

Greater Binghamton Airport Outer Marker (BGM OM)
Binghamton, NY

Demolish, Remove and Dispose of the BGM OM Facility



SPECIFICATIONS

For

Federal Aviation Administration
New England Region

By

AJW-2E15A, OPS Engineering Center NE

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SECTION 00 73 19 – SAFETY AND HEALTH REQUIREMENTS

PART 1 – GENERAL

1.1 Summary

- A. Requirements for Employee Health and Safety

1.2 Applicable Publications - The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only:

A. Code of Federal Regulations (CFR)

1. OSHA General Industry Safety and Health Standards (29 CFR 1910), Publication V2206; OSHA Construction Industry Standards (29 CFR 1926). One source of these regulations is OSHA Publication 2207, which includes a combination of both parts 1910 and 1926 as they relate to construction safety and health.
2. National Emission Standards for Hazardous Air Pollutants (40 CFR, Part 61)
3. Federal Standard (Fed. Std.) 313A – Material Safety Data Sheets, Preparation and the Submission of
4. FAA Order JO 3900.57A, Environmental and Occupational Safety and Health (EOSH) Requirements in the Planning and Execution of Construction and Maintenance Activities at National Airspace System (NAS) Facilities. Specifically, FAA Form 3900-18, Pre-Construction EOSH Checklist. This checklist will be reviewed with the Contractor and FAA prior to construction.

1.3 Work Covered by This Section

- A. This section is applicable to all work covered by this contract.

1.4 Definition of Hazardous Materials

- A. Refer to hazardous and toxic materials/substances included in Subparts H and Z of 29 CFR 1910; and to others as additionally defined in Fed. Std. 313. Those most commonly encountered include asbestos, polychlorinated biphenyl's (PCB's), explosives, and radioactive material, but may include others.

1.5 Quality Assurance

- A. Safety Meeting – Representatives of the Contractor shall meet with the CO and COR prior to the start of work, for the purpose of reviewing the contractor's safety and health programs and discussing implementation of all safety and health provisions pertinent to the work to be performed under this contract. The contractor shall be prepared to discuss, in detail, the measures he/she intends to take in order to control any unsafe or unhealthy conditions associated with the work to be performed under the contract. If directed by the COR, this meeting may be held in conjunction with other meetings, which are scheduled to take place prior to start of work under this contract. The contractor's principal on-site representative(s), the general superintendent, and his/her safety representative(s) shall attend this meeting.
- B. Compliance with Regulations – All work, including the handling of hazardous materials shall comply with applicable state and municipal safety and health requirements. Where there is a conflict between applicable regulations, the most stringent shall apply.
- C. Contractor's Responsibility – The contractor shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of the work.

- D. Inspections, Tests and Reports – The required inspections, tests, and reports made by the contractor, subcontractors, specially trained technicians, equipment manufacturers, and others as required, shall be at the contractor's expense.
- E. Site Specific Safety Plan (SSSP) – The Contractor will be required to submit his plan for maintaining a safe work environment for construction workers employed on this project. As a minimum, the plan shall show weekly "tail gate meetings", scheduled inspections of equipment to check for potential hazards created by wear, etc. and a statement that the current OSHA regulations on safety in the construction industry will be followed. The plan will be used by the COR to insure that the work is accomplished in accordance with safety practices. The COR may stop any operation, which is in violation of the OSHA standards and fails to comply with the safety plan or accepted safe work practices.

1.6 Submittals

A. Accident and Fire Reporting

1. The Contractor shall report to the Contracting Officer any accident or fire occurring at the site of the work which causes:
 - a. A fatality or as much as one lost workday on the part of any employee of the Contractor or subcontractor at any tier;
 - b. Damage of \$1,000 or more to Government-owned or leased property, either real or personal;
 - c. Damage of \$1,000 or more to Contractor or subcontractor owned or leased motor vehicles or mobile equipment; or
 - d. Damage for which a contract time extension may be requested.
2. Accident and fire reports required by paragraph (1) above shall be accomplished by the following means:
 - a. Accidents or fires resulting in a death, hospitalization of five or more persons, or destruction of Government-owned or leased property (either real or personal), the total value of which is estimated at \$100,000 or more, shall be reported immediately by telephone to the Contracting Officer or his/her authorized representative and shall be confirmed by telegram or facsimile transmission within 24 hours to the Contracting Officer. Such telegram or facsimile transmission shall state all known facts as to extent of injury and damage and as to cause of the accident or fire.
 - b. Other accident and fire reports required by paragraph (a) above may be reported by the Contractor using a state, private insurance carrier, or Contractor accident report form which provides for the statement of:
 - i. The extent of injury; and
 - ii. The damage and cause of the accident or fire.
 - c. Such report shall be mailed or otherwise delivered to the Contracting Officer within 48 hours of the occurrence of the accident or fire.
3. The Contractor shall assure compliance by subcontractors at all tiers with the requirements of this clause.

- B. Permits – If hazardous materials are disposed of off-site, submit copies of permits from applicable Federal, State, or municipal authorities.

1.7 Materials and Equipment

- A. Special facilities, devices, equipment, clothing, and similar items used by the Contractor in the execution of work shall comply with applicable regulations.

1.8 Hazardous Materials

- A. The contractor shall bring to the attention of the COR any material suspected of being hazardous which he/she encounters during execution of the work. A determination will be made by the COR as to whether the contractor shall perform tests, and/or if the material is found hazardous and additional protective measures are needed, a contract change may be required, subject to applicable provisions of this contract.

1.9 Suspension of Work

- A. The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government. The Contracting Officer may, in emergency or life threatening situations notify the contractor orally to suspend, delay or interrupt all or any part of the work and issue the notice in writing immediately after the oral notice.
- B. If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted:
 - 1. by an act of the Contracting Officer in the administration of this contract, or
 - 2. by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly.
 - 3. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract.
- C. A claim under this clause shall not be allowed:
 - 1. for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and
 - 2. unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

1.10 Protection

- A. The Contractor shall take all necessary precautions to prevent injury to the public, building occupants, or damage to property of others. For the purposes of this contract, the public or building occupants shall include all persons not employed by the Contractor or related subcontractor.
- B. Work shall not be performed in any area occupied by Federal employees unless adequate steps are taken for the protection of the public and Federal employees.

- C. Whenever practicable, the work area shall be fenced, barricaded, or otherwise blocked off to prevent unauthorized entry into the work area.
- D. Alternate Precautions
 - 1. When the nature of the work prevents isolation of the work area, alternate precautions such as the posting of signs, the use of signal persons, the erection of barricades or similar protection around particularly hazardous operations shall be used as appropriate.

END OF SECTION 00 73 19

SECTION 01 11 00 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 SCOPE

BGM OM Demolition Scope

The Contractor shall furnish all labor, equipment and materials necessary for the demolition of the Binghamton Outer Marker (BGM OM) located in Binghamton, NY. The following items are a brief summary of the project and are provided solely for the purpose of describing the general nature of the work. The contractor is responsible for accomplishing all items of work identified in the applicable attachments, specifications, and provisions of the contract.

In general the work consists of the following:

1. **Prior to the start of construction, the Contractor shall review the Hazmat report and take appropriate action for abatement of the OM Shelter. The OM Shelter has both Asbestos Containing Material (ACM) and Lead Based Paint (LBP). Provide the FAA documentation of the abatement process.**
2. **The Contractor shall remove and dispose of any equipment or materials inside the BGM OM shelter or fenced in area unless otherwise identified by the FAA. All Electronic Equipment removed from the shelter or OM plot shall be destroyed to the point of disrepair before disposal or brought to an electronic recycle facility.**
3. **The Contractor shall remove and dispose of six (6) 12V batteries in an environmentally compliant manner. Provide the FAA documentation of the disposal method.**
4. **The Contractor shall remove and dispose of the existing Thermostat and Fluorescent Light Tubes found within the shelter. Both are considered mercury-containing material and shall be disposed of in an environmentally compliant manner. Provide the FAA documentation of the disposal method.**
5. **The contractor shall remove the existing fire extinguisher from the shelter and dispose of properly.**
6. **The Contractor shall remove and dispose of the 8.5' x 11' x 10' Wooden A-Frame with metal structure shelter, and the associated 5' x 2' 2 step concrete entrance.**
7. **Shelter foundation is comprised of four (4) 12" x 12" x 1' visible concrete piers. The contractor shall remove the piers and spread the remaining crushed stone completely, and grade site accordingly.**
8. **The Contractor shall Demolish and remove the Single Yagi Antennae, 10' Metal Antenna Mast, and associated 30" x 30" concrete pier foundation.**
9. **The Contractor shall remove the NDB Pole found on the site plot and any associated cabling that remains.**
10. **The Contractor shall remove and dispose of the NDB Pole metal foundation and tilt down pole support.**
11. **The Contractor shall remove and dispose of the power meter box, and associated conduit and cabling found on the side of the shelter.**

12. **The Contractor shall remove and dispose of the site perimeter fencing. The fencing consists of approximately 160 linear feet of 7' tall chain link fence fabric, 500 linear feet of barbed wire, two 6' wide swing gates, one 3' pedestrian gate and associated metal fence posts with concrete foundations.**
13. **The Contractor shall remove and dispose of the shelter and OM antenna counterpoise where possible or cut and remove any portions which are above 3' below grade.**
14. **The existing PVC Shed and its contents found on the premises shall be removed by the SSC prior to the arrival of the contractor.**
15. **The Contractor shall remove and dispose of all conduits and conductors where it is practical to do so. Otherwise, the contractor shall cut and cap all conduits 3' below grade or where vertical utilities transition to horizontal, whichever occurs first.**
16. **The Contractor shall demolish and remove all foundations or structures to a minimum of 3' below grade and cover with existing ground cover material, if available, or import additional ground cover material to match existing, and cover to a depth of approximately 3'.**
17. **The Contractor shall grade all disturbed areas to match the surrounding site contours. The facility contains a stoned access road from the public street to the facility. The access road shall be left in place.**
18. **The Contractor shall be responsible for obtaining any permits required for the demolition and restoration of the BGM OM facility. Contractor shall contact DigSafe prior to excavation.**
19. **The Contractor shall be solely responsible for any damage caused that is not directly related to the disposition of the BGM OM facility. This includes, but is not limited to, damage to underground or overhead cables still in use, sewer lines, neighboring fences, the surrounding landscape, and local roadways/curbs.**
20. **The Contractor shall be responsible for providing all temporary services needed for the disposition of the BGM OM facility. This includes, but is not limited to, sanitary facilities, covered dumpsters, and temporary power. The commercial power to the BGM OM facility will be shut off prior to the Contractor arriving on-site.**
21. **The Contractor shall coordinate the schedule of work with the COR, the SSC, the RE and any applicable local authorities.**

1.2 APPLICABLE DOCUMENTS

- A. **Applicable Documents** - All FAA, Military, Federal, and industrial codes or standards, specifications, and contract drawings referenced in this and the following divisions form a part of this specification are applicable only to the extent they were used as a basis of this design. All references to codes, standards, specifications, and construction drawings refer to the latest editions (and any supplements) in effect on the date of the contract.
- B. **Applicable Publications** - The publications listed below form a part of this specification to the extent referenced. The publications are referenced to in the text by basic designation only.
 1. **CODE OF FEDERAL REGULATIONS (CFR):**
 - a. OSHA General Industry Safety and Health Standards (29 CFR 1910), OSHA Construction Industry Standards (29 CFR 1926). OSHA 2202 is a condensed version of

29 CFR 1926. Each is for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington DC 20402.

- b. National Emission Standards for Hazardous Air Pollutants (40 CFR, Part 61).
- 2. FEDERAL STANDARD:
 - a. Preparation and the Submission of 313A Material Safety Data Sheets.

1.3 DEFINITIONS

- A. Federal Aviation Administration (FAA) - The terms "Federal Aviation Administration" (FAA) and "Government" as used herein denotes the "owner"
- B. Contracting Officer (CO) - The term "Contracting Officer" (CO) as used herein denotes the person designated to act for the Government in the performance of this contract.
- C. Contracting Officers Representative (COR) - The term "Contracting Officers Representative" (COR) as used herein denotes the representative of the Contracting Officer at the job site. The COR's authority is limited. These limitations are defined in the Letter of Delegation provided to the COR and the Contractor at the preconstruction meeting.
- D. Contractor and Subcontractor - The term "Contractor" as used herein denotes the firm retained by the FAA to perform and complete work required by the Contract. The term "subcontractor" as used herein denotes the person or firm retained by the Contractor to perform a particular unit of work required by the Contractor. Subcontractors shall be required to meet all specifications required of the Contractor.
- E. Furnished Material - The term "furnished material" (GFM) as used herein denotes all Government Furnished Equipment (GFE) and material furnished by the Federal Aviation Administration. Any and all material not listed as "Furnished" shall be supplied by the Contractor. Furnished material is listed in Section 01 11 00, Part 3.3.

1.4 GOVERNMENT FURNISHED EQUIPMENT AND MATERIAL (GFE & GFM)

Not Applicable

1.5 CONSTRUCTION CONDITIONS

- A. Preconstruction Conference - The Contractor shall attend a preconstruction conference at the time and location specified by the CO. Local procedures related to ingress, egress and security will be discussed. Requirements for material disposal, security and safety will be discussed. Compliance with these procedures while on site is mandatory.
- B. Conflict Resolution - The Contractor shall meet standards, specifications, and drawings as specified herein. The specifications and drawings will rule in all cases. Specifications will govern over drawings. In the event of dimensional discrepancies or omissions, the Contractor shall field verify and correct the information, and the COR shall render an interpretation and decision.
- C. Inspection

1. Access for Inspection - The Contractor shall allow the COR complete access to all portions of the work. Portions of the work buried, enclosed, or disguised, will be inspected by the COR before being obscured by the next operation of the Contractor. In all cases, the COR shall be informed accordingly and given access to the work. Work obscured before inspection and acceptance by the COR, may, at the option of the COR be opened for inspection at no additional cost to FAA.
 2. Joint Acceptance Inspection - The COR shall inspect all work after substantial completion including all materials, tools, and equipment. Such inspection may extend to all or a part of the work for the preparation, fabrication or manufacture of the materials to be used. The COR shall notify the Contractor of any non-compliance with the contract specifications and/or drawings, and may reject workmanship or materials accordingly. After the COR reviews the contract documents and verify the Contractor has completed all required work, a Joint Acceptance Inspection (JAI), which is a FAA internal approval process, will be held.
- D. Existing Utilities - Subsurface utilities and cables, whose existence is known to FAA, are shown on the contract drawings in approximate locations. Other utilities may not be shown on the contract drawings. The Contractor shall ring out and mark the existing power and control cable runs prior to any construction activities so as to maintain clearances from underground cables during construction. The Contractor shall field verify the location of underground utilities before excavating cable trenches and concrete foundations. This will be accomplished, in part, by coordinating with the FAA and the COR.
1. Hand Excavation - Hand excavation methods will be used in locating all existing utilities. Any damage caused by the Contractor will be repaired immediately by the Contractor at no additional cost to FAA. Repairs, if required, will be in accordance with the specifications and conditions stipulated by the COR.
- E. Project Coordination - The Contractor shall be required to coordinate construction activities with the FAA through the COR. All work, which affects Facilities and Equipment, shall be coordinated and approved by FAA personnel through the COR twenty-one (21) days in advance of the scheduled work. Failure to notify and obtain the necessary approval may result in a rescheduling of the work. If weather conditions or operations preclude a scheduled shutdown of the FAA facility, the Contractor shall reschedule the work. The Contractor shall be required to coordinate all power shutdowns of existing facilities with the FAA, through the COR, twenty-one (21) days in advance. Each shutdown for testing or cut-overs will be limited to off-peak hours, with the facility placed back in service at the end of the workday or as stipulated by the FAA. The Contractor shall not be allowed any extension of time or compensation for lack of compliance with this requirement.
- F. Layout of Work - The Contractor shall field verify measurements and work from the established base lines and bench marks indicated on the drawings and will be responsible for all measurements in connection therewith. The Contractor will furnish, at his/her own expense, all templates, equipment, tools, materials, and labor as may be required in laying out any part of the work.
- G. Permits, Inspection, Licenses, Certificates - The Contractor shall obtain and pay fees for permits, licenses, or certificates required by Federal, State and City/Town officials as necessary to perform the work, prior to starting construction, and in a timely manner to avoid delays in

starting the job. The Contractor will abide by all requirements dictated by the municipality for such permits without any additional cost.

- H. Compliance with Local and Other Codes - The Contractor shall comply with codes and standards, such as the National Electric Code, latest edition or local code. Where the requirements of the specifications and drawings exceed those codes, the Contractor shall comply with the requirements of the specifications and drawings.
- I. Temporary Facility - The Contractor shall provide and pay for all temporary services and facilities as specified below and as necessary for the proper and expeditious execution of the work. The Contractor shall make, or have made all connections to existing services and sources of supply as necessary and/or indicated and pay all charges for same. The Contractor shall remove all such temporary installations and connections when no longer necessary for the project work.
 - 1. Temporary Water - The Contractor shall make arrangements to furnish a potable water supply for workers and project work, and pay for all temporary water and services, in accordance with OSHA requirements.
 - 2. Temporary Toilets and Sanitation - The Contractor shall provide ample and suitable on-site sanitary conveniences with proper enclosures for the use of the workers and other personnel employed at the site, in accordance with OSHA requirements. Locations will be subject to approval from the COR. After completion of the work, such conveniences will be promptly removed from the site.
 - 3. Temporary Light and Power - The Contractor shall arrange for, provide and maintain all temporary electric light and power as required throughout the work. The Contractor shall pay all costs for the installation and use of such temporary light and power.
 - a. The Contractor shall furnish, install, connect and maintain all the wiring, sockets, lamps, receptacles, switches, feeders, circuit work, etc. necessary to provide temporary artificial illumination and power as required for the performance of all work covered by these specifications or which may be required for safety and for inspection purposes. Contractor shall provide all power unless coordinated and approved by the FAA and COR that the contractor may use onsite available receptacles.
- K. Protection of Existing Vegetation, Improvements and Structures - The Contractor shall take all precautions necessary to protect the existing facilities, equipment, buildings, foundations, vegetation, etc., during construction. Any areas damaged by the Contractor or any subcontractors, will be repaired or replaced to their original conditions by the Contractor at no additional cost to FAA. Repairs will be approved by the COR and will match to original finish. The Contractor shall provide all temporary covers, enclosures, barricades, etc., required to protect the existing facilities.
- L. Schedules
 - 1. Project Schedule - The Contractor shall, within ten (10) calendar days from date of award of contract, submit to the CO for approval a practical project schedule. The schedule will show the order in which the Contractor proposes to carry out the work, the date on which he/she

- shall start the several salient features (including procurement of materials, plant and equipment), night work required including cutovers, and the contemplated dates for completing the work. The schedule shall be in the form of a progress chart of suitable scale to indicate the approximate percentage of work scheduled for completion at any time. The Contractor shall enter on the chart the actual progress at such intervals as directed by the CO. The project schedule shall include milestone schedule for payments. The milestones should be stated with requested reimbursement for each milestone (based upon actual costs, overhead and profit).
2. Progress Schedule - The Contractor, if requested by the CO, shall submit a progress schedule at such intervals as directed by the CO. If the Contractor fails to submit a progress schedule within three (3) business days, the CO may withhold approval of progress payment estimates until the Contractor submits the required progress schedule.
 3. Hours of Work - Unless otherwise approved by the COR, all work shall be based on a standard 8 - hour workday unless longer hours have been approved and accomplished between the hours of 6:00 a.m. to 5:00 p.m. daily, except weekends and Federal holidays. No work is allowed on weekends and Federal holidays unless approved by the CO in writing.
- M. Site Access – Access to the site will be via a pre-determined route identified and agreed upon at the preconstruction conference. The Site is not located in a restricted area, no badging is required.
- N. Special Site Conditions – N/A
- O. Equipment and Waste Disposal - The Contractor shall provide on-site covered containers for the collection of construction waste materials, debris and rubbish and periodically remove the aforementioned materials from the site. Any spillage on access and haul routes will be cleaned up immediately. Disposal location to be determined by the Contractor and approved by the COR. All equipment, materials, spoil, waste and debris removed from the work site and not specified for reuse or identified as salvageable items, or identified as contaminated contents will be disposed of off site in areas authorized by the applicable County, State and/or Local agencies and in accordance with current rules and regulations governing the disposal of such waste. The Contractor will pay disposal fees and miscellaneous charges. Copies of all documentations of the disposal of any hazardous wastes will be submitted in accordance with Section 01 35 43.13.
- P. Cleanup - The work site shall be kept clean and orderly during the progress of work.
- Q. Final Cleaning - After final inspection, but before final acceptance of the work, all exterior surfaces of the equipment will be cleaned. All debris will be removed from the general site area.

1.6 Sequence of Work

The Contractor shall be required to submit detailed sequence of work for demolition of the facility. The plans shall limit any impact to the Airport and personnel. The plans will describe, in detail, all preparatory work, and estimated time required for each event listed in the plans. A list of equipment and quantity and type of personnel will be attached.

1.7 SAFETY

OSHA and FAA safety standards will be enforced. In keeping with such standards, the Contractor shall, at a minimum, provide:

- A. Safety Plan - The Contractor shall have a Safety Plan with the purpose of maintaining a safe working environment for construction workers employed on site. Two (2) copies of the plan shall be submitted to the CO for review and approval. As a minimum, the safety plan shall require weekly "tailgate" meetings, scheduled inspections of equipment which check for potential hazards created by wear, damages, etc. and a statement that the current Occupation Safety and Health Act (OSHA) regulations on safety in the construction industry, OSHA Title 29, Part 1910 and Part 1926, as well as FAA safety regulations, are followed. The plan will be used by the COR, who is OSHA trained, to insure that the work is accomplished in accordance with accepted safety practices.
- B. First Aid and CPR - At least one (1) employee shall have a current certification in First Aid and Cardio-Pulmonary Resuscitation (CPR) and be on the site at all times. Such employee shall be designated to provide first response medical treatment to site personnel in the event of an accident or other medical emergency. The employee shall not be permitted to work on live electrical circuits or be placed in any other situation, which may endanger or interfere in their ability to provide medical treatment.
- C. Trained Personnel - Personnel shall be properly trained in the usage of all equipment for which they will be required to use during the Contract. Documentation or other evidence of training may be requested by the COR at any time. Personnel without adequate training will be prohibited from using such equipment.
- D. Material Safety Data Sheets - The Contractor shall have Material Safety Data Sheets (MSDS) conforming to Federal Standard 313A, written by the manufacturer, for all materials containing chemicals or other substances which may pose a hazard. One (1) copy of each MSDS will be submitted to the CO and one (1) copy of each MSDS will be kept on file at the job site at all times. The Contractor and subcontractors shall be prohibited from handling any material, which does not have an applicable MSDS on file at the site until such MSDS arrives on site.
- E. Safety Equipment - The Contractor shall provide safety equipment including, but not limited to, a Red Cross approved First-Aid kit and the appropriate number of annually inspected, charged, fire extinguishers with the proper NFPA rating.
- F. HAZCOM Program - The Contractor shall have a hazard communications (HAZCOM) program. The Contractor and each subcontractor shall submit a copy of their HAZCOM program as well as a copy of their current OSHA 200 form, if requested.
- G. Designated Foreman - When any construction activity is conducted at the site, the presence of a designated, competent, badged contractor's foreman is required at the job site. The foreman must be qualified and capable of organizing and coordinating all activities of the Contractor and his subcontractors, and keeping a safe job site.
- H. Work Force - The Contractor shall at all times, when construction activities are conducted, have a substantial number of workers for each task to proceed expeditiously and without generating delay, for lack of man-power.

PART 2 - MATERIALS AND EQUIPMENT

2.1 FAA/GOVERNMENT-FURNISHED EQUIPMENT/MATERIAL

Not Applicable

2.2 CONTRACTOR-FURNISHED MATERIAL AND EQUIPMENT

- A. Material Deliveries - All material deliveries made under this contract shall be arranged for delivery to the Contractor's material staging area. This area shall be located as determined at the preconstruction conference. Delivery vehicles shall be directed to the material staging area.
- B. Storage and Protection - The Contractor, through the COR, shall secure from FAA all necessary clearances for storage areas on site, including any time limitations upon the use of such areas. The storage and protection of Contractor material will be the sole responsibility of the Contractor. The Contractor shall provide at his/her own expense all fencing, shelters and security personnel as may be necessary for the protection of the material and equipment.

PART 3 - EXECUTION

3.1 WORK SEQUENCE

- A. Work shall be performed in the following sequence:
 - 1. FAA shall provide the Contractor with all necessary shop drawings, product data, and samples for all Government furnished equipment.
 - 2. The Contractor shall submit all required product information, shop drawings, and samples as required in the specifications. Protective device time current characteristic curves will be those for the equipment being furnished. Alternate protective devices will be submitted for approval.
 - 3. The Contractor is responsible for handling, storing, and installing all furnished and non-furnished equipment.
 - 4. Upon completion of demolition the contractor shall clean the affected area and repair any damage caused due to construction. A final walk through will be performed with the COR to insure a satisfactory end result.

3.2 CONTRACTOR USE OF PREMISES

- A. General - During the construction period the Contractor shall have full use of the premises for construction operations, including use of the site. The Contractor's use of the premises is limited only by the Government's right to perform work or to retain other contractors on portions of the Project.
- B. Use of the Site - Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.

1. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Government, the Government's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

3.3 GOVERNMENT-FURNISHED EQUIPMENT / MATERIAL- Not Applicable

Excess Property:

Upon completion of all work under these specifications, the Contractor, together with the COR, shall list the excess Government material in the space provided below. Both the Contractor and the COR shall certify the quantity of excess material listed. In addition, the Contractor shall perform the following with respect to residual furnished material:

Item #	Item Description	Quantity	Received	Remarks
1				
2				
3				
4				
5				
6				
1				
2				
3				

CERTIFICATION OF EXCESS MATERIAL

The undersigned hereby acknowledge transfer of excess materials in the quantities and condition noted:

COR/CO _____
SIGNATURE DATE TRANSFERRED

CONTRACTOR _____
SIGNATURE DATE RECEIVED

END OF SECTION 01 11 00

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 GENERAL

- A. Samples, certificates, reports, catalog cuts, letters, shop drawings, etc. required under this specification shall be submitted to the CO and/or Project Engineer. All products specified herein to meet certain published specifications shall have clarifications submitted which state compliance with such specifications. The Contractor shall provide a minimum of ten (10) business days for FAA to review the submittals, unless otherwise noted in the specifications. Rejection of submittals shall not be grounds for claims by the Contractor.

1.2 SUBMITTAL PROCEDURE

- A. Three (3) complete sets (to include one reproducible) of all shop drawings and/or product data shall be submitted by the Contractor to the CO. Two sets will be marked and returned to the Contractor by the Project Engineer, with the approval status noted.
- B. All submittals shall be accompanied by transmittal letters identifying the contents of the submittal. Transmittal letters shall consist of one original and one copy.
- C. Work requiring an approved submittal shall not be initiated prior to approval of that submittal.
- D. Submittals from subcontractors shall be reviewed and approved by the Contractor and coordinated with any other work involved before they are transmitted for review. Submittals shall be complete and detailed, and assembled in sets. Incomplete or inadequate descriptions will not be approved.

1.3 SUBMITTAL APPROVAL

- A. Approved As Submitted - If "Approved As Submitted" is marked by the Project Engineer, each copy of the submittal will be identified as having received such approval by being stamped (or annotated) and dated. After submittals have been approved, no changes or substitutions will be permitted without written approval by the Project Engineer.
- B. Approved As Noted - If "Approved As Noted" is marked by the Project Engineer, the submittal is satisfactory contingent upon the Contractor's acceptance of comments and notations. If accepted, resubmittal is not required.
- C. Not Approved - If "Not Approved" is marked by the Project Engineer, the submittal does not meet job requirements and the Contractor must resubmit. If submittal is disapproved, the Contractor shall resubmit the corrected material in the same quantity as specified for the original submittal.

1.4 SUBSTITUTE MATERIAL

The Contractor may submit for approval material other than that specified if it meets the following:

- A. Meets or exceeds the specifications as determined by the FAA.
- B. Material is available on a timely basis.
- C. Substitution of a material shall not obligate the FAA for additional costs which may be associated with furnishing and installing the substitute material. Substitution submissions shall be clearly marked as such and shall meet the requirements of paragraph 2.1, Submittals. The

Contractor shall allow ten (10) business days from date of receipt by the Project Engineer for substitute submission approval.

END OF SECTION 01 33 00

SECTION 01 35 43.13 - ENVIRONMENTAL PROCEDURES FOR HAZARDOUS MATERIALS

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. General: This section details what is known about specific hazardous materials that might be affected by the work as described in the attached plans and drawings. It includes warnings to the General Contractor and his subcontractors, and general rules on how to perform the work and protect workers and the environment.
- B. This section covers work with Lead based paint (LBP) and other hazard-containing materials. Any other hazardous material suspected of being present at the site should be brought to the attention of the COR.
- C. It is the responsibility of the Contractor to remove the material with Care: Cutting and sawing on painted surfaces shall be done under lead abatement conditions. All materials containing LBP shall be disposed of in accordance with all applicable Federal, State and Local regulations. If materials are to be recycled, a receipt from the recycling facility shall be submitted to the COR. The Contractor shall be responsible for securing and paying for:
 - 1. Labor, materials and equipment;
 - 2. Other facilities and services necessary for proper execution and completion of the work;
 - 3. All permits, government fees and/or notifications, as required by Federal, State, and local regulations.
 - 4. Any required employee training (e.g. - supervisor and worker, lead awareness, respiratory protection program, etc.) and/or monitoring (e.g. - medical, employee exposure, etc.);
 - 5. Clearance testing;
 - 6. Waste disposal permits and testing, and associated disposal costs; and
 - 7. Providing submittals to the COR prior to the commencement of work.

1.2 DEFINITIONS

- A. Abatement: Procedures to control fiber or dust release from asbestos or lead-containing materials, or other hazardous materials. Includes removal, encapsulation, enclosure, repair, demolition, disposal and renovation activities.
- B. Clearance Air Monitoring: The processes of measuring the concentrations of airborne contaminants to determine if an abated area is sufficiently clean to allow reoccupancy.
- C. Competent Person: A person who is capable of identifying existing ACM or LBP hazards in the workplace. The duties of the Competent Person include the performance or supervision of the following: establishing the negative-pressure enclosure, ensuring its integrity, and controlling entry and exit from the enclosures; supervising any employee exposure monitoring required by the OSHA standards; ensuring that all employees in the work area wear the appropriate personal protective equipment and are trained in the use of appropriate methods of exposure control and the use the hygiene facilities. The Competent Person shall also be trained in the contents of OSHA regulations 29 CFR 1926.1101 and 29 CFR 1926.62; and other practices for reducing the hazards.
- D. Eight-Hour Time Weighted Average (TWA): Airborne concentration of a contaminant averaged over an 8-hour workday to which an employee is exposed.
- E. Hazardous Materials Abatement Subcontractor: The individual and/or business performing the Hazardous Materials Abatement. The Subcontractor is responsible for the proper completion of project activities in accordance with all Federal, State and local regulations, and FAA guidelines.

- F. Permissible Exposure Limit (PEL): An airborne concentration of asbestos fibers (longer than 5 micrometers) of 0.1 fibers per cubic centimeter (f/cc) calculated as an eight (8) hour time-weighted average (TWA). For lead, the PEL is 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).
- G. TSDF: An EPA and/or State approved Treatment, Storage, and Disposal Facility for hazardous materials.
- H. Visible Debris: Any particulate material or residue that is visually detectable on a surface without the aid of instruments.
- I. Asbestos: The minerals amosite, chrysolite, crocidolite, actinolite, anthophyllite and tremolite.
- J. Asbestos-Containing Material (ACM): Material composed of asbestos of any type in an amount greater than 1 percent by weight.
- K. Friable Asbestos: ACM that, when dry, may be easily crumbled, pulverized, or reduced to powder by hand pressure; includes previously non-friable material after it has become damaged to the extent that when dry, it may be crumbled, pulverized, or reduced to powder by hand pressure.

1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.
 - 1. CODE OF FEDERAL REGULATIONS (CFR):
 - a. OSHA General Industry Safety and Health Standards (29 CFR 1910), and OSHA 1910.120, Hazardous Waste Operations
 - b. OSHA Construction Industry Standards (29 CFR 1926), including but not limited to, the following:
 - (1) CFR 1926.62: Lead
 - (2) CFR 1926.1101: Asbestos
 - (3) OSHA: Flooring Industry Settlement Agreement (asbestos, 6/15/95)
 - (4) OSHA: Roofing Industry Settlement Agreement (asbestos, 3/15/95)
 - c. National Emission Standards for Hazardous Air Pollutants (40 CFR, Part 61)
 - d. EPA Resource Conservation and Recovery Act (40 CFR Parts 260 through 271)
 - e. Department of Transportation (DOT) 49 CFR Part 173 and Part 178
 - 2. FEDERAL STANDARD
 - a. 313: Material Safety Data Sheets, Preparation and Submission

1.4 RELATED DOCUMENTS

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

1.5 SUBMITTALS

- A. General: Submittals shall be in conformance with Section 01 33 00. Submit the following:
 - 1. Product data and MSDS where applicable, for the following:
 - a. Materials to be used for LBP abatement, including LBP removal chemicals, encapsulants, washing solutions, neutralizers, etc.
 - 2. Transportation and disposal facilities to be used for hazardous materials.

3. Permits and Notifications: When hazardous materials are disposed, the Contractor shall submit copies of permits and manifests from applicable Federal, State, and local authorities, and necessary certificates to document that the material(s) has (have) been disposed of as per regulations and Contract Specifications.
4. Plan of Action: A detailed site-specific plan of action for handling hazardous materials including, but not limited to, LBP must be submitted. The hazardous materials plan of action shall contain the following:
 - a. Identification of possible hazards, problems, and proposed control mechanisms.
 - b. Description of how applicable safety and health regulations and standards are to be met.
 - c. Protection of public or others not related to the operation.
 - d. List of names of employees to be used for the work, including specialized training, licenses and experience.
 - e. Type of protective equipment and work procedures to be used.
 - f. Material Safety Data Sheets (MSDS) for and procedures for using, disposing of, or storing toxic/hazardous materials (See also 29 CFR 1910.1200 and 1926.59).
 - g. Emergency procedures for accidental spills or exposures.
 - h. Interfacing and control of subcontractors, if applicable.
 - i. Identifications of any required analyses, test demonstrations, and validation requirements.
 - j. Methods of certification for compliance.
5. Results of monitoring, clearance tests, and laboratory tests.

PART 2 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Special facilities, devices, equipment, clothing, and similar items used by the Contractor in the execution of the work shall comply with all applicable Federal, State, and local regulations.

2.2 MATERIAL SAFETY DATA SHEETS (MSDS)

- A. MSDS shall be available for all products used under this contract. The Contractor shall be responsible for meeting the hazard communication requirements, in accordance with 29 CFR 1910.1200 and 29 CFR 1926.59.

PART 3 - EXECUTION

3.1 OTHER ASBESTOS-CONTAINING AND HAZARDOUS MATERIALS

- A. If any other suspected hazardous material is encountered during the work, the information shall be immediately transmitted to the COR. The work in the impacted area shall be stopped and contained immediately pending appropriate consultation with the Owner. After consultation with the Owner, the CO will direct the Contractor through the COR as to what further actions are to be taken.

END OF SECTION 01 35 43.13

SECTION 02 41 00 - DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY: This section specifies removal, disposal, storage and salvage of existing materials, equipment and fixtures.

1.2 APPLICABLE DOCUMENTS: N/A

1.3 CONSTRUCTION CONDITIONS: It is the contractor's responsibility to bring the site back to its original condition as stated in the scope of work found in section 01 11 00 of this specification. Contractor must coordinate all efforts and submit demolition plans to the COR for approval.

PART 2 - MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. Removal of any government property from the facility shall be at the expressed direction of the FAA
- B. Title to removed property: Materials and equipment to be removed and salvaged shall remain the property of the FAA. Materials and equipment to be removed and disposed of shall become the property of the contractor.
- C. Contractor shall relocate/dispose of equipment from the facility per governing regulations.

2.2 EQUIPMENT TO BE REMOVED

- A. The following list of existing material and equipment shall be removed. Equipment and material includes, but is not limited to:
 - 1. NDB antennae found onsite, and Metal foundation.
 - 2. OM shelter and concrete entrance pad.
 - 3. Power meter enclosure and associated conduit and cabling.
 - 4. OM Antennae and associated foundation
 - 5. Chain link Fence fabric, barbed wire, gate, and fence posts.
 - 6. Any associated equipment or materials inside the OM plot unless otherwise identified by the FAA.

PART 3 - EXECUTION

3.1 PERSONNEL PROTECTION: Erect and maintain, as required by conditions and progress of the work, all necessary safeguards for safety and protection of employees, and FAA personnel working within the facility. Safeguards shall include railings, partitions, polyethylene dust enclosures, lighting, posting of danger signs and other warnings against hazards. Take such steps as necessary to minimize dust pollution during the demolition operations. Critical equipment is located in the working vicinity; polyethylene dust enclosures must be established before and during the working period.

3.2 GENERAL

- A. All materials, equipment and fixtures to be removed and salvaged shall be removed with care, stored and protected.
- B. Each item of equipment indicated to be removed and salvaged shall be removed as a unit; listed, indexed, and tagged for storage.
- C. Each unit shall be removed with the auxiliary equipment required for normal operation of the unit, except when multiple units have common auxiliary equipment that is required for continuous operation of the units left in place.
- D. Do not commence demolition until all equipment is de-energized and clearance given by COR.
- E. The sequence of area demolitions shall be scheduled, with respect to performance of new finishing. Schedule the demolition work in such a way as to ensure against disruption of systems and services essential to the operation of the facility, prolonged inconvenience to personnel, and in relation to preceding and succeeding construction activities. Follow the sequence of work in specification 01 11 00 Summary of Work.
- F. Construction materials i.e. conduit, conductors, shall be removed, where indicated or required to facilitate the new work, and legally disposed of in a timely manner.

3.3 CLEANUP: Provide a clean and orderly site at all times. Particular attention shall be given to the elimination of combustible rubbish or debris in the areas and none shall be left exposed overnight or at other periods of time the work is shutdown.

END OF SECTION 02 41 00

SECTION 31 23 00- EXCAVATION AND FILL

PART 1 - GENERAL

- 1.1 SUMMARY: This section covers the requirements of general site work, consisting of excavation, trenching, backfilling, compacting, soil stabilization, grading, graveling, and clean-up.
- 1.2 SCOPE: Provide necessary means to remove and backfill the existing foundation as described in Section 01 11 00. Contractor shall excavate, loam and seed as necessary to match the surrounding conditions.
- 1.3 APPLICABLE DOCUMENTS: The following publications of the issues in effect on the date of this solicitation form a part of this section to the extent referenced.
- A. American Society for Testing and Materials (ASTM):
- D 2922-81 Test Methods for Density of Soil and Soil - Aggregate in Place by Nuclear Methods (Shallow Depth)

PART 2 - MATERIALS AND EQUIPMENT

2.1 MATERIALS

- A. Site Materials: Trench backfill material shall be sand and stone-free earth as specified hereinafter.
- B. Fill Materials: All fill material shall be free from organic matter, debris, vegetation and other deleterious substances. It shall be of a quality suitable for the purpose intended and shall compact thoroughly without the presence of excessive voids when watered and compacted. Fill shall be non-expansive in nature.

PART 3 - EXECUTION

3.1 Trenching:

- A. Not Applicable

3.2 Over Excavation:

- A. Where excavation is carried to a depth greater than required, backfilling shall be subject to approval by the COR and shall be compacted as required.

3.3 Wet Excavation:

- A. No additional compensation will be allowed for any sheeting, shoring, pumping, or draining required to place and keep excavations in dry condition for construction.
- B. No water shall be allowed to remain in or around any part of the work.

3.4 Existing Facilities:

- A. Contact local utility companies and government public works offices prior to the start of any excavation. **Dig Safe shall be contacted in all instances.**
- B. Prior to any excavation or trenching, utilize a cable detector to verify and locate any utilities and cable runs which may be in the vicinity of site work or crossed by the new cable runs.
- C. The existing utilities and cable runs shall be exposed by hand digging in these areas and shall be protected from any possible damage.
- D. Any damage caused by the contractor shall be immediately repaired with materials and methods approved by the COR at no additional cost to the Government.

3.5 Trench Backfill and Fill:

- A. Layers shall not exceed loose depths of 8 inches as specified in FAA-C-1391c. Each layer shall be properly moistened and compacted, as specified herein, by power operated mechanical equipment. Where utilities are not shown to be concrete encased, the first layer of backfill shall be 3 inches sand, with no particles over 1/4 inch diameter.

3.6 Plastic Marking Tape:

- A. Plastic marking tape for identifying and locating underground utilities shall be acid and alkali resistant polyethylene film, 6 inches wide and 0.004 inch thick. Tape shall have foil backing to enable detection by metal detector at a depth of 3 feet. All utility lines shall be marked with a printed inscription and color as follows:

RED	ELECTRIC
YELLOW	FUEL
ORANGE	COMMUNICATIONS
BLUE	WATER
GREEN	SEWER

3.7 Aggregate Base: (Not Used)

3.8 Compaction: All loose or disturbed soil shall be compacted in place by approved compaction equipment with a minimum of four complete passes over the entire area.

3.9 Grading: Grade site areas to the lines and grades indicated on the drawings or as directed. Slope graded areas approximately 2% for drainage away from the structures and site area. Areas within the limit of grading shall be finish graded to fill ruts, holes, etc., and to remove surface rocks or boulders.

3.10 Pavement Replacement: Contractor shall conform to local paving standards if the existing Access Road pavement is damaged. Contractor is responsible to bring all areas disturbed during construction back to the original condition. .

3.11 Pavement Removal: (Not Used)

3.12 ENVIRONMENTAL CONSIDERATIONS.

- A. General. - All construction operations shall be conducted in such a manner as to prevent the pollution to air, water or land, and shall, within reasonable limits control noise and the disposal of solid waste material, as well as other pollutants.
- B. Protection of water resources. - The Contractor shall control the disposal of fuels, oils, bitumens, calcium chloride, acids or harmful materials, both on and off the premises and shall comply with applicable Federal, State, County and Municipal laws concerning pollution of rivers and streams while performing work under this contract. Special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, herbicides and insecticides, and surface drainage from entering public waters. Water used in on-site material processing, concrete curing, foundation and concrete cleanup, and other waste waters shall not be allowed to re-enter a stream if an increase in the turbidity of the stream could result therefrom.

3.13 Dust control. - The Contractor shall maintain all excavations, embankments, stockpiles, access roads, plant sites, waste areas, borrow areas, and all other work areas free from excess dust to such reasonable degree as to avoid causing a hazard or nuisance to the Using Service or to others. Approved temporary methods consisting of sprinkling, chemical treatment, or similar methods will be permitted to control dust. Dust control shall be performed as the work proceeds and whenever a dust nuisance or hazard occurs.

3.14 Erosion control. - Surface drainage from cuts and fills within the construction limits, whether or not completed, and from borrow and waste disposal areas, shall be graded to control erosion within acceptable limits. Temporary control measures shall be provided and maintained until permanent drainage facilities are completed and operative. The area of bare soil exposed at any one time by construction operations should be held to a minimum.

3.15 Post-construction cleanup or obliteration. - The Contractor shall obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. These disturbed areas shall be graded and filled and the areas seeded unless otherwise noted on the drawings.

3.16 QUALITY ASSURANCE:

- A. When excavations are completed, the contractor shall notify the COR for his inspection and approval prior to placement of concrete or installation of cables, ducts, conduits, or piping.

END OF SECTION 31 23 00

APPENDIX A

Supplemental Facility Information

2.0 SITE DESCRIPTION

Site Information

Site Address	3 Oliver Street Binghamton, NY 13904
Coordinates	Lat: 42° 06' 17.1"N Long: 75° 53' 28.3"W
Site Elevation	843 ft.
Lease Information	DTFAEN-16-L-00080
Co-Located	NDB
Adjacent Property	The site is located on a leased easement area of off Court St. The adjacent plot is residential housing to the north, and is directly adjacent to a parking lot for a business to the west.
Site Drainage and Run-off	Water from the site would appear to drain into the surrounding grassy and vegetated areas, as well as to the street.
Site Grounds	The portion of the site within the fenced in area is comprised of crushed stone. The portion of the site outside the fenced in area is comprised of stoned access road, and a surrounding grass and wooded area.

Site Specific Integrated Risk Management Plan

Site Access	The site is located off of the airport. It is best to meet the FAA SSC Technicians at the site using the above address. The site is accessed via a stone access road directly off Oliver Street.
Security Requirements	The FAA perimeter chain link fence has a vehicle gate which is padlocked. The shelter entrance door has a lock as well. The SSC Technicians have keys to both locks and can provide access.
Badging and Insurance Requirements	No specific requirements needed to perform the work on the individual site.
Facility Reference Data File (FRDF)	Located in Shelter
Confined Space	N/A
Subcontractor Staging Area	Staging can be established just outside the fenced area.
Working Hours	Work Schedule will need to be determined. Work is anticipated to be done during normal day shift hours. Consideration for work hours, noise, traffic, and personal safety will be incorporated in the demolition work plan.
EDDA Recommendation	ESC is recommended.
IRMC	No
7460-1	No
Permits	N/A
Earth Work	A small amount of earthwork will be needed to grade the site to match surrounding contours.
High Work	None
Electrical Work	None
FAA Disposal Action Plan	Dispose of excess remaining inventory through proper paperwork and disposal methods.

Site Facility

Equipment Building	Type	Wood A-Frame Building with Metal Structure	Size	8' 6" x 11' x 10'		
Building State	Cond	Poor	Age	40 years old		
Building Entrance	Type	Concrete Steps	Size	5' x 2' x 1' visible		
Building Foundation	Type	Concrete Piers	Size	1' x 1' x 1' visible		
Antenna Tower	Type	Single Yagi	Height	10' High		
Antenna Tower Foundation	Type	Concrete	Size	30" x 30" x 8" visible		
Inventory Onsite	-Vinyl Shed (10' x 12') <ul style="list-style-type: none">Items in Shed<ul style="list-style-type: none">Weed WhackerLawn MowerLadderGas / Gas CansMisc. Boxes					
Inventory In Shelter	<ul style="list-style-type: none">File CabinetBattery BoxDeskPower PanelTrash Can50 W NDB Transmitter50 W Antennae Tuning UnitEye WashFire ExtinguisherMarker Beacon CabinetFirst AidSpare PartsMisc. ToolsAuger BitTool Battery ChargerPhone					
Floor Tiles	Type	9" x 9" Vinyl	Color	Green	Quantity	10' x 7.5' = 17.5 Sqft
Sub Floor Materials	Type	Plywood			Size	17.5 Sqft
Fuel Storage Tank	Cap.	N/A			Manuf.	N/A
Perimeter Fence	Type	Chain Link 6' High With 1' BarbWire			Lin. Ft.	40' x 40' =160Lnft
Plot	Type	Crushed Stone within Fence, Grass Outside			Size	
Access Road	Type	Stone			Size	
Other Structures	Type	NDB				

Electronics Equipment

Antenna/Pole	Type	Top Hat NDB	Size	30' High, with 12" concrete sonoutbe
Electronics Equipment				

3.0 UTILITY DISPOSITION TABLE

Utility List	Location	Utility Company Name	Meter/Junction Box	Service is:
Power	Power Meter on side of OM Shelter	NYSEG	94 871 798	Active
<i>Action:</i>	SSC to coordinate with Local utility company to remove power feeds from the feeding transformer found along the main road. Utility shall pull the meter found near the site plot, and confirm no power exists in the meter box.			
Telephone	Telco feed found inside the shelter	Unknown	Unknown	Active
<i>Action:</i>	SSC to coordinate with telephone company to remove telco feeds from the feeder along the main road. Utility cut all cables feeding the facility, and confirm service has been terminated.			
Natural Gas or Propane	N/A	N/A	N/A	N/A
<i>Action:</i>	N/A			
Sewer, Storm, and Sanitary Systems	N/A	N/A	N/A	N/A
<i>Action:</i>	N/A			
Water	N/A	N/A	N/A	N/A
<i>Action:</i>	N/A			
Fiber Optic	N/A	N/A	N/A	N/A
<i>Action:</i>	N/A			
Counterpoise	Copper wires from main ground plate to counterpoise	N/A	N/A	N/A
<i>Action:</i>	Contractor to remove any ground rods or bonding jumpers to the Restoration Standards found in Section 5.D.			

A. Demolition Disconnect Sketch

Page left blank intentionally. Multiple potential sketches may be needed.

4.0 HAZARDOUS MATERIALS SUMMARY TABLE

Recordkeeping, notifications, manifests, safety plans, and PPE: Will be kept by the subcontractor conducting the abatement/disposal work and provided to the FAA project engineer with the close out paperwork.

Environmental Issues Presence or Absence of:

Tanks, piping	No
Distressed vegetation	No
Transformers (FAA OWNED, NO PCP TAGS)	No
Staining / evidence of contaminated soil or concrete	No
Sump pump system and interior drainage system (if chemicals were present a source for their mitigation off of the property)	No
Metal of other trash items either semi buried or exposed, metal surfaces could have lead paint, or be otherwise contaminated	No
Adjacent water ways, ponds, lagoons, storm drains – drainage details	No
Odors, mold, mildew (currently Texas has regulations to manage mold, Florida is close to enacting)	No
Evidence of monitoring systems i.e., monitoring wells, boring caps....	No

Hazardous Material (regulated)	Location	Form	Qty	Recommended Action if Abatement is Required	Planned Method of Disposal	FAA Action
PACM *Indicate which materials are friable and which are non-friable.	OM Shelter	Gray Floor Tile	9 SqFt	To be abated by a state licensed asbestos abatement contractor.	Convey to a certified Hazmat disposal facility.	Provide demolition contractor with inspection report. Obtain chain of custody receipts
		Green Floor Tile	68 SqFt			
		Black Floor Mastic	68 SqFt			
LBP	OM Shelter	Gray Paint	3% by wt.	To be abated by a state licensed asbestos abatement contractor.	Convey to a certified Hazmat disposal facility.	Provide demolition contractor with inspection report. Obtain chain of custody receipts
	Soil	Below FAA Action Level				
Household-type chemicals, cleaners, and miscellaneous	None Found During Survey	N/A	N/A	Read the labels to see if there are any special instructions for disposal.	The vast majority of cleaning products are formulated for safe disposal in municipal landfills	If special disposal requirements, obtain chain of custody receipts.

Oils and Lubricants	OM Shed	Oil and Gasoline	1qt Oil 2 Gal Gas	To be disposed of in an environmentally compliant manner	Convey to a certified Hazmat recycling facility	If special disposal requirements, obtain chain of custody receipts.
Suspect PCB-containing equipment	OM Shelter	Caulk	Below FAA Action Level	N/A	N/A	N/A
Potential Mercury-containing equipment	Thermostat	Mercury	(1)	To be disposed of in an environmentally compliant manner	Convey to a certified Hazmat recycling facility	Obtain chain of custody receipt
Batteries	Battery Box in OM Shelter	12 V	6	To be disposed of in an environmentally compliant manner	Convey to a certified Hazmat recycling facility	Obtain chain of custody receipt
Fuel Storage Tank	N/A	N/A	N/A	N/A	N/A	N/A
Refrigerant R-22 (Freon) Hydrochlorofluorocarbon (HCFC)	N/A	N/A	N/A	To be disposed of in an environmentally compliant manner	Convey to a certified Hazmat recycling facility	Obtain chain of custody receipt
Building components containing potential Radioactive material	N/A	N/A	N/A	N/A	N/A	N/A
Charged-canisters associated with fire suppression systems	Interior Wall of OM Shelter	Amerex Fire Extinguisher / Carbon Dioxide	15 Lbs	To be disposed of in an environmentally compliant manner	Convey to a certified Hazmat recycling facility	Provide documentation showing chain of custody
Pressure Treated Wood Preservatives	N/A	N/A	N/A	To be disposed of in an environmentally compliant manner	Treated as municipal or construction debris solid waste	Provide contractor FAA Memorandum "Guidance on the Proper Handling and Disposal of Pressure-Treated Wood Utility Poles"

APPENDIX B

Site Photographs

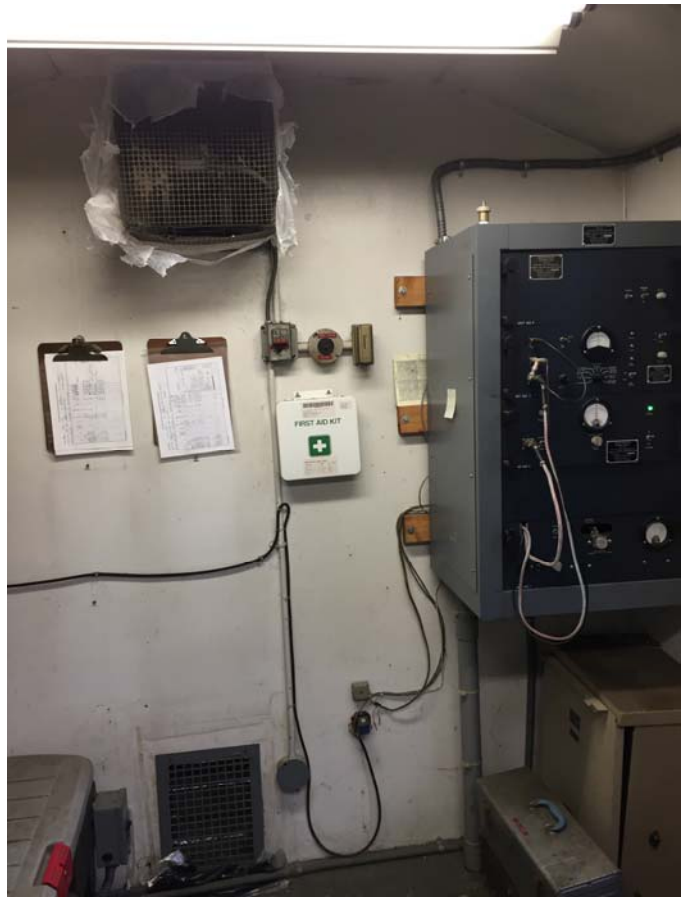
6.0 SITE PHOTOGRAPHS



BUILDING EXTERIOR



BGM OM – Binghamton, NY



BUILDING INTERIOR



BGM OM – Binghamton, NY

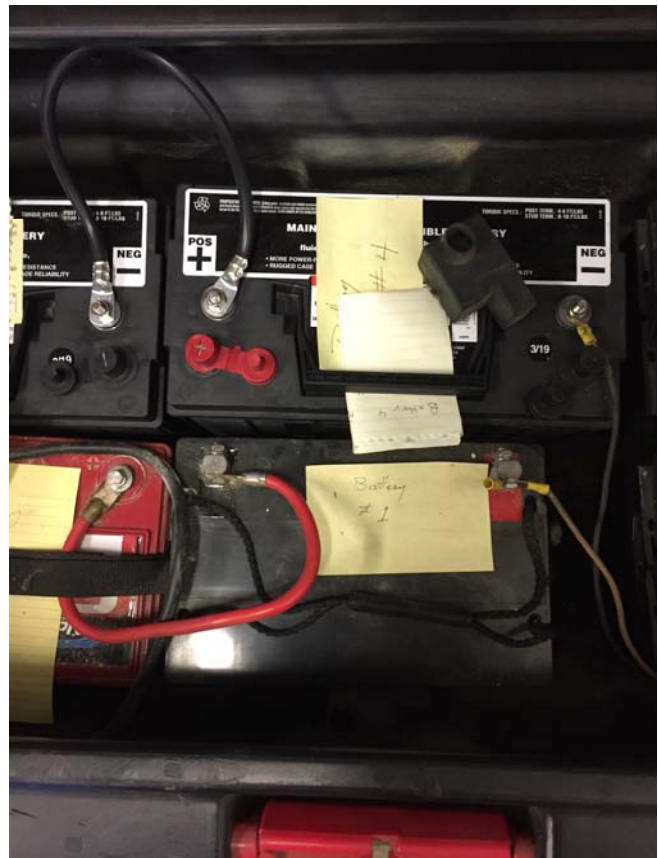


TOWERS AND FOUNDATIONS





MISC.



BGM OM – Binghamton, NY



SITE GROUNDS



BGM OM – Binghamton, NY

APPENDIX C

Hazmat Test Results

Preliminary Assessment / Site Inspection Real Property Disposition Program

BGM Outer Marker (OM) Binghamton, NY

JCN: 18068152



Prepared For:
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20024



Prepared By:
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400 Virginia Avenue, SW
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October 15, 2020

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Appendices

Appendix A – Site Photographs

Appendix B – Pre-Demolition Building Survey for Asbestos Containing Materials, Lead Based Paint & PCBs

Appendix C – FIRM, Wetlands and Location Maps

Appendix D – EDR Reports (Summary Radius Map; Aerial Photos; Sanborn)

1. Executive Summary

The Federal Aviation Administration (FAA), Real Property Disposition Program, tasked Leidos (NISC III) to assist in conducting an environmental Preliminary Assessment/Site Inspection (PA/SI). The purpose of the PA/SI was to confirm the presence or absence of potential contaminants of concern from FAA operations.

A site visit was performed at the Binghamton (BGM) Outer Marker (OM) property (42.104740, -75.891180) on September 1, 2020. The facility is located within Binghamton, New York. The property is accessed from Oliver Street. The Subject Property is 100 feet by 100 feet and is leased from WBNG Television, Inc.

Based on the facility commissioning date of August 1, 1951, record reviews, and personnel interviews, the potential for lead contamination existed at the facility. In order to minimize FAA liability, and in accordance with the FAA guidance document *Soil Baseline Sampling Guide for Facilities Scheduled for Decommissioning/Disposition with Suspected Lead Based Paint (LBP) and Polychlorinated Biphenyl (PCB)-Containing Paint* (September 2019), samples were collected from structure surfaces (paint chip) and from surrounding soils (discrete samples, 0-6 inches below ground surface) during the site visit. All soil samples were analyzed using Environmental Protection Agency (EPA) SW-846 Method 6010D.

One paint chip sample was analyzed and found to exhibit total lead concentrations exceeding the threshold of 5,000 mg/kg for lead-based paint. Soil samples were analyzed for lead in soil and found not to exhibit total lead concentrations exceeding the EPA residential limit of 400 mg/kg, the human health-based action level.

Soil samples were analyzed for polychlorinated biphenyls (PCBs) in soil and found not to exhibit PCB concentrations exceeding the FAA threshold level of 1 mg/kg. Additionally, one caulk sample was analyzed for PCBs and found not to exhibit PCB concentrations exceeding the FAA action level of 50 mg/kg, which is based on the Toxic Substances Control Act (TSCA).

The services of Environmental Data Resources, Inc. (EDR) were used to research environmental records and databases as part of this review. Based on information reviewed in the EDR report, the Susquehanna River is approximately 0.10 miles south of the Subject Property. Review of the EDR provided historical aerial photography supported the site commissioning year of 1951.

Based on the findings contained in this report, no further action is recommended.

2. Physical Description and Location

The BGM OM is located within Binghamton, New York which is approximately 60 miles south of Syracuse, New York. The site is surrounded by commercial properties to the east, south and west and residential properties to the north. The site is accessed using Oliver Street which is a

paved roadway that runs in a general north-south direction just east of the site. The nearest surface water feature is the Susquehanna River, located approximately 0.10 miles south of the site. Please see Appendix C to review the site maps.

Based on personnel interviews and records review, it was determined the BGM OM parcel of land is owned by WBNG Television, Inc. and used as an OM and Locator Outer Marker (LOM) by the FAA. BGM OM is still an active site. Decommissioning of the site and demolition of the building is pending.

According to FAA records, the facility was constructed in 1951. It consists of: an 8 feet by 10 feet prefab with vinyl siding equipment shelter building installed on concrete piers; a 10 foot high OM antenna; and a 30 foot high LOM antenna. The facility plot measures 100 feet by 100 feet, of which an area (38 feet by 38 feet) is enclosed by a 6-foot high chain link fence topped with barbed wire. Also located within the fenced area is a small vinyl storage shed. The fenced area is covered in crushed stone with the area outside the fence includes grassy covered and gravel and soil covered areas. Soil staining was not observed on the grounds. Power is supplied to the facility via overhead lines from electric distribution service along Oliver Street. The transformer that services the Subject Property is located offsite along Oliver Street approximately 100 feet south of the access drive and is pole-mounted. The transformer is owned by the local utility company (New York State Electric and Gas Corporation).

At the time of the inspection, the facility was fully functional. Secondary power is supplied by six lead-acid batteries, within a spill containment box. There were two fluorescent light fixtures and an electrical panel on the interior of the shelter. Also as this site is an active OM site, there were wall mounted cabinets and panels related to the active functions of the equipment.

The BGM OM was observed to be in good overall condition on the date of the inspection. There was no evidence of hazardous materials mismanagement, including storage, use or disposal on the Subject Property. No evidence was observed that would have indicated any issues with the ballasts associated with the fluorescent lighting fixtures.

Table 1: Summary of Site Information

Site Address	Oliver Street, Binghamton, NY 13904
Coordinates	42.104740, -75.891180
Site Elevation	847 feet
Earliest REMS Date	October 1, 1950
FSEP Commission Date	August 1, 1951
FSEP Swap Out Date	August 1, 1985
Ownership	Leased: Lease No. DTFAEN-16-L-00080
Co-Located Facilities	BGM LOM (formerly NDB)

3. Records Review

According to the Facility Service and Equipment Profile (FSEP), the BGM OM was commissioned on August 1, 1951. According to the Real Estate Management System (REMS), the Subject Property was acquired October 1, 1950. Based on a review of historical aerial photographs, the facility is first visible in 1957.

The services of EDR were used to research environmental records and databases as a part of this PA/SI. According to the information reviewed in the EDR report, there are 55 sites listed within one mile of the Subject Property. However, for purposes of this PA/SI, only those sites within 0.125 mile of the Subject Property were evaluated further for potential risks to the Subject Property and are detailed below. Based on the records reviewed, no underground storage tanks (UST) or aboveground storage tanks (AST) are believed to have existed at the BGM OM facility.

- Mr Tire, 335 Court Street (0.031 miles WSW). The site is listed for being in the AST database. There are three ASTs at the site (500 gallon; 250 gallon; 250 gallon), all contain waste oil/used oil.
- The Salvation Army, 325 Court Street (0.081 miles W). The site is listed for being in the UST database. There is one tank at the site (10,000 gallon) that contained gasoline and has the status of 'Closed – In Place' and a closed date of 1/1/1992.
- Ebonex Corp., Court Street (0.084 miles WSW). The site is listed for a mercury spill from 1990. The spill reportedly occurred indoors while removing mercury switches from control units and did not get to any drains. The spill status is closed.
- Dollar General Store, 357 Court Street (0.105 miles E). The site is listed for being a very small quantity generator (VSQG) of hazardous waste.
- Weber Ash Disposal Site, 60 Gould Road (0.108 miles N). The site is listed for being an inactive landfill for industrial waste. After further investigation, the actual location of this site was determined to be approximately 8 miles NNE from the Subject Property.
- Greenblott Metal Co., 7-9 Alice Street (0.115 miles WSW). The site is listed for a spill from 2008. The spilled material was a small bucket of red powder dye used to dye concrete. Material was cleaned up and the incident was closed.
- Former Keystone Tobacco, 1 Alice Street (0.117 miles WSW). The site is listed for a spill from 2003. The spill was from a gasoline UST that was removed. Incident was closed with reported minor water and soil contamination remaining.

Based on the local topographic and presumed hydrogeologic gradients, and their current regulatory statuses, these and the remaining facilities listed in the EDR report are not expected to present a potential environmental impact to the Subject Property. There are three orphan sites listed in the EDR report. However, after further investigation, it was determined that these sites do not present a risk to the Subject Property. One site was located over a mile from the Subject Property. One site was over 0.5 miles from the Subject Property and across the Susquehanna River. One site was a closed spill at a residence from 1995 that was at least 0.5 miles from the Subject Property. Please see Appendix D to review the EDR Report.

4. Findings

During the PA/SI, the BGM OM facility was assessed for indications of environmental contamination related to FAA operations. Anna Dinh of Leidos conducted a site visit at the facility on September 1, 2020. Brian Hall, Airway Transportation Systems Specialist (ATSS) with the FAA Elmira System Support Center (SSC), provided access to the site. Weather conditions at the time of the site inspection were overcast and in the upper 60s.

- ☐ **Air Conditioning (A/C) Units:** The facility does not have any A/C units.
- ☐ **Antifreeze and Oil:** N/A.
- ☒ **Asbestos:** The floor tiles and mastic remain as part of the building. According to the laboratory results from samples taken, asbestos containing materials (ACM) was identified as being the 77 square feet of floor tile and 68 square feet of mastic within the equipment shelter building. Based on analytical results, the gray floor tile (9 square feet) has 3.5% chrysotile; the green floor tile (68 square feet) has 5.3% chrysotile; and the black mastic under the green floor tile (68 square feet) has 3.3% chrysotile. The ACM is reported as Category I, non-friable.
- ☒ **Batteries:** Six lead-acid batteries were reported to be in a spill containment battery box in the equipment shelter building. The batteries were reported to be in good condition. The spill containment battery box was not opened during the site inspection because the site was an active OM site.
- ☒ **Chemical Storage and Hazardous Waste:** Small chemical containers were observed in the storage shed and equipment shelter building during the site inspection. These included chemicals used for facility maintenance including oil, gasoline, paint, etc.
- ☐ **Drinking Water:** The facility does not have any drinking water facilities.
- ☐ **Ecological Risk:** This site is not expected to present an ecological impact to the surrounding environment. The nearest wetland is a riverine, is associated with the Susquehanna River and is located approximately 0.10 miles south of the Subject Property. The Subject Property has no discernable slope. However, as the site is slightly lower than Oliver Street, water would be expected to run from the Oliver Street to the Subject Property. The site is located within Zone B which is an area between limits of 100-year flood and 500-year flood; areas of 100-year shallow flooding where depths less than 1 foot.
- ☐ **Engine Generator:** No engine generator (EG) was observed. There is no evidence that an EG had ever been located at the site.
- ☒ **Exterior Transformers/Equipment:** The transformer that serviced the Subject Property is owned by New York State Electric and Gas Corporation and is located on a utility pole offsite along Oliver Street approximately 100 feet south of the access drive. No labeling or indication regarding PCBs was observed during the site inspection. No staining

and/or leaks were observed. No staining of the soil and no stressed vegetation was observed around the base of the pole during the site inspection.



Floor Drains: The facility does not have any floor drains.



Interior Transformers/Equipment: The facility does not have any interior transformers.



Lead: Based upon the pre-1983 commission date of the facility, it was determined that lead paint chip and lead-in-soil sampling was necessary. Soil samples were collected from all sides of the equipment shelter building. Lastly, paint chip samples were collected from the painted structures on the site: painted wood siding on the exterior of the equipment shelter building. All samples were collected during the September 1, 2020 site inspection. The soil samples were analyzed for total lead using EPA SW-846 Method 6010D by a state approved, accredited laboratory.

Beneath the site crushed stone layer, site soils consisted of urban land soils with a variable texture. Soil samples were taken at a depth of approximately 2 inches below the crushed stone layer and on top of the vapor barrier. No odors, staining, or paint chips were observed in site soils during this investigation.

The paint chip collected from the wood siding on the exterior of the equipment shelter building exhibited concentrations of 3 % by weight (30,000 mg/kg) for total lead. The paint on the wood siding on the exterior of the equipment shelter building is considered to be Lead-Based Paint (>5000 mg/kg).

The soil samples exhibited total lead concentrations ranging from 48 mg/kg to 260 mg/kg. All soil sample analytical results were below the EPA residential limit of 400 mg/kg for lead (human health-based action level). Please see Appendix B for the Pre-Demolition Building Survey for Asbestos Containing Materials, Lead Based Paint & PCBs which includes: site maps showing sample locations; a summary of analytical results; and associated laboratory report.



Pesticides/Herbicides: Based on interviews with FAA personnel, pesticides or herbicides have not been applied at the facility.



Polychlorinated Biphenyls (PCBs): There are two fluorescent light fixtures in the equipment shelter building. Any ballasts in these fixtures would be suspect for PCBs. One caulk sample was analyzed for PCBs and was below the 50 mg/kg threshold. Four soil samples were analyzed for PCBs in soil and were all less than the 1 mg/kg threshold.



Potential Receptors: The nearest surface water feature is the Susquehanna River, approximately 0.1 miles south of the Subject Property. There are eleven federal or state regulated groundwater wells within one mile of the facility. For more detailed information on surrounding receptors, please refer to the site report from EDR as included in Appendix D. Based on the conditions observed at the Subject Property, BGM OM is not expected to present an environmental impact to local sensitive receptors.



Sewage: The facility does not have any sewage system and there are no connections to municipal sewer systems.

- ☐ **Staining or Releases:** No staining or evidence of a release was observed during the site inspection. No indication of a release was found during the records review.
- ☐ **UST or AST:** No underground storage tanks (UST) or aboveground storage tanks (AST) are believed to have existed at the facility.
- ☐ **Other:** No staining or obvious indication of a potential environmental impact was observed at the current BGM OM facility during this PA/SI.

5. History and /or Evidence of Release(s)

- ☒ No evidence of mismanagement
- ☐ Evidence of mismanagement:

6. Recommendation(s)

- ☒ No Further Action – Pursue Site Closure
- ☐ Additional/Initial Sample Collection
- ☐ Remedial Delineation/Investigation
- ☐ Remedial Action

The BGM OM facility was observed to be in overall good condition. No evidence of hazardous material mismanagement, including storage use or disposal, was observed at the facility during the PA/SI.

Based on laboratory analysis, the soil samples exhibited total lead concentrations ranging from 48 mg/kg to 260 mg/kg. All soil sample analytical results were below the EPA residential limit of 400 mg/kg for lead (human health-based action level). Additionally, soil samples analyzed for PCBs in soil were all less than the 1 mg/kg threshold. No further action is recommended.

7. Limitations

This PA/SI was performed in accordance with the guidelines outlined in the FAA, ATC Facilities EOSH Services Environmental Cleanup Program, *Baseline Sampling Guide for Facilities Scheduled for Decommissioning/Disposition with Suspected Lead Based Paint (LBP) and Polychlorinated Biphenyl (PCB)-Containing Paint* (September 2019). Methodologies include interviews with individuals familiar with the Subject Property, site surveys, historical records review, material sample analysis, report preparation, and on-site field inspection. Information obtained in interviews and the site inspection were recorded and reviewed before inclusion into this report. All information obtained during the site investigations and subsequently included within this report is believed to be reliable. The purpose of these investigations is to provide the FAA with information regarding environmental conditions relating to the Subject Property.

This report was prepared by Steven Thurman with Leidos (NISC III) and the site inspection was conducted by Anna Dinh with Leidos (NISC III). Steven Thurman has more than 33 years of experience in the environmental and the health and safety fields and Anna Dinh has more than five years of experience in the environmental industry. Leidos (NISC III) subcontracted with Churchill Environmental to perform the sample collection during the PA/SI.



822 State Fair Blvd., Syracuse, NY 13209
Phone: 315-428-1959
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PRE-DEMOLITION BUILDING SURVEY
FOR
ASBESTOS CONTAINING MATERIALS
LEAD BASED PAINT & PCBs

Property address:
BGM OUTER MARKER
OLIVER ST.
BINGHAMTON, NY

Prepared For:
LEIDOS CORP.
400 Virginia Ave., S.W. STE 500
Washington, DC 20024

Prepared By:
Churchill Environmental Inc.
639 N. SALINA ST.
SYRACUSE, NY 13208

Date: 10/7/2020

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5.0 – CONSULTANT CERTIFICATION

DISCLAIMER

This report has been prepared primarily on the basis of the results of visual site observations, analysis of building materials, and a general survey of facility **BGM Outer Marker** located on **Oliver St., Binghamton, NY**, where the demolition(s) will be performed.

Joe Nanno, a Certified Asbestos Building Inspector for Churchill Environmental, Inc.; performed the facility survey work on **9/1/2020**.

This survey is for Asbestos, Lead Based Paint and PCBs in Caulk that may be required by the USEPA.

All measurements are estimates only. It is the responsibility of the demolition/abatement contractor to field-verify the locations and quantities.

EXECUTIVE SUMMARY

Churchill Environmental, Inc. was retained by **Leidos Corp.** to perform a Pre-Demolition Building Survey on facility **BGM Outer Marker** located on **Oliver St., Binghamton, NY**. The purpose of the survey was to determine the presence, location, and quantity of asbestos containing materials (ACM), lead based paint (LBP), Lead in Soil, and PCBs in Soil that may exist at the site where the demolition(s) will be performed.

The results of laboratory testing for the ACM sampling event conducted at the property indicated that **Three (3)** of the Fourteen (14) samples collected from the Five (5) Homogenous Areas identified as suspect building materials were **found to contain asbestos**. Any materials found above 1% are considered Regulated Asbestos Containing Materials (RACM).

The results of laboratory testing for the LBP sampling event conducted at the property indicated that **Eight (8)** of the Eight (8) soil samples taken were found to contain lead. Six of the eight samples were found to be below the FAA action level of 400 mg/kg in soil. The results of laboratory testing for the LBP in paint indicated that **one (1)** of the one (1) paint chip sample taken **was found to contain lead**. The paint chip sample was found to be **3% by weight**, which is above the 0.5% by weight action level.

The results of laboratory testing for the PCBs conducted on the property indicated that Zero (0) of the Four (4) soil samples were found to be below the FAA action level. The results of laboratory testing for the PCBs in caulk indicated that the One (1) sample taken was found to be above the action level. The action level in PCBs for the FAA in non-liquid wastes is greater than 1 mg/kg.

Notes:

1. **9x9 Floor Tile – Gray** was found inside facility **BGM Outer Marker**. Approximately 9 square feet.
2. **Mastic – Black** was found inside facility **BGM Outer Marker**. Approximately 68 square feet.
3. **9x9 Floor Tile – Green** was found inside facility **BGM Outer Marker**. Quantity is included w/ Sam. #003 L1
4. A Vapor Barrier was found below the course stone throughout the site. Vapor Barrier was found to be in excellent condition with no tears or puncture holes found in any of the sampling areas.
5. Soil samples for both LBP and PCB were taken from the top of the layer of Vapor Barrier. Approximately 2 inches below the stone grade.
6. LBP was found in all of the soil samples. None of the samples were found to be above the FAA action level of 400ppm.
7. LBP was found in the Exterior Paint Chip of facility **BGM Outer Marker** at 3.0% by weight.
8. All PCB Soil samples were found to be below the action level. One PCB Caulk sample was found to be above the FAA action level of 1 mg/kg.
9. During the Inspection, this facility was found to still be active and power running to it. Because the power was still activated, some of the building materials found could not be sampled at this time. One of the Antenna poles was found with what appeared to be Transite Pipe wrapped around it. The Antenna was energized and could not be safely sampled. Sampling of the suspect pipe would have to be performed once the facilities electricity has been shut off.

1.0 INTRODUCTION

Churchill Environmental, Inc. was retained by **Leidos Corp.** to perform a Pre-Demolition Building Survey on **BGM Outer Marker** located on **Oliver St., Binghamton, NY**. The purpose of the survey was to determine the presence, location, and quantity of asbestos containing materials (ACM), lead based paint (LBP), Lead in Soil, and PCBs in Soil that may exist at the site where the demolition(s) will be performed.

The field survey was conducted on **9/1/2020**, and included the following:

- Review of all available floor plans;
- A visual site inspection to identify suspect ACM;
- Collection and analysis of samples from each suspect ACM;
- Documentation of sample locations and locations of identified ACM including drywall systems, floor coverings, roofing materials, etc.;
- Documentation of sample locations, and locations of identified ACM, on floor plan drawings and survey forms;
- A visual inspection to identify paint coatings representative of the predominant paint coatings within the facility;
- Collection analysis of suspect Lead Paint Chip samples from selected interior and exterior surface;
- Collection analysis of suspect Lead Soil samples from selected exterior drip lines and extend 5 feet out from facility (staggered);
- Documentation of sample locations and locations of identified LBP in soil and paint;
- Collection analysis of suspect PCB-containing building materials & suspect PCB Soil from selected exterior drip lines; and
- Documentation of sample locations and locations of identified PCBs in soil and caulking's.

The following Sections summarize the ACM, LBP, and PCB findings of the survey conducted at the site, including floor plan drawings, and data tables. Chain of custody forms, laboratory results, laboratory accreditation, and consultant's certifications and license are also included in the report.

Facility Description:

- Facility is 7' x 11' and is Vinyl Sided w/ Wood Siding underneath.

The materials sampled were based on guidance by **Anna Dinh**, of Leidos Corp as to where the demolition(s) will be performed.

2.0 SUMMARY OF FINDINGS

Pre-Demolition Asbestos Survey

Fourteen (14) bulk samples were collected from Five (5) homogeneous areas and submitted for analysis by polarized light microscopy (PLM). The results of laboratory testing indicated that **Three (3)** of the samples collected tested positive for non-friable asbestos.

Bulk sample locations of positive ACM, are indicated on the sample location diagrams. All ACM identified within the space are listed. Amounts of the material, physical descriptions and conditions are recorded on the data table. The building survey form allows the building inspector to assess and record information regarding the type, location, quantity, and condition of the ACM within the given space.

***No building plans were available at the time of the survey.**

Table #1

BGM Outer Marker – Binghamton ACM Samples							
Sample	Date	Material Description	Location	F/NF	Condition	Asbestos %	Quantity
20135A-001 L1	9/1/20	Mastic - Yellow	BGM OM	NF	Good	NA	N/A
20135A-001 L2	9/1/20	9x9 Floor Tile - Gray	BGM OM	NF	Good	3.5%	9 sq. ft.
20135A-002 L1	9/1/20	Mastic - Yellow	BGM OM	NF	Good	NA	N/A
20135A-002 L2	9/1/20	9x9 Floor Tile - Gray	BGM OM	NF	Good	NA/PS	N/A
20135A-003 L1	9/1/20	Mastic - Black	BGM OM	NF	Good	3.3%	68 sq. ft.
20135A-003 L2	9/1/20	9x9 Floor Tile - Green	BGM OM	NF	Good	5.3%	68 sq. ft.
20135A-004 L1	9/1/20	Mastic - Black	BGM OM	NF	Good	NA/PS	N/A
20135A-004 L2	9/1/20	9x9 Floor Tile - Green	BGM OM	NF	Good	NA/PS	N/A
20135A-005	9/1/20	Conduit Caulk - Black	BGM OM	NF	Good	NA	N/A
20135A-006	9/1/20	Conduit Caulk - Black	BGM OM	NF	Good	NA	N/A
20135A-007	9/1/20	Felt Paper - Black	BGM OM	NF	Good	NA	N/A
20135A-008	9/1/20	Shingle - Tan	BGM OM	NF	Good	NA	N/A
20135-009	9/1/20	Shingle - Tan	BGM OM	NF	Good	NA	N/A

F=Friable NF=Non-Friable NA=No Asbestos NA/PS=No Asbestos/Positive Stop N/A= Not Available

Lead-Based Paint Sampling

A LBP sampling event was conducted for all readily accessible interior and exterior facility areas by Joe Nanno. The LBP survey was completed on 9/1/2020 and included the physical sampling of paint coatings and ground soil that were deemed representative of the predominant paint coatings observed within the building. LBP, as defined by the EPA, is paint with a lead concentration of greater than or equal to 0.5 percent (%) lead by weight.

The results of laboratory testing for the LBP sampling event conducted at the property indicated that **Eight (8)** of the Eight (8) soil samples taken were found to contain lead. Zero of the eight samples were found to be below the FAA action level of 400 mg/kg in soil. The results of laboratory testing for the LBP in paint indicated that **one (1)** of the one (1) paint chip samples taken **was found to contain lead**. The paint chip sample was found to be **3% by weight**, which is above the 0.5% by weight action level.

The following table provides a summary of the lead in soil and pint chip sampling results:

Table #2

BGM Outer Marker – Binghamton LBP Samples							
Sample Number	Date	Time Sample Taken	Matrix	Total Lead Paint (% by wt.)	Total Lead Soil (mg/kg)	Location	Composition
Soil-01	9/1/20	1426	Soil	X	63 mg/kg	North of Building	Soil
Soil-02	9/1/20	1429	Soil	X	230 mg/kg	East of Building	Soil
Soil-03	9/1/20	1431	Soil	X	150 mg/kg	South of Building	Soil
Soil-04	9/1/20	1434	Soil	X	260 mg/kg	West of Building	Soil
Soil-05	9/1/20	1437	Soil	X	48 mg/kg	Northwest of Building	Soil
Soil-06	9/1/20	1439	Soil	X	100 mg/kg	Northeast of Building	Soil
Soil-07	9/1/20	1442	Soil	X	88 mg/kg	Southeast of Building	Soil
Soil-08	9/1/20	1445	Soil	X	52 mg/kg	Southwest of Building	Soil
Chip-01	9/1/20	1437	Paint	3.0% by wt.	X	North Corner of Building	Gray Paint

PCB Sampling

The results of laboratory testing for the PCBs conducted on the property indicated that Zero (0) of the Four (4) soil samples were found to be below the FAA action level. The results of laboratory testing for the PCBs in caulk indicated that the One (1) sample taken was found to be above the FAA action level. The FAA action level for PCBs in non-liquid wastes is greater than 1 mg/kg.

The following table provides a summary of the PCB in soil and building material sampling results:

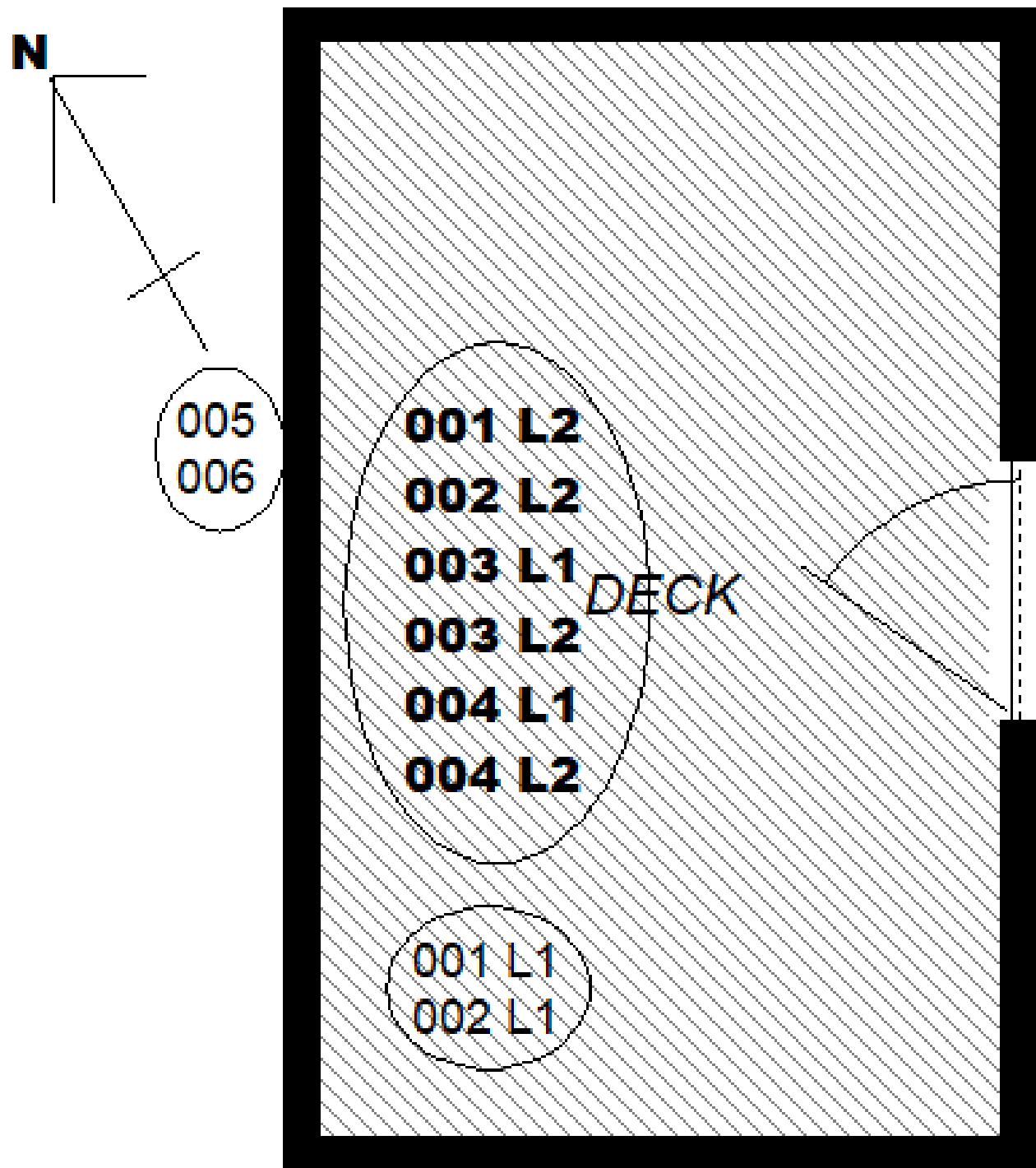
Table #3

BGM Outer Marker – Binghamton PCB Samples							
Sample Number	Date	Time Sample Taken	Matrix	Total PCB Caulk (mg/kg.)	Total PCB Soil (mg/kg)	Location	Composition
PCB-1	9/1/20	1448	Soil	X	<0.118 mg/kg	North of Building	Soil
PCB-2	9/1/20	1450	Soil	X	0.189 mg/kg	East of Building	Soil
PCB-3	9/1/20	1453	Soil	X	0.868 mg/kg	South of Building	Soil
PCB-4	9/1/20	1455	Soil	X	<0.125 mg/kg	West of Building	Soil
PCB-5	9/1/20	1457	Caulk	<3.65 mg/kg	X	North Wall Façade	Caulk



Joe Nanno
Building Inspector
10/7/2020

BGM OM - ACM

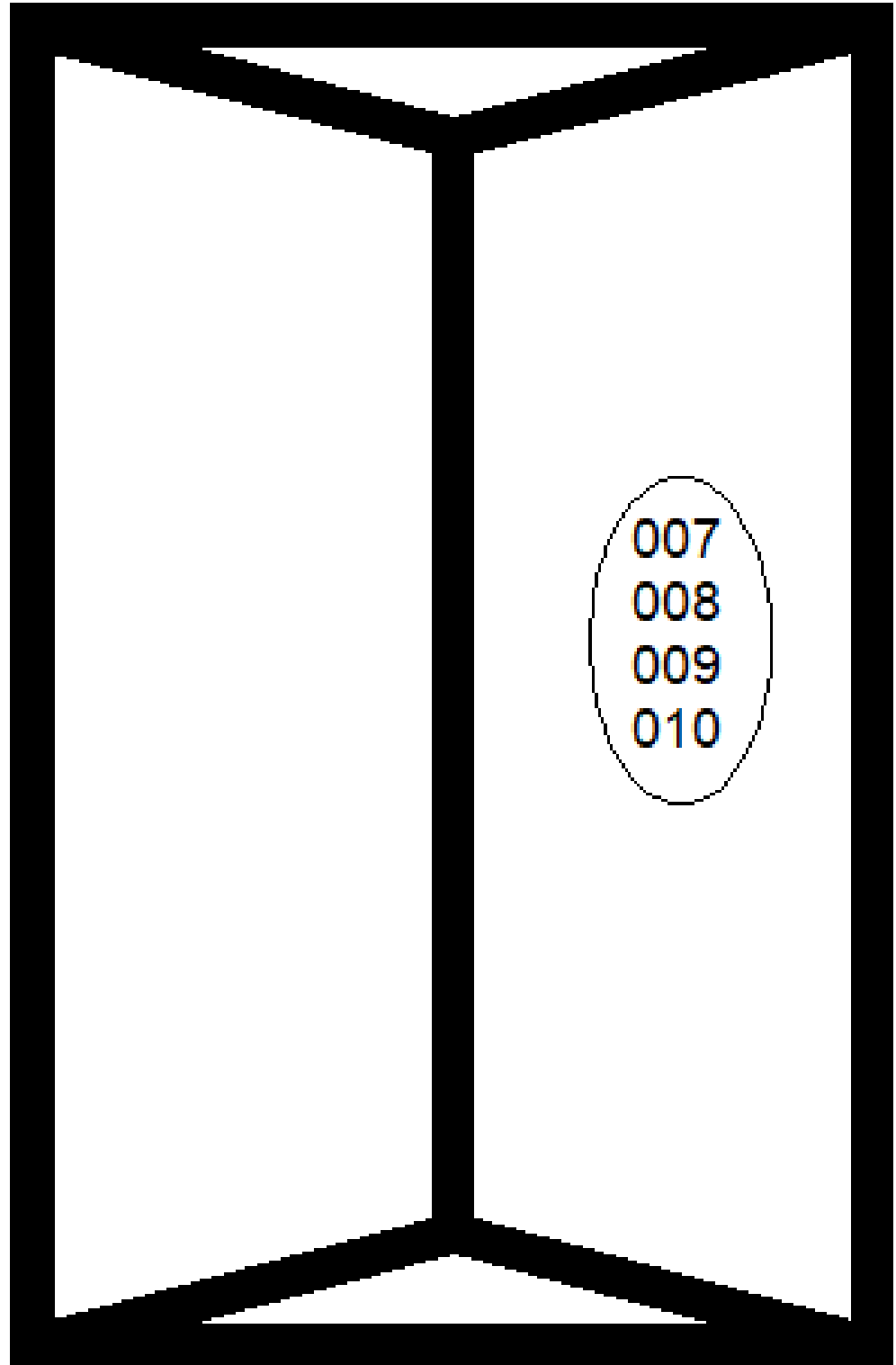
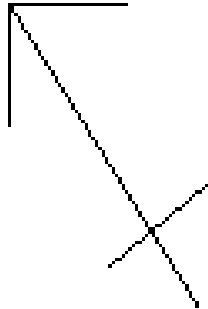


**Drawing is not to Scale*

**Bold Sample Numbers Are Positive Samples*

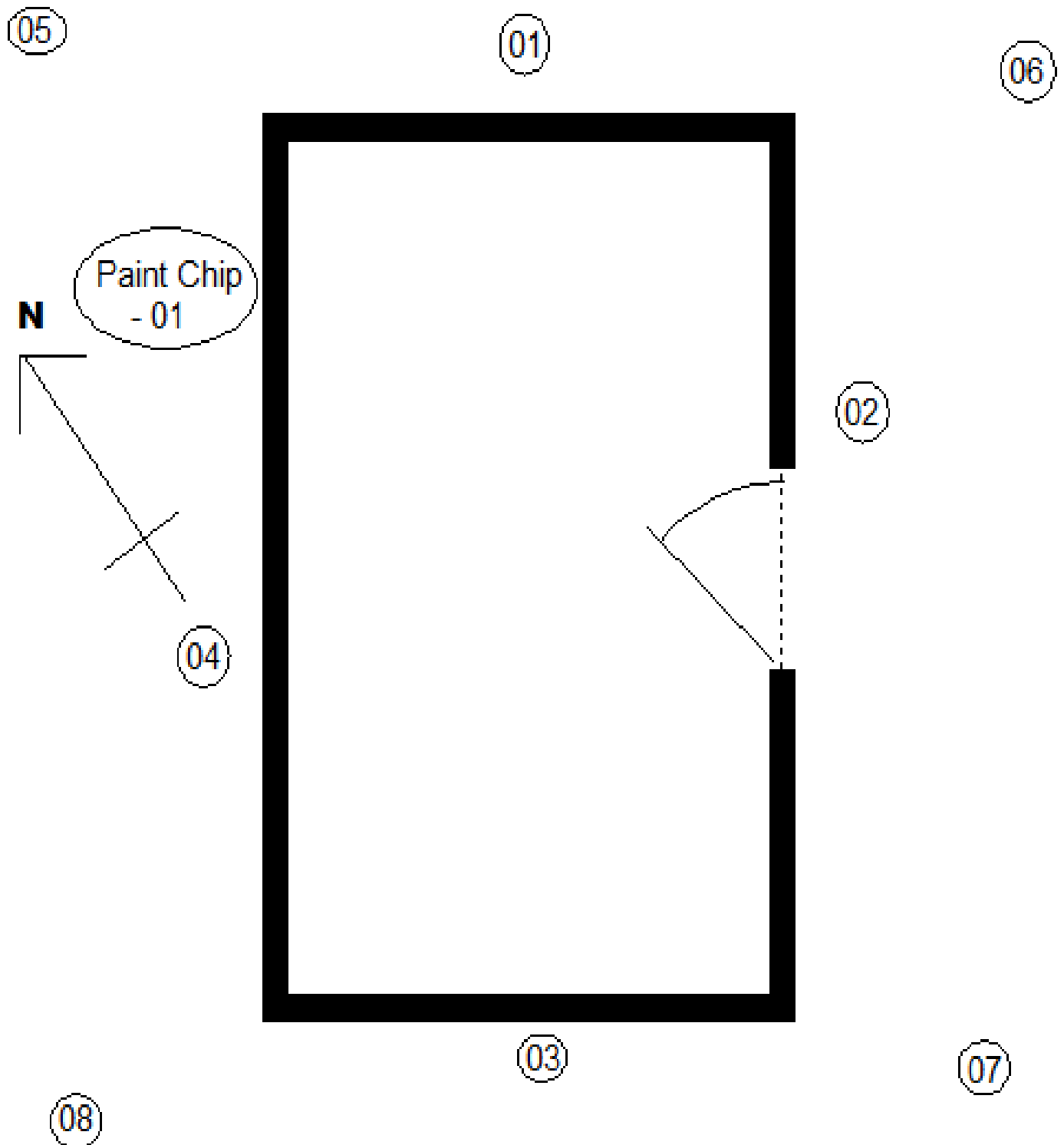
BGM OM Roof - ACM

N



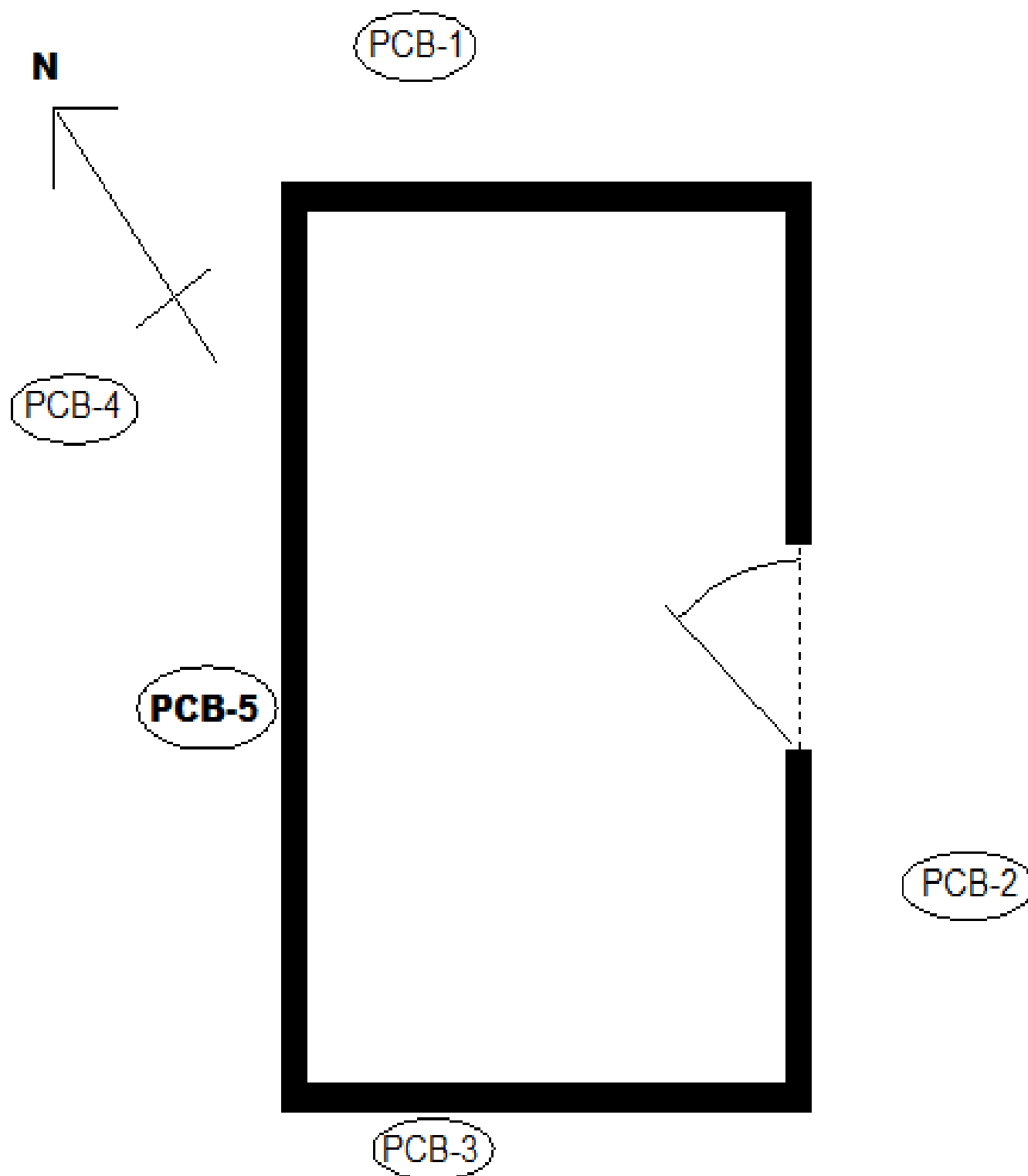
**Drawing is not to Scale*

BGM OM - Lead Locations



**Drawing is not to Scale*

BGM OM - PCB Locations



**Drawing is not to Scale*

**PCB-5 was found above the FAA action level of 1 mg/kg*