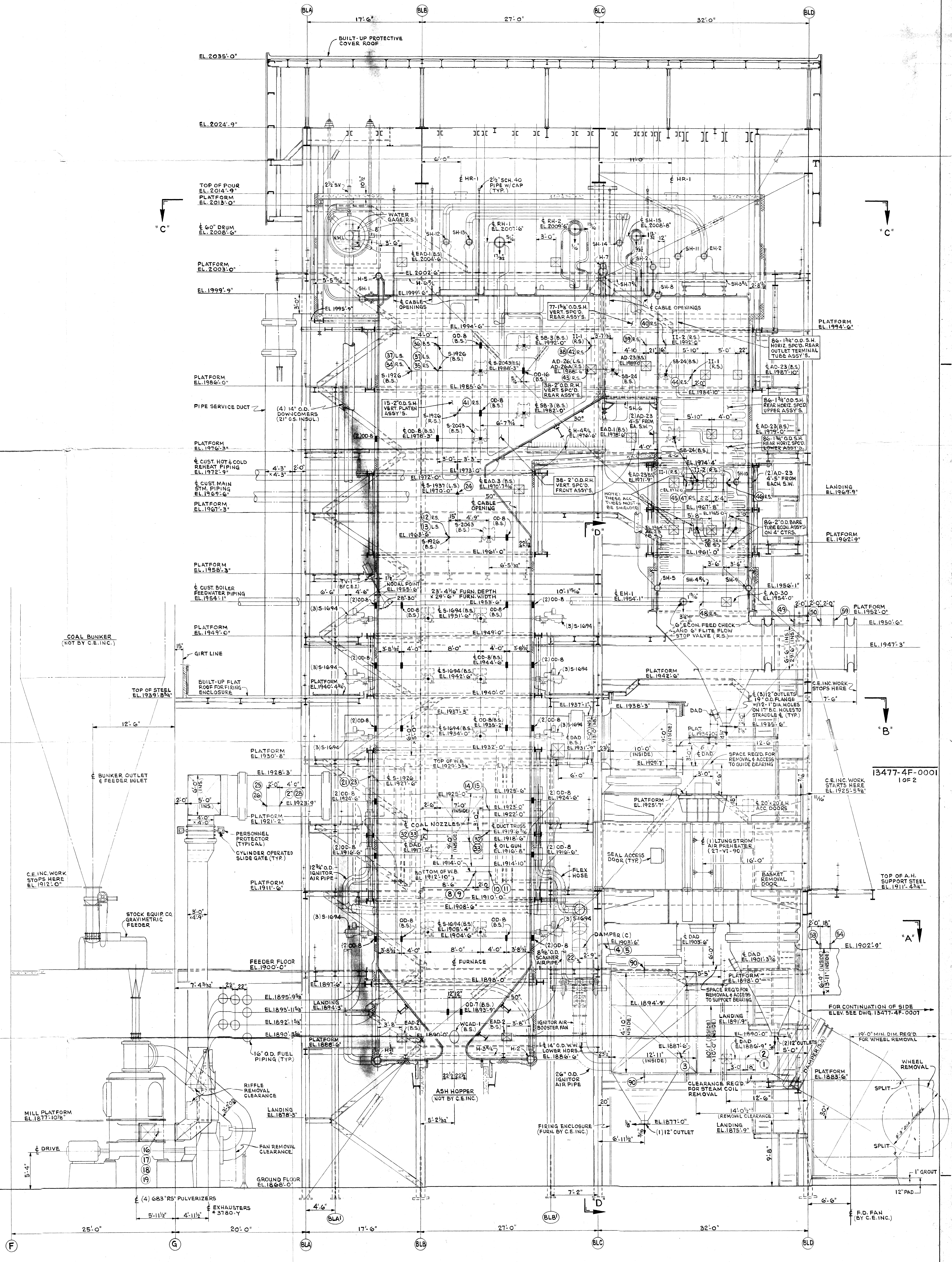
LUTZ, DAILY and BRAIN
CITY OF GRAND ISLAND, NEBRASKA
PLATTE GENERATING STATION
OUTLET FLUE ASSY.
PLAN, SECTIONS and DETAILS

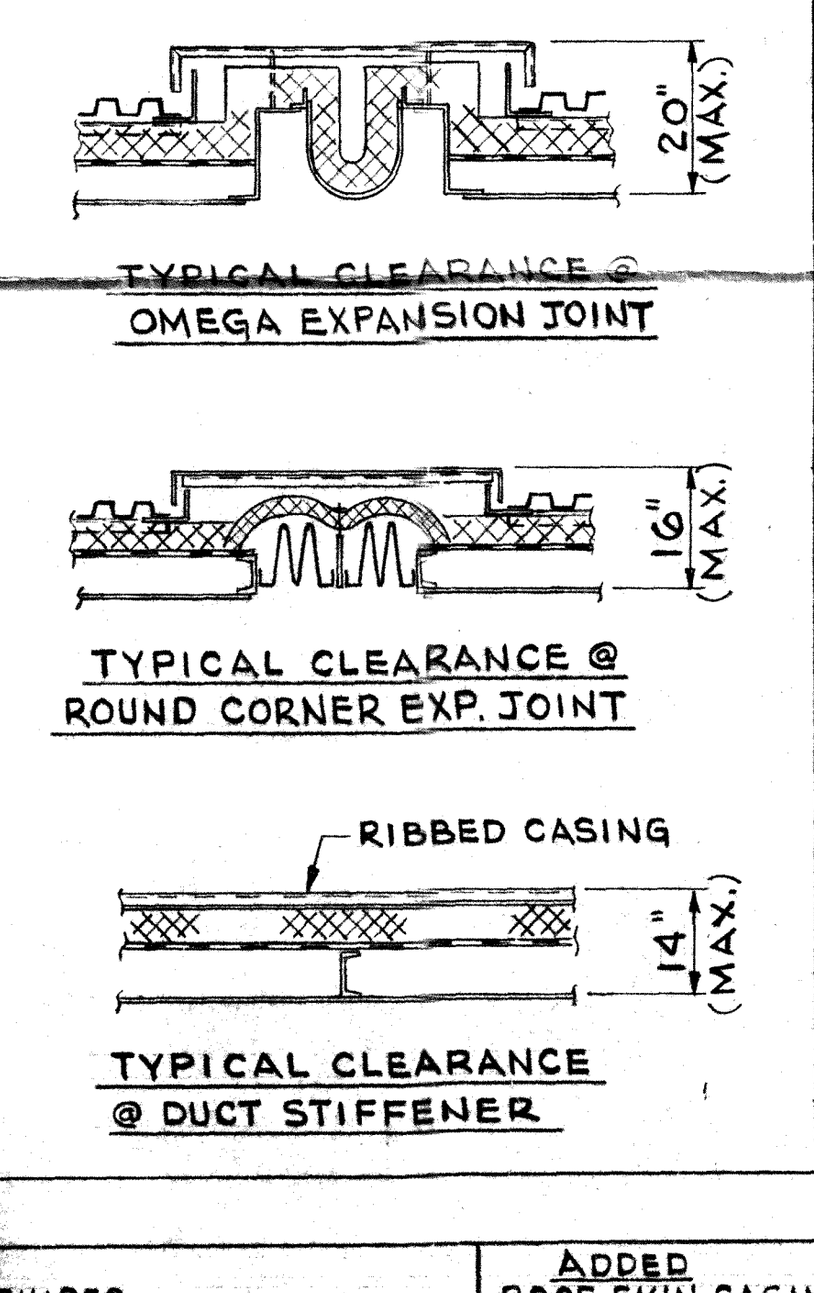
SCALE: NONE
CONTRACT NO.: 0-78-005-17
DRAWING NO.: 421-4503
REV.: 1

APR 9 ... 1979

10/77 DIETERICH-POST 6531-B

13477-4F-0001
2 OF 2





LEGEND OF HEADER MARK NUMBERS

MARK NO	DESCRIPTION
EH-1	12¾" O.D. ECON. INLET HDR.
EH-2	10¾" O.D. ECON. OUTLET HDR.
H-1	14" O.D. FURN. LOWER FRONT HDR.
H-2	14" O.D. FURN. LOWER REAR HDR.
H-3R/L	14" O.D. FURN. LOWER SIDE HDRS.
H-4R/L	8⅝" O.D. FURN. EXT. SIDE INLET HDRS.
H-5	10¾" O.D. FURN. UPPER FRONT HDR.
H-6R/L	10¾" O.D. FURN. UPPER SIDE HDRS.
H-7	10¾" O.D. FURN. REAR OUTLET HDR.
SH-1	10¾" O.D. BACKPASS @ ROOF INLET HDR.
SH-2	10¾" O.D. BACKPASS @ ROOF OUTLET HDR.
SH-3R/L	10¾" O.D. BACKPASS SIDE INLET HDRS.
SH-4R/L	10¾" O.D. BACKPASS SIDE OUTLET HDRS.
SH-5	10¾" O.D. BACKPASS FRONT INLET HDR.
SH-6	10¾" O.D. BACKPASS EXT. FLOOR INLET HDR.
SH-7R/L	10¾" O.D. BACKPASS EXT. SIDE OUTLET HDR.
SH-8	10¾" O.D. BACKPASS FRONT JUNCTION HDR.
SH-9	10¾" O.D. BACKPASS REAR OUTLET HDR.
SH-10	10¾" O.D. S.H. HORIZ. SP'CD. INLET HDR.
SH-11	12¾" O.D. S.H. VERT. SP'CD. REAR OUTLET HDR.
SH-12	10¾" O.D. S.H. VERT. PLATEN INLET HDR.
SH-13	12¾" O.D. S.H. VERT. PLATEN OUTLET HDR.
SH-14	12¾" O.D. S.H. VERT. SP'CD. FRONT INLET HDR.
SH-15	18" O.D. S.H. VERT. SP'CD. FRONT OUTLET HDR.
RH-1	18" O.D. R.H. VERT. SP'CD. INLET HDR.
RH-2	24" O.D. R.H. VERT. SP'CD. OUTLET HDR.

LEGEND OF SETTING NUMBERS FOR DOORS, SOOT BLOWERS AND INSTRUMENT INSERTS

S-1694	WALL BLOWER
S-2043	RETRACT. SOOT BLOWER
SB-3 & 24	" " "
SB-24A	HALF TRACT SOOT BLOWER
S-1937	TEMPERATURE PROBE
WCAD-1	16"x23½" WATER COOLED ACCESS DOOR
OD-7 & 8	4"x10" OBSERVATION DOOR
OD-16	" " "
EAD-1,2 & 3	18"x16" ENCLOSURE ACCESS DOOR
AD-23,26 & 30	18"x16" ACCESS DOOR
AD-26A	" " " " W/ INSTR. INSERT
DAD	DUCT ACCESS DOOR
HR-1	HEAT REMOVAL DOOR (18"x16")
TV-1	T.V. CAMERA
S-1926	INSTRUMENT INSERT
II-1 & 2	" "

NOTE: ALL DIMENSIONS SHOWN ON GENERAL ARR'G'T. DWGS. INDICATE COLD POSITION.

LUTZ, DAILY & BRAIN Consulting Engineers SHAWNEE MISSION, KANSAS

JUL 6 1983

UNIT DESCRIPTION

ONE (1) 100 MW RADIANT REHEAT, BALANCED DRAFT, OUTDOOR UTILITY UNIT.
FUSION WELDED FURNACE WALLS (2½" O.D. TUBES ON 3" CENTERS)
FIN WELDED FURNACE EXT. SIDE TUBES (2½" O.D. TUBES ON 5" CENTERS)
FIN WELDED BACKPASS SIDE TUBES (1¾" O.D. TUBES ON 4" CENTERS)
FIN WELDED BACKPASS REAR TUBES (1¾" O.D. TUBES ON 4" CENTERS)
RIBBED ALUMINUM OUTER CASING
STRUCTURAL STEEL BY C.E. INC.
FUEL: PULVERIZED COAL
SEISMIC DESIGN: U.B.C. ZONE #1
WIND LOAD: U.B.C. 30 P.S.F. ZONE

REVISIONS

5 7-11-80 R.H. CARROLL J.P.O.
ADDED: BUCKSTAY LEVELING GUIDES @ EL. 1910'-0", 1919'-6 3/16", 1961'-0", & 1967'-8".

6 6-1-83 R.H.C. EH
ADDED: RET. SOOT BLOWER SB-24 @ 1972'-0". HALF TRACT SOOT BLOWER SB-24A @ 1965'-0". NOTE TO SHIELD ACC. TUBES IN ECON. @ S.B. LOC.
REVISED: LOC. OF INST. CONNS 45 & 47 @ 1971'-9".
REMOVED: ACC. DOOR AD-23 @ 1964'-9".

2 (CONT'D.)
ADDED: STEAM COIL REMOVAL CLR. DIM. COAL BUNKER (NOT BY C.E. INC.) RIFFLE REMOVAL CLR. EXHAUSTER FAN REMOVAL CLR. MIN. DIM. REQ'D. FOR F.D. FAN WHEEL REM'V'L. DAD @ EL. 1929'-7" IN H.A. CROSSOVER PLATFORM @ EL. 1925'-7" AD-9 @ EL. 1970'-7 3/16"
ADDED: PIPE DUCT. DRUM HANGER RODS. PRESS. PARTS SUPPORT LEVEL. DIM. FOR FIRING ENCLR. IGNITORS. EXP. @ ALL HOPPER OUTLETS. COUTANT BOTTOM SUPPORTS
DELETED: A.H. ACC. DOOR @ AIR OUTLET. EAD-1 @ EL. 1969'-0"

3 E.H. 11-17-78
REVISED: DIM. FROM ¢ FRONT WALL TO ¢ EAD-1. LOC. OF AD-9 @ EL. 1970'-7 3/16". ECON. INLET FEED STOP & CHECK VALVES AD-9 TO EAD-3 @ EL. 1970'-7 3/16". INSIDE RADIUS FOR GAS DUCT LEAVING ECON. DOOR @ EL. 1954'-0" FROM DAD TO AD-30. TYPICAL DUCT CLEARANCE DETAILS
ADDED: BUCKSTAY LEVELING GUIDES. FURNACE BOTTOM SEALS & SHIELDS. FURNACE REAR ARCH BUCKSTAYS. FURNACE REAR ARCH SKIN CASING. WATER GAGE. REF. DWG. NO FOR INSTR. CONN. LEGEND. INSTRUMENT CONNECTIONS. DESCRIPTION NOTES FOR S.H., R.H. & ECON. ASSY'S.
ADDED: ROOF SKIN CASING STEEL. AD-9 & AD-9A @ EL. 1988'-6"
CORRECTED: EL. OF AD-23 FROM 1978'-10" TO 1987'-10"

4 E.H. 3-30-79 J.N.O.
REVISED: EL. OF DAD FROM 1901'-0" TO 1901'-3 7/16". FIRING ENCLOSURE ROOF
ADDED: IGNITOR AND SCANNER AIR FANS & PIPING. INST. CONNS. # 20, 22, 30, 31 & 90. PROTECTIVE COVER ROOF. FURNACE GUIDES. CUST. BLR. FEED, MAIN STM, HOT & COLD RH PIPING

1 E.H. 6-2-78
REVISED: GROUND FLOOR ELEV. FROM 1860'-0" TO 1868'-0". DIM. FROM GROUND TO ¢ W.W. LOWER HDRS. & ALL ELEVS. ACCORDINGLY. SIZE OF STEAM AIR HEATER. ELEV. & LOC. OF H.A. DUCT TO PULV. BUCKSTAYS & BROUGHT UP TO DATE. PRESS. PARTS & BROUGHT UP TO DATE. ELEV. OF EXT. ARCH FLOOR. SETTING NO'S FOR DOORS & SOOT BL'W'RS. AND BROUGHT UP TO DATE
REVISED: DOOR & SOOT BLOWER LOC. IN BACK-PASS SIDEWALLS. EL. OF S-1694 FROM 1906'-10" TO 1905'-4". EL. OF OD-8 FROM 1906'-0" TO 1904'-6". UNIT DESCRIPTION NOTE & LEGEND OF HDR. MK. NO'S. ENCLOSURE IN DRUM AREA. GAS DUCT TO I.D. FAN. F.D. FAN PER CERT. PRINT FROM GREEN FAN CO. LOCATION OF EXHAUSTERS
ADDED: COLUMN DESIGNATIONS. ADDITIONAL OD-8'S IN UPPER FURN. AREA. OD-16 @ EL. 1988'-3". TURNING VANES IN DUCTS PER MK'D. PRINTS FROM PERF DESIGN. MILL PLATFORM @ EL. 1877'-10⅛". FEEDERS. FUEL PIPING. A.H. ACCESS DOORS
ADDED: DAD'S @ EL. 1903'-6" & 1901'-0". EAD-1'S @ EL. 1969'-0". TIE DOWN DIM'S. FOR HOPPER OUTLETS. COLUMNS BLA' & BLB'. DUCT TO PULVERIZER

2 E.H. 8-18-78 J.N.O.
REVISED: EL. OF DAD FROM 1929'-9" TO 1931'-9". DOOR & S.B. LOCATIONS IN EXT. & B.P. SIDEWALLS. EL. OF ROOF ENCLR. FLOOR. BUCKSTAY EL. FROM 1985'-0" TO 1985'-6". BUCKSTAY EL. FROM 1920'-11 13/16" TO 1919'-6 3/16". ROOF ENCLR. PERIMETER DIM'S. EL. OF RH-2 & SH-15. DUCT @ PULVERIZER INLET

REFERENCE DRAWINGS

GENERAL ARR'G'T. - PLAN "A-A"	13477-4E-0002
" " " "B-B"	13477-4E-0003
" " " "C-C"	13477-4E-0004
" " FRONT	13477-4F-0005
" " ELEV. "D-D"	13477-4E-0006
" " PARTIAL SIDE	13477-4F-0007
" " INSTR. CONN LEGEND	13477-4D-0016
PRESS. PARTS ARR'G'T. - UPPER SIDE ELEV.	13477-4F-0100
" " " - LOWER " "	13477-4E-0101
VALVE LIST	13477-4D-0300
P.P. CONN. LOC. & EXP. DIAGRAM (SH. #1)	13477-4E-0303
" " " " " (SH. #2)	13477-4E-0304

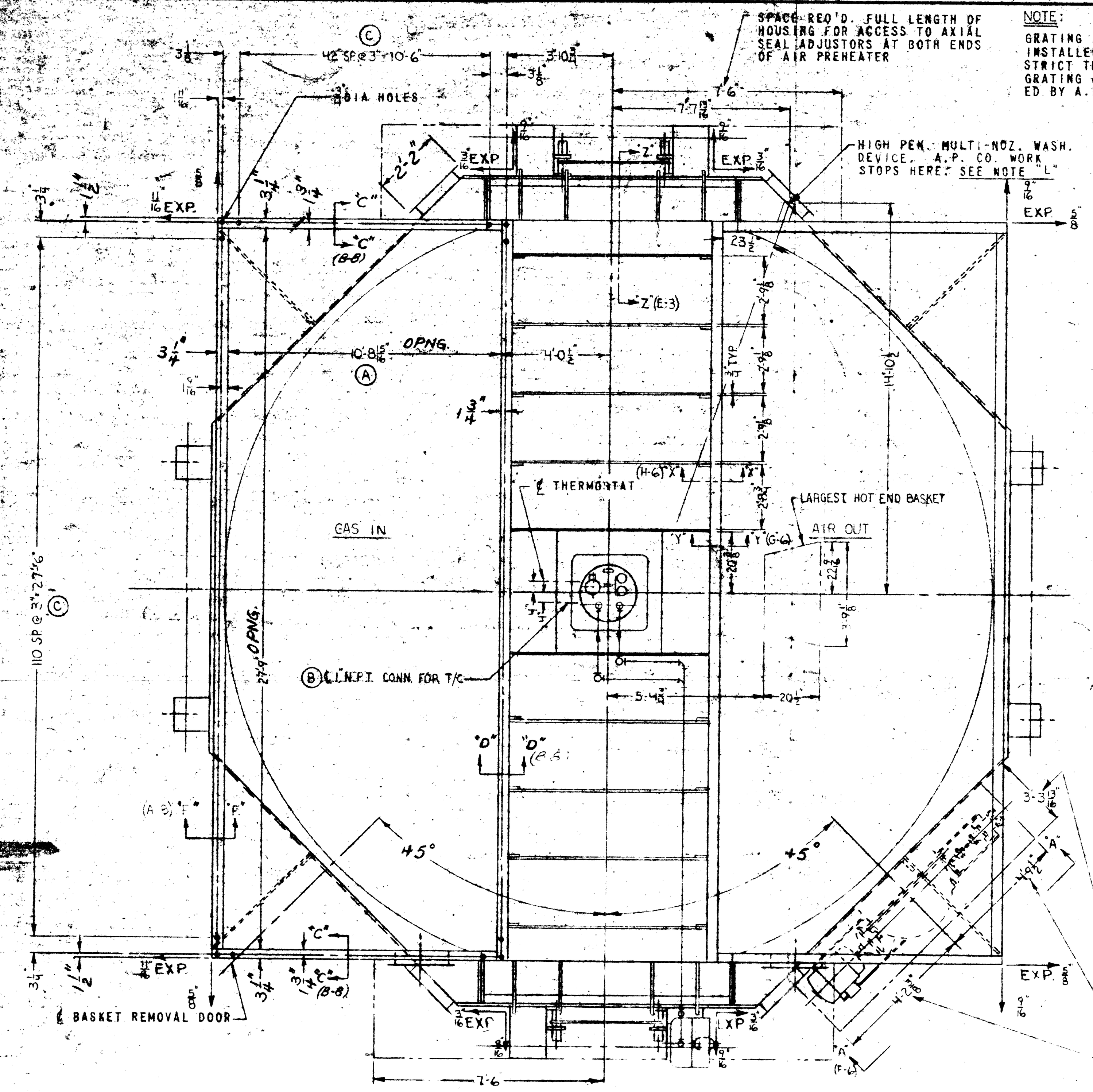
LUTZ, DAILY & BRAIN - CONT. NO 77-8-2

GENERAL ARRANGEMENT - SIDE
FOR **CITY OF GRAND ISLAND**
PLATTE GENERATING STATION, UNIT #1
GRAND ISLAND, NEBRASKA

SCALE ¼" = 1'-0" DATE 3-21-78
DRAWN BY ED HOWARD CHECKED BY BSH 3-21-78
TRACED BY APPROVED

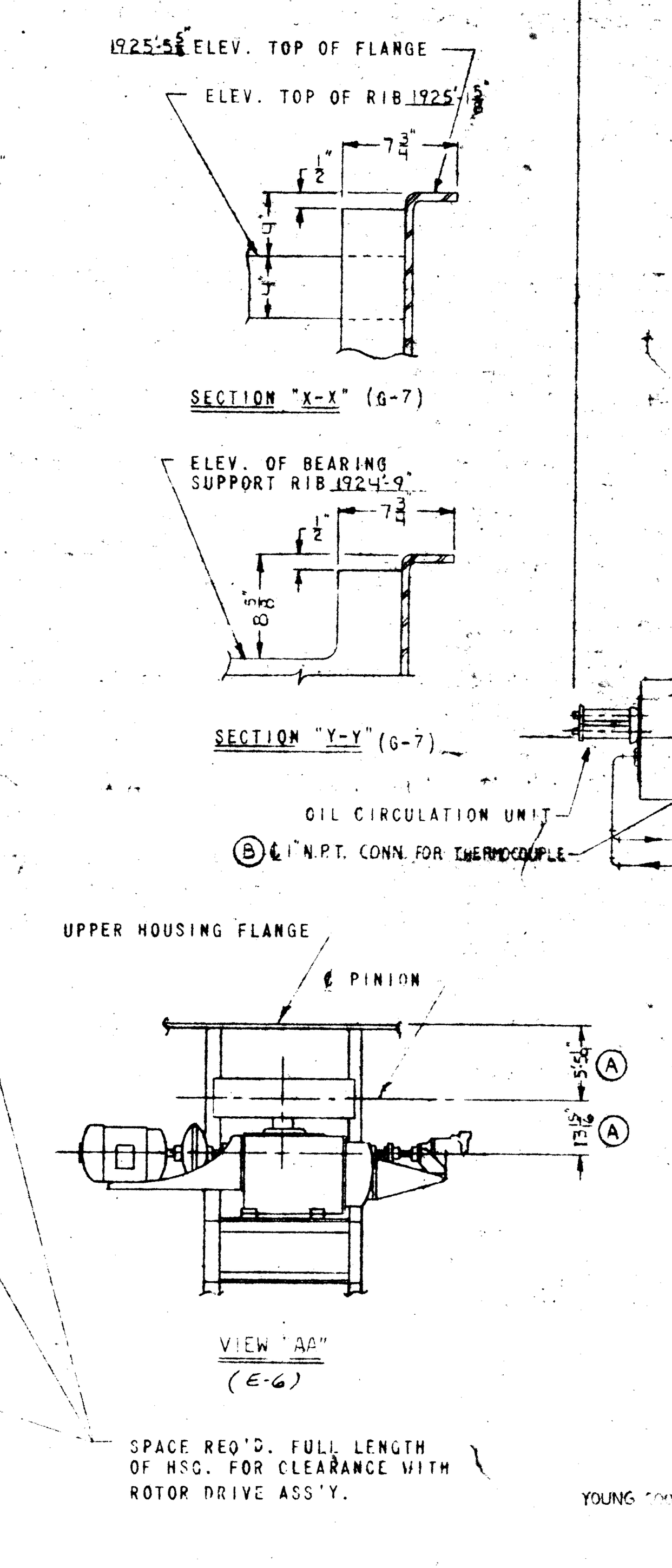
COMP. CODE 91-84-0303
DWG. NO. 13477-4F-0001-06

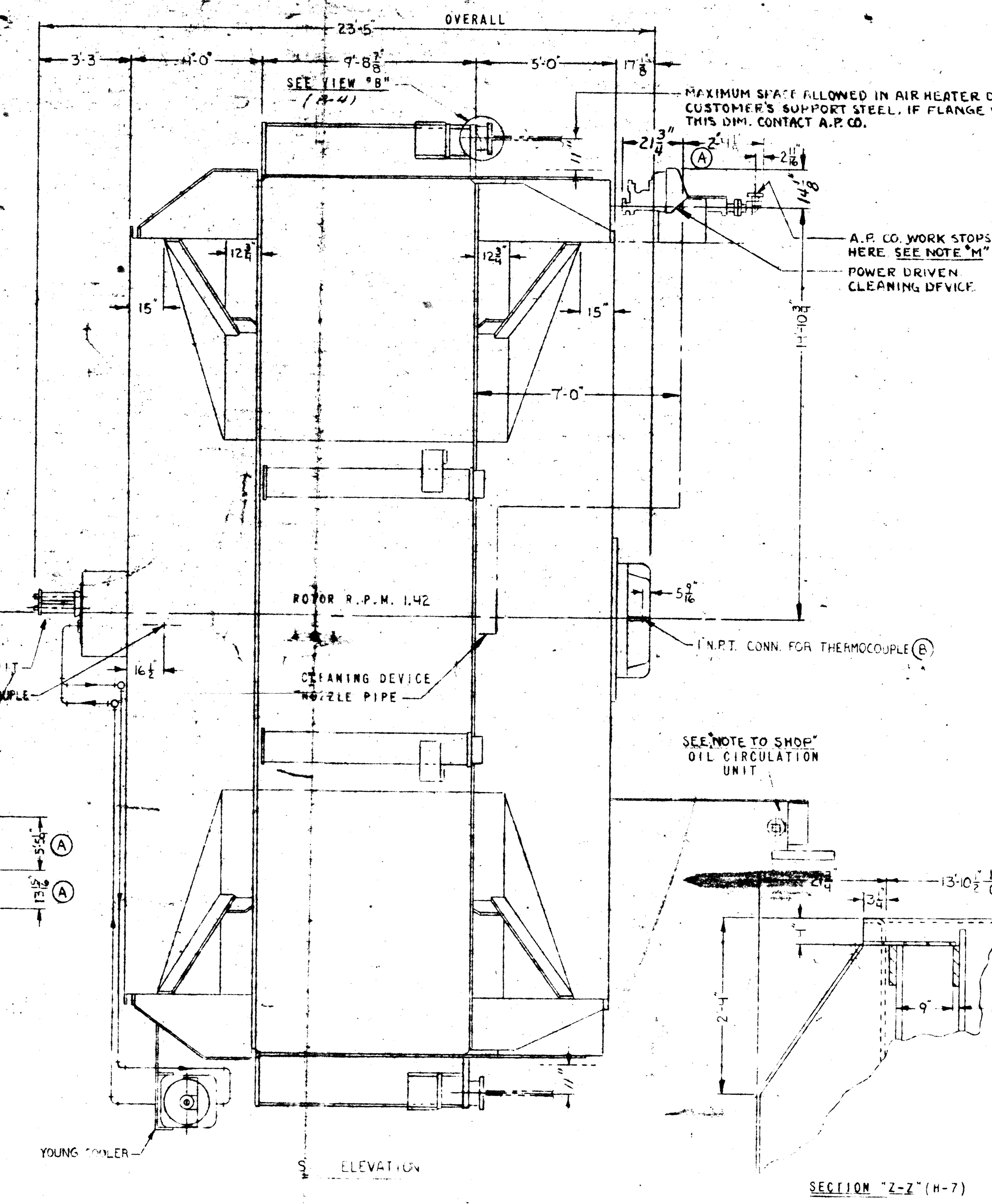
GRAND ISLAND 77-8
51-01
1/19 + 1 SP

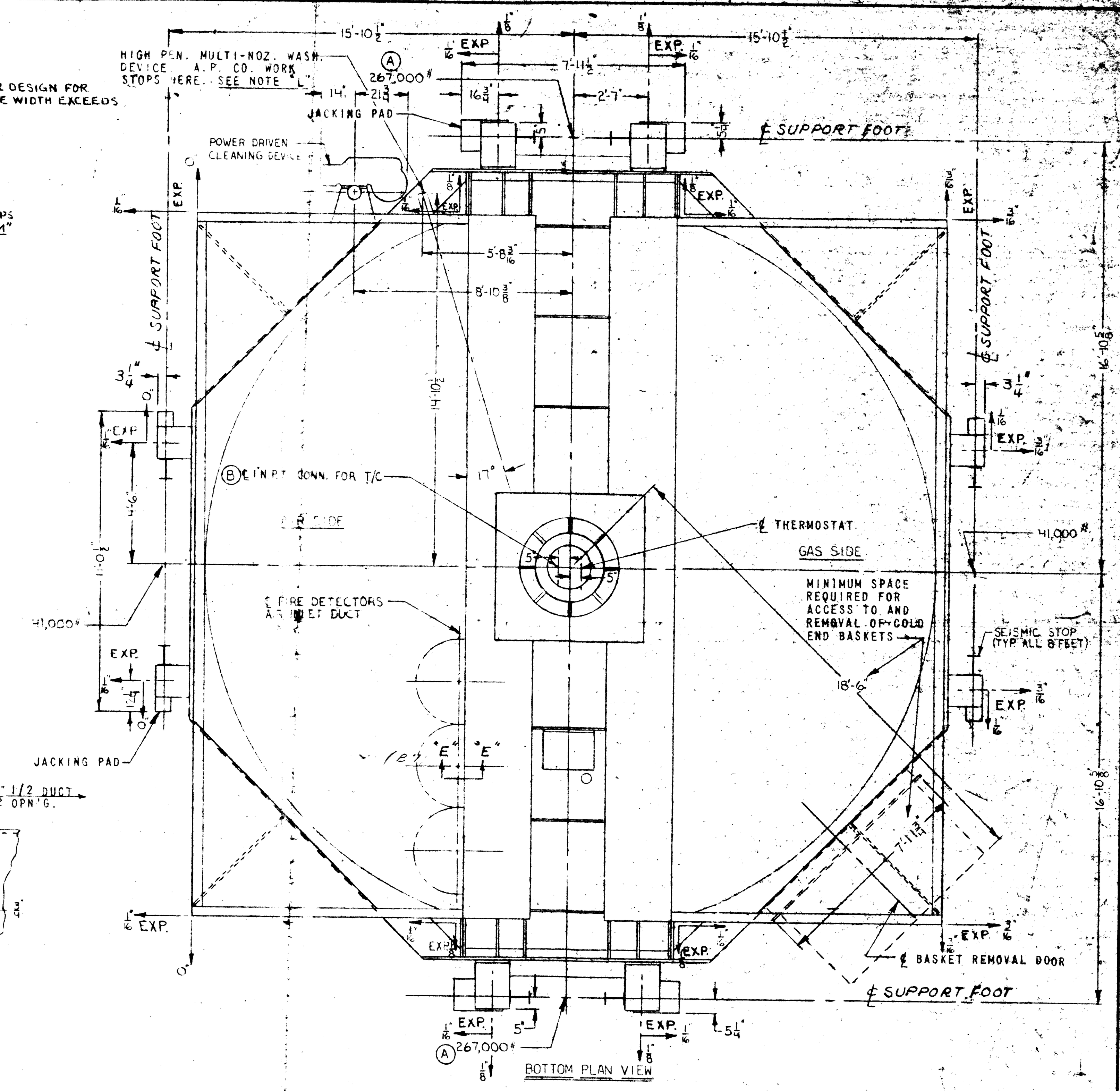


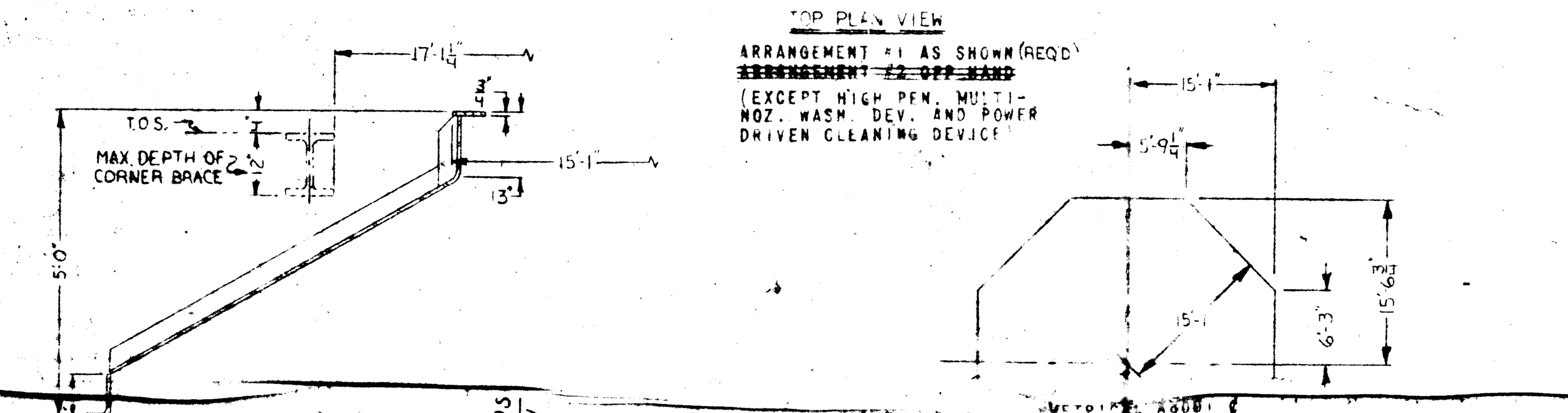
ARRANGEMENT #1 AS SHOWN (REQ'D)
~~ARRANGEMENT #2 OPP HAND~~
(EXCEPT HIGH PEN. MULTI-NOZ. WASH. DEV. AND POWER DRIVEN CLEANING DEVICE)

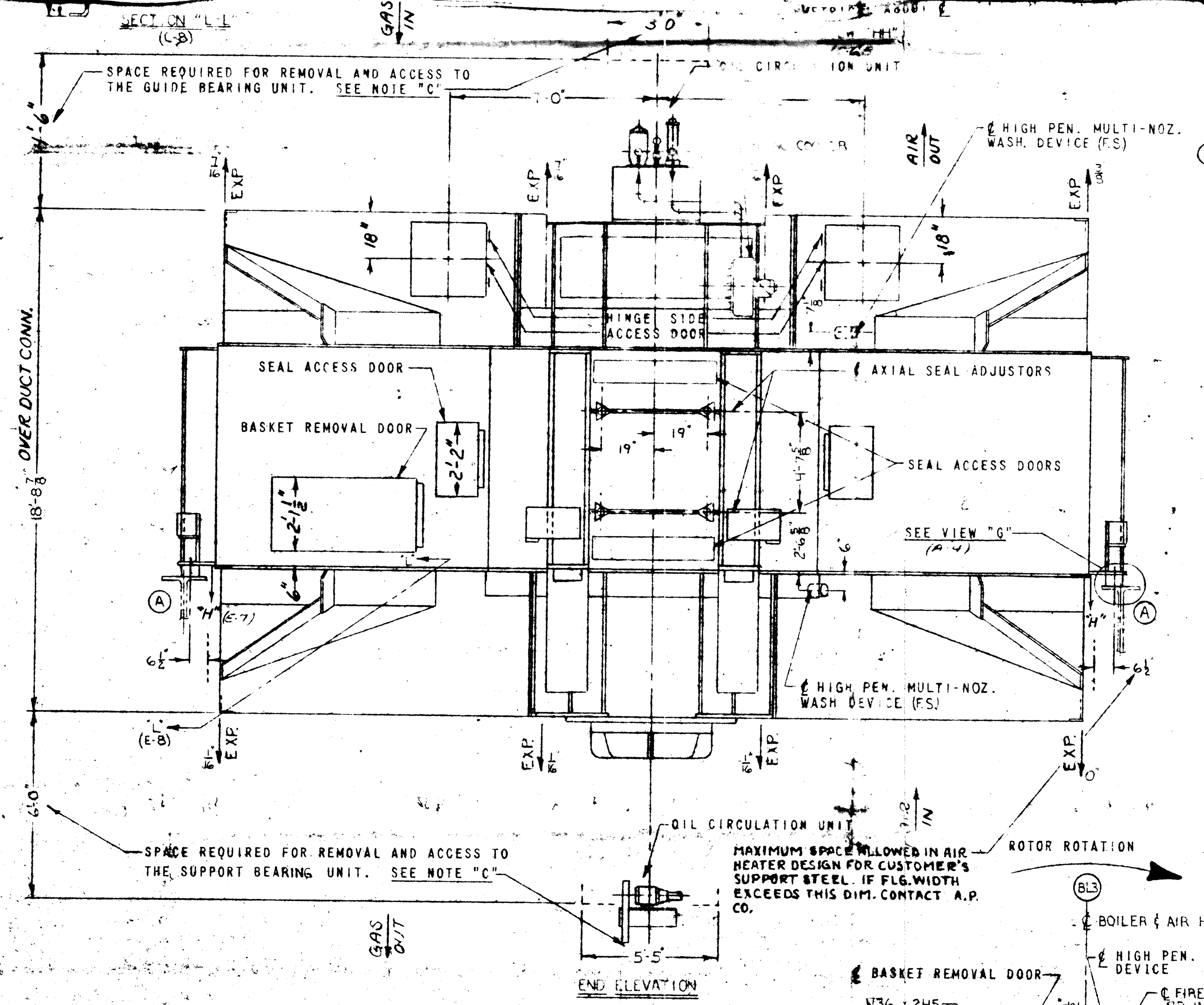
NOTE:
GRATING AND GRATING SUPPORTS SHOULD BE INSTALLED IN A MANNER THAT WILL NOT RESTRICT THE EXPANSION OF THE PREHEATER. GRATING & GRATING SUPPORTS NOT FURNISHED BY A.P.CO.

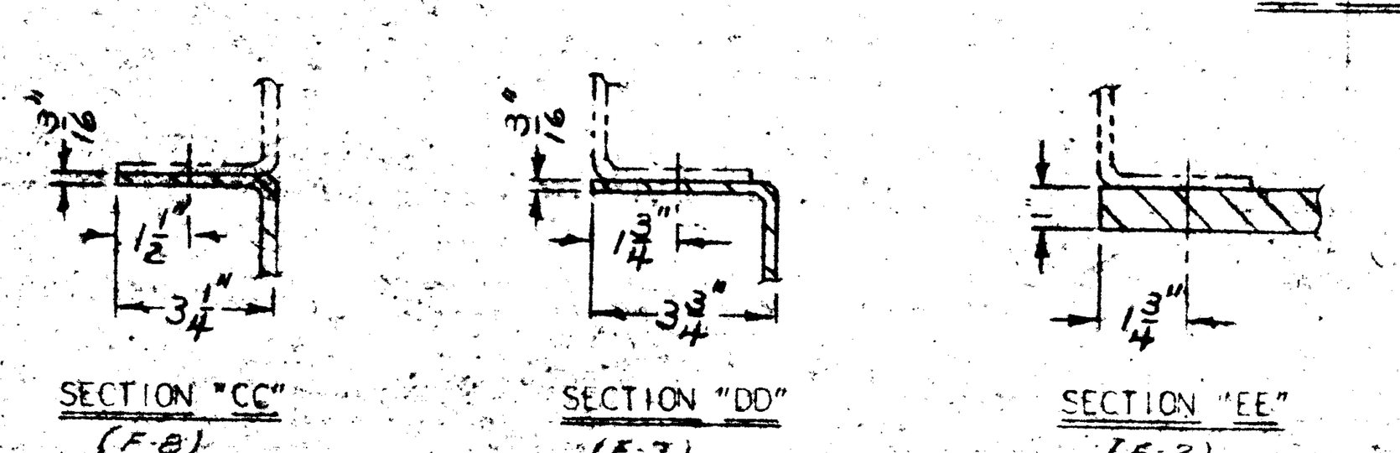












ALL MATERIAL SPECIFIED IN THE FOLLOWING NOTES OR SHOWN ON THIS DRAWING ARE FURNISHED BY A.P. CO. UNLESS OTHERWISE STATED.

AIR PREHEATER DUCT WORK

DUCT BRACING, NOZZLE PIPES, ETC. WITHIN THE AIR PREHEATER DUCT WORK ARE NOT SHOWN. IF DAMPERS, TEST CONNECTIONS, ETC. ARE REQUIRED IN OR NEAR THE DUCT WORK, CONSULT A.P. CO.

DUCT OPENINGS & FLANGE DRILLINGS

ALL DUCT OPENINGS & FLANGE DRILLINGS ARE IDENTICAL TO THOSE SHOWN ON THE GAS INLET DUCTS.

ROTOR DRIVE UNIT

[illegible] WITH BUILT IN OVERRUNNING CLUTCH. 15 H.P. G.E. MOTOR FRAME 254-T. T.E.F.C., 1800 RPM, 230/460 VOLTS, 3 PHASE, 60 HERTZ, [illegible] 20, CLASS "B" INSULATION FOR 40°C. MAX. AMBIENT TEMP. [illegible] SEVERE DUTY CONTINUOUS DUTY, 300% BREAKDOWN TORQUE, SQUIRREL CAGE, BALL BEARING, CAST IRON CONSTRUCTION. ALL WINDINGS TO BE COPPER, SINGLE SHAFT EXTENSION, OVERSIZED CONDUIT BOX WITH 1-1/2" CONDUIT CONN. MOTOR TO BE EQUIPPED WITH A SPACE HEATER FOR OPERATION ON 120 VOLTS A.C., [illegible] 60 HZ., [illegible] MODEL 12 H HCM. WITH A WALDRON 1-1/2 [illegible] COUPLING, WITH COUPLING GUARD. [illegible] FURNISHED BY A.P.CO.

AUXILIARY AIR MOTOR DRIVE

(B) CHICAGO PNEUMATIC AIR MOTOR [illegible] (400) RPM-MAX AIR PRESSURE 70 P.S.I.G., CONSUMPTION IS 220 STD. CU. FT/MIN. AT 0.4 ROTOR R.P.M. FALK STEEL-FLEX COUPLING TYPE T10 SIZE 40-T, WITH COUPLING GUARD. ASCO SOLENOID VALVE, N.E.M.A. IV WATERTIGHT ENCLOSURE, 125 VOLTS, A.C. 60 HERTZ. VALVE OPENS WHEN SOLENOID IS DE-ENERGIZED. 1/2" CONDUIT CONNECTION. LUBRICATOR, FILTER, SOLENOID VALVE, [illegible] GAGE TO BE LOCATED BY ERECTOR IN AN ACCESSIBLE POSITION AS CLOSE TO THE AIR MOTOR AS POSSIBLE, PREFERABLY NOT TO EXCEED FOUR FEET FROM AIR MOTOR. AIR MOTOR MUST BE FURNISHED WITH CLEAN DRY AIR. 1" AIR CONNECTION. PIPING NOT BY A.P. COMPANY.

ACCESS DOORS

2-20" x 20" QUICK OPENING ACCESS DOORS, ONE IN EACH DUCT, ALLOWING FOR INSULATION AS FOLLOWS: GAS INLET 4", AIR OUTLET 4", INTEGRAL WITH THE HEATER, BY A.P.CO., AND 2 ACCESS DOORS, ONE EACH IN THE GAS OUTLET AND AIR INLET, ADJACENT TO THE HEATER, NOT FURNISHED BY A.P.CO.

PORT AND LIGHT

ONE 250 WATT 115 VOLT VAPOR PROOF LIGHT WITH 3/4" CONDUIT CONNECTION, AND ONE GLASS FACED OBSERVATION PORT, BOTH LOCATED IN AIR INLET DUCT. ALL SHIPPED UNATTACHED AND LOCATED UNDER SUPERVISION OF ERECTOR OR FIELD ENGINEER AT POINTS BEST SUITED FOR VIEWING THE COLD END ELEMENT.

FIELD WELDING

440 LINEAL FEET OF 1/4" ERECTION WELD.
350 LINEAL FEET OF SEAL WELD.
ESTIMATES BASED ON SINGLE PASS WELDS. WELDING ROD NOT FURNISHED BY A.P. CO. WELDS BETWEEN CONNECTING PLATE AND ROTOR HOUSING FLANGES; ROTOR HOUSING PANELS TO PEDESTALS AND CONNECTING PLATE SPLITS WHICH BOLT SECTIONS OF DUCT AND CENTER TUB TOGETHER, ARE TO BE DOWN BEAD WELDED, WHERE POSSIBLE, WITH A 3/16" FILLET. AN 1/8" FILLET WILL BE SUFFICIENT ON HORIZONTAL OR OVERHEAD WELDS IN THESE AREAS. ALL STRUCTURE WELDS WILL BE SPECIFIED ON EACH COMPONENT DRAWING.

EXPANSION JOINTS

EXPANSION JOINTS TO BE PROVIDED IN THE GAS OUTLET, GAS INLET AND AIR OUTLET DUCTS SO LOCATED AS TO PREVENT TRANSMISSION OF EXCESSIVE FORCES TO THE DUCT CONNECTING FLANGES OF THE PREHEATERS AS A RESULT OF THERMAL EXPANSION OF DUCTS AND/OR PREHEATER. NOT FURNISHED BY A.P. CO.

INSULATION

DO NOT INSULATE OVER AXIAL SEAL ADJUSTERS, SEAL ACCESS DOORS, & BASKET REMOVAL DOOR. DO NOT INSULATE BEHIND ROTOR DRIVE SPEED REDUCER. THIS AREA HAS BEEN INSULATED

FIELD INSULATION

DUCT CONNECTION PIECES, FLATS AND CENTERPLATE COMPRISING THE AREA BETWEEN DUCTS OF THE HOT END CONNECTING PLATE AND ANY DAMPERS OR EXPANSION JOINTS AT THE BEARING ELEVATION SHOULD BE COVERED WITH 4" OF INSULATION. THE COLD END CONNECTING PIECES, FLATS, CENTER PLATE AND ANY DAMPERS OR EXPANSION JOINTS AT THE BEARING ELEVATION SHOULD BE COVERED WITH 2" OF INSULATION ON THE GAS OUTLET SIDE ONLY UNLESS, THE AIR INLET TEMPERATURE IS ELEVATED BY MEANS OF AN AIR TEMPERING DEVICE. THEN IT TOO WILL REQUIRE 2" OF INSULATION. INSULATION SHOULD BE APPLIED IN A MANNER TO PERMIT A FREE CIRCULATION OF AMBIENT AIR AROUND THE BEARING. INSULATION NOT FURNISHED BY AIR PREHEATER COMPANY.

NOTE "C"

IMMOVABLE STRUCTURES SUCH AS STEEL WORK, EXPANSION JOINTS ETC. SHOULD NOT ENCROACH ON THE REMOVAL SPACES SHOWN FOR THE SUPPORT AND GUIDE BEARING UNITS. LIGHT STRUCTURES, SUCH AS DUCT WALLS MAY BE CUT IF NECESSARY TO PROVIDE SPACE.

OIL CIRCULATION SYSTEM SUPPORT BEARING

1/4 H.P., G.E. MOTOR, FRAME 143TC, T.E.N.V., 1800 RPM, 230/460 VOLTS, 3 PH., 60 HZ., FULL LOAD AMPS. 2.4/1.2, RIGID MOUNTING, BALL BEARING, SQUIRREL CAGE, SEVERE DUTY, CONTINUOUS DUTY, NEMA DESIGN "B", CLASS "B" INSULATION FOR 40°C. MAX. AMB., 1.0 SERVICE FACTOR, CAST IRON CONSTRUCTION, FOOT MOUNTED WITH "C" FACE FLANGE, ALL WINDINGS TO BE COPPER, OVERSIZED CONDUIT BOX WITH 1-1/4" CONDUIT CONN.
DELAVAL IMO PUMP B3EBA-87
LOVEJOY L-R FLEXIBLE COUPLING TYPE "L" SIZE L-090.
CUNO FILTER 182-G78-LB WITH 2-#50 MICRO FILTER CARTRIDGES

PALMER #6017, 90° ANGLE THERMOMETER WITH BRASS SOCKET, 3/4" N.P.T., GRADUATED 30° TO 240°F.
ASHCROFT PRESSURE GAGE, 4-1/2" DIA., GRADUATED 0 TO 100 PSI, 0 TO 7 KG/SQ C.M. INNER.

(B) BURLING IMMERSION THERMOSTAT, MODEL #B-1C, NEMA IV WEATHERPROOF ENCLOSURE, RANGE 50° - 180°F, MINIMUM ELECTRICAL RATING 125-250-480 VOLTS, A.C., 20 AMP., CIRCUIT CLOSES ON OIL TEMPERATURE RISE AND ENERGIZES THE OIL CIRC PUMP. 1/2" CONDUIT CONNECTION. ONE REQUIRED. NORMAL OPERATING TEMP. RANGE 90°-120°F. PUMP START TEMP. TO BE DETERMINED WHEN OIL REACHES VISCOSITY OF 7000 SSU.

OIL CIRCULATION SYSTEM GUIDE BEARING

(B) 1/2 H.P., G.E. MOTOR, FRAME #56, "C" FLANGE MOUNTED, T.E.F.C., 900 RPM 230/460 V., 3 PH., 60 HZ., F.L.A. 2.4/1.2, RIGID MOUNTING, BALL BRG., SEVERE DUTY, CONT. DUTY, NEMA DESIGN "B", CAST IRON CONST., CLASS "B" INSUL. FOR 40°C MAX. AMB., 1.0 SERVICE FACTOR, END MOUNTED OUTBOARD FAN, ALL WINDINGS TO BE COPPER, OVERSIZE COND. BOX WITH 3/4" COND. CONN.
LOVEJOY L-R FLEXIBLE COUPLING, TYPE "L" SIZE 090.
ROPER PUMP, SIZE 18-F-3, WITH MECHANICAL SEAL AND INTEGRAL RELIEF VALVE. ASHCROFT GAGE, 4-1/2" DIA., GRADUATED 0 TO 100 PSI, 0 TO 7 KG/SQ C.M. INNER.
PALMER DIAL THERMOMETER #1035, GRADUATED 0° TO 240°F.
SEE YOUNG COOLER NOTE.

(B) FENWAL THERMOSTAT. SINGLE CIRCUIT, NEMA IV WEATHERPROOF ENCLOSURE, RANGE 50°-400°F/10° 200°F MIN. ELECTRICAL RATING 125-250 VOLTS, AC, 15 AMPS CIRCUIT CLOSES ON OIL TEMPERATURE RISE AND ENERGIZES THE OIL CIRCULATION PUMP. 1/2" CONDUIT CONNECTION, NORMAL OPERATING TEMP RANGE 90° - 120°F. PUMP START TEMP. TO BE DETERMINED WHEN OIL REACHES A VISCOSITY OF 7000 SSU.

THERMOCOUPLES

(B) SUPPORT BEARING AND GUIDE BEARING HOUSING PROVIDED WITH THERMOCOUPLE CONNECTIONS. THERMOCOUPLES NOT FURNISHED BY A.P. CO. 3-1/2 INSERTION LENGTH REQUIRED.

CLEANING EQUIPMENT

TWO (2) HIGH PENETRATION MULTI-NOZZLE WASHING PIPES WHICH MAY BE USED FOR NORMAL WASHING OF THE AIR PREHEATER. ONE (1) TO BE LOCATED IN EACH THE AIR INLET AND OUTLET DUCTS INTEGRAL WITH THE HEATER. SEE NOTE "L" FOR WATER CONDITIONS.

ONE 4" STRAINER PER DEVICE WITH 300# SLIP ON WELDED FLANGES GASKETS, BOLTS AND NUTS. SHIPPED UNATTACHED FOR FIELD INSTALLATION IN THE PIPING ADJACENT TO THE HIGH PEN. MULTI-NOZ. WASHING DEVICES. REMOVE ALL WELD, WELD MATERIAL AND BURRS IN THE ADJACENT PIPING THAT COULD BREAK LOOSE AND PLUG THE NOZZLES.

POWER DRIVEN TWIN NOZZLE CLEANING DEVICE FOR STEAM BLOWING TO BE LOCATED IN THE AIR INLET DUCT, ADJACENT TO THE PREHEATER AS SHOWN. LEVER THROW ARM ON CLEANING DEVICE ROTATES COUNTER-CLOCKWISE AS VIEWED FROM END OF SHAFT. FOR MOTOR SPEC'S AND OTHER DATA SEE NOTES BELOW.

1/4 H.P., G.E. MOTOR, FRAME 56, T.E.F.C., 1200 RPM, 230/460 V., 3 PH., 60 HZ., 1.0 SERVICE FACTOR, F.L.A. [illegible] CLASS B INSULATION FOR 40°C AMB., RIGID MOUNTING, BALL BEARING, SEVERE DUTY, CONT. DUTY, OUTBOARD FAN, WELDED ON BASE, CAST IRON CONST. ALL WINDINGS TO BE COPPER, OVERSIZED COND. BOX WITH 3/4" COND. CONN. COUPLING GUARD FURNISHED.
NO EXTERNAL, THERMAL, OR DEAD WEIGHT LOAD TO BE IMPOSED ON APCO. STEAM CONNECTION.

TIME REQUIRED FOR NOZZLE TO MAKE ONE PASS IS APPROX. 30 MIN.

ORIFICE PLATE WITH 1/8" DIA. ORIFICE. 1-1/2" 600 # ASTM SLIP-ON RAISED FACE ORIFICE FLANGES, GASKETS, STUDS BOLTS AND NUTS. 4-1/2" DIA. ASHCROFT GAUGE. 1/4" M.P.T. LOWER CONN. GRADUATED 0 TO 400 P.S.I.G. 0-28 KG/SQ CM. 1/4" [illegible] SCREWED VALVE AND 1/4" SIPHON FURNISHED BY A.P. CO. AND SHIPPED UNATTACHED FOR FIELD INSTALLATION IN PIPING ASSEMBLY ADJACENT TO THE STEAM BLOWING CLEANING DEVICE. RECOMMENDED LENGTH OF PRESSURE GAGE LINE IS TO BE 5'-0" MIN. FOR BLOWING PRESSURE, SEE NOTE "M"

NOTE "M".

1-1/2" STEAM INLET CONNECTION. 300# ASTM SLIP-ON RAISED FACE FLANGES, GASKETS, STUD BOLTS, AND NUTS. STEAM AT 450 PSIG 630 °F WILL BE MADE AVAILABLE FOR CLEANING. PRESSURE TO BE REDUCED THROUGH THE ORIFICE TO THE RECOMMENDED INITIAL BLOWING PRESSURE OF 200 P.S.I.G. OPERATOR MAY INCREASE OR DECREASE BLOWING PRESSURE AS DESIRED. THE BLOWING PRESSURE SHOULD NOT EXCEED A MAX. OF 250 P.S.I.G. WITH INLET VALVES WIDE OPEN. CONSUMPTION AT 250 P.S.I.G. WILL BE 5050 #/HR.

A BLOWING STEAM SOURCE SHOULD BE SELECTED WHICH WILL DELIVER SUPERHEATED STEAM TO THE CLEANING DEVICE HAVING AN ENTHALPY OF 13[illegible] BTU/LB. AT 250 P.S.I.G. (302°F SUPERHEAT). A CONSTANT PRESSURE THROUGHOUT THE BLOWING CYCLE MUST BE MAINTAINED.

IF OIL IS TO BE USED FOR FIRING THE BOILER DURING THE INITIAL START-UP PERIOD, WE RECOMMEND STEAM AT A MIN. OF 150 P.S.I.G. OR AIR AT A MIN. OF 90 P.S.I.G. BE MADE TEMPORARILY AVAILABLE UNTIL THE REGULAR BLOWING MEDIUM CAN BE USED.

NOTE "L"

(C) WATER INLET CONNECTION, 4" PIPE WITH WELD END. WATER CONDITIONS AT CONNECTION TO HIGH PEN. MULTI-NOZ. WASHING DEVICE 200 PSIG
(D) MIN., 425 G.P.M. PER DEVICE. TOTAL FLOW FOR ONE HEATER 850 GPM.

NOTE TO ERECTOR

REMOVE ALL COMPONENTS PAINTED YELLOW PRIOR TO START-UP.

BASKET REMOVAL

COLD END BASKETS ARRANGED FOR REMOVAL THROUGH HOUSING AS SHOWN. ALL OTHER BASKETS ARRANGED FOR UPWARD REMOVAL THROUGH ADJACENT DUCTS.

FINAL CHECKOUT (USING CHECK SHEETS PROVIDED) OF ALL AIR HEATER COMPONENTS WILL BE REQUIRED AFTER AIR HEATER IS ERECTED AND ALL CONNECTING DUCT WORK IS ATTACHED. THIS CHECKOUT TO BE ACCOMPLISHED IN THE PRESENCE OF AIR PREHEATER COMPANY PERSONNEL.

NOTE TO SHOP

OIL CIRCULATION SYSTEM TO BE INSPECTED AND TESTED AFTER ASSEMBLY.

AIR FLOW RECOMMENDATIONS

WHEN TWO OR MORE AIR PREHEATERS ARE ATTACHED TO A BOILER UTILIZING SEPARATE FORCED DRAFT FANS, IT IS ESSENTIAL THAT PROVISIONS, BE MADE TO INSURE A FLOW OF AIR TO EACH AIR PREHEATER SHOULD ONE FORCED DRAFT FAN BECOME INOPERATIVE OR SHOULD STARTUP ON ONE FAN BE CONTEMPLATED. AIR MUST BE PASSING THROUGH THE AIR PREHEATER WHEN FLUE GAS IS PASSING THROUGH AIR HEATER.

AIR PREHEATER EXPANSION

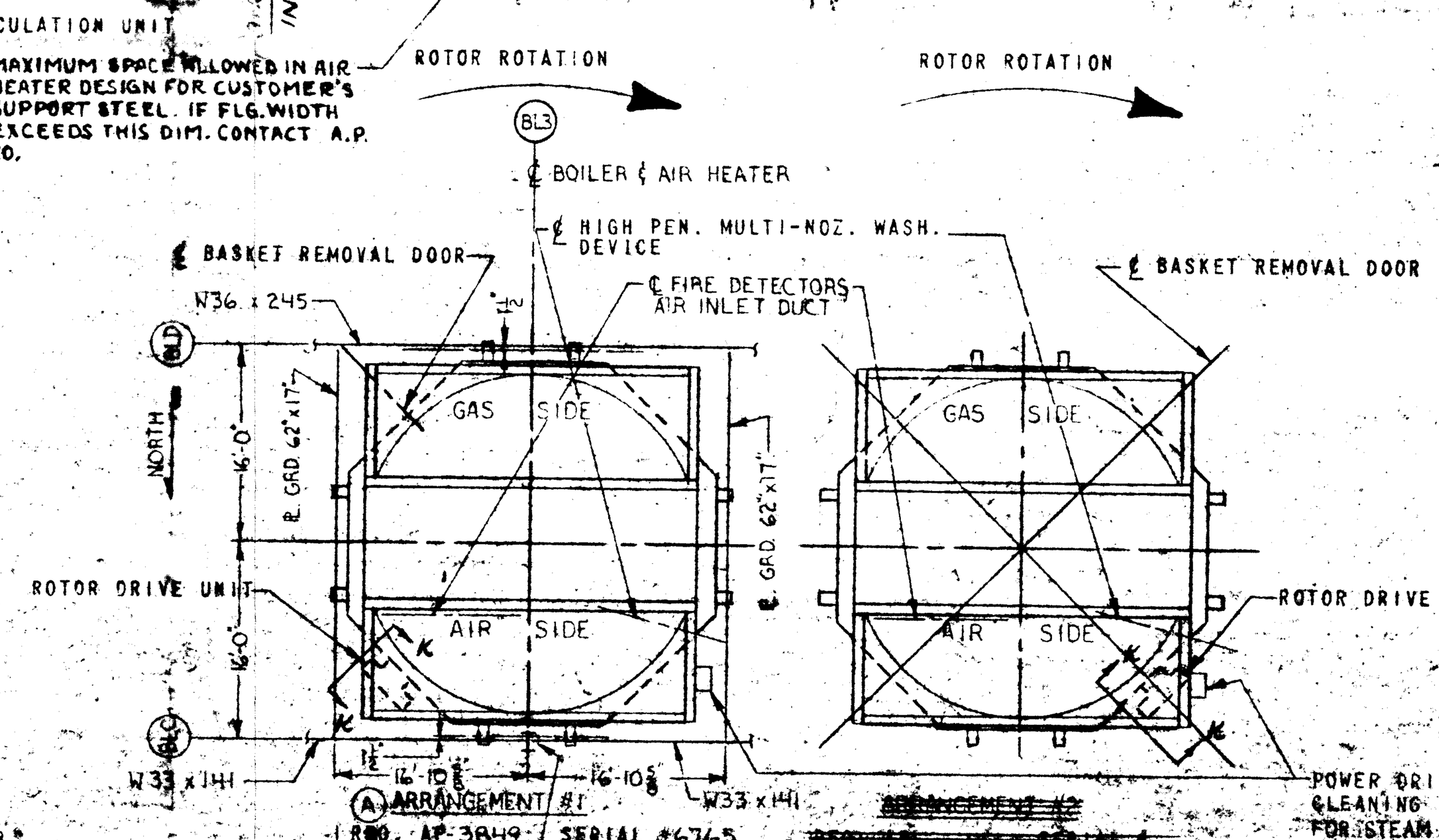
EXPANSIONS INDICATED ARE EXPECTED VALUES FOR THE MAXIMUM PROPOSED OPERATING CONDITIONS.

FIRE DETECTION SYSTEM

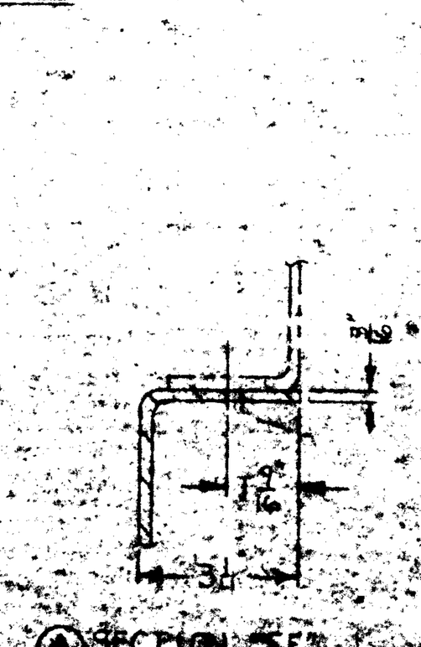
FIRE DETECTION SYSTEM ASSEMBLY TO BE FURNISHED WITH AUXILIARY EQUIPMENT BY A.P.CO. ALARM WIRING AND ALARM SYSTEM TO BE FURNISHED BY OTHERS.

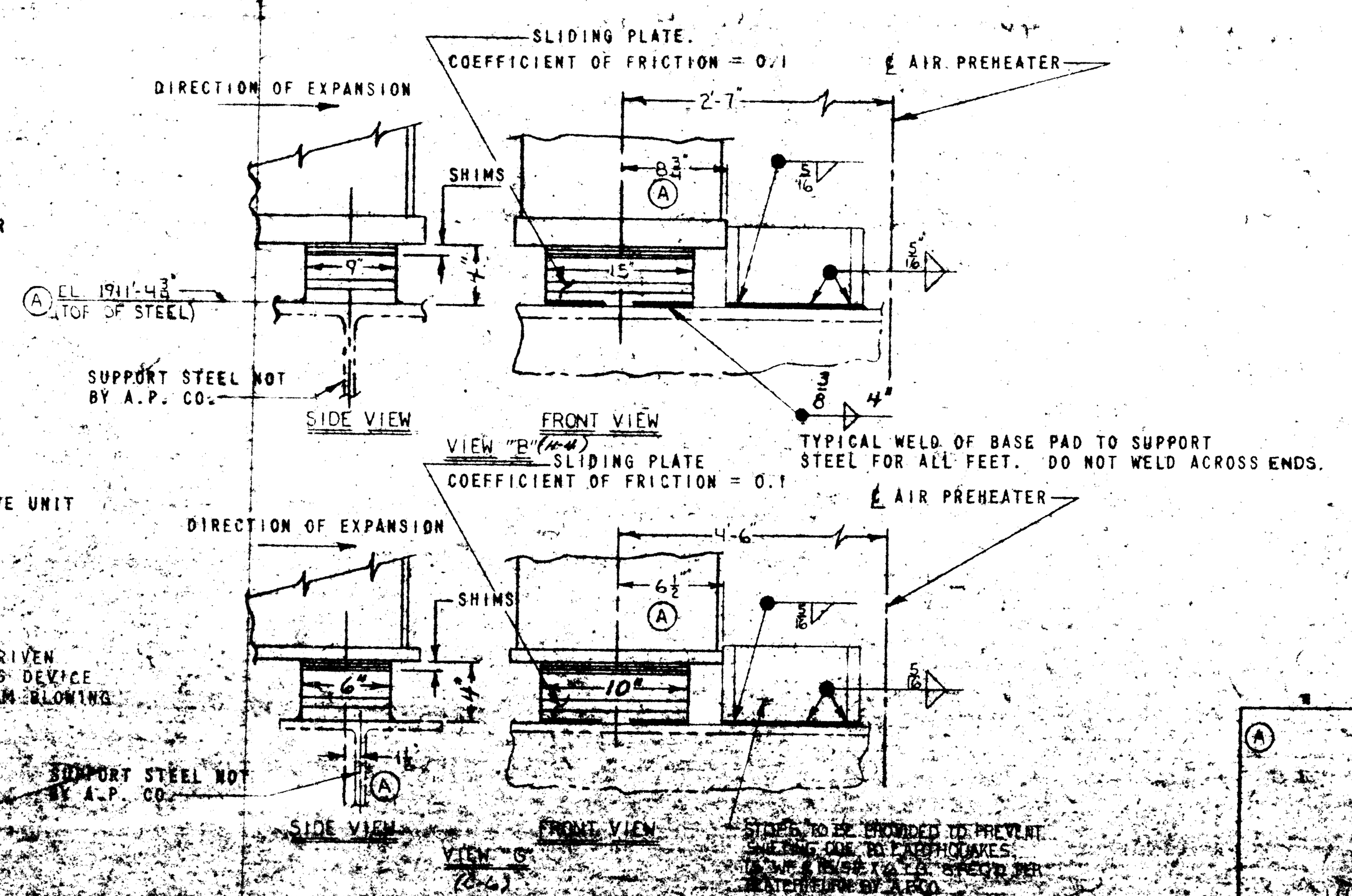
(C) YOUNG COOLER

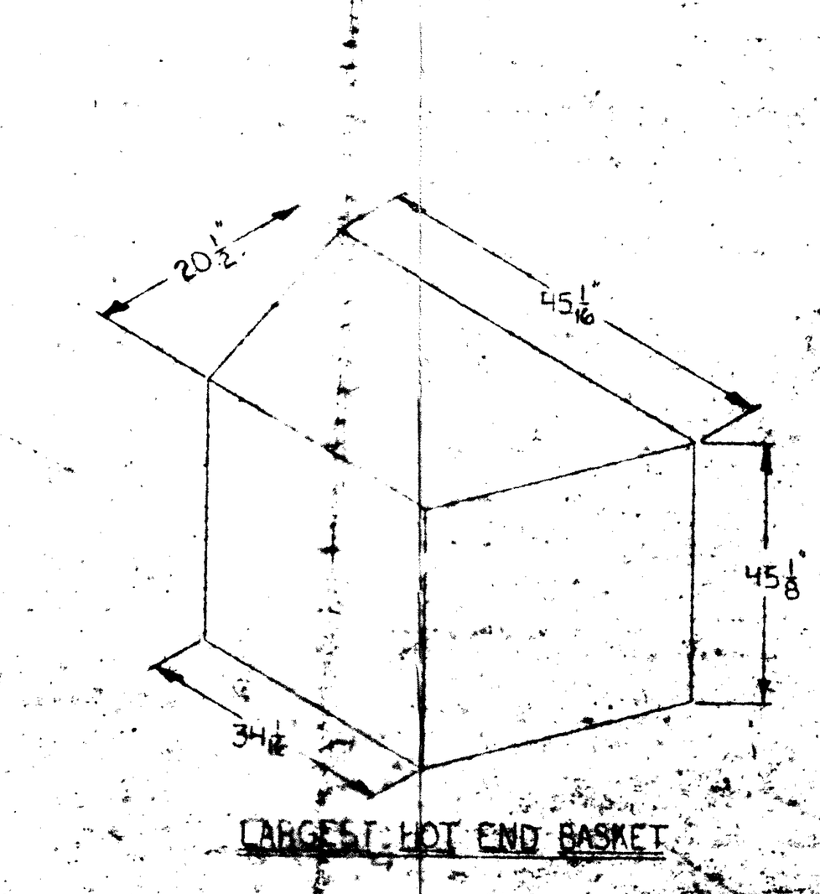
THE YOUNG OIL COOLER WITH FAN AND FAN GUARD. 1/4 H.P. ELECTRIC MOTOR 56 FRAME, T.E.F.C., 1200 RPM, 230/460 VOLTS, 3 PHASE, 60 HERTZ, FULL LOAD AMPS., 1.4/0.7. RIGID MOUNTING, BALL BEARING, CLASS B INSULATION FOR 40°C AMBIENT, 1.0 SERVICE FACTOR, SEVERE DUTY, CONTINUOUS DUTY, OUTBOARD FAN, WELDED ON BASE, CAST IRON CONSTRUCTION, ALL WINDINGS TO BE COPPER, OVERSIZED CONDUIT BOX WITH A 3/4" CONDUIT CONN. THE YOUNG OIL COOLER MAY BE RELOCATED BY THE ERECTOR TO OBTAIN THE BEST POSSIBLE FREE FLOW OF AMBIENT AIR TO AND FROM THE INLET AND OUTLET OF THE COOLER. COOLER TUBE MATERIAL IS HIGH PRESSURE STEEL WITH ALUMINUM FINS.



(A) ARRANGEMENT #1 ~~ARRANGEMENT #2~~
REQ. AP-3849 SERIAL #6765
MOTOR ROTATES COUNTER-CLOCKWISE AS VIEWED FROM "KK" (ARRGT. #1)
DIAGRAMMATIC TOP PLAN VIEW SHOWING RELATIVE POSITION OF ROTOR DRIVE UNIT, BASKET REMOVAL DOOR, CLEANING EQUIPMENT AND FIRE DETECTORS
CCK. W14x167 NOT BY A.P.CO. SHIMS FULL DEPTH OF AIR HEATER







TOTAL WEIGHT OF PREHEATER	616,000 #
WEIGHT OF SUPPORT BEARING ASSY.	10,740 #
WEIGHT OF GUIDE BEARING ASSY.	2,120 #
WEIGHT OF ROTOR DRIVE UNIT	4,000 #
WEIGHT OF HEAVIEST HOT END BASKET	1,400 #
WEIGHT OF HEAVIEST COLD END BASKET	560 #
WEIGHT OF HEAVIEST PIECE (C.E. CENT. SECTION) APPROX.	44,000 #
WEIGHT OF EMPTY ROTOR	62,122 #

51-251

OCT 18 1979

LUTZ, DAILY & BRAIN
Consulting Engineers
SHAWNEE MISSION, KANSAS

	DATE	BY
APPROVED *	1-3-80	RBS
APPROVED AS NOTED		
RETURNED FOR CORRECTION		

* Approved for Compliance with Engineers Plans and Specifications. Approval does not void any part of contract or guarantee detailed quantities or dimensions.

CITY OF GRAND ISLAND
PLATTE GENERATING STATION, UNIT #1
CE CONTRACT 13477
LUTZ, DAILY & BRAIN CONTRACT No. 77-8-2

GRAND ISLAND 77-8
OUTDOOR UNIT

13477-B-5M5

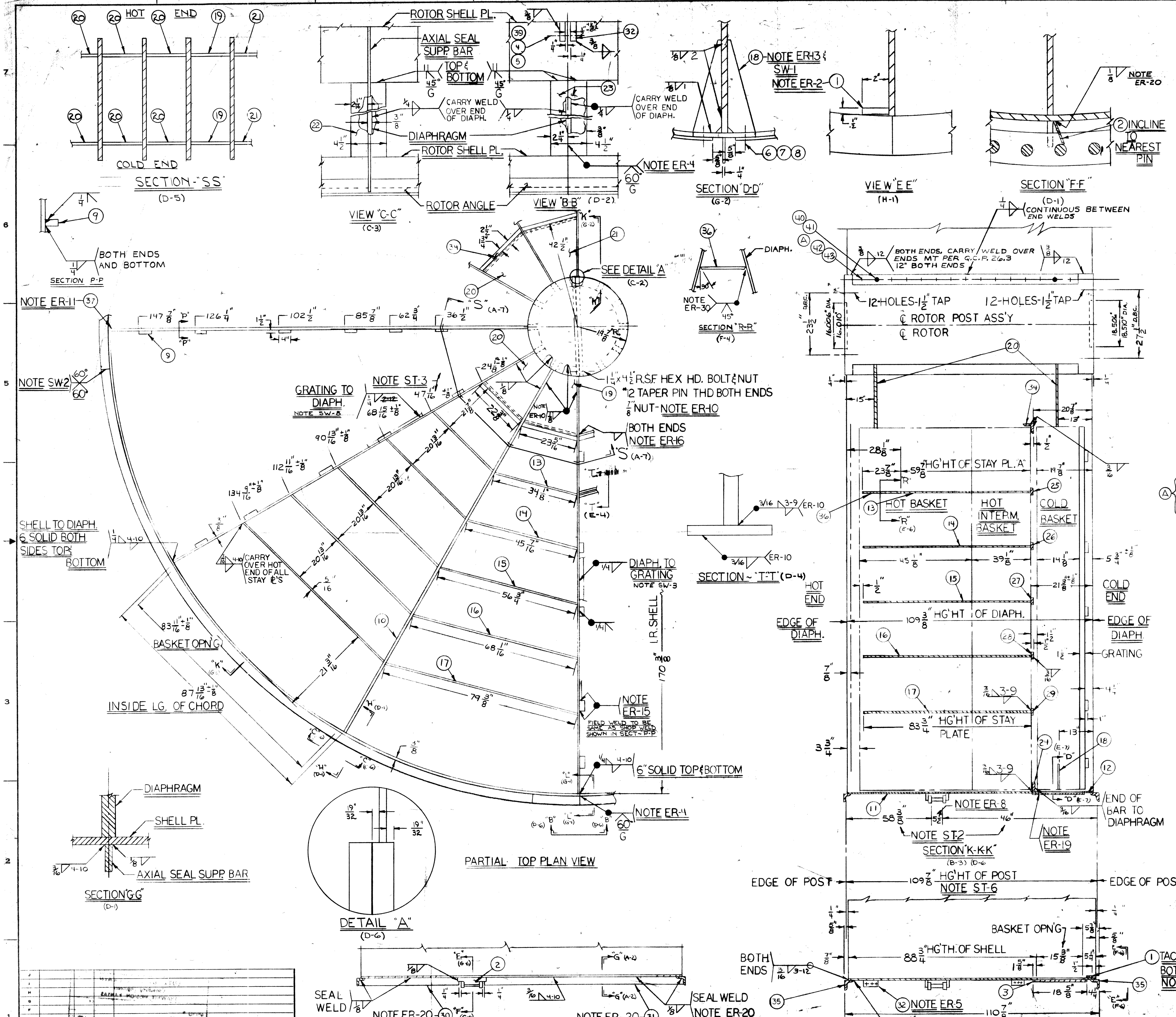
(A) CITY OF GRAND ISLAND
AP-3849
GRAND ISLAND, NEBRASKA
FOR C.E. POWER SYSTEMS
LUTZ, DAILY & BRAIN, [illegible]
ORDER NO. 1870[illegible]

Subject	AIR PREHEATER
Model	M-22201GX-AP
Size, Type	27-VI
Des.	
Dr.	OLG
Tr.	
Material	

THE AIR PREHEATER COMPANY, INC.
WELLSVILLE, N.Y.

GENERAL ARRANGEMENT
27 VI-90" (42 OHB/34 OHB/12 [illegible])

C	4-19-79	RMS	CLL	ALT. PER CE PHONE CONN. DTD. 8-21-79
B	12-8-78	DLG	[illegible]	ALT. PER CE SUPP. 3 AMP DTD. 11-13-78 & DESIGN MEMO
K	8-4-78	DLG	[illegible]	ALT. PER CE SUPP. 2 AMP DTD. 6-27-78 DESIGN MEMO
A	6-2-78	DLG	[illegible]	ALT. PER CE SUPP. 1 AMP DTD. 4-21-78 DESIGN MEMO
SYM.	DATE	ALT.	CHK.	DESCRIPTION
ALTERATIONS				



BILL OF MATERIAL

REF. NO.	PART CODE NO.	DRAWING NO.	REQ'D.	MAT'L.	DESCRIPTION
1	00500	A-E-271763	2	5111	1/2" x 1" x 2"
2		E-47639	12		SEAL TAB (SHIP 2 LOOSE)
3		D-67461	12		COVER ASSEMBLY ASS'Y. 6 (SL)
4	32050	P-16-25412	8	3205	1" FIN. HEX. NUT (SL)
5	32010	P-32-25406	8	3201	1" x 4" HEX. HD. CAPSCREW (SL)
6	32050	P-10-25412	288	3205	5/8" FIN. HEX. NUT (SL)
7	32220	P-8-30765	288	3222	5/8" K.S.M. WELDING STUD 1" LG. (AW)
8	32210	P-10-25413	288	3221	5/8" LOW ALLOY FLAT WASHER (SL)
9		E-56928	144		GRATING SUPPORT BLOCK 1" x 1-1/2" x 4" (SHIP 12 LOOSE)
10		D-7-271079	12		DIAPHRAGM
11		D-2-271078	6		ROTOR SHELL PLATE (HOT END)
12		D-1-271078	6		ROTOR SHELL PLATE (COLD END)
13	01100	A-13-271763	12	4006	5/16" x 34-1/8" x 59-7/8"
14	01100	A-14-271763	12	4006	5/16" x 45-7/16" x 83-3/4"
15	01100	A-15-271763	12	4006	5/16" x 56-3/4" x 83-3/4"
16	01100	A-16-271763	12	4006	5/16" x 83-3/4" x 68-1/16"
17	01100	A-17-271763	12	4006	5/16" x 83-3/4" x 79-3/8"
18		E-2-41104	24		FILLER PIECE (SHIP 8 LOOSE)
19		D-4-46303	4		END PLATE (SL)
20		D-4-46302	16		END PLATE
21		D-4-46301	4		END PLATE (SL)
22		E-41103	10		SHELL BAR
23		E-41102	4		SHELL BAR AT SPLIT
24		D-6-46086	12		BASKET SUPPORT BAR
25		E-1-48041	12		BASKET SUPPORT BAR
26		E-2-48041	12		BASKET SUPPORT BAR
27		E-3-48041	12		BASKET SUPPORT BAR
28		E-4-48041	12		BASKET SUPPORT BAR
29		E-5-48041	12		BASKET SUPPORT BAR
30		D-16-55889	12		AXIAL SEAL SUPPORT BAR (HOT END) (S-2-L)
31		D-6-55889	12		AXIAL SEAL SUPPORT. BAR (COLD END) (S-2-L)
32		E-40547	8		ROTOR SPLIT BAR
33		E-176063	2 PER CONT.		HANDLE (SL)
34		E-46089	12		BASKET SUPPORT ANGLE (SHIP 2 LOOSE)
35		D-2-65621	12		ROTOR ANGLE
36		E-3-59720	12		STAY PLATE EXTENSION SL
37		B-46090	2		ROTOR LIFTING ARRG'T.
38		D-41653	1 PER CONT		FIELD ERECTOR'S INSTRUCTIONS
39		E-26991	4		DRIFT AND TAPER PIN (SL)
40		E-260226	4		THREADED TAPER PIN (SL)
41	31010	P-14-25412	8	3205	7/8" FIN. HEX. NUT (SL)
42	31010	P-36-25407	30	3201	1 1/4" x 4 1/2" HEX. HD. CAPSCREW (SL)
43	31010	P-20-25412	30	3205	1 1/4" FIN. HEX. NUT (SL)

A (items 40–43)

REFERENCE DRAWINGS

GROUP NO.	DESCRIPTION
0101	ROTOR POST ASS'Y.
0102	ROTOR PIN RACK ASS'Y.
0104 / 0104	GRATING INNER / OUTER
0103	RADIAL SEAL ASS'Y.
0504	AXIAL SEAL ASS'Y.
0505	BY PASS SEAL

NOTES TO ERECTOR:

FOR NOTES ER-1. 2. 4. 5. 6. 8. 9. 10. 11. 13. 15. 16. 19. 20. & 29 SEE REF. #38.

NOTES TO SHOP:

S-1 PAINT YELLOW ALL TEMPORARY BRACING THAT IS TO BE REMOVED IN FIELD

SHOP WELDING NOTES:

SW-1 WELD FILLER PIECE IN PLACE AT ASS'Y EXCEPT ON DIAPH 90° FROM SPLIT AND ON SPLIT.

SW-2 BEVEL & WELD SPLITS IN ROTOR ANGLE AS SHOWN.

SW-3 1" LONG TACKWELDS BETWEEN SIDE RAILS & DIAPHRAGM. LOCATE TACK-WELDS 24" INBOARD FROM ROTOR SHELL. APPROXIMATELY BUT NOT LESS THAN 24" SPACING. WELD ON HOT SIDE OF GRATING ONLY AND CENTERED BETWEEN CROSS BARS.

SHOP TOLERANCE NOTES:

ST-1 ALL DIM NOT TOL. FOR REF. ONLY.

ST-2 MAX TOL EITHER OF THESE DIM IN A PLANE PARALLEL TO END OF POST ±3/16".

ST-3 STAY PLATE & BASKET SUPP BARS TO BE LOCATED WITHIN A TOL OF ±1/8".

ST-5 THIS DIM TO BE HELD TO A TOL OF -.000" +.015" AFTER ASS'Y. OF ROTOR.

ST-6 THIS DIM SHOULD NOT EXCEED +.0625" -.0000" & FLATNESS OF POST ENDS NOT TO EXCEED .008".

ST-7 STAY PLATES TO BE LOCATED RADIALLY FROM EDGE OF POST WITHIN A TOL. OF ±1/8".

ST-8 ROTOR ANGLES - SQUARE - 1/16" IN 4" - RADIUS TO SWEEP 1/8" VARIATION.

ST-9 ROTOR ANGLES TO BE HELD ±0" -3/16" IN A PLANE PARALLEL TO THE END OF POST.

51 1199

REFERENCE ONLY

FEB 7 1985

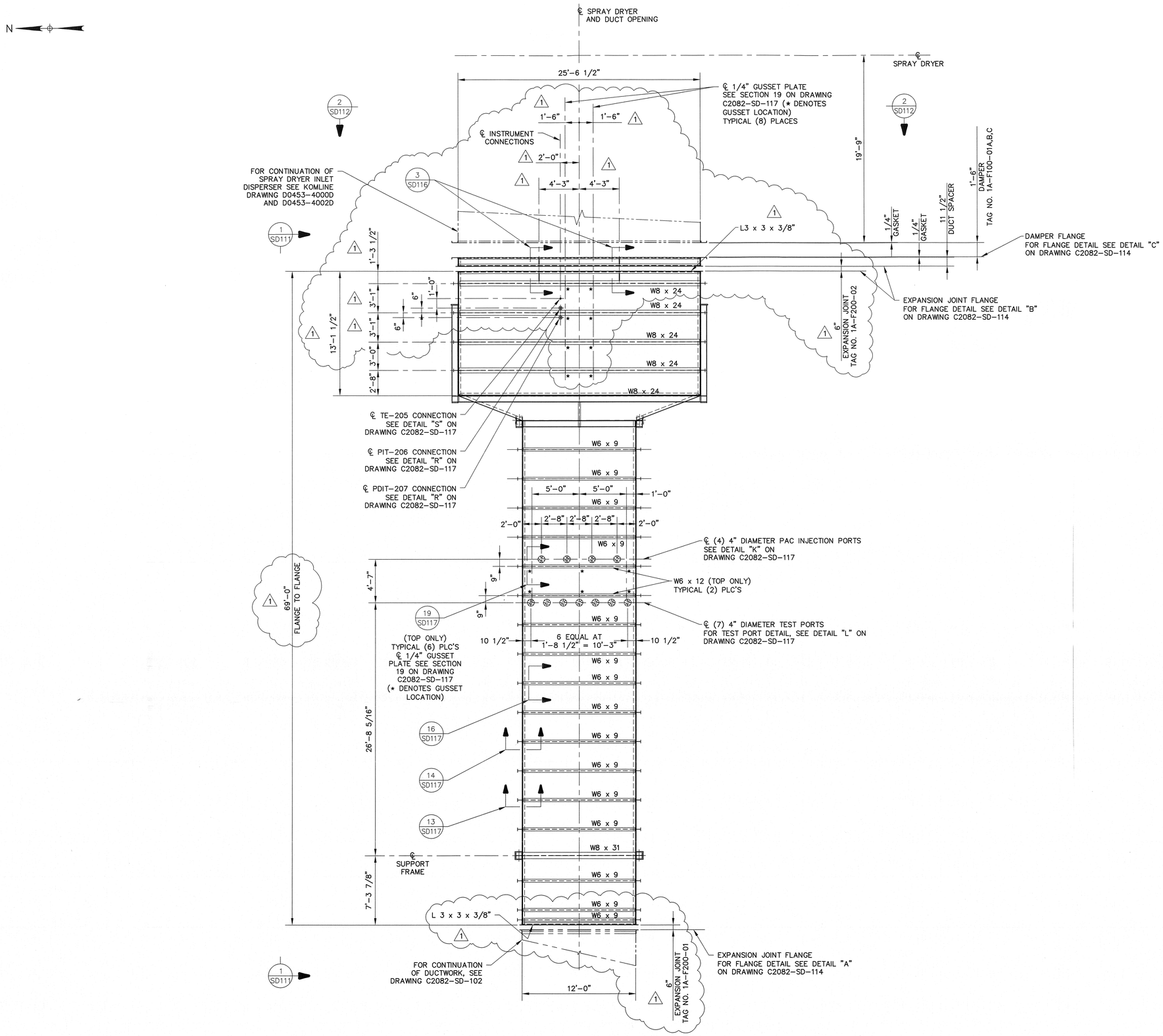
PLUG GAUGE F-270955

Subject: AIR PREHEATER	CE AIR PREHEATER	THE AIR PREHEATER COMPANY, INC. WELLSVILLE, N. Y. 14895	
Model / Arrg't / Size, Type Series: 27 VI450	ROTOR ASSEMBLY		
Des. / Ch.			
Dr. DRF / Ch.			
Tr. / Ch.	CODES	DRAWING NUMBER: GROUP / SIZE / NUMBER / ISSUE	
Material	ER 80100	0100 / A / 271763 / A	
Stk. No. / DATE 9-22-78 / SCALE N.T.S.	N.D.T.	WT. / SHEET / OF	

SUPERSEDED BY / SUPERSEDES

MARK	DATE	ALT.	CKD.	NATURE OF ALTERATIONS
J				
I				
H				
G				
F				
E				
D				
C				
B				
A	1-12-82	DM	CDA	ADDED ITEMS #40-43

ALTERATIONS



SPRAY DRYER INLET DUCT – PLAN VIEW

NOTES:

1. FOR GENERAL NOTES AND REFERENCE DRAWINGS SEE DRAWING C2082-SD-100.
2. ELEVATIONS SHOWN ARE BASED ON A GRADE ELEVATION OF 1867'-0".
3. FOR ADDITIONAL TYPICAL DUCT DETAILS SEE DETAILS "AA", "AB", "AC" AND "AD" ON DRAWING C2082-SD-117.

REFERENCE DRAWINGS:

C2082-SD-100	DUCTWORK GENERAL NOTES AND REFERENCE DRAWINGS
C2082-SD-111	DUCTWORK SPRAY DRYER INLET DUCT ELEVATION VIEW
C2082-SD-112	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-113	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-114	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-115	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-116	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-117	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-118	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-119	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-190	DUCTWORK 24" X 36" ACCESS DOOR ASSEMBLY
C2082-SD-191	DUCTWORK 24" X 36" ACCESS DOOR SECTIONS AND DETAILS
C2082-SD-192	DUCTWORK 24" X 36" ACCESS DOOR SECTIONS AND DETAILS
C2082-SD-193	DUCTWORK ACCESS DOOR SAFETY LATCH ASSEMBLY AND DETAILS
C2082-BSD-01	DUCTWORK BILL OF MATERIAL
C2082-SGC-01	PAINT SPECIFICATION
1 SXX-3	SPECIFICATION FOR FIELD INSTALLATION OF FIBERGLASS ACCESS DOOR PACKING

PROFESSIONAL (CIVIL) ENGINEER
MICHAELA WALSH, JR
E-14548
STATE OF NEBRASKA
JR1 9/6/13

REVISION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION		DESCRIPTION	1–	DESCRIPTION	0–6/28/13	DESCRIPTION
DRAWN BY															B FERRERI	ADDED REFERENCE DRAWING, REVISED EXPANSION JOINT WIDTHS PER VENDOR INFORMATION AND REVISED STIFFENER SPACING AT EXPANSION JOINTS	BFOX	ISSUED FOR FABRICATION
CHECKED BY															B Fox		BDF	
REVIEWED FOR DESIGN															G Cordova		G CORDOVA	
APPROVED FOR ENGINEERING																	R SEIFERT	
APPROVAL DATE															06Sep13		6/27/13	

MET
Marsulex Environmental Technologies

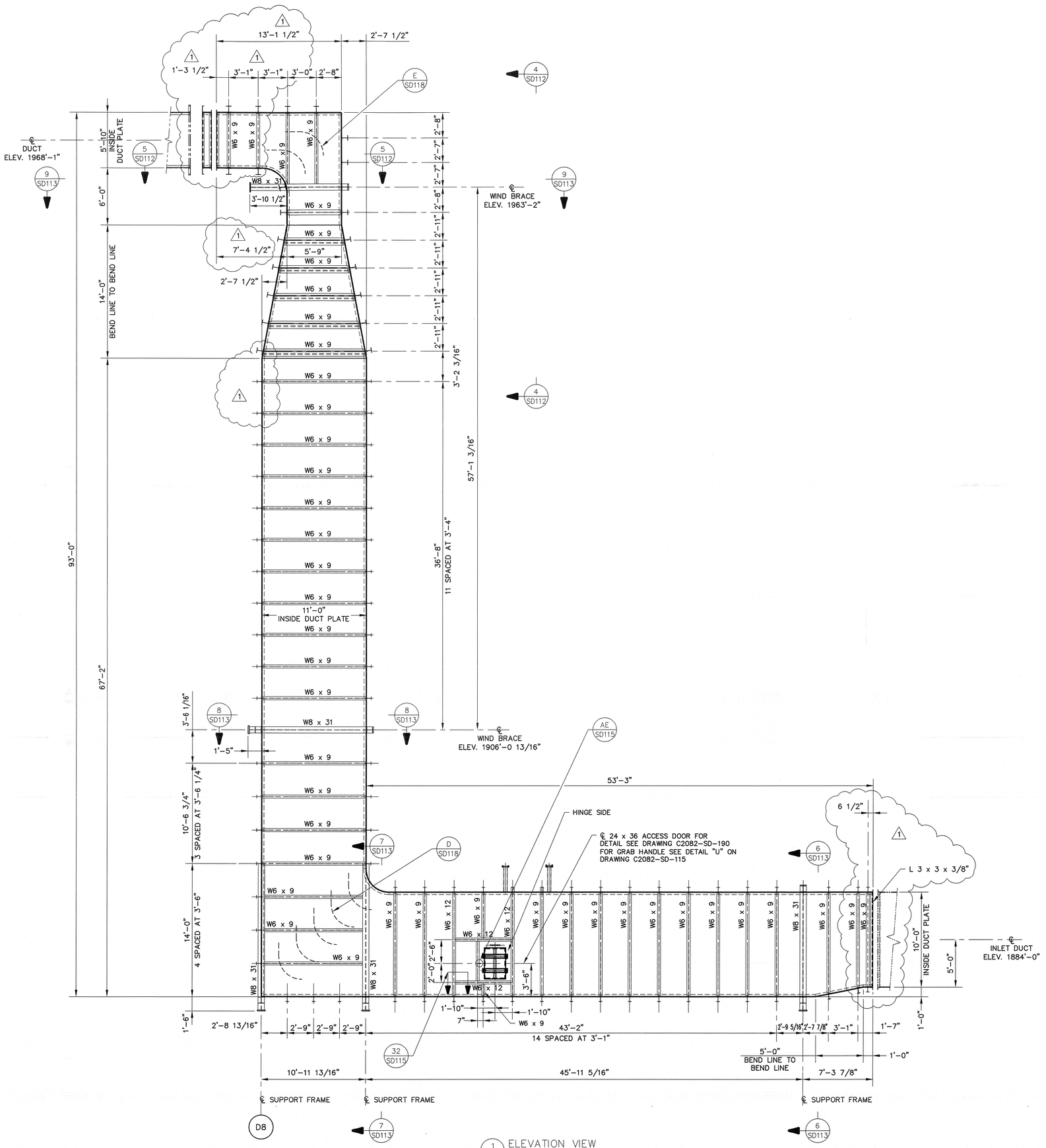
CITY OF GRAND ISLAND UTILITIES
GRAND ISLAND, NEBRASKA
PLATTE STATION UNIT #1
AIR QUALITY CONTROL SYSTEMS UPGRADE

DUCTWORK
SPRAY DRYER INLET DUCT
PLAN VIEW

ISSUED FOR CONSTRUCTION — DATE: 06Sep13
DRAWING SCALE: 1/4" = 1' – 0"
PLOTTING SCALE: 1 = 48

AUTHORIZATION NO.	DRAWING NUMBER	REVISION
C2082	SD–110	1

FILE NAME: C20B2SD110 | E | SHEET NO.: 01 OF 01



1 SD110 ELEVATION VIEW

NOTES:

1. FOR GENERAL NOTES AND REFERENCE DRAWINGS SEE DRAWING C2082-SD-100 AND C2082-SD-110.
2. ELEVATIONS SHOWN ARE BASED ON A GRADE ELEVATION OF 1867'-0".

REFERENCE DRAWINGS:

C2082-SD-100	DUCTWORK GENERAL NOTES AND REFERENCE DRAWINGS.
C2082-SD-110	DUCTWORK SPRAY DRYER INLET DUCT PLAN VIEW
C2082-SD-112	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-113	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-115	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-118	DUCTWORK SPRAY DRYER INLET DUCT SECTIONS AND DETAILS
C2082-SD-190	DUCTWORK 24" x 36" ACCESS DOOR ASSEMBLY

MICHAEL A. WALSH, JR. E-14548 PROFESSIONAL (CIVIL) ENGINEER STATE OF NEBRASKA
9/6/13

MET Marsulex Environmental Technologies

CITY OF GRAND ISLAND UTILITIES
GRAND ISLAND, NEBRASKA
PLATTE STATION UNIT #1
AIR QUALITY CONTROL SYSTEMS UPGRADE

DUCTWORK
SPRAY DRYER INLET DUCT
ELEVATION VIEW

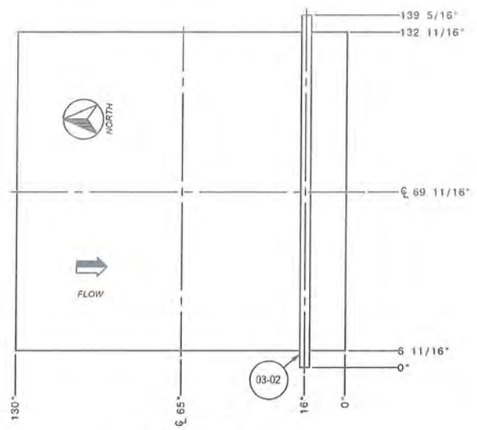
REVISION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
DRAWN BY								1- B FERRERI	0-6/28/13 BFOX	ISSUED FOR FABRICATION
CHECKED BY								B Fox	BDF	
REVIEWED FOR DESIGN								G Cordova	G CORDOVA	
APPROVED FOR ENGINEERING									R SEIFERT	
APPROVAL DATE								06Sep13	6/27/13	

DELETED UPPER ACCESS DOOR AND REVISED STIFFENERS AT DOOR; REVISED EXPANSION JOINT WIDTHS PER VENDOR INFORMATION, ADDED STIFFENER AT INLET JOINT AND REVISED STIFF SPACING AT OUTLET JOINT

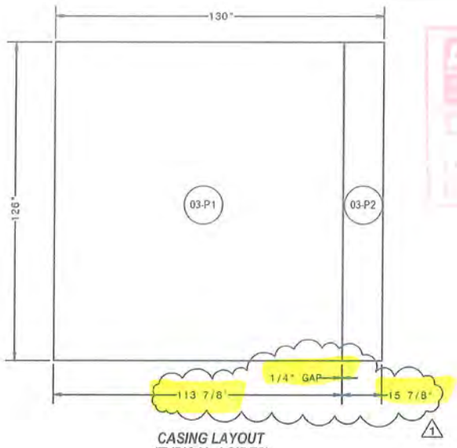
ISSUED FOR CONSTRUCTION — DATE 06Sep 2013
DRAWING SCALE: 1/4" = 1' - 0"
PLOTTING SCALE: 1 = 48
AUTHORIZATION NO.: C2082
DRAWING NUMBER: SD-111
REVISION: 1
FILE NAME: C2082SD111
SHEET NO.: 01 OF 01

NOTES:

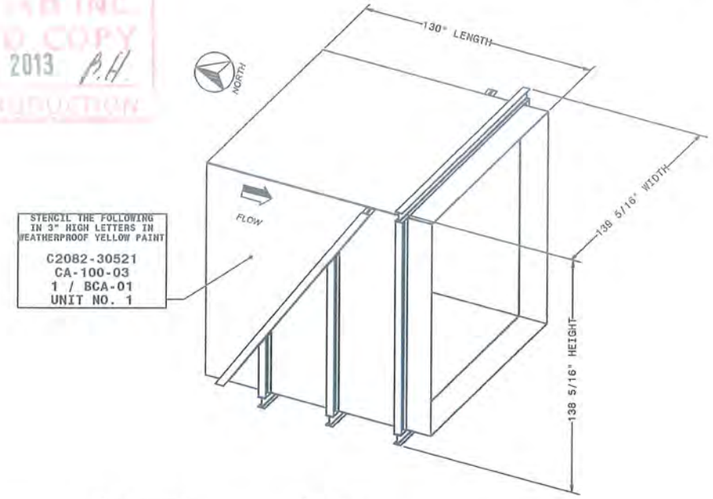
1. ALL WELDING SHALL BE IN ACCORDANCE WITH CSA W59 / AWS D1.1.
2. TEMPORARY SHIPPING BRACING SHALL BE PAINTED YELLOW.
3. INTERNAL CASING PLATE SEAL WELDS TO BE DIESEL TESTED.

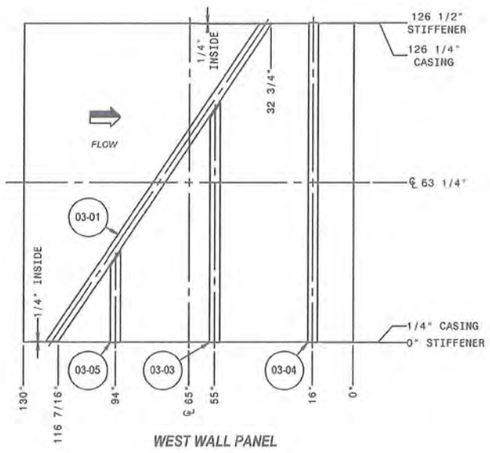


ROOF PANEL

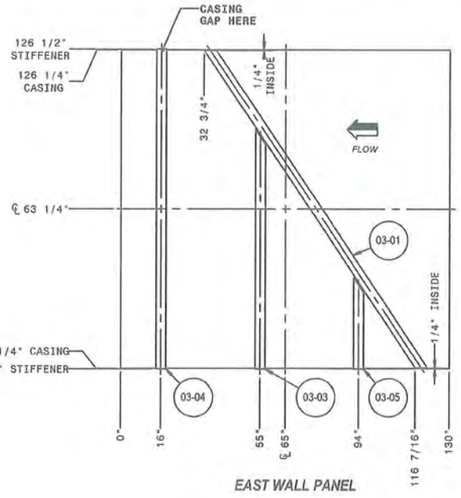


CASING LAYOUT
(TYPICAL 4 SIDES)

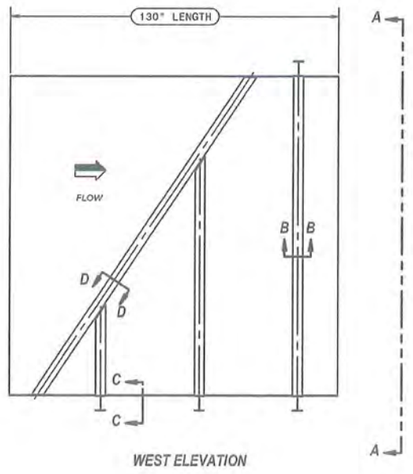




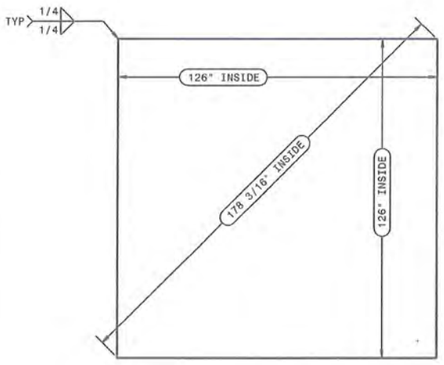
WEST WALL PANEL



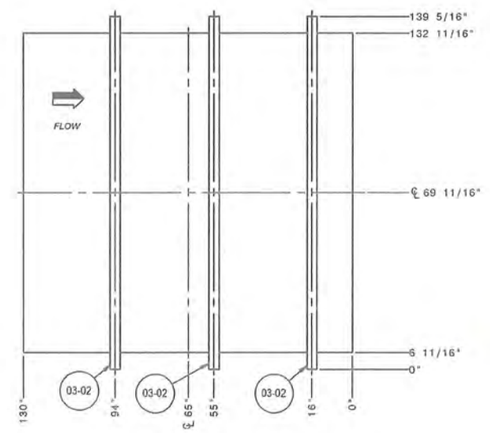
EAST WALL PANEL



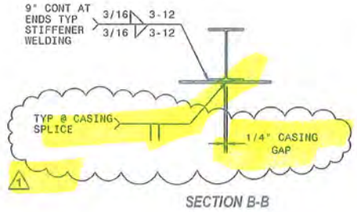
WEST ELEVATION



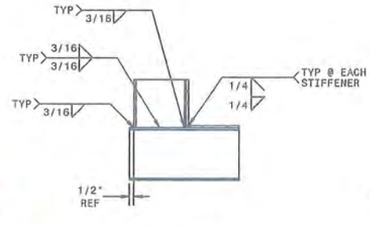
SECTION A-A



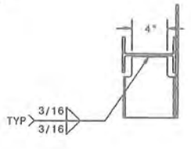
FLOOR PANEL



SECTION B-B



SECTION C-C



SECTION D-D

TAG: 29-288-03
QTY: 1 REQ.
HOPPER OUTLET
WEIGHT: 5800 lbs

QTY'S SHOWN FOR 1 UNIT ONLY 1 TOTAL

QTY.	PART NO	PART NAME	DESCRIPTION	MATERIAL	LENGTH	WIDTH	WEIGHT
2	03-05	STIFFENER	W6x9	A992 Gr.50	37 1/4"		26
2	03-04	STIFFENER	W6x9	A992 Gr.50	126 1/2"		95
2	03-03	STIFFENER	W6x9	A992 Gr.50	95 3/4"		70
4	03-02	STIFFENER	W6x9	A992 Gr.50	139 5/16"		105
2	03-01	STIFFENER	W6x12	A992 Gr.50	153 1/2"		151
4	03-P2	CASING PLATE	1/4" PLATE	44W	126"	15 7/8"	141
4	03-P1	CASING PLATE	1/4" PLATE	44W	126"	113 7/8"	1011

BILL OF MATERIAL AND PARTS LIST

REV.	DESCRIPTION	DATE	BY	CHK'D
1	CASING GAP CHANGE TO 1/4"	NOV-21-2013	BH	ADW
0	ISSUED FOR FABRICATION	NOV-15-2013	BH	ADW

CAMBRIDGE PRO FAB INC.
479 FRANKLIN BLVD. CAMBRIDGE, ON CANADA N1R 6G6

PROJECT: MET GRAND ISLAND

TITLE: SPRAY DRYER HOPPER OUTLET DETAIL

DRN'D BH DATE NOV-15-2013
CHK'D ADW WEIGHT 5712 lbs
SHT No. 1 OF 1 JOB No. 29-288 DWG No. 03 REV 1

Code 1 (1) Work May Proceed
(2) Revise and Resubmit. Subject to incorporation of changes Notes.-Work May proceed.
(3) Revise and Resubmit. Work May Not proceed.
(4) Review not required. Work May proceed.
IMPORTANT: Permission to proceed does not constitute acceptance or relieve supplier from full compliance with contractual obligations.

MET
Date: 12/3/13
Engr: BDW

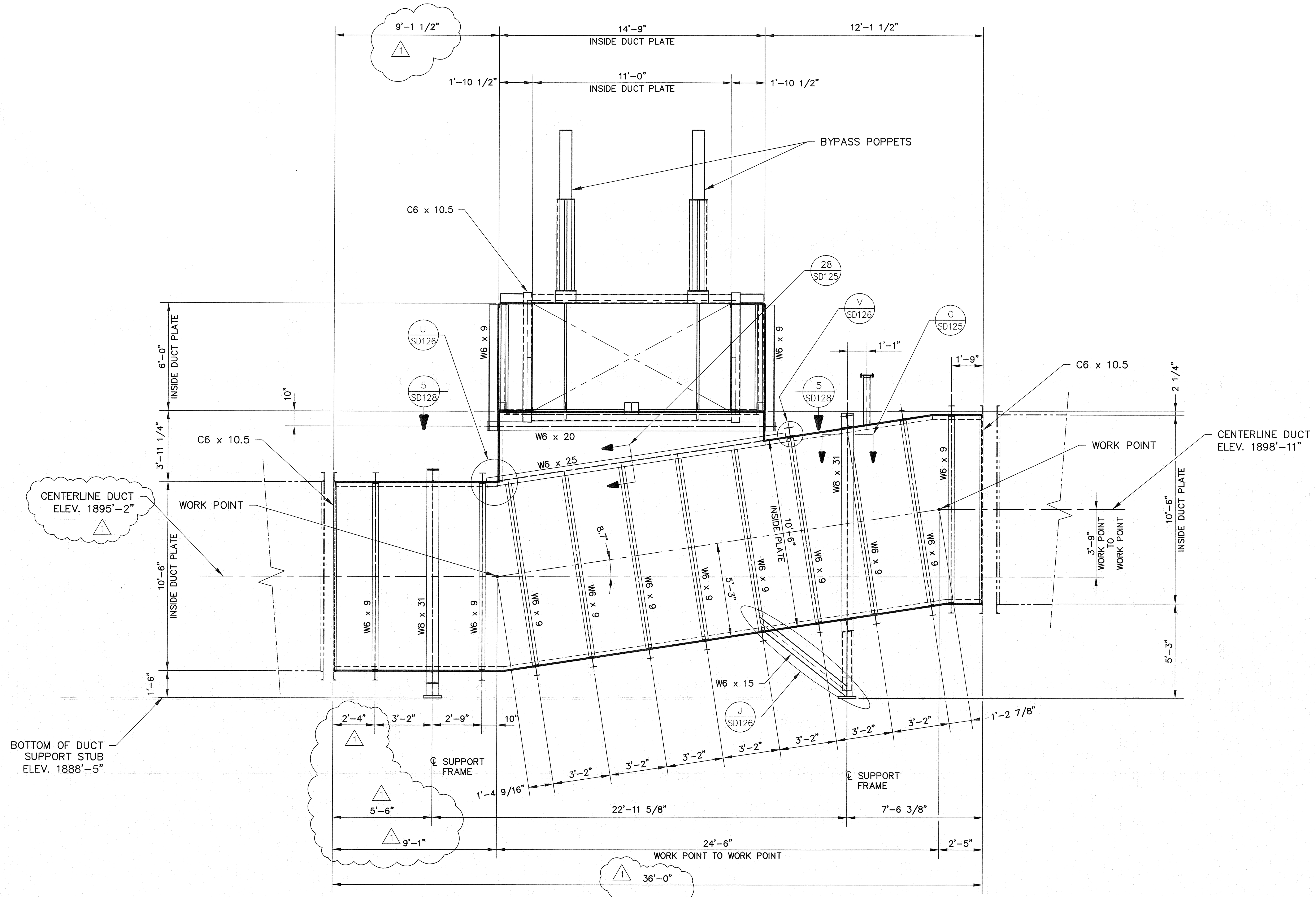
PO# 'C2082'-24
VP: 'VP #036'-'A'
REQ: 'N000'
EFN: '024V0036.'PDF'
DATE: 12-2-2013

36A

C128641

NOTES:

1. FOR GENERAL NOTES AND REFERENCE DRAWINGS SEE DRAWING C2082–SD–100 AND C2082–SD–120.
2. ELEVATIONS SHOWN ARE BASED ON A GRADE ELEVATION OF 1867'–0".



1
SD120
SECTION

REFERENCE DRAWINGS:

C2082–SD–100 DUCTWORK
GENERAL NOTES & REFERENCE DRAWINGS.

C2082–SD–120 DUCTWORK
BYPASS / FABRIC FILTER INLET
PLAN VIEW

C2082–SD–125 DUCTWORK
BYPASS / FABRIC FILTER INLET
SECTIONS AND DETAILS

C2082–SD–126 DUCTWORK
BYPASS / FABRIC FILTER INLET
SECTIONS AND DETAILS

C2082–SD–128 DUCTWORK
BYPASS / FABRIC FILTER INLET
SECTIONS AND DETAILS

PROFESSIONAL (Civil) ENGINEER
MICHAEL A. WALSH, JR
E-14548
STATE OF NEBRASKA
[illegible] 9/6/13

1 REVISION	1–	DESCRIPTION	0–6/28/13
2 DRAWN BY	B FERRERI	CORRECTED ELEVATION (1895'–2" WAS LISTED AS 1898'–11") AND EXPANSION JOINT WIDTHS PER VENDOR DRAWINGS	BFOX
3 CHECKED BY	B Fox		BDF
4 REVIEWED FOR DESIGN	G. Cordova		G CORDOVA
5 APPROVED FOR ENGINEERING	[illegible]		R SEIFERT
6			
7			
8 APPROVAL DATE	06Sep13		6/27/13

DESCRIPTION: ISSUED FOR FABRICATION

MET
Marsulex Environmental Technologies

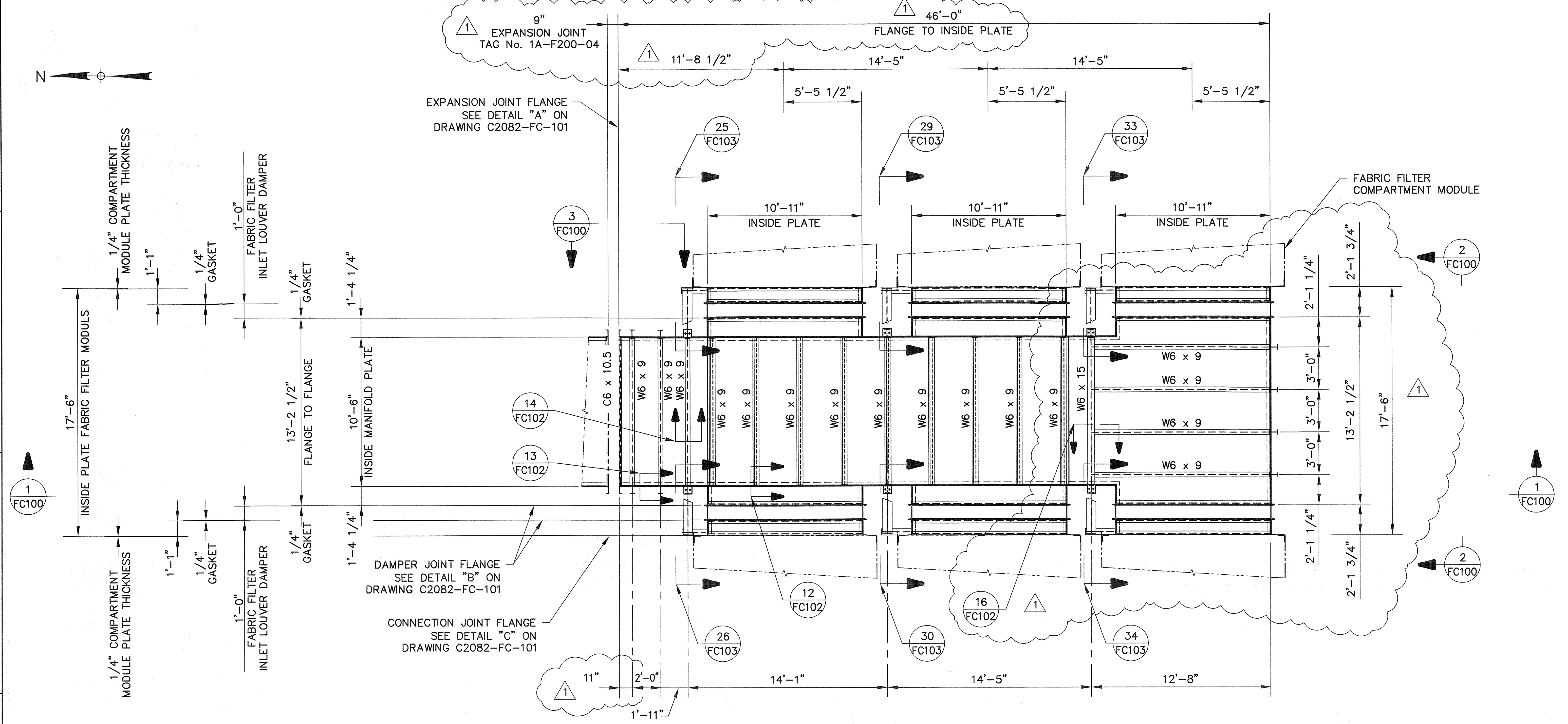
CITY OF GRAND ISLAND UTILITIES
GRAND ISLAND, NEBRASKA
PLATTE STATION UNIT #1
AIR QUALITY CONTROL SYSTEMS UPGRADE

DUCTWORK
BYPASS / FABRIC FILTER INLET
ELEVATION VIEW

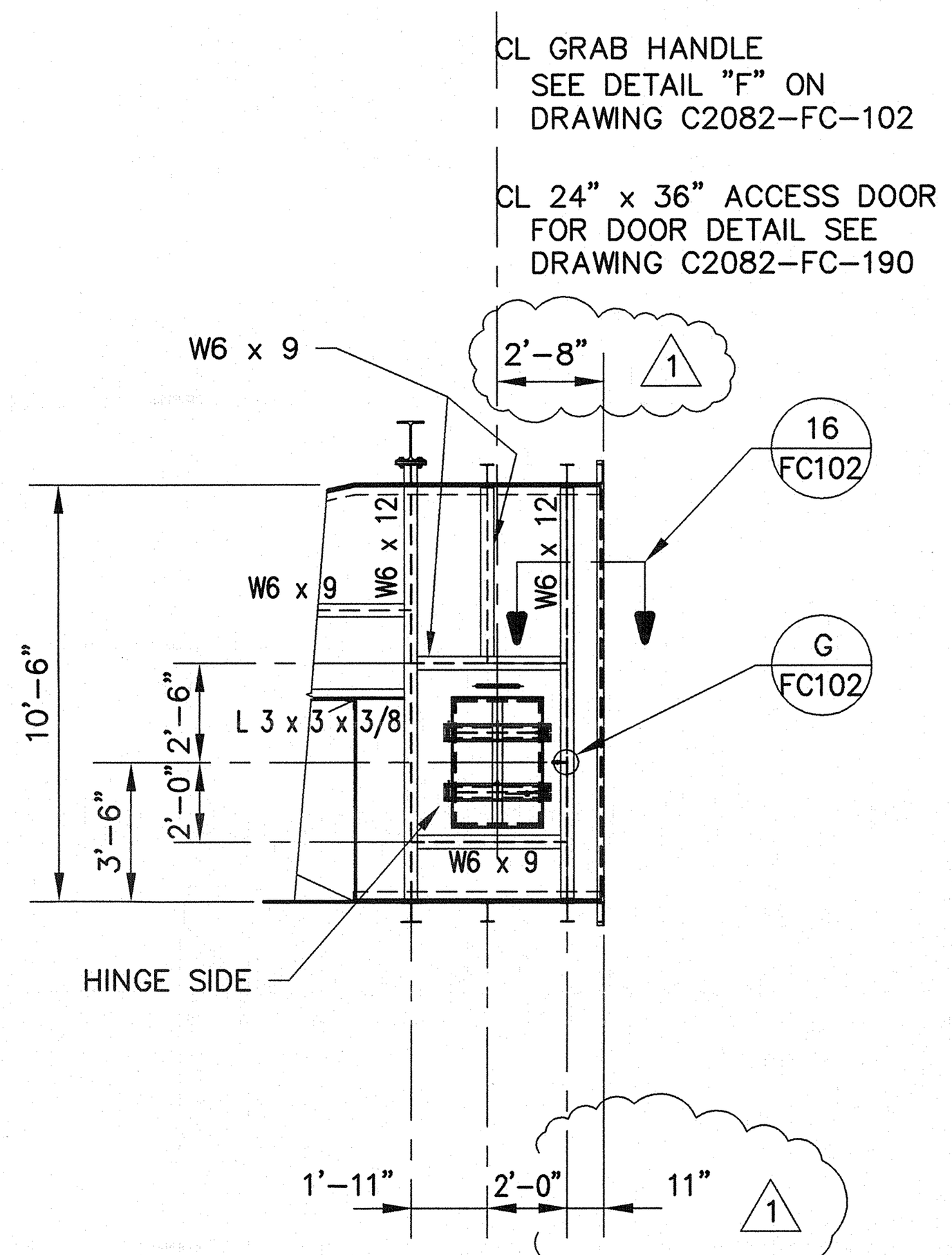
ISSUED FOR CONSTRUCTION: [illegible] DATE: 06Sep2013
DRAWING SCALE: 3/8" = 1'–0"
PLOTTING SCALE: 1 = 32

AUTHORIZATION NO.	DRAWING NUMBER	REVISION
C2082	SD–121	1

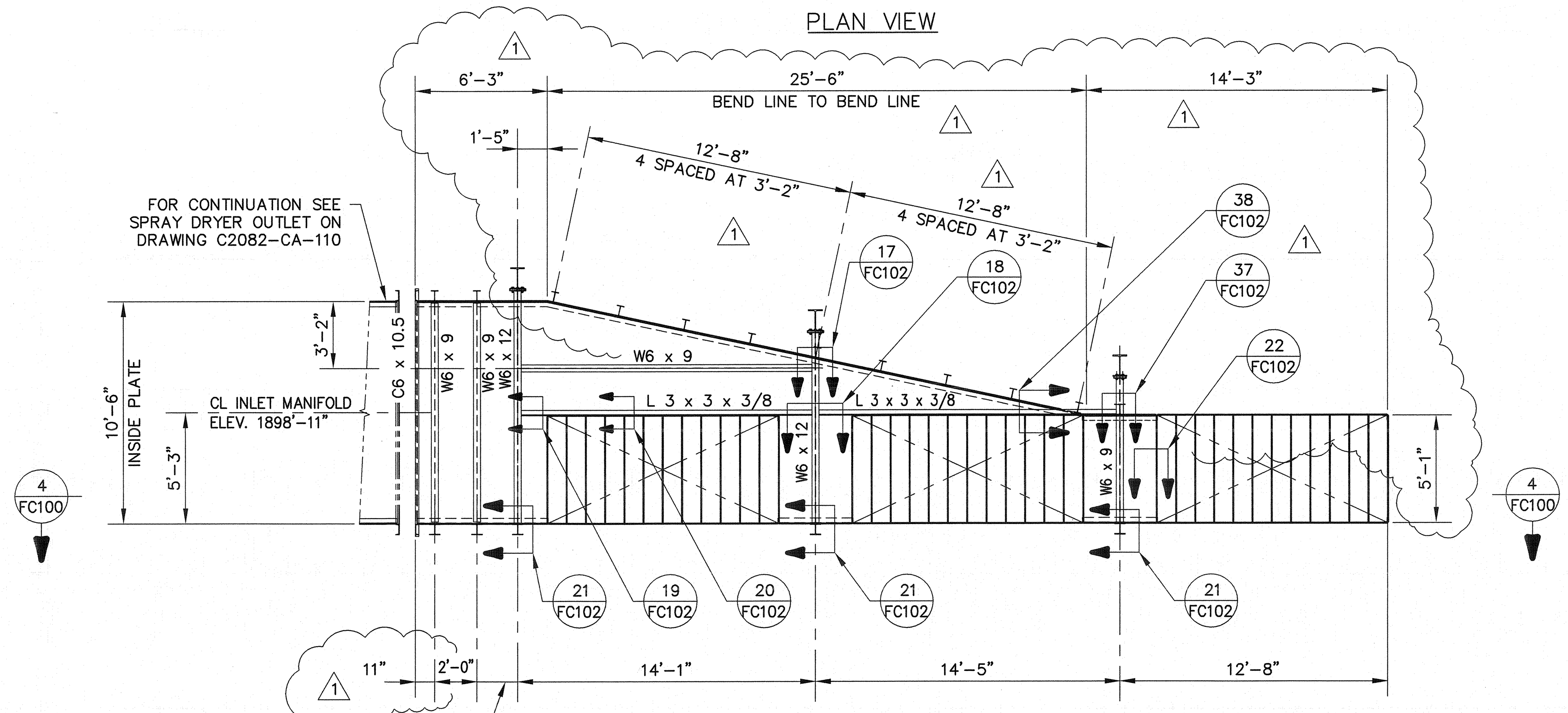
FILE NAME: C2082SD121 E
SHEET NO.: 01 OF 01



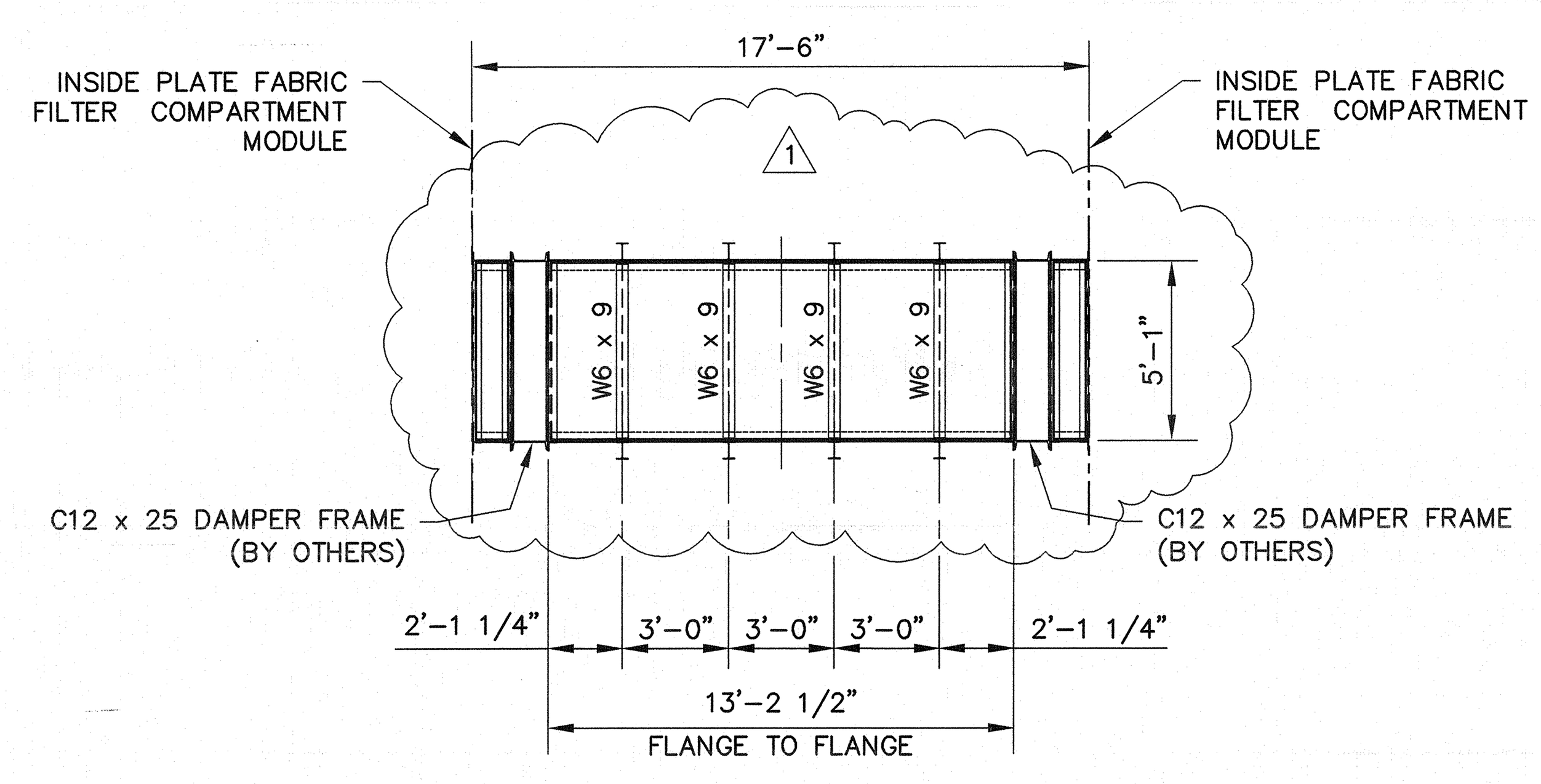
PLAN VIEW



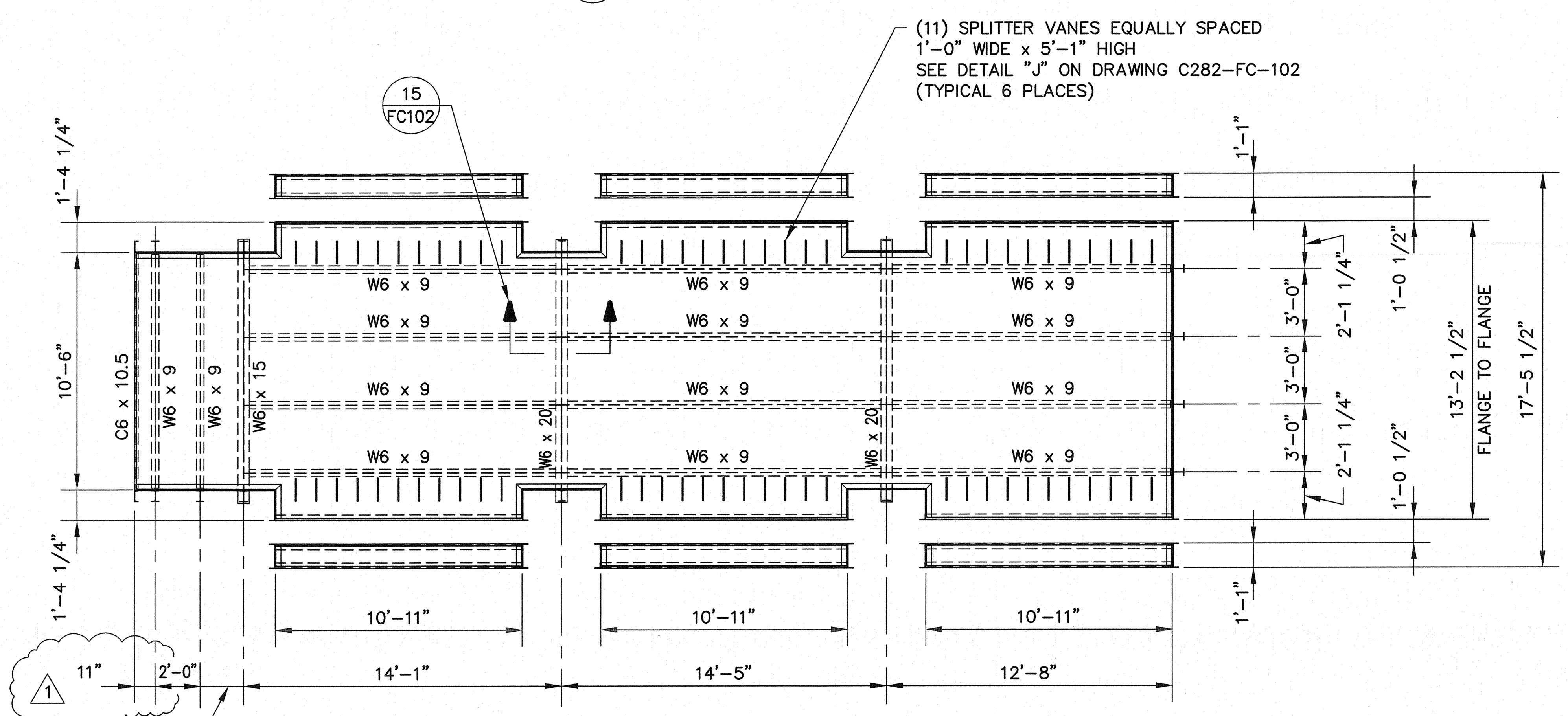
3 FC100 SECTION



1 FC100 SECTION



2 FC100 SECTION



4 FC100 SECTION

NOTES:

1. FOR GENERAL NOTES AND REFERENCE DRAWINGS SEE DRAWING C2082-FA-001.
2. FOR ADDITIONAL TYPICAL DUCT DETAILS SEE DETAIL "AA" ON DRAWING C2082-FC-102

REFERENCE DRAWING

C2082-FA-001	FABRIC FILTER GENERAL NOTES & REFERENCE DRAWINGS
C2082-FC-101	FABRIC FILTER – INLET MANIFOLD SECTIONS AND DETAILS
C2082-FC-102	FABRIC FILTER – INLET MANIFOLD SECTIONS AND DETAILS
C2082-FC-103	FABRIC FILTER – INLET MANIFOLD SECTIONS AND DETAILS
C2082-FC-190	FABRIC FILTER – 24" x 36" ACCESS DOOR ASSEMBLY
C2082-FC-191	FABRIC FILTER – 24" x 36" ACCESS DOOR SECTIONS AND DETAILS
C2082-FC-192	FABRIC FILTER – 24" x 36" ACCESS DOOR SECTIONS AND DETAILS
C2082-FC-193	FABRIC FILTER – ACCESS DOOR SAFETY LATCH ASSEMBLY AND DETAILS
C2082-SGC-01	PAINT SPECIFICATION
C2082-BFA-01	FABRIC FILTER BILL OF MATERIAL
1 SXX-3	SPECIFICATION FOR FIELD INSTALLATION OF FIBERGLASS ACCESS DOOR PACKING

PROFESSIONAL (Civil) ENGINEER
MICHAEL A. WALSH, JR
E-14548
STATE OF NEBRASKA
8/30/13

REVISION	1	DESCRIPTION	0	DESCRIPTION
	1-8/27/13		0-7/22/13	
DRAWN BY	BDF	REVISED MANIFOLD PER MODEL STUDY AND EXPANSION JOINT PER VENDOR INFORMATION	BDF	ISSUED FOR FABRICATION
CHECKED BY	D Reynolds		D REYNOLDS	
REVIEWED FOR DESIGN	G Cordova		G CORDOVA	
APPROVED FOR ENGINEERING	[illegible]			
	[illegible]		R WARNER	
			R WARNER	
APPROVAL DATE	29 Aug 13		22 JUL 13	

MET
Marsulex Environmental Technologies

CITY OF GRAND ISLAND UTILITIES
GRAND ISLAND, NEBRASKA
PLATTE STATION UNIT #1
AIR QUALITY CONTROL SYSTEMS UPGRADE

FABRIC FILTER
INLET MANIFOLD
PLAN VIEW

ISSUED FOR CONSTRUCTION	DATE
[illegible]	29 Aug 2013
DRAWING SCALE: 1/4" = 1'-0"	
PLOTTING SCALE: 1 = 48	

AUTHORIZATION NO.	DRAWING NUMBER	REVISION
C2082	FC-100	1

FILE NAME: C2082FC100 E
SHEET NO.: 01 OF 01

PGS Spring 2020 Outage

Bid, Time Sheet and Billing Format

Company _____

Vacuum Cleaning - 48 Service Hours in 4, 12 hour shifts

		unit	Qty	Rate	Total cost	Taxes
Mobilization	Vacuum Truck					
April 24, 2020	Vacuum Truck					
	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	Milage					
	Other					
	Other					
	Other					
Totals						

48 hrs Daily Charges	Vacuum Truck					
April 25, 2020 thru	Vacuum Truck					
April 28-2020	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	PPE					
	Consumables					
	Other					
	Other					
	Other					
totals						

De-Mobilization	Vacuum Truck					
April 29, 2020	Vacuum Truck					
	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	milage					

	Other					
	Other					
	Other					
totals						

Hydro blast Cleaning - 48 Service hours in 4 12 hour shifts

		units	Qty	Rate	Total cost	Taxes
Mobilization	Pump Trailer/truck					
April 24, 2020	Pump Trailer/truck					
	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	Other					
	Other					
	Other					
totals						
48 hrs of Daily Charges	Pump Trailer/truck					
April 25, 2020 thru	Pump Trailer/truck					
April 28, 2020	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	PPE					
	Consumables					
	Other					
	Other					
	Other					
totals						
De-Mobilization	Pump Trailer/truck					
April 29, 2020	Pump Trailer/truck					
	Support Truck					
	Support Truck					
	Support Truck					
	Supervisor	st				
		ot				
	Operator	st				
		ot				
	Laborer	st				
		ot				
	Personnel	st				
		ot				
	Per diems					
	milage					

Other					
Other					
Other					
Totals					

Air Heater Wash

April 29-30, 2020

Lump Sum Base Bid _____

Taxes _____

Alternate Bid _____

Taxes _____

(All bids must be submitted on this form)

BOTTOM ASH AND BOILER INDUSTRIAL CLEANING
SPRING 2020 OUTAGE
BID DATA FORM

CITY OF GRAND ISLAND
GRAND ISLAND, NE

The undersigned Bidder, having examined all specifications and other bidding documents, and all addenda thereto, and being acquainted with and fully understanding all conditions relative to the specified materials and equipment, hereby proposes to provide all necessary supervision, materials, equipment, and labor to provide industrial cleaning services, consisting of an air heater wash, high pressure water blasting and line moling in the bottom ash system and vacuum cleaning throughout Platte Generating Station FOB the City of Grand Island, freight prepaid, at the following price:

ITEM DESCRIPTION	Air Heater Wash (Firm fixed pricing)	Vacuum Services (Lump sum-T&M)	Hydro-blast Services (Lump sum-T&M)
Material	$ 25,045.00	$ 12,655.00	$ 21,510.00
Labor	$ 7,524.00	$ 21,534.00	$ 10,488.00
Applicable Sales tax*	$ 2,442.68	$ 2,564.18	$ 2,339.85
Base Bid	$ 34,848.83	$ 36,582.23	$ 34,237.86

Total Base Bid $ 106,162.71

*** If bidder fails to include sales tax in their bid price or takes exception to including sales tax in their bid price, the City will add a 7.5% figure to the bid price for evaluation purposes; however, the City will only pay actual sales tax due. The State of Nebraska Department of Revenue has determined that building cleaning and maintenance services are taxable on both materials and labor.**

☐ EXCEPTIONS: By checking this box, Bidder acknowledges there are Exceptions or Clarifications noted to the bid, and those exceptions are fully explained on a separate sheet, clearly marked, and attached to the Bid Data Form.

☑ By checking this box, Bidder acknowledges the specified completion date of the project is **April 30, 2020.**

Meylan Enterprises, Inc. — 01.06.20
Bidder Company Name — Date

6225 S. 60th Street — Omaha — NE — 68117
Company Address — City — State — Zip

Nicholas Graham Cagle — Nicholas Graham Cagle V.P.
Print Name — Signature

Email: nickcagle@meylan.net — Telephone No. (402) 895-5219

According to Nebraska Sales and Use Tax Requirements, Section 1-017, Contractors, check which option you have selected to file with the Nebraska Department of Revenue:

Option 1 (Section 1-017.05)_____ Option 2 (Section 1-017.06)__X__ Option 3 (Section 1-017.07)_____

If the Nebraska sales and use tax election is not filed or noted above, the contractor will be treated as a retailer under Option 1 for sales and use tax purposes.

☐ By checking this box, Bidder acknowledges that Addenda Number(s) _____ were received and considered in Bid preparation.

If Bidder supplies individual unit pricing information as supplemental pricing to the base material and labor cost above, said individual pricing is proprietary information and should not be released under a public records request. The total amount of the bid is not considered proprietary information and will be released pursuant to City Procurement Code.

Karen Nagel

From: Darrell Dorsey
Sent: Friday, January 10, 2020 11:01 AM
To: Nicholas Graham Cagle (nickcagle@meylan.net)
Cc: Lynn Mayhew; Karen Nagel
Subject: Platte Generating Station - Bid Data

Nick-
We are in the process of evaluating all proposals received for the Bottom Ash and Boiler Industrial Cleaning Spring 2020 Outage.

In reviewing your proposal the entries on your BID DATA FORM and comparing it to your bid detail spreadsheet figures, there are several errors.

The hydro-blast 'Applicable Sales tax*' entry should be $2399.85 , not $2339.85, and the total should be $34,397.85.

The three 'Base Bid' entries of $34,848.83, $36,582.23, $34,237.86 are all incorrect. Those same entries should be $35,011.68, $36,753.18, $34,397.85

In reviewing the bid details on your spreadsheet, there is also an error in the overtime allocation for the hydro-blast work:

Submitted:		Qty	Rate	Total
Foreman	st	24	$65.00	$1,560.00
	ot	24	$84.50	$2,028.00
Operator	st	24	$45.00	$1,080.00
	ot	24	$58.50	$1,404.00
Tech	st	48	$40.00	$1,920.00
	ot	48	$52.00	$2,496.00
				$10,488.00

* st: 1st 8 hrs of each shift, Monday-Friday
ot: After the first 8 hrs of each shidft Monday-Friday ar Sunday

Corrected:				
Foreman	st	16	$65.00	$1,040.00
	ot	32	$84.50	$2,704.00
Operator	st	16	$45.00	$720.00
	ot	32	$58.50	$1,872.00
Tech	st	32	$40.00	$1,280.00
	ot	64	$52.00	$3,328.00
				$10,944.00

* st: 1st 8 hrs of each shift, Monday-Friday
ot: After the first 8 hrs of each shidft Monday-Friday ar Sunday

OT adder	$456.00
tax	$34.20

$490.20

The addition of $490.20 to the previously corrected Hydro-blast bid of $34,397.85 gives corrected Hydro-blast bid of $34,888.05

This will result in a Total Base Bid of $106,652.91

Whereas these are all mathematical errors that correctable with the information already provided in your proposal, I will use the new total for evaluation purposes. Please review and let me know if you agree with the adjustments I have made.

Regards-

BID BOND

Conforms with The American Institute of Architects, A.I.A. Document No. A-310

KNOW ALL BY THESE PRESENTS, That we, **Meylan Enterprises, Inc., 6225 S. 60th Street, Omaha, NE 68117**

as Principal, hereinafter called the Principal,

and the **Universal Surety Company**,

of **P.O. Box 80468, Lincoln, NE 68501**, a corporation duly organized under

the laws of the State of **Nebraska**, as Surety, hereinafter called the Surety, are held and firmly bound unto

The City of Grand Island as Obligee, hereinafter called the Obligee,

in the sum of **FIVE PERCENT OF AMOUNT BID**

Dollars ($ **5%**), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Bottom Ash and Boiler Industrial Cleaning Spring 2020 Outage**

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **7th** day of **January**, **2020**.

Witness

Meylan Enterprises, Inc. (Seal)
Principal

Nicholas Graham Cagley, Vice President
Title

Witness

Universal Surety Company

By
Joan Leu, Attorney-in-Fact

S-0054/GEEF 12/00

FRP

UNIVERSAL SURETY COMPANY

Lincoln, Nebraska

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That the **UNIVERSAL SURETY COMPANY**, a corporation of the State of Nebraska having its principal office in the City of Lincoln, Nebraska, pursuant to the following Bylaw, which was adopted by the Board of Directors of the said Company on July 23, 1981, to wit:

"Article V-Section 6. RESIDENT OFFICERS AND ATTORNEYS-IN-FACT. The President or any Vice President, acting with any Secretary or Assistant Secretary, shall have the authority to appoint Resident Vice Presidents and Attorneys-in-Fact, with the power and authority to sign, execute, acknowledge and deliver on its behalf, as Surety: Any and all undertakings of suretyship and to affix thereto the corporate seal of the corporation. The President or any Vice President, acting with any Secretary or Assistant Secretary, shall also have the authority to remove and revoke the authority of any such appointee at any time."

does hereby make, constitute and appoint

Sharon K. Murray, Firth, Nebraska or David A. Dominiani, Lincoln, Nebraska
or Maura P. Kelly, Council Bluffs, Iowa or Joan Leu, Ralston, Nebraska or Jacqueline L. Drey
or Kevin J. Stenger or David G. Jesse, Omaha, Nebraska

its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for and on its behalf, as Surety:

Any and all undertakings of suretyship

And the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its offices in Lincoln, Nebraska, in their own persons.

The following Resolution was adopted at the Regular Meeting of the Board of Directors of the **UNIVERSAL SURETY COMPANY**, held on July 23, 1981:

"RESOLVED, That the signatures of officers of the Company and the seal of the Company may be affixed by facsimile to any Power of Attorney executed in accordance with Article V-Section 6 of the Company Bylaws: and that any such Power of Attorney bearing such facsimile signatures, including the facsimile signature of a certifying Assistant Secretary and facsimile seal shall be valid and binding upon the Company with respect to any bond, undertaking or contract of suretyship to which it is attached."

All authority hereby conferred shall remain in full force and effect until terminated by the Company.

IN WITNESS WHEREOF, **UNIVERSAL SURETY COMPANY** has caused these presents to be signed by its President and its corporate seal to be hereunto affixed this 16th day of February, 20 18.

Carol J. Clark
Secretary/Treasurer

UNIVERSAL SURETY COMPANY

By Curtis L. Hartter
President

UNIVERSAL SURETY COMPANY CORPORATE SEAL LINCOLN, NEBRASKA

State of Nebraska }
County of } ss. Lancaster

On this 16th day of February, 20 18, before me personally came Curtis L. Hartter, to me known, who being by me duly sworn, did depose and say that (s)he resides in the County of Lancaster, State of Nebraska; that (s)he is the President of the **UNIVERSAL SURETY COMPANY**, the corporation described in and which executed the above instrument; that (s)he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; that (s)he signed (his) (her) name by like order; and that Bylaw, Article V-Section 6, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

Tara Martin
Notary Public

GENERAL NOTARY - State of Nebraska
TARA MARTIN
My Comm. Exp. February 16, 2022

My Commission Expires February 16, 2022.

I, Philip C. Abel, Director of **UNIVERSAL SURETY COMPANY**, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by said **UNIVERSAL SURETY COMPANY**, which is still in full force and effect.

Signed and sealed at the City of Lincoln, Nebraska this 7th day of January, 2020.

Philip C. Abel
Director

UNIVERSAL SURETY COMPANY CORPORATE SEAL LINCOLN, NEBRASKA

6225 S. 60th Street, Omaha, NE 68117
PH: 800.545.5468 – FAX: 402.731.6848

T&M Rate Schedule Developed for:

City of Grand Island, Nebraska
Spring 2020 Outage

I. T&M Rates: Hydroblast Services

Personnel:	**Regular**	**Overtime**
Supervisor	$65.00/hour	$84.50/hour
Operator	$45.00/hour	$58.50/hour
Technician	$40.00/hour	$52.00/hour

Regular: first (8) hours, of each shift, Mon – Fri.
Overtime: after the first (8) hours, of each shift, Mon – Fri, all hours Sat, Sun and Federal Holidays.

Equipment/Materials:

10/20K Hydroblast Pump	$175.00/hour
10/20K Hydroblast Tool	$25.00/hour
Level I PPE	$25.00/day
Per Diem	$115.00/day

Mobilization/Demobilization: *F.O.B. Omaha, NE (270) RTM*

Pump Truck	$1.50/mile
Support Truck	$1.50/mile
Per Diem	$115.00/day

II. T&M Rates: Vacuum Services

Personnel:	**Regular**	**Overtime**
Foreman	$50.00/hour	$65.00/hour
Operator/Tech	$40.00/hour	$52.00/hour

Regular: first (8) hours, of each shift, Mon – Fri.
Overtime: after the first (8) hours, of each shift, Mon – Fri, all hours Sat, Sun and Federal Holidays.

Equipment/Materials:

Vacuum Truck	$85.00/hour
Vacuum Consumables	$250.00/day
Level I PPE	$25.00/day
Per Diem	$115.00/day

Note: Vacuum Services T&M Rates will be utilized for deslagging of the Finishing Superheater and Horizontal Superheater assemblies.

6225 S. 60th Street, Omaha, NE 68117
PH: 800.545.5468 – FAX: 402.731.6848

T&M Rate Schedule Developed for:

City of Grand Island, Nebraska
Spring 2020 Outage

Mobilization/Demobilization: *F.O.B. Omaha, NE (270) RTM*

Vacuum Truck	$1.50/mile
Support Truck	$1.50/mile
Per Diem	$115.00/day

III. T&M Rates: APH Wash Services

Personnel:	**Regular**	**Overtime**
Supervisor	$65.00/hour	$84.50/hour
Operator	$45.00/hour	$58.50/hour
Technician	$40.00/hour	$52.00/hour

Regular: first (8) hours, of each shift, Mon – Fri.
Overtime: after the first (8) hours, of each shift, Mon – Fri, all hours Sat, Sun and Federal Holidays.

Equipment/Materials:

10K Hydroblast Pump	$175.00/hour
10K Hydroblast Tool	$50.00/hour
Level I PPE	$25.00/day
Per Diem	$115.00/day

Mobilization/Demobilization: *F.O.B. Omaha, NE (270) RTM*

Pump Truck	$1.50/mile
Support Truck	$1.50/mile
Per Diem	$115.00/day

IV. Standby Time:

In the event, Meylan Enterprises, Inc. crews and equipment are required to standby on the job or work is stopped, through no fault of Meylan, standby charges will be incurred by GIUD for that time at 100% of the applicable rates provided above. All charges are Gate-to-Gate.

V. Diverse Supplier Participation:

Meylan Enterprises, Inc. is a Woman Owned Business Enterprise (WBE), with certification from the Women's Business Enterprise National Council (WBENC). Diverse Supplier participation on the total dollars spent in connection with the work covered by this Proposal is one hundred percent (100%).

Submitted by: Meylan Enterprises, Inc., 6225 S. 60th St., Omaha, NE 68117
City of Grand Island Spring 2020 Outage

Description	U/M	Qty	Rate	Total
Vacuum Services (48) Hours				
Foreman ST	Hour	16	$ 50.00	$ 800.00
OT	Hour	32	$ 65.00	$ 2,080.00
Operator ST	Hour	32	$ 40.00	$ 1,280.00
OT	Hour	64	$ 52.00	$ 3,328.00
Tech ST	Hour	64	$ 40.00	$ 2,560.00
OT	Hour	128	$ 52.00	$ 6,656.00
Vacuum Truck	Hour	96	$ 85.00	$ 8,160.00
Vacuum Consumables	Day	8	$ 250.00	$ 2,000.00
PPE	Day	35	$ 23.00	$ 975.00
Per Diem	Day	35	$ 115.00	$ 4,025.00
Mob/Demob (270) RTM				
Vacuum Truck	Mile	540	$ 1.50	$ 810.00
Support Truck	Mile	540	$ 1.50	$ 810.00
Per Diem	Day	7	$ 115.00	$ 805.00
Sales Tax	7.50%			$ 2,564.18
Lump Sum - T&M				$ 36,753.18

*ST: first (8) hours, of each shift, Monday – Friday.
*OT: after the first (8) hours, of each shift, Monday – Friday, and all hours Saturday and Sunday.

Vacuum Services:
Materials $ 12,655.00
labor $ 21,534.00
Tax $ 2,564.18
Total $ 36,753.18

Description	U/M	Qty	Rate	Total
Hydroblast Services (48) Hours				
Supervisor ST	Hour	24	$ 65.00	$ 1,560.00
OT	Hour	24	$ 84.50	$ 2,028.00
Operator ST	Hour	24	$ 45.00	$ 1,080.00
OT	Hour	24	$ 58.50	$ 1,404.00
Tech ST	Hour	48	$ 40.00	$ 1,920.00
OT	Hour	48	$ 52.00	$ 2,496.00
10/20KPSI Pump	Hour	96	$ 175.00	$ 16,800.00
10/20K Hydroblast Tool	Hour	48	$ 25.00	$ 1,200.00
PPE	Day	16	$ 25.00	$ 400.00
Per Diem	Day	16	$ 115.00	$ 1,840.00
Mob/Demob (270) RTM				
Tractor Trailer	Mile	270	$ 1.50	$ 405.00
Support Truck	Mile	270	$ 1.50	$ 405.00
Per Diem	Day	4	$ 115.00	$ 460.00
Sales Tax	7.50%			$ 2,399.85
Lump Sum - T&M				$ 34,397.85

Hydroblast Services:
Material $21,610.00
Labor $10,488.00
Tax $2,399.85
Total $34,397.85

Description	U/M	Qty	Rate	Total
APH Wash (96) Hours				
Supervisor ST	Hour	24	$ 65.00	$ 1,560.00
OT	Hour	12	$ 84.50	$ 1,014.00
Operator ST	Hour	24	$ 45.00	$ 1,080.00
OT	Hour	12	$ 58.50	$ 702.00
Tech ST	Hour	48	$ 40.00	$ 1,920.00
OT	Hour	24	$ 52.00	$ 1,248.00
10KPSI Pump	Hour	108	$ 175.00	$ 18,900.00
10KPSI APH Tool	Hour	72	$ 50.00	$ 3,600.00
PPE	Day	12	$ 25.00	$ 300.00
Per Diem	Day	12	$ 115.00	$ 1,380.00
Mob/Demob (270 RTM)				
Tractor Trailer	Mile	270	$ 1.50	$ 405.00
Per Diem	Day	4	$ 115.00	$ 460.00
Sales Tax	7.50%			$ 2,442.68
Firm Fixed Price				$ 35,012.68

*ST: first (8) hours, of each shift, Monday – Friday.
*OT: after the first (8) hours, of each shift, Monday – Friday, and all hours Saturday and Sunday.

APH Wash:
Material $25,045.00
Labor $7,524.00
Tax $2,442.68
Total $35,012.68

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PH: 800.545.5468 – FAX: 402.731.6848

I. Meylan Enterprises, Inc. Industrial Service References:

Talen Energy – Colstrip Station
Colstrip, MT
Contact: Dayla Topp (406) 748-5276
Services Performed: Boiler Cleaning, Air Heater Cleaning Units 1, 2, 3 and 4.

MidAmerican Energy – Neal Energy Center
Sioux City, IA
Contact: Nick Novotny (712) 277-5245
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Units 3 and 4.

Westar Energy – Jeffrey Energy Center
St. Marys, KS
Contact: Wayne McAfee (785) 458-6224
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Units 1, 2 and 3.

Platte River Power Authority – Rawhide Station
Ft. Collins, CO
Contact: Travis Hunter (970) 229-1748
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Rawhide Station Unit 1.

We Energies – Pleasant Prairie Station
Pleasant Prairie, WI
Contact: Bob Weisheim (262) 947-5286
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Pleasant Prairie Units 1 and 2

We Energies – Elm Road Station
Oak Creek, WI
Contact: Bob Weisheim (262) 947-5286
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Elm Road Units 1 and 2.

OPPD – Nebraska City Station
Nebraska City, NE
Contact: Matt Zersen (402) 661-9395
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, misc. Industrial Services NCS Units 1 and 2.

OPPD – North Omaha Station
Nebraska City, NE
Contact: Joel Johnston (402) 636-2687
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, misc. Industrial Services NOS Units 1, 2, 3, 4 and 5.

MidAmerican Energy – Walter Scott Energy Center
Council Bluffs, IA
Contact: Keith Jackson (712) 310-0250
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services WSEC Units 1, 2, 3 and 4.

DTE Energy - Belle River Power Plant
East China, MI
Contact: Dale Cash (810) 326-3384
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Belle River Units 1 and 2.

PacifiCorp - Wyodak Station
Gillette, WY
Contact: Bernadette Hinshaw (307) 689-3537
Services Performed: Boiler Cleaning, Air Heater Cleaning, misc. Industrial Services Wyodak Unit 1.

NPPD – Gerald Gentleman Station
Sutherland, NE
Contact: Todd Hoerler (308) 386-8066
Services Performed: Air Heater Cleaning GGS Units 1 and 2.

DTE Energy - St. Clair Power Plant
East China, MI
Contact: Jim Karl (586) 292-6428
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services SCPP Units 1, 2, 3, 4, 6 and 7.

We Energies - Oak Creek Station
Oak Creek, WI
Contact: Cory Gonyer (414) 571-3351
Services Performed: Boiler Cleaning, Air Heater Cleaning, Vacuum Services, Explosives Blasting, misc. Industrial Services Oak Creek Station Units 5, 6, 7 and 8.

MidAmerican Energy – Louisa Generating Station
Muscatine, IA
Contact: Ron Martell (563) 288-2818
Services Performed: Air Heater Cleaning Unit 1.

Deseret Power – Bonanza Station
Vernal, UT
Contact: Mike Goddard (435) 781-5704
Services Performed: Air Heater Cleaning Bonanza Station Unit 1.

PacifiCorp – Naughton Station
Kemmerer, WY
Contact: Ryan Witbeck (307) 828-4356
Services Performed: Boiler Cleaning, Air Heater Cleaning, Air Heater Wash Naughton Station Units 1, 2 and 3.

Scott Sonnenfelt

4906 South 170th Street
Omaha, NE 68135
(402) 659-8666
ssonnenfelt@meylan.net

OBJECTIVE

To obtain a position that best utilizes my skills and experience

EDUCATION

High School

EMPLOYMENT

I have been with Meylan Enterprises, Inc. for 17 years. My experience includes refractory hydro demolition services, removing vibracast refractory lining to bare metal, experience on flow rates computer controlled high energy rotary, and indexing equipment. I have also performed high energy cleaning services at coal fired utilities.

As a Supervisor, I have performed numerous Refractory Hydrodemolition projects, for a minimum of (5) years, and possess intimate knowledge of all aspects of the process, to include; 1) operation, maintenance and troubleshooting of 20,000 PSI medium-high pressure diesel pumping units, 2) operation, maintenance and troubleshooting of proprietary Refractory Hydrodemolition equipment, to include rigging, air tuggers, hydraulic motors/pumps, 20.000 PSI medium-high pressure water jetting tooling, microprocessor indexing and programming controllers..

CERTIFICATIONS

- Respiratory Evaluation good until 7/25/20
- OSHA 10 Hour Safety & Health Training Course taken 7/25/19
- Fall Prevention Certification done 7/25/19
- Confined Spaces & Dangerous Places done 7/25/19 (includes the following)
- Authorized Entrant Training
- Attendant Training
- Entry Supervisor Training
- Rescue Training
- Practical Training
- NSC Adult CPR/AED Certified until 7/23/19
- OSHA 30 Hour Safety & Health Training Course taken 8/13/15

Dave Carstensen

11305 Gold Street
Omaha, NE 6114
(402) 507-9177
dcarstensen@meylan.net

OBJECTIVE

To obtain a position that best utilizes my skills and experience

EDUCATION

High School

EMPLOYMENT

I have been with Meylan Enterprises, Inc. for 24 years. My experience includes refractory hydro demolition services, removing vibracast refractory lining to bare metal, experience on flow rates computer controlled high energy rotary, and indexing equipment. I have also performed high energy cleaning services at coal fired utilities.

As a Supervisor, I have performed numerous Refractory Hydrodemolition projects, for a minimum of (5) years, and possess intimate knowledge of all aspects of the process, to include; 1) operation, maintenance and troubleshooting of 20,000 PSI medium-high pressure diesel pumping units, 2) operation, maintenance and troubleshooting of proprietary Refractory Hydrodemolition equipment, to include rigging, air tuggers, hydraulic motors/pumps, 20,000 PSI medium-high pressure water jetting tooling, microprocessor indexing and programming controllers..

CERTIFICATIONS

- Respiratory Evaluation good until 7/25/20
- OSHA 10 Hour Safety & Health Training Course taken 7/25/18
- Fall Prevention Certification done 7/25/19
- Confined Spaces & Dangerous Places done 7/25/19 (includes the following)
- Authorized Entrant Training
- Attendant Training
- Entry Supervisor Training
- Rescue Training
- Practical Training
- NSC Adult CPR/AED Certified until 7/23/19
- OSHA 30 Hour Safety & Health Training Course taken 8/13/15

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Schedule
Grand Island Spring 2020 Outage

4/23/2020- *PGS Unit taken off-line

4/25/2020- *Set up and begin Vacuum work after 10 am
*Set up and begin hydro blasting bottom ash bins

4/26/2020- *Continue vacuum work: Precipitator Hopper and SDA Outlet to the Fabric Filter inlets
*Hydoblast clean bottom ash system lines

4/27/2020- *Dry vac Precipitator Outlet duct and designated areas
*Wet vac under SDA hopper for SDA wash and swirler vane wash
*Hydroblast Settling tank, Surge Tank, Blowdown Tank, drains and lines

4/28/2020- *Rod out and dry vac the Finishing Superheat section of the boiler tubes
*Wet vac support on hydroblast work
*Hydroblast Settling tnak, Surge Tank, Blowdown Tank, drains and lines
*Finish vacuum and hydoblast work by end of shift
4/29/2020- *Set up for Air Heater Wash
*Begin Air Heater wash

4/30/2020- *Finish Air Heater Wash

MEYLAN ENTERPRISES, INC.
Confined Space Program
Revised September 18, 2019

Purpose

The purpose of the Confined Space Program is to increase the safety of Meylan Enterprises, Inc. (Meylan) employees and onsite contractor(s) by establishing appropriate procedures for identifying, classifying and managing confined spaces in Meylan operations and facilities.

Scope

The objective of this program is to protect personnel from injury upon entry into a confined space. Work will not begin in a confined space until the potential hazards have been identified, eliminated or minimized, and a proper classification of the space has been made. Employees will not enter a confined space until the requirements of this written program, have been implemented.

All employees are required to follow the procedures outlined in this program. Any deviations from this program must be immediately brought to the attention of the Safety Director. This program will apply to all Meylan employees and onsite contractor(s) during maintenance, repair, cleaning, construction or other activities that take place in the confined space(s).

Program Responsibilities

Management. Meylan is committed to the safety of employees as it pertains to working in or near confined spaces, and management supports the efforts of the Confined Space Program by pledging financial and leadership support for the identification and control of confined space risk factors. Management is responsible for:

- Consulting with affected employees on the development and implementation of all aspects of the confined space program.
- Providing affected employees all information contained within the confined space program.

Safety Director/Qualified Person. The safety director/qualified person is responsible for the following:

- Conducting an initial survey of both the premises and operations to identify confined spaces.
- Establishing a process to identify the addition or deletion of confined spaces.
- Maintaining a current inventory of confined spaces.
- Evaluating each confined space to classify the spaces as permit-required or non-permit required.
- Informing exposed employees of the existence, location and danger posed by the permit-required confined space by posting danger signs.
- Conducting confined space air monitoring and maintaining related records.
- Reviewing cancelled entry permits for opportunities for continuous improvement.
- Preventing Meylan employees and onsite contractors from entering permit-required confined spaces that are not approved for entry.
- Maintaining the rescue plan for all confined spaces.
- Reviewing the Confined Space Program at least annually, or more often if needed, to determine if changes are needed due to added processes, equipment or recently introduced hazards.
- Conducting, documenting and assessing the effectiveness of employee training.

Host Employer (confined space owner). The host employer is responsible for the following:

- Advise contractors why the confined space is permit-required.
- Share with the contractor any information concerning the confined space.
- Inform contractors that they must comply with a permit required program.
- Inform contractor of any special procedures or precautions that must be taken.
- Coordinate entry operations and safety for multiple contractor employment.
- Provide lock-out/tag-out of all mechanical hazards associated with a confined space.
- Provide the necessary monitoring, isolation, ventilation, control, and specialized equipment.
- Provide or insure the availability of a rescue team in an emergency situation.

Controlling Contractor (Meylan) As a contractor working under the direction of the host employer, it is Meylan's responsibility for the following:

- Erect barriers to limit pedestrian, vehicular and other traffic in the area as necessary to protect entrants from external hazards.
- Conduct a debriefing session at the end of the job to discuss hazards encountered.
- Constantly monitor the conditions in the confined space to verify that the space is still acceptable for entry.
- Provide verification of conditions throughout the duration of entry.
- Obtain all information available regarding permit-required space hazards and entry operations.
- Coordinate entry operations with the host employer when their workers will work in or near a permit-required space.
- Advise the host employer of any hazard encountered or introduced as a result of the work being performed.
- Upon the start of every shift, Meylan will conduct a new confined space permit and testing for hazardous atmospheres air.

Entry Supervisor. Entry Supervisors are responsible for the following:

- Conducting an initial external visual inspection of the confined space entry point when possible.
- Knowing the requirements of the Confined Space Program, including how to properly implement the duties of the Entrants, Attendants and Rescue Personnel.
- Completing entry permits.
- Determining entrance requirements.
- Posting the permit in a conspicuous location near the entry point.
- Determining the number of Attendants required for safe completion of the work.
- Verifying that rescue services are available prior to and throughout the entry and that the means for summoning them are operable.
- Verifying that all required preliminary actions have been taken prior to endorsing the permit and authorizing entry to begin.
- Ensuring no additional responsibilities are given to the Attendant other than observing the Entrant(s) and their duties.
- Ensuring that acceptable conditions are maintained for the duration of the entry.
- Communicating the status and requirements of the entry to other Entry Supervisors whenever the Entry Supervisor role is changed.
- Terminating entry, assuring removal of personnel and equipment and revoking or canceling the permit when required.

Entry Team - Attendant. Attendants are responsible for the following:

- Being stationed outside the point of entry/exit of the confined space to observe the permit-required confined space.
- Remaining at the entry point and maintaining two-way communication with the Entrant(s) during entry until relieved by another Attendant, or until the entry is completed or terminated by the Entry Supervisor or Leader.
- Maintaining a sign-in/sign-out log of all individuals entering the confined space.
- Providing standby assistance to Entrants entering the confined space.
- Directing Entrants to exit the confined space when any irregularities are observed.
- Initiating evacuation and emergency procedures.
- Monitoring for any conditions or changes that could adversely affect the entry.
- Preventing unauthorized entry.

Entry Team - Entrant. Entrants are responsible for the following:

- Reading and obeying entry permit requirements.
- Maintaining two-way communication with the Attendant.
- Recognizing potential hazards that may be encountered during the entry.
- Understanding the proper use and limitations of equipment for controlling these hazards.
- Inspecting for hazards not identified by atmospheric monitoring during entry activities.
- Responding to emergencies, including implementing methods for self-rescue or evacuation.
- Recognizing symptoms and warning signs of exposure to potential hazards or prohibited conditions.
- Notifying the Attendant of any symptoms of exposure, emergency or unacceptable condition in the confined space.
- Exiting the confined space immediately if symptoms, warning signs or unacceptable conditions occur or if directed by the Attendant or Entry Supervisor.
- Inspecting for hazards during entry activities.

Identification of Hazards and Evaluation of Confined Spaces

Identifications Host Employer. Due to the nature of our work, the host employer will usually designate the confined spaces. In these cases, the host employer will usually identify the space with signs, barricades, etc. However, supervisors shall review the characteristics of all spaces to be entered to determine if the space is a confined space. Examples of such spaces include, but are not limited to, vessels, tanks, vaults, bins, line, or large pipes.

Once a space has been identified as a confined space, specific actions must be completed and specific safeguards must be in place prior to any employee entry.

Properties Survey and Inventory. The Safety Director will conduct a survey of all our locations to identify and determine any in-house confined spaces. The surveys will be completed from site observations and job hazard analyses. An inventory of each these branch location or equipment that meets the definition of a confined space, which would have the potential for engulfment, entrapment, hazardous energy, atmospheres with flammable or explosive potential, oxygen deficiency, and/or the presence of toxic and corrosive material and all other hazards will be documented. The information will also be communicated to all personnel, and, as well as, the appropriate confined space procedures will be developed and followed prior to entry. The Safety Director will determine, based on the identified hazards, which confined spaces will be entered and require a permit prior to entry and which confined spaces will not be entered. Both determinations will be documented on the inventory.

Hazard Reevaluation. The Safety Director will identify and reevaluate hazards at least annually, or sooner based on changes in activities or other physical or environmental conditions that could adversely affect work.

Any change in designation of a confined space will be routed to all affected personnel by the Safety Director.
Hazard Controls. When personnel will be required to enter confined spaces, Meylan will utilize hierarchy of hazard control techniques to first eliminate and then, if they cannot be eliminated, reduce hazards of confined spaces. The following order of precedence will be followed when eliminating or reducing confined space hazards:

- Engineering Controls: These are controls that eliminate or reduce the hazard through implementation of approved engineering practices.
- Administrative Controls: These are controls which eliminate or reduce the hazard through changes in work practices including, but not limited to, rotating workers, reducing the amount of worker exposure and housekeeping.
- Personal Protective Equipment (PPE): If the hazard cannot be elimnated or reduced to a safe level through engineering and/or administrative controls, PPE will be used. The Safety Director will determine the appropriate PPE needed by all personnel entering the confined space, including rescue teams.

Permit-Required Confined Space Labeling and Security

Each permit-required confined space shall have one of the following signs on or near the entrance(s) that identifies the space as a permit-required confined space. The specific signage will be determined by the Safety Director based on the identified hazards that exist within the confined space. Signs will be maintained in a legible condition.

Reclassifying Permit-Required Spaces

The Safety Director is the only company representative authorized to reclassify a permit-required confined space to a non-permit confined space at our locations. It will be the host employer's responsibility to maintain the reclassification of a permit-required confined space to a non-permit confined space at their site. Spaces may only qualify for reclassification if they do not contain, or could not potentially contain, atmospheric hazards (as per the inventory and by testing on the day of the reclassification attempt).
If a previously identified and eliminated hazard or a new hazard becomes apparent or active in a reclassified space, all employees shall immediately exit the space and the space will revert to a permit-required confined space.

Entry Permits

A permit-required confined space entry permit process will be used to guide Entry Supervisors, Attendants and Entrants through a systematic evaluation of the permit-required confined space to be entered, and to establish appropriate entry conditions refer to **Appendix A (Permit Required Confined Space Decision Flow Chart)**. Before each entry into a permit-required confined space, an entry permit will be completed by the Entry Supervisor. The Entry Supervisor will then communicate the contents of the permit to all employees involved in the operation, and post the permit conspicuously near the work location. A standard entry permit, located in **Appendix B**, will be used for all entries.

Permit Scope and Duration. A permit is only valid for one shift. For a permit to be renewed, the following conditions must be met before each reentry into the confined space:

- Atmospheric testing will be conducted and the results will be within acceptable limits. If atmospheric test results are not within acceptable limits, effective mitigation precautions to protect Entrants against the atmospheric hazards will be addressed on the permit, be operational and will mitigate the hazard to a level safe for entrance.
- Only operations or work *originally* approved on the *original* permit will be conducted in the confined space.

A new permit will be issued, or the original permit will be reissued if possible, whenever changing work conditions or work activities introduce new hazards into the confined space.
The Safety Director will retain each canceled entry permit for at least one year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation will be noted on the respective permit(s) so that appropriate revisions to the Program can be made.

Entry Procedures

Pre-Entry Hazard Assessment. A hazard assessment will be completed by the Entry Supervisor prior to any entry into a confined space. The hazard assessment should identify:

- The sequence of work to be performed in the confined space.
- The specific hazards known or anticipated.
- The control measures to be implemented to eliminate or reduce each of the hazards to an acceptable level.

No entry will be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. Personnel who are to enter the permit-required confined space will be informed of known or potential hazards associated with it.
When entry into a confined space is necessary, either the Entry Supervisor may initiate entry procedures, including—when necessary—the completion of a permit-required confined space entry permit. Entry into a confined space will follow the standard entry procedure below.
Permit-Required Standard Entry. The confined space entry permit will be completed in its entirety before any entry. Entry will be allowed only when all requirements of the permit are met and the permit has been reviewed and signed by the Entry Supervisor. The following conditions must be met prior to a standard entry:

- Affected personnel will be proficient in the duties that will be performed within the confined space.
- The internal atmosphere within the confined space will be tested with a calibrated, direct-reading instrument.
- Personnel will be provided with necessary PPE as determined by the Entry Supervisor.
- Atmospheric monitoring will take place during the entry. If a hazardous atmosphere is detected during entry:
    - Personnel within the confined space will be evacuated by the Attendant(s) or Entry Supervisor until the space can be evaluated to determine how the hazardous atmosphere developed.
    - Controls will be put in place to protect employees before reentry.

- Confined space hazards will be isolated from the space. Isolation is the protection against the release of active or stored energy and/or material into the space. Isolation will be achieved by the appropriate means as determined by the host employer. Options will include:

    - Blanking or blinding;

- Misaligning or removing sections of lines, pipes or ducts;
- A double block and bleed system;
- Lockout or tagout of all sources of energy; and
- Blocking or disconnecting all mechanical linkages.

If isolation of the space is infeasible pre-entry, testing will be performed to the extent feasible before entry is authorized. If entry is authorized, entry conditions will be continuously monitored in the areas where authorized Entrants are working.

Atmospheric Testing. Before entry into a permit-required confined space, the Entry Supervisor will conduct testing for hazardous atmospheres. Atmospheric test data is required and will be done initially, with all existing ventilation systems shut down. Atmospheric testing is required for two distinct purposes:

1. Evaluation of the hazards of the space.
2. Verification that acceptable conditions exist for entry into that space.

The internal atmosphere will be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapors, and potential toxic air contaminants—in that order. If a person must go into the space to obtain the needed data, then standard confined space entry procedures will be followed.
Only testing equipment approved by the Safety Director will be used for confined space atmospheric testing. All testing equipment used at Meylan will be approved by Underwriters Laboratories for use in hazardous atmospheres and are to be calibrated per manufacturer's recommendations every three months and the "Calibration Test Certificate" will in the possession with each monitor at all times. All testing equipment will be sent to the manufacture for recertification annually. The Safety Director will maintain an instrument maintenance and recertification record **(Appendix C – List Test Instruments).**

Evaluation Testing. Initial results of testing for atmospheric hazards will be evaluated and interpreted by Entry Supervisor. Atmospheric testing evaluation and interpretation must be received prior to filling out the confined space entry permit or any entrance into a permit-required confined space. It will be the requirement of the Entry Supervisor to conduct a daily bump test to ensure the monitor and alarms are working properly.

Verification Testing. All confined spaces that have been identified as having, or possibly having, a hazardous atmosphere will be tested for residues of all identified or suspected contaminants. The evaluation testing will be conducted at the time of entry to determine if the hazards are within acceptable limits. Results of testing will be recorded by the Entry Supervisor. During the time the permit-required confined space is occupied, the atmosphere will be periodically retested (frequency to be determined by Host Employer procedures or the Safety Director on our property based on the known hazard) to verify that atmospheric conditions remain within acceptable entry parameters.

Acceptable Limits. The atmosphere of a confined space will be considered to be within acceptable limits when the following conditions are met and maintained:

- Oxygen: 19.5 percent to 23.5 percent.
- Flammability: below 10 percent of the Lower Flammable Limit (LFL) for gases, vapors, mists or combustible dusts.
- Toxicity: below the permissible exposure limit (PEL)/threshold limit value (TLV) or time-weighted average (TWA) of a substance.

Forced Air Ventilation. When conditions accommodate continuous forced air ventilation as a remedy for

atmospheric conditions, the following precautions will be followed:

- Employees will not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
- Forced air ventilation will be directed so as to ventilate the immediate areas where an employee is or will be present within the space.
- Continuous ventilation will be maintained until all employees have left the space.
- Air supply or forced air ventilation will originate from a clean source.

If the confined space does not have acceptable entry conditions, entry IS NOT permitted.

Isolation and Lockout/Tagout Safeguards

All energy sources that are potentially hazardous to confined space Entrants will be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes will be locked out and/or tagged out as required by Meylan or the host employer site Lockout/Tagout Program prior to permitting entry into the confined space. In confined spaces where complete energy isolation is not possible, the Program Administrator will evaluate the situation and make provisions to allow as much isolation as practical.

When there is a need to test, position or activate equipment by temporarily removing the lockout protections, all Entrants will be removed from the space prior to removal of the safety devices and activation of the systems. Any removal of locks, tags or other protective measures will be done in accordance with Meylan or the host employer on their site Lockout/Tagout Program.

Emergency Response, Evacuation and Rescue

Meylan has been provided with emergency medical rescue service by many of its host employers. Prior to entry into any permit required confined space; the entry supervisor will determine the capabilities of the rescue team to include:

- Use of personnel protective equipment;
- Rescue equipment for confined spaces;
- Training as entrants;
- History of practice rescues; and
- Basic first aid and CPR.

Should a host employer rescue team be unavailable or not meet the necessary requirements set forth in the standard, the entry supervisor will contact the closest professional rescue team and provide them with all necessary information regarding hazards and location prior to any entry. In addition, the rescue team will be provided access to all permit-required spaces to better enable them to develop appropriate rescue plans and practice rescue operations. Rescue team phone numbers and every means of obtaining the quickest possible emergency response will be listed on the permit and provided to all attendants.

Employee Training

Meylan will develop, maintain and provide training to each affected employee whose work is regulated by the Confined Space Program. The training will provide the understanding, knowledge and skills necessary to safely perform required work in confined spaces. Training will be conducted:

- Before the employee is first assigned duties involving confined spaces.
- Before there is a change in an affected employee's assigned duties.
- When there is a change in a permit-required confined space operation that presents new hazards not previously covered in training.

- When Meylan has reason to believe that there are deviations from the permit-required confined space entry procedures, or that there are inadequacies in the employee's knowledge or use of these procedures.

General Training Requirements. All affected employees will receive training on the following general information:

- Specific hazards associated with the confined space to be entered.
- Personal protective equipment selected for the hazard(s), including proper use, inspection, care and maintenance, limitations and other applicable safety instructions.
- The permit system and other procedural requirements for conducting a confined space entry
- Responding to emergencies.
- Duties and responsibilities of confined space entry team members.
- How to recognize probable air contaminant overexposure symptoms in themselves as well as co-workers, and methods for alerting assigned Attendants.

Training for Attendants. In addition to the general training requirements above, Attendants will also be trained on the following:

- Duties, responsibilities and procedures for both routine and emergency operations.
- Hazards that may be encountered by Entrants and the signs and symptoms of overexposure.
- Procedures for summoning rescue or other emergency services.
- Proper use of the equipment used for communicating with Entry and Rescue Personnel.
- Performance of non-entry retrievals.

Verification of Training. Periodic assessment of the effectiveness of employee training will be conducted by the Safety Director. Refresher training will be conducted on a yearly basis to maintain employee competence in entry procedures and precautions. Written training records will be retained by the Safety Director and be periodically reviewed to ensure proper follow-up for refresher training.

Outside Contractors

Whenever outside personnel are contracted to perform work that involves confined space entry, Meylan will inform the contractors about any relevant confined spaces, including:

- The classification of the space (permit-required or non-permit).
- The hazards and operations within or near the space.
- Any precautions or procedures that were implemented for the protection of employees in or near the confined space.

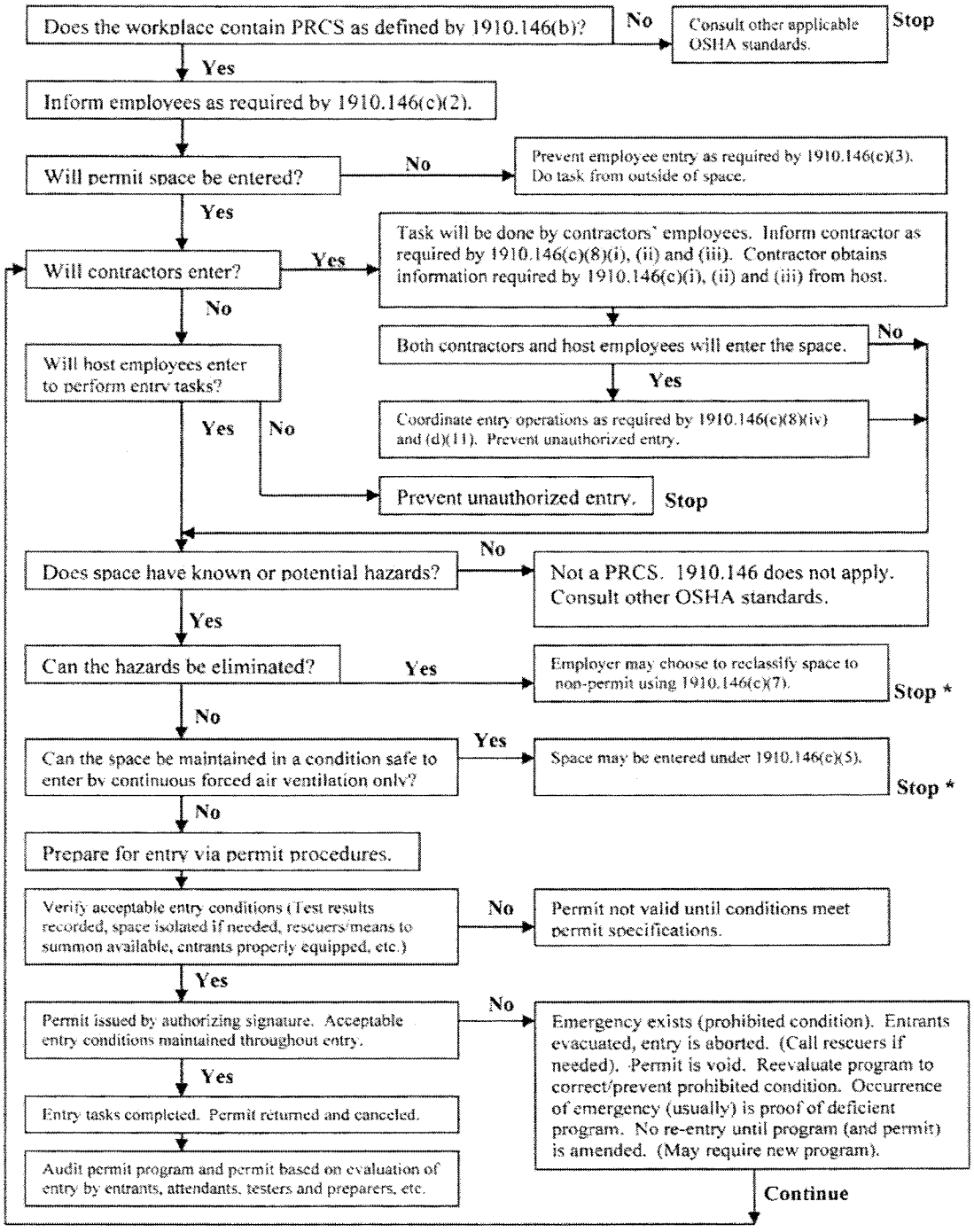
The contractor must inform Meylan immediately of any hazards encountered or created during the course of entry. At the conclusion of all entry operations, a debriefing will be held with the Safety Director to discuss any additional hazards or problems encountered and corrective measures to be taken prior to future entry.

Periodic Program Review

The confined space program and procedures will be reviewed annually.

Appendix A – Permit-Required Confined Space Decision Flow Chart

Permit – Required Confined Space Decision Flow Chart



***Spaces may have to be evacuated and re-evaluated if hazards arise during entry.**

MEYLAN

CONFINED SPACES ENTRY PERMIT

LOCATION OF CONFINED SPACE	DATE/TIME
PURPOSE OF ENTRY	DURATION
AUTHORIZED BY	EXPIRES ON
ATTENDANT(S)	

AUTHORIZED ENTRANTS (LIST OTHERS ON BACK OF FORM)

• MEASURES FOR ISOLATING & EQUIPMENT •	• YES •	• NO •	• MEASURES FOR ISOLATING & EQUIPMENT •	• YES •	• NO •
Lock Out - De-Energize - Try-Out Equipment			Self-Contained Breathing Apparatus (SCBA)		
Line(s) Broken - Capped - Blanked			Air-Line Respirators w/Emergency-Escape Capability		
Purge - Flush and Vent			Air-Purifying Respirators and Cartridges		
Ventilation			Resuscitator/Inhaler		
Secure Area (Post and Flag)			Communications Equipment		
Full Body Harness w/"D" Ring			Protective Clothing		
Tripod Emergency Escape Unit			Head/Eye/Hearing Protection (circle type(s))		
Lifelines			Hot Work Permit Required		
Fire Extinguishers					
Lighting (Explosion-Proof)					

ATMOSPHERE MONITORING

TEST(S) TO BE TAKEN	YES	NO	Acceptable Entry Conditions (Circle Appropriate Level) TYL*	PEL**	_____	Test No. / DATE / 11/4 2:05 D m	1 DATE ____ m	2 DATE ____ m	3 DATE ____ m	4 DATE ____ m	5 DATE ____ m	6 DATE ____ m	7 DATE ____ m	8 DATE ____ m
Oxygen			19.5-23.5%			19.5								
Combustible Gas			Below 10% LEL			/								
Carbon Monoxide			0-35 PPM			/								
Hydrogen Sulfide			0-10 PPM	0-15 PPM										
Hydrogen Cyanide			SKIN	4 PPM										
Sulfur Dioxide			0-2 PPM	0-5 PPM										
Ammonia				0-35 PPM										

Individual Conducting Test (name) _____

Any questions pertaining to test requirements contact _____

• INSTRUMENTS USED •	• NAME •	• TYPE •	• IDENT. NO. •

• STANDBY PERSON(S) •

YES ☐ | |

Appendix C– Identification of Test Instruments

MFG. NAME	BW Technologies		
TYPE	GasAlertMax XT II		
IDENTIFICATION NO.	MA216-027096, MA216-027199, MA216-027083, MA216-027034, MA216-027055, MA216-027044, MA216-027085, MA216-027210, MA216-027035, MA216-027037, MA216-027829, MA216-027043, MA216-027059, MA216-003471, MA216-003480, MA216-003477, MA216-003463,		

MEYLAN ENTERPRISES, INC.
Respiratory Protection Program
Revised July 1, 2019

Purpose

The purpose of the Meylan Enterprises, Inc. (Meylan) Respiratory Protection Program is to make sure that all employees, when exposed to respiratory hazards, are properly and adequately protected when using a respirator. Meylan is committed to the safety of our employees by preventing atmospheric hazards through the use of engineering controls. In the event engineering controls are not feasible, or during the implementation of such controls, respiratory protection will be required.

All employees are required to follow the procedures outlined in this program. Any deviations from this program must be immediately brought to the attention of the Safety Director.

Scope

This program applies to all employees who are required to wear respirators during normal work operations or during some non-routine or emergency operations, such as a spill of a hazardous substance. All employees working in the areas and/or engaged in certain processes or tasks identified in **Appendix A** are required to participate in the company's respiratory protection program.

Program Responsibilities

Management. Meylan is responsible for providing the tools and resources necessary to implement this program and for ensuring the provisions in this program are being followed by the Safety Director.

Safety Director. The Safety Director for Meylan will be responsible for:

1. Identifying work areas, processes or tasks that have respiratory hazards and oversee the elimination or control of respiratory hazards.
2. Evaluating the need for respirators in areas where respiratory hazards cannot be eliminated.
3. Evaluating requests for voluntary use of respirators.
4. Ensuring adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators.
5. Selecting appropriate respiratory protection options.
6. Monitoring respirator use to ensure that respirators are used in accord with their certifications.

7. Arranging for and/or conducting training.
8. Ensuring proper storage, cleaning, inspections, and maintenance of respiratory protection equipment.
9. Ensuring qualitative or quantitative fit testing is conducted.
10. Administering the medical surveillance program.
11. Maintaining records required by the program.
12. Evaluating the program annually.
13. Updating written program as needed.

Supervisors. Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the workers under their charge. Supervisors will:

1. Ensure that employees under their supervision who are required to wear respirators, or who voluntarily wear respirators, have received appropriate training, fit testing and annual medical evaluation.
2. Ensure the availability of appropriate respirators and accessories.
3. Be aware of tasks requiring the use of respiratory protection.
4. Enforce the proper use of respiratory protection when necessary.
5. Ensure that respirators are properly cleaned, maintained, inspected, and stored according to the respiratory protection plan.
6. Ensure that respirators fit well and do not cause discomfort.
7. Monitor work areas and operations to identify new or developing respiratory hazards.
8. Coordinate with the Safety Director on how to address respiratory hazards or other concerns regarding the program.
9. Ensure adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators.

Employees. Each employee will:

1. Wear his or her respirator when and where required and in the manner in which they were trained.
2. Care for and maintain their respirators as instructed, and store them in a clean, sanitary location.
3. Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
4. Inform their supervisor or the Safety Director of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
5. Inform their supervisor of need for a medical re-evaluation.

General Requirements

Hazard Assessment. The workplace will be evaluated and each operation, process, or work area where airborne contaminants may be present in routine and non routine operations or during an emergency will be identified and documented. Hazard Assessments are performed at least every five years or whenever new or potential hazards are introduced into the workplace from changes in operations, processes, materials or personnel. The hazard assessments include, but are not limited to, the following items:

1. Identification and development of a list of hazardous substances used in the workplace, organized by department or work process. See **Appendix B** for identified respiratory hazards.
2. Review of work processes to determine where employees are potentially exposed to these respiratory hazards. The review will be conducted by surveying the workplace, reviewing process records and/or talking with employees and supervisors.
3. If worker exposures have not been, or cannot be, evaluated they will be considered immediately dangerous to life and health and appropriate protections will be implemented.

Respirator Selection. The Safety Director will determine which individuals require respiratory protection and which respirator(s) will be used. Respirators will be selected based on the hazards to which workers are exposed and in accordance with regulations, standards, and best practices. A sufficient number of respirator sizes and models will be provided to employees during fit testing to identify an acceptable respirator that fits correctly.
Respirators selected will meet the following standards and guidelines:

1. Assigned Protection Factors (APFs) and calculated Maximum Use Concentrations (MUCs).
2. Certified by the National Institute for Occupational Safety and Health (NIOSH) and used in accordance with the terms of that certification.
3. Filters, cartridges, and canisters labeled with the appropriate NIOSH certification label. *The label must not be removed or defaced while the respirator is in use.*

Atmospheres immediately dangerous to life and health (IDLH) — For areas or environments deemed to have IDLH atmospheres, a full facepiece pressure demand supplied air respirator (SAR) with auxiliary self-contained breathing apparatus (SCBA) unit or a full facepiece pressure demand SCBA with a minimum service life of 30 minutes is provided. Respirators used for escape only are NIOSH-certified for the atmosphere in which they will be used. Note: All oxygen deficient atmospheres (those with less than 19.5% oxygen) are considered IDLH.

Non-IDLH Atmospheres – For areas or environments that do not have IDLH atmospheres, respirators are selected that are appropriate for the chemical nature and/or physical form of the air contaminant present. Air-purifying respirators used for protection against gases and vapors are equipped with cartridges having end-of-service-life indicators (ESLIs) or are subject to a change-out schedule based on the atmospheric contaminant. For protection against particulates, air-purifying respirators are equipped with NIOSH-certified HEPA filters.

Investigating Employee Concerns. If an employee feels that respiratory protection is needed during a particular activity, he or she should contact a supervisor or the Safety Director. The Safety Director will evaluate the potential hazard(s), arranging for outside assistance as necessary. The results of the investigation will be communicated to the employee and supervisor. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks, and this program will be updated accordingly.

Medical Evaluation. Employees who are either required to wear respirators or who choose to wear an air-purifying respirator (APR) voluntarily must pass a medical exam before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician or licensed health care provider has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use. Medical evaluation procedures are as follows:

- The medical evaluation will be conducted using the questionnaire in **Appendix C**.
- The Safety Director will:
    - Ensure that all affected employees are given a copy of the medical questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the company physician or licensed health care provider.
    - To the extent feasible, assist employees who are unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the employee will be sent directly to the physician for medical evaluation.

Employees are allowed to fill out the questionnaire on company time. They are authorized to have follow-up medical exams as required or deemed necessary by Concentra Urgent Care (Omaha), Concentra Urgent Care (St. Louis), Concentra Medical Center (Houston - Texas), Proactive Occupational Medicine (Kentucky) and Baylor Scott & White Health Care (Cameron - Texas) and have the opportunity to speak with the physician about their medical evaluation.

The Safety Director will provide Concentra Urgent Care (Omaha), Concentra Urgent Care (St. Louis), Concentra Medical Center (Houston - Texas), Proactive Occupational Medicine (Kentucky) and Baylor Scott & White Health Care (Cameron - Texas) with a copy of this program, a copy of the 29 CFR 1910.134 Respiratory Protection standard and a medical release form in **Appendix C**. They will also provide the exposure information contained in **Appendix A** for each employee receiving a medical exam along with the employee's title, proposed respirator type and weight, length of time required to wear the respirator, expected physical workload (light, moderate or heavy), temperature and humidity extremes, and any additional protective clothing required.

After an employee has received medical clearance and begun to wear his or her respirator, additional medical evaluations will be provided if:

- The employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- Concentra Urgent Care (Omaha), Concentra Urgent Care (St. Louis), Concentra Medical Center (Houston - Texas), Proactive Occupational Medicine (Kentucky) and Baylor Scott & White Health Care (Cameron - Texas) or supervisor informs the Safety Director that the employee needs to be reevaluated.
- Information from this program, including observations made during fit testing or program evaluation, indicates a need for reevaluation.
- Concentra Urgent Care (Omaha), Concentra Urgent Care (St. Louis), Concentra Medical Center (Houston - Texas), Proactive Occupational Medicine (Kentucky) and Baylor Scott & White Health Care (Cameron - Texas) or supervisor's observations indicate that additional medical evaluation is needed. For example, a change in workplace conditions that may result in an increased physiological burden on the employee.

Fit Testing. The Safety Director will ensure that employees required to wear tight-fitting facepiece respirators, as listed in **Appendix A**, successfully complete a fit test. Any employee who is voluntarily wearing a tight-fitting respirator will have the option to be fit tested. The 3M FT-10 Qualitative Fit Test Apparatus (Sweet) Protocol will be used based on the respirators being implemented.

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees are provided with several models and sizes of respirators so that they may find an optimal fit.
After the initial test, additional fit testing will be completed:

- Annually;
- When there are changes in the employee's physical condition that could affect respiratory fit (e.g., obvious change in body weight, facial scarring, dental work, facial surgery, etc.). Changes can be reported by employee or visually observed by practicing licensed health care provider, supervisor or Safety Director;
- When a different respirator is to be used, including facepiece; or
- If employee reports respirator fit is unacceptable.

Each employee's fit test will be recorded and maintained by the Safety Director using the form in **Appendix D**.

Respirator Use. Employees or workers wearing respirators shall:

- Not use the respirator in a manner for which it is not certified by NIOSH or by its manufacturer.

- Conduct user seal checks each time they wear their tight-fitting respirator using either the checks listed below or the manufacturer's seal checks:
    - *Positive pressure check.* Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve, then carefully replace it after the test.
    - *Negative pressure check.* Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly and hold the breath for ten seconds. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory. Sometimes the design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. In these cases, the test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove.
- Leave the work area to go to the job trailer to maintain their respirator for the following reasons:
    - To clean their respirator;
    - If the respirator is impeding their ability to work;
    - To change filters or cartridges, or replace parts; or
    - To inspect the respirator if it stops functioning as intended.
- Not wear tight-fitting respirators if they have any condition, such as facial scars, facial hair or missing dentures, that prevents them from achieving a good seal.
- Not wear headphones, jewelry or other articles that may interfere with the facepiece-to-face seal.

Employees are permitted to leave their work area and go to job trailer when they need to wash their face and respirator facepiece to prevent eye or skin irritation, or to replace the filter, cartridge or canister, or when they detect vapor or gas breakthrough or leakage in the facepiece or detect any other damage to the respirator or its components. Employees should notify their supervisor before leaving the area.

Emergency Procedures. The malfunctioning of the respirator itself can result in an emergency situation. The following emergency procedure for respirator malfunction will be followed:

- Air-Purifying Respirator (APR) Malfunction. For any malfunction of an APR (e.g., breakthrough, facepiece leakage or improperly working valve), the respirator wearer must inform his or her supervisor that the respirator no longer functions and go to the designated safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.

Cleaning, Maintenance, Storage and Change Schedules

Cleaning. Respirators are to be regularly cleaned and disinfected at the designated respirator cleaning station, located at Omaha Corporate Office and Kentucky branch. Respirators issued for the exclusive use of an employee are to be cleaned as often as necessary, but at least once a day for workers at a worksite that requires the continuous use every day. Respirators used in fit testing and training are cleaned and disinfected after each use.

The following procedures are to be used when cleaning and disinfecting respirators:

- Disassemble respirator, removing any filters, canisters or cartridges;
- Wash the facepiece and associated parts with warm water and the detergent supplied at the cleaning station. Do not use organic solvents;
- Rinse completely in clean warm water;
- Wipe the respirator with disinfectant wipes or solution to kill germs;
- Air dry in a clean area;
- Reassemble the respirator and replace any defective parts;
- Test the respirator to ensure that all components work properly; and
- Place in a clean, dry plastic bag or other airtight container.

The Safety Director will ensure an adequate supply of appropriate cleaning and disinfecting materials are at the cleaning station. If supplies are low, employees should contact their supervisor, who will inform the Safety Director.

Maintenance. Respirators are to be properly maintained at all times to ensure that they function properly and adequately protect the employee. Maintenance involves a thorough visual inspection for cleanliness and defects before each use and during cleaning. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer.
The following items should be checked when inspecting respirators:

- Respirator function;
- Tightness of connections;
- Elastomeric parts: pliability and signs of deterioration;
- Facepiece: cracks, tears or holes;
- Facemask distortion;
- Cracked or loose lenses/face shield;
- Valves: Residue or dirt;
- Cracks or tears in valve material;
- Head straps: breaks, tears or broken buckles; and
- Filters/Cartridges: approval designation intact, gasket cracks or dents in housing.

Respirators that are defective or have defective parts must be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his or her supervisor. **NO EMPLOYEE SHALL WEAR A DEFECTIVE RESPIRATOR.** Supervisors will give all defective respirators to the Safety Director. The Safety Director will decide whether to:

- Temporarily take the respirator out of service until it can be repaired;
- Perform a simple fix; or
- Dispose of the respirator due to an irreparable problem or defect.

When a respirator is taken out of service, the respirator will be tagged out of service, and the employee will be given a replacement of the same make, model and size. If the employee is not given a replacement of the same make, model and size, then the employee must be fit tested.

Storage. Respirators must be stored in a clean, dry area in accordance with the manufacturer's recommendations and/or in such a fashion as to protect it from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and deformation of the facepiece or exhalation valve.
Each employee will clean and inspect their own respirator in accordance with this program, storing it in a plastic bag with their name on it. Plastic bags are provided by your supervisor or Safety Director.

Training, Program Evaluation, Documentation and Recordkeeping

Training. The Safety Director will provide training to all respirator users and their supervisors on the contents of the Respiratory Protection Program and their responsibilities under it, including appropriate information from OSHA 29 CFR 1910.134, the Respiratory Protection standard. Employees and workers will be trained prior to using a respirator in the workplace. Retraining shall be administered annually, and/or when the following situations occur:

- Changes in the workplace or the type of respirator that render previous training obsolete;
- Inadequacies in the employee's knowledge or use of the respirator indicate that the worker has not retained the requisite understanding or skill; or
- Any other situation arises in which retraining appears necessary to ensure safe respirator use.

As with any employee, supervisors must be trained prior to using a respirator in the workplace. They also should be trained prior to supervising workers who must wear respirators if the supervisors themselves will not use a respirator. Supervisors will provide the basic information on respirators in **Appendix B** of this program to employees who voluntarily wear respirators even though not required to do so by the employer. Supervisors will ensure that each employee can demonstrate knowledge of the following:

- Why the respirator is necessary;
- How improper fit, usage or maintenance can compromise the protective effect of the respirator;
- Limitations and capabilities of the respirator;
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;
- How to inspect, put on and remove, use, and check the seals of the respirator;
- Procedures for maintenance and storage of the respirator;
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and
- The general requirements of this program and OSHA 29 CFR 1910.134, the Respiratory Protection standard.

An employee's training will be documented and recorded.

Program Evaluation. The Safety Director will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections, air monitoring and a review of records. At a minimum, the following factors will be considered:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- Appropriate respirator selection for the hazards to which the employee is exposed;
- Proper respirator use under the workplace conditions the employee encounters; and
- Proper respirator maintenance.

Problems identified will be noted on an evaluation form included in **Appendix E** and corrected by the Safety Director. These findings will be reported to management, and the report will list plans to correct deficiencies in the respirator program and target dates for implementing those corrections.

Documentation and Recordkeeping. A written copy of this program and the OSHA 29 CFR 1910.134 Respiratory Protection standard is kept with the Safety Director office and is available to all employees who wish to review it.
The Safety Director will also maintain copies of the records (except medical records) for all employees covered under the respirator program. Completed medical questionnaires and documented findings that are confidential will remain at the medical facilities where the tests were performed. The company will only retain the physician's written recommendation (a signed medical release) regarding each employee's ability to wear a respirator.

Copies of training and fit test records are also located with the program. These records will be updated as new employees are trained, as existing employees receive refresher training and when new fit tests are conducted.

Appendix A – Work Processes Requiring Respiratory Protection

Type of Respirator/Filters/Cartridges Dust Mask 3M	**Work Area/Task/Job Type** Various areas at the job site depending on the severity of the dust	**Conditions of Use** Voluntary or Mandatory
Half Mask Respirator 3M 7500	Various areas at the job site depending on the severity of the conditions	Voluntary or Mandatory
Full Face Respirator 3M 6800	SCR Confined Space Area or other areas determined upon conducting a Hazard Assessment	Mandatory
3M 6004 Ammonia/Methylamine Cartridge	SCR Confined Space Area or other areas determined upon conducting a Hazard Assessment	Mandatory
3M 2081 P100	Various areas at the job site depending on the severity of the conditions	Mandatory

Appendix B – Hazard Assessment

Meylan's Safety Director has completed a hazard assessment of all identified respiratory hazards. The table below lists each of the departments, work processes or operations that have respiratory hazards associated with them and the results of the hazard assessment. The data is reviewed annually and updated as needed.

Department	Contaminants	Exposure Level (8-hour TWA Results)	Occupational Exposure Limit (OSHA PEL, ACGIH TLV, NIOSH REL, etc.)	Controls in Place and PPE Used
SCR Confined Space Area	Possible contaminated air	N/A	<N/A>	Full Face Respirator
Precip Area	Possible dust spill	N/A	N/A	Dust Mask

Appendix C – Medical Evaluation Questionnaire and Medical Release

To the employer: A medical examination is not required for questions in Part A, Section 1 or for question 9 in Part A, Section 2.

To the employee: To maintain your confidentiality, Meylan will not look at or review your answers, and will tell you how to deliver or send this questionnaire directly to the health care professional who will review it.

Part A – Section 1 (Required)

The following information must be provided by every employee who is required to use any type of respirator.
Please print.

1. Today's date _____
2. Your name _____
3. Your age (to nearest year) _____
4. Sex (circle one) Male / Female
5. Height _____ ft _____ in
6. Weight _____ lbs
7. Job title _____
8. Phone number (including area code) where you can be reached (_____) _____-_____
9. What is the best time to call you at this number? _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire? (circle one) Yes / No
11. Check which type of respirator you will use (you can check more than one category).
    _____ **N**, **R**, or **P** disposable respirator—also known as dust mask, filtering facepiece or a filter-mask
    (non-cartridge type only)

    _____ **Other type**—half- or full-facepiece type, powered-air purifying, supplied-air, or self-contained breathing apparatus
12. Have you worn a respirator before? (circle one) Yes/No

Please circle Yes or No

1. Do you *currently* smoke tobacco, or have you smoked tobacco in the last month? Yes / No

2. Have you *ever* had any of the following conditions?

a. Seizures	Yes / No
b. Diabetes	Yes / No
c. Allergic reactions that interfere with your breathing	Yes / No
d. Claustrophobia (fear of closed-in places)	Yes / No
e. Trouble smelling odors	Yes / No

3. Have you *ever* had any of the following pulmonary or lung problems?

a. Asbestosis	Yes / No
b. Asthma	Yes / No
c. Chronic bronchitis	Yes / No
d. Emphysema	Yes / No
e. Pneumonia	Yes / No
f. Tuberculosis	Yes / No
g. Silicosis	Yes / No
h. Pneumothorax (collapsed lung)	Yes / No
i. Lung cancer	Yes / No
j. Broken ribs	Yes / No
k. Any chest injuries or surgeries	Yes / No
l. Any other lung problems	Yes / No

4. Do you *currently* have any of the following symptoms of pulmonary or lung illness?

a. Shortness of breath Yes / No

b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline Yes / No

c. Shortness of breath when walking with other people at an ordinary pace on level ground Yes / No

d. Have to stop for breath when walking at your own pace on level ground Yes / No

e. Shortness of breath when washing or dressing yourself Yes / No

f. Shortness of breath that interferes with your job Yes / No

g. Coughing that produces phlegm (thick sputum or mucous) Yes / No

h. Coughing that wakes you early in the morning Yes / No

i. Coughing that occurs mostly when you are lying down
Yes / No
j. Coughing up blood in the last month
Yes / No
k. Wheezing Yes / No
l. Wheezing that interferes with your job
Yes / No
m. Chest pain when you breathe deeply
Yes / No
n. Any other symptoms that you think may be related to lung problems
Yes / No

5. Have you *ever* had any of the following cardiovascular or heart problems?

a. Heart attack Yes / No
b. Stroke Yes / No
c. Angina Yes / No
d. Heart failure Yes / No
e. Swelling in your legs or feet (not caused by walking) Yes / No
f. Heart arrhythmia (heart beating irregularly) Yes / No
g. High blood pressure Yes / No
h. Any other heart problem Yes / No

6. Have you *ever* had any of the following cardiovascular or heart symptoms?

a. Frequent pain or tightness in your chest Yes / No
b. Pain or tightness in your chest during physical activity Yes / No
c. Pain or tightness in your chest that interferes with your job Yes / No
d. In the past two years, have you noticed your heart skipping or missing a beat
Yes / No
e. Heartburn or indigestion that is not related to eating Yes / No
f. Any other symptoms that you think may be related to heart or circulation problems
Yes / No

7. Do you *currently* take medication for any of the following problems?

a. Breathing or lung problems Yes / No
b. Heart trouble Yes / No
c. Blood pressure Yes / No
d. Seizures Yes / No

8. Have you used a respirator before? Yes / No

If YES, have you *ever* had any of the following problems?

a. Eye irritation	Yes / No
b. Skin allergies or rashes	Yes / No
c. Anxiety	Yes / No
d. General weakness or fatigue	Yes / No
e. Any other problem that interferes with your use of a respirator	Yes / No

9. Would you like to talk to the health care professional reviewing this questionnaire about your answers? Yes / No

Part A – Section 3 (May be required depending on respirator type)

The following information questions are **required** for every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). These questions are **optional** for employees who will use other types of respirators.

Please circle Yes or No

1. Have you *ever* lost vision in either eye (temporarily or permanently)? Yes / No

2. Do you *currently* have any of the following vision problems?

a. Wear contact lenses	Yes / No
b. Wear glasses	Yes / No
c. Color blind	Yes / No
d. Any other eye or vision problem	Yes / No

3. Have you *ever* had an injury to your ears, including a broken ear drum? Yes / No
4. Do you *currently* have any of the following hearing problems?

a. Difficulty hearing	Yes / No
b. Wear a hearing aid	Yes / No
c. Any other hearing or ear problem	Yes / No

5. Have you *ever had* a back injury? Yes / No

6. Do you *currently* have any of the following musculoskeletal problems?

a. Weakness in any of your arms, hands, legs, or feet	Yes / No
b. Back pain	Yes / No
c. Difficulty fully moving your arms and legs	Yes / No
d. Pain or stiffness when you lean forward or backward at the waist	Yes / No
e. Difficulty fully moving your head up or down	Yes / No
f. Difficulty fully moving your head side to side	Yes / No
g. Difficulty bending at your knees	Yes / No

h. Difficulty squatting to the ground Yes / No
i. Difficulty climbing a flight of stairs or a ladder carrying more than 25 lbs Yes / No
j. Any other muscle or skeletal problem that interferes with using a respirator Yes / No

Part B – Employment Questions (Required)

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen? Yes / No

   If YES, do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions? Yes / No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (gases, fumes or dust), or have you come into skin contact with hazardous chemicals? Yes / No

   If YES, name the chemicals if you know them:_____

   _____

   _____

3. Have you ever worked with any of the materials, or under any of the conditions, listed below?

   a. Asbestos Yes / No
   b. Silica (*e.g.*, in sandblasting) Yes / No
   c. Tungsten/cobalt (e.g., grinding or welding this material) Yes / No
   d. Beryllium Yes / No
   e. Aluminum Yes / No
   f. Coal (for example, mining) Yes / No
   g. Iron Yes / No
   h. Tin Yes / No
   i. Dusty environments Yes / No
   j. Any other hazardous exposures Yes / No

If YES, describe these exposures:_____

_____

_____

4. List any second jobs or side businesses you have:_____

_____

_____

5. List your previous occupations:_____

_____

6. List your current and previous hobbies:_____

_____

_____

7. Have you been in the military services? Yes / No

   If YES, were you exposed to biological or chemical agents (either in training or combat)? Yes / No

8. Have you ever worked on a HAZMAT team? Yes / No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications)? Yes / No

   If YES, name the medications if you know them:_____

   _____

   _____

10. Will you be using any of the following items with your respirator(s)?

    a. HEPA Filters Yes / No
    b. Canisters (for example, gas masks) Yes / No
    c. Cartridges Yes / No

11. How often are you expected to use the respirator(s)?

    a. Escape only (no rescue) Yes / No
    b. Emergency rescue only Yes / No
    c. Less than 5 hours *per week* Yes / No
    d. Less than 2 hours *per day* Yes / No
    e. 2 to 4 hours per day Yes / No
    f. Over 4 hours per day Yes / No

12. During the period you are using the respirator, how would you describe your work effort?

    a. *Light* (less than 200 kcal per hour): Yes / No

       If YES, how long does this period last during the average shift? _____hrs_ _____mins

       Examples of a light work effort are sitting while writing, typing, drafting or performing light assembly work; or standing while operating a drill press (1-3 lbs) or controlling machines.

    b. *Moderate* (200 to 350 kcal per hour) Yes / No

If YES, how long does this period last during the average shift?
_____hrs _____mins
Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. *Heavy* (above 350 kcal per hour) Yes / No

If YES, how long does this period last during the average shift?
_____hrs_____mins
Examples of heavy work are lifting a heavy load (about 50 lbs) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator? Yes / No

If YES, describe this protective clothing and/or equipment:_____

_____

_____

14. Will you be working under hot conditions (temperature exceeding 77 degrees F)?
Yes / No

15. Will you be working under humid conditions? Yes / No

16. Describe the work you'll be doing while you're using your respirator(s):_____

_____

_____

_____

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):_____

_____

_____

_____

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Substance #1 – Name _____

Estimated maximum exposure level per shift_____

Duration of exposure per shift_____

Substance #2 – Name _____

Estimated maximum exposure level per shift _____

Duration of exposure per shift_____

Substance #3 – Name _____

Estimated maximum exposure level per shift _____

Duration of exposure per shift _____

List any other toxic substances you'll be exposed to while using your respirator:_____

_____

_____

_____

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue or security):_____

_____

_____

Medical Release

Information provided to the physician:

Employee name _____

Date _____

Job _____

Work location _____

Type and weight of respirator _____

To be used under the following conditions:

- *Duration and frequency of use* _____
- *Expected physical effort* _____
- *Additional protective clothing and equipment* _____
- *Environmental temperature and humidity extremes* _____

Air contaminants and concentration levels employee may be exposed to:

_____

_____

_____

_____

_____

_____

Estimated frequency of cartridge/filter replacement _____

Medical Evaluation: Physician Release

Is employee medically able to use the respirator? Yes / No

List any limitations on respirator use _____

_____

_____

Is a follow-up medical evaluation required? Yes / No

If YES, list date of evaluation _____

Employee has been given a copy of this recommendation Yes / No

Signature of Physician or Other Licensed Health Care Provider

Date

Appendix D – Respirator Fit Test Record

Respirator Fit Test Record

Name: _____ **Initials:** _____

Type of qualitative/quantitative fit test used: _____

Name of test operator: _____ **Initials:** _____

Date: _____

Respirator Mfr./Model/Approval No. Size Pass/Fail or Fit Factor
Note: "Fit factor" is the numerical result of quantitative fit test from instrument reading

1. _____ S M L P / F or _____
2. _____ S M L P / F or _____
3. _____ S M L P / F or _____
4. _____ S M L P / F or _____

Clean Shaven? Yes___ No___ (Fit-test cannot be done unless clean-shaven)

Medical Evaluation Completed? Yes___ No___ **Clearance?** Yes___ No___

NOTES: _____

_____

_____

_____

This record indicates that you have passed or failed a qualitative or quantitative fit test, as shown above, for the particular respirator(s) shown. Other types will not be used until fit tested.

Appendix E – Respiratory Protection Program Evaluation

Respiratory Protection Program Evaluation

Evaluator Name:_____

Date:_____

Names of employees consulted during the evaluation:

1. _____
2. _____
3. _____
4. _____
5. _____

Problems Identified	Corrective Action

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into by and between **MEYLAN ENTERPRISES, INC.,** hereinafter called the Contractor, and the **CITY OF GRAND ISLAND, NEBRASKA**, hereinafter called the City.

WITNESSETH:

THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published for *BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE;* and

WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the aforesaid Contractor to be the lowest responsive and responsible bidder, and has duly awarded to said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this Contract;

NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself, himself/herself, or themselves, and its, his/her, or their successors, as follows:

ARTICLE I. That the following documents shall comprise the Contract, and shall together be referred to as the "Agreement" or the "Contract Documents";

1. This Contract Agreement.
2. City of Grand Island's Specification for this project.
3. Meylan Enterprises, Inc.'s bid signed and dated January 6, 2020.

In the event of any conflict between the terms of the Contract Documents, the provisions of the document first listed shall prevail.

ARTICLE II. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract documents as listed in the attached General Specifications, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;

ARTICLE III. That the City shall pay to the Contractor for the performance of the work embraced in this Contract and the Contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the Contract) of **One Hundred Six Thousand Six Hundred Fifty-Two and 91/100 Dollars ($106,652.91)** for all services, materials, and work covered by and included in the Contract award and designated in the foregoing Article II;

payments thereof to be made in cash or its equivalent in the manner provided in the General Specifications.

The total cost of the Contract includes:

	Air Heater Wash (Firm fixed pricing)	Vacuum Services (Lump sum-T&M)	Hydro-blast Services (Lump sum-T&M)
Material	$ 25,045.00	$ 12,655.00	$ 21,510.00
Labor	$ 7,524.00	$ 21,534.00	$ 10,488.00
Adjustment			456.00
Applicable Sales tax*	$ 2,442.68	$ 2,564.18	$ 2,399.85
Adjustment			34.20
Base Bid	$ 35,011.68	$ 36,753.18	$ 34,888.05

Total $ 106,652.91

Contractor Tax Option 2. The State of Nebraska Department of Revenue has determined that building cleaning and maintenance services are taxable on both materials and labor.

The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

ARTICLE IV. The Contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the Contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the Contractor. Invoices can to be presented hard copy or via email to billing@giud.com. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The Contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the Contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of the BOTTOM ASH AND BOILER INDUSTRIAL CLEANING-SPRING 2020 OUTAGE.

ARTICLE V. That the Contractor shall start work as soon as possible after the Contract is signed and the required bonds and insurance are approved, and that the Contractor shall deliver the equipment, tools, supplies, and materials F.O.B. Platte Generating Station, and complete the work on or before ***April 30, 2020***.

ARTICLE VI. The Contractor agrees to comply with all applicable State fair labor standards in the execution of this Contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. During the performance of this Contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis, of race, color, religion, sex, national origin,

age or disability. The Contractor agrees to comply with all applicable Local, State and Federal rules and regulations. The Contractor agrees to maintain a drug-free workplace policy and will provide a copy of the policy to the City upon request. Every public contractor and his, her or its subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE VII. Gratuities and kickbacks: City Code states that it is unethical for any person to offer, give, or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefor. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

MEYLAN ENTERPRISES, INC.

By_____ Date _____

Title_____

CITY OF GRAND ISLAND, NEBRASKA

By_____ Date _____
Mayor

Attest:_____
City Clerk

The Contract is in due form according to law and hereby approved.

_____ Date _____
Attorney for the City

R E S O L U T I O N 2020-19

WHEREAS, the City of Grand Island invited sealed bids for Bottom Ash and Boiler Industrial Cleaning at Platte Generating Station – Spring 2020 Outage, according to plans and specifications on file with the Utilities Department; and

WHEREAS, on January 7, 2020, bids were received, opened and reviewed; and

WHEREAS, Meylan Enterprises, Inc., of Omaha, Nebraska, submitted a bid in accordance with the terms of the advertisement of bids and plans and specifications and all other statutory requirements contained therein, such bid being in the amount of $106,652.91; and

WHEREAS, the bid of Meylan Enterprises, Inc., is less than the estimate for Bottom Ash and Boiler Industrial Cleaning at Platte Generating Station – Spring 2020 Outage.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the bid of Meylan Enterprises, Inc., in the amount of $106,652.91 for Bottom Ash and Boiler Industrial Cleaning at Platte Generating Station – Spring 2020 Outage, is hereby approved as the lowest responsible bid.

- - -

Adopted by the City Council of the City of Grand Island, Nebraska, January 28, 2020.

_____
Roger G. Steele, Mayor

Attest:

_____
RaNae Edwards, City Clerk

Approved as to Form ¤ _____
January 24, 2020 ¤ City Attorney