

Harriman

State of Maine
Mackworth Island
Renovations Phase 1

Falmouth, Maine

Project No. 23216
BGS No. 3675

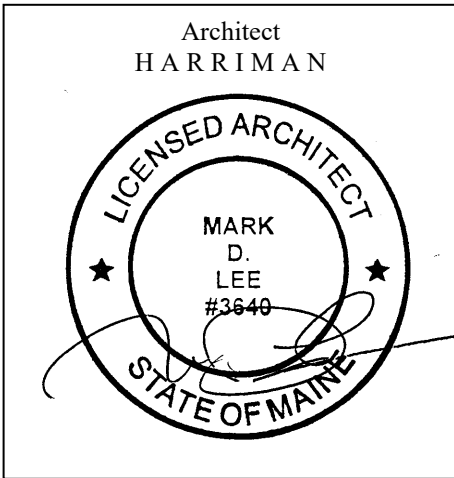
July 30, 2024

Construction Documents

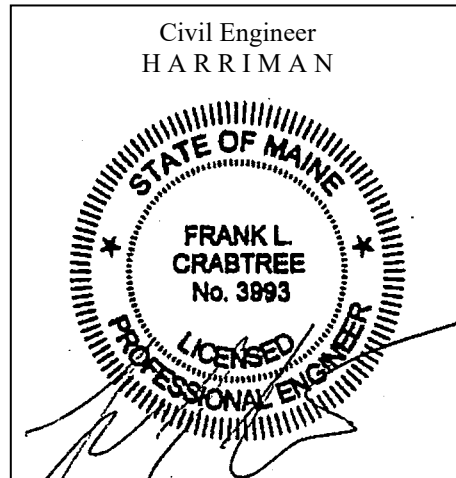
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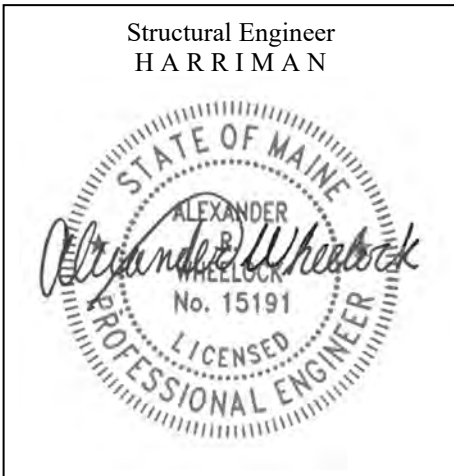
Architect
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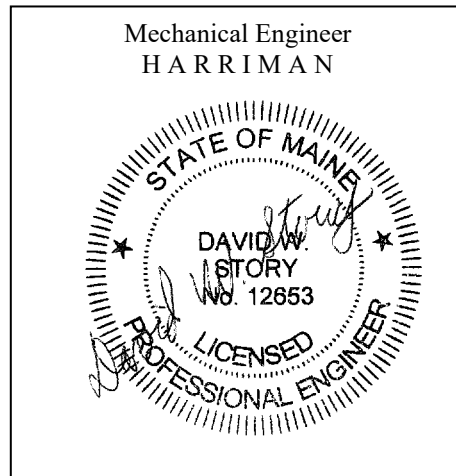
Civil Engineer
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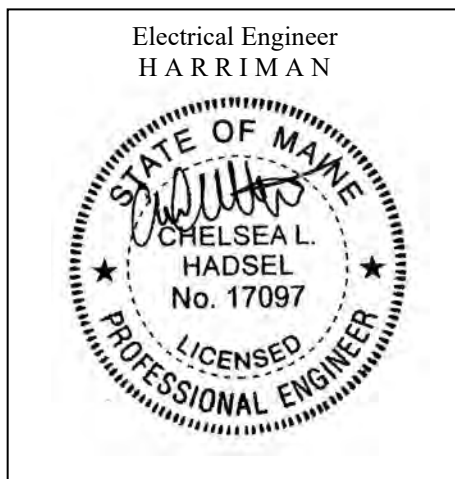
Structural Engineer
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Mechanical Engineer
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Electrical Engineer
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STATE OF MAINE
MACKWORTH ISLAND RENOVATIONS
PHASE 1
FALMOUTH, MAINE
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00 11 13
Notice to Contractors

Mackworth Island Renovations Phase 1

BGS Project #3375

Phase 1 scope includes several modifications to the existing Governor Baxter School for the Deaf campus. Scope items include a new campus gateway structure, site utility modifications, abatement and demolition of two buildings, and minor renovations to two buildings.

The cost of the work is approximately \$. The contract shall designate the Substantial Completion Date on or before (10) ten months after contract is awarded, and the Contract Final Completion Date on or before (12) twelve months after contract is awarded.

1. Submit bids on a completed Contractor Bid Form, plus bid security when required, all scanned and included as an attachment to an email with the subject line marked "**Bid for Mackworth Island Phase 1 Renovations**" and addressed to the Bid Administrator at: bgs.architect@maine.gov, so as to be received no later than **2:00 p.m. on Thursday, September 5, 2024**.

Bid submissions will be opened and read aloud at the time and date noted above at the online virtual meeting, accessible as a video conference call. Those who wish to participate in the call must submit a request for access to deane.rykerson@maine.gov.

Any bid received after the noted time will not be considered a valid bid and will remain unopened. Any bid submitted by any other means will not be considered a valid bid. The Bid Administrator may require the Bidder to surrender a valid paper copy of the bid form or the bid security document in certain circumstances.

Questions on the bid opening process shall be addressed to the Bid Administrator: Deane Rykerson, Project Manager, Maine Bureau of General Services at deane.rykerson@maine.gov.

2. The bid shall be submitted on the Contractor Bid Form (section 00 41 13) provided in the Bid Documents. The Owner reserves the right to accept or reject any or all bids as may best serve the interest of the Owner.
3. Bid security *is required* on this project.
If noted above as required, the Bidder shall include a satisfactory Bid Bond (section 00 43 13) or a certified or cashier's check for 5% of the bid amount with the completed bid form submitted to the Owner. The Bid Bond form is available on the BGS website.
4. Performance and Payment Bonds *are required* on this project.
If noted above as required, or if any combination of Base Bid and Alternate Bids amounts selected in the award of the contract exceeds \$125,000.00, the selected Contractor shall furnish a 100% contract Performance Bond (section 00 61 13.13) and a 100% contract Payment Bond (section 00 61 13.16) in the contract amount to cover the execution of the Work. Bond forms are available on the BGS website.
5. Filed Sub-bids *are not required* on this project.

00 11 13
Notice to Contractors

6. There *are no* Pre-qualified General Contractors on this project.
If Pre-qualified General Contractors are identified for this project, the name of each company, with their city and state, are listed below.

7. An on-site pre-bid conference *will* be conducted for this project.
If a pre-bid conference is scheduled, it is *mandatory* for General Contractors and optional for Subcontractors and suppliers. Contractors who arrive late or leave early for a mandatory meeting may be prohibited from participating in this meeting and bidding. *Tuesday, August 20, 2024 at 10:00 a.m.*

8. Bid Documents - full sets only - will be available on or about *Tuesday, July 30, 2024* and may be obtained *at a cost of \$200.00 non-refundable for each complete set of plans and specifications before they are shipped. No sets will be issued until payment is received. A file transfer of PDF files is also available at a non-refundable cost of \$150.00. Bid Documents are available from:*
Harriman
Attention: Mike Dixon
46 Harriman Drive
Auburn, ME 04210
mdixon@harriman.com
207-784-5100

9. Bid Documents may be examined at:

<i>AGC Maine</i> <i>188 Whitten Road</i> <i>Augusta, ME 04330</i> <i>Phone 207-622-4741</i> <i>Fax 207-622-1625</i>	<i>Construction Summary</i> <i>734 Chestnut Street</i> <i>Manchester, NH 03104</i> <i>Phone 603-627-8856</i> <i>Fax 603-627-4524</i>
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Dodge Data & Analytics
Phone 413-376-7032

SECTION 002000 - INFORMATION AVAILABLE TO BIDDERS

PART 1 GENERAL

1.1 INFORMATION FOR BIDDERS

A. Existing Conditions Documents:

1. Harriman Architects Full HazMat Survey Report
2. Mackworth Island Mansion Evaluation Report Draft
3. Young Hall_Building B_original-scans
4. Carter Hall_Building G_original-scans
5. Sanders Hall_K-Building-original-scans
6. SW Cole Geotech 24-0493 Report
7. 20240523__STI-Ortho-Survey
8. 20240523__STI-Survey
9. 20240530__STI-Fiber-Survey

END OF SECTION 000200

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April 10, 2024

Mr. William Gatchell, AIA
Harriman Architects
33 Jewell Ct. # 101
Portsmouth, NH 03801

Re: Mackworth Island, Governor Baxter School for the Deaf
Building Survey Findings
RPF File No. 240042

Dear William,

On February 5th, 2024, and subsequent visits, RPF Environmental (RPF) conducted a survey at the Mackworth Island Governor Baxter School for the Deaf located within Mackworth Island, on Andrews Avenue in Falmouth, ME. The survey was performed in the following locations as designated by you or your site representative, for accessible hazardous building material as indicated herein:

Building B, Young Hall
Building G, Carter Hall
Connector G-K Structure

Below is a summary of findings, discussion of the results and preliminary recommendations for proper management of the identified hazardous building material. Attached to this report are the survey data tables, laboratory results, survey methodologies and limitations.

This report is not intended to be used as an abatement specification or work plan. To proceed with abatement work, a work plan or project design documents must be prepared prior to abatement by a certified abatement project designer.

Summary of Findings

The Mackworth Island Governor Baxter School for the Deaf is a state-run educational campus located on Mackworth Island in Casco Bay, Maine. The island is accessed by a 1/3-mile causeway and also houses a small state park. For this survey, only Building G, Building B, and their connecting corridors to Building K were surveyed. These buildings are of typical educational and institutional-style, brick-and-mortar construction. Building G sits on a slab, one story, and has a flat membrane “over-roof.” Building B is on a slab with a walkout vestibule, is two-stories and similar or near identical in construction to Building G. The buildings are connected by a small gymnasium or auditorium, which is physically attached to building G.

The scope of the survey included accessible asbestos containing material in accordance with the initial asbestos inspection requirements prior to renovation or demolition work as stated in the State regulations and applicable federal regulations. In addition, the survey included screening for lead paint (LP), and other hazardous or regulated materials.

Asbestos

Existing survey and testing information provided by Client to RPF during this project includes a copy of the AHERA book given to RPF on site by LEA – Andy on February 5th, 2024). Based on the review of the existing survey records, the following materials are identified as ACM:

Pipe and Fitting Insulation (covered in table below)
Transite Window Transoms (covered in table below)
Textured or Sprayed On ceiling surface (covered in table below)
Vinyl Floor Coverings and Adhesives (covered in table below)

During this survey, several types of suspect asbestos containing material (ACM) were observed by RPF, including friable and nonfriable suspect material. Based on the testing performed by RPF asbestos was detected in the following materials:

HG2	12” White/Blue Floor Tile with Adhesive
HG3	Carpet Adhesive
HG6	9” Grey Floor Tile with Adhesive
HG8	Grey Window Glaze
HG10	1x1 Fixed Wall Tile (fissure & dot)
HG12	Black Sink Basin Undercoat
HG13	12” Tan/Gold Floor Tile with Black Mastic
HG14	White/Grey Window Caulk
HG18	Grey Window Glaze
HG21	12” Olive Green/White/Gold Floor Tile with Adhesive
HG24	Black Flooring Adhesive
HG25	Pipe Fitting Insulation (Building B)
HG26	Pipe Fitting Insulation (Building G)
HG29	Decorative Surfacing

Lead Paint

Based on the year of construction and extent of renovation conducted over the years, it is reasonable to assume that some lead paint (LP) is present. RPF conducted limited spot testing of paint and LP was confirmed to be present on various interior and exterior building components. The intent of the lead testing was for potential lead hazardous waste disposal screening purposes only.

Other Potentially Hazardous Building Material

Based on the RPF visual observations, potentially polychlorinated biphenyl (PCB) containing light ballasts, mercury containing switches, and fluorescent light bulbs are present through the building. In addition, other potentially hazardous or universal wastes were identified as described below.

Depending on the extent of renovation and final construction plans, proper abatement and/or management of the materials may be required in accordance with applicable State and federal regulations. Renovation and demolition plans should be reviewed by a certified industrial hygienist and project designer for possible impact issues. Based on the impact assessment and planned usage, design documents should be prepared. A management plan should also be prepared to address any asbestos or other hazardous material scheduled to remain after construction.

Discussion of Findings

Asbestos-Containing Material

Asbestos is the name for a group of naturally occurring minerals that separate into strong, fine fibers. The adverse health effects associated with asbestos exposure have been extensively studied for many years. Results of these studies and epidemiological investigations have demonstrated that inhalation of asbestos fibers may lead to an increased risk of developing one or more diseases. In all cases, extreme care must be used not to disturb asbestos-containing materials or to create fiber release episodes.

In the accessible locations surveyed, RPF identified thirty-two (32) homogeneous groups of accessible suspect asbestos containing material. Suspect materials were identified based on current industry standards, EPA, and other guideline listings of potential suspect ACM.

The following is a summary list of the suspect ACM identified and sampled during this survey:

- HG1 Covebase Adhesive
- HG2 12" White/Blue Floor Tile with Adhesive
- HG3 Carpet Adhesive
- HG4 2x2 Suspended Ceiling Tiles (solid)
- HG5 2x2 Suspended Ceiling Tiles (fissure & dot)
- HG6 9" Grey Floor Tile with Adhesive
- HG7 1x1 Fixed Ceiling Tile (big dots)
- HG8 Grey Window Glaze
- HG9 Gypsum Board Paneling
- HG10 1x1 Fixed Wall Tile (fissure & dot)
- HG11 1x1 Fixed Wall Tile (solid)
- HG12 Black Sink Basin Undercoat
- HG13 12" Tan/Gold Floor Tile with Black Mastic
- HG14 White/Grey Window Caulk
- HG15 Suspended Ceiling Tile
- HG16 Grey/Brown Floor Tile Adhesive and Grout

- HG17 Pegboard
- HG18 Grey Window Glaze
- HG19 White/Grey Sub-flooring/Leveler
- HG20 2x2 Suspended Ceiling Tile (random)
- HG21 12” Olive Green/White/Gold Floor Tile with Adhesive
- HG22 2x4 Suspended Ceiling Tile (double dot)
- HG23 Gypsum Board with Joint Compound
- HG24 Black Flooring Adhesive
- HG25 Pipe Fitting Insulation (Bldg. B)
- HG26 Pipe Fitting Insulation (Bldg. G)
- HG27 Laminate Countertop Adhesive
- HG28 Gypsum Board Wall Panels
- HG29 Decorative Surfacing
- HG30 Pipe Insulation Wrap
- HG31 2x4 Suspended Ceiling Tile (heavy dimpled)
- HG32 2x2 Suspended Ceiling Tile (fissure & dot)

A total of one-hundred seventy-six (176) samples were extracted from the different groups of suspect material in accordance with EPA sampling protocols. Of the samples collected by RPF, asbestos was detected in eighteen (18) groups of suspect ACM. The following table includes a list of ACM and accessible asbestos identified in the building or accessible areas surveyed, EPA category listings, and asbestos content. Actual laboratory results are included in Appendix A.

SUMMARY OF ACM IDENTIFIED					
Homogenous Group/Area	Building Material	Location	Approx. Quantity	EPA Category	Asbestos Results
HG3	Carpet Adhesive/Mastic	Building G – Hallway interior space only	13,400 SF	Category I Nonfriable	3.16%-6.58% Chrysotile
HG6	9” Grey Vinyl Floor Tile with Mastic	Building G, Interior, Classroom Bathrooms, Closet and Kitchen Spaces		Category I Nonfriable	4.34%-7.59% Chrysotile
HG13, HG21 and HG2D	12” Floor Tile with Mixed Mastic	Building G – Throughout interior classroom spaces A-D, 1-6, Teacher Lounge and “Office”		Category I Nonfriable	0.12%-6.2% Chrysotile
HG8	Window Glaze, Grey	Building G & B - Aluminum Frame Windows Throughout all Spaces, Interior	2600 LF	Non-ACM	0.09%-0.33% Chrysotile
HG10	1’ x 1’ Fixed Wall Tile – Fissure & Dot	Building G, interior - Acoustic Room	200 SF	Friable	3% Amosite
HG12	Black Sink Basin Undercoat	Building G, Acoustic Room	8 SF	Category II Nonfriable	1.91% Chrysotile

SUMMARY OF ACM IDENTIFIED					
Homogenous Group/Area	Building Material	Location	Approx. Quantity	EPA Category	Asbestos Results
HG14	Window Caulk, Grey	Building B & Building G, interior, at wire mesh windows in steel frames	158 LF	Category I Nonfriable	2.62%-2.72% Chrysotile
HG18	Window Glaze, White and Grey	Corridor from Building G to K, Upper and Lower, Windows	800 LF	Category II Nonfriable	0.17%-2.45% Chrysotile
HG24	Black Flooring Adhesive, "Mastic"	Building B interior, Throughout 2 nd floor, residual locations 1 st floor	6920 SF	Category I Nonfriable	3.68%-5.52% Chrysotile
HG25	Mudded Fitting Insulation	Building B, 1 st Floor and 2 nd Floor hidden in wall cavities at plumbing walls. 1 st floor – loose Pipe Insulation and fittings from Corridor, in storage	90 EA	Friable	20% Chrysotile
HG26	Mudded Fitting Insulation	Building G, including Auditorium, South Half of Building – HVAC/Mech rooms, plumbing walls, horizontal chase above hallway and at classroom heat radiators - throughout	155 EA	Friable	3% Chrysotile
HG29	Decorative Surfacing	Building B, at entry overhang and throughout the 2 nd floor	5300 SF	Friable	3% Chrysotile, 2% Amosite
--	Transite Electric Panel Board - Black	Building G, interior, Electrical Closet	8 SF	Category I Nonfriable	Previously Identified
--	Transite Paneling - Grey	North Exterior of Building B Transoms, Building G Southwest Exterior, Door Transoms	464 SF	Category I Nonfriable	Previously Identified

The ACM identified during this survey consists of friable and nonfriable material. The nonfriable ACM was observed to be in relatively good condition within Building G, and left undisturbed and properly managed, is unlikely to cause any major fiber release episodes. The nonfriable ACM Floor Tile in building B was found to be in poor condition, with loose and damaged tiles throughout the 2nd floor. The friable ACM of building B was observed to be mostly in poor condition. This includes the spray-on decorative/acoustical surfacing, which is water damaged and peeling throughout and damaged ACM pipe insulation fittings within wall cavities of Building B, which were observed to be in poor condition. Additionally, the sprinkler riser room, mechanical room behind the stage in the auditorium and some radiator locations of Building G, are showing similar damage, with cut, exposed ends, several areas of damaged outer coverings and debris present on the floor surface. Lastly, pipe insulation and fittings, reportedly removed from the adjacent Corridor to building K, are being stored in the "Day Room" on the 1st floor of building B. This ACM was observed to be within cut runs of fiberglass insulation, leaving the ACM fittings without

obvious damage. Care should be used to prevent further damage and to ensure that dust is not disturbed and made airborne in areas with damaged friable ACM in all areas.

Exterior building components, with the exception of accessible window caulk, were not included in the scope of the ACM inspection. The scope of this inspection did not include roofing.

Suspect materials encountered at the site subsequent to this survey, which are not included on the enclosed listings of suspect material sampled, should be assumed to be ACM until proper testing proves otherwise (for example prior to any disturbance due to maintenance, renovation, or demolition activity). Please notify RPF in this event to arrange for proper testing and assessments. Please reference the attached methodology and limitations.

The purpose of this survey included asbestos inspections to accommodate renovation or demolition activity. The RPF scope of work did not include an inspection for EPA AHERA compliance pursuant to 40 CFR Part 763.

Lead Paint Screening

Based on the type and age of building construction, it is reasonable to assume that various painted surfaces contain some lead. It is common in buildings such as this and that have had various renovation and upgrades to have both lead containing paint and non-lead containing paint. Lead is a toxic metal that was used for many years in paint and other products found in and around buildings and homes. Exposure to lead may cause a range of health effects, from behavioral problems and learning disabilities, to seizures and death. Children six years old and under are most at risk; however, adults are also susceptible to the effects of lead over exposure.

For the purposes of this survey, RPF performed screening for lead in paint using a SciAps X-Ray Fluorescence (XRF) Meter of various interior and exterior painted surfaces. The results of this lead screening are included in Appendix B and summarized below:

Building G	0.2 to 1.5 mg/cm ²
Building B	0.1 to 5.1 mg/cm ²
Connector G-K Structure	0.2 to 1.0 mg/cm ²

Based on this limited testing, it should be assumed that other painted surfaces at the site may also contain lead. Current State of Maine Lead Poisoning regulations consider any paint that contains greater than 1.0 mg/cm² to be lead-based paint. However, the intent of this survey was for construction purposes only and preliminary demolition waste stream implications, not for compliance with State, HUD, or any regulatory abatement order.

Any surfaces with lead present should be managed in accordance with current rules and guidelines, including but not limited to OSHA worker safety rules and State and EPA waste handling and disposal regulations. U.S. Occupational Safety and Health Administration (OSHA) construction rules do not specify any "safe" or acceptable levels of lead within paint for the purposes of occupational exposures. Therefore, construction work involving paint found to contain lead must be completed in accordance with OSHA regulations, not limited to the lead standard, 29 CFR

1926.62. Contractors completing work in areas found to contain lead, or where it is reasonable to assume lead may be present, should be notified of the presence (and potential presence) of lead and proper work protocols should be used.

As lead was found to be present in the screening, proper waste testing with TCLP extraction for lead and potentially other toxic materials should also be completed prior to disposal of any waste generated in accordance with current EPA requirements. Often times it is recommended that pre-demolition TCLP testing be completed such that waste can be segregated as required during demolition activity. Construction/demolition waste that is found to contain lead greater than or equal to 5.0 milligrams per liter (mg/L) by TCLP analysis must be handled and treated as hazardous waste.

Please also note that construction and renovation work involving lead paint in housing and child-occupied facilities built before 1978 is also regulated under the EPA Renovation, Repair, and Painting (RRP) rule. Any contractors conducting such work must be properly certified and must use lead safe work methods pursuant to the EPA RRP rule. In addition, pursuant to Title X requirements landlords and sellers are required to disclose the results of lead inspections to tenants and purchasers, and to provide the warning notice and pamphlets in accordance with Title X and State requirements.

Polychlorinated Biphenyls

In support of various renovation activities scheduled to take place within the building, RPF conducted sampling of various suspect materials for polychlorinated biphenyls (PCBs).

On March 4, 2024, RPF collected thirteen bulk samples from various areas and surfaces within the project scope of work areas. The samples were submitted for analysis for PCB content to Eastern Analytical Services by EPA Method 8082A with Soxhlet Extraction (as determined by the laboratory). The results of the analysis are summarized below with actual laboratory results included in Appendix C.

SUMMARY OF PCB RESULTS		
Sample Number	Sample Description/Location	Total PCB Result (ppm)
PCB1	Window Glaze, Dark Grey, Upper Corridor to Building K, Exterior	<0.9
PCB2	Window Glaze, White, Lower Corridor to Building K, Interior	6.6
PCB3	Window Caulk, White, Upper Corridor to Building K, at sills, Exterior	<0.8
PCB4	Flooring Adhesive (Mastic), Building B, Interior, 2 nd Floor under 9” ACM Vinyl Tiles	15
PCB5	Window Glaze, White/Grey, Building B, Aluminum Framed Windows	2

SUMMARY OF PCB RESULTS		
Sample Number	Sample Description/Location	Total PCB Result (ppm)
PCB6	Window Caulk, Black, Building B, 2 nd floor, East Stairwell - present at all Interior wire mesh windows within steel frames	<1
PCB7	Window Caulk, White, Building B, 2 nd floor, Exterior – Found on Aluminum Framed Windows	7.5
PCB8	Window Caulk, Grey, Building B, 1st floor, West Stairwell – also present at Interior wire mesh windows within steel frames of Building G	<0.9
PCB9	Building Seam Caulk, White, Building B, Exterior, at Southwest-most entry door, Vertical Seam	<1
PCB10	Building Seam Caulk, Tan, Building G, Exterior, at Courtyard corner, Horizontal Seam above windows.	<1
PCB11	Roof Tar/Flashing Adhesive, Black, Building G, Exterior, SE corner, at Courtyard	<1
PCB12	Window and Door Opening Caulk, White, Building B, Exterior, North Side, at steel top plates above windows, horizontal	<1
PCB13	Door Frame Caulk, Grey, Building B, Exterior, Ground level/walkout double doors, Southeast corner of the Building.	<0.9

The US EPA has determined that the use of manufactured PCB products containing PCBs at greater than or equal to 50 ppm is not authorized under the Toxic Substances Control Act (TSCA) and 40 CFR P761. These results show that the total PCB concentration in each sample to be below the US EPA threshold of 50 ppm.

Other Universal/Regulated Wastes

In the course of this survey RPF completed inventories of suspect other potentially hazardous building materials. The following table includes a listing of the inventory with additional information included in the following paragraphs:

Description	Quantity
Fluorescent Bulbs – 2’, 4’ and 8’	375
Compact Fluorescent & Incandescent Bulbs	110
Ballasts	185

Description	Quantity
Smoke Detectors	48
Emergency Lighting	38
Exit Signs	28
Fire Alarms	29

Fluorescent Bulbs & Mercury Switches

Fluorescent lamps contain a small quantity of mercury that may pose a hazard to human health or the environment if the materials are not managed properly. These bulbs, along with mercury switches (thermostats) should be segregated and properly disposed of during demolition.

Light Ballasts

PCBs have been shown to cause chronic toxic effects and are a human carcinogen. PCBs are toxic according to the U.S. EPA and are a regulated material. The two primary federal laws that affect the handling of PCBs are the Toxic Substance Control Act and the Superfund Law (CERCLA). Other regulations include various State requirements, Department of Transportation, U.S. OSHA, and the Resource Conservation and Recovery Act. The regulations establish various requirements for the removal, handling, storage, and disposal of PCBs.

With regard to light ballasts, approximately half were manufactured prior to 1979 and nearly all pre-1979 ballasts contain PCBs. Ballasts manufactured after July 1, 1978, and that do not contain PCBs are required to be clearly marked “No PCBs”. Please note that it is possible that post 1979 ballasts may contain some PCBs in the capacitor oils and more information should be requested if needed for applicable State and federal agencies. PCBs may also be present in common household appliances with small capacitors and as dielectric fluids; other electric equipment such as transformers, switches, and voltage regulators. Documentation of current conditions and in-depth hazard assessments, and laboratory testing for these other PCB usages, is beyond the scope of work for this initial survey.

During demolition, additional inspections should be made to identify PCB versus non-PCB containing ballasts. Ballasts should be checked for a “PCB-Free” or “No PCBs” label prior to disposal. PCB and non-PCB ballasts should be segregated and packaged for waste disposal in accordance with State and federal requirements. There is a substantial cost difference for disposal of PCB ballasts versus non-PCB ballasts.

Batteries

Many batteries should not be disposed of through typical garbage or recycling methods. Many nickel-cadmium (Ni-Cd) batteries and small sealed lead batteries must be segregated and properly recycled or disposed of in accordance with state and federal regulations.

Other Universal Wastes

Many other common items can contain regulated or otherwise hazardous materials that require special consideration, handling, and disposal during demolition of a building. Many of these wastes are defined as “Universal Waste” and may require special handling, packaging, and disposal. During project design, a building or site-specific work plan should be developed to document and detail the specific storage, labeling, packaging, and disposal requirements based on the specific items and renovation or demolition planned. Such delineation is beyond the scope of this survey.

Visual Observations for Water Damage and Suspect Fungal Growth

For accessible areas, visual observations for overt signs of water damage and mold growth were completed by RPF during the survey. Water damaged porous building materials which have at any time been wet for 24 to 72 hours should be removed to prevent fungal growth. After addressing and eliminating the source of moisture, materials with water damage/fungal growth should be removed by a qualified professional.

A summary of the visual observations regarding water damage or suspect fungal growth throughout the areas of concern are as follows:

Location	Description
Building G, Northwest corner	Water damage, snow/ice melt seeping from roof above
Building G, Mechanical Spaces	Visual water staining on some Pipe Insulation runs. More significant damage in occasional, localized areas.
Building G, North Exterior, Main Entrance Overhang	Water damage to masonry in corner where overhang meets building
Building G, Above Bathroom spaces and some kitchen spaces	Water damaged ceiling tiles and similar, in most areas above plumbing walls
Building G – At alcove style exit doors on North half of building	Water damage consistent in these areas, to include the small server room adjacent to the main entrance
Corridor to Building K, Upper and Lower	Water and other damage throughout
Corridor from Bldg. G to Bldg. B	The floor is rotted, patched with plywood. Door frame bent.
Building B, 2nd Floor,	Private bathroom, water intrusion above shower and the tub and bathroom space below
Building B, 1st Floor & 2nd Floor,	Shower Rooms, water intrusion above shower fixtures
Building B, 1st/2nd Floor, Stairwells	Severe damage has allowed large water intrusions which have spread to the 1 st floor and Ground level of the structure.

Location	Description
Building B – All Areas	Building B has water damage throughout the 2 nd floor, mostly water damage only on the 1 st floor and within the small walk-out basement portion

Conclusions

Based on the survey findings, the building was found to contain ACM, LP, and other hazardous building material. Additional testing for PCBs within suspected materials located, found that all testing results are shown to be well below the US EPA Manufactured PCB Product Threshold of 50 ppm.

In accordance with current regulatory requirements, ACM that may be impacted or disturbed (such that asbestos fiber release occurs) by renovation, demolition or other such activity must be removed by qualified, licensed firms. Asbestos abatement work must be designed (abatement specifications or work plan prepared) by an accredited and/or licensed asbestos designer. Although regulations for removal of nonfriable ACM are somewhat less stringent than the requirements for friable ACM, it should be noted that nonfriable ACM that is subjected to grinding, abrasion, and other forces, could be rendered friable. In this event, the nonfriable ACM would be re-categorized friable ACM. ACM that will not be impacted by renovation or demolition activity may be left in place if managed properly and if the materials are maintained in good condition. Notification to State or US EPA is required 10-days prior to the start of abatement work and demolition.

ACM to remain in the building must be included in the school's Management Plan.

An accredited Management Planner should prepare the O&M Program in accordance with the guidelines set forth in 40 CFR Part 763 (AHERA).

Work impacting LP, fluorescent light bulbs, mercury (and potential PCB ballasts) must be performed in accordance with current State and federal standards, including but not limited safe work practices, engineering controls, proper waste packaging, and proper disposal. Work involving LP may require notification of tenants, if rented or leased space, prior to start of work.

Sufficiently in advance of the start of renovation and/or remediation work, abatement project design should be completed. As part of the initial design steps any planned renovation and demolition activity should be reviewed for potential impact on ACM, LP, and other hazardous materials. Only qualified, trained, and licensed firms, as applicable, should be engaged to complete asbestos abatement, lead paint removal, or other activities that impact hazardous or regulated materials.

All employees and contractors that may access or otherwise disturb areas with ACM, LP or other hazardous materials should be notified of their presence, and the need to use caution when proceeding with work. Appropriate notifications, labeling and other hazard communications should be completed to all employees, contractors, and others in accordance with US OSHA regulations and other applicable requirements.

With the exception of the specific testing and analysis detailed herein, no other samples of materials, oil, water, ground water, air, or other suspect hazardous materials were collected in the course of this inspection that supports or denies these conclusions. No additional services beyond those explicitly stated herein were performed and none should be inferred or implied. The summary and conclusions are based on reasonably ascertainable information as described in this report. RPF Environmental makes no guarantees, warranties, or references regarding this property or the condition of the property after the period of this report.

If you have any questions at this time, or if you would like to discuss the remediation process, please call our office.

Sincerely,
RPF ENVIRONMENTAL



Nicholas Jay Howard
EH&S Consultant
Licensed Asbestos Inspector

Enclosures:

- Appendix A: Asbestos Analysis Results
- Appendix B: Lead Screening Results
- Appendix C: PCB Analysis Results
- Appendix D: Photographs
- Appendix E: Sampling Map
- Appendix F: Licenses and Certifications
- Appendix G: Summary of Methodology and Limitations

240042 030624

APPENDIX A



Bulk Asbestos Analysis

By Polarized Light Microscopy
 EPA Method: 600/R-93/116 and
 40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
 320 1st NH Turnpike
 Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG1A	Cove base adhesive, Brown/Tan, Building G, classroom 1	Not Analyzed			
10043192_0001	gravimetric reduction				
HG1B	Cove base adhesive, Brown/Tan, Building G, office by acoustic room	Not Analyzed			
10043192_0002	gravimetric reduction				
HG1C	Cove base adhesive, Brown/Tan, Building G, hallway	Not Analyzed			
10043192_0003	gravimetric reduction				
HG1D	Cove base adhesive, Brown/Tan, Building G, Bus Office	Not Analyzed			
10043192_0004	gravimetric reduction				
HG1E	Cove base adhesive, Brown/Tan, Corridor to K, upper	Not Analyzed			
10043192_0005	gravimetric reduction				
HG1F	Cove base adhesive, Brown/Tan, Building B, 1st floor	Not Analyzed			
10043192_0006	gravimetric reduction				
HG1G	Cove base adhesive, Brown/Tan, Building B, 2nd floor	Not Analyzed			
10043192_0007	gravimetric reduction				
HG2A - A	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	Not Analyzed			
10043192_0008	tile - gravimetric reduction				

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Eloisa Blake (122)

Analyst

Approved Signatory



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Lab Sample ID	Lab Notes				Treatment
HG2A - B	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	Not Analyzed			
10043192_0106	adhesive - gravimetric reduction				
HG2B - A	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	Not Analyzed			
10043192_0009	tile - gravimetric reduction				
HG2B - B	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	Not Analyzed			
10043192_0107	adhesive - gravimetric reduction				
HG2C - A	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, adjacent room	Not Analyzed			
10043192_0010	tile - gravimetric reduction				
HG2C - B	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, adjacent room	Not Analyzed			
10043192_0108	adhesive - gravimetric reduction				
HG2D - A	12" Floor Tile with Adhesive, white, Building G, Office Space	Not Analyzed			
10043192_0011	tile - gravimetric reduction				
HG2D - B	12" Floor Tile with Adhesive, white, Building G, Office Space	Not Analyzed			
10043192_0109	adhesive - gravimetric reduction				
HG3A	Carpet Adhesive, Tan/Black, Building G, Classroom 2	Not Analyzed			
10043192_0012	gravimetric reduction				

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Lab Sample ID	Lab Notes				Treatment
HG3B	Carpet Adhesive, Tan/Black, Building G, Classroom 1	Not Analyzed			
10043192_0013	gravimetric reduction				
HG3C	Carpet Adhesive, Tan/Black, Building G, hallway, centered	Not Analyzed			
10043192_0014	gravimetric reduction				
HG3D	Carpet Adhesive, Tan/Black, Building G, hallway, by Vault	Not Analyzed			
10043192_0015	gravimetric reduction				
HG4A	Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0016					Teased
HG4B	Suspended ceiling tile, 2'x2', solid, white, building G, Audio Test Rm. Office	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0017					Teased
HG4C	Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1 Kitchen	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0018					Teased
HG5A	Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0019					Teased
HG5B	Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0020					Teased

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG5C	Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom D	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0021					Teased
HG6A - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom	Not Analyzed			
10043192_0022	tile - gravimetric reduction				
HG6A - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom	Not Analyzed			
10043192_0110	adhesive - gravimetric reduction				
HG6B - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom threshold	Not Analyzed			
10043192_0023	tile - gravimetric reduction				
HG6B - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom threshold	Not Analyzed			
10043192_0111	adhesive - gravimetric reduction				
HG6C - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	Not Analyzed			
10043192_0024	tile - gravimetric reduction				
HG6C - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	Not Analyzed			
10043192_0112	adhesive - gravimetric reduction				
HG6D - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	Not Analyzed			
10043192_0025	tile - gravimetric reduction				

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG6D - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	Not Analyzed			
10043192_0122	adhesive - gravimetric reduction				
HG7A	Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0026					Teased
HG7B	Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 3	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0027					Teased
HG7C	Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0028					Teased
HG8A	Window glaze, grey, Building G, Classroom 1	Not Analyzed			
10043192_0029	gravimetric reduction				
HG8B	Window glaze, grey, Building G, Classroom 2	Not Analyzed			
10043192_0030	gravimetric reduction				
HG8C	Window glaze, grey, Building G, Teachers Lounge	Not Analyzed			
10043192_0031	gravimetric reduction				
HG9A	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0032	gypsum board & paint only				Dissolved

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG9B	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0033	gypsum board & paint only				Dissolved
HG9C	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0034	gypsum board & paint only				Dissolved
HG9D	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0035	gypsum board & paint only				Dissolved
HG9E	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0036	gypsum board & paint only				Dissolved
HG9F	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0037	gypsum board & paint only				Dissolved
HG9G	Gypsum board paneling, building G, faux wood	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0038	gypsum board & paint only				Dissolved
HG10A	Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	3% Amosite	70% Fiber Glass 20% Cellulose	7% Other	White Fibrous Heterogeneous
10043192_0039					Teased, Ashed
HG10B	Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	Not Analyzed			
10043192_0040					

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Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG10C	Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	Not Analyzed			
10043192_0041					
HG11A	Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0042					Teased
HG11B	Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0043					Teased
HG11C	Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0044					Teased
HG12	Sink Base undercoating, black, Building G, Acoustic Room	Not Analyzed			
10043192_0045	gravimetric reduction				
HG13A - A	12" Floor tile with adhesive, tan with gold, Building G,	5% Chrysotile		95% Other	Beige, Tan Non-Fibrous Heterogeneous
10043192_0046	tile				Dissolved
HG13A - B	12" Floor tile with adhesive, tan with gold, Building G,	5% Chrysotile		95% Other	Black Non-Fibrous Homogeneous
10043192_0113	adhesive				Dissolved
HG13B - A	12" Floor tile with adhesive, tan with gold, Building G,	Not Analyzed			
10043192_0047	tile				

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Lab Sample ID	Lab Notes				Treatment
HG13B - B	12" Floor tile with adhesive, tan with gold, Building G,	Not Analyzed			
10043192_0114	adhesive				
HG13C - A	12" Floor tile with adhesive, tan with gold, Building G,	Not Analyzed			
10043192_0048	tile				
HG13C - B	12" Floor tile with adhesive, tan with gold, Building G,	Not Analyzed			
10043192_0115	adhesive				
HG14A	Window caulk, white/grey, Building G, West entry, solid pane window	Not Analyzed			
10043192_0049	gravimetric reduction				
HG14B	Window caulk, white/grey, Building G, West entry, solid pane window	Not Analyzed			
10043192_0050	gravimetric reduction				
HG14C	Window caulk, white/grey, Building G, West entry, solid pane window	Not Analyzed			
10043192_0051	gravimetric reduction				
HG15	Suspended ceiling tile, 6" wide patch, random patter, Building G, NW-most room	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0052					Teased
HG16A - A	Floor tile adhesive and grout, grey/brown, Building G, SW-most bathroom	None Detected		100% Other	Gray Non-Fibrous Heterogeneous
10043192_0053	grout				Dissolved

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Lab Sample ID	Lab Notes				Treatment
HG16A - B	Floor tile adhesive and grout, grey/brown, Building G, SW-most bathroom	Not Analyzed			
10043192_0116	adhesive - gravimetric reduction				
HG16B - A	Floor tile adhesive and grout, grey/brown, Building G, common men's bathroom	None Detected		100% Other	Gray, Tan Non-Fibrous Heterogeneous
10043192_0054	grout				Dissolved
HG16B - B	Floor tile adhesive and grout, grey/brown, Building G, common men's bathroom	Not Analyzed			
10043192_0117	adhesive - gravimetric reduction				
HG16C - A	Floor tile adhesive and grout, grey/brown, Building G, common women's bathroom	None Detected		100% Other	Gray Non-Fibrous Heterogeneous
10043192_0055	grout				Dissolved
HG16C - B	Floor tile adhesive and grout, grey/brown, Building G, common women's bathroom	Not Analyzed			
10043192_0118	adhesive - gravimetric reduction				
HG17A	Pegboard, brown, Building G, Classroom West of courtyard	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10043192_0056					Teased
HG17B	Pegboard, brown, Building G, Classroom West of courtyard	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10043192_0057					Teased
HG17C	Pegboard, brown, Building G, Classroom West of courtyard	None Detected	98% Cellulose	2% Other	Brown Fibrous Heterogeneous
10043192_0058					Teased

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Eloisa Blake (122)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG18A	Window Glaze, grey, Corridor from G to K, lower corridor, near building G	Not Analyzed			
10043192_0059	gravimetric reduction				
HG18B	Window Glaze, grey, Corridor from G to K, lower corridor, halfway	Not Analyzed			
10043192_0060	gravimetric reduction				
HG18C	Window Glaze, grey, Corridor from G to K, lower corridor, 3/4 way to building K	Not Analyzed			
10043192_0061	gravimetric reduction				
HG18D	Window Glaze, grey, Corridor from G to K, lower corridor, at building K	Not Analyzed			
10043192_0062	gravimetric reduction				
HG18E	Window Glaze, grey, Corridor from G to K, upper corridor, near building K	Not Analyzed			
10043192_0063	gravimetric reduction				
HG19A	Sub-flooring/leveler, white/grey, Building G, hallway, at West end	None Detected		100% Other	Gray, White Non-Fibrous Heterogeneous
10043192_0064					Dissolved
HG19B	Sub-flooring/leveler, white/grey, Building G, hallway	None Detected		100% Other	Gray, White Non-Fibrous Heterogeneous
10043192_0065					Dissolved
HG19C	Sub-flooring/leveler, white/grey, Building G, hallway, at fire door to West foyer	None Detected		100% Other	Gray, White Non-Fibrous Heterogeneous
10043192_0066					Dissolved

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Eloisa Blake (122)

Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
 EPA Method: 600/R-93/116 and
 40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
 320 1st NH Turnpike
 Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG20A	Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0067					Teased
HG20B	Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0068					Teased
HG20C	Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0069					Teased
HG21A - A	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0070	tile - gravimetric reduction				
HG21A - B	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0119	adhesive - gravimetric reduction				
HG21B - A	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0071	tile - gravimetric reduction				
HG21B - B	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0120	adhesive - gravimetric reduction				
HG21C - A	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0072	tile - gravimetric reduction				

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Eloisa Blake (122)

Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
 EPA Method: 600/R-93/116 and
 40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
 320 1st NH Turnpike
 Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG21C - B	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	Not Analyzed			
10043192_0121	adhesive - gravimetric reduction				
HG22A	Suspended ceiling tile, 2'x4', double dot, Building G, hallway	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0073					Teased
HG22B	Suspended ceiling tile, 2'x4', double dot, Building G, hallway	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray Fibrous Heterogeneous
10043192_0074					Teased
HG22C	Suspended ceiling tile, 2'x4', double dot, Building G, hallway	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0075					Teased
HG23A	Gypsum board with joint compound, upper corridor to Bldg. K, near top of corridor	None Detected	10% Cellulose	90% Other	White Non-Fibrous Heterogeneous
10043192_0076	gypsum board: none detected, joint compound: none detected				Dissolved
HG23B	Gypsum board with joint compound, Building B, 1st Floor, West End	None Detected	10% Cellulose	90% Other	White Non-Fibrous Heterogeneous
10043192_0077	gypsum board & paint only				Dissolved
HG23C	Gypsum board with joint compound, Building B, 1st Floor, West End	None Detected	10% Cellulose	90% Other	White Non-Fibrous Heterogeneous
10043192_0078	gypsum board & paint only				Dissolved
HG24A	Flooring adhesive, black, Building B, 1st floor, kitchen	Not Analyzed			
10043192_0079	gravimetric reduction				

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Eloisa Blake (122)

Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG24B	Flooring adhesive, black, Building B, 2nd floor, SW-Most room, under carpet	Not Analyzed			
10043192_0080	gravimetric reduction				
HG24C	Flooring adhesive, black, Building B, 2nd floor, kitchen, under carpet on tile	Not Analyzed			
10043192_0081	gravimetric reduction				
HG25A	Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage	20% Chrysotile	30% Fiber Glass	50% Other	Gray, White Fibrous Heterogeneous
10043192_0082					Teased, Dissolved
HG25B	Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage	Not Analyzed			
10043192_0083					
HG25C	Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage	Not Analyzed			
10043192_0084					
HG26A	Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage	3% Chrysotile	30% Fiber Glass	67% Other	Gray, White Fibrous Heterogeneous
10043192_0085					Teased, Dissolved
HG26B	Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage	Not Analyzed			
10043192_0086					
HG26C	Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage	Not Analyzed			
10043192_0087					

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Analyst

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG27A	Laminate Countertop adhesive, tan, Building B, 1st Floor	Not Analyzed			
10043192_0088	gravimetric reduction				
HG27B	Laminate Countertop adhesive, tan, Building B, 1st Floor	Not Analyzed			
10043192_0089	gravimetric reduction				
HG27C	Laminate Countertop adhesive, tan, Building B, 1st Floor	Not Analyzed			
10043192_0090	gravimetric reduction				
HG28A	Gypsum Wall board wall panels, Building G, 1st floor, office area	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0091					Dissolved
HG28B	Gypsum Wall board wall panels, Building G, 1st floor, office with tan paint on panels	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0092					Dissolved
HG28C	Gypsum Wall board wall panels, Building G, 1st floor, West end	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0093					Dissolved
HG28D	Gypsum Wall board wall panels, Building G, 1st floor, NW-most room	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0094					Dissolved
HG28E	Gypsum Wall board wall panels, Building G, 1st floor, SW-most room	None Detected	10% Cellulose	90% Other	Gray Non-Fibrous Heterogeneous
10043192_0095					Dissolved

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Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG29A	Decorative surfacing, white, Building B, entry from Bldg. G, stairwell	3% Chrysotile 2% Amosite		95% Other	White Non-Fibrous Heterogeneous
10043192_0096					Dissolved
HG29B	Decorative surfacing, white, Building B, entry from Bldg. G, stairwell	Not Analyzed			
10043192_0097					
HG29C	Decorative surfacing, white, Building B, entry from Bldg. G, stairwell	Not Analyzed			
10043192_0098					
HG30A	Pipe insulation wrap, white, Building G, classroom # 6	None Detected	75% Cellulose	25% Other	White Fibrous Heterogeneous
10043192_0099					Dissolved, Teased
HG30B	Pipe insulation wrap, white, Building G, above ceiling in attic crawl space	None Detected	75% Cellulose	25% Other	White Fibrous Heterogeneous
10043192_0100					Teased, Dissolved
HG30C	Pipe insulation wrap, white, Building G, Mechanical room	None Detected	98% Cellulose	2% Other	White Fibrous Heterogeneous
10043192_0101					Teased, Dissolved
HG31	Suspended ceiling tile, 2'x4', heavy dimpled, patch, Building G, server closet	None Detected	40% Cellulose 40% Fiber Glass	20% Other	Gray, White Fibrous Heterogeneous
10043192_0102					Teased
HG32A	Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0103					Teased

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Eloisa Blake (122)

Analyst

Approved Signatory



Bulk Asbestos Analysis

By Polarized Light Microscopy
EPA Method: 600/R-93/116 and
40 CFR, Part 763, Subpart E, App.E



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PLM

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
HG32B	Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0104					Teased
HG32C	Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby	None Detected	40% Fiber Glass 40% Cellulose	20% Other	Gray Fibrous Heterogeneous
10043192_0105					Teased

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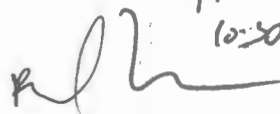
10043192

Client: RPF Environmental
Contact: Nick Howard
Address: 320 1st NH Turnpike, Northwood, NH 03261
Phone: (603) 942-5432
Fax: (603) 942-5300
Email: Nick@rpf.com
Project: 240042 Hamman
Client Request: Stop at First Positive
Start Date: 02.09.24
Agency: PLM EPA 600
Hours: 72 Hours

Instructions:
 Use Column "B" for your contact info.
 To See an Example Click the bottom Example Tab.
 Enter samples between "<<" and ">>"
 Begin Samples with a "<<" above the first sample
 and end with a ">>" below the last sample.
 Only Enter your data on the first sheet "Sheet1"
 Note: Data 1 and Data 2 are optional
 fields that do not show up on the official
 report, however they will be included
 in the electronic data returned to you
 to include your own version of the report data.

**Scientific Analytical
 Institute, Inc.**
 3423 S. Pomona Dr.
 Greensboro, NC 27407
 Phone 336.292.2888
 Fax 336.292.2888
 Email lab@saiweb.com

<<			
HG1A	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, classroom 1	NO SFP
HG1B	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, office by acoustic room	NO SFP
HG1C	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, hallway	NO SFP
HG1D	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, Bus Office	NO SFP
HG1E	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Corridor to K, upper	NO SFP
HG1F	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building B, 1st floor	NO SFP
HG1G	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building B, 2nd floor	NO SFP
HG2A	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	
HG2B	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	
HG2C	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, adjacent room	
HG2D	Add Grav Prep Analysis		
HG3A	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, Classroom 2	NO SFP
HG3B	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, Classroom 1	NO SFP
HG3C	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, hallway, centered	NO SFP
HG3D	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, hallway, by Vault	NO SFP
HG4A		Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1	
HG4B		Suspended ceiling tile, 2'x2', solid, white, building G, Audio Test Rm. Office	
HG4C		Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1 Kitchen	
HG5A		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	
HG5B		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	
HG5C		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom D	
HG6A	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom	
HG6B	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom threshold	
HG6C	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	
HG6D	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	under 12" white FT
HG7A		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	
HG7B		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 3	
HG7C		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	
HG8A	Add Grav Prep Analysis	Window glaze, grey, Building G, Classroom 1	
HG8B	Add Grav Prep Analysis	Window glaze, grey, Building G, Classroom 2	
HG8C	Add Grav Prep Analysis	Window glaze, grey, Building G, Teachers Lounge	
HG9A		Gypsum board with joint compound, building G,	
HG9B		Gypsum board with joint compound, building G,	
HG9C		Gypsum board with joint compound, building G,	
HG9D		Gypsum board with joint compound, building G,	
HG9E		Gypsum board with joint compound, building G,	
HG9F		Gypsum board with joint compound, building G,	
HG9G		Gypsum board with joint compound, building G,	
HG10A		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG10B		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG10C		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG11A		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG11B		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG11C		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG12	Add Grav Prep Analysis	Sink Base undercoating, black, Building G, Acoustic Room	Single Sink
HG13A		12" Floor tile with adhesive, tan with gold, Building G,	
HG13B		12" Floor tile with adhesive, tan with gold, Building G,	
HG13C		12" Floor tile with adhesive, tan with gold, Building G,	
HG14A	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG14B	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG14C	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG15		Suspended ceiling tile, 8" wide patch, random patter, Building G, NW-most room	Patch/Repair
HG16A	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, SW-most bathroom	Do Not analyze tiles
HG16B	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, common men's bathroom	Do Not analyze tiles
HG16C	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, common women's bathroom	Do Not analyze tiles
HG17A		Pegboard, brown, Building G, Classroom West of courtyard	
HG17B		Pegboard, brown, Building G, Classroom West of courtyard	
HG17C		Pegboard, brown, Building G, Classroom West of courtyard	
HG18A	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, near building G	
HG18B	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, hallway	
HG18C	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, 3/4 way to building K	
HG18D	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, at building K	
HG18E	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, upper corridor, near building K	
HG19A		Sub-flooring/leveler, white/grey, Building G, hallway, at West end	
HG19B		Sub-flooring/leveler, white/grey, Building G, hallway	
HG19C		Sub-flooring/leveler, white/grey, Building G, hallway, at fire door to West foyer	
HG20A		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG20B		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG20C		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG21A	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North	
HG21B	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North	
HG21C	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	
HG22A		Suspended ceiling tile, 2'x4', double dot, Building G, hallway	

2/12
 10:30


Accepted

Rejected

10043192

HG22B
HG22C
HG23A
HG23B
HG23C
HG24A
HG24B
HG24C
HG25A
HG25B
HG25C
HG26A
HG26B
HG26C
HG27A
HG27B
HG27C
HG28A
HG28B
HG28C
HG28D
HG28E
HG29A
HG29B
HG29C
HG30A
HG30B
HG30C
HG31
HG32A
HG32B
HG32C
>>

Add Grav Prep Analysis
Add Grav Prep Analysis
Add Grav Prep Analysis

Add Grav Prep Analysis
Add Grav Prep Analysis
Add Grav Prep Analysis

Suspended ceiling tile, 2'x4', double dot, Building G, hallway
Suspended ceiling tile, 2'x4', double dot, Building G, hallway
Gypsum board with joint compound, upper corridor to Bldg. K, near top of corridor
Gypsum board with joint compound, Building B, 1st Floor, West End
Gypsum board with joint compound, Building B, 1st Floor, West End
Flooring adhesive, black, Building B, 1st floor, kitchen
Flooring adhesive, black, Building B, 2nd floor, SW-Most room, under carpet
Flooring adhesive, black, Building B, 2nd floor, kitchen, under carpet on tile
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Laminate Countertop adhesive, tan, Building B, 1st Floor
Laminate Countertop adhesive, tan, Building B, 1st Floor
Laminate Countertop adhesive, tan, Building B, 1st Floor
Gypsum Wall board wall panels, Building G, 1st floor, office area
Gypsum Wall board wall panels, Building G, 1st floor, office with tan paint on panels
Gypsum Wall board wall panels, Building G, 1st floor, West end
Gypsum Wall board wall panels, Building G, 1st floor, NW-most room
Gypsum Wall board wall panels, Building G, 1st floor, SW-most room
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Pipe insulation wrap, white, Building G, classroom # 6
Pipe insulation wrap, white, Building G, above ceiling in attic crawl space
Pipe insulation wrap, white, Building G, Mechanical room
Suspended ceiling tile, 2'x4', heavy dimpled, patch, Building G, server closet
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby

adhesive only, Green CT's
adhesive only, Green CT's
adhesive only, Green CT's

single tile

Samples 144 standard with layering
Grav Prep Samples = 40
Total samples = 181



Scientific Analytical Institute, Inc.
 4604 Dundas Drive Greensboro, NC 27407
 Phone: 336.292.3888 Fax: 336.292.3313
 www.sailab.com lab@sailab.com

Lab Use Only
 Lab Order ID: 10043192
 Client Code: _____

Company Contact Information	
Company: RPF Environmental	Contact: <i>ALAN MERRIN</i>
Address: 320 1st NH Turnpike	Phone <input type="checkbox"/> : 603-942-5432
Northwood, NH 03261	Fax <input type="checkbox"/> : 603-942-5300
	Email <input checked="" type="checkbox"/> : <i>ALAN@RPF.COM</i>

Billing/Invoice Information	Turn Around Times [^]	
SAME <input checked="" type="checkbox"/>	90 Min. <input type="checkbox"/>	48 Hours <input type="checkbox"/>
Company:	3 Hours <input type="checkbox"/>	72 Hours <input checked="" type="checkbox"/>
Contact:	6 Hours <input type="checkbox"/>	96 Hours <input type="checkbox"/>
Address:	12 Hours <input type="checkbox"/>	120 Hours <input type="checkbox"/>
	24 Hours <input type="checkbox"/>	144 ⁺ Hours <input type="checkbox"/>
[^] TATs not available for certain test types		
PO Number: <i>24-0042 HARRIMAN</i>		
Project Name/Number:		

Industrial Hygiene Test Types	
Silica as Alpha Quartz*	<input type="checkbox"/>
Silica as Cristobalite*	<input checked="" type="checkbox"/> <i>PCM</i>
Silica as Tridymite*	<input type="checkbox"/>
Silica as Alpha Quartz, Cristobalite, Tridymite*	<input type="checkbox"/> <i>LOW</i>
Include Respirable Dust	<input type="checkbox"/>
Silica Bulk*	<input type="checkbox"/>
Bulk Phase ID/Whole Rock SAI Method H-SOP-003	<input checked="" type="checkbox"/> <i>PCR</i>
Total Dust NIOSH Method 0500	<input type="checkbox"/>
Respirable Dust NIOSH Method 0600	<input type="checkbox"/>
PCM NIOSH 7400 (Fibers)	<input type="checkbox"/>
TEM NIOSH 7402 (Asbestos)	<input type="checkbox"/>
Hexavalent Chromium (OSHA ID-215) (Note if from spray paint operations)	<input type="checkbox"/>
Metals (NIOSH 7300) (Specify Metals Under Comments)	<input type="checkbox"/>
Other	<input type="checkbox"/>

*Modified NIOSH 7500 OSHA ID 142

Sample ID #	Description/Location	Volume/Area	Comments (List Metals Here)
	<i>SEE ECOC FROM NICK@RPF.COM</i>		

Total # of Samples _____

Relinquished by	Date/Time	Received by	Date/Time
<i>[Signature]</i>	<i>02.09.24 1505</i>	<i>[Signature]</i>	
	<i>5</i>		



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID <i>Lab Sample ID</i>	Description <i>Lab Notes</i>	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)	Other Non-Asbestos (Wt. %)
HG1A <i>10043192_0001</i>	Cove base adhesive, Brown/Tan, Building G, classroom 1	42.83%	0%	None Detected	57.17%
HG1B <i>10043192_0002</i>	Cove base adhesive, Brown/Tan, Building G, office by acoustic room	38.15%	0%	None Detected	61.85%
HG1C <i>10043192_0003</i>	Cove base adhesive, Brown/Tan, Building G, hallway	55.76%	0%	None Detected	44.24%
HG1D <i>10043192_0004</i>	Cove base adhesive, Brown/Tan, Building G, Bus Office	48.20%	0%	None Detected	51.80%
HG1E <i>10043192_0005</i>	Cove base adhesive, Brown/Tan, Corridor to K, upper	36.44%	0%	None Detected	63.56%
HG1F <i>10043192_0006</i>	Cove base adhesive, Brown/Tan, Building B, 1st floor	34.36%	0%	None Detected	65.64%
HG1G <i>10043192_0007</i>	Cove base adhesive, Brown/Tan, Building B, 2nd floor	47.32%	0%	None Detected	52.68%
HG2A - A <i>10043192_0008</i>	12" Floor Tile with Adhesive, white and blue, Building G, Classr	18.02%	79.96%	None Detected	2.02%

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
Lab Sample ID	Lab Notes					
HG2A - B	12" Floor Tile with Adhesive, white and blue, Building G, Classr	19.75%	0%	None Detected		80.25%
10043192_0106						
HG2B - A	12" Floor Tile with Adhesive, white and blue, Building G, Classr	17.91%	81.68%	None Detected		0.41%
10043192_0009						
HG2B - B	12" Floor Tile with Adhesive, white and blue, Building G, Classr	17.61%	0%	None Detected		82.39%
10043192_0107						
HG2C - A	12" Floor Tile with Adhesive, white and blue, Building G, Classr	18.63%	80.54%	None Detected		0.83%
10043192_0010						
HG2C - B	12" Floor Tile with Adhesive, white and blue, Building G, Classr	18.58%	0%	None Detected		81.42%
10043192_0108						
HG2D - A	12" Floor Tile with Adhesive, white, Building G, Classroom	22.65%	75.01%	0.12%	Chrysotile	2.22%
10043192_0011						
HG2D - B	12" Floor Tile with Adhesive, white, Building G, Classroom	21.91%	0%	3.90%	Chrysotile	74.19%
10043192_0109						
HG3A	Carpet Adhesive, Tan/Black, Building G, Classroom 2	78.42%	0%	None Detected		21.58%
10043192_0012						

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
Lab Sample ID	Lab Notes					
HG3B	Carpet Adhesive, Tan/Black, Building G, Classroom 1	79.74%	0%	None Detected		20.26%
10043192_0013						
HG3C	Carpet Adhesive, Tan/Black, Building G, hallway, centered	60.48%	0%	3.16%	Chrysotile	36.36%
10043192_0014						
HG3D	Carpet Adhesive, Tan/Black, Building G, hallway, by Vault	17.69%	0%	6.58%	Chrysotile	75.73%
10043192_0015						
HG6A - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroo	24.01%	48.53%	5.49%	Chrysotile	21.97%
10043192_0022						
HG6A - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroo	20.93%	0%	7.91%	Chrysotile	71.16%
10043192_0110						
HG6B - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroo	25.21%	47.04%	5.55%	Chrysotile	22.20%
10043192_0023						
HG6B - B	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroo	25.37%	0%	7.46%	Chrysotile	67.17%
10043192_0111						
HG6C - A	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	25.77%	39.45%	6.96%	Chrysotile	27.82%
10043192_0024						

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID <i>Lab Sample ID</i>	Description <i>Lab Notes</i>	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
HG6C - B <i>10043192_0112</i>	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	27.28%	0%	7.27%	Chrysotile	65.45%
HG6D - A <i>10043192_0025</i>	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	28.14%	50.17%	4.34%	Chrysotile	17.35%
HG6D - B <i>10043192_0122</i>	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	24.10%	0%	7.59%	Chrysotile	68.31%
HG8A <i>10043192_0029</i>	Window glaze, grey, Building G, Classroom 1	17.48%	74.88%	0.23%	Chrysotile	7.41%
HG8B <i>10043192_0030</i>	Window glaze, grey, Building G, Classroom 2	9.01%	79.92%	0.33%	Chrysotile	10.74%
HG8C <i>10043192_0031</i>	Window glaze, grey, Building G, Teachers Lounge	8.96%	88.16%	0.09%	Chrysotile	2.79%
HG12 <i>10043192_0045</i>	Sink Base undercoating, black, Building G, Acoustic Room	36.23%	0%	1.91%	Chrysotile	61.86%
HG14A <i>10043192_0049</i>	Window caulk, white/grey, Building G, West entry, solid pane w	9.27%	0%	2.72%	Chrysotile	88.01%

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID <i>Lab Sample ID</i>	Description <i>Lab Notes</i>	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
HG14B <i>10043192_0050</i>	Window caulk, white/grey, Building G, West entry, solid pane w	12.54%	0%	2.62%	Chrysotile	84.84%
HG14C <i>10043192_0051</i>	Window caulk, white/grey, Building G, West entry, solid pane w	9.48%	0%	2.72%	Chrysotile	87.80%
HG16A - B <i>10043192_0116</i>	Floor tile adhesive and grout, grey/brown, Building G, SW-most ba	10.03%	0%	None Detected		89.97%
HG16B - B <i>10043192_0117</i>	Floor tile adhesive and grout, grey/brown, Building G, common me	5.93%	0%	None Detected		94.07%
HG16C - B <i>10043192_0118</i>	Floor tile adhesive and grout, grey/brown, Building G, common wo	3.61%	0%	None Detected		96.39%
HG18A <i>10043192_0059</i>	Window Glaze, grey, Corridor from G to K, lower corridor, near buil	43.83%	55.33%	0.17%	Chrysotile	0.67%
HG18B <i>10043192_0060</i>	Window Glaze, grey, Corridor from G to K, lower corridor, halfway	41.37%	46.36%	2.45%	Chrysotile	9.82%
HG18C <i>10043192_0061</i>	Window Glaze, grey, Corridor from G to K, lower corridor, 3/4 way t	50.97%	13.97%	1.75%	Chrysotile	33.31%

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
Lab Sample ID	Lab Notes					
HG18D	Window Glaze, grey, Corridor from G to K, lower corridor, at buildi	43.46%	45.30%	2.25%	Chrysotile	8.99%
10043192_0062						
HG18E	Window Glaze, grey, Corridor from G to K, upper corridor, near bui	43.41%	47.69%	1.78%	Chrysotile	7.12%
10043192_0063						
HG21A - A	12" Floor tile with adhesive, olive green/white/gold, Buildi	21.83%	76.35%	0.18%	Chrysotile	1.64%
10043192_0070						
HG21A - B	12" Floor tile with adhesive, olive green/white/gold, Buildi	22.50%	0%	6.20%	Chrysotile	71.30%
10043192_0119						
HG21B - A	12" Floor tile with adhesive, olive green/white/gold, Buildi	22.98%	73.83%	0.32%	Chrysotile	2.87%
10043192_0071						
HG21B - B	12" Floor tile with adhesive, olive green/white/gold, Buildi	22.31%	0%	3.88%	Chrysotile	73.81%
10043192_0120						
HG21C - A	12" Floor tile with adhesive, olive green/white/gold, Buildi	26.70%	70.91%	0.24%	Chrysotile	2.15%
10043192_0072						
HG21C - B	12" Floor tile with adhesive, olive green/white/gold, Buildi	25.92%	0.88%	3.66%	Chrysotile	69.54%
10043192_0121						

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Eloisa Blake (54)

Analyst

Approved Signatory



Bulk Asbestos Analysis by Polarized Light Microscopy

Gravimetric Reduction
EPA Method: 600/R-93/116 and 600/M4-82-020



NVLAP LAB CODE 20664-0

Customer: RPF Environmental Inc.
320 1st NH Turnpike
Northwood, NH 03261

Attn: Nick Howard

Lab Order ID: 10043192

Analysis: PGR

Date Received: 02/12/2024

Date Reported: 02/15/2024

Project: 240042 Harriman

Sample ID	Description	Organic (Wt. %)	Acid Soluble (Wt. %)	Asbestos (Wt. %)		Other Non-Asbestos (Wt. %)
Lab Sample ID	Lab Notes					
HG24A	Flooring adhesive, black, Building B, 1st floor, kitchen	37.64%	0%	4.99%	Chrysotile	57.37%
10043192_0079						
HG24B	Flooring adhesive, black, Building B, 2nd floor, SW-Most room, under c	26.49%	0%	3.68%	Chrysotile	69.83%
10043192_0080						
HG24C	Flooring adhesive, black, Building B, 2nd floor, kitchen, under carpet on	30.99%	0%	5.52%	Chrysotile	63.49%
10043192_0081						
HG27A	Laminate Countertop adhesive, tan, Building B, 1st Floor	98.16%	0%	None Detected		1.84%
10043192_0088						
HG27B	Laminate Countertop adhesive, tan, Building B, 1st Floor	98.05%	0%	None Detected		1.95%
10043192_0089						
HG27C	Laminate Countertop adhesive, tan, Building B, 1st Floor	98.62%	0%	None Detected		1.38%
10043192_0090						

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Eloisa Blake (54)

Analyst

Approved Signatory

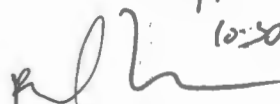
10043192

Client: RPF Environmental
Contact: Nick Howard
Address: 320 1st NH Turnpike, Northwood, NH 03261
Phone: (603) 942-5432
Fax: (603) 942-5300
Email: Nick@rpf.com
Project: 240042 Hamman
Client Request: Stop at First Positive
Start Date: 02.09.24
Agency: PLM EPA 600
Hours: 72 Hours

Instructions:
 Use Column "B" for your contact info.
 To See an Example Click the bottom Example Tab.
 Enter samples between "<<" and ">>"
 Begin Samples with a "<<" above the first sample
 and end with a ">>" below the last sample.
 Only Enter your data on the first sheet "Sheet1"
 Note: Data 1 and Data 2 are optional
 fields that do not show up on the official
 report, however they will be included
 in the electronic data returned to you
 to include your own version of the report data.

**Scientific Analytical
 Institute, Inc.**
 3423 S. Pomona Dr.
 Greensboro, NC 27407
 Phone 336.292.2888
 Fax 336.292.2888
 Email lab@saic.com

<<			
HG1A	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, classroom 1	NO SFP
HG1B	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, office by acoustic room	NO SFP
HG1C	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, hallway	NO SFP
HG1D	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building G, Bus Office	NO SFP
HG1E	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Corridor to K, upper	NO SFP
HG1F	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building B, 1st floor	NO SFP
HG1G	Add Grav Prep Analysis	Cove base adhesive, Brown/Tan, Building B, 2nd floor	NO SFP
HG2A	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	
HG2B	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, Kitchen	
HG2C	Add Grav Prep Analysis	12" Floor Tile with Adhesive, white and blue, Building G, Classroom 1, adjacent room	
HG2D	Add Grav Prep Analysis		
HG3A	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, Classroom 2	NO SFP
HG3B	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, Classroom 1	NO SFP
HG3C	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, hallway, centered	NO SFP
HG3D	Add Grav Prep Analysis	Carpet Adhesive, Tan/Black, Building G, hallway, by Vault	NO SFP
HG4A		Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1	
HG4B		Suspended ceiling tile, 2'x2', solid, white, building G, Audio Test Rm. Office	
HG4C		Suspended ceiling tile, 2'x2', solid, white, building G, Classroom 1 Kitchen	
HG5A		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	
HG5B		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom A	
HG5C		Suspended ceiling tile, 2'x2', fissure & dot, building G, Classroom D	
HG6A	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom	
HG6B	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 2, Bathroom threshold	
HG6C	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 6	
HG6D	Add Grav Prep Analysis	9" Floor Tile with Adhesive, grey, Building G, Classroom 1	under 12" white FT
HG7A		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	
HG7B		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 3	
HG7C		Fixed ceiling tile, 1'x1', big dots, Building G, Classroom 2	
HG8A	Add Grav Prep Analysis	Window glaze, grey, Building G, Classroom 1	
HG8B	Add Grav Prep Analysis	Window glaze, grey, Building G, Classroom 2	
HG8C	Add Grav Prep Analysis	Window glaze, grey, Building G, Teachers Lounge	
HG9A		Gypsum board with joint compound, building G,	
HG9B		Gypsum board with joint compound, building G,	
HG9C		Gypsum board with joint compound, building G,	
HG9D		Gypsum board with joint compound, building G,	
HG9E		Gypsum board with joint compound, building G,	
HG9F		Gypsum board with joint compound, building G,	
HG9G		Gypsum board with joint compound, building G,	
HG10A		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG10B		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG10C		Fixed Wall Tiles, 1'x1', Fissure & Dot, Building G, Acoustic Room	
HG11A		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG11B		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG11C		Fixed Wall Tiles, 1'x1', solid white, Building G, Acoustic Room	
HG12	Add Grav Prep Analysis	Sink Base undercoating, black, Building G, Acoustic Room	Single Sink
HG13A		12" Floor tile with adhesive, tan with gold, Building G,	
HG13B		12" Floor tile with adhesive, tan with gold, Building G,	
HG13C		12" Floor tile with adhesive, tan with gold, Building G,	
HG14A	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG14B	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG14C	Add Grav Prep Analysis	Window caulk, white/grey, Building G, West entry, solid pane window	
HG15		Suspended ceiling tile, 8" wide patch, random patter, Building G, NW-most room	Patch/Repair
HG16A	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, SW-most bathroom	Do Not analyze tiles
HG16B	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, common men's bathroom	Do Not analyze tiles
HG16C	Add Grav Prep Analysis	Floor tile adhesive and grout, grey/brown, Building G, common women's bathroom	Do Not analyze tiles
HG17A		Pegboard, brown, Building G, Classroom West of courtyard	
HG17B		Pegboard, brown, Building G, Classroom West of courtyard	
HG17C		Pegboard, brown, Building G, Classroom West of courtyard	
HG18A	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, near building G	
HG18B	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, hallway	
HG18C	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, 3/4 way to building K	
HG18D	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, lower corridor, at building K	
HG18E	Add Grav Prep Analysis	Window Glaze, grey, Corridor from G to K, upper corridor, near building K	
HG19A		Sub-flooring/leveler, white/grey, Building G, hallway, at West end	
HG19B		Sub-flooring/leveler, white/grey, Building G, hallway	
HG19C		Sub-flooring/leveler, white/grey, Building G, hallway, at fire door to West foyer	
HG20A		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG20B		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG20C		Suspended ceiling tile, 2'x2', random, Building G, Office area, women's bathroom	
HG21A	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North	
HG21B	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North	
HG21C	Add Grav Prep Analysis	12" Floor tile with adhesive, olive green/white/gold, Building G, under carpet North half	
HG22A		Suspended ceiling tile, 2'x4', double dot, Building G, hallway	

2/12
 10:30


Accepted

Rejected

10043192

HG22B
HG22C
HG23A
HG23B
HG23C
HG24A
HG24B
HG24C
HG25A
HG25B
HG25C
HG26A
HG26B
HG26C
HG27A
HG27B
HG27C
HG28A
HG28B
HG28C
HG28D
HG28E
HG29A
HG29B
HG29C
HG30A
HG30B
HG30C
HG31
HG32A
HG32B
HG32C
>>

Add Grav Prep Analysis
Add Grav Prep Analysis
Add Grav Prep Analysis

Add Grav Prep Analysis
Add Grav Prep Analysis
Add Grav Prep Analysis

Suspended ceiling tile, 2'x4', double dot, Building G, hallway
Suspended ceiling tile, 2'x4', double dot, Building G, hallway
Gypsum board with joint compound, upper corridor to Bldg. K, near top of corridor
Gypsum board with joint compound, Building B, 1st Floor, West End
Gypsum board with joint compound, Building B, 1st Floor, West End
Flooring adhesive, black, Building B, 1st floor, kitchen
Flooring adhesive, black, Building B, 2nd floor, SW-Most room, under carpet
Flooring adhesive, black, Building B, 2nd floor, kitchen, under carpet on tile
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building B, 1st Floor, hallway, at bathroom H2O damage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Mudded PI fitting, grey/white, Building G Auditorium, mechanical closet behind stage
Laminate Countertop adhesive, tan, Building B, 1st Floor
Laminate Countertop adhesive, tan, Building B, 1st Floor
Laminate Countertop adhesive, tan, Building B, 1st Floor
Gypsum Wall board wall panels, Building G, 1st floor, office area
Gypsum Wall board wall panels, Building G, 1st floor, office with tan paint on panels
Gypsum Wall board wall panels, Building G, 1st floor, West end
Gypsum Wall board wall panels, Building G, 1st floor, NW-most room
Gypsum Wall board wall panels, Building G, 1st floor, SW-most room
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Decorative surfacing, white, Building B, entry from Bldg. G, stairwell
Pipe insulation wrap, white, Building G, classroom # 6
Pipe insulation wrap, white, Building G, above ceiling in attic crawl space
Pipe insulation wrap, white, Building G, Mechanical room
Suspended ceiling tile, 2'x4', heavy dimpled, patch, Building G, server closet
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby
Suspended ceiling tile, 2'x2', fissure & dot - new, Building G, main entry lobby

adhesive only, Green CT's
adhesive only, Green CT's
adhesive only, Green CT's

single tile

Samples 144 standard with layering
Grav Prep Samples = 40
Total samples = 181



Scientific Analytical Institute, Inc.
 4604 Dundas Drive Greensboro, NC 27407
 Phone: 336.292.3888 Fax: 336.292.3313
 www.sailab.com lab@sailab.com

Lab Use Only
 Lab Order ID: 10043192
 Client Code: _____

Company Contact Information	
Company: RPF Environmental	Contact: ALAN MERRIN
Address: 320 1st NH Turnpike	Phone ☐: 603-942-5432
Northwood, NH 03261	Fax ☐: 603-942-5300
	Email ☑: ALAN@RPF.COM

Industrial Hygiene Test Types	
Silica as Alpha Quartz*	<input type="checkbox"/>
Silica as Cristobalite*	<input checked="" type="checkbox"/>
Silica as Tridymite*	<input type="checkbox"/>
Silica as Alpha Quartz, Cristobalite, Tridymite*	<input type="checkbox"/>
Include Respirable Dust	<input type="checkbox"/>
Silica Bulk*	<input type="checkbox"/>
Bulk Phase ID/Whole Rock SAI Method H-SOP-003	<input checked="" type="checkbox"/>
Total Dust NIOSH Method 0500	<input type="checkbox"/>
Respirable Dust NIOSH Method 0600	<input type="checkbox"/>
PCM NIOSH 7400 (Fibers)	<input type="checkbox"/>
TEM NIOSH 7402 (Asbestos)	<input type="checkbox"/>
Hexavalent Chromium (OSHA ID-215) (Note if from spray paint operations)	<input type="checkbox"/>
Metals (NIOSH 7300) (Specify Metals Under Comments)	<input type="checkbox"/>
Other	<input type="checkbox"/>

Billing/Invoice Information	Turn Around Times^	
SAME <input checked="" type="checkbox"/>	90 Min. <input type="checkbox"/>	48 Hours <input type="checkbox"/>
Company:	3 Hours <input type="checkbox"/>	72 Hours <input checked="" type="checkbox"/>
Contact:	6 Hours <input type="checkbox"/>	96 Hours <input type="checkbox"/>
Address:	12 Hours <input type="checkbox"/>	120 Hours <input type="checkbox"/>
	24 Hours <input type="checkbox"/>	144* Hours <input type="checkbox"/>
^TATs not available for certain test types		
PO Number: 24-0042	HARRIMAN	
Project Name/Number:		

Sample ID #	Description/Location	Volume/Area	Comments (List Metals Here)
	SEE ECOC FROM NICK@RPF.COM		

Total # of Samples _____

Relinquished by	Date/Time	Received by	Date/Time
	02.09.24	1505	

APPENDIX B

**HARRIMAN ARCHITECTS
 Mackworth Island
 Falmouth, ME**

XRF TEST RESULTS

Sample Collected: February 6, 2024

Component	Substrate	Color	Location	Result (mg/cm ²)
Wall	Gypsum Wall Board	Black	Building G, Classroom 4	0.3
Door	Metal	Beige	Building G, West Entry Door	0.0
Wall	Concrete Masonry Unit (CMU)	Beige	Building G, Northwestern-most Classroom	0.0
Door Frame	Metal	White	Building G, Northwestern-most Classroom	0.0
Wall	CMU	Beige	Building G, West Entry Foyer	0.0
Heater Register	Metal	Tan	Building G, Acoustic Room	0.0
Wall	CMU	Sky Blue	Building G, Classroom with Door G11	0.0
Kitchen Ceiling Trim	Wood	White	Building G, Sky-Blue Classroom	0.4
Ceiling Trim	Wood	Beige	Building G, Adjacent (east) of Sky-Blue Room	0.0
Fire Door Frame	Metal	Green	Building G, Adjacent (east) of Sky-Blue Room	0.0
Floor	Concrete	Green	Building G, Center of Hallway	0.0
Structural Beam	Metal	Maroon	Building G, Above Classroom 4	0.4
Wall	Wood	Pink	Building G, Classroom 4 Bathroom	0.0
Wall	Gypsum Wall Board	White	Building G, Office Entry Foyer	0.4
Iron Pipe	Metal	White	Building G, Hallway – Center	0.0
Wall	Gypsum Wall Board	Beige	Building G, Classroom 5	1.5
Door Frame	Metal	Yellow	Building G, Hallway, Women's Bathroom	0.0
Wall	Wood	Beige	Building G, Classroom 5	0.3
Cork Board	Wood	Beige	Building G, Classroom 5	1.5

**HARRIMAN ARCHITECTS
 Mackworth Island
 Falmouth, ME**

XRF TEST RESULTS

Sample Collected: February 6, 2024

Component	Substrate	Color	Location	Result (mg/cm ²)
Ceiling	Wood	White	Building G, Classroom 6, Bathroom	0.2
Wall	Wood	Pea Green	Building G, Sprinkler Room	0.2
Floor	Concrete	Green	Building G, Sprinkler Room	0.2
Wall	Concrete	Pink/Beige	Building G, Office – Bathroom	0.0
Wall	CMU	White	Building G, Office, Exterior Wall	0.0
Wall	Gypsum Wall Board	Black	Building G, Office – Panel Wall Rooms	0.6
Heat Register	Metal	Brown	Building G, Office – Panel Wall Rooms	0.0
Wall	Brick	Beige	Building G, Office by Bathrooms	0.0
Railing	Metal	Black	Building G, Entry Lobby	0.0
Structural Beam	Metal	White	Corridor from Building B to Building K	0.5
Window Trim	Wood	Red	Corridor from Building B to Building K	0.4
Knee Wall	Concrete	Grey	Corridor from Building B to Building K	0.2
Wall	Gypsum Wall Board	Beige	Corridor from Building B to Building K	0.0
Ceiling	Wood	White	Corridor from Building B to Building K	0.0
Floor	Wood	Grey	Corridor at Door to Building K	0.0
Door Trim	Wood	Grey	Lower Corridor, Fire Door	0.0
Stair Tread Runner	Metal	Black	Building B, Entry	1.0
Door Frame	Metal	Black	1 st Floor, Building B	0.0
Wall	CMU	Tan/Yellow	1 st Floor, Building B	0.5
Post	Metal	Beige/Maroon	1 st Floor Hallway, Center	0.0

**HARRIMAN ARCHITECTS
 Mackworth Island
 Falmouth, ME**

XRF TEST RESULTS

Sample Collected: February 6, 2024

Component	Substrate	Color	Location	Result (mg/cm ²)
Mop Closet Wall	CMU	Mint Green	1 st Floor, Switchboard Room	0.0
Wall – Low	Wood	Beige	1 st Floor, Hallway, By Switchboard Room	0.1
Wall	CMU	Red/Brown	Tunnel Entry Foyer, 1st Floor	0.0
Beam – Hatch	Metal	Yellow	2 nd Floor, Building B, Attic Hatch Room	2.4
Beam	Metal	Yellow	2 nd Floor, Building B, Attic Hatch Room	1.1
Railing	Metal	Black	Gym, Stage Railing	0.5
Door Frame	Metal	Brown	Gym, Door from Auditorium to Tunnel	0.0
Floor	Concrete	Grey	Corridor from B to K	0.0
Floor	Concrete	Grey	In Corridor from B to K	0.2
Ladder	Metal	Light Grey	Building B, 2 nd Floor, Attic Hatch Room	0.2
Ceiling	Wood	White	Building B, 2 nd Floor, Attic Hatch Room	0.0
Wall	CMU	Light Blue	Building B, 2 nd Floor, Attic Hatch Room	0.0
Roof Hatch	Metal	Red	Building B, 2 nd Floor, Attic Hatch Room	0.0
Wall	CMU	Black/Grey	Building B, 2 nd Floor, Kitchen Space	0.0
Wall	CMU	Yellow	Locker Room, 2 nd Floor, Building B	0.0
Wall	CMU	Blue	Locker Room, 2 nd Floor, Building B	0.0
Stall Wall	Wood	Blue	Locker Room, 2 nd Floor, Building B	0.3
Wall	Wood	Beige	Building B, 2 nd Floor, Kitchen	0.4
Closet Wall	Wood	Beige	Building B, 2 nd Floor, Room 211	0.1
Window Trim	Wood	Pink/Tan	Building B, 2 nd Floor,	0.5

HARRIMAN ARCHITECTS
Mackworth Island
Falmouth, ME

XRF TEST RESULTS

Sample Collected: February 6, 2024

Component	Substrate	Color	Location	Result (mg/cm ²)
Wall	Wood	Light Blue	Building B, 2 nd Floor, Room 211	0.1
Wall	CMU	Yellow	Building B, 2 nd Floor	0.1
Wall	Wood	Light Blue	Building B, 2 nd Floor	0.3
Railing	Metal	Black	Building B, Entry Foyer	5.1
Stair Tread Nosing	Concrete	Black	Building B, Entry Foyer	0.0
Wall	CMU	Pink/Red	Building B, Entry Foyer	0.0

RPF File No.240042

Notes:

- Lead based paint as defined by current state lead poisoning prevention regulations, is any paint that contains in excess of 1.0 mg/cm² of lead. OSHA does not currently establish a percent lead for lead paint.
- mg/cm² milligrams per centimeter square; cps means hertz measurement
- Please reference the full report for discussions and additional information and limitations pertaining to these results. This testing is not for State or HUD LBP inspection or risk assessment compliance.

APPENDIX C

Allan Mercier
RPF Environmental, Inc.
320 First NH Turnpike
Northwood , NH 03261



Laboratory Report for:

Eastern Analytical, Inc. ID: 274783

Client Identification: Macworth Island | 24.0042

Date Received: 3/5/2024

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:

- < : "less than" followed by the reporting limit
- > : "greater than" followed by the reporting limit
- %R : % Recovery

Certifications:

Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

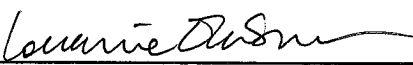
References:

- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992
- ASTM International

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,


Lorraine Olashaw, Lab Director

3.13.24
Date



SAMPLE CONDITIONS PAGE

EAI ID#: 274783

Client: RPF Environmental, Inc.

Client Designation: Macworth Island | 24.0042

Temperature upon receipt (°C): 18.9

Received on ice or cold packs (Yes/No): N

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
274783.01	PCB1	3/5/24	3/4/24 10:29	solid		Adheres to Sample Acceptance Policy
274783.02	PCB2	3/5/24	3/4/24 10:44	solid		Adheres to Sample Acceptance Policy
274783.03	PCB3	3/5/24	3/4/24 11:20	solid		Adheres to Sample Acceptance Policy
274783.04	PCB4	3/5/24	3/4/24 11:31	solid		Adheres to Sample Acceptance Policy
274783.05	PCB5	3/5/24	3/4/24 12:40	solid		Adheres to Sample Acceptance Policy
274783.06	PCB6	3/5/24	3/4/24 13:04	solid		Adheres to Sample Acceptance Policy
274783.07	PCB7	3/5/24	3/4/24 13:29	solid		Adheres to Sample Acceptance Policy
274783.08	PCB8	3/5/24	3/4/24 14:01	solid		Adheres to Sample Acceptance Policy
274783.09	PCB9	3/5/24	3/4/24 14:21	solid		Adheres to Sample Acceptance Policy
274783.1	PCB10	3/5/24	3/4/24 14:40	solid		Adheres to Sample Acceptance Policy
274783.11	PCB11	3/5/24	3/4/24 14:49	solid		Adheres to Sample Acceptance Policy
274783.12	PCB12	3/5/24	3/4/24 14:54	solid		Adheres to Sample Acceptance Policy
274783.13	PCB13	3/5/24	3/4/24 14:59	solid		Adheres to Sample Acceptance Policy

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.
- Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.
- Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.
- Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.



LABORATORY REPORT

EAI ID#: 274783

Client: RPF Environmental, Inc.

Client Designation: Macworth Island | 24.0042

Sample ID:	PCB1	PCB2	PCB3	PCB4
Lab Sample ID:	274783.01	274783.02	274783.03	274783.04
Matrix:	solid	solid	solid	solid
Date Sampled:	3/4/24	3/4/24	3/4/24	3/4/24
Date Received:	3/5/24	3/5/24	3/5/24	3/5/24
% Solid:				
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	3/7/24	3/7/24	3/7/24	3/7/24
Date of Analysis:	3/8/24	3/8/24	3/8/24	3/8/24
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	56	58	50	58
PCB-1016	< 0.9	< 1	< 0.8	< 1
PCB-1221	< 0.9	< 1	< 0.8	< 1
PCB-1232	< 0.9	< 1	< 0.8	< 1
PCB-1242	< 0.9	< 1	< 0.8	< 1
PCB-1248	< 0.9	< 1	< 0.8	< 1
PCB-1254	< 0.9	6.6	< 0.8	< 1
PCB-1260	< 0.9	< 1	< 0.8	15
PCB-1262	< 0.9	< 1	< 0.8	< 1
PCB-1268	< 0.9	< 1	< 0.8	< 1
TMX (surr)	57 %R	103 %R	90 %R	69 %R
DCB (surr)	56 %R	56 %R	67 %R	48 %R

Results are reported on a solid as received basis.

Acid clean-up was performed on the samples and associated batch QC.

Detection limits elevated due to sample matrix and in response to the lower initial mass used for analysis.



LABORATORY REPORT

EAI ID#: 274783

Client: RPF Environmental, Inc.

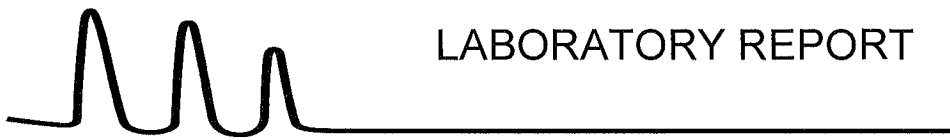
Client Designation: Macworth Island | 24.0042

Sample ID:	PCB5	PCB6	PCB7	PCB8
Lab Sample ID:	274783.05	274783.06	274783.07	274783.08
Matrix:	solid	solid	solid	solid
Date Sampled:	3/4/24	3/4/24	3/4/24	3/4/24
Date Received:	3/5/24	3/5/24	3/5/24	3/5/24
% Solid:				
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	3/7/24	3/7/24	3/7/24	3/7/24
Date of Analysis:	3/8/24	3/8/24	3/8/24	3/8/24
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	58	60	56	54
PCB-1016	< 1	< 1	< 0.9	< 0.9
PCB-1221	< 1	< 1	< 0.9	< 0.9
PCB-1232	< 1	< 1	< 0.9	< 0.9
PCB-1242	< 1	< 1	< 0.9	< 0.9
PCB-1248	< 1	< 1	< 0.9	< 0.9
PCB-1254	2	< 1	7.5	< 0.9
PCB-1260	< 1	< 1	< 0.9	< 0.9
PCB-1262	< 1	< 1	< 0.9	< 0.9
PCB-1268	< 1	< 1	< 0.9	< 0.9
TMX (surr)	94 %R	68 %R	103 %R	57 %R
DCB (surr)	83 %R	37 %R	90 %R	45 %R

Results are reported on a solid as received basis.

Acid clean-up was performed on the samples and associated batch QC.

Detection limits elevated due to sample matrix and in response to the lower initial mass used for analysis.



LABORATORY REPORT

EAI ID#: **274783**

Client: **RPF Environmental, Inc.**

Client Designation: **Macworth Island | 24.0042**

Sample ID:	PCB9	PCB10	PCB11	PCB12
Lab Sample ID:	274783.09	274783.1	274783.11	274783.12
Matrix:	solid	solid	solid	solid
Date Sampled:	3/4/24	3/4/24	3/4/24	3/4/24
Date Received:	3/5/24	3/5/24	3/5/24	3/5/24
% Solid:				
Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	3/7/24	3/7/24	3/7/24	3/7/24
Date of Analysis:	3/8/24	3/8/24	3/8/24	3/8/24
Analyst:	MB	MB	MB	MB
Extraction Method:	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A
Dilution Factor:	60	58	60	58
PCB-1016	< 1	< 1	< 1	< 1
PCB-1221	< 1	< 1	< 1	< 1
PCB-1232	< 1	< 1	< 1	< 1
PCB-1242	< 1	< 1	< 1	< 1
PCB-1248	< 1	< 1	< 1	< 1
PCB-1254	< 1	< 1	< 1	< 1
PCB-1260	< 1	< 1	< 1	< 1
PCB-1262	< 1	< 1	< 1	< 1
PCB-1268	< 1	< 1	< 1	< 1
TMX (surr)	65 %R	80 %R	79 %R	58 %R
DCB (surr)	65 %R	77 %R	43 %R	42 %R

Results are reported on a solid as received basis.

Acid clean-up was performed on the samples and associated batch QC.

Detection limits elevated due to sample matrix and in response to the lower initial mass used for analysis.



LABORATORY REPORT

EAI ID#: 274783

Client: RPF Environmental, Inc.

Client Designation: Macworth Island | 24.0042

Sample ID: PCB13

Lab Sample ID: 274783.13

Matrix: solid

Date Sampled: 3/4/24

Date Received: 3/5/24

% Solid:

Units: mg/kg

Date of Extraction/Prep: 3/7/24

Date of Analysis: 3/8/24

Analyst: MB

Extraction Method: 3540C

Analysis Method: 8082A

Dilution Factor: 56

PCB-1016	< 0.9
PCB-1221	< 0.9
PCB-1232	< 0.9
PCB-1242	< 0.9
PCB-1248	< 0.9
PCB-1254	< 0.9
PCB-1260	< 0.9
PCB-1262	< 0.9
PCB-1268	< 0.9
TMX (surr)	52 %R
DCB (surr)	48 %R

Results are reported on a solid as received basis.

Acid clean-up was performed on the sample and associated batch QC.

Detection limits elevated due to sample matrix and in response to the lower initial mass used for analysis.



QC REPORT

EAI ID#: 274783

Client: RPF Environmental, Inc.

Batch ID: 638454-03777/S030724PCB1

Client Designation: Macworth Island | 24.0042

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 0.02	0.13 (96 %R)	0.14 (104 %R) (8 RPD)	3/8/2024	mg/kg	40 - 140	30	8082A
PCB-1221	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1232	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1242	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1248	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1254	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1260	< 0.02	0.12 (93 %R)	0.13 (99 %R) (7 RPD)	3/8/2024	mg/kg	40 - 140	30	8082A
PCB-1262	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
PCB-1268	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	3/8/2024	mg/kg			8082A
TMX (surr)	100 %R	99 %R	107 %R	3/8/2024	% Rec	30 - 150	30	8082A
DCB (surr)	114 %R	107 %R	113 %R	3/8/2024	% Rec	30 - 150	30	8082A

*! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

CHAIN-OF-CUSTODY RECORD

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

274783

SAMPLE I.D.	SAMPLING DATE/TIME <small>*IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME</small>	MATRIX (SEE BELOW)	GRAB/# COMPOSITE	ANALYSIS										# OF CONTAINERS	NOTES MEOH VIAL #							
				VOC	SVOC	TCDF	INORGANICS	MICRO	METALS	OTHER												
PCB1	03.04.24 1029		524.2 524.2 MTBE ONLY 8260 624 VTCS 1, 4 DIOXANE 8021																			
PCB2	03.04.24 1044		8015 GRO MAVPH																			
PCB3	03.04.24 1120		8270 625 ABN PAH EDB DBCP TPH8100 LI L2																			
PCB4	03.04.24 1131		8015 DRO MAEPH																			
PCB5	03.04.24 1240		PEST 608 PCB 608 PEST 8081 PCB 8082																			
PCB6	03.04.24 1304		OIL & GREASE 1664 TPH 1664																			
PCB7	03.04.24 1329		TCDF 1311 ABN METALS VOC PEST HERB																			
PCB8	03.04.24 1401		BOD CBOD TS TSS TDS																			
PCB9	03.04.24 1421		BR CI F SO4 NO2 NO3 NO3 NO3																			
PCB10	03.04.24 1440		TKN NH3 TN T. PHOS. O. PHOS.																			
			pH T. RES. CHLORINE SPEC. CON. T. ALK.																			
			COD PHENOLS TOC DOC																			
			TOTAL CYANIDE TOTAL SULFIDE																			
			REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY																			
			TOTAL COLIFORM E. COLI FECAL COLIFORM																			
			ENTEROCOCCI HETEROTROPHIC PLATE COUNT																			
			DISSOLVED METALS (LIST BELOW)																			
			TOTAL METALS (LIST BELOW)																			

MATRIX: A-AIR, S-SOIL, G-GROUND WATER, SW-SURFACE WATER, DW-DRINKING WATER, WW-WASTE WATER
PRESERVATIVE: H-HCL, N-NHNO3, S-H2SO4, Na-NALOH, M-MEOH

PROJECT MANAGER: ALVAN D. MEECEER
COMPANY: ROP ENVIRONMENTAL

ADDRESS: 320 1ST NH TURKPIKE
CITY: WORTHWOOD STATE: NH ZIP: 03261
PHONE: (603) 942 5432 EXT: _____
E-MAIL: ALAN@AIRPE.COM
SITE NAME: MACWORTH 15LAND
PROJECT #: 24.0042
STATE: NH MA VT OTHER: _____
REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER: _____

QUOTE #: _____ P.O. #: _____

CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: Lab Copy GREEN: Customer Copy)

QA/QC REPORTING

A B C
MAMCP

TEMP: 18.9 °C
ICP? YES (NO)

REPORTING OPTIONS
PRELIMS: YES OR NO _____

ELECTRONIC OPTIONS
PDF EXCEL EQUUS _____ OTHER: _____

TURN AROUND TIME
24hr* 48hr*
3-4 Day* 5 Day 7 Day
10 Day *Pre-approval Required

SAMPLER: NICHOLAS JAY HOWARD
RECEIVED BY: [Signature]
DATE: 03.05.24 TIME: 1141

REINQUISHED BY: [Signature] DATE: _____ TIME: _____ RECEIVED BY: _____
REINQUISHED BY: _____ DATE: _____ TIME: _____ RECEIVED BY: _____
REINQUISHED BY: _____ DATE: _____ TIME: _____ RECEIVED BY: _____

METALS: 8 RCMA 13 PP FE, MN PQ, CU

OTHER METALS: _____

SAMPLES FIELD FILTERED? YES NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IE DIFFERENT)

SITE HISTORY: _____
SUSPECTED CONTAMINATION: _____
FIELD READINGS: _____



CHAIN-OF-CUSTODY RECORD
BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

274783

SAMPLE I.D.	SAMPLING DATE/TIME	*IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC		SVOC		TCDF	INORGANICS				MICRO		METALS		OTHER	# OF CONTAINERS	NOTES M-FOH VIAL #
					1, 4 DIOXANE	MAVPH	MAEPH	ABN METALS		HERB	SO ₄	DOC	E. COLI	DISSOLVED METALS (LIST BELOW)	TOTAL METALS (LIST BELOW)					
PCB 11	03.04.24	1449		524.2 524.2 MTBE ONLY 8260 624 VTICS 8021	8015 GRO		8015 DRO												1	
PCB 12	03.04.24	1454		8270 625 ABN PAH EDB DBCP			PEST 608 PEST 8081	PCB 608 PCB 808											1	
PCB 13	03.04.24	1459		TPH8100 LI L2															1	
				OIL & GREASE 1664 TPH 1664																
				TCDF 1311 ABN METALS VOC PEST HERB																
				BOD CBOD TS TSS TDS																
				Br Cl F SO ₄ NO ₂ NO ₃ NO ₃ NO ₃																
				TKN NH ₃ TN T. PHOS. O. PHOS.																
				pH T. RES. CHLORINE SPEC. CON. T. ALK.																
				COD PHENOLS TOC DOC																
				TOTAL CYANIDE TOTAL SULFIDE																
				REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY																
				TOTAL COLIFORM E. COLI FECAL COLIFORM																
				ENTEROCOCCI HETEROTROPHIC PLATE COUNT																
				DISSOLVED METALS (LIST BELOW)																
				TOTAL METALS (LIST BELOW)																

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER;
 WW-WASTE WATER
 PRESERVATIVE: H-HCL; N-NHNO₃; S-H₂SO₄; Na-NaOH; M-MEOH

PROJECT MANAGER: ALAN D. MENCIER
 COMPANY: PPF ENVIRON MENTAL
 ADDRESS: 320 1ST NH TURNPIKE
 CITY: NORWOOD STATE: NH ZIP: 03261
 PHONE: (603) 942-5432 EXT: _____
 E-MAIL: NICOLEA@PPF.COM
 SITE NAME: MACWORTH ISLAND
 PROJECT #: 24,0042
 STATE: NH MA ME VT OTHER: _____
 REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR
GWP, OIL FUND, BROWNFIELD OR OTHER: _____
 QUOTE #: _____ PO #: _____

QA/QC REPORTING: A B C
 MAMCP
 TEMP: 18.9 °C
 ICE? YES NO
 REPORTING OPTIONS: PRELIMS: YES OR NO
 ELECTRONIC OPTIONS: PDF EXCEL
 OTHER: _____
 TURN AROUND TIME: 24hr* 48hr*
 3-4 Days* 5 Day 7 Day 10 Day
 *Pre-approval Required
 RELINQUISHED BY: Nicholas JAY HOWARD DATE: 03.05.24 TIME: 11/41
 RECEIVED BY: [Signature] DATE: _____ TIME: _____
 RELINQUISHED BY: _____ DATE: _____ TIME: _____
 RECEIVED BY: _____ DATE: _____ TIME: _____

METALS: 8 RCRA 13 PP Fe, Mn, Pb, Cu
 OTHER METALS: _____
 SAMPLES FIELD FILTERED? YES NO
 NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)
 SITE HISTORY: _____
 SUSPECTED CONTAMINATION: _____
 FIELD RECORDS: _____

APPENDIX D



1. Mackworth Island, Casco Bay, Maine



2. Governor Baxter School for the Deaf on Mackworth Island



3. Building B Exterior



4. Building G – Carter Hall



5. HG10 ACM 1' x 1' Fixed Wall Tiles, Fissure and Dot Style, Building G, Acoustic Room



6. HG13, HG21 & HG2D ACM – Building G, 12" Vinyl Floor tile with mastic, under carpets

SITE PHOTOGRAPHS

Site Address:
Mackworth Island
Casco Bay, Falmouth, ME



www.airpf.com
603-942-5432

Project No. 240042



7. HG25 ACM Mudded Fitting, Building B where removal occurred at bathroom or kitchen spaces



8. HG26 ACM Mudded Fitting, Building G, Auditorium



9. Building B, showing HG29 ACM, decorative surfacing



10. HG3 ACM Carpet Adhesive, found in hallway space of Building G, on concrete



11. HG6 Grey 9" Floor tile with Mastic, in bathroom, kitchen and closets spaces throughout classrooms of Building G, to include under carpet and 12" Floor Tile



12. HG8 & HG18 ACM Window Glaze – Throughout Buildings G & Building B at Aluminum Framed Windows, HG18 group specific to Corridor to Building K

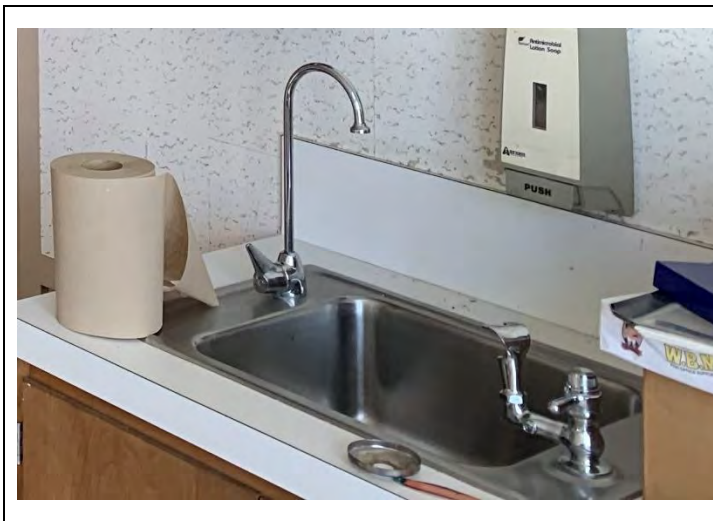
SITE PHOTOGRAPHS

Site Address:
Mackworth Island
Casco Bay, Falmouth, ME



www.airpf.com
603-942-5432

Project No. 240042



13. HG12 ACM Sink Base Undercoating, Building G, Acoustic Room.



14. HG14 ACM Grey Window Caulk, associated with wire mesh windows in steel frames, both buildings



15. HG24 Black Flooring Mastic, Building B, 1st Floor, remaining Mastic from under removed walls, same as 2nd floor under 9" VT throughout entire 2nd floor



16. Building B 2nd floor carpet – showing imprint of loose and damaged 9" ACM Vinyl Floor Tile underneath - throughout



17. ACM Transite Transoms over Fire Doors, Building G, SW Exterior



18. ACM Transite Panel in Electrical closet building G

SITE PHOTOGRAPHS

Site Address:
Mackworth Island
Casco Bay, Falmouth, ME



www.airpf.com
603-942-5432

Project No. 240042



19. "Over-Roof" of Building G. Previous gravel roof left in place under new roof, and over hallway of Building G



20. "Over-Roof" Space contains some Mudded Fittings in Fiberglass Pipe Insulation runs - HG26 ACM

SITE PHOTOGRAPHS

Site Address:
Mackworth Island
Casco Bay, Falmouth, ME



www.airpf.com
603-942-5432

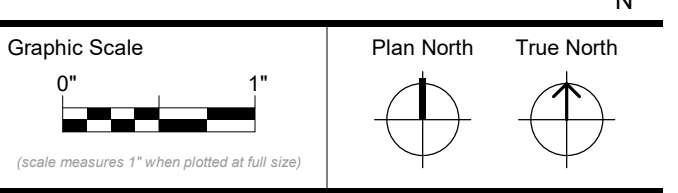
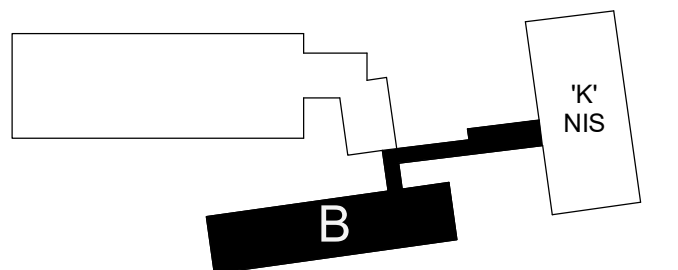
Project No. 240042

APPENDIX E

GENERAL NOTES

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KEY PLAN



PRELIMINARY NOT FOR CONSTRUCTION

EXISTING CONDITIONS

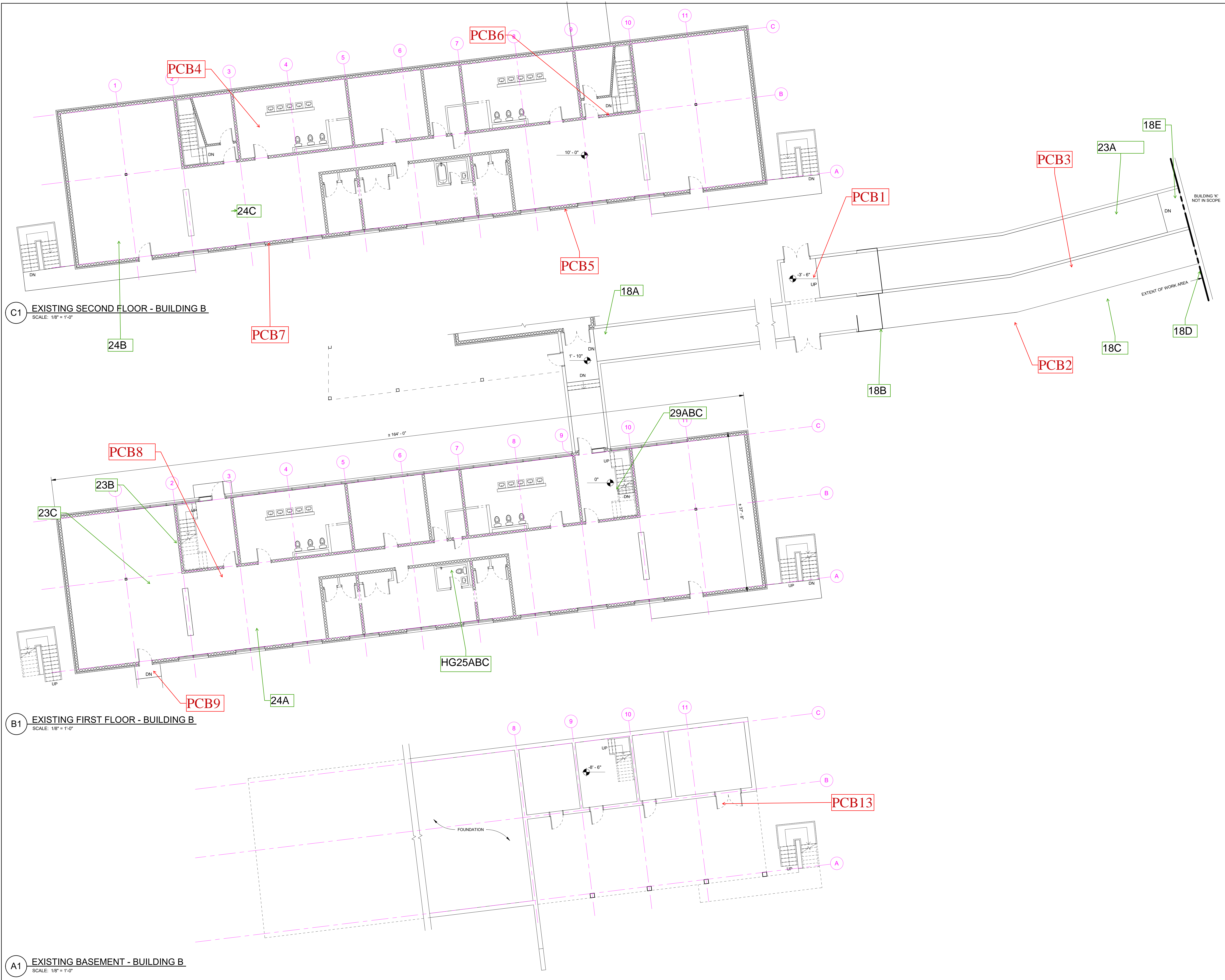
MARCH, 2024

Revision Date	Revision Description

Drawn by: KLS

EXISTING FLOOR PLANS - BUILDING B

A05-1B



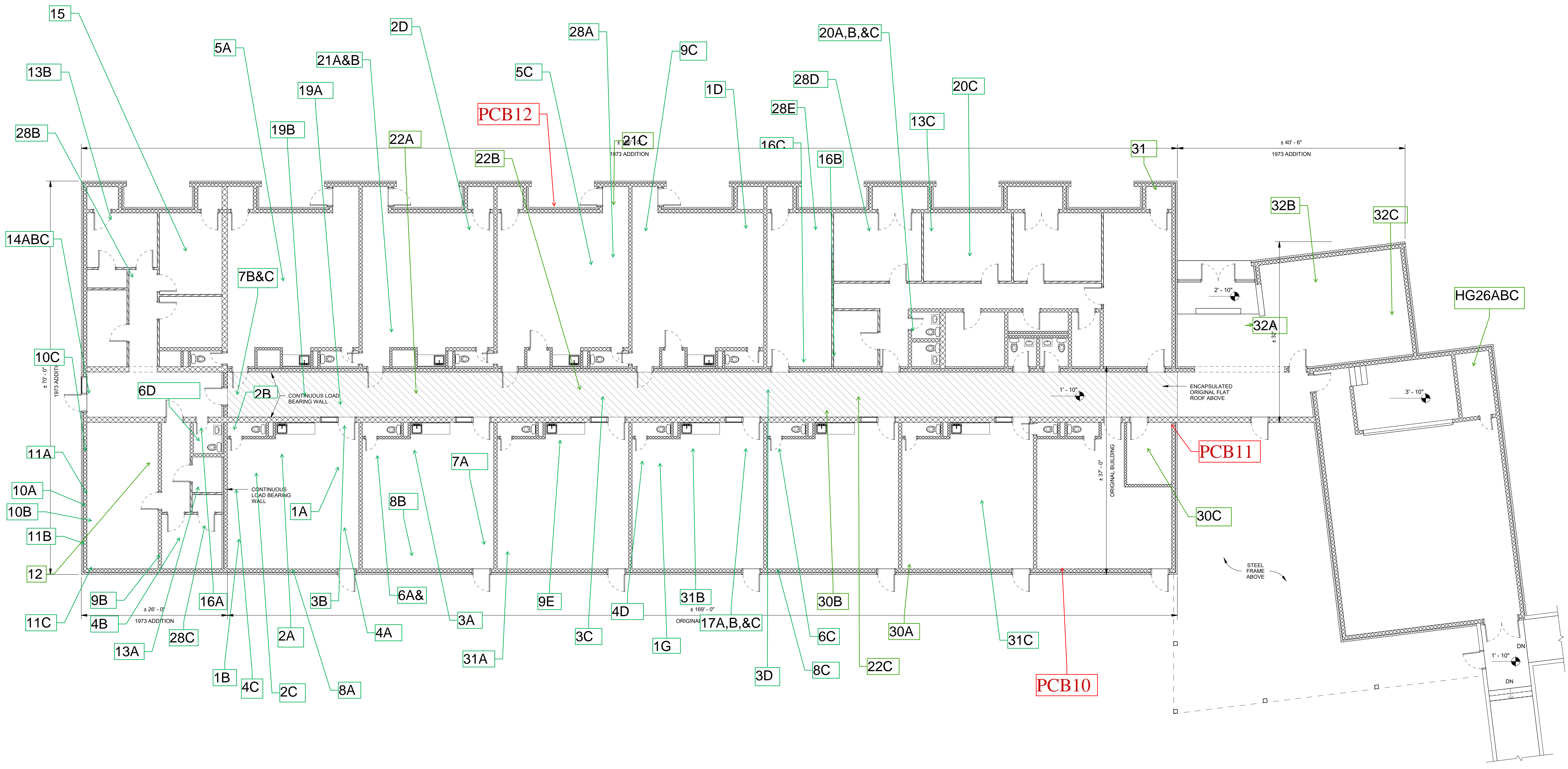
C1 EXISTING SECOND FLOOR - BUILDING B
SCALE: 1/8" = 1'-0"

B1 EXISTING FIRST FLOOR - BUILDING B
SCALE: 1/8" = 1'-0"

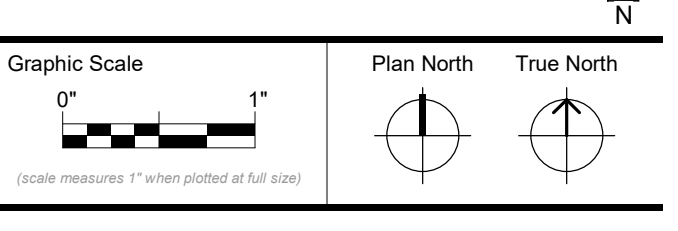
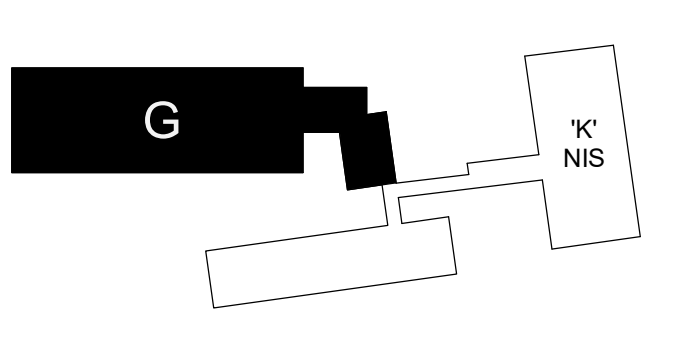
A1 EXISTING BASEMENT - BUILDING B
SCALE: 1/8" = 1'-0"

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KEY PLAN



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CONSTRUCTION

EXISTING CONDITIONS

MARCH, 2024

Revision Date	Revision Description

Drawn by: Author

EXISTING FIRST FLOOR - BUILDING G

MACKWORTH ISLAND IMPROVEMENTS PHASE 1

FALMOUTH, ME

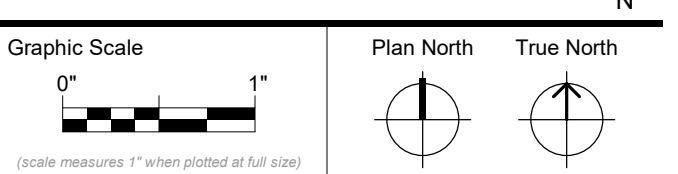
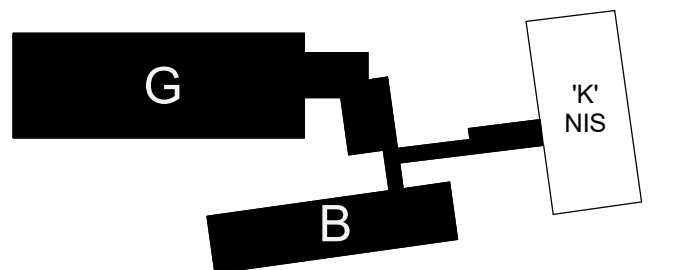
Harriman Project No. 23216

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KEY PLAN



PRELIMINARY
NOT FOR
CONSTRUCTION

PROGRESS

MARCH, 2024

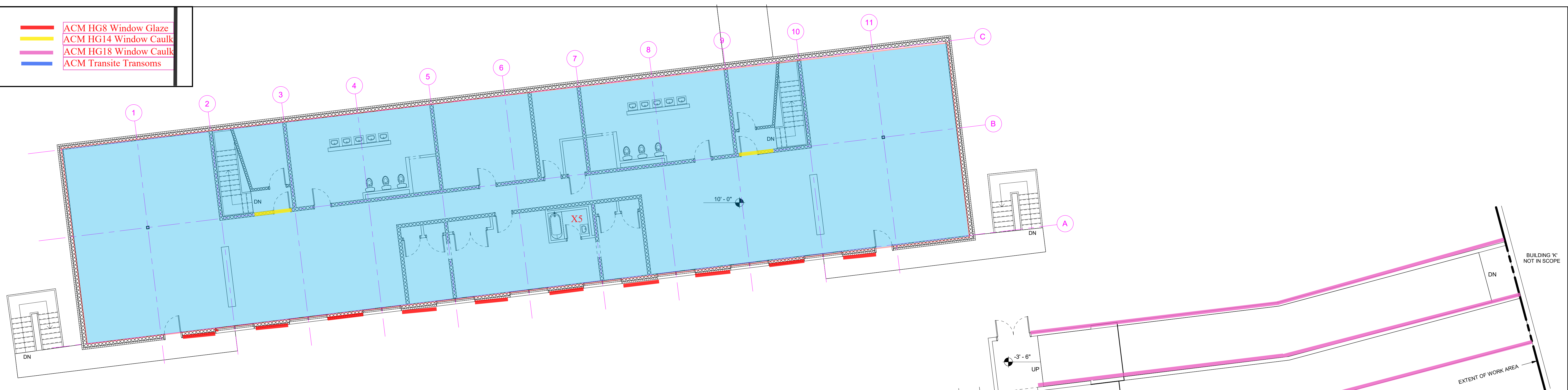
Revision Date	Revision Description

Drawn by: Author

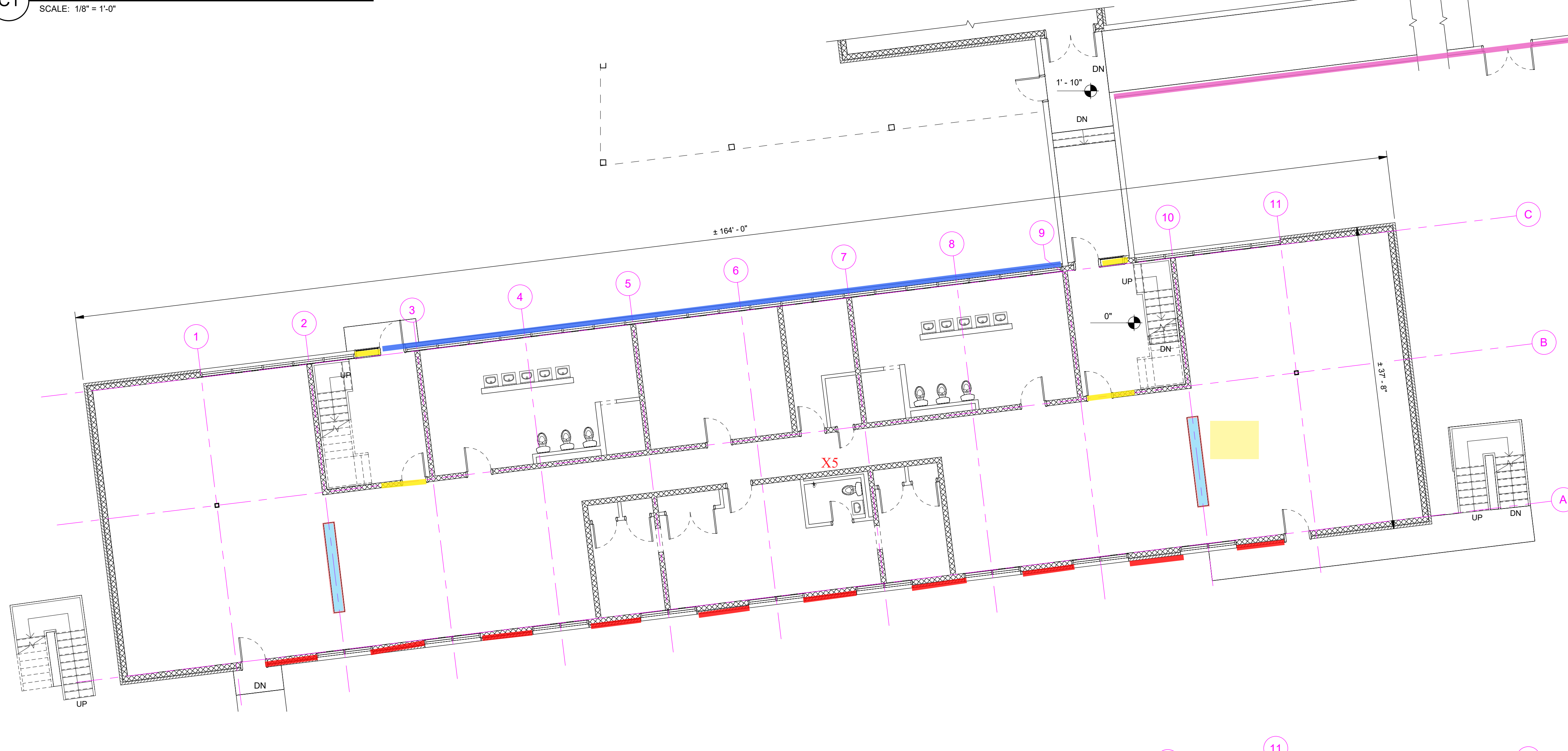
ROOF PLAN

A05- 2

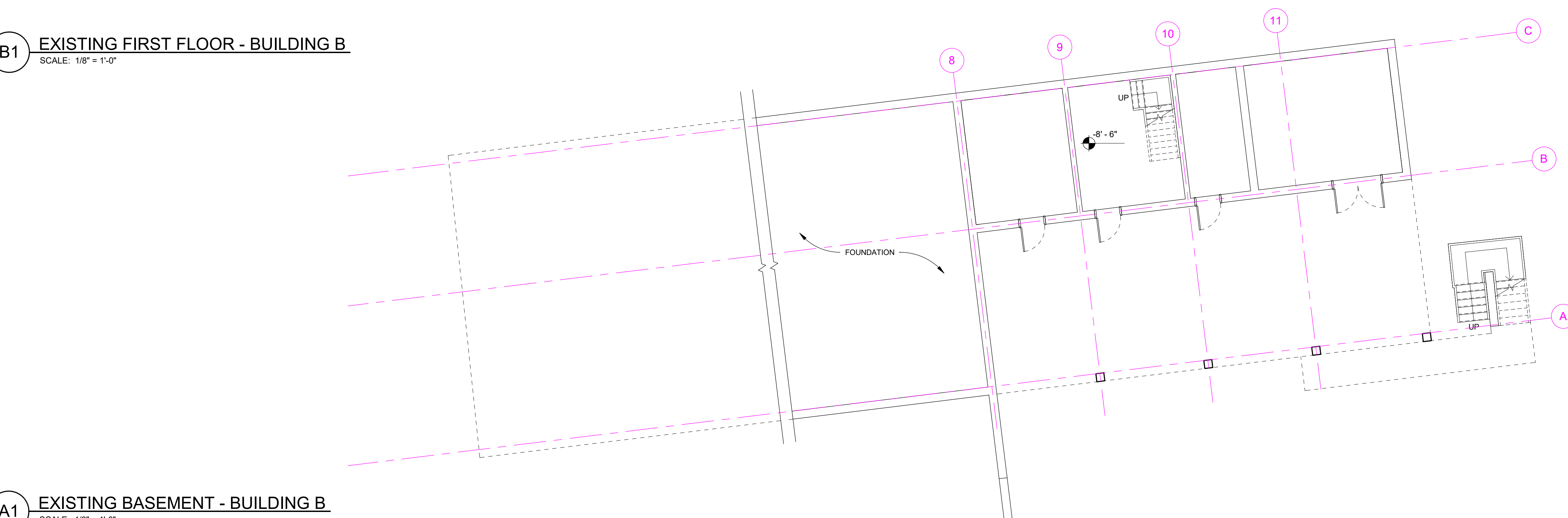
- ACM HG8 Window Glaze
- ACM HG14 Window Caulk
- ACM HG18 Window Caulk
- ACM Transit Transoms



C1 EXISTING SECOND FLOOR - BUILDING B
SCALE: 1/8" = 1'-0"



B1 EXISTING FIRST FLOOR - BUILDING B
SCALE: 1/8" = 1'-0"



A1 EXISTING BASEMENT - BUILDING B
SCALE: 1/8" = 1'-0"

Harriman

MACKWORTH ISLAND IMPROVEMENTS PHASE 1

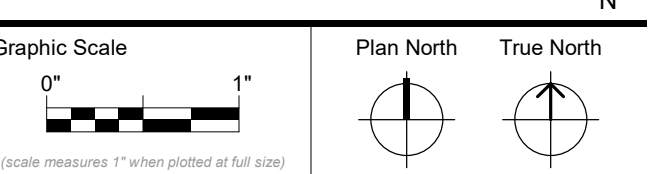
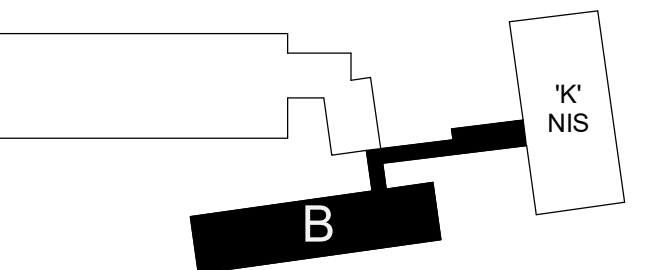
FALMOUTH, ME

Harriman Project No. 23216

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KEY PLAN



PRELIMINARY
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EXISTING CONDITIONS

MARCH, 2024

Revision Date	Revision Description

Drawn by: KLS

EXISTING FLOOR PLANS -
BUILDING B

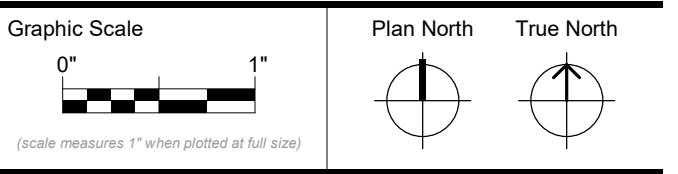
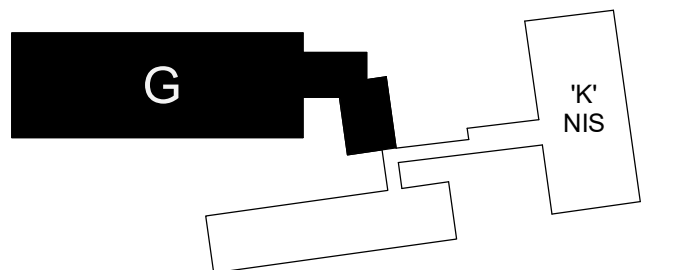
A05-1B

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6. TEMPORARY SINGLE POINT POWER AND WATER CONNECTIONS PROVIDED BY OWNER. SEE LOCATION NOTED. CONTRACTOR RESPONSIBLE FOR CODE COMPLIANT DISTRIBUTION BEYOND SINGLE POINT PROVIDED.
7. BUILDING UTILITIES LOCATED WITHIN THE PROJECT SCOPE AREA THAT SERVE OTHER BUILDINGS TO BE MAINTAINED. ANY DISRUPTION CAUSED BY THE SCOPE OF WORK IS TO BE COORDINATED WITH OWNER AND UTILITY PROVIDER PRIOR TO ASSOCIATED WORK.
8. ANY ASSOCIATED UTILITIES SERVING BUILDINGS 'B' AND 'G' FROM DISTRIBUTION THAT ALSO CONNECTS TO OTHER BUILDING IS TO BE DISCONNECTED WITH NO DISRUPTION OF SERVICE TO OTHER BUILDINGS. DISCONNECT WORK TO BE COORDINATED WITH OWNER AND UTILITY PROVIDER PRIOR TO ASSOCIATED WORK.



KEY PLAN



PRELIMINARY
NOT FOR
CONSTRUCTION

EXISTING CONDITIONS

MARCH, 2024

Revision Date	Revision Description

Drawn by: Author

EXISTING FIRST FLOOR - BUILDING G

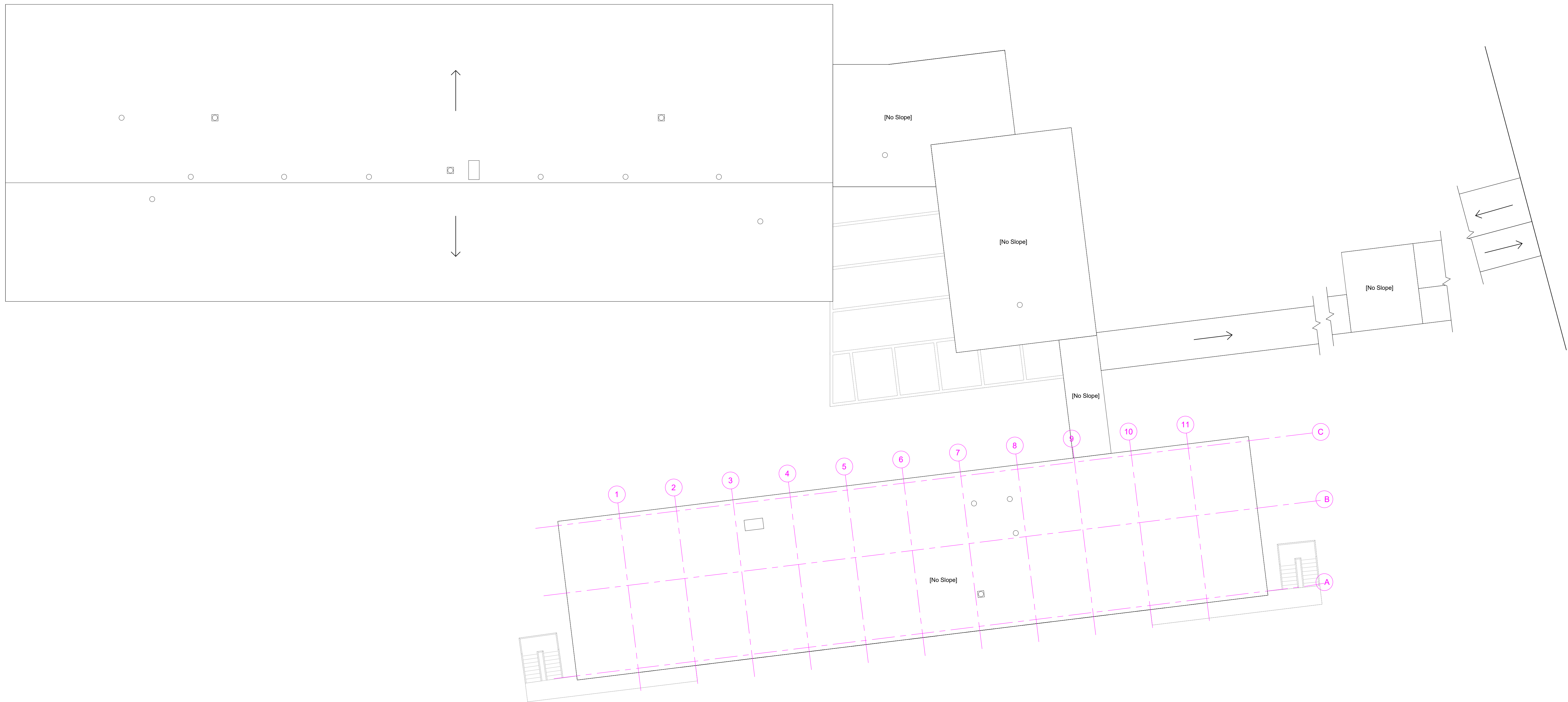
MACKWORTH ISLAND IMPROVEMENTS PHASE 1

FALMOUTH, ME

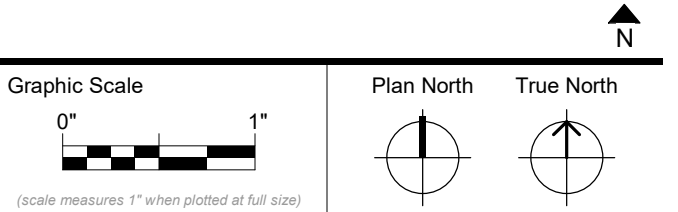
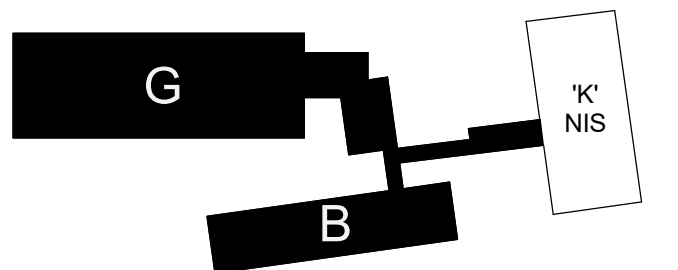
Harriman Project No. 23216

GENERAL NOTES

- ALL WORK TO BE DONE IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS, CODES AND STANDARDS, AND MEET THE REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
- BUILDINGS AND CONNECTORS NOTED TO BE DEMOLISHED IN THEIR ENTIRETY. REMOVALS TO INCLUDE ALL FOUNDATIONS, FOOTINGS AND ASSOCIATED CONSTRUCTED SUB GRADE ELEMENTS.
- SEE SPECIFICATIONS BACKFILLING SCOPE REQUIREMENTS.
- DRAWINGS ARE ILLUSTRATIVE OF EXISTING CONDITIONS FOR SCOPE AND ESTIMATING PURPOSES. CONDITIONS HAVE NOT BEEN FIELD VERIFIED. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL CONDITIONS.
- REMEDICATION OF HAZARDOUS MATERIALS TO BE COMPLETED PRIOR TO DEMOLITION WITH NOTED EXCEPTIONS:
 - ROOFING: SEE HAZARDOUS MATERIALS REPORT
 - ANY HAZARDOUS MATERIALS DISCOVERED DURING DEMOLITION PROCESS SHOULD FOLLOW APPROVED ABATEMENT PROCEDURES AND APPLICABLE LAWS.
- ALL BUILDING FLUISHING UTILITIES TO BE DISCONNECTED AND CAPPED AT THE SHUT OFF VALVES PRIOR TO START OF DEMOLITION.
- TEMPORARY SINGLE POINT POWER AND WATER CONNECTIONS PROVIDED BY OWNER. SEE LOCATION NOTED. CONTRACTOR RESPONSIBLE FOR CODE COMPLIANT DISTRIBUTION BEYOND SINGLE POINT PROVIDED.
- BUILDING UTILITIES LOCATED WITHIN THE PROJECT SCOPE AREA THAT SERVE OTHER BUILDINGS TO BE MAINTAINED. ANY DISRUPTION CAUSED BY THE SCOPE OF WORK IS TO BE COORDINATED WITH OWNER AND UTILITY PROVIDER PRIOR TO ASSOCIATED WORK.
- ANY ASSOCIATED UTILITIES SERVING BUILDINGS 'B' AND 'G' FROM DISTRIBUTION THAT ALSO CONNECTS TO OTHER BUILDING IS TO BE DISCONNECTED WITH NO DISRUPTION OF SERVICE TO OTHER BUILDINGS. DISCONNECT WORK TO BE COORDINATED WITH OWNER AND UTILITY PROVIDER PRIOR TO ASSOCIATED WORK.



KEY PLAN



PRELIMINARY NOT FOR CONSTRUCTION

PROGRESS

MARCH, 2024

Revision Date	Revision Description

Drawn by: Author

ROOF PLAN

A05- 2

APPENDIX F

State of Maine
Asbestos Abatement Program

Jacob C. Dunkerley



Inspector

Cert No. AI-0950
Trn.Exp.Date 11/8/24

Expiration Date **11/30/2024**

This is not a legal form of official identification



RPF ENVIRONMENTAL, INC.

320 First NH Turnpike, Northwood, NH 03261 (603) 942-5432
Class Location: Northwood, NH

This is to certify that

Jake Dunkerley

*has completed the requisite training and
has passed an examination for accreditation as:*

Asbestos Inspector - Annual Refresher

Pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

January 11, 2024
Course Date

January 11, 2024
Examination Date

January 12, 2025
Expiration Date

240010 – 02- 12/30/97
Certificate Number/DOB



Brianna Ham, Instructor

APPENDIX G

Summary of Methodology: Asbestos-Containing Building Materials Survey

EPA accredited inspector(s) surveyed accessible space in the building or site areas included within the RPF Scope of Work (SOW) to identify suspect asbestos-containing building material (ACBM). Suspect ACBM was inventoried and categorized into homogeneous groups of materials. To the extent indicated in the report, samples were then extracted from the different groups of homogeneous materials in accordance with applicable State and federal rules and regulations. For surveys in which the SOW included full inspections of the affected space, sampling methodologies were based on the requirements set forth in 40 CFR Part 763 (EPA) and 29 CFR Part 1926.1101 (OSHA). For preliminary or limited surveys, findings apply to only the affected material or space as indicated in the RPF SOW and Report and additional inspection and testing will be required to satisfy regulatory obligations associated with renovation, demolition, maintenance and other occupational safety and health requirements. Sampling methodologies used are as set forth in 40 CFR Part 763 (EPA):

- Surfacing Material: 3 bulk samples from each homogenous area and/or material that is 1,000 square feet or less. 5 bulk samples from each homogenous area that is greater than 1,000 square feet but less than or equal to 5000 square feet. 7 bulk samples from each homogenous area that is greater than 5,000 square feet.
- Thermal System Insulation: 3 bulk samples from each homogenous area. 1 bulk sample from each homogenous area of patched thermal system insulation if the patched section is less than 6 linear or square feet. Samples sufficient to determine whether the material is ACM from each insulated mechanical system where cement is utilized on tees, elbows, or valves.
- Miscellaneous ACM: 3 samples from each miscellaneous material. 1 sample if the amount of miscellaneous material is less than 6 square or linear feet.

Collected samples were individually placed into sealed containers, labeled, and submitted with proper chain of custody forms to the RPF NVLAP-accredited vendor laboratory. Sample containers and tools were cleaned after each sample was collected. Samples were analyzed for asbestos content using polarized light microscopy (PLM). Although PLM is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, PLM may not be sensitive enough to detect all of the asbestos fibers in certain types of materials, such as floor tile and other nonfriable ACBM. In the event that more definitive results are requested in cases of with negative or trace results of asbestos are detected, RPF recommends that confirmation testing be completed using transmission electron microscopy.

For each homogeneous group of suspect material, a “stop at first positive” (SFP) method may have been employed during the analysis. The SFP method is based on current EPA sampling protocols and means that if one sample within a homogeneous group of suspect material is found to contain >1% asbestos, then further analysis of that specific homogenous group samples is terminated, and the entire homogeneous group of material is considered to be ACBM regardless of the other sample results. This is based on the potential for inconsistent mix of asbestos in the product yielding varying findings across the different individual samples collected from the same homogeneous group. Unless otherwise noted in the report, sample groups found to have 1% to <10% asbestos content are assumed to be ACBM; to rebut this assumption further analysis with point count methods are required.

Inaccessible and hidden areas, including but not limited to wall/floor/ceiling cavity space, space with obstructed access (such as fiberglass insulation above suspended ceilings), sub floors, interiors of mechanical and process equipment, and similar spaces were not included in the inspection and care should be used when accessing these areas in the future. Unless otherwise noted in the RPF Report, destructive survey techniques were not employed during this survey.

In the event that additional suspect materials are encountered that are not addressed in this report, the materials should be properly tested by an accredited inspector. For example, during renovation and demolition it is likely that additional suspect material will be encountered, and such suspect materials should be assumed to be hazardous until proper inspection and testing occurs.

RPF followed applicable industry standards; however, various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspection, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material. Also reference the Limitations document attached to the report.

Summary of Methodology: Lead in Paint Survey

Screening for lead in paint (LP) was performed using bulk sampling of paint or using an X-Ray Fluorescence (XRF) meter for in situ measurements of various painted surfaces. For bulk sampling, samples for determinations were collected by scraping lead paint chips from the substrate. The surveyor attempted to sample layers of paint down to the substrate surface at each sample location. Samples were placed into proper sample containers, the containers were then sealed, labeled and shipped with chain of custody to the RPF AIHA accredited vendor laboratory. The samples were analyzed for total lead content using SW 846 3050B - NIOSH Method 7420. For XRF screening, the device was used and calibrated in accordance with the equipment and industry guidelines applicable for the specific testing performed.

Unless specific TCLP waste characterizations were included in the RPF Scope of Work (SOW), further analysis of waste streams for toxicity characteristics including, but not necessarily limited to lead, may be required prior to disposal of the waste stream. Other toxics may also be present including other heavy metals and PCBs and it may also be necessary to conduct waste characterization for these materials.

Sampling was limited to the specific components as listed in the RPF Report and testing and survey was not completed on every different surface in every room or area in the building. In addition, unless otherwise noted in the RPF Report, surface dust, air and soil testing were not conducted during this survey. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing and air monitoring throughout the building, LBP testing of all surfaces in the building, and representative soil testing in the exterior areas should be completed. This type of testing and analysis was beyond the SOW for the initial survey.

The intent of this survey is for lead in construction purposes, not for lead abatement, lead inspections, or lead hazard assessments in residential situations. Specific survey and inspection protocols are required for residential lead-based paint inspections that were not included in the RPF SOW.

RPF followed applicable industry standards for construction related identification in nonresidential settings; however, RPF does not warrant or certify that all lead or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to inspect or sample, assumptions regarding the determination of homogenous or like types of paint, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar appearing material. Also reference the Limitations document attached to the report.

Summary of Methodology: Polychlorinated Biphenyls, Mercury and Refrigerants

Various, accessible fluorescent light fixtures were inspected to determine if the ballasts contain a “No PCBs” label. Ballasts that do not have the “No PCBs” label are assumed to contain PCB.

Only limited fixtures were checked based on accessibility and safety concerns. Further inspection will be required during the course of construction, maintenance, renovation and demolition.

Various equipment and machinery within the building may also contain PCB oils. Specific findings relating to such equipment and machinery were not included in the RPF SOW.

It is common to find fluorescent light bulbs, thermostats and switches present in buildings. RPF performed a visual inspection of specific areas included in the RPF SOW in an attempt to identify such materials. Findings are limited to the specific accessible space accessed by RPF.

Various compressor and refrigerant equipment may be present, and should be assumed that such equipment contains Freon or other chlorofluorocarbons unless otherwise tested or documented. Although general comment may be provided in the RPF Report, the specific identification of all potential Freon and CFCs is not included in the RPF SOW.

The findings may or may not be fully representative of all of the entire building. Confirmation testing and analysis of PCB, refrigerants and mercury was not included in the RPF SOW.

RPF followed applicable industry standards; however, RPF does not warrant or certify that all hazardous material in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspection, electrical safety considerations, and assumptions relating to areas or material being representative of other locations which in fact may not be representative. Also reference the Limitations document attached to the report.

LIMITATIONS

1. The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the RPF Environmental, Inc. Scope of Work (SOW) as discussed in the proposal and/or agreement. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. The nature of this survey or monitoring service was limited as indicated herein and in the report or letter of findings. Further testing, survey, and analysis is required to provide more definitive results and findings.
2. For site survey work, observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACM material in the designated areas were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility and/or other site conditions. Asbestos or hazardous material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds. Access and observations relating to electrical and mechanical systems within the building were restricted or not feasible to prevent damage to the systems and minimize safety hazards to the survey team.
3. Although assumptions may have been stated regarding the potential presence of inaccessible or concealed asbestos and other hazardous material, full inspection findings for all asbestos and other hazardous material requires the use of full destructive survey methods to identify possible inaccessible suspect material and this level of survey was not included in the SOW for this project. For preliminary survey work, sampling and analysis as applicable was limited and a full survey throughout the site was not performed. Only the specific areas and /or materials indicated in the report were included in the SOW. This inspection did not include a full hazard assessment survey, full testing or bulk material, or testing to determine current dust concentrations of asbestos in and around the building. Inspection results should not be used for compliance with current EPA and State asbestos in renovation/demolition requirements unless specifically stated as intended for this use in the RPF report and considering the limitations as stated therein and within this limitations document.
4. Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the survey. Interiors of mechanical equipment and other building or process equipment may also have asbestos and other hazardous material present and were not included in this inspection. For renovation and demolition work, further inspection by qualified personnel will be required during the course of construction activity to identify suspect material not previously documented at the site or in this survey report. Bordering properties were not investigated and comprehensive file review and research was not performed.
5. For lead in paint, observations were made of the designated accessible areas of the site as indicated in the Report. Limited testing may have been performed to the extent indicated in the text of the report. In order to conduct thorough hazard assessments for lead exposures, representative surface dust testing, air monitoring and other related testing throughout the building, should be completed. This type of in depth testing and analysis was beyond the scope of services for the initial inspection. For lead surveys with XRF readings, it is recommended that surfaces found to have LBP or trace amount of lead detected with readings of less than 4 mg/cm² be confirmed using laboratory analysis if more definitive results are required. Substrate corrections involving destructive sampling or damage to existing surfaces (to minimize XRF read-through) were not completed. In some instances, destructive testing may be required for more accurate results. In addition, depending on the specific thickness of the paint films on different areas of a building component, differing amounts of wear, and other factors, XRF readings can vary slightly, even on the same building component. Unless otherwise specifically stated in the scope of services and final report, lead testing performed is not intended to comply with other state and federal regulations pertaining to childhood lead poisoning regulations.

6. Air testing is to be considered a “snap shot” of conditions present on the day of the survey with the understanding that conditions may differ at other times or dates or operational conditions for the facility. Results are also limited based on the specific analytical methods utilized. For phase contrast microscopy (PCM) total airborne fiber testing, more sensitive asbestos-specific analysis using transmission electron microscopy (TEM) can be performed upon request.
7. For asbestos bulk and dust testing, although polarize light microscopy (PLM) is the method currently recognized in State and federal regulations for asbestos identification in bulk samples, some industry studies have found that PLM may not be sensitive enough to detect all of the asbestos fibers in certain nonfriable material, vermiculate type insulation, soils, surface dust, and other materials requiring more sensitive analysis to identify possible asbestos fibers. In the event that more definitive results are requested, RPF recommends that confirmation testing be completed using TEM methods or other analytical methods as may be applicable to the material. Detection of possible asbestos fibers may be made more difficult by the presence of other non-asbestos fibrous components such as cellulose, fiber glass, etc., by binder/matrix materials which may mask or obscure fibrous components, and/or by exposure to conditions capable of altering or transforming asbestos. PLM can show significant bias leading to false negatives and false positives for certain types of materials. PLM is limited by the visibility of the asbestos fibers. In some samples the fibers may be reduced to a diameter so small or masked by coatings to such an extent that they cannot be reliably observed or identified using PLM.
8. For hazardous building material inspection or survey work, RPF followed applicable industry standards; however, RPF does not warrant or certify that all asbestos or other hazardous materials in or on the building has been identified and included in this report. Various assumptions and limitations of the methods can result in missed materials or misidentification of materials due to several factors including but not limited to: inaccessible space due to physical or safety constraints, space that is difficult to reach to fully inspect, assumptions regarding the determination of homogenous groups of suspect material, assumptions regarding attempts to conduct representative sampling, and potential for varying mixtures and layers of material sampled not being representative of all areas of similar material.
9. Full assessments often requires multiple rounds of sampling over a period of time for air, bulk material, surface dust and water. Such comprehensive testing was beyond the scope of RPF services. In addition clearance testing for abatement, as applicable, was based on the visual observations and limited ambient area air testing as indicated in the report and in accordance with applicable state and federal regulations. The potential exists that microscopic surface dust remains with contaminant present even in the event that the clearance testing meets the state and federal requirements. Likewise for building surveys, visual observations are not sufficient alone to detect possible contaminant in settled dust. Unless otherwise specifically indicated in the report, surface dust testing was not included in the scope of the RPF services.
10. For abatement or remediation monitoring services: RPF is not responsible for observations and test for specific periods of work that RPF did not perform full shift monitoring of construction, abatement or remediation activity. In the event that problems occurred or concerns arouse regarding contamination, safety or health hazards during periods RPF was not onsite, RPF is not responsible to provide documentation or assurances regarding conditions, safety, air testing results and other compliance issues. RPF may have provided recommendations to the Client, as needed, pertaining to the Client’s Contractor compliance with the technical specifications, schedules, and other project related issues as agreed and based on results of RPF monitoring work. However, actual enforcement, or waiving of, contract provisions and requirements as well as regulatory liabilities shall be the responsibility of Client and Client’s Contractor(s). Off-site abatement activities, such as waste transportation and disposal, were not monitored or inspected by RPF.
11. For services limited to clearance testing following abatement or remediation work by other parties: The testing was limited to clearance testing only and as indicated in the report and a site assessment for possible environmental health and safety hazards was not performed as part of the scope of this testing. Client, or Client’s abatement contractor as applicable, was responsible for performing visual inspections

of the work area to determine completeness of work prior to air clearance testing by RPF.

12. For site work, including but not limited to air clearance testing services, in which RPF did not provide full site safety and health oversight, abatement design, full shift monitoring of all site activity, RPF expresses no warranties, guarantees or certifications of the abatement work conducted by the Client or other employers at the job site(s), conditions during the work, or regulatory compliance, with the exception of the specific airborne concentrations as indicated by the air clearance test performed by RPF during the conditions present for the clearance testing. Unless otherwise specifically noted in the RPF Report, visual inspections and air clearance testing results apply only to the specific work area and conditions present during the testing. RPF did not perform visual inspections of surfaces not accessible in the work area due to the presence of containment barriers or other obstructions. In these instances, some contamination may be present following RPF clearance testing and such contamination may be exposed during and after removal of the containment barriers or other obstructions following RPF testing services. Client or Client's Contractor is responsible for using appropriate care and inspection to identify potential hazards and to remediate such hazards as necessary to ensure compliance and a safe environment.
13. The survey was limited to the material and/or areas as specifically designated in the report and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this site inspection. Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other hazardous product and materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the Report.
14. For mold and moisture survey services, RPF services did not include design or remediation of moisture intrusion. Some level of mold will remain at the site regardless of RPF testing and Contractor or Client cleaning efforts. RPF testing associated with mold remediation and assessments is limited and may or may not be representative of other surfaces and locations at the site. Mold growth will occur if moisture intrusion deficiencies have not been fully remedied and if the site or work areas are not maintained in a sufficiently dry state. Porous surfaces in mold contaminated areas which are not removed and disposed of will likely result in future spore release, allergen sources, or mold contamination.
15. Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.
16. Where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
17. All hazard communication and notification requirements, as required by U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and are not part of the RPF SOW.
18. The applicability of the observations and recommendations presented in this report to other portions of the site was not determined. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site and work conditions that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report.

March 8, 2024

William Gatchell, AIA
Associate, Senior Architect
Harriman
33 Jewel Court
Portsmouth, NH 03801

Re: Building Envelope Evaluation
Mackworth Island Phase I Implementation
The Mansion at the
Governor Baxter School for the Deaf
Falmouth, ME
Gale JN 842690

Dear Mr. Gatchell:

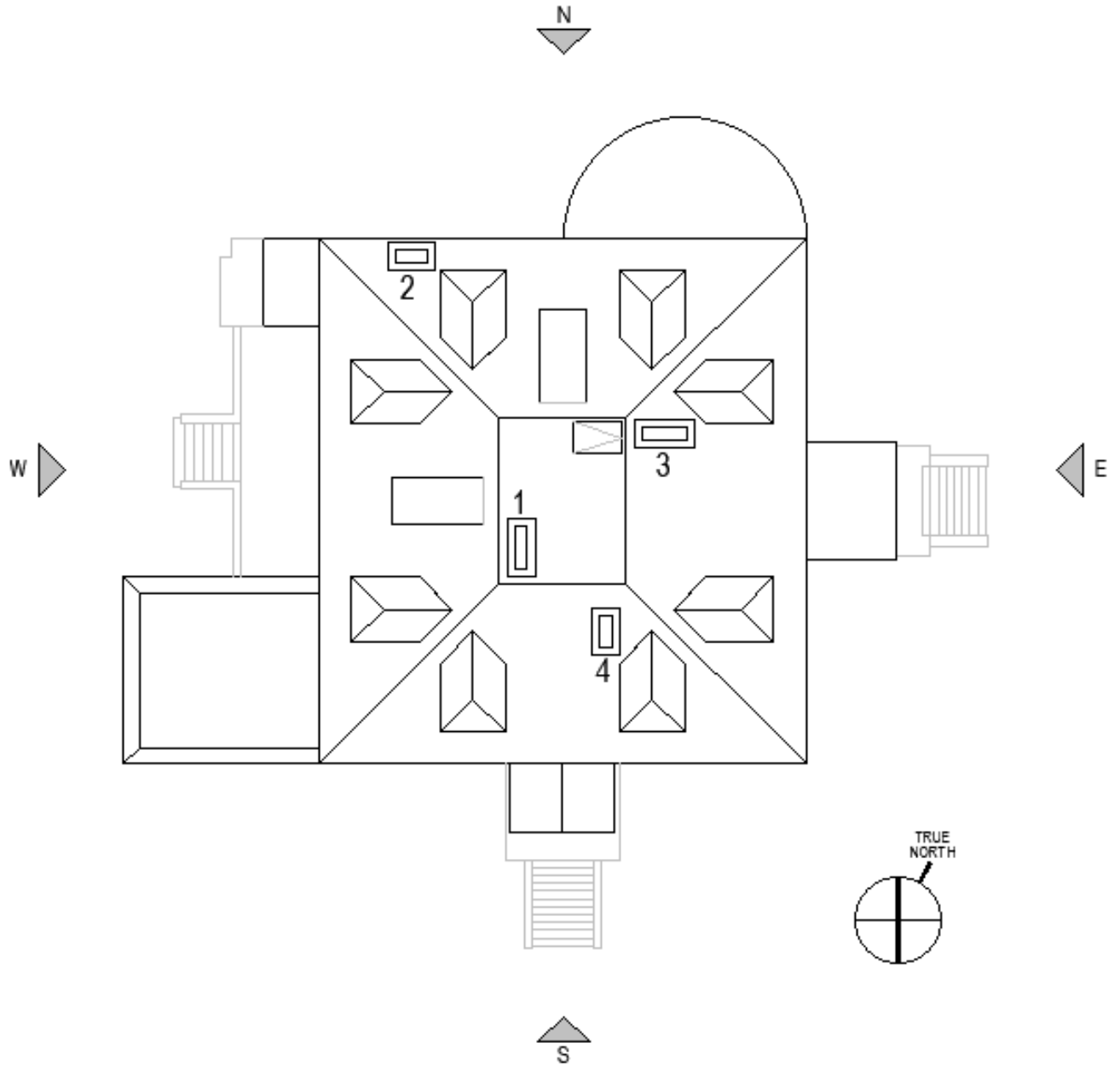
In accordance with our agreement, Gale Associates Inc. (Gale) performed a visual evaluation of the as-built conditions of the existing building envelope components for the Mansion building at the Governor Baxter School for the Deaf (School) located on Mackworth Island (Mackworth). Gale's evaluation included a review of the roof, exterior masonry walls, masonry chimneys, doors, and windows. Representatives from Gale visited the project on February 12, 2024, to conduct this evaluation. Access to the roof and building interiors was coordinated and provided by the school.

The purpose of the evaluation is to provide Harriman with a better understanding of the conditions observed and how they may be contributing to reported moisture related issues and deterioration of the building envelope components and to provide our opinions for repair, replacement, and restoration options to address the observed defect conditions. Refer to the Key Plan referenced below for representative roof area locations and elevation locations. This report will be used by Harriman for cost-estimating purposes to finalize the Phase I Implementation scope of work for building envelope repair, replacements and/or restoration of the Mansion that will be designed by Gale pending authorization by Harriman and the Bureau of General Services based on the prioritization of work and available funding.



Image 1: View of the Mansion at the Governor Baxter School for the Deaf.

KEY PLAN



EXTERIOR ELEVATIONS*Image 2: South elevation**Image 3: East elevation**Image 4: North elevation**Image 5: West elevation***BACKGROUND INFORMATION**

The Mansion building at the Governor Baxter School for the Deaf is located on Mackworth Island in the Town of Falmouth, Maine. The island has a long history dating back over 100 years. It was initially inhabited and used for agriculture, hunting, and fishing by the Wabanaki. European settlements led to the island being gifted to its namesake, Arthur Mackworth in 1631. In 1863 the island briefly hosted Camp Berry, a Civil War training location.

Development of the island began in earnest following James Baxter's purchase in 1885. The island passed to his son Percival Baxter who built the existing Mansion in 1917. In 1943 Percival gifted the island to the State of Maine. The deeded island gift included restrictions that the island "always be used for State public purposes only," that a cemetery for animals including bronze tablets be maintained, and that the property never be used for penal or corrective institutions. In accepting the deed, the Maine State Legislature provided that the Island be "held forever by the people of Maine for state public purposes, as trustee in trust."

A campus of eight (8) buildings was funded by former Governor Percival Baxter and the Maine State legislature as a school for the deaf and its use restricted to that purpose. Campus construction began in 1955. The island is currently used and celebrated as the Governor Baxter School for the Deaf and Mackworth Island State Park. Its varied uses result in multiple state agencies having jurisdiction over limited areas of the island or island infrastructure.

Harriman, as contracted through the Maine Bureaus of General Services (BGS) had prepared a Conceptual Utilization Master Plan which included a series of recommendations to improve multiple use areas and infrastructure for the island. Planning recommendations in the report were a result of a months-long process to provide short-term, long-term, and phased solutions to address identified issues and to enhance the character and quality of Mackworth Island for visitors and occupants.

The first task as outlined in Harriman’s Master Plan is to proceed with the implementation of Phase 1 on the campus of the Governor Baxter School for the Deaf. In general, Phase I includes the demolition of Buildings B and G, and its connecting structure to Building K, and the exterior restoration of Building A (Mansion).

The current building known as the Mansion was the summer home of the Baxter family from its construction in 1918 to when the island was gifted in 1943. It is both historically and architecturally significant. The development of the school campus in the 1950’s surrounds the building and prohibits views from most areas of the island.

The Mansion is a wood-framed 2-1/2 story structure with brick masonry exterior and stone masonry foundation. The primary sloped roofing is terra cotta tile, with elastomeric membrane and rolled asphalt roofing at the flat and low-sloped roofs. The dormers are faced with terra cotta shingles and trimmed with painted wood. The low end of the terra cotta tiled primary roof transitions to a decorative copper cornice and perimeter gutter system. The perimeter soffit is painted wood beadboard. Exterior trim and millwork are painted wood. The exterior windows are a combination of wooden double-hung and steel framed fixed and casement units. All single-glazed with cast stone or brownstone sills. The exterior entrance doors are solid wood with sidelights and transom, all with a painted finish and aluminum storm doors.

DOCUMENT REVIEW

Harriman provided Gale with pertinent documents as outlined below.

- Conceptual Utilization Master Plan: Mackworth Island, Conceptual Utilization Master Plan, as prepared by Harriman Final Report and dated January 27, 2023, (referred to as “Master Plan” herein). The Master Plan addresses the preservation of Mackworth as a “natural refuge set in Casco Bay” and to strengthen the “history and legacy of Mackworth” as the home to the Deaf Community. Regarding the Baxter Mansion, it was distinguished as being a “hidden jewel” and being listed on the National Register of Historical Places, along with eight (8) other buildings being included as part of the Baxter School for the Deaf Historic District. The Mansion was identified as being in “good condition” and included an allowance for Front Door and Porch renovations in the amount of \$500,000.
- Drawing A-1: Mansion Elevations & Details, as prepared by Stubbins and Saunders, dated August 26, 1955. (Note: the elevation illustrations are limited).

Drawing A-2 Mansion Floor Plans: as prepared by Stubbins and Saunders, dated August 26, 1955.

- Casework, Plumbing and Electrical drawings from 1953.

VISUAL OBSERVATIONS

On January 18, 2024, Gale visited the above referenced project to conduct an initial walk-through along with Harriman, BGS and School personnel to gain an understanding of the schools’ grounds and to view the interior and exterior of the Baxter Mansion.

Gale performed its site evaluation on February 12, 2024, by visually observing and documenting the interior and exterior conditions. Visual observations and photographs were performed from ground level, roof level and via binoculars.

Gale also reviewed the higher facade elevations and roof areas, utilizing our DJI Phantom Pro 4 UAV drone to provide photographs of these elements. Photographs of Buildings B and G (scheduled for demolition) were also taken but are not included in this report.

INTERIOR OBSERVATIONS

Gale was escorted throughout the interior of the Mansion by school staff to observe existing conditions and to identify and locate areas of water damage.

The following is a summary of Gale's interior observations.

1. There are several areas of water damage on the ceilings and walls of the first, second, and third floor rooms (refer to image numbers 6 through 11). Damage consists of blistered, cracked and deteriorated plaster finishes and appear to be below and adjacent to the chimneys.
2. The interior of the windows is either paint finished or bare wood and many are showing water damage as witnessed in blistered and peeling paint, and water-stained wood (refer to images 12 and 13).
3. Gale was informed that repairs from water intrusion at the ceilings and walls have been an ongoing issue.



Image 6: View of water damage at second floor closet ceiling and wall.



Image 7: View of water damage at first floor bathroom wall-southwest corner. Behind the bathroom door.



Image 8: View of water damaged plaster patching



Image 9: View of damaged plaster ceiling



Image 10: View of water damaged ceiling in stairway



Image 11: View of water damaged plaster.



Image 12: View of painted interior windowsill with blistered and peeling paint.



Image 13: View of interior bare wood windowsill with water-stained wood.

EXTERIOR OBSERVATIONS

The following is a summary of Gale's exterior observations.

A. Masonry Chimneys and Flashing- Existing Conditions

There are four (4) existing red clay brick masonry chimneys laid in a Common Bond pattern with tinted red colored mortar and concave profile joints. The chimneys have yellow and red brick corbeling details, cast stone caps covered with adhered elastomeric membrane.

Three (3) of the four (4) chimneys are located and penetrate through steep sloped areas and appear to be flashed into the Spanish tile roofing with copper step flashing and through wall flashing. The fourth chimney is located and penetrates through the flat roof area and appears to be flashed with elastomeric membrane and surface mounted copper counterflashing. The flashings appear to be in serviceable condition.

Overall, the chimneys appear to be in very poor condition and include the following defects:

1. The mortar joints are typically deteriorated and include cracked, loose, debonded, and eroded mortar. There are some joint locations where the mortar is missing in its entirety. Prior mortar joint repair efforts were poorly matched in color and in joint profile (refer to images 14, 15 and 16).
2. The bricks are typically cracked, loose and displaced, particularly the yellow brick corbeling. Prior brick repair efforts were matched in color and type (refer to image 14, 15 and 16).
3. At Chimney #4, poorly matched and applied mortar, and bituminous roof mastic was applied over the brick corbeling in a likely attempt as a temporary repair. Note that the mastic is aged and weathered (refer to images 20 and 21).
4. The chimney caps are severely cracked at each chimney location (refer to images 15, 17 and 18).



Image 14: View of chimney #1 that includes mortar deterioration, loose and displaced brick, poorly matched brick and mortar repairs.



Image 15: View of chimney #1 that includes cracked cast stone cap, deteriorated and missing mortar, and poorly matched brick and mortar repairs.



Image 16: View of chimney #2 that includes mortar deterioration, loose and displaced brick, and poorly matched brick and mortar repairs.



Image 17: Side view of chimney #2 that includes deteriorated mortar joints, loose and displaced brick at the yellow brick banding and cracked cap.



Image 18: View of chimney #3 that includes cracked cast stone cap, severe mortar deterioration and poorly matched brick and mortar repairs.



Image 19: View of chimney #3 that includes mortar deterioration in the yellow brick corbelling.



Image 20: View of chimney #4 with bituminous mastic repairs.



Image 21: View of chimney #4 that appears to have been rebuilt but with poorly matching and applied mortar. Also, notice bituminous mastic repairs.

B. Exterior Masonry Walls and Masonry Elements - Existing Conditions

The exterior masonry walls appear to be multi-wythe brick comprised of red clay brick laid in a Common Bond pattern (with a Flemish Bond at approximately every sixth course) with tinted red colored mortar with concave profile joints. The top of the two-story walls below the roof cornices includes red brick corbelling and sawtooth soldier banding. The one-story walls include yellow brick sawtooth patterned banding and inlay. The windows sills and masonry half walls around entrances are topped with cast stone.

Overall, the exterior masonry walls appear to be in satisfactory condition with some evidence of past mortar repair work. The exterior defects include:

1. Random and isolated areas of deteriorated mortar. Refer to Image 22.
2. The mortar joints at the yellow brick banding appear to be deteriorated and in poor condition. Refer to Image 22.
3. Random and isolated areas of repair mortar that appeared poorly applied and matched to mortar and color. Refer to color matched mortar. Refer to Images 25 & 27.
4. Cracks in the cast stone sills and caps. Refer to Images 25 & 27.
5. Brick staining below cast stone sills.
6. General areas of atmospheric and organic staining on the brick masonry surfaces.

The stone foundation wall is approximately twenty-four inches thick and built as an uncoursed stone rubble wall using granite, slate, marble and other varieties of natural stone. The wall appears to be in satisfactory condition inside and out with limited areas of cracked, delaminated or missing mortar and cracked and spalled stone (refer to Appendix A for locations and extents). Refer to Images 28 And 29.

There are areas of vegetated vines growing on the stone foundation and brick wall surfaces. Refer to Images 30 and 31.



Image 22: Typical view of the existing red brick masonry and cast stone sill. Notice deteriorated mortar joint.



Image 23: View of decorative yellow brick banding with deteriorated mortar joints.



Image 24: Typical view of decorative yellow brick inlay.



Image 25: View of cracked cast stone sills, spalled brick and poor mortar match at repair locations.



Image 26: View of eroded brick and cast stone sill mortar joints.



Image 27: View of crack cast stone sill and past mortar that were poorly matched to the existing.



Image 28: View of cracked stone in foundation



Image 29: Typical view of the existing stone foundation wall. Note the transverse crack in the mortar.



Image 30: View of vines growing against the southeast corner of the foundation.



Image 31: View of vines growing up the brick wall near the southeast corner

C. Building Entries and Porch Existing Conditions

The existing South and East building entries are representative of classical Greek revival architecture of the Ionic Order consisting of round columns and square pilasters with fluting, abacus with ornate volutes, an entablature with frieze and cornice, dentil and modillion moldings and pediment with a sloping cornice and rake. The entryway sides are partially enclosed by brick masonry knee walls and sidelights that are true divided lite window sash with 3 over 6 muntin pattern. The components are typically painted wood, however, the column bases and abacus at the south entry appear to be cast stone.

The West building's entry porch and stairs are in a heavy state of deterioration with atmospheric and environmental staining, spalling, broken or missing brick units.

The porch decks appear to be cast-in-place concrete and covered with clay tile inlaid pavers at the south and east entries and marble tile at the west entry. The stairs leading to porches also appear to be of cast-in-place concrete with brick masonry sidewalls that are capped with concrete.

1. The South Entryway Observations and Defects:

- a) The wood columns appeared rotted, decayed, and split.
- b) Missing glazing putty at sidelight windows
- c) The painted finishes are split, blistered, and peeling.
- d) The clay tile pavers are broken, delaminated, loose, and uneven.
- e) The brick masonry stair sidewalls include spalled brick, delaminated and eroded mortar joints.
- f) Brick mortar repairs were poorly matched and applied.
- g) The concrete steps and caps are worn and weathered and include spalls.
- h) Failed perimeter sealant between the steps and the masonry walls.
- i) The step flashing at the roof is rust corroded.
- j) Vines growing on the masonry.
- k) Environmental and organic staining on all surfaces.



Image 32: Overall view of the south entrance with broken, displaced, and uneven clay tile pavers and cracked concrete steps.



Image 33: View of the Ionic column volute and abacus that are severely deteriorated. Also notice the painted wood column is split.



Image 34: View of the painted wood entry sidelights. Sidelights are deteriorated and missing glazing putty.



Image 35: Opposite image 30.



Image 36: View of typical organic and environmental staining



Image 37: View of deteriorated joint sealant between stair steps and the brick masonry.



Image 38: View of sidewall including deteriorated mortar joints, spalled brick, and poorly matched mortar repairs. Notice the south entrance is flanked by two (2) cast iron lion sculptures perched on cast stone plinths.



Image 39: View of opposite sidewall including deteriorated mortar joints, spalled brick, and poorly matched mortar repairs.

2. East Entryway Observations and Defects:

- a) The painted finishes are split, blistered, and peeling.
- b) The clay tile pavers are broken, delaminated, loose, and uneven.
- c) The brick masonry stair sidewalls include spalled brick, delaminated and eroded mortar joints.
- d) Brick mortar repairs were poorly matched and applied.
- e) The concrete caps are worn and weathered and include spalls.
- f) Failed perimeter sealant between the steps and the masonry walls
- g) Environmentally and organic staining on all surfaces



Image 40: Overall view of East entryway including enclosed breezeway with aluminum entrance door. Also notice peeling paint on the wood columns.



Image 41: View of deteriorated brick masonry and organic algae staining on the brick masonry stair sidewalls.



Image 42: View of broken, displaced, and uneven tile pavers.



Image 43: View of deteriorated brick masonry stair sidewall including eroded mortar joints, spalled and displaced brick, and deteriorated joint sealant.



Image 44: View of poor patching at top step and railing base



Image 45: View of side of porch including mortar deterioration, spalled and displaced brick, and algae growth.



Image 46: View of exterior door within the enclosed breezeway including peeling paint.



Image 47: View of interior of breezeway including cracked and peeling painted wood column.

3. West Entryway Observations and Defects

- a) The concrete foundation of the sidewalls is deteriorated concrete.
- b) The brick masonry stair sidewalls include spalled brick, delaminated and eroded mortar joints.
- c) Deteriorated and poorly matched and applied mortar joints.
- d) The concrete caps are worn and weathered and include spalls.
- e) The concrete steps are weathered and worn and include cracks.
- f) Failed perimeter sealant between the steps and the masonry walls
- g) The clay tile pavers are broken, delaminated loose, and uneven.
- h) Peeling paint on metal railings
- i) Vines growing on the masonry.
- j) Environmental and organic staining on all surfaces



Image 48: Overall view of West entrance, including boarded up basement windows.



Image 49: Partial view of West entrance including environmental and atmospheric staining and plant growth.



Image 50: View of marble tile pavers that are delaminated, broken, and displaced unevenly.



Image 51: View of deterioration of the concrete foundation, deteriorated and missing brick and mortar joints, missing joint sealant at steps, as well as dormant vine growth.



Image 52: View of accumulating organic debris and growth near



Image 53: View of eroded foundation, including deteriorated and missing brick.

D. Terra Cotta Spanish Tile Roofing Existing Conditions

The upper Spanish tile, hipped roof with ridge caps is in good condition considering its age. There are several areas where the tiles are cracked or displaced with environmental staining throughout. The perimeter copper gutter system is in a varied state of disrepair and shows significant environmental and atmospheric staining. The dormer sidewalls are finished in terracotta shakes. The upper roof has a continuous wood beadboard soffit with paint finish.

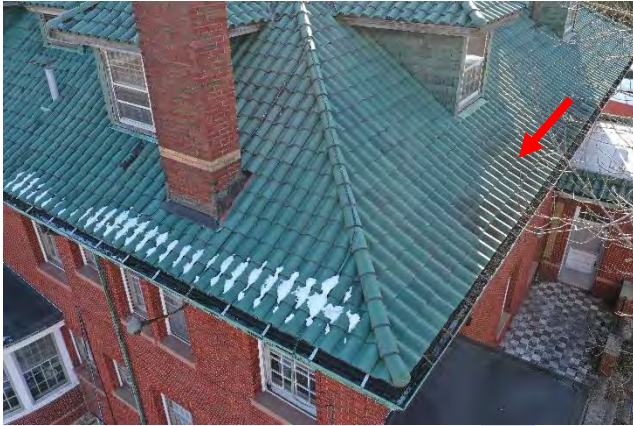


Image 54: View of terra cotta roof including atmospheric staining.



Image 55: View of typical dormer. Wood trim at eave and windows are bare wood.



Image 56: Typical view of the Terra Cotta Spanish tile roofing including hip and ridge caps and finial, and flat shingle tile on the sides of the dormer.



Image 57: Another typical view of the Terra Cotta Spanish tile roofing including hip and ridge caps and finials. Notice the broken terra cotta tiles.



Image 58: View of broken and missing roofing tiles at the gutter roof edge of the south elevation.



Image 59: View broken roofing tiles and roof mastic repairs.



Image 60: View of stockpiled terra cotta tiles in basement.

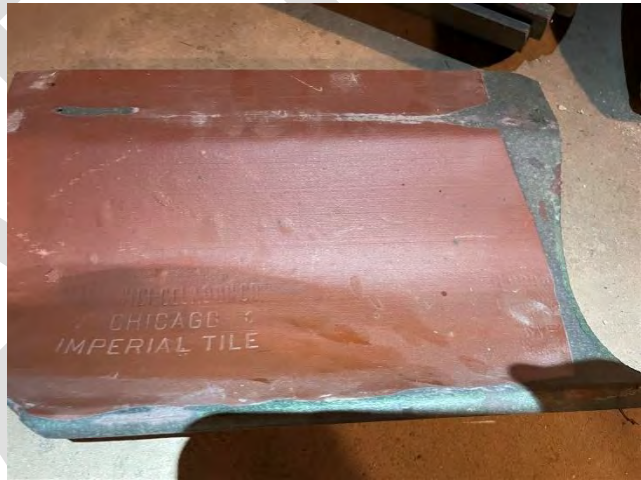


Image 61: View of terra cotta tile backside labeled "Chicago Imperial Tile." The tiles were manufactured by the Ludowici Roof Tile company.

E. Low Slope and Canopy Roofing Existing Conditions

The existing roofing at the upper peak and porch canopy roofs are covered with an elastomeric single-ply membrane roofing system. The age and service life of the membrane is unknown. Since roofing test cuts were not taken the roofing assembly is also unknown, particularly the thickness and assumed thermal resistance (R-value) of the roofing insulation, or if any exists at all. Visually, the roofing systems appear to be in serviceable condition and there were no identified leaks directly below these roof areas. In addition, there were no visible signs of roofing damage or seam voids in the elastomeric membrane.

However, at the upper peak roof, the perimeter flashing, and edge metal fascia loosely overlap the terra cotta tile ridge caps. The metal could be lifted by hand revealing wood blocking that is below the horizontal flange of the metal and exposing the underlying roof. There appeared to be no vertical fastening of the fascia metal along the perimeter of edge of this roof. It should also be noted that at the brick masonry chimneys that penetrate the upper peak roof appears to be flashed with a surface mounted counterflashing detail, in lieu of a brick throughwall flashing.

At the South entrance porch roof, the rising wall flashing of the elastomeric roofing is counterflashed with metal step flashing. The flashing is rust corroded and there are several pieces that are missing that are exposing the roof membrane flashing to the weather.

The low sloped roof area above the single level solarium room located at the southeast corner of the Mansion appears to be covered with a thermoplastic single-ply membrane roof system. The roofing appears to be in serviceable condition, although the roofing assembly's age and service life are unknown.

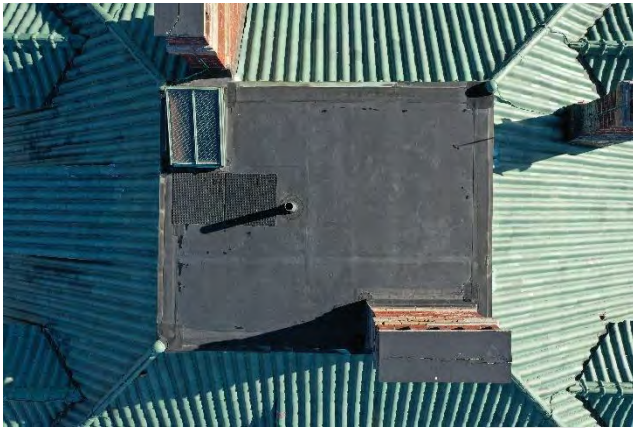


Image 62: View of upper peak roof, surrounded by the terra cotta Spanish tile roofing, that is covered with elastomeric roofing.



Image 63: View of elastomeric membrane flashing surface mounted metal counterflashing detail.



Image 64: View of the perimeter flashing, and edge metal fascia overlap the terra cotta tile ridge caps.



Image 65: View of edge metal fascia lifted and exposing wood blocking and underlying roof.



Image 66: View of elastomeric membrane roof over the Rotunda Room. Notice the absence of step flashing at the rising wall interface.



Image 67: View of the south entrance including missing and rust corroded step counterflashing. Note that the roof to wall transition where the flashing is missing is open to the weather.



Image 68: View of the low sloped thermoplastic roofing system over the solarium roof and surrounded by terra cotta Spanish tile mansard.



Image 69: View of the low sloped thermoplastic roofing system over the solarium roof with damaged copper throughwall flashing and deteriorated joint sealant.

F. Cornice and Gutters Existing Conditions

The existing cornice is clad with sheet metal copper and includes K-style formed copper gutters with corrugated copper downspout leaders. The cornice metal, gutters and downspouts all appear to be original to the building. There are sections of gutter that are broken away from the brackets and the faces bent. At the north corner of the building, soldered seams are separated. There are missing downspout leaders along the South elevation. The gutters appear to be lined with an elastomeric membrane. There is evidence of past repairs with newer sheet metal patches and/or cover plates.

The soffits are clad with painted wood bead board paneling painted. The painted finish appears to be moisture and dirt stained and the paint finish is blistered and peeling. There is some visual evidence where the wood appears to be rotted and decayed.



Image 70: View of damaged and broken gutter, and gutter brackets.



Image 71: View of missing downspout leader.



Image 72: Typical view of the existing wood bead board soffit paneling. Notice dirt and moisture staining.



Image 73: View of the existing wood bead board soffit paneling. Notice that wood appears to be rotted and decayed.

G. Doors and Windows Existing Conditions

The existing doors are solid wood with a painted finish and appear to function as intended. They are historically significant to the building, and it is Gale's opinion that they remain in place and to be restored along with sidelights and transom windows, as discussed further.

The building has both double hung wood windows with ropes and weights, and steel windows with casement sash that are set in a wood frame that appear to be original to the building and are historic. There are also fixed wood and metal sashes. The double hung wood windows with painted finish, are single glazed and include exterior

aluminum storm panels. These panels were likely added to improve the insulating performance of the window assembly. The hung windows appear to be in serviceable condition, but the operating function during the seasons may vary. Although the storm panels provide insulating value, they are aesthetically distracting as the aluminum is mill finish in color and on some windows the mid-rail of the storm panels do not align with the mid-rail of the hung window.

The steel framed windows include both operating vertical casements and horizontal awnings. The windows also include internal aluminum storm panels. The storm panels vary in appearance, as some are white in color or are mill finish. These panels are not as aesthetically distracting as the exterior panels, but the clips that hold the panels in place include a thumb screw and are susceptible to damage and/or becoming lost during their removal and reinstallation. It should be noted that the perimeter windows sealants are deteriorated and are in need of replacement.

The exterior painted finishes on many of the windows are severely weathered and deteriorated, as it is blistered, peeled or is missing. The steel components are exhibiting some rust corrosion, but the existing wood appears solid and in satisfactory condition. In general, the paint finish provides the waterproofing integrity for the wood window components, however, the paint finish will gradually deteriorate from exposure to the weather and UV radiation. As a result, the paint finish needs to be re-applied approximately every five to seven (5-7) years to maintain its waterproofing integrity. Maintenance of the paint finish appeared to be deferred for several years, exposing the wood window components beyond to the weather and UV radiation, however, during the evaluation Gale did not observe deteriorated wood window components at accessible areas.



Image 74: View of entryway at west porch.



Image 75: View of entryway at West porch.



Image 76: View of exterior door at South porch



Image 77: View of exterior door at East porch



Image 78: View of steel framed windows and in wood frames notice deteriorated paint and with rust corrosion.



Image 79: Another view of steel framed windows and in wood frames notice deteriorated paint and with rust corrosion.



Image 80: Typical view of deteriorated paint finish and exposed bare wood.



Image 81: Typical view peeling paint finish at steel window.



Image 82: Typical view peeling paint finish at steel window.



Image 83: Typical view of basement level wood windows. Notice deteriorated paint finish.



Image 84: View of typical wood framed double hung windows with storm panels.



Image 85: View of rotted and decayed wood sills.



Image 86: View of typical wood transom window above entry door



Image 87: View of typical deteriorated window perimeter sealant.

DISCUSSION AND OPINIONS

Masonry Chimneys and Flashing

Based on Gale's visual evaluation, it appears that the brick masonry chimneys, and associated components are in extremely poor condition. The upper portions of the chimneys appear unstable as defects include deteriorated mortar joints, cracked and spalled brick and cracked cast stone concrete caps. Displaced bricks can become a life-safety issue and the further deterioration of the mortar joints will rapidly accelerate with repeated freeze/ thaw cycles. It is Gale's opinion that the chimneys be rebuilt with the removal and replacement of the chimney caps, brick and brick corbelling and mortar down to the existing roof decks. The new brick will need to match the existing in size, type, shape, texture and colors, and new mortar to match the existing colors, texture and joint profile. Structural review is required for seismic reinforcement.

Exterior Masonry Walls

The existing exterior masonry walls appear in serviceable condition, except for the entry porch base walls and exterior side walls that were observed to include deteriorated mortar, cracked, spalled and missing brick. Please refer to the Building Entries and Porches section for further detail on these areas.

It is Gale's opinion that selective repointing of the mortar joints on the building facades be performed by cutting, raking and cleaning the joints and applying new pointing mortar to match the existing historical mortar type, color, texture and joint profile. In addition, it is our opinion that previously repaired mortar joints that were poorly matched in color, texture and profile, as well as being applied be repointed to provide a uniform consistency and appearance across the facades. There are also cracked, spalled or missing brick that should be replaced and shall match the existing brick size, shape, texture and color.

Environmental and atmospheric staining can be expected with a brick of this age in the oceanside environment. There are areas that have vegetative growth as well as heavy algae buildup, particularly on the East elevation under the pine trees has occurred. It is Gale's opinion that the entire exterior brick and cast stone masonry features be lightly cleaned using restoration cleaning detergents that will not damage or harm the masonry. The intent is not clean the masonry surfaces to a new like condition, but to remove the environmental and atmospheric staining, algae, and vegetative growth that can harm and adversely affect the performance of the masonry. This effort should also include removal of the vine growth and cutting back trees and tree branches.

Deteriorated mortar is mortar that is either cracked, delaminated, soft or eroded. Deteriorated mortar occurs when there is excessive exposure to moisture entering the wall and the effects of freeze thaw cycling, thermal expansion, building settlement and when the composition of the mortar is poorly designed, mixed and applied where it cannot resist exposure to weathering and atmospheric conditions. and water exposure. Deteriorated mortar was observed at locations shown on the drawings and could be sufficiently repaired by repointing only the affected areas, however, maintenance of the mortar joints that do not receive repairs should be anticipated and budgeted for future repair work. Please also note that spot repointing of masonry walls can be noticeable from the ground and affect the aesthetics of the building. While contractors will make an effort to match the colors and materials, it is difficult to match them identically because of the weathering on the existing moisture. For that reason, 100% repointing of mortar is often considered. Given the limited extent of the deteriorated mortar on the facility, 100% repointing could be limited to the brick masonry chimneys and parapet walls to mitigate the potential of excess moisture infiltration and future remedial repairs as these locations where deterioration appears more severe.

The repointing of deteriorated mortar joints should be performed in accordance with the Brick Industry of America's (BIA) Technical Note 7F, which requires the removal of existing mortar to a predetermined depth and replacement with a mortar mix appropriate for the masonry units and the surrounding environment. The proper procedure includes cutting existing joints back to at least three-fourths' of an inch (3/4") in depth or deeper, until sound mortar is encountered and applying new mortar of an appropriate strength and composition in lifts (thin applications) until the full depth of the cut is solidly packed. It is Gale's opinion that a qualified engineering firm designs, and a qualified masonry contractor performs, the masonry repairs so that repairs are performed in accordance with BIA requirements.

Building Entries and Porches

The existing building entries and porches vary in their condition. Typically, the brick masonry base walls and stone foundations are in very poor condition, which include widespread areas of cracked and spalled brick and stone, and mortar deterioration. This condition appears to be attributable to the use of ice melting salts and snow

removal during the colder winter months and from landscaping activity during the warmer growing months of the year.

The wood millwork and details at the south and east entrances consisting of the round columns and square pilasters with fluting, abacus with ornate volutes, an entablature with frieze and cornice, dentil and modillion moldings and pediment with a sloping cornice and rake are in need of repair, restoration, replacement and repainting.

South Entrance and Porch

Although some of the painted wood millwork at the south entrance is in satisfactory condition, it is Gale's opinion that the Ionic fluted columns, bases and abacus details are in need of repair, restoration and/or replacement with consideration given to two options.

The *first* option to consider includes repairing the existing deteriorated wood in place using wood epoxy and epoxy consolidant, including select wood dutchmen repairs. Since the volute abacus appears to be an architectural cast stone element, patching of the ornate detailing will be challenging and likely unsightly. However, the stone can be consolidated to stabilize and strengthen the masonry, and once painted, its appearance will be left with imperfections from the loss of the material and the ornate features. In addition, once repainted, the columns will likely exhibit some imperfections.

The *second* option would include replacing the columns and abacus, with custom replications. The columns can be made with custom wood millwork consisting of decay resistant red cedar or mahogany, or with custom fabricated fiberglass. The ornate volute abacus can either be recast with architectural cast stone or be replicated with custom fabricated fiberglass.

It is Gale's opinion that paint be stripped from all of the components and prepared for repainting. The new paint system would include 100% acrylic exterior paint, with three (3) coats consisting of primer, intermediate and finish coats.

Our opinions for repairs to address the defective conditions of the concrete steps, stone foundation, masonry walls and porch flooring are as follows:

- Remove clay tile pavers and grind the recessed area to receive new tile match existing in size, color and finish.
- Replace spalled bricks and stone to match existing in size, color and texture.
- Cut, rake and repoint brick mortar joints 100% to matching existing mortar type, color, texture and joint profile.
- Replace or repair the cracked cast stone top step.
- Clean all masonry surfaces of environmental and atmospheric staining.
- Rake out and replace sealant at steps with urethane sealant with a broadcasted sand finish.
- Consideration for a code compliant perimeter metal railing system similar to what is present at the west porch as means to protect the open edges stairs and porch.

East Entrance and Porch

Although the defective conditions are not quite as severe as the South Entrance and Porch. It is Gales opinion that the same scope and approach be undertaken at the East Entrance and Porch.

In addition, our opinions for repairs to address the defective conditions of the concrete steps, stone foundation, masonry walls and porch flooring are as follows:

- Remove clay tile pavers and grind the recessed area to receive new tile match existing in size, color and finish.
- Replace spalled bricks and stone to match existing in size, color and texture.
- Cut, rake and repoint brick mortar joints 100% to matching existing mortar type, color, texture and joint profile.
- Clean all masonry surfaces of environmental and atmospheric staining.
- Rake out and replace sealant at steps with urethane sealant with a broadcasted sand finish.
- Consideration for a code compliant perimeter metal railing system similar to what is present at the west porch as means to protect the open edges stairs and porch.

West Entrance and Porch

The inlay marble tile pavers are broken and delaminating. The steel railing is in serviceable condition with preparation and repaint. The supporting concrete foundation for the brick sidewalls at the stairs is deteriorated and the bricks masonry is partially supported.

Our opinions for repairs to address the defective conditions of the concrete steps, masonry walls and porch flooring are as follows:

- Remove and rebuild stairs including concrete foundation, steps and brick masonry sidewalls after the supporting.
- Remove marble paver tiles and grind the recessed area to receive new tile match existing in size, color and finish.
- Clean all masonry surfaces of environmental and atmospheric staining.
- Rake out and replace sealant at steps with urethane sealant with a broadcasted sand finish.

Terra Cotta Spanish Clay Tile Roofing

Test cuts of the roofing assembly were not performed as part of this evaluation and the components of the roof assembly is unknown, aside from the Spanish clay tile and tile accessory components that were visually viewed from above, and the wood roof board decking from below. It is unknown if there is a weather barrier underlayment, such as asphalt impregnated felt paper. Interior leaks appear to indicate that there is no weather barrier. If there is, it is likely deteriorated or damaged. In addition, since ice and water shield membrane was not a product of this time period; the roof eaves, valleys, ridges and penetrations would not have had the benefit of this additional waterproofing material that is utilized in today's steep sloped roofing installations.

Broken, detached and missing tile conditions can be attributable to the original installation; such cracks and fissures in the patch of tile, fasteners were overdriven or when walking upon the roof surface resulted caused cracks and breakage but went unnoticed due to the overlaying tile hiding the defects that were not initially replaced. Since this roof appears to have been in service over 100 years, years of thermal expansion and contraction movement may cause breakage, particularly if the tiles were fastened too tightly. Most likely tile loss can be attributable to rust corroded fastener failure or from "rust jacking" where the fastener expanded beyond the size pre-punched fasteners holes where the clay can then crack and split, eventually breaking away. In

addition, hidden conditions such as rotted and decayed roof decking may be contributing to tile loss, as it would no integrity to maintain fastener pull-out resistance.

To address the defective conditions, Gale offers opinions for consideration of three (3) options, as follows:

Option No. 1: Replace the existing Spanish tile roofing system in its entirety. The benefits of this option include providing a long-term weather resistant solution to protecting the building's interior from leaks and subsequent water damage to finishes. The roofing replacement work would involve installing a new underlying weather barrier consisting of 30# asphalt impregnated or a breathable synthetic underlayment, as well as applying ice and water shield at the roof eaves, valleys, ridges and roof penetrations. Since the tiles were manufactured by Ludowici and who continues to manufacture Spanish tiles of equivalent size and profile, and color matching, including accessories, the historic look and appearance of the roof would be nearly unchanged. In addition, Ludowici offers a 75-year warranty against color fading and manufacturing defects. If this option were to be chosen, then special bidding provisions are needed by the State to allow for specific Ludowici tile as proprietary product.

Option No. 2: Replacement of the roofing system similar to option 1 but salvaging the existing tiles for partial re-use. This option would include careful removal of the tile by identifying the roofing materials that are sound and intact, and without defects and using them to be reinstalled on approximately half the of the roof that is most visible to the public. The benefit of this option is to maintain at least some of the original historic material and fabric of the building's roof. This option is labor intensive, requiring the Contractor to take additional precautions in protecting the existing roofing tiles and requires others to closely monitor the quality of the existing roofing materials and their reinstallation. There are no long-term performance benefits to reusing the existing roofing tiles, other than for historic purposes. Also, it should be understood that there would be some aesthetic differences between the original reinstalled roofing tiles and the new.

Option No. 3: Perform remedial repairs by identifying and replacing cracked, broken or missing tiles, and re-flashing and re-sealing the roof penetrations. This option is a short-term solution and may not prevent leaks and water intrusion to the building's interior but does not address the fastening integrity of the clay roofing tiles nor concealed rot and decayed wood roof decking.

Low Slope and Canopy Roofing

The low slope canopy roofing is elastomeric membrane and the age unknown. The membrane does not appear to be punctured anywhere, however the perimeter lap sealant at the flat roofs is brittle and failing from age and UV exposure. Although not critical to a watertight assembly at this time, it is Gale's opinion future replacement of these roofs may be needed.

The wall flashing detail at the Sun Porch is of concern as the membrane flashing is terminated with an aluminum bar that is sealed and fastened to the face of brick and is not counter flashed with through wall flashing (refer to image #56). It is Gale's opinion that new copper (preferably pre-patina copper to match the patinaed copper of the original copper flashings on the building) through wall flashing be installed to conceal the termination bar flashing.

Consideration may be given to replacing all low sloped roofing systems if replacement of the steep sloped Spanish tile roofing system is decided upon and is undertaken. The benefit of this approach allows for design coordination of the perimeter tie-in details between the low slope and steep roofing, providing a long-term weather resistant

for 15 to 25 years, ability to add and increase the thermal resistance with rigid insulation and reduces the impacts to the building that would undergo future roofing if not done at the same time.

If the existing low sloped roofing systems are to be replaced with a new roofing assembly the insulation is required to meet current energy codes where covering heated space below. The State of Maine currently utilizes the 2015 International Energy Conservation Code, which requires a minimum value of R-30 for commercial roofing insulation. It is Gale's opinion that a single-ply membrane such as a thermoplastic (PVC) or elastomeric membrane roofing may be considered as the replacement roofing system. Although elastomeric membranes are typically black in color, white is also available. PVC membranes are available in a variety of colors. If desired, it is possible that patina green color is available that would closely mimic the color of the Spanish tile roofing tiles and patinaed copper.

Cornice and Gutters

The existing sheet metal gutters are in various stages of disrepair. Attempting to patch and resolder the joints would be challenging, and the results of such repairs will likely not be successful. It is Gale's opinion that new custom copper gutters be fabricated with pre-patina copper to match the existing profile and be installed, along with new downspout leaders. The existing cornice metal can remain, although refastening is recommended while installing the new gutter.

The wood beadboard at the cornice soffits is exhibiting some rot and decay deterioration. It is Gale's opinion that areas deteriorated bead board be replaced with new to match the existing bead profile and spacing with decay resistant red cedar or mahogany wood. The remaining surfaces should be scraped of loose, blistered, and peeling paint and be cleaned of dirt and moisture staining and repainted 100%.

Doors and Windows

Please note that the single pane of glass within the wood window sashes does not meet current Maine Uniform Building and Energy Code Requirements. While the installation of new insulated glazing units (IGU) within the sashes may improve the thermal performance of the windows, retrofitting the sashes with IGU can be costly, invasive, and will change the historical aesthetic of the window. In lieu of installing new windows or retrofitting the existing sashes with IGU, it is Gale's opinion that the storm window panels provide very good insulating performance and would comply with the code. But due to the service life, weather exposure, etched glazing and aesthetic appearance of the storm window, it is Gale's opinion that they be replaced with new custom storm panels to maintain the thermal performance of the window assembly. The storm panels that are manufactured currently are used on historical buildings.

Consideration may be given to replacing the existing windows. However, this may not be necessary particularly if the occupants do not operate the windows frequently. It is Gale's opinion that the existing windows can be economically repaired by repainting the wood components, replacing cracked panes of glass, repairing broken balances, installing weatherstripping, and removing and replacing adhesively failed perimeter sealants. However, future maintenance and re-application of the paint finish should be anticipated to prolong the service life of the wood window system.

It is the opinion of Gale that further study and evaluation of the operational condition of the windows be performed, which is beyond the scope of this Evaluation. Further study is also required to develop a scope for window replacement, if it is desired by Harriman, BGS, the School and stakeholders.

SUMMARY OF OPINIONS

Masonry Chimneys and Flashing

- Rebuild all Masonry Chimneys and replace chimney caps with precast concrete.

Exterior Masonry Walls

- Cut, rake and repoint eroded and deteriorated stone foundation mortar joints. The new mortar shall match type, color, texture and joint profile.
- Replace spalled or missing stone at foundation. New stone to match existing type, shape and size.
- Cut, rake and repoint eroded and deteriorated brick masonry mortar joints, and previously repaired mortar joints with poorly matched and applied mortar. The new mortar shall match type, color, texture and joint profile.
- Replace cracked, spalled or missing bricks to match existing size, shape, texture and color.
- Remove all vines from concrete and brick masonry surfaces.
- Clean efflorescence, moisture, dirt atmospheric and organic staining from masonry surfaces with light duty restoration cleaner.

Building Entries and Porches

South Entrance and Porch

- Remove clay tile pavers and grind the recessed area to receive new tile match existing in size, color, and finish.
- Replace spalled bricks and stone to match existing in size, color, and texture.
- Cut, rake and repoint brick mortar joints 100% to match the existing mortar type, color, texture and joint profile.
- Replace or repair the cracked cast stone top step.
- Clean all masonry surfaces of environmental and atmospheric staining.
- Rake out and replace sealant at steps with urethane sealant with a broadcasted sand finish.
- Consideration of a code compliant perimeter metal railing system similar to what is present at the west porch as means to protect the open edges stairs and porch.
- *Option No. 1- Repair of Columns, Abacus, and Pediments, Cornices and Trim*
 - Strip all paint from exterior millwork and components.
 - Consolidate existing wood exhibiting moderate decay.
 - Repair wood defects with wood epoxy.
 - Install wood dutchman where wood is found to be rotted or decayed.
 - Apply consolidant to all Abucus Volutes.
 - Apply three (3) coat paint finish.
- *Option No. 2- Replace round Columns and Abacus Volutes, and repair Pediments, Cornices and Trim*
 - Strip all paint from exterior millwork and components.

- Consolidate existing wood exhibiting moderate decay.
- Repair wood defect with wood epoxy.
- Install wood dutchman where wood is found to be rotted or decayed.
- Replace round columns with Custom optional:
 - Millwork – Red Cedar or Mahogany
 - Fabricated Fiberglass.
- Replace Abacus Volutes round columns with Custom optional:
 - Architectural Cast Stone
 - Fabricated Fiberglass.
- Apply three (3) coat paint finish.

East Entrance and Porch

- Same Scope of Work as described for the South Entrance and Porch

Spanish Clay Tile Roofing

- *Option No. 1:* Replace the existing Spanish tile roofing system, including dorm tile cladding in its entirety with custom matching Ludowici Terra Cotta Spanish Tiles and accessories, including:
 - Installation of new underlayment with 30# asphalt impregnated or a breathable synthetic underlayment.
 - Installation of new ice and water shield membrane at roof eaves, valleys, ridges and roof penetrations, six (6) feet wide minimum.
 - Installation of new pre-patina sheet metal copper edge metal, valley flashings, step flashing, counterflashing, and apron and cricket flashings.
- *Option No. 2:* Same as Option No.1 except for salvaging and reinstalling 50% of the existing roofing tiles.
- *Option No. 3:* Perform remedial repairs by identifying and replacing cracked, broken, or missing tiles, and re-flashing and re-sealing the roof penetrations.

Low Slope and Canopy Roofing

- Alternate No. 1 – Upper Peak Roof: Replace existing low sloped single-ply membrane roofing roof with new PVC or Elastomeric single-ply roofing, including:
 - 30mil self-adhered bituminous membrane vapor barrier
 - ½" Fiberglass reinforced moisture resistance gypsum base board
 - ¼" tapered insulation, minimum five (5) -inch thick polyisocyanurate insulation in multiple layers and mechanically attached.
 - ½" High-density polyisocyanurate cover board, adhered.
 - Single-ply membrane roofing, fully adhered, optional:

- 60 mil PVC, custom color
 - 60 mil Elastomeric (EPDM) membrane
- Alternate No. 2 – Solarium Roof: Replace existing low sloped single-ply membrane roofing roof with new PVC or Elastomeric single-ply roofing. Same as Option No. 1, including:
 - Remove and replace existing throughwall flashing at rising wall with new pre-patina copper flashing.
 - Removal and replacement of brick masonry to replace throughwall flashing.
- Alternate No. 3 – Rotunda Room Roof: Replace existing low sloped single-ply membrane roofing roof with new PVC or Elastomeric single-ply roofing. Same as Option No. 1, including:
 - Remove and replace existing throughwall flashing at rising wall with new pre-patina copper flashing.
 - Removal and replacement of brick masonry to replace throughwall flashing.
- Alternate No. 4 – Canopy Roof South and East Entrance Porches:
 - 30mil self-adhered bituminous membrane vapor barrier
 - ½” Fiberglass reinforced moisture resistance gypsum base board, mechanically attached:
 - Single-ply membrane roofing, fully adhered, optional:
 - 60 mil PVC, custom color
 - 60 mil Elastomeric (EPDM) membrane
 - Remove and replace existing throughwall flashing at rising wall with new pre-patina copper flashing.
 - Removal and replacement of brick masonry to replace throughwall flashing.

Cornice and Gutters

- Replace existing sheet metal gutters and downspout leaders with new custom copper gutters be fabricated with pre-patina copper to match the existing profile.
- Limited Repairs and Repainting of existing wood beadboard soffit panels
 - Remove and replace rotted and decayed wood with new to match the existing bead profile and spacing with decay resistant red cedar or mahogany wood.
 - Scrape loose, blistered, and peeling paint and clean dirt and moisture staining and repainted 100%.

Doors and Windows

- Clean and repaint existing entry doors.
- Replace weatherstripping at entry doors.
- Wood Windows, Frames and Trim
 - Strip all paint from exterior frames, trim, muntins and components.
 - Consolidate existing wood exhibiting moderate decay.
 - Repair wood defect with wood epoxy.

- Install wood dutchman where wood is found to be rotted or decayed.
- Apply three (3) coat paint finish.
- Metal Windows:
 - Strip all paint from metal windows including sill, side and head rails, and muntins
 - Apply three (3) coat paint finish with direct to metal primer and paint.
- Replace all exterior and interior storm panels, with new custom storm panels.

Other Considerations

- The building will need to be tested for hazardous containing materials.

We trust this information suits your needs currently. Please do not hesitate to contact us if you require additional information regarding this matter.

Best regards,
GALE ASSOCIATES, INC.



Phillip Gotts, Associate AIA
Project Designer
Building Enclosure Consulting
and Commissioning (BECC) Group

GALE ASSOCIATES, INC.



Arno L. Skalski, LEED® AP
Associate
Building Enclosure Consulting
and Commissioning (BECC) Group

PDG/als

Enclosures:
Appendix A- Defect Roof plan and Exterior Elevations.

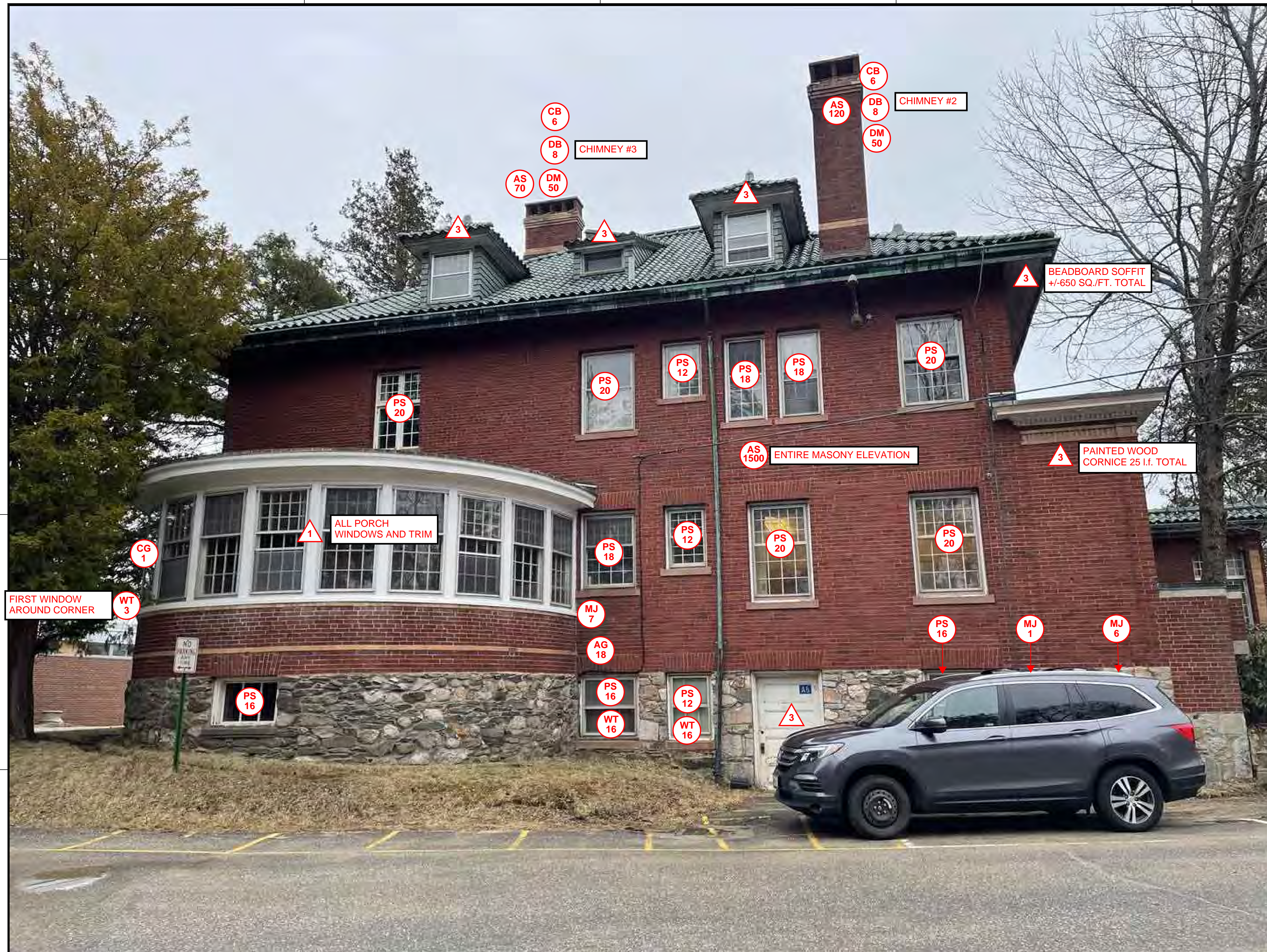
PDG:als/

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Appendix A

Defect Drawings



DEFECT LEGEND	
MASONRY	STONE & CONCRETE
AG # ALGAE; # INDICATES SQUARE FEET	CC # CRACKED CONCRETE; # INDICATES LINEAR FEET
AS # ATMOSPHERIC STAINING; # INDICATES SQUARE FEET	CRS # CRUMBLING STONE; # INDICATES UNITS
CB # CRACKED BRICK; # INDICATES UNITS	CS # CRACKED STONE; # INDICATES LINEAR FEET
DB # DISPLACED BRICK; # INDICATES UNITS	CT # CRACKED TERRA-COTTA; # INDICATES LINEAR FEET
DM # DETERIORATED MORTAR JOINT; # INDICATES SQUARE FEET	DS # DETACHED STONE; # INDICATES UNITS
FRMJ # PREVIOUS REPAIRED MORTAR JOINT; # INDICATES LINEAR FEET	ES # ENVIRONMENTAL SOILING; # INDICATES SQUARE FEET
SB # SPALLED BRICK; # INDICATES UNITS	WS # WEATHERED STONE; # INDICATES SQUARE FEET
VG # VEGETATIVE GROWTH; # INDICATES SQUARE FEET	
SEALANT & GLAZING	WOOD & PAINT
CG # CRACKED GLAZING; # INDICATES LINEAR FEET	WB # DETERIORATING WOOD BLOCKING; # INDICATES LINEAR FEET
FS # FAILED SEALANT; # INDICATES LINEAR FEET	WT # DETERIORATING WOOD TRIM; # INDICATES LINEAR FEET
MG # MISSING GLAZING	WBD # WOOD BLOCKING MISSING / DISPLACE; # INDICATES LINEAR FEET
PS # FAILED PERIMETER SEALANT; # INDICATES LINEAR FEET	△ CLASS 1 PAINT DEFECT (MOLD, STAINING, ALGAE)
	△ CLASS 2 PAINT DEFECT (CRACKED / WRINKLED)
	△ CLASS 3 PAINT DEFECT (PEELING / EXPOSED SURFACE)
	▲ PP PEELING PAINT



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BUILDING ENVELOPE EVALUATION & DESIGN
FALMOUTH, ME 04105

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80 EXCHANGE STREET, 3RD FLOOR
PORTLAND, MAINE 04101

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GRAPHIC SCALE

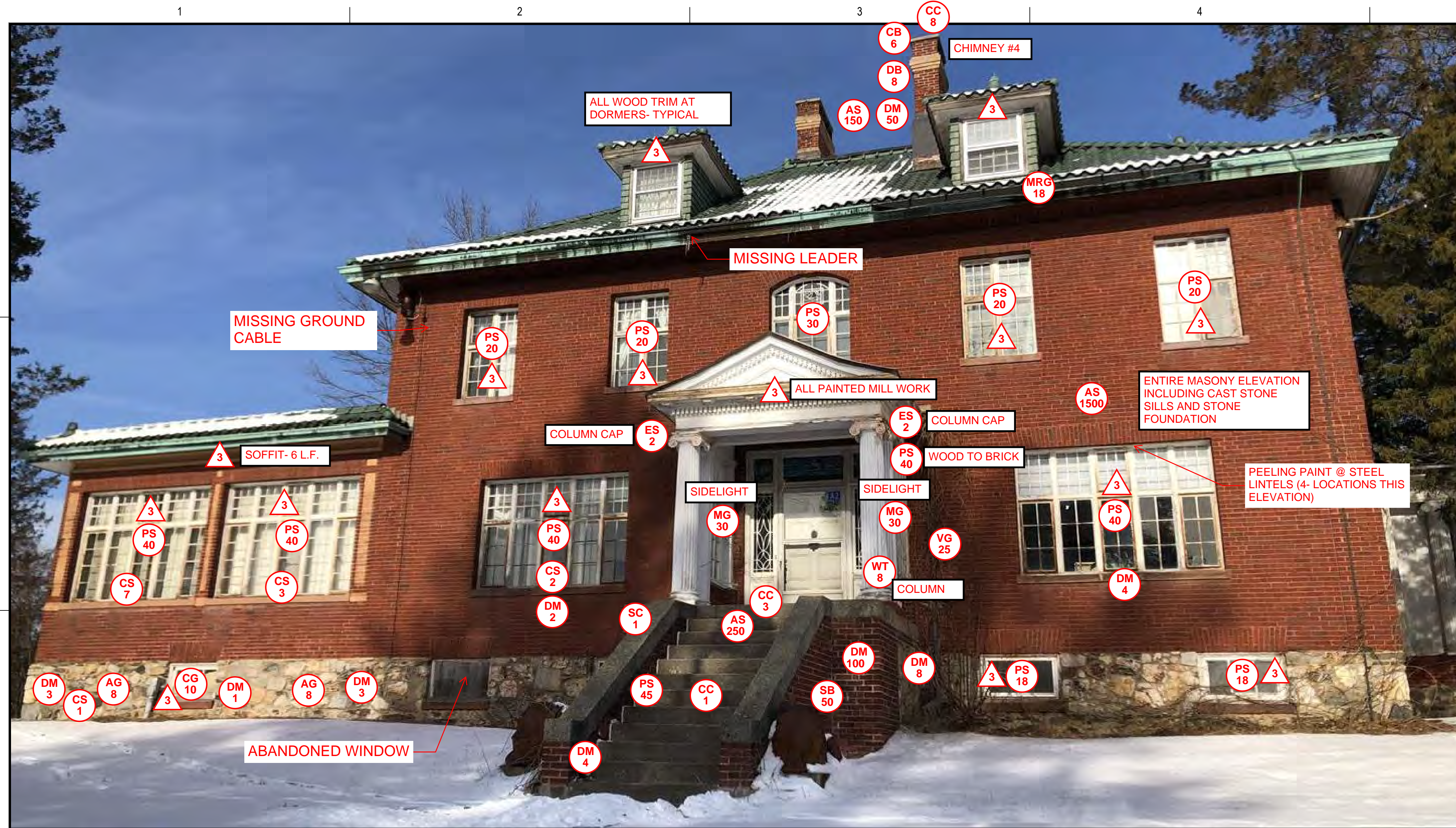
SHEET TITLE

NORTH ELEVATION

DRAWING NO.


A201

1 NORTH ELEVATION
A201 SCALE: NOT TO SCALE



1 SOUTH ELEVATION
A202 SCALE: NOT TO SCALE

DEFECT LEGEND	
MASONRY	STONE & CONCRETE
<ul style="list-style-type: none"> AG # ALGAE; # INDICATES SQUARE FEET AS # ATMOSPHERIC STAINING; # INDICATES SQUARE FEET CB # CRACKED BRICK; # INDICATES UNITS DB # DISPLACED BRICK; # INDICATES UNITS DM # DETERIORATED MORTAR JOINT; # INDICATES SQUARE FEET FRMJ # PREVIOUS REPAIRED MORTAR JOINT; # INDICATES LINEAR FEET SB # SPALLED BRICK; # INDICATES UNITS VG # VEGETATIVE GROWTH; # INDICATES SQUARE FEET 	<ul style="list-style-type: none"> CC # CRACKED CONCRETE; # INDICATES LINEAR FEET CRS # CRUMBLING STONE; # INDICATES UNITS CS # CRACKED STONE; # INDICATES LINEAR FEET CT # CRACKED TERRA-COTTA; # INDICATES LINEAR FEET DS # DETACHED STONE; # INDICATES UNITS ES # ENVIRONMENTAL SOILING; # INDICATES SQUARE FEET WS # WEATHERED STONE; # INDICATES SQUARE FEET
SEALANT & GLAZING	WOOD & PAINT
<ul style="list-style-type: none"> CG # CRACKED GLAZING; # INDICATES LINEAR FEET FS # FAILED SEALANT; # INDICATES LINEAR FEET MG # MISSING GLAZING PS # FAILED PERIMETER SEALANT; # INDICATES LINEAR FEET 	<ul style="list-style-type: none"> WB # DETERIORATING WOOD BLOCKING; # INDICATES LINEAR FEET WT # DETERIORATING WOOD TRIM; # INDICATES LINEAR FEET WBD # WOOD BLOCKING MISSING / DISPLACED; # INDICATES LINEAR FEET ▲ CLASS 1 PAINT DEFECT (MOLD, STAINING, ALGAE) ▲ CLASS 2 PAINT DEFECT (CRACKED / WRINKLED) ▲ CLASS 3 PAINT DEFECT (PEELING / EXPOSED SURFACE) ▲ PP PEELING PAINT



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GRAPHIC SCALE			
SHEET TITLE			
SOUTH ELEVATION			
DRAWING NO.			
A202			



DEFECT LEGEND			
MASONRY		STONE & CONCRETE	
AG #	ALGAE; # INDICATES SQUARE FEET	CC #	CRACKED CONCRETE; # INDICATES LINEAR FEET
AS #	ATMOSPHERIC STAINING; # INDICATES SQUARE FEET	CRS #	CRUMBLING STONE; # INDICATES UNITS
CB #	CRACKED BRICK; # INDICATES UNITS	CS #	CRACKED STONE; # INDICATES LINEAR FEET
DB #	DISPLACED BRICK; # INDICATES UNITS	CT #	CRACKED TERRA-COTTA; # INDICATES LINEAR FEET
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FRMJ	PREVIOUS REPAIRED MORTAR JOINT; # INDICATES LINEAR FEET	ES #	ENVIRONMENTAL SOILING; # INDICATES SQUARE FEET
SB #	SPALLED BRICK; # INDICATES UNITS	WS #	WEATHERED STONE; # INDICATES SQUARE FEET
VG #	VEGETATIVE GROWTH; # INDICATES SQUARE FEET		
SEALANT & GLAZING		WOOD & PAINT	
CG #	CRACKED GLAZING; # INDICATES LINEAR FEET	WB #	DETERIORATING WOOD BLOCKING; # INDICATES LINEAR FEET
FS #	FAILED SEALANT; # INDICATES LINEAR FEET	WT #	DETERIORATING WOOD TRIM; # INDICATES LINEAR FEET
MG #	MISSING GLAZING	WBD #	WOOD BLOCKING MISSING / DISPLACE; # INDICATES LINEAR FEET
PS #	FAILED PERIMETER SEALANT; # INDICATES LINEAR FEET	△	CLASS 1 PAINT DEFECT (MOLD, STAINING, ALGAE)
		△	CLASS 2 PAINT DEFECT (CRACKED / WRINKLED)
		△	CLASS 3 PAINT DEFECT (PEELING / EXPOSED SURFACE)
		▲	PEELING PAINT

1 EAST ELEVATION
A203 SCALE: NOT TO SCALE

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GRAPHIC SCALE

SHEET TITLE

EAST ELEVATION

DRAWING NO.

A203

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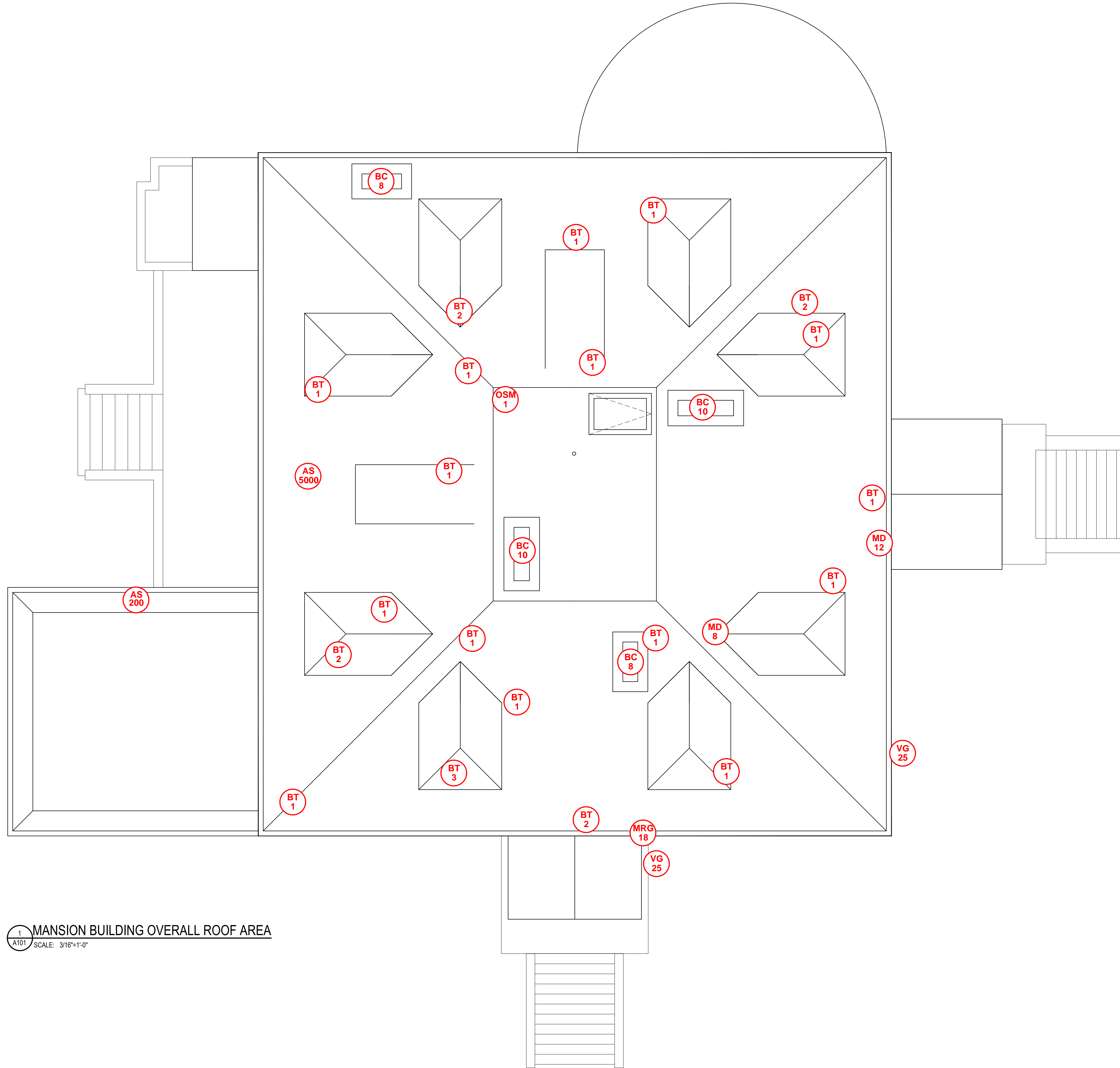
E
D
C
B
A

ROOFING DEFECT LEGEND	
BT #	BROKEN TERRA COTTA TILE # INDICATES UNITS
MD #	MATERIALS / DEBRIS ON ROOF: # INDICATES SQUARE FEET
MRG #	MISSING / BROKEN GUTTER: # INDICATES LINEAR FEET
OSM #	OPEN SEAM: # INDICATES LINEAR FEET
VG #	VEGETATIVE GROWTH: # INDICATES SQUARE FEET
BC #	BROKEN CONCRETE CHIMNEY CAP # INDICATES SQUARE FEET
AS #	ATMOSPHERIC STAINING # INDICATES SQUARE FEET

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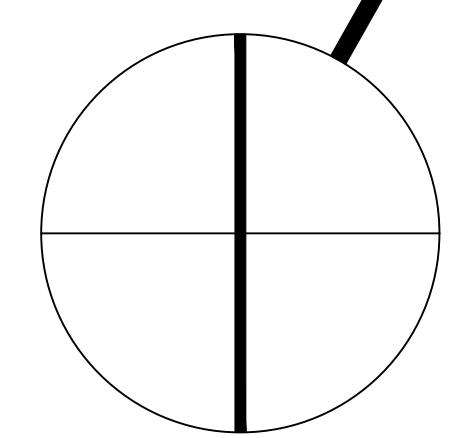
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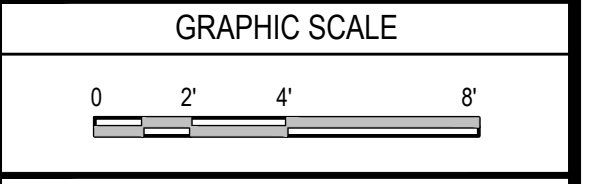


1 MANSION BUILDING OVERALL ROOF AREA
A101 SCALE: 3/16"=1'-0"

TRUE NORTH

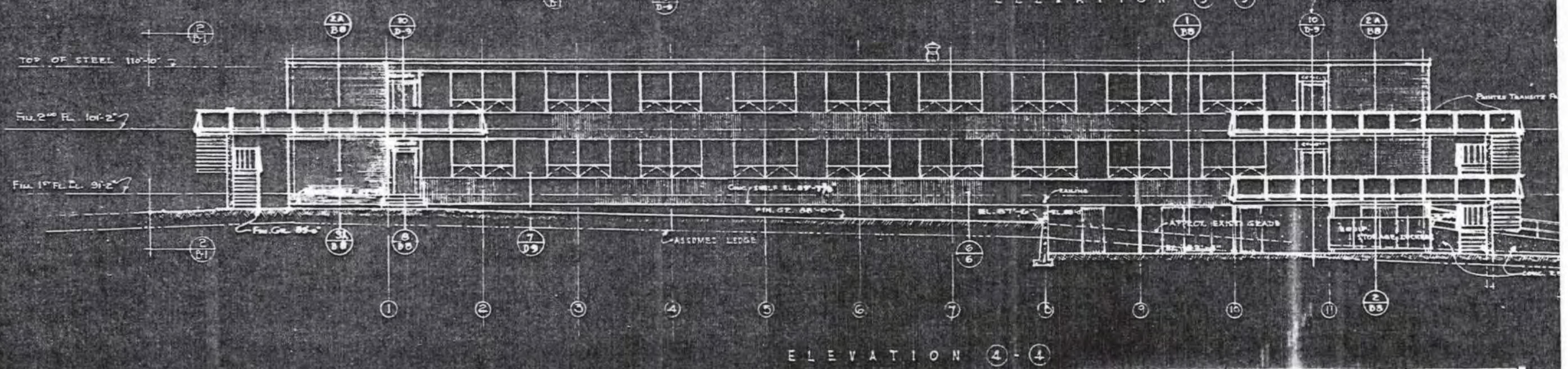
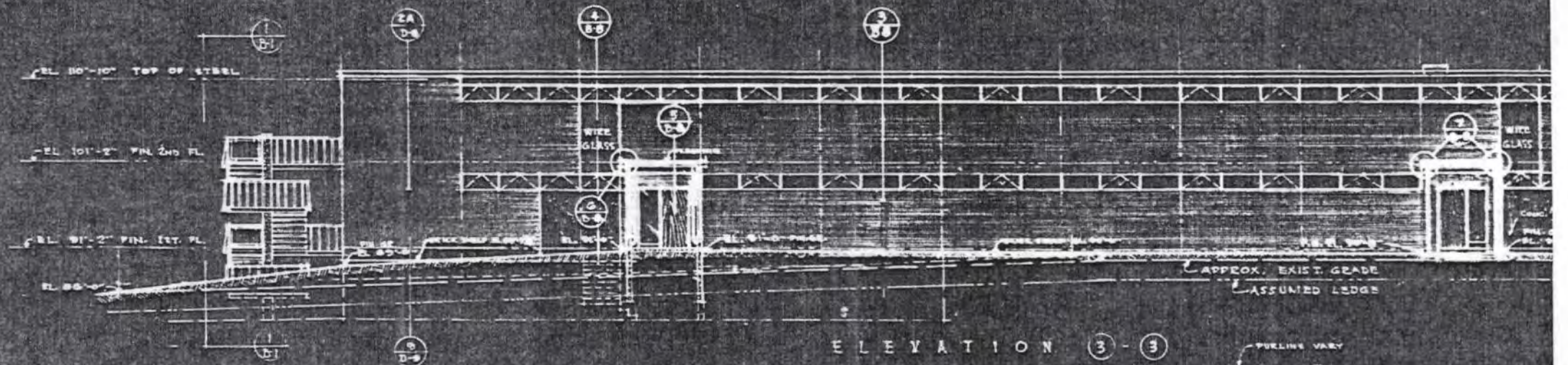
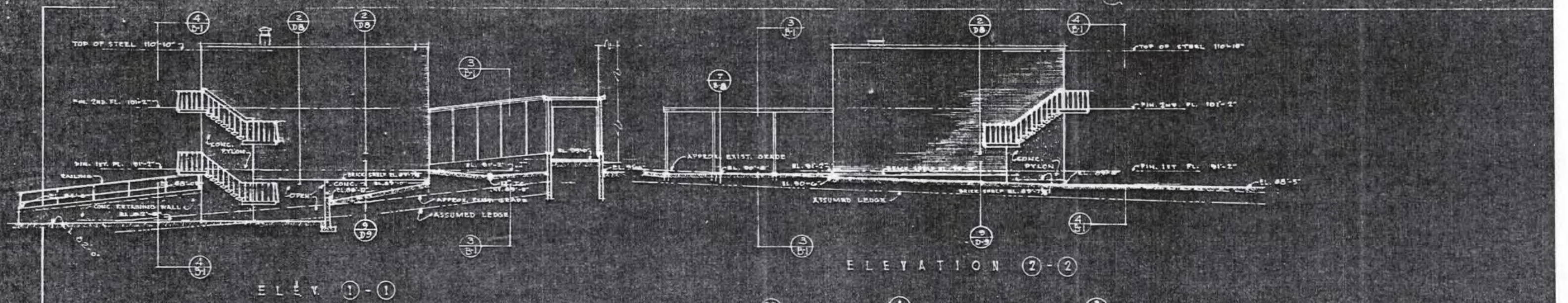


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SHEET TITLE
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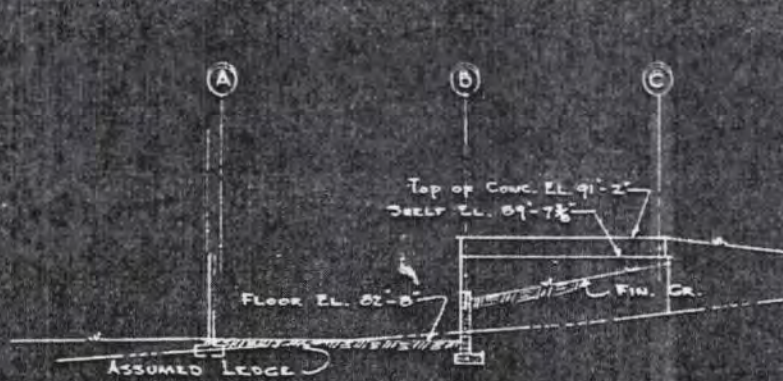
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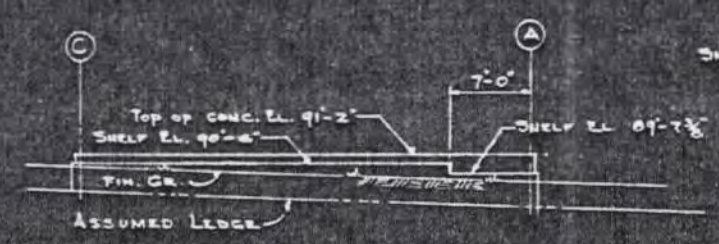
MAINE SCHOOL FOR THE DEAF
 MACKWORTH ISLAND FALMOUTH MAINE

PRIMARY DOOR
 ELEVATIONS

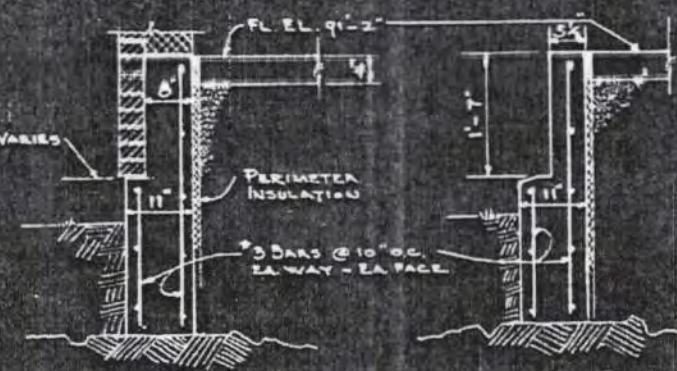
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			SHEET NO. B1



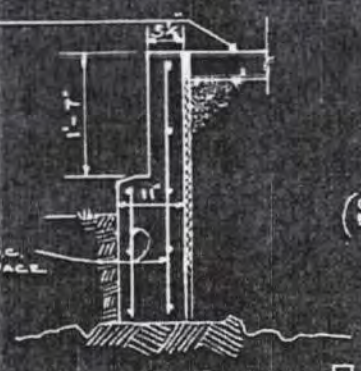
ELEVATION 1-1



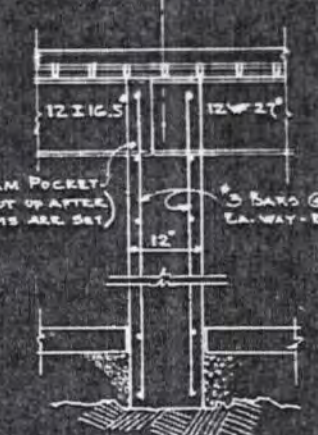
ELEVATION 2-2



SECTION A-A



SECTION B-B
SCALE: 1/2" = 1'-0"



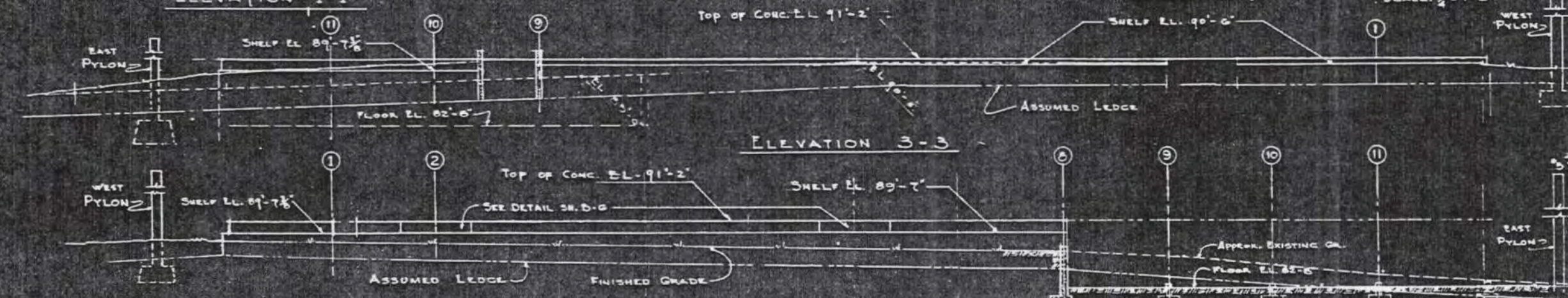
SECTION C-C

* 4 TEMP BARS @ 12" o.c. HOR. (HOOPS)

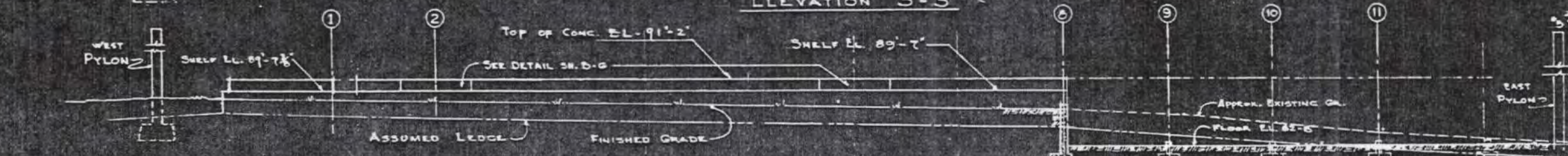
* 3 BARS @ 9" o.c. EA. WAY - EA. FACE

* 5 BARS @ 18" o.c. VERTICAL EACH FACE

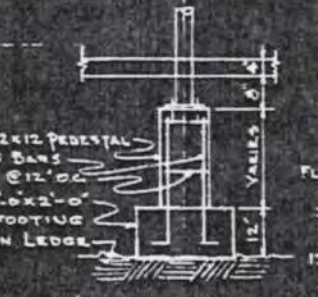
* 5 BARS @ 9" o.c. VERTICAL EACH FACE



ELEVATION 3-3



ELEVATION 4-4



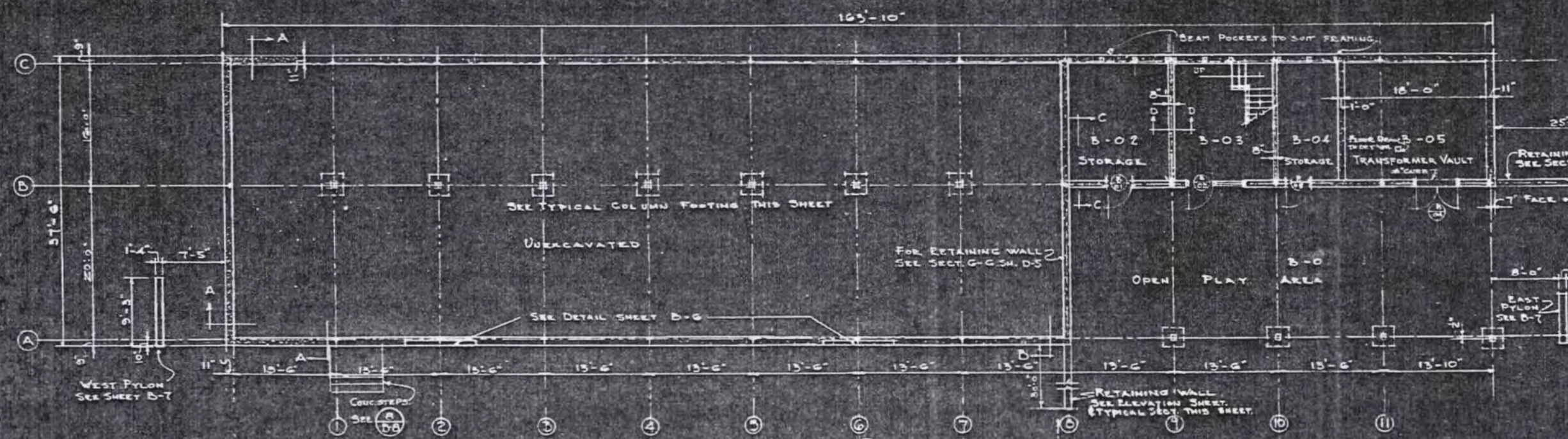
TYPICAL COLUMN FOOTING
SCALE: 1/2" = 1'-0"

* 3 BARS @ 12" o.c. 2'-0" x 2'-0" FOOTING ON LEDGE

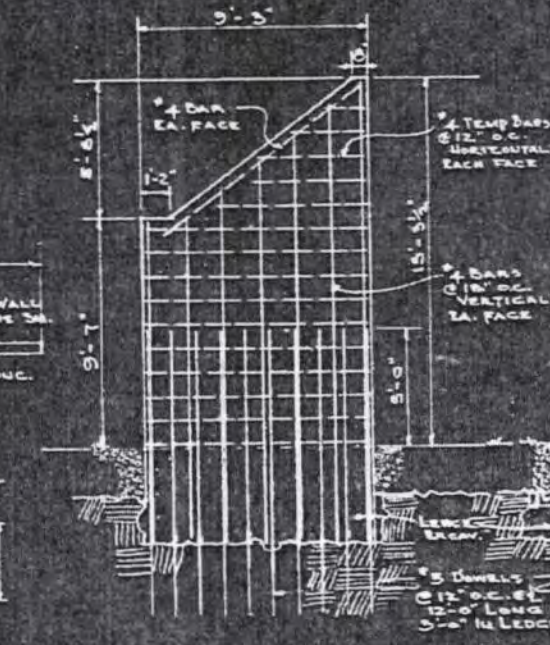
* 12x12 PEDESTAL

* 3 BARS @ 12" o.c.

* 12x12 PEDESTAL



FOUNDATION PLAN
SCALE: 1/8" = 1'-0"



SIDE ELEVATION
STAIR PYLON (WEST)
SEE SHEET B-7

* 4 TEMP BARS @ 12" o.c. VERTICAL EACH FACE

* 4 BARS @ 18" o.c. VERTICAL EA. FACE

* 5 BARS @ 12" o.c. 12" o.c. LONG 3'-0" IN LEAD

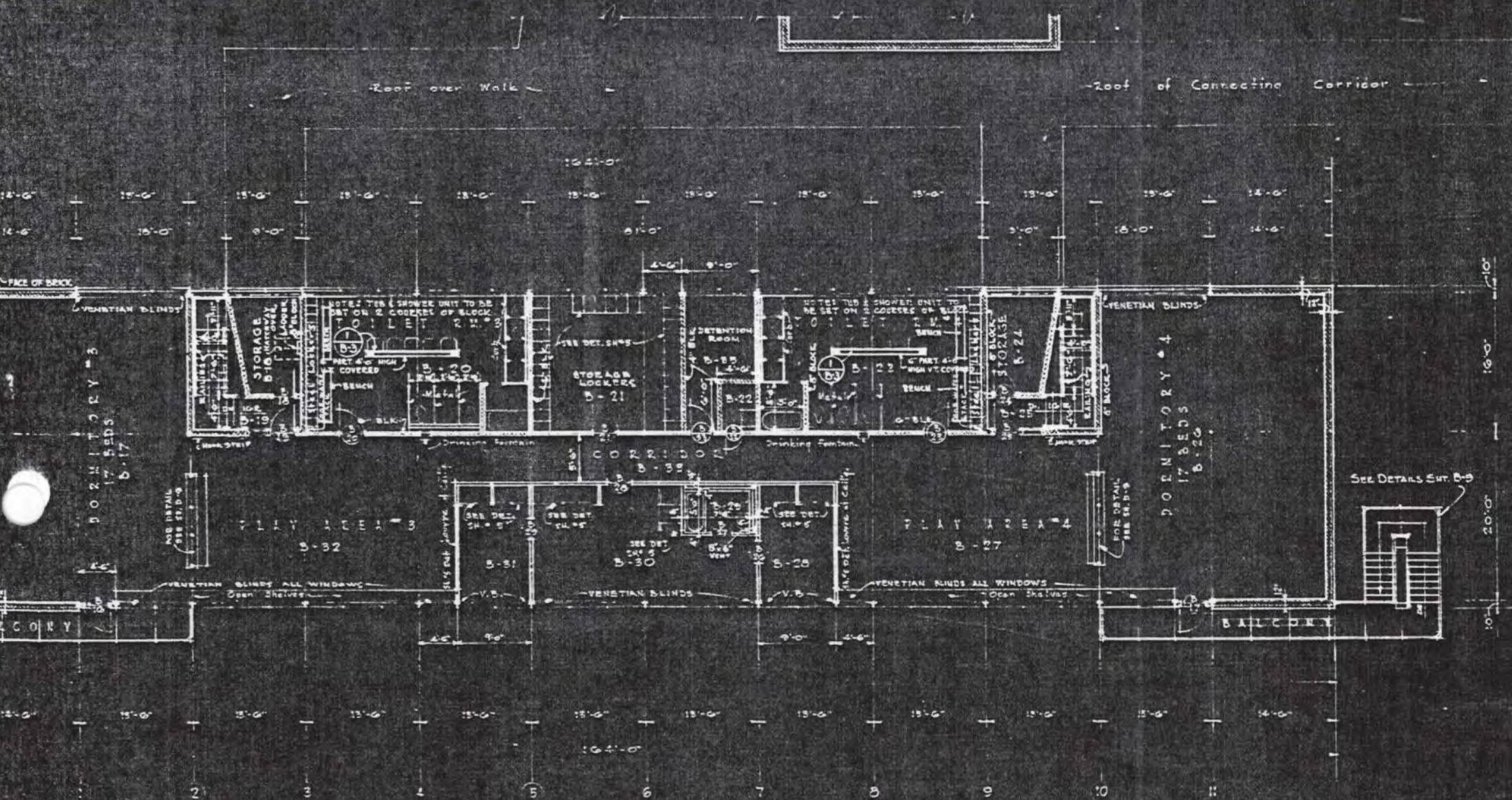
MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

PRIMARY DOOR
FOUNDATION

BLD'G - B

STEVEN...
FOR... MAINE

JOB NO. 8848
SHEET NO. B.2



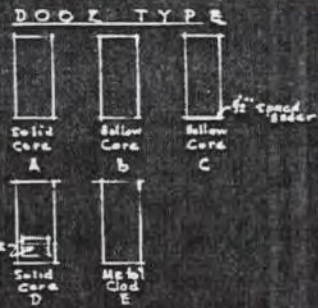
PRINT RECORD
NO. WHO DATE

DOOR SCHEDULE				
NO.	SIZE	TYPE	FRAME	NOTES
B-01	12'-6" x 7'-0"	D	S	12'-6" METAL LOUVER
B-02	12'-6" x 7'-0"	A	U	12'-6" METAL LOUVER
B-03	12'-6" x 7'-0"	D	S	
B-04	12'-6" x 7'-0"	E	R	12'-6" METAL LOUVER SA. DE.
B-1	12'-6" x 7'-0"	A	W	
B-2	12'-6" x 7'-0"	A	W	
B-3	12'-6" x 7'-0"	A		SIMILAR TO K
B-4	12'-6" x 7'-0"	A		SIMILAR TO K
B-5	12'-6" x 7'-0"	A	D	
B-6	12'-6" x 7'-0"	B	L	
B-7	12'-6" x 7'-0"	B	B	Metal Separator
B-8	12'-6" x 7'-0"	B	B	
B-9	12'-6" x 7'-0"	C	H	Metal Separator
B-10	12'-6" x 7'-0"	B	B	Metal Separator
B-11	12'-6" x 7'-0"	B	L	
B-12	12'-6" x 7'-0"	B	H	
B-13	12'-6" x 7'-0"	C	H	Metal Separator
B-14	12'-6" x 7'-0"	B	G	
B-15	12'-6" x 7'-0"	B	H	
B-16	12'-6" x 7'-0"	A	W	
B-17	12'-6" x 7'-0"	A	W	
B-18	12'-6" x 7'-0"	C	C-C	
B-19	12'-6" x 7'-0"	A	L	
B-20	12'-6" x 7'-0"	B	B	Metal Separator
B-21	12'-6" x 7'-0"	B	B	
B-22	12'-6" x 7'-0"	C	H	Metal Separator
B-23	12'-6" x 7'-0"	B	B	Metal Separator
B-24	12'-6" x 7'-0"	C	C-C	
B-25	12'-6" x 7'-0"	A	L	
B-26	12'-6" x 7'-0"	B	H	
B-27	12'-6" x 7'-0"	C	H	Metal Separator
B-28	12'-6" x 7'-0"	B	G	
B-29	12'-6" x 7'-0"	B	H	
B-30	12'-6" x 7'-0"	A	T	
B-31	12'-6" x 7'-0"	A	T	
B-32	12'-6" x 7'-0"	B	B	
B-33	12'-6" x 7'-0"	B	B	

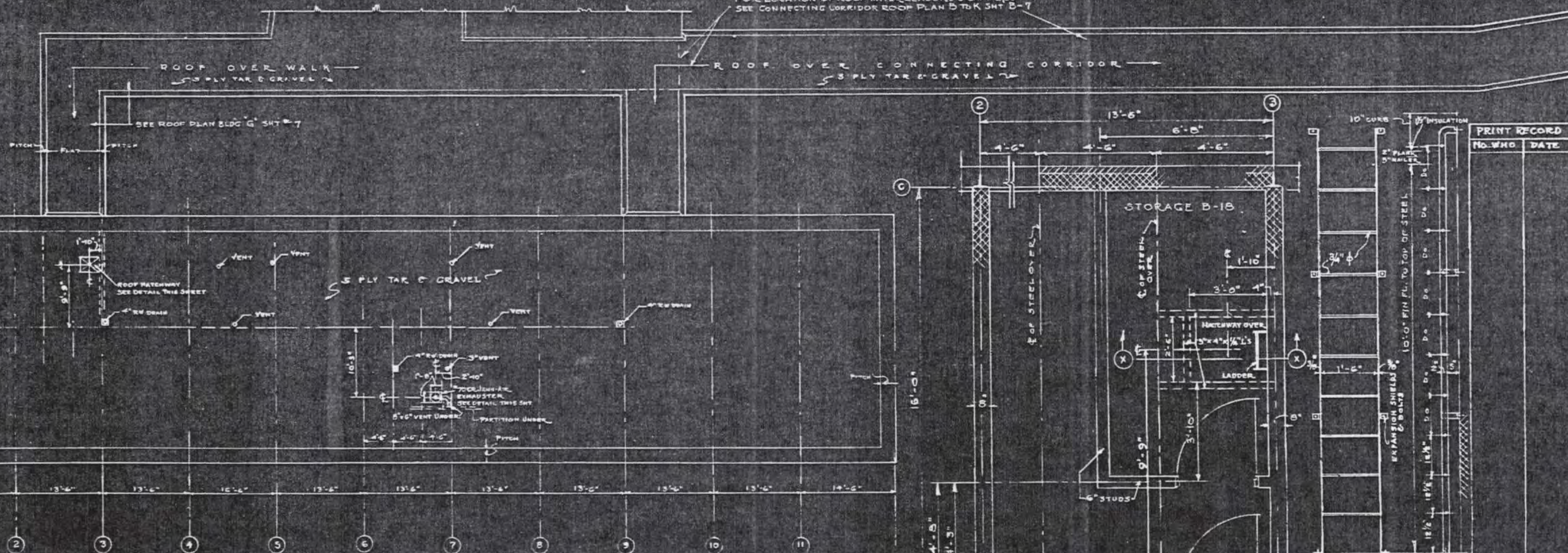
NOTE: UNLESS OTHERWISE NOTED DOORS DESIGNATED 5'-0" IN THE "SIZE" COLUMN ARE A PAIR OF 2-1/2" DOORS

LEGEND
 BRICK
 CINDER BLOCK
 STUD. PARTITION

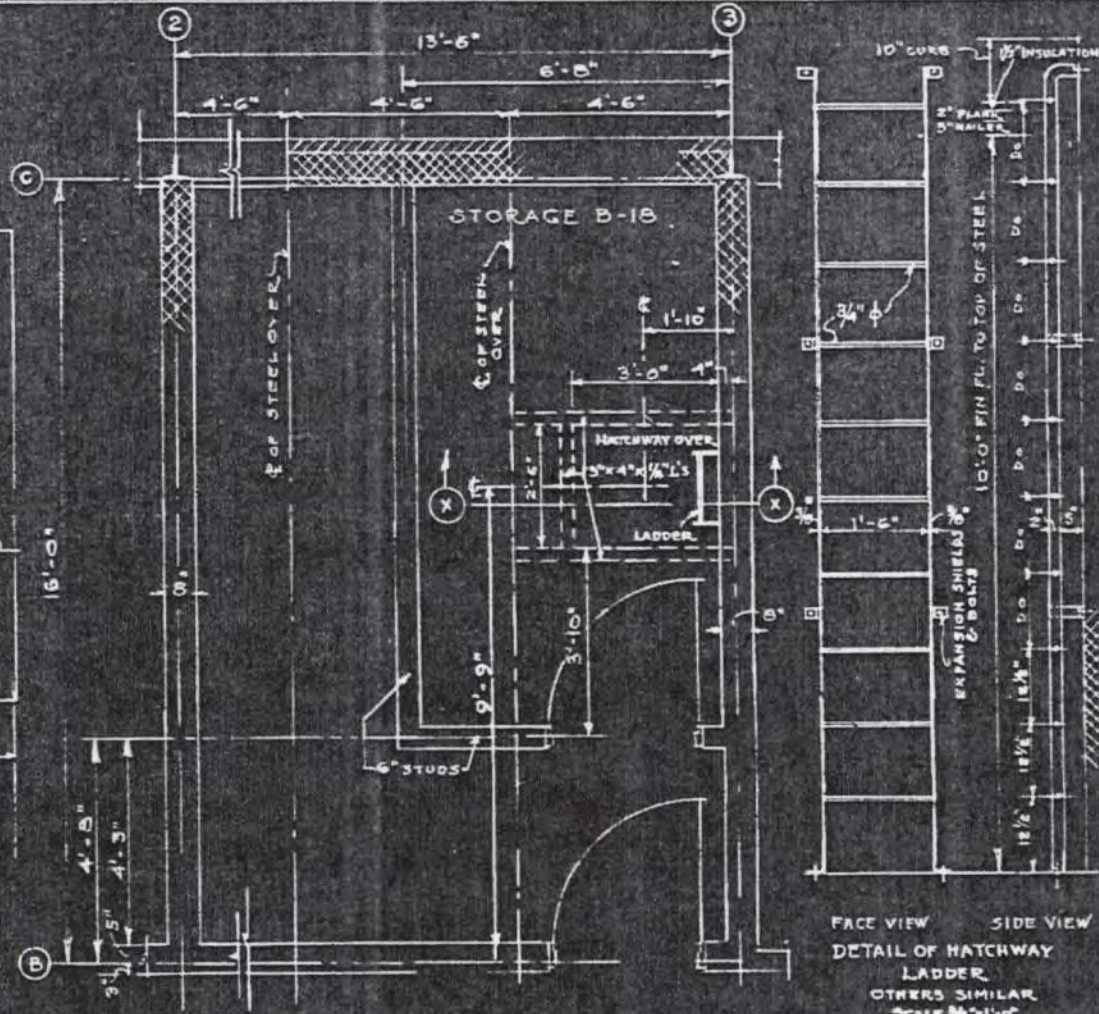
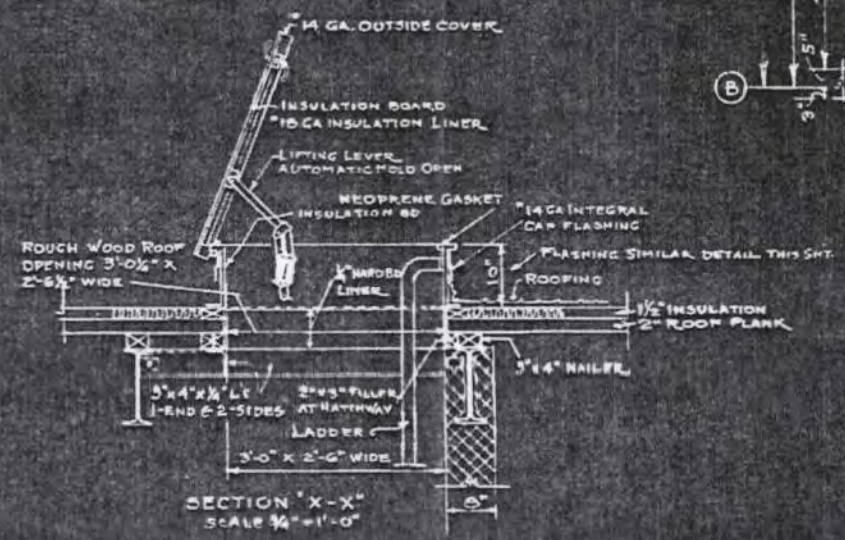
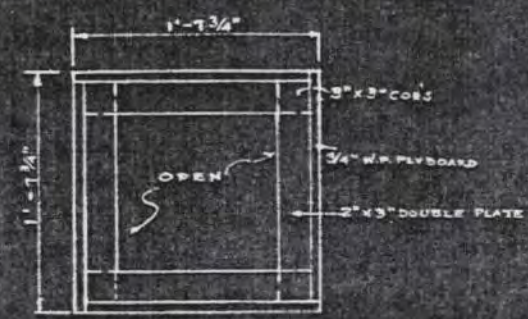
FRAME TYPE
 See Detail Sh. 2 & 3



FOR LOCATION OF ROOF WATER LEADERS & BAFFLES
SEE CONNECTING CORRIDOR ROOF PLAN B TO K SHT B-7



ROOF PLAN
SCALE 1/8" = 1'-0"

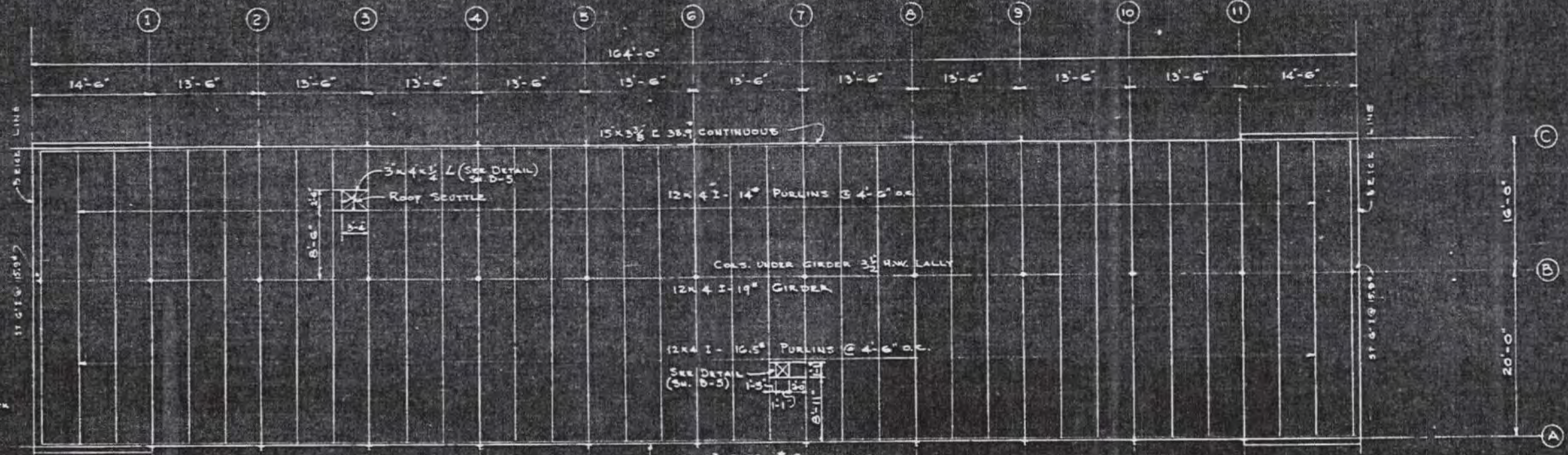


NOTE ALL ROOF VENTS UNDER 4"
GO THRU ROOF AS 4"

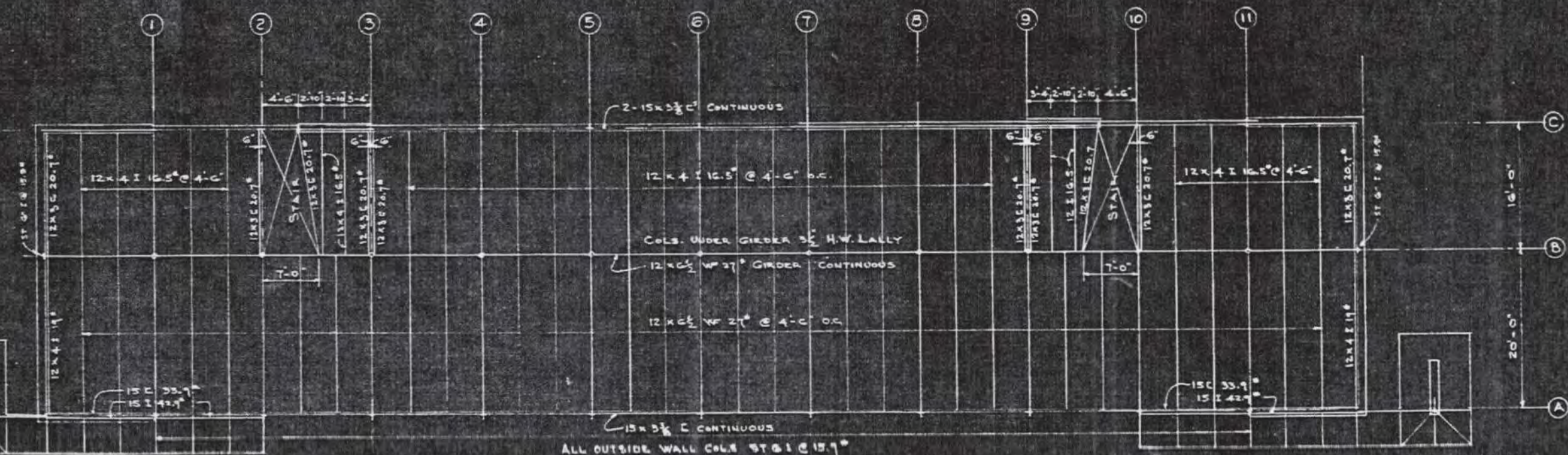
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NO.	WHO DATE

ISSUED AUG 26 1955

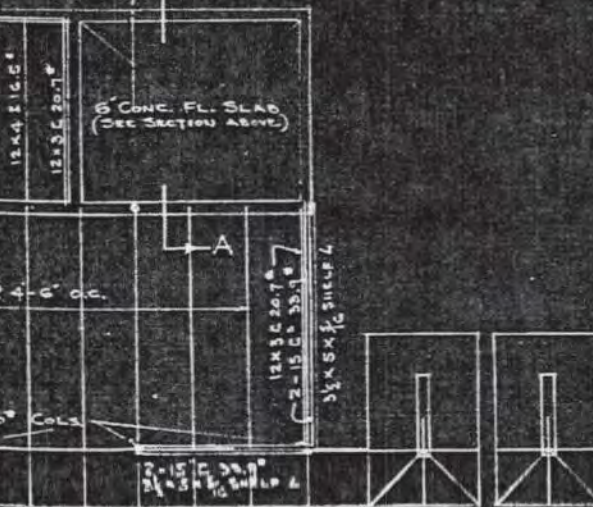
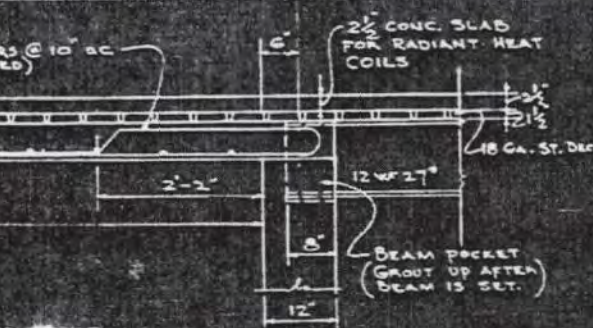
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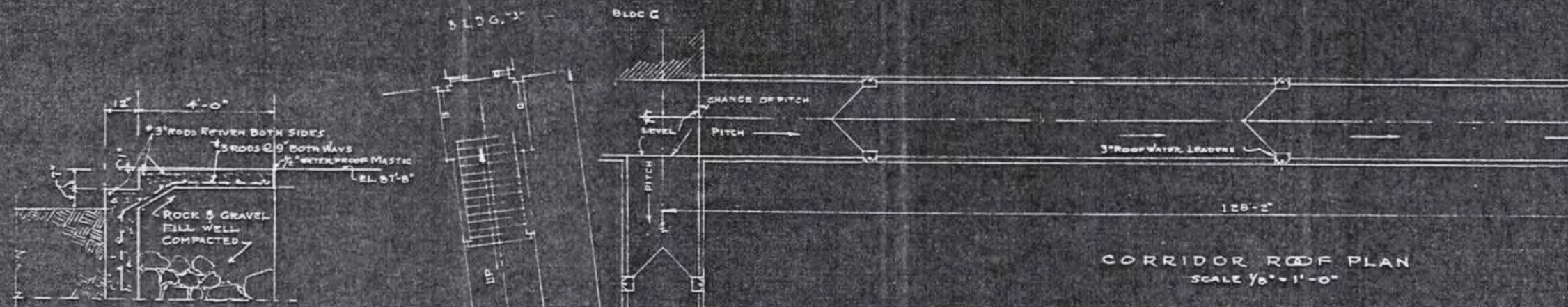
ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"



SECOND FLOOR FRAMING PLAN
SCALE: 1/8" = 1'-0"



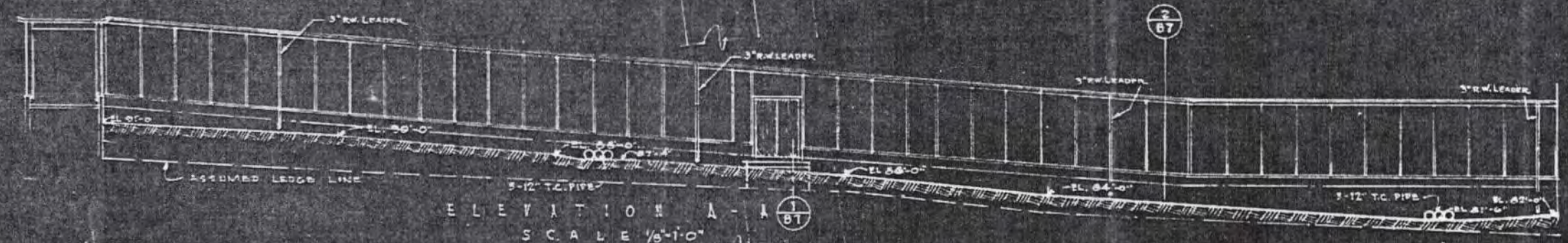
ISSUED AUG 26 1959



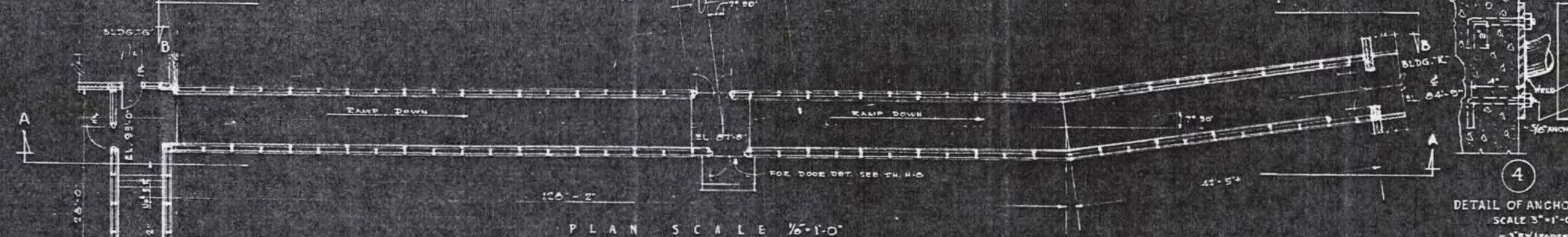
1 SCALE 1/2" = 1'-0"

CORRIDOR ROOF PLAN
SCALE 1/8" = 1'-0"

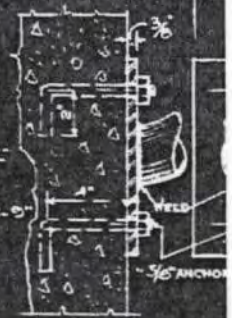
NOTE: ROOF WATER LEADERS OR CONDUCTORS ARE TO BE APPROXIMATELY 48'-0" O.C. UNLESS LOCATED OTHERWISE AND ARE TO BE IN EACH CASE OPPOSITE A WOOD MULLION OR STEEL COLUMN SEE DETAILS ON SHEET C-5



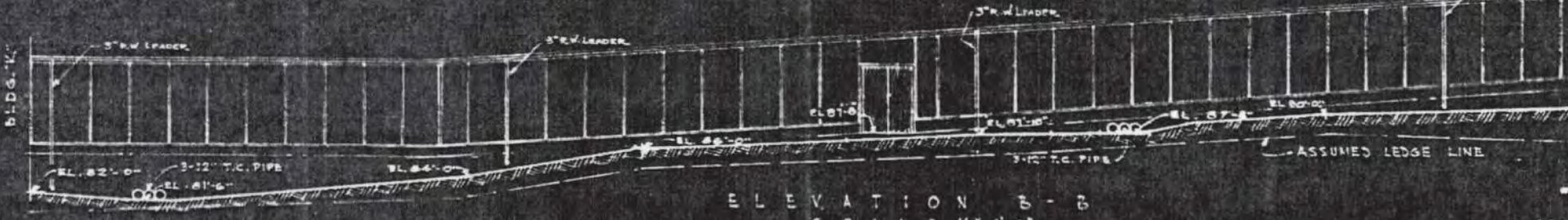
ELEVATION A-A
SCALE 1/8" = 1'-0"



PLAN SCALE 1/8" = 1'-0"



4
DETAIL OF ANCHOR
SCALE 3" = 1'-0"

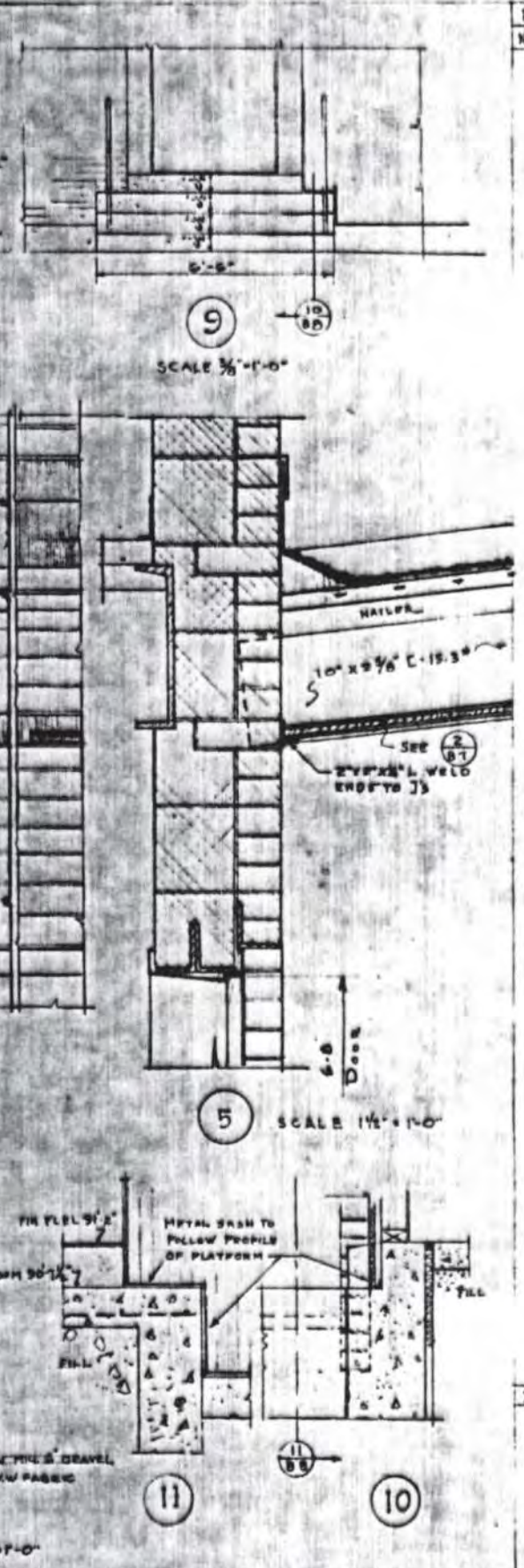
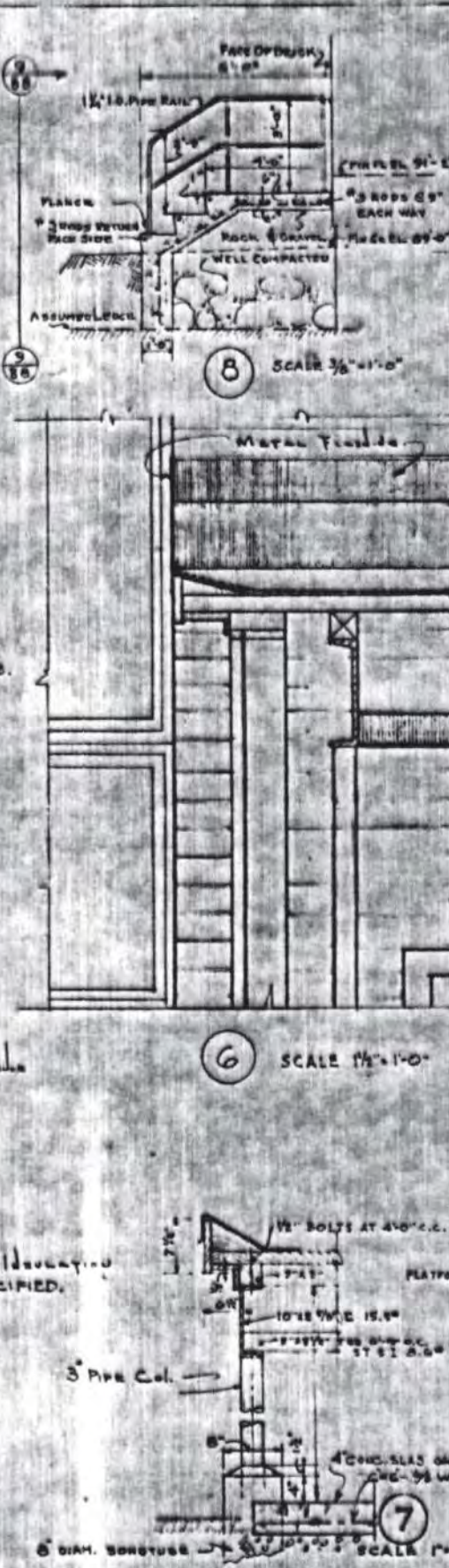
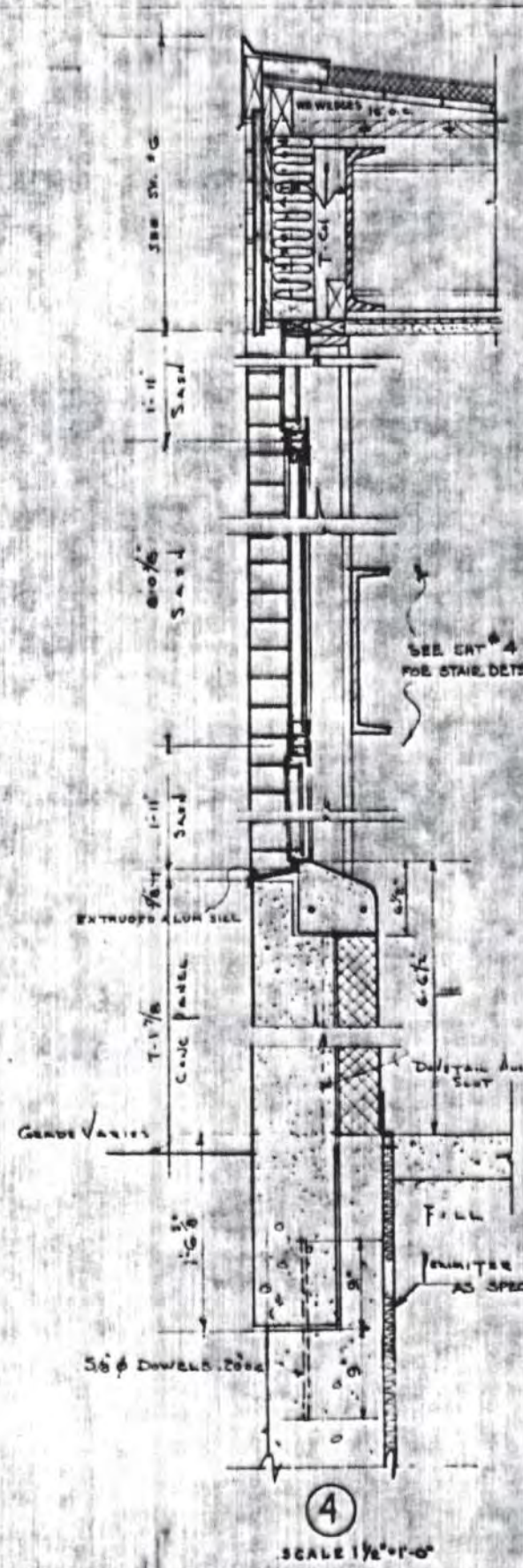
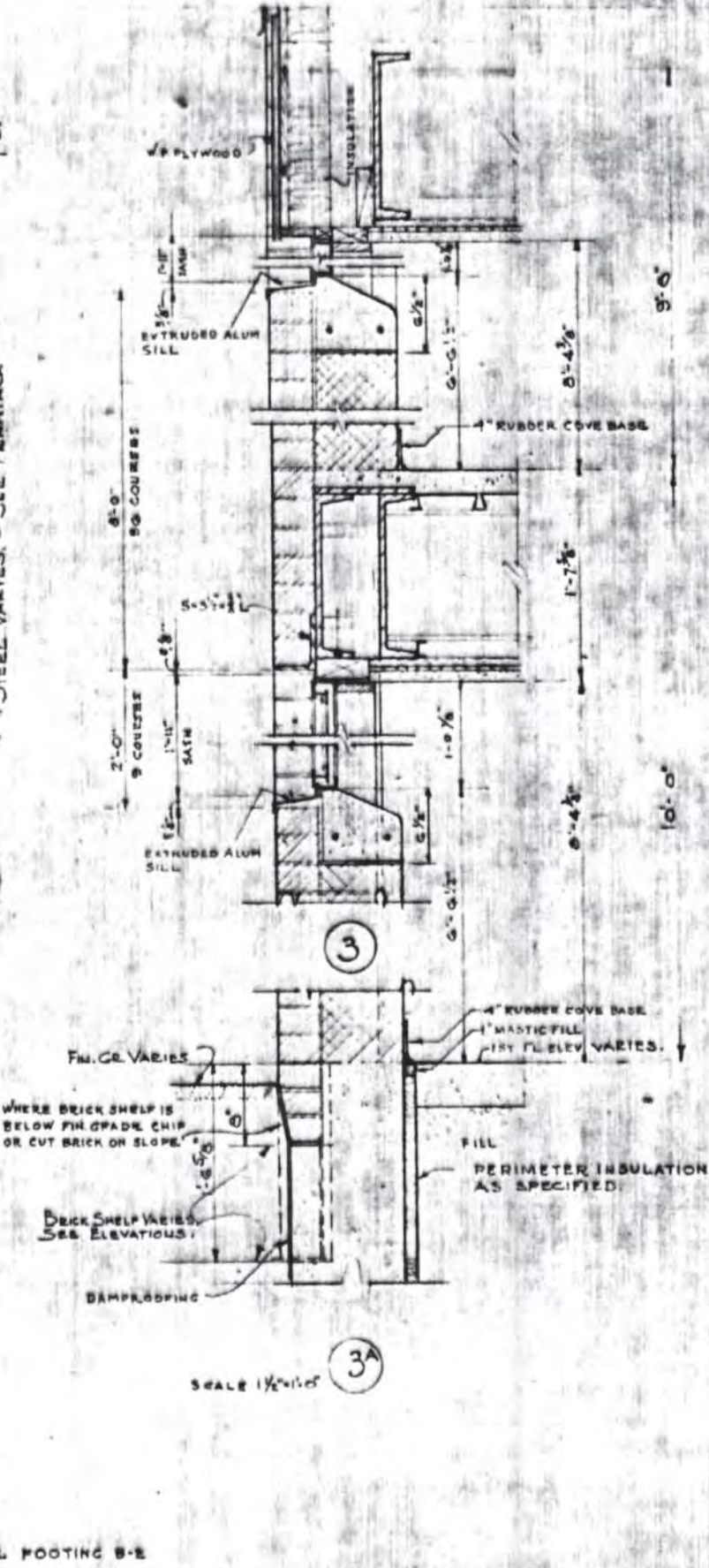
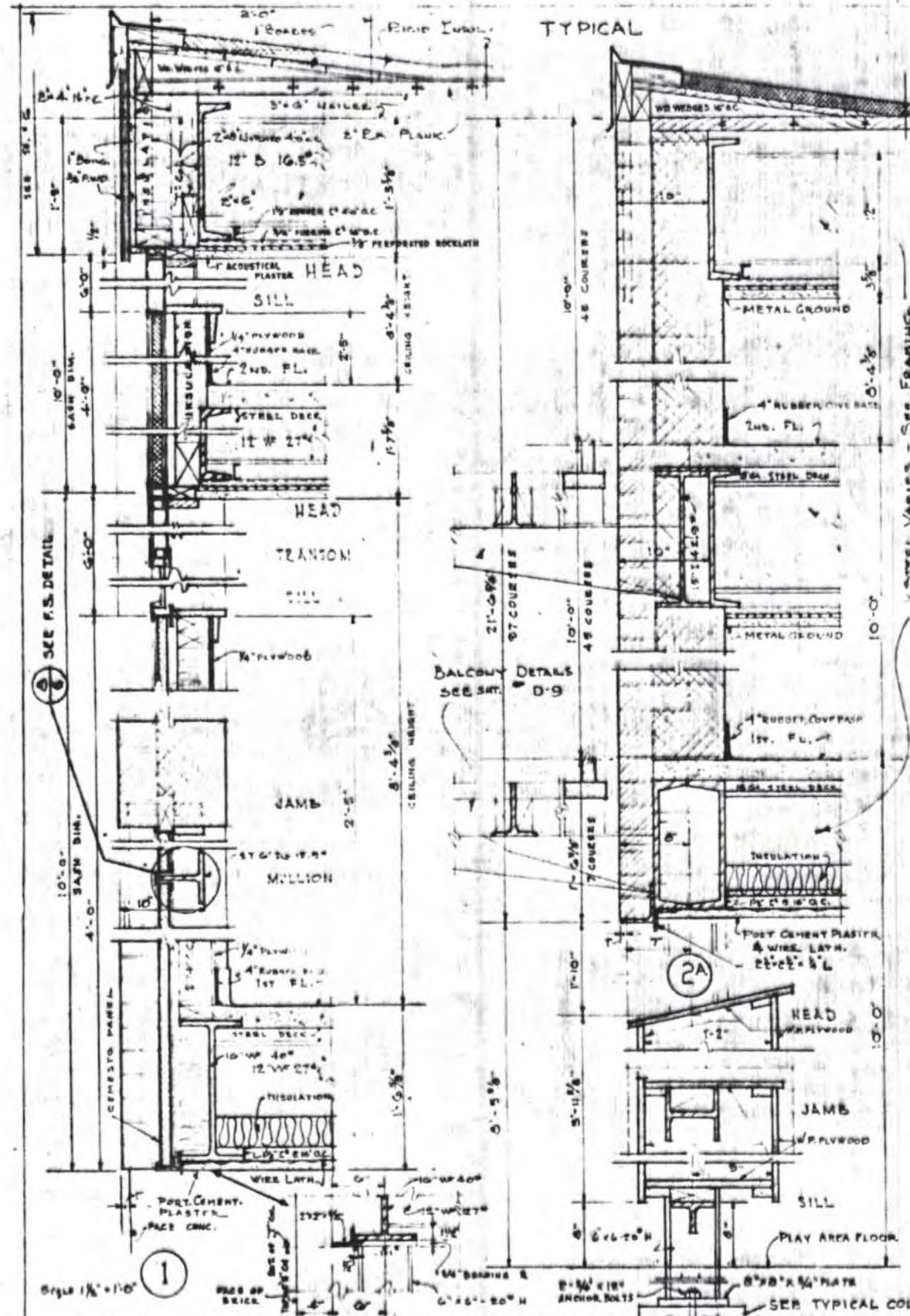


ELEVATION B-B
SCALE 1/8" = 1'-0"

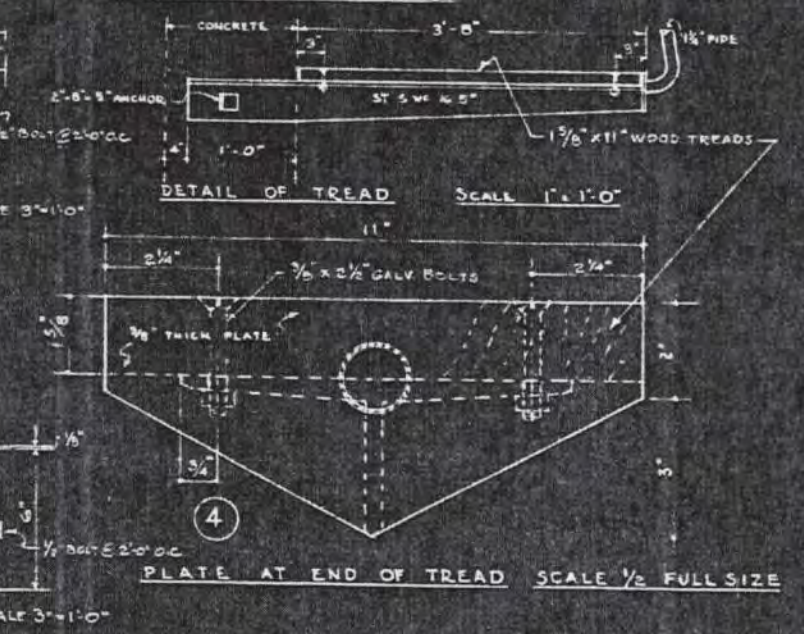
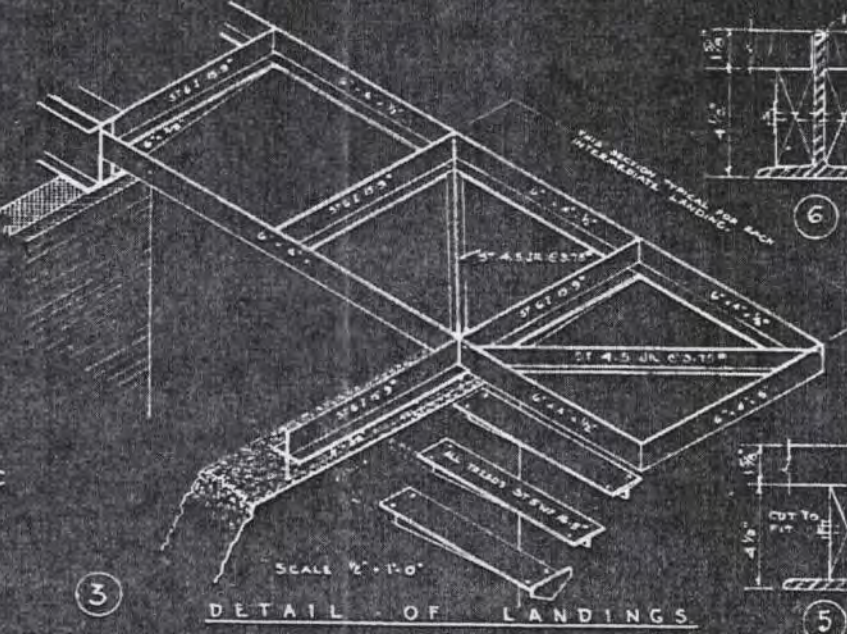
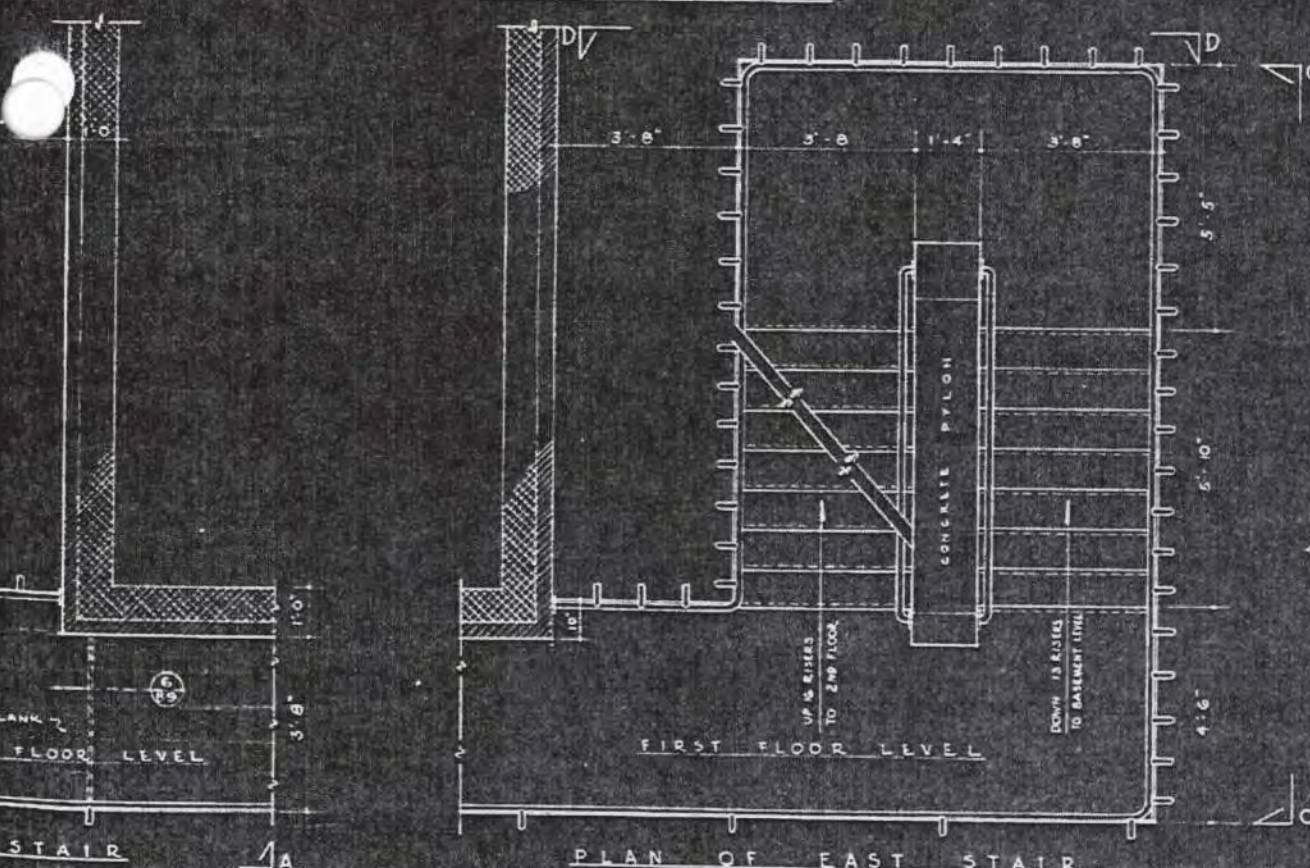
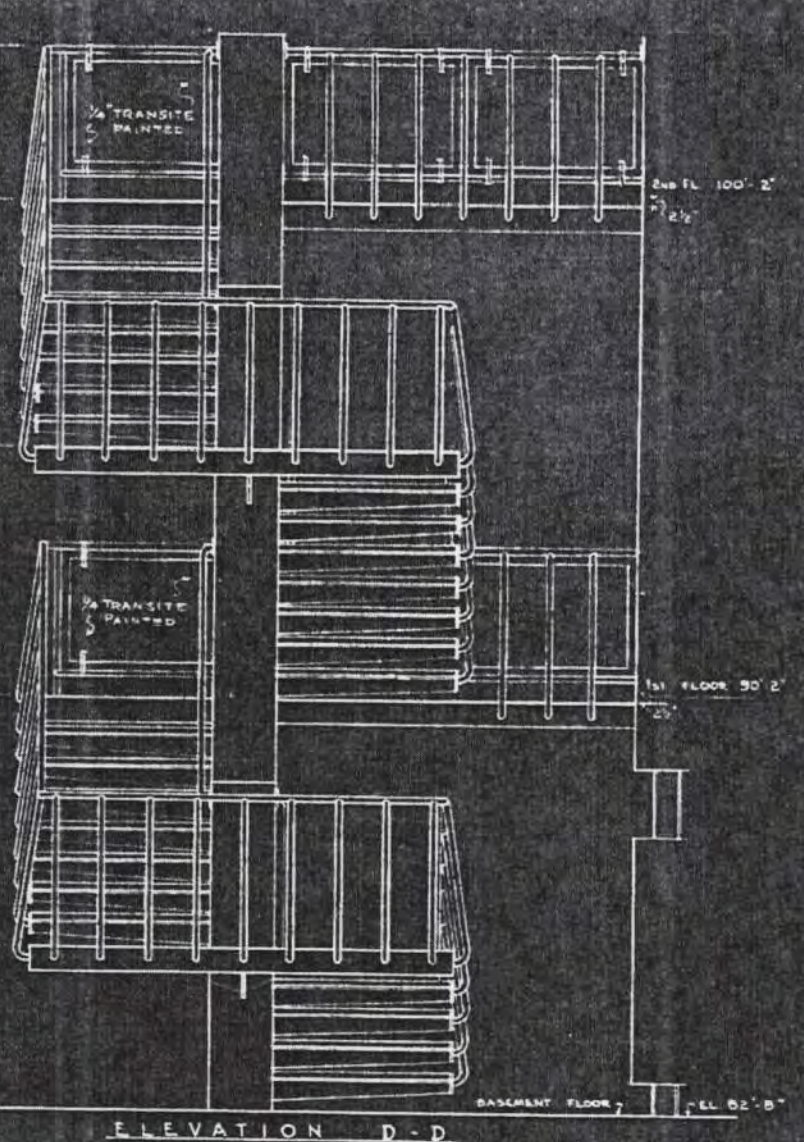
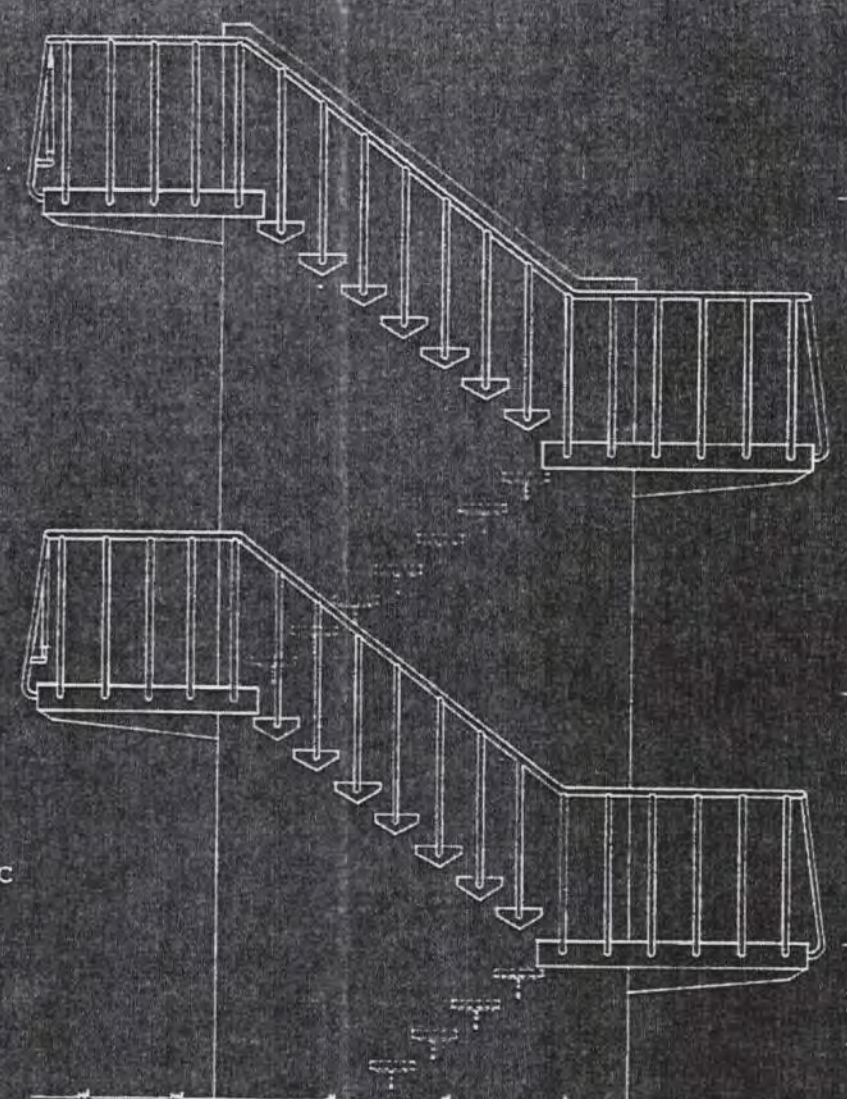
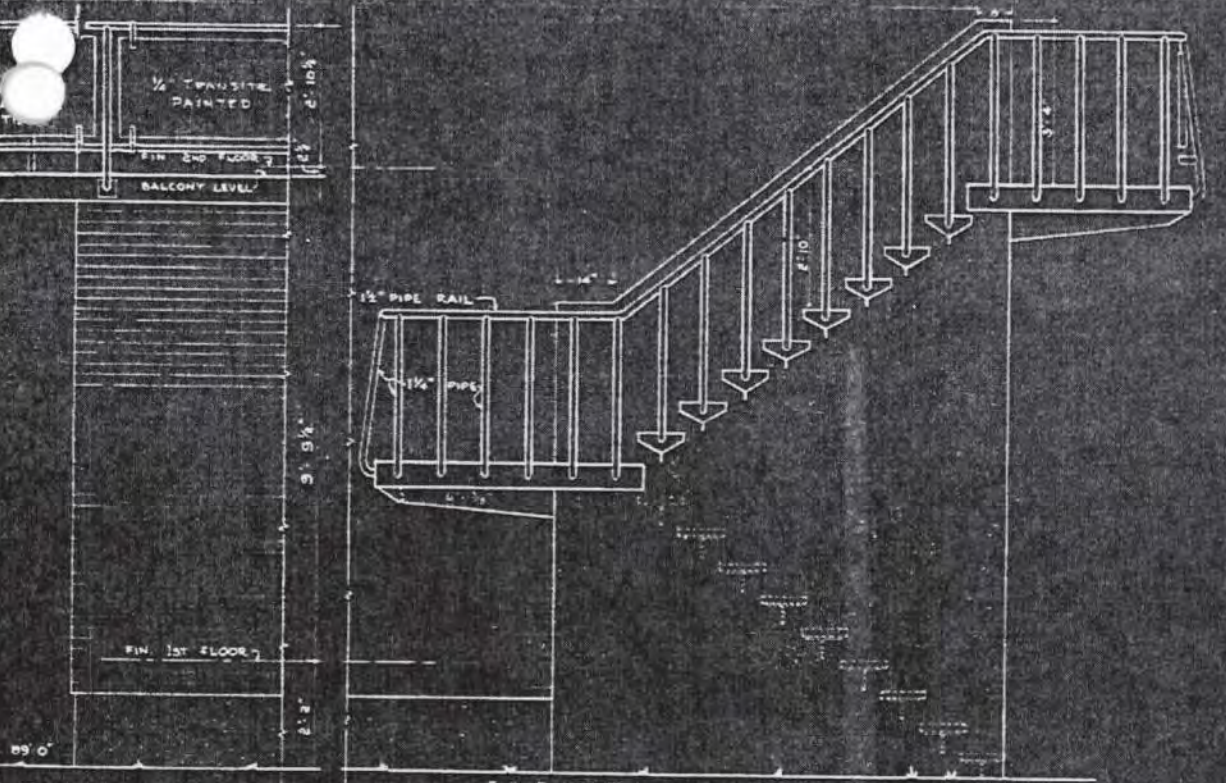
MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

PRIMARY DORM
CONNECTING C

BLDG-B	RS	JOB No. 5543
		SHEET NO.
		B7



PRINT AS SHOWN
NO WHO DATE



SCALE OF PLANS AND ELEVATIONS 1/2" = 1'-0"

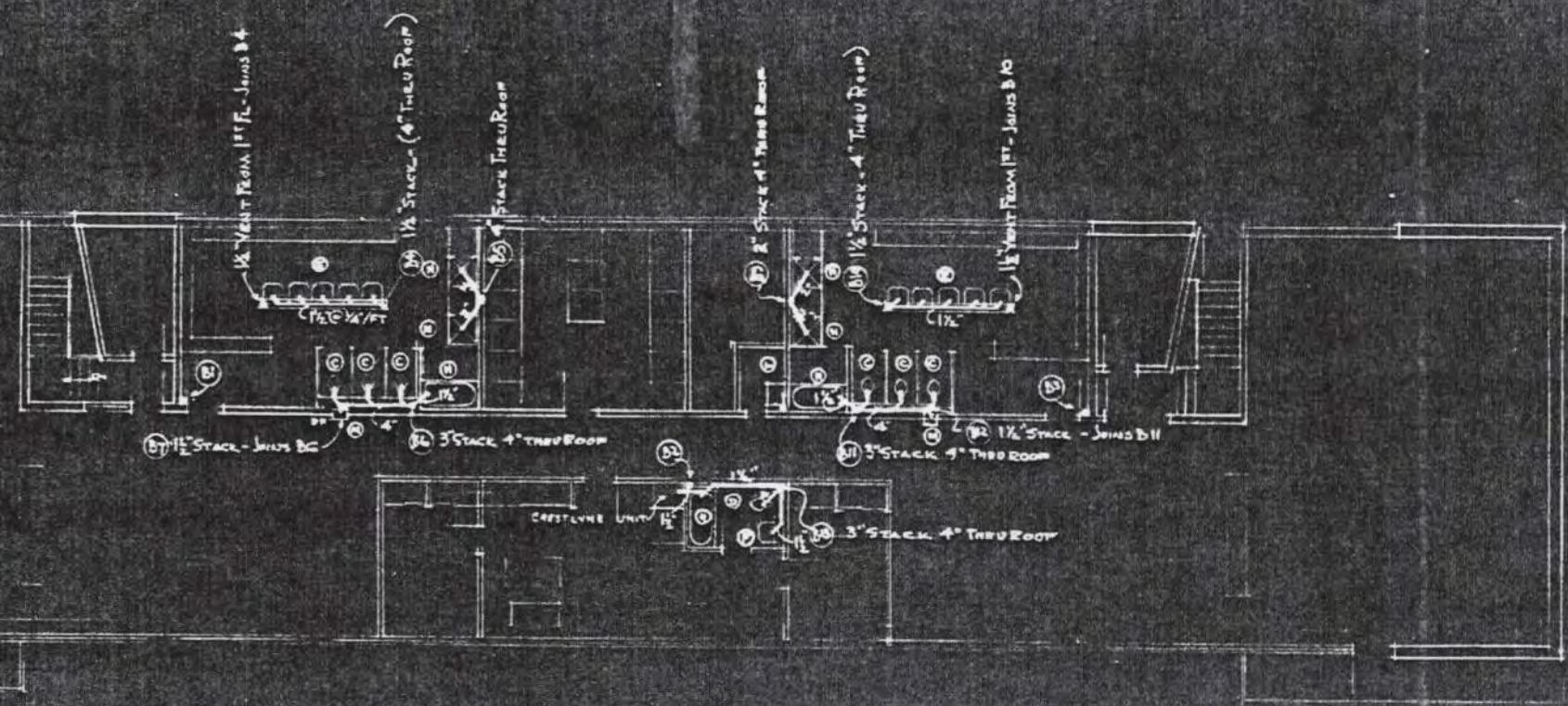
SCHOOL FOR THE DEAF AND FALMOUTH MAINE

PRIMARY DORMITORY EXTERIOR STAIR DETAILS

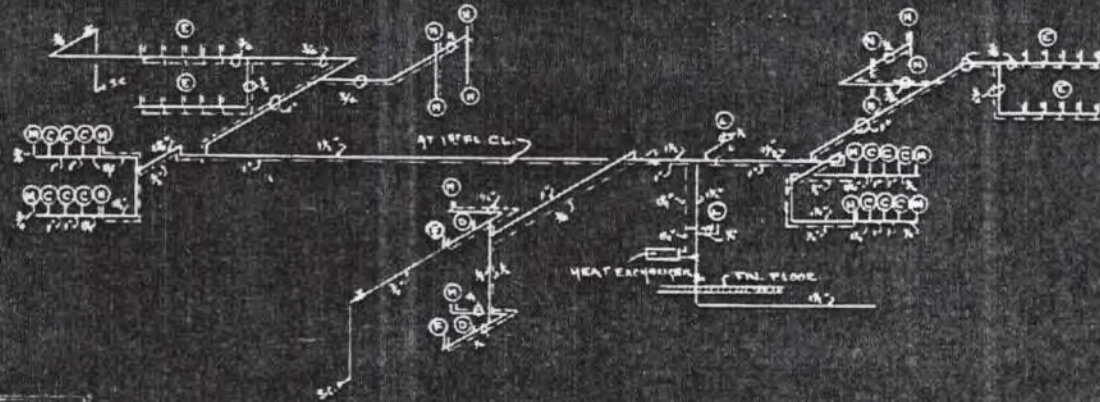
SCALE AS NOTED BLDG. 'B'

STEVENSON ENGINEERS
JOB NO. 5343
SHEET NO. 39

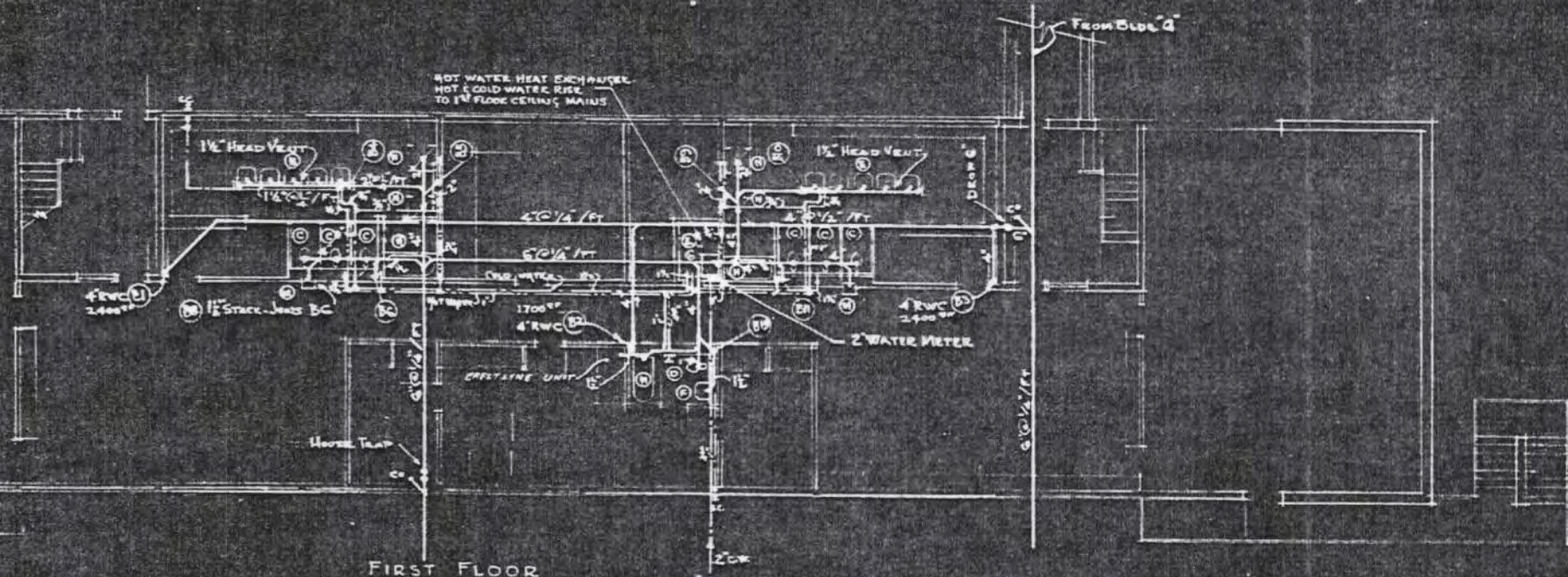
PRINT RECORD
NO. WHO DATE



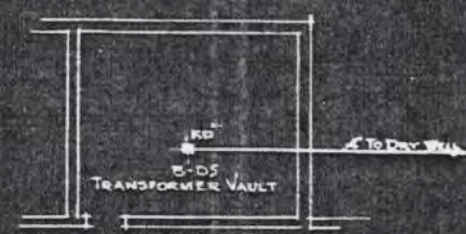
SECOND FLOOR



DIAGRAMATIC PIPING PLAN
DOMESTIC HOT AND COLD WATER



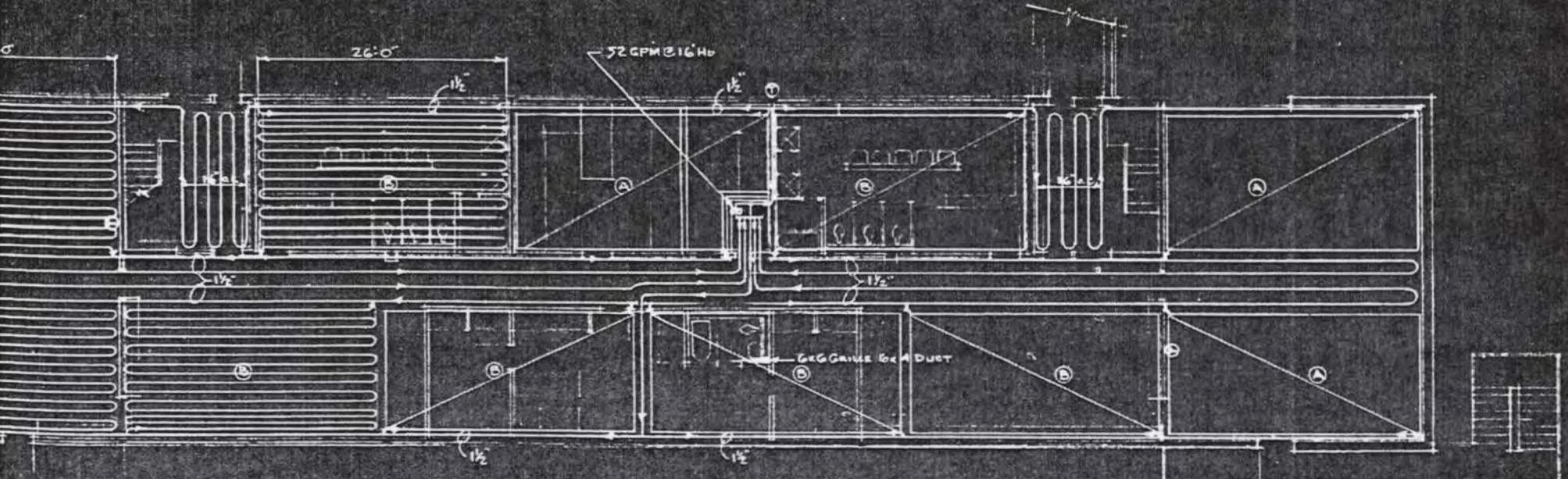
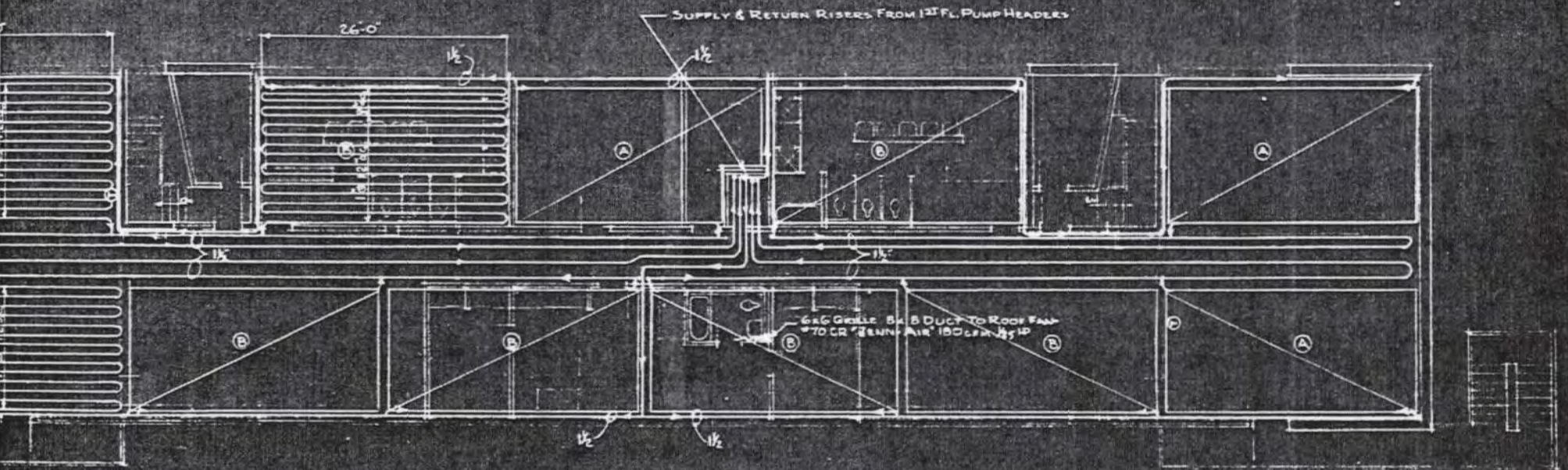
FIRST FLOOR



NOTE ALL ROOF VENTS UNDER 4\"/>

ISSUED AUG 28 1953

PRINT RECORD	
NO. WHO	DATE



ISSUED AUG 26 1935

SCHOOL FOR THE DEAF
AND FAIRMOUTH MAINE

PRIMARY DORMITORY
HEATING SCALE 1/8" = 1'-0"

BLDG-B

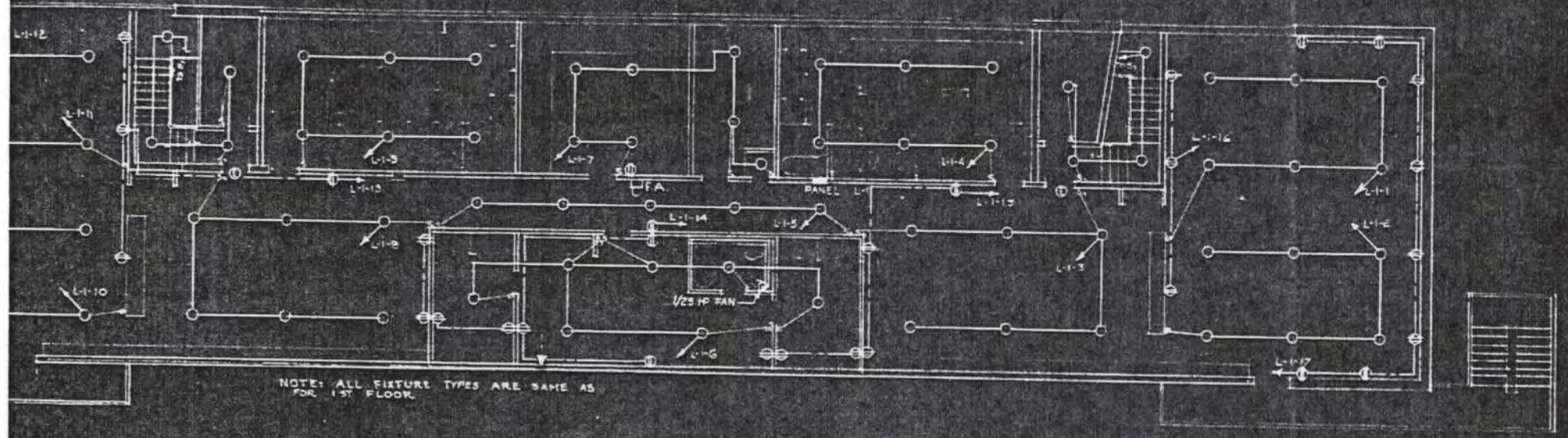
STEVENS and SAUNDERS
ARCHITECTS
PORTLAND MAINE

JOB NO. 7343
SHEET NO.
-B M 2

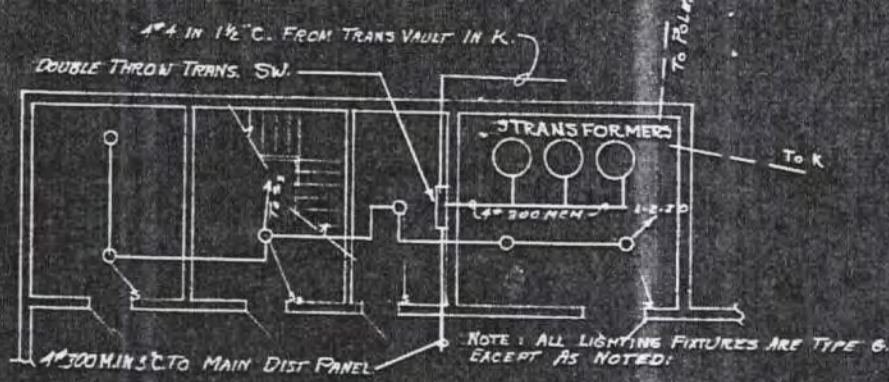
PRINT RECORD	
NO	DATE

PANEL SCHEDULE BLDG. B.

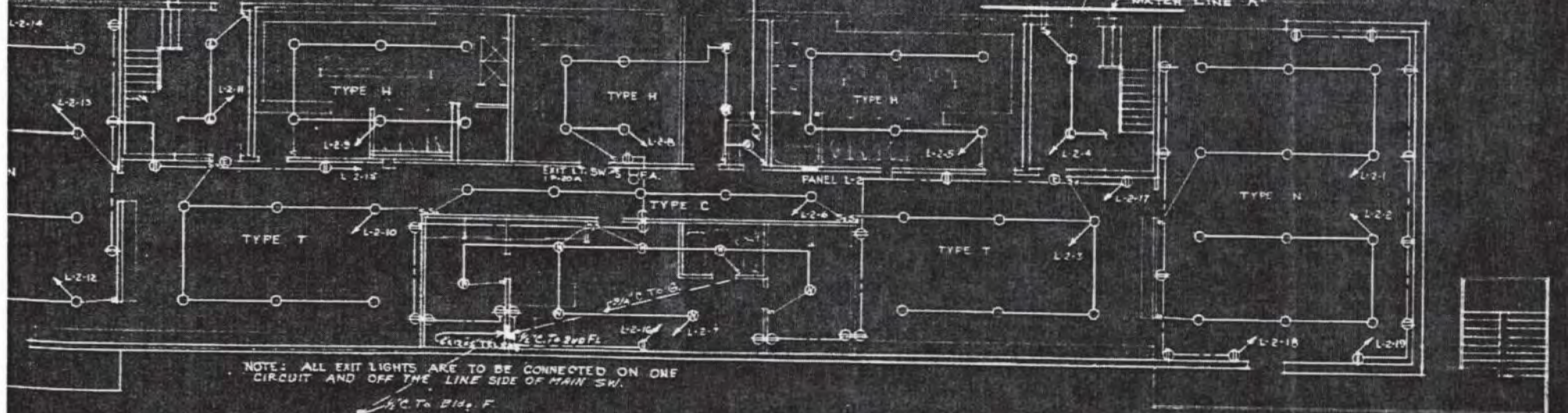
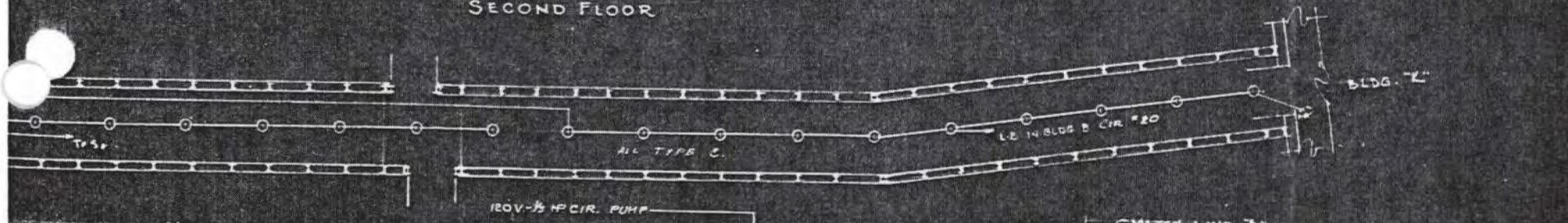
PANEL				
CIRCUIT	DESCRIPTION	CIR. BR.	WIRE	COND.
1-17	LIGHTING	1P-20A		
18-24	SPARES	1P-20A		
PANEL				
1-13	LIGHTING	1P-20A		
20-24	SPARES	1P-20A		



SECOND FLOOR



DETAIL BASEMENT BLDG. B.
SCALE 1/8" = 1'-0"



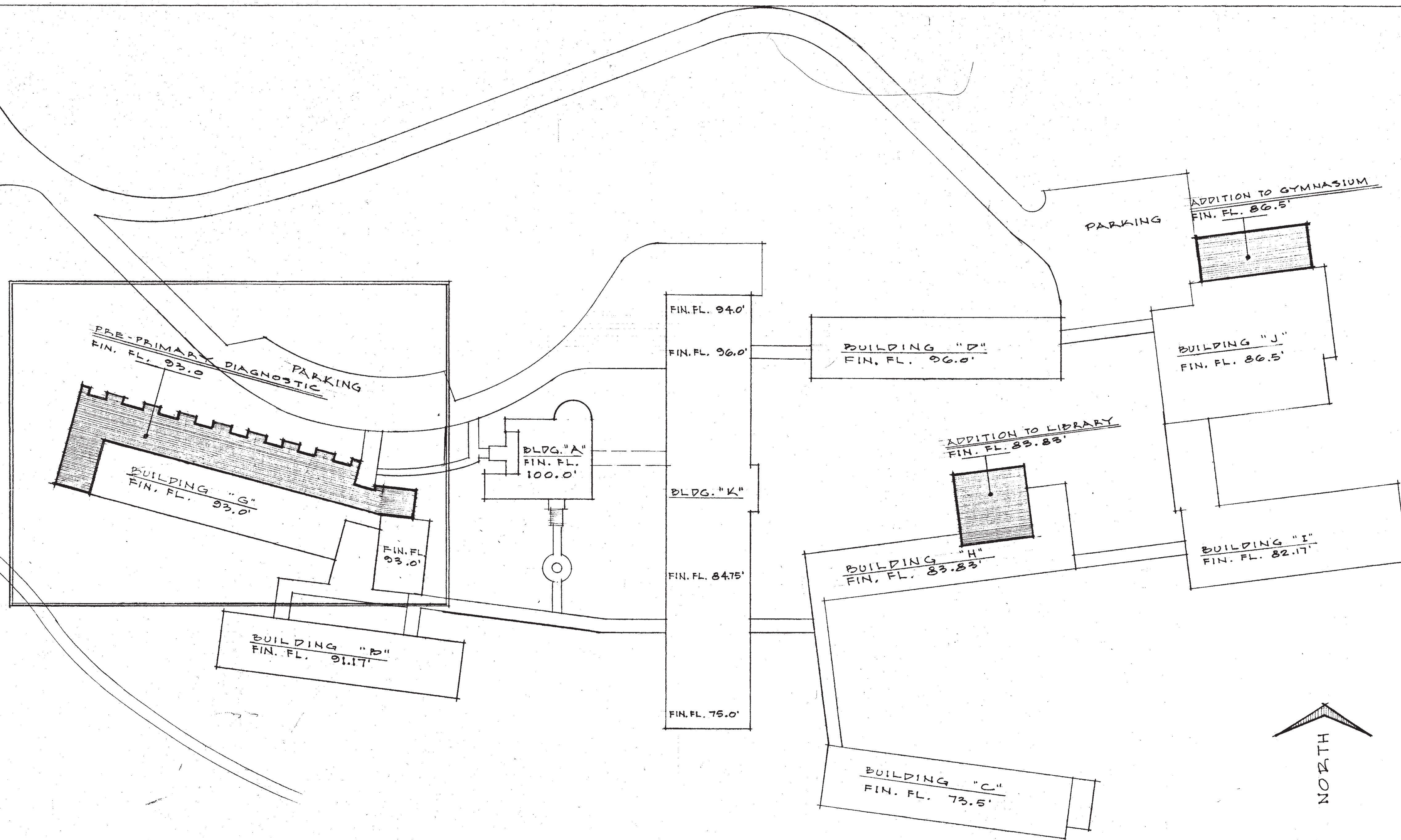
FIRST FLOOR

- ELECTRIC SYMBOL LIST
- INCAND. FIXTURE OUTLET
 - FLUOR. FIXTURE OUTLET
 - DUPLEX CONV. OUTLET - 1'-0" ABOVE FIN. FL.
 - TEL. OUTLET - 1'-0" ABOVE FIN. FL. (INTER. COM.)
 - FIRE ALARM w/ VISUAL & AUDIO SIGNAL
 - CLOCK w/ VISUAL & AUDIO PROGRAM SIGNAL
 - TEL. OUTLET - 1'-0" ABOVE FIN. FL. (NET. & T)
 - ELECTRIC PANEL
 - TEL. PANEL OR CAS
 - 20M. LUMEN STREET LIGHT
 - NEW POLE
 - NEPO #R-250 T2 D W/ MER. BALASTS.

ISSUED AUG. 26 1955

INDEX OF DRAWINGS

1.	LOCATION PLAN
2.	SITE PLAN & DETAILS
3.	FOUNDATION PLAN & DETAILS
4.	FRAMING PLAN
5.	FLOOR PLAN
6.	ELEVATIONS
7.	WALL SECTIONS
8.	WALL SECTIONS
9.	DOOR DETAILS
10.	1/4" CLASSROOM LAYOUT & CASEWORK DET'L
11.	PLUMBING PLAN
12.	HEATING & VENTILATING PLAN
13.	ELECTRICAL PLAN

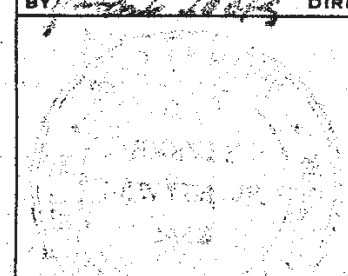


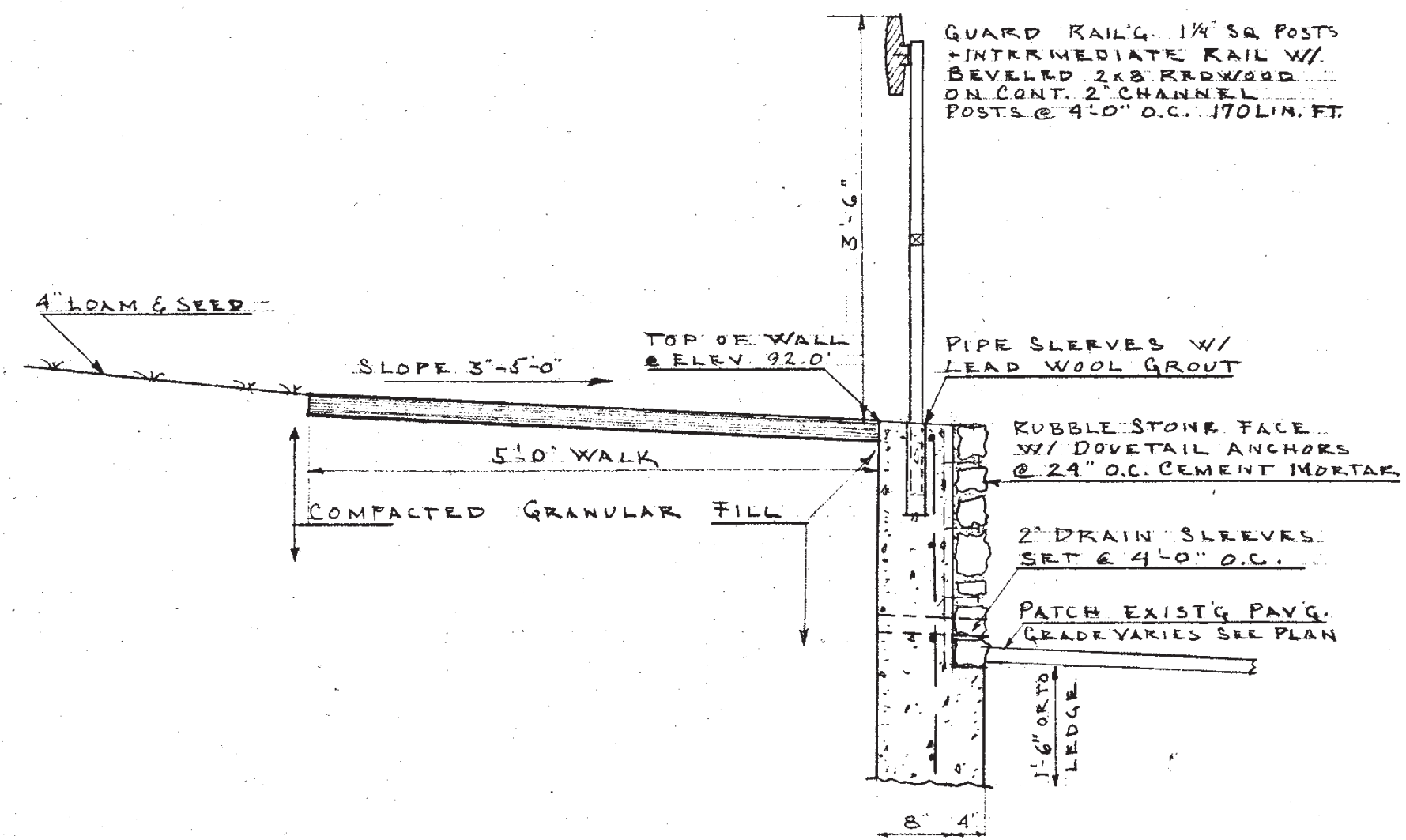
CONTRACT SET # 7

SITE PLAN
SCALE 1"=40'-0"

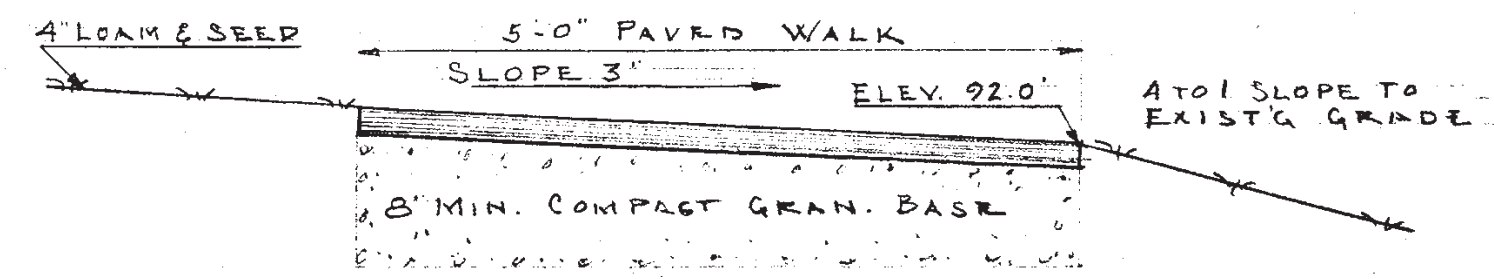
PRE-PRIMARY DIAGNOSTIC CENTER
GOVERNOR BAXTER'S STATE SCHOOL FOR THE DEAF
MACKWORTH ISLAND
FALMOUTH, MAINE

Significant approval of these plans by the Director of the Bureau of Public Improvements is to the effect that such design and construction are the responsibility of the designer.

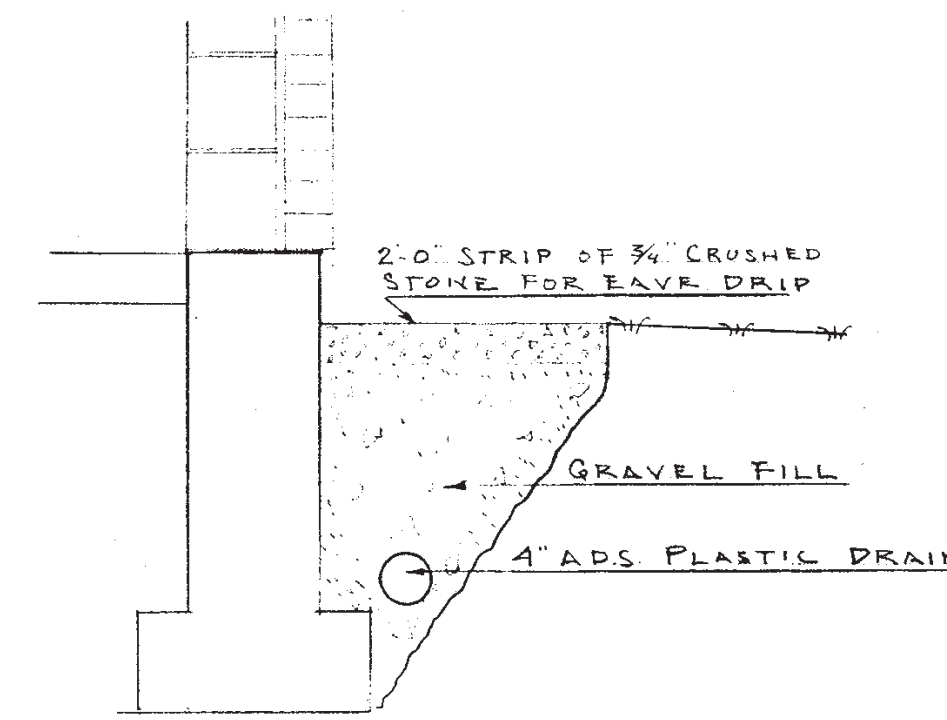
APPROVED FOR: DEPT. OF HEALTH & WELFARE	APPROVED FOR: DEPT. OF INSURANCE
BY: [Signature] DATE: [Date]	BY: [Signature] DATE: [Date]
APPROVED FOR: BUREAU OF PUBLIC IMPROVEMENTS	APPROVED FOR:
BY: [Signature] DIRECTOR DATE: [Date]	BY: [Signature] TITLE DATE:
	
STATE OF MAINE TITLE: SITE PLAN GOV. BAXTER'S STATE SCHOOL FOR THE DEAF LOCATION: MACKWORTH ISLAND FALMOUTH, MAINE TITLE THIS DWG: LOCATION PLAN	
ARCHT: [Signature] SEAL	PROJECT NO. 73-0612-8093
DRAWN BY: [Signature]	ALLIED ENGINEERING, INC.
CHECKED BY: H.E.S.	ARCHITECT-ENGINEERS
NO. DATE DESCRIPTION APPROV'D	DATE: MAR 15, 1973 GORHAM, MAINE
1	SHEET NO. 6 OF 13



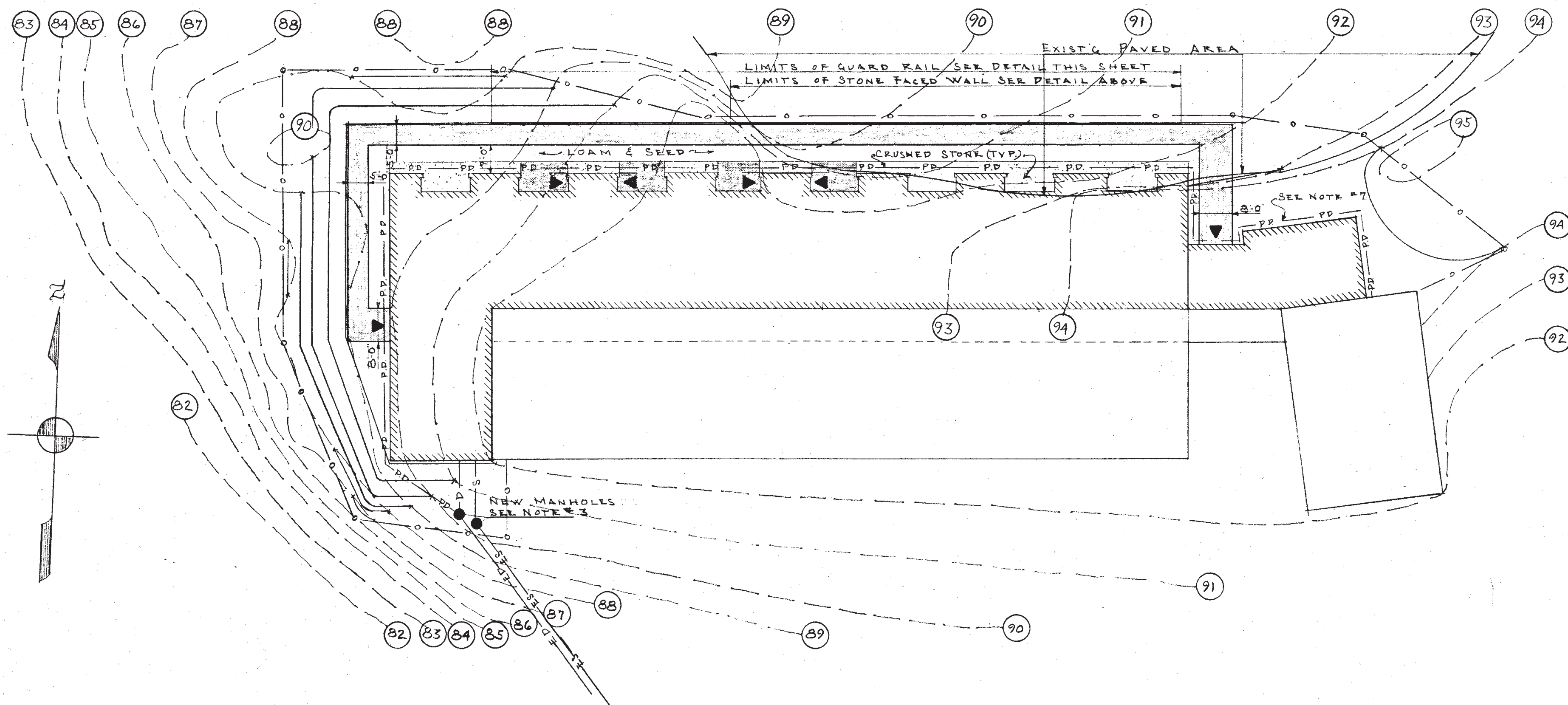
GUARD RAIL AND WALL DETAIL
SCALE 3/4" = 1'-0"



TYPICAL WALK DETAIL
SCALE 3/4" = 1'-0"



EAVE DRIP DETAIL
SCALE 3/4" = 1'-0"



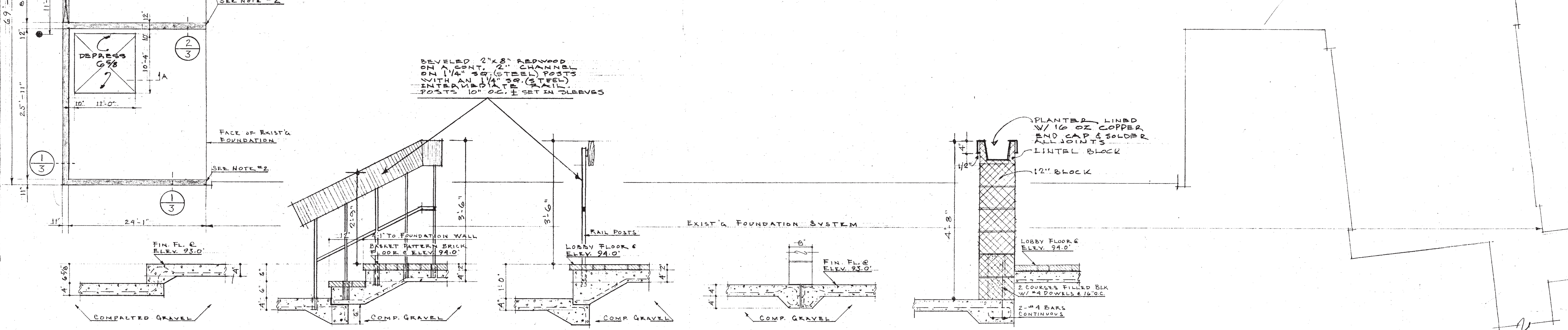
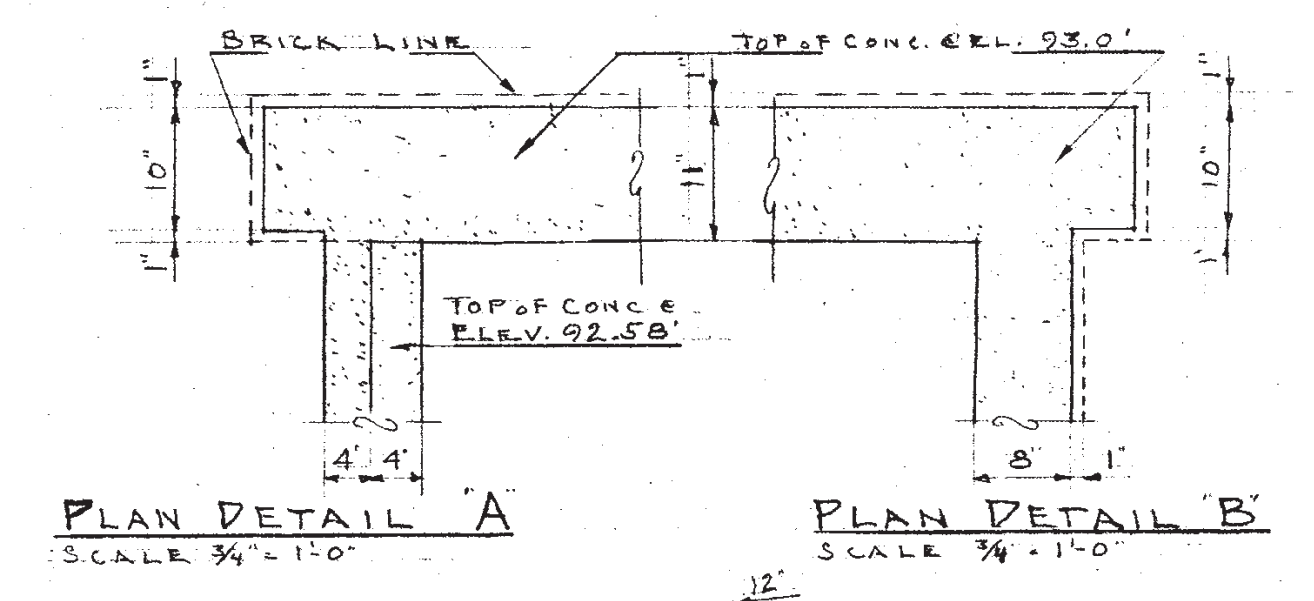
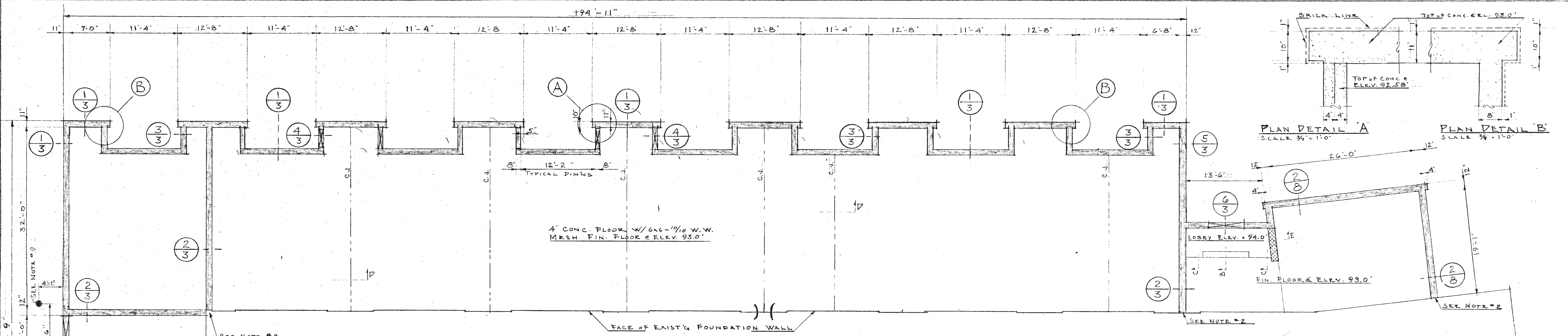
SITE PLAN
SCALE 1" = 20'

SITE LEGEND			
EXIST'G CONTOUR		FINISH CONTOUR	
EXIST'G PAVING		NEW PAVING	
EXIST'G SEWER		NEW SEWER	
EXIST'G DRAIN		NEW DRAIN	
		NEW PERIM. DRAIN	
		LIMIT OF WORK	

GENERAL NOTES:

1. ALL AREAS WITHIN THE LIMITS OF WORK NOT COVERED BY OTHER MATERIALS SHALL RECEIVE 4" MIN. LOAM W/ FERTILIZER AND SEED. SEE SPEC.
2. REMOVE ALL EXIST'G PAVING FROM AREAS TO BE REGRADED.
3. PROVIDE & INSTALL 2 NEW CONC. MAN HOLES COMPLETE W/ CAST IRON FRAMES & COVERS. CONSTRUCT FLOW CHANNELS IN BASES. EXIST'G PIPING @ ELEV. 84" NEW PIPING TO MAN HOLE SHALL BE ALL CAST IRON BY PLUMBER. SEE PLUMB'G PLANS & DETAILS.
4. ALL SURFACES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEERS.
5. ALL AREAS SHALL BE CAREFULLY GRADED TO DRAIN BY GRAVITY. SEE FINISH CONTOURS.
6. PATCH EXIST'G PAVING TO NEW STONE FACED WALL AND FORM CURB TO GRADE 92.0.
7. PROVIDE & INSTALL 4" ADS. PLASTIC PERIMETER DRAIN IN LOCATIONS SHOWN BY THE SITE PLAN. ELEVATION OF DRAIN SHALL BE FIELD SET BY THE ENGINEERS.

APPROVED FOR DEPT. OF HEALTH & WELFARE	APPROVED FOR DEPT. OF INSURANCE
BY TITLE DATE	BY TITLE DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS	APPROVED FOR
BY DIRECTOR DATE	BY TITLE DATE
 STATE OF MAINE TITLE THIS DWG: SITE PLAN & DETAILS	
2 DRAWN BY C.K.S.	PROJECT NO. 73-0672 5003
1 CHECKED BY H.E.S.	ARCHITECT-ENGINEER
NO. DATE DESCRIPTION APPROVED	DATE AS NOTED
REVISIONS DATE: MAR. 15, 1973 GORHAM, MAINE	
SHEET NO. 2 OF 1	



DETAIL A
SCALE 3/4" = 1'-0"

DETAIL B

DETAIL C

DETAIL D

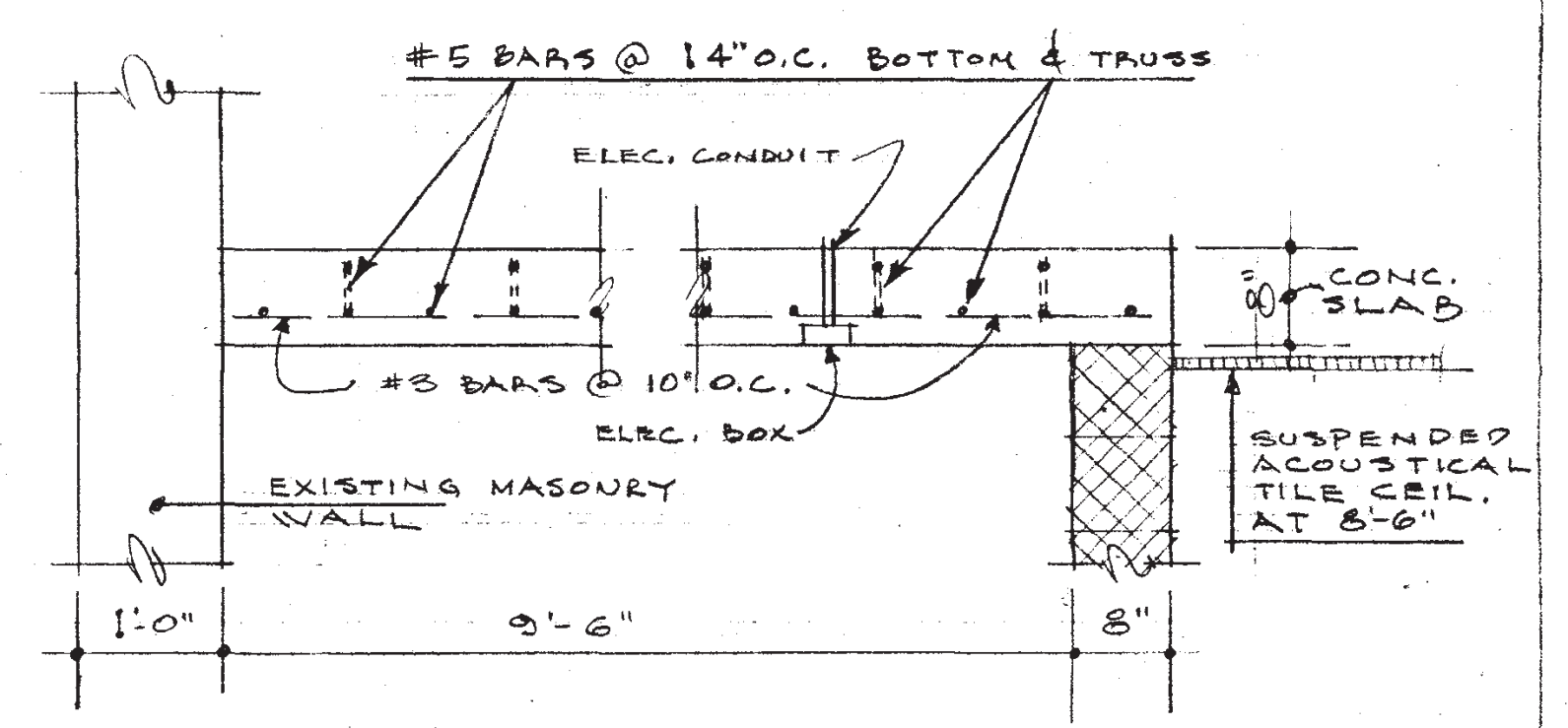
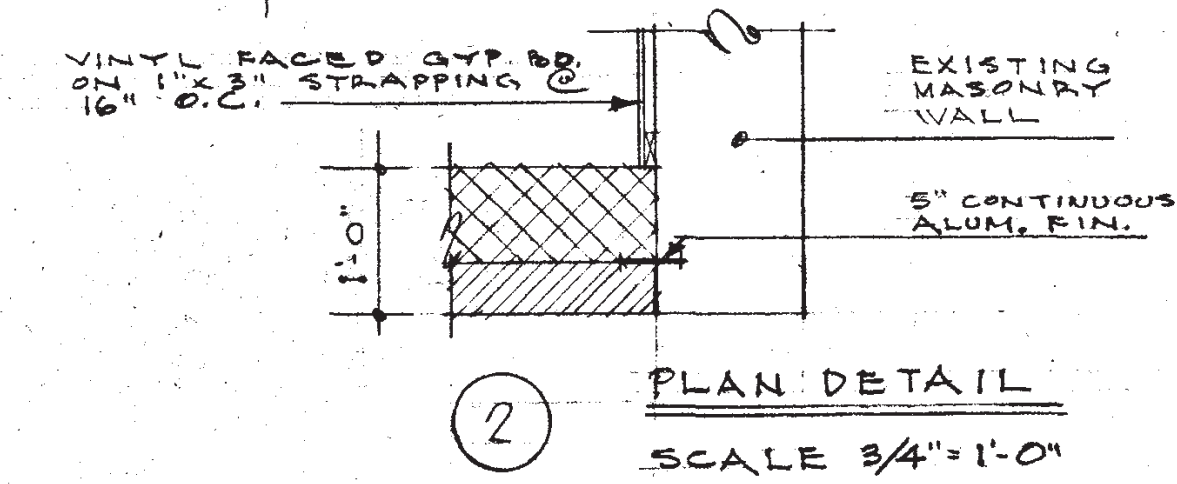
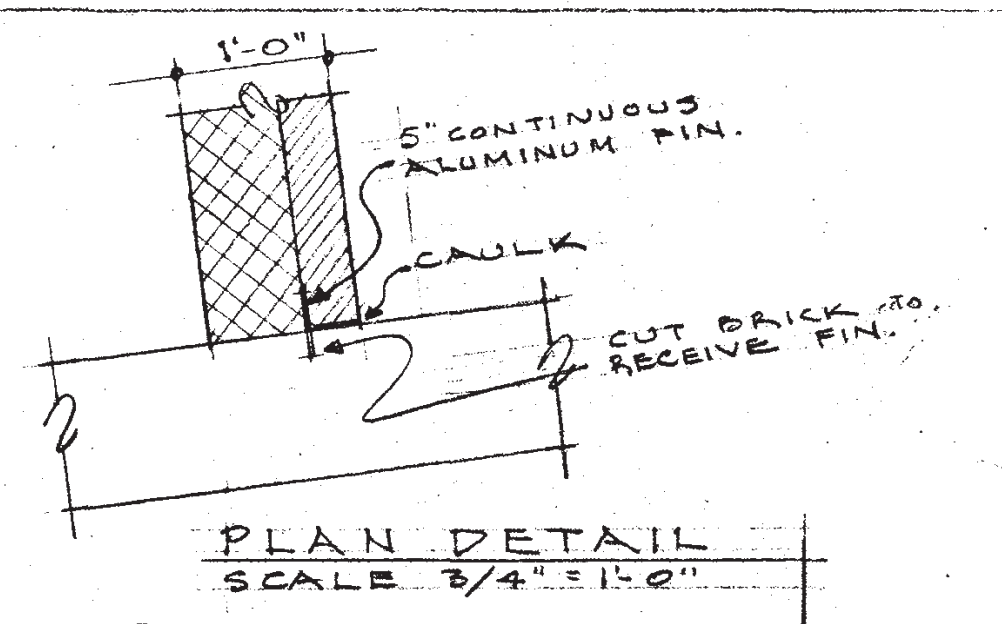
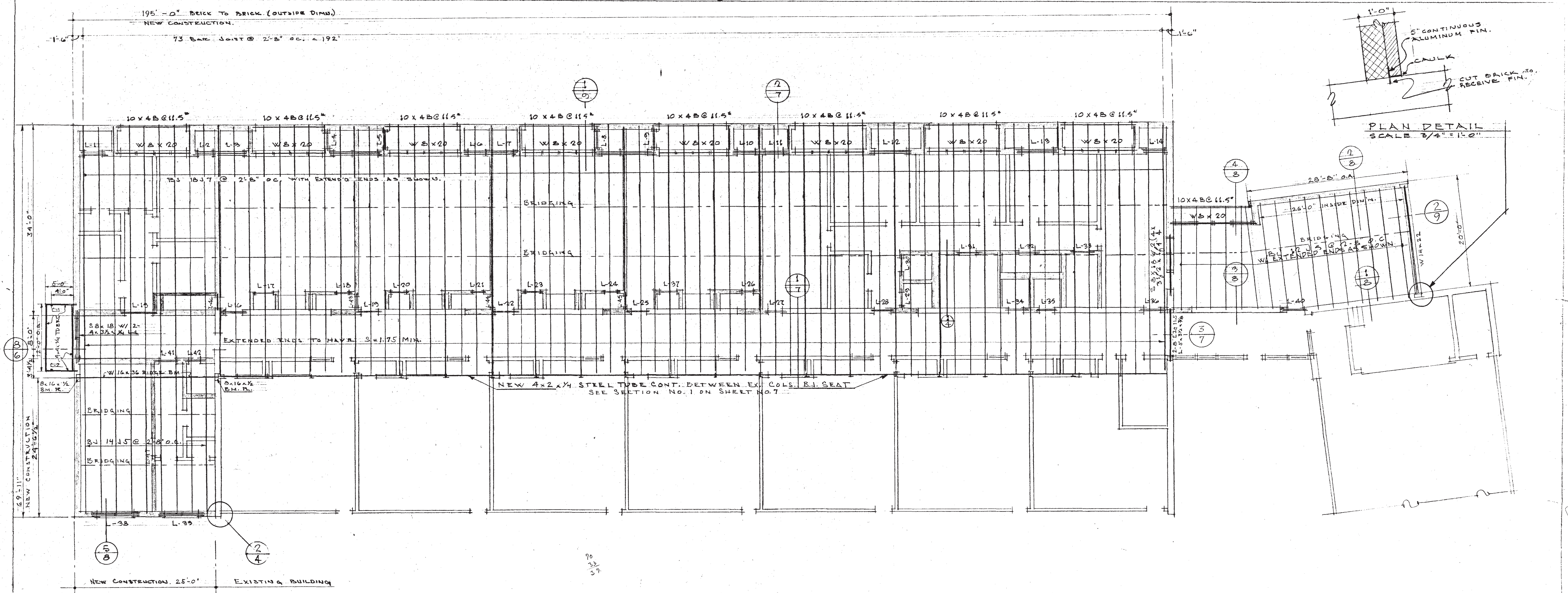
DETAIL E

FOUNDATION NOTES:

1. ALL FOUNDATION CONCRETE SHALL BE 3000 # @ 28 DAYS. SLUMP TESTS AND TEST CYCLES SHALL BE MADE @ ALL MAJOR JOINTS.
2. ALL INTERSECTING CONC. WALLS SHALL BE TIED W/ #4 BARS 4'-0" LONG BENT 210°-210° WHERE NEW WALLS JOIN EXIST'G WALLS THEY SHALL BE TIED BY DRILLING AND GROUTING W/ #5 DOWELS @ 12" O.C. DOWELS SHALL BE 18" LONG SET 8" MIN. INTO EXIST'G CONC. WALLS.
3. ALL FOOTINGS SHALL BEAR ON LEDGE ROCK. SEE ELEVATION SHT #6 FOR ASSUMED LEDGE.
4. ALL GRADE SLABS SHALL BE REINFORCED W/ 6x6-10/10 WELDED WIRE MESH.
5. BOTTOM ELEV. OF INTERIOR WALLS ARE SHOWN INSIDE RECTANGULAR FIGURE.
6. ALL GRADE SLABS SHALL HAVE 6 MIL. POLY VAPOR BARRIER.
7. ALL AREAS WHERE FINISH GRADE IS HIGHER THAN FINISH FLOOR LEVEL SHALL BE WATERPROOFED W/ PRIME COAT OF DEHYDRATING #4 AND TROWEL COAT OF DEHYDRATING #6.
8. CONTRACTOR MUST CHECK W/ ALL MECHANICAL TRADES FOR EXACT LOCATION, SIZE AND ELEVATION OF REQUIRED SLEEVES THRU CONCRETE WALLS AND FLOORS.
9. PROVIDE & INSTALL 2 SONO-TUBE BASES FOR COLUMNS C-1 & C-2. BOTTOM OF BASES SHALL BREAK ON LEDGE AND TOP OF CONC. SHALL BE @ ELEV. 92.0'. PROVIDE 1/2" x 1/2" ANCHOR BOLTS FOR COL. BASE PLATES. SEE COL. SHOP DRAWINGS.
10. ALL EXPOSED CONC. SHALL BE NEATLY FINISH RUBBED.

FOUNDATION SECTIONS
SCALE 3/4" = 1'-0"

APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY	TITLE	BY	TITLE
DATE	DATE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR	
BY	TITLE	BY	TITLE
DATE	DATE	DATE	DATE
STATE OF MAINE			
TITLE PRE-PRIMARY DIAGNOSTIC CENTER GOV. BAKER STATE SCHOOL FOR THE DEAF LOCATION WACKWORTH ISLAND FALMOUTH, MAINE			
FOUNDATION PLAN AND DET'L'S.			
ARCHT'S DRAWN BY C.K.S.	SEAL	PROJECT NO. 73-6672- 5003	SHEET NO. 3 of 13
CHECKED BY H.E.S.	ALLIED ENGINEERING INC		
NO. DATE	DESCRIPTION	APPROV'D	SCALE AS NOTED
	REVISIONS	DATE	MAR. 15, 1973
		ARCHITECT-ENGINEER GORHAM, MAINE	



LINTEL SCHEDULE:

LINTEL NUMBER	TYPE	M.O.	REMARKS
L-1, L-2, L-3, L-6, L-7, L-10, L-11	3-4 x 3 1/2 x 1/4	3'-4"	6" MIN. END BEARG
L-4, L-5, L-8, L-9	2-4 x 3 1/2 x 1/4	3'-4"	DO
L-12, L-13	3-5 x 3 1/2 x 1/4	6'-4"	6" MIN. END BEARG
L-14	3-4 x 3 1/2 x 1/4	3'-4"	6" MIN. END BEARG
L-15	3-5 x 3 1/2 x 1/4	3'-0"	6" MIN. END BEARG
L-16, L-19, L-22, L-25, L-27, L-28	3-4 x 3 1/2 x 1/4	3'-4"	6" MIN. END BEARG
L-34, L-35, L-36, L-40, L-41	3-4 x 3 1/2 x 1/4	3'-4"	DO
L-17, L-20, L-23, L-37	2-4 x 3 1/2 x 1/4	3'-4"	DO
L-18, L-21, L-24, L-26	3-4 x 3 1/2 x 1/4	2'-8"	DO
L-29, L-30, L-34, L-35	2-4 x 3 1/2 x 1/4	3'-0"	DO
L-31, L-32, L-33	2-4 x 3 1/2 x 1/4	3'-4"	DO
L-42	3-4 x 3 1/2 x 1/4	2'-8"	DO
L-38, L-39	3-5 x 3 1/2 x 1/4	6'-4"	6" MIN. END BEARG
L-43, L-44, L-45	2-4 x 3 1/2 x 1/4	2'-8"	6" MIN. END BEARG
L-46	3-4 x 3 1/2 x 1/4	2'-8"	DO
L-47	2-4 x 2 1/2 x 1/4	3'-4"	DO

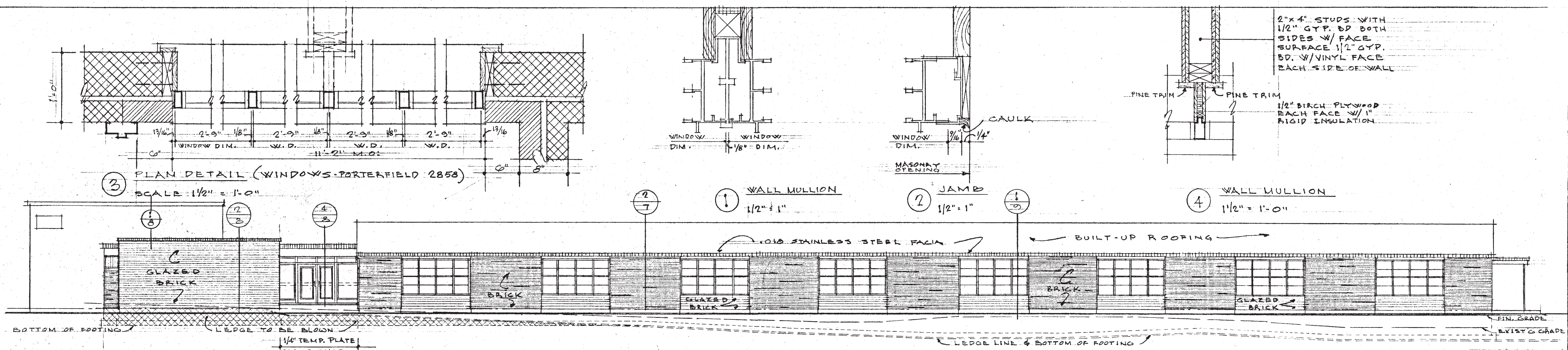
COLUMN SCHEDULE:

COL. NO.	SIZE	LENGTH TOP C.R. TO BOT. B.R.	B.R. SIZE	C.R. SIZE	REMARKS
C-1, C-2	4x4x1/4	8'-11"	8x8x1/2	NONE	FIELD WELD @ CAP.

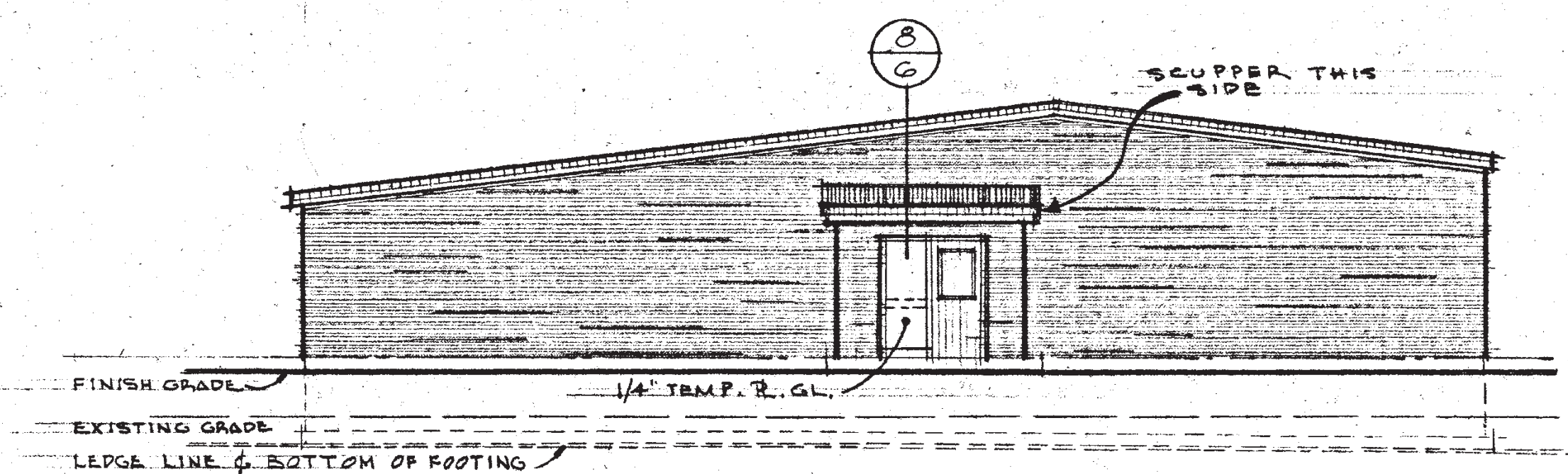
GENERAL NOTES:

1. ALL STRUCTURAL STEEL WILL CONFORM TO ASTM A36 STANDARDS.
2. ALL STEEL JOISTS WILL CONFORM TO THE LATEST EDITION OF S.J.I. STANDARDS.
3. SEE ARCH. WALL SECTIONS & DETAILS FOR MISC. STEEL REQUIREMENTS.
4. ALL BEAMS RESTING ON MASONRY WALLS SHALL HAVE BEARING 2'S - 3 COURSES OF FILLED BLOCK UNDER.
5. SEE ARCH. PLANS & SECTIONS FOR MISC ANGLES & LINTELS REQUIRED.
6. ALL BAR JOIST EXTENDED ENDS SHALL BE DESIGNED AS SIMPLE BEAMS & SHALL BE CAPABLE OF SUPPORT'G. 40% SQ. FT. TOTAL ROOF LOAD.
7. STEEL JOIST SHALL BEAR ON WALL ANGLES OR BEAMS. SEE ARCH. SECTIONS FOR SPECIAL SLOPED SEATS, REQ'D. @ BEARG POINTS AND EXTENDED ENDS.

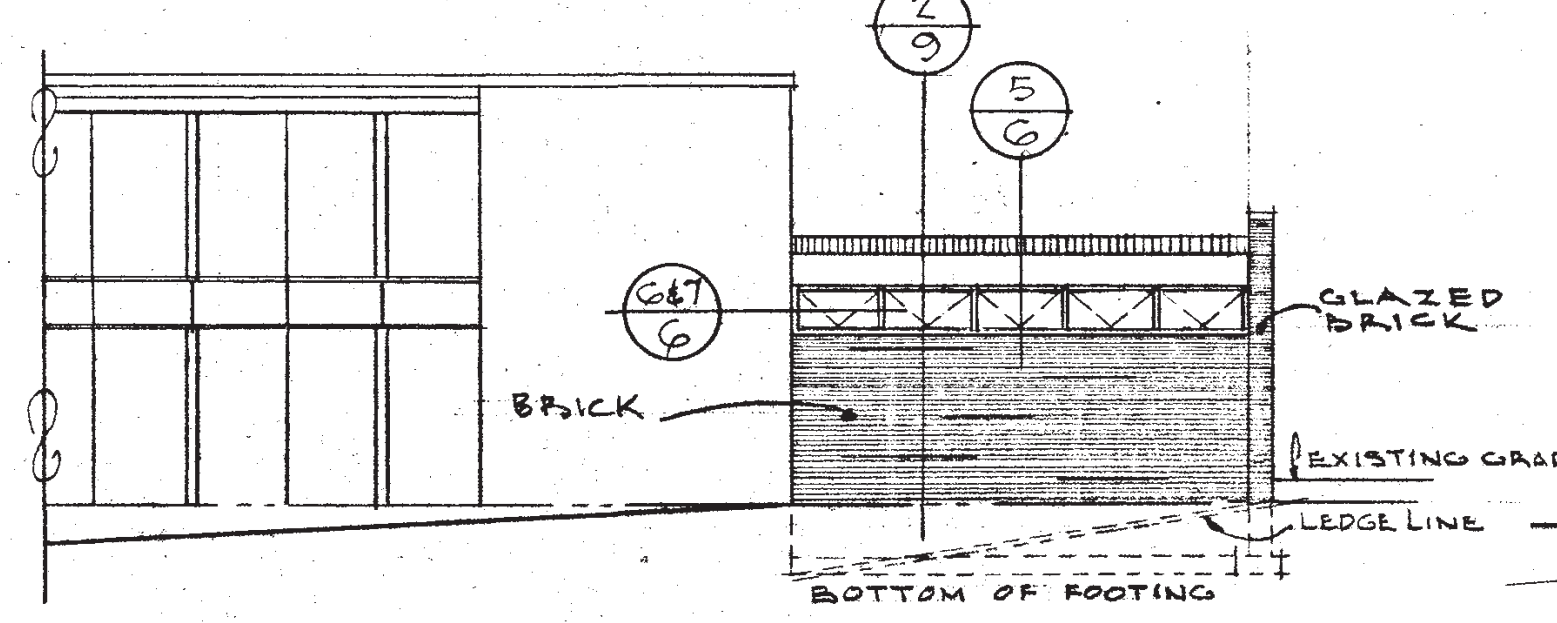
APPROVED FOR DEPT. OF HEALTH & WELFARE	APPROVED FOR DEPT. OF INSURANCE
BY TITLE DATE	BY TITLE DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS	APPROVED FOR
BY DIRECTOR DATE	BY TITLE DATE
STATE OF MAINE	
TITLE: PRE-PRIMARY DIAGNOSTIC CENTER GOV. BAXTER STATE SCHOOL FOR THE DEAF LOCATION: MACKWORTH ISLAND BALMOUTH, MAINE	
FRAMING PLAN	
ARCHT'S DRAWN BY CHECKED BY	SEAL H.E.S. C.K.S.
PROJECT NO. 73-00-2 5003	SHEET NO. 4 OF 15
NO. DATE DESCRIPTION	APPR'D SCALE DATE
1 1/8" = 1'-0"	MAR. 15, 1973
REVISIONS	
DATE MAR. 15, 1973	
CORHAM, MAINE	



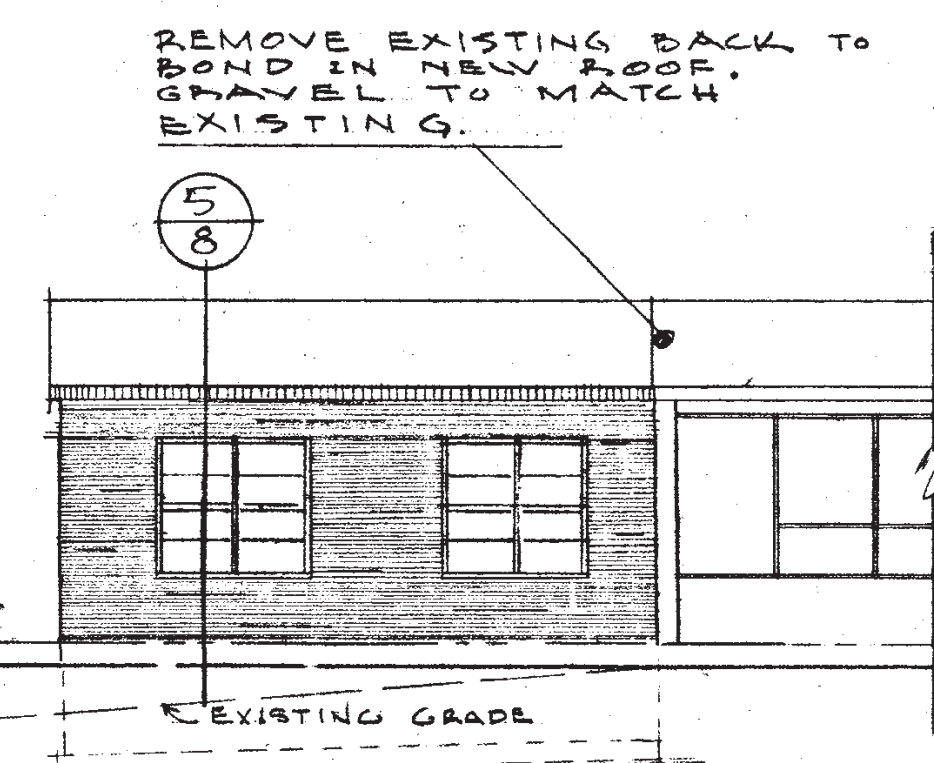
NORTH ELEVATION
SCALE 1/8" = 1'-0"



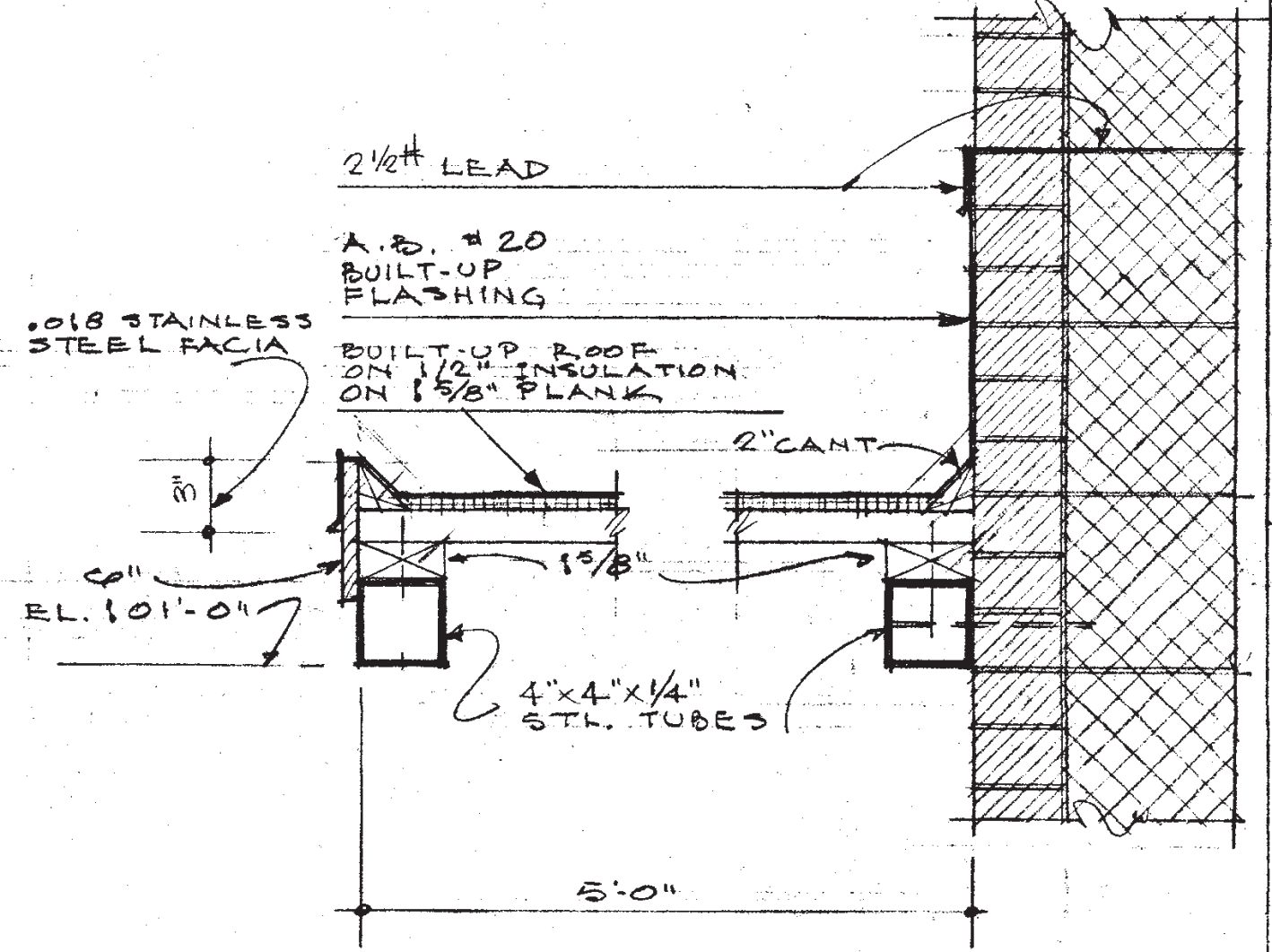
WEST ELEVATION
SCALE 1/8" = 1'-0"



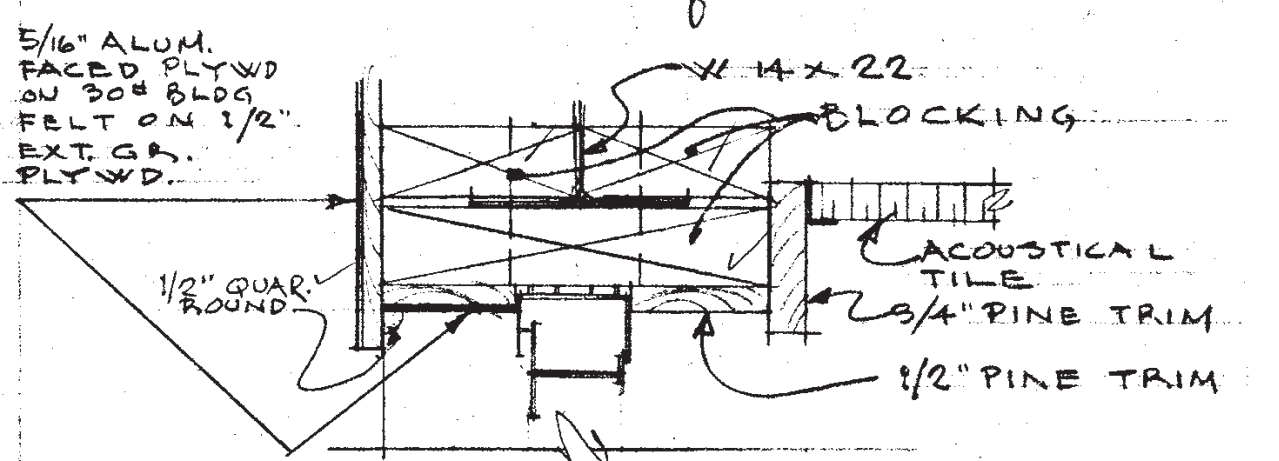
EAST ELEVATION
SCALE 1/8" = 1'-0"
(NOTE: 5 NEW WINDOWS THIS ELEVATION TO BE GLAZED WITH 1/4" TEMP. R. GLASS AND TO HAVE FULL SCREENS.)



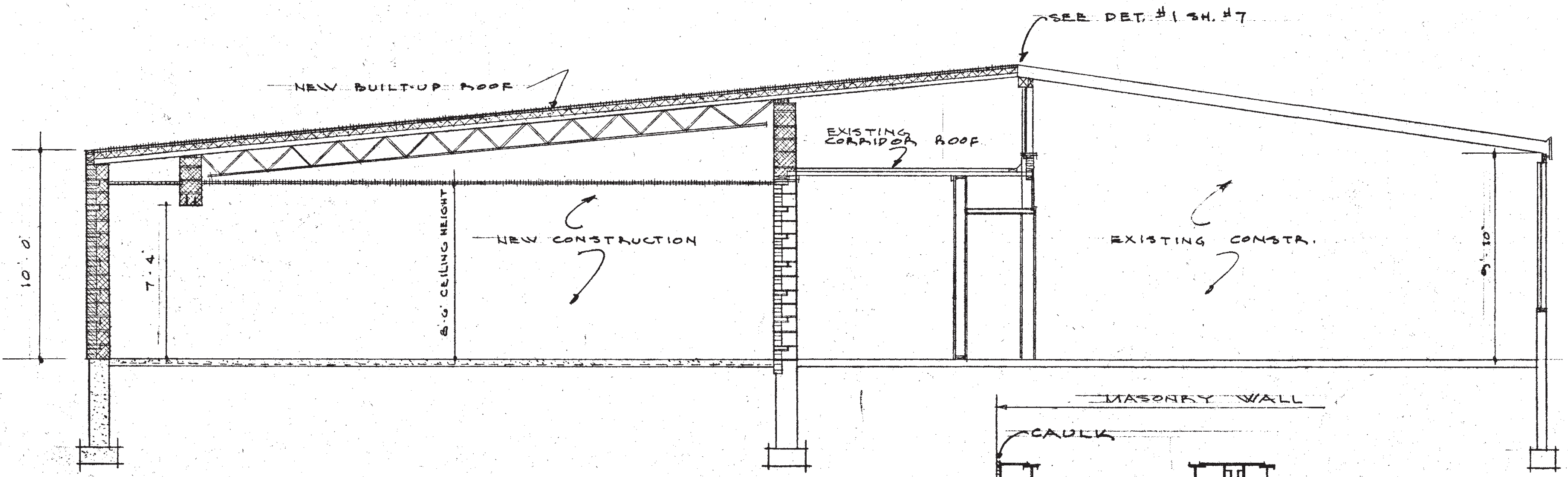
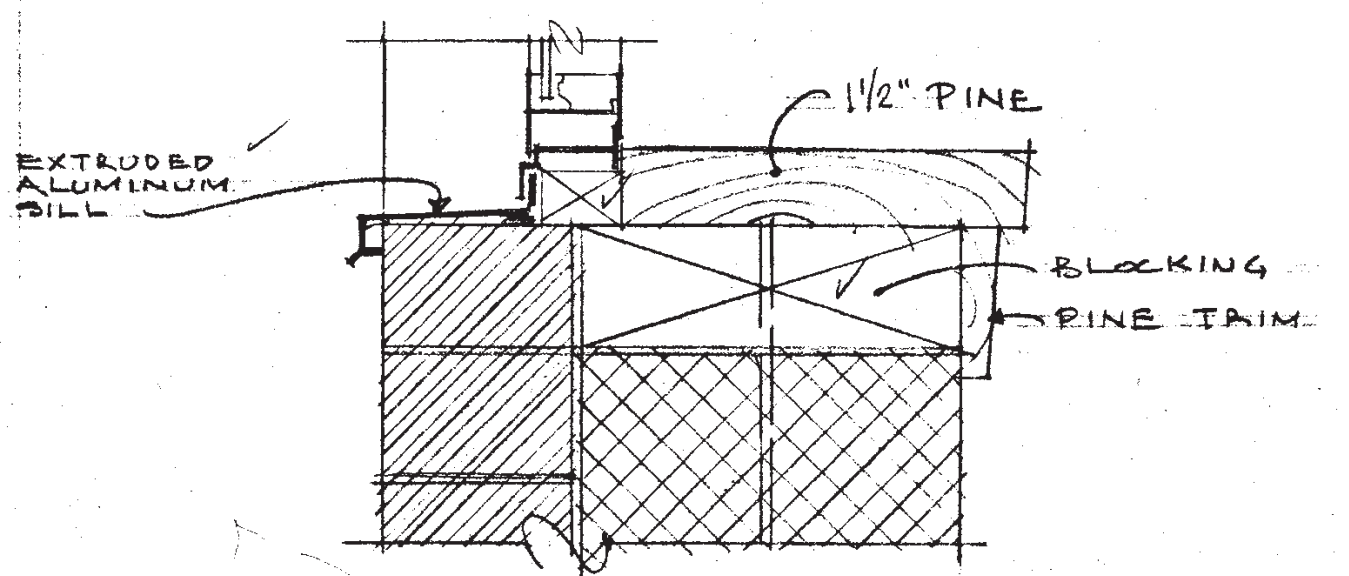
SOUTH ELEVATION
SCALE 1/8" = 1'-0"



SECTION 8
SCALE 1/2" = 1'-0"



SECTION 5
HEAD & SILL
SCALE 3/8" = 1'-0"

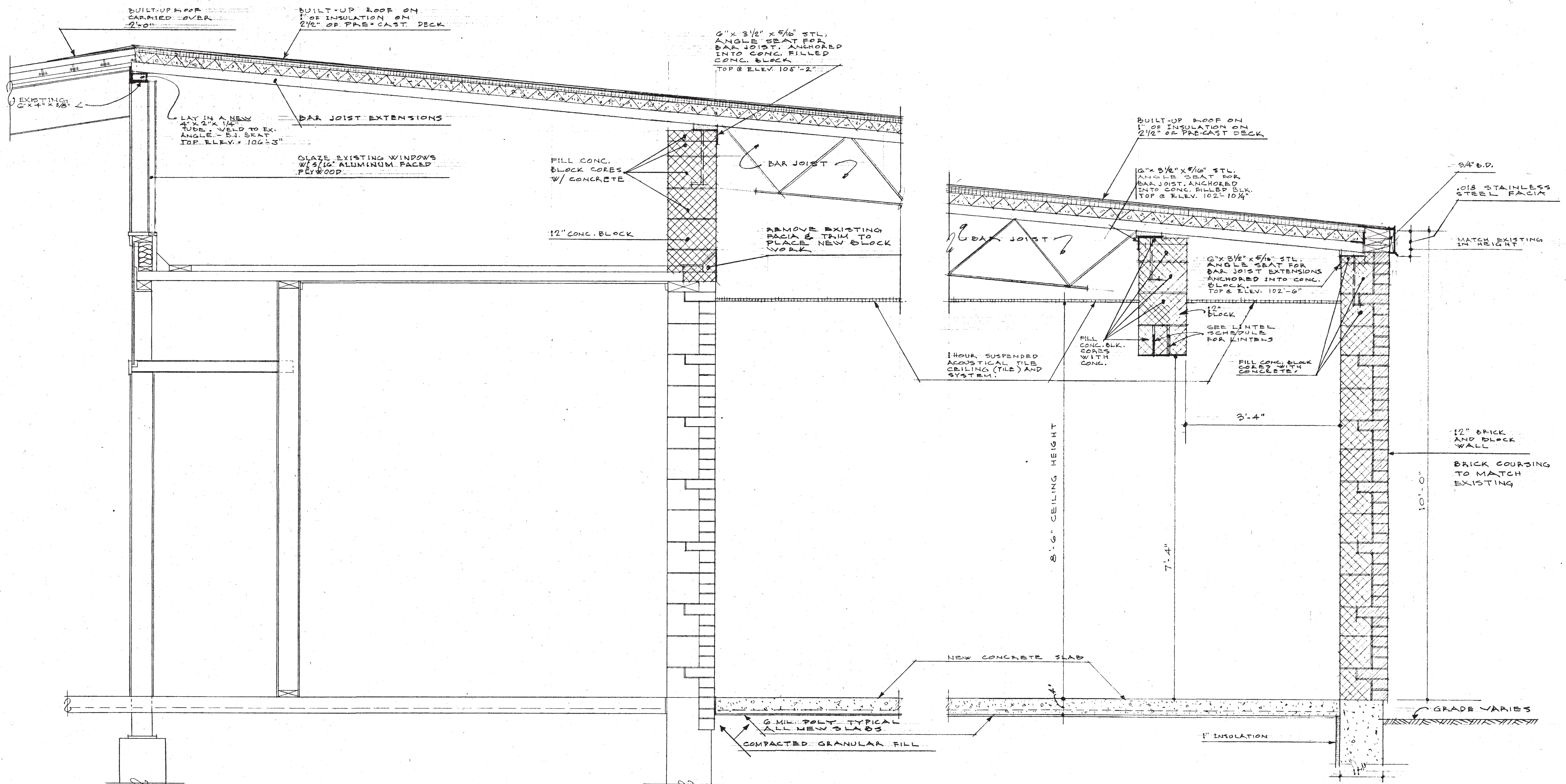


TYPICAL CROSS SECTION (A)
SCALE 1/4" = 1'-0"

PLAN JAMB 3" = 1'-0"
PLAN MULLION 3" = 1'-0"

Be not wrong of this, only by the approval of the architect. The architect is not responsible for the construction of the building, but only for the design and the construction of the building.

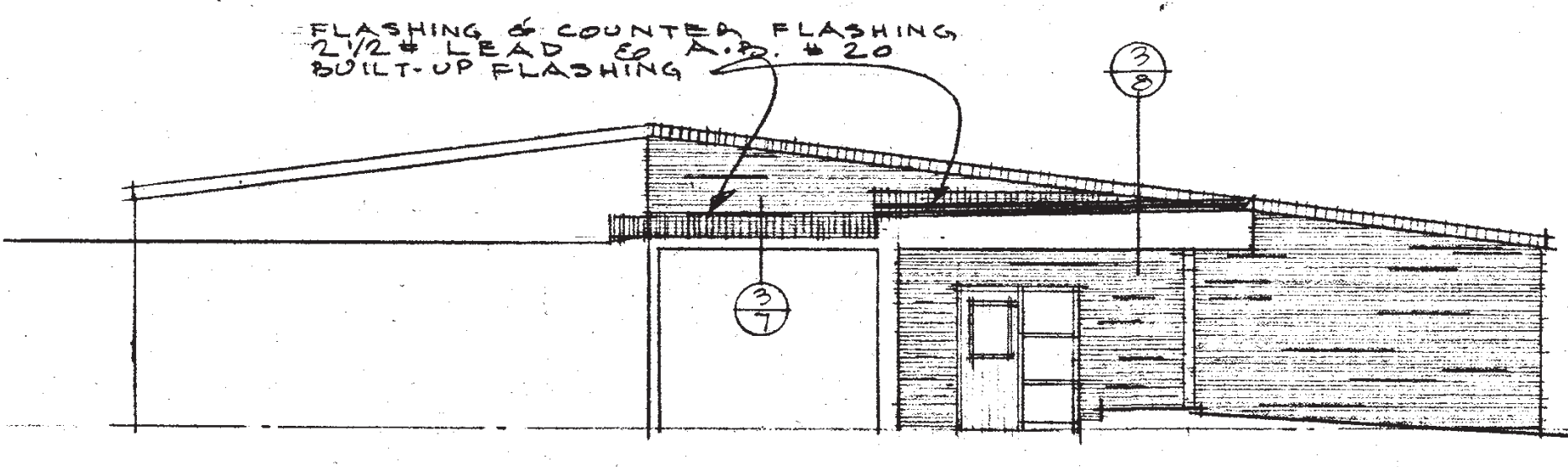
APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY TITLE DATE	DATE	BY TITLE DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR ED - C	
BY TITLE DATE	DATE	BY TITLE DATE	DATE
STATE OF MAINE			
TITLE PRE. PRIMARY DIAGNOSTIC CENTER GOV. WALTER STATE SCHOOL FOR THE DEAF LOCATION MACK WORTH ISLAND BALMOUTH, MAINE			
TITLE THIS DWG ELEVATIONS			
ARCHT'S DRAWN BY SEAL	SEAL	PROJECT NO. 179-2072- 5273	SHEET NO. 6 OF 13
CHECKED BY SCALE DATE	APPROV'D DATE	ARCHITECT-ENGINEER GORHAM, MAINE	
REVISIONS		DATE	



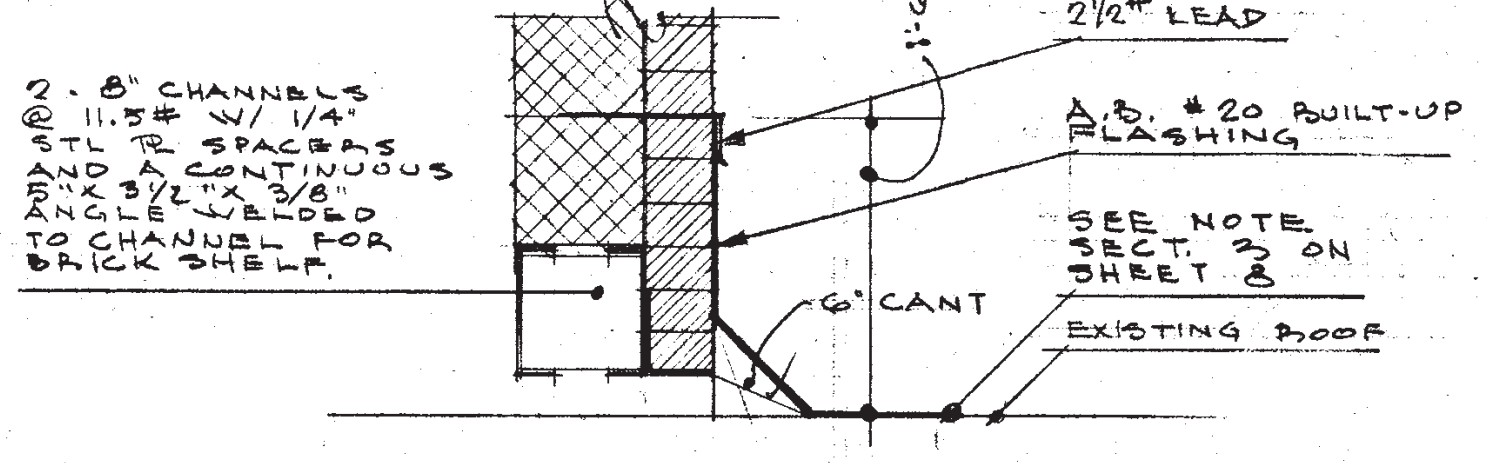
1 WALL SECTION
SCALE: 1" = 1'-0"

2 WALL SECTION
SCALE: 1" = 1'-0"

3 WALL SECTION
SCALE: 1" = 1'-0"

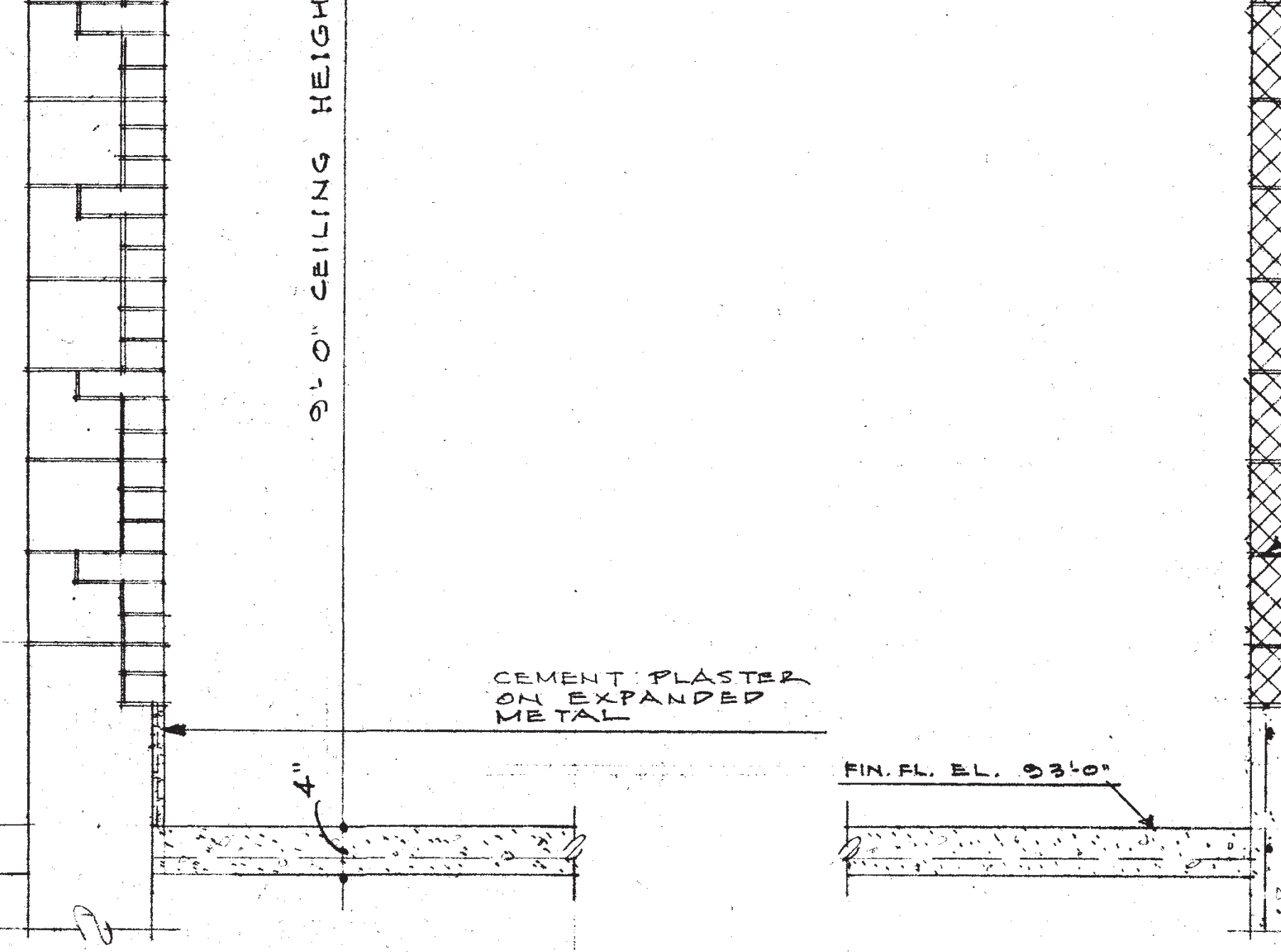
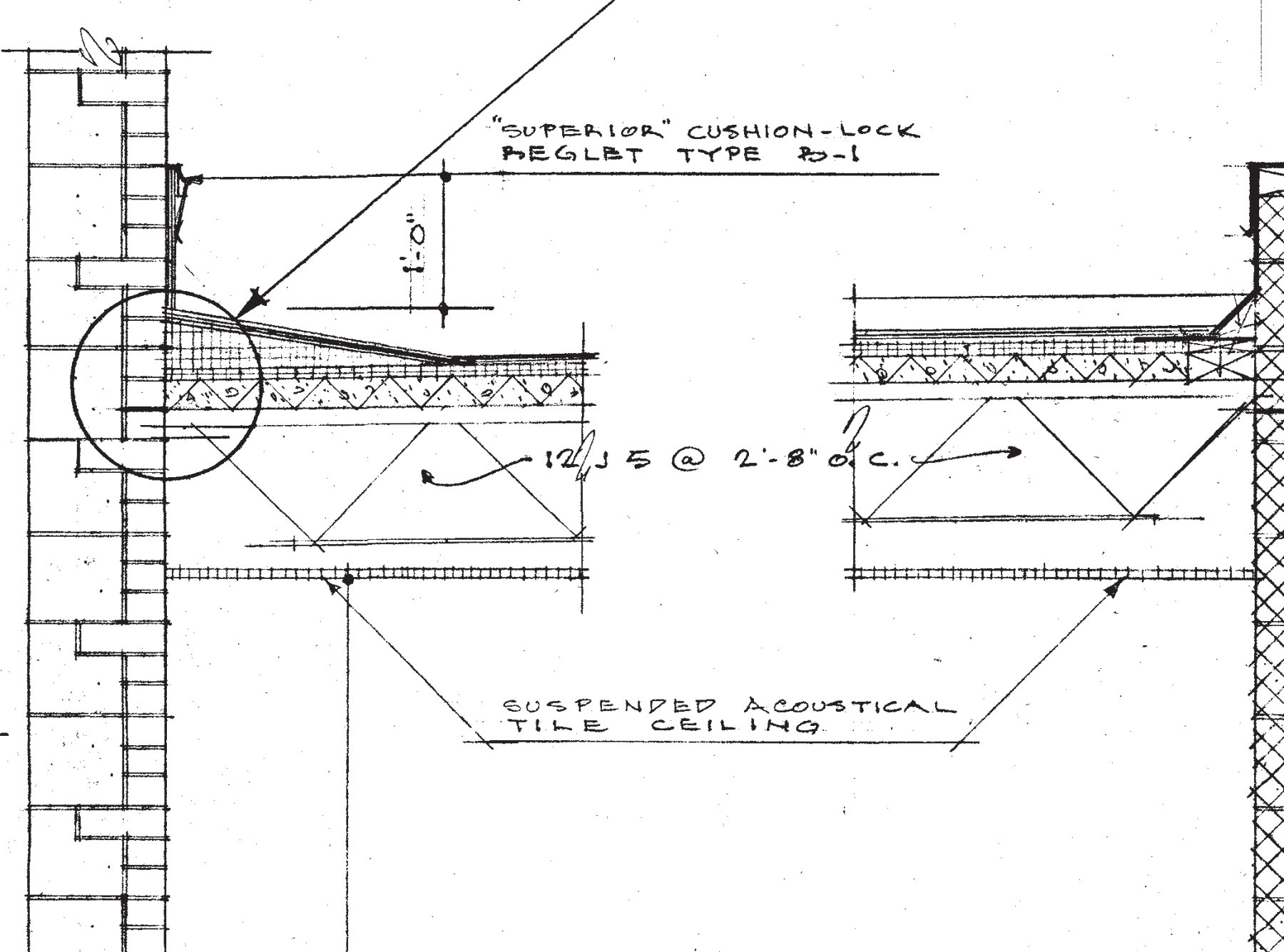
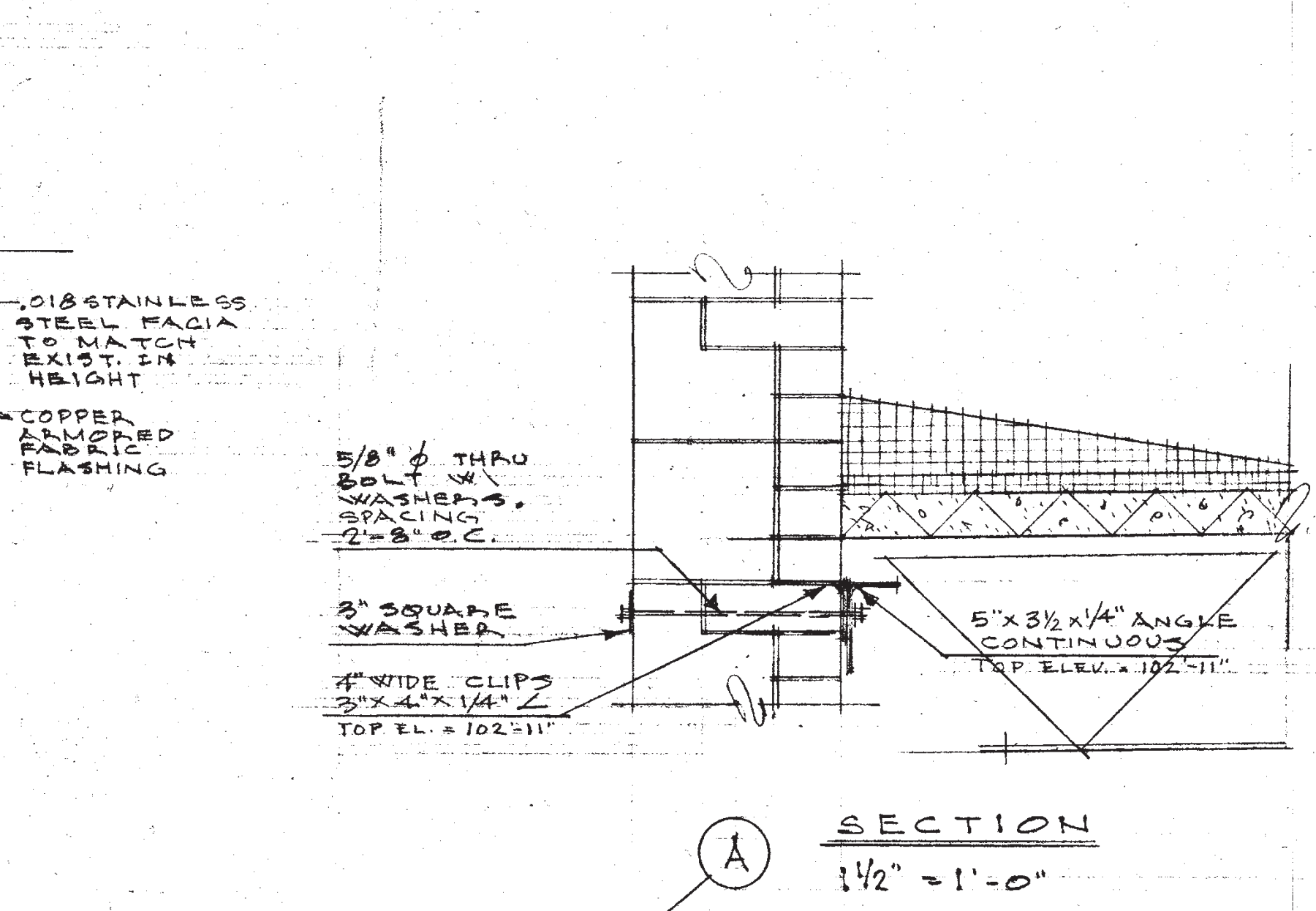
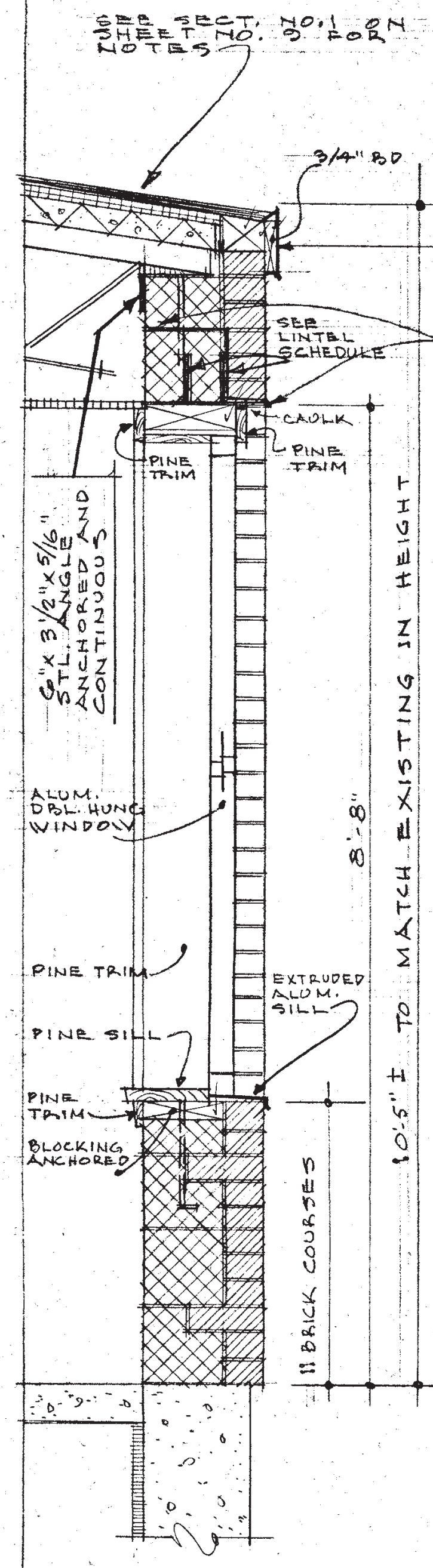


EAST ELEVATION
SCALE 1/8" = 1'-0"

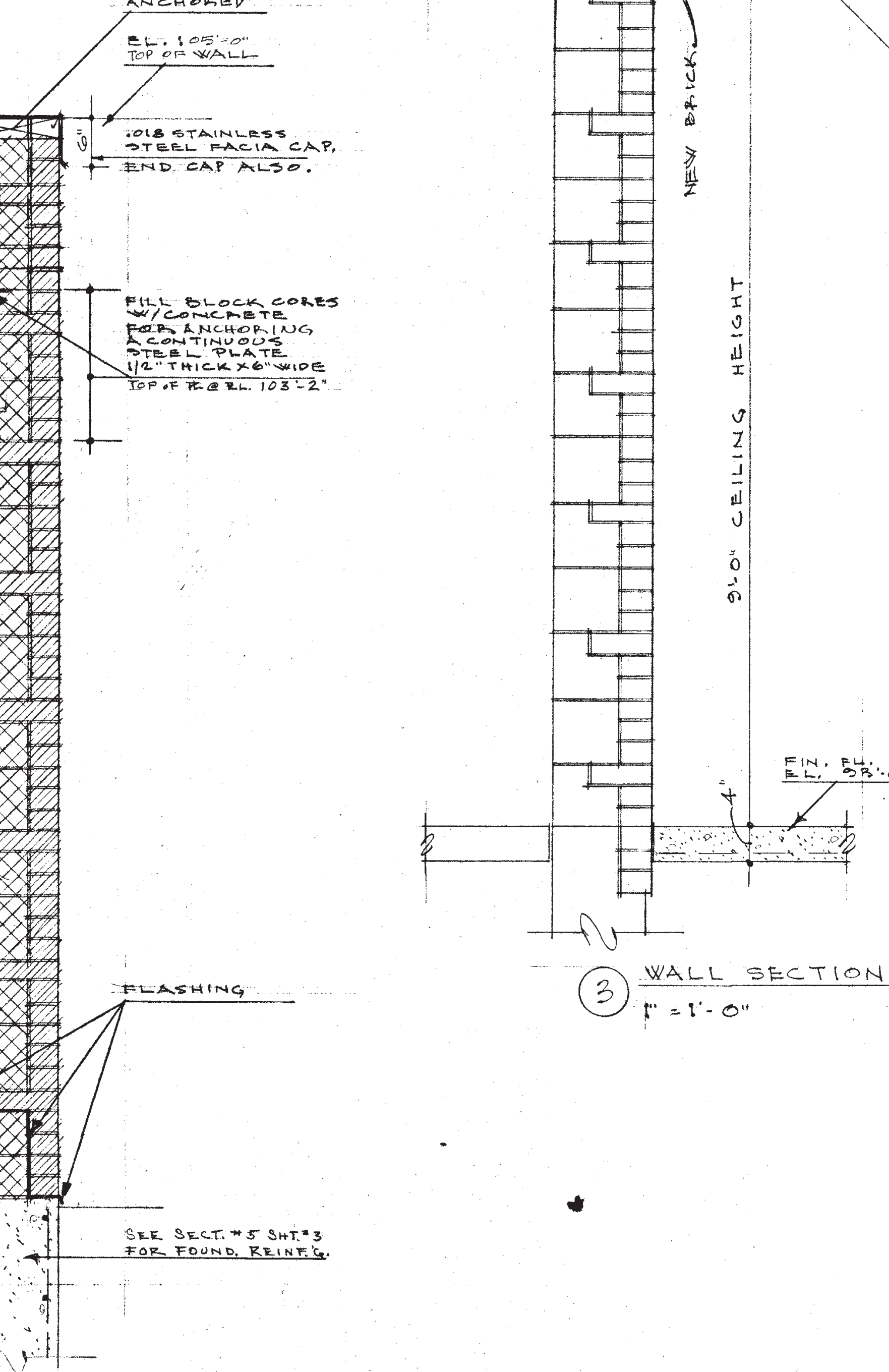
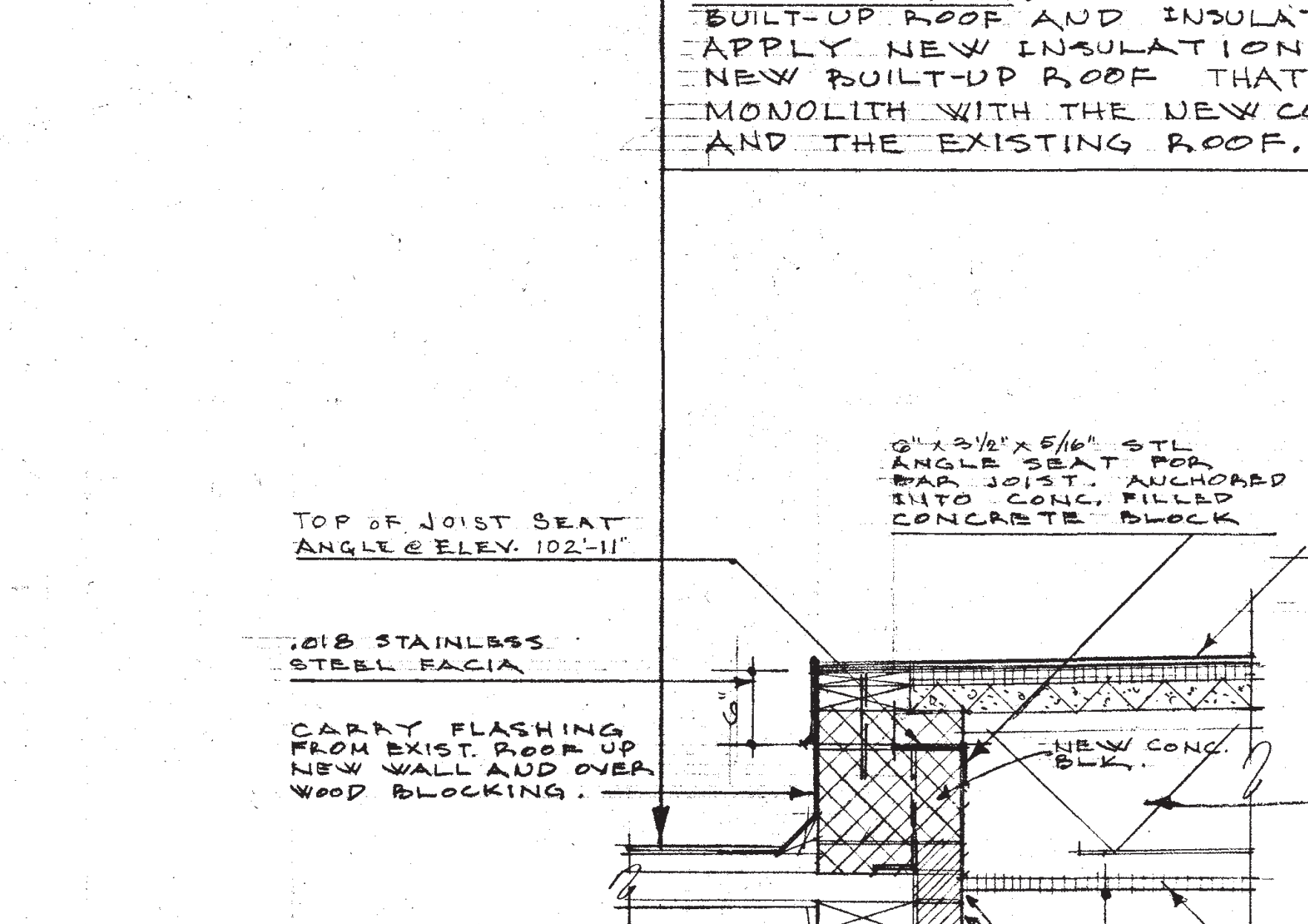


APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY	TITLE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR	
BY	TITLE	DATE	DATE
STATE OF MAINE TITLE: PRE-PRIMARY DIAGNOSTIC CENTER 20V. BAXTER STATE SCHOOL FOR THE DEAF LOCATION TITLE THIS DWG: WALL SECTIONS			
ARCHT'S DRAWN BY HE S	SEAL	PROJECT NO. 13-6672-5003	SHEET NO. 7 OF 13
CHECKED BY HE S	DATE MAR. 15, 1973	ARCHITECT-ENGINEER CORHAM, MAINE	
NO. DATE DESCRIPTION		REVISIONS	
2			
1			

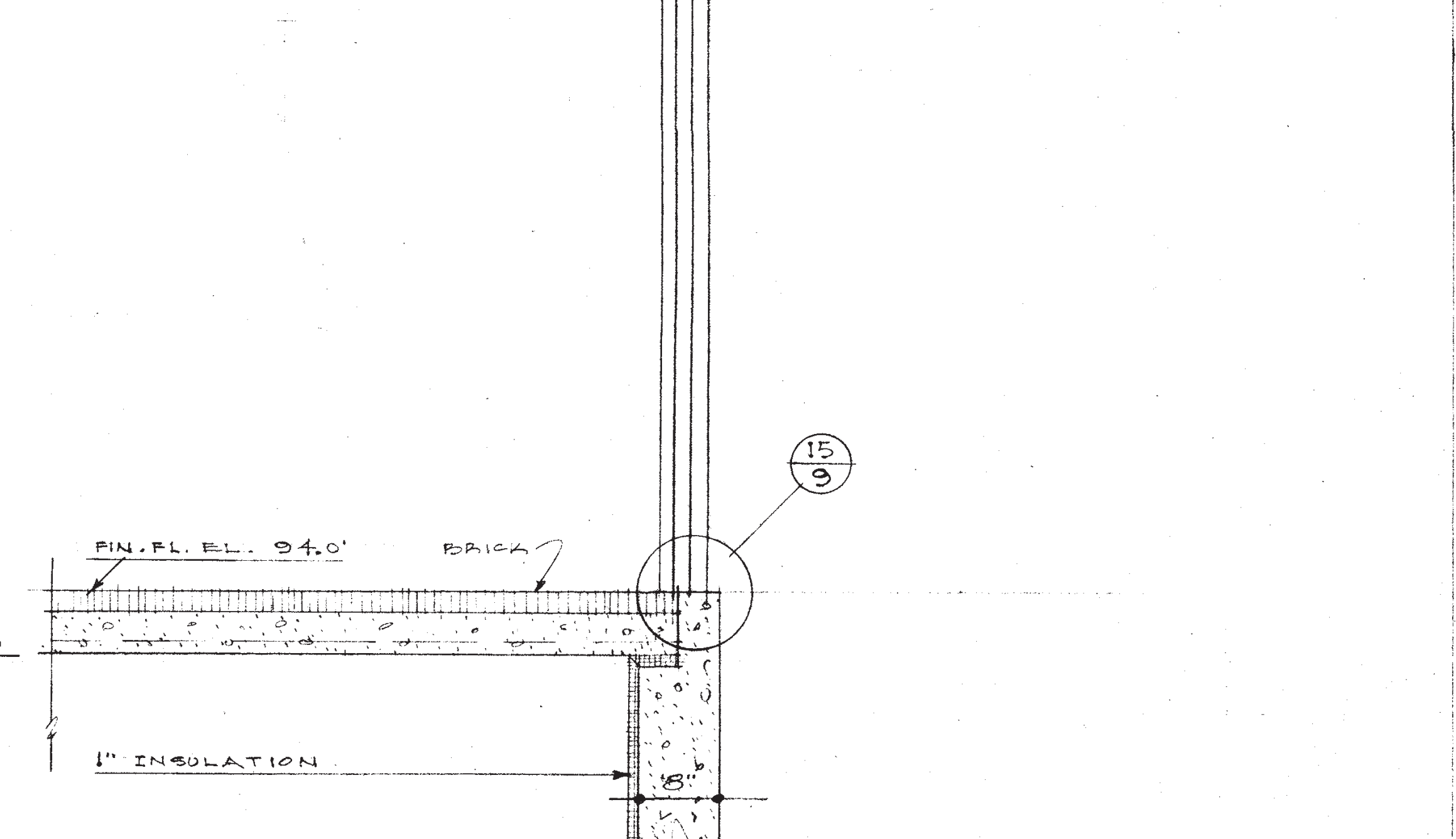
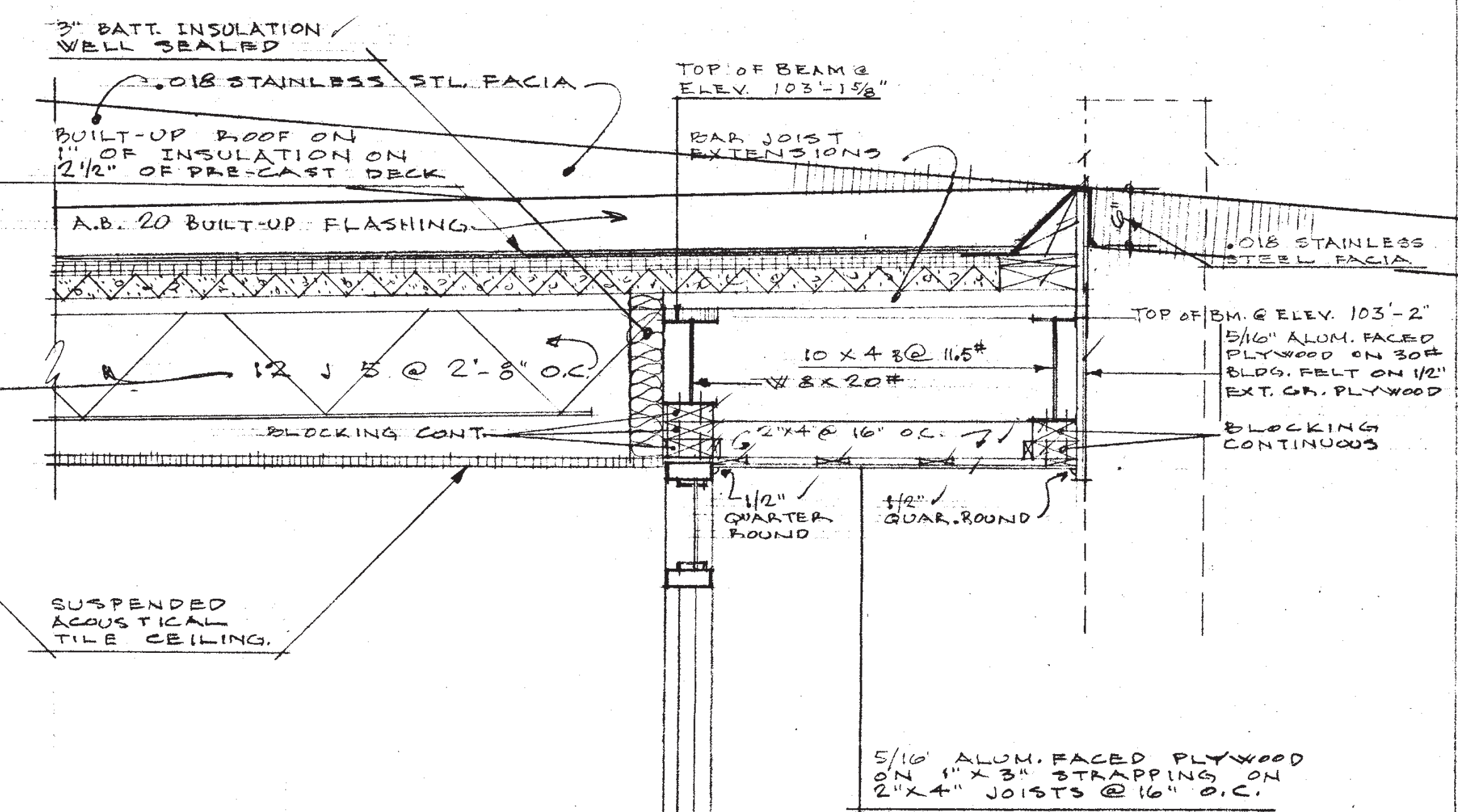
OVER FLAT ROOF SECTION OF CORRIDOR. REMOVE EXISTING BUILT-UP ROOF AND INSULATION. APPLY NEW INSULATION AND A NEW BUILT-UP ROOF THAT IS MONOLITH WITH THE NEW CONSTRUCTION AND THE EXISTING ROOF.



1 WALL SECTION 1" = 1'-0"

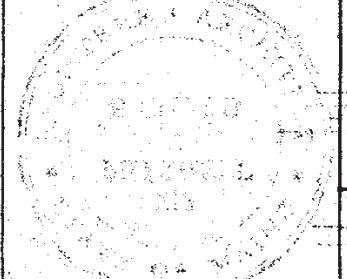


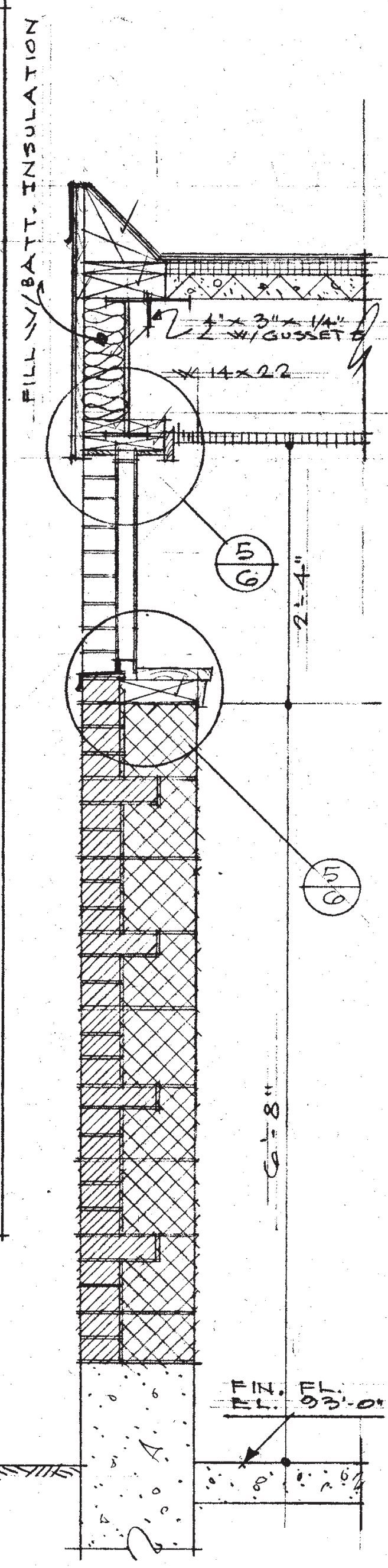
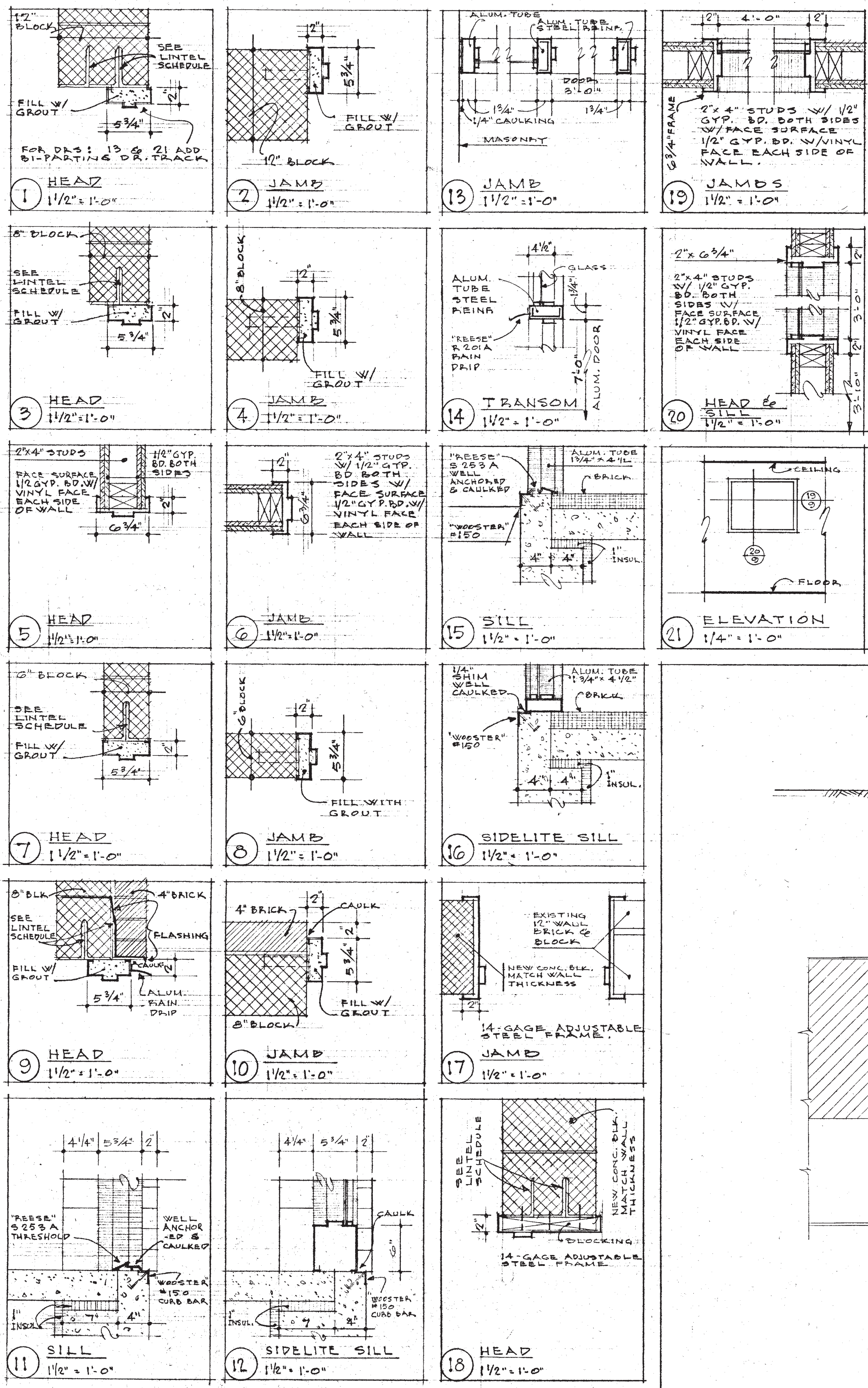
2 WALL SECTION 1" = 1'-0"



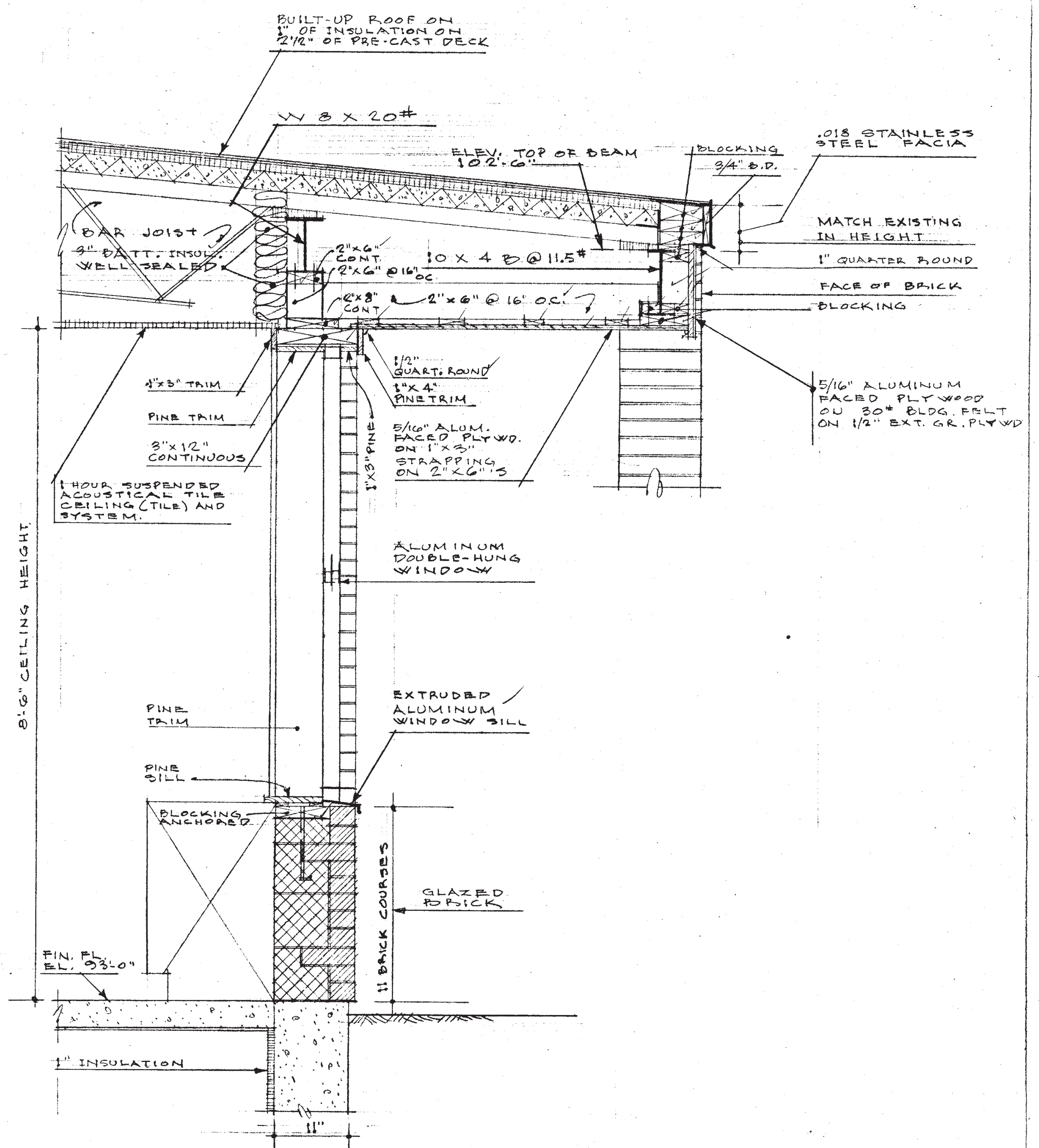
3 WALL SECTION 1" = 1'-0"

4 WALL SECTION 1" = 1'-0"

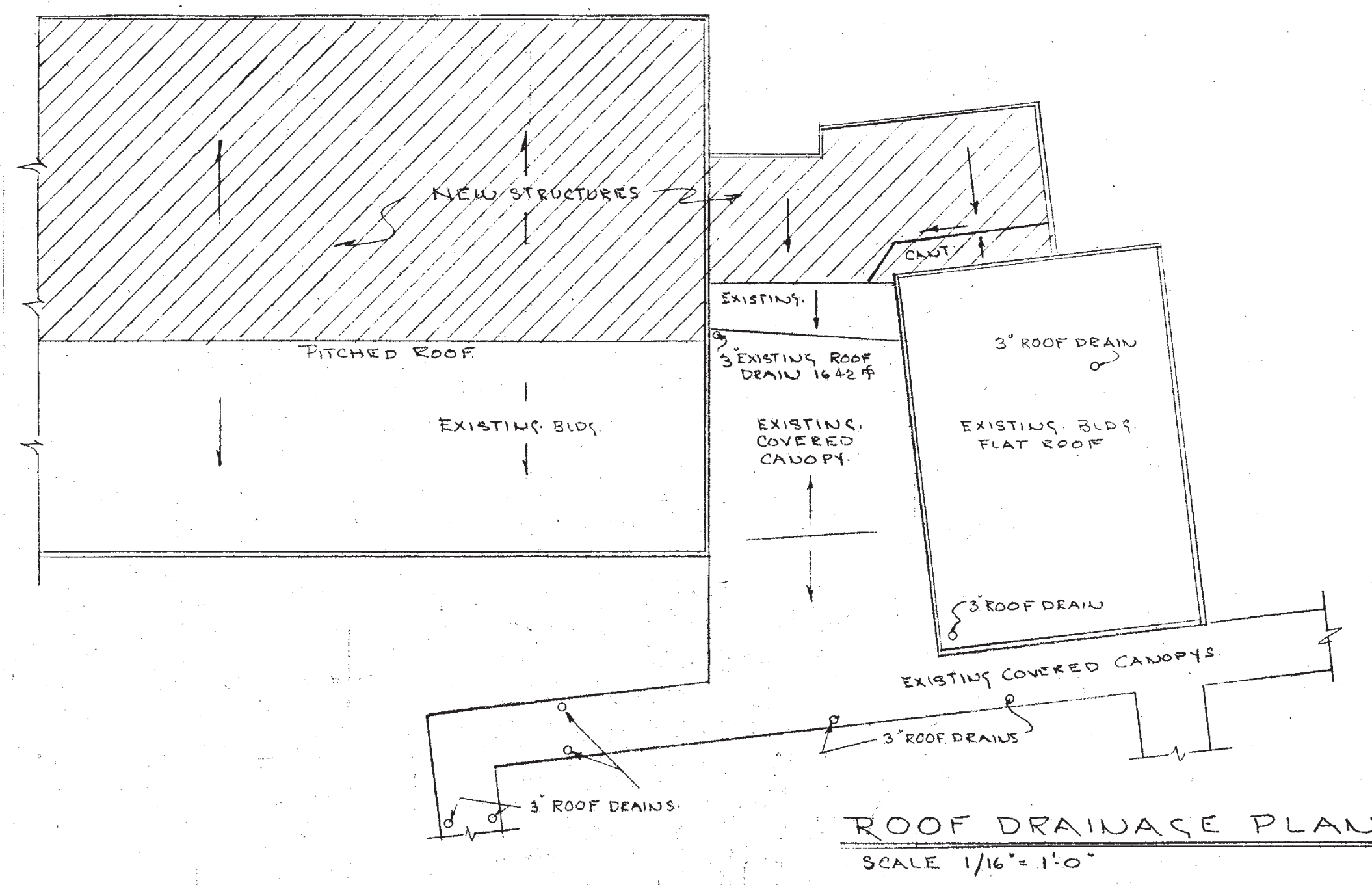
APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF PUBLIC SAFETY	
BY	TITLE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR	
BY	DIRECTOR	DATE	DATE
 STATE OF MAINE TITLE: PRIMARY DIAGNOSTIC CENTER GOV. BAXTER STATE SCHOOL FOR THE DEAF LOCATION: MACKWORTH ISLAND PALMOUTH, MAINE TITLE THIS DWG: WALL SECTIONS			
ARCHT'S	BEAL		
DRAWN BY	Plan	PROJECT NO. 79-0671-3003	
CHECKED BY	HES	ARCHITECT-ENGINEER	
SCALE	AS NOTED	GORHAM, MAINE	
DATE	MAR. 15, 1973	SHEET NO. 8 OF 13	



2 WALL SECTION
SCALE 1" = 1'-0"

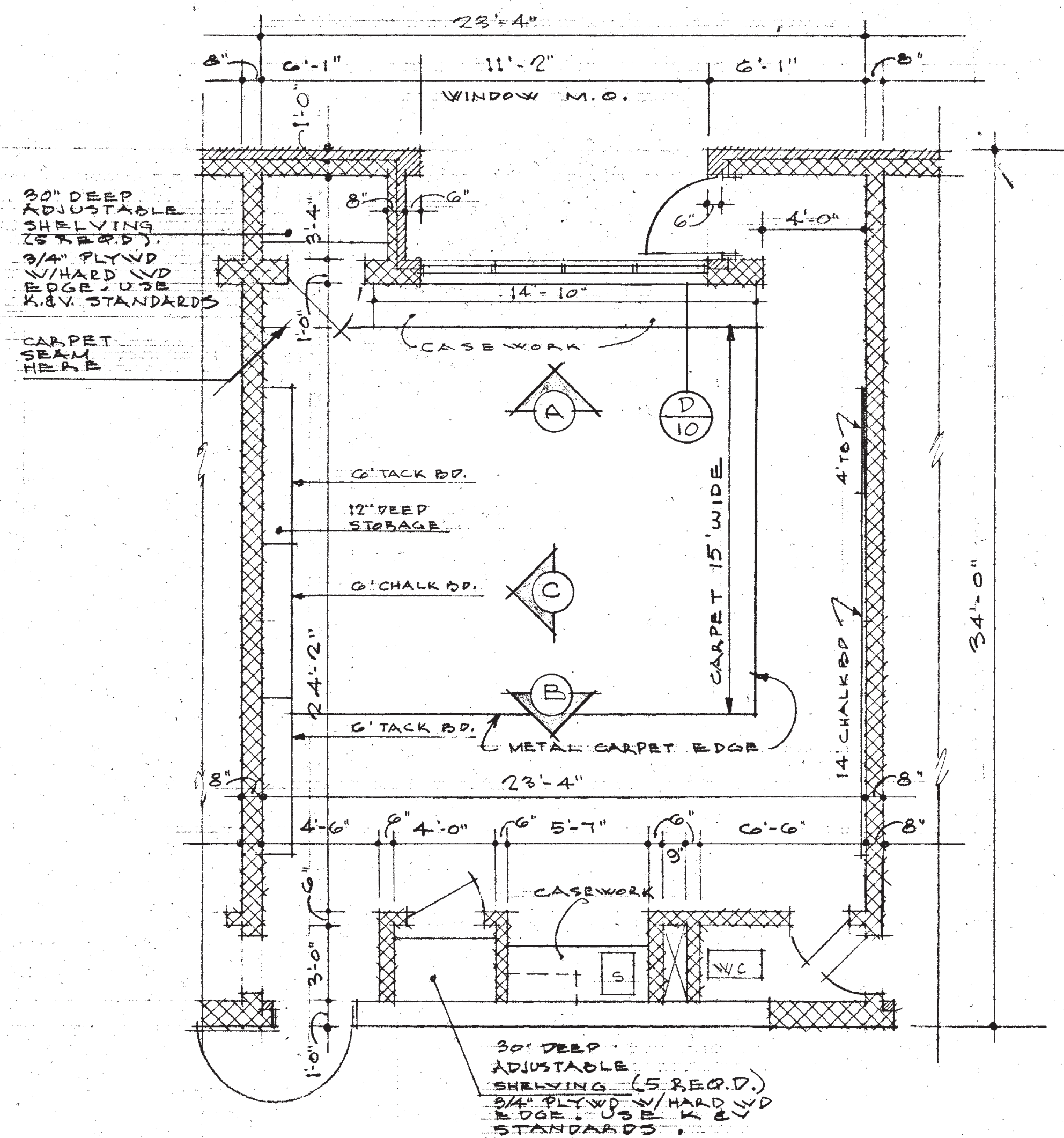


1 WALL SECTION
SCALE 1" = 1'-0"

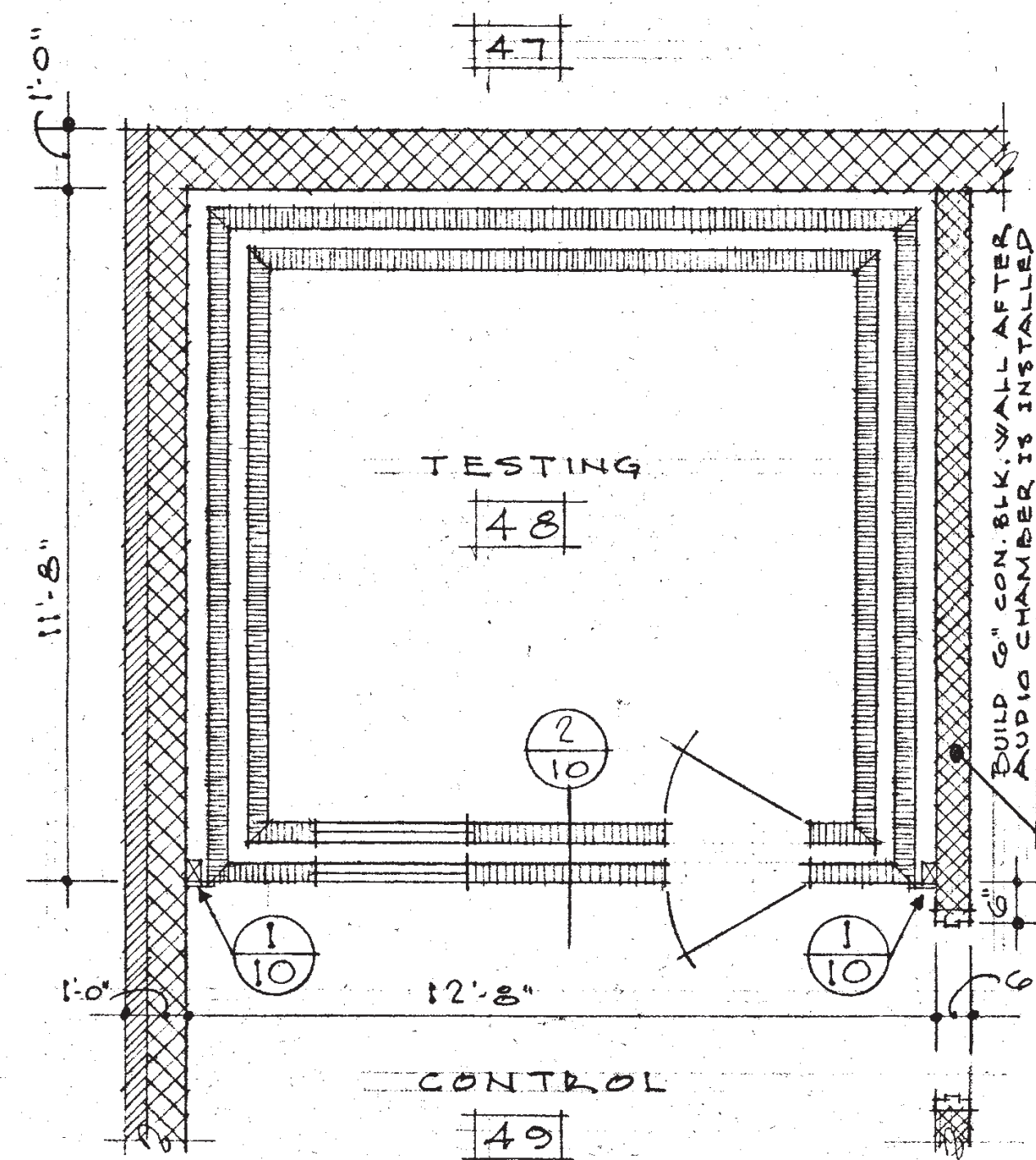


ROOF DRAINAGE PLAN
SCALE 1/16" = 1'-0"

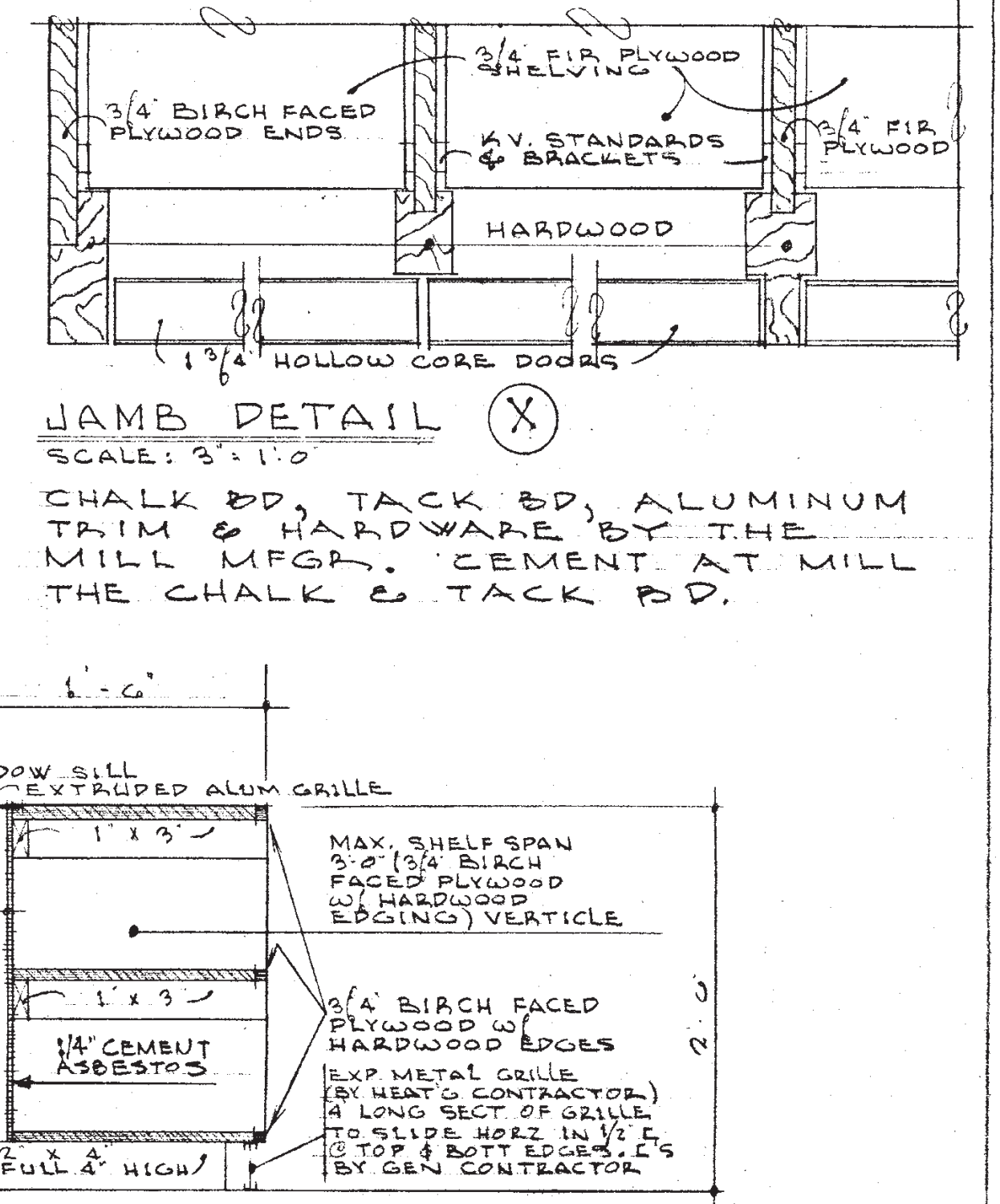
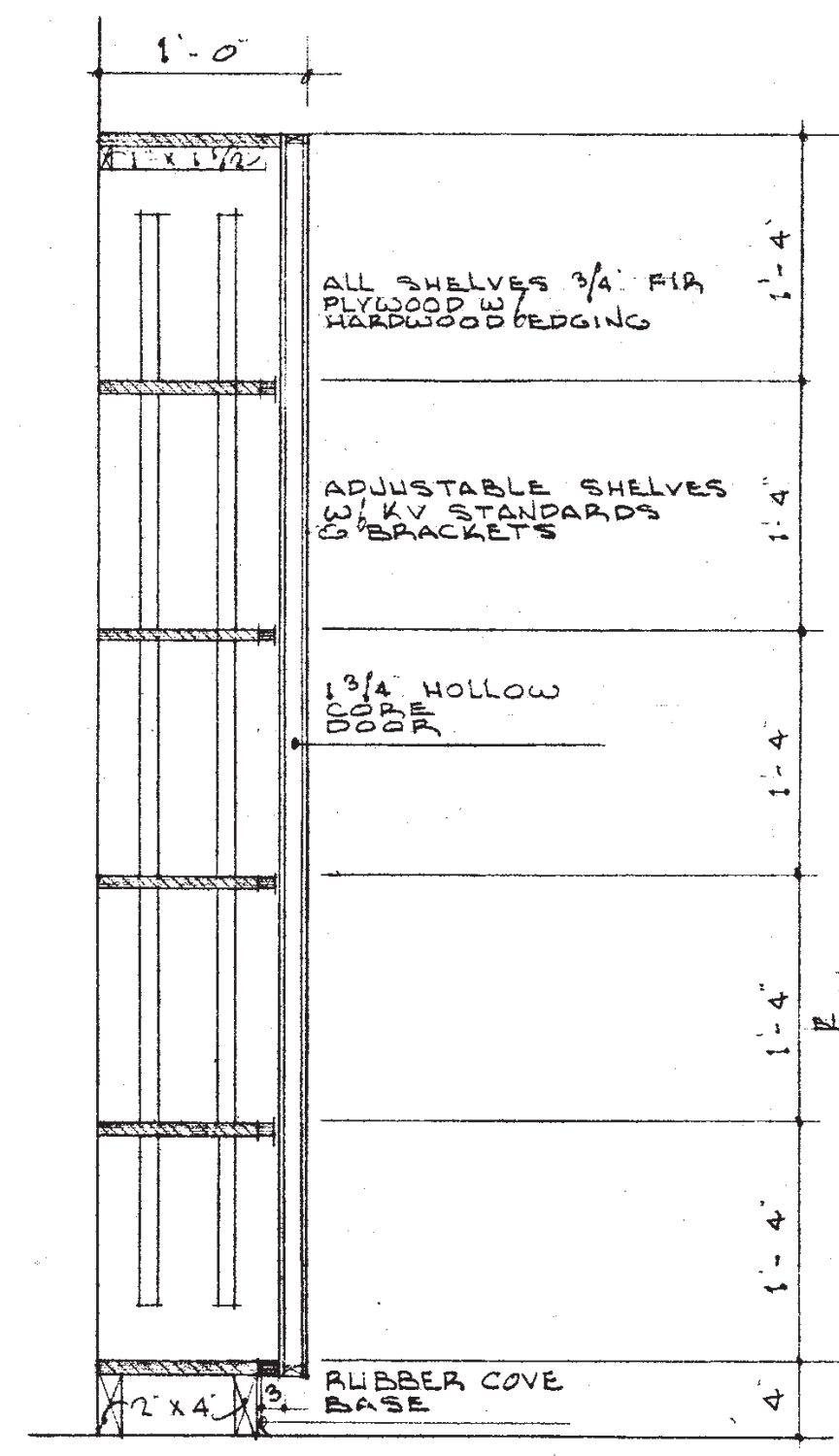
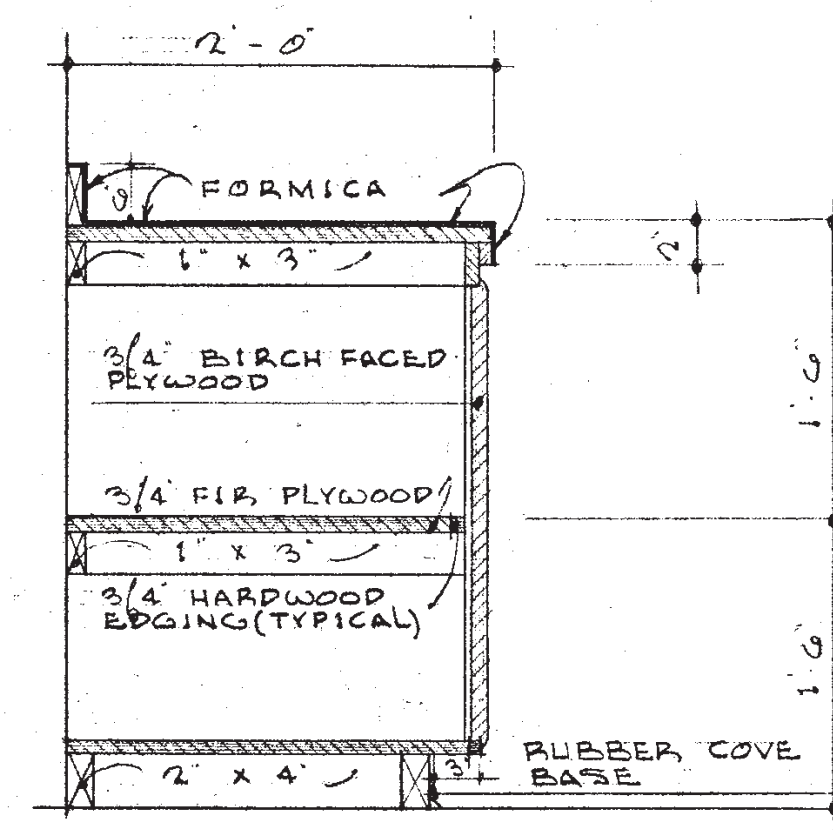
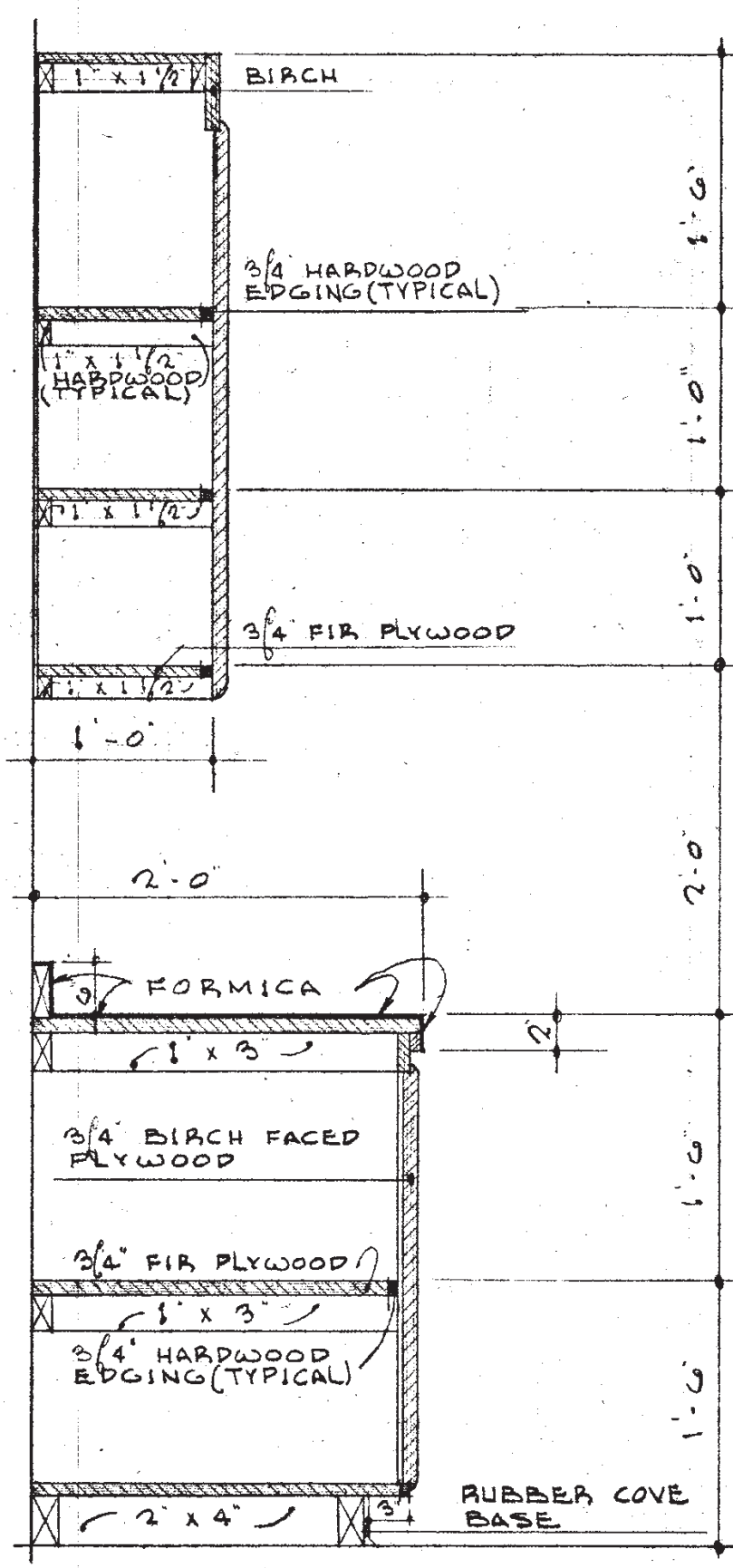
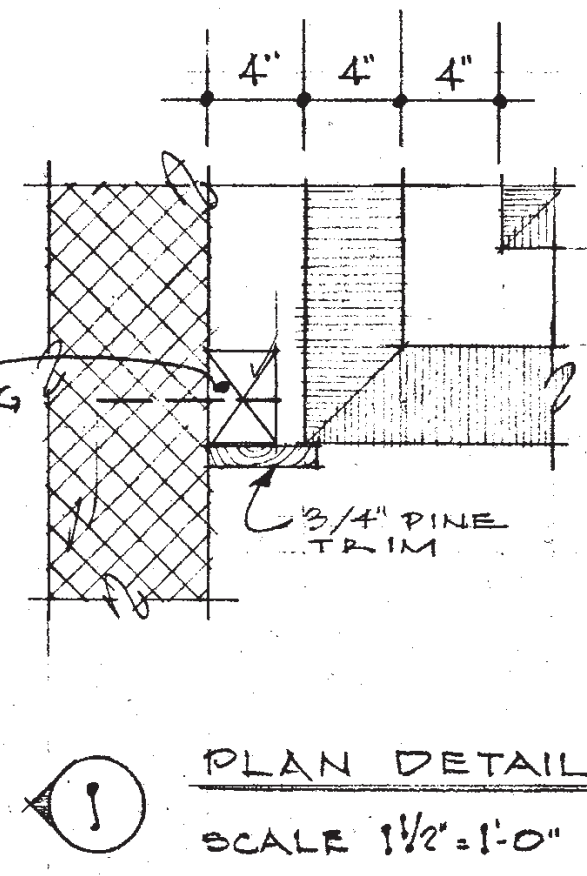
APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY	TITLE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR	
BY	DIRECTOR	DATE	DATE
STATE OF MAINE			
TITLE PRE-PRIMARY DIAGNOSTIC CENTER GOV. BAXTER STATE SCHOOL FOR THE DEAF LOCATION: MACKWORTH ISLAND FALMOUTH, MAINE			
TITLE THIS DWG DOOR DETAILS			
ARCHT#	SEAL	PROJECT NO.	
DRAWN BY Ram	CHECKED BY HES	73-0672-5003	
NO.	DATE	DESCRIPTION	APPR'D
1	3/7/73	ROOF DRAINAGE PLAN ADDED	RM
REVISIONS		SCALE AS NOTED	DATE MAR. 15, 1973
ALLIED ENGINEERING INC		ARCHITECT-ENGINEER	SHEET NO. 9 13
GORHAM, MAINE			OF



TYPICAL CLASSROOM LAYOUT
SCALE 1/4" = 1'-0"



TESTING AREA ROOM 48 & 49
SCALE 3/8" = 1'-0"

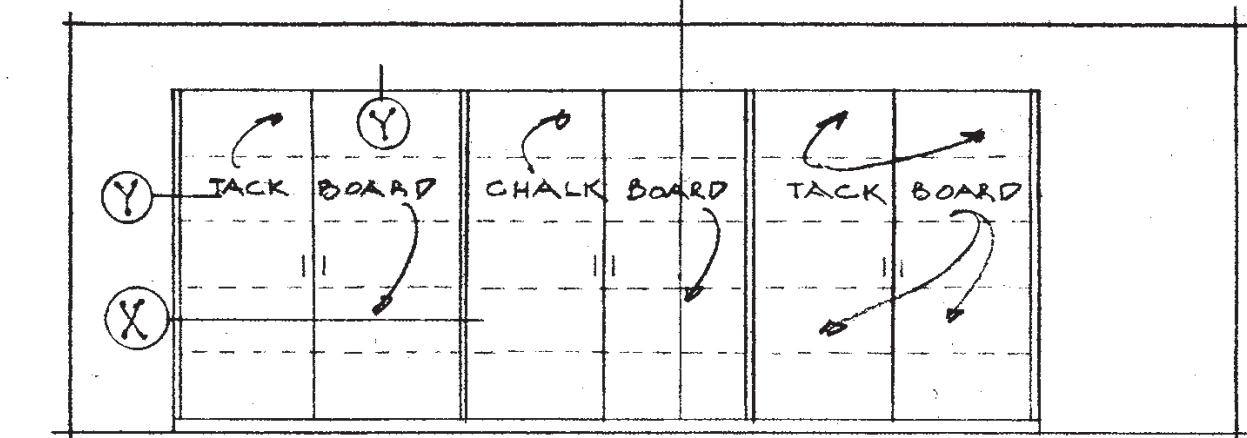
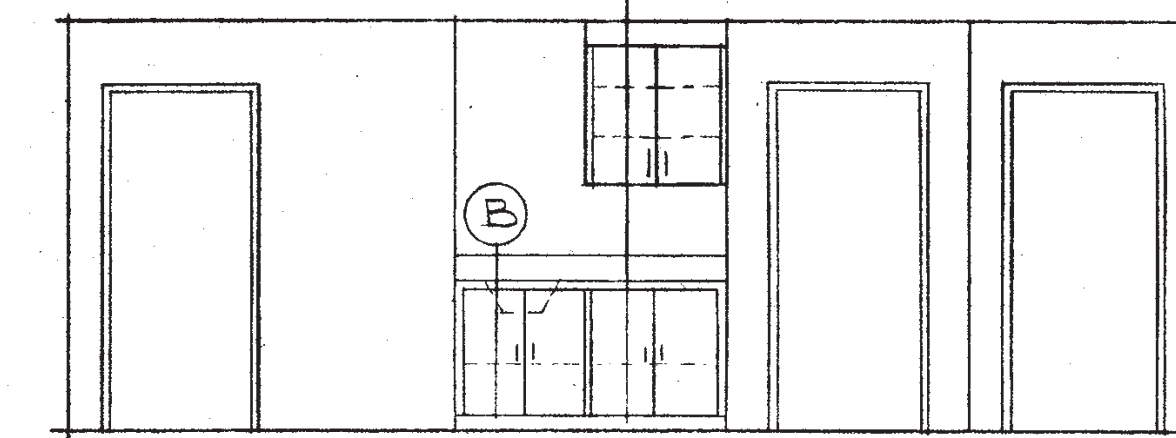
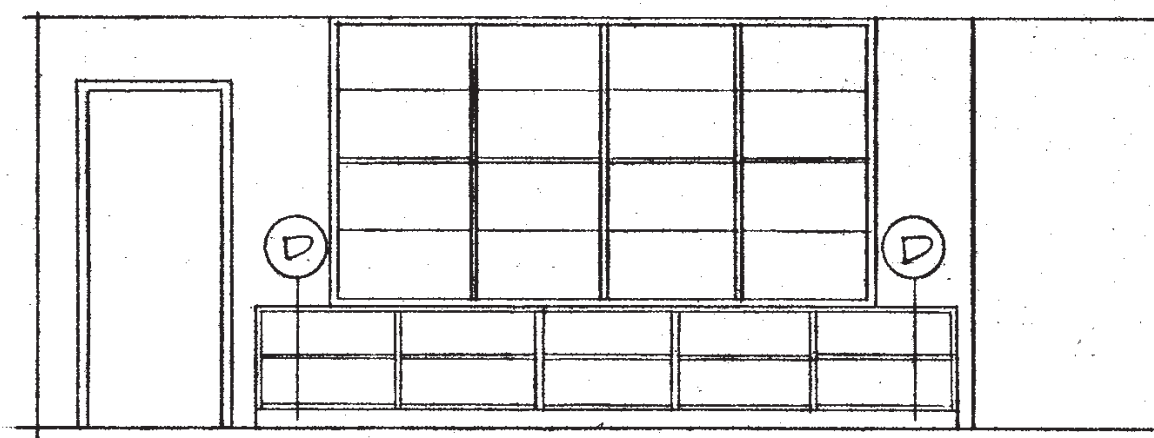


A SECTION SCALE 1" = 1'-0"

B SECTION SCALE 1" = 1'-0"

C SECTION SCALE 1" = 1'-0"

D SECTION SCALE 1" = 1'-0"

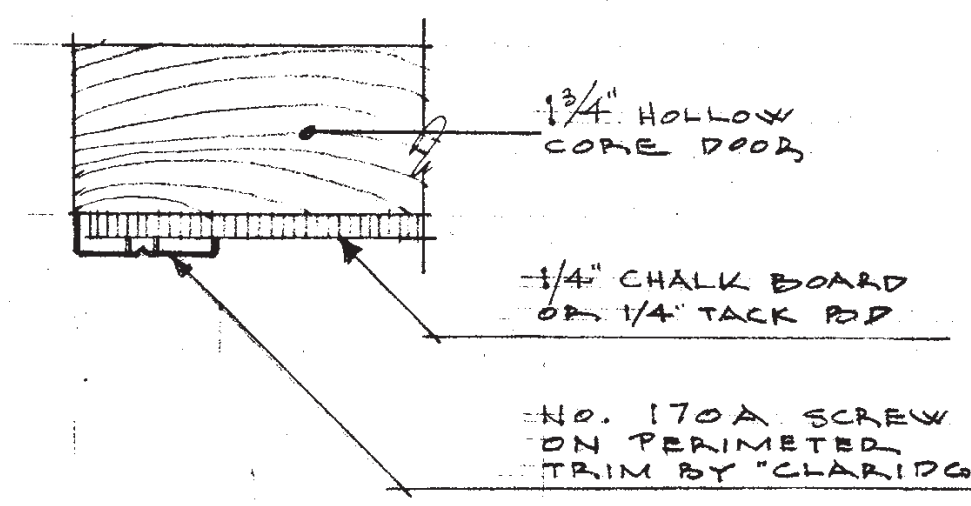


ELEVATION A SCALE 1/4" = 1'-0"

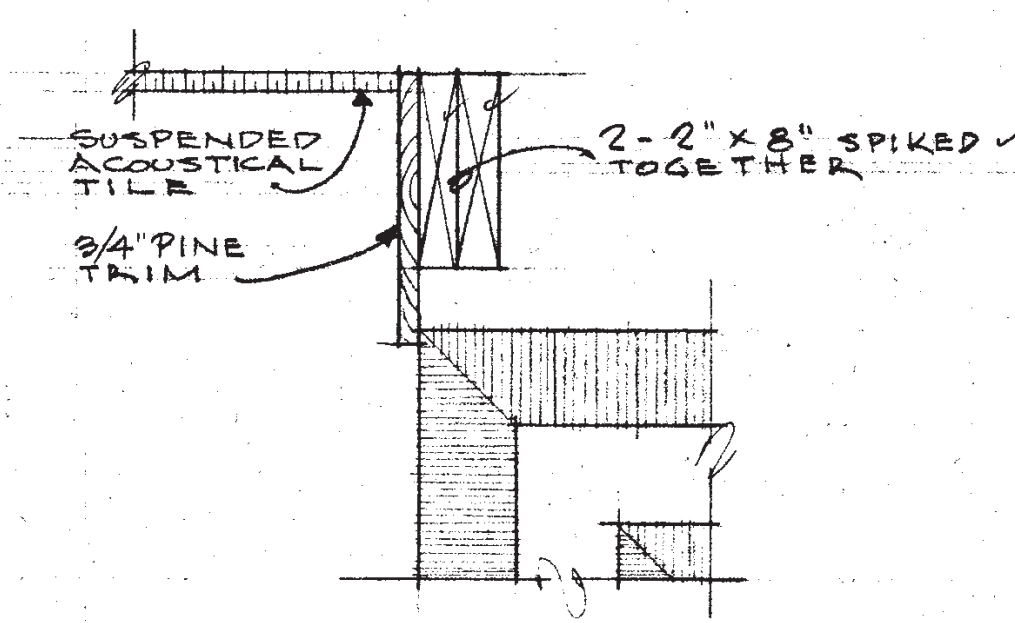
ELEVATION B SCALE 1/2" = 1'-0"

ELEVATION C SCALE 1/4" = 1'-0"

6" HOLLOW CORE DOORS ARE REQUIRED 3'-0" x 6'-8" x 1 3/4"

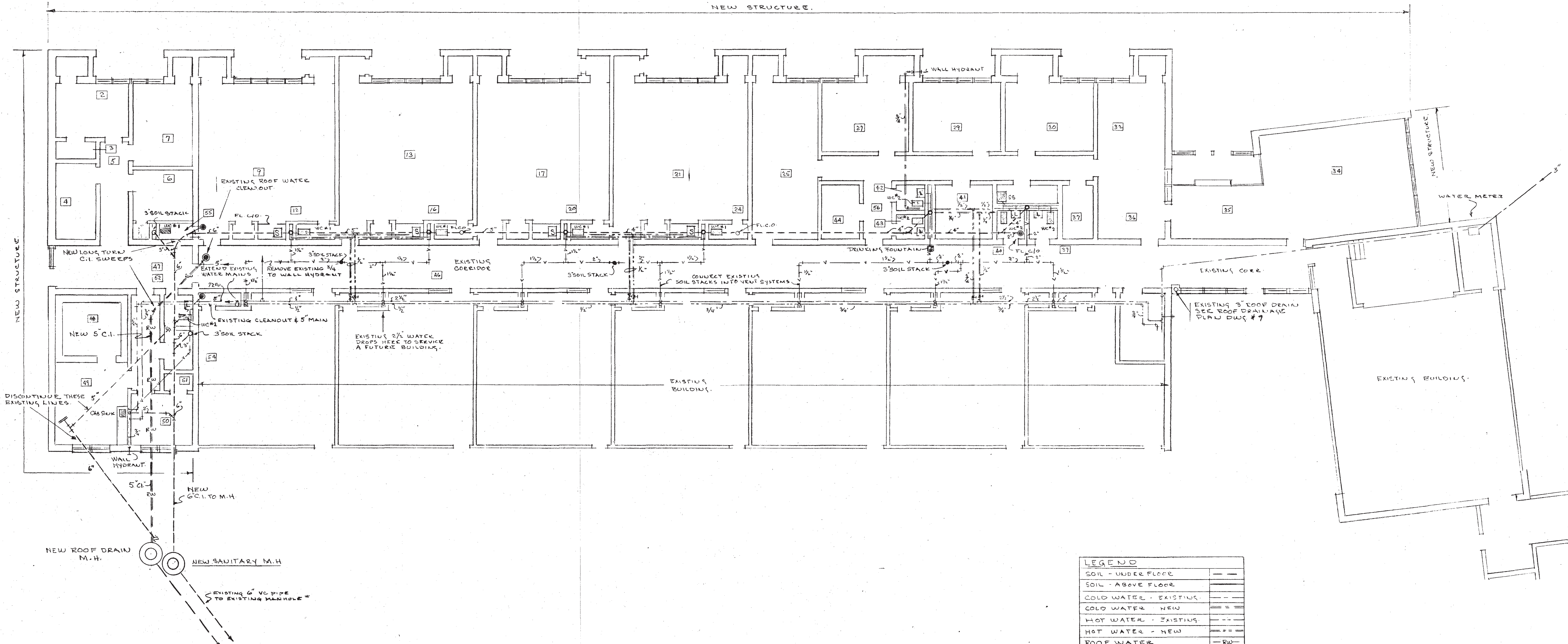


PLAN DETAIL (CHALK & TACK BD. TRIM) SCALE 1/2" = 1"



CEIL-HEAD DET. SCALE 1 1/2" = 1'-0"

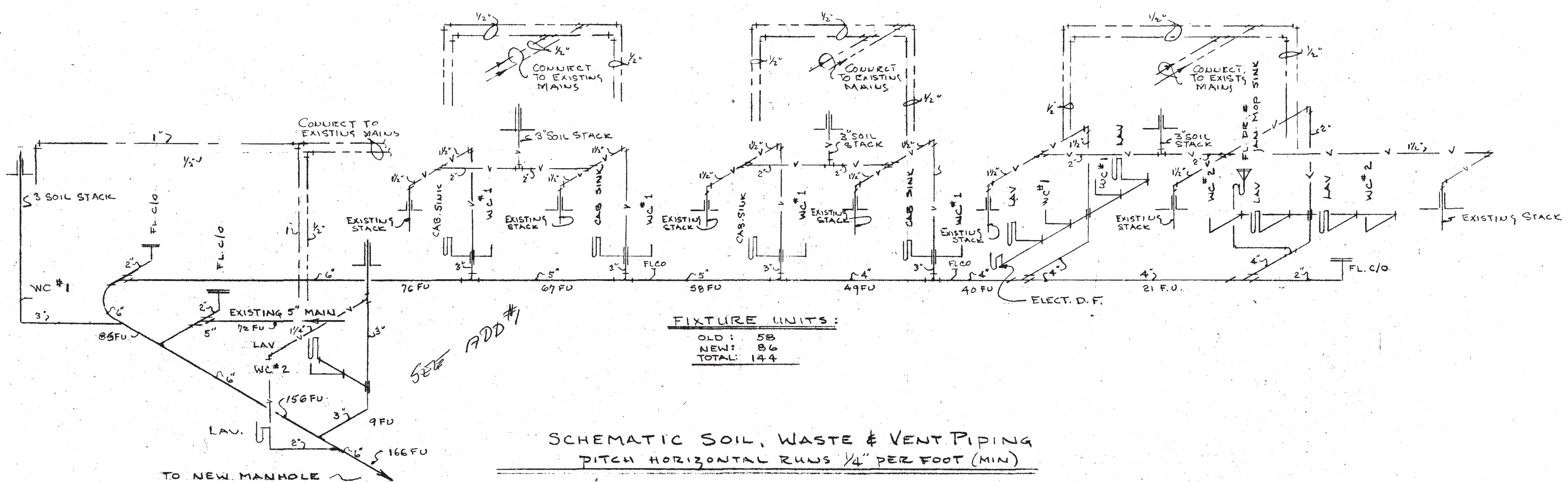
APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY	TITLE	BY	TITLE
DATE	DATE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS		APPROVED FOR	
BY	DIRECTOR	BY	TITLE
DATE	DATE	DATE	DATE
STATE OF MAINE TITLE: PRE-PRIMARY DIAGNOSTIC CENTER GOV. BAXTER STATE SCHOOL FOR THE DEAF LOCATION: WACCAWORTH ISLAND FAIRMOUTH, MAINE TITLE THIS DWG: TYPICAL 1 1/2" CLASSROOM LAYOUT CASEWORK DETAILS			
ARCHT	SEAL	PROJECT NO.	73-6672-5003
DRAWN BY	R.M.P.	ALLIED ENGINEERING INC	
CHECKED BY	H.E.S.	ARCHITECT-ENGINEER	
NO.	DATE	DESCRIPTION	APPROV'D
2			
1			
SCALE: AS NOTED		DATE: MAR. 15, 1973	GORHAM, MAINE
REVISIONS			
			SHEET NO. 10 OF 13



LEGEND

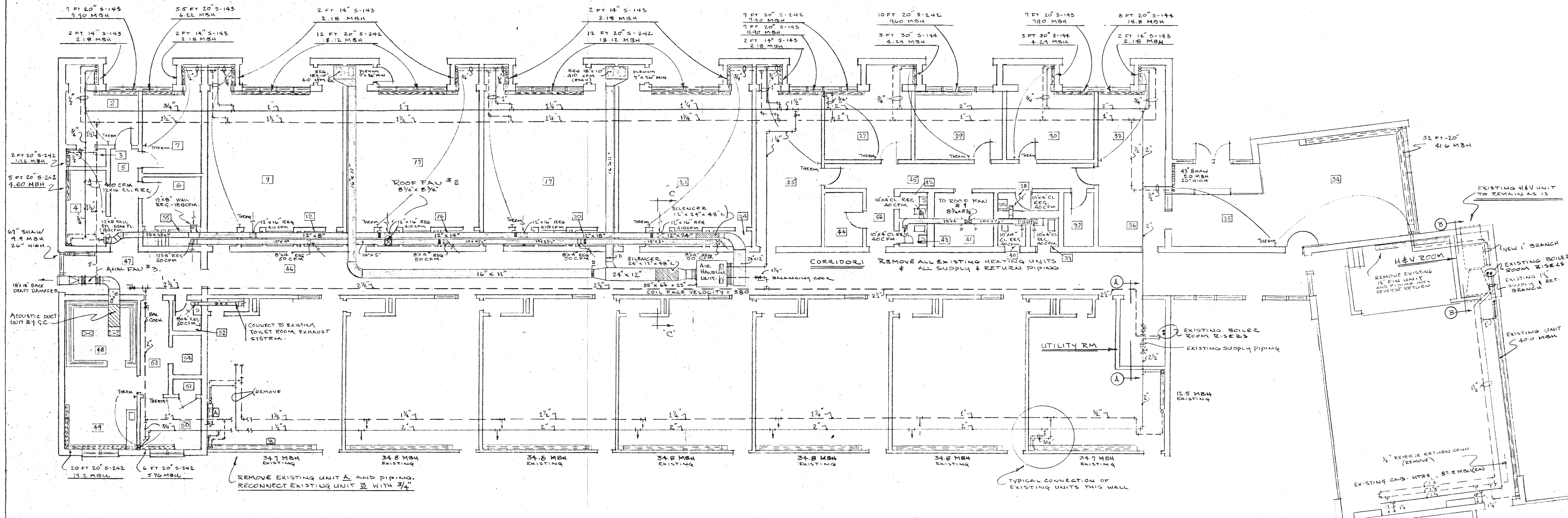
SOIL - UNDER FLOOR	---
SOIL - ABOVE FLOOR	---
COLD WATER - EXISTING	---
COLD WATER - NEW	---
HOT WATER - EXISTING	---
HOT WATER - NEW	---
ROOF WATER	-RW-
VENT BRANCHES	-V-

NOTE:
ELECTRIC DRINKING FOUNTAIN SPECIFICATION:
EQUAL TO HALSEY TAYLOR MODEL SWBA, 110V/60/15A

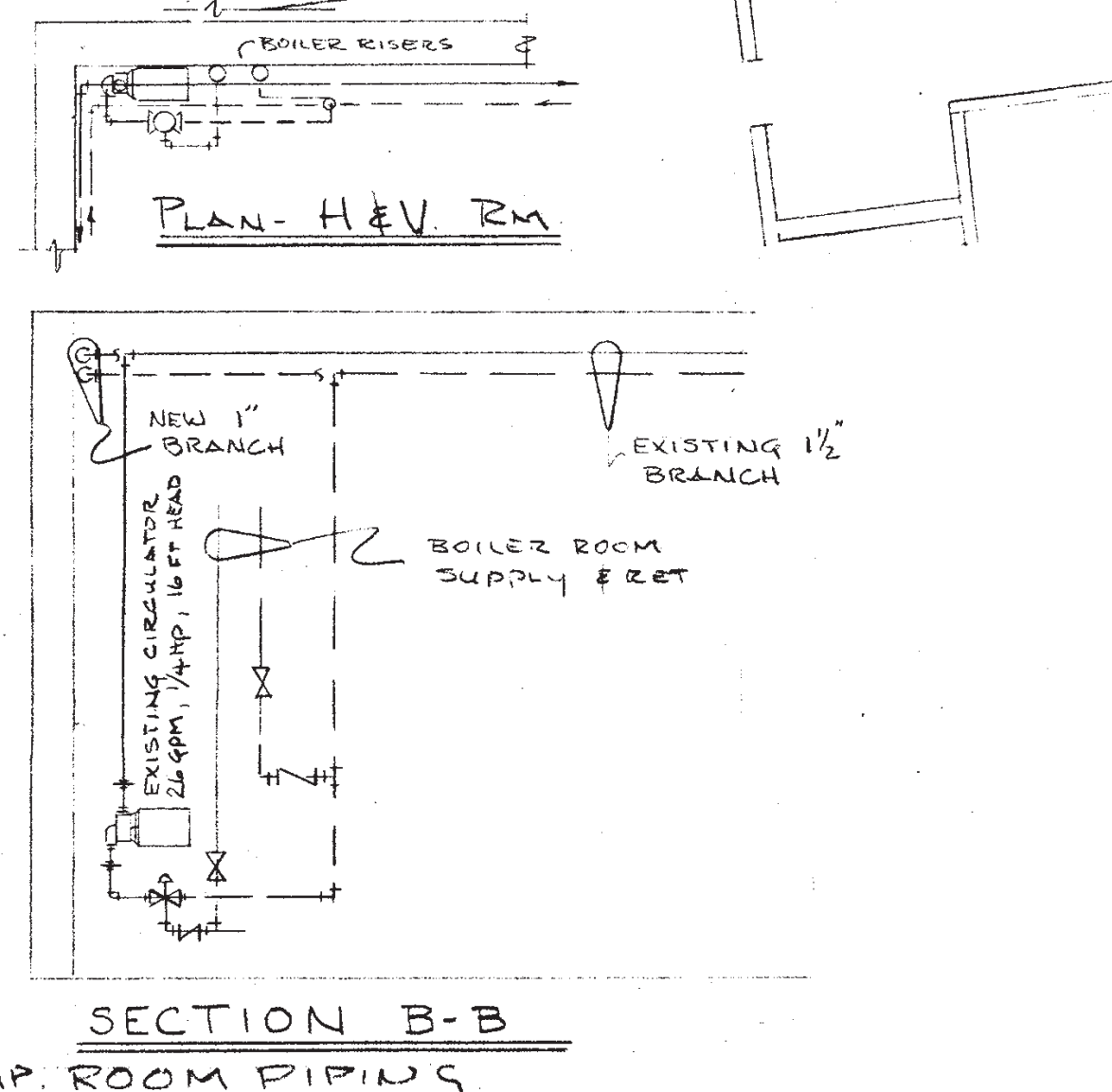
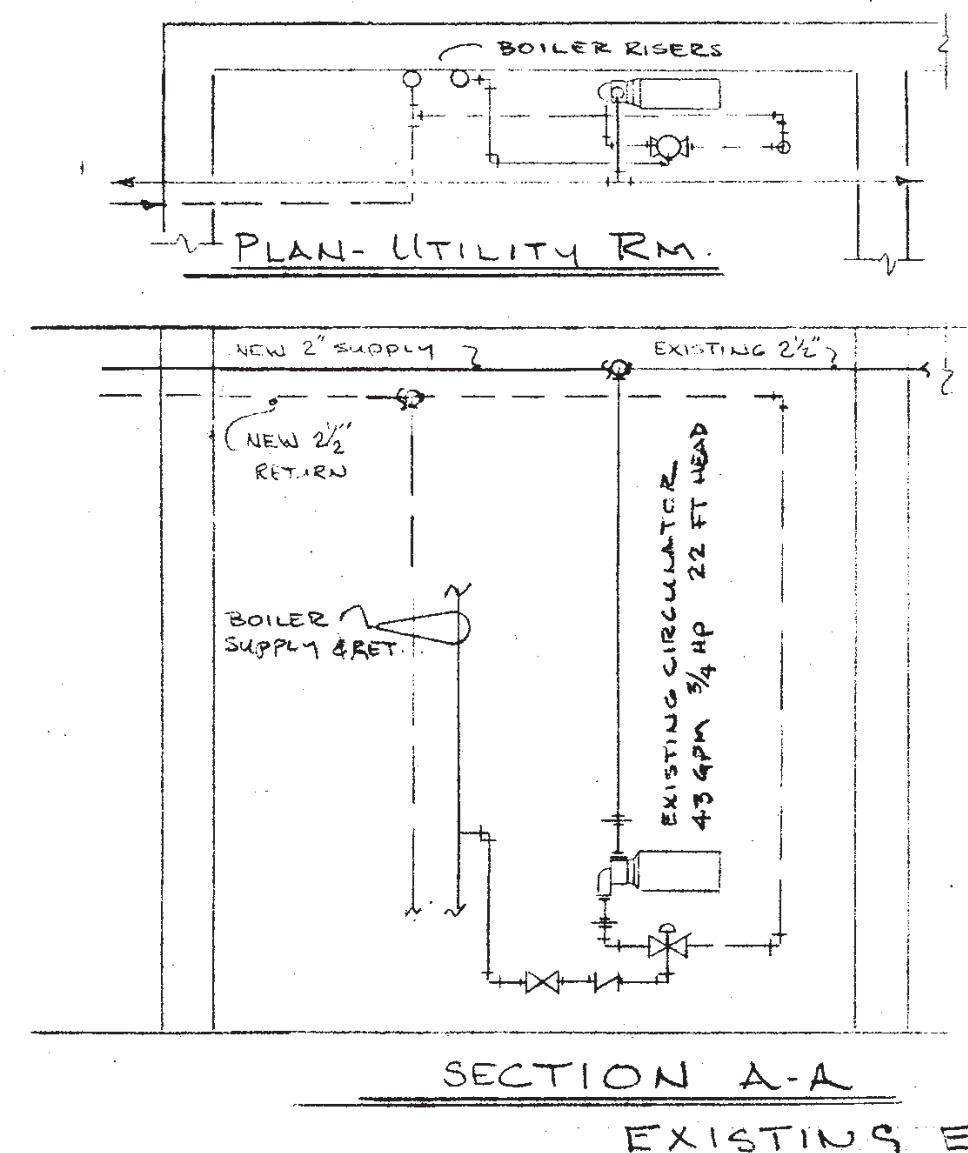
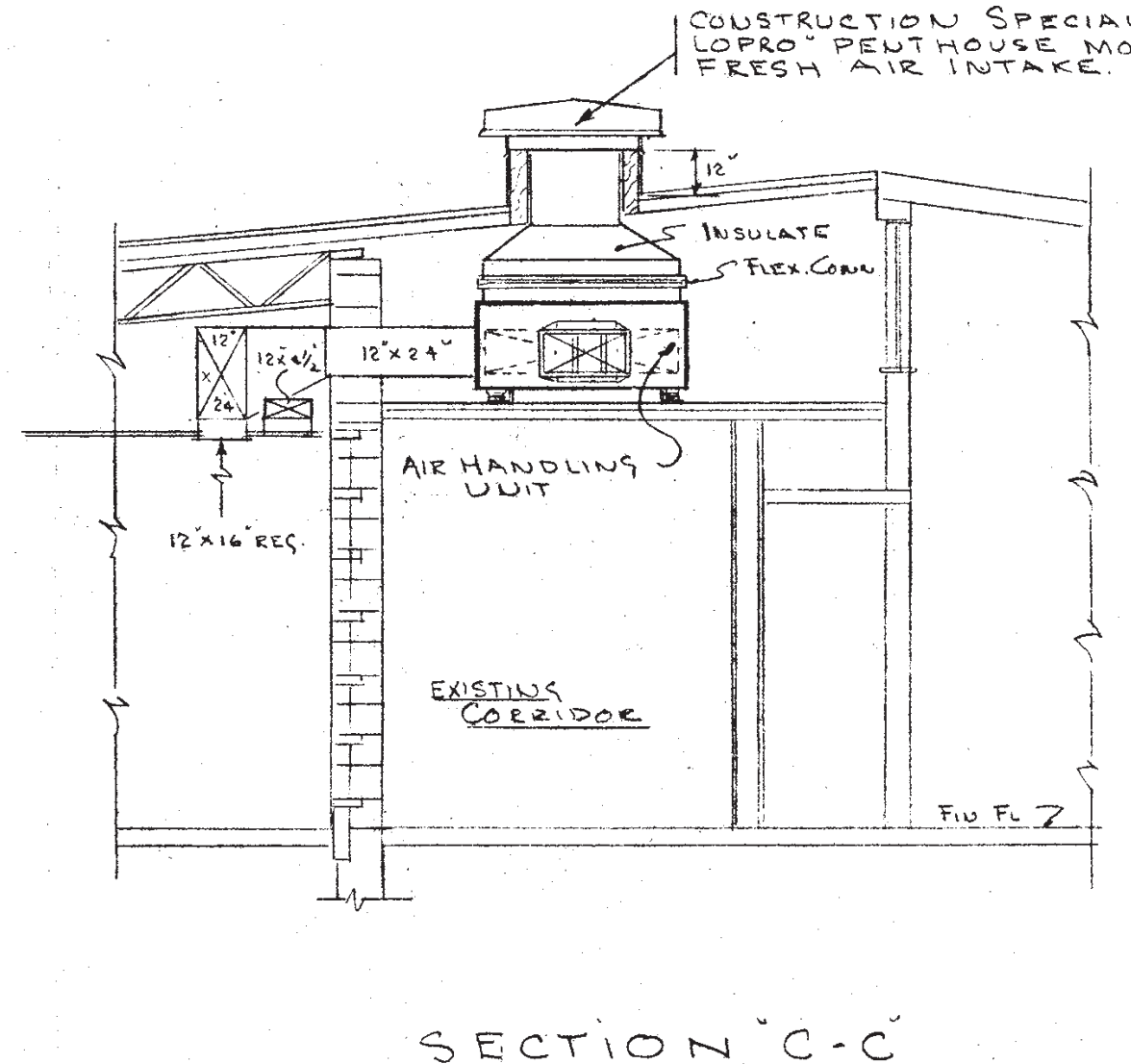


SCHMATIC SOIL, WASTE & VENT PIPING
PITCH HORIZONTAL RUNS 1/4" PER FOOT (MIN)

APPROVED FOR DEPT. OF HEALTH & WELFARE BY [Signature] TITLE [Title] DATE [Date]		APPROVED FOR DEPT. OF INSURANCE BY [Signature] TITLE [Title] DATE [Date]	
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS BY [Signature] DIRECTOR DATE [Date]		APPROVED FOR BY [Signature] TITLE [Title] DATE [Date]	
<p>STATE OF MAINE THE PRIMARY DIAGNOSTIC CENTER, GOV. BAXTER STATE SCHOOL FOR THE DEAF, LOCATION: MAINE STATE ISLAND, FALMOUTH, MAINE</p> <p>TITLE THIS DWG: PLUMBING PLAN</p>			
ARCHT'S SEAL DRAWN BY: D.M.		PROJECT NO: 73-6612	
CHECKED BY: H.E.S.		SCALE: 1/8" = 1'-0"	
DATE: MAR. 15, 1973		SHEET NO: 11 OF 13	
REVISIONS		CORHAM, MAINE	

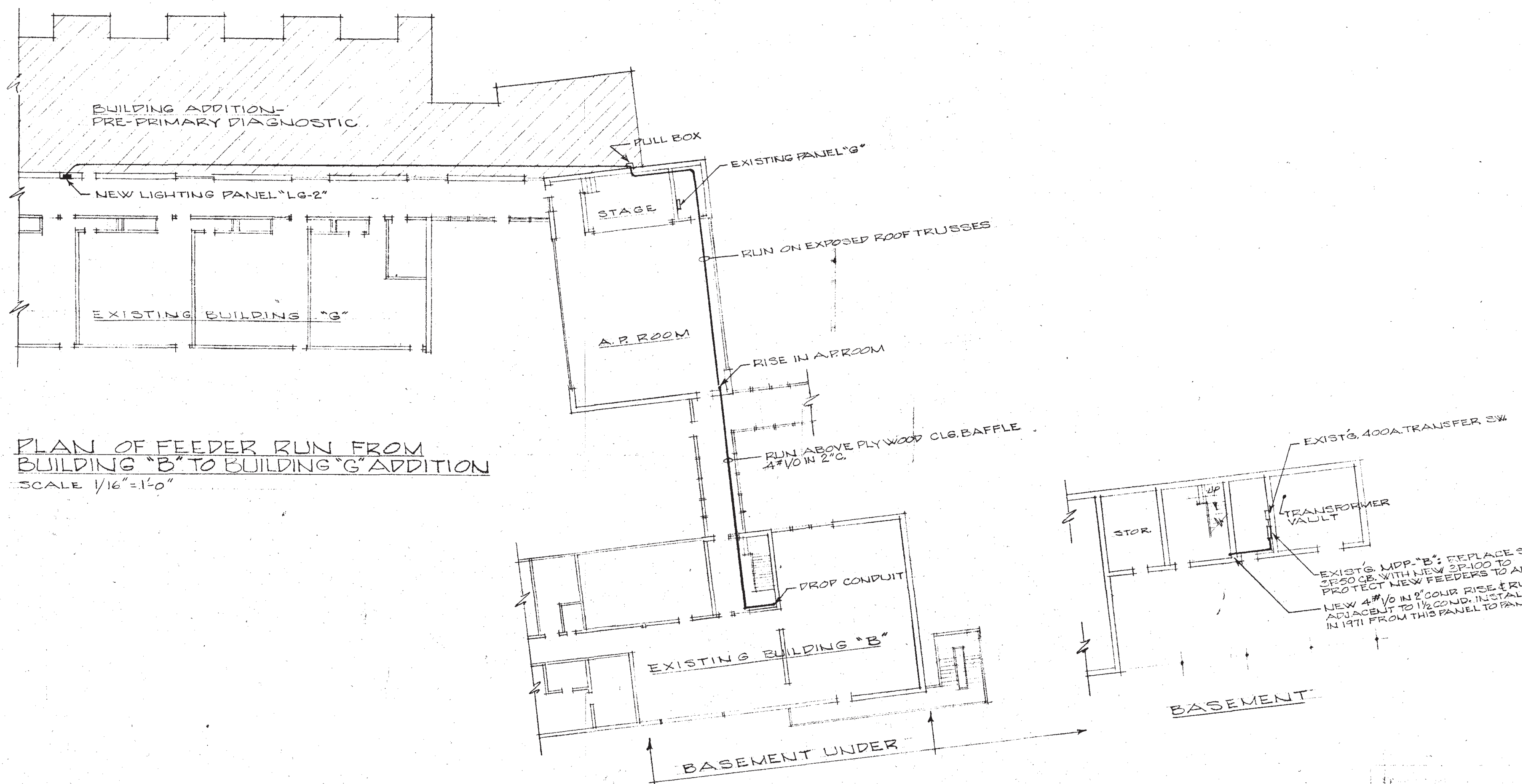
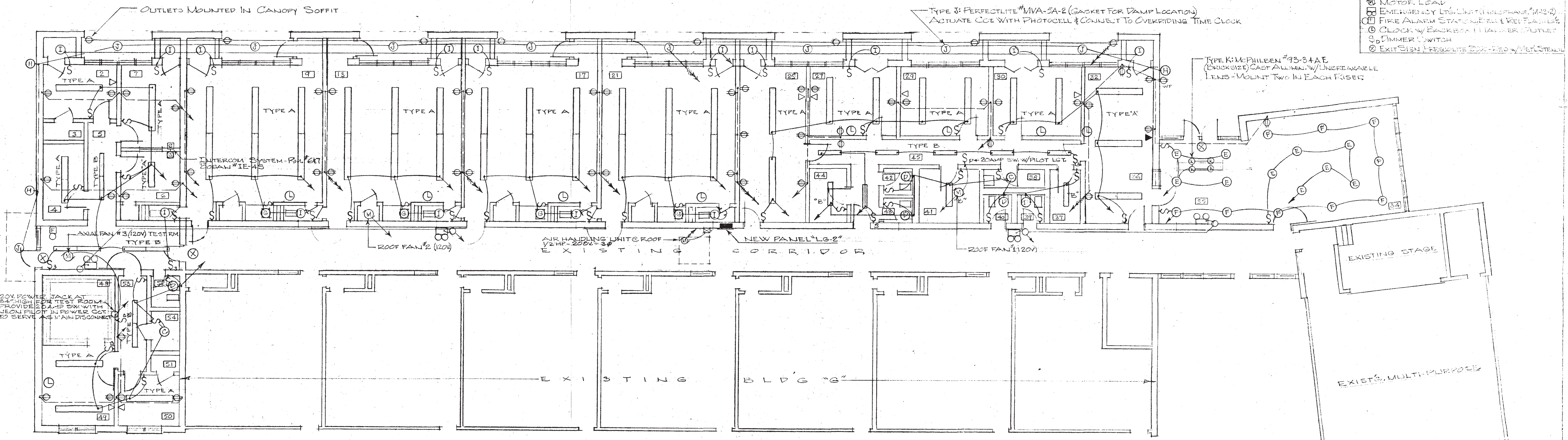


EQUIPMENT SCHEDULE											
AIR HANDLING UNIT											
CFM	S.P.	RPM	HP	ELECT	TYPE	COIL	WATER IN	FILTERS	UNITS	CONTROL	
2000	1/2"	582	1/2	208/ea/3	HORIZ.	94.6 MBH	190°	THRU AWAY	ACOUSTIC	VALVE	
ROOF FAUS											
FAU NO.	CFM	S.P.	RPM	T.S.	HP	ELECT	DRIVE	BACK DRAFT D.	BIRD SCREEN	COIL SWITCH	
1	208	1/4"	1250	2700	1/25	110/ea/1	DIRECT	YES	YES	YES	
2	330	1/2"	1300	3403	1/10	-	DIRECT	-	-	-	
AXIAL FAU											
FAU NO.	CFM	S.P.	RPM	O.V.	H.R.	ELECT	DRIVE	BACK DRAFT D.			
3	500	1/2"	1200	780	1/8	110/ea/1	BELT.	18'x18"			



APPROVED FOR DEPT. OF HEALTH & WELFARE		APPROVED FOR DEPT. OF INSURANCE	
BY	TITLE	DATE	DATE
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS			
BY	TITLE	DATE	DATE
STATE OF MAINE TITLE PRE-PRIMARY DIAGNOSTIC CENTER CIV. BAKED, STATE SCHOOL FOR THE DEAF LOCATION MACKWORTH ISLAND FALMOUTH, MAINE TITLE THIS DWG HEATING & VENTILATING			
ARCHT'S SEAL	SEAL		
DRAWN BY	KM	CHECKED BY	HES
ALLIED ENGINEERING, INC		PROJECT NO.	
ARCHITECT-ENGINEER		173-24-72	
CORHAM, MAINE		6003	
REVISIONS		DATE	SHEET NO.
2	3/7/73	VENTILATION ROOM #4	12
1			13
DATE		MAR. 15, 1973	OF

- ELECTRICAL SYMBOLS**
- LIGHTING PANEL
 - DISTRIBUTION PANEL
 - ⊖ CONTROL POINT
 - ⊕ LIGHTING OUTLET & FIXTURE TYPE
 - ⊖ DUPLEX WALL RECEPTACLE (20A)
 - ⊖ SINGLE P/L SWITCH (20A)
 - ⊖ THREE-WAY SWITCH
 - ⊖ TELEPHONE OUTLET
 - ⊖ MOTOR LOAD
 - ⊖ EMERGENCY LIGHTING (HOLOPHANE)
 - ⊖ FIRE ALARM STATION BELL & REEFER
 - ⊖ CLOCK / SWITCH BOX / HALLER OUTLET
 - ⊖ DIMMER SWITCH
 - ⊖ EXIT SIGN PRESOLITE



PLAN OF FEEDER RUN FROM BUILDING "B" TO BUILDING "G" ADDITION
SCALE 1/16" = 1'-0"

LIGHTING FIXTURES

SYMBOL	LOCATION	MANUFACTURE	CAT. NO.	LAMPS	REMARKS
A	CL. ROOMS	LPI	969048	4x4012RSCW	SURFACE ACRYLIC INS. HOLO LENS
B	CORRIDOR	LIGHTROL	7140-6100	"	4'x8' SURFACE w/ HOLOPHANE LENS
C	STORAGE	PRESOLITE	CF-28	150	SURFACE
D	TOILETS	ART METAL	3559AA	2/75	ACRYLIC LAM. MIRROR (w/ GUN) 5'
E	PLAY AREA	OMEGA	E-501	150 PAR FL	RECESSED LENS LITE
F	LOBBY	MARKSTONE	424344(SER)	75	GLASS PENDANT (4" DIA. X 13")
G	CL. ROOMS	MARKSTONE	401	60	" (4" DIA. X 7")
H	EXTERIOR	HOLOPHANE	410-120PR	100MV	WALL BRACKET w/ PHOTOCELL
I	CLOSETS	PRESOLITE	4091	40	SURFACE CLMNTS. (OPRD)

PANEL SCHEDULE

ITEM	LOCATION	MAINS	C.B. PILES	AMPS	LOADS
LG-2	CORRIDOR	200 ML	38-1P	20	LIGHTING & HEV
TYPE NQP			1-3P	15	AIR HANDLING UNIT
			1-1P	30	CCT FOR NET ET RT IN RM #36

NOTE: PROVIDE PULSATING RED FIRE ALARM SIGNAL LIGHT ABOVE EACH CLOCK AND BELOW EACH FIRE ALARM BELL.

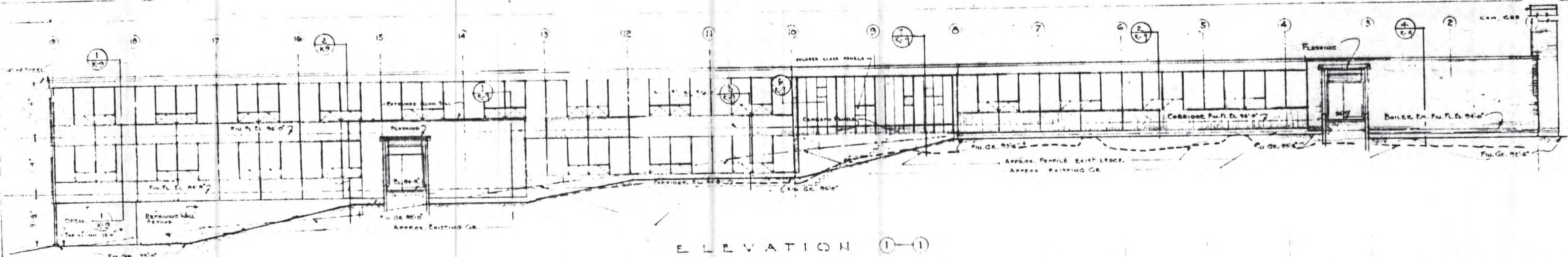
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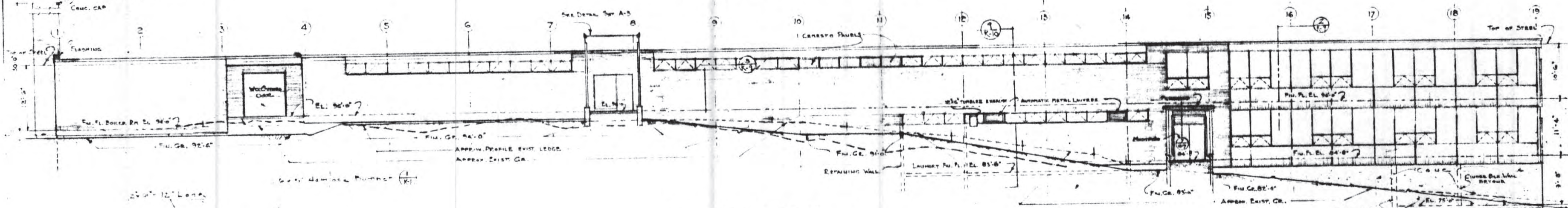
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BY: [Signature] TITLE: [Blank] DATE: [Blank]	BY: [Signature] TITLE: [Blank] DATE: [Blank]
APPROVED FOR BUREAU OF PUBLIC IMPROVEMENTS	APPROVED FOR
BY: [Signature] DIRECTOR: [Blank] DATE: [Blank]	BY: [Signature] TITLE: [Blank] DATE: [Blank]
STATE OF MAINE	
PRE-PRIMARY DIAGNOSTIC CENTER 500 BAYVIEW STATE SCHOOL PARK DRIVE LOCATION: NACKWORTH ISLAND BALDWIN, MAINE	
TITLE THIS DWG ELECTRICAL PLAN	
ARCHT'S SEAL	REAL
DRAWN BY: BB	CHECKED BY: HES
ALLIED ENGINEERING INC	PROJECT NO. 73-6572-5023
ARCHITECT-ENGINEER	SHEET NO. 13 OF 13
GORHAM, MAINE	DATE: MAR. 15, 1973

REVISIONS

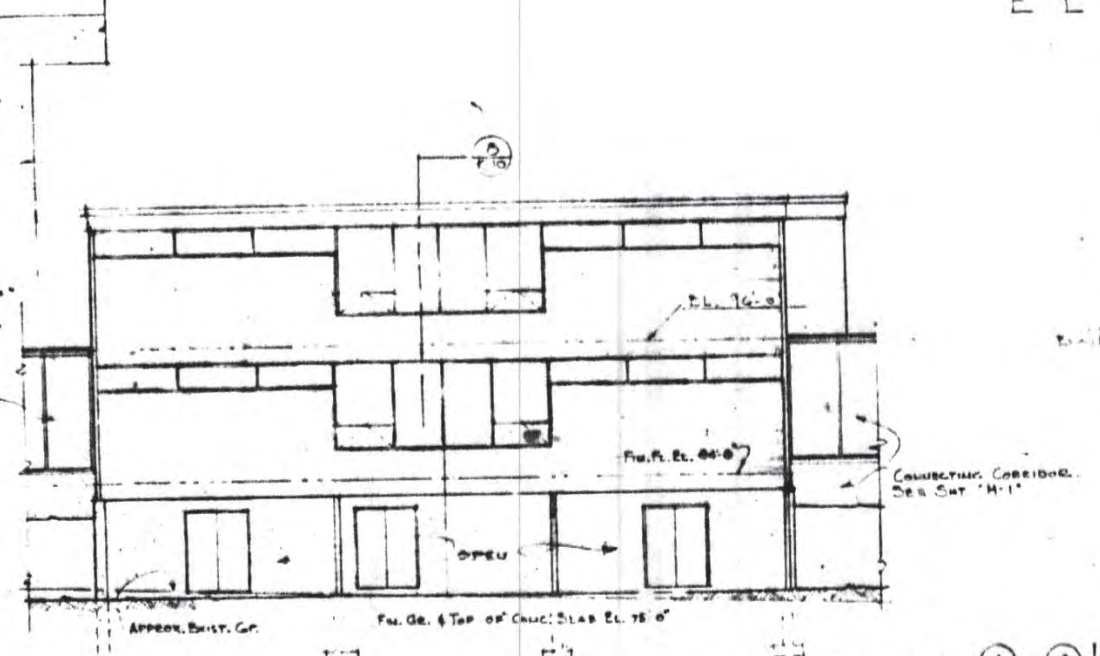
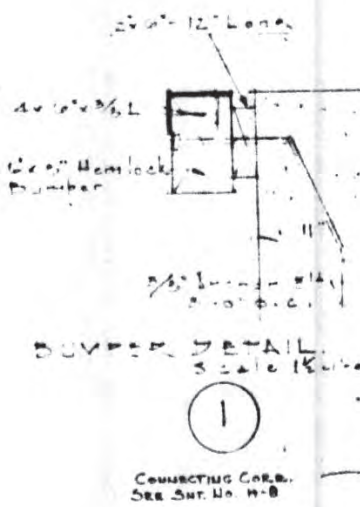
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2				
1				



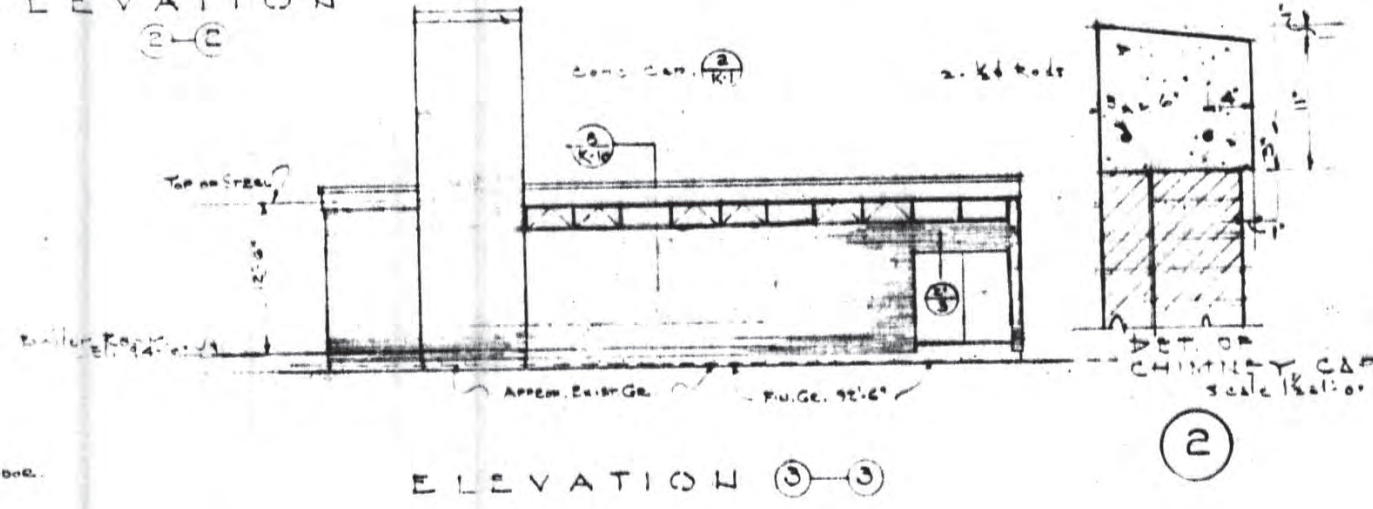
ELEVATION 1-1



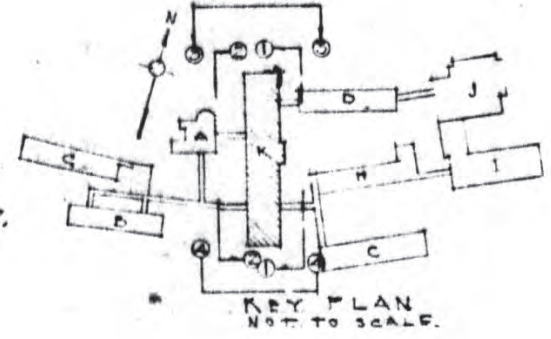
ELEVATION 2-2



SOUTH ELEVATION 4-4



ELEVATION 3-3



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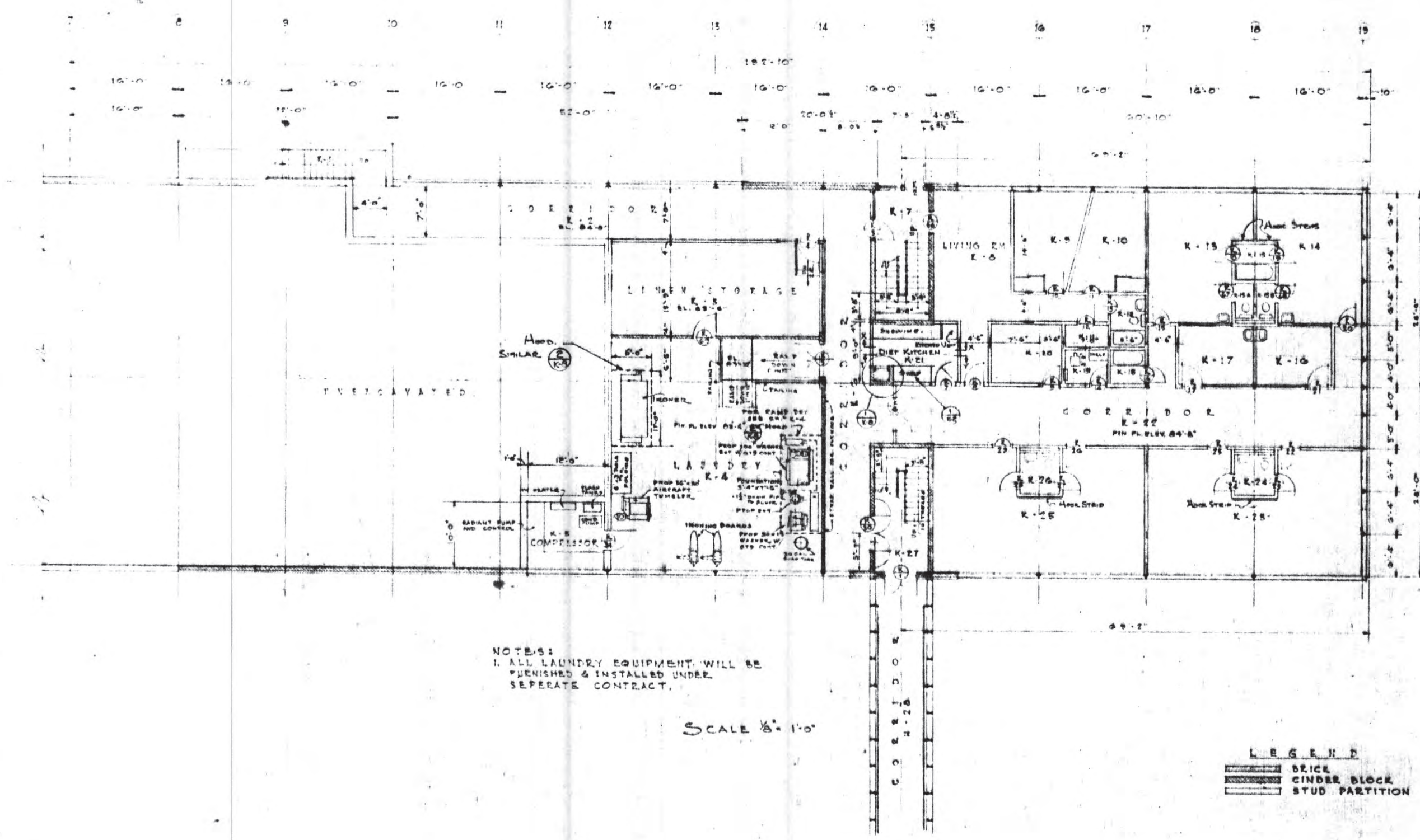
MAINE SCHOOL FOR THE DEAF
WACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
ELEVATIONS SCALE 1/8"=1'-0"

BLDG-K

STEVENSON & SAUNDERS
ARCHITECTS
PORTLAND, MAINE

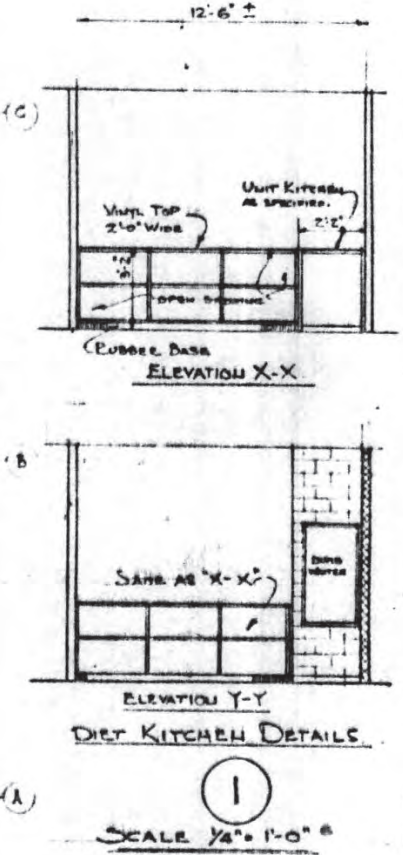
JOB NO. 5549
SHEET NO.
K-1



NOTES:
1. ALL LAUNDRY EQUIPMENT WILL BE
FURNISHED & INSTALLED UNDER
SEPERATE CONTRACT.

SCALE 1/8" = 1'-0"

LEGEND
BRICK
CINDER BLOCK
STUD PARTITION



ABBREVIATIONS	
SYMBOL	MEANING
A. T.	ASPHALT TILE
R. C.	RUBBER TILE COVE BASE
A. C. T.	ACOUSTICAL TILE
V. T.	VINYL TILE
S.P.P.	GUM PLYWOOD PAINTED

ISSUED AUG 26 1933

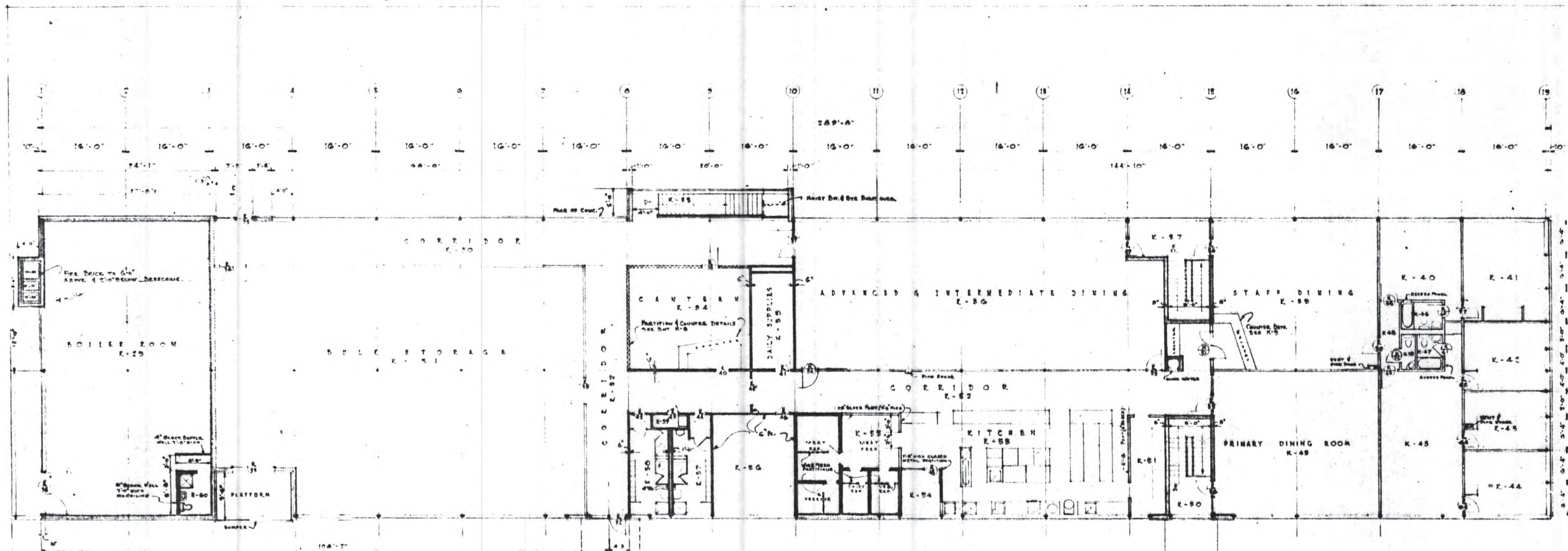
MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
BASEMENT PLAN SCALE 1/8" = 1'-0"

BLD'G-K

JOB NO. 5845
SHEET NO.
K2

3/5/35



NOTES:
1. ALL KITCHEN EQUIPMENT WILL BE FURNISHED & INSTALLED UNDER SEPARATE CONTRACT.
2. ALL REFRIGERATOR COMPRESSORS, INSULATION, DOORS, SHELVING & WIRE MESH PARTITIONS WILL BE FURNISHED & INSTALLED UNDER SEPARATE CONTRACT.

CANOPY (SEE SHEET A.3.)

MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

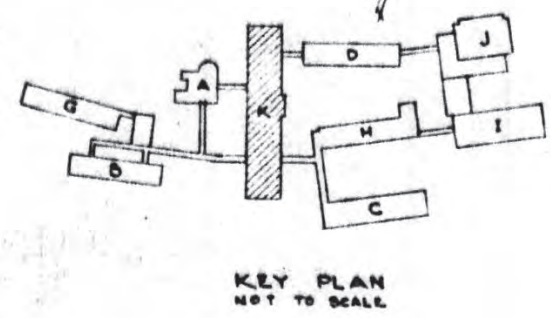
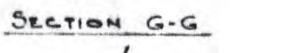
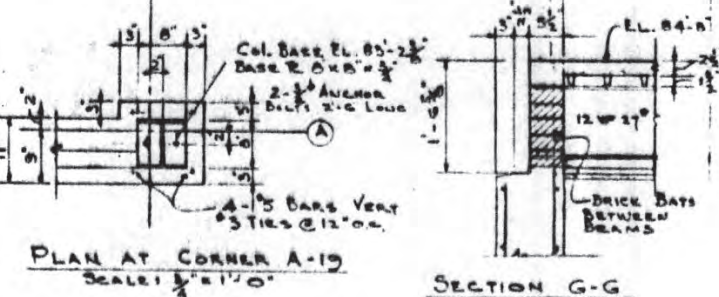
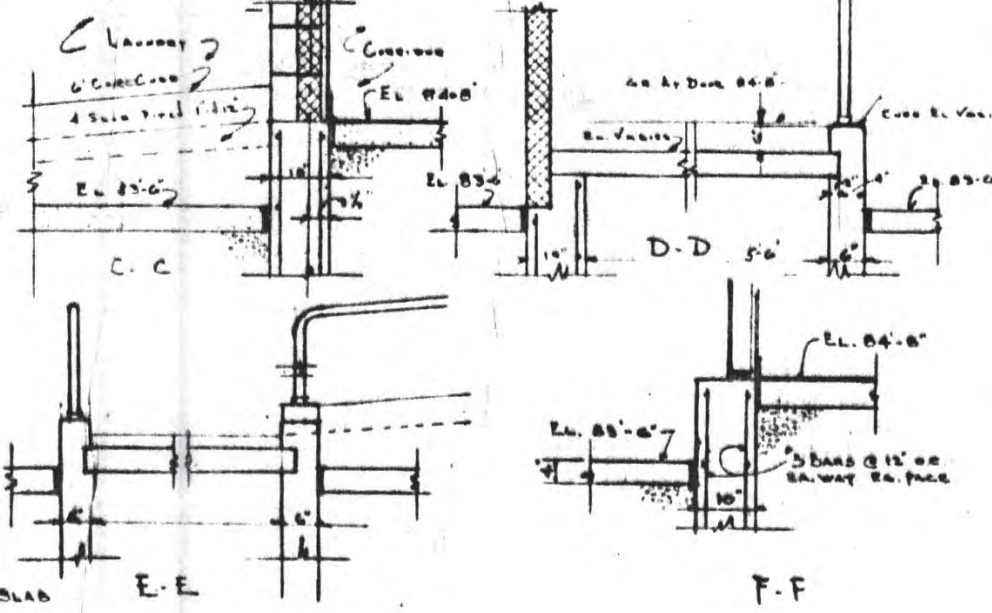
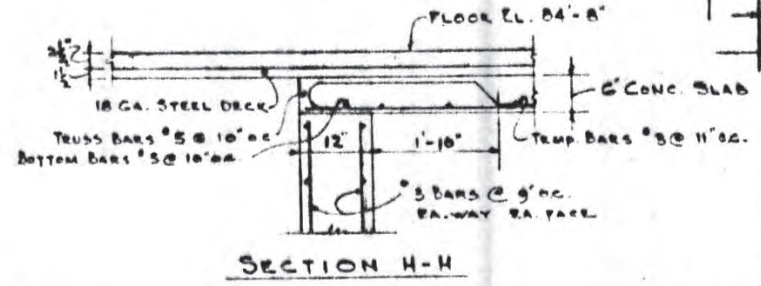
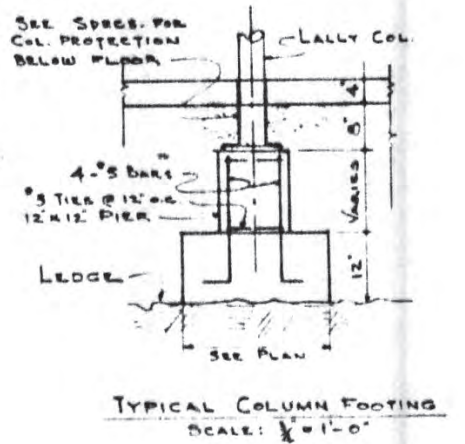
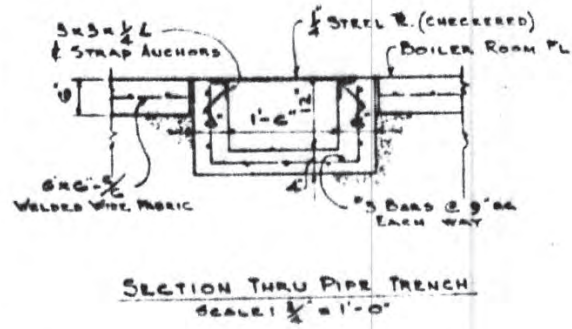
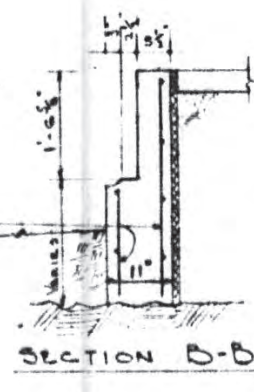
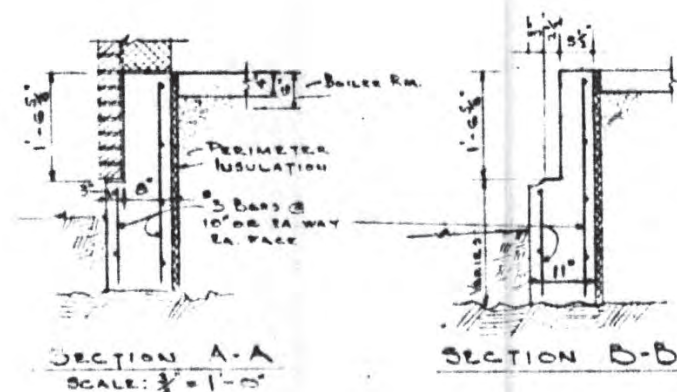
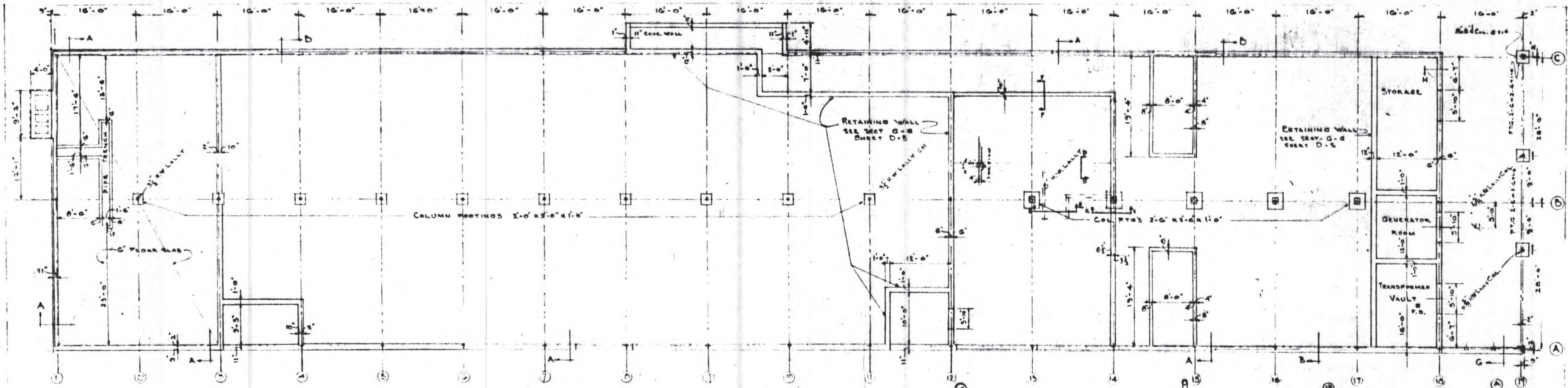
DINING HALL BUILDING
FIRST FLOOR PLAN SCALE 1/8" = 1'-0"

BLDG-K

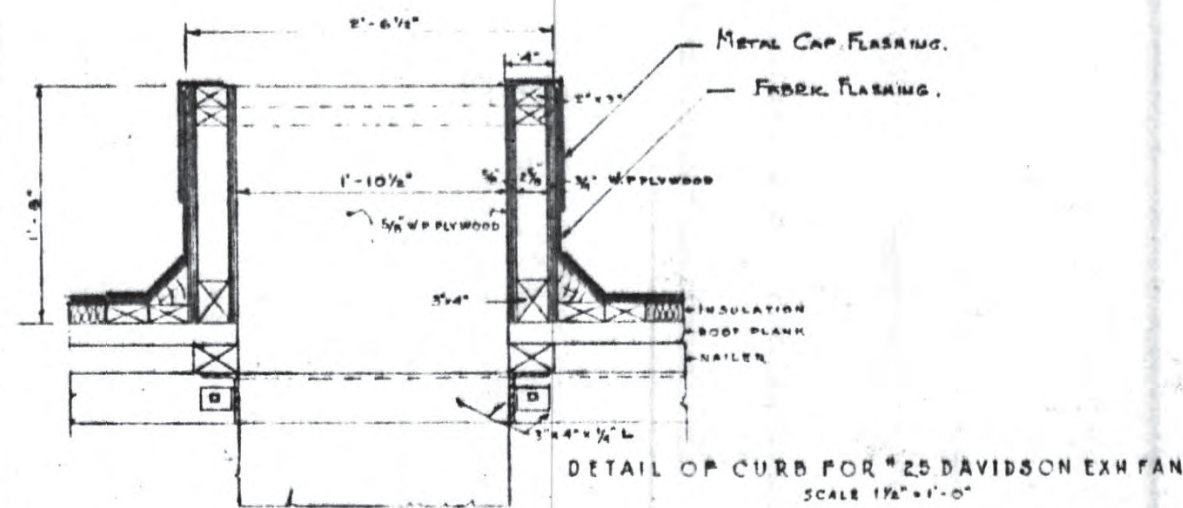
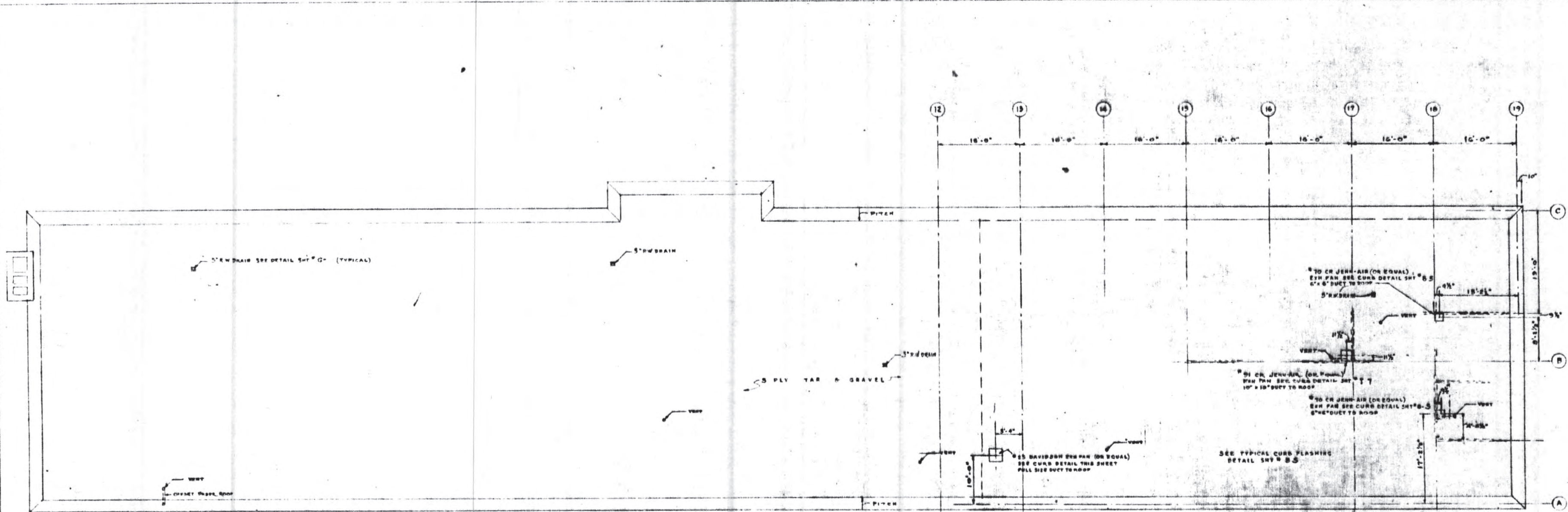
STEVENS and SANDERS
ARCHITECTS
PORTLAND - MAINE

JOB NO. 5545
SHEET NO. K 3

ISSUED AUG 26 1955

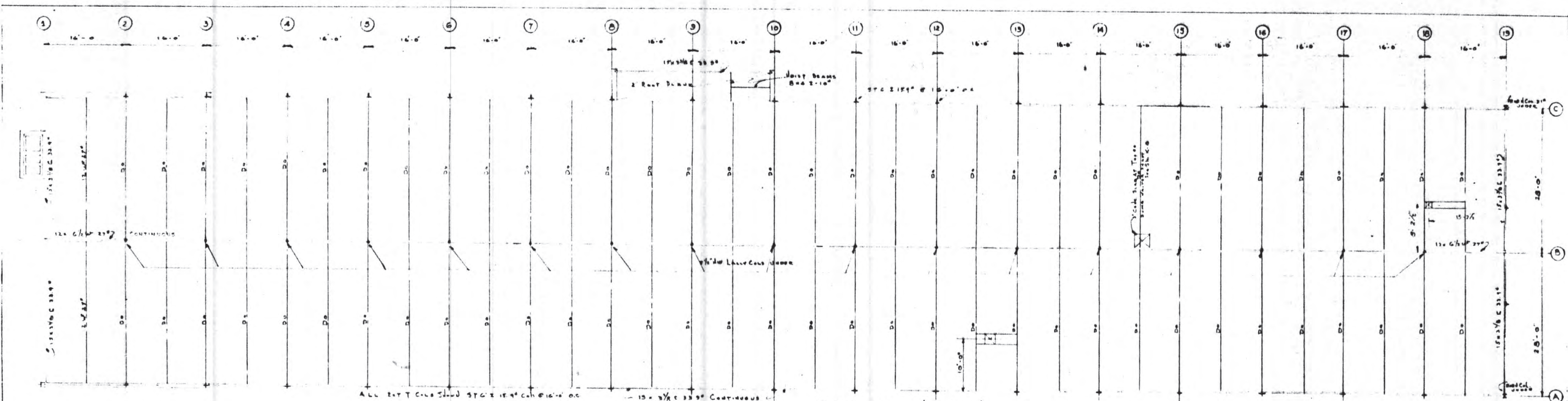


ISSUED AUG 28 1935

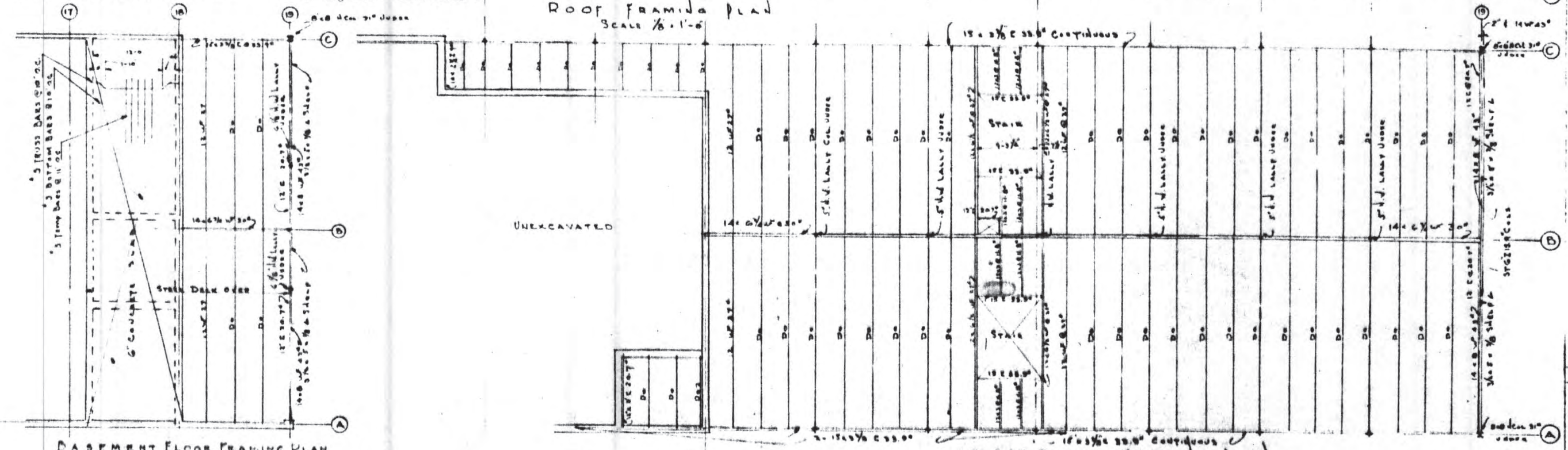


ROOF PLAN
SCALE 1/8" = 1'-0"

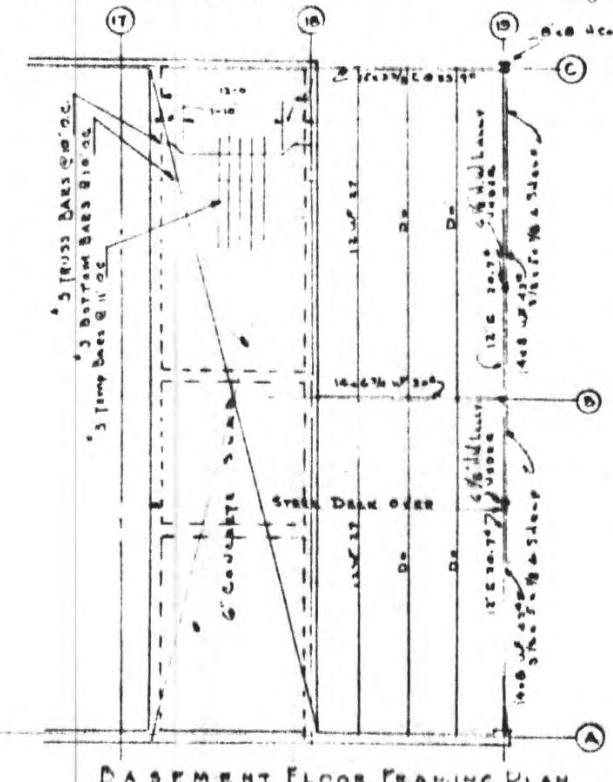
ALL VENTS TO BE 4" AT ROOF



Roof Framing Plan
Scale 1/8" = 1'-0"



First Floor Framing Plan
Scale 1/8" = 1'-0"



Basement Floor Framing Plan
Scale 1/8" = 1'-0"

UNEXCAVATED

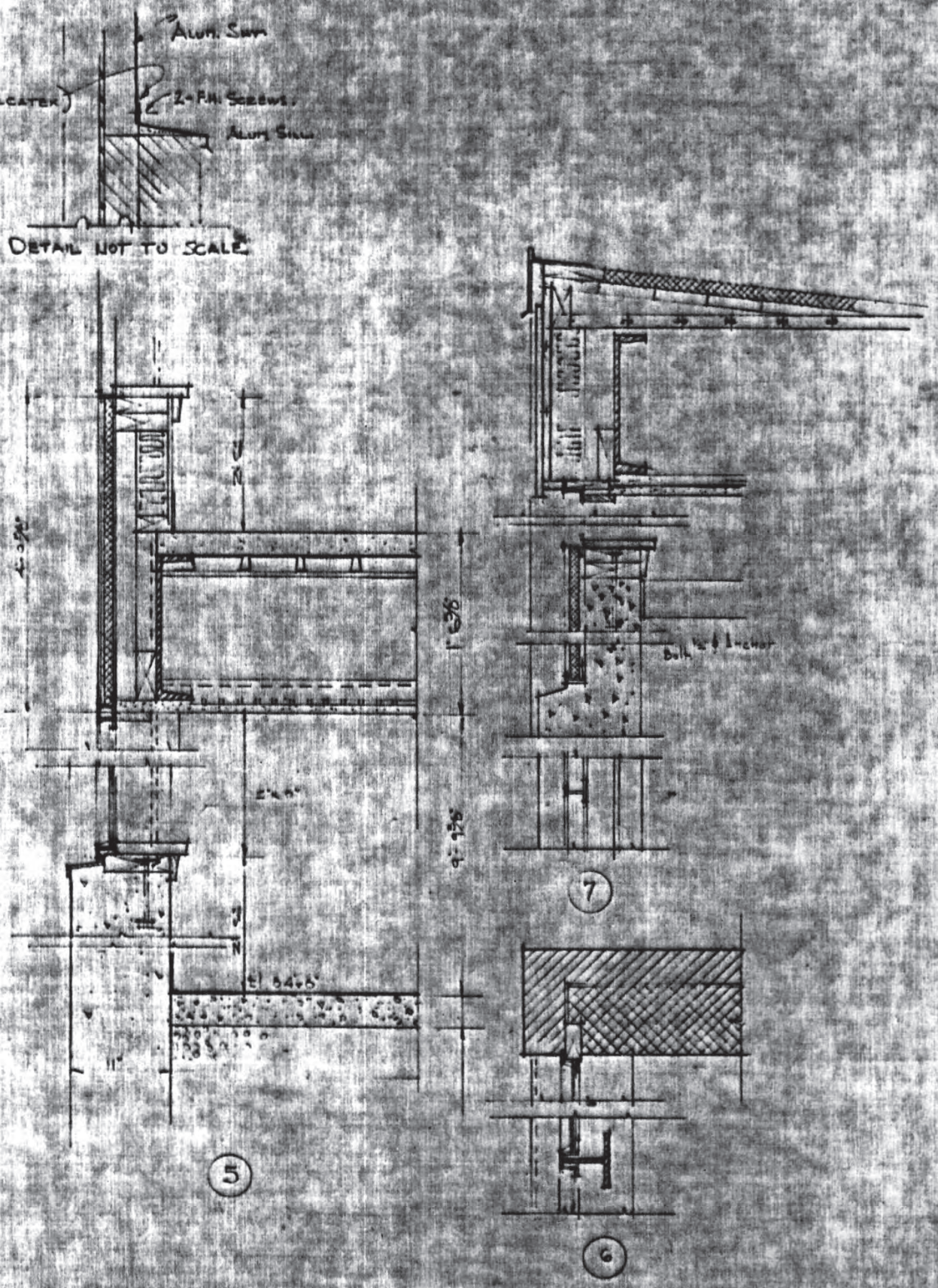
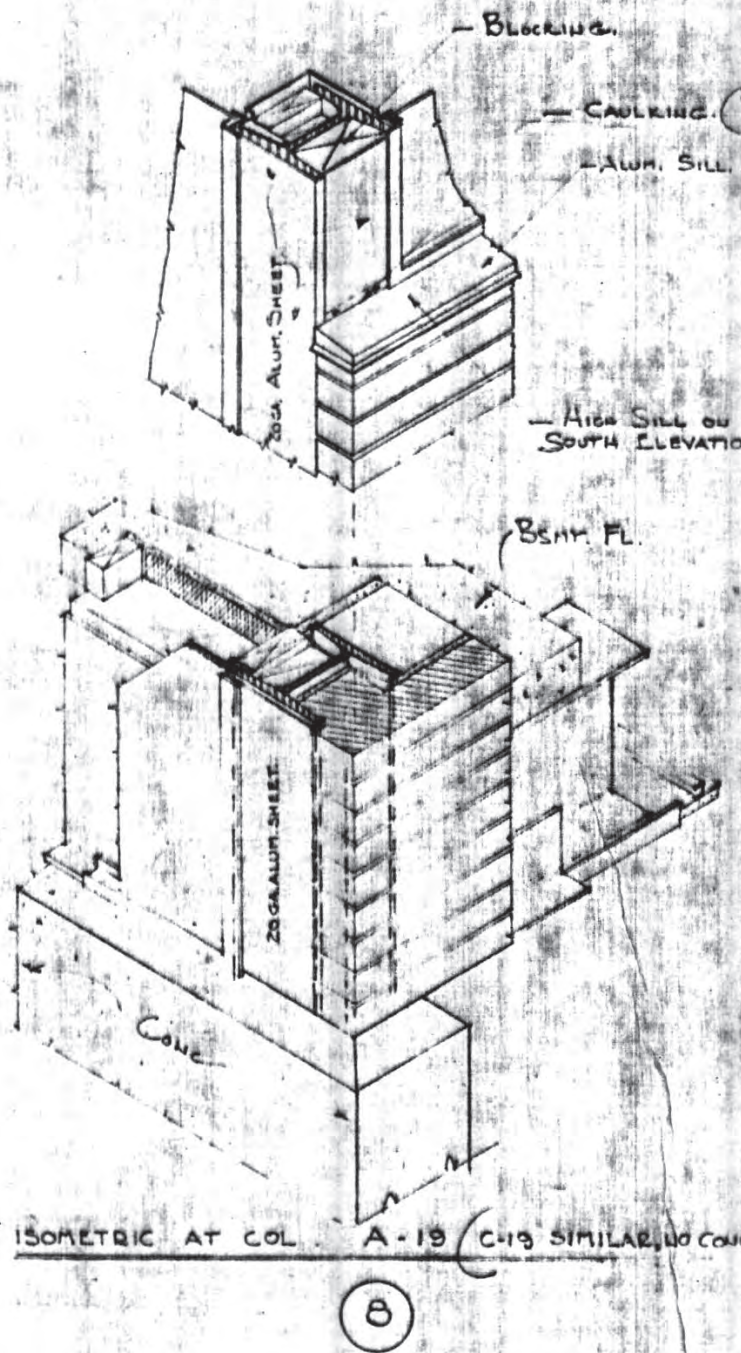
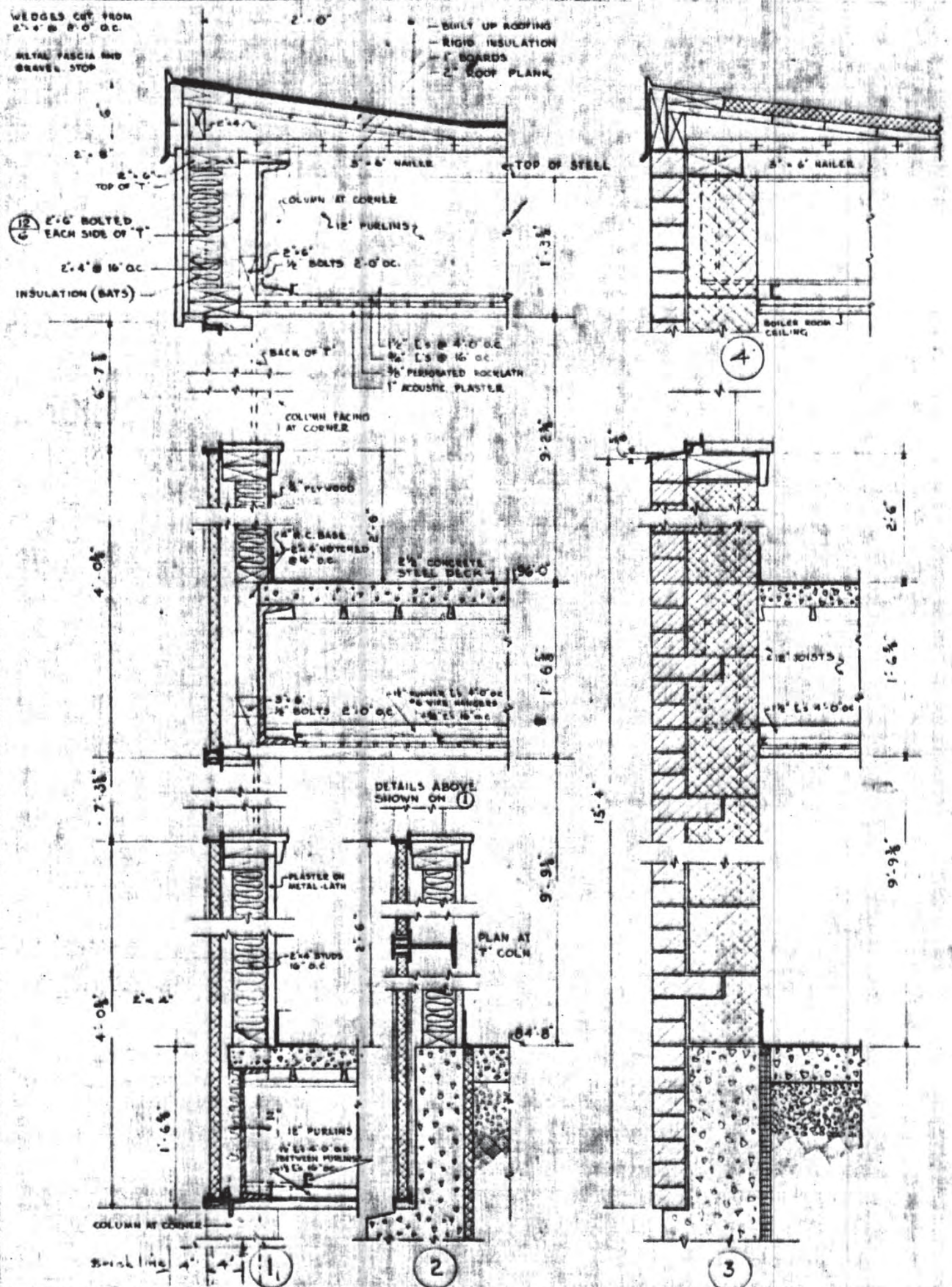
MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
FRAMING PLANS SCALE 1/8" = 1'-0"

BLD'G - 'K'

STEVENS and SAUNDERS
ARCHITECTS
PORTLAND MAINE

JOB NO 5543
SHEET NO
K7



PRINT RECORD
NO. WHO DATE

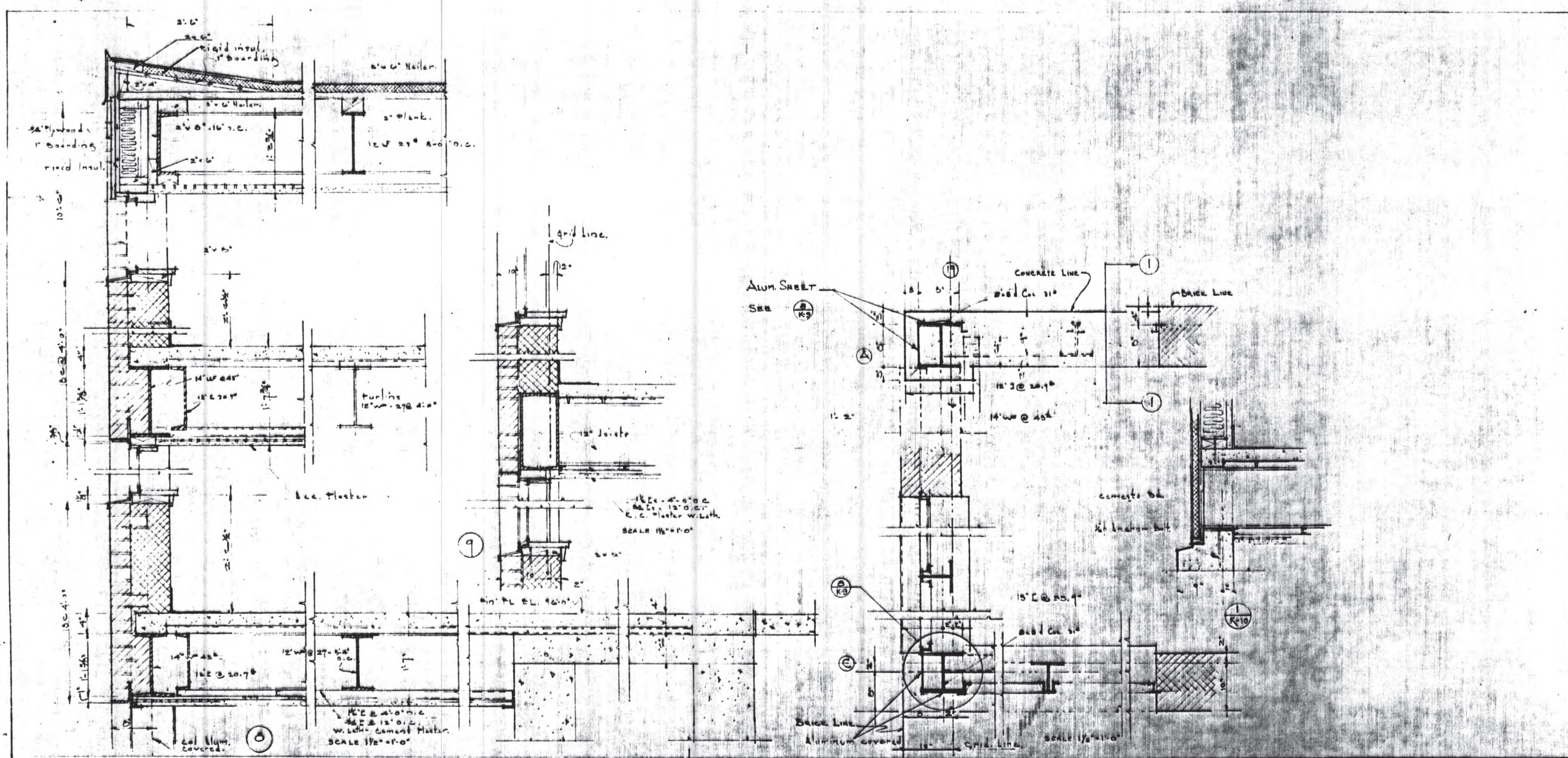
ISSUED AUG 28 1933

MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
WALL SECTIONS & DETAILS SCALE AS NOTED BLD'G-K

STEVENS and SAUNDERS
ARCHITECTS
PORTLAND MAINE

JOB NO. 8843
SHEET NO. 19



MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

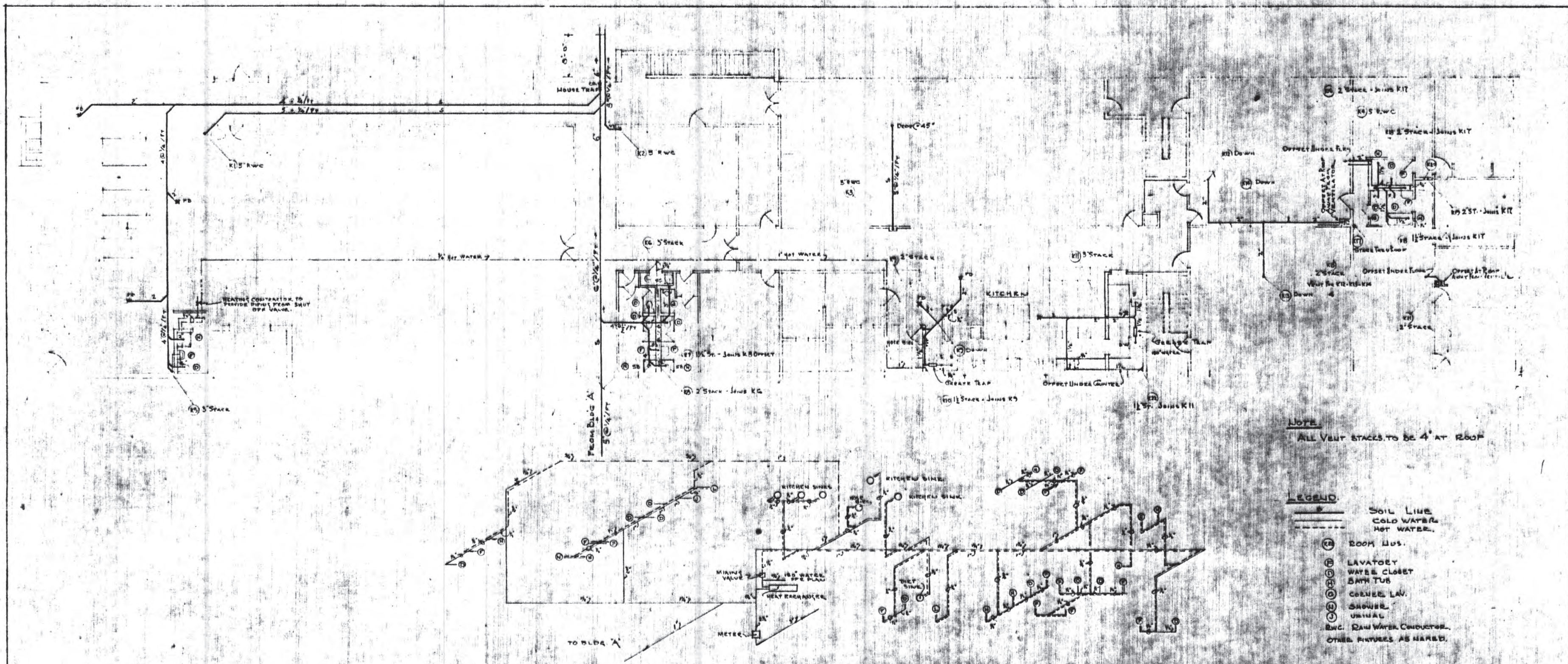
DINING HALL BUILDING
WALL SECTIONS & DETAILS SCALE AS NOTED

BLD'G - 'K'

STEVENS and SAUNDERS
ARCHITECTS
PORTLAND MAINE

JOB NO 5343
SHEET NO
K10

1936 AUG 26 1935

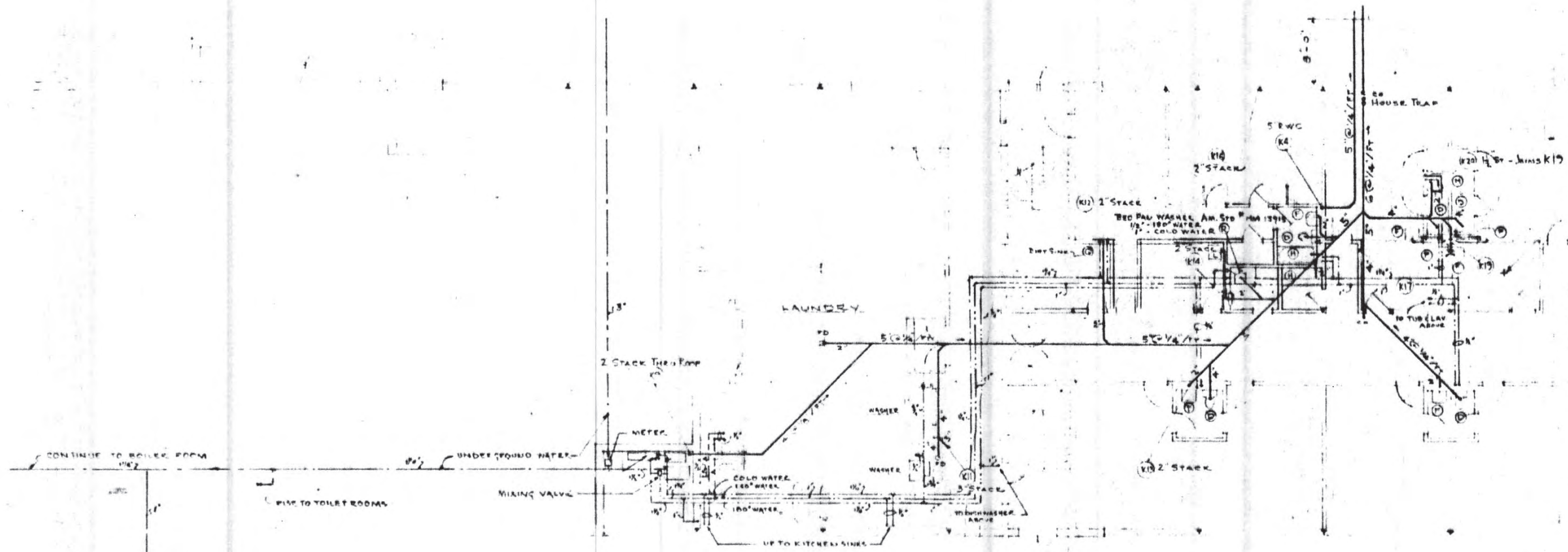


NOTE
ALL VENT STACKS TO BE 4" AT ROOF

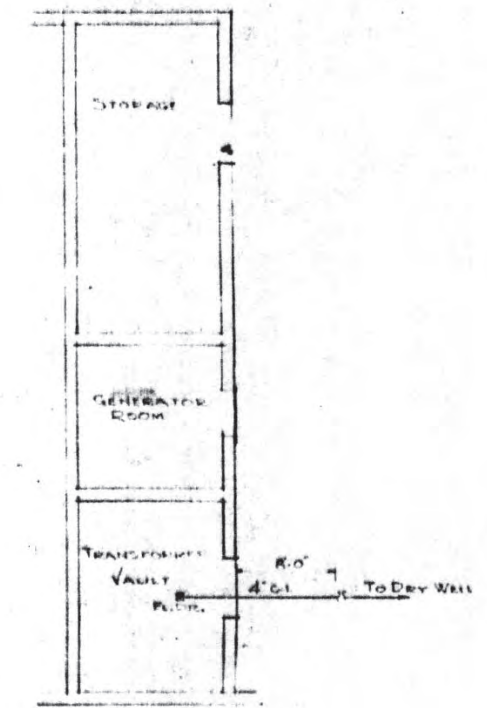
- LEGEND
- SOIL LINE
 - COLD WATER
 - HOT WATER
 - ⊙ ROOM L.S.
 - ⊙ LAVATORY
 - ⊙ WATER CLOSET
 - ⊙ BATH TUB
 - ⊙ COOLER LAV.
 - ⊙ SHOWER
 - ⊙ URINAL
 - ETC. RAW WATER CONDUCTOR
 - OTHER FIGURES AS NAMED

DIAGRAMATIC PIPING PLAN
DOMESTIC HOT AND COLD WATER

PRINT RECORD
No Who DATE



- EDGE IS FOR DENTAL CHAIR.



SUB-BASEMENT PLUMBING

LEGEND
 ——— SOIL LINE
 - - - COLD WATER
 - - - 140° WATER
 - - - 180° WATER

ISSUED

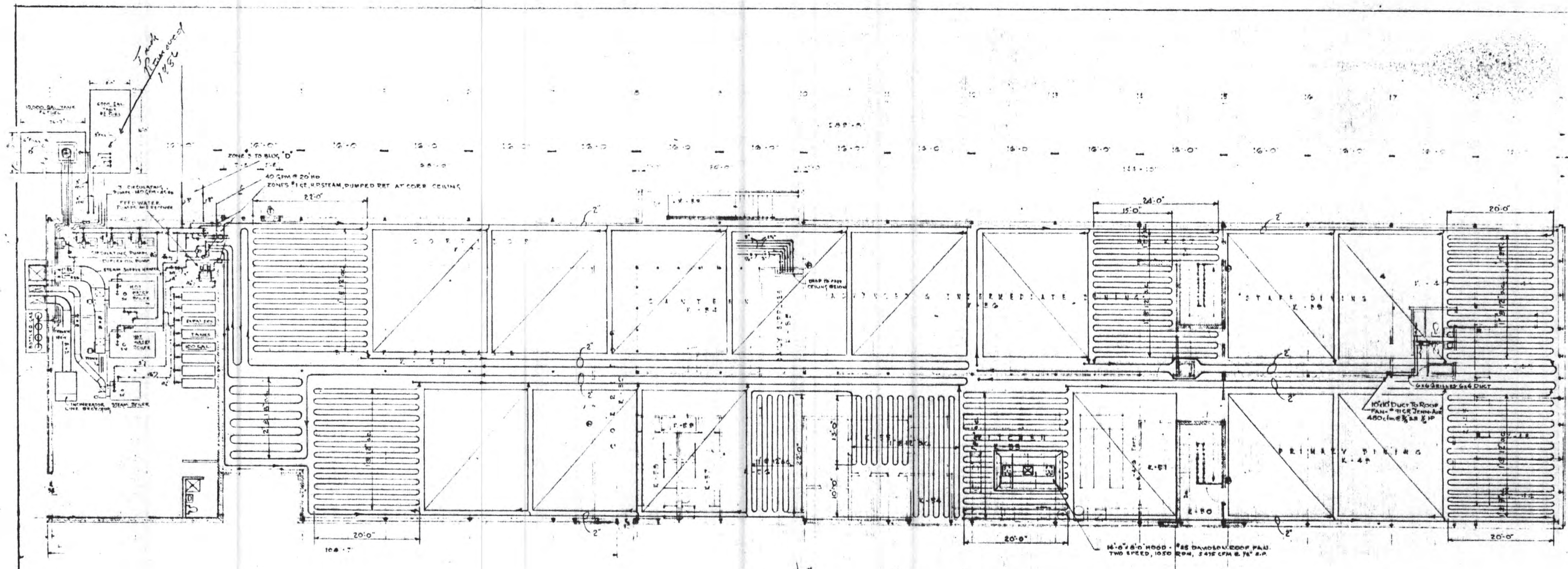
MAINE SCHOOL FOR THE DEAF
 MACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
 BASEMENT PLUMBING SCALE 1/8" = 1'-0"

BLDG "K"

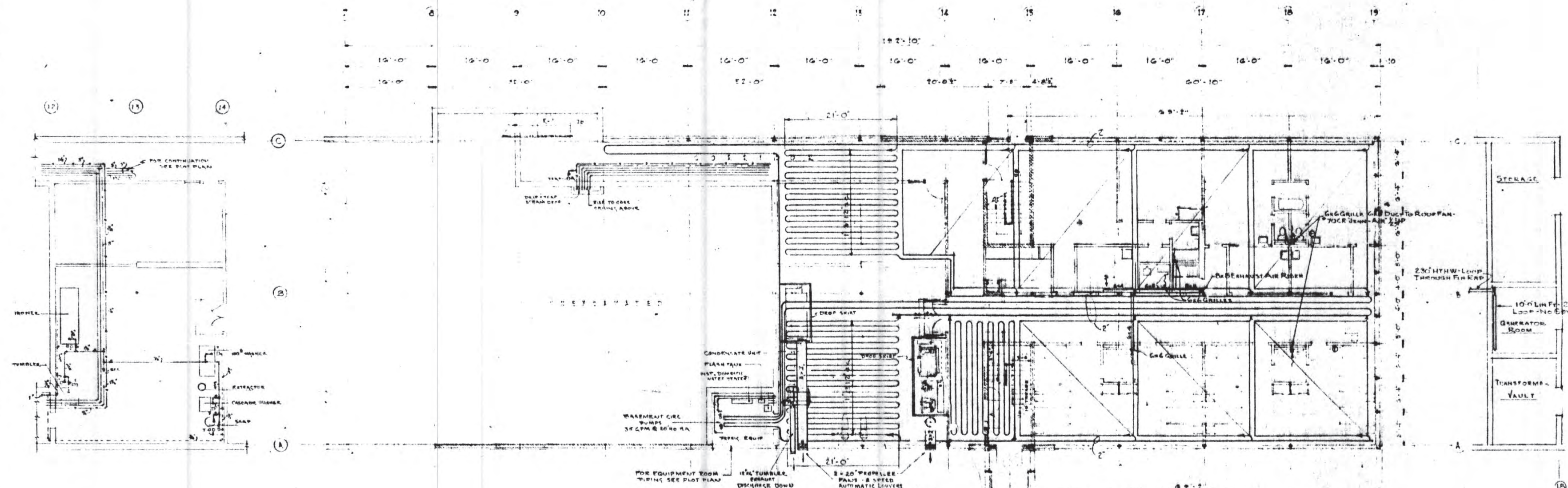
STEVEN R. FUNDERS
 ARCHITECTS
 PORTLAND MAINE

JOB No 5343
 SHEET No
 KM2



FIRST FLOOR & BOILER ROOM

LEGEND
 Hot Water Heating
 High Pressure Steam
 Pumped Return



LEGEND.
 ——— Hot Water Heating.
 ——— High Pressure Steam.
 ——— Pumped Return.

BASEMENT

MAINE SCHOOL FOR THE DEAF
 MACKWORTH ISLAND FALMOUTH MAINE

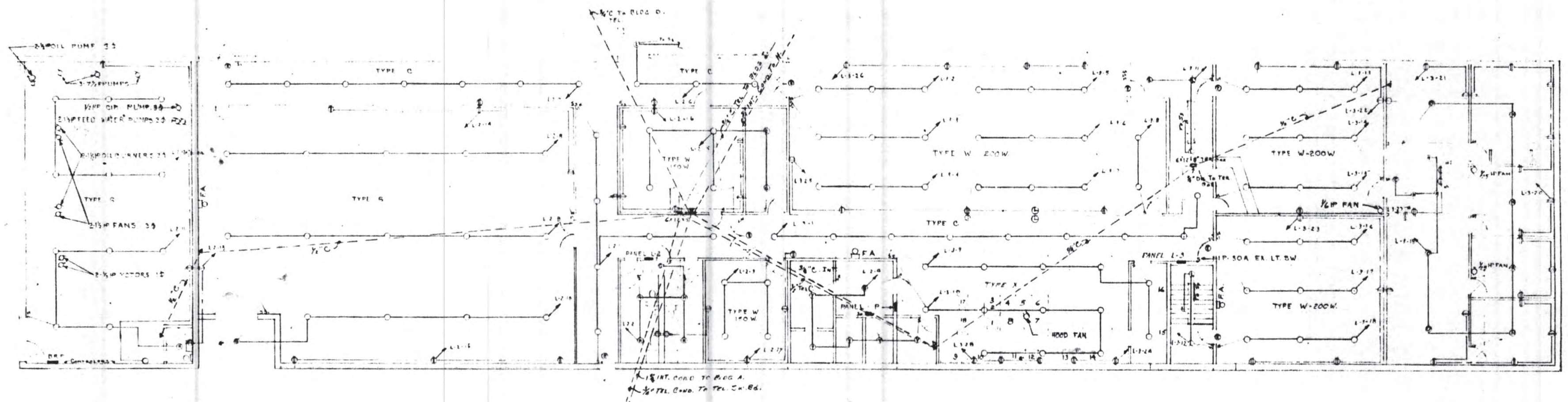
DINING HALL BUILDING
 BASEMENT HEATING & VENTILATION SCALE 1/8" = 1'-0" BLD'G "K"

STEVENS & BOUNDERS
 ARCHITECTS
 PORTLAND MAINE

JER No 5343
 SHEET NO
 KM 4

ISSUED AUG 27 1955

PRINT RECORD
NO WHO DATE



ISSUED AUG 26 1935

MAINE SCHOOL FOR THE DEAF
MACKWORTH ISLAND FALMOUTH MAINE

DINING HALL BUILDING
FIRST FLOOR ELECTRICAL

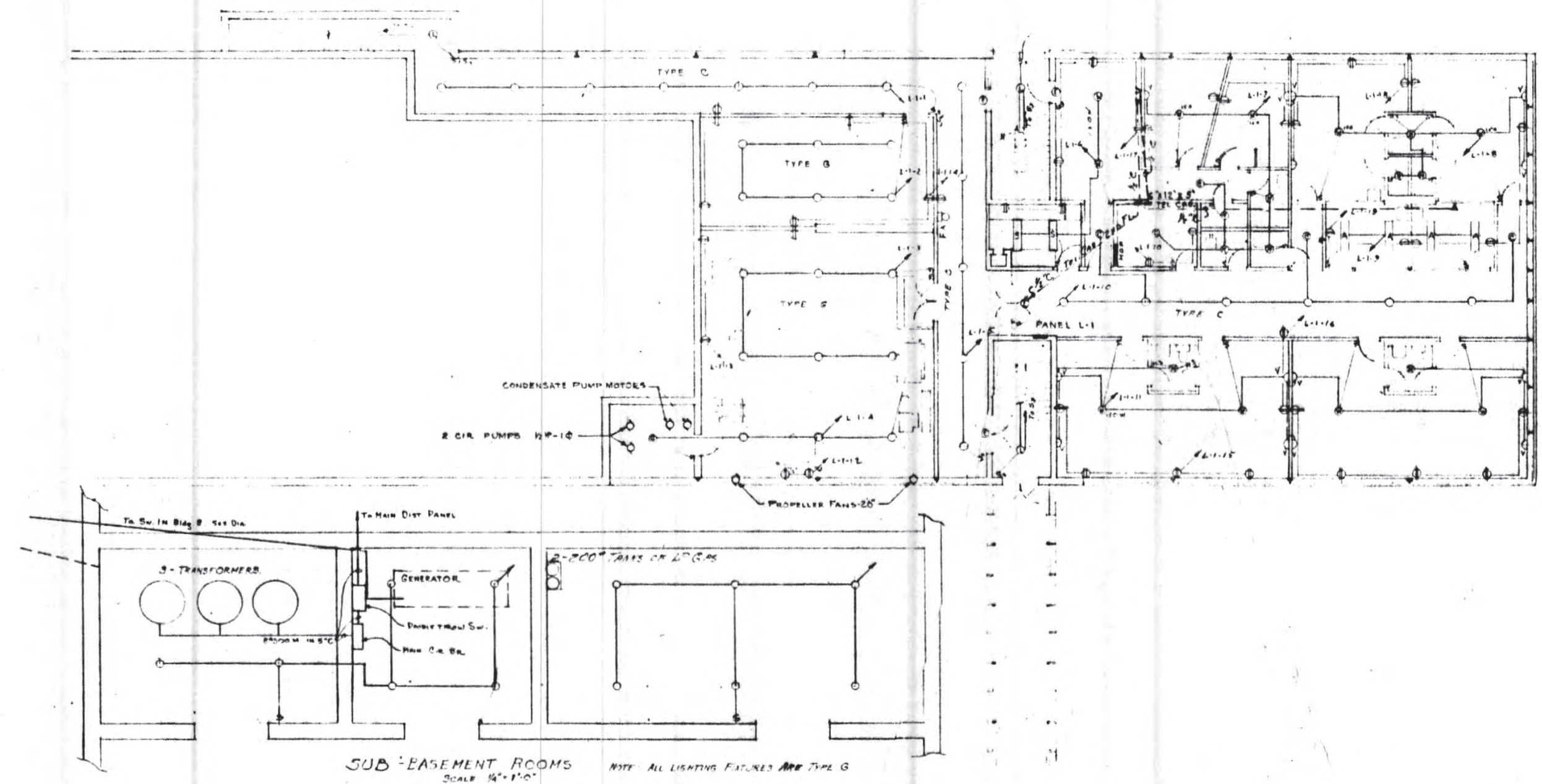
SCALE 1/8" = 1'-0"

BLDG-K

STEVENS and SAUNDERS
ARCHITECTS
PORTLAND MAINE

JOB NO 5343
SHEET NO
KM5

Modified in 1986
NOT CURRENT



PANEL SCHEDULE BLDG. K.

PANEL P-1				
CIRCUIT	DESCRI. POINT	CIR. BR.	WIRE CONC.	
1-2	FRYER	3P-40A	3#6 1"	
3-5	RANGE & BROILER	3P-50A	3#6 1"	
6-7	ROASTER & OVEN	3P-60A	3#6 1"	
8	STEAM KETTLE	2P-30A	2#10 3/4"	
9	STEAM TABLE	2P-30A	2#10 3/4"	
10	HOOD FAN	3P-20A	3#12 3/4"	
11	VEG. PEELER	1P-20A	2#12 1/2"	
12	VEG. CUTTER	1P-20A	2#12 1/2"	
13	MIXER	1P-20A	3#10 3/4"	
14	DISHWASHER	1P-20A	2#10 3/4"	
15	COMPRESSOR (REFRER)	3P-30A	3#10 3/4"	
16	" (40'RM)	3P-30A	3#10 3/4"	
17	FANS	1P-20A	2#10 3/4"	
18-19	WASHING MACHINES	3P-20A	3#10 3/4"	
20	EXTRACTOR	3P-30A	3#10 3/4"	
21	TUMBLER	3P-30A	3#10 3/4"	
22	IRONER	3P-20A	3#12 3/4"	
MAIN DISTRIBUTION PANEL				
1	FEDER. FEEDL P-1	3P-50A	3#6 1"	
2	"	L-1	3P-50A	3#6 1"
3	"	L-2	3P-50A	3#6 1"
4	"	L-3	3P-50A	3#6 1"
PANEL L-1				
1-15	LIGHTING	1P-20A		
20-24	SPARES	1P-20A		
PANEL L-2				
1-17	LIGHTING	1P-20A		
18-24	SPARES	1P-20A		
PANEL L-3				
1-27	LIGHTING	1P-20A		
28-36	SPARES	1P-20A		
BOILER ROOM POWER				
1-3	3-7HP. PUMPS	3P-60A	3#6 1"	
4-9	6-1/2HP. MOTORS	3P-20A	3#12 1/2"	
10-14	MISC. SHAL. EQUIP.	3P-20A	3#12 1/2"	
15-20	MISC. " "	1P-20A	2#12 1/2"	

ISSUED AUG 26 1933



REPORT

24-0493 S

May 17, 2024

Explorations and Geotechnical Engineering Services

Proposed Baxter School for the Deaf Improvements
Mackworth Island
Falmouth, Maine

Prepared For:
Maine Bureau of General Services
Attention: Deane Rykerson
77 State House Station
Augusta, ME 04333

Prepared By:
S. W. Cole Engineering, Inc.
286 Portland Road
Gray, ME 04039
T: 207-657-2866

www.swcole.com | info@swcole.com

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2.1 Explorations	2
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Appendix C	Exploration Logs & Key
Appendix D	Laboratory Test Results
Appendix E	Foundation Test Pit Photographs

24-0493 S

May 17, 2024

Maine Bureau of General Services
Attention: Deane Rykerson
77 State House Station
Augusta, ME 04333

Subject: Explorations and Geotechnical Engineering Services
Proposed Baxter School for the Deaf Improvements
Mackworth Island
Falmouth, Maine

Dear Deane:

In accordance with our Proposal, dated March 18, 2024, and corresponding State of Maine Agreement, dated April 16, 2024, we have performed subsurface explorations for the subject project. This report summarizes our findings and geotechnical recommendations and its contents are subject to the limitations set forth in Appendix A.

1.0 INTRODUCTION

1.1 Scope and Purpose

The purpose of our services was to obtain subsurface information at the site in order to develop geotechnical recommendations relative to foundations and earthwork associated with the proposed construction. Our scope of services included test pit explorations, soils laboratory testing, a geotechnical analysis of the subsurface findings and preparation of this report.

1.2 Site and Proposed Construction

We understand the site is located at the Baxter School for the Deaf campus on Mackworth Island in Falmouth, Maine. The campus includes several educational buildings with associated paved and landscape areas. Existing site grades are generally undulating across the campus.

We understand proposed improvements include two new prefabricated pavilion structures in a relatively flat and level area of abandoned tennis courts in the northeast portion of the campus. We understand each pavilion will measure up to about 20 by 28 feet in plan footprint and are anticipated to be wood-framed structures. Additionally, we understand reconstruction of an existing exterior access ramp on the easterly side of Building “J” is proposed. Grades in this area generally drop to the east, away from Building “J”.

Existing site features are shown on the “Exploration Location Plan” attached in Appendix B.

2.0 EXPLORATION AND TESTING

2.1 Explorations

Six test pits (TP-1 through TP-6) were made at the site on May 10, 2024 by Seaboard Drilling, LLC. The exploration locations were requested by Harriman and established in the field by S. W. Cole Engineering, Inc. (S.W.COLE) using measurements from existing site features. The approximate exploration locations are shown on the “Exploration Location Plan” attached in Appendix B. Logs of the explorations and a key to the notes and symbols used on the logs are attached in Appendix C.

2.2 Testing

Soil samples obtained from the explorations were returned to our laboratory for further classification and testing. The results of one moisture content test are noted on the logs. The results of a grain size analysis are attached in Appendix D.

3.0 SUBSURFACE CONDITIONS

3.1 Soil and Bedrock

Test pits TP-1 through TP-4 were made in the proposed pavilion area. Underlying a surficial layer of topsoil or tennis court pavement, where present, these test pits encountered fill extending to depths ranging from about 1.5 to 2.5 feet below ground surface (bgs). The fill consisted of brown sand with varying portions of silt, gravel, roots, and abandoned wires. A thin buried relic ground surface layer of silty sand with organics was encountered beneath the fill in test pit TP-2. Underlying the fill, the test pits

encountered glacial till consisting of orange-brown to brown silty sand with varying portions of gravel and cobbles. Refusal surfaces (probable bedrock) were encountered in test pits TP-1 and TP-2 at depths of about 4 and 5 feet bgs. Not all of the strata were encountered at each exploration; refer to the attached test pit logs for more detailed subsurface information.

Test pits TP-5 and TP-6 were made along the edge of the existing foundations at the access ramp on Building “J”. Refer to the attached test pit logs and photographs for the findings in these test pits.

3.2 Groundwater

The soils encountered in the explorations were generally damp to moist from the ground surface. Free water and saturated soils were not encountered in the explorations. Long term groundwater information is not available. It should be anticipated that groundwater levels will fluctuate, particularly in response to periods of snowmelt and precipitation, as well as changes in site use.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General Findings

Based on the subsurface findings, the proposed construction appears feasible from a geotechnical standpoint. The principle geotechnical considerations include:

- The explorations encountered topsoil, pavement, fill, relic organics, and loose existing foundation backfill soils, overlying native deposits of glacial till and refusal surfaces (probable bedrock). We recommend all existing organics, pavement, fill, backfill (including foundation backfill), utilities, foundations, and structures be completely removed from beneath new foundations, floor slabs, and hardscaping which may be sensitive to post-construction settlement. Overexcavations should be backfilled with compacted Structural Fill.
- Following removal and replacement of unsuitable soils, support of the proposed structures on spread footing foundations appears suitable. Footings should bear on at least 3-inches of compacted Crushed Stone overlying undisturbed native

non-organic soils or overlying compacted Structural Fill use to backfill overexcavations.

- On-grade floor slabs in heated areas should be underlain by at least 12-inches of compacted Crushed Stone overlying properly prepared subgrades. On-grade floor slabs in unheated areas should be underlain by compacted Structural Fill extending down to design frost depth or to sound intact bedrock, if shallower to reduce potential of frost heave.
- Some of the test pits encountered relatively shallow refusal surfaces (probable bedrock). Additionally, bedrock outcrops are visible across much of Mackworth Island. Depending on design finish grades, bedrock removal may be required for construction. Given the proximity to existing infrastructure, we recommend bedrock be removed by hydraulic hoe-ramming in lieu of blasting.
- Subgrades in portions of the site will consist of sensitive silty native soils. Earthwork and grading activities should occur during drier, non-freezing weather of Spring, Summer and Fall. Rubber tired construction equipment should not operate directly on the native silty soils when wet. Excavation of bearing surfaces should be completed with a smooth-edged bucket to lessen subgrade disturbance.

4.2 Site and Subgrade Preparation

We recommend that site preparation begin with the construction of an erosion control system to protect adjacent drainage ways and areas outside the construction limits. Surficial organics, roots and topsoil should be completely removed from areas of proposed fill and construction. As much vegetation as possible should remain outside the construction areas to lessen the potential for erosion and site disturbance.

The explorations encountered topsoil, pavement, fill, relic organics, and loose existing foundation backfill soils, overlying native deposits of glacial till and refusal surfaces (probable bedrock). We recommend all existing organics, pavement, fill, backfill (including existing foundation backfill), utilities, foundations, and structures be completely removed from beneath new foundations, floor slabs, and hardscaping which may be sensitive to post-construction settlement. Additionally, any loose or weathered bedrock encountered at foundation subgrade should be removed down to sound, intact bedrock.

The extent of removal should extend 1 foot laterally outward from outside edge of perimeter footings for every 1-foot of excavation depth (1H:1V bearing splay). Overexcavations should be backfilled with compacted Structural Fill.

We recommend that footings be excavated using a smooth-edged bucket and that footings be underlain by at least 3 inches of compacted Crushed Stone.

4.3 Excavation and Dewatering

Excavation work will generally encounter existing topsoil, pavement, fill and backfill, native glacial till soils, and potentially bedrock. Care must be exercised during construction to limit disturbance of the bearing soils. Earthwork and grading activities should occur during drier, non-freezing weather of Spring, Summer and Fall. Rubber tired construction equipment should not operate directly on the native silty soils, when wet. Final cuts to subgrade should be performed with a smooth-edged bucket to help reduce strength loss from soil disturbance.

Based on the subsurface findings and depending on design finish grades, we anticipate bedrock removal may be needed for construction. Given the proximity to existing buildings and infrastructure, we recommend bedrock be removed by hydraulic hoe-ramping in lieu of blasting. Pre-construction surveys should be completed on surrounding structures, water supply wells and infrastructure prior to excavating.

Vibrations from construction should be controlled below threshold limits of 0.5 in/sec for structures, water supply wells and infrastructure within 500 feet of the project site. More restrictive vibration limits may be warranted in specific cases with sensitive equipment, historic structures or artifacts on-site or within close proximity.

Sumping and pumping dewatering techniques should be adequate to control groundwater in excavations. Controlling the water levels to at least one foot below planned excavation depths will help stabilize subgrades during construction. Excavations must be properly shored or sloped in accordance with OSHA Regulations to prevent sloughing and caving of the sidewalls during construction. Care must be taken to preclude undermining adjacent structures, utilities and roadways. The design and planning of excavations, excavation support systems, and dewatering is the responsibility of the contractor.

4.4 Foundations

We recommend the structures be supported on spread footings founded on at least 3-inches of compacted Crushed Stone bearing on undisturbed native glacial till, sound intact bedrock, or compacted Structural Fill used to backfill overexcavations down to suitable soils. For foundations bearing on properly prepared subgrades, we recommend the following geotechnical parameters for design consideration:

Geotechnical Parameters for Spread Footings and Foundation Walls	
Design Frost Depth (100 year AFI)	4.5 feet
Net Allowable Soil Bearing Pressure	3.0 ksf
Base Friction Factor	0.35
Total Unit Weight of Backfill	125 pcf
At-Rest Lateral Earth Pressure Coefficient	0.5
Internal Friction Angle of Backfill	30°
Seismic Soil Site Class	C (IBC 2015)
Estimated Total Settlement	1-inch
Differential Settlement	½-inch

4.5 Slab-On-Grade

On-grade floor slabs in heated areas may be designed using a subgrade reaction modulus of 100 pci (pounds per cubic inch) provided the slab is underlain by at least 12-inches of compacted Crushed Stone placed over properly prepared subgrades. On-grade floor slabs in unheated areas should be underlain by compacted non-frost susceptible Structural Fill extending down to design frost depth or to sound intact bedrock if shallower. The structural engineer or concrete consultant must design steel reinforcing and joint spacing appropriate to slab thickness and function, as well as curling and cracking.

We recommend a radon venting system and sub-slab vapor retarder be installed within the Crushed Stone layer recommended beneath floor slabs. The vapor retarder must have a permeance that is less than the floor cover or surface treatment that is applied to the slab. The vapor retarder must have sufficient durability to withstand direct contact with the sub-slab base material and construction activity. The vapor retarder material should be placed according to the manufacturer’s recommended method, including the taping and lapping of all joints and wall connections. The architect and/or flooring consultant should select the vapor retarder products compatible with flooring and adhesive materials.

The floor slab should be appropriately cured using moisture retention methods after casting. Typical floor slab curing methods should be used for at least 7 days. The architect or flooring consultant should assign curing methods consistent with current applicable American Concrete Institute (ACI) procedures with consideration of curing method compatibility to proposed surface treatments, flooring and adhesive materials.

4.6 Fill, Backfill and Compaction

We recommend the following fill and backfill materials: recycled products must also be tested in accordance with applicable environmental regulations and approved by a qualified environmental consultant.

Common Borrow: Fill to raise grades in landscape areas should be non-organic compactable earth meeting the requirements of 2020 MaineDOT Standard Specification 703.18 Common Borrow.

Structural Fill: Fill to raise grades beneath proposed structures, backfill for overexcavations, backfill for foundations, and material below exterior entrances slabs should be clean, non-frost susceptible sand and gravel meeting the gradation requirements for Structural Fill as given below:

Structural Fill	
Sieve Size	Percent Finer by Weight
4 inch	100
3 inch	90 to 100
¾ inch	25 to 90
No. 40	0 to 30
No. 200	0 to 6

Crushed Stone: Crushed Stone used beneath foundations and floor slabs should be washed ¾-inch crushed stone meeting the requirements of 2020 MaineDOT Standard Specification 703.13 Crushed Stone ¾-Inch.

Reuse of Site Soils: The non-organic on-site soils are unsuitable for reuse in building areas but may be suitable for reuse as Common Borrow landscape areas, provided they are at a compactable moisture content at the time of reuse.

Placement and Compaction: Fill should be placed in horizontal lifts and compacted such that the desired density is achieved throughout the lift thickness with 3 to 5 passes of the compaction equipment. Loose lift thicknesses for grading, fill and backfill activities should not exceed 12 inches. We recommend that fill and backfill in building and paved areas be compacted to at least 95 percent of its maximum dry density as determined by ASTM D-1557. Crushed Stone should be compacted with 3 to 5 passes of a vibratory plate compactor having a static weight of at least 500 pounds.

4.8 Weather Considerations

Construction activity should be limited during wet and freezing weather and the site soils may require drying or thawing before construction activities may continue. The contractor should anticipate the need for water to temper fills in order to facilitate compaction during dry weather. If construction takes place during cold weather, subgrades, foundations and floor slabs must be protected during freezing conditions. Concrete and fill must not be placed on frozen soil; and once placed, the concrete and soil beneath the structure must be protected from freezing.

4.9 Design Review and Construction Testing

S.W.COLE should be retained to review the construction documents prior to bidding to determine that our earthwork and foundation recommendations have been properly interpreted and implemented.

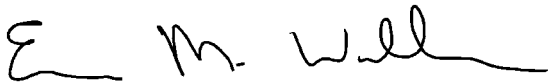
A construction materials testing and quality assurance program should be implemented during construction to observe compliance with the design concepts, plans, and specifications. S.W.COLE is available to observe earthwork activities and the preparation of foundation bearing surfaces, as well as to provide testing and IBC Special Inspection services for soil and concrete construction materials.

5.0 CLOSURE

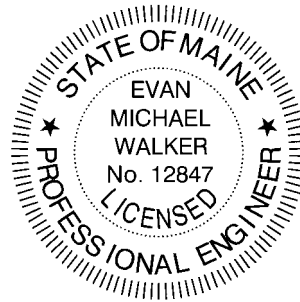
It has been a pleasure to be of assistance to you with this phase of your project. We look forward to working with you during the construction phase of the project.

Sincerely,

S. W. Cole Engineering, Inc.

A handwritten signature in black ink that reads 'E. M. Walker'.

Evan M. Walker, P.E.
Senior Geotechnical Engineer



EMW:tjb

APPENDIX A

Limitations

This report has been prepared for the exclusive use of the Maine Bureau of General Services for specific application to the proposed Baxter School for the Deaf Improvements on Mackworth Island in Falmouth, Maine. S. W. Cole Engineering, Inc. (S.W.COLE) has endeavored to conduct our services in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S.W.COLE's scope of services has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE.

APPENDIX B

Figures



LEGEND

 APPROXIMATE TEST PIT LOCATION

NOTES:

1. EXPLORATION LOCATION PLAN PREPARED FROM ORTHOIMAGERY TITLED "ORTHOREGIONAL2021," PROVIDED BY THE MAINE GEOLIBRARY.
2. THE TEST PITS WERE LOCATED IN THE FIELD BY S. W. COLE ENGINEERING, INC. USING A MAPPING GRADE GNSS RECEIVER.
3. THIS PLAN SHOULD BE USED IN CONJUNCTION WITH THE ASSOCIATED S. W. COLE ENGINEERING, INC. GEOTECHNICAL REPORT.
4. THE PURPOSE OF THIS PLAN IS ONLY TO DEPICT THE LOCATION OF THE EXPLORATIONS IN RELATION TO THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION AND IS NOT TO BE USED FOR CONSTRUCTION.



MAINE BUREAU OF GENERAL SERVICES
EXPLORATION LOCATION PLAN
 PROPOSED BAXTER SCHOOL FOR THE DEAF IMPROVEMENTS
 ANDREWS AVENUE
 FALMOUTH, MAINE

Job No.	24-0493	Scale	1" = 40'
Date:	05/13/2024	Sheet	1

APPENDIX C

Exploration Logs and Key



TEST PIT LOGS

PROJECT NO.: 24-0493
 LOGGED BY: Evan Walker
 CONTRACTOR: Seaboard Drilling
 EQUIPMENT: Bobcat E42 Excavator

CLIENT: Maine Bureau of General Services
 PROJECT: Proposed Baxter School for the Deaf Improvements
 LOCATION: Andrews Avenue, Falmouth, ME

TEST PIT TP-1

DATE: 5/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 5.3
 WATER LEVEL DEPTHS (FT): Soils Damp, No Free Water Observed REMARKS:

Depth (feet)	Graphic Log	Stratum Description	H ₂ O Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
0.3		Vegetation / Topsoil (FILL)					
1.6		Brown, SAND, some silt, trace gravel, with roots (FILL)					
5.0		Brown, silty SAND, some gravel, with occasional cobbles (Till)					
5.0		Weathered Bedrock					

Refusal at 5.3 feet
 Probable Bedrock

TEST PIT TP-2

DATE: 5/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 4.2
 WATER LEVEL DEPTHS (FT): Soils Moist, No Free Water Observed REMARKS:

Depth (feet)	Graphic Log	Stratum Description	H ₂ O Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
0.3		3" Tennis Court Pavement					
1.8		Brown, gravelly SAND, trace silt (FILL)					w = 2.5 %
2.0		Dark brown, silty SAND, with organics (RELIC GROUND SURFACE)					
4.0		Orange-brown to brown, silty SAND, some gravel, with occasional cobbles (Till)					
4.0		Weathered Bedrock					

Refusal at 4.2 feet
 Probable Bedrock

TEST PIT 24-0493.GPJ SWCE TEMPLATE.GDT 5/17/24

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:

- Water Level
- At time of Digging
- At Completion of Digging
- After Digging

q_p = Pocket Penetrometer Strength, kips/sq.ft.



TEST PIT LOGS

PROJECT NO.: 24-0493
 LOGGED BY: Evan Walker
 CONTRACTOR: Seaboard Drilling
 EQUIPMENT: Bobcat E42 Excavator

CLIENT: Maine Bureau of General Services
 PROJECT: Proposed Baxter School for the Deaf Improvements
 LOCATION: Andrews Avenue, Falmouth, ME

TEST PIT TP-3

DATE: 5/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 5.0
 WATER LEVEL DEPTHS (FT): Soils Damp, No Free Water Observed REMARKS:

Depth (feet)	Graphic Log	Stratum Description	H ₂ O Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
1.5		Brown, silty SAND, some gravel, with roots (FILL)					
		Abandoned wires at 1.5'					
5		Brown, gravelly silty SAND, with occasional cobbles (Till)					

Bottom of Exploration at 5.0 feet

TEST PIT TP-4

DATE: 5/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 7.5
 WATER LEVEL DEPTHS (FT): Soils Moist, No Free Water Observed REMARKS:

Depth (feet)	Graphic Log	Stratum Description	H ₂ O Depth	Sample No.	Type	Sample Depth (ft)	Field / Lab Test Data
0.3		3" Tennis Court Pavement					
		Brown, gravelly SAND, trace silt (FILL)					
2.5		Orange-brown to brown, silty gravelly SAND, with occasional cobbles (Till)					

Bottom of Exploration at 7.5 feet

TEST PIT 24-0493.GPJ SWCE TEMPLATE.GDT 5/17/24

Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:
 Water Level
 ▽ At time of Digging
 ▼ At Completion of Digging
 ▾ After Digging

q_p = Pocket Penetrometer Strength, kips/sq.ft.



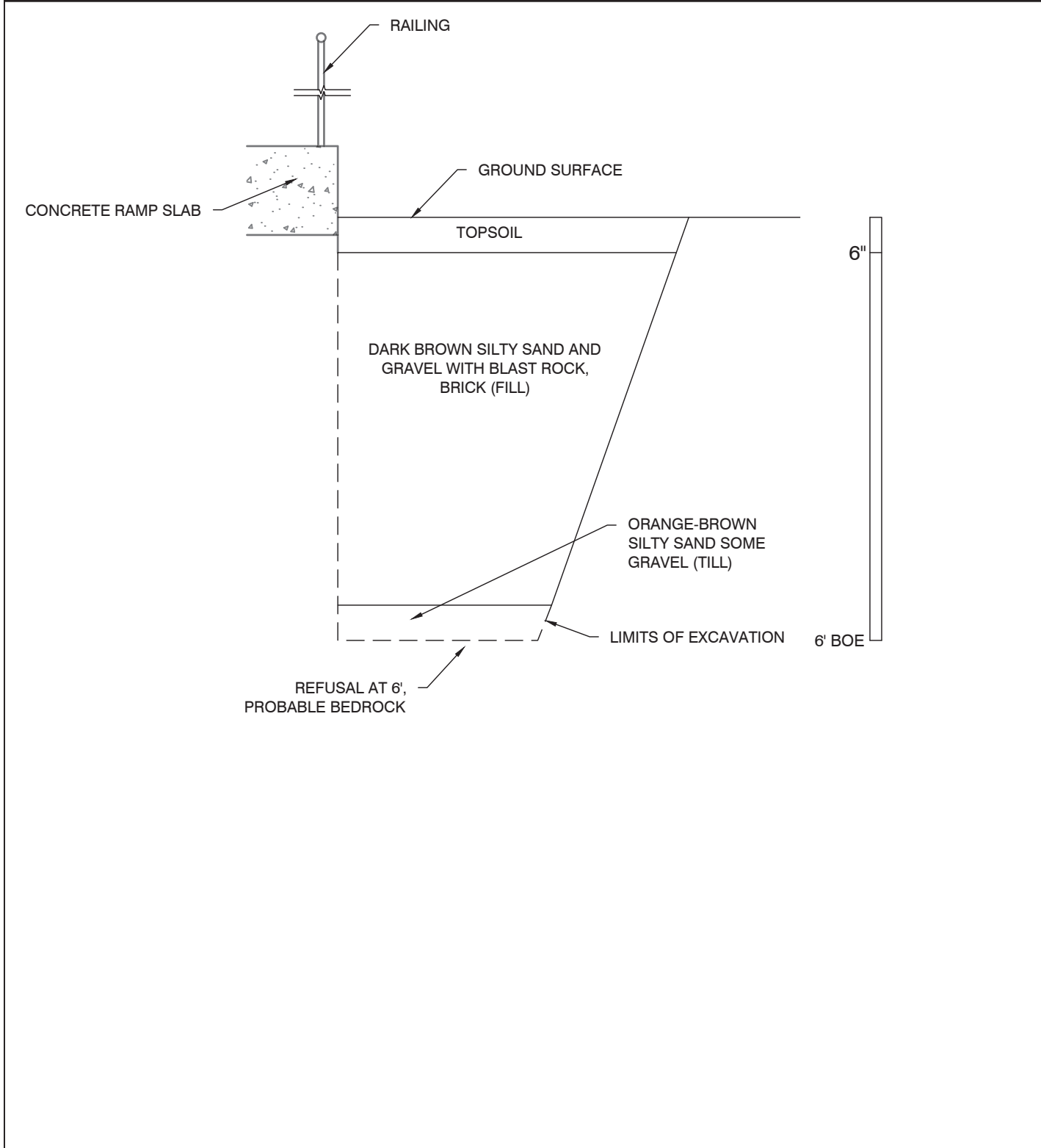
TEST PIT LOG

PROJECT NO.: 24-0493
 LOGGED BY: Evan Walker
 CONTRACTOR: Seaboard Drilling, LLC
 EQUIPMENT: Bobcat E42

CLIENT: Maine Bureau of General Services
 PROJECT: Proposed Baxter School for the Deaf Improvements
 LOCATION: Andrews Avenue, Falmouth, Maine

TEST PIT TP-5

DATE: 5/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 6.0'
 WATER LEVEL DEPTHS (FT): No Free Water Observed



Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:
 Water Level
 ▽ At time of Digging
 ▼ At Completion of Digging
 ▾ After Digging

qp = Pocket Penetrometer Strength, kips/sq.ft.
 G.S. = G.S.
 BOE = Bottom of Exploration



TEST PIT LOG

PROJECT NO.: 24-0493

LOGGED BY: Evan Walker

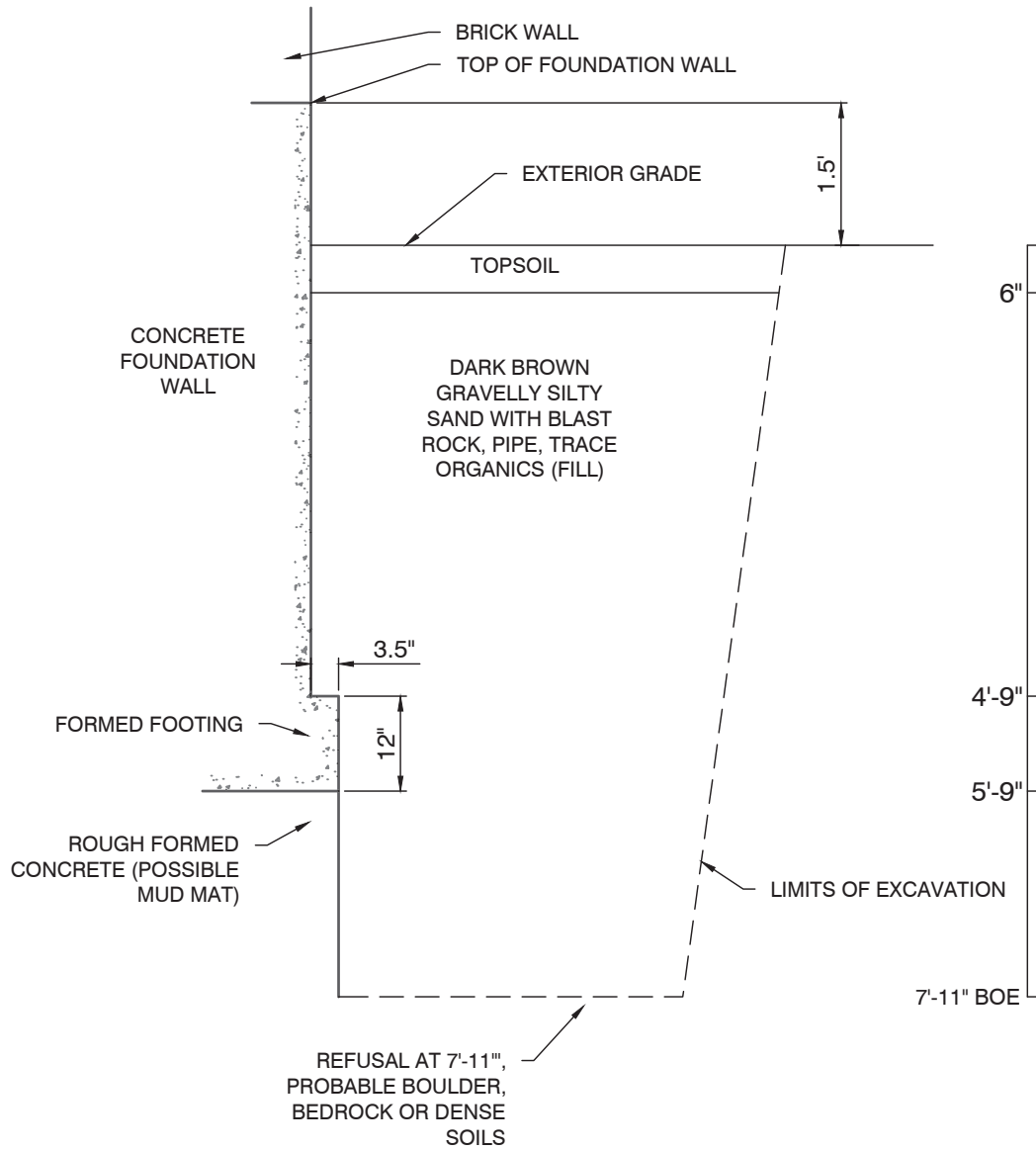
CLIENT: Maine Bureau of General Services
PROJECT: Proposed Baxter School for the Deaf Improvements
LOCATION: Andrews Avenue, Falmouth, Maine

CONTRACTOR: Seaboard Drilling, LLC
EQUIPMENT: Bobcat E42

TEST PIT TP-6

DATE: 05/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 7'-11"
WATER LEVEL DEPTHS (FT): No Free Water Observed

AT BUILDING J FOUNDATION



Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:
 Water Level
 At time of Digging
 At Completion of Digging
 After Digging

qp = Pocket Penetrometer Strength, kips/sq.ft.
G.S. = G.S.
BOE = Bottom of Exploration



TEST PIT LOG

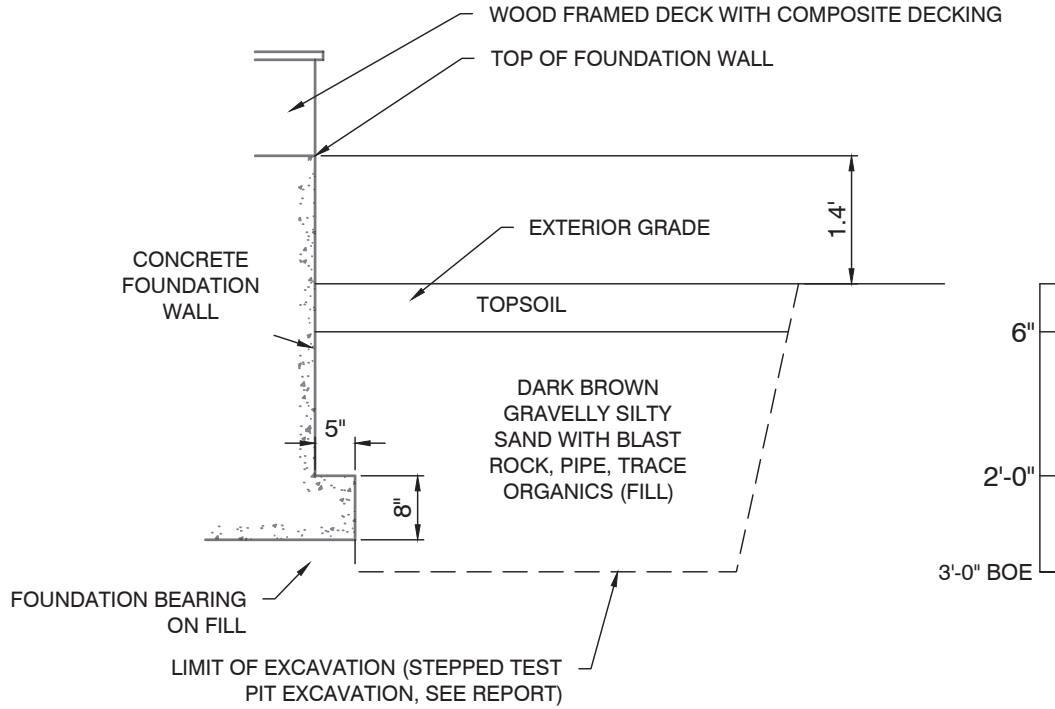
PROJECT NO.: 24-0493
 LOGGED BY: Evan Walker
 CONTRACTOR: Seaboard Drilling, LLC
 EQUIPMENT: Bobcat E42

CLIENT: Maine Bureau of General Services
 PROJECT: Proposed Baxter School for the Deaf Improvements
 LOCATION: Andrews Avenue, Falmouth, Maine

TEST PIT TP-6

DATE: 05/10/2024 LOCATION: See Exploration Location Plan SURFACE ELEVATION (FT): N/A COMPLETION DEPTH (FT): 3.0'
 WATER LEVEL DEPTHS (FT): No Free Water Observed

AT RAMP FOUNDATION



Stratification lines represent approximate boundary between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

KEY TO NOTES AND SYMBOLS:
 Water Level
 ▽ At time of Digging
 ▼ At Completion of Digging
 ▾ After Digging

qp = Pocket Penetrometer Strength, kips/sq.ft.
 G.S. = G.S.
 BOE = Bottom of Exploration

KEY TO NOTES & SYMBOLS
Test Boring and Test Pit Explorations

Stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w	-	water content, percent (dry weight basis)
q _u	-	unconfined compressive strength, kips/sq. ft. - laboratory test
S _v	-	field vane shear strength, kips/sq. ft.
L _v	-	lab vane shear strength, kips/sq. ft.
q _p	-	unconfined compressive strength, kips/sq. ft. – pocket penetrometer test
O	-	organic content, percent (dry weight basis)
W _L	-	liquid limit - Atterberg test
W _P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass.
γ _T	-	total soil weight
γ _B	-	buoyant soil weight

Description of Proportions:

Trace:	0 to 5%
Some:	5 to 12%
“Y”	12 to 35%
And	35+%
With	Undifferentiated

Description of Stratified Soils

Parting:	0 to 1/16” thickness
Seam:	1/16” to 1/2” thickness
Layer:	½” to 12” thickness
Varved:	Alternating seams or layers
Occasional:	one or less per foot of thickness
Frequent:	more than one per foot of thickness

REFUSAL: Test Boring Explorations - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: Test Pit Explorations - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.

APPENDIX D

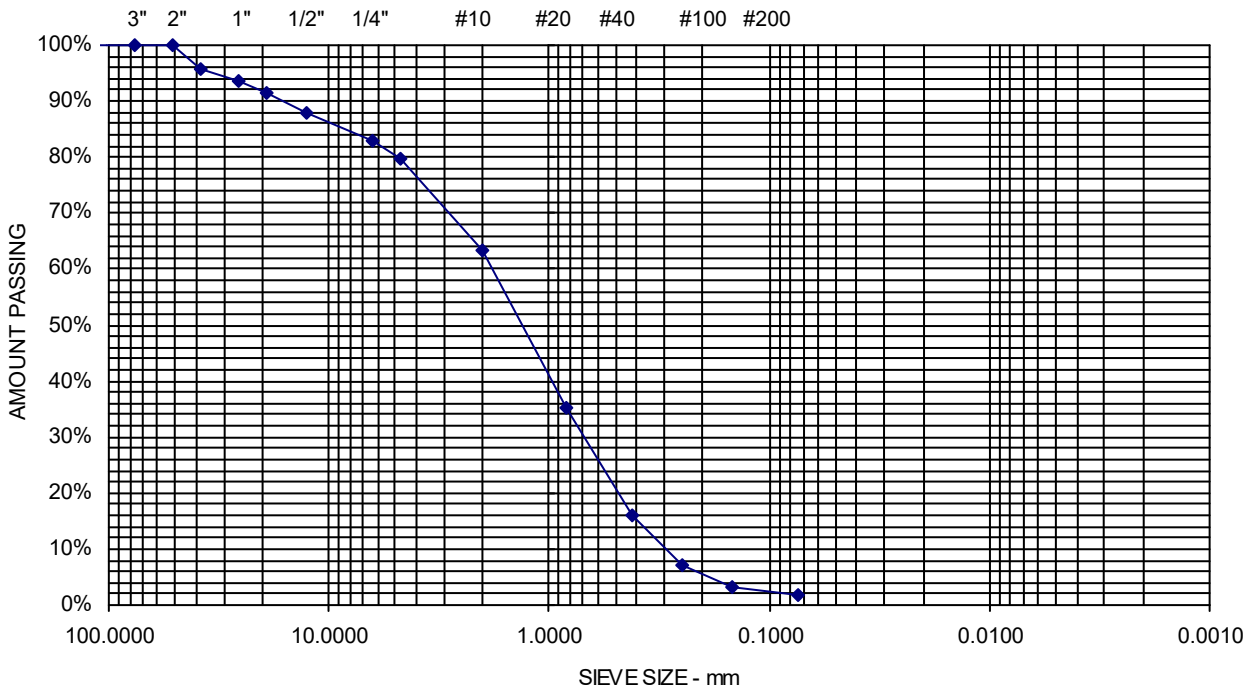
Laboratory Test Results

Project Name FALMOUTH ME - PROPOSED BAXTER SCHOOL FOR THE DEAF
BUILDING ADDITIONS - GEOTECHNICAL ENGINEERING SERVICES
Client GENERAL SERVICES ADMINISTRATION

Project Number 24-0493
Lab ID 31691G
Date Received 5/14/2024
Date Completed 5/16/2024
Tested By NAOMI MULLER

Material Source **TP-2, 1-1.5**

<u>STANDARD DESIGNATION (mm/μm)</u>	<u>SIEVE SIZE</u>	<u>AMOUNT PASSING (%)</u>	
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	96	
25.0 mm	1"	94	
19.0 mm	3/4"	91	
12.5 mm	1/2"	88	
6.3 mm	1/4"	83	
4.75 mm	No. 4	80	20.4% Gravel
2.00 mm	No. 10	63	
850 um	No. 20	35	
425 um	No. 40	16	77.8% Sand
250 um	No. 60	7	
150 um	No. 100	3	
75 um	No. 200	1.7	1.7% Fines



APPENDIX E

Foundation Test Pit Photographs



TEST PIT TP-5



TEST PIT TP-5



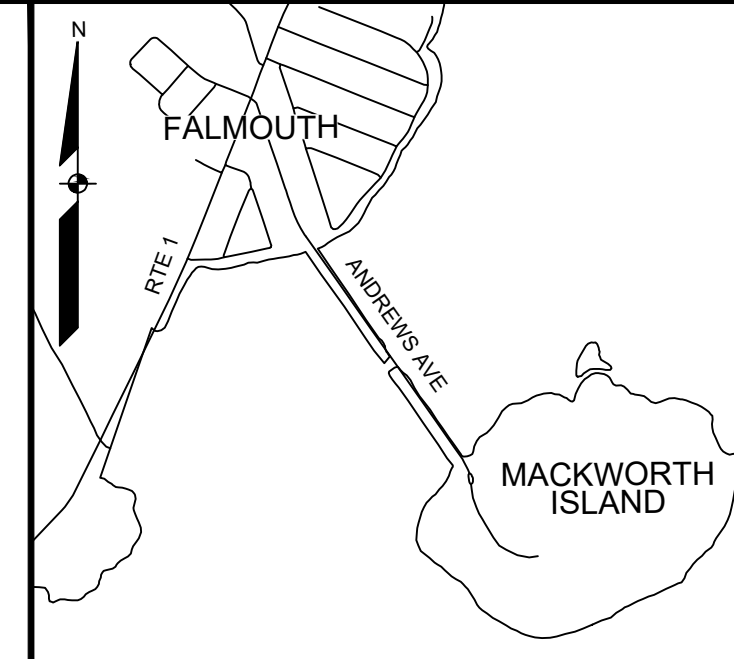
TEST PIT TP-6



TEST PIT TP-6



MACWORTH ISLAND PROJECT LAYOUT
NOT TO SCALE



LOCATION MAP

220594.dwg, TAB:NSE Sh. 1

DESIGNED	-
DRAWN	JMC/CNG
CHECKED	NSE
DATE	11/15/22
SCALE	NONE
PROJECT	220594

EXISTING CONDITIONS SURVEY
OF: MACWORTH ISLAND TRAIL LOOP
 ANDREWS AVENUE CAUSEWAY
 FALMOUTH, MAINE 04105
FOR: HARRIMAN
 23 HARRIMAN DRIVE
 AUBURN, MAINE 04210

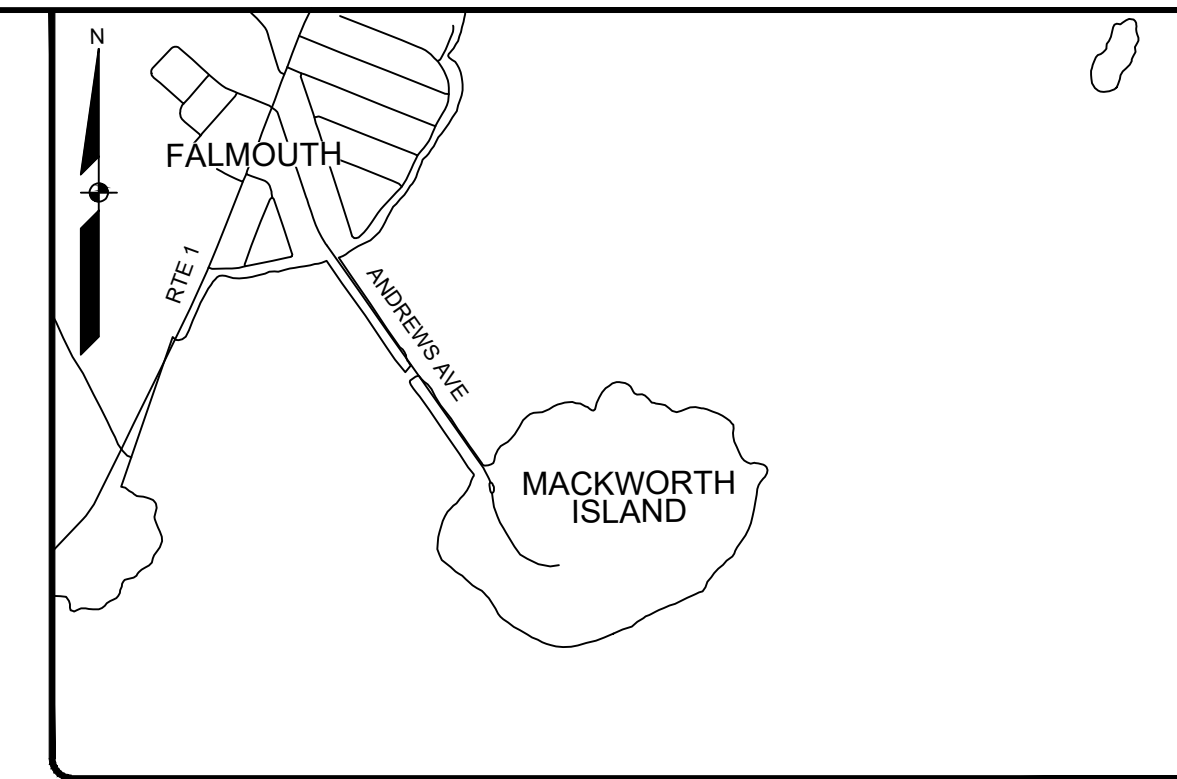
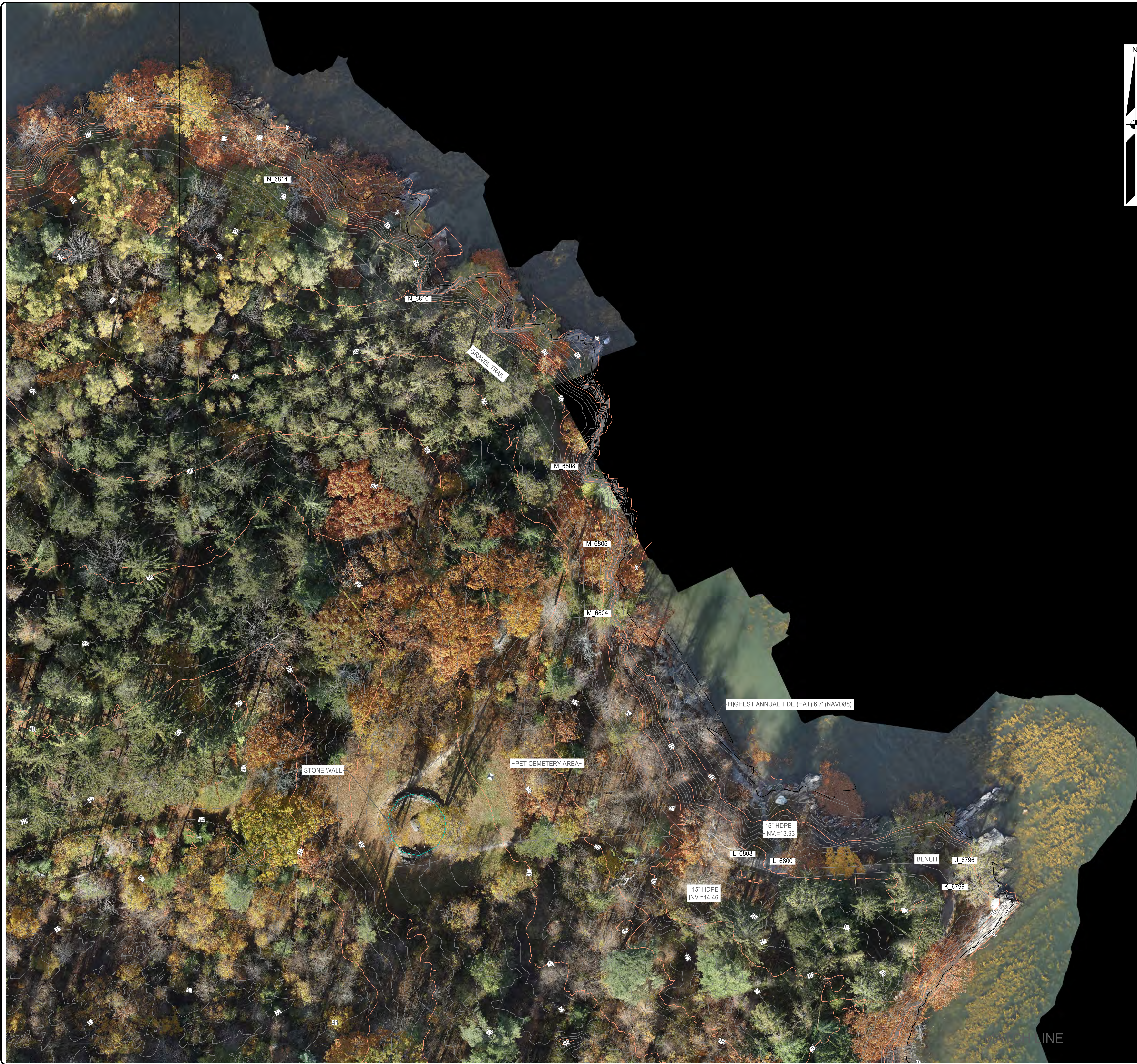
SEBAGO
 TECHNICALS
SEBAGOTECHNICALS.COM
 75 John Roberts Rd, Suite 41A
 South Portland, ME 04106
 207-200-2100
 South Portland, Bridgton, Sanford and Bath

REV	BY	DATE	STATUS
1	NSE	02/10/2023	ISSUED TO CLIENT

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NICHOLAS S. ELLISTON, PLS 2518

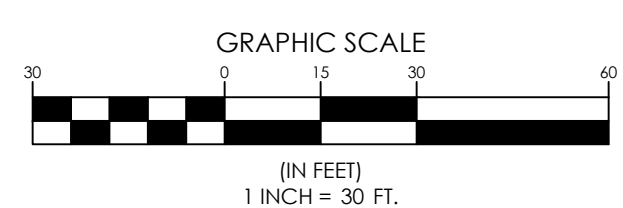
PLS OR PE



LOCATION MAP

LEGEND

- DECIDUOUS TREE
- STUMP
- SIGN
- BENCH
- CONTOURS
- WATER GATE VALVE
- WATER SHUT OFF
- HYDRANT
- WATER
- SANITARY MANHOLE
- SANITARY SEWER
- STORM DRAIN
- DRAINAGE MANHOLE
- CATCH BASIN
- CULVERT
- TRANSFORMER PAD
- LIGHT POLE
- UTILITY POLE
- GUY WIRE
- UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC
- GAS
- BOULDER
- PHOTO LOCATION
- SURVEY CONTROL



NICHOLAS S. ELLISTON, PLS 2518	
PLS OR PE	

REV	BY	DATE	STATUS
NSE		02/10/2023	ISSUED TO CLIENT
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SEBAGO
T E C H N I Q S

SEBAGOTECHNIQS.COM
75 John Roberts Rd, Suite 4A
South Portland, ME 04106
207-209-7100

South Portland, Bridgton, Sanford and Bath

EXISTING CONDITIONS SURVEY
OF:
MACKWORTH ISLAND TRAIL LOOP
ANDREWS AVENUE CAUSEWAY
FALMOUTH, MAINE 04105

FOR:
HARRIMAN
23 HARRIMAN DRIVE
ALBURN, MAINE 04210

DESIGNED	
DRAWN	JMC
CHECKED	NSE
DATE	11/15/22
SCALE	1" = 30'
PROJECT	220594

220594.dwg, TAB:NSE Sh. 4