Harriman

ADDENDUM

Date February 2, 2024

To Prospective Bidders

Re Addendum No. 3 to the Construction Documents for:

Dorthea Dix Psychiatric Campus Pooler Pavilion Abatement Bangor, Maine Project No. 23134

This Addendum forms a part of the Contract Documents and modifies the original Issued for Bid Documents dated December 7, 2023, Addendum No. 1 dated January 4, 2024, and Addendum No. 2 dated January 22, 2024. Acknowledge receipt of this Addendum in the space provided in the Bid Form.

This Addendum consists of seven pages, Existing Conditions Floor Plan Drawings, and Specification Sections 012200, 028213, and 028416.

Harriman

Mark D. Lee, AIA Principal

Page 1 of 7

DOCUMENTS ISSUED FOR REFERENCE

- 1. Existing Conditions Floor Plan Drawings with ACM notations by RPF.
- 2. Existing Conditions Floor Plan Drawings including Site Diagram provided by Harriman.

QUESTIONS AND ANSWERS

- Q1: Page 8 of the RPF survey has a table summary of universal waste quantities. Is the removal and disposal of the universal wastes listed at Pooler Pavilion intended to be part of the asbestos abatement bid?
- A1: Yes, See attached Specification Section 02 84 16 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBs AND MERCURY regarding the removal, handling, and disposal of universal wastes in accordance with all local, state and federal regulations.
- Q2: The RPF survey provides a summary of ACM to be removed called Table 1. Can you please provide a floorplan clearly identifying the locations of these asbestos containing materials?
- A2: See attached floor plan documents issued for reference with this Addendum.
- Q3: At the prebid conference it was apparent a significant amount of interior walls have been built atop the asbestos containing flooring. Will you provide bidders with a way to quantify the amount of walls to be demolished to perform the asbestos abatement work?
- A3: See attached floor plan documents issued for reference with this Addendum. The walls noted are approximate locations and quantities.
- Q4: At the prebid conference it was apparent a significant amount of asbestos flooring is present below other non-asbestos carpet or non-asbestos VCT tile. In some cases the asbestos layer is the bottom of three layers. Will you provide bidders with a way to quantify which flooring areas are single layer, double layer, and triple layer flooring?
- A4: See attached floor plan documents issued for reference with this Addendum. Much of the ACBM flooring is exposed and not covered by other flooring. The bidders have had the opportunity to see the areas of abatement and make determinations of what ACBM may be covered. Quantification of materials is the responsibility of the bidder.
- Q5: At the prebid conference we found several areas where flooring was missing and the underlying asbestos containing black mastic could be inspected. Upon inspection, we found a porous sandy gypcrete floor leveler in several locations. This leveler substrate was not identified as asbestos containing on this project. Due to the nature and properties of the porous sandy gypcrete floor leveler, should we assume the black mastic has leeched into the leveler? If so, we will include some extent of grinding to remove the mastic from the leveler.
- A5: In accordance with Maine Chapter 425 and standard asbestos abatement practice, the abatement of ACBM flooring and mastic must be accomplished until the underlying substrate meets the clearance visual inspection criteria. This often entails the removal of underlying substrates (leveller, filler, etc) if they cannot be sufficiently cleaned to pass visual inspection. The determination to remove the

underlying substrates will be the responsibility of the bidder.

- Q6: Please confirm permanent power will be provided at no charge to the contractor.
- A6: See revision to Specification Section 015000 Temporary Facilities and Controls, Article 3.2, C.

See notation for location of proposed temporary electrical patch panel on floor plan reference drawings provided with this addendum.

- Q7: Water is required for MDEP asbestos worker decontamination showers. Will any water service be available for this project?
- A7: See revision to Section 015000 Temporary Facilities and Controls, Article 3.2, B.

See notation for location of proposed temporary domestic water connection on the floor plan reference drawings provided with this addendum.

- Q8: What is the total square feet of area of the new & old portions of the building?
- A8: See attached floor plan documents issued for reference with this Addendum.

 Approximate total is 78,015 GSF. GSF is defined as the outermost face of exterior wall.
- Q9: Can a color-coded diagram of the floor surfaces requiring abatement be provided? OR shall the abatement contractor assume all floor mastics must be removed?
- A9: See attached floor plan documents issued for reference with this Addendum.
- Q10: Based upon Table 1 of the "Summary of ACM to be Removed", is it likely to assume that all layers of floor finishes including the mastic adhesive & all leveling compounds shall require removal as an asbestos containing material?
- A10: See A5.

The decision to remove the underlying substrates to affect abatement and pass visual inspection will be the responsibility of the bidder. The requirement for this process is to pass visual inspection and air clearance as required by Maine Chapter 425.

Q11: Based upon the site visit, it was observed that interior wall partitions are constructed on top of original asbestos floor finishes within the 1948 Building win on the 1st & 2nd floors...

In an effort to eliminate change orders, shall it be assumed that the contract owns ALL selective demolition to access asbestos containing building materials during the abatement project?

A11: See A3.

Yes, the Contractor is responsible for selective demolition as required to access known and discovered areas of ACM.

Q12: What is the extent of the boarding up of windows following removal of window sashes?

1st Floor Only with Reinforce poly on upper windows? If so, please identify the quantity of window on the Basement, 1st floor & 2nd floor.

- A12: Answered in Addendum 2, Question and Answers #2.
 - Bidder is responsible for determining the quantity of windows.
- Q13: Is the caulking associated with the aluminum storm windows an asbestos material?
- A13: All window caulk will be abated as ACBM as part of this project.
- Q14: Will the ceramic flooring & associated grout bed require abatement as asbestos within the bathrooms? Is there asbestos mastic beneath the ceramic tiles & grout?
- A14: The ceramic flooring grout and bed are not ACBM and do not need to be abated as part of this project.
- Q15: Will the State of Maine provide a water source connection (Hose bib, spigot at water main to building) on the inside of the building for a central location in each building (Old & New)?
- A15: See revision to Section 015000 Temporary Facilities and Controls issued with this addendum.
- Q16: Will the State of Maine provide an electrician to hook-up & disconnect temporary electrical panels at each level of each wing of the building?
- A16: See revision to Section 015000 Temporary Facilities and Controls issued with this addendum.
- Q17: Can all construction debris generated during pre-demolition activities remain on-site (inside or outside of the building)? Will the fire dept & State Fire Marshall consider this a fire hazard and therefore will the construction debris be disposed of from the site?
- A17: Non-contaminated debris to be removed or remain contained within the building. Contractor to provide a unit cost for a dumpster in their Bid for this purpose. See added Specification Section 012200 issued with this addendum. Quantities to be negotiated for contract inclusion with the Owner after Bid is awarded.
 - All egress pathways through and around the building should remain clear of debris obstruction for the entire duration of the abatement scope.
 - All non-contaminated debris shall be removed from exterior areas of the building prior to Substantial Completion.
- Q18: Will the Owner perform grubbing and cut back of the excess vegetation & trees to allow for access to the outside of the building (i.e., windows, doors, etc.) requiring exterior caulking removal?
- A18: No. Site and building to be considered 'as is'. Existing vegetation in immediate proximity to the building and in the courtyard does not need to be preserved. See site diagram in attached floor plan documents issued for reference with this Addendum.

- Q19: Since the tar paper on the new addition (1959) is a non-asbestos material (<1% point count), will the demolition contractor be responsible for removal and disposal of the roof system with the building structure?
 - It would be cost prohibitive for the State of Maine to require the abatement contractor to expend additional labor hours (400-600 hours) to remove the non-asbestos roofing system from the deck, when the demolition contractor can perform this work utilizing mechanical means within a day or two.
- A19: See A20. Removal of roofing material is not included in Abatement scope.
- Q20: If the removal of the non-asbestos roofing system be required to remove the non-asbestos tarpaper on the NEW building, please specify if the non-asbestos tar paper is directly adhered to the deck & mopped on to the deck substrate?
- A20: The underlying trace asbestos containing tar paper did not appear to be directly adhered to the deck; however, given the nature of the roofing system and limited access for sampling it cannot be confirmed that there are not portions of tar paper that are adhered.
- Q21: If the non-asbestos tar paper is directly adhered to the deck, is the waterproofing mastic an asbestos containing material or is it non-asbestos?
- A21: The tar paper is not known to be adhered to the roof deck. No mastic was encountered during the survey of the roofing system.
- Q22: What does the roof deck consist of corrugated metal pan with concrete, metal pan only, wood deck, etc.?
- A22: The primary roof assembly based on in-field inspection is assumed to be partial areas of stone ballast, single-ply elastomeric membrane, tar paper, ~1" fiberboard, ~4" insulation, and metal deck.
- Q23: What is the profile of the roof composition type of material layers & thickness?
- A23: See A22.
- Q24: Will the abatement contractor be responsible for site fencing and security around the entire perimeter of the building structure? If so, what are the setbacks for the fence line? Please provide a total linear feet of fencing required?
- A24: Yes, the Contractor will be required to provide fencing at a minimum restricting access to their laydown area and/or to the courtyard. Contractor to provide temporary directional and warning signage as required.
- Q25: Will there be a clerk of the works at the site representing the State of Maine? If so, does the abatement contractor need to provide a job trailer with a desk & chair?
- A25: No, the State will not have nor require facilities for an Owner's Representative on site. Owner's I.H. and DDPC facilities staff will be visiting the site on a regular basis. The State will provide office space for their representatives.
- Q26: Who is responsible for temporary sanitary toilets during the project?
- A26: The Contractor is responsible for temporary sanitation facilities for their workforce.

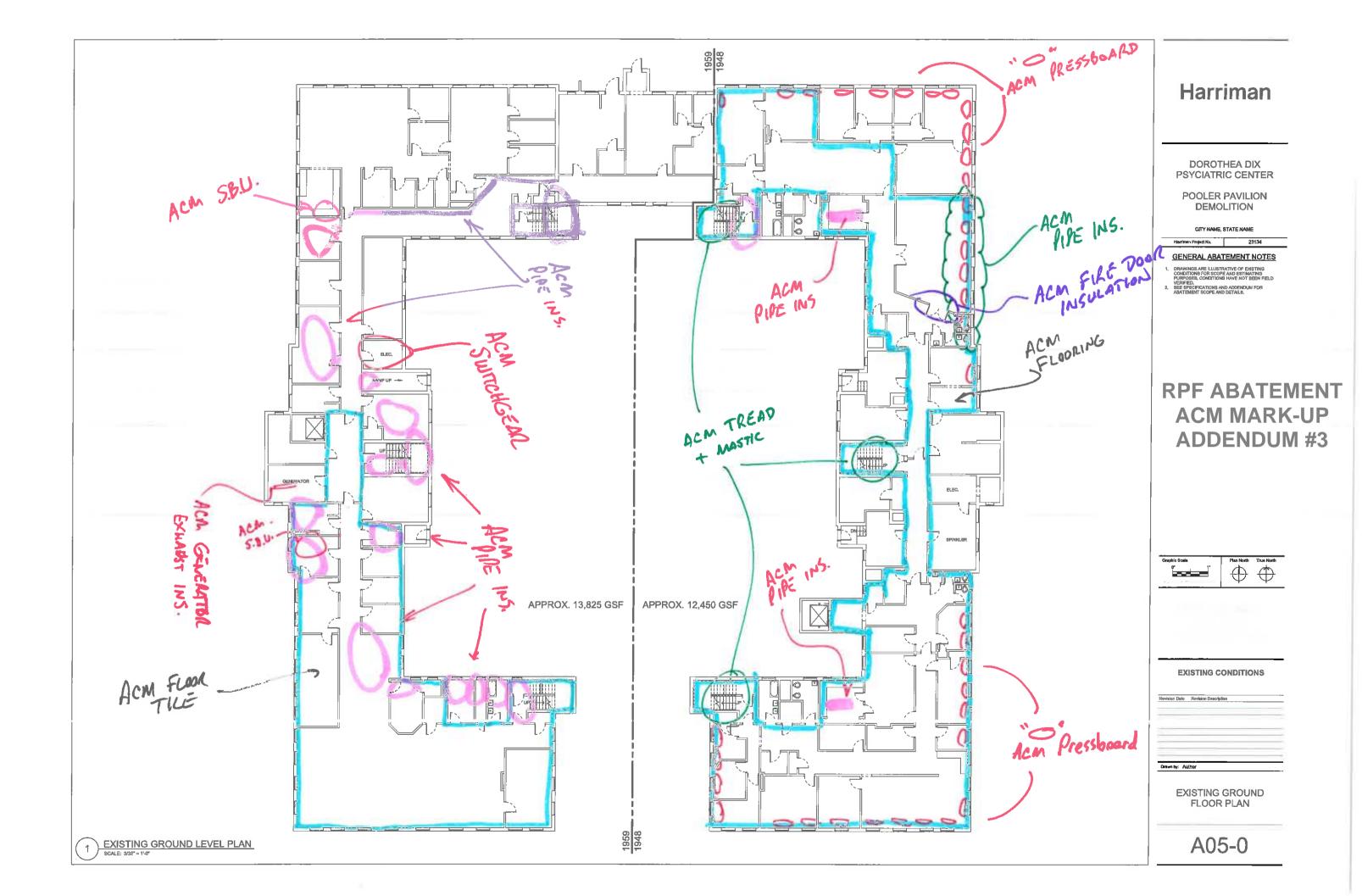
- Q27: Will the contractor retain all salvage rights within the building?
- A27: No. The Contractor does not have salvage rights within the building.
- Q28: What is the extent of the asbestos pipe insulation located within the building? There appears to be greater than 2,500 LF of pipe inside the new building.
- A28: See attached floor plan documents issued for reference with this Addendum.
- Q29: In an effort to eliminate a change order to the State of Maine, will the abatement contractor own all demolition to access and removal and disposal of all floor finishes, mastics, & pipe insulation located above grade within the building?
- A29: The Abatement Contractor is responsible for the demolition and removal of any nonstructural materials containing or a part of an assembly in direct contamination contact with ACM. This typically entails the removal of lower portions of wall systems to access ACBM flooring underneath partition walls as opposed to whole component demolition and similar focused demolition activities.
- Q30: What is the extent of the miscellaneous hazardous materials to be removed from the site (ie. Bulbs, ballasts, paints, chemicals, batteries, etc.)?
- A30: See A1. A separate specification section is provided and a listing of universal wastes is included in the Hazardous Materials Report.
- Q31: The Contractor Bid Form 00 41 13 states that bids are to be sent to Jill Instasi Sr PM. Is this accurate or is it to Linda Greely OR is it to the BGS architect email address?
- A31: Jill Instasi is no longer a valid contact for this project. Please use the BGS.Architect@Maine.gov email address, ATTN: Linda Greeley unless specifically noted otherwise.
- Q32: Does the contractor bid form need to be followed up with a hard copy if emailed?
- A32: No. Digital bid only per the instructions noted in A31.
- Q33: Please clarify project start and completion dates.
- A33: The State intends to move forward with this Scope of Work promptly in the spring/summer of 2024. The dates noted in 001113 Notice to Contractors are approximate. Substantial Completion refers to Scope of Work being complete. Contract Final Completion refers to the administrative final payment after work is complete.

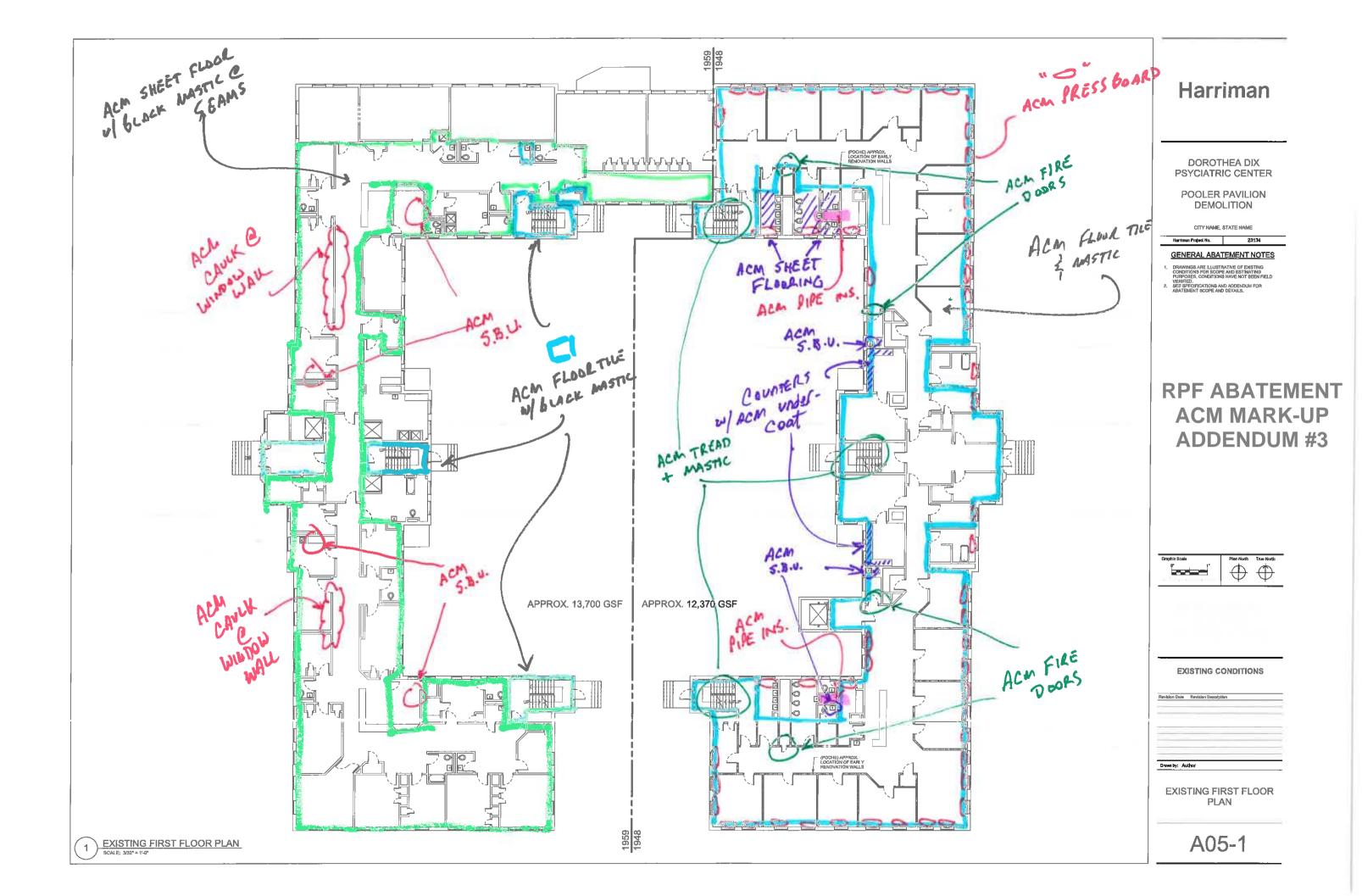
CHANGES TO SPECIFICATIONS

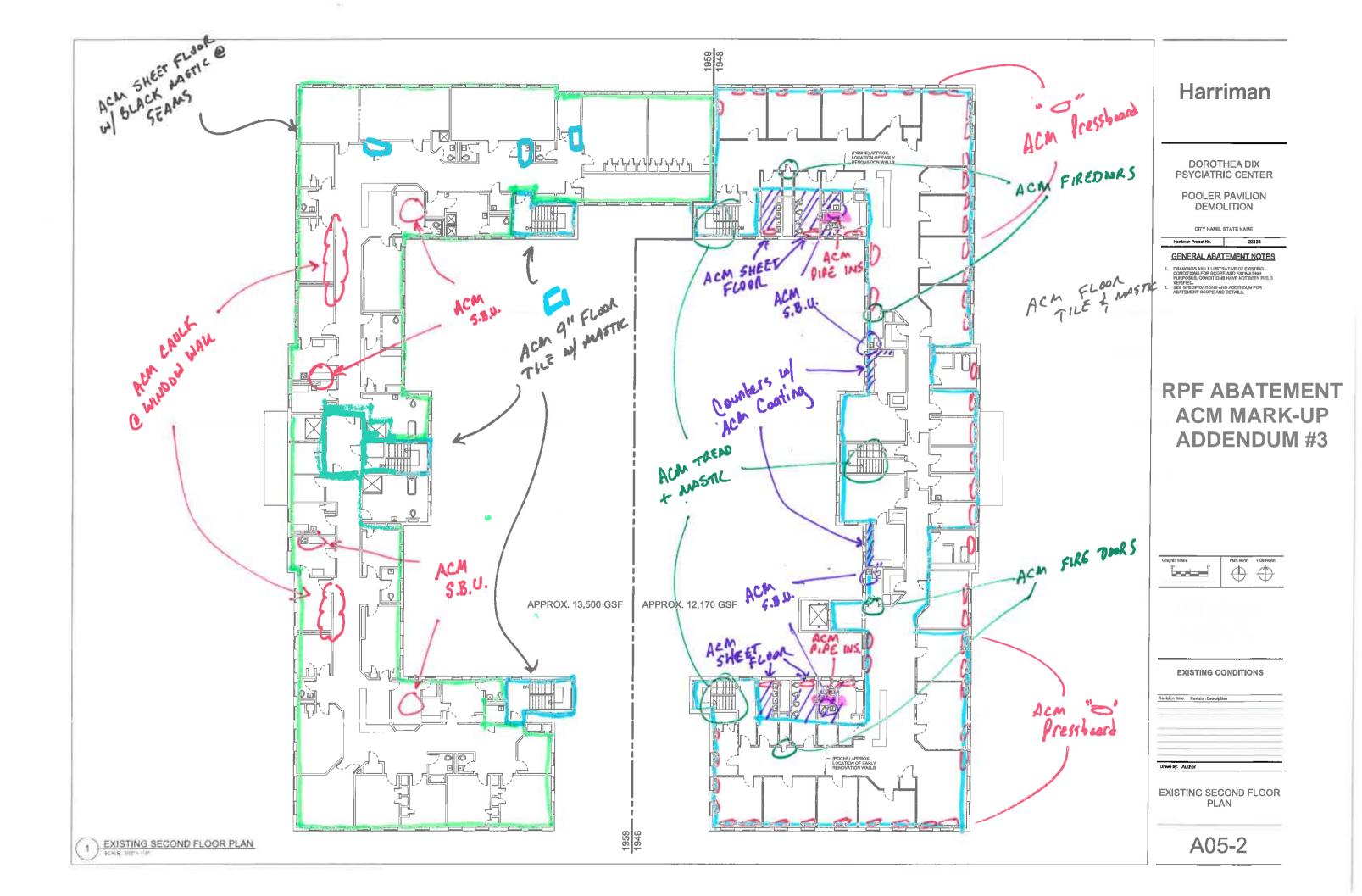
- SECTION 012200 UNIT PRICES
 - a. Issued with this addendum.
- 2. SECTION 015000 TEMPORARY FACILITIES AND CONTROLS
 - a. Article 3.2, B., delete paragraph and replace with the following:
 - "B. The Owner will provide (1) water connection off the building's 2" domestic main line. The Contractor is responsible for routing water from that point as required."

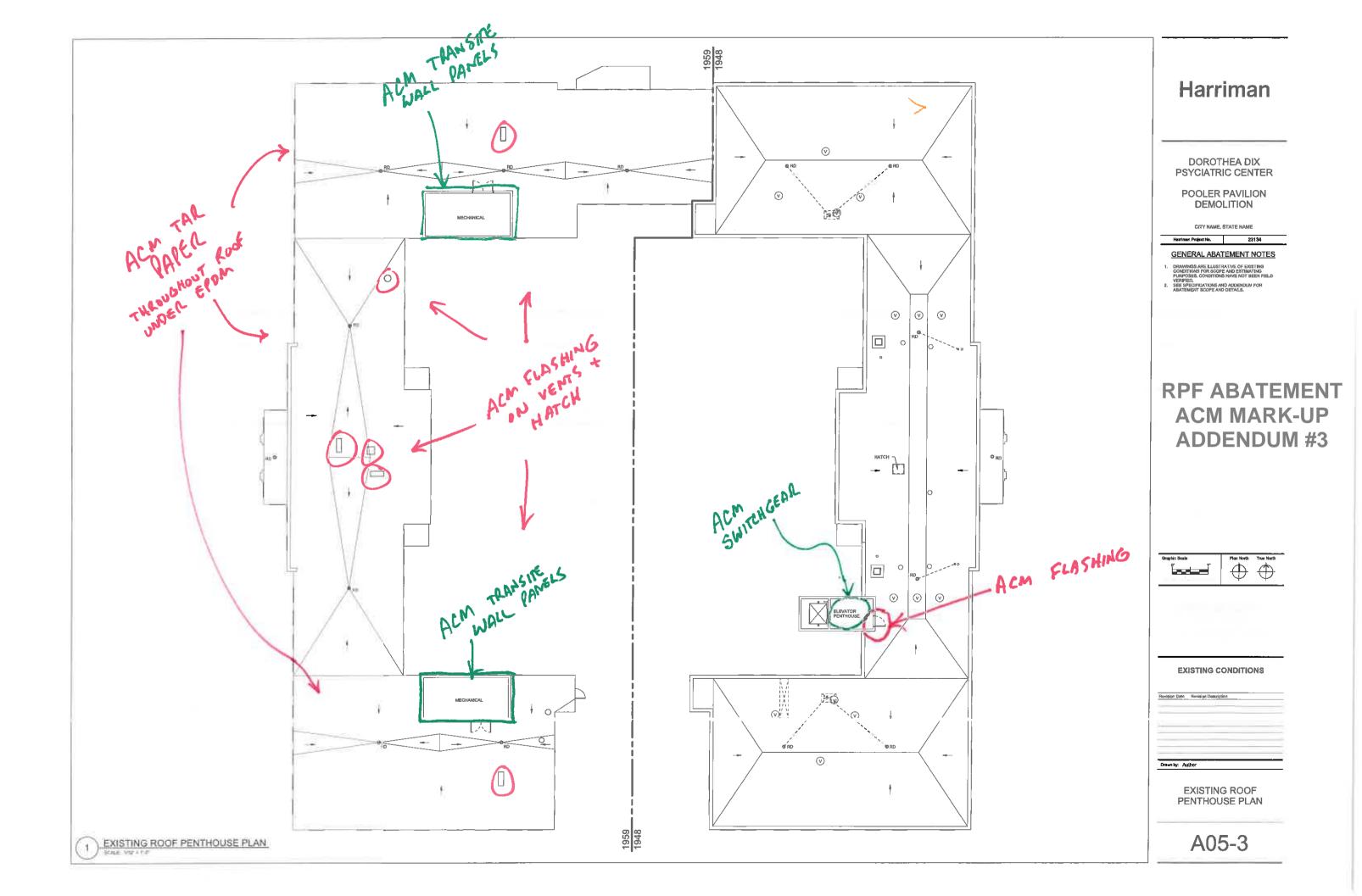
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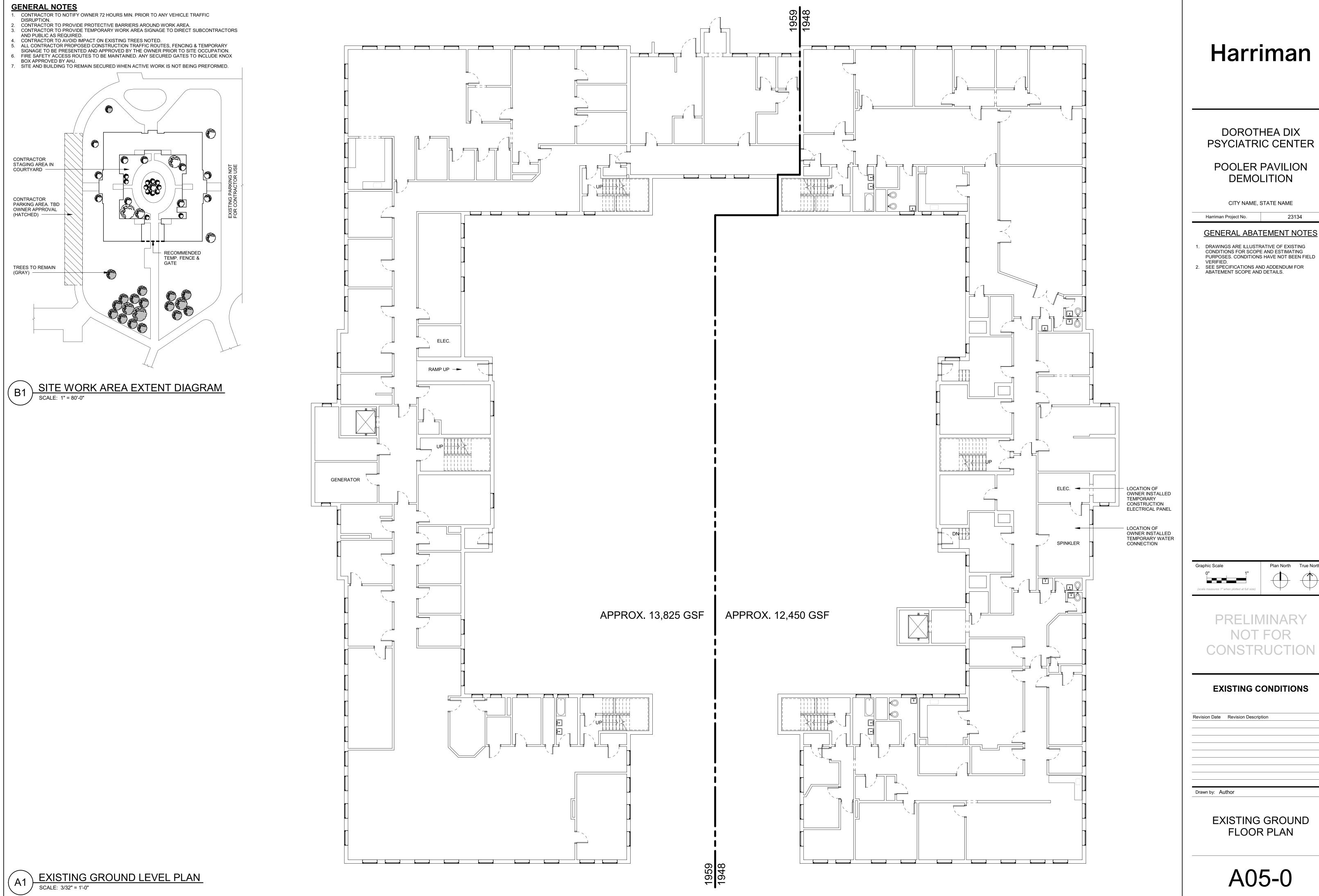
- b. Article 3.2, C., delete paragraph and replace with the following:
 - "C. Owner will provide (1) 200 amp sub panel in the location of the 'old' electrical room for Contractor use.. Power for the entire building will otherwise be shut down completely. The Contractor will be responsible for code compliant temporary routing of power from the Owner supplied panel across the rest of the building as required."
- 3. SECTION 028213 TABLE 1 SUMMARY OF ACM TO BE REMOVED
 - a. Revised and reissued with this addendum.
- 4. <u>SECTION 028416 HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBS AND MERCURY</u>
 - a. Issued with this addendum.

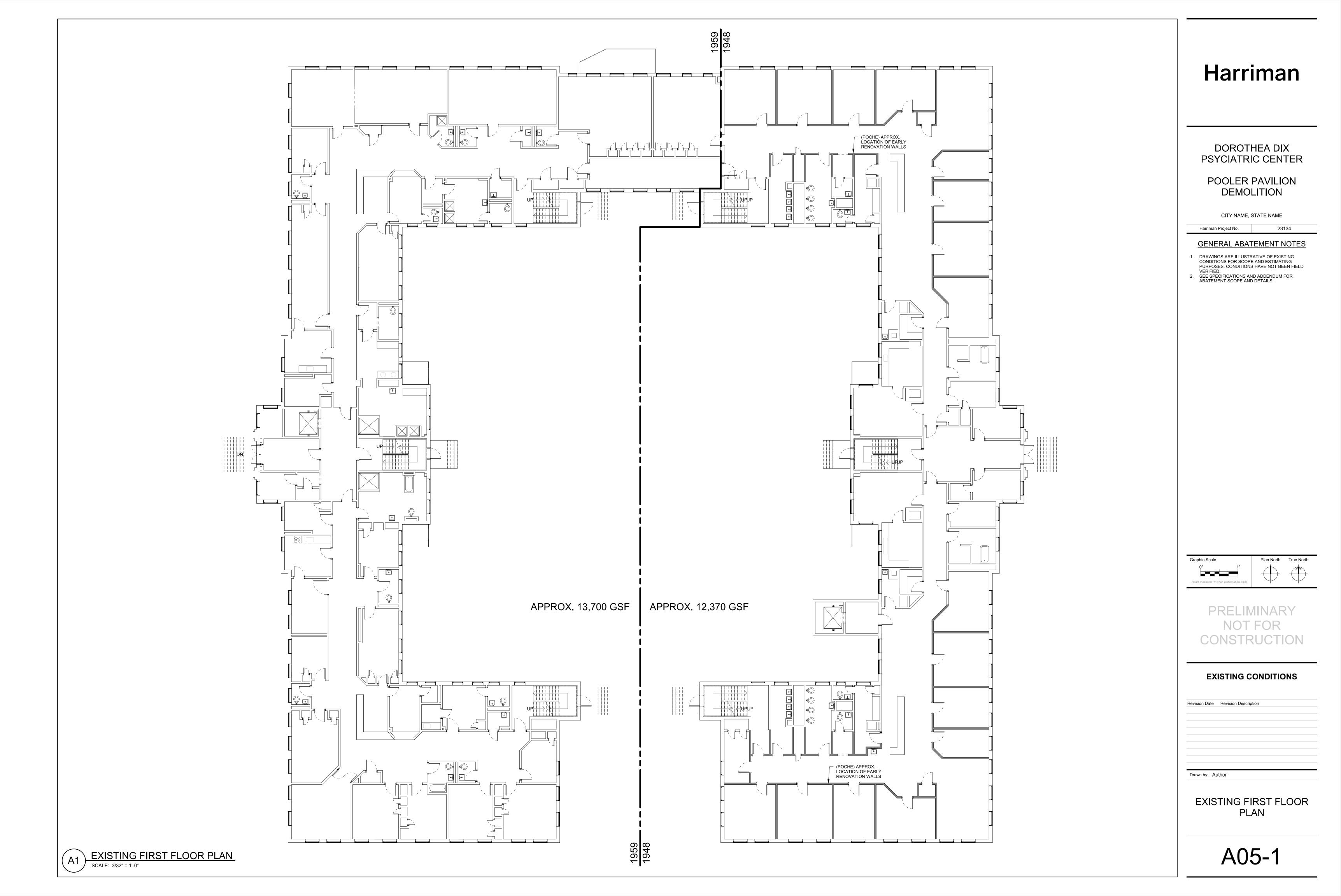


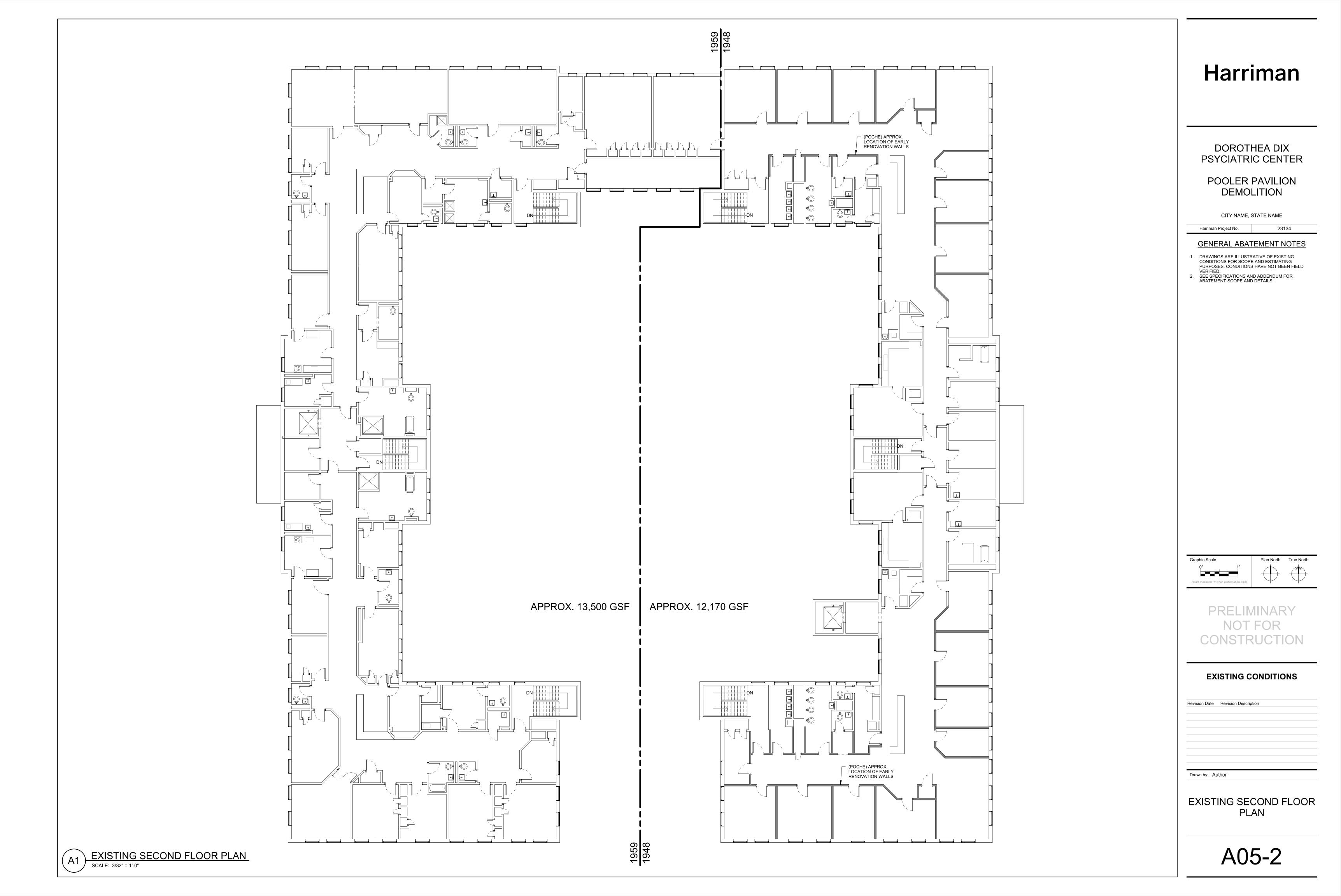


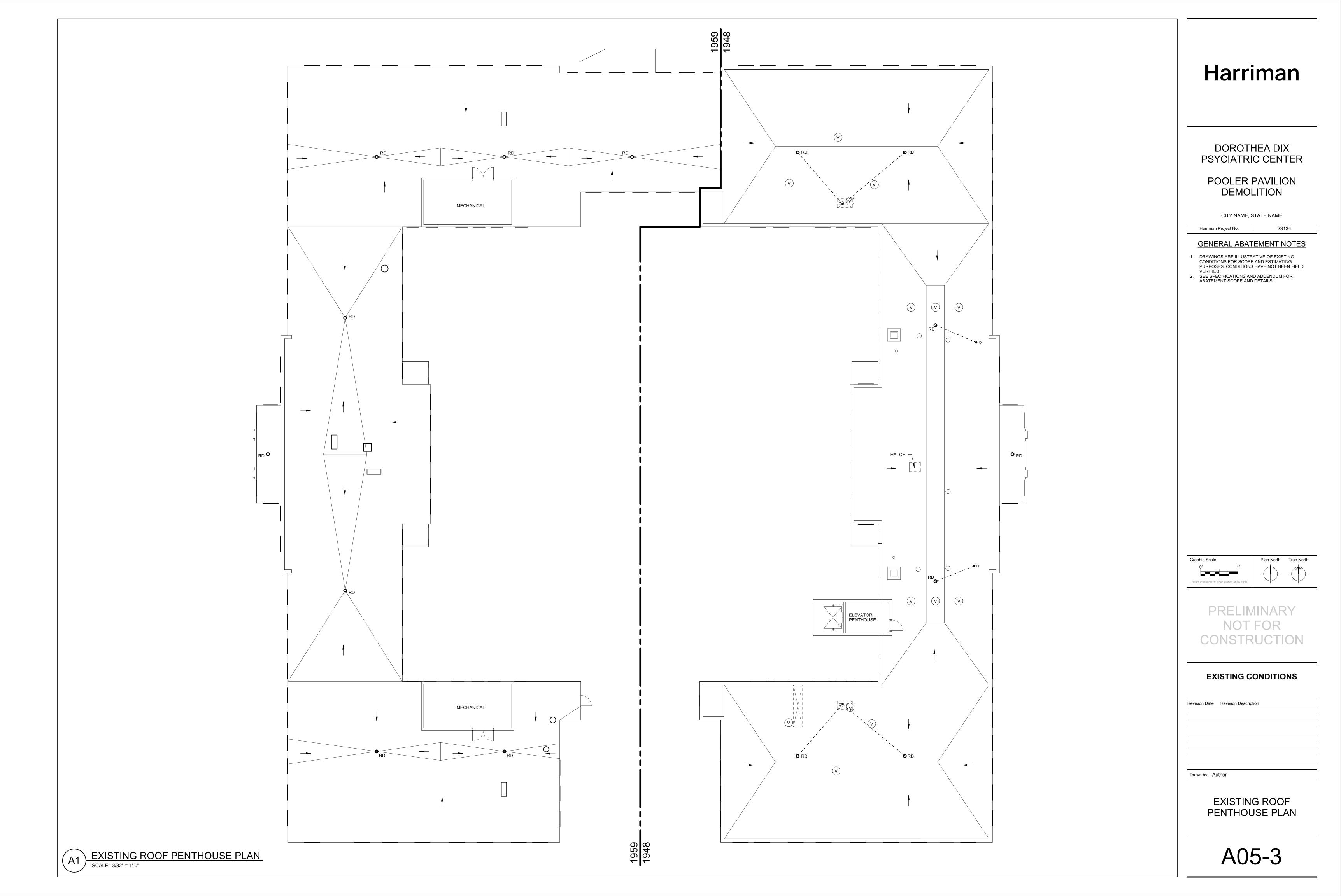


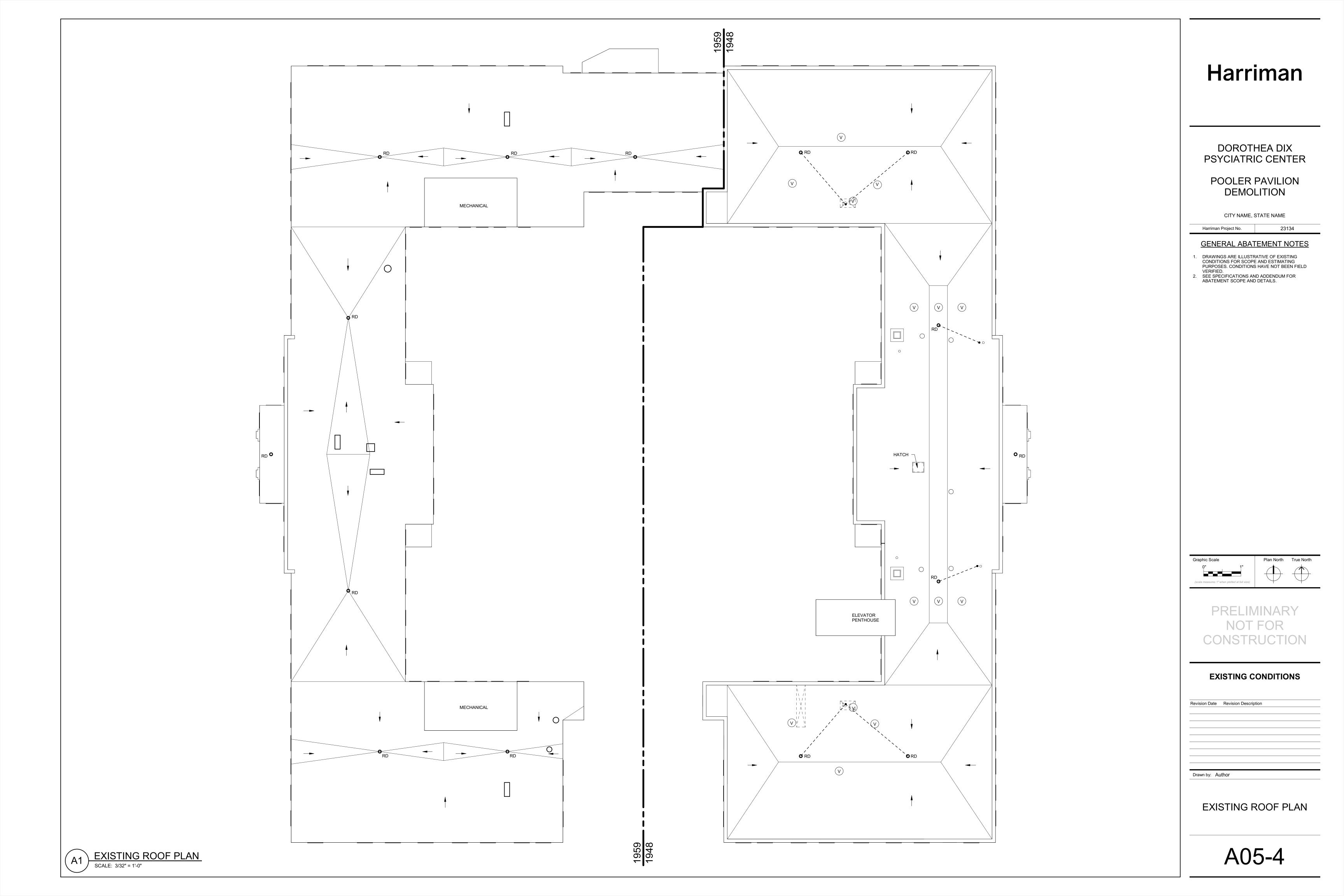












SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for unit prices.
- B. Related Sections include the following:
 - 1. Division 01 Section "Allowances" for procedures for using unit prices to adjust quantity allowances.
 - 2. Division 01 Section "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
 - 3. Division 01 Section "Quality Requirements" for general testing and inspecting requirements.

1.3 DEFINITIONS

A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services added to or deducted from the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, hauling, disposal, installation, equipment, labor, compaction, insurance, overhead, and profit.
- B. Measurement and Payment: Refer to individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

UNIT PRICES 012200 - 1

3.1 LIST OF UNIT PRICES

A. Unit Price No. 1:

- 1. Description: Provide unit cost for (1) 30 yard dumpster rental used specifically for the disposal of non-contaminated materials removed from the building.
- 2. Quantity to be negotiated for contract inclusion with Owner.
- 3.

END OF SECTION 012200

UNIT PRICES 012200 - 2

TABLE 1
SUMMARY OF ACM TO BE REMOVED

MATERIAL DESCRIPTION	LOCATION	QUANTITY	EPA CATEGORY	ASBESTOS CONTENT
Pooler Pavilion (new wing)				
Pipe Insulation (white) Pipe Fitting Insulation (white) Pipe Insulation (grey AirCell) Pipe Fitting Insulation (associated with AirCell Pipe Insulation)	Basement, hallways, stairwells, and rooms throughout	2,500 linear feet	Friable ACM	15% Chrysotile, 5% Amosite 15% Amosite, 10% Chrysotile
			Friable ACM	55% Chrysotile
			Non-ACM	<1% Amosite
Exhaust Breeching Exhaust Breeching Elbows	Basement, Generator Room	20 linear feet	Friable ACM	60% Chrysotile
				55% Chrysotile
Switchgear	Basement Electrical Room	30 square feet	Category II Nonfriable	Assumed ACM
Sheet Flooring	1 st and 2 nd floor throughout	22,000 square feet	Category I Nonfriable	3% Chrysotile
Mastic (black)	Corridors throughout at seams of vinyl sheet flooring	2,000 linear feet	Category I Nonfriable	5.6% Chrysotile
Window Glaze	Exterior windows, throughout	5,300 linear feet	Non-ACM	0.1% Chrysotile
9" Floor Tile (grey/brown) and Flooring Mastic (black)	Basement, throughout south wing, central	12,340 square feet	Category I Nonfriable	4.7% Chrysotile
	stairwell, and south stairwell 1 st and 2 nd floor, closets, north, center, and south stairwells, and main entry lobby		Non-ACM	0.5-2.3% Chrysotile
Sink Basin Undercoat (black)	Basement, 1 st , and 2 nd floor kitchenettes and nurse's stations	8 sink basins (50 square feet total)	Category I Nonfriable	5.6% Chrysotile
Caulk (white)	Exterior, throughout wing around windows and doors	3,780 linear feet	Category II Nonfriable	4.5% Chrysotile
Caulk (black)	1 st and 2 nd floor, lounge windows in north and south wings	320 linear feet	Category II Nonfriable	8.9% Chrysotile
Flashing (silver/black)	Roof on vent covers, hatch, and other penetrations	250 square feet	Category II Nonfriable	1.87% Chrysotile

TABLE 1
SUMMARY OF ACM TO BE REMOVED

MATERIAL DESCRIPTION	LOCATION	QUANTITY	EPA CATEGORY	ASBESTOS CONTENT
Tar Paper	Throughout roof, under EPDM roofing system on roof deck	13,825 square feet	Non-ACM	Trace (<1%) Asbestos
Transite Panels	Roof affixed to exterior of penthouse structures	800 square feet	Category II Nonfriable	20% Chrysotile
Pooler Pavilion (old wing)				
Fire Door Insulation (white)	1 st and 2 nd floor, utility room and soiled linen doors Ground Floor, chapel doors	10 Doors, 21 square feet each	Friable ACM	8% Amosite 3% Chrysotile
Pressboard (white)	Ground floor, 1 st and 2 nd floor behind wall mount heaters	140 panels, approximately 1,120 square feet	Friable ACM	60% Chrysotile
Pipe and Fitting Insulation	Ground Floor Chapel	120 linear feet	Friable ACM	10% Amosite
9" Floor Tile (maroon and black) and Black Flooring Mastic	2 nd Floor Throughout 1 st Floor Throughout Ground Floor, Throughout	11,000 square feet 11,000 square feet 7,500 square feet	Category I Nonfriable	6.8% Chrysotile
Caulk (white)	Throughout building at exterior windows, under trim molding. Only residual observed	222 window openings, up to 16 linear feet per opening	Category II Nonfriable	1.8% Chrysotile
Sink Basin Undercoat	1 st and 2 nd floor dish washing rooms	4 counters, approximately 30 square feet per counter 120 square feet total	Category II Nonfriable	9.8% Chrysotile
Tan Sheet Flooring	1 st and 2 nd floor, north and south bathrooms	140 square feet	Category I Nonfriable	13.3% Chrysotile
Stair Tread Floor Tiles	North, South and Central Stairwells	1,000 square feet	Category I Nonfriable	5.6% Chrysotile
Black Mastic				2.0% Chrysotile
Sink Basin Undercoat (black)	1 st and 2 nd floor, north and south nurse's station kitchenette and soiled linen rooms	8 sinks at approximately 6 square feet each	Category II Nonfriable	4.9% Chrysotile
Flashing	Roof, flashing at threshold of elevator top room door	4 square feet	Category I Nonfriable	2.89% Chrysotile
Switchgear Panel	Roof, elevator top room	45 square feet	Category II Nonfriable	20% Chrysotile

SECTION 028416 - HANDLING OF LIGHTING BALLASTS AND LAMPS CONTAINING PCBs AND MERCURY

PART 1 – GENERAL

1.1 SUMMARY

- A. Work Included: Provide labor, materials, and equipment to complete the work specified of this Section including, removal, characterization (including any testing that may be required by the disposal facility) and lawful disposal of hazardous building materials and special wastes as follows:
 - 1. Hazardous materials.
 - 2. Fluorescent light ballasts and capacitors throughout all site structures.
 - 3. All containers, drums, and unknown materials.
 - 4. Gear oils, hydraulic oils, and refrigeration liquids, etc. From various pieces of equipment.
 - 5. File all necessary notices, obtain all permits and licenses, and pay all governmental taxes, fees, and other costs in connection with the work. Obtain all necessary approvals of all governmental departments having jurisdiction.
 - 6. Comply with Health and Safety Plan.
- B. Related Work: The following items are closely related to this work but not included in this Section and will be performed under the designated Sections.
 - 1. Demolition
 - 2. Asbestos Abatement

1.2 LOCATION OF WORK

- A. Location of work areas, descriptions, estimated types, and quantities of hazardous materials are described in the RPF report appended hereto. If additional hazardous materials are encountered, Contractor shall notify Engineer immediately and be prepared to remediate the material.
- B. The RPF report identifies hazardous materials encountered and enumerated during the survey. The quantities are provided for general guidance and may not correspond exactly to the quantity to be removed. The Contractor is responsible to investigate all structures for the presence of all hazardous materials. The Contractor shall determine quantities of hazardous materials for bidding purposes.
- C. Handling and disposal of all items identified in the RPF report and during the pre-bid site inspection are to be included in the lump sum bid item of the contract. Any hazardous materials encountered that are not identified will be paid for as a Change in Work.

1.3 REFERENCES

- A. The Contractor is advised to thoroughly review the documents referenced in this Section. Strict adherence to the hazardous materials, noise, air and water pollution regulations and requirements is required.
 - 1. Code of Federal Regulations
 - a. 29 CFR 1910, "Occupational Safety and Health Standards" (General Industry Standards)
 - b. 29 CFR 1910.20, "Access to Employee Exposure and Medical Records"
 - c. 29 CFR 1910.134, "Respiratory Protection"
 - d. 29 CFR 1910.146, "Permit Required Confined Space"
 - e. 29 CFR 1910.1200, "Hazard Communication"
 - f. 29 CFR 1926, "Safety and Health Regulations for Construction" (Construction Industry Standards)
 - g. 29 CFR 1926.62 "Lead-Construction"
 - h. 40 CFR 50, "National Primary and Secondary Ambient Air Quality Standards
 - i. 40 CFR 60, "Standards of Performance for New Stationary Sources," Appendix B, "Test Methods"
 - j. 40 CFR 117, "Determination of Reportable Quantities for Hazardous Substances"
 - k. 40 CFR 122, "EPA Administered Permit Program: The National Pollutant Discharge Elimination System"
 - 1. 40 CFR 172, "Hazardous Waste Transportation"
 - m. 40 CFR 261, "Identification and Listing of Hazardous Waste"
 - n. 40 CFR 262, "Standards Applicable to Generators of Hazardous Waste"
 - o. 40 CFR 263, "Standards Applicable to Transporters of Hazardous Waste"
 - p. 40 CFR 268, "Land Disposal Restrictions"
 - q. 40 CFR 300, "National Oil and Hazardous Substances Pollution Contingency Plan"
 - r. 40 CFR 302, "Designation, Reportable Quantities, and Notification"
 - 2. Occupational Safety and Health Administration OSHA Booklet 3126 "Working with Lead in the Construction Industry".
 - 3. National Institute for Occupational Health and Safety
 - a. NIOSH Method 7082, "Lead"
 - 4. American Society for Testing and Materials
 - a. ASTM D3335, "Test Method for Low Concentration for Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy"

- 5. EPA (Environmental Protection Agency) Publications
 - a. SW-846, Test Methods for Evaluating Solid Waste Physical/Chemical Methods
 - b. EPA Method 3050, "Acid Digestion of Sediments, Sludges, and Soils"
- 6. Steel Structures Painting Council
 - a. SSPC Guide 61 (CON) Guide for Containing Debris Generated During Paint Removal Operations
- 7. State of Maine Department of Environmental Protection
 - a. Chapter 700 -- Wellhead Protection: Siting of Facilities that Pose a Significant Threat to Drinking Water
 - b. Chapter 850 -- Identification of Hazardous Wastes
 - c. Chapter 851 -- Standards for Generators of Hazardous Waste
 - d. Chapter 852 -- Land Disposal Restrictions
 - e. Chapter 853 -- Licensing of Transporters of Hazardous Waste
 - f. Chapter 854 -- Standards for Hazardous Waste Facilities
 - g. Chapter 855 -- Interim Licenses for Waste Facilities for Hazardous Waste
 - h. Chapter 856 -- Licensing of Hazardous Waste Facilities
 - i. Chapter 857 -- Hazardous Waste Manifest Requirements
 - j. Chapter 858 -- Universal Waste Rules

1.4 SUBMITTALS

- A. Prior to removal of hazardous materials, submit a Hazardous Waste Handling Plan, including identification of the proposed waste hauler and disposal facility with copies of all applicable licenses, registrations, and approvals.
- B. Provide a detailed plan describing methods of removal and disposal of PCB contaminated concrete.
- C. Provide a detailed plan describing methods of removal and disposal of the oily water located within the boiler room.
- D. Provide copies of all worker certifications associated with OSHA 40 Hour Hazardous Waste Site Health and Safety Training in accordance with 29 CFR 1910.120.
- E. After completion of hazardous materials removal, provide a final report documenting removal, transportation, and disposal activities. This shall include copies of manifests, shipping slips, permits, and licenses for this project.

PART 2 – PRODUCTS

2.1 PROTECTIVE EQUIPMENT

F. Provide health and safety equipment required to protect workers and to comply with the Health and Safety Plan.

2.1 DRUMS

G. Provide DOT approved drums or containers for the disposal of specified materials.

PART 3 - EXECUTION

3.1 LIGHT BALLASTS

- H. Light ballasts requiring removal were observed throughout the facility.
- I. Remove, characterize and lawfully dispose to an appropriate off-site PCB disposal facility all PCB and non-PCB light ballasts throughout the facility. In preparing its bid, Contractor should assume that all light ballasts contain PCBs.
- J. Document all disposal activities to ensure compliance with regulations.

3.2 MERCURY

- A. Under current federal regulations, items containing mercury may be classified as hazardous waste. These include, but are not limited to fluorescent lamps, high-intensity discharge lamps, thermometers, manometers thermostats and relay switches. The following shall be followed for disposal of all mercury items:
 - 1. Collection, characterization and proper disposal of all fluorescent tubes and mercury items found throughout the facility.
 - 2. Care must be taken to not break these items, as that may cause mercury exposure to individuals handling them and may require additional clean-up and decontamination.
 - 3. Provide all waste shipment records or recycling records and incorporate them in the final report.

3.3 HAZARDOUS MATERIALS/WASTE

- A. All hazardous materials shall be characterized and disposed of in accordance with applicable regulations. Disposal manifests shall be provided for all waste disposals.
- B. Workers who handle hazardous materials shall be licensed and trained in safe and proper hazardous materials handling procedures. At a minimum, this shall include OSHA 40 Hour Hazardous Waste Site Health and Safety Training in accordance with 29 CFR 1910.120.
- C. Any hazardous materials containers in poor condition shall be removed as soon as possible.
- D. Handling Hazardous Waste
 - 1. Place waste in DOT approved containers and label the containers for transport to a licensed disposal site.

- 2. Use an authorized hazardous waste transporter to haul waste to a hazardous waste facility.
- 3. Follow all record-keeping, chain-of-custody and reporting requirements including a copy of the hazardous waste manifest.
- 4. Accurately measure and weigh the volume of each container or load of waste removed from the site. Submit records of waste volumes to OWNER and ENGINEER.
- 5. Special attention shall be given to the time of storage, amount of material stored at any one time, use of proper containers and personnel training.
- 6. Paint debris shall not be placed on the unprotected ground and shall be shielded to prevent dispersion of the debris by wind or rainwater.
- 7. Provide appropriate notifications to regulatory agencies if there is a release to the environment exceeding the CERCLA reporting requirements (e.g., lead --1 pound).
- 8. Any evidence of improper storage shall be cause for immediate shutdown of the project until corrective action is taken.
- 9. Provide legal transportation of the waste to the disposal landfill, and complete or obtain all required licenses, manifests, landfill slips, or other forms. Copies of all forms or licenses, and the signed original of the Waste Manifest for each waste load, shall be given to the ENGINEER or OWNER.

3.4 MACHINERY FLUIDS AND PHYSICAL PLANT SYSTEMS FLUIDS

- A. Drain all equipment containing hydraulic fluids, lubricating oils, fuel oil, antifreeze, fire suppression chemicals and all other types of fluids. Decontaminate all systems, including piping, by means of steam cleaning or triple rinsing, or both, with a compatible fluid to remove all visible contamination.
- B. Collect and drum all fluids, including decontamination fluids drained from the above-described equipment.
- C. Label drums for transport and disposal.
- D. After removal of all hazardous components, dispose of remaining equipment carcasses and piping in accordance with applicable regulations. Contractor shall submit documentation verifying removal, transportation, and disposal at the approved disposal facility.

3.5 UNKNOWN CHEMICALS/MATERIALS

- A. There may be some unknown chemicals/materials identified throughout the facility. The following shall be followed for the disposal of all unknown chemicals/materials:
 - 1. All unknown chemicals/materials must be characterized in accordance with State and Federal regulations.
 - 2. Once characterized, the unknown chemicals/materials must be packaged, labeled, transported, and disposed of in accordance with all State and Federal regulations.

3. Provide all waste shipment records or recycling records and incorporate them into the final report.

3.6 BATTERIES AND FIRE EXTINGUISHERS

- B. In accordance with State and Federal regulations, many batteries and fire extinguishers must be managed as hazardous wastes when disposed of. These include, but are not limited to, all types of fire extinguishers, lead acid batteries, nickel cadmium batteries, lithium batteries, and older alkaline batteries containing mercury. The following protocol shall be followed for the disposal of all such fire extinguishers and batteries:
 - 1. Collection, characterization, and proper disposal of all fire extinguishers and batteries found throughout the facility.
 - 2. Provide waste shipment records or recycling records and incorporate them in the final report.

END OF SECTION 028416