

PART I - THE SCHEDULE

SECTION C – STATEMENT OF WORK

Dated 05/12/2026

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1.0 DESCRIPTION OF WORK – GENERAL

Except as otherwise expressly provided herein, Contractor shall supply all adequate and competent labor, supervision, tools, equipment, installed and consumable materials, services, testing devices, warehousing and each and every item of expense necessary for the supply, field erection, application, handling, hauling, unloading and receiving, installation, construction, demolition, assembly, evaluation, and quality assurance as applicable to perform a TPO overlay over the Valley that will extend past the high point of the roof, clearing debris, cleaning/repairing roof drains, preparation/repairs needed, as necessary, prior to installation of TPO overlay, installation of TPO overlay of the X-700 Lower High Bay (approximately 23,000 S.F. as described below and hereinafter called the Work.

2.0 SPECIFICATIONS, DRAWINGS, ATTACHMENTS, AND EXHIBITS

All Work shall be performed in strict accordance with the following specifications, details, drawings and other documents. Contractor shall notify the Company in writing of any conflict between these specifications and Federal or State guidelines.

2.1 Specifications

Specification No.	Rev.	Title
N/A	N/A	N/A

2.2 Attachments

For attachments refer to Section J.

2.3 Exhibits

Exhibit No.	Title
Exhibit 1	Milestone Schedule
Exhibit 2	Acronyms
Exhibit 3	Construction Sign
Exhibit 4	Engineering Evaluation – X-700 Roof Structural Integrity Assessment

3.0 DESCRIPTION OF WORK - SPECIFIC

The Work for the X-700 described in Articles 1.0 and 2.0 of this Statement of Work shall include, but not be limited to, the following:

Inspection, evaluation, mobilization, site preparation, installation of roofing systems as necessary, loading of sanitary/industrial and Low Level Waste (LLW) into containers, work area restoration, and demobilization.

3.1 X-700 Roof Overlay

3.1.1 X-700 Facility Description

X-700 Converter Shop and Chemical Cleaning Facility

The X-700 Process Building existing roof system consists of three (3) roof sections. The Upper High Bay approximately 65,000 S.F., Lower High Bay approximately 24,000 S.F., and the West Addition approximately 10,700 S.F. The building consists of approximately 210 L.F. expansion joints. The primary roof area is constructed with a gravel surfaced built-up-roof (BUR) consisting of four (4) piles of fiberglass felts layered in applications of coal tar pitch bitumen installed over one (1) inch fiberglass insulation boards and a sloped metal deck substrate. 43,000 S.F. of the Upper High Bay currently consists of the original roof material. Approximately 22,000 S.F. of the Upper High Bay was overlaid with an TPO membrane in 2014. In 2009, the Lower High Bay had a spray foam overlay installed. The valleys are constructed with asphalt BUR consisting of a mineral surfaced modified bitumen cap sheet installed over four (4) piles of fiberglass felts layered in applications of hot asphalt over one (1) inch fiberglass insulation boards and a sloped metal deck substrate.

3.1.2 X-700 Roof condition when transitioned to the Contractor

The X-700 Roof primary in-leakage located on the highbay roof, especially in the valley location. In 2009 spray foam roof overlay was performed on the lowbay and highbay valley, with the anticipation to complete the rest of the highbay roof the following year; however, due to funding and transition to a new company the highbay roof repair was never completed. Evidence of water ponding, break-through of foam roofing, ridging in isolated locations of the built-up roof, clogged roof drains. Contractor will also be responsible for clearing debris, cleaning/repairing roof drains, repairing the foam roof near the South penthouse. The existing BUR system is to remain in place and the Contractor is to minimize destruction of the existing roof surface to what is required by the manufacturer installation instructions.

The X-700 original roof and the roof addition are adequate for routine assessment and maintenance activities, except for the area encompassed by columns D4/D7 and E4/E7. The safe and allowable imposed roof load limits are indicated directly below:

1. A uniform roof live load of 30 PSF is permitted over the entire roof.

-OR-

2. Per Code, a concentrated 300-pound limit per person including hand tools is the limit codified by the Ohio Building Code Table 1607.1. A single concentrated load per person is also codified. For a single worker this is based upon a square area of 2'-6" x 2'-6". For purpose of final clarification, a total of 6 maintenance workers are permitted on a rectangular section of roof bounded on the perimeter by either a column line [e.g. rafter framing member] and/or a purlin. For the original building, the typical purlin is a 16 WF 40. For the building western addition, a W10x21 or W10x39 are typical purlins.

It is expected that a Material Relocation Tugger (MRT) will be needed to complete the scope of work. The contractor will be responsible for providing details of the device for evaluation by SOCCo Engineering. The contractor will be responsible for providing ramps to cross the expansion joints and may be required to install decking to distribute the weight of the device. This determination will be completed after specifications of the MRT have been provided and evaluated by SOCCo Engineering.

The primary means of access will be via stairways to the roof penthouse. The secondary means of roof access/egress for emergency purposes will be via exterior ladders to the stairways.

Radiological contamination is not anticipated throughout this work evolution. However, removal of existing roofing material and/or roofing layers may present unknown radiological hazards.

3.2 Specific Scope of Work

3.2.1 Roof Overlay

A. Roof work will consist of the following:

1. Roof Overlay of the X-700 Lower High Bay (approximately 23,000 S.F.)
2. Expansion joint repairs/capping (approximately 125 L.F.)
3. Removal of existing spray foam roofing overlay
4. Repair of metal decking where leaking exist
5. Sealing of passive and powered roof vents. Sealing may be accomplished with sheet metal caps or membrane equivalent to new roof surface.
6. Roof overlay installation
7. Membrane termination strip/edge flashing installation

B. To an extent practical, the existing roof materials need to remain in place with minimal destruction of the surface and thus minimal waste created from the existing roof.

C. Roof overlay shall be performed per the manufacturer's details and specifications and in such a manner as to eliminate hazards to persons and property; to minimize interference with use of adjacent areas, utilities and structures or interruption of use of such utilities; and to provide free passage to and from such adjacent areas of structures.

D. An independent inspection firm designated by warranty provider will inspect the completed roofing installation to ensure installation is in accordance with the manufacturer's current written specifications and details. The on-site inspection must be coordinated with the CTR in advance in order to gain access to the plant and roof. Engineering and building operations will also perform a walk-down of work prior to contractor de-mobilizing.

3.2.2 The Contractor shall schedule a walk through with the Company prior to beginning any work activity. The Contractor shall give the Company a minimum notice of three business days for this walk through. Facility repairs shall not commence until the walk through has been performed and the facility has been deemed ready for repairs by the Company.

3.2.3 Contractor may mobilize to the Work Area once they have received an "A" or "B" status on all required pre-mobilization submittals and Authorization to Mobilize has been given.

3.2.4 Contractor shall coordinate all mobilization activities with the Contract Technical Representative (CTR).

- 3.2.5 Contractor shall coordinate with the CTR to establish the field office location, break area, smoke area, restroom facilities, lay down area, staging area, and other temporary facilities.
- 3.2.6 Contractor shall provide and install safeguards including but not limited to safety / warning signs, such as the required personal protective equipment (PPE) and “Danger Work in Progress” signage for work performed on the ground. Signage shall be placed every 25 ft. around the defined work area.
- 3.2.7 Contractor shall provide OSHA approved fall protection systems for the duration of this work. These systems shall be approved by the Company. The Contractor shall submit a list of any fall protection equipment required for review by the Company to assess any limitation or restrictions with placement.
- 3.2.8 Contractor shall erect barricades and barriers around defined features of each area to prevent equipment from disturbing and/or damaging items. These items include utility manholes, utility poles, utility pipe racks, storm sewer grates, among other features. The Company and Contractor shall perform a walk-down of the area prior to any Work activity to verify all structures are accounted for and protected.
- 3.2.9 Prior to the start of Work, the CTR shall ensure operations within the building do not pose a risk of venting hazardous chemicals to the roof.
- 3.2.10 Before beginning any Work, the Contractor shall survey the site and examine the drawings and specifications to determine the extent of the Work.

3.3 Surface Decontamination of Equipment and Tools

- 3.3.1 The Company will provide qualified labor, material, and appropriate means and methods for the decontamination of equipment, in the unlikely event that such contamination is encountered. The Company will perform decontamination activities of equipment within five (5) work days. See Section H for additional information.

3.4 Contractor Work Plan:

The Contractor shall submit a Detailed Work Plan for each task to be performed, this can be one work plan with sections on each task or a series of work plans. The Contractor shall follow the format specified in Attachment J-25. The Contractor’s Detailed Work Plan(s) will be reviewed by the SOCCo High Hazard Work Review Board as part of the submittal review process. The Contractor should be prepared to address their approach to safety management for high hazard work. Required attendees include the Contractor’s HSE representative and field supervisor who will be required to be familiar with the contents of the work plan and present the Contractor’s approach for managing high hazard work. Contractor shall allow up to eight (8) hours for presentation and review by the High Hazard Work Review Board (excluding planning). High hazard work activities include:

- Electrical work – greater than 50 volts
- Excavation and penetrations (permit required)
- Elevated work – over 6 feet from the base working surface
- Hoisting and rigging
- Work in confined space (permit required)
- Radiological and chemical (Radiation work requiring an ALARA review and chemical for high concentration acids, caustics (>10%))

- 3.4.1 The Contractor shall submit for approval a detailed Work Plan including but not limited to the following:
- A. Work sequence
 - B. Methods to be used to prevent the potential spread of contamination.
 - C. Means to protect adjacent structures, equipment, material, and underground and above ground utilities from damage, including protection from projectiles.
 - D. Methods to protect against inclement weather.

3.5 Pay Item Descriptions

The Pay Item Descriptions as defined in Section B.2 show activities for which the Contractor shall report progress and use for invoicing.

- 3.5.1 Contractor shall submit a value for each pay item (refer to Section B – Supplies or Services and Prices/Costs for Pay Item Schedule of Values). The value shall correspond to descriptions of the activities including profit, overhead, insurance, training and submittal documents not specifically listed as a pay item shall be allocated to each pay item proportional to its value. The Company will review each pay item value to ensure that the value is consistent with the work to be performed. Pay item values determined by the Company to be unacceptable shall be revised and resubmitted by the Contractor. Payments shall not be made to the Contractor until the Company approves the pay item values.

4.0 MATERIAL, EQUIPMENT, OR SERVICES

4.1 Furnished by Company

The Company will furnish or cause to be furnished to Contractor, without cost to Contractor, the following items for or in connection with performance of the Work:

- 4.1.1 Contractor shall provide all necessary resources to receive, stage and store Company supplied materials in accordance with the instructions provided in the Contract.
- 4.1.2 Notwithstanding the Article entitled the "Permits, Applications and Licenses" in Section H Special Contract Requirements, Company will furnish the permits listed in Article 5.
- 4.1.3 The Company will provide Plant radios as required.
- 4.1.4 Personal Protective Equipment for activities within Radiologically Controlled Areas.
- 4.1.5 If the Contractor's work requires use of a respirator, the Company will provide required respirators.
- A. The Contractor is responsible for submitting respirator requests. Respirator requests must be made on a Company provided Respirator Request Form and each request shall be delivered to the CTR before 8:00 a.m., Mondays and Wednesdays. Monday requests shall be for respirators required for each worker for Tuesday, Wednesday and Thursday. Wednesday requests shall be for respirators required for each worker for Friday, Saturday, Sunday, and Monday. Additions and or revisions to the requests shall be made, as needed, by 8:00 a.m. at least the day prior to the need. Respirator usage and return requirements are specified in Attachment J-13.
- 4.1.6 The Company shall provide containers for Low Level Waste, and transportation for on-site and off-site disposal of Low Level Waste. Refer to the Waste Management section of this Statement of Work.

4.1.7 The Company shall provide a construction sign (Exhibit 3) for the Contractor to place near the construction site. This sign shall contain contact information for the Company's oversight personnel.

4.2 Furnished by Contractor

4.2.1 Contractor shall provide all necessary resources to receive, stage, and store materials in accordance with the instructions provided in the Contract.

4.2.2 The Contractor will provide Hoisting and Rigging support to lift required materials/tools/equipment to each roof and also remove any of these items and waste from the roof.

5.0 TEMPORARY FACILITIES AND UTILITIES

5.1 Furnished by Company

Company will supply or cause to be supplied the following temporary facilities and utilities to Contractor, without cost to Contractor, for or in connection with performance of the Work:

5.1.1 Parking areas for the Contractor's Work vehicles will be limited to a location near the Work area. Parking along plant site roads and streets shall not be permitted. Unless otherwise directed by the CTR, parking for the Contractor and subcontractor employees shall be limited to the parking lot outside the security fence parking facilities.

5.1.2 Limited roughly graded space adjacent to the Work Area for temporary facilities and storage of material and equipment. (No storage facilities or protective coverings of any kind will be furnished by Company.)

5.1.3 The Company shall supply Sanitary and Change Facilities required for the project. Contractor shall coordinate with the CTR for the location of Sanitary and Change Facilities.

5.1.4 Smoking Areas:

- Contractor personnel will only be permitted to smoke at designated smoking areas as directed by the CTR.
- Meeting the requirements for establishing and maintaining the smoking area shall be the sole responsibility of the Contractor.
- No smoking shall be allowed outside of the designated smoking area.
- The Contractor shall provide an appropriate fire extinguisher.
- Smoking area shall be designated with a non-flammable barricade.
- Containers for extinguishing and disposal of cigarette butts shall be utilized.
- Contractor shall provide and maintain safe walking access to the smoking area.
- Contractor shall provide a waste disposal container for debris other than cigarette butts.
- Contractor shall follow good housekeeping practices.

5.2 Furnished by Contractor

Except as expressly set forth in Article 5.1 of this Statement of Work, the supply, installation, provision, maintenance, repair, and final removal of all temporary facilities

and utilities, necessary for full and complete performance of the Work, is the sole responsibility of the Contractor.

Such items shall include, but not necessarily be limited to those listed below. Contractor has the sole responsibility to identify and provide all required temporary facilities and utilities to perform the Work. The type of facilities, move-in and move-out dates, and locations on the work Site shall be subject to and in accordance with the review and approval of CTR.

5.2.1 Temporary Facilities and Lay-down Area

- A. Contractor trailers must be secured or anchored to prevent movement or turnover from high winds. Trailer anchoring shall meet OBBC & DOE-STD-1088-95. Preferred Anchor system is a Minuteman LLBS system with drive pins as determined in length per project condition. Contractor may choose to anchor the trailer by using 10 foot long Jersey Barriers with ½" galvanized wire rope tie downs in accordance with the spacing table 1 in 24 CFR 3285.402. Trailer manufacturer shall provide anchor calculations to ensure overturning, lateral movement is in compliance with anchor system specified or for any alternative anchor systems. Electrical connections must be made by a qualified electrician. The Company reserves the right to inspect and approve the Contractor's office installation.
- B. Upon demobilization, the land previously occupied by Contractor's Temporary Facilities and Lay-down area shall be returned to its pre-construction condition or better. This requirement shall also apply to all Temporary Roads, and Parking, Lay-down areas and Temporary Utilities. ODOT #57 gravel shall be used as fill where needed.

5.2.2 Eating Facilities

It is the Contractor's sole responsibility to provide break and lunch areas for their employees, vendors and subcontractors.

5.2.3 Storage Compounds

Adequate weather-tight storage for materials, tools, and equipment which are subject to damage by weather. The location of storage compounds must be agreed with CTR before storage of materials commences. Such compounds shall be maintained for the storage of the approved materials and for no other purpose.

5.2.4 Construction Power / Temporary Facility Area Power

Contractor shall provide temporary power (generator) to provide electric for temporary facilities including Contractor's Project Trailer, temporary lighting, tools and equipment to perform the work. Electrical connections to Contractor trailers, temporary facilities or other electrical systems or equipment must be completed in accordance with the requirements of Attachment J-13. Contractor shall not be permitted to occupy trailers or temporary facilities prior to inspection and approval by the Company.

- A. Onsite generation of power is allowed providing that such power is obtained through the use of properly installed, acoustically insulated diesel electric generating units as approved by the CTR.

- B. Contractor's distribution system, lighting systems and wiring shall be installed in accordance with the National Fire Protection Association (NFPA) and the National Electric Code (NEC) and maintained in a satisfactory condition.
- C. No weight shall be imposed upon any electric cable and no staging, ladder or similar equipment shall rest against or be attached to it. Temporary power cables in use by Contractor must be positioned so that they do not cause a tripping hazard. (Run 8-ft overhead or laid neatly out of walkways.)
- D. Contractor shall be responsible for maintaining and removing any equipment or devices installed.
- E. Before the Contractor plugs in any electrical appliance to any plug socket belonging to the Company it shall ensure that the appliance is in good condition and is fitted with a suitable cable, including fully rated and insulated neutral conductor and protective ground conductor.

5.2.5 Water Disposal and Dewatering

- A. Contractor shall be responsible for the safe and proper disposal of water that accumulates in the work area from rain or Work activities to locations as approved by the CTR.

5.2.6 Temporary Buildings

Contractor shall provide, operate, maintain, and dispose of all temporary buildings in accordance with the requirements of the Contract.

5.2.7 Fuels and Lubricants

- A. Oils, greases, and similar materials must be stored in nonflammable bins or buildings or in a fenced compound remote from other combustible materials in accordance with NFPA and as approved by CTR.
- B. "No smoking": signs shall be provided by Contractor and prominently displayed in areas where flammable materials are stored. Additionally, Contractor shall provide and maintain suitable fire extinguisher in such areas.
- C. Contractor shall provide all fuel for heating and ventilation for their Temporary Facilities.
- D. Fossil Fueled Vehicle Limitations in Buildings: This limitation is applicable to, but not limited to, automobiles, trucks, tractors, forklifts, high-lifts, other cylinder handling equipment, and personnel carriers. Fossil fuels include, but are not limited to gasoline, diesel, or ethanol. The size of a fuel tank on each individual fossil fueled vehicle is limited to 50 gallons of fossil fuel. The use of propane for vehicle fuel is prohibited.
- E. Stationary fuel powered equipment (e.g. generators, pumps, light plants, etc.) with a fuel holding capacity equal to or greater than 55 gallons of fuel must be equipped with a double walled fuel tank. If a double wall fuel tank is not available then the stationary fuel powered equipment must be placed in an acceptable secondary containment device as approved by HSE and the CTR. If an existing secondary containment area is not available, then it is the Contractor's sole responsibility to provide an acceptable secondary containment device. The secondary containment

device must be sized to hold the equivalent of the largest tank volume within that containment.

- F. For equipment requiring secondary containment that will be stored outdoors, the containment area must provide for accumulated precipitation, and as such, be sized to 120% of the largest tank volume within that containment. The secondary containment's material(s) of construction shall be impervious to and compatible with, the liquid to be contained. Any spills within the dike or outside the dike shall be reported immediately to the CTR. Provisions shall be made for draining off accumulations of water.
- G. The Contractor shall ensure that any drain valves remain closed except when draining. The stationary fuel powered equipment and all secondary containment areas must be inspected and maintained daily. The Contractor shall ensure documentation of these inspections is recorded daily, and that the inspection log is available for the Company for inspection upon request. Temporary Electric Generators greater than 25kW will require grounding per OSHA 29 CFR 1926 (F)(3)(i).

5.2.8 Communication

Contractor shall provide and operate all means of communication required for performance of the Work with the exception of plant radios as identified in section 4.1.3. All other items may include but not be limited to telephones (non-camera cell phones), and facsimiles. Wireless communication systems shall be approved by the CTR prior to bringing the system on-site. Cameras are not permitted on site.

5.2.9 Temporary Roads and Parking

- A. Contractor shall comply with load restrictions in all buildings and all roads and bridges.
- B. Maintenance of Traffic: The Contractor shall provide flagmen, safety cones, barricades, signage, etc., as necessary to maintain safe traffic flow on plant streets. Street closure or reduction from two-lane traffic to one-lane traffic shall be minimized. Contractor shall use their employees for flagman to control traffic within areas under Contractor control. Contractor shall coordinate traffic control with the CTR if traffic control is required outside of project boundaries. Signage shall be based on International signage standards and conventions.
- C. The Contractor shall, furnish, erect, and maintain during the progress of Work activities, substantial barricade, bridging, ramps, sidewalks, cones, barrels, guard rails, and signage; furnish, place and maintain adequate lights and warning signals, provide flagmen and watchmen.
- D. No Plant streets or roadways shall be barricaded without coordination with the CTR. Requests for street closures shall be submitted to the CTR for approval at least three (3) days in advance.
- E. Contractor area barriers shall have a designated entrance location(s); each location shall have a sign identifying the project name, contract number, Contractor, Contractor contact and phone number and CTR contact and phone number to notify for entry.

- F. Barricades, temporary bridging, and other temporary construction installed by the Contractor shall be removed by the Contractor upon completion of work requiring such safeguards.

5.2.10 Equipment Inspections

Contractor vehicles, equipment, materials, trailers, tool boxes and tools shall be subject to inspection as described in Attachment J-13.

5.2.11 Material Handling and Rigging

- A. Construction activities, material deliveries, and off-loading operations shall be conducted to minimize interruptions to the Company's normal operations. Blockage of Company gates or other access to the work area shall not be permitted without prior coordination and approval of the CTR.
- B. Contractor shall provide and operate cranes and other necessary equipment for handling, hauling, unloading, receiving, and lifting Contractor-supplied materials, tools, and equipment at the job site and to each work area. Operators, Riggers, and Signalmen must provide training certification to Company for approval prior to mobilization.

5.2.12 The Contractor is responsible for providing the means and methods to protect the work area and building before and during periods of inclement weather.

5.2.13 Small tools

- A. The Contractor shall perform a daily inspection of all equipment, vehicles, tools, safety devices, electrical cords, equipment guarding, fire extinguishers, etc. to assure the safe working condition and OSHA compliance of all tools and equipment. Documentation must be compiled by date and list all the tools/equipment inspected for that date, daily inspection of tools/equipment shall be noted on the Contractor Daily Report.
- B. Documentation of inspections must be made available for the Company's review. Equipment that does not meet the manufacturer's requirements for safe use shall be taken out of service. Prior to reinstating tools and equipment previously taken out of service, the tools and equipment must be inspected by the Contractor competent person.

5.2.14 Electric Power Tools and Equipment

- A. All electric power tools and equipment shall be protected with a Ground Fault Circuit Interruptor (GFCI). The GFCI must be plugged in at the power source and shall be inspected and tested daily or prior to use.
- B. Power tool cords and extension cords must be kept in good condition and out of the way of traffic. Electrical cords shall be routed safely to prevent a tripping hazard and damage to the cord. Faulty or damaged cords must be properly disposed of or removed from site. Faulty or damaged cords on electrical hand tools must be repaired by a qualified electrician or removed from site.

5.2.15 Supplemental lighting, provided by the Contractor, shall provide adequate lighting and comply, at a minimum, with OSHA lighting and illumination requirements.

5.2.16 Permits

A. Job Site Work Permits: All permits required for performance of the Work at the jobsite will be arranged by the Company. The Company will provide the following permits as required: Contractor shall request the permit a minimum of three (3) working days in advance of the permit need.

- (1) Excavation
- (2) Penetration
- (3) Welding / Hot Work
- (4) Lockout / Tagout (LOTO)
- (5) Radiological Work Permit (RWP)

5.2.17 Temporary fencing to secure work areas, temporary facilities, materials, and equipment storage areas.

5.2.18 Transportation facilities on and off-site. Only Contractor's company vehicles, as approved by CTR, will be allowed on-site.

5.3 Environmental Protection

5.3.1 Vehicles, equipment, or liquid storage containers shall not be stored in areas where spillage or leakage of materials would enter the plant's drainage system. The Contractor shall immediately notify the CTR of any spills, regardless of the quantity, type, or location. Spill response and cleanup will be performed under the direction of the Company. Cost associated with spills resulting from negligence by the Contractor shall be the sole responsibility of the Contractor.

5.3.2 All products or hazardous materials brought on-site by the Contractor shall be maintained under the control of the Contractor. No excess products or hazardous materials are to remain onsite after the project is complete. Contractor shall submit Material Safety Data Sheets (MSDS) for review and approval prior to bringing such items on-site in accordance with Attachment J-13.

5.3.3 The Contractor will be permitted to wash equipment at PORTS if it can be done in accordance with applicable Federal and State regulations and as approved by the Company. Disposal of accumulated debris from washing activities shall be governed by the Waste Management section of this document.

5.3.4 Environmental Emissions Consideration:

A. All fuel-burning equipment such as but not limited to cranes, bulldozers, earthmovers, welders, generators, compressors, pumps, and light plants must meet regulatory permit requirements. Unless a piece of equipment is specifically exempted under the regulations, it must have an air permit. Off-road diesel-powered vehicles and equipment (both mobile and stationary), with engine horse power (hp) ratings of 50 hp or more shall be a minimum of Tier 2 compliant. Any regulatory exemptions must be reviewed by the Company prior to equipment use. The Contractor shall provide documentation of compliance with applicable regulatory permits and standards to the CTR prior to delivery of equipment to PORTS.

B. Fuel Requirements: To the extent practicable, construction equipment with engine hp ratings of 50 hp or more shall utilize Ultra-Low Sulfur Diesel (ULSD) fuel.

- C. Permit Exemption: The Contractor shall maintain logs for any piece of equipment exempted from permitting based on hours of operation (e.g.: emergency generators, emergency compressors, and emergency pumps) to document fuel use and to verify that the equipment was not operated in excess of 500 hours annually. The Contractor shall provide to the Company prior to delivery of equipment to PORTS documentation of equipment operating logs for any regulatory exempt piece of equipment.

5.3.5 Fugitive Dust Emissions:

- A. The Contractor shall minimize emissions of fugitive dust by methods such as spraying, misting, or watering materials likely to become airborne. Work activities will be performed at a time that weather conditions allow for the use of water for dust suppression.
- B. The Company may perform air monitoring to confirm the effectiveness of the Contractor dust suppression.

5.4 Excavation/Penetration

- 5.4.1 A Penetration Permit is required when breaching or penetrating any building surface more than 1-½" (unless excluded), any blacktop or concrete pavement surface more than three (3) inches, or the earth's surface more than twelve (12) inches by any means other than those considered excavation or trenching. These methods include, but are not limited to, auguring, drilling, driving, and coring, or penetrating. Penetrations include drilling wells and boring for soil samples up to and including 12 inches in diameter.
- 5.4.2 If during the execution of the Work, the Contractor encounters hidden utilities or other structures or interferences not identified previously, the Contractor shall stop work and immediately advise the Company and confirm findings in writing. Company will evaluate findings and direct Contractor to resume work following investigation. The Contractor shall record location, including elevations of hidden utilities or other structures or interferences.

5.5 Existing Utilities/Service Interruption

- 5.5.1 Where Work involves breaking into or connecting to existing services or utilities, carry out work at times as directed by the Company.

6.0 PERFORMANCE SCHEDULE AND SEQUENCE OF WORK

- 6.1 Specific milestones, interfaces, and other schedule related bases of this Contract are as set forth in Exhibit 1.
- 6.2 General scheduling, reporting and coordination requirements shall be described in Section H, Special Contract Requirements.
 - 6.2.1 Contractor shall submit the detailed schedule required by Section H Special Contract Requirements in accordance with Attachments J-6 and J-8.
- 6.3 Contractor Project Schedule shall be a resource loaded Critical Path Method (CPM) Schedule that clearly identifies both, all logical relationships/dependencies between activities related to the project, and the project's projected critical path schedule from Notice to

Proceed through project completion. This resource loaded Critical Path Method (CPM) Schedule shall have the following two levels:

- A. The first level, the Pay Item level (Pay Item Layout)
- B. The second level, the Activity Level (Detailed Layout)
- C. Activities will roll up to support the Pay Items

6.4 The initial Contractor Project Schedule, once approved by the Company will be known as the Contractor Baseline Schedule (may include approved modifications). This Schedule will be used for comparison with subsequent project schedules. The project schedule shall include the following:

- Actual or projected start and finish dates
- Activity progress and remaining duration
- Bar chart schedule comparing the current schedule to the baseline schedule
- Revisions to craft resources
- Specific to estimated schedules in man hours
- Percent complete for each activity (summarized/listed in the Pay Item section of the Contractor Project Schedule and shall be the basis for the amount invoiced for that Pay Item).
- A copy of the updated Contractor Project Schedule shall be submitted to the Company by the date established in the contract.

6.5 The Contractor shall submit a Four-Week Rolling Schedule (refer to Attachment J-30) which documents/lists four weeks of the Project Detailed Activity Layout, which shall include the following:

- A schedule of the previous week, the present week, and the two future weeks
- Activities grouped by Pay Item activities and sorted by Early Start Dates
- Activities schedule coded with corresponding Pay Item ID code
- Expected/Projected Man-hours by craft (carpenters, laborers, operators, etc.) for each activity
- Pay Item values breakdown of activities
- The Four-Week Rolling Schedule shall be presented to the Company at the Weekly Progress Meeting.

6.6 Contractor Scheduling Software

6.6.1 The Contractor may use the following software, which is compatible with the Company Scheduling Software (Primavera P6) to prepare the required project schedules:

- A. Primavera P3
- B. Primavera Subcontractor
- C. Microsoft Project

D. If using electronic scheduling software, than an electronic file containing the updated project schedule shall be submitted along with the hard copy of the updated schedule.

6.7 Work Hours, Deliveries and Overtime

6.7.1 The project work hours will be four days per week, 10 hours per day, (Monday through Thursday) between the hours of 7:00 a.m. and 5:30 p.m. Contractor shall be prepared to work the hours required by Contract. The Contractor may request in writing earlier start times to account for weather conditions (i.e. excessive heat). The requested work schedule must be within contractual guidelines for all entities involved.

- 6.7.2 Material and equipment deliveries shall be permitted Monday through Thursday, e.g. 7:00 AM-5:30 PM Eastern Time. Deliveries must be coordinated with the CTR at least one (1) working day in advance. Deliveries outside of these times must be coordinated with the CTR at least two (2) working days in advance.
- 6.7.3 Requests for scheduled overtime, weekend, or holiday work during normal situations shall be made to the CTR at least two working days before the start of these shifts.
- 6.7.4 Requests for non-scheduled extended work hours in emergency situations shall be made to the CTR at least three hours in advance for overtime during the normal work week and at least by noon of the last regular workday.
- 6.7.5 For work being performed outside the normal work schedule the Contractor shall coordinate with the CTR for any special arrangements for security, safety, escorting, health physics, and other the Company provided resources. Plant entry and exit requirements may change when working outside of the normal work schedule. It is the Contractor's sole responsibility to coordinate with the CTR to plan accordingly for personnel, deliveries, and all other requirements needed to perform work during non-normal scheduled work times.

7.0 REPORTING REQUIREMENTS AND COORDINATION MEETINGS

Contractor shall promptly submit the schedules and reports set forth in Attachment J-8 Contractor / Supplier Submittal Register.

7.1 Daily Reports

Contractor shall make written Daily Reports (Attachment "J-5", Contractor Daily Report) to the CTR by 10:00 am each morning for the preceding day.

7.2 Weekly Progress Meetings

- 7.2.1 The Contractor shall attend weekly progress meetings. Contractor shall be prepared to discuss scheduled progress versus actual progress giving details of Work completed in relation to the approved schedule, which provides details of how the Work will be completed.
- 7.2.2 The person or persons designated by the Contractor to attend the meetings shall have the required authority to make decisions and commit the Contractor to solutions agreed upon during these meetings.

7.3 Monthly Reports, Schedules and Schedule updates

Shall be in form and format approved by Company. These reports shall be submitted under cover of a letter in accordance with Attachment J-6.

7.4 Other Meetings

Contractor participation in certain additional activities shall also be required. These activities shall include, but not be limited to:

- 7.4.1 Meetings / briefings as described in Attachment J-13.

8.0 CORRESPONDENCE, SUBMITTALS AND COMMUNICATION REQUIREMENTS

- 8.1 Correspondence, submittals and communication with the Contractor shall be in accordance with Attachment J-6.
- 8.2 When required by the Contract, Contractor shall transmit to Company, technical submittals, shop drawings or samples, including supporting catalog cuts, manufacturer's literature, sketches or drawings, calculations and other pertinent data, in sufficient detail to enable Company to review the information and determine that Contractor clearly understands the requirements of the Contract. Documents shall be transmitted to Company under cover of formal contract correspondence utilizing Attachment J-6 Contractor/Supplier Cover Sheet. Contractor shall provide submittals listed on Attachment J-8 (Contractor / Supplier Submittal Register) as part of the Statement of Work.
- 8.3 Contractor shall submit all engineering data, samples, and shop drawings (herein called "data") listed on "Attachment J- 8 (Contractor / Supplier Submittal Register) for review in accordance with Attachment "J-6".
- A. Refer to the Attachment J-8, (Review Period Column) for the Company required review period of data submitted by Contractor.
 - B. Each submittal of Contractor's data shall be signed by Contractor and accompanied by a letter of transmittal containing the date of submittal, Contract Number, and all pertinent information required for identifying and checking submittals.
 - (1) One (1) reproducible and two (2) prints shall be submitted for each drawing and any other documents larger than 11" x 17".
 - (2) Two (2) prints shall be submitted for documents which are 11" x 17" and smaller, and documents such as procedures and calculations shall be 8 1/2" x 11" size.
- 8.3.2 Although Work may proceed on receipt of data with a Code "B" notation, Contractor must incorporate the changes indicated, resubmit for final approval Code "A" before release of materials or equipment for shipment can be approved by Company. Returned copies of data with Code "B" and "C" shall be resubmitted not later than ten days after the date of transmittal by Contractor of such copies of such data.
- 8.4 For Contracts that include new construction, the Contractor shall furnish to Company reproducible drawings revised by Contractor to show "as-built" information.
- 8.4.1 Contractor's revisions shall show details of those locations where the Work performed by Contractor was at variance with the details shown on the drawings (either furnished by Company or furnished by Contractor and reviewed by Company).
 - 8.4.2 Contractor's submittal to Company of such "As-Built" drawings shall be made on a continuous basis as the Work proceeds, but in all cases prior to the date of Notice of Acceptance. For the purposes of Contractor's inclusion of "As-Built" information,
 - 8.4.3 Company will provide Contractor with an electronic version of Company furnished drawings.
- 8.5 Company reserves the right to review certified material test reports for all materials of construction at any time during field erection. Contractor shall maintain these documents

readily available for such review and shall submit all documents to Company on the completion of the Work.

- 8.6 Contractor shall maintain at the jobsite up-to-date copies of all drawings, specifications, and other documents and supplementary data, complete with latest revisions thereto. In addition, Contractor shall maintain a continuous record of all field changes, and at the conclusion of the Work, shall incorporate all such changes on the "As Built" drawings and other engineering data and shall submit the required number of copies thereof to Company.
- 8.7 Contractor shall show the Company Contract Number and identifying item numbers, if applicable, on all data submitted pursuant to this Article 8.0.

9.0 CLEAN-UP, SAFETY, WORK RULES, AND REGULATIONS

- 9.1 Contractor shall perform the work in a safe manner and keep the work site in a clean condition in accordance with Attachment J-13, Environmental Health & Safety Requirements for On-site Work and shall comply with all work rules and regulations.
- 9.2 The Contractor shall submit their Corporate Safety Plan to the Company for review in accordance with Attachment J-8. The Contractor shall adopt and follow the Company's Environmental Health & Safety Requirements (Attachment J-13), as the Project Safety Plan. The Contractor shall designate the individual(s) responsible for on-site implementation of the plan, specify qualifications for those individuals, and provide a list of those project activities for which subsequent hazard analyses are to be performed.
- 9.3 For Fire Protection Requirements refer to Attachment J-29.

10.0 WASTE MANAGEMENT

The X-700 Roof Repair debris may include wood (OSB or fiberboard), spray foam roofing material, TPO roofing material, and related system components.

- 10.1 The Contractor shall demolish, size reduce and load debris and waste generated from the Work into appropriate containers. Debris and waste generated during this project shall be segregated and containerized as follows:

Material	Waste Type	Container type:
Debris	Low-level Waste	Intermodal

- 10.2 The Contractor shall not collect or store debris. When debris piles are necessary for the Work the Contractor shall maintain the piles. This includes minimizing the volume and hazards associated with the material.
- 10.3 Debris/Waste Container Supply and Management

10.3.1 Low-Level Waste Containers

- A. The Company will provide intermodal container(s) (25 cy) for use by the Contractor to load low-level waste. The Company will stage the empty intermodal container(s) in the Laydown, and Staging Area prior to the removal of damaged roofing material from the X-700 Roof.
- B. The Company will prepare and deliver the intermodal containers for loading by the Contractor with the appropriate liners, dunnage, and shoring installed. The Contractor shall ensure materials are loaded in such a way that the container is not damaged during loading or transport. A Company waste package certifier shall be

present during all LLW loading operations to ensure prohibited items are not added to the containers and will seal the container after it is closed. The Company will remove and install intermodal container lids. The Contractor shall be responsible for damage to Company provided intermodal containers that is a result of loading LLW.

C. The Company will manage the intermodal containers. Management of the intermodal containers includes the movement of empty and full containers to and from the work area, and placement of the containers as required for loading LLW by the Contractor. The Contractor shall not manage, handle or transport intermodal containers.

D. Each loaded intermodal container shall not exceed 17,500 pounds gross weight.

10.4 Container Transport

10.4.1 The Company shall provide transportation for LLW waste containers on-site and off-site.

10.5 Labeling of Waste and Containers

10.5.1 The Company will be responsible for labeling and marking sanitary/industrial waste containers and LLW Containers.

10.6 Contractor Generated Waste

10.6.1 The Contractor shall ensure all packaging materials and/or scrap material (e.g. dunnage, protective wrap, etc.) brought to PORTS by the Contractor shall be taken off-site and disposed of by the Contractor to minimize the amount of waste generated at the work site.

10.6.2 Wastes generated by the Contractor shall be monitored by the Company prior to off-site removal. If contamination is found greater than release limits, the Contractor must contact the CTR for further guidance on disposition.

10.7 Debris Characteristics/Handling Requirements

10.7.1 Low-level Waste

A. Low-level waste will include debris from the damaged roof, other components within the Radiological Control Area and secondary waste such as PPE, material or equipment used during Work activities.

B. LLW shall be size reduced to less than eight feet in length and two feet wide.

C. Placement of LLW into intermodal containers shall be performed under the oversight of the Company.

11.0 SECURITY

11.1 For Security requirements while working on the PORTS Site the Contractor shall refer to Attachment J-15, Specification 01546 PORTS SOCCo Site Security Requirements.

12.0 QUALITY ASSURANCE

12.1 Contractor shall be responsible for the performance of all quality assurance program criteria specified in Attachment J-16 Quality Assurance Requirements. The Contractor shall submit a

- Quality Assurance Program Plan and supporting Inspection Procedures required to perform the Work in accordance with Attachment J-8.
- 12.2 Contractor quality document(s) submittals shall be approved by the Company prior to activities affecting quality start. The Company may audit the Contractor's quality program prior to initiating work.
 - 12.3 The Contractor shall provide record copies of all reports, personnel rosters, test and inspection results where applicable.
 - 12.4 The Contractor shall provide at a minimum a manufacturer's 10-year leak-free warranty as well as the manufacturer's "80 Miles per Hour" Wind Warranty Rider.

13.0 CONSTRUCTION

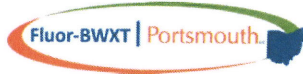
- 13.1 Contractor shall perform the Work in accordance with this Statement of Work all contractual inquiries should be addressed to the Contract Administrator and Technical inquiries addressed to the CTR in accordance with Attachment J-6.
- 13.2 Acceptance of Contract:
 - 13.2.1 In Conjunction with Contract Clause H.54 the Contractor shall coordinate a final acceptance walk down of the work with the CTR and others as required to verify completion of the Work and identified discrepancies. Discrepancies will be documented on a punch list and shall be resolved by the Contractor prior to acceptance. Completion of the Punch List must be executed within the Contractor's project schedule for work completion and not extend beyond the approved project schedule.
 - 13.2.2 The Company shall verify and document that all deliverables, including the Performance Verification Testing submittals of the test reports, has been received and that all requirements have been satisfied. Any nonconformance shall be just cause for rejection of the service provided and delayed payment until the supplier complies with the SOW.

EXHIBIT 1 – SCHEDULE SUMMARY

Schedule Summary		
Item	Schedule Activities	Duration (Calendar Days)
1	Notice to Proceed (NTP)	-
2	Pre-Mobilization Submittals and Training	30 Days after NTP
3	X-700 Mobilization	40 Days after NTP
4	X-700 Roof Repair Work Activities	88 Days after NTP
5	X-700 Demobilization	118 Days after NTP
10	Project Close Out	148 Days after NTP

EXHIBIT 2 – ACRONYMS

ACM	Asbestos Containing Material
CPM	Critical Path Method
CTR	Contract Technical Representative
D & D	Decontamination and Decommissioning
DOE	Department of Energy
ESH & Q	Environmental Safety Health and Quality
FMSCR	Federal Motor Carrier Safety Regulations
GFCI	Ground Fault Circuit Interrupter
GVWR	Gross Vehicle Weight Rating
HEPA	High Efficiency Particulate Air
HSE	Health Safety Environmental
KW	Kilowatt
LLBS	Longitudinal and Lateral Bracing System
LLW	Low-Level Waste
LOTO	Lock Out Tag Out
NEC	National Electric Code
NFPA	National Fire Protection Association
OBBC	Ohio Basic Building Code
ODOT	Ohio Department of Transportation
OSHA	Occupational Safety and Health Administration
PORTS	Portsmouth Gaseous Diffusion Plant
PPE	Personal Protection Equipment
PUCO	Public Utilities Corporation of Ohio
RWP	Radiological Work Permit
SHWP	Safety & Health Work Permit
SOCCo	Southern Ohio Cleanup Company
SOW	Statement of Work
SWPPC	Storm Water Pollution Prevention Controls



ENGINEERING EVALUATION COVERSHEET

Number: EVAL-DE-2012-0316

ESO#/PR#/NCR#: ESO E4766, E3839, E7694, and E10102

Revision: 3

Duration: Time Limited

Type: Engineering

Title: X-700 Roof Structural Integrity Assessment

Doc Link:

Final Doc Link:

Description/Evaluation Statement:

Revision 3 of this Engineering Evaluation was completed to comply with the 5-year reevaluation requirements for roof structures. The previous revision expires on 27 August 2024, so a new revision is being completed. Engineering conducted a walkdown of the facility for Revision 3 on 22 August 2024. Revision 3 also includes an updated FBP Building Roof Assessment form (Attachment A) and photographs from the walkdown (Attachment B).

R3

CONCLUSION

The previous revision's restriction placed on the highbay encompassing columns D4/D7 and E4/E7 is still in effect. Additionally, Engineering found corrosion in the metal decking, not documented in previous revisions, on the Northwest corner of the roof. Engineering is restricting access to the roof in this area encompassing columns F13/F14 and EF13/EF14. If access is needed in these areas, contact Engineering for further analysis. These restricted areas are illustrated in Attachment A.

[Revision 2, Approved 27 AUG 2019]

Revision 2 of this Engineering Evaluation was performed as an update to the structural integrity inspection as part of the five year inspection program required for having a nuclear safety function as described in the Basis for Interim Operations (BIO) of Former Uranium Enrichment Facilities (FUEF). This revision includes an updated roof assessment form and current photos of the roof. The previous restriction placed on the highbay roof encompassed by columns D4/D7 and E4/E7 is still in effect. The steam leak location in the highbay which has caused the corrosion of the metal roof decking in this area is currently slated for repairs in the fall of 2019. Once repairs to the steam leak are completed, repair of the metal decking should be addressed as required by Engineering (thickness testing may be able to be performed to verify deterioration). No additional/new significant structural issues were observed during the 2019 walkdown. Therefore, this Engineering Evaluation is being extended for an additional 5 year period.

Observations from the 2019 walkdown include debris (varies types), evidence of water ponding, break-through of foam roofing, ridging in isolated locations of the built-up roof, clogged roof drains, and evidence of animal activity (possibly raccoons). Engineering recommends clearing debris, cleaning/repairing roof drains, repairing the foam roof near the South penthouse, and relocating the animals. In addition, it is highly recommended that stanchions be placed around the restricted area (as defined above and in the roof assessment form) of the highbay to eliminate access as the area is not clearly evident.

[Approved 28 AUG 2014]

Revision 1 of this Engineering Evaluation includes documentation from a 2014 walkdown to ensure that there are no

signs or issues that would question the structural integrity of the X-700 roof structure. There is only one location located on the highbay roof encompassed by columns D4/D7 and E4/E7 that restricts personnel access due to corrosion of the metal decking. No other significant issues were noted during the walkdown, so this Engineering Evaluation is being extended for 5 years and the X-700 structure is adequate for routine maintenance access and inspection activities, except for the one restricted area discussed above, as defined in this Engineering Evaluation.

NOTE: There have been multiple roof leaks located on the highbay roof, especially in the valley location. In 2009 a spray foam roofing overlay was performed on the lowbay and highbay valley, with the anticipation to complete the rest of the highbay roof the next year; however, due to funding and transition to a new company the highbay roof repair was never completed. Roof work is anticipated for 2014-2015 to perform a TPO overlay over the valley that will extend past the high point of the roof, similar to the TPO overlay performed by TPMC/WEMS on the south portion of the highbay.

[Approved 22 AUG 2012]

Revision 0 discussion:

ESO E3839 requested an engineering evaluation be performed to assess the roof structural integrity for the X-700 Converter Shop and Chemical Cleaning Facility. In the 2012 roof structural integrity walkdown, the entire top of the X-700 roof was visually inspected. In addition, the underside of the X-700 roof structure was also visually inspected.

Summary of results:

The X-700 original roof and the roof addition are adequate for routine assess and maintenance activities, except for the area encompassed by columns D4/D7 and E4/E7. The safe and allowable imposed roof load limits are indicated directly below:

1. A uniform roof live load of 30 PSF is permitted over the entire roof.

-OR-

2. Per Code, a concentrated 300 pound limit per person including hand tools is the limit codified by the Ohio Building Code Table 1607.1 A single concentrated load per person is also codified. For a single worker this is based upon a square area of 2'-6" x 2'-6". For purpose of final clarification, a total of 6 maintenance workers are permitted on a rectangular section of roof bounded on the perimeter by either a column line [e.g. rafter framing member] and/or a purlin. For the original building, the typical purlin is a 16 WF 40. For the building western addition, a W10x21 or W10x39 are typical purlins.

Operability Recommendations:		Changes to Design Docs Needed: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Operable? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Affected Docs	

Implementation:		Date Approved: 9/4/2024	
Actions Required: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Expiration Date: 9/4/2029	
EIAW/IAW Number: N/A		Next Review Date: N/A	
USQD Screening Number: N/A			
USQD Number: N/A			

NOTE: If implementing actions are required, an EIAW/IAW number is also required to assure such actions are completed and do not violate certificate requirements and authorizations.

Non-Conforming Item Disposition:

- | | |
|--|---|
| <input checked="" type="checkbox"/> N/A | <input type="checkbox"/> NCR VOID (Item conforms) |
| <input type="checkbox"/> Reject - Return To Supplier | <input type="checkbox"/> Reject - Scrap/Dispose |
| <input type="checkbox"/> Repair | <input type="checkbox"/> Rework |
| <input type="checkbox"/> Use-As-Is | <input type="checkbox"/> Upgrade |
| | <input type="checkbox"/> Documentation |

Other Comments or Notes:

Attachments
1) Attachment A - Roof Assessment Form
2) Attachment B - Rev. 3 Pictures
3) Attachment C - Rev. 2 Attachments

APPROVALS

AUTHOR: *Nathan McLaughlin* 9/3/2024 Nathan McLaughlin
Signature/Date

REVIEWER: *Rick Matulja* 0356012024 Rick Matulja
Signature/Date

APPROVER: *Ellen K. Stone* 9/4/2024 ellen stone
Signature/Date

FBP BUILDING ROOF ASSESSMENT

COVER SHEET

Project: **Structural Integrity Assessment** Engineering Evaluation No.: **EVAL-DE-2012-0316 Rev.3**

Building: **X-700 Complex** Intended Load: **Routine Maintenance Access**

Location/Area: **Entire Roof** No. of Employees **6** (x 300 lbs) = **1800 pounds**

Type of Structure: **Steel Frame / Steel Metal Deck (S)** Each employee plus hand-carried tools plus hand-carried materials may not exceed 300 pounds.

Weight of Equipment + Included above

Age of Structure: **69 Years – Original Structure** Weight of Materials + Included above
53 Years – Western Addition

Occupied? Yes No Total Weight = **1800 pounds**

Maintained? Yes No Date of Assessment: **22 AUG 2024**

The roof described above has been assessed by representatives of Engineering and Safety for Routine Maintenance Access. The result of this structural integrity assessment is:

- Passed (This judgment is based upon a Good-Faith roof assessment for routine maintenance access.)
- Conditionally Passed (Most of the roof areas are accessible, except as listed in EVAL-DE-2012-0316 R3)
- Did Not Pass (Requires further evaluation prior to FBP and/or FBP-managed contractor employee access.)

A separate engineering evaluation is needed for conditions other than stated above (such as the use or installation of rooftop equipment, or the stockpiling of materials on the roof).

Walkdown Date: 22 AUG 2024

Assessment Team

Dan Joosse	DANIEL JOOSSE (Affiliate) Digitally signed by DANIEL JOOSSE (Affiliate) <small>Date: 2024.09.03 09:11:59 -04'00'</small>	
Facility Custodian (Print)	Facility Custodian (Sign)	Date
Kurt Myers	KURT MYERS (Affiliate) Digitally signed by KURT MYERS (Affiliate) <small>Date: 2024.08.28 16:08:43 -04'00'</small>	
Safety Representative (Print)	Safety Representative (Sign)	Date
Nathan McLaughlin	NATHAN J MCLAIGHLIN Digitally signed by NATHAN J MCLAIGHLIN <small>Date: 2024.09.03 12:19:18 -04'00'</small>	
Engineer (Print)	Engineer (Sign)	Date
N/A	N/A	N/A
Other: <u>N/A</u> (Print)	(Sign)	Date

FBP BUILDING ROOF ASSESSMENT

CHECKLIST

I. WALLS/ROOF SUPPORT

A. Exterior Walls

- 1. Concrete
 - a. Tilt-up panels
 - b. Cast-in-place
 - c. Precast panels
- 2. Masonry
 - a. Block (CMU)
 - b. Brick
- 3. Steel frame w/ Corrugated asbestos siding
 - a. Pre-engineered building
- 4. Wood frame with _____ siding
- 5. Other _____

B. Interior Walls/Columns

- 1. Concrete
 - a. Cast-in-place
 - b. Tilt-up panels
 - c. Precast panels
- 2. Masonry
 - a. Block (CMU)
 - b. Brick
- 3. Steel frame w/siding
- 4. Wood frame w/siding
- 5. Other Open Structure

II. ROOF

A. Roofing

- 1. Metal type
- 2. Built-up type
- 3. Single-ply type
- 4. Urethane
- 5. Asphalt Shingle
- 6. Other Spray foam roof on main low bay and high bay valley, TPO overlay on high bay

B. Decking

- 1. Reinforced concrete slab
- 2. Precast concrete plank
- 3. Prestressed concrete plank and deck
- 4. Composite concrete slab
- 5. Steel w/concrete fill
- 6. Steel deck
- 7. Composite Steel
- 8. Plywood
- 9. T&G wood plank
- 10. Other _____

C. Roof Structure

- 1. Concrete
 - a. Waffle Slab
 - b. Concrete encased beams w slab
 - c. Precast concrete plank
- 2. Masonry beam

C. Roof Structure (continued)

- 3. Steel
 - a. Framework type _____
 - b. Joists
 - c. Trusses
- 4. Wood
 - a. Joists
 - b. Manufactured joists type _____
 - c. Beams
- 5. Other _____

III. ROOF CONDITION

A. General Appearance

- 1. Debris
- 2. Drainage (some standing water / fair)
- 3. Visible damage from roof:
 - a. Concave/convex deflection
 - b. Surface uniformity
 - Loose material
 - Deviations from one area to another
 - c. Sun damage
- 4. Visible damage from interior:
 - a. Concave/convex deflection
 - b. Notable ceiling damage
 - Water stains on ceiling panels
- 5. General condition Good
- 6. New equipment/alterations
- 7. Other _____
- 8. Aged roof

B. Surface Condition

- 1. Bare spots in gravel/ballast
- 2. Visible light from below (through ceiling)
- 3. Alligator/cracking
- 4. Spalling concrete surfaces
- 5. Slippage
- 6. Housekeeping
- 7. Evidence of recent repairs (yrs ago)
- 8. OK

C. Membrane Condition

- 1. Blistering
- 2. Splitting
- 3. Ridging/wrinkling
- 4. Fishmouthing
- 5. Loose felt laps/seams
- 6. Punctures, fastener backout
- 7. Securement to substrate
- 8. Membrane shrinkage
- 9. Membrane slippage
- 10. Evidence of recent repairs
- 11. N/A

GENERAL: Plant maintenance or building custodian consulted for building history and known hazards.

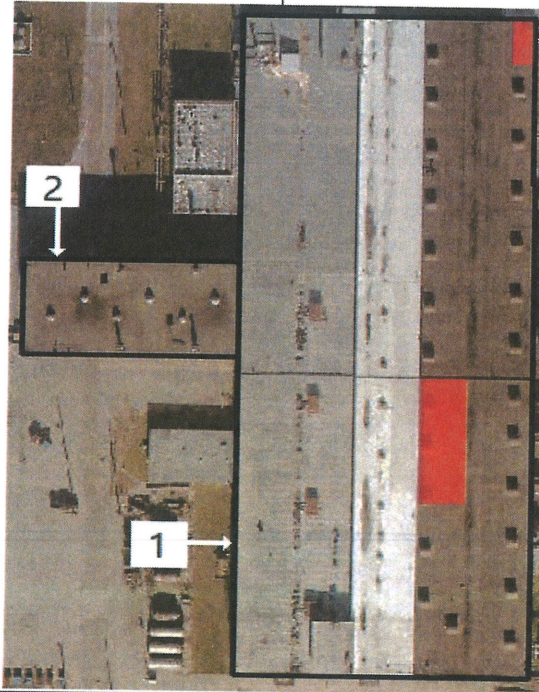
FBP BUILDING ROOF ASSESSMENT

FINDINGS SHEET

Roof Sketch Legend: Roof Access Allowed Roof Access NOT ALLOWED

Top View Sketch or Satellite Photograph:

Side/End View:



Roof Sections (see Note No.1)	<u>Inspected</u> (Yes/No)	<u>Passed</u> (Yes/No)
1. Original Structure	Yes	Yes*
2. West Addition	Yes	Yes

NOTES:

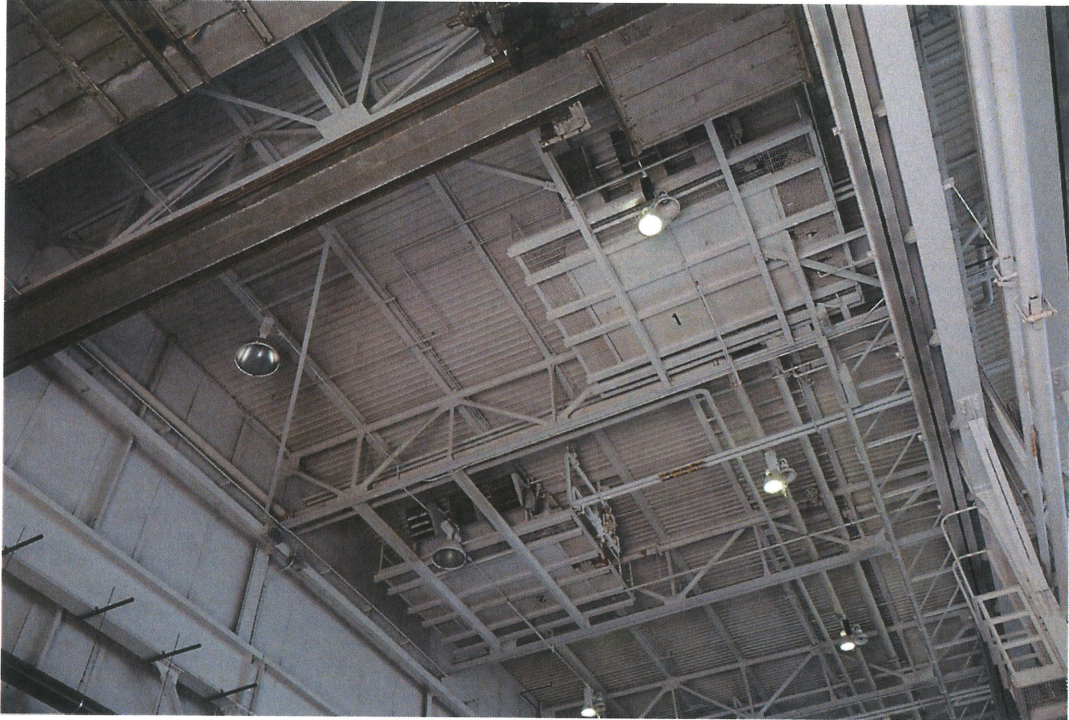
*NOTE: Access to the roof is restricted between columns E4/D4 through E7/D7 and F13/EF13 through F14/EF14.

Building or Trailer No. **X-700** Location/Area: **Entire Roof**

Comments (add additional sheets as necessary):

See EVAL-DE-2012-0316, Rev.3 for additional details.

The **X-700** roof is structurally adequate for Routine Maintenance Access to the areas identified above in the roof sketch for six employees (as defined on page 1 of this FBP Building Roof Assessment) on each of the two roof sections.



Southeast corner of building



Looking North



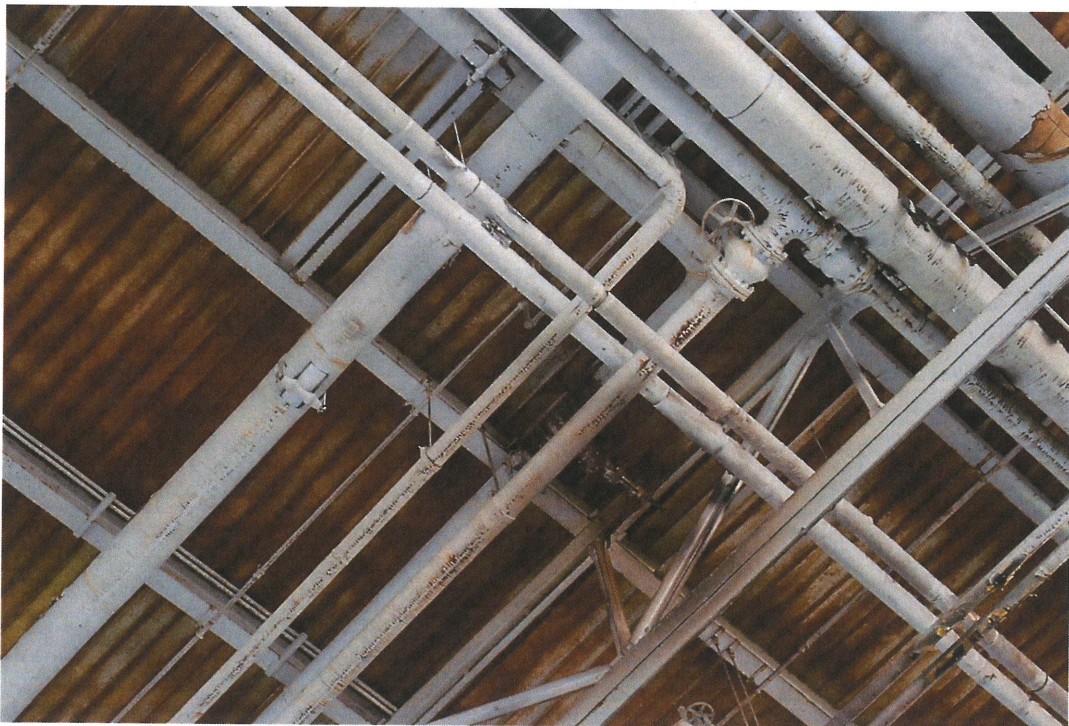
Looking North



Corrosion in large area of roof between columns D4/D7 and E4/E7



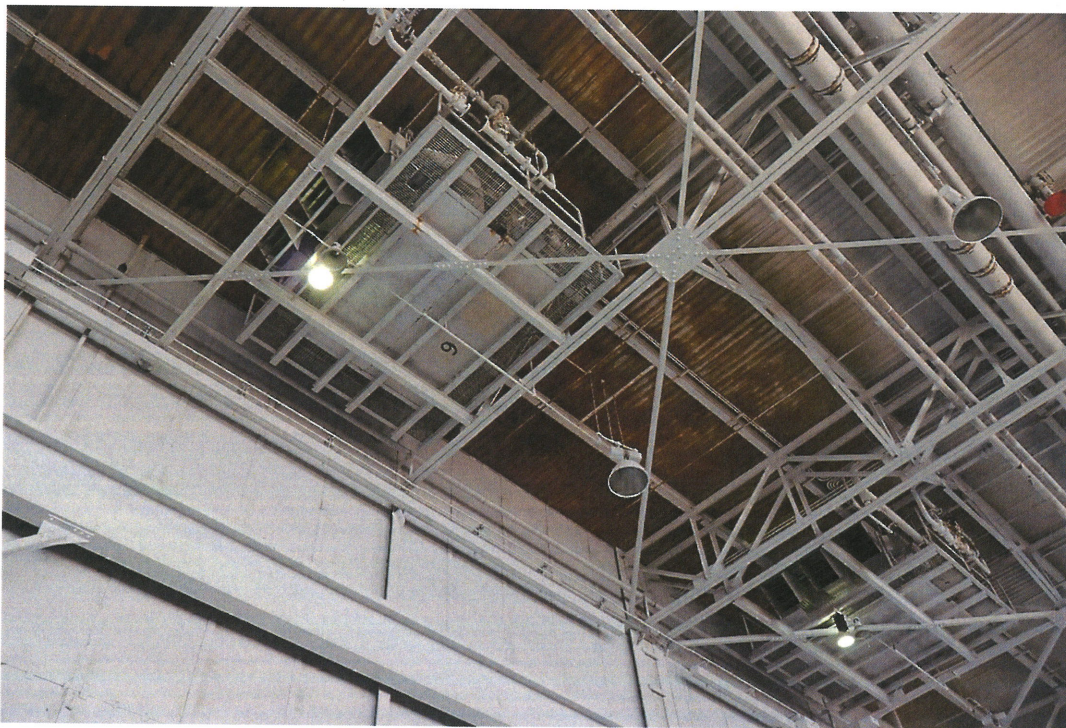
Closer look at corrosion



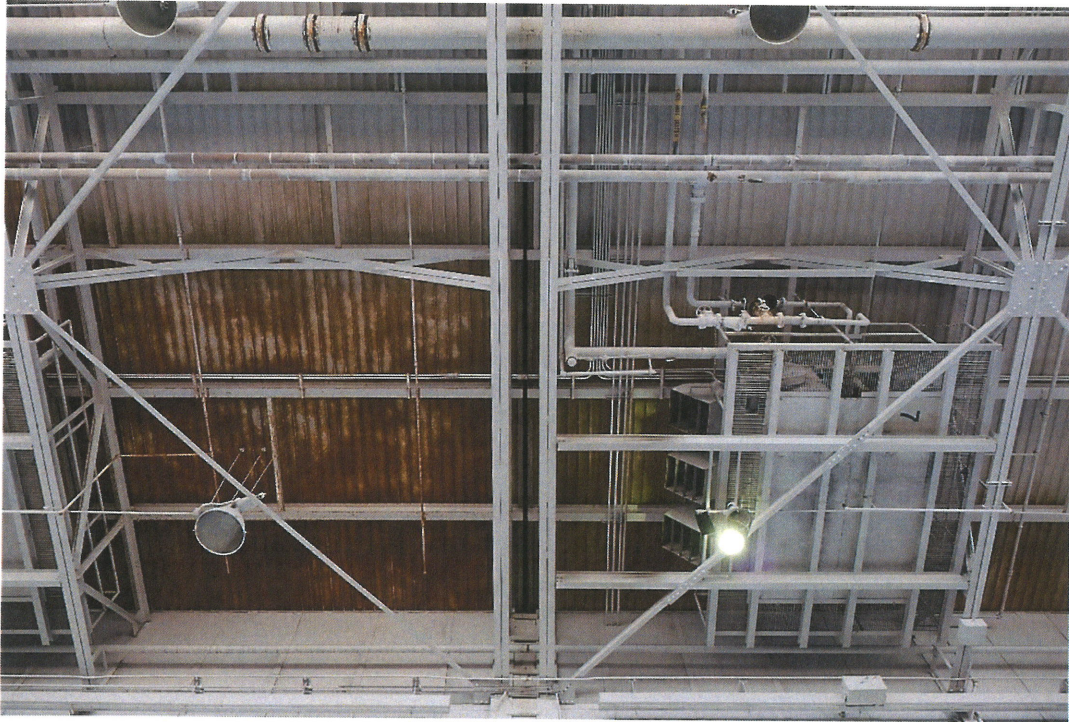
Close up of corrosion



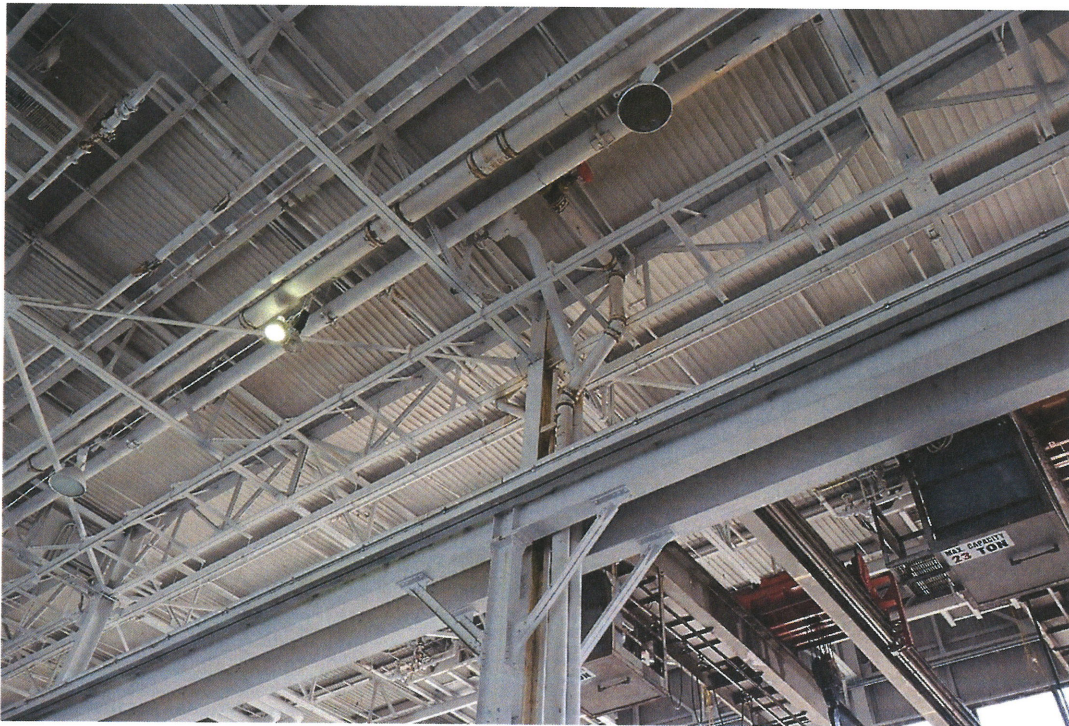
Roof on East side of the Cleaning Area



Corrosion between columns D4/D7 and E4/E7



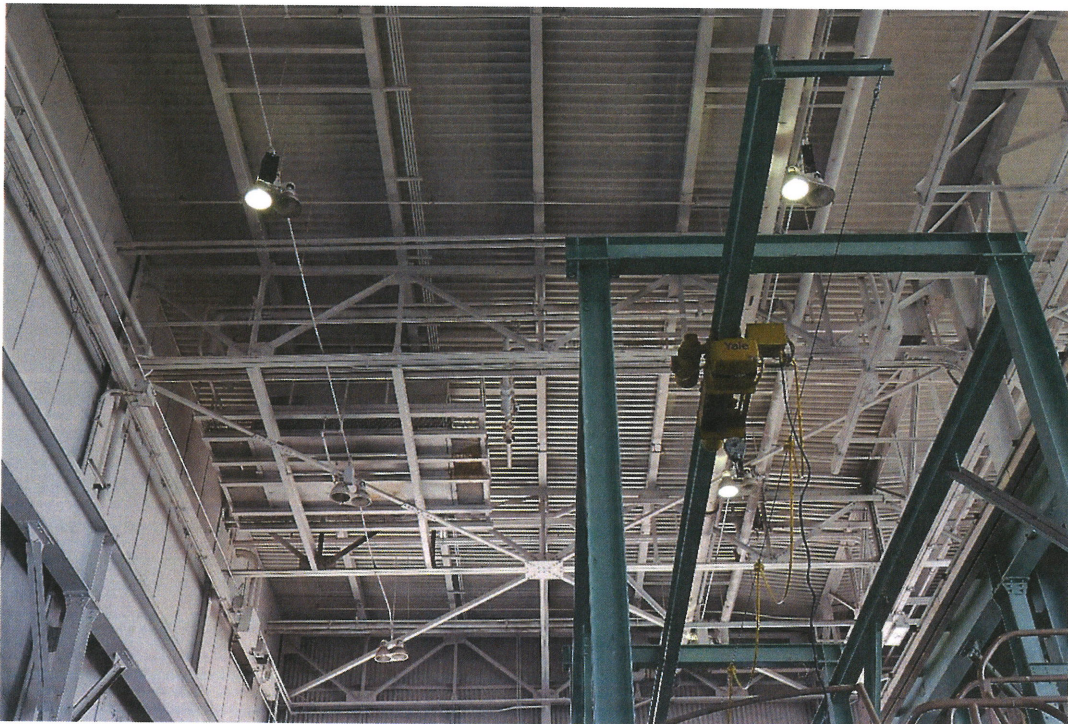
Corrosion between columns D4/D7 and E4/E7



Near column E8



Near column E12



North side of building



Corrosion on Northeast side of roof between columns EF13/EF14 and F13/F14



Close view of corrosion



Evidence of some sort of repair near column E12



South side of Highbay



Southeast side of Highbay



Southeast side of Highbay



Evidence of water leak on column B3



Column B3



Looking North in Highbay



Looking North in Highbay



Column B4



Roof above Shop Area



Minor corrosion in roof near column B6



Close up of minor corrosion



Roof on Northeast side of Shop Area



Roof on Northwest side of Shop Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof in Retubing Area



Roof on Northeast side of Retubing Area



Roof in West building addition



Roof in West building addition



Roof in West building addition



Roof in West building addition



Roof in West building addition



Roof in West building addition

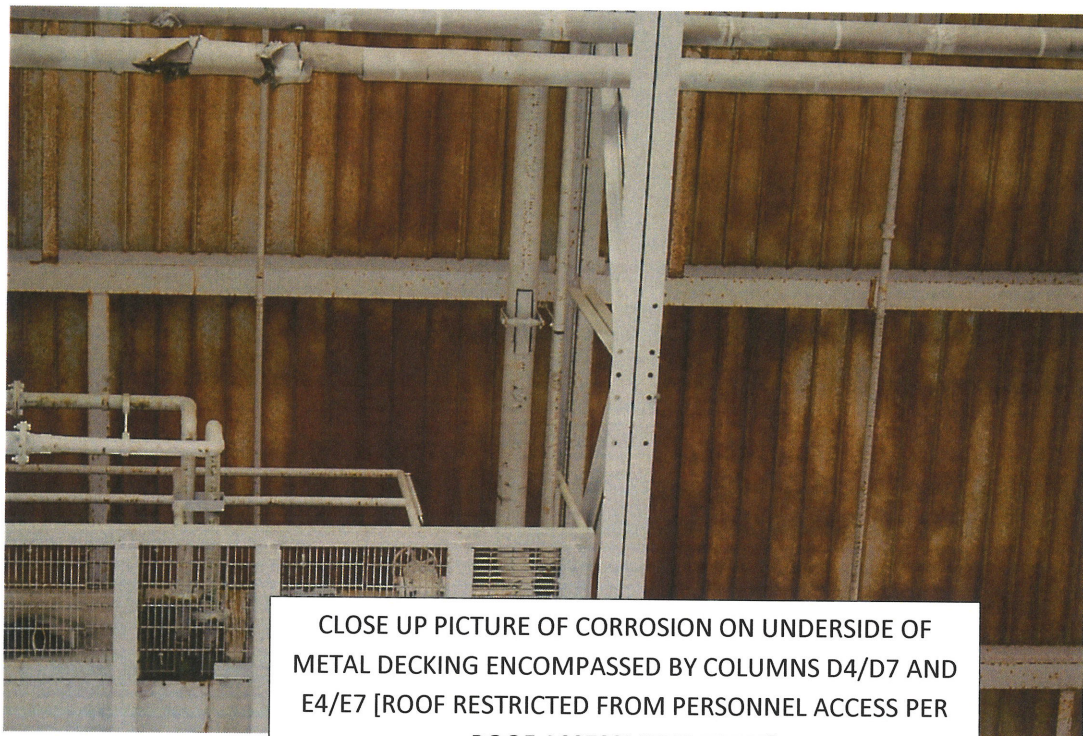
2014 ROOF STRUCTURAL INTEGRITY INSPECTION PICTURES

X-700 Highbay Roof – East/South Section (FBP Area) (CONT.)



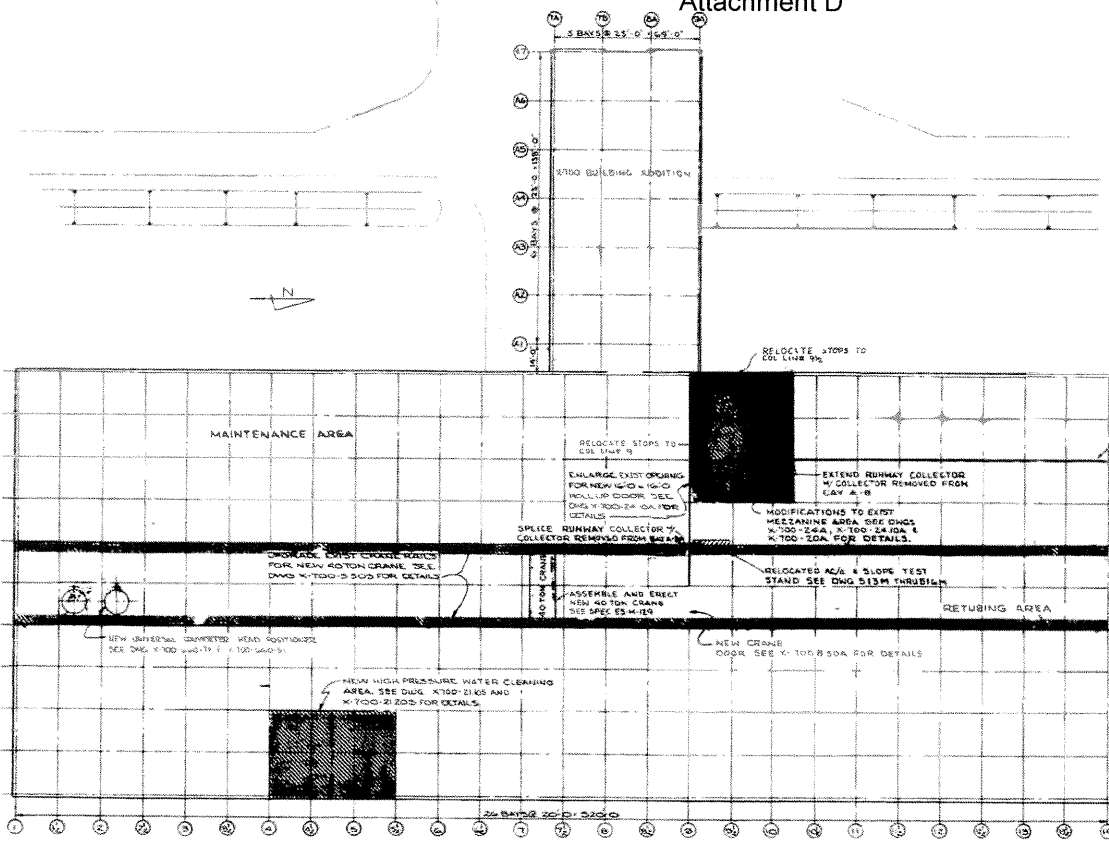
2014 ROOF STRUCTURAL INTEGRITY INSPECTION PICTURES

X-700 HIGHBAY ROOF – EAST/SOUTH SECTION (FBP AREA) (CONT.)



CLOSE UP PICTURE OF CORROSION ON UNDERSIDE OF METAL DECKING ENCOMPASSED BY COLUMNS D4/D7 AND E4/E7 [ROOF RESTRICTED FROM PERSONNEL ACCESS PER ROOF ASSESSMENT FORM]

Attachment D



REMOVE EXISTING COLLECTOR AND REPLACE WITH GENERAL ELECTRIC #0 AND #12 IN OTHER TYPE CATV-561 OR EQUAL.

MODIFICATIONS - TO - EXISTING - X-700 - BLDG

SCALE: 1/4" = 1'-0"

10/31

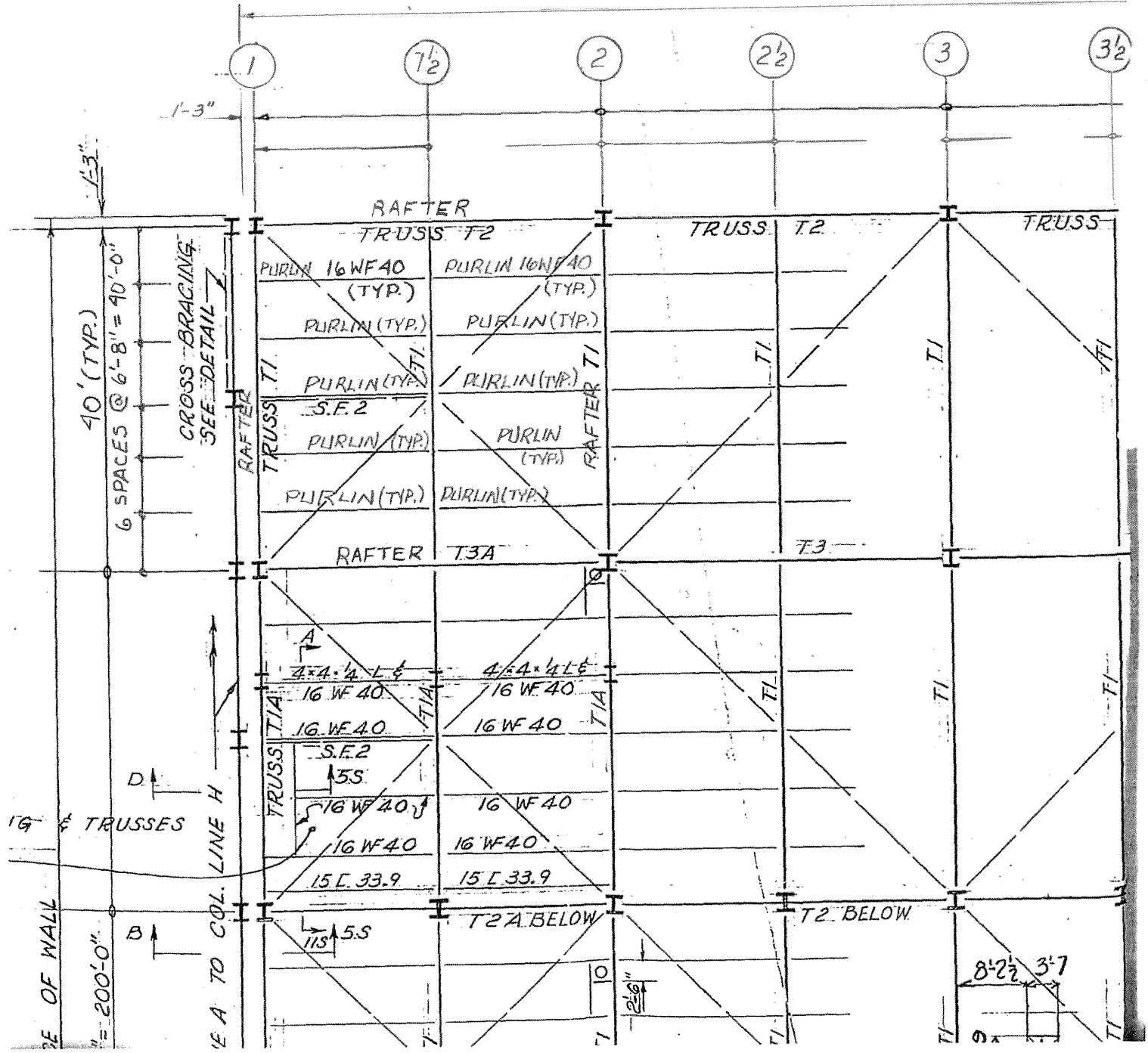
ENCLOSURE SHEET
 LITHO IN U.S.A.
 REPRODUCED BY THE ARCHITECT

PROJECT 35002		4 CERTIFIED FOR CONSTRUCTION	
GOOD YEAR		3 ADDED CONCRETE HEAD POSITIONER	
GOOD YEAR ATOMIC CORPORATION		2 CHANGED BAY A18 CRANE COLLECTOR	
P.O. BOX 404, BOSTON, MASS.		1 APPROVED - TITLE II	
THE HONEYWELL TEST & MEASUREMENT COMPANY		0 FOR APPROVAL - TITLE II	
1000 WASHINGTON STREET, BOSTON, MASS. 02111		X-700 BUILDING MODIFICATION	
E-700-5505 X-700-850A		BUILDING PLAN	
10-100 24A		DATE: 11/1/12	
-21205 84 10A		SCALE: 1" = 20'-0"	
S-100-518M THRU S18M		X-700	
DATE: 11/1/12		BY: L.N. BACHMAN	

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Partial Roof Framing Plan - Main (or Original Building)

Dwg. X-700-3-S



Attachment D

EVAL DE 2012-05 For Rev 3 Page 05 of 06

ROOFING	6.0
INSUL.	1.0
ROOF	12.0
PURLINS	3.0
EQUIP.	5.5
SNOW	30.0
	<hr/>
	37.5 % ON PURLINS
EQUIP.	2.5
	<hr/>
	60.0 % ON E.F.W. TRUSS
TRUSS	4.0
	<hr/>
	64.0 % ON N.F.S. TRUSS
<u>ROOF FRAMING LOADING</u>	

WIND LOAD 20#/sq ft
OR
EARTHQUAKE 2% G.

HORIZ. LOADING

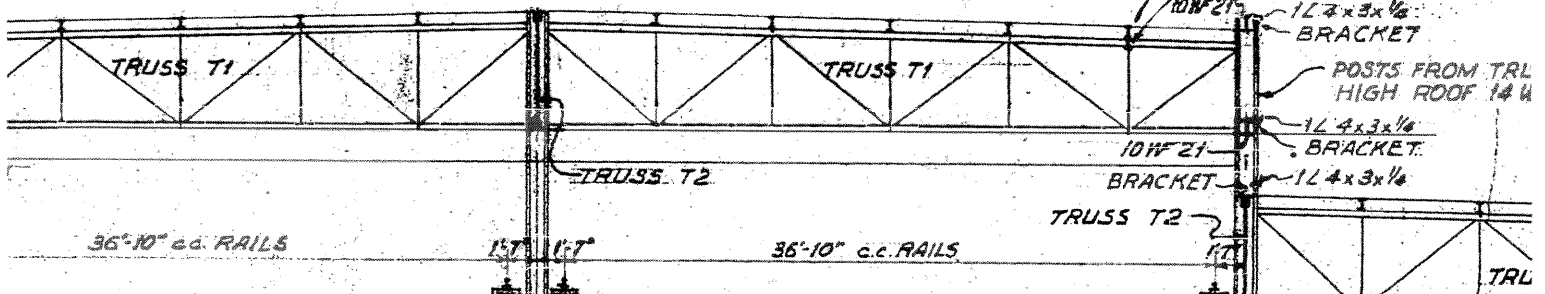
Dwg. X-700-4-S

Original Roof Load Design Requirements

12/34

PURLINS- 10 WF 21

ROOF TO BE 1/2" #18 GA. METAL DECK.
WELDED TO SUPPORTING MEMBERS.



PURLIN AT HIGH POINT
PURLIN AT LOW POINT
SLOPE 10" IN 40'-0" TO SL

10 WF 21
1L 4x3x1/4
BRACKET

POSTS FROM TRU
HIGH ROOF 14 W

1L 4x3x1/4
BRACKET

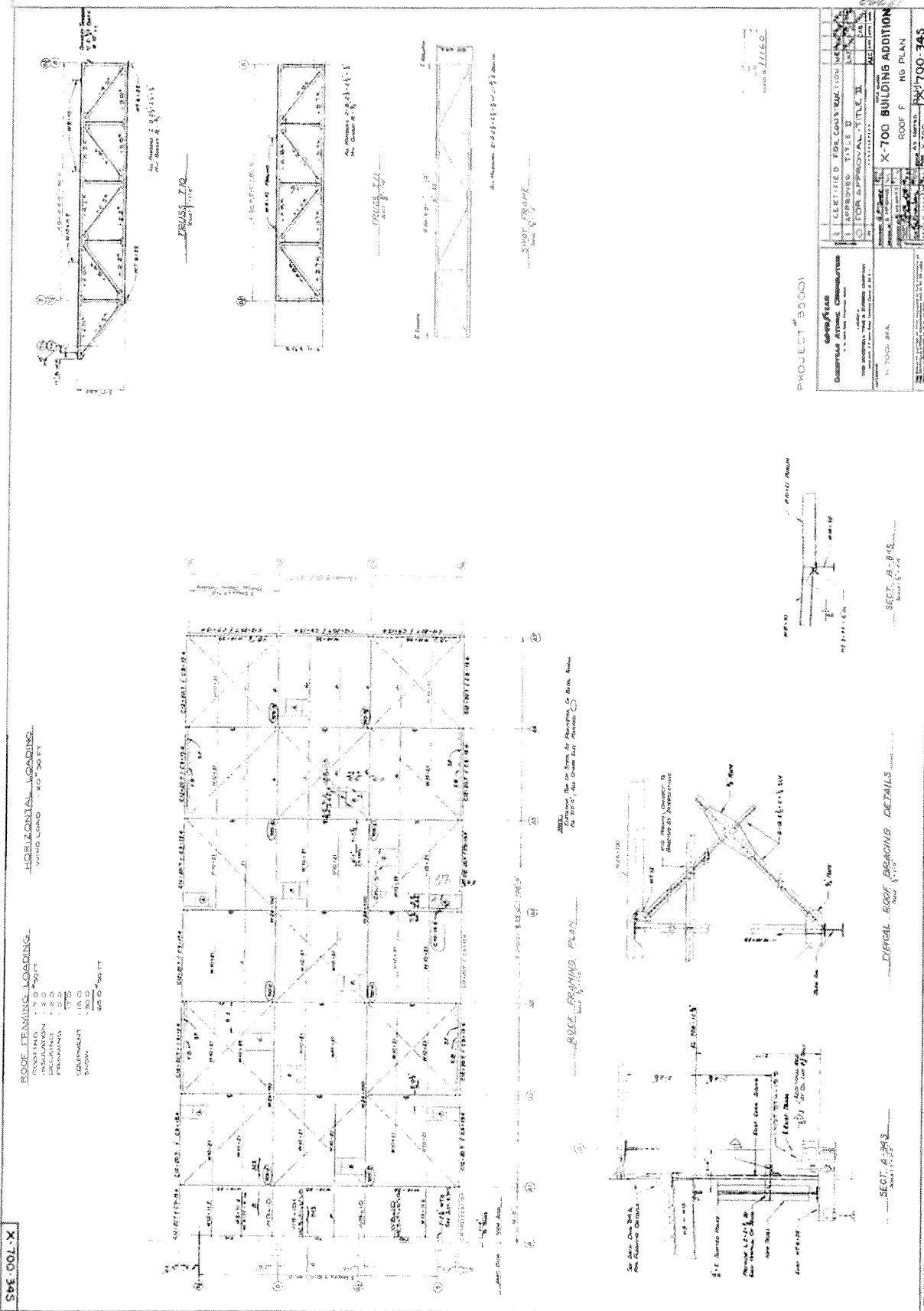
1L 4x3x1/4
BRACKET

TRUSS T2

36'-10" c.c. RAILS

36'-10" c.c. RAILS

TRU



15/3A

X-700-34S

ROOF FRAMING LOADING

ROOFING	-	7.0	#	SQ.FT
INSULATION	-	2.0		
DECKING	-	3.0		
FRAMING	-	5.0		
		<u>17.0</u>		
EQUIPMENT	-	18.0		
SNOW	-	30.0		
		<u>65.0</u>	#	SQ.FT



Partial Roof Framing Plan - Building Addition

Dwg. X-700-34S

