GWINNETT COUNTY
DEPARTMENT OF FINANCIAL SERVICES
PURCHASING DIVISION

75 Langley Drive | Lawrenceville, GA 30046-6935
O: 770.822.8720 | F: 770.822.8735
GwinnettCounty.com

January 9, 2026

ADDENDUM #2
BL016-26, Library Administration Headquarters Renovation Project

This Addendum forms a part of the Contract Documents and Construction Drawings and modifies the original Bid Documents for the above-referenced project.

REVISIONS (SPECIFICATIONS):

RS1. A REVISED BIDDING FORM is included as an attachment to this addendum. Bidders must submit their bids on the revised bidding form.

RS2. Section 07 01 50 [Preparation for Re-Roofing]: Refer to attached specifications 07 01 50 [Preparation for Re-Roofing], dated January 9, 2026, for revisions in BOLD text.

RS3. Section 27 40 00 [Audio Visual Systems]: Refer to attached specifications 27 40 00 [Audio Visual Systems], dated January 9, 2026, for revisions in BOLD text.

RS4. Section 21 22 00 [Clean Agent Fire Extinguishing Systems]: Refer to attached specifications 21 22 00 [Clean Agent Fire Extinguishing Systems], dated January 9, 2026, for revisions in BOLD text.

REVISIONS (DRAWINGS):

RD1. Refer to enclosed revised drawing sheet C1.01 with latest revision date of 01/09/2026 for revisions in clouded area.

RD2. Refer to enclosed revised drawing sheet C4.01 with latest revision date of 01/09/2026 for revisions in clouded area.

RD3. Refer to enclosed revised drawing sheet C5.01 with latest revision date of 01/09/2026 for revisions in clouded area.

RD4. Refer to enclosed revised drawing sheet A2.01 with latest revision date of 01/09/2026 for revisions in clouded area.

RD5. Refer to enclosed revised drawing sheet A2.02 with latest revision date of 01/09/2026 for revisions in clouded area.

RD6. Refer to enclosed revised drawing sheet A4.02 with latest revision date of 01/09/2026 for revisions in clouded area.

RD7. Refer to enclosed revised drawing sheet A9.61 with latest revision date of 01/09/2026 for revisions in clouded area.

RD8. Refer to enclosed revised drawing sheet A9.62 with latest revision date of 01/09/2026 for revisions in clouded area.

RD9. Refer to enclosed revised drawing sheet A10.02 with latest revision date of 01/09/2026 for revisions in clouded area.

RD10. Refer to enclosed revised drawing sheet A11.00 with latest revision date of 01/09/2026 for revisions in clouded area.

RD11. Refer to enclosed revised drawing sheet PD1.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD12. Refer to enclosed revised drawing sheet P1.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD13. Refer to enclosed revised drawing sheet P4.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD14. Refer to enclosed revised drawing sheet P6.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD15. Refer to enclosed revised drawing sheet M0.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD16. Refer to enclosed revised drawing sheet M1.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD17. Refer to enclosed revised drawing sheet M5.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD18. Refer to enclosed revised drawing sheet M6.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD19. Refer to enclosed revised drawing sheet M7.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD20. Refer to enclosed revised drawing sheet E1.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD21. Refer to enclosed revised drawing sheet E2.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD22. Refer to enclosed revised drawing sheet E4.01with latest revision date of 01/09/2026 for revisions in clouded area.

RD23. Refer to enclosed revised drawing sheet E5.02 with latest revision date of 01/09/2026 for revisions in clouded area.

RD24. Refer to enclosed revised drawing sheet E6.02 with latest revision date of 01/09/2026 for revisions in clouded area.

RD25. Refer to enclosed revised drawing sheet FA0.01 with latest revision date of 01/09/2026 for revisions in clouded area.

RD26. Refer to enclosed revised drawing sheet AV-301 with latest revision date of 01/09/2026 for revisions in clouded area.

RD27. Refer to enclosed revised drawing sheet AV-401 with latest revision date of 01/09/2026 for revisions in clouded area.

RD28. Refer to enclosed revised drawing sheet AV-501 with latest revision date of 01/09/2026 for revisions in clouded area.

CLARIFICATIONS:

C1. The bidding form has been revised to correct a clerical error. Refer to the attached REVISED BIDDING FORM.

C2. Gwinnett County retained United Consulting to test samples of black floor mastic for the presence of asbestos fibers. The analysis determined that regulated concentrations of asbestos fibers were not detected. Please refer to the enclosed Limited Asbestos Survey Report prepared by United Consulting, dated January 8, 2026, for additional information.

C3. Refer to enclosed existing building design intent drawing sheets A-2, A-3, and A-15, dated 12/09/1988, for illustration of the exterior doors and windows requiring re-sealing and re-painting of steel lintels. Refer to the General Notes 16 and 17 on drawing sheet A2.02 for additional information.

QUESTIONS & ANSWERS:

Q1. Paragraph 1.8 MAINTNANCE MATERIALS SUBMITTALS. It has been our experience that the end user does not want these Items, and that they represent an unnecessary additional cost. Are Maintenance Materials to be included in the Base Bid, or will be allowed to show them as an Add Alternate?

A1. We understand the question refers to the specification section 21 22 00 paragraph 1.8. If so, please include items specified in the base bid.

Q2. Paragraph 2.1 CLEAN-AGENT SYSTEMS Item B under this section calls out protection of the room cavity above and below the ceiling, and below the raised floor as separate Zones. Zoning of this type is not allowed by NFPA 2001, "Standard on Clean Agent Extinguishing Systems". Also, there are no raised access floors in the IT Lab or MDF Room. Are we to include Clean Agent protection of the area above the ceilings in the IT Lab and MDF Room?

A2. There is an existing raised floor in the Library IT Lab. We understand the question refers to the specification section 21 22 00 paragraph 2.1. If so, Contractor shall provide protection coverage within the room and below the floor.

Q3. Paragraph 2.9 CONTROL PANELS Item F under this section calls out a Graphic Annunciator Panel. This Graphic Annunciator is also called out in Paragraph 2.14 ANNUCIATOR PANEL and

one would be required for the IT Lab and the MDF Room. These rooms are small and the number of annunciated devices is limited, which calls into question the cost/benefit aspect of this requirement. Are we to include the cost of a Graphic Annunciator Panel for the IT Lab and MDF Room in the Base Bid, or will be allowed to show them as an Add Alternate?

A3. We understand the question refers to the specification section 21 22 00 paragraph 2.9. If so, please include them in the base bid.

Q4. Paragraph 2.15 DIGITAL ALARM COMMUNICATOR TRANSMITTER The function of a Digital Alarm Transmitter Communicator is to provide for reporting of Alarm and Trouble conditions to an off-site Central Monitoring Station. The Fire Alarm System for the building already has this functionality, and the Clean Agent Panels will be monitored by the building Fire Alarm Panel, so this seems to be an unnecessary duplication/expense. Are we to include the cost of a Digital Alarm Communicator Transmitter for the IT Lab and MDF Room in the Base Bid, or will be allowed to show them as an Add Alternate?

A4. We understand the question refers to the specification section 21 22 00 paragraph 2.15. Paragraph 2.15 is deleted from the specifications. Refer to the enclosed revised specification section.

Q5. May we know the full height to deck of the Library Administration Headquarters Renovation Project?

A5. Please refer to the supplemental drawing ASD-01, issued in Addendum No. 1, for approximate deck heights per the original building construction documents. Contractor shall field verify for more accurate as-built information.

Q6. I've been informed that WT-3, ROCA Suite Couvet Blanco has been discontinued. Please let me know if you have a replacement selected for this material, or if you'd like me to include an allowance instead.

A6. Please refer to revisions to WT-3 and WT-2 in the Materials Finish Schedule on enclosed sheet A11.00

Q7. For the restroom wall tile, I see that there are 2 tiles called out in the Finish Schedule. I see the elevations for Wet Walls (WT-3), and that tile extends to the ceiling height. I do not see that same information for the non-wet walls. Are we to follow the same guidance for those that are to receive WT-2?

A7. All restroom walls to receive full height tile.

Q8. Please clarify which manufacturers are allowed for the DDC controls system. Per 23 09 00 – 1.1 F. – It appears Trane is the only approved manufacturer/installer, however 23 09 00 – 2.1 F. lists additional manufacturers/installers.

A8. Due to compatibility with existing BMS monitoring, Trane-only is desired. Disregard other manufacturers listed in 2.1.

Q9. With the second jobsite visit scheduled for Jan 8th, can the RFI deadline be extended to Jan 9th in case any additional issues arise from the site visit?

A9. No, it will not be extended.

Q10. What Landscaping scope of work (if any) is required? It is not shown on plans.

A10. Landscaping is not in the project scope.

Q11. Is the Pre-Fab Metal Storage Shed part of the GCs scope of work on this project? If so, please provide additional specifications.

A11. No, it was removed in Addendum No. 1.

Q12. Please provide specs for the Demountable Partitions.

A12. Detail 10/A4.02 has been revised to include more information, and a new detail has been added to A9.62 to provide additional information about the demountable partition.

Q13. Please confirm the anticipated start date of the project.

A13. The County anticipates award of the contract in early February or early March 2026. As such, the County anticipates a Notice to Proceed in mid-March or mid-April 2026, depending on when Board of Commissioners approval is obtained.

Q14. [Fire Alarm, Electrical Notes vs Specs Section 28 46 21.11]: The electrical notes require removal of all existing fire alarm devices back to source and provide a new FACP, while the fire alarm specification indicates that new components shall operate as an extension of the existing system and that existing equipment shall be maintained operational until new equipment is tested and accepted. Please confirm whether the project intent is (1) full replacement of the fire alarm system including a new FACP and devices, or (2) extension/partial modification of the existing system, and identify what existing equipment (if any) is to remain.

A14. Intent is FULL REPLACEMENT.

Q15. [Fire Alarm, Sequence of Operations Matrix]: The fire alarm specification repeatedly states to "refer to drawings for specific Sequence of Operations Matrix," but the electrical notes state the fire alarm drawings are schematic and show minimal devices, and the bid set does not clearly present a project-specific input/output cause-and-effect matrix for integrated functions (door releases, HVAC shutdown, smoke control references, etc.). Please provide the required Sequence of Operations Matrix (cause-and-effect) that governs all required interfaces and outputs for this project, including any required door hardware releases, HVAC shutdown points, and any emergency shutoff functions.

A15. Fire Alarm Matrix is added. Please refer to the enclosed revised drawing sheet FA0.01.

Q16. [Arch Sheet A3.14 – Typical Roof Details; Specs Vol II, Section 07 54 19] Sheet A3.14 defines the typical method for localized existing roof deck repair as part of the new roofing assembly. However, the Contract Documents do not define the quantitative limits of deck repair included in the Base Bid. Please confirm that roof deck repairs are limited to localized preparation as shown on A3.14, and that any widespread or deteriorated deck conditions beyond this typical detail are excluded from the Base Bid and to be addressed by allowance or change order if encountered.

A16. These allowances are defined in specification 01 21 00 "Allowances." The quantity of Allowance No. 7 is missing and has been corrected to 150 screws as part of this addendum. Please refer to the enclosed specification section 07 01 50.

Q17. [Low Voltage, Device/Equipment List]: The low voltage plan includes a device/equipment list with quantities (switches, UPS, WAPs, etc.), but procurement responsibility (owner-furnished vs contractor-furnished) is not explicitly stated in the excerpted schedule. Please confirm whether the listed low voltage equipment is contractor-furnished/installed or owner-furnished with contractor installation only, and identify any County-provided standards for acceptable manufacturers/models.

A17. The General Contractor shall be responsible for furnishing and installing the equipment listed for both the Library and the County.

Q18. [Addendum 1, Fire Protection scope and permitting]: Fire protection permitting, plan review, inspections, and acceptance testing responsibilities are not clearly assigned for sprinkler modifications and any new underground fire service. Please confirm responsibility for permitting, submissions, fees, inspections, flushing, hydrostatic testing, and final acceptance documentation.

A18. All shall be the General Contractor's responsibility.

Q19. [Section 07 01 50 deck repair and abandoned opening requirements]: The specifications reference steel deck replacement methods and conditions, but the drawings do not quantify abandoned openings or provide a deck penetration survey. Please confirm whether deck opening repairs and steel deck replacement are to be carried as an allowance or unit-price item, and provide basis quantities or a roof deck opening schedule for bidding.

A19. The size and locations of abandoned penetrations are indicated on the mechanical drawings for the project. All required deck repairs associated with abandoned penetrations shall be included in the Base Bid.

Q20. [Civil paving work, Addendum 1 Q and A related to milling and overlay]: Milling and overlay thickness is referenced, but the full limits, tie-ins, and base repair assumptions are not clearly defined for bidding. Please confirm the full limits of milling and overlay, tie-in requirements, and whether any base repairs or subgrade remediation are included or excluded.

A20. The limits of each repair are indicated by the hatch pattern shown in the legend on the Pavement Plan. The tie-in location at Lawrenceville Highway is shown as revised on the Pavement Plan. Areas of asphalt pavement removal and replacement shall be full-depth repairs, including base and subgrade remediation, to ensure proper subgrade compaction, as revised on Detail Sheet C4.01 enclosed.

Q21. On Sheet E1.01 the symbol MA is directing to 4 sets of fixtures in conference room 511. What is MA?

A21. MA is not an electrical item and has been removed. Refer to the enclosed revised drawing.

Q22. The note at the bottom of the electrical fixture schedule is obscuring the fixture type and description. Please clarify.

A22. Footnote has been removed. Refer to the enclosed revised electrical drawing.

Q23. The one-line drawings for the Conference Rooms show that the Basis of Design is Cisco, but the specifications call for Poly as the Basis of Design. Please confirm that Cisco is the Basis of Design for the Conference Rooms. (AV-401).

A23. Per county standard, only Cisco equipment is used. Refer to revised specifications.

Q24. The one-line drawings show that the Basis of Design is the Samsung QB Series for displays, but the specifications call for the Samsung QM Series. Please clarify which series is desired. (AV-401).

A24. The layer in the one-line drawings with the model number was inadvertently left on. The specification is correct. Refer to the enclosed revised drawing.

SUBSTITUTION REQUESTS:

SR1. Section Number 09 84 33 Sound-Absorbing Wall and Units Request:

Request: Substitute J2 Systems J2 Batten Panel for the bases-of-design Turf Slate S4 Panel.
Answer: Rejected. Bases-of-design Turf Slate S4 Panel has a specified finish that is not available in the requested substitution product. Also, the sizing comparison provided is insufficient for the architect to evaluate further.

SR2. Section Number 09 84 33 Sound-Absorbing Wall and Units Request:

Request: Substitute J2 Systems J2 PET Felt Box Baffle for Unlit Acoustical Ceiling baffle for the bases-of-design Focal Point Seem 2 Acoustical Unlit
Answer: Rejected. Bases-of-design Focal Point Seem 2 Acoustical Unlit has a matching light fixture incorporated into the design. Also, the specified finish is not available in the requested substitution product.

This addendum should be acknowledged in the space provided on page 000410-3 of the bid documents and returned with your bid. Failure to do so may result in your bid being deemed non-responsive.

Thank you,

Jake Scarpone

Jake Scarpone, CPPB
Purchasing Associate III

Attachments:

1. Pre-Bid Conference 2 Sign-In Sheets, dated 1/8/26
2. REVISED BIDDING FORM
3. Specification Section 07 01 50 PREPARATION FOR RE-ROOFING
4. Specification Section 21 22 00 CLEAN-AGENT FIRE-EXTINGUISHING SYSTEMS
5. Specification Section 27 40 00 AUDIO VISUAL SYSTEMS
6. Limited Asbestos Survey Report prepared by United Consulting, dated January 8, 2026
7. Civil drawing sheets C1.01, C4.01, and C5.01 with revision date of 1/9/2026
8. Architectural drawing sheets A2.01, A2.02, A4.02, A9.61, A9.62, A10.02, A11.00 with revision date of 1/9/2026
9. Existing building design intent architectural drawing sheets A-2, A-3, and A-15, dated 12/09/1988
10. Plumbing drawing sheets PD1.01, P1.01, P4.01, and P6.01 with revision date of 1/9/2026.
11. Mechanical drawing sheet M1.01, M5.01, M6.01, and M7.01 with revision date of 1/9/2026.
12. Electrical & Fire Protection drawing sheets E1.01, E2.01, E4.01, E5.02, E6.02, and FA0.01 with revision date of 1/9/2026
13. Audio Visual drawing sheets AV-301, AV-401, AV-501 with revision date of 1/9/2026
14. Substitution request for Sound-Absorbing Wall unit
15. Substitution request for Sound-Absorbing Ceiling unit

PRE-BID CONFERENCE 2

1/8/26

BL016-26

	Representative Name	Company Name	Phone #	E-Mail Address
	(DEPARTMENT REPRESENTATIVES SIGN-IN AT BOTTOM)			
1.	Logan Barnes	Clarkesan plumbing	404-860-3187	Logan@Clarkesonplumbing.Com
2.	Dalton Reim	Reim Construction LLC	609-970-5533	Dalton@ReimconstructionLLC.com
3.	KELLY SIMMON	multiplex	678.317-2040	Admin@MULTIPLEXLLC.COM
4.	Brian Owens	TSAV	706-372-0585	brianowens@tsav.com
5.	NATE VACHER	TSAV	706-461-6283	sales@tsav.com
6.	Jake Holley	CAS	770-317-1778	JHolley@conditionedairsystems.com
7.	Welton Li	Mr. Duct Cleaner	404-615-1844	welton1@mrductcleaner.com
8.	Mat Cloud	Beam Team Constr.	907-888-3095	MATCloud@the BeamTeam.com
9.	Anthony King	Roof management	404-433-9909	AKing@roofmanagementinc.com
10.	Jay Lee	Blasius System	206 4346447	jaylee@blasiussystem.com
11.	Brody Anderson	B and D Concrete Cutting	678-472-8223	banderson@bdconcretecutting.com
12.	Aaron Morales	Bulldog Movers	770-570-0805	Aaron@bulldogmovers.com
13.	Nicholas Hooper	MPI Systems	770-527-5625	nicholas.hooper@metropower.com

Department Representative Name	Department	Department Representative Name	Department
Jake Scarpone	DOFS		
Anna West	DOFS		
Tom Cook	DOSS		

PRE-BID CONFERENCE 2

1/8/26

BL016-26

	Representative Name	Company Name	Phone #	E-Mail Address
	(DEPARTMENT REPRESENTATIVES SIGN-IN AT BOTTOM)			
1.	Luther Livingston	F5360 Gen Contractors	678-558-9373	PRECONATL@F5360.com PRECON@F5360.com
2.	Robert Washington	Century Fire Pro	678-360-6385	Robert.Washington@CenturyFP.com
3.	Kenny Livebarry	Century Fire	954-214-0124	KLivebarry@CenturyFP.com
4.	Chayce Eberhart	Adams Paving Company	706-207-3372	adamspaving co@outlook.com
5.	Ada Orafor	Savvy Service Group	404-579-0975	INFO@savvyservicegroup.com
6.	Elizabeth Scholl	Clean Team Group	678-531-1996	info@ctgcleaning.com
7.	Kevin Marks	Suddath Workplace Solutions	404-242-4452	Kmarks@suddath.com
8.	Justin Burgess	JR Hobbs	470-909-3239	jburgess@jrhobbs.com
9.	Michael Bowens	Harmon Solution	770-5893481	bowens and bowens associates
10.	Lynwood Bradley	Harmon Solutions	408-867-4766	Lynwood.Bradley@gmail.com
11.	Joe Powell	Paul Davis N. Atlanta	678-300-3607	Joe.powell@pauldavis.com
12.	Tamia Triana	Paul Davis N. Atlanta	770-985-1727	Tamia.triana@pauldavis.com
13.	Blue Early	All His Painting	6789339219	allHispainting@gmail.com

Department Representative Name	Department	Department Representative Name	Department
MATT GEIGER 770/310-2885	CONSTRUCTION	SALES FLOORS AND REMODELING	@GMAIL.COM

1/8/26

PRE-BID CONFERENCE 2

BL016-26

	Representative Name	Company Name	Phone #	E-Mail Address
	(DEPARTMENT REPRESENTATIVES SIGN-IN AT BOTTOM)			
1.	JP PRESTON	GARRARD GROUP	770-317-1796	JPRESTON@GARRARDGROUP.COM
2.	GREGORY WILLIAMS	SERVICEMASTER	770-808-8068	sm.maintenance.systems@gmail.com.
3.	Richard Kemper	KMD MANAGEMENT	404-391-9337	RKEMPER@KMDMANAGEMENT.COM
4.	Carlo Obando	Golden Roofing llc.	770-7438107	cogoldenroof@gmail.com
5.	Mario Felipe	Klein Contracting	7708409924	mario@KleinContracting-com
6.	Keith Wilson	Premier Construction	404 392 3716	KeithW@premconusa.com
7.	Michael Porter	Flood Brothers	(4) 499-4245	Michael.porter@floodbrothers.net
8.	Jorge Salazar	CrystalCraft Creations	6787890292	js.ccreations@Gmail.com
9.	Joshua Harrington	Angle Architecture	6789202394	J.Harrington at Angle-Architecture.com
10.	TIM BROWN	RTW Construction Partners	678-926-9464	tim@rtwconstructionpartners.com
11.	Latrice Land	Eastern Builders	7705576972	llard@eastern-builders.com
12.	ISMAEL MARTINEZ	BIG M Contractors	404 626 8619	ismael.g02009@Hotmail.com
13.	ROBERT BARRETT	MERIT CONSTRUCTION	678 618 9220	ROBERTB@MERIT-CONSTRUCTION.COM

Department Representative Name	Department	Department Representative Name	Department

PRE-BID CONFERENCE 2

BL016-26

	Representative Name	Company Name	Phone #	E-Mail Address
	(DEPARTMENT REPRESENTATIVES SIGN-IN AT BOTTOM)			
1.	Mark Shively	BCI	404-428-2378	mshively@buskercom.com
2.	Mike Everett	EMC Security	678-879-1234	meverett@emcsecurity.com
3.	Howard Freeman	Rosie's Roofing	470-571-5038	mfreeman@rosiesrestoration.com
4.	Jordan Harris	Good Shepherd Roofing	678-925-6996	jordan@goodshepherdroofing.com
5.				
6.				
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11.				
12.				
13.				

Department Representative Name	Department	Department Representative Name	Department

BL016-26
Library Administration Headquarters Renovation Project
COMPANY NAME_____

Bidder submits the following lump sum/unit prices for the **Library Administration Headquarters Renovation Project** identified in Bid Form as part of this Bid. Failure to utilize and return this form as a part of the bidding documents may result in rejection of bid.

REVISED BIDDING FORM

ITEM
The undersigned agrees to provide all necessary labor, material, and equipment for the as defined in the Construction Documents for:

A. BASE BID, **Library Administration Headquarters Renovation Project**
LUMP SUM BASE BID

_____ Dollars and _____ Cents

($ _____)

B. ALLOWANCE NO. 1, See Specification Section 01 21 00 Allowances for details.

Three Hundred Thousand_____ Dollars and ____No____ Cents

($ 300,000.00 _____)

C. TOTAL BID AMOUNT, Base Bid (A) + Allowance No. 1 (B)

_____ Dollars and _____ Cents

($ _____)

D. ALLOWANCE NO. 1 ACKNOWLEDGEMENT
A three hundred thousand dollar ($300,000.00) allowance shall be provided as part of the **Total Bid Amount** of this project to be used at the Owner's direction for work to be performed under the Contract, including but not limited to, a new monument sign, moving services for moving County departments into the renovated spaces, additional scope, unforeseen conditions, or Owner-selected items. All expenditures from this allowance shall be authorized in writing by the Owner and itemized on the pay application schedule of values. Unused portions of the allowance shall be credited to the Owner by Change Order at the completion of the Project. (See Specification Section 01 21 00 Allowances for additional details).

Confirmed: _____
(Signature)

SECTION 07 01 50

PREPARATION FOR RE-ROOFING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1. Section 072216 – Roof Board Insulation
2. Section 075423 – Thermoplastic Polyolefin (TPO) Membrane Roofing
3. Section 076200 – Flashing and Sheet Metal

B. SUMMARY

1. Facility protection including but not limited to, exterior walls/windows, interiors, existing roofing, installed roofing materials.

C. ACTION SUBMITTALS

1. Prior to the start of work, submit the following to the Owner for approval:

a. Product submittals for all items to be used for interior protections, including technical data sheets and Material Safety Data Sheets for products proposed for use.

D. QUALITY ASSURANCE

1. Applicator Qualifications: A qualified firm that is approved, authorized, or licensed to install the specified products. The firm shall have a minimum of 5 years documented experience performing work equal or similar to the specified work.

PART 2 - PRODUCTS

2.1 SHEET METAL: 20-gauge galvanized steel.

2.2 SODIUM HYPOCHLORITE 5% SOLUTION: Clorox, As Manufactured By The Clorox Company, 1221 Broadway Oakland, California 94612, or approved equal prior to bid.

2.3 METAL DECK PRIMER: Kem Kromik as manufactured by Sherwin Williams or approved equal.

2.4 METAL DECK: ASTM A 653, galvanized G-90 deck, manufactured in accordance with the requirements of the Steel Deck Institute, Inc. for wide rib (Type B). Minimum section properties:

A. Yield strength = 33 ksi.

B. Thickness: 22 gauge.

C. Panel Coverage: Minimum 36 inches. Deck-To-Joist Fastener: ASTM A240, 410 stainless steel, self-drilling minimum #12 stainless steel screw with a nominal head diameter of 0.430 inches. Screws shall penetrate the substrate a minimum of 1-1/2 inch.

2.5 DECK SIDE LAP SCREWS: ASTM A240, 410 stainless steel, self-drilling minimum #10 stainless steel screw with a nominal head diameter of 0.415 inches. Screws shall penetrate the substrate a minimum of 1 inch.

2.6 **DECK-TO-JOIST FASTENER: ASTM A240, 410 stainless steel, self-drilling minimum #12 stainless steel screw with a nominal head diameter of 0.430 inches. Screws shall penetrate the substrate a minimum of 1-1/2 inch.**

2.7 MASONRY FASTENER:

A. Masonry Anchor, minimum 1-1/4 inch into substrate, as manufactured by OMG Roofing Products
B. Tapcon ¼" x minimum 1-1/4" in the substrate, as manufactured by Buildex.
C. Roofing Spike, minimum 1-1/4 inch into substrate, as manufactured by Powers Fasteners.
D. approved equal prior to bid.

2.8 WOOD SCREWS: 12 double-coated galvanized steel screws or stainless steel self-tapping wood screws that shall be able to resist any galvanic action that may be able to develop between the nail and the pressure treatment. The use of a lesser quality screw will not be approved. Screws shall be of sufficient length to penetrate a minimum of 1-1/2-inches into the substrate.

2.9 WOOD NAILS: For securing new lumber to new lumber or new plywood/OSB to new lumber, double-coated galvanized steel or stainless-steel ring shank nails to penetrate a minimum of 1-1/2 inches into the substrate but not smaller than 8d nails. Use 16d nails where material being secured is 1-1/2-inches to 2-inches thick.

PART 3 - EXECUTION

3.1 GENERAL

A. Limit size of work sections to safeguard adjacent materials, structures, etc., and to minimize dust and noise. Size of work sections shall be no larger than can be made watertight in the same day and prior to any inclement weather.

B. Protect existing facilities from damage during work. Do not overload existing paving, curbs, sidewalks, etc. with vehicle traffic. Do not overload new or existing construction with demolition debris, equipment, etc.

C. Walls, windows, roof edges, etc., adjacent to pump lines, hoists, and staging areas shall be protected using canvas tarpaulins. Plastic or felt will not be acceptable.

D. Plywood, minimum ¾" thick, or other suitable materials shall be used to protect roof areas from damage that may be caused by concentrated equipment loads and foot traffic.

E. Roof traffic shall be confined to work areas. Contractor shall be responsible for leaks that develop in traffic areas during and after project completion.

F. Self-supporting ramps shall be used where expansion joints, area dividers, etc. are to be crossed.

G. Contractor shall protect interior operations from adverse weather during roofing operations.

H. At the end of each work day, the contractor shall apply nightly temporary tie-ins to ensure that the building is weather tight, and that newly installed materials are free from moisture and debris. Newly installed materials coming in contact with moisture and debris is grounds for rejection of materials and shall constitute the replacement of the materials with like materials at no additional cost to the Owner.

I. The Contractor will be held liable for any damages to the building, building contents, its occupancy, grounds or landscaping resulting from work under the Contract. In the event of damage, Contractor will restore property to a condition equivalent to that at the time the project started.

J. The Contractor shall keep existing drainage facilities and associated leaders/downspouts clear of debris and bitumastic materials during construction. The Contractor will be required to use elastomeric plugs to protect leaders/downspouts during demolition and re-roofing operations.

K. Prior to the start of re-roofing operations, the Contractor has the option to water test all drain leaders and lines for clogs prior the start of work. All findings shall be immediately reported to the Owner/Engineer in writing for direction prior to proceedings.

1. Failure to perform this option and proceeding with work shall serve as the acceptance of the existing drain leaders and lines to be functioning at one hundred percent (100%) capacity prior to the start of re-roofing operations.
2. Furthermore, with this acceptance, the Contractor shall be responsible to ensure that drain leaders and lines are functioning at one-hundred (100%) capacity prior to the Final Payment at no additional cost to the Owner.

L. Prior to the start of re-roofing operations, the Contractor shall provide Owner personnel with plastic bags/tarps which will be used by personnel to protect televisions, computers, and other associated equipment during the period of time that re-roofing operations are occurring. Bags/tarps shall be provided a minimum of one week prior to the start of re-roofing operations. Costs for providing such materials shall included in the Base Bid.

M. Contractor will still be required to provide any other additional protection to interior items as may be deemed necessary to comply with the requirements of the Contract Documents.

N. Anchor all roof-mounted equipment to resist uplift, sliding and overturning according to FM Property Loss Prevention Data Sheet 1-28, Wind Design, Sections 2.6 and 3.8.

3.2 DEMOLITION

A. Refer to Section 011100 Summary of Work.

B. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
2. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
4. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain portable fire-suppression devices during flame-cutting operations.
5. Maintain fire watch during and for at least one hour after flame-cutting operations.
6. Maintain adequate ventilation when using cutting torches.
7. Remove equipment and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.
8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

C. Any strainers and/or clamping rings that are damaged and/or lost during the re-roofing project shall be replaced with new strainers and/or clamping rings at no additional cost to the Owner.

1. Any plastic strainers shall be discarded and replaced with new cast iron strainers. This cost shall be included in the Base Bid.

D. The removal of roof-mounted equipment and/or curbs, as identified either on plans and/or marked on the roof, shall be included in the Base Bid.

E. The Designer and Contractor shall document the actual quantities removed for materials bid on a unit price basis.

F. Raising curbs, associated roof top units or other equipment as required to achieve minimum 8-inch base flashing height and obtain specified manufacturer's warranty shall be included in the base bid.

G. All existing roof-mounted equipment shall be lifted or removed so that existing flashings can be totally removed.

H. Remove only as much material as can be totally replaced in the same day.

I. Demolition shall be performed by personnel familiar with the replacement of materials being used.

J. Demolition adjacent to areas to remain shall be performed in a neat manner with straight lines to facilitate tie-ins of replacement materials. Contractor shall review tie-in methods with the Designer for approval. Designer has final approval of such methods.

K. Excessive demolition, as determined by the Owner's representative, shall be replaced with equal materials at the Contractor's expense in accordance with the General Conditions of the Contract.

L. No demolition shall be performed if the chance of precipitation is 40% or more as reported by the nearest office of the National Weather Service.

M. Existing through-wall flashing shall remain unless otherwise indicated.

N. Demolition shall be staged in a manner to prevent traffic, debris, staining or dust accumulation on newly applied roofing. Contractor is responsible for cleaning the new roof system.

O. Prior to the installation of any new roofing, flashings, metal flashings, any other miscellaneous items, the Contractor shall clean surfaces of all dust, dirt, and other foreign materials.

P. Inspect the deck carefully. If, in Contractor's opinion, there are metal deck areas that require repair and/or replacement, notify the Designer. Do not proceed with any repairs or replacement until directed by the Designer.

Q. Prior to the installation of any new roofing materials, extend all existing soil pipe vents through the roof to a minimum height of 8 inches (or as required by local plumbing codes) above the finished roof surface. Furnish a piece of PVC piping that will fit snugly into the existing soil pipe vent and shall extend into the pipe a minimum of 12 inches. Provide a second PVC pipe that fits snugly around the smaller PVC pipe and shall provide a minimum 8" height above the finished roof surface. The smaller pipe height shall match the outer pipe. Cement the two PVC pipes together with an approved pipe solvent/glue. Insert the extension into the existing soil pipe vent.

1. Note: The placement of a PVC pipe extension directly on top of the existing soil pipe vent without the support method described above shall be removed by the Contractor and new extensions approved by the Designer shall be installed at no additional cost to the Owner.

R. Unit Price Work:

1. **(Allowance No. ~~1~~ 2)** Where wood blocking or curbs are damaged or deteriorated, remove existing wood blocking to a point 6 inches beyond the damage and/or deterioration, and repair and/or replace with new wood blocking to match existing. Secure new blocking to the substrate using specified screws at spacings not to exceed 12 inches on-

center, staggered pattern.

a. **(Allowance No. ~~1~~ 2)** Contract shall include 150 board feet of wood blocking replacement in the Base Bid.

2. **(Allowance No. ~~2~~ 3)** Where steel decking is rusted but remains structurally sound, wire brush deck units so that all rust is removed. Paint with specified metal primer, or approved equal, and allow to dry before proceeding with the installation of new materials.

   a. **(Allowance No. ~~2~~ 3)** Contract shall include 650 square feet of metal deck priming in the Base Bid.

3. **(Allowance No. ~~3~~ 4)** Where steel decking is damaged or rusted through in small areas (less than 6-inches in any direction), clean deck of rust with a wire brush. Paint with specified metal primer or approved equal. Install over the damaged area the specified sheet metal that shall be secured to the existing steel deck with specified deck screws located 1 inch from the perimeter of the plate, and at 6 inches on center. Extend the new steel plate a minimum of 6 inches onto the surface of the existing steel deck beyond the damaged area.

   a. **(Allowance No. ~~3~~ 4)** Contract shall include 650 square feet of sheet metal installation in the Base Bid.

4. **(Allowance No. ~~4~~ 5)** Where steel decking is severely damaged or has deteriorated over large areas (greater than 6-inches in any direction), remove the entire existing deck unit and install new specified decking. Lap new deck units over the existing in the same manner as originally installed. Secure to structural framing with specified screws at Steel Deck Institute 36/4 patterns each available framing member and not more than 24 inches on center at side laps using specified side lap screws. At the perimeter, specified deck fasteners shall be applied at spacings not to exceed 6 inches on-center along the parapet framing.

(ALLOWANCE NO. ~~4~~ 5) CONTRACT SHALL INCLUDE 250 SQUARE FEET OF STEEL DECK REPLACEMENT IN THE BASE BID.

5. **(Allowance No. ~~5~~ 6)** At those locations where side lap screws have not been installed or side lap screws exceed 30-inches on-center, furnish and install new self-tapping sheet metal screws at spacings not to exceed 30-inches on-center. Contractor shall submit technical data on the proposed screws before the start of this phase of the work.

   a. **(Allowance No. ~~5~~ 6)** Contract shall include the installation of 150 side lap screws in the Base Bid.

6. **(Allowance No. ~~6~~ 7)** At those locations where existing welds have broken from the top of the supporting members or have not been installed, furnish and install new screws in accordance with Drawings 3-4/A3.14. Welding is not an acceptable means of attaching/re-attaching the deck to the supporting member. Fasteners shall penetrate the structural membrane a minimum of 1-1/2 inches

   a. (Allowance No. 7) Contract shall include the installation of 150 deck-to-joist screws in the Base Bid.

7. Contractor shall include allowances as indicated on the Bid Form in the Base Bid. Contract will be increased at unit price rates for unit price work that exceeds allowances. Contract will be reduced for unused unit price work at the bid unit price rate. Owner reserves the right to negotiate lump sum modifications to the contract for bulk unit price work.

S. Cost associated with any necessary removals at roof drains to install new roof drains and/or drain sumps shall be included in the Base Bid.

T. Abandoned Penetrations at Metal Roof Decks:

1. At all abandoned roof penetrations, less than 6 inches in diameter, secure a piece of 20 ga. galvanized steel to the existing deck at spacings not to exceed 6 inches on center and located approximately one inch from the edge of the opening. Sheet metal shall be secured to the deck with specified deck screws. The sheet metal shall extend onto the existing deck a minimum of 6 inches.
2. At abandoned openings, larger than 12 inches on any side but less than 24 inches, furnish and install new steel decking which matches the existing and install so that the ends and sides extend past the edges of the existing deck a minimum of 12 inches. The ends of the new steel deck shall extend over a structural member. Secure the new deck to the existing deck with specified deck screws at spacings not to exceed 6 inches on-center located approximately 6 inches from the opening on all sides. The ends of the new deck shall be secured to the existing structural supports using specified deck screws at Steel Deck Institute 36/7 patterns. Install specified side lap screws along the side laps at spacings not to exceed 30 inches on-center.
3. At abandoned openings, larger than 24 inches on any side, furnish and install new steel decking which matches the existing and install so that the new deck unit is supported by a minimum of three structural supports. Ensure that the new deck section is “nested” tightly in the existing, which may require the removal of existing deck fasteners or grinding down existing welds. Secure the new deck to each structural member with specified deck screws at Steel Deck Institute 36/7 patterns. At side laps, furnish and install a minimum of 3 specified side lap screws between each structural member.

U. Cost associated with the removal of any abandoned equipment as identified on plans and/or on the roof shall be included in the Base Bid.

V. Remove all existing pipe portals or pitch pans. Furnish and install new pipe vaults or chases at gas, power and control conduit entry onto the roof from the interior space. Pipe vault installation is not required where field wrap membrane base flashings may be installed and warrantied by the roof system manufacturer. There should be no substitution for the “vault” type roof housing, however alternate manufacturer’s may be approved prior to bid.

END OF SECTION 07 01 50

SECTION 21 22 00

CLEAN-AGENT FIRE-EXTINGUISHING SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 APPLICABLE STANDARDS AND PUBLICATIONS

A. The design, installation, testing and maintenance of the Clean Agent Extinguishing System shall be in accordance with the applicable requirements set forth in the latest edition of the following codes, standards, and third party approval agencies:

1. NFPA 2001: Standard on Clean Agent Fire Extinguishing Systems
2. NFPA 70: National Electrical Code
3. NFPA 72: National Fire Alarm and Signaling Code
4. Factory Mutual (FM)
5. Underwriters Laboratories (UL)
6. Requirements of the local Authority Having Jurisdiction (AHJ)

1.3 SUMMARY

A. Section Includes:

1. Piping and piping specialties.
2. Extinguishing-agent containers.
3. Extinguishing agent.
4. Detection and alarm devices.
5. Releasing control panel.
6. Accessories.
7. Connection devices for and wiring between system components.
8. Connection devices for power and integration into building's fire-alarm system.

B. Section Excludes:

1. Power supply (120/240 VAC) to system control panel.
2. Interface (conduit and wiring) to HVAC units, dampers, electric power supplies, relays, or shunt-trip breakers.
3. Interface (conduit and wiring) to local/remote fire alarm system
4. Connection to listed central station fire alarm system.
5. Room sealing, other than penetrations made by the suppression system contractor during system installation. Suppression system contractor shall coordinate room sealing requirements with project’s General contractor and all sub-contractors.

1.4 DEFINITIONS

A. ATS: Acceptance Testing Specifications.

B. EPO: Emergency Power Off.

C. AHJ: Authority Having Jurisdiction.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For clean-agent fire-extinguishing system signed and sealed by a qualified professional engineer.

1. Prepared by persons with the following qualifications:
    a. Trained and certified by the manufacturer of the Clean Agent Suppression system.
    b. NICET certified Fire-Alarm Technician, Level III minimum.
2. Comply with recommendations in the “Working Plans” Section of the “System Design” Chapter in NFPA 2001.
3. Comply with the recommendations in the “Documentation” Section of the “Fundamentals of Fire Alarm Systems” Chapter in NFPA 72.
4. Include plans, elevations, sections, details, and attachments to other work.
5. Include design calculations: Enclosure volume, agent quantity, backup battery, voltage drop, detector spacing, etc.
6. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
7. Include plans to indicate mounting location of field devices, including size and routing of cable and conduits.
8. Submittals shall be signed and sealed by the Contractor’s qualified professional engineer prior to submitting them to the Authority Having Jurisdiction.
9. Submittals shall be approved by the Authority Having Jurisdiction prior to submitting them to Architect.

A. Delegated-Design Submittal: For clean-agent fire-extinguishing system signed and sealed by a qualified professional engineer.

1. Indicate compliance with performance requirements and design criteria, including analysis data.
2. Include design calculations for selecting the spacing and sensitivity of detection devices, complying with NFPA 72.
3. Include design calculations for weight, volume, and concentration of extinguishing agent required for each hazard area.
4. Include design calculations for room enclosure pressure relief/venting as required to avoid structural damage to the hazard enclosure, equipment, or building.
5. Indicate the Following on Reflected Ceiling Plans:
    a. Ceiling penetrations and ceiling-mounted items.
    b. Extinguishing-agent containers, piping, discharge nozzles, photoelectric smoke detectors, and accessories.
    c. Method of attaching hangers to building structure.

d. Other ceiling-mounted items including light fixtures, diffusers, grilles, speakers, sprinklers, and access panels.

6. Indicate the Following on Occupied Work Area Plans:

a. Controls and alarms.
b. Extinguishing-agent containers, piping and discharge nozzles if mounted in space, detectors, and accessories.
c. Equipment and furnishings.

7. Indicate the Following on Access Floor Space Plans:

a. Extinguishing-agent containers, piping and discharge nozzles, detectors, and accessories.
b. Method of supporting piping.

8. Indicate the Following on Ceiling Plans:

a. Extinguishing-agent containers, piping and discharge nozzles, detectors, and accessories.
b. Method of supporting piping.
c. Other equipment located in the ceiling space that is being protected including sprinkler piping, HVAC equipment, raceways, or conduit.

1.6 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Sprinkler systems, drawn to scale, on which the following items are shown and coordinated with each other, using input from Installers of the items involved:

1. Domestic water piping.
2. Items Penetrating Finished Ceiling Include the Following:

a. Lighting fixtures.
b. Air outlets and inlets.
c. Occupancy sensors
d. Etc.

B. Design Data:

1. Permit Approved Drawings: Working plans, prepared according to NFPA 2001, that have been approved by authorities having jurisdiction. Include design calculations.

C. Field quality-control reports.

D. Installer Qualifications:

1. Authorized distributor of the system manufacturer. Shall maintain an inventory of replacement parts.
2. Trained by the system manufacturer to design, install, test, and maintain the clean agent extinguishing system.
3. Provide proof of emergency service available on a twenty-four hour, seven-days-a-week basis.
4. Maintain or have access to a recharging station capable of recharging the largest suppression system within 72 hours after a discharge.

5. Minimum five (5) years' experience in the design, installation, and testing of clean-agent fire extinguishing systems. A list of systems of similar nature and scope shall be provided upon request.
6. Shall employ a NICET Level III certified special hazard designer, who will be responsible for this project.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For special agent system to include in emergency, operation, and maintenance manuals.

B. Deliver copies to Authorities Having Jurisdiction and include the following:

1. Comply with the "Records" Section of the "Inspections, Testing and Maintenance" Chapter of NFPA 72.
2. Provide "Record of Completion Documents" according to NFPA 72 article "Permanent Records" in the "Records" section of the "Inspection, Testing and Maintenance" Chapter in NFPA 72.
3. Record copy of site-specific software.
4. Provide "Maintenance, Inspection and Testing Records" according to NFPA 72 article of the same name and include the following:
    a. Frequency of testing of installed components.
    b. Frequency of inspection of installed components.
    c. Requirements and recommendations related to results of maintenance.
    d. Manufacturer's user training manuals.
5. Manufacturer's required maintenance related to system warranty requirements.
6. Abbreviated operating instructions for mounting at the control panel.
7. Room enclosure pressurization test (Door Fan test) results.

C. As-built Drawings: Indicate actual installation configuration at time of project completion including all equipment locations, pipe routing, conduit routing, room configurations, etc.

1.8 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents. Deliver extra materials to Owner.

1. Detection Devices: Not less than 20 percent of amount of each type installed.
2. Container Valves: Not less than 10 percent of amount of each size and type installed.
3. Nozzles: Not less than 20 percent of amount of each type installed.
4. Extinguishing Agent: Not less than 100 percent of amount installed in largest hazard area. Include pressure-rated containers with valves.

1.9 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. FM Global Compliance: Provide components that are FM Approved and that are listed in FM Global's "Approval Guide."

C. UL Compliance: Provide equipment listed in UL's "Fire Protection Equipment Directory."

D. All devices, components, and equipment shall be new, standard products of the manufacturer's latest design and suitable to perform the functions intended. The name of the manufacturer, part number, and serial number shall appear on all major components.

E. Locks for all cabinets shall be keyed alike.

PART 2 - PRODUCTS

2.1 CLEAN-AGENT SYSTEMS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Ansul Incorporated; Tyco International.
2. Chemetron Fire Systems.
3. Fike Corporation.
4. Siemens Building Technologies, Inc.

B. Description: Clean-agent fire-extinguishing system shall be an engineered system for total flooding of the hazard area including the room cavity above the ceiling, below the ceiling, and below the raised floor. System includes separate zones above and below the ceiling and beneath the raised floor. If smoke is detected below the raised floor, extinguishing agent shall be discharged in the underfloor zone only. If smoke is detected below the ceiling, extinguishing agent shall be discharged in zones above and below the ceiling and below the floor. If smoke is detected above the ceiling, extinguishing agent shall be discharged in the zone above the ceiling only.

C. Delegated Design: Design clean-agent fire-extinguishing system and obtain approval from authorities having jurisdiction. Design system for Class A, B, and C fires as appropriate for areas being protected, and include safety factor. Use clean agent indicated and in concentration suitable for normally occupied areas.

D. Performance Requirements: Discharge HFC 227ea within 10 seconds and maintain 7.1 percent concentration by volume at 70 deg F (21 deg C) for 10-minute holding time in hazard areas.

1. HFC 227ea concentration in hazard areas greater than 9.0 percent immediately after discharge or less than 5.8 percent throughout holding time will not be accepted without written authorization from Owner and authorities having jurisdiction.
2. System Capabilities: Minimum 620-psig (4278-kPa) calculated working pressure and 360-psig (2484-kPa) initial charging pressure.

E. Performance Requirements: Discharge FK-5-1-12 within 10 seconds and maintain 6.6 percent concentration by volume at 70 deg F (21 deg C) for 10-minute holding time in hazard areas.

1. FK-5-1-12 concentration in hazard areas greater than 10.0 percent immediately after discharge or less than 6.5 percent throughout holding time will not be accepted without written authorization from Owner and authorities having jurisdiction.

2. System Capabilities: Minimum 620-psig (4278-kPa) calculated working pressure and 360-psig (2484-kPa) initial charging pressure.

F. Performance Requirements: Discharge IG-541 within 60 seconds and maintain 38 percent concentration by volume at 70 deg F (21 deg C) for 10-minute holding time in hazard areas.

1. IG-541 concentration in hazard areas greater than 40 percent immediately after discharge or less than 32 percent throughout holding time will not be accepted without written authorization from Owner and authorities having jurisdiction.
2. System Capabilities: Minimum 2175-psig (15-MPa) calculated working pressure upstream from orifice union, minimum 1000-psig (6895-kPa) calculated working pressure downstream from orifice union, and 2175-psig (15-MPa) initial charging pressure.

G. Cross-Zoned Detection: Devices located in two separate zones. Sound alarm on activating single-detection device, and discharge extinguishing agent on actuating single-detection device in other zone.

H. Verified Detection: Devices located in single zone. Sound alarm on activating single-detection device, and discharge extinguishing agent on actuating second-detection device.

2.2 SYSTEM OPERATING SEQUENCE

A. Counting Zoned Detection:

1. Actuating First Detector (Alarm Signal):

a. Visual and audible indication on gas suppression releasing control panel.
b. Energize audible and visual alarms inside the protected hazard area (unique pattern).
c. Transfer relays to shut down air-conditioning and ventilating systems and associated dampers serving the protected area, close doors in protected area.
d. send Alarm signal to building's fire-alarm system to initiate building evacuation sequence.
e. Send Alarm signal to Municipal Fire Dept.

2. Actuating Second Detector (Pre-discharge):

a. Visual and audible indication on control panel.
b. Energize audible and visual alarms inside the protected hazard area (unique pattern).
c. Transfer relays to shut down power to protected equipment, if required by Owner.
d. Start time delay for extinguishing-agent discharge for 20 seconds.
e. send 2nd Alarm signal to building's fire-alarm system.

3. Extinguishing-agent discharge (Release): Pre-discharge time delay expires or manual release switch is operated.

a. Visual and audible indication on control panel.
b. Energize electric alarm bell inside and outside the protected area (unique pattern).
c. Release clean agent suppression system agent.

B. Supervisory signal initiation shall be by one or more of the following devices and systems:

1. Clean agent container low pressure switch.

2. Clean Agent control panel disabled switch activated.

C. Trouble signal initiation shall be by one or more of the following devices and actions:

1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
3. Loss of primary power at fire-alarm control unit.
4. Ground or a single break in fire-alarm control unit internal circuits.
5. Abnormal AC voltage at fire-alarm control unit.
6. Break in standby battery circuitry.
7. Failure of battery charging.
8. Abnormal position of any switch at fire-alarm control unit or annunciator.

D. System Supervisory and Trouble Signal Actions:

1. Visual and audible indication on control panel.
2. Visual indication on optional annunciator panel.
3. Transfer relays to send signal to building's fire-alarm system.

E. Operating manual release switches will cause the immediate discharge of the extinguishing agent, overriding the system's discharge time delay and abort functions. Panel operation shall duplicate the extinguishing-agent discharge sequence described in the previous paragraphs.

1. Electric manual release switches shall be located at each hazard exit.
2. Push button actuators shall be located on extinguishing agent container solenoid actuator. Requires a discharge pressure switch to be mounted on the discharge piping. Switch shall be wired to the control panel to indicate system activation when actuator is pressed.

F. Operating abort switches will delay extinguishing-agent discharge while being activated. Release of hand pressure on the switch will cause agent discharge if the discharge time delay has expired.

G. EPO: Will terminate power to protected equipment immediately on actuation, if required by Owner.

H. Low-Agent Pressure Switch: Initiate trouble alarm if sensing less than set pressure.

2.3 PIPE AND FITTINGS

A. Steel Pipe: ASTM A-106, Seamless, Grade A Schedule 80.

1. Threaded Fittings:

a. Forged Steel Fittings: ASME B16.3, Class 2000 and Class 3000.
b. Flanges and Flanged Fittings: ASME B16.5, Class 1500.
c. Fittings Working Pressure: [2900 psig (19,996 kPa)] or [4350 psig (29,993 kPa)] minimum, upstream of the pressure reducer. Pressure rating downstream of pressure reducer determined by system flow calculations.
d. Flanged Joints: Class 1,500 minimum.

2. Forged-Steel Welding Fittings: ASME B16.11, Class 3000, socket pattern.

3. Steel, Grooved-End Fittings: FM Approved and NRTL listed, ASTM A 47/A 47M malleable iron or ASTM A 536 ductile iron, with dimensions matching steel pipe and ends factory grooved according to AWWA C606.

B. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.

1. ASME B16.21, nonmetallic, flat, asbestos-free, 1/8-inch (3.2-mm) maximum thickness unless thickness or specific material is indicated.

C. Flange Bolts and Nuts: ASME B18.2.1, carbon steel.

D. Welding Filler Metals: Comply with AWS D10.12M/D10.12 for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.

E. Steel, Keyed Couplings: UL 213, AWWA C606, approved or listed for clean-agent service, and matching steel-pipe dimensions. Include ASTM A 536, ductile-iron housing, rubber gasket, and steel bolts and nuts.

2.4 VALVES

A. General Valve Requirements:

1. UL listed or FM Approved for use in fire-protection systems.
2. Compatible with type of clean agent used.

B. Container Valves: With rupture disc or solenoid and manual-release lever, capable of immediate and total agent discharge and suitable for intended flow capacity.

C. Valves in Sections of Closed Piping and Manifolds: Fabricate to prevent entrapment of liquid, or install valve and separate pressure relief device.

D. Valves in Manifolds: Check valve; installed to prevent loss of extinguishing agent when container is removed from manifold.

2.5 EXTINGUISHING-AGENT CONTAINERS

A. Description: High strength alloy steel tanks complying with ASME Boiler and Pressure Vessel Code: Section VIII, for unfired pressure vessels. Include minimum working-pressure rating that matches system charging pressure, valve, pressure switch, and pressure gage.

1. Finish: Manufacturer's standard color, enamel or epoxy paint.
2. Manifold: Fabricate with valves, pressure switches, and connections for multiple storage containers, as indicated.
3. Manifold: Fabricate with valves, pressure switches, selector switch, and connections for main- and reserve-supply banks of multiple storage containers.
4. Storage-Tank Brackets: Factory- or field-fabricated retaining brackets consisting of steel straps and channels; suitable for container support, maintenance, and tank refilling or replacement.

B. Location: Located within hazard area, or as near as possible to reduce the required amount of pipe and fittings.

2.6 FIRE-EXTINGUISHING CLEAN AGENT

A. HFC 227ea Clean Agent: Heptafluoropropane.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. DuPont.
b. Great Lakes Chemical Corporation.

B. FK-5-1-12 Clean Agent: Dodecaflouro-2-methylpentan-3-one.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. 3M.

C. IG-541 Clean Agent: Mixture of nitrogen, argon, and carbon dioxide inert gases.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

a. Ansul Incorporated; Tyco International.

2.7 DISCHARGE NOZZLES

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Ansul Incorporated; Tyco International.
2. Chemetron Fire Systems.

B. Equipment manufacturer's standard one-piece brass or aluminum alloy of type, size, discharge pattern, and capacity required for application.

C. Material: Corrosion-resistant metal.

D. Stamped with orifice size and type.

2.8 MANIFOLD AND ORIFICE UNIONS

A. Description: NRTL-listed device with minimum 2175-psig (15-MPa) pressure rating, to control flow and reduce pressure of IG-541 gas in piping.

1. NPS 2 (DN 50) and Smaller: Piping assembly with orifice, sized for system design requirements.
2. NPS 2-1/2 (DN 65) and Larger: Piping assembly with nipple, sized for system design requirements.

2.9 CONTROL PANELS

A. Description: FM Approved or NRTL listed, including equipment and features required for testing, supervising, and operating fire-extinguishing system. Listed and approved for releasing service, and suitable for deluge/pre-action sprinkler service.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Fike®; SHP-PRO®:

B. Power Requirements: 120VAC; with electrical contacts for connection to system components and fire-alarm system, and transformer or rectifier as needed to produce power at voltage required for initiating devices, notification appliances, trouble signals, supervisory signals, digital alarm communicator transmitter, and auxiliary power.

1. Alarm current draw of the entire clean agent suppression system shall not exceed 80 percent of the control panel's power supply rating.

C. Enclosure: NEMA ICS 6, Type 1, steel cabinet.

1. Mounting: Surface
2. Finish: Redbaked on enamel finish

D. Supervised Circuits: Wired NFPA 72, Class A

1. Two detection circuits; capable of cross zone; counting zone; or single detector release actuation methods.
2. Three initiating device circuits; capable of monitoring contact closure devices.
3. Three notification appliance circuits.
4. Agent release circuit capable of actuating suppression system.
5. Solenoid release circuit capable of actuating suppression system or sprinkler solenoids.
6. Auxiliary power circuit (resettable/non-resettable) for field devices.
7. Three Form-C relay contacts for auxiliary control functions.
8. Eight additional Form-C relay contacts with addition of supplemental relay cards.

E. Control-Panel Features:

1. Microprocessor controlled.
2. Ten LED indicators to provide positive indication of system status.
3. Diagnostic LED indicator to display system and trouble events.
4. Configurable via dip-switches.
5. Automatic switchover to standby power at loss of primary power.
6. Storage container, low-pressure indicator.
7. Service disconnect to interrupt system operation for maintenance with visual status indication on the panel.
8. Silence and reset switch.
9. 120 VAC or 240 VAC power input.
10. Five optional abort types.
11. Simultaneous monitoring and release of clean agent and sprinkler suppression systems.

F. Annunciator Panel: Graphic type showing protected, hazard-area plans, as well as locations of detectors and abort, EPO, and manual stations. Include lamps to indicate device-initiating alarm, electrical contacts for connection to control panel, and stainless-steel or aluminum enclosure.

G. Standby Power: 24-V dc supply system with batteries, automatic battery charger, and automatic transfer switch.

1. Batteries: Sealed lead calcium, sized to operate system for [24] hours in standby mode and alarm mode for minimum of [15] minutes.

H. Optional Cards: Cards mount directly to and receive their operational power from the SHP PRO® control board.

1. Class A Input Module: Converts all five initiating devices circuits to NFPA 72, Class A wiring.
2. Class A Output Module: Converts all three notification appliance and releasing circuits to NFPA 72, Class A wiring.
3. Relay Module: Provides four additional Form-C relay contacts for auxiliary control functions.

2.10 SYSTEM PHOTELECTRIC SMOKE DETECTORS

A. General Requirements:

1. Comply with NFPA 2001, NFPA 72, and UL 268.
2. 24-VDC, nominal.
3. Two-wire type.
4. Self-restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
5. Integral Visual-Indicating Light: LED type, indicating detector has operated and power-on status.

B. Photoelectric Detectors: LED light source and silicon photodiode receiving element.

C. Base Mounting: Detector shall be mounted on a twist-lock, fixed base.

1. Base provides terminals for connection to control unit.

D. Signals to the Building Fire Alarm Control Panel: Any type of local system Alarm, Trouble, or Supervisory event is reported to the building fire alarm control panel as a composite signal for each event type.

2.11 SWITCHES

A. General Description: Surface FM Approved or NRTL listed, low voltage, includes contacts for connection to control panel.

B. Manual Release Switch: Unit can manually discharge extinguishing agent with operating device that remains engaged until unlocked.

1. Stainless steel faceplate.
2. Dual-action requiring two distinct operations to initiate suppression system release.
3. Red plastic release button, keyed reset.
4. "MANUAL RELEASE" caption.

C. Abort Switch: Unit can manually prevent the release of the suppression system while pressed.

1. Stainless steel faceplate.
2. Red plastic abort button, momentary contact (dead-man type).
3. Available with key-operated switch.
4. "SYSTEM ABORT" caption.

D. Main-Reserve Switch: Unit allows transfer of release circuit signal from main supply to reserve supply.

1. Stainless steel faceplate.
2. Black plastic selector button (main/reserve)
3. "CONTAINER SELECT" caption.

E. EPO Switch (Where required by Owner): "EPO" caption, with yellow finish.

F. Low-Agent Pressure Switches: Installed on extinguishing agent container; pneumatic operation.

G. Suppression Disconnect Switches: Unit enables releasing circuit (i.e., clean agent or sprinkler) to be disconnected from the control panel.

1. Stainless steel faceplate.
2. Key operated selector switch (armed/disarmed).
3. LEDs to provide indication of switch status (armed/disarmed).
4. “SUPPRESSION DISCONNECT” caption.

H. Discharge Pressure Switches: Installed on suppression piping to provide indication of manual actuation of the clean agent suppression system back to the control panel.

2.12 ALARM DEVICES

A. General Requirements: Listed and labeled by an NRTL or FM Approved, low voltage, and surface mounting.

B. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly. Connected to notification appliance signal circuits, equipped for mounting as indicated and with screw terminals for system connections.

C. Bells, comply with UL 464: High dBa output; 24vdc; vibrating type; minimum 6-inch (150-mm) diameter. Bells shall produce a sound-pressure level of 90 dBa minimum, measured 10 feet (3 m) from horn.

D. Horns, comply with UL 464: Electric-vibrating-polarized type, 24-V dc. Horns shall produce a sound-pressure level of 90 dBa minimum, measured 10 feet (3 m) from horn.

E. Visible Notification Appliances, comply with UL 1971: Xenon strobe lights with translucent lens, with "FIRE" or similar caption.

1. Rated Light Output:

a. Indicated on drawings.
b. 15/30/75/110 cd, selectable in the field.

2. Mounting: Indicated on Drawings.
3. For units with guards to prevent physical damage, light output ratings shall be determined with guards in place.

4. Flashing shall be in a temporal pattern, synchronized with other units.
5. Strobe Leads: Factory connected to screw terminals.
6. Mounting Faceplate: Factory finish, red.

2.13 INFORMATIONAL SIGNAGE

A. Provide informational signs as required to comply with NFPA 2001 for the specific agent.

2.14 ANNUNCIATOR PANEL

A. Description: Annunciator shall provide a graphic display of the protected area, and shall provide LEDs to indicate the location of system detectors.

1. Mounting: Steel enclosure; black finish; flush or surface mounted.

~~2.15 DIGITAL ALARM COMMUNICATOR TRANSMITTER~~

~~A. Digital alarm communicator transmitter shall be acceptable to the remote central station and shall comply with UL 632 and be listed and labeled by an NRTL.~~

~~B. Features:~~

~~1. 100 event history buffer.~~
~~2. Communication Protocols: Modem IIIa^2, SIA, and 4/2~~
~~3. LEDs for heartbeat, system trouble, and telephone line trouble (one per line).~~
~~4. Dual telephone line interface.~~
~~5. Self-Test: Conducted automatically every 10 minutes with report transmitted to central station.~~
~~6. Communication failure indication.~~
~~7. Operating Power: 24 V dc continuous power from control panel.~~

~~C. Functional Performance: Unit shall receive an alarm, supervisory, or trouble signal from the control panel and automatically capture one telephone line(s) and dial a preset number for a remote central station. When contact is made with the central station, signals shall be transmitted. If service on either line is interrupted for longer than 36 seconds, transmitter shall initiate a local trouble signal and transmit the signal indicating loss of telephone line to the remote alarm receiving station over the remaining line. Transmitter shall automatically report telephone service restoration to the central station. If service is lost on both telephone lines, transmitter shall initiate the local trouble signal.~~

~~D. Mounting: Digital alarm communicator transmitter must be mounted adjacent to the control panel within 20 feet (6.1 m) with interface wiring in conduit.~~

~~E. Secondary Power: Auxiliary power supply with integral rechargeable battery and automatic charger; UL listed for Fire Protective Signaling System service.~~

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with hazard-area leakage requirements, installation tolerances, and other conditions affecting work performance.

1. The general contractor shall be responsible for sealing and securing the protected enclosure against agent loss and/or leakage during the required agent “hold’ period.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 HFC 227ea AGENT PIPING APPLICATIONS

A. Flanged pipe and fittings and flanged joints may be used to connect to specialties and accessories and where required for maintenance.

B. NPS 2 (DN 50) and Smaller: Schedule 40, steel pipe; malleable-iron threaded fittings; and threaded joints.

C. NPS 2-1/2 (DN 65) and Larger: Schedule 40, steel pipe; [forged-steel welding fittings; and welded joints] [steel, grooved-end fittings; steel, keyed couplings; and grooved joints].

3.3 IG-541 AGENT PIPING APPLICATIONS

A. Piping between Storage Containers and Orifice Union: Schedule [80] [160], steel pipe; [forged-steel welding fittings; and welded joints] [malleable-iron fittings with threaded or flanged joints].

B. Piping Downstream from Orifice Union: Schedule [40] [80], steel pipe; [forged-steel welding fittings; and welded joints] [malleable-iron fittings with threaded or flanged joints].

3.4 FK-5-1-12 AGENT PIPING APPLICATIONS

A. Flanged pipe and fittings and flanged joints may be used to connect to specialties and accessories and where required for maintenance.

B. NPS 2 (DN 50) and Smaller: Schedule 40, steel pipe; malleable-iron threaded fittings; and threaded joints.

C. NPS 2-1/2 (DN 65) and Larger: Schedule 40, steel pipe; [forged-steel welding fittings; and welded joints] [steel, grooved-end fittings; steel, keyed couplings; and grooved joints].

3.5 CLEAN-AGENT PIPING INSTALLATION

A. Install clean-agent extinguishing piping and other components level and plumb, according to manufacturers' written instructions.

B. Each pipe section shall be cleaned internally after preparation and before assembly by means of swabbing, using a suitable nonflammable cleaner. Pipe network shall be free of particulate matter and oil residue before installing nozzles or discharge devices.

C. Grooved Piping Joints: Groove pipe ends according to AWWA C606 dimensions. Assemble grooved-end steel pipe and steel, grooved-end fittings with steel, keyed couplings and lubricant according to manufacturer's written instructions.

D. Install extinguishing-agent containers anchored to substrate.

E. Install pipe and fittings, valves, and discharge nozzles according to requirements listed in NFPA 2001, Section "Distribution."

1. Install valves designed to prevent entrapment of liquid, or install pressure relief devices in valved sections of piping systems.
2. Support piping using supports and methods according to NFPA 13.
3. Install control panels, detection system components, alarms, and accessories, complying with requirements of NFPA 2001, Section "Detection, Actuation, and Control Systems," as required for supervised system application.

3.6 DETECTION, ACTUATION, ALARM, AND CONTROL SYSTEMS INSTALLATION

A. Install control panels, detection system components, alarms, and accessories, complying with requirements of NFPA 72 and NFPA 2001, Section "Detection, Actuation, and Control Systems," as required for supervised system application.

B. Smoke Detector Spacing:

1. Comply with NFPA 72, “Smoke-Sensing Fire Detectors” Section in the “Initiating Devices” Chapter, for smoke detector spacing.
2. Smoke ceiling spacing shall not exceed 30 feet (9 m).
3. Spacing of detectors for irregular areas, for irregular ceiling construction, and for high ceiling areas shall be determined according to Appendix A in NFPA 72.
4. HVAC: Locate detectors not closer than 3 feet (1 m) from air-supply diffuser or return-air opening.
5. Lighting Fixtures: Locate detectors not closer than 12 inches (300 mm) from any part of a lighting fixture.

C. Audible Alarm-Indicating Devices: Wall mounted with tops above the finished floor not less than 90 inches (2.29 m), and below the ceiling not less than 6 in. (150 mm). Install bells and horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille.

D. Visible Alarm-Indicating Devices: Wall mounted with entire lends not less than 80 in. (2.03 m) and not greater than 96 in. (2.44 m) above the finished floor. Where ceiling height does not permit mounting at minimum height, mount within 6 inches (150 mm) of the ceiling.

E. Combination Audible-Visual Devices: Where combination audible and visual devices are used, mount devices according to Visual Alarm-Initiating Device requirements.

F. Control Unit: Surface mount, with top of cabinet not more than 72 inches (1830 mm) above the finished floor.

G. Annunciator: Install with top of panel not more than 72 inches (1830 mm) above the finished floor.

3.7 CONNECTIONS

A. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Where installing piping adjacent to equipment, allow space for service and maintenance.

C. Connect electrical devices to control panel and to building's fire-alarm system. Electrical power, wiring, and devices are specified in Section 284621.11 "Addressable Fire-Alarm Systems" or Section 284621.13 "Conventional Fire-Alarm Systems."

3.8 IDENTIFICATION

A. Identify system components and equipment. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

B. Identify piping, extinguishing-agent containers, other equipment, and panels according to NFPA 2001.

C. Install signs at entry doors for protected areas to warn occupants that they are entering a room protected with a clean-agent fire-extinguishing system.

D. Install signs at entry doors to advise persons outside the room the meaning of the horn(s), bell(s), and strobe light(s) outside the protected space.

E. Install framed operating instructions in a location visible from control unit.

3.9 SYSTEM WIRING

A. Wiring shall be installed by qualified individuals, in a neat and workmanlike manner in accordance with the National Electrical Code (NEC), Article 725 and 760, except as otherwise permitted for limited energy circuits as described in NFPA 72. Installation shall meet all local, state, province and/or country codes.

B. All wiring shall be installed in electrical metallic tubing (EMT) or conduit and must be kept separate from all other building wiring. Runs of conduit shall be straight, neatly arranged, properly supported and installed parallel and perpendicular to walls and partitions.

C. Conductors shall be sized according to the design documents and color coded to allow easy circuit identification.

D. All wires shall be tagged at all junction boxes.

E. All wires shall be tested for the presence of opens, shorts and grounds prior to connection to control panel. Final wire terminations to control panel shall be made under the direct supervision of a factory trained representative.

F. All system components shall be securely supported independent of the wiring.

G. Ground control panel and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to control panel.

3.10 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

C. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

A. Submit test plan for review and approval by the owner or owner’s designated representative prior to performing tests.

B. Detection, Actuation, Alarm, and Control Systems Tests:

1. Visual Inspection: Conduct the visual inspection prior to testing.

a. Inspection shall be based on completed Record Drawings and system documentation that is required by NFPA 72 in it “Completion Documents, Preparation” Table in the “Documentation” Section of the “Fundamental of Fire Alarm Systems” Chapter.
b. Comply with “Visual Inspection Frequencies” Table in the “Inspection” Section of the “Inspection, Testing and Maintenance” Chapter in FNPA 72; retain the “Initial/Reacceptance” column and list only the installed components.

2. Operational Test: After electrical circuitry has been energized, apply power to control panel and confirm proper unit operation. Comply with “Test Methods” Table in the “Testing” Section of the “Inspection, Testing, and Maintenance” Chapter in NFPA 72.
3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

C. Clean-Agent Fire Extinguishing Systems Test:

1. Flow Test: Using nitrogen or other inert gas, perform a flow test on the piping network to verify that flow is continuous and unobstructed through piping and nozzles.
2. Pressure/Leak Test: pneumatically test the piping in a closed circuit for a period of 10 minutes at 40 psi (276 kPa). At the end of 10 minutes, the pressure drop shall not exceed 20 percent of the test pressure. Repair leaks and retest until no leaks exist.
3. Room Pressurization Test: After all construction work is complete, conduct a room pressurization test in accordance with NFPA 2001 in each clean agent suppression system hazard area. Test shall confirm enclosures ability to retain the agent concentration level for the required hold time. If room pressurization testing indicates that openings exist which would result in leaks and/or loss of the extinguishing agent, the installing contractor shall be responsible for coordinating the proper sealing of the protected space(s) by the general contractor or his sub-contractor or agent. The general contractor shall be responsible for adequately sealing all protected space(s) against agent loss or leakage. The installing contractor shall inspect all work to ascertain that the

protected space(s) have been adequately and properly sealed. THE SUPPRESSION SYSTEM INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUCCESS OF THE ROOM PRESSURIZATION TESTS. If the first room pressurization test is not successful, in accordance with these specifications, the installing contractor shall direct the general contractor to determine, and correct, the cause of the test failure. The installing contractor shall conduct additional room pressurization tests, at no additional cost to the owner, until a successful test is obtained. Copies of successful test results shall be submitted to the owner for his record. Upon acceptance by the owner, the completed system(s) shall be placed into service.

D. System will be considered defective if it does not pass tests and inspections.

E. Prepare test and inspection reports: Factory-authorized service representative shall prepare the “Fire Alarm System Record of Completion” in the “Documentation” Section of the “Fundamentals of Fire Alarm Systems” Chapter in NFPA 72 and the “Inspection and Testing Form” in the “Records” Section of the “Inspection, Testing and Maintenance” Chapter in NFPA 72.

3.11 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain the clean-agent fire-extinguishing systems.

3.12 SERVICE CONTRACT

A. Suppression system installing contractor shall provide two (2) inspections of the systems installed under this contract, during the manufacturer’s one-year warranty period. The first inspection shall be at the six month interval, and the second shall be at the twelve month interval after system acceptance.

B. Inspections shall be conducted in accordance with the equipment manufacturer’s guidelines and the recommendations of NFPA 72 and NFPA 2001. Use forms provided in NFPA 72 for initial tests and inspections.

C. Prepare and submit test and inspection reports.

3.13 WARRANTY

A. Clean Agent System manufacturer shall guarantee all components furnished under this contract against defects in design, materials, and workmanship for no less than one (1) year from the date of system acceptance.

END OF SECTION 21 22 00

SECTION 27 40 00

AUDIO VISUAL SYSTEMS

PART 1 - GENERAL

1.1 DESCRIPTION

A. The work required under this section of the specifications consists of the furnishing, installation, and programming of independent audio visual system upgrades for the Audio Video systems located at the Lawrenceville Library. Reference floor plan drawings for audio visual equipment locations. In addition to all audio visual components, the contractor shall be required to provide coordination with the data infrastructure systems. Also, the contractor shall coordinate with the electrical contractors for all power receptacles to support the audio visual systems.

B. The Audio Visual scope of work will require the AV contractor to provide a complete, quality operating system which will display playback, and route computer, video, and audio signals as well as control signals to each noted space of the building. A factory approved representative shall complete all applicable system connections. A factory approved and factory trained representative of the AV contractor shall complete all onsite programming of equipment.

C. AV Contractor to provide a complete and working solution. If additional pieces of equipment are needed from what is shown in the drawings in order to provide the completed solution, the AV Contractor shall provide them at no additional cost to the Owner.

D. The AV contractor shall provide all labor, materials, equipment, and supervision to install specified systems. The installation, testing, and commissioning of all equipment shall be the full responsibility of the Audio Visual contractor for this project.

1.2 QUALITY CRITERIA AND STANDARDS

A. The Audio Visual wiring, devices, and equipment shall comply with applicable UL, NEC, and NEMA code standards. All Audio Visual equipment shall be UL-listed and labeled.

B. Audio Visual wiring systems shall conform to established trade and industry standards. The following specifications and standards are incorporated into and become a part of this Specification by reference.

1. AES14-1992 (r2004): – AES Standard for Professional Audio Equipment

2. AES26-2001 – AES Recommended Practice for Professional Audio

3. ICEA S-80-576 ICEA Standard for Communications Wire and Cable for Wiring of Premises

4. NFPA 70 70 National Electric Code

5. UL 50 Enclosures for Electrical Equipment

C. All Installer's Qualifications:

1. Firm with at least 3 years of successful application, installation, and testing experience on specified systems and equipment.

2. The AV contractor must show proof of being in the Audio Visual trade for a minimum of three years and provide three (3) references with contact names and telephone numbers regarding successful completion of Audio Visual projects of similar scope and size.

3. All supervisors and installers assigned to the installation of this system or any of its installers assigned to the installation of this system or any of its components shall have components shall have factory certification from each equipment manufacturer that they are qualified to install and test the provided products. Unqualified staff shall not be used for the installation of the equipment, cables, and associated hardware.

4. All installers assigned to the installation of this system or any of its components shall have a minimum of 3 years' experience in the installation of the specified Audio Visual equipment and components.

1.3 SUBMITTALS

A. Product Data: Audio Visual contractor shall provide a numbered equipment list of the systems devices being provided for approval by the owner's architect and engineer. The list shall include quantity of items, manufacturers product number, description of item and Audio Visual specification that it represents. Submit manufacturer's technical product technical data sheet for each item of systems equipment in order of the numbered equipment list. Submittal shall include documents that contain complete floor plans and reflected ceiling plans, wiring and schematic diagrams and other details required to demonstrate that the system has been coordinated and will function as a complete system. Documents shall include vertical riser diagrams, equipment rack details, elevation documents, connector faceplate details, sizes, and type of all cables and raceway.

B. Test Plan: AV Contractor shall submit a test plan to the owner's architect and engineer that defines the tests required to ensure that the system meets technical, operational, and performance specifications, 30 days prior to the proposed test date. The test plan must be approved by the owner's architect and engineer before the start of any testing. The test plan shall identify the capabilities and functions to be tested and include detailed instructions for the setup and execution of each test and procedures for evaluation and documentation of the results.

1.4 WARRANTY

A. All equipment shall be new and shall be under warranty for a period of one (1) year, from the date of acceptance by the owner, against defects in equipment or workmanship. Failed equipment shall be replaced by the AV contractor at no cost to the owner. Owner's personnel may perform initial trouble investigation, but replacement of failed equipment and escalated problem support will be handled by the AV contractor.

1.5 ACCEPTABLE MANUFACTURES

A. Reference Part 2 – Products Section of the specification for complete list of acceptable manufacturers.

1.6 RECORD DOCUMENTS

A. At the time of final inspection, provide three (3) sets of complete data on Audio Visual System equipment used in this project. This data shall be in bound form and shall include all shop documents required for this project.

B. All record documents shall include "as built" system interconnection diagrams with major components identified and number and type of interconnecting conductors.

C. Maintenance and operating Manufacturer's instructions on all systems.

D. Certification from system manufacturers that systems are installed in accordance with

E. Manufacturer's recommendations and are functioning correctly at the time of final inspection.

F. As-built documents to show raceway layout and wiring for all systems.

1.7 CONTROL SYSTEMS

A. Audio Visual Contractor is to coordinate with owner their required Control System(s) functionality and Graphic User Interface (GUI) layouts.

B. Audio Visual Contractor is to provide at least one (1) week in advance of System installation details of Control System functionality and complete, sample GUI pages for owner review and comment.

C. Audio Visual Contractor shall make necessary adjustments in functionality and the GUI as directed by owner after their initial review.

D. Audio Visual Contractor shall make appropriate Control System changes as necessary (and within reason) based on owner comments for no additional charge one (1) time after Audio Visual System has been in use for fourteen (14) days.

E. Project Closeout Audio Visual Contractor is to provide owner with all Control System programming/codes/files in uncompiled format for their use and ownership including all Control System Passwords.

PART 2 - PRODUCTS

2.1 GENERAL MATERIAL REQUIREMENTS

A. Provide all materials indicated in the AV drawing set. Materials and equipment shall be the manufacturers' latest standard design that has been in satisfactory use for at least 1 year prior to installation. See Part 3 - Execution specification section for additional product requirements.

2.2 NINETY-EIGHT INCH LCD FLAT PANEL DISPLAY

A. The LCD Screen shall be mounted as indicated in contract drawings. Audio Visual contractor to coordinate screen mounting requirements with General Contractor. Audio visual contractor to provide mounting hardware as per manufactures recommendation. Contractors to ensure that wall surface will accommodate Display weight and installation requirements. Display to be rated for commercial use.

B. Display specifications of equipment shall include:

1. Video

a. Screen Size: 98”

b. Native Resolution: 3840 X 2160

c. 24/7 Operation

d. Landscape or Portrait Mode Operation

e. Inputs: HDMI: Two minimum.

C. Basis of Design: Samsung QM98C or comparable

2.3 EIGHTY-FIVE INCH LCD FLAT PANEL DISPLAY

A. The LCD Screen shall be mounted as indicated in contract drawings. Audio Visual contractor to coordinate screen mounting requirements with General Contractor. Audio visual contractor to provide mounting hardware as per manufactures recommendation. Contractors to ensure that wall surface will accommodate Display weight and installation requirements. Display to be rated for commercial use.

B. Display specifications of equipment shall include:

1. Video

a. Screen Size: 85”

b. Native Resolution: 3840 X 2160

c. 24/7 Operation

d. Landscape or Portrait Mode Operation

e. Inputs: HDMI: Two minimum.

C. Basis of Design: Samsung QM85C or comparable.

2.4 SIXTY-FIVE INCH LCD FLAT PANEL DISPLAY

A. The LCD Screen shall be mounted as indicated in contract drawings. Audio Visual contractor to coordinate screen mounting requirements with General Contractor. Audio visual contractor to provide mounting hardware as per manufactures recommendation. Contractors to ensure that wall surface will accommodate Display weight and installation requirements. Display to be rated for commercial use.

B. Display specifications of equipment shall include:

1. Video

a. Screen Size: 65”

b. Native Resolution: 3840 X 2160

c. 24/7 Operation

d. Landscape or Portrait Mode Operation

e. Inputs: HDMI: Two minimum.

C. Basis of Design: Samsung QM65C or comparable.

2.5 DISPLAY MOUNT

A. Shall be a fixed mount. Shall have a minimum capacity of 125lbs. Shall offer lateral shift of 12.9 to 21.4 inches. Shall allow for manual height adjustment of up to 1 inch.

B. Basis of design: Chief Fusion Wall-Fixed Series LSM1U.

2.6 WIRELESS PRESENTATION SYSTEM

A. The Wireless Presentation Device shall be mounted as provided in the contract documents for connecting laptop or mobile devices wirelessly to the video system. The Audio Visual Contractor shall install and coordinate programming functionality to provide complete integrated software with control system solution.

B. Basis of Design: Crestron Air Media AM-3100-WF or approved comparable.

2.7 VIDEO CONFERENCING SOUND BAR – SB1

A. A. Audio Visual contractor shall provide and install the USB conferencing soundbar as indicated in the contract documents.

B. B. The USB conferencing sound bar shall meet the following specifications:

1. Camera Type: Dual lens, 2160p, 4K UHD (3840 x 2160)

2. Microphone Type: Two MEMS microphones; two second-order microphones

3. Microphone Pickup Range: Up to 25 ft (7.62 m)

4. Ports:

a. HDMI Input (for device mode/content sharing)

b. 2 HDMI output

~~c. 3.5MM Line-in~~

~~d. 3.5mm Line-out~~

~~e. RJ11 (for expansion microphone)~~

~~f. 2x USB-A USB-C (for Device Mode)~~

g. ~~2x~~ **3x** RJ45 Ethernet ports (one for LAN; two for IP peripheral connection/ link-local)

h. Power connector

C. Basis of Design: ~~POLY X72~~ **Cisco Room Bar Pro** or approved comparable

2.8 VIDEO EXTENDER KIT

A. Audio Visual Contractor to provide and install Video Extender Kit where indicated or as required by distance for transmission of audio/video signals between input location and rack and between rack and display location. Provide rack mounted device as indicated. The type of STP cable utilized shall be compatible with receiver and with distance covered.

B. Video Extender Kit specifications of equipment shall include:

1. HDMI OVER ETHERNET CABLING: 4K HDMI Extender transmits 4K 60Hz (4:4:4) video signals and 7.1ch audio up to 230ft (70m) with zero latency over a single CAT5e/6 cable; HDMI 2.0; HDR; HDCP 2.2; HDMI or S/PDIF audio output; DTS and Dolby Digital audio

2. POWER-OVER-CABLE: Included power adapter connects to the HDMI Extender Kit's transmitter and powers the receiver for areas where power outlets may be limited; Power is delivered to the receiver over a CAT5e/6 cable, using Power-over-Cable (PoC)

3. VERSATILE FUNCTIONALITY: Transmitter features an HDMI output which can be used to connect a local display or to connect cascaded HDMI extenders; HDMI extender over Ethernet Cable is ideal for digital signage in malls, stadiums, and hospitals.

4. IR EXTENSION: HDMI over CAT5/CAT6 Extender includes an IR Control Extension Kit, with 1x IR Blaster and 1x IR Receiver, to control an IR device from the receiver; IR Blaster/Receiver feature pre-installed adhesive for convenient installation

5. INSTALLATION OPTIONS: Durable metal housing, 8kV air and 6kV contact ESD protection, suitable for a variety of environments; Included mounting kit and rubber feet provide versatile installation options; No IP configuration, software, or drivers required

C. Basis of Design: Startech 4K70IC-EXTEND-HDMI or approved comparable

2.9 VIDEO CONFERENCING CONTROL PAD – CTL2

A. Audio Visual contractor shall provide and install the Video Conferencing Control Pad in rooms with a Conferencing Sound Bar as indicated in the contract documents.

B. The Video Conferencing Control Pad shall meet the following specifications:

1. Intuitive, high-resolution ~~10”~~ 10.1" touch display

2. Sleek design and flexible, intuitive set-up

~~3. Large Multi-colored LED lights show status~~

4. Single cable for both power and connectivity

C. C. Basis of design: ~~POLY TC-10~~ **Cisco Room Navigator** or approved comparable.

2.10 TABLETOP CABLE ENCLOSURE – AV CUB

A. The Tabletop Cable Enclosure shall be provided for the spaces indicated in the contract drawings and shall operate the in-room control systems as well as provide auxiliary connection access for the systems.

1. The Tabletop Cable Enclosure shall meet the following specifications:

a. Mounting: Furniture mount with included hardware

b. Accessory Plates: Various audio, video, control and power receptacle connector plates or cable retractors.

2. Basis of Design: Extron Cubby 500 with Power Module or approved comparable

a. Package System shall include:

b. USB Power Plate 200 AC AAP (60-1356-02)

c. AC Power

d. Refence single line drawings for HDMI and USB-C requirements.

2.11 TABLETOP CABLE CUBBY CABLE RETRACTORS

A. The Tabletop Cable Cubby Cable Retractors shall be provided for the spaces indicated in the contract drawings with Cable Cuddy tabletop devices. They shall provide connection access for the systems.

1. The Tabletop Cable Cubby Cable Retractors shall meet the following specifications:

a. Provide and install one USB-C retractor.

b. Provide and install one Cat6 network retractor.

2.12 DISTRIBUTED AUDIO SYSTEM AMPLIFIERS

A. The distributed audio system shall be based on the design shown in the contract drawings.

1. Basis of Design: Q-SYS CX-Q Series Network Amplifiers

2.13 TRANSIENT VOLTAGE SURGE SUPPRESSION

A. Transient voltage surge suppression devices shall be provided to protect power strips in each rack and all equipment. Transient voltage surge suppression shall be provided for all Audio Visual equipment devices

B. The Transient voltage surge suppression devices shall be an industrial-grade surge suppressor with EMI/RFI filtering.

2.14 RACKMOUNT POWER & SURGE PROTECTION

A. Rackmount power distribution and surge protection shall be included with each rack of AV equipment. Surge protection shall be non-consumable, able to recover without intervention from multiple over-voltage or under-voltage events over the course of the entire service life of the system.

1. Rackmount power and surge protection shall meet the following specifications:

a. Non-degrading surge technology

b. 100% MOV Design and will not shunt power to ground

c. 12yr Warranty

d. Automatic recovery – does not require hard reset after a surge event

e. 9 outlets – 8 in rear + 1 convenience outlet in the front

f. Standard 19” rack mountable form factor – 1RU

2. Basis of Design: Middle Atlantic PDx-920R-SP or approved comparable.

2.15 TV Back Box Surge Protection

A. TV Back box power distribution and surge protection shall be included with each AV monitor location.

1. TV Back box power and surge protection shall meet the following specifications:

a. The surge protector shall be a compact mountable unit in a magnetic shielding steel enclosure.

b. It shall operate from 120 volts AC and have a 6-foot, grounded, 3-wire #14 line cord.

c. There shall be 4 grounded AC receptacles.

d. Overall dimensions shall be 1.79" H x 8.15" W x 7.27" D. Weight shall be 4.1 pounds.

e. The unit shall have remote turn-on capabilities enabled by a wired serial connection.

f. The unit shall measure voltage and record power quality events in its internal memory.

g. Remote turn-on and turn-off and retrieval of measurements and recorded events shall be activated by software.

h. Surge protection shall be non-consumable, able to recover without intervention from multiple over-voltage or under-voltage events over the course of the entire service life of the system.

i. The surge protector shall have a load rating of 15 amps at 120 volts and provide EMI/RFI filtering, inrush current elimination, zero-cross switching, and catastrophic over/under-voltage shutdown.

2. Basis of design: Surge-X SX-DS-154

2.16 WIRING & CONNECTORS

A. Audio Cables:

1. Audio Cable 2 pair:

a. Provide multi-pair shielded cable.

b. Use two-pair cabling where two or less pairs are scheduled.

c. Neatly dressed unused pairs in rear of junction box or rack.

d. PVC outer Jacket.

e. Each pair to be individually jacketed with foil shield with drain wire.

f. Conductors to be 0.76mm nominal outer diameter.

g. Acceptable Product: 1814R (9451DP where CMP rating required)

h. Gepco GA61802GFC (or 6602HS where CMP is required)

2. Analog Audio Cable single pair (Inner Rack Wiring):

a. Provide for inner rack wiring.

b. PVC outer jacket.

c. Conductors to be 0.76mm nominal outer diameter.

d. Acceptable product:

e. Gepco 6180 EZ

f. Belden 9451

g. Clark Wire & Cable SPA22GS

h. West Penn 451

B. Speaker Cable Indoor:

1. 70Volt Plenum Speaker Cable:

a. Pairs: Single

b. Conductors: Stranded tinned copper conductors, 18 AWG minimum.

c. Size according to load and distance

d. Jacket:

e. PVC

f. NEC Specification: CL2P

g. Acceptable Product: Belden 6000UE series or comparable from West Penn.

C. Speaker Cable Outdoor:

1. 70Volt Water blocked Speaker Cable:

a. Pairs: Single

b. Conductors: Stranded tinned copper conductors, 14 AWG minimum.

c. Jacket: PVC

d. NEC Specification: Article 725, CL3

e. Acceptable Product: Belden 5100U1, West Penn AQC226 or approved substitute.

D. HDMI Cable:

1. Provide pre-molded cables in lengths required to dress neatly without coiled remainder.

2. Acceptable Product:

a. Extron Ultra-Flex HDMI Cable

b. Crestron HDMI Cable

c. As Approved

E. Augmented Category 6 Balanced Twisted Pair Cable:

1. The horizontal balanced twisted pair cable to meet or exceed the Category 6A transmission characteristics per ANSI/TIA/EIA-568-C.

F. For balance of A/V cables and connectors, reference one-line diagram in contract documents and provide appropriate cables and connectors to ensure a fully functional Audio Visual System.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Verify that surfaces and conditions are ready to accept the work of this section. General System components and appurtenances shall be installed in accordance with NFPA 70, manufacturer's instructions, and as shown. Necessary interconnections, services, and adjustments required for complete and operable Audio Visual systems shall be provided. Components shall be labeled in accordance with TIA/EIA 606. Penetrations in fire-rated construction shall be fire-stopped. A/V cables shall not be installed in the same raceway as AC power cables. Cables not installed in conduit or wire ways shall be properly secured and neat in appearance and, if installed in plenums or other spaces used for environmental air, shall comply with NFPA 70 requirements for this type of installation.

B. Equipment Racks and Cabinets

1. Open frame equipment racks shall be bolted to the floor slab. Cable guides shall be bolted or screwed to racks. Racks shall be installed level.

C. Rack Mounted Equipment

1. Rack mounted equipment shall be securely fastened to racks by means of the manufacturer's recommended fasteners.

3.2 GROUNDING / BONDING

A. System should follow the grounding requirements of the National Electrical Code (NEC). Frame of all metal equipment racks should be grounded.

3.3 TESTING AND CHECK-OUT

A. Testing requirements apply to all equipment. AV Contractor to test each Audio Visual component as recommended by manufacturer. Test methods and test results shall be submitted to the owner’s architect and engineer and approved prior to final inspection.

B. Materials and documentation to be furnished under this specification are subject to inspections and tests by the owner’s architect and engineer. All components shall be terminated prior to testing. Equipment and systems will not be accepted until the required inspections and tests have been made, demonstrating that the Audio Visual systems conform to the specified requirements, and that the required equipment, systems, and documentation have been provided.

C. Systems with Digital Signal Processors shall have the processor programmed for audio signal routing and control as required. AV Contractor to configure settings such as high pass filters according to typical best practices design. AV Contractor to equalize sound system using test equipment and methods that correspond to the sophistication of the system and the use of the space. Audio should retain a neutral sound quality without any emphasized frequencies or susceptibility to feedback.

3.4 TRAINING

A. The AV Contractor shall include in the base contract all costs required to train Owner’s operating and maintenance personnel in the functionality, operation, use and maintenance of systems provided under this section of the Specifications.

B. Training sessions shall be conducted for User staff related to the functionality, operation, and maintenance of all equipment and systems furnished and installed under this contract. One training session, up to four hours duration, shall be conducted for staff as scheduled by the Owner. Another training session shall be conducted about one month after the initial training sessions if required by the Owner.

3.5 AS-BUILT DOCUMENTS AND /OR DOCUMENTATION:

A. As-built documents shall be provided noting the exact cable path and cable labeling information. Documents in .DWG format shall be provided by the AV contractor. As-builts shall be submitted to the owner via email or on a flash drive, saved as .DXF or .DWG files. Redline hardcopies shall be provided as well. CAD generated as-built information shall be shown on a new layer named AS-BUILT.

B. System Acceptance: Before the Owner accepts the system, the AV contractor shall be required to walk through the installation with the Owner's representative and the design engineer to verify proper installation and operation. AV Contractor to provide digital audio signal processor files for review prior to final system inspection.

END OF SECTION 274000

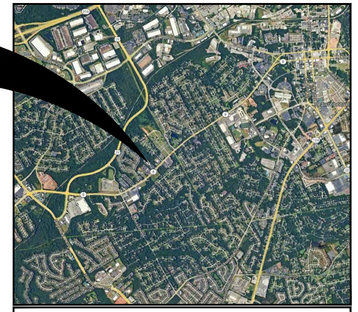
SITE NOTES

1. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, SPECIFICATIONS AND REQUIREMENTS. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE.
2. DEVIATIONS FROM THESE PLANS AND NOTES WITHOUT PRIOR CONSENT OF THE OWNER, THEIR REPRESENTATIVE, OR THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE. ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. THIS WILL INCLUDE ALL STRIPING AND PARKING LOT SIGNAGE.
4. CONTRACTOR SHALL FURNISH AND MAINTAIN ANY AND ALL NECESSARY BARRICADES AROUND THE WORK AND PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
5. ALL BUILDING DIMENSIONS AND DOOR LOCATIONS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL PLANS.
6. FOR CONSTRUCTION DETAILS, SEE DETAIL SHEETS.
7. ALL SITE DIMENSIONS ARE TO THE FACE OF CURB EXCEPT WHERE NOTED.
8. ALL ON SITE CURB SHALL BE 24" CURB & GUTTER.
9. ALL WORK ON-SITE MUST CONFORM TO GWINNETT COUNTY STANDARDS.
10. PAVEMENT MARKING, INCLUDING STANDARD HANDICAP SYMBOLS, PARKING STRIPING AND TRAFFIC ARROWS, SHALL BE PAINTED ON PAVEMENT AT LOCATIONS SHOWN.
11. SITE CONTRACTOR TO VERIFY EXISTING TOPOGRAPHIC AND UTILITY DATA PRIOR TO ANY CONSTRUCTION.
12. PROVIDE BOLLARDS AT LOCATIONS SHOWN, AND AROUND TRANSFORMERS, GAS METERS, AND OTHER UTILITIES IN VULNERABLE TRUCK AREAS.
13. WARRANTY: THIS SUBCONTRACTOR SHALL WARRANT ALL ASPHALT AGAINST ALL DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR.
14. ALL CURB AND GUTTER SHALL HAVE A 4' RADIUS UNLESS OTHERWISE NOTED ON THE PLANS.
15. SITE CONTRACTOR IS RESPONSIBLE FOR WORK TO WITHIN 5'-0" OF BUILDING. UNLESS OTHERWISE NOTED ON THE PLANS.
16. ALL PAINT SHALL BE APPLIED ACCORDING TO THE MANUFACTURERS SPECIFICATIONS TO INCLUDE A MINIMUM OF TWO COATS AND A THICKNESS OF 15 MILS ± 1 MIL WET.
17. ALL PAINTED STRIPING IN PARKING LOT & ASPHALT PAVED AREAS SHALL BE PAINTED WITH A PRODUCT THAT PROVIDES A HIGH SLIP-RESISTANT FINISH IN WET & DRY PAVEMENT CONDITIONS.
18. ALL YELLOW PAINT TO BE ACRYSET AY-251 OR APPROVED EQUAL.
19. ALL BLUE PAINT TO BE ACRYEST HANDICAP BLUE AL-247 OR APPROVED EQUAL.
20. ALL WHITE PAINT TO ACRYSET AW-250 OR APPROVED EQUAL.
21. ALL EXISTING STRIPING SHOWN ON THE PLANS AS TO BE REMOVED SHALL BE PAINTED WITH A MINIMUM OF 2 COATS OF BLACK ACRYSET PAINT AB-245 (OR APPROVED EQUAL). ALTERNATIVELY CONTRACTOR MAY REMOVE EXISTING STRIPING USING PRESSURIZED WATER.
22. CONTRACTOR TO USE CAUTION WITHIN THE VICINITY OF THE SANITARY SEWER MAIN.
23. PARKING LOTS SHALL BE MAINTAINED IN GOOD CONDITIONS, FREE OF POTHOLES, FADED PAVING MARKINGS, WEEDS, DUST, TRASH AND DEBRIS.
24. NOTIFY GWINNETT COUNTY INSPECTOR 24 HOURS BEFORE BEGINNING OF EVERY PHASE OF CONSTRUCTION 678.518.6000.
25. NO CERTIFICATE OF OCCUPANCY WILL BE ISSUED UNTIL ALL SITE IMPROVEMENTS HAVE BEEN COMPLETED.
26. NO OUTSIDE STORAGE PROPOSED. THIS INCLUDES SUPPLIES, EQUIPMENTS, VEHICLES, PRODUCTS, ETC.
27. SIGNS, LOCATION, NUMBER, AND SIZE ARE NOT APPROVED UNDER THIS BUILDING PERMIT. A SEPARATE PERMIT IS REQUIRED FOR EACH SIGN.
28. ALL CONSTRUCTION TO COMPLY WITH GWINNETT COUNTY STANDARDS.
29. NO OVERSIZED SIGNS ARE PERMITTED.
30. NATURAL VEGETATION SHALL REMAIN ON THE PROPERTY UNTIL ISSUANCE OF A DEVELOPMENT PERMIT. NO INTERIM LAND DISTURBANCE PERMITS SHALL BE ISSUED.
31. RESURFACE THE PAVEMENT BY MILLING AND OVERLAYING THE TOP ASPHALT LAYER, WITH A MAXIMUM THICKNESS OF 2 INCHES FOR STANDARD DUTY PAVEMENT AND 3 INCHES FOR HEAVY DUTY PAVEMENT.

SITE LEGEND

- PROPOSED CURB & GUTTER
- REVERSED PITCH CURB & GUTTER
- PROPERTY LINE
- ADJOINING LOT LINE
- STRIPING
- CONCRETE
- RESURFACE STANDARD DUTY PAVEMENT
- RESURFACE HEAVY DUTY PAVEMENT
- REMOVE & REPLACE ASPHALT PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- EXISTING FEATURES SCREENED

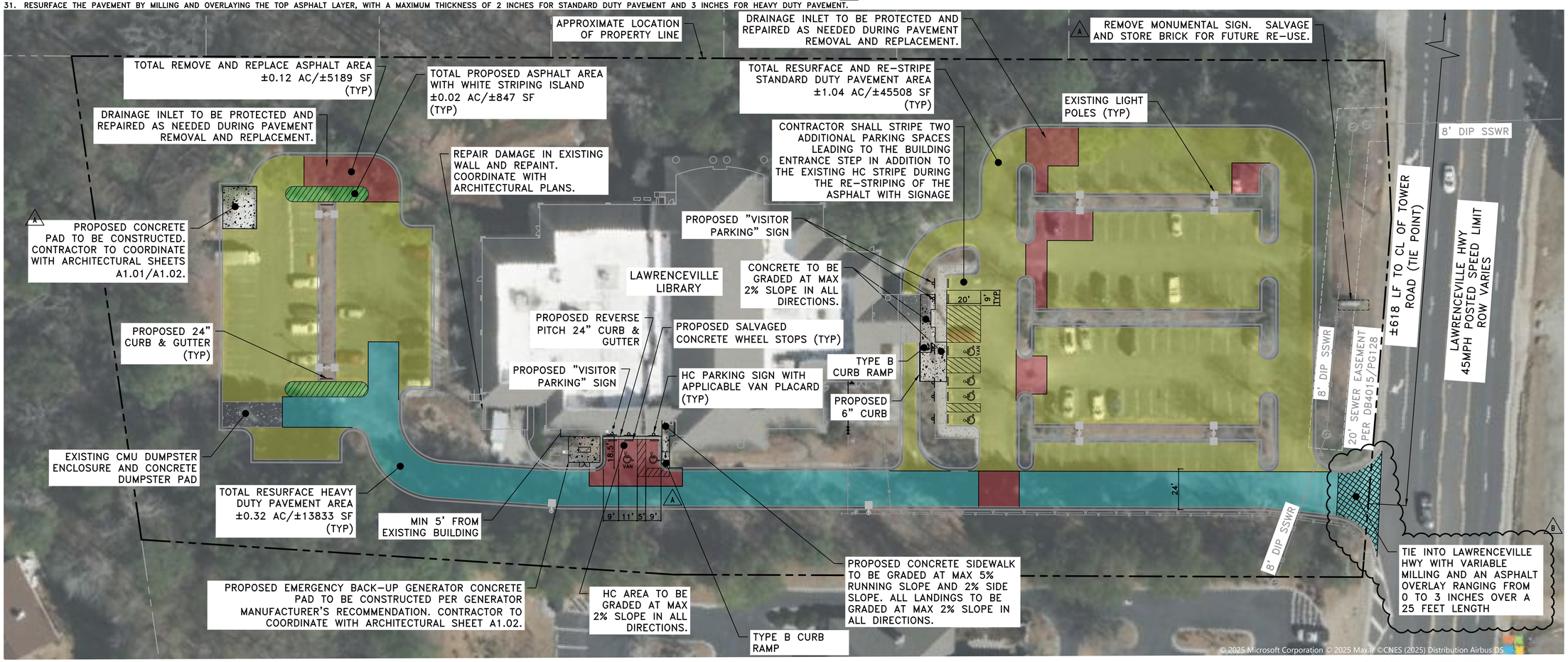
SITE



LOCATION MAP

TOTAL SITE AREA: ±5.00 AC
DISTURBED AREA: ±0.30 AC

PARCEL ID: 5111 141



DRAWING INDEX

No.	SHEET NAME
C1.01	PAVEMENT PLAN
C2.01	CIVIL DEMOLITION AND UTILITY PLAN
C3.01	EROSION CONTROL PLAN
C4.01	DETAILS
C5.01	DETAILS

CERTIFICATE OF DEVELOPMENT PLANS APPROVAL STATEMENT

ALL REQUIREMENTS OF THE GWINNETT COUNTY UNIFIED DEVELOPMENT ORDINANCE (UDO) RELATIVE TO THE PREPARATION AND SUBMISSION OF A DEVELOPMENT PLANS HAVING BEEN FULFILLED, AND SAID APPLICATION AND ALL SUPPORTING PLANS AND DATA HAVING BEEN REVIEWED FOR CODE COMPLIANCE BY ALL AFFECTED COUNTY DEPARTMENTS AS REQUIRED UNDER THEIR RESPECTIVE AND APPLICABLE REGULATIONS, APPROVAL OF THIS DEVELOPMENT PLAN IS HEREBY GRANTED AND ALL OTHER DEVELOPMENT PLANS ASSOCIATED WITH THIS PROJECT SHALL BE SUBJECT TO ALL FURTHER PROVISIONS OF SAID UDO.

DIRECTOR — DATE
DEPARTMENT OF PLANNING AND DEVELOPMENT

THIS CERTIFICATE EXPIRES TWELVE MONTHS FORM THE DATE OF APPROVAL UNLESS A DEVELOPMENT PERMIT IS ISSUED.

CONTRACTOR TO PROVIDE 3 SETS OF "AS-BUILT" PLANS TO OWNER.

IF ANY CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR THE FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY, AND SHALL NOT COMMENCE OPERATION UNTIL THE CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

811 Know what's below. Call before you dig.

CASE NUMBER: EPN2025-02721

COLUMBIA ENGINEERING
2862 BUFORD HIGHWAY
SUITE 200
DULUTH, GEORGIA 30096
(770) 925-0357

THIS DRAWING AND DESIGN ARE THE PROPERTY OF THE CONSULTANT. THEY ARE NOT TO BE USED, REPRODUCED, COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO OTHERS, WITHOUT THE PRIOR WRITTEN CON- SENT OF THE CONSULTANT. ALL COMMON LAW RIGHTS OF COPYRIGHT AND OTHERWISE ARE HEREBY SPECIFICALLY RESERVED.

CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED PROFESSIONAL ENGINEER KAYSIE GLAZER No. PE035778
01/09/26

DRAWN BY: KG
CHECKED BY: KG

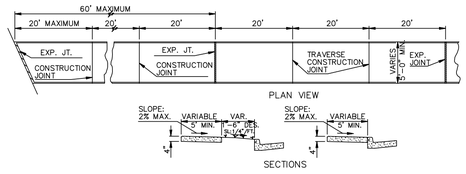
REVISIONS

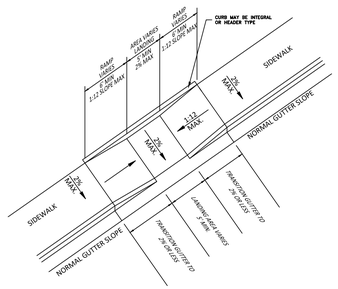
REV#	DATE	DESCRIPTION
A	01/02/2026	ADDENDUM 1
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 12.01.2025
SHEET TITLE PAVEMENT PLAN
SHEET NO. C1.01





TYPE "B"

NOTES FOR CONCRETE SIDEWALKS

A. CONCRETE TO BE PLACED 4" THICK AND FINISHED WITH TAMPS, WOOD FLOATS AND STIFF-BRISTLE BROOMS.

B. TRANSVERSE CONSTRUCTION JOINTS SHALL BE PLACED AT 20 FT. INTERVALS. ALL EDGES TO BE ROUNDED TO½" RADIUS.

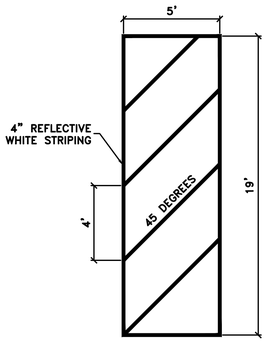
C. EXPANSION JOINTS SHALL BE PLACED, WHERE SIDEWALKS TIE INTO A STRUCTURE OR TERMINATE AT CURB, RAMPS OR DRIVEWAYS AND AT 60' INTERVALS.

NOTES FOR CURB CUT RAMPS:

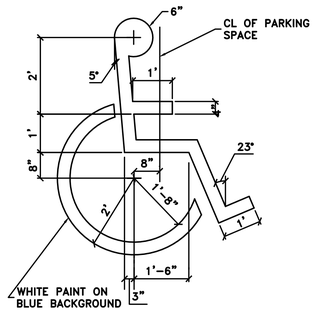
1. CURB CUT RAMPS WILL BE LOCATED AS FOLLOWS:
   a) AT ALL PEDESTRIAN CROSSWALKS WHERE CURB IS CONSTRUCTED OR REPLACED.
   b) WHERE THE SIDEWALK IS INTERRUPTED BY THE CURB AT TURNOUTS OR AT INTERSECTIONS.
   c) AT OTHER LOCATIONS SPECIFIED IN THE PLANS, SUCH AS HOSPITALS, NURSING HOMES, REST AREAS, ETC., WHERE THE CURB WOULD OTHERWISE BE AN OBSTRUCTION TO THE PHYSICALLY HANDICAPPED.
2. ACTUAL LOCATION OF CURB CUT RAMPS WILL BE AS DIRECTED BY THE ENGINEER, OR AS SHOWN IN THE PLANS. THE LOCATION OF RAMPS, WHEN REQUIRED, SHALL BE COORDINATED WITH LOCATIONS OF CROSSWALK LINES AND STOP BARS.
3. RAMPS WILL BE CONSTRUCTED FROM CONCRETE. SPECIFICATIONS FOR RAMP WILL BE THE SAME AS FOR CONCRETE SIDEWALK. RAMPS SHALL HAVE EITHER A ROUGH OR A TEXTURED FINISH.
4. DROP INLETS ARE NOT TO BE LOCATED DIRECTLY IN FRONT OF RAMPS. CATCH BASINS SHOULD BE LOCATED AT LEAST 10 FT. FROM RAMPS WHEN FEASIBLE.
5. WHERE RAMPS ARE LOCATED IN RADII, THE DIMENSIONS SHOWN FOR RAMP WIDTHS AND TAPERS ARE MEASURED PERPENDICULAR TO THE RAMP AND NOT ALONG THE CURVE.
6. WHERE UTILITY STRUCTURES CONFLICT, WHERE SIDEWALK GEOMETRY VARIES, AT SKEWED INTERSECTIONS, OR IN OTHER SPECIAL CASES, THE RAMP DESIGNS MAY BE MODIFIED BY THE DESIGNER OR ENGINEER, PROVIDED THAT THE WIDTH REMAINS A MINIMUM OF 36 INCHES, AND NO SLOPE ON THE ACCESSIBLE PART OF THE RAMP IS STEEPER THAN 12:1.
7. LIN. FT. OF CURB AND GUTTER WILL INCLUDE THE TRANSITIONED CURB IN FRONT OF RAMPS. SQ. YDS. OF CONCRETE SIDEWALK WILL INCLUDE RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR CURB CUT RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SAWING AND REMOVING EXISTING SIDEWALK OR CURB WHERE NECESSARY FOR RAMP CONSTRUCTION.
8. 4" CONCRETE SIDEWALK PAVING IS REQUIRED AT ALL CURB CUTS, EVEN WHERE PAVED SIDEWALK IS NOT REQUIRED, SHADED AREAS IN DETAILS ABOVE ARE THE MINIMUM REQUIREMENTS.

ACCESSIBLE RAMP DETAILS

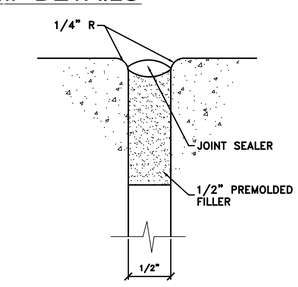
NTS



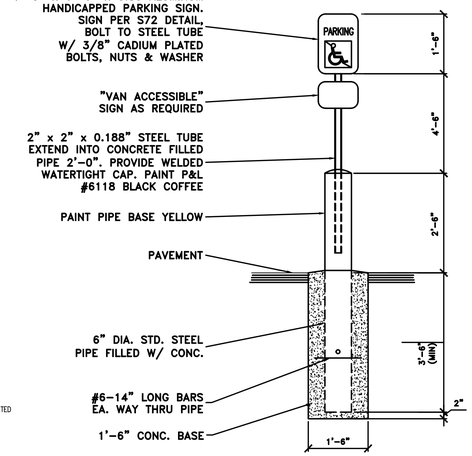
HANDICAP MARKING DIAGONAL
SCALE:NTS S37



UNIVERSAL STRIPED HANDICAP SYMBOL
SCALE:NTS S16

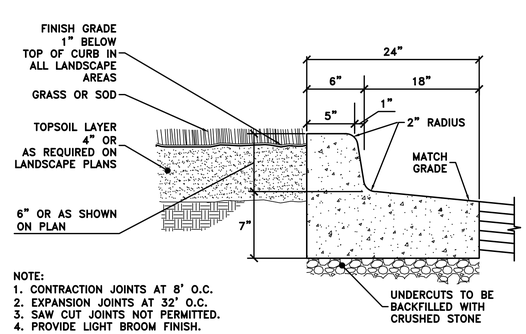


CONCRETE EXPANSION JOINT
SCALE:NTS S40



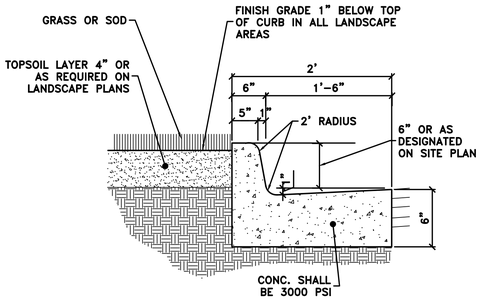
NOTE:
HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS.

VAN ACCESSIBLE SIGN
SCALE:NTS S47



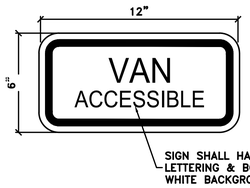
NOTE:
1. CONTRACTION JOINTS AT 8' O.C.
2. EXPANSION JOINTS AT 32' O.C.
3. SAW CUT JOINTS NOT PERMITTED.
4. PROVIDE LIGHT BROOM FINISH.

PARKING LOT
24" REVERSE PITCH
CURB AND GUTTER
SCALE:NTS S02



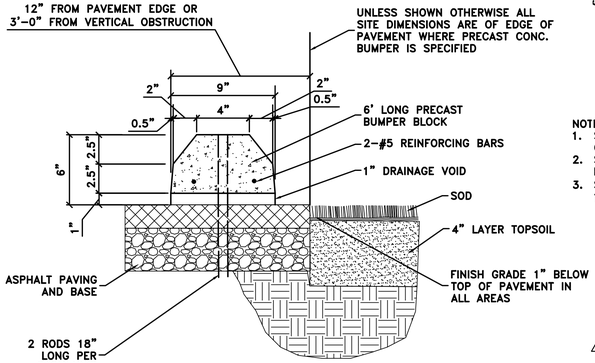
NOTE:
1. CONTRACTION JOINTS AT 8' O.C.
2. EXPANSION JOINTS AT 32' O.C.
3. SAW CUT JOINTS NOT PERMITTED.
4. PROVIDE LIGHT BROOM FINISH.

PARKING LOT
24" CURB & GUTTER
SCALE:NTS S01

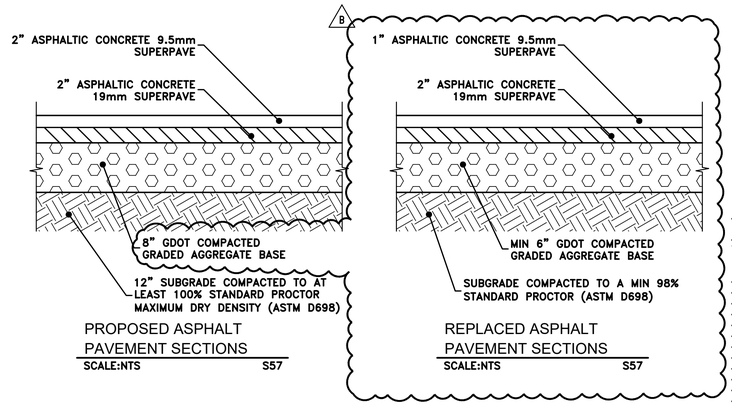


NOTES:
1. SIGN SHALL MEET ALL STATE & FEDERAL ADA GUIDELINES & REQUIREMENTS.
2. SIGN SHALL MEET ALL MUTCD REGULATORY SIGN REQUIREMENTS FOR R7-8a & R7-8b.
3. SIGN SHALL BE MOUNTED A MINIMUM OF 60" ABOVE THE PARKING SURFACE (MIN. 84" IN GEORGIA).

VAN ACCESSIBLE SIGN PLACARD
SCALE:NTS



PRECAST CONCRETE WHEEL STOP
SCALE:NTS S65

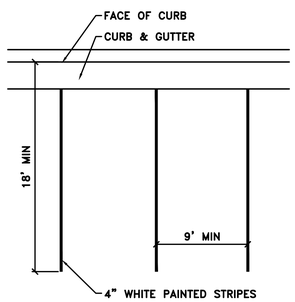


PROPOSED ASPHALT
PAVEMENT SECTIONS
SCALE:NTS S57

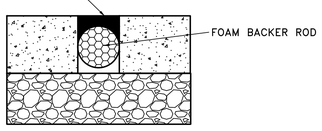
REPLACED ASPHALT
PAVEMENT SECTIONS
SCALE:NTS S57

NOTES:
1. SIGN SHALL MEET ALL STATE & FEDERAL ADA GUIDELINES & REQUIREMENTS.
2. SIGN SHALL MEET ALL MUTCD REGULATORY SIGN REQUIREMENTS FOR R7-8
3. SIGN SHALL BE MOUNTED A MINIMUM OF 84" ABOVE THE PARKING SURFACE.

GEORGIA ACCESSIBLE PARKING SIGN
SCALE:NTS S72

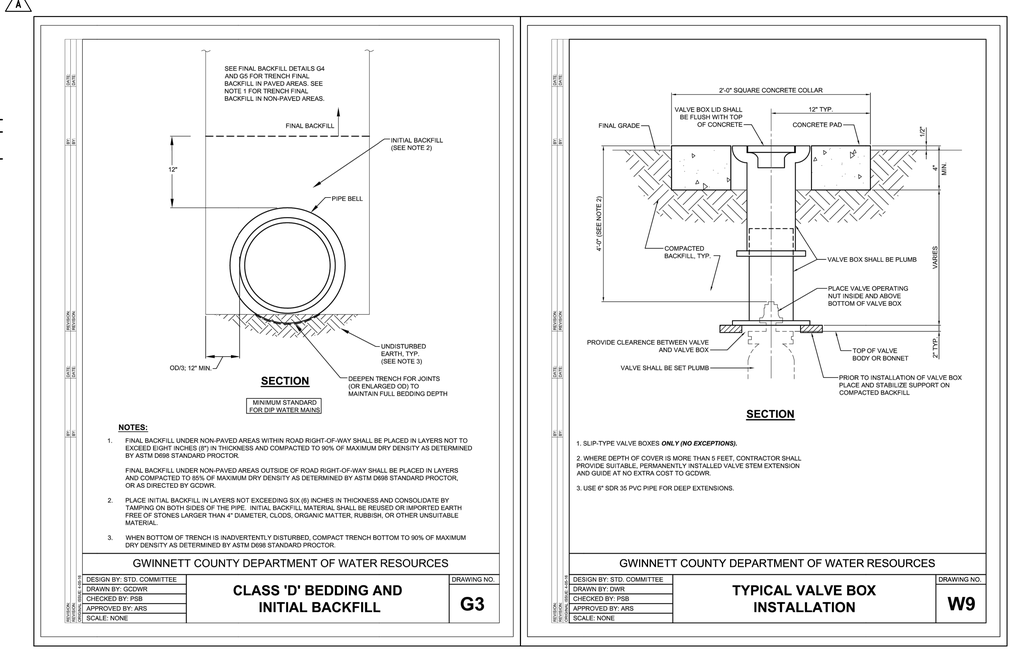


90° STRIPING DETAIL
SCALE:NTS S32



CONCRETE JOINT & CRACK SEAL

NOTE: THOROUGHLY CLEAN JOINTS AND CRACK BEFORE SEALING.



COLUMBIA ENGINEERING
2862 BUFORD HIGHWAY
SUITE 200
DULUTH, GEORGIA 30096
(770) 925-0357

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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED PROFESSIONAL ENGINEER KAYSIE GLAZIER NO. PE035778
01/09/26

DRAWN BY: KG
CHECKED BY: KG

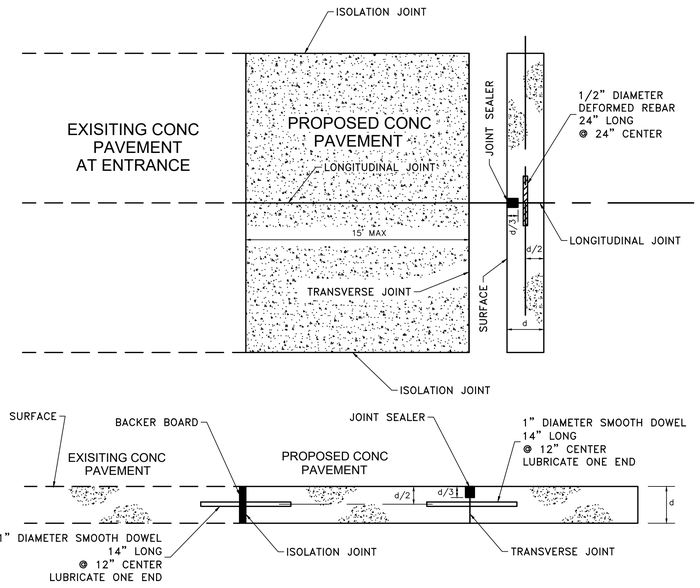
REVISIONS

REV#	DATE	DESCRIPTION
A	01/02/2026	ADDENDUM 1
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

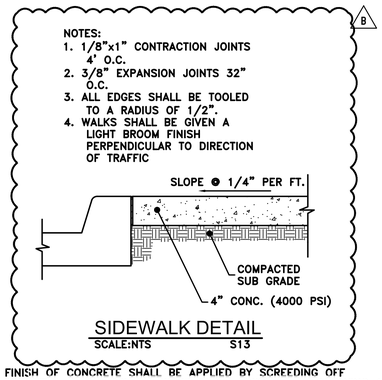
PROJECT NO. 20-24092.00
DATE 12.01.2025
SHEET TITLE DETAILS
SHEET NO. C4.01



CONCRETE PAVEMENT JOINTS

CONCRETE PAVEMENT JOINTS NOTES:

1. CONSTRUCT TRANSVERSE CONTRACTION JOINTS AT 15 FOOT CENTERS, REINFORCED WITH 14 INCH LONG, SMOOTH DOWELS (ONE END GREASED) AT 12 IN CENTERS.
2. CONSTRUCT ISOLATION JOINTS BETWEEN NEW AND EXISTING PAVEMENT WITH PREFORMED BACKERBOARD. REINFORCE THE ISOLATION JOINTS SIMILAR TO THE TRANSVERSE JOINTS.
3. CONSTRUCT LONGITUDINAL JOINTS BETWEEN ADJACENT NEW PAVEMENT SECTIONS USING 24 INCH LONG, ½-INCH DIAMETER DEFORMED BARS AT 24 INCH SPACING.
4. CONSTRUCT LONGITUDINAL JOINTS BETWEEN NEW PAVEMENT SECTIONS AND NEW CURB AND GUTTER USING 24 INCH LONG, ½-INCH DIAMETER DEFORMED BARS SPACED AT 24 INCHES. (ONLY VALID IF CURB AND GUTTER IS REMOVED AND REPLACED.)



SIDEWALK DETAIL

SCALE:NTS S13

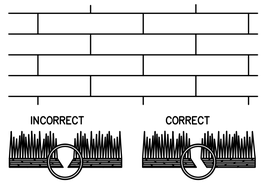
1. FINISH OF CONCRETE SHALL BE APPLIED BY SCREEDING OFF CONCRETE, THEN APPLYING WOOD FLOAT FINISH, THEN APPLYING A BROOM FINISH PARALLEL TO DRAINAGE WITH MAXIMUM DEPTH OF DEPRESSIONS TO BE 1/32".
2. ALL LONGITUDINAL, TRANSVERSE, AND EXPANSION JOINTS SHALL BE SEALED WITH W.R. MEADOWS SEALANT. APPLICATION OF JOINT SEALER SHALL BE PERFORMED IN A TIMELY, NEAT, AND WORKMANLIKE MANNER.
3. MONOLITHIC CURB AND PAVEMENT JOINTS SHALL BE CONTINUOUS THROUGH CURBS.
4. CONTRACTOR SHALL LAY OUT THE LONGITUDINAL CONSTRUCTION JOINTS AND TRANSVERSE CONTRACTION JOINTS SUCH THAT THE JOINT SPACING IS NO LESS THAN 10 FT, OR GREATER THAN 15 FT. ALL STORM DROP INLETS, SANITARY MANHOLES LIGHT POLES, WATER VALVE BOXES, AND OTHER SIMILAR STRUCTURES SHALL BE LOCATED ON A JOINT LINE OR AT A JOINT INTERSECTION AND SHALL BE ISOLATED WITH A PERIMETER EXPANSION JOINT ONE FOOT AWAY FROM THE OUTSIDE EDGE OF EACH STRUCTURE. JOINT LAYOUT SHALL BE DONE IN ACCORDANCE WITH ACCEPTED JOINT LAYOUT CRITERIA.
5. LANE PAVING SHALL BE UTILIZED ON THIS PROJECT UNLESS AN ALTERNATE ACCEPTABLE METHOD IS APPROVED BY THE ENGINEER CONTRACTOR SHALL NOT OPERATE LOADED CONCRETE TRUCKS ON NEWLY PAVED LANES IN LIGHT DUTY PAVING AREAS. TRUCK TRAFFIC SHALL NOT BE ALLOWED ON NEWLY PAVED AREAS. CONTRACTOR SHALL REPAIR ANY DAMAGE TO NEWLY PAVED AREAS RESULTING FROM SUBSEQUENT PAVING OPERATIONS. METAL KEYWAY FORMS WHEN USED SHALL BE REMOVED PRIOR TO POURING ALTERNATE ADJACENT PAVEMENT SLABS.
6. ACCURATE PAVEMENT GRADES ALONG FUTURE CURB & GUTTER ARE ESPECIALLY IMPORTANT BECAUSE OF THE NEED TO MAINTAIN PROPER SLOPE WITHIN THE CURB & GUTTER SECTION AND TO MAINTAIN A 6" CURB HEIGHT.
7. PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS AND GRADES OF UTILITY APPURTENANCES (MH'S, VALVE BOXES, C.O.'S, ETC.) PRIOR TO POURING. HE IS ALSO RESPONSIBLE FOR PROOF ROLLING ALL SUBGRADE AND PAYING PARTICULAR ATTENTION TO UTILITY TRENCHES.
8. PRIOR TO BIDDING THE CONTRACTOR SHALL FULLY INSPECT THE SITE TO FAMILIARIZE HIMSELF WITH PRESENT SITE CONDITIONS. NOTIFY ENGINEER PRIOR TO BIDDING OF ANY DISCREPANCIES BETWEEN DRAWING AND SITE CONDITIONS.

CONCRETE PAVING PLAN NOTES

SCALE:NTS S35

Ds4 SOD MAINTENANCE AND INSTALLATION

SOD LAYOUT AND PREPARATION



LAY SOD IN A STAGGERED PATTERN. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER. DO NOT LEAVE SPACES AND DO NOT OVERLAP. A SHARPENED MASON'S TROWEL IS A HANDY TOOL FOR TUCKING DOWN THE ENDS AND TRIMMING PIECES.

BUTTING: ANGLED ENDS CAUSED BY THE AUTOMATIC SOD CUTTER MUST BE MATCHED CORRECTLY.

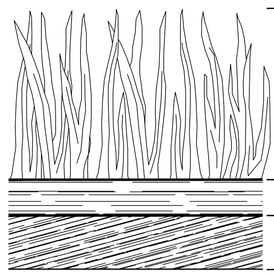
DIRECTIONS FOR INITIAL MAINTENANCE

Step 1. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL

Step 2. WATER TO A DEPTH OF 4" AS NEEDED. WATER WELL AS SOON AS THE SOD IS LAID.

Step 3. MOW WHEN THE SOD IS ESTABLISHED -- IN 2-3 WEEKS. SET THE MOWER HIGH (2"-3").

APPEARANCE OF GOOD SOD



SHOOTS OR GRASS BLADES: GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH: GRASS CLIPPINGS AND DEAD LEAVES (UP TO 1/2" THICK).

ROOT ZONE: SOIL AND ROOTS. SHOULD BE 1/2"-3/4" THICK WITH DENSE ROOT MAT FOR STRENGTH.

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. COOL SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS/AC 1000 LBS/AC 400 LBS/AC	50-100 LBS/AC 1/2/ - 30
2. COOL SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500 LSB/AC 1000 LBS/AC 400 LBS/AC	0-50 LBS/AC 1/ - -
3. GROUND COVERS	FIRST SECOND MAINTENANCE	10-10-10 10-10-10 10-10-10	1300 LBS/AC 3/ 1300 LBS/AC 3/ 1100 LBS/AC	- - -
4. SHRUBS LESPEDEZA	FIRST MAINTENANCE	0-10-10 0-10-10	700 LBS/AC 700 LBS/AC 4/	- -
5. TEMPORARY COVER CROPS SEEDED ALONE	FIRST	10-10-10	500 LBS/AC	30 LBS/AC 5/
6. WARM SEASON GRASSES	FIRST SECOND MAINTENANCE	6-12-12 6-12-12 10-10-10	1500 LBS/AC 800 LBS/AC 400 LBS/AC	50-100 LBS/AC 2/6/ 50-100 LBS/AC 2/ 30 LBS/AC
7. WARM SEASON GRASSES AND LEGUMES	FIRST SECOND MAINTENANCE	6-12-12 0-10-10 0-10-10	1500 LBS/AC 1000 LBS/AC 400 LBS/AC	50 LBS/AC 6/

MULCHING RATES:
1. DRY STRAW: 2 TONS PER ACRE.
2. DRY HAY: 2-1/2 TONS PER ACRE.
3. FOR HYDRAULIC SEEDING USE WOOD DELLULOSE MULCH OR WOOD PULP FIBER AT THE RATE OF 500 POUNDS PER ACRE.

1/ APPLY IN SPRING FOLLOWING SEEDING.
2/ APPLY IN SPLIT APPLICATIONS WHEN HIGH RATES ARE USED.
3/ APPLY IN 3 SPLIT APPLICATIONS.
4/ APPLY WHEN PLANTS ARE PRUNED.
5/ APPLY TO GRASS SPECIES ONLY.
6/ APPLY WHEN PLANTS GROW TO A HEIGHT OF 2 TO 4 INCHES.

FERTILIZER AND MULCHING REQUIREMENTS Ds1

SCALE:NTS E41

SPECIES	BROADCAST PER ACRE	BROADCAST PER 1000 SF	RESOURCE AREA	PLANTING DATES J F M A M J J A S O N D	REMARKS
BARLEY ALONE IN MIXTURE	144 LBS 24 LBS	3.3 LBS 0.6 LBS	M-L 4/ P C		14,000 SEED PER POUND WINTER HARDY. USE ON PRODUCTIVE SOILS
LESPEDEZA, ANNUAL ALONE IN MIXTURE	40 LBS 10 LBS	0.9 LBS 0.2 LBS	M-L P C		200,000 SEED PER POUND MAY VOLUNTEER FOR SEVERAL YEARS USE INOCULANT EL
LOVEGRASS, WEEPING ALONE IN MIXTURE	4 LBS 2 LBS	0.1 LBS 0.2 LBS	M-L P C		1,500,000 SEED PER POUND MAY LAST FOR SEVERAL YEARS. MIX WITH SERICEA LESPEDEZA
MILLET, BROWN TOP ALONE IN MIXTURE	40 LBS 10 LBS	0.9 LBS 0.2 LBS	M-L P C		137,000 SEED PER POUND, QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IS SEEDED AT HIGH RATES
RYE ALONE IN MIXTURE	3 BU 1/2 BU	3.9 LBS 0.6 LBS	M-L P C		18,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT AND WINTER HARDY
RYEGRASS, ANNUAL ALONE	50 LBS	0.9 LBS	M-L P C		227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES.

M-L REPRESENTS TO MOUNTAIN; BLUE RIDGE; AND RIDGES AND VALLEYS MLRA'S
P REPRESENTS THE SOUTHERN PIEDMONT MLRA
C REPRESENTS THE SOUTHERN COASTAL PLAIN; SAND HILLS; AND ATLANTIC COAST. FLATWOODS MLRA'S

DISTURBED AREA STABILIZATION (TEMP) Ds2

SCALE:NTS E42

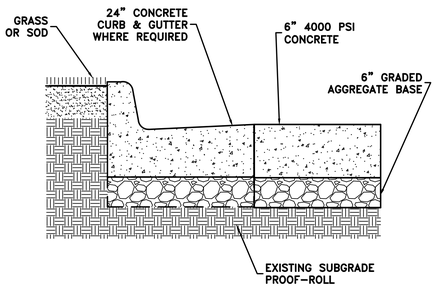
SPECIES	BROADCAST PER ACRE	BROADCAST PER 1000 SF	RESOURCE AREA	PLANTING DATES J F M A M J J A S O N D	REMARKS
BERMUDA, COMMON HULLED SEED ALONE WITH OTHER PERENNIALS	10 LBS 6 LBS	0.2 LBS 0.1 LBS	P C		1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOD FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS
BERMUDA, COMMON UNHULLED SEED W/TEMP COVER WITH OTHER PERENNIALS	10 LBS 6 LBS	0.3 LBS 0.1 LBS	P C		PLANT WITH WINTER ANNUALS PLANT WITH TALL FESCUE
CENTIPEDE	BLOCK SOD ONLY		M-L P		DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE. EFFECTIVE ADJACENT TO CONC. AND IN CONCENTRATED FLOW AREAS. IRRIGATION IS NEEDED UNTIL FULLY ESTABLISHED. DO NOT PLANT NEAR PASTURES.
CROWNVETCH WITH WINTER ANNUALS OR COOL SEASON GRASSES	15 LBS	0.3 LBS	M-L P		100,000 SEED PER POUND. DENSE GROWTH. DROUGHT TOLERANT AND FIRE RESISTANT. USE FROM NORTH ATLANTA & NORTHWARD
FESCUE, TALL ALONE W/OTHER PERENNIALS	50 LBS 30 LBS	1.1 LBS 0.7 LBS	M-L P		227,000 SEED PER POUND. USE ALONE ONLY ON BETTER SITES. NOT FOR DROUGHTY SOILS. NOT FOR HEAVY USE.
LESPEDEZA SCARIFIED UNSCARIFIED	60 LBS 70 LBS	1.4 LBS 1.7 LBS	M-L P C		300,000 SEED PER POUND. HEIGHT OF GROWTH IS 18 TO 24 INCHES. ADVANTAGES IN URBAN AREAS. MIX W/ WEEPING LOVEGRASS, COMMON BERMUDA BAHIA, TALL FESCUE, OR WINTER ANNUALS, INOCULATE SEED W/ EL INOCULANT.

M-L REPRESENTS TO MOUNTAIN; BLUE RIDGE; AND RIDGES AND VALLEYS MLRA'S
P REPRESENTS THE SOUTHERN PIEDMONT MLRA
C REPRESENTS THE SOUTHERN COASTAL PLAIN; SAND HILLS; BLACK LANDS; AND ATLANTIC COAST. FLATWOODS MLRA'S

NOTE:
AGRICULURAL LIME SHALL BE APPLIED AS INDICATED BY SOIL TEST OR AT THE RATE OF 1 TO 2 TONS PER ACRE.

DISTURBED AREA STABILIZATION (PERM) Ds3

SCALE:NTS E43



CONCRETE PAVING NOTE:

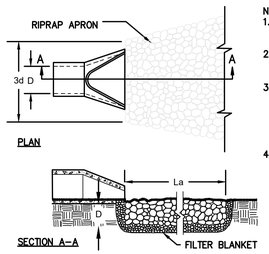
1. GRADE SUBGRADE AND PROOF-ROLL WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY SOFT OR YIELDING SUBGRADE. UNDERCUT THESE AREAS TO A DEPTH OF 6 INCHES AND REPLACE WITH GRADED AGGREGATE BASE (GAB) COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY ASTM D698 AT +/- 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT.

CONCRETE PAVEMENT

SCALE:NTS

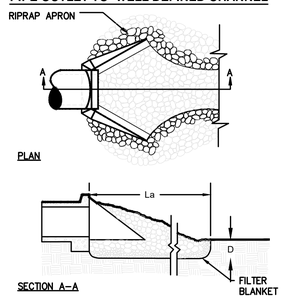
RIPRAP OUTLET PROTECTION St

PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



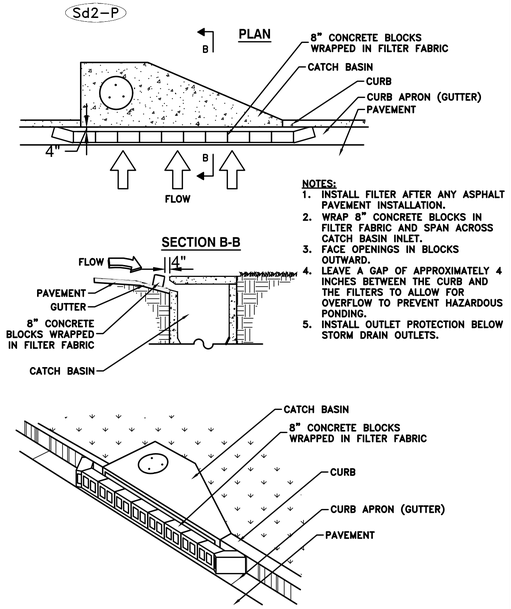
NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESSTHAN 6".
3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.

PIPE OUTLET TO WELL DEFINED CHANNEL



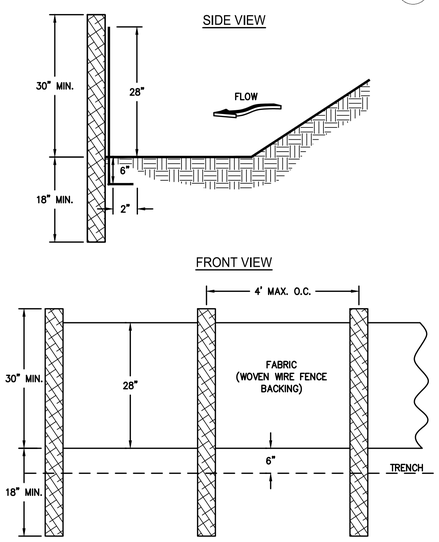
CURB INLET FILTER "PIGS IN BLANKET"

Sd2-P



NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
3. FACE OPENINGS IN BLOCKS OUTWARD.
4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.

SILT FENCE - TYPE SENSITIVE Sd1



NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

COLUMBIA ENGINEERING
2862 BUFORD HIGHWAY
SUITE 200
DULUTH, GEORGIA 30096
(770) 925-0357

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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED NO. PE035716 PROFESSIONAL ENGINEER KAYSIE GLAZER

01/09/26

DRAWN BY: KG

CHECKED BY: KG

REVISIONS

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00

DATE 12.01.2025

SHEET TITLE DETAILS

SHEET NO. **C5.01**

LEGEND-FLOOR PLANS

C1 / C2 Ax.xx — **INTERIOR ELEVATIONS**: VIEW NUMBER, SHEET NUMBER

Ax.xx — **SECTIONS**: VIEW NUMBER, SHEET NUMBER

Ax.xx — **PLAN CALLOUTS**: VIEW NUMBER, SHEET NUMBER

PARTITION GRAPHIC INDICATORS

-SEE PARTITION TYPES FOR FULL PARTITION DETAILS

- EXISTING TO REMAIN CMU WALL
- EXISTING TO REMAIN NON-CMU WALL
- EXISTING TO REMAIN 4 HR RATED CMU WALL
- NEW 4 HR RATED CMU WALL TO MATCH EXISTING
- NEW INT WALL WITH BATT INSULATION TO CEILING OR 6" ABOVE ACT CEILING
- NEW INT CMU WALL TO CEILING OR 6" ABOVE ACT CEILING
- NEW INT WALL WITH BATT INSULATION TO DECK/CAP ABOVE
- NEW 1HR RATED WALL TO DECK ABOVE
- CL-# NEW CLERESTORY WINDOWS - REFER TO A10.02
- SF-# NEW STOREFRONT SYSTEM - REFER TO A10.02

GENERAL NOTES

1. ALL DIMENSIONS ARE FROM FINISH FACE OF EXISTING WALL, FACE OF METAL STUD, FACE OF MASONRY, FACE OF METAL PANEL, OR FACE OF CONCRETE, U.N.O.
2. ALL DOOR FRAMES IN METAL STUD WALLS TO BE SET 4" FROM PERPENDICULAR WALLS ADJACENT TO DOOR HINGE SIDE, UNO. ALL DOOR FRAMES IN MASONRY WALLS TO BE SET 8" FROM PERPENDICULAR WALLS ADJACENT TO DOOR HINGE SIDE, UNO.
3. WHERE METAL FURRING IS ATTACHED TO STEEL OR CONCRETE, THE DIMENSION IS TO STEEL OR CONCRETE, UNO.
4. SEE LIFE SAFETY PLANS FOR FIRE EXTINGUISHER TYPES, DETAILS & LOCATIONS.
5. SEE PARTITION TYPES FOR UL DESIGN ASSEMBLIES.
6. SEE DIMENSION PLAN (A2.02) AND ENLARGED PLANS FOR DIMENSIONS AND WALL TYPES.
7. PROVIDE 45 DEGREE DIAGONAL BRACING (MATCH GAUGE OF STUD) STAGGERED AT 48" O.C. TO STRUCTURE ABOVE AT ALL METAL STUD PARTITIONS THAT DO NOT EXTEND TO DECK. REFER TO DETAIL ON SHEET A4.02
8. PROVIDE FRT PLYWOOD BETWEEN METAL STUDS TO MATCH THE OVERALL HEIGHT AND WIDTH OF WALL MOUNTED MONITORS AND TVS, U.N.O.; GC TO COORDINATE FINAL SIZE AND LOCATION WITH AV DWGS & OWNER.
9. PROVIDE WOOD BLOCKING IN STUD WALLS FOR ALL WALL MOUNTED ACCESSORIES, FIXTURES, FURNITURE AND SYSTEMS.
10. THE FINISH ELEVATIONS OF EXIT LANDINGS SHALL NOT EXCEED A MAXIMUM OF 1/2" BELOW THRESHOLDS.
11. ALIGN ALL NEW WALLS WITH EXISTING WALLS WHERE APPLICABLE.
12. UNLESS NOTED OTHERWISE THE TYPICAL WALL TYPES ARE MAA3/MAA6. SEE SHEET G3.01.
13. SEE FINISH SCHEDULE FOR ADDITIONAL FINISHES APPLIED TO INTERIOR WALLS.
14. PATCH & REPAIR WALLS AT DEMOLISHED WALL INTERECTIONS, TYP.
15. PATCH AREAS WHERE EXISTING OUTLETS AND FLOOR BOXES ARE TO BE REMOVED. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS
16. REMOVE EXISTING SEALANT AND BACKER ROD AROUND EXTERIOR WINDOWS AND DOORS AND RECAULK INSTALL BACKER ROD & SEALANT, REFER TO EXISTING BUILDING CD DRAWING SHEET A-2, A-3, AND A-15 DATED 12/09/88 FOR APPROXIMATE SIZES.
17. PREP AND REPAINT METAL LINTEL ABOVE ALL EXTERIOR WINDOWS AND DOORS. REFER TO EXISTING BUILDING CD DRAWING SHEET A-2, A-3, AND A-15 DATED 12/09/88 FOR APPROXIMATE SIZES.
18. ACCESS PANELS SHALL BE PROVIDED IN ALL ASSEMBLIES FOR ANY EQUIPMENT OR ITEM REQUIRING MAINTENANCE OR PERIODIC REPLACEMENT.

REMOVE BOOK DROP-OFF BOX, AND INFILL BRICK WALL TO MATCH ADJACENT WITH SALVAGED BRICKS FROM MONUMENTAL SIGN.

1 FLOOR PLAN
A2.01 1/8" = 1'-0"

TRUE NORTH / PROJECT NORTH

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA — HYONTAE KANG — CERTIFICATE NO. RA031825 — REGISTERED ARCHITECT

Hyontae Kang

12.01.2025

DRAWN BY: Author

CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA
30046

PROJECT NO. 20-24092.00

DATE 12.01.2025

SHEET TITLE FLOOR PLAN - OVERALL

SHEET NO. A2.01

FLOOR PLAN CODED NOTES

C1	PATCH & REPAIR ADJOINING WALLS AT DEMOLISHED WALL INTERSECTIONS, TYP.
C2	MATCH EXISTING WALL CONSTRUCTION AND FINISH
C3	FURR CMU WALL WITH 3 5/8" METAL STUD AND ONE LAYER OF 5/8" GWB
C4	MATCH EXISTING - 8" SMOOTH FACE CMU + 3/4" HAT CHANNEL + 1/2" GWB BOTH SIDES PER EXISTING DWGS. VERIFY IN FIELD.
C5	INFILL DOOR OPENING WITH 4-HOUR FIRE RATED CMU TO MATCH EXISTING WALL TYPE.
C6	FLOAT ALL NEW RESTROOM FLOOR TILE TO BE LEVEL WITH DRAIN. COMPLY WITH TCNA RECOMMENDATIONS FOR THINSET BEDDING THICKNESS AND PROVIDE LEVELING COMPOUND AS REQUIRED FOR FLUSH ALIGNMENT.

LEGEND-FLOOR PLANS

PARTITION GRAPHIC INDICATORS

-SEE PARTITION TYPES FOR FULL PARTITION DETAILS

- EXISTING TO REMAIN CMU WALL
- EXISTING TO REMAIN NON-CMU WALL
- EXISTING TO REMAIN 4 HR RATED CMU WALL
- NEW 4 HR RATED CMU WALL TO MATCH EXISTING
- NEW INT WALL WITH BATT INSULATION TO CEILING OR 6" ABOVE ACT CEILING
- NEW INT CMU WALL TO CEILING OR 6" ABOVE ACT CEILING
- NEW INT WALL WITH BATT INSULATION TO DECK/CAP ABOVE
- NEW 1HR RATED WALL TO DECK ABOVE

WALL IDENTIFICATION TAG

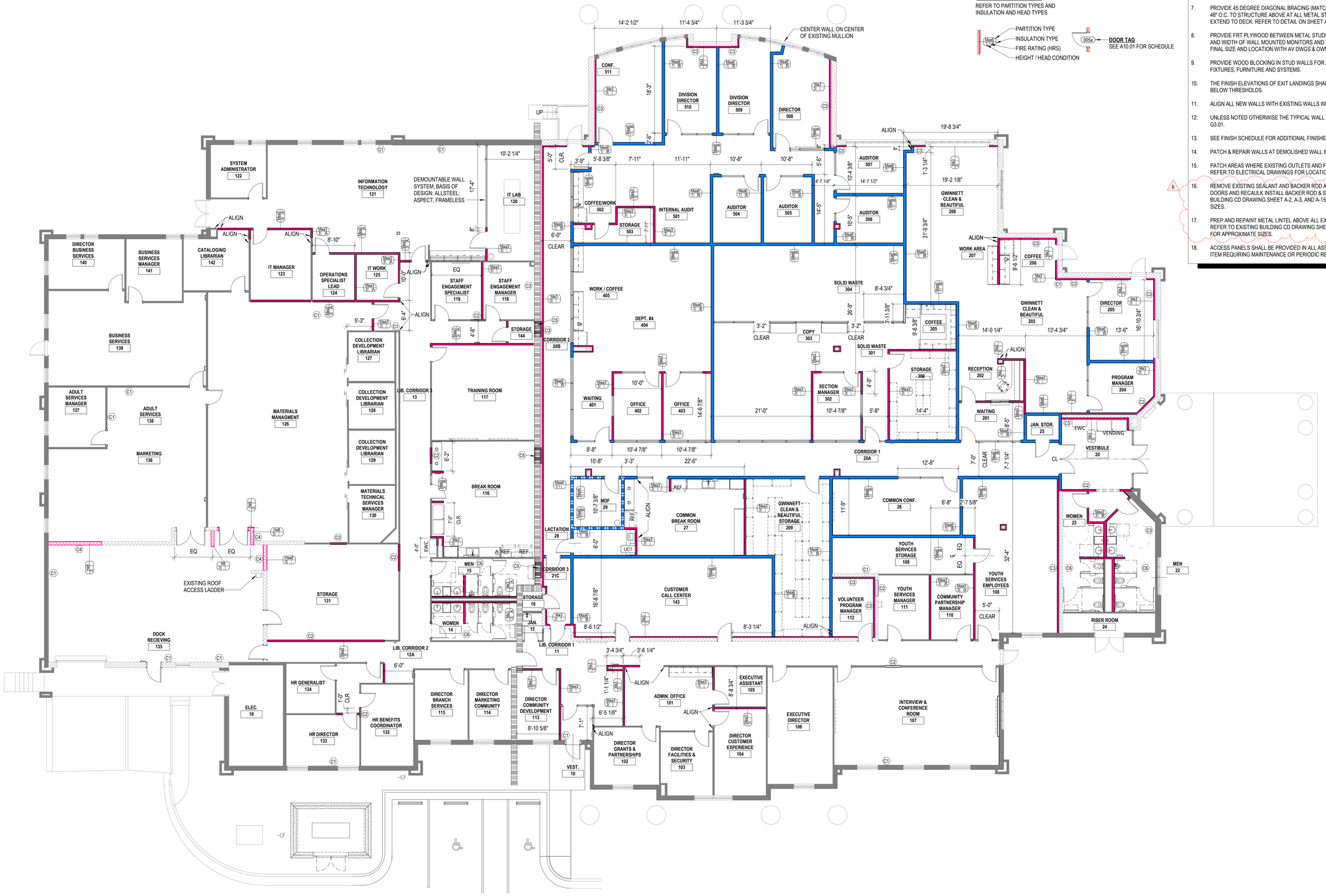
REFER TO PARTITION TYPES AND INSULATION AND HEAD TYPES

Ma#3 — PARTITION TYPE / INSULATION TYPE / FIRE RATING (HRS) / HEIGHT / HEAD CONDITION

005a — **DOOR TAG** SEE A10.01 FOR SCHEDULE

GENERAL NOTES

1. ALL DIMENSIONS ARE FROM FINISH FACE OF EXISTING WALL, FACE OF METAL STUD, FACE OF MASONRY, FACE OF METAL PANEL, OR FACE OF CONCRETE, U.N.O.
2. ALL DOOR FRAMES IN METAL STUD WALLS TO BE SET 4" FROM PERPENDICULAR WALLS ADJACENT TO DOOR HINGE SIDE, UNO. ALL DOOR FRAMES IN MASONRY WALLS TO BE SET 8" FROM PERPENDICULAR WALLS ADJACENT TO DOOR HINGE SIDE, UNO.
3. WHERE METAL FURRING IS ATTACHED TO STEEL OR CONCRETE, THE DIMENSION IS TO STEEL OR CONCRETE, UNO.
4. SEE LIFE SAFETY PLANS FOR FIRE EXTINGUISHER TYPES, DETAILS & LOCATIONS.
5. SEE PARTITION TYPES FOR UL DESIGN ASSEMBLIES.
6. SEE DIMENSION PLAN (A2.02) AND ENLARGED PLANS FOR DIMENSIONS AND WALL TYPES.
7. PROVIDE 45 DEGREE DIAGONAL BRACING (MATCH GAUGE OF STUD) STAGGERED AT 48" O.C. TO STRUCTURE ABOVE AT ALL METAL STUD PARTITIONS THAT DO NOT EXTEND TO DECK. REFER TO DETAIL ON SHEET A4.02
8. PROVIDE FRT PLYWOOD BETWEEN METAL STUDS TO MATCH THE OVERALL HEIGHT AND WIDTH OF WALL MOUNTED MONITORS AND TVS, U.N.O.; GC TO COORDINATE FINAL SIZE AND LOCATION WITH AV DWGS & OWNER.
9. PROVIDE WOOD BLOCKING IN STUD WALLS FOR ALL WALL MOUNTED ACCESSORIES, FIXTURES, FURNITURE AND SYSTEMS.
10. THE FINISH ELEVATIONS OF EXIT LANDINGS SHALL NOT EXCEED A MAXIMUM OF 1/2" BELOW THRESHOLDS.
11. ALIGN ALL NEW WALLS WITH EXISTING WALLS WHERE APPLICABLE.
12. UNLESS NOTED OTHERWISE THE TYPICAL WALL TYPES ARE MAA3/MAA6. SEE SHEET G3.01.
13. SEE FINISH SCHEDULE FOR ADDITIONAL FINISHES APPLIED TO INTERIOR WALLS.
14. PATCH & REPAIR WALLS AT DEMOLISHED WALL INTERECTIONS, TYP.
15. PATCH AREAS WHERE EXISTING OUTLETS AND FLOOR BOXES ARE TO BE REMOVED. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS
16. REMOVE EXISTING SEALANT AND BACKER ROD AROUND EXTERIOR WINDOWS AND DOORS AND RECAULK INSTALL BACKER ROD & SEALANT. REFER TO EXISTING BUILDING CD DRAWING SHEET A-2, A-3, AND A-15 DATED 12/09/88 FOR APPROXIMATE SIZES.
17. PREP AND REPAINT METAL LINTEL ABOVE ALL EXTERIOR WINDOWS AND DOORS. REFER TO EXISTING BUILDING CD DRAWING SHEET A-2, A-3, AND A-15 DATED 12/09/88 FOR APPROXIMATE SIZES.
18. ACCESS PANELS SHALL BE PROVIDED IN ALL ASSEMBLIES FOR ANY EQUIPMENT OR ITEM REQUIRING MAINTENANCE OR PERIODIC REPLACEMENT.



1 / A2.02 FLOOR PLAN
1/8" = 1'-0"

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA — HYONTAE KANG — CERTIFICATE NO. RA031825 — REGISTERED ARCHITECT

Hyontae Kang

12.01.2025

DRAWN BY: RMA

CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

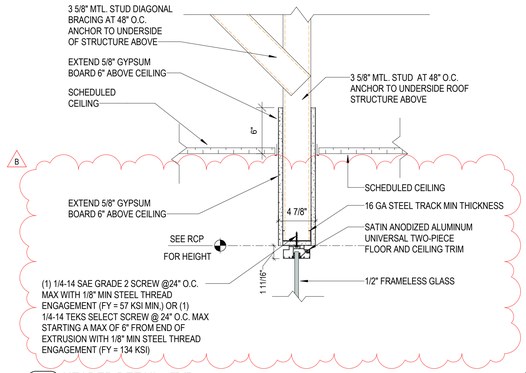
1001 Lawrenceville Hwy
Lawrenceville, GA
30046

PROJECT NO. 20-24092.00

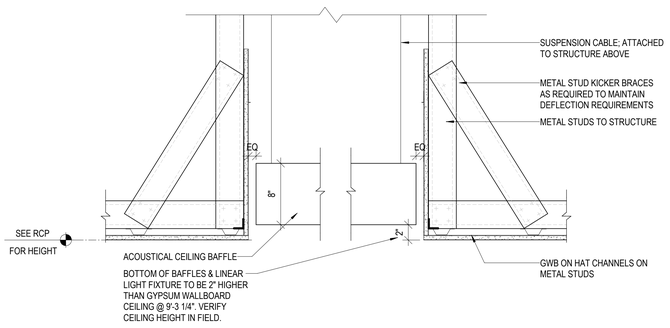
DATE 12.01.2025

SHEET TITLE DIMENSION PLAN - OVERALL

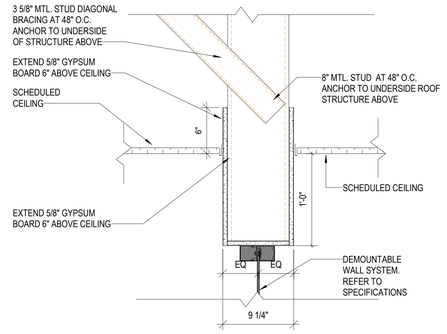
SHEET NO. A2.02



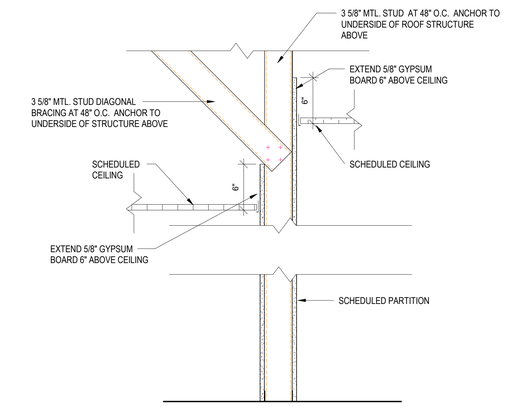
10 A4.02 HEADER DETAIL - TYP.
1 1/2" = 1'-0"



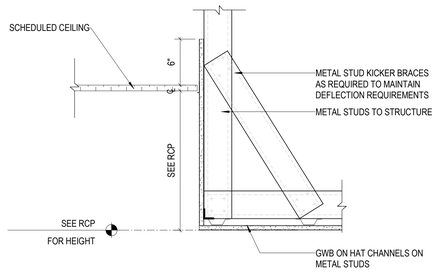
9 A4.02 SOFFIT DETAIL - ACOUSTIC BAFFLE CEILING
1 1/2" = 1'-0"



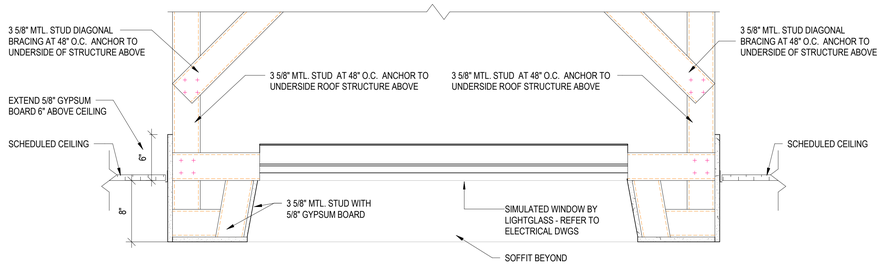
6 A4.02 HEADER DETAIL @ IT LAB
1 1/2" = 1'-0"



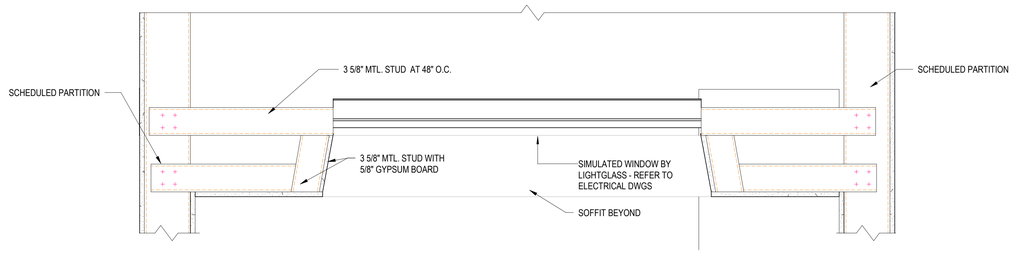
4 A4.02 ACT CEILING DETAIL
1 1/2" = 1'-0"



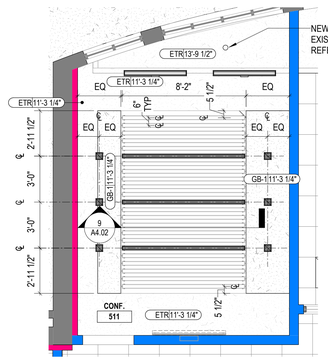
8 A4.02 STANDARD SOFFIT DETAIL
1 1/2" = 1'-0"



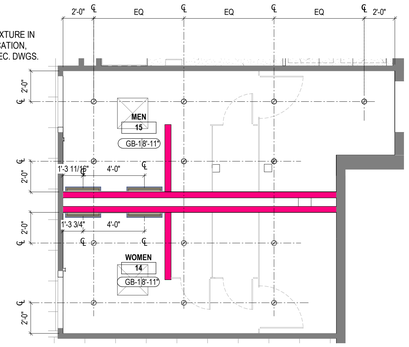
3 A4.02 SOFFIT DETAIL - SIMULATED WINDOWS - OPEN SIDE CONDITION
1 1/2" = 1'-0"



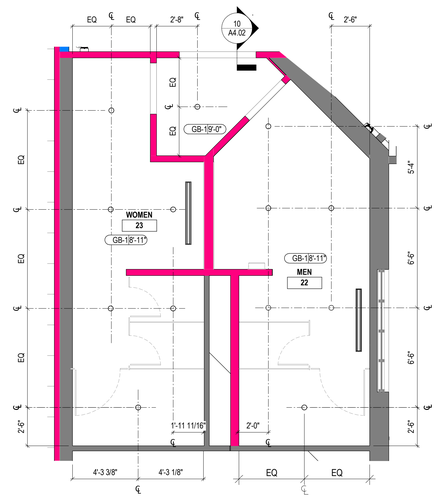
5 A4.02 SOFFIT DETAIL - SIMULATED WINDOWS - WALL CONDITION
1 1/2" = 1'-0"



7 A4.02 CONF. 511 - ENLARGED RCP
1/4" = 1'-0"



2 A4.02 WOMEN 14 & MEN 15 - ENLARGED RCP
1/4" = 1'-0"



1 A4.02 MEN 22 & WOMEN 23 - ENLARGED RCP
1/4" = 1'-0"

POH+W ARCHITECTS

ARCHITECTURE
INTERIOR DESIGN
GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA
HYONTAE KANG
CERTIFICATE NO. RA031825
REGISTERED ARCHITECT
Hyontae Kang
12.01.2025

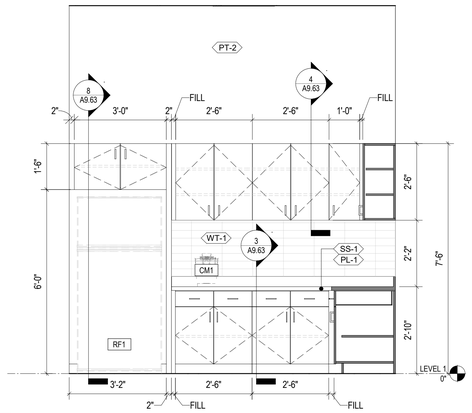
DRAWN BY: Author
CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

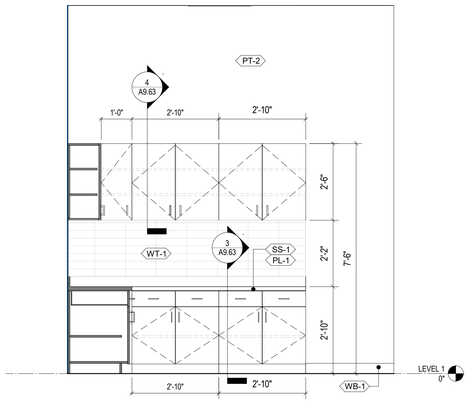
LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

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Lawrenceville, GA 30046

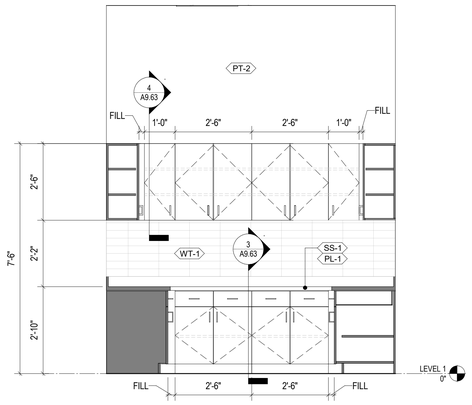
PROJECT NO. 20-24092.00
DATE 12.01.2025
SHEET TITLE ENLARGED REFLECTED CEILING PLANS & DETAILS
SHEET NO. A4.02



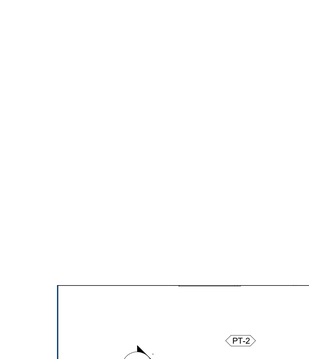
7 A9.61 COFFEE 305 - NORTH
1/2" = 1'-0"



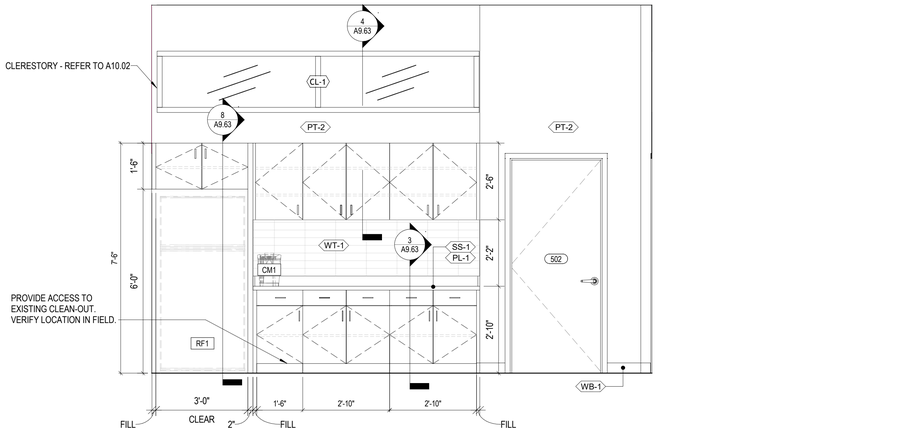
6 A9.61 COFFEE 305 - SOUTH
1/2" = 1'-0"



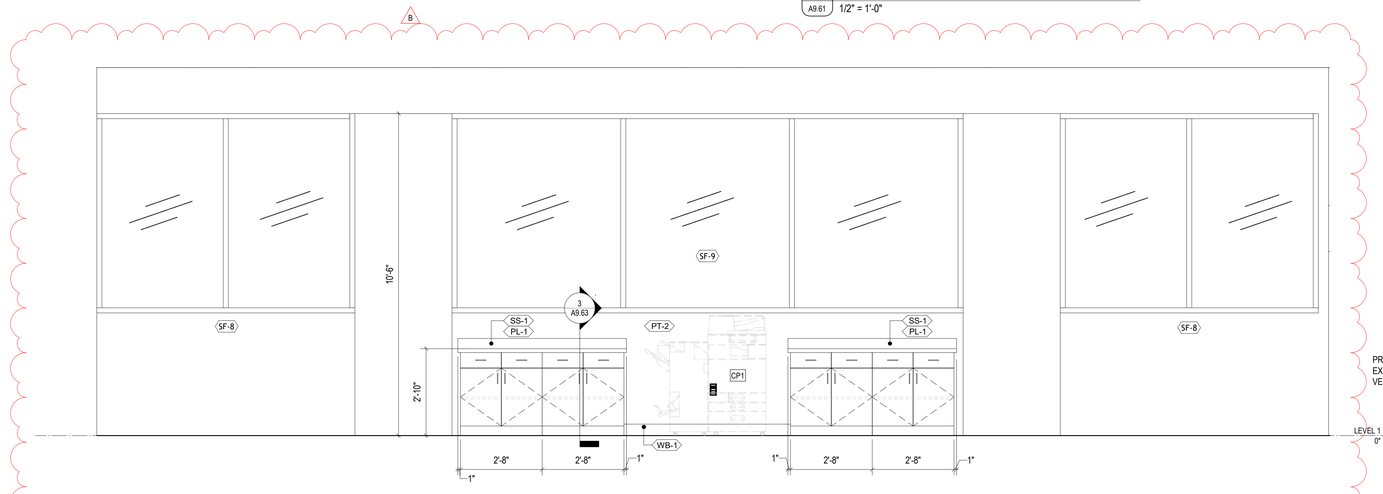
5 A9.61 COFFEE 305 - EAST
1/2" = 1'-0"



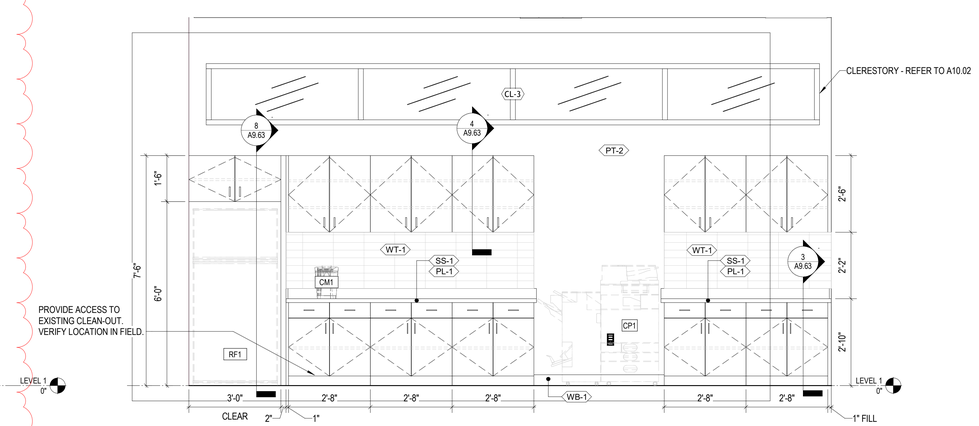
4 A9.61 LACTATION 28 - EAST
1/2" = 1'-0"



3 A9.61 WORK/COFFEE 502 - WEST
1/2" = 1'-0"



2 A9.61 COPY / WORK 303 - NORTH
1/2" = 1'-0"



1 A9.61 WORK/COFFEE 405 - WEST
1/2" = 1'-0"

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA
HYONTAE KANG
CERTIFICATE NO. RA034829
REGISTERED ARCHITECT
Hyontae Kang
12.01.2025

DRAWN BY: Author
CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

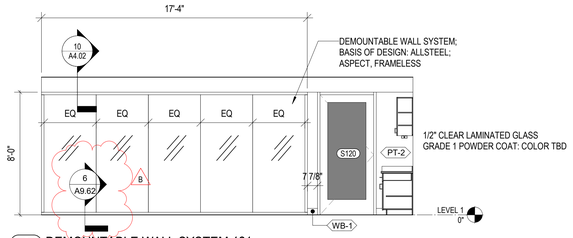
1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00

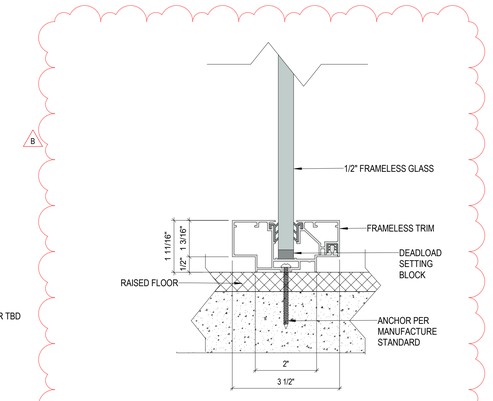
DATE 12.01.2025

SHEET TITLE INTERIOR ELEVATIONS

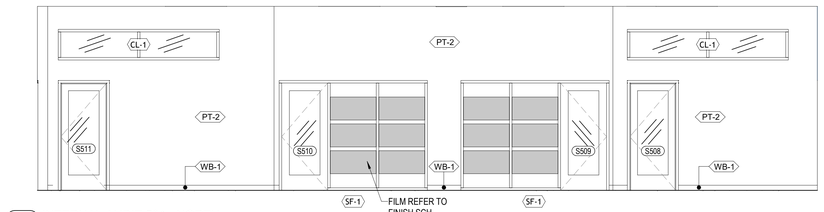
SHEET NO. A9.61



5 A9.62 DEMOUNTABLE WALL SYSTEM 121
1/4" = 1'-0"



6 A9.62 DEMOUNTABLE WALL SYSTEM - SILL DETAIL
6" = 1'-0"



4 A9.62 INTERNAL AUDIT 501 - NORTH
1/4" = 1'-0"

GENERAL NOTES

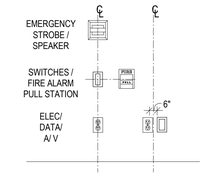
1. REFER TO A11 SHEETS FOR FINISH SCHEDULE AND FINISH PLANS.
2. ANY SHOWN LIGHT FIXTURES, AIR TERMINALS, GRILLES, ELECTRICAL FIXTURES, OUTLETS, DATA RECEPTACLES, AND AUDIO/VIDEO CONNECTIONS, ETC ARE FOR ARCHITECTURAL COORDINATION AND DIMENSIONAL CONTROL ONLY - SEE MECHANICAL, ELECTRICAL, AND PLUMBING, LV, FIRE PROTECTION, A/V DRAWINGS AS APPLICABLE.
3. SEE MEP DRAWINGS FOR MOUNTING HEIGHTS NOT GIVEN HERE.
4. ALIGN (VERT & HORIZ) COMPONENTS.
5. COMBINE ADJACENT SWITCHES & RECEPTACLES WITHIN SINGLE COVER PLATE.
6. EDGE OF LIGHT SWITCH WALL PLATE SHALL BE NOT MORE THAN 4" AWAY FROM METAL/WOOD DOOR FRAME. TYPICAL FOR SINGLE OR MULTIPLE WALL SWITCHES.
7.
8. COVER PLATES OF ALL VARYING COMPONENT DEVICES TO BE OF THE SAME COLOR AND FINISH
9. REFER TO CASEWORK SECTIONS AND SPECIFICATIONS FOR CASEWORK CONSTRUCTION AND HARDWARE.

CJ = DENOTES CONTROL JOINT

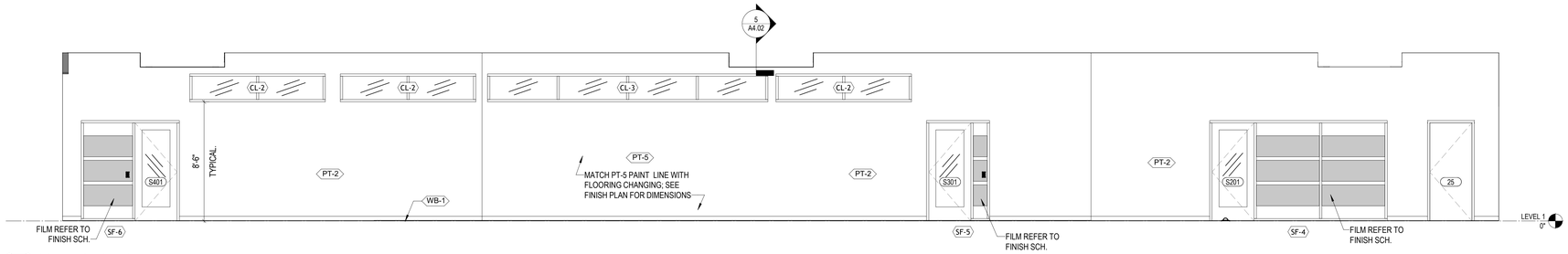
ELEVATION TAGS

XX-X — MATERIAL TAG - SEE MATERIAL FINISH SCHEDULE FOR DETAILS

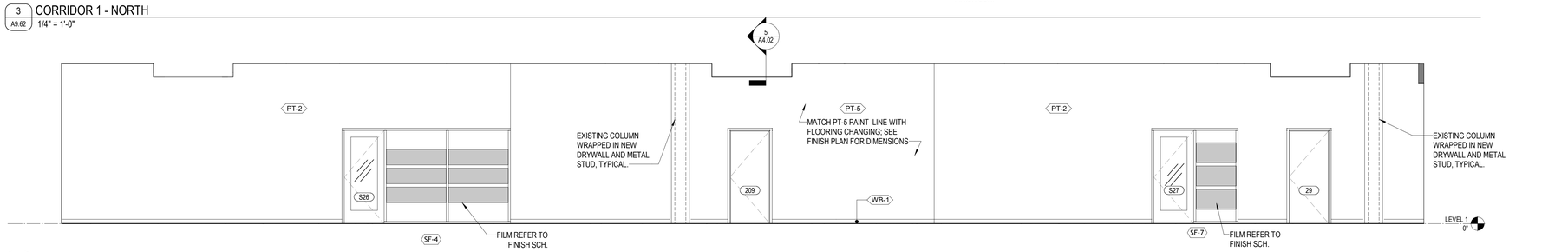
RA-# — RESTROOM ACCESSORY TAG - SEE A8.01 FOR RESTROOM ACCESSORIES SCHEDULE



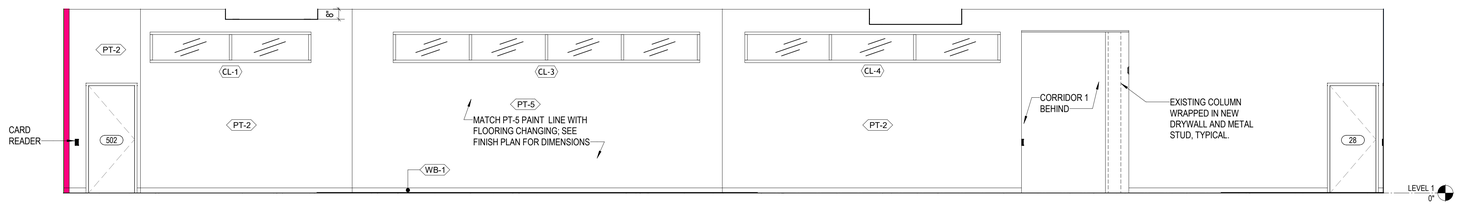
ALIGN COMPONENTS VERT & HORIZ



3 A9.62 CORRIDOR 1 - NORTH
1/4" = 1'-0"



2 A9.62 CORRIDOR 1 - SOUTH
1/4" = 1'-0"



1 A9.62 CORRIDOR 2 - EAST
1/4" = 1'-0"

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA
HYONTAE KANG
CERTIFICATE NO. RA031825
REGISTERED ARCHITECT
Hyontae Kang
12.01.2025

DRAWN BY: Author
CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00

DATE 12.01.2025

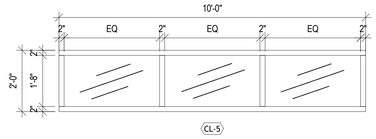
SHEET TITLE INTERIOR ELEVATIONS

SHEET NO. A9.62

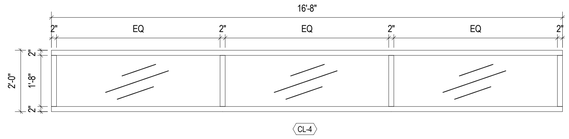
STOREFRONT SCHEDULE

STOREFRONT			FRAME			
NO.	WIDTH	HEIGHT	MATERIAL	HEAD	JAMB	REMARKS
CL-1	10'-6"	2'-0"	ALUM.	3/A10.03	3/A10.03	
CL-2	9'-10 1/2"	2'-0"	ALUM.	3/A10.03	3/A10.03	
CL-3	20'-0"	2'-0"	ALUM.	3/A10.03	3/A10.03	
CL-4	16'-8"	2'-0"	ALUM.	3/A10.03	3/A10.03	
SF-1	9'-8"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-2	8'-0"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-3	5'-0"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-4	12'-8"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-5	4'-6"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-6	7'-0"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-7	6'-6"	7'-2"	ALUM.	3/A10.03	3/A10.03	
SF-8	8'-5"	6'-6" B	ALUM.	3/A10.03	3/A10.03	
SF-9	16'-8"	6'-6"	ALUM.	3/A10.03	3/A10.03	
SF-10	12'-2 5/8"	11'-8"	ALUM.	7/A10.03	6/A10.03	VERIFY MEASUREMENTS IN FIELD. SYSTEM TO REPLACE EXISTING.
SF-11	6'-11 5/8"	7'-5"	ALUM.	3/A10.03	3/A10.03	
SF-12	6'-7 1/8"	6'-11"	ALUM.	3/A10.03	3/A10.03	
SF-13	4'-5 1/8"	6'-7"	ALUM.	3/A10.03	3/A10.03	
SF-14	5'-0"	5'-0"	ALUM.	3/A10.03	3/A10.03	

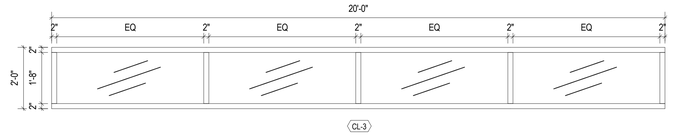
S = SAFETY GLAZING



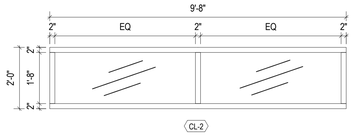
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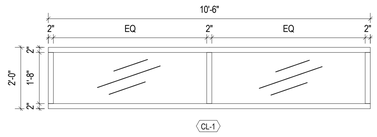
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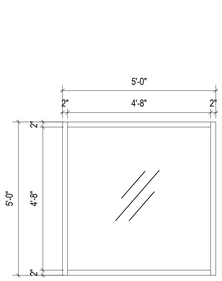
CL-3



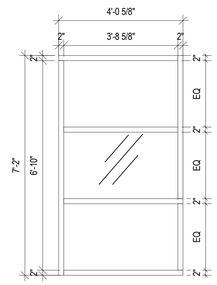
CL-2



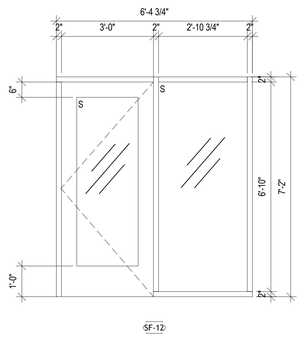
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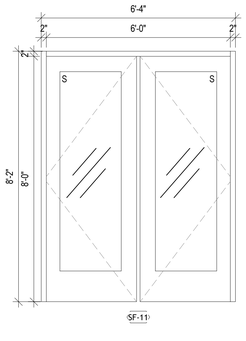
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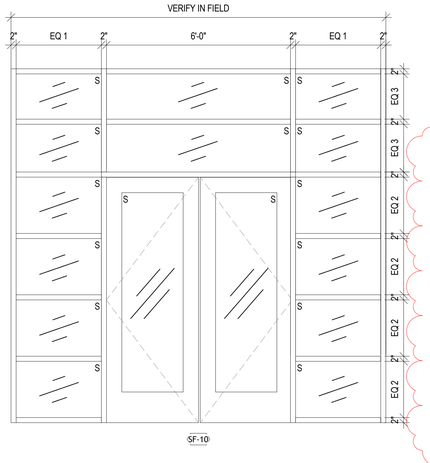
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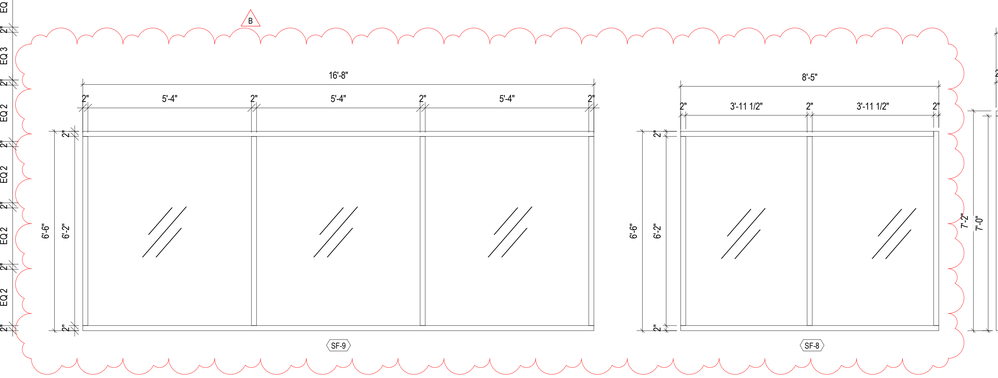
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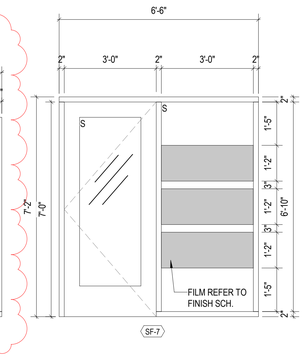
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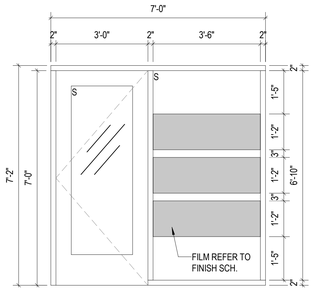
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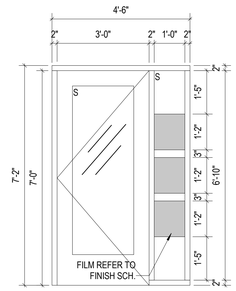
SF-9 SF-8



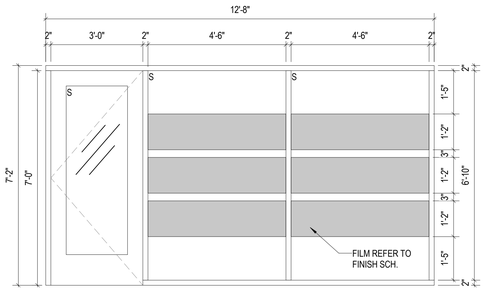
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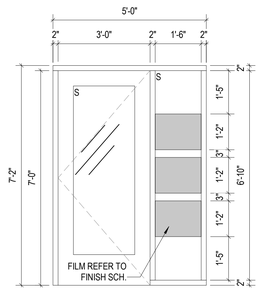
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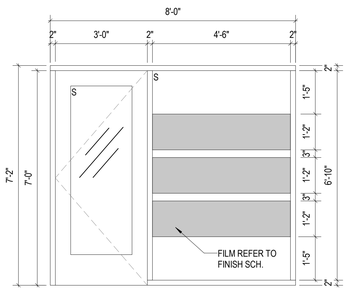
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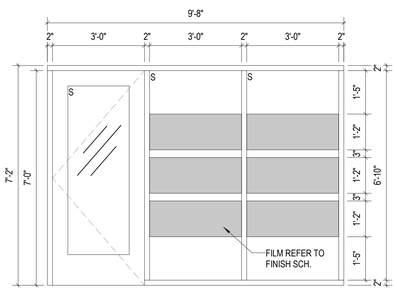
SF-4



SF-3



SF-2



SF-1

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA
HYONTAE KANG
CERTIFICATE NO. RA031825
REGISTERED ARCHITECT

Hyontae Kang

12.01.2025

DRAWN BY: Author

CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA
30046

PROJECT NO.
20-24092.00

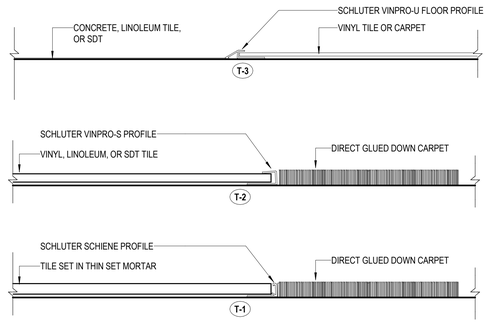
DATE
12.01.2025

SHEET TITLE
STOREFRONT SCHEDULE, ELEVATIONS AND DETAILS

SHEET NO.
A10.02

ARCH- MATERIAL FINISH SCHEDULE

SYMBOL	MATERIAL	MANUFACTURER	STYLE/COLLECTION	COLOR NAME	MATL. # OR COLOR #	MATERIAL SIZE	FINISH	GROUT MRF & COLOR	ATTIC STOCK AMOUNT	REPRESENTATIVE CONTACT		GENERAL LOCATION	INSTALLATION NOTES	MISCELLANEOUS NOTES
										CONTACT NAME	CONTACT EMAIL			
FLOOR														
CPT-1	CARPET	SHAW CONTRACT	COLLECTIVE, SIDE BY SIDE TILE	TOGETHER	50105	18" X 36"	--	--	--			CONFERENCE ROOM FLOOR	ASHLAR	
CPT-2	CARPET	SHAW CONTRACT	VERTICAL LAYERS, RELIEF	PAST	50515	9" X 36"	--	--	--			PRIVATE OFFICE FLOOR	ASHLAR	
CPT-3	CARPET	SHAW CONTRACT	VERTICAL LAYERS, UNCOVER	ALUM	50760	9" X 36"	--	--	--			GENERAL FLOOR	ASHLAR	
CON-1	CONCRETE												PROVIDE TINTED CONCRETE SEALER	
FT-1	FLOOR TILE	MILESTONE	LUXURY	AMANI GREY	1100470	12" X 24"	MATTE					RESTROOMS & VESTIBULE FLOOR	MONOLITHIC	COORD. W ARCHITECT IF MOSAIC TILE IS NEEDED AT EXISTING DRAINS
LNT-1	LINOLEUM TILE	FORB	MARMOLEUM, MCT TILE	GREY DUSK	MCT 3607	13.11" X 13.11"	--	--	--			STORAGE FLOOR	MONOLITHIC	
LVT-1	LUXURY VINYL TILE	SHAW CONTRACT	UNITE II, UNION	CONCRETE PATH	49121	9" X 48"	--	--	--			COFFEE AREA	ASHLAR	
LVT-2	LUXURY VINYL TILE	SHAW CONTRACT	UNITE II, COMMINGLE	CONCRETE	50105	9" X 48"	--	--	--			CORRIDOR	ASHLAR	
SDT-1	STATIC DISSAPATIVE TILE	ROPPE	ESD VINYL STATIC CONTROL TILE	HAZE GRAY	751	12" X 12"	--	--	--			MDF FLOOR	MONOLITHIC	
WO-1	WALK OFF	SHAW CONTRACT	ALL ACCESS, SWIFT TILE	TRAVERSE	14557	24" X 24"	--	--	--			VESTIBULE FLOOR	MONOLITHIC	
MILLWORK														
PL-1	PLASTIC LAMINATE	WILSONART	HIGH PRESSURE LAMINATE	PHANTOM PEARL	8211	--	28 GLOSS LINE	--	--			COFFEE & BREAKROOM CABINET		
PL-2	PLASTIC LAMINATE	FENIX	FENIX	GRIGIO LONDRA	0718	--	--	--	--			RESTROOM APRON		
SS-1	QUARTZ SURFACE	WILSONART	QUARTZ	LYRA	Q2001	2CM	POLISHED	--	--			COFFEE & BREAKROOM COUNTERTOP		
SS-2	QUARTZ SURFACE	WILSONART	QUARTZ	FOSSA FALLS	Q4065	2CM	POLISHED	--	--			RESTROOM COUNTERTOP		
WALL														
APT-1	ACOUSTICAL PANEL TREATMENT	TURF	SLAT	DARK WALNUT D07 FOR SLAT AND BLOCK 07 FOR BACK PANEL	D07	S4 PANEL TYPE	--	--	--			LARGE CONFERENCE ROOMS		
PT-1	PAINT	SHERWIN WILLIAMS	--	SNOWBOUND	SW 7004	--	SEMIGLOSS	--	--			DOOR FRAMES AND PANELS		
PT-2	PAINT	SHERWIN WILLIAMS	--	SKYLINE STEEL	SW 1015	--	EG-SHEL/SATIN	--	--			GENERAL WALL PAINT		
PT-3	PAINT	SHERWIN WILLIAMS	--	STORM CLOUD	SW 6249	--	EG-SHEL/SATIN	--	--			OPEN OFFICE ACCENT PAINT		
PT-4	PAINT	SHERWIN WILLIAMS	--	PUSSYWILLOW	SW 7643	--	EG-SHEL/SATIN	--	--			PRIVATE OFFICE ACCENT PAINT		
PT-5	PAINT	SHERWIN WILLIAMS	--	LET IT RAIN	SW 9152	--	EG-SHEL/SATIN	--	--			LARGER CONFERENCE ROOM		
PT-6	PAINT	SHERWIN WILLIAMS	--	SNOWBOUND	SW 7004	--	FLAT	--	--			CEILING PAINT		
WB-1	WALL BASE	TARKETT	MILLWORK REVEAL	STERLING SILVER	--	4.25" HIGH	--	--	--			GENERAL WALL BASE		
WT-1	WALL TILE	ELON TILE	MOON	BLUE	CT312	3" X 12"	GLOSSY					COFFEE & BREAKROOM WALL TILE	MONOLITHIC	1/4" GROUT JOINT
WT-2	WALL TILE	TRINITY TILE	VIDAL	SANDOLLAR	--	12" X 24"	MATTE					RESTROOM WALL TILE	MONOLITHIC	1/4" GROUT JOINT
WT-3	WALL TILE	TRINITY TILE	VIDAL	SANDOLLAR	--	12" X 24"	CHISELED					RESTROOM WET WALL TILE	MONOLITHIC	1/4" GROUT JOINT
WC-1	WALLCOVERING	MOMENTUM	AVANT	CASSANDRE	LV-AV-10	--	--	--	--			CONFERENCE ROOM WALL COVERING		
WF-1	WINDOW FILM	AVERY DENNISON	ETCHMARK	--	--	--	--	--	--			--	ON WHITE GLAZING FILM IN 15' ROLL GOODS	
WS-1	WINDOW SHADE	SWF CONTRACT	CLASSICS 1" CORDLESS ALUMINUM BLINDS	TBD	--	--	--	--	--			GENERAL WINDOW SHADE	--	
WS-2	WINDOW SHADE	MECHO	MECHO/5X SYSTEM	--	--	--	--	--	--			CONFERENCE ROOM 107 & 511	PROVIDE CLASSIC BLACKOUT 0700 SERIES AND OPAQUE SHADE FABRIC COLOR TBD	



1 / A11.00 THRESHOLD DETAILS
6" = 1'-0"

POH+W ARCHITECTS

ARCHITECTURE

INTERIOR DESIGN

GRAPHIC DESIGN

ATLANTA + PITTSBURGH

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CONSTRUCTION DOCUMENTS

STATE OF GEORGIA
HYONTAE KANG
CERTIFICATE NO. RA031825
REGISTERED ARCHITECT
Hyontae Kang
12.01.2025

DRAWN BY: Author
CHECKED BY: HK

REV#	DATE	DESCRIPTION
B	01/09/2026	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

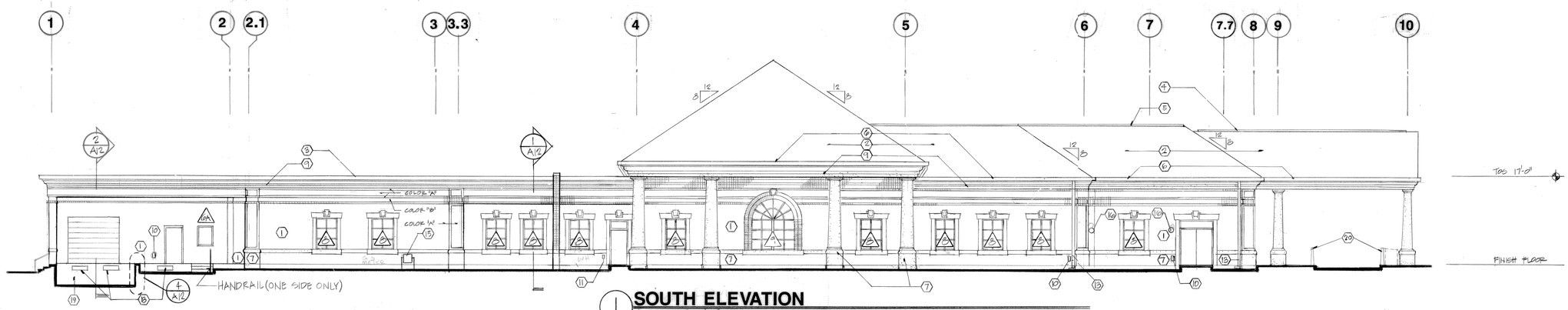
PROJECT NO. 20-24092.00

DATE 12.01.2025

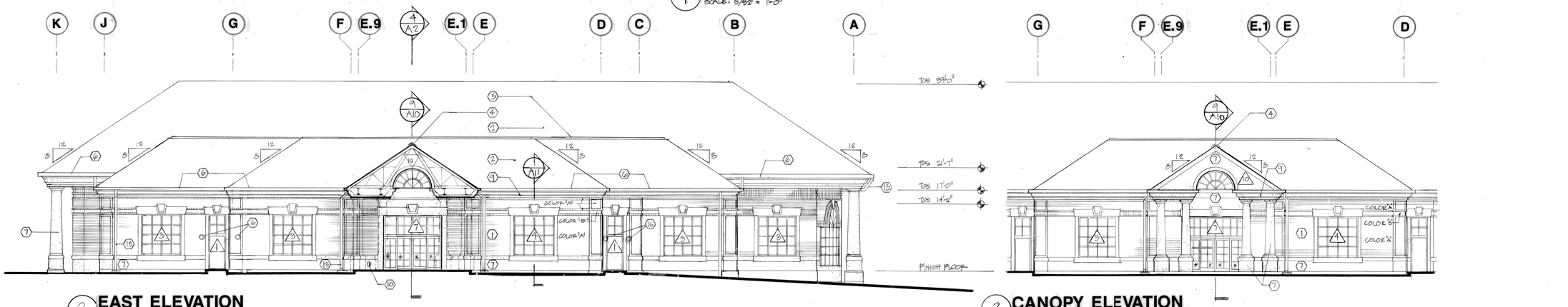
SHEET TITLE MATERIAL FINISHES

SHEET NO. A11.00

AF 44701



1 SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



2 EAST ELEVATION
SCALE: 3/32" = 1'-0"

3 CANOPY ELEVATION
SCALE: 3/32" = 1'-0"

REMOVE EXISTING SEALANT AND BACKER ROD, AND INSTALL NEW BACKER ROD AND SEALANT AT EXTERIOR DOORS AND WINDOWS.

PREPARE AND PAINT STEEL LINDELS AT EXTERIOR DOORS AND WINDOWS.

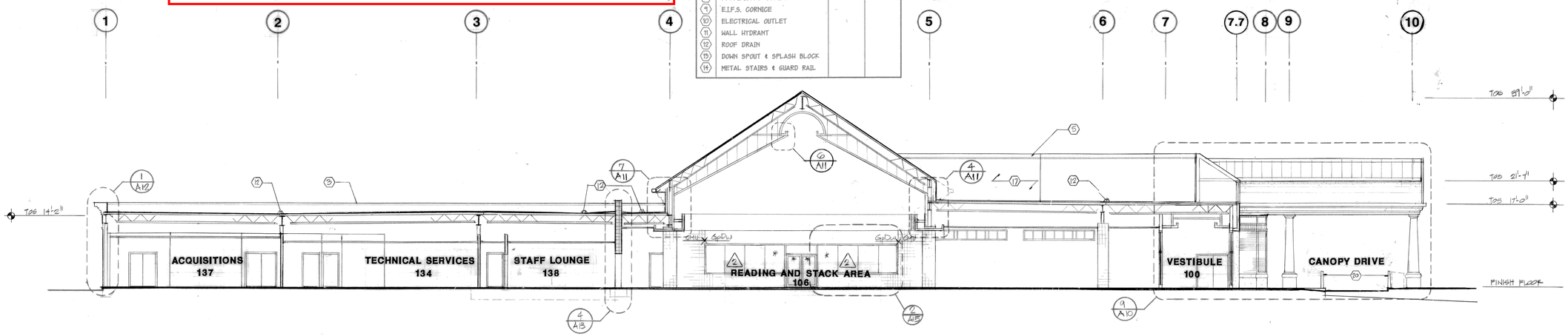
REFER TO DRAWING SHEETS A-3, AND A-15 DATED 12/09/88 FOR ADDITIONAL INFORMATION.

ELEVATION MATERIAL LEGEND

#	DESCRIPTION	DETAIL	SPEC. SECTION
1	BRICK VENEER		
2	FIBERGLASS SHINGLES		
3	PREFINISHED ALUMINUM COPING		
4	PREFINISHED RIDGE VENT		
5	PREFINISHED PEAK VENT		
6	PREFINISHED 6" ALUM. GUTTER		
7	E.I.F.S.		
8	PREFINISHED COPING		
9	E.I.F.S. CORNICE		
10	ELECTRICAL OUTLET		
11	WALL HYDRANT		
12	ROOF DRAIN		
13	DOWN SPOUT & SPLASH BLOCK		
14	METAL STAIRS & GUARD RAIL		

#	DESCRIPTION
15	GAS METER
16	LIGHT FIXTURE
17	VERT. ROOF MEMBRANE
18	DOCK BUMPERS
19	RUBBED CONC.
20	METAL BOLLARD-PREFIN.

* TEMPERED GLAZING



4 LONGITUDINAL BUILDING SECTION
SCALE: 3/32" = 1'-0"

THIS 1988 DESIGN INTENT DRAWING WAS ISSUED BY POH+W ARCHITECTS FOR LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT TO ILLUSTRATE EXTERIOR DOORS AND WINDOWS REQUIRING RE-SEALING AND REPAINTING OF STEEL LINTELS

Project:

LAWRENCEVILLE PUBLIC LIBRARY

1001
U.S. HIGHWAY 29
LAWRENCEVILLE,
GEORGIA

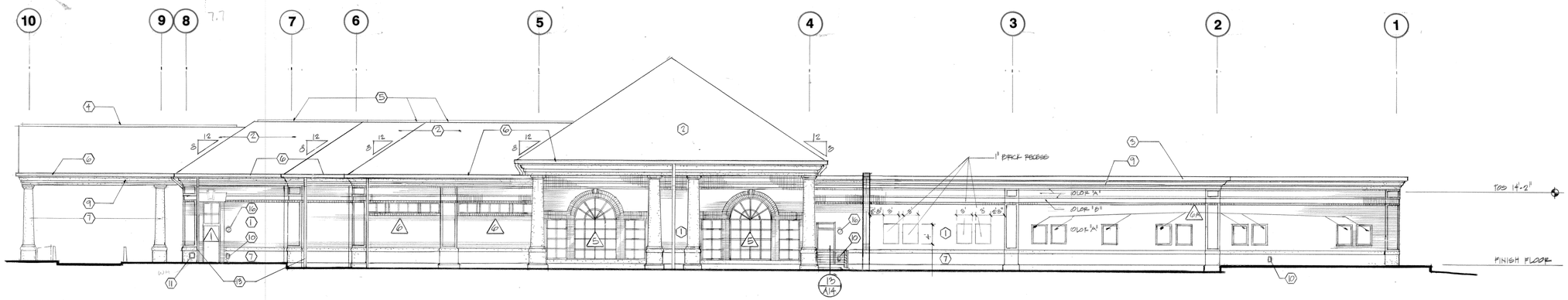
job no.: 87053
drawn: G. AMATO
checked:
edition: 12-09-88

EXTERIOR BLDG. ELEVATIONS /SECTIONS

A-2

PERIMETER REPROGRAPHICS

AP 44701

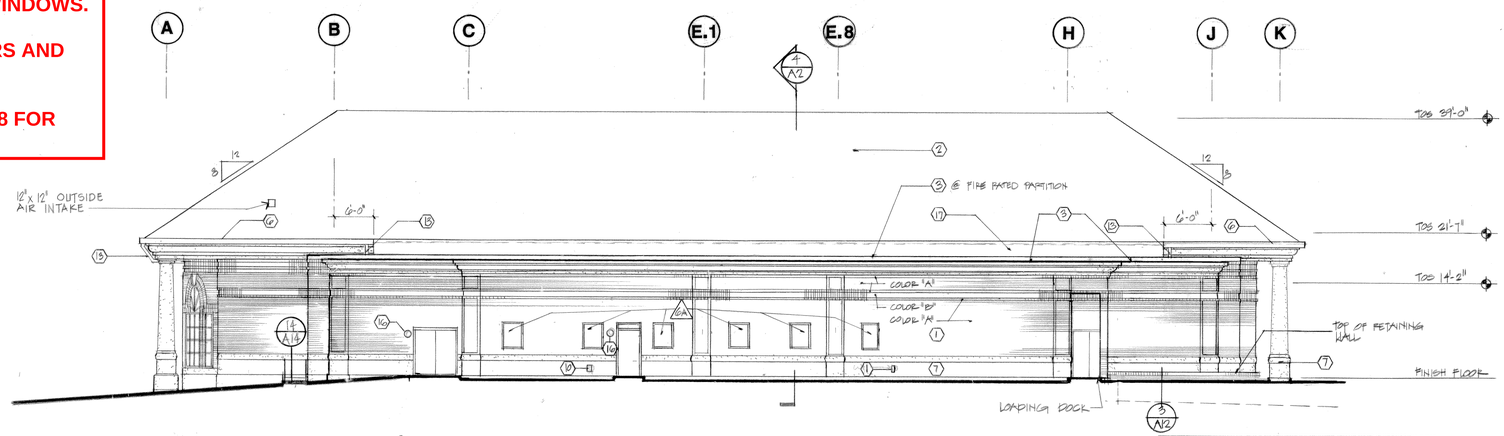


1 NORTH ELEVATION
SCALE: 3/32" = 1'-0"

REMOVE EXISTING SEALANT AND BACKER ROD, AND INSTALL NEW BACKER ROD AND SEALANT AT EXTERIOR DOORS AND WINDOWS.

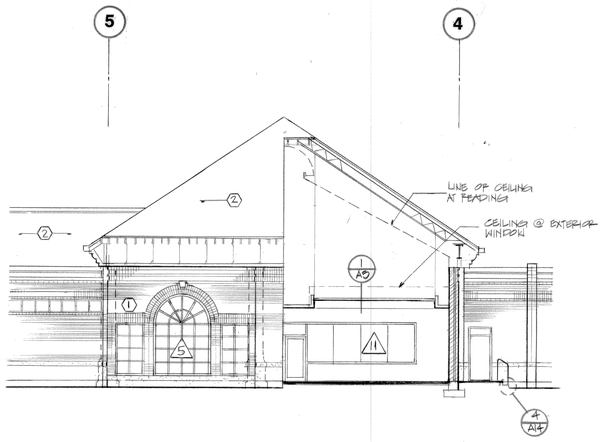
PREPARE AND PAINT STEEL LINDELS AT EXTERIOR DOORS AND WINDOWS.

REFER TO DRAWING SHEETS A-2 AND A-15 DATED 12/09/88 FOR ADDITIONAL INFORMATION.

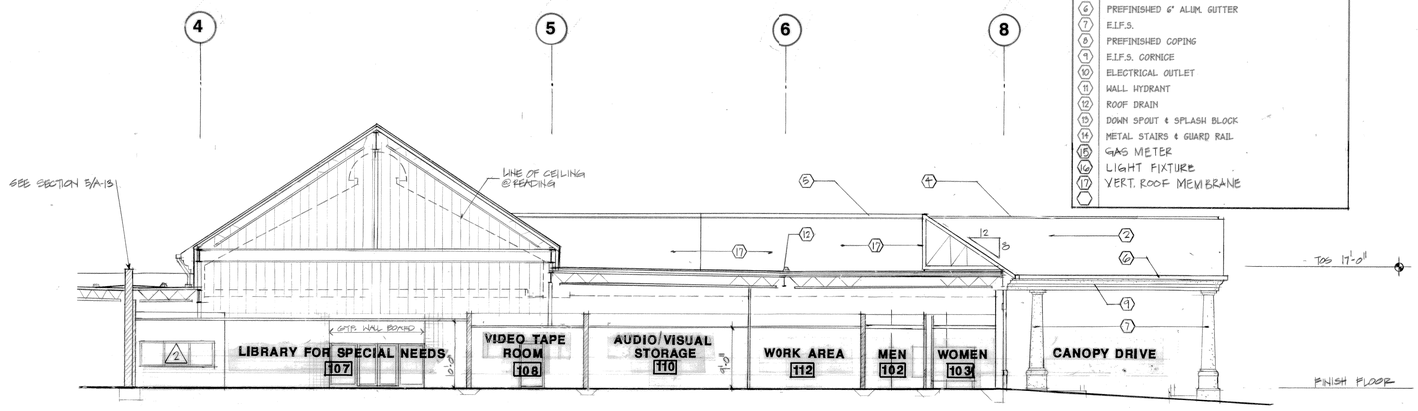


2 WEST ELEVATION
SCALE: 3/32" = 1'-0"

ELEVATION MATERIAL LEGEND	
#	DESCRIPTION
1	BRICK VENEER
2	FIBERGLASS SHINGLES
3	PREFINISHED ALUMINUM COPING
4	PREFINISHED RIDGE VENT
5	PREFINISHED PEAK VENT
6	PREFINISHED 6" ALUM. GUTTER
7	E.I.F.S.
8	PREFINISHED COPING
9	E.I.F.S. CORNICE
10	ELECTRICAL OUTLET
11	WALL HYDRANT
12	ROOF DRAIN
13	DOWN SPOUT & SPLASH BLOCK
14	METAL STAIRS & GUARD RAIL
15	GAS METER
16	LIGHT FIXTURE
17	VERT. ROOF MEMBRANE



4 PARTIAL BUILDING SECTION AT PERIODICALS
SCALE: 3/32" = 1'-0"



3 PARTIAL BUILDING SECTION
SCALE: 3/32" = 1'-0"

THIS 1988 DESIGN INTENT DRAWING WAS ISSUED BY POH+W ARCHITECTS FOR LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT TO ILLUSTRATE EXTERIOR DOORS AND WINDOWS REQUIRING RE-SEALING AND REPAINTING OF STEEL LINTELS

Project:

LAWRENCEVILLE PUBLIC LIBRARY

1001
U.S. HIGHWAY 29
LAWRENCEVILLE, GEORGIA

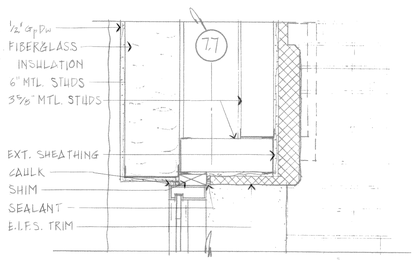
job no.: 87053
drawn: G.AMATO
checked:
edition: 12-09-88

EXTERIOR BLDG. ELEVATIONS / SECTIONS / WINDOW SCHDULE

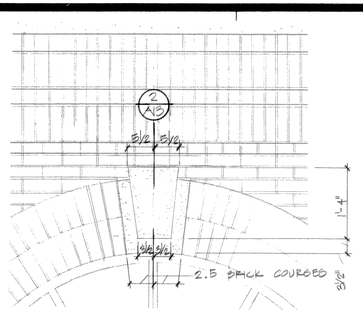
A-3

PERIMETER REPROGRAPHICS

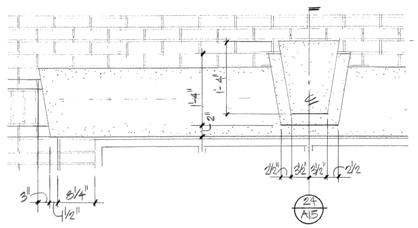
AP 44701



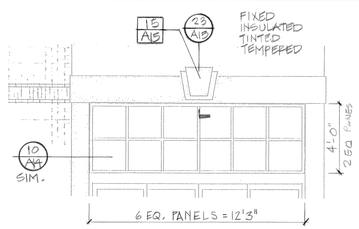
23 HEAD at EXTERIOR VEST.
SCALE: 1½" = 1'-0"



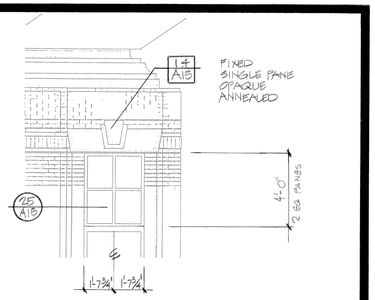
18 SCALE: ¾" = 1'0"



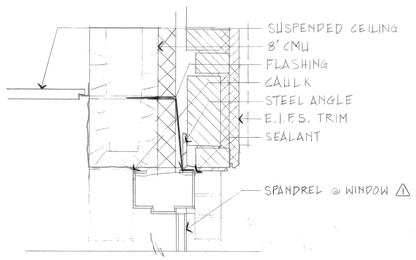
13 SCALE: ¾" = 1'0"



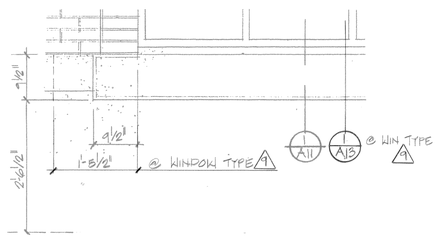
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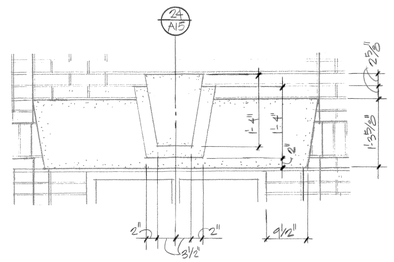
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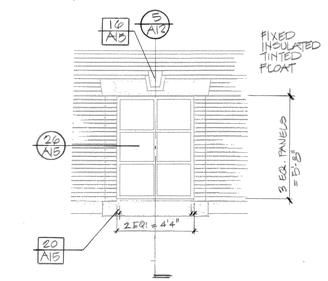
24 HEAD at DOOR LINTEL
SCALE: 1½" = 1'-0"



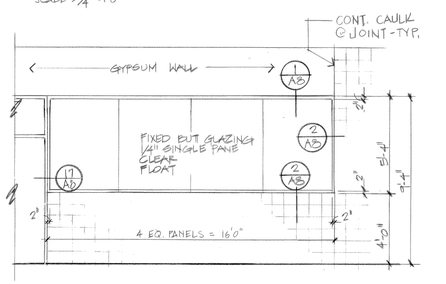
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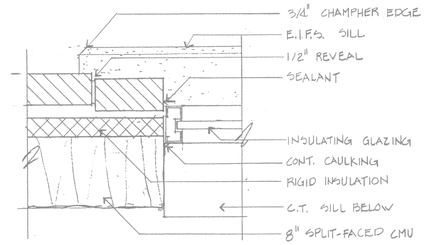
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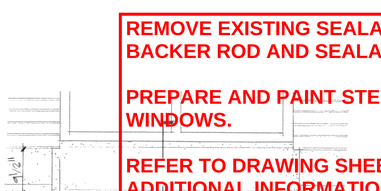
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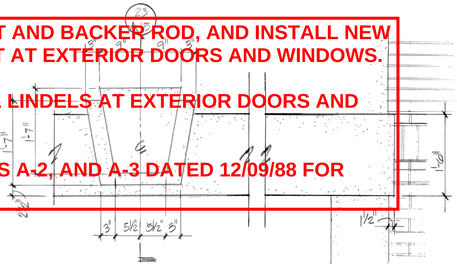
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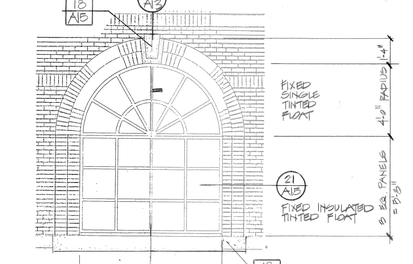
25 WINDOW JAMB @ CMU
SCALE: 1½" = 1'-0"



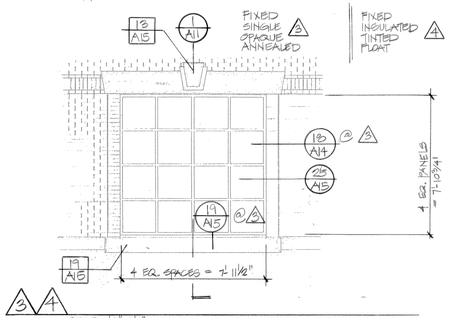
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15 SCALE: ¾" = 1'0"



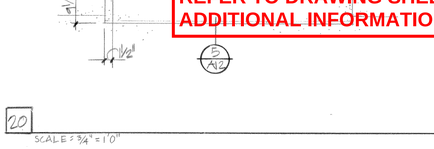
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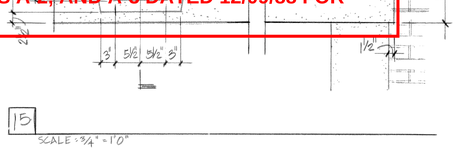
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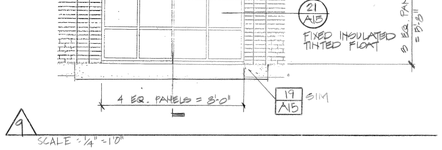
26 WINDOW JAMB @ 6" STUD WALL
SCALE 1½" = 1'-0"



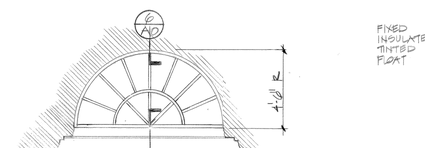
21 JAMB @ PERIODICAL/ADMIN.
SCALE: 1½" = 1'0"



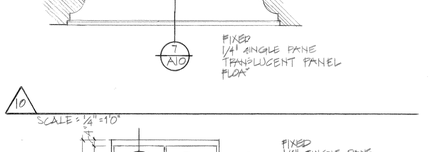
16 SCALE: ¾" = 1'0"



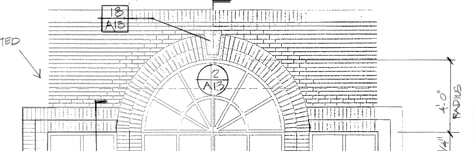
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11 SCALE: ¼" = 1'0"



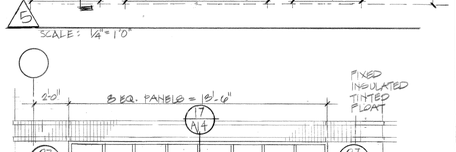
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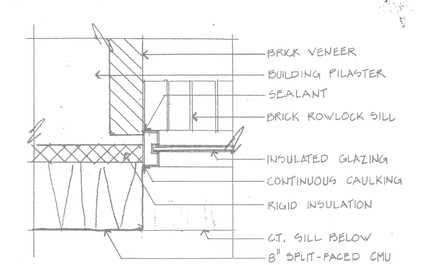


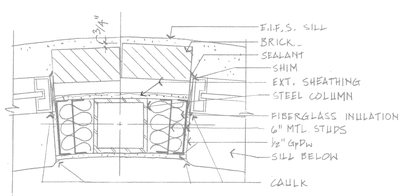
5 SCALE: ¼" = 1'0"



10A SCALE: ¼" = 1'0"

27 JAMB @ HIGH WINDOW
SCALE: 1½" = 1'-0"





22 INTER. JAMB @ PERIODICALS
SCALE: 1½" = 1'0"

REMOVE EXISTING SEALANT AND BACKER ROD, AND INSTALL NEW BACKER ROD AND SEALANT AT EXTERIOR DOORS AND WINDOWS.

PREPARE AND PAINT STEEL LINDELS AT EXTERIOR DOORS AND WINDOWS.

REFER TO DRAWING SHEETS A-2, AND A-3 DATED 12/09/88 FOR ADDITIONAL INFORMATION.

THIS 1988 DESIGN INTENT DRAWING WAS ISSUED BY POH+W ARCHITECTS FOR LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT TO ILLUSTRATE EXTERIOR DOORS AND WINDOWS REQUIRING RE-SEALING AND REPAINTING OF STEEL LINTELS

Project:

LAWRENCEVILLE PUBLIC LIBRARY

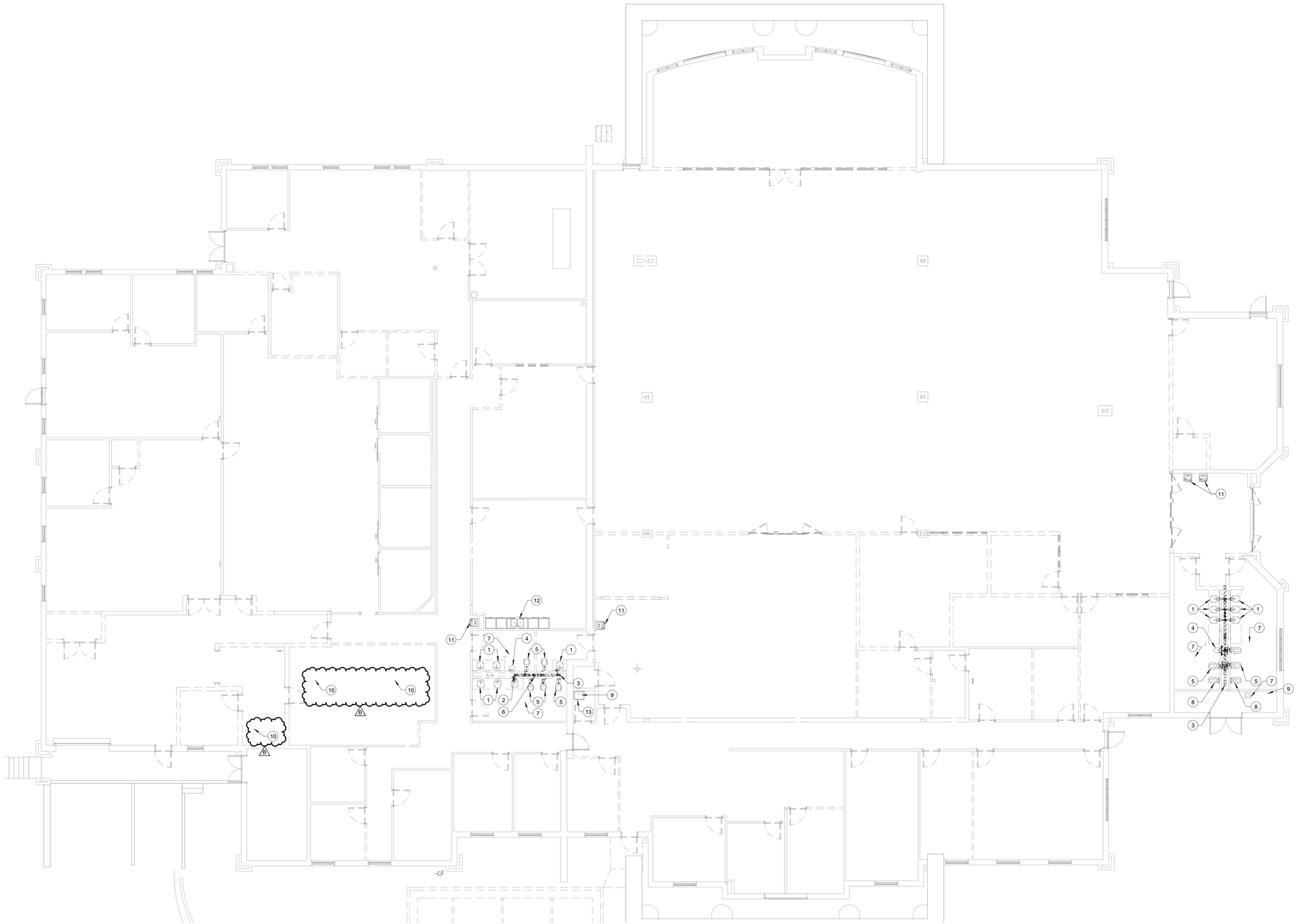
1001
U.S. HIGHWAY 29
LAWRENCEVILLE, GEORGIA

job no.: **87053**
drawn: G.M.AMATO
checked:
edition: 12-09-88

WINDOW ELEVATIONS / DETAILS

A-15

PERIMETER REPROGRAPHICS



SHEET NOTES

KEYED NOTES

1. EXISTING LAVATORY AND ASSOCIATED PIPING TO BE REMOVED. CAP WASTE ARM IN WALL. CAP VENT ABOVE CEILING. REMOVE EXISTING CW & HW SUPPLIES.
2. CAP SANITARY BELOW SLAB AND REMOVE ALL PIPING DOWNSTREAM OF CAP.
3. CAP SANITARY BELOW SLAB AND REMOVE ALL PIPING UPSTREAM OF CAP.
4. EXISTING URINAL AND ASSOCIATED PIPING TO BE REMOVED. CAP VENT ABOVE CEILING. REMOVE EXISTING SANITARY BELOW SLAB.
5. EXISTING WATER CLOSET AND ASSOCIATED PIPING TO BE REMOVED. REMOVE EXISTING CW SUPPLY. REMOVE EXISTING SANIATRY BELOW SLAB.
6. CAP EXISTING VENT ABOVE CEILING AND REMOVE ALL VENT PIPING DOWNSTREAM OF CAP. REMOVE EXISTING SANITARY BELOW SLAB.
7. EXISTING FLOOR DRAIN AND P-TRAP TO BE REMOVED AND REPLACED. CAP SANITARY BELOW SLAB FOR RECONNECTION.
8. EXISTING PLUMBING FIXTURE TO REMAIN.
9. EXISTING WATER HEATER AND ASSOCIATED PIPING TO BE REMOVED.
10. EXISTING SPRINKLER HEAD TO BE REMOVED. CAP DOMESTIC COLD WATER LINE ABOVE CEILING AND REMOVE ALL PIPING TO SPRINKLER HEAD.
11. EXISTING DRINK FOUNTAIN AND ASSOCIATED PIPING TO BE REMOVED. CAP WASTE ARM IN WALL FOR RECONNECTION. CAP CW SUPPLY IN WALL FOR RECONNECTION.
12. EXISTING SINK AND ASSOCIATED PIPING TO BE REMOVED AND REPLACED. CAP WASTE ARM IN WALL FOR RECONNECTION. CAP CW & HW SUPPLIES IN WALL FOR RECONNECTION.
13. EXISTING UTILITY SINK AND ASSOCIATED PIPING TO BE REMOVED AND REPLACED. CAP SANITARY IN WALL FOR RECONNECTION. CAP CW & HW SUPPLIES IN WALL FOR RECONNECTION.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED NO. PE026002 PROFESSIONAL 11-9-25 ENGINEER JESSE W. FOLEY

DRAWN BY: Author
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

GWINNETT COUNTY LAWRENCEVILLE LIBRARY HQ AND ADMINISTRATION RENOVATION

1001 Lawrenceville Hwy
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PROJECT NO.
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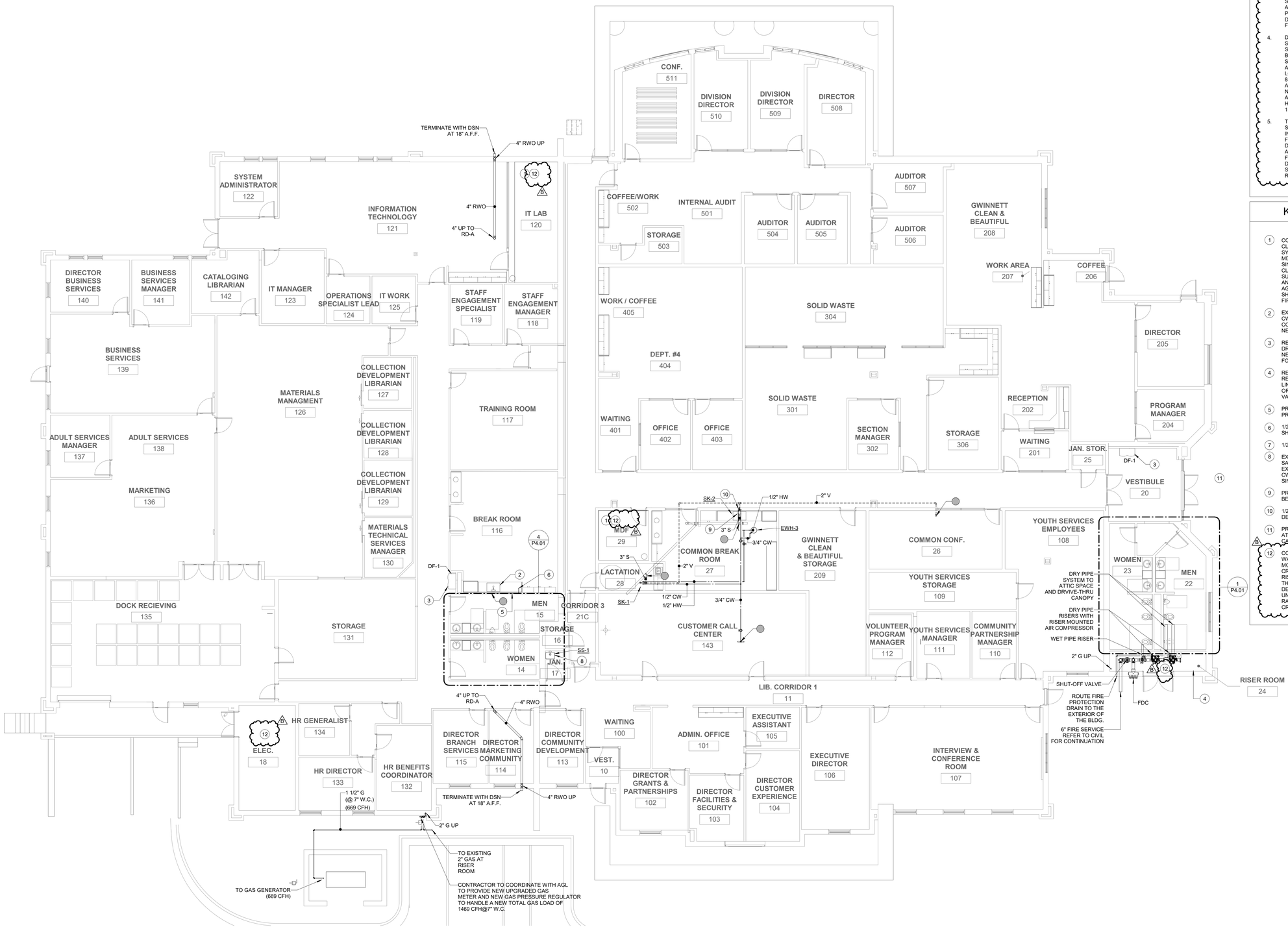
DATE
12/01/2025

SHEET TITLE
PLUMBING LEVEL 1 DEMOLITION PLAN

SHEET NO.
PD1.01

1 PD1.01 PLUMBING LEVEL 1 DEMOLITION PLAN
1/8" = 1'-0"

TRUE NORTH PROJECT NORTH



1 P1.01 PLUMBING LEVEL 1 PLAN
1/8" = 1'-0"

SHEET NOTES

1. A MINIMUM OF 18 INCHES OF CLEARANCE SHALL BE PROVIDED IN FRONT OF THE WET PIPE AND DRY PIPE RISERS.
2. INSTALL THE SPRINKLER SYSTEM PER FM PROPERTY LOSS PREVENTION DATA SHEET 2-0, INSTALLATION GUIDELINES FOR AUTOMATIC SPRINKLERS.
3. DESIGN THE AUTOMATIC SPRINKLER SYSTEM IN NON-STORAGE AREAS IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEET 3-26, FIRE PROTECTION FOR NON-STORAGE OCCUPANCIES. THE AUTOMATIC SPRINKLER PROTECTION SHOULD BE DESIGNED TO MEET THE FOLLOWING CRITERIA.
4. DESIGN THE AUTOMATIC SPRINKLER SYSTEM IN ANY STORAGE/WAREHOUSING AREAS BASED ON THE COMMODITY, STORAGE ARRANGEMENT, ETC. IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEET 8-9, STORAGE OF CLASS 1, 2, 3, 4 AND PLASTIC COMMODITIES. USE NOMINALLY RATED 160°F FM APPROVED STORAGE SPRINKLERS HAVING A MINIMUM K-FACTOR OF 11.2.
5. THE CLEAN AGENT SYSTEM SHOULD BE DESIGNED AND INSTALLED IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEET 4-9, HALOCARBON AND INERT GAS (CLEAN AGENT) FIRE EXTINGUISHING SYSTEMS. DRAWINGS/ CALCULATIONS SHOULD BE PROVIDED TO FM FOR REVIEW WHEN AVAILABLE.

KEYED NOTES

1. CONTRACTOR SHALL PROVIDE A CLEAN AGENT FIRE SUPPRESSION SYSTEM FOR THE IT LAB (120) AND MDF (29). EQUIPMENT INCLUDES SINGLE HAZARD CONTROL PANEL, CLEAN AGENT TANK FIRE SUPPRESSION MANUAL RELEASE ANED ABORT SWITCH. THE CLEAN AGENT FIRE SUPPRESSION SYSTEM SHALL BE MONITOR BY THE BUILDING FIRE ALARM SYSTEM.
2. EXTEND AND CONNECT EXISTING 1/2" CW & HW TO NEW SINK. EXTEND AND CONNECT EXISTING 2" SANITARY TO NEW SINK.
3. RECONNECT NEW 1/2" CW SUPPLY TO DRINKING FOUNTAIN. RECONNECT NEW 2" SANITARY TO NEW DRINKING FOUNTAIN.
4. REPLACE EXISTING PRESSURE REDUCING VALVE ON THE CW SUPPLY LINE WITH A NEW WATTS LF25AUB-Z3 OR EQUAL PRESSURE REDUCING VALVE.
5. PROVIDE WATTS LF7 BACKFLOW PREVENTER.
6. 1/2" CW TO COFFEE MAKER WITH SHUT-OFF VALVE.
7. 1/2" CW TO ICE MAKER.
8. EXTEND AND CONNECT EXISTING 2" SANITARY TO NEW UTILITY SINK. EXTEND AND CONNECT EXISTING 1/2" CW & HW SUPPLY TO NEW UTILITY SINK.
9. PROVIDE 2" TRAP PRIMED HUB DRAIN BELOW COUNTER.
10. 1/2" CW & HW DROP. REFER TO DETAIL 2/P6.01.
11. PROVIDE DRY PIPE SYSTEM FOR ATTIC SPACE AND DRIVE-THRU CANOPY
12. CONTRACTOR SHALL PROVIDE WATER LEAK DETECTION AND FLOW MONITORING DEVICE(S) FOR THE CRITICAL EQUIPMENT AREA AND RISER ROOM AREA INTERFACED WITH THE BAS. A DRAIN PAN WITH LEAK DETECTION SHALL BE PROVIDED UNDER EXISTING WATER AND RAINWATER PIPING WITHIN THIS CRITICAL EQUIPMENT AREA.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. PE036008 1-9-26 JESSE W. FOLEY

DRAWN BY: Author
CHECKED BY: Checker

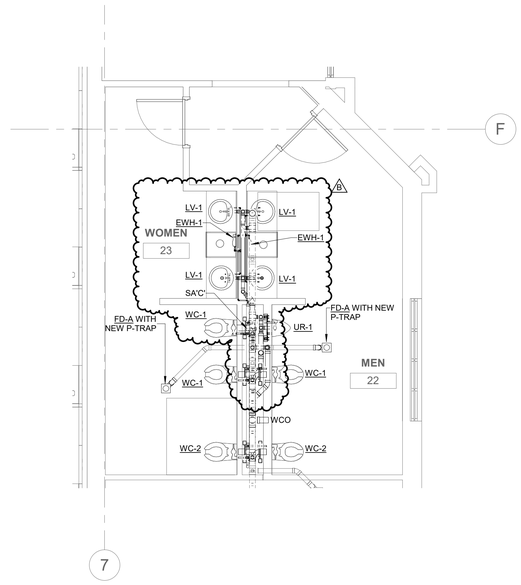
REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

GWINNETT COUNTY LAWRENCEVILLE LIBRARY HQ AND ADMINISTRATION RENOVATION

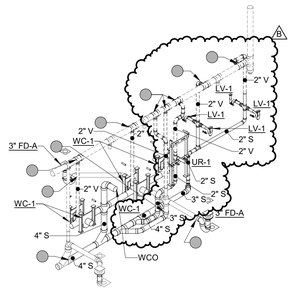
1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 12/01/2025
SHEET TITLE PLUMBING LEVEL 1 PLAN
SHEET NO. P1.01

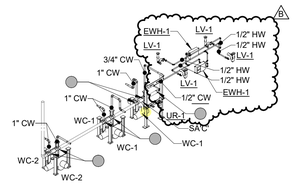
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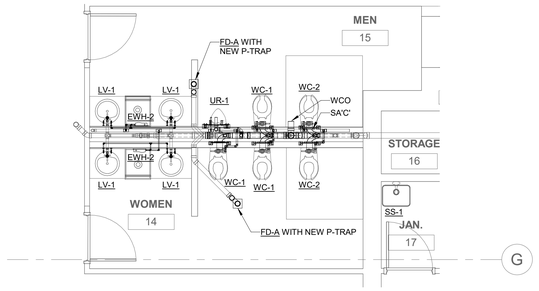
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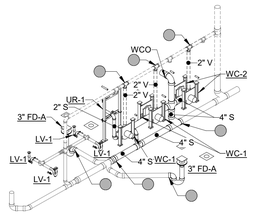
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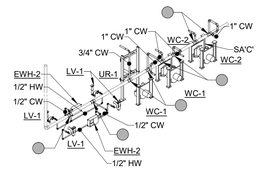
3 RESTROOM (22/23) PRESSURE RISER DIAGRAM
N.T.S.



4 RESTROOMS (14/15) ENLARGED PLAN - PLUMBING
N.T.S.



5 RESTROOM (14/15) DRAINAGE RISER DIAGRAM
N.T.S.



6 RESTROOM (14/15) PRESSURE RISER DIAGRAM
N.T.S.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED NO. PE036008 PROFESSIONAL 1-9-26 ENGINEER JESSE W. FOLEY

DRAWN BY: Author
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

GWINNETT COUNTY LAWRENCEVILLE LIBRARY HQ AND ADMINISTRATION RENOVATION

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PROJECT NO. 20-24092.00

DATE 12/01/2025

SHEET TITLE ENLARGED PLUMBING PLAN

SHEET NO. P4.01

PLUMBING FIXTURES

SYMBOL	DESCRIPTION	SERVICES				FLOW RATE	FIXTURE				TRIM			TRAP		CARRIER		REMARKS
		S/W	V	CW	HW		TYPE	SIZE	MANUFACTURER	MODEL	TYPE	MANUFACTURER	MODEL	TYPE	MANUFACTURER	TYPE	MANUFACTURER	
WC-1	WATER CLOSET	4"	2"	1 1/4"	-	1.28 GPF	WHITE VITREOUS CHINA, TOP SPUD, SIPHON JET, WALL-MOUNTED, HET	ELONGATED	AMERICAN STANDARD	3351.001	SENSOR ACTIVATED FLUSHOMETER, PISTON TYPE, BATTERY POWERED	SLOAN	8111-1.28	INTEGRAL	-	FLOOR MOUNTED WITH MOVABLE FACE PLATE.	ZURN	CARRIER TO BE ZN1201-ND4 FOR W/ ZURN ZZ ADJUSTABLE COUPLING FOR BACK TO BACK AND ZN1201-N-4 W/ ZURN ZZ ADJUSTABLE COUPLING FOR SINGLE.COMMERCIAL EXTRA HEAVY-DUTY WHITE SEAT WITH OPEN FRONT AND STAINLESS STEEL NUTS AND BOLTS. CHURCH #9500-C OR EQUAL.
WC-2	WATER CLOSET (ADA)	4"	2"	1 1/4"	-	1.28 GPF	WHITE VITREOUS CHINA, TOP SPUD, SIPHON JET, WALL-MOUNTED, HET	ELONGATED	AMERICAN STANDARD	3351.001	SENSOR ACTIVATED FLUSHOMETER, PISTON TYPE, BATTERY POWERED	SLOAN	8111-1.28	INTEGRAL	-	FLOOR MOUNTED WITH MOVABLE FACE PLATE	ZURN	CARRIER TO BE ZN1201-ND4 FOR W/ ZURN ZZ ADJUSTABLE COUPLING FOR BACK TO BACK AND ZN1201-N-4 W/ ZURN ZZ ADJUSTABLE COUPLING FOR SINGLE.COMMERCIAL EXTRA HEAVY-DUTY WHITE SEAT WITH OPEN FRONT AND STAINLESS STEEL NUTS AND BOLTS. CHURCH #9500-C OR EQUAL.
UR-1	URINAL (ADA)	2"	2"	3/4"	-	0.5 GPF	WHITE VITREOUS CHINA, TOP SPUD, HET	-	AMERICAN STANDARD	6590.001	SENSOR ACTIVATED FLUSHOMETER, PISTON TYPE, BATTERY POWERED	SLOAN	8186.05	INTEGRAL	-	FLOOR MOUNTED WITH MOVABLE FACE PLATE	ZURN	CARRIER TO BE Z1221 OR EQUAL
LV-1	LAVATORY	1 1/2"	2"	-	1/2"	0.5 GPM	SINK SPECIFIED BY ARCH'L - INTEGRAL BOWL WITH SOILID SURFACE	-	-	-	SENSOR, DECK MOUNTED, SINGLE TEMPERATURE INLET, VANDAL RESISTANT, BATTERY POWERED	SLOAN	SF-2450-4 SERIES	CHROME PLATED CAST BRASS, 2 PIECE, CLEANOUT PLUG	McGUIRE	-	-	TRAP & SUPPLIES TO BE INSULATED WITH McGUIRE PROWRAP PREFORMED ADA INSULATION KIT OR EQUAL.
SK-1	SINK (ADA)	1 1/2"	2"	1/2"	1/2"	1.5 GPM	STAINLESS STEEL, COUNTER MOUNTED, ADA DEPTH	17" X 20"	ELKAY	ELUHAD 211550PD	DECK-MOUNTED GOOSENECK FAUCET WITH 4" CENTER, 4" WRISTBLADE	MOEN	7594EWSRS	CHROME PLATED CAST BRASS, 2 PIECE, CLEANOUT PLUG	McGUIRE	-	-	TRAP & SUPPLIES TO BE INSULATED WITH McGUIRE PROWRAP PREFORMED ADA INSULATION KIT OR EQUAL.
DF-1	DRINKING FOUNTAIN	2"	2"	1/2"	-	8 GPH	WALL MOUNTED EXPOSED, DOUBLE BOWL, BOTTLE FILLING STATION, INTEGRAL CHILLER, ADA	-	HALSEY TAYLOR	HTHB-HAC8BLPV-NF	-	-	-	-	-	FLOOR MOUNTED WITH MOVABLE BRACKETS	JAY R. SMITH	
SA'X'	SHOCK ABSORBER	-	-	SEE PLAN	-	-	PISTON TYPE SHOCK ABOSORBER, COPPER CONSTRUCTION, MAINTENANCE FREE, LETTER DESIGNATION SIZE	-	PPP	SC SERIES	-	-	-	-	-	-	-	
SS-1	UTILITY SINK	3"	2"	1/2"	1/2"	13 GPM	ENAMELED CAST IRON WITH DRILLED BACK 2 HOLES ON 8" CENTERS AND RIM GUARD	-	AMERICAN STANDARD	7692.008	POLISHED CHROME PLATED FAUCET WITH WALL BRACE, CERAMIC DISC VALVES, INEGRAL CHECK STOPS, VANDAL-RESISTANT LEVER HANDLES, AND VACUUM BREAKER	AMERICAN STANDARD	8340.243	P.C. SELECTED FITTING. SEE SPECIFICATION FOR PIPING MATERIAL	-	-	-	

NOTES:
1. REFER TO SPECIFICATION FOR ADDITIONAL ACCETABLE MANUFACTURERS. PRODUCTS IN SCHEDULE REPRESENT BASIS OF DESIGN, AND SHALL BE USED TO SET PRODUCT QUALITY.
2. PROVIDE THERMOSTATIC MIXING VALVES SET AT 109°F AT ALL PUBLIC SINKS/LAVS THAT RECIEVE HOT WATER.
3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES AND FITTINGS.

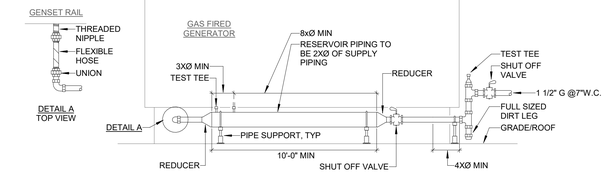
DRAINS

SYMBOL	TYPE	STRAINER	OUTLET	MANUFACTURER	MODEL	REMARKS
RD-A	OVERFLOW ROOF DRAIN	DOME, ALUMINUM	NO-HUB	JAY R. SMITH	1070-C-AD	EMERGENCY WITH 2" HIGH STANDPIPE, UNDERDECK CLAMP, ALUMINUM DOME.
DSN	DOWNSPOUT NOZZLE	N/A	NO-HUB	JAY R. SMITH	1770-BS	CAST BRONZE NOZZLE AND FLANGE WITH BIRD SCREEN
FD-A	FINISHED FLOOR DRAIN	SQUARE, NICKLE BRONZE	NO-HUB	JAY R. SMITH	2005Y-B-U-P050	TOILET ROOMS & ALL PUBLIC ACCESS AREAS WITH SEDIMENT BUCKET AND TRAP PRIMER.

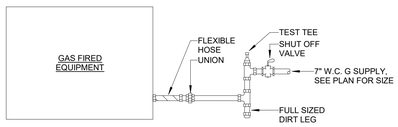
NOTES:
1. BEFORE SETTING DRAINS, OBTAIN EXACT INFORMATION RELATIVE TO FINISH FLOOR LEVEL AND SET TOP OF DRAINS AT FINISH FLOOR ELEVATION.
2. DRAIN SIZES ARE INDICATED ON THE DRAINS.

ELECTRIC WATER HEATER

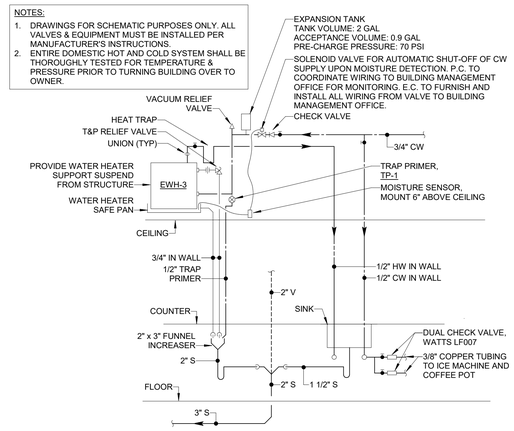
SYMBOL	LOCATION	STORAGE (GAL)	RECOVERY		TEMP SETTING	ELECTRICAL REQUIREMENTS			MANUFACTURER	MODEL	REMARKS
			GAL/HR	DEG RISE		KW	VOLTS	PHASE			
EWH-1	WOMEN (23) & MEN (22)	---	---	43°F	110°F	6.24	208	1	CHRONOMITE	CMI-30L/208	COORDINATE VOLTAGES WITH ELECTRICAL PLANS. PROVIDE WITH A QUICK DISCONNECT SWITCH.
EWH-2	WOMEN (14) & MEN (15)	---	---	43°F	110°F	6.24	208	1	CHRONOMITE	CMI-30L/208	COORDINATE VOLTAGES WITH ELECTRICAL PLANS. PROVIDE WITH QUICK DISCONNECT SWITCH.
EWH-3	COMMON BREAK ROOM	10	8	100°F	140°F	2	208	1	A.O. SMITH	DEL-10	COORDINATE VOLTAGES WITH ELECTRICAL PLANS



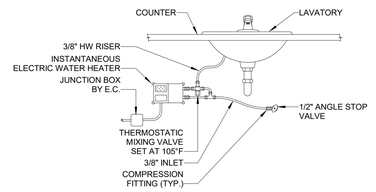
4 I-2 CONNECTION TO GAS FIRED GENERATOR
N.T.S.



3 CONNECTION TO GAS FIRED EQUIPMENT
N.T.S.



2 ELECTRIC WATER HEATER
N.T.S.



1 INSTANTANEOUS ELEC. WATER HEATER
N.T.S.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED No. PE036002 PROFESSIONAL 1-9-26 ENGINEER JESSE W. FOLEY

DRAWN BY: Author
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

GWINNETT COUNTY LAWRENCEVILLE LIBRARY HQ AND ADMINISTRATION RENOVATION

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 12/01/2025
SHEET TITLE PLUMBING SCHEDULES
SHEET NO. P6.01

MECHANICAL DEMOLITION NOTES

1. ALL WORK SHALL CONFORM TO THE STATE BUILDING CODES AND ALL OTHER APPLICABLE CODES AND REGULATIONS
2. THE DRAWINGS DEPICT ONLY GENERALLY THE EXISTING CONDITIONS THE CONTRACTOR SHALL MAKE FIELD OBSERVATIONS AND CONFIRM WALL LOCATIONS, DUCTWORK, PIPING AND OTHER UTILITIES ABOVE EXISTING CEILINGS.
3. ALL CONFLICTS AND ITEMS FOR CLARIFICATIONS SHALL BE BROUGHT TO THE ENGINEER/ ARCHITECT'S ATTENTION PRIOR TO WORK IN THE AREA.
4. THE CONTRACTOR IS RESPONSIBLE TO FOLLOW BUILDING MANAGEMENT RULES WITH REGARDS TO TRASH, ELEVATORS, NOISE, SPRINKLERS AND FIRE ALARM.
5. THE CONTRACTOR SHALL MAINTAIN IN OPERATION ALL EXISTING UTILITIES DURING CONSTRUCTION.
6. ITEMS IDENTIFIED TO BE SALVAGED SHALL BE STOCKPILED IN AN AREA FOR REMOVAL BY THE OWNER. ALL OTHER ITEMS BEING REMOVED SHALL BE DISPOSED OF LEGALLY OFF SITE. ALL ITEMS BEING REMOVED AND NOT REUSED SHALL BE DISPOSED OF AS DIRECTED BY THE OWNER.
7. CAPPING OF ALL SERVICES SHALL BE PERFORMED TO LEAVE EXISTING SERVICES TO OTHER AREAS INTACT AND FUNCTIONAL.
8. ALL DEMOLITION WORK WILL BE SCHEDULED WITH BUILDING MANAGEMENT AND PERFORMED ONLY FOLLOWING APPROVAL.
9. THE CONTRACTOR SHALL INFORM BUILDING MANAGEMENT AND RECEIVE SCHEDULE APPROVAL FOR ANY REQUIRED UTILITY SHUTDOWN.
10. WHERE EQUIPMENT IS SHOWN TO BE REMOVED, THE EQUIPMENT SHALL BE DELIVERED TO BUILDING MANAGEMENT FOR STORAGE OR PROPERLY DISPOSED OF AS DIRECTED BY BUILDING MANAGEMENT.
11. WHERE EQUIPMENT IS SHOWN OR NOTED AS BEING REMOVED & REPLACED AFTER WALL/CEILING STRUCTURAL OR ARCHITECTURAL WORK IS PERFORMED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER, SAFE STORAGE OF SUCH EQUIPMENT.
12. ANY DUCTWORK SHOWN TO BE REMOVED SHALL INCLUDE REMOVE OF ALL ASSOCIATED DUCTWORK, FLEXIBLE CONNECTIONS, DIFFUSERS, HANGERS, INSULATION, ETC.
13. ANY PIPING SHOWN TO BE REMOVED WILL BE REMOVED TO THE POINT INDICATED ON THE DRAWING OR TO THE ACTIVE MAIN AND VALVED AND CAPPED. PIPING REMOVAL SHALL INCLUDE ALL HANGERS, VALVES, INSULATION, ETC.
14. EXISTING DUCTWORK SHALL BE CAPPED AND SEALED AIR TIGHT, EXCEPT WHERE UTILIZED FOR NEW BRANCH DUCTWORK.
15. THERMOSTATS ARE TO BE RELOCATED AS SHOWN ON NEW WORK DRAWING.
16. REMOVE AND CLEAN ALL SUPPLY, RETURN & EXHAUST DIFFUSERS & GRILLES. RE-INSTALL OR SAVE FOR RELOCATION AS SHOWN ON NEW WORK PLAN.
17. ALL DIFFUSERS TO BE TIED TO UNDERSIDE OF STRUCTURE TO FACILITATE REMOVAL OF EXISTING CEILING AND MAINTAIN DIFFUSER CONNECTION TO DUCTWORK WHERE APPLICABLE. DIFFUSERS SHALL BE REPLACED INTO NEW CEILING GRID AS SHOWN ON THE NEW WORK DRAWING. ADDITIONAL LENGTH OF FLEX MAY BE REQUIRED FOR DIFFUSERS.
18. CONTRACTOR SHOULD SURVEY EXISTING CONDITIONS AND INFORM ENGINEER OF ANY DEVIATIONS PRIOR TO CONSTRUCTION.

MECHANICAL DUCTWORK NOTES

1. ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA STANDARDS.
2. PROVIDE VOLUME DAMPERS AT ALL LOW PRESSURE SUPPLY, RETURN AND EXHAUST DUCTWORK BRANCH TAKE-OFFS.
3. RETURN DUCT MAINS FROM AIR HANDLING EQUIPMENT SHALL BE INTERNALLY LINED WITH 1" ACOUSTICAL LINING A MINIMUM OF 10'-0" FROM THE UNIT UNLESS OTHERWISE NOTED. ALL DUCTWORK DIMENSIONS INDICATED ARE CLEAR INSIDE DIMENSIONS. ALL INTERNAL ACOUSTICAL DUCT LINING SHALL HAVE AIR SURFACE COATED WITH ACRYLIC COATING FORMULATED WITH IMMOBILIZED EPA REGISTERED ANTI-MICROBIAL AGENT PROVEN TO RESIST MICROBIAL GROWTH AS DETERMINED BY ASTM G21 AND G22. (B)
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL LOCATIONS OF DIFFUSERS, REGISTERS AND GRILLES.
5. FIRE DAMPERS AND ACCESS PANELS SHALL BE INSTALLED AT ALL FIRE RATED ASSEMBLIES AND FLOOR PENETRATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR ASSEMBLY LOCATIONS. WHERE DUCTS PENETRATE WALLS THAT CARRY BOTH FIRE AND SMOKE RATINGS, THE DAMPER SHALL BE COMBINATION FIRE/ SMOKE DAMPERS. COMBINATION FIRE/ SMOKE DAMPERS SHALL BE PROVIDED WITH POWER IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS. THE MECHANICAL SUBCONTRACTOR SHALL COORDINATE COMBINATION FIRE/ SMOKE DAMPER POWER REQUIREMENTS WITH THE ELECTRICAL SUBCONTRACTOR.
6. PROVIDE FIRE DAMPERS AT ALL TRANSFER DUCTS IN FIRE RATED PARTITIONS.
7. EACH SUPPLY DIFFUSER/REGISTER RUNOUT SHALL BE PROVIDED WITH A VOLUME DAMPER. REFER TO CEILING DIFFUSER BRANCH TAKE-OFF DETAIL FOR ADDITIONAL INFORMATION.
8. ALL VOLUME DAMPERS LOCATED ABOVE HARD NON-ACCESSIBLE CEILINGS SHALL BE PROVIDED WITH A YOUNG REGULATOR VOLUME DAMPER FOR REMOTE BALANCING.
9. RUNOUT SIZES TO DIFFUSERS/REGISTERS SHALL MATCH INLET SIZE NOTED IN THE DIFFUSER REGISTER/ GRILLE SCHEDULE OR TAG UNLESS SHOWN OTHERWISE ON THE FLOOR PLANS.
10. RUNOUT SIZES TO TERMINAL UNITS SHALL BE 2" LARGER THAN INLET SIZE WHEN RUNOUT LENGTH EXCEEDS TWENTY (20) FEET. TERMINAL UNITS SHALL HAVE AT LEAST THREE (3) DUCT DIAMETERS OF STRAIGHT DUCT MATCHING THE UNIT'S INLET SIZE DIRECTLY OFF THE TERMINAL UNITS.
11. ALL FANS SUPPLYING MORE THAN 2,000 CFM OF AIR TO ANY SPACE SHALL BE INSTALLED WITH A SMOKE DETECTOR IN THE RETURN DUCTWORK. DUCT SMOKE DETECTORS SHALL BE INSTALLED IN THE RETURN AIR PATH OF AIR DISTRIBUTION SYSTEMS UTILIZING A COMMON SUPPLY AND/OR RETURN AIR PLENUM WITH A COMBINED DESIGN CAPACITY GREATER THAN 2,000 CFM. THE SMOKE DETECTOR SHALL BE WIRED TO STOP THE FAN UPON DETECTION OF SMOKE, AND SIGNAL THE BUILDING FIRE ALARM CONTROL PANEL. THE SMOKE DETECTOR SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR, MOUNTED IN THE DUCT BY MECHANICAL CONTRACTOR AND WIRED BY THE ELECTRICAL CONTRACTOR.
12. FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 6'-0" IN LENGTH. FLEXIBLE DUCTWORK SHALL BE INSTALLED AS STRAIGHT AS POSSIBLE AND SHALL BE ROUTED AND SUPPORTED WITHOUT FORMING CRIMPS OR OTHER AIR FLOW RESTRICTIONS. PROVIDE SQUARE TO ROUND ADAPTERS OR BOOTS TO CONNECT TO AIR DEVICES NECK WHEN REQUIRED.

MECHANICAL GENERAL NOTES

1. ALL HVAC WORK SHALL BE IN ACCORDANCE WITH APPLICABLE FEDERAL,STATE AND LOCAL CODES INCLUDING AMENDMENTS:
   2018 INTERNATIONAL BUILDING CODE
   2018 INTERNATIONAL MECHANICAL CODE
   2015 INTERNATIONAL ENERGY CONSERVATION CODE
2. INDOOR DESIGN CONDITIONS:
   SUMMER (COOLING): 75ºF, 50% RH, AT 93.8ºF DB/74.3ºF WB OUTDOOR.
   WINTER (HEATING): 70ºF AT 20.7ºF OUTDOOR.
3. THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) CONTRACTOR SHALL VISIT THE SITE TO DETERMINE ALL PRE-EXISTING CONDITIONS AND WORK NECESSARY PRIOR TO SUBMISSION OF BID PRICE.
4. THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) CONTRACTOR SHALL BE FAMILIAR WITH ALL CONTRACT DOCUMENTS FOR ALL TRADES AND COORDINATE WITH OTHER CONTRACTORS.
5. DRAWINGS ARE DIAGRAMMATIC ONLY: FINAL ROUTING OF DUCTWORK, PIPING AND EQUIPMENT LOCATIONS SHALL BE DETERMINED IN THE FIELD ADDITIONAL OFFSETS, ELBOWS, ETC., SHALL BE PROVIDED AND INSTALLED WITHOUT ADDITIONAL COST TO THE OWNER.
6. THE HVAC CONTRACTOR SHALL COORDINATE ALL ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.
7. THE AUTOMATIC TEMPERATURE CONTROL (ATC) CONTRACTOR SHALL COORDINATE THERMOSTAT LOCATIONS WITH THE ARCHITECTURAL FURNITURE PLANS. THERMOSTATS SHALL BE INSTALLED 48" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
8. THE HVAC CONTRACTOR SHALL FURNISH AND INSTALL ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE HVAC WORK COMPLETE AND READY FOR OPERATION.
9. ALL HVAC EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. DEMOLITION WORK SHALL BE DONE BY THE HVAC CONTRACTOR. THE HVAC CONTRACTOR SHALL COORDINATE ALL WORK CONCERNING EXISTING EQUIPMENT AND SYSTEMS REMAINING IN THE BUILDING. ALL UNUSED DUCTS AND PIPES AS A RESULT OF THE DEMOLITION SHALL BE CAPPED, SEALED AND INSULATED.
11. THE HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE INTEGRITY, CONDITION AND LOCATION OF EXISTING DUCTWORK AND PIPING WHICH IS TO BE REUSED. IF PIPING AND DUCTWORK CANNOT BE REUSED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ ENGINEER TO DETERMINE THE EXTENT OF REPLACEMENT.
12. FURNISH TO THE GENERAL CONTRACTOR ALL INFORMATION REQUIRED FOR SETTING OF WALL, ROOF AND PARTITION OPENINGS FOR HVAC WORK. THIS INFORMATION SHALL BE FURNISHED IN A TIMELY MANNER SUCH THAT CONSTRUCTION SCHEDULE IS NOT JEOPARDIZED.
13. INFORM AND COORDINATE WITH THE OWNER ALL NECESSARY INTERRUPTIONS TO EXISTING BUILDING SYSTEMS AND SERVICE THAT MAY AFFECT THE NORMAL OPERATION OF OCCUPIED PORTIONS OF THE BUILDING. THE OWNER SHALL BE INFORMED OF ANY INTERRUPTIONS AT LEAST TWO (2) WEEKS IN ADVANCE.
14. INFORM THE OWNER WELL IN ADVANCE OF ANY WORK TO BE UNDERTAKEN IN OCCUPIED AREAS OF THE BUILDING ASSOCIATED WITH THIS PROJECT. CONFORM NOISE LIMITS IN THE PORTIONS OF THE BUILDING WHICH REMAIN OCCUPIED DURING CONSTRUCTION.
15. COORDINATE PHASING REQUIREMENTS FOR THE PROJECT WITH THE GENERAL CONTRACTOR.
16. FIELD MEASURE THE EXACT SIZES AND VERIFY ALL OPENINGS FOR SHAFTS AND LOUVERS PRIOR TO SUBMISSION OF SHOP DRAWINGS AND INSTALLATION.
17. MINIMAL CONTROL POWER HAS BEEN IDENTIFIED ON THE DRAWINGS. IF ANY ADDITIONAL POWER IS REQUIRED BASED ON SYSTEMS DESIGN BY THE CONTROLS CONTRACTOR THE ATC/BAS CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY THAT POWER.
18. THE HVAC CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT,DUCTWORK, PIPING, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.
19. ANY EXISTING WALL, FLOOR, OR CEILING SURFACE THAT IS DISTURBED DURING THE COURSE OF THE HVAC WORK SHALL BE REPAIRED TO MATCH NEW AND/OR EXISTING CONDITIONS.
20. PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS AND IN WALL STRUCTURES OF ADEQUATE SIZE TO ALLOW FOR MAINTENANCE, BALANCING AND COMPLETE REPLACEMENT OF EQUIPMENT WITHOUT DISTURBING PERMANENT CONSTRUCTION. ACCESS PANELS IN CEILINGS AND WALLS SHALL BE PROVIDED WHERE SHOWN ON THE PLANS OR NECESSARY TO ACCESS DAMPERS, VALVES, ETC. COORDINATE EXACT LOCATION & SIZES OF ALL ACCESS PANELS WITH THE ARCHITECT DURING THE SHOP DRAWING PROCESS.
21. PORTIONS OF DUCTWORK AND PIPE INSULATION VISIBLE THROUGH AIR DISTRIBUTION DEVICES IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.
22. ALL PIPE AND DUCT PENETRATIONS OF FIRE AND/OR SMOKE-RATED ASSEMBLIES SHALL BE FIRE-STOPPED AS REQUIRED TO RESTORE THE ASSEMBLY TO ITS ORIGINAL INTEGRITY. FIRE BARRIER PRODUCTS SHALL BE AS MANUFACTURED BY TREMCO, HILTI, 3M OR APPROVED EQUAL.
23. WHERE ABOVE CEILING VOLUMES OR MECHANICAL ROOM/CLOSETS ARE UTILIZED AS A RETURN AIR PLENUM, ALL MATERIALS EXPOSED WITHIN THE PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 AS DETERMINED IN ACCORDANCE WITH ASTM E84.
24. THE HVAC CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO SUBMITTING SHOP DRAWINGS OR ORDERING EQUIPMENT. EQUIPMENT SHALL BE FURNISHED WIRED FOR THE VOLTAGES SHOWN ON THE ELECTRICAL PLANS.
25. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS AND THE ELECTRICAL DRAWINGS.
26. ALL REQUIRED CONTROL WIRING (INCLUDING POWER WIRING REQUIRED FOR CONTROL PANELS, DEVICES, ETC.) NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK.
27. UNLESS NOTED OTHERWISE, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED WITH THE EQUIPMENT IT SERVES AND INSTALLED BY THE MECHANICAL CONTRACTOR. MOTOR STARTERS FOR HVAC EQUIPMENT SHALL BE FURNISHED WITH THE MOTOR OR APPARATUS WHICH IT OPERATES. MOTOR STARTER INSTALLATION SHALL BE BY THE ELECTRICAL CONTRACTOR.
28. ALL EVAPORATORS AND COOLING COILS LOCATED ABOVE THE LOWEST LEVEL FINISHED FLOOR SHALL BE INSTALLED WITH AN AUXILIARY CONDENSATE DRAIN PAN UNDER THE UNIT. PROVIDE AN ELECTRONIC WATER LEVEL DETECTOR WIRED TO SHUTDOWN THE UNIT UPON DETECTION OF WATER IN THE AUXILIARY DRAIN PAN. AS AN ALTERNATE TO THE AUXILIARY CONDENSATE DRAIN PAN, AN ELECTRONIC WATER LEVEL DETECTOR WIRED TO SHUTDOWN THE UNIT UPON DETECTION OF WATER MAY BE INSTALLED IN THE PRIMARY DRAIN LINE, THE OVERFLOW DRAIN LINE OR THE EQUIPMENT-SUPPLIED DRAIN PAN. THE WATER LEVEL DETECTOR SHALL BE LOCATED AT A POINT HIGHER THAN THE PRIMARY DRAIN LINE CONNECTION AND BELOW THE OVERFLOW RIM OF PAN.
29. DESIGN AND ANCHOR ALL ROOF-MOUNTED EQUIPMENT TO RESIST UPLIFT, SLIDING AND OVERTURNING IN ACCORDANCE WITH FM PROPERTY LOSS PREVENTION DATA SHEET 1-28, WIND DESIGN, SECTIONS 2.6 AND 3.8. (B)

MECHANICAL LEGEND

DUCTWORK SPECIALTIES

14 x 6	RECTANGULAR DUCT
12Ø	ROUND DUCT
14 x 6	DUCT SECTION - SUPPLY
14 x 6	DUCT SECTION - RETURN
14 x 6	DUCT SECTION - EXHAUST
12Ø	ROUND DUCT WITH SIZE
	DUCT TURNING UP
	DUCT TURNING DOWN
	FLEXIBLE DUCT CONNECTION
	DIFFUSER
	DIFFUSER WITH FLEX DUCT
	RETURN/EXHAUST OUTLET
	ACOUSTICAL DUCT LINING
	SOUND ATTENUATOR
	NEW DUCTWORK
	EXISTING DUCT TO REMAIN
	EXISTING DUCT TO BE REMOVED
VD	VOLUME DAMPER
FD	FIRE DAMPER (VERTICAL)
FD	FIRE DAMPER (HORIZONTAL)
MD	MOTORIZED DAMPER
	TRANSFER DUCT

TAGS - EQUIPMENT, DRAWING

EQP #	MOTORIZED EQUIPMENT (EF, B) UPPER - EQUIPMENT DESIGNATION LOWER - EQUIPMENT NUMBER
SD-1 #	AIR DISTRIBUTION (SD, RG, LD, ETC.) UPPER - AIR DISTRIBUTION DESIGNATION LOWER - AIRFLOW IN CFM
H-1 A	UPPER - SECTION DESIGNATION LOWER - DRAWING NUMBER
12 H-1	UPPER - DETAIL DESIGNATION LOWER - DRAWING NUMBER

MISCELLANEOUS

S	WALL SWITCH
T	THERMOSTAT
T	TEMPERATURE SENSOR
●	CONNECT NEW TO EXISTING
◪	LIMIT OF REMOVAL

ABBREVIATIONS

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EAT	ENTERING AIR TEMPERATURE
ETR	EXISTING TO REMAIN
EWT	ENTERING WATER TEMPERATURE
EA	EXHAUST AIR
FLA	FULL LOAD AMPS
FD	FIRE DAMPER
FSD	COMBINATION FIRE DAMPER/SMOKE DAMPER
HP	HORSEPOWER
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MD	MOTORIZED DAMPER
OA	OUTSIDE AIR
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SD	SMOKE DETECTOR
SP	STATIC PRESSURE (INCHES OF WATER)
VD	VOLUME DAMPER
WB	WET BULB TEMPERATURE °F

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED No. PE036002 PROFESSIONAL ENGINEER JESSE W. FOLEY 1-9-26

DRAWN BY:	WJP
CHECKED BY:	RDM

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

20-24092.00

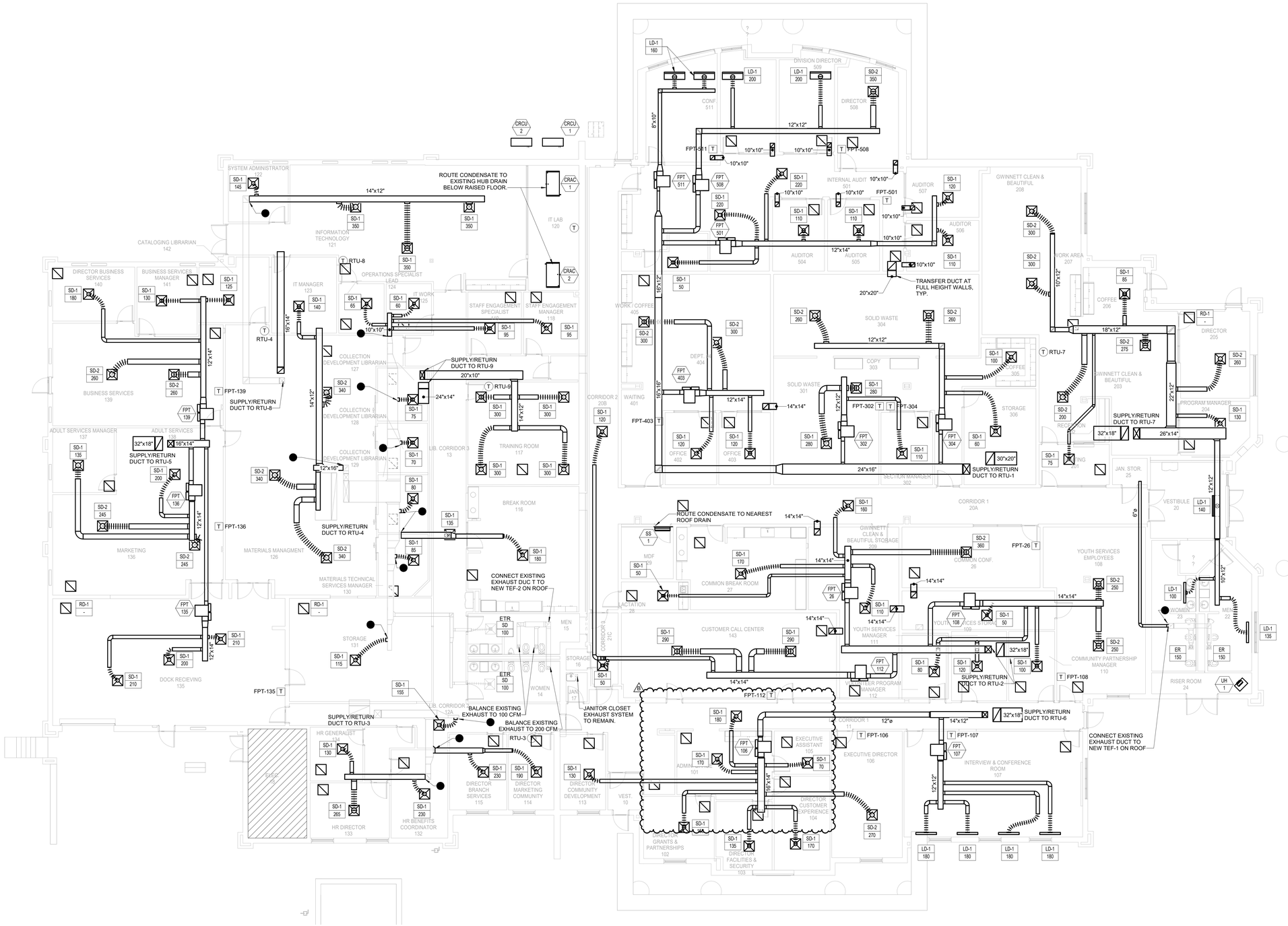
12/01/2025

MECHANICAL LEGEND & GENERAL NOTES

M0.01

SHEET NOTES

1. FPT-26 SHALL BE INSTALLED UNDER PHASE 2. BALANCE THE DAY-1 AIRFLOW FOR RTU-2 ACCORDINGLY.
2. LEAK DETECTORS (PROVIDED BY PLUMBING CONTRACTOR) LOCATED IN ELEC. 18, MDF 29, AND IT LAB 120 SHALL BE MONITORED BY THE BUILDING AUTOMATION SYSTEM. REFER TO P1.01 FOR EXACT LOCATIONS.



1 M1.01 MECHANICAL PLAN
1/8" = 1'-0"

PHASING OF WORK

ALL CONSTRUCTION SHALL BE PERFORMED IN TWO PHASES. SEE ARCHITECTURAL PLANS FOR DELINEATION OF PHASE 1 AND PHASE 2 LIMITS. ALL DEMOLITION AND NEW WORK IN THE PHASE 1 AREA SHALL BE COMPLETE AND ALL SYSTEMS OPERATIONAL PRIOR TO START OF PHASE 2. OWNER WILL SEEK A TEMPORARY OCCUPANCY OF THE PHASE 1 AREA, PRIOR TO PHASE 2. ALL PHASE 1 SCOPE AND SYSTEMS SUPPORTING OPERATIONS AND LIFE SAFETY SHALL BE COMPLETE AND ABLE TO FUNCTION INDEPENDENT OF PHASE 2 COMPLETION.

ALL SCOPE AND SYSTEMS SUPPORTING THE NEW IT LAB 120 SHALL BE DONE IN STAGES IN ORDER TO MAINTAIN FUNCTION AND OPERATION OF THE IT NETWORK THROUGHOUT CONSTRUCTION.

TRUE NORTH PROJECT NORTH

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

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CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED No. PE036002 PROFESSIONAL 1-9-26 ENGINEER JESSE W. FOLEY

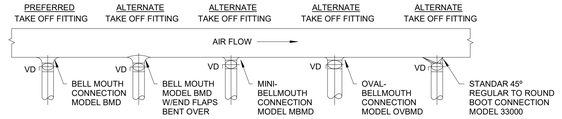
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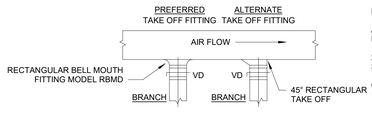
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B	01/09/2026	Addendum 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

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20-24092.00
12/01/2025
MECHANICAL PLAN
[redacted]
M1.01



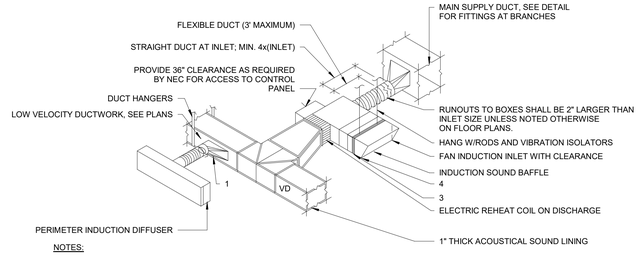


NOTES:

ALL ROUND AND RECTANGULAR BELL MOUTH FITTINGS SHALL BE INCLUDED WITH THE FOLLOWING STANDARD FEATURES:
1. NEOPRENE GASKET TO MINIMIZE AIR LEAKAGE.
2. PRE-DRILLED HOLES FOR QUICK MOUNTING.
3. CONSTRUCTED OF HEAVY DUTY GALVANIZED STEEL.

OPTIONAL FEATURES SHALL INCLUDE THE FOLLOWING:
1. 26 GAUGE GALVANIZED QUADRANT VOLUME DAMPER WITH TIGHT FITTING GASKETING TO MINIMIZE LEAKAGE AT DAMPER PIVOT POINTS.
2. HEAVY DUTY HARDWARE IS AVAILABLE FOR APPLICATIONS WITH INCREASED STATIC PRESSURE.

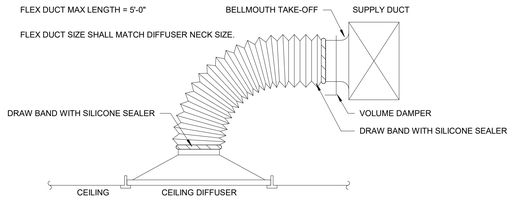
1 BELL MOUTH CONNECTION DETAIL
N.T.S.



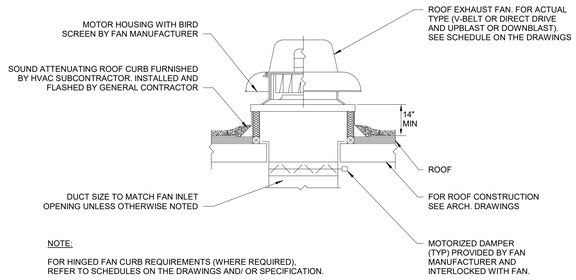
NOTES:

1. TAKE OFF BOOT W/ MAXIMUM 3' FLEXIBLE DUCT. ALL ELBOWS OF 90° SHALL BE "HARD" DUCT. PROVIDE QUADRANT DAMPER IN EACH BRANCH.
2. FAN POWERED TERMINAL BOX (FPT) IS ILLUSTRATED. INLET DUCT CONDITIONS AND DUCT DISCHARGE CONDITIONS ARE TYPICAL FOR ALL TERMINAL BOXES.
3. PROVIDE 1" THICK FILTER.
4. RETURN AIR FROM CEILING PLENUM THROUGH INTERNALLY LINED SOUND BAFFLE.
5. FOR DUCT SIZES SEE PLAN DRAWINGS.

2 FAN POWERED-PARALLEL VAV BOX W/ ELECTRIC REHEAT COIL DETAIL
N.T.S.



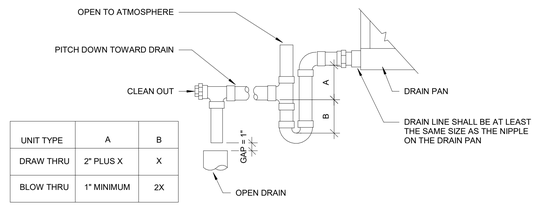
3 CEILING DIFFUSER BRANCH TAKE-OFF DETAIL (FLEX)
N.T.S.



NOTE:

FOR HINGED FAN CURB REQUIREMENTS (WHERE REQUIRED), REFER TO SCHEDULES ON THE DRAWINGS AND/ OR SPECIFICATION.

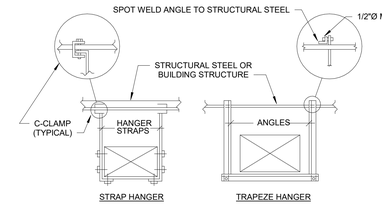
4 ROOF EXHAUST FAN DETAIL (MUSHROOM TYPE)
N.T.S.



UNIT TYPE	A	B
DRAW THRU	2" PLUS X	X
BLOW THRU	1" MINIMUM	2X

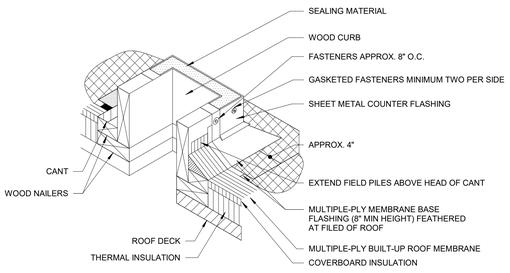
WHERE X = STATIC PRESSURE IN PAN

5 CONDENSATE DRAIN TRAP
N.T.S.



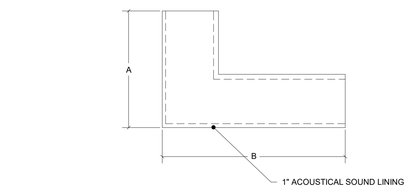
NOTES:
1. REFER TO OTHER DETAILS ON THIS DRAWING FOR HIGH VELOCITY DUCTWORK DETAILS AS REQUIRED.
2. FOR STRAP AND TRAPEZE HANGER SIZE, REFER TO SMACNA DUCT STANDARDS.
3. NO POP RIVETS ALLOWED. USE SELF TAPPING SHEET METAL SCREWS ONLY.
4. AIR GAPS IN INSULATION CREATED BY TRAPEZE HANGERS SHALL BE FILLED WITH APPROPRIATE INSULATION.

6 DUCT HANGER DETAIL (LOW VELOCITY)
N.T.S.



NOTES:
1. WHEN POSSIBLE, THE MECHANICAL UNITS SHOULD NOT BE SET UNTIL THE ROOF MEMBRANE AND FLASHING HAVE BEEN INSTALLED.
2. REFER TO THE SHEET METAL SECTION OF THE METAL ROOFING MANUAL FOR JOINERY AND SECUREMENT DETAILS FOR SHEET METAL.
3. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING EXISTING ROOF WARRANITES AND ACCEPTABLE ROOFING CONTRACTORS TO PERFORM THE INSTALLATION OF ROOF CURBS.

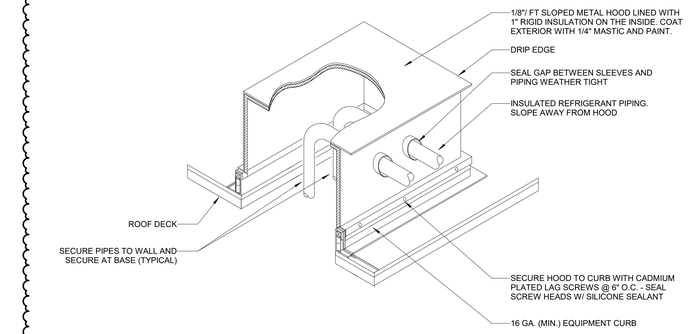
7 ROOF CURB DETAIL
N.T.S.



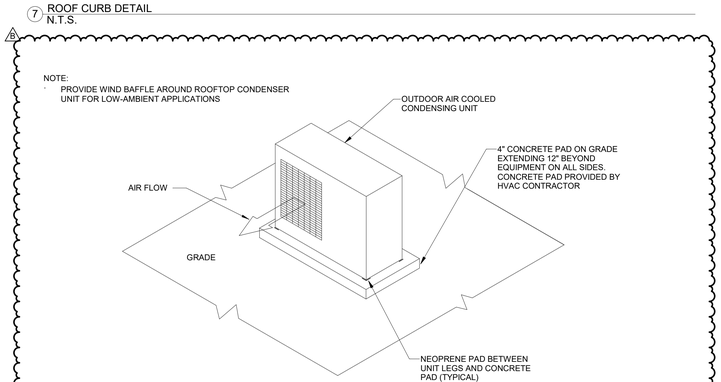
NOTE:

1. A + B = 4'-0" MINIMUM
2. NO TURNING VANES
3. DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS
4. SIDE VIEW

8 TRANSFER DUCT DETAIL
N.T.S.



9 DTL - REFRIGERANT PIPING ROOF PENETRATION CURB CAP DETAIL (NEW)
N.T.S.



NOTE:
PROVIDE WIND BAFFLE AROUND ROOFTOP CONDENSER UNIT FOR LOW-AMBIENT APPLICATIONS

10 ROOF TOP CONDENSER MOUNTING DETAIL
N.T.S.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. PE036002 JESSE W. FOLEY 1-9-26

DRAWN BY: WJP
CHECKED BY: RDM
[redacted]

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

[redacted] 20-24092.00
[redacted] 12/01/2025
[redacted] MECHANICAL DETAILS
[redacted] M5.01

DX ROOFTOP UNITS WITH GAS HEAT — RTU

SYMBOL	SERVICE	MODEL	CFM		SUPPLY FAN						EXHAUST FAN		COOLING CAPACITY					REFRIGERANT		GAS HEAT		HOT GAS REHEAT		ELECTRICAL				WEIGHT	EMERGENCY POWER	REMARKS
			TOTAL	O.A.	# OF FANS	CFM / FAN	TSP	ESP	FAN RPM	HP / FAN	BHP / FAN	# OF FANS	CFM / FAN	EAT		LAT		TOTAL CAP (MBH)	SENS CAP (MBH)	LBS	TYPE	CAPACITY(MBH)	EAT (° F)	LAT (° F)	MBH	EAT (° F)	LAT (° F)	V	PH	HZ	SCCR			
														DB	WB	DB	WB															
RTU-1	1ST FLOOR	YHK150	4,200	1,050	2	2,100	1.7	1.5	1,199	3.0	2.1	1	1,730	80.2	67.4	57.9	56.2	150	104	12.9	R454B	150	60	86	103	55	73	208	3	60	65	2711	NO	1 2 3 4 5 6 7 8 9 10 11 12 14
RTU-2	1ST FLOOR	YSK072	2,400	600	1	2,400	1.7	1.5	1,286	3.0	1.4	1	1,730	80.0	65.3	56.2	54.7	77	63	8.4	R454B	80	60	86	39	55	73	208	3	60	65	1275	NO	1 2 3 4 5 6 7 8 9 10 11 12 14
RTU-3	1ST FLOOR	YHK036	1,200	200	1	1,200	1.7	1.5	1,191	1.0	0.7	-	-	78.3	64.0	56.2	54.0	35	29	5.6	R454B	80	60	110	27	55	73	208	3	60	65	860	NO	1 2 3 4 5 6 7 8 9 10 11 13 14
RTU-4	1ST FLOOR	YSK072	2,400	450	1	2,400	1.7	1.5	1,286	3.0	1.4	1	1,730	79.0	64.3	55.2	53.7	75	63	8.4	R454B	80	60	86	39	55	73	208	3	60	65	1275	NO	1 2 3 4 5 6 7 8 9 10 11 12 14
RTU-5	1ST FLOOR	YSK072	2,400	400	1	2,400	1.7	1.5	1,210	3.0	1.8	1	1,730	78.8	64.1	53.1	51.6	73	57	8.4	R454B	80	60	90	34	55	73	208	3	60	65	1275	NO	1 2 3 4 5 6 7 8 9 10 11 12 14
RTU-6	1ST FLOOR	YHK060	2,000	375	1	2,000	1.7	1.5	1,145	3.0	1.0	1	1,730	78.3	64.0	55.6	54.3	52	44	7.9	R454B	80	60	90	50	55	73	208	3	60	65	1138	NO	1 2 3 4 5 6 7 8 9 10 11 12
RTU-7	1ST FLOOR	YHK060	2,000	310	1	2,000	1.7	1.5	1,145	3.0	1.0	1	1,730	78.7	64.0	55.0	53.7	58	48	7.9	R454B	80	60	90	50	55	73	208	3	60	65	1138	NO	1 2 3 4 5 6 7 8 9 10 11 12
RTU-8	1ST FLOOR	YHK036	1,200	150	1	1,200	1.7	1.5	1,282	1.5	1.0	-	-	78.3	64.0	55.0	53.7	31	27	3.7	R454B	80	60	110	22	55	73	208	3	60	65	839	NO	1 2 3 4 5 6 7 8 9 10 11 13 14
RTU-9	1ST FLOOR	YHK036	1,200	300	1	1,200	1.7	1.5	1,282	1.5	1.0	-	-	81.0	68.4	55.5	54.4	25	16	3.7	R454B	80	60	110	22	55	73	208	3	60	65	839	NO	1 2 3 4 5 6 7 8 9 10 11 13 14

SELECTION BASED ON: TRANE

REMARKS:
1. INSULATED ADAPTER ROOF CURB MOUNTED ON EXISTING CURB.
2. ~~PROVIDE SMOKE DETECTOR IN RETURN DUCTWORK AND DISCONNECT SWITCH.~~
3. FACTORY PROVIDED CONVENIENCE OUTLET.
4. MERV 13 FILTRATION.
5. FACTORY PROVIDED FROSTAT.
6. HINGED ACCESS DOORS.
7. FACTORY PROVIDED HAIL GUARD.
8. CONDENSATE DRAIN OVERFLOW SWITCH.
9. SMOKE DETECTOR MOUNTED IN THE SUPPLY AIR DUCTWORK.
10. ANTI-SHORT CYCLE TIMER.
11. 7-DAY PROGRAMMABLE THERMOSTAT IN LOCKING COVER.
12. 0-100% ECONOMIZER WITH DIFFERENTIAL ENTHALPY CONTROL AND MODULATED POWERED EXHAUST.
13. FACTORY PROVIDED BAROMETRIC RELIEF DAMPER.
14. MULTIPLE ZONE VAV.

UNIT HEATER (ELECTRIC) — UH

SYMBOL	MODEL	SERVES	MOUNTING	CFM						EMERGENCY POWER	REMARKS
					KW	STAGES	V	PH	AMPS		
UH-1	MUH	24 RISER ROOM	CEILING	350	3	1	208	3	14	NO	1 2 3 4 5

SELECTION BASED ON: QMARK

REMARKS:
1. SINGLE POINT POWER CONNECTION WITH FACTORY MOUNTED AND WIRED DISCONNECT.
2. REMOTE THERMOSTAT.
3. FAN DELAY SWITCH
4. THERMAL CUTOUT.
5. COORDINATE MOUNTING HEIGHT W/ ARCH.

COMPUTER ROOM AIR CONDITIONING UNIT — CRAC

SYMBOL	MODEL	CFM	FAN QTY.	ESP	FAN kW (EACH)	COOLING DATA					ELECTRICAL					REMARKS
						EDB	EWB	LDB	LWB	NET SENS (KW)	V	PH	HZ	MCA	MOCP	
CRAC-1	MT036HE1	1,350	1	0.2"	0.5	72	60	54	51	7.68	208	3	60	8.3	15	1 2 3
CRAC-2	MT036HE1	1,350	1	0.2"	0.5	72	60	54	51	7.68	208	3	60	8.3	15	1 2 3

SELECTION BASED ON: VERTIV

REMARKS:
1. PROVIDE WITH NETWORK INTERFACE CARD FOR INTEGRATION TO BMS
2. SINGLE POINT POWER CONNECTION WITH FACTORY MOUNTED AND WIRED DISCONNECT (N+1 PER ROOM)
3. VARIABLE SPEED FAN SPEED CONTROL

COMPUTER ROOM CONDENSING UNIT — CRCU

SYMBOL	MODEL	SERVES	AMBIENT (DEG F)	FAN QTY.	NET SENS (KW)	ELECTRICAL					REMARKS
						V	PH	HZ	MCA	MOCP	
CRCU-1	PDF037AL	CRAC-1	95	1	7.6	208	3	60	27.5	45	1 2 3 4 5
CRCU-2	PDF037AL	CRAC-2	95	1	7.6	208	3	60	27.5	45	1 2 3 4 5

SELECTION BASED ON: VERTIV

REMARKS:
1. PROVIDE WITH NETWORK INTERFACE CARD FOR INTEGRATION TO BMS
2. PROVIDE WITH SINGLE POINT POWER SUPPLY WITH FACTORY MOUNTED AND WIRED DISCONNECT
3. VARIABLE SPEED FAN SPEED CONTROL
4. ~~PROVIDE WITH WEATHER COVER, MOUNTED ON CONCRETE PAD, AND SECURED WITH ANCHOR BOLTS.~~
5. CONDENSING UNIT SHALL BE MOUNTED ON 4" THICK CONCRETE PAD, EXTENDING 12" BEYOND TEH FOOTPRINT OF THE EQUIPMENT ON ALL SIDES.

DUCTLESS SPLIT SYSTEM — SS/CU

SYMBOL	SERVES	MODEL (INDOOR / OUTDOOR)	INDOOR UNIT TYPE	CFM	TOTAL CAPACITY MBH		NOMINAL TONS	OUTDOR UNIT LOCATION	EMERGENCY POWER	ELECTRICAL					REMARKS
					COOLING	SENSIBLE				V	PH	HZ	MCA	MOP	
SS/CU-1	29 DATA	NTYWST09 / NTYSS509	WALL MOUNTED	300	9.0	8.1	1	ROOF	NO	208	1	60	10.0	15	1 2 3 4 5 6 7 8 9 10

SELECTION BASED ON: TRANE

REMARKS
1. INSTALL PER MANUFACTURER'S RECOMMENDED CLEARANCES AND GUIDELINES.
2. PROVIDE WITH LOW AMBIENT COOLING DOWN TO 0°F.
3. PROVIDE WALL-MOUNTED PROGRAMABLE THERMOSTAT.
4. PROVIDE FLOAT SWITCH TO DISABLE INDOOR UNIT UPON DETECTION OF HIGH WATER LEVEL.
5. PROVIDE WITH CONDENSATE PUMP.
6. TOTAL CAPACITY IS AT 95°F AMBIENT.
7. DISCONNECT BY ELECTRICAL CONTRACTOR, INDOOR UNIT POWERED FROM EXTERIOR UNIT.
8. MAXIMUM ONE-WAY REFRIGERANT PIPE LENGTH SHALL BE 160 FT MINIMUM.
9. MOUNT INDOOR UNIT AT 10'-0" AFF.
10. PROVIDE REFRIGERANT PIPING BETWEEN INDOOR AND OUTDOOR UNIT. PIPING SHALL BE HARD COPER AND ROUTED PER MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS.

FAN POWERED TERMINAL (ELECTRIC HEAT) (PARALLEL FLOW) — FPT

SYMBOL	MODEL	PRIMARY AIRFLOW	MIN AIRFLOW	FAN AIRFLOW	INLET SIZE	FAN S.P.	MOTOR HP	MOTOR			HEATER								EMERGENCY POWER	REMARKS
								V	PH	HZ	EAT	LAT	APD	KW	STAGES	V	PH	HZ		
FPT-302	FDV	675	270	405	8	0.25	1/3	208	3	60	68	90	0.1	4.7	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-304	FDV	625	250	375	8	0.25	1/3	208	3	60	68	90	0.1	4.4	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-403	FDV	840	335	505	10	0.25	1/3	208	3	60	68	90	0.1	5.8	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-501	FDV	935	375	560	10	0.25	1/3	208	3	60	68	90	0.1	6.5	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-508	FDV	755	300	455	10	0.25	1/3	208	3	60	68	90	0.1	5.3	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-511	FDV	325	135	190	6	0.25	1/3	208	3	60	68	90	0.1	2.3	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-106	FDV	1275	510	765	12	0.25	1/3	208	3	60	68	90	0.1	8.9	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-107	FDV	720	290	430	10	0.25	1/3	208	3	60	68	90	0.1	5.0	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-108	FDV	850	340	510	10	0.25	1/3	208	3	60	68	90	0.1	5.9	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-26	FDV	850	400	450	10	0.25	1/3	208	3	60	68	90	0.1	5.9	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-112	FDV	830	330	500	10	0.25	1/3	208	3	60	68	90	0.1	5.8	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-136	FDV	825	330	495	10	0.25	1/3	208	3	60	68	90	0.1	5.7	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-135	FDV	620	300	320	8	0.25	1/3	208	3	60	68	90	0.1	4.3	3	208	1	60	NO	1 2 3 4 5 6 7 8
FPT-139	FDV	955	380	575	10	0.25	1/3	208	3	60	68	90	0.1	6.6	3	208	1	60	NO	1 2 3 4 5 6 7 8

SELECTION BASED ON: PRICE

REMARKS:
1. PROVIDE EC MOTOR, FACTORY WIRED 24 VOLT TRANSFORMER AND ELECTRIC REHEAT COIL WITH SINGLE POINT POWER CONNECTION AND DISCONNECT SWITCH.
2. WHERE MEDIUM PRESSURE BRANCH DUCT EXCEEDS TWENTY (20) FEET, INCREASE TO NEXT HIGHER SIZE (i.e. 6" INLET -> 8" DUCT).
3. 3/4" THICK FOIL FACED FIBERGLASS INSULATION.
4. NEMA 1 WIRING ENCLOSURE W/FACTORY DISCONNECT SWITCH. SINGLE POINT POWER CONNECTION.
5. FACTORY MOUNTED DDC CONTROLS.
6. WALL MOUNTED TEMPERATURE SENSOR.
7. UNITS SHALL BE A.R.I. CERTIFIED.
8. RADIATED SOUND (@ 1.5") SHALL NOT EXCEED 35 NC.

DIFFUSERS, REGISTERS & GRILLES SCHEDULE

SYMBOL	MODEL	NECK SIZE	FACE SIZE	FUNCTION	MATERIAL	TYPE	FINISH	DAMPER	CFM RANGE	REMARKS
SD-1	ASPD	8"Ø	24X24	SUPPLY	STEEL	CEILING	PER ARCH	NONE	0 - 200	1 3 4
SD-2	ASPD	12"Ø	24X24	SUPPLY	STEEL	CEILING	PER ARCH	NONE	200 - 500	1 3 4
RG-1	PFRF	24X24	24X24	RETURN	STEEL	CEILING	PER ARCH	NONE	0 - 1500	3 4
RD-1	APDDR	14X14	24X24	RETURN	STEEL	CEILING	PER ARCH	NONE	0 - 720	3 4
ER-1	630	8X8	10X10	EXHAUST	STEEL	CEILING/WALL	PER ARCH	OBD	0 - 200	3 4
LD-1	SDA	8"Ø	48" X 2-SLOT	SUPPLY	STEEL	CEILING	PER ARCH	IN NECK	0 - 200	2 3 4

SELECTION BASED ON: PRICE

REMARKS:
1. 4-WAY CORE WITH 24 X 24 LAY-IN BORDER AND ROUND NECK ADAPTOR
2. 1" SLOT AND ACOUSTICALLY LINED PLENUM AND FACE ADJUSTABLE BUTTERFLY DAMPER
3. COORDONATE FRAME WITH CEILING TYPE AND/OR SUSPENSION SYSTEM. REFER TO ARCHITECTURAL DRAWINGS.
4. FINISH SHALL BE OF THE TYPE AND COLOR SPECIFIED BY THE ARCHITECT. SUBMIT COLOR/FINISH CHART AS PART OF SHOP DRAWINGS.

EXHAUST FAN SCHEDULE — EF

SYMBOL	MODEL	TYPE	SERVICE	CFM	S.P. (IN. W.G.)	FAN RPM	BHP	HP	DRIVE TYPE	ELECTRICAL			REMARKS
										V	PH	HZ	
TEF-1	G95-VG	CENTRIFUGAL	RESTROOM	485	0.5	1454	0.09	1/6	DIRECT	115	1	60	1 2 3 4 5 6 7
TEF-2	G95-VG	CENTRIFUGAL	RESTROOM	485	0.5	1454	0.09	1/6	DIRECT	115	1	60	1 2 3 4 5 6 7

SELECTION BASED ON: GREENHECK

REMARKS
1. SINGLE POINT POWER CONNECTION WITH FACTORY SUPPLIED DISCONNECT SWITCH OR PLUG
2. INTEGRAL BACKDRAFT DAMPER
3. FAN SPEED CONTROL
4. PROVIDE 14" HIGH ROOF CURB
5. FAN SHALL RUN ON TIMECLOCK DURING BUILDING OCCUPIED HOURS
6. MOUNT FAN BEARINGS OUT OF AIR STREAM
7. EC/VARI-GREEN MOTOR

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS

GEORGIA REGISTERED No. PE036002 PROFESSIONAL ENGINEER 1-9-26 JESSIE W. FOLEY

DRAWN BY: WJP
CHECKED BY: RDM

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

20-24092.00

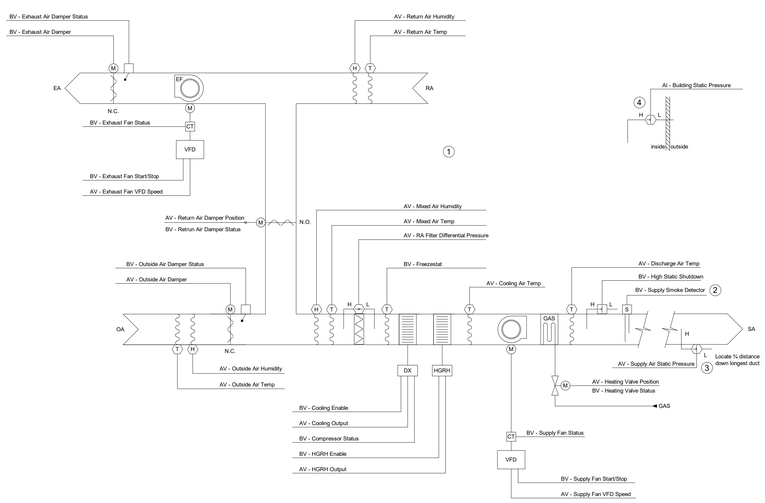
12/01/2025

MECHANICAL SCHEDULES

M6.01

KEYED NOTES

1. ALL SENSORS AND CONTROL DEVICES UNLESS NOTED OTHERWISE SHALL BE PROVIDED BY THE RTU MANUFACTURER. CONTROLLER SHALL BE PROVIDED BY THE RTU MANUFACTURER.
2. SMOKE DETECTOR SHALL BE PROVIDED BY MECHANICAL CONTRACTOR IN DUCTWORK EXTERNAL TO UNIT AND WIRED TO SHUT-DOWN UNIT UPON DETECTION OF SMOKE.
3. DUCT STATIC PRESSURE SENSOR TO BE PROVIDED BY RTU MANUFACTURER AND INSTALLED BY MECHANICAL CONTRACTOR.
4. BUILDING STATIC PRESSURE SENSOR SHALL BE UTILIZED FOR EXHAUST FAN SPEED CONTROL. MECHANICAL CONTRACTOR SHALL INSTALL AS INDICATED ON DRAWINGS.



A. DESCRIPTION
   1. RTU SHALL BE PROVIDED WITH FACTORY CONTROLS AND SENSORS WITH A NETWORK INTERFACE CARD FOR INTEGRATION INTO THE BAS.

B. CONTROL POINTS ADJUSTABLE BY BAS
   1. AT A MINIMUM, THE FOLLOWING POINTS SHALL BE ADJUSTABLE BY THE BAS:
      a. SUPPLY AIR TEMPERATURE SET POINT (LEAVING UNIT)
      b. SUPPLY FAN VFD SPEED
      c. EXHAUST FAN VFD SPEED
      d. UNIT ENABLE/DISSABLE

C. SET POINTS (ALL ADJUSTABLE THROUGH BAS)
   1. SUPPLY AIR TEMPERATURE SET POINT: 55 DEG. F
   2. RETURN AIR HUMIDITY SETPOINT: 50% RH
   3. SUPPLY FAN STATIC PRESSURE SETPOINT: 1.5 IN WG (TO BE DETERMINED DURRING TEST AND BALANCE)
   4. BUILDING STATIC PRESSURE SETPOINT: 0.05 IN WG (TO BE DETERMINED DURRING TEST AND BALANCE)

D. RUN CONDITIONS – REQUESTED: THE UNIT SHALL RUN WHENEVER:
   1. ANY ZONE IS OCCUPIED.
   2. OR A DEFINABLE NUMBER OF UNOCCUPIED ZONES NEED COOLING.

E. FREEZE PROTECTION: THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZE STAT STATUS. FREEZE STATS SHALL BE SET AT 35 DEG. F.

F. HIGH STATIC SHUTDOWN: THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A HIGH STATIC SHUTDOWN SIGNAL.

G. SUPPLY AIR SMOKE DETECTION: THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SUPPLY AIR SMOKE DETECTOR STATUS.

H. AHU OPTIMAL START: THE UNIT SHALL START PRIOR TO SCHEDULED OCCUPANCY BASED ON THE TIME NECESSARY FOR THE ZONES TO REACH THEIR OCCUPIED SETPOINTS. THE START TIME SHALL AUTOMATICALLY ADJUST BASED ON CHANGES IN OUTSIDE AIR TEMPERATURE AND ZONE TEMPERATURES.

I. SUPPLY FAN: THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

J. SUPPLY AIR DUCT STATIC PRESSURE CONTROL: THE CONTROLLER SHALL MEASURE DUCT STATIC PRESSURE AND MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT. THE SPEED SHALL NOT DROP BELOW 30% (ADJ.). THE STATIC PRESSURE SETPOINT SHALL BE RESET BASED ON ZONE COOLING REQUIREMENTS.

K. EXHAUST FAN: THE EXHAUST FAN SHALL MODULATE SPEED TO MAINTAIN BUILDING STATIC PRESSURE SET POINT.

L. SUPPLY AIR TEMPERATURE SETPOINT – BUILDING LOAD RESET: THE BAS SHALL MONITOR THE PRIMARY AIR DAMPER FOR ALL CONECTED TERMINAL UNITS AND SHALL MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT RESET BASED ON BUILDING LOAD. THE SUPPLY AIR TEMPERATURE SETPOINT SHALL RESET FOR COOLING AS FOLLOWS:
   1. AS THE BAS DETERMINES THE COOLING LOAD WITHIN THE BUILDING IS DECREASING, THE SUPPLY AIR TEMPERATURE SETPOINT SHALL GRADUALLY RESET UP TO A MAXIMUM OF 60 DEGREES F (ADJ.). IF ANY ZONE IS DETERMINED TO EXCEED ITS ZONE TEMPERATURE AND IS NOT ABLE TO MAINTAIN SETPOINT FOR A 10 MIN (ADJ.) PERIOD, THE UNIT WILL BEGIN TO GRADUALLY LOWER THE SUPPLY AIR TEMPERATURE SETPOINT UNTIL ALL ZONES ARE SATISFIED.
   2. AS THE BAS DETERMINES THE COOLING LOAD WITHIN THE BUILDING IS INCREASING, THE SUPPLY AIR TEMPERATURE SETPOINT SHALL BE GRADUALLY RESET DOWN TO A MINIMUM OF 53 DEGREES F (ADJ.). IF ANY ZONE IS DETERMINED TO HAVE DROPPED BELOW ITS ZONE TEMPERATURE AND IS NOT ABLE TO MAINTAIN SETPOINT FOR A 10 MIN (ADJ.) PERIOD, THE UNIT WILL BEGIN TO GRADUALLY RAISE THE SUPPLY AIR TEMPERATURE SETPOINT UNIT ALL ZONES ARE SATISFIED.

M. DX COOLING: THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND MODULATE THE DX COOLING COMPRESSORS TO MAINTAIN ITS COOLING SETPOINT.
   1. THE COOLING SHALL BE ENABLED WHENEVER:
      a. THE SUPPLY FAN STATUS IS ON.
      b. AND THE HEATING IS NOT ACTIVE.

N. GAS HEATER: THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND MODULATE THE GAS HEATING VALVE TO MAINTAIN ITS HEATING SETPOINT .
   1. THE HEATING SHALL BE ENABLED WHENEVER:
      a. OUTSIDE AIR TEMPERATURE IS LESS THAN 65° (ADJ.).
      b. AND THE SUPPLY FAN STATUS IS ON.
      c. AND THE COOLING IS NOT ACTIVE.

O. THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF. IF OPTIMAL START UP IS AVAILABLE THE MIXED AIR DAMPER SHALL OPERATE AS DESCRIBED IN THE OCCUPIED MODE EXCEPT THAT THE OUTSIDE AIR DAMPER SHALL MODULATE TO FULLY CLOSED.

P. FILTER DIFFERENTIAL PRESSURE MONITOR: THE CONTROLLER SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER.

Q. MIXED AIR TEMPERATURE: THE CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL.

R. DEHUMIDIFICATION CONTROL: THE CONTROLLER SHALL MONITOR THE RETURN AIR HUMIDITY AND USE AS REQUIRED FOR HUMIDITY CONTROL AND MODULATE THE HOT-GAS REHEAT TO MAINTAIN THE RETURN AIR TEMPERATURE SETPOINT.

S. RETURN AIR TEMPERATURE: THE CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR SETPOINT CONTROL.

T. ECONOMIZER; THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT OF 2 DEG. F (ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SET POINT . THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM OPEN POSITION TO MEET THE OUTSIDE AIR FLOW LISTED ON THE RTU SCHEDULE WHENEVER OCCUPIED.

   1. THE ECONOMIZER SHALL BE ENABLED WHENEVER:
      A. OUTSIDE AIR TEMPERATURE IS LESS THAN 65 DEG. F (ADJ.)
      B. AND THE OUTSIDE AIR ENTHALPY IS LESS THAN 22 BTU/LB (ADJ.)
      C. AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE
      D. AND THE OUTSIDE AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPY
      E. AND THE SUPPLY FAN STATUS IS ON.

   2. THE ECONOMIZER SHALL CLOSE WHENEVER:
      A. MIXED AIR TEMPERATUR DROPS FROM 40 DEG. F TO 35 DEG. F.
      B. OR THE FREEZE STAT IS ON
      C. OR ON LOSS OF SUPPLY FAN STATUS.

U. OUTSIDE AIR TEMPERATURE/HUMIDITY: THE CONTROLLER SHALL MONITOR THE OUTSIDE AIR TEMPERATURE AND HUMIDITY FOR ECONOMIZER CONTROL.

V. SUPPLY (DISCHARGE) AIR TEMPERATURE: THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE FOR SETPOINT CONTROL.

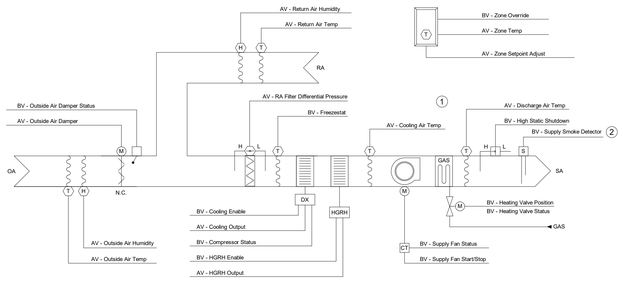
W. THE FOLLOWING POINTS, AT A MINIMUM BUT NOT LIMITED TO, SHALL BE MONITORED AND TRENDED:
   1. SUPPLY AIR STATIC PRESSURE
   2. BUILDING STATIC PRESSURE
   3. SUPPLY AIR STATIC PRESSURE SETPOINT
   4. FILTER DIFFERENTIAL PRESSURE
   5. MIXED AIR TEMPERATURE
   6. RETURN AIR HUMIDITY
   7. RETURN AIR TEMPERATURE
   8. SUPPLY AIR TEMPERATURE SETPOINT
   9. SUPPLY AIR TEMPERATURE
   10. SUPPLY FAN VFD SPEED
   11. SUPPLY FAN STATUS
   12. SUPPLY FAN START/STOP
   13. EXHAUST FAN VFD SPEED
   14. EXHAUST FAN STATUS
   15. MIXED AIR TEMPERATURE SETPOINT
   16. EXHAUST FAN START/STOP
   17. COOLING CAPACITY
   18. GAS VALVE POSITION
   19. RETURN AIR DAMPERS
   20. EXHAUST AIR DAMPERS
   21. OUTSIDE AIR DAMPERS
   22. FREEZESTAT
   23. HIGH STATIC SHUTDOWN
   24. HOT-GAS REHEAT STATUS
   25. OUTSIDE AIR TEMPERATURE
   26. OUTSIDE AIR HUMIDITY
   27. COOLING COIL LEAVING AIR TEMPERATURE

X. ALARMS SHALL BE GENERATED AS FOLLOWS:
   1. FREEZESTAT.
   2. HIGH STATIC SHUTDOWN.
   4. SUPPLY AIR SMOKE DETECTION
   5. ANY VALVE FAILURE
   6. ANY DAMPER FAILURE
   7. SUPPLY FAN:
      a. SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
      b. SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
      c. SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).
   8. EXHAUST FAN :
      a. EXHAUST FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
      b. EXHAUST FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
      c. EXHAUST FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).
   9. HIGH SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJ.) GREATER THAN SETPOINT.
   10. LOW SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJ.) LESS THAN SETPOINT.
   11. HIGH SUPPLY AIR TEMPERATURE: IF THE SUPPLY AIR TEMPERATURE IS 5°F (ADJ.) GREATER THAN SETPOINT.
   12. LOW SUPPLY AIR TEMPERATURE: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).
   13. PREFILTER CHANGE REQUIRED: PREFILTER DIFFERENTIAL PRESSURE EXCEEDS A USER DEFINABLE LIMIT (ADJ.).
   14. HIGH MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).
   15. LOW MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).
   16. HIGH RETURN AIR HUMIDITY: IF THE RETURN AIR HUMIDITY IS GREATER THAN 70% (ADJ.).
   17. HIGH RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).

1 ROOF TOP UNIT - DX, GAS, VAV, ECON, POWER EXH
N.T.S.

KEYED NOTES

1. ALL SENSORS AND CONTROL DEVICES UNLESS NOTED OTHERWISE SHALL BE PROVIDED BY THE RTU MANUFACTURER. CONTROLLER SHALL BE PROVIDED BY THE RTU MANUFACTURER.
2. SMOKE DETECTOR SHALL BE PROVIDED BY MECHANICAL CONTRACTOR IN DUCTWORK EXTERNAL TO UNIT AND WIRED TO SHUT-DOWN UNIT UPON DETECTION OF SMOKE.



A. DESCRIPTION
   1. RTU SHALL BE PROVIDED WITH FACTORY CONTROLS AND SENSORS WITH A NETWORK INTERFACE CARD FOR INTEGRATION INTO THE BAS.

B. SET POINTS (ALL ADJUSTABLE THROUGH BAS)
   1. SPACE OCCUPIED COOLING SETPOINT
   2. SPACE OCCUPIED HEATING SETPOINT
   3. SPACE UNOCCUPIED COOLING SETPOINT
   4. SPACE UNOCCUPIED HEATING SETPOINT

C. RUN CONDITIONS – SCHEDULED: THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
   1. OCCUPIED MODE: THE UNIT SHALL MAINTAIN
      a. A 75°F (ADJ.) COOLING SETPOINT
      b. A 70°F (ADJ.) HEATING SETPOINT.
   2. UNOCCUPIED MODE: THE UNIT SHALL MAINTAIN
      a. A 80°F (ADJ.) COOLING SETPOINT
      b. A 55°F (ADJ.) HEATING SETPOINT.

D. ZONE OPTIMAL START: THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

E. FREEZE PROTECTION: THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS. FREEZE STATS SHALL BE SET AT 35 DEG. F.

F. SUPPLY AIR SMOKE DETECTION: THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SUPPLY AIR SMOKE DETECTOR STATUS.

G. SUPPLY FAN: THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

H. COOLING: THE FACTORY CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE COMPRESSORS TO MAINTAIN ITS COOLING SETPOINT.

I. HEATING: THE FACTORY CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE GAS HEAT TO MAINTAIN ITS HEATING SETPOINT.

J. OUTSIDE AIR DAMPER: WHEN THE UNIT IS IN OCCUPIED MODE, THE OUTSIDE AIR DAMPER SHALL OPEN TO MAINTAIN THE OUTSIDE AIR FLOW SHOWN ON THE RTU SCHEDULE. EXACT POSITION SHALL BE DETERMINED DURRING TEST AND BALLANCE. THE OUTSIDE AIR DAMPER SHALL CLOSE WHEN UNIT IS IN UNOCCUPIED MODE.

L. RETURN AIR TEMPERATURE: THE CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR SETPOINT CONTROL AND ECONOMIZER CONTROL.

M. ECONOMIZER; THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT OF 2 DEG. F (ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SET POINT . THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM OPEN POSITION TO MEET THE OUTSIDE AIR FLOW LISTED ON THE RTU SCHEDULE WHENEVER OCCUPIED.

   1. THE ECONOMIZER SHALL BE ENABLED WHENEVER:
      A. OUTSIDE AIR TEMPERATURE IS LESS THAN 65 DEG. F (ADJ.)
      B. AND THE OUTSIDE AIR ENTHALPY IS LESS THAN 22 BTU/LB (ADJ.)
      C. AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE
      D. AND THE OUTSIDE AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPY
      E. AND THE SUPPLY FAN STATUS IS ON.

   2. THE ECONOMIZER SHALL CLOSE WHENEVER:
      A. MIXED AIR TEMPERATUR DROPS FROM 40 DEG. F TO 35 DEG. F.
      B. OR THE FREEZE STAT IS ON
      C. OR ON LOSS OF SUPPLY FAN STATUS.

N. OUTSIDE AIR TEMPERATURE/HUMIDITY: THE CONTROLLER SHALL MONITOR THE OUTSIDE AIR TEMPERATURE AND HUMIDITY FOR ECONOMIZER CONTROL.

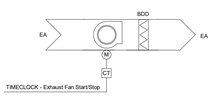
O. DEHUMIDIFICATION CONTROL: THE CONTROLLER SHALL MONITOR THE RETURN AIR HUMIDITY AND USE AS REQUIRED FOR HUMIDITY CONTROL AND MODULATE THE HOT-GAS REHEAT TO MAINTAIN THE RETURN AIR TEMPERATURE SETPOINT.

P. EXHAUST FAN: THE EXHAUST FAN SHALL MODULATE SPEED TO MAINTAIN BUILDING STATIC PRESSURE SET POINT.

Q. THE FOLLOWING POINTS, AT A MINIMUM BUT NOT LIMITED TO, SHALL BE MONITORED AND TRENDED:
   1. SPACE TEMPERATURE
   2. RETURN AIR TEMPERATURE
   3. RETURN AIR HUMIDITY
   4. GAS HEAT STATUS
   5. COOLING STATUS
   6. FREEZE STAT
   7. SUPPLY FAN STATUS
   8. SUPPLY FAN START/STOP
   9. HEATING SETPOINT
   10. COOLING SETPOINT
   11. OUTSIDE AIR TEMPERATURE
   12. OUTSIDE AIR HUMIDITY
   13. COOLING COIL LEAVING AIR TEMPERATURE
   14. EXHAUST FAN STATUS
   15. DISCHARGE AIR TEMPERATURE

R. ALARMS SHALL BE GENERATED AS FOLLOWS:
   1. FREEZE STAT.
   2. SUPPLY AIR SMOKE DETECTION.
   3. SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
   4. HIGH ZONE TEMPERATURE.
   5. LOW ZONE TEMPERATURE.
   6. ANY DAMPER FAILURE
   7. HIGH STATIC SHUTDOWN

2 ROOF TOP UNIT - DX, GAS, CV
N.T.S.

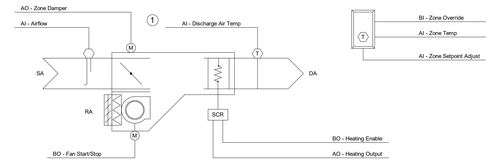


A. EXHAUST FAN – BATHROOMS, JANITOR'S CLOSETS
   1. EXHAUST FANS SERVING BATHROOMS, JANITOR'S CLOSETS, SHALL BE CONTROLLED BY A TIMECLOCK ON AN OCCUPIED/UNOCCUPIED SCHEDULE.
   2. RUN CONDITIONS - SCHEDULED: THE EXHAUST FANS SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE. THE EXHAUST FANS SHALL BE ENABLED IN OCCUPIED MODE AND DISABLED IN UNOCCUPIED MODE.

5 EXHAUST FANS - JANITORS/RESTROOMS
N.T.S.

KEYED NOTES

1. ALL SENSORS AND CONTROL DEVICES UNLESS NOTED OTHERWISE SHALL BE PROVIDED BY THE BAS CONTRACTOR. CONTROLLER SHALL BE PROVIDED BY THE BAS CONTRACTOR.



A. DESCRIPTION: FPT SHALL BE PROVIDED WITH VAV MODULAR ASSEMBLY FOR VAV CONTROL BY THE BAS MANUFACTURER.

B. RUN CONDITIONS – SCHEDULED: THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
   1. OCCUPIED MODE: THE UNIT SHALL MAINTAIN
      a. A 75°F (ADJ.) COOLING SETPOINT
      b. A 70°F (ADJ.) HEATING SETPOINT.
   2. UNOCCUPIED MODE: THE UNIT SHALL MAINTAIN
      a. A 80°F (ADJ.) COOLING SETPOINT
      b. A 55°F (ADJ.) HEATING SETPOINT.

C. ZONE SETPOINT ADJUST: THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SETPOINTS AT THE ZONE SENSOR. THE DEAD BAND FOR SET POINT ADJUSTMENT SHALL BE DEFINED BY THE OWNER (IE +/- 3 DEG. F)

D. ZONE OPTIMAL START: THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

E. ZONE UNOCCUPIED OVER-RIDE: A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME. AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

F. VARIABLE VOLUME TERMINAL UNIT – FLOW CONTROL: THE UNIT SHALL MAINTAIN ZONE SETPOINTS BY CONTROLLING THE AIRFLOW THROUGH ONE OF THE FOLLOWING:
   1. OCCUPIED:
      a. WHEN ZONE TEMPERATURE IS GREATER THAN ITS COOLING SETPOINT, THE ZONE DAMPER SHALL MODULATE BETWEEN THE MINIMUM OCCUPIED AIRFLOW (ADJ.) AND THE MAXIMUM COOLING AIRFLOW (ADJ.) UNTIL THE ZONE IS SATISFIED.
      b. WHEN THE ZONE TEMPERATURE IS BETWEEN THE COOLING SETPOINT AND THE HEATING SETPOINT, THE ZONE DAMPER SHALL MAINTAIN THE MINIMUM REQUIRED ZONE VENTILATION (ADJ.).
      c. WHEN ZONE TEMPERATURE IS LESS THAN ITS HEATING SETPOINT, THE CONTROLLER SHALL ENABLE HEATING TO MAINTAIN THE ZONE TEMPERATURE AT ITS HEATING SETPOINT. THE PRIMARY AIR SHALL BE AT ITS MINIMUM PRIMARY AIR REQUIRED FOR VENTILATION, AND THE FAN AND HEAT SHALL BE ENABLED TO MAINTAIN SET POINT.
   2. UNOCCUPIED:
      a. WHEN THE ZONE IS UNOCCUPIED THE ZONE DAMPER SHALL CONTROL TO ITS MINIMUM UNOCCUPIED AIRFLOW (ADJ.).
      b. WHEN THE ZONE TEMPERATURE IS GREATER THAN ITS COOLING SETPOINT, THE ZONE DAMPER SHALL MODULATE BETWEEN THE MINIMUM UNOCCUPIED AIRFLOW (ADJ.) AND THE MAXIMUM COOLING AIRFLOW (ADJ.) UNTIL THE ZONE IS SATISFIED.
      c. WHEN ZONE TEMPERATURE IS LESS THAN ITS UNOCCUPIED HEATING SETPOINT, THE CONTROLLER SHALL ENABLE HEATING TO MAINTAIN THE ZONE TEMPERATURE AT THE SETPOINT. THE FAN AND HEAT SHALL BE ENABLED TO MAINTAIN SET POINT.

G. ELECTRIC REHEAT: THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE/STAGE THE ELECTRIC HEAT TO MAINTAIN ITS SETPOINT.
   1. THE ELECTRIC REHEAT SHALL BE ENABLED WHENEVER:
      a. THE ZONE TEMPERATURE IS BELOW SETPOINT.

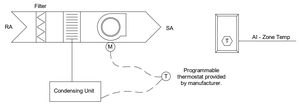
H. FAN CONTROL: FAN SHALL BE ENABLED TO OPERATE ANYTIME THERE IS CALL FOR HEATING.

I. DEMAND CONTROL VENTILATION: REFER TO DRAWINGS FOR FPT'S EQUIPPED WITH CO2 SENSORS FOR DEMAND CONTROL VENTILATION.
   1. UPON DETECTION OF HIGH CO2 LEVELS ABOVE 900 PPM SETPOINT (ADJ.), THE FPT PRIMARY AIR VALVE SHALL OPEN FROM CURRENT POSITION TO MAXIMUM POSITION AS REQUIRED TO REDUCE CO2 LEVEL TO SETPOINT. AS CO2 LEVELS DROP BELOW SETPOINT THE PRIMARY AIR VALVE SHALL RETURN TO NORMAL OPERATION. ELECTRIC REHEAT COIL SHALL MODULATE AS REQUIRED TO MAINTAIN SPACE TEMPERATURE SETPOINT.

J. THE FOLLOWING POINTS, AT A MINIMUM BUT NOT LIMITED TO, SHALL BE MONITORED AND TRENDED:
   1. ZONE TEMPERATURE.
   2. AIRFLOW.
   3. DISCHARGE AIR TEMPERATURE.
   4. ZONE OVER-RIDE.
   5. ELECTRIC HEAT STATUS
   6. AIRFLOW SETPOINT
   7. HEATING SETPOINT.
   8. COOLING SETPOINT.
   9. FILTER HOURS.
   10. FAN STATUS.

K. ALARMS SHALL BE GENERATED AS FOLLOWS:
   1. HIGH ZONE TEMPERATURE
   2. LOW ZONE TEMPERATURE.
   3. HIGH DISCHARGE AIR TEMPERATURE.
   4. LOW DISCHARGE AIR TEMPERATURE.
   5. FAN FAILURE.

3 FAN POWERED TERMINALS - PARALLEL W/ ELECTRIC HEAT
N.T.S.



A. COMPUTER ROOM AIR CONDITIONING UNITS SHALL BE PROVIDED WITH AND CONTROLLED BY A FACTORY CONTROL SYSTEM, BELOW IS A SEQUENCE OF OPERATION. THE SEQUENCE OF OPERATION IS PROVIDED TO DEFINE THE BASIC INTENT OF UNIT FUNCTION BUT IS NOT TO CONFLICT WITH, OVERRIDE OR TAKE PRECEDENCE OVER THE FACTORY CONTROLS, SEQUENCES, SAFETIES AND ALARMS. ALL SYSTEM CONTROLS, SEQUENCES, SAFETIES AND ALARMS SHALL BE HANDLED BY THE FACTORY CONTROLS AND SHALL OPERATE IN A STANDALONE FASHION WITH THE EXCEPTION OF A SPACE TEMPERATURE SENSOR PROVIDED BY THE BAS CONTRACTOR.

B. RUN CONDITIONS – CONTINUOUS: THE UNIT SHALL BE CONTINUOUSLY ENABLED TO MAINTAIN THE FOLLOWING SETPOINTS:
   1. COOLING SETPOINT: 75°F (ADJ.)

C. ZONE SETPOINT ADJUST: THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE COOLING SETPOINTS AT THE ZONE SENSOR.

D. FAN: THE FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN.

E. COOLING STAGE: THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT, TO PREVENT SHORT CYCLING, THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

F. THE FOLLOWING POINTS, AT A MINIMUM BUT NOT LIMITED TO, SHALL BE MONITORED AND TRENDED:
   1. SPACE TEMPERATURE
   2. SPACE HUMIDITY
   3. HEATING STATUS
   4. COOLING STATUS
   5. SUPPLY FAN STATUS
   6. SUPPLY FAN START/STOP
   7. HEATING SETPOINT
   8. COOLING SETPOINT
   9. DISCHARGE AIR TEMPERATURE

G. ALARMS SHALL BE GENERATED AS FOLLOWS:
   1. SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
   2. HIGH ZONE TEMPERATURE.
   3. LOW ZONE TEMPERATURE.
   4. HIGH ZONE HUMIDITY.
   5. LOW ZONE HUMIDITY.

6 COMPUTER ROOM AIR CONDITIONING UNITS
N.T.S.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS

GEORGIA
NO. PE036002
PROFESSIONAL
1-9-26
ENGINEER
JESSE W. FOLEY

DRAWN BY:	WJP
CHECKED BY:	RDM

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

[redacted] 20-24092.00

[redacted] 12/01/2025

[redacted] MECHANICAL CONTROL DIAGRAMS

[redacted] **M7.01**

SHEET NOTES

A. COORDINATE ALL MOUNTING HEIGHTS OF LIGHTS WITH INTERIORS, ARCHITECT, AND LANDSCAPE.

B. OCCUPANCY SENSOR(S) SHALL CONTROL LIGHTING IN ALL COMMON / AMENITY / RETAIL / UNLESS NOTED OTHERWISE. VACANCY SENSOR(S) OR COMBINATION OF LOW VOLTAGE SWITCH AND OCCUPANCY SENSOR(S) SHALL CONTROL LIGHTING.

C. OCCUPANCY SENSOR(S) SHALL CONTROL LIGHTING IN ALL COMMON / AMENITY / RETAIL / UNLESS NOTED OTHERWISE. VACANCY SENSOR(S) OR COMBINATION OF LOW VOLTAGE SWITCH AND OCCUPANCY SENSOR(S) SHALL CONTROL LIGHTING.

D. LIGHTING LOCATED IN OFFICES, STORAGE ROOMS AND OTHER AREAS THAT ARE ON THE SAME BRANCH CIRCUIT AS THE TIME CLOCK SHALL BE WIRE IN PARALLEL TO ALLOW SEPARATE SWITCHING OF THOSE SPACES

E. LIGHTING LOCATED IN OFFICES, STORAGE ROOMS AND OTHER AREAS THAT ARE ON THE SAME BRANCH CIRCUIT AS THE TIME CLOCK SHALL BE WIRE IN PARALLEL TO ALLOW SEPARATE SWITCHING OF THOSE SPACES

F. PROVIDE UL924 DEVICES AS REQUIRED TO ALLOW SWITCHING OF NORMAL AND EMERGENCY FIXTURES LOCATED IN THE SAME ROOM.

G. CONTRACTOR TO LABEL CEILING GRID FOR ROOM CONTROLLER AND BRIDGES IN CEILING.

H. CONTRACTOR TO LABEL ALL FACEPLATES FOR SWICHES WITH PANEL AND CIRCUIT NUMBER.

PHASING OF WORK
ALL CONSTRUCTION SHALL BE PERFORMED IN TWO PHASES. SEE ARCHITECTURAL PLANS FOR DELINEATION OF PHASE 1 AND PHASE 2 LIMITS. ALL DEMOLITION AND NEW WORK IN THE PHASE 1 AREA SHALL BE COMPLETE AND ALL SYSTEMS OPERATIONAL PRIOR TO START OF PHASE 2. OWNER WILL SEEK A TEMPORARY OCCUPANCY OF THE PHASE 1 AREA, PRIOR TO PHASE 2. ALL PHASE 1 SCOPE AND SYSTEMS SUPPORTING OPERATIONS AND LIFE SAFETY SHALL BE COMPLETE AND ABLE TO FUNCTION INDEPENDENT OF PHASE 2 COMPLETION. ALL SCOPE AND SYSTEMS SUPPORTING THE NEW IT LAB 120 SHALL BE DONE IN STAGES IN ORDER TO MAINTAIN FUNCTION AND OPERATION OF THE IT NETWORK THROUGHOUT CONSTRUCTION.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

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CONSTRUCTION DOCUMENTS



DRAWN BY: Author
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

IT MANAGER 123
IT WORK 125
STAFF ENGAGEMENT SPECIALIST 119
SYSTEM ADMINISTRATOR 122
OPERATIONS SPECIALIST LEAD 124
INFORMATION TECHNOLOGY 121
STAFF ENGAGEMENT MANAGER 118
CATALOGING LIBRARIAN 142
DIRECTOR BUSINESS SERVICES 140
BUSINESS SERVICES MANAGER 141
BUSINESS SERVICES 139
COLLECTION DEVELOPMENT LIBRARIAN 127
COLLECTION DEVELOPMENT LIBRARIAN 128
ADULT SERVICES 138
ADULT SERVICES MANAGER 137
MARKETING 136
COLLECTION DEVELOPMENT LIBRARIAN 129
MATERIALS TECHNICAL SERVICES MANAGER 130
STORAGE 131
DOCK RECIEVING 135
HR GENERALIST 134
ELEC. 18
MATERIALS MANAGMENT 126
TRAINING ROOM 117
BREAK ROOM 116
STORAGE 16
LIB. CORRIDOR 11
COMMON CONF. 26
YOUTH SERVICES STORAGE 109
YOUTH SERVICES EMPLOYEES 108
COMMUNITY PARTNERSHIP MANAGER 110
YOUTH SERVICES MANAGER 111
VOLUNTEER PROGRAM MANAGER 112
GWINNETT CLEAN & BEAUTIFUL STORAGE 209
INTERVIEW & CONFERENCE ROOM 107
HR GENERALIST 134
HR DIRECTOR 133
HR BENEFITS COORDINATOR 132
DIRECTOR BRANCH SERVICES 115
WOMEN 14
DIRECTOR MARKETING COMMUNITY 114
MEN 15
JAN. 17
DIRECTOR COMMUNITY DEVELOPMENT 113
VEST. 10
WAITING 100
DIRECTOR GRANTS & PARTNERSHIPS 102
DIRECTOR FACILITIES & SECURITY 103
DIRECTOR CUSTOMER EXPERIENCE 104
EXECUTIVE ASSISTANT 105
EXECUTIVE DIRECTOR 106
ADMIN. OFFICE 101

1 E1.01 ELECTRICAL LIGHTING PLAN
1/8" = 1'-0"

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 01/09/2025
SHEET TITLE ELECTRICAL LIGHTING PLAN
SHEET NO. **E1.01**

TRUE NORTH PROJECT NORTH

SHEET NOTES

A. ALL MICROWAVE RECEPTACLES SHALL BE MOUNTED PER ARCHITECTURAL ELEVATIONS.

B. REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR EQUIPMENT LOADS. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL EQUIPMENT SUPPLIER, PRIOR TO ROUGH-IN.

C. ALL 15A AND 20A CIRCUITS SERVING SPECIFIC AREAS SHALL BE PROTECTED AGAINST ARC-FAULT INTERRUPTION.

D. CONTRACTOR SHALL PREPARE TYPE WRITTEN PANEL DIRECTORIES FOR EACH PANEL. DIRECTORY SHALL UTILIZE EXACT ROOM NUMBERS/NAMES AS SHOWN ON ARCHITECTURAL PLANS. DIRECTORY SHALL SPECIFICALLY COMPLY WITH NEC ARTICLE 408.4

E. COORDINATE RECEPTACLE MOUNTING HEIGHTS AND LOCATIONS WITH ARCHITECTURAL DETAILS, ELEVATIONS, AND/OR MILLWORK CONTRACTOR, PRIOR TO ROUGH-IN AND COMPLY AS REQUIRED.

F. CONTRACTOR TO LABEL ALL FACEPLATES FOR RECPTACLES WITH PANEL AND CIRCUIT NUMBER.

G. CONTRACTOR TO PROVIDE ALTERNATE POWER SOURCE TO KEEP LIBRARY SERVER ON AT ALL TIMES. SERVER MUST NEVER GO DOWN.

H. CONTRACTOR TO DEMO ALL EXISTING RECEPTACLES. CONTRACTOR HAS OPTION TO REUSE ACCEPTABLE EXISTING RECEPTACLES IN EXISTING TO REMAIN LOCATIONS.

I. ALL MODULAR FURNITURE FEEDS SHALL BE 3P-4W WITH HANDLE TIE

KEYED NOTES

1. PROVIDE POWER FOR CUBICAL. CIRCUIT AS INDICATED.
2. REFER TO AV SHEET AV-000 FOR FLOOR BOX SPECIFICATIONS AND DETAILS.
3. REFER TO AV SHEET AV-301 FOR BACKBOX SPECIFICATIONS DETAILS.
4. PROVIDE A 20A-120V CIRCUIT FOR DOOR ACTUATOR TO SPECIFIED CIRCUIT SHOWN.

PHASING OF WORK
ALL CONSTRUCTION SHALL BE PERFORMED IN TWO PHASES. SEE ARCHITECTURAL PLANS FOR DELINEATION OF PHASE 1 AND PHASE 2 LIMITS. ALL DEMOLITION AND NEW WORK IN THE PHASE 1 AREA SHALL BE COMPLETE AND ALL SYSTEMS OPERATIONAL PRIOR TO START OF PHASE 2. OWNER WILL SEEK A TEMPORARY OCCUPANCY OF THE PHASE 1 AREA, PRIOR TO PHASE 2. ALL PHASE 1 SCOPE AND SYSTEMS SUPPORTING OPERATIONS AND LIFE SAFETY SHALL BE COMPLETE AND ABLE TO FUNCTION INDEPENDENT OF PHASE 2 COMPLETION. ALL SCOPE AND SYSTEMS SUPPORTING THE NEW IT LAB 120 SHALL BE DONE IN STAGES IN ORDER TO MAINTAIN FUNCTION AND OPERATION OF THE IT NETWORK THROUGHOUT CONSTRUCTION.

AHA
3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

CONSTRUCTION DOCUMENTS



DRAWN BY: Author
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REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

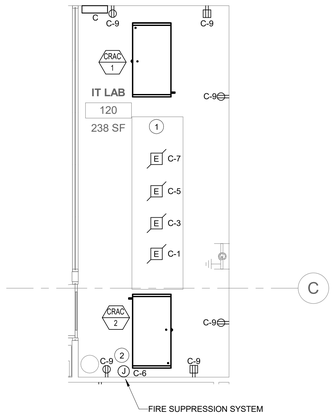
LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

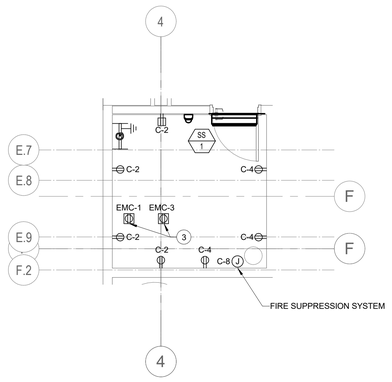
PROJECT NO. 20-24092.00
DATE 01/09/2025
SHEET TITLE ELECTRICAL POWER PLAN
SHEET NO. **E2.01**

TRUE NORTH PROJECT NORTH

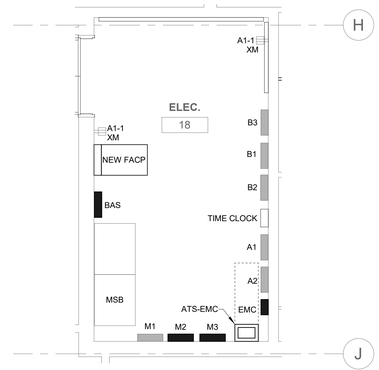
1 E2.01 ELECTRICAL POWER PLAN
1/8" = 1'-0"



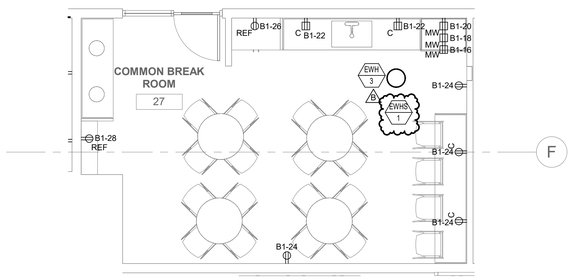
1 E4.01 ELECTRICAL POWER PLAN - IT LAB 120
1/4" = 1'-0"



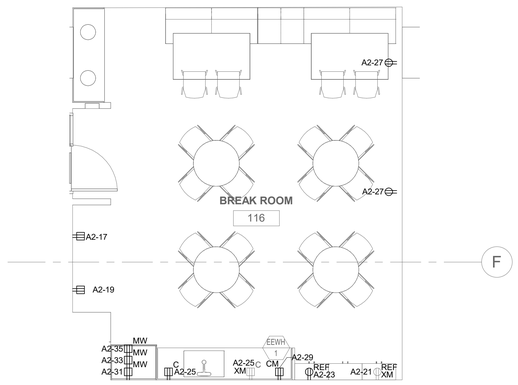
2 E4.01 ELECTRICAL POWER PLAN - MDF 29
1/4" = 1'-0"



3 E4.01 ELECTRICAL POWER PLAN - ELEC. 18
1/4" = 1'-0"



4 E4.01 ELECTRICAL POWER PLAN - COMMON BREAK ROOM 27
1/4" = 1'-0"



6 E4.01 ELECTRICAL POWER PLAN - BREAK ROOM 116
1/4" = 1'-0"

SHEET NOTES

A. ALL MICROWAVE RECEPTACLES SHALL BE MOUNTED PER ARCHITECTURAL ELEVATIONS.

KEYED NOTES

1. PROVIDE 4 - L5-30R RECEPTACLES FOR RACK POWER. DEDICATED CIRCUITS UNDER THE FLOOR. CONTRACTOR TO SURFACE-MOUNT BOX UNDER RAISED FLOOR.
2. PROVIDE FINAL CONNECTION FOR FIRE SUPPRESSION SYSTEM. CONNECT SYSTEM TO PANEL AS INDICATED.
3. PROVIDE A L5-20R QUAD RECPETACLE FOR FOR RACK POWER.

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
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REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 01/09/2025
SHEET TITLE ELECTRICAL DETAILS
SHEET NO. **E4.01**

ELEC - LIGHTING FIXTURE SCHEDULE

TYPE	MTG	DESCRIPTION	MANUFACTURER	CATALOG NO.	LAMPS NO.	LAMPS TYPE	VOLT	REMARKS
A1	RECESSED	2X4 LED TROFFER	COOPER LIGHTING	24CZSCT3-UNV-LOW-3500K	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
A2	RECESSED	2X4 LED TROFFER	COOPER LIGHTING	24CZSCT3-UNV-MID-3500K	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
A3	RECESSED	2X4 LED TROFFER	COOPER LIGHTING	24CZSCT3-UNV-HIGH-3500K	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
B1	RECESSED	4" DOWNLIGHT LED	COOPER LIGHTING	HC415D010-HM40525835-41WDC	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
B2	RECESSED	6" DOWNLIGHT LED	COOPER LIGHTING	HC620D010-HM60525835-61WDC	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
B3	RECESSED	2" DOWNLIGHT LED	COOPER LIGHTING	ML204LSFL9FS1E-TIR1D55WFL-TL2SDMWB-5500LM-3500K	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
B4	RECESSED	6" DOWNLIGHT LED	COOPER LIGHTING	HC640D010-HM63040840-61WDC	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
EX	SURFACE	EDGE-LIT LED EXIT SIGN	COOPER LIGHTING	EUR60R	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
EX2	SURFACE	EDGE-LIT LED EXIT SIGN	COOPER LIGHTING	EUR60R	1	LED	120 V	COORDINATE FINISH AND MOUNTING HEIGHT WITH ARCHITECT.
F2-6	RECESSED	1' X 6' LINEAR LED	FOCAL POINT	FSM2L-FL550LF-35K-UNV-WH-6FT	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
F2-8	RECESSED	1' X 8' LINEAR LED	FOCAL POINT	FSM2L-FL-500LF-35K-UNV-WH-6FT FSM2L-FL-500LF-35K-UNV-WH-8FT	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
F8	RECESSED	1' X 8' LINEAR LED	XICO LIGHTING	GHY6-R-PMW-E1-90-35-ORL-DLAM-50-UNV-FD01-6FT	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
G1	RECESSED	1' LINEAR LED	COOPER LIGHTING	CS-SL-9SCT-120-ID-UNV-W-SA-STD-1F-CS-10V-STD	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
G2	RECESSED	1' X 2' LINEAR LED	COOPER LIGHTING	CS-SL-9SCT-120-ID-UNV-W-SA-STD-1F-CS-10V-STD	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
G4	RECESSED	1' X 4' LINEAR LED	COOPER LIGHTING	CS-SL-9SCT-120-ID-UNV-W-SA-STD-1F-CS-10V-STD	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
H	SUSPENDED	DECORATIVE PENDANT LED FIXTURE	BETA CALCO	WHPPP-LMA0200-CR80-CTA35CTC00-FA01	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
J	SURFACE	LED ARCHITECTURAL WALL SCONCE	VISTA LIGHTING	CB5518-L30K(L)-MVOLT	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
K	SUSPENDED	Linger 12-Light Abstract Chandelier	Visual Comfort & Co.	KW 5589BZ-SG	1	LED	120 V	COORDINATE FINISH AND MOUNTING HEIGHT WITH ARCHITECT.
M	RECESSED	1' X 8' LINEAR LED	XICO LIGHTING	ASM2BS-BW-8W-X-500DN-200UP-35K-1C1UNV-LD1-JXX- NTL-8FT	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
M2-6	RECESSED	2.5" APETURE SLOT LED	FOCAL POINT	FSM2L-FL-375LF-35K-UNV-WH-6FT	1	LED	120 V	COORDINATE MOUNTING WITH ARCHITECT.
M2-8	RECESSED	2.5" APETURE SLOT LED	FOCAL POINT	FSM2L-FL-375LF-35K-UNV-WH-8FT	1	LED	120 V	COORDINATE MOUNTING WITH ARCHITECT.
S	RECESSED	48" X 48" SIMMULATED WINDOW LED	LIGHTGLASS	S48X48-G1-35-R-CX-A-NO	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
S2	RECESSED	1' X 4' INDUSTRIAL LINEAR LED	COOPER LIGHTING	4SNX-57SL-LW-UNV-L835-CD	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
S3	RECESSED	1' X 2' INDUSTRIAL LINEAR LED	COOPER LIGHTING	4SNX-30SL-LW-UNV-L835-CD	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
S4	RECESSED	24" X 24" SIMMULATED WINDOW LED	LIGHTGLASS	S42X42-G1-35-R-CX-A-NO	1	LED	120 V	COORDINATE FINISH WITH ARCHITECT.
UCL	SURFACE	12' LINEAR LED	KENDO	KS-136-3500K	1	LED	120 V	COORDINATE LENS, FEED POSITION, FINISH, AND MOUNTING HEIGHT WITH ARCHITECT.
V	RECESSED	LINEAR LED COVE LIGHTING	MYKA	MYKA-37-HE48S0-40K	1	LED	120 V	COORDINATE LENS, FEED POSITION, FINISH, AND MOUNTING HEIGHT WITH ARCHITECT.

NOTE: BASIS OF DESIGN IS A COOPER PACKAGE. EQUIVALENT PACKAGES FROM LITHONIA AND LEVITON WILL BE CONSIDERED, SUBJECT TO REVIEW. B

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: Lawrenceville Library and Administration HQ Renovation
Project Type: Alteration

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Lawrenceville Library and Administration HQ Renovation (Office)	28309	0.82	23213
		Total Allowed Watts =	23213

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Lawrenceville Library and Administration HQ Renovation (Office, 28309 sq.ft.)				
LED: A1: 2X4: Other:	1	164	29	4723
LED: A2: 2X4: Other:	1	99	42	4118
LED: A3: 2X4: Other:	1	30	51	1524
LED: B1: 4" DOWNLIGHT: Other:	1	39	35	1349
LED: B2: 6" DOWNLIGHT: Other:	1	14	35	484
LED: B3: 2" DOWNLIGHT: Other:	1	6	8	50
LED: B4: 6" DOWNLIGHT: Other:	1	6	42	253
LED: F8: 8' LINEAR: Other:	1	8	36	288
LED: F2-6: 6' LINEAR: Other:	1	1	57	57
LED: F2-8: 8' LINEAR: Other:	1	2	76	152
LED: G1: COVE: Other:	1	2	7	14
LED: G2: COVE: Other:	1	2	14	28
LED: G4: COVE: Other:	1	8	14	112
LED: H: PENDANT: Other:	1	2	22	44
LED: J: SCONCE: Other:	1	7	10	70
LED: K: CHANDELIER: Other:	1	1	35	35
LED: M: 8' LINEAR: Other:	1	3	236	708
LED: M2-6: 6' LINEAR: Other:	1	2	32	63
LED: M2-8: 8' LINEAR: Other:	1	6	42	252
LED: S: 48" X48" SIMMULATED WINDOW: Other:	1	5	70	349
LED: S2: 4' LINEAR: Other:	1	7	40	278
LED: S3: 2' LINEAR: Other:	1	2	21	42
LED: S4: 24" X24" SIMMULATED WINDOW: Other:	1	2	22	43
LED: V: 37' LINEAR: Other:	1	2	8	16
		Total Proposed Watts =		15054

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Anika A. Marks - Electrical Engineer — Name - Title
Signature
09/16/2025 — Date

ELEC - MECHANICAL EQUIPMENT SCHEDULE

TYPE	NO.	EQUIPMENT	CHARACTERISTICS	VOLTS	PH	PANEL	CIRCUIT NUMBER	O.C.P.	FEEDER	CONNECTION TYPE TS	STR	VFD	DS	F-DS	FC	WP	REMARKS
CRAC	1	SPLIT SYSTEM	3 TON UNIT	208 V	3	EMC	5,7,9	15A	3 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
CRAC	2	SPLIT SYSTEM	3 TON UNIT	208 V	3	EMC	2,4,6	15A	3 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
CRCU	1	SPLIT SYSTEM	3 TON UNIT	208 V	3	EMC	11,13,15	30A	3 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
CRCU	2	SPLIT SYSTEM	3 TON UNIT	208 V	3	EMC	8,10,12	30A	3 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
CU	1	DUCTLESS SPLIT SYSTEM	0.75 TON UNIT	208 V	1	EMC	14,16	15A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
DPV	1	DRY PIPE VALVE AIR COMPRESSOR	AIR COMPRESSOR	120 V	1	B2	25	20A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
DPV	2	DRY PIPE VALVE AIR COMPRESSOR	AIR COMPRESSOR	120 V	1	B2	27	20A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
EWH	1A	WATER HEATER	30L UNIT	208 V	1	M1	25	40A	2 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2
EWH	1B	WATER HEATER	30L UNIT	208 V	1	M1	32,34	40A	2 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2
EWH	2A	WATER HEATER	30L UNIT	208 V	1	M1	7,9	40A	2 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2
EWH	2B	WATER HEATER	30L UNIT	208 V	1	M1	7,9	40A	2 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2
EWH	3	WATER HEATER	30G UNIT	208 V	1	M1	15,17	30A	2 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2
EWHS	1	WATER HEATER SOLENOID	2-WAY	120 V	1	M1	36	15A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2
FPT	25	TERMINAL UNIT	1/3 HP MOTOR AND 2.8kW HEATER	208 V	3	M1	19,21,23	30A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	106	TERMINAL UNIT	1/3 HP MOTOR AND 8.9kW HEATER	208 V	3	M1	25,27,29	40A	4 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4,5
FPT	107	TERMINAL UNIT	1/3 HP MOTOR AND 5kW HEATER	208 V	3	M1	31,33,35	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	108	TERMINAL UNIT	1/3 HP MOTOR AND 5.9kW HEATER	208 V	3	M1	2,4,6	30A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	112	TERMINAL UNIT	1/3 HP MOTOR AND 5.8kW HEATER	208 V	3	M1	8,10,12	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	135	TERMINAL UNIT	1/3 HP MOTOR AND 4.3kW HEATER	208 V	3	M1	14,16,18	25A	4 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	136	TERMINAL UNIT	1/3 HP MOTOR AND 5.7kW HEATER	208 V	3	M1	20,22,24	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	139	TERMINAL UNIT	1/3 HP MOTOR AND 5.8kW HEATER	208 V	3	M1	26,28,30	30A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	302	TERMINAL UNIT	1/3 HP MOTOR AND 4.7kW HEATER	208 V	3	M2	1,3,5	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	304	TERMINAL UNIT	1/3 HP MOTOR AND 4.4kW HEATER	208 V	3	M2	7,9,11	25A	4 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	403	TERMINAL UNIT	1/3 HP MOTOR AND 5.8kW HEATER	208 V	3	M2	13,15,17	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	501	TERMINAL UNIT	1/3 HP MOTOR AND 6.5kW HEATER	208 V	3	M2	19,21,23	30A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	508	TERMINAL UNIT	1/3 HP MOTOR AND 5.3kW HEATER	208 V	3	M2	25,27,29	25A	4 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
FPT	511	TERMINAL UNIT	1/3 HP MOTOR AND 2.3kW HEATER	208 V	3	M2	31,33,35	15A	4#12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4,5
RTU	1	ROOFTOP UNIT	12.5 TON UNIT	208 V	3	M2	2,4,6	100A	3 #2 AND 1 #8 G ~ 1.5" C	-	-	-	X	-	X	-	1,2,4
RTU	2	ROOFTOP UNIT	6 TON UNIT	208 V	3	M2	8,10,12	50A	3 #6 AND 1 #8 G ~ 1.25" C	-	-	-	X	-	X	-	1,2,4
RTU	3	ROOFTOP UNIT	3 TON UNIT	208 V	3	M2	14,16,18	35A	3 #10 AND 1 #10 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
RTU	4	ROOFTOP UNIT	6 TON UNIT	208 V	3	M2	20,22,24	50A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
RTU	5	ROOFTOP UNIT	6 TON UNIT	208 V	3	M2	26,28,30	50A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
RTU	6	ROOFTOP UNIT	5 TON UNIT	208 V	3	M3	1,3,5	45A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
RTU	7	ROOFTOP UNIT	5 TON UNIT	208 V	3	M3	7,9,11	45A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
RTU	8	ROOFTOP UNIT	4 TON UNIT	208 V	3	M3	13,15,17	45A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
RTU	9	ROOFTOP UNIT	4 TON UNIT	208 V	3	M3	19,21,23	45A	3 #8 AND 1 #10 G ~ 1" C	-	-	-	X	-	X	-	1,2,4
SS	1	DUCTLESS SPLIT SYSTEM	0.75 TON UNIT	208 V	1	EMC	14,16	15A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,3,4
TEF	1	ROOF EXHAUST FAN	DIRECT DRIVE CENTRIFUGAL	120 V	1	M3	20	15A	2 #12 AND 1 #12 G ~ 0.75" C	X	-	-	-	-	X	-	1,2,4
TEF	2	ROOF EXHAUST FAN	DIRECT DRIVE CENTRIFUGAL	120 V	1	M3	22	15A	2 #12 AND 1 #12 G ~ 0.75" C	X	-	-	-	-	X	-	1,2,4
UH	1	WALL HEATER	ARCHITECTURAL HEAVY DUTY	208 V	3	M3	14,16,18	20A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
UH	2	WALL HEATER	ARCHITECTURAL HEAVY DUTY	208 V	3	M3	8,10,12	20A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
UH	3	WALL HEATER	ARCHITECTURAL HEAVY DUTY	208 V	3	M3	2,4,6	20A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
VF	26	EXHAUST FAN	INLINE	120 V	1	M3	24	15A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4
VF	107	EXHAUST FAN	INLINE	120 V	1	M3	26	15A	2 #12 AND 1 #12 G ~ 0.75" C	-	-	-	X	-	X	-	1,2,4

MECHANICAL EQUIPMENT SCHEDULE REMARKS:

1. E.C. SHALL COORDINATE FUSE SIZE AND OVERCURRENT PROTECTION FOR ALL MECHANICAL, PLUMBING W/ MANUFACTURER'S RECOMMENDATION.
2. COORDINATE LOCATION WITH MECHANICAL/PLUMBING DRAWINGS PRIOR TO ROUGH-IN.
3. INDOOR UNIT (DSI) FED FROM OUTDOOR UNIT (DSO). COORDINATE CONTROLS REQUIREMENTS WITH MANUFACTURE/VENDOR PRIOR TO INSTALLATION.
4. DISCONNECT OR THERMAL SWITCH PROVIDED WITH EQUIPMENT BY MECHANICAL CONTRACTOR. COORDINATE WITH MECHANICAL DRAWINGS/MECHANICAL CONTRACTOR DISCONNECT OR THERMAL SWITCH IS INTEGRAL TO EQUIPMENT PRIOR TO INSTALLATION.
5. WIRE SINGLE PHASE FAN MOTOR FOR THE FPTS IN THE FOLLOWING SEQUENCE TO BALANCE THE LOAD BETWEEN PHASES.
   - FPT L-1-1 NEUTRAL TO PHASE A
   - FPT L-1-2 NEUTRAL TO PHASE B
   - FPT L-1-3 NEUTRAL TO PHASE C

   REPEAT THE SEQUENCE AND BALANCE LOADS ACROSS PHASES.

MECHANICAL EQUIPMENT SCHEDULE CONNECTION TYPES:

TS - TOGGLE SWITCH
STR - MOTOR STARTER
VFD - VARIABLE FREQUENCY DRIVE
DS - DISCONNECT SWITCH
F-DS - FUSED DISCONNECT SWITCH
FC - FLEXIBLE CONNECTION
WP - WEATHERPROOF

LIGHTING CONTROLS

1. PRIVATE OFFICES:
   A. WALL-MOUNTED VACANCY SENSOR WITH DUAL-LEVEL SWITCHING TO ACCOMMODATE PRESENTATION TECHNOLOGY OR AUDIO VISUAL EQUIPMENT.
2. OPEN PLAN OFFICES OR MULTI-PERSON WORK SPACES:
   A. CEILING-MOUNTED OCCUPANCY SENSORS (PROVIDE FULL COVERAGE) WITH DUAL-LEVEL MANUAL SWITCHING TO ACCOMMODATE PRESENTATION TECHNOLOGY OR AUDIO VISUAL EQUIPMENT.
3. CLASSROOMS OR TRAINING ROOMS:
   A. CEILING-MOUNTED OCCUPANCY SENSORS (PROVIDE FULL COVERAGE) WITH DUAL-LEVEL MANUAL SWITCHING TO ACCOMMODATE PRESENTATION TECHNOLOGY OR AUDIO VISUAL EQUIPMENT.
   B. AMBIENT LIGHT BLOCKING SYSTEM (BLACKOUT SHADES).
   C. ZONE LIGHTING TO MINIMIZE SCREEN GLARE (FRONT ROW SEPARATE ZONE), WITH CLASSROOM PARTICIPANTS STILL ABLE TO SEE WELL ENOUGH TO OPEN CHAIRS AND TAKE NOTES.
   D. LIGHTING CONTROLS NEAR ENTRANCES AND AT PRESENTATION STATION.
   E. LIGHTING COORDINATED WITH LCD PROJECTOR.
4. OTHER ADMINISTRATIVE SUPPORT AREAS:
   A. WALL-MOUNTED VACANCY SENSORS FOR SMALL RECTANGULAR AREAS OF 150 SQUARE FEET OR LESS.
   B. OTHERWISE, CEILING MOUNTED OCCUPANCY SENSORS.
5. RESTROOMS IN ADMINISTRATIVE OR GENERAL PURPOSE SPACES:
   A. WALL-MOUNTED VACANCY SENSORS FOR SMALL RECTANGULAR AREAS OF 150 SQUARE FEET OR LESS.
   B. OTHERWISE, CEILING MOUNTED OCCUPANCY SENSORS, LOCATED TO COVER ENTRY VESTIBULE AND MAIN TOILET AREA.
6. UTILITY SPACES WITH FINISHED CEILINGS:
   A. WALL-MOUNTED VACANCY SENSORS FOR SMALL RECTANGULAR AREAS OF 150 SQUARE FEET OR LESS.
   B. OTHERWISE, CEILING MOUNTED OCCUPANCY SENSORS.
7. UTILITY SPACES WITH EXPOSED CEILINGS:
   A. WALL-MOUNTED VACANCY SENSORS FOR SMALL RECTANGULAR AREAS OF 150 SQUARE FEET OR LESS.
   B. OTHERWISE, CEILING MOUNTED OCCUPANCY SENSORS, WITH LOCATION COORDINATED SUCH THAT STRUCTURAL MEMBERS DO NOT AFFECT COVERAGE DISTRIBUTION.
8. ACCEPTABLE MANUFACTURERS:
   A. WATTSTOPPER
   B. HUBBEL

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS

No.22161 PROFESSIONAL 01.09.26 ENGINEER STEPHEN GARY ROBERTS

DRAWN BY: SHD
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 01/09/2025
SHEET TITLE ELECTRICAL SCHEDULES
SHEET NO. **E5.02**

Existing Branch Panel: B2

Location:
Supply From: B1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 WYE
Phases: 3
Wires: 4

A.I.C. Rating: 10kAIC
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 225 A

Notes:
~PROVIDE GFCI TYPE BREAKER.

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - COMMON COF. 26	20 A	1	1.1 kVA	1.6 kVA					1	20 A	PRINTER - WORK / COFFEE 405	2
3	TV/AV - COMMON COF. 26	20 A	1			0.5 kVA	0.4 kVA			1	20 A	REC - DEPT. #4 404	4
5	FURNITURE REC - COMMON COF. 26	20 A	1					0.2 kVA	0.3 kVA	3	20 A	FURNITURE REC - DEPT. #4 404	6
7	REC - VOLUNTEER PROGRAM MANAGER 112	20 A	1	0.9 kVA	0.3 kVA					--	--	--	8
9	REC - YOUTH SERVICES MANAGER 111	20 A	1			1.1 kVA	0.3 kVA			--	--	--	10
11	REC - COMMUNITY PARTNERSHIP MANAGER...	20 A	1					0.7 kVA	0.9 kVA	1	20 A	REC - OFFICE 402	12
13	REC - YOUTH SERVICES EMPLOYERS 108	20 A	1	0.5 kVA	0.9 kVA					1	20 A	REC - OFFICE 403	14
15	FURNITURE REC - YOUTH SERV. EMPL. 108	20 A	3			0.2 kVA	0.3 kVA			3	20 A	FURNITURE REC - SOLID WASTE 301	16
17	--	--	--					0.2 kVA	0.3 kVA	--	--	--	18
19	--	--	--	0.2 kVA	0.3 kVA					--	--	--	20
21	REC - VEST. 20, VEST. 21, MEN 22, WOM. 23,...	20 A	1			0.7 kVA	0.3 kVA			3	20 A	FURNITURE REC - SOLID WASTE 304	22
23	VENDING MACHINE - VESTIBULE 20	20 A	1					0.2 kVA	0.3 kVA	--	--	--	24
25	VENDING MACHINE - VESTIBULE 20	20 A	1	0.2 kVA	0.3 kVA					--	--	--	26
27	~DRINKING FOUNTAIN - VESTIBULE 20	20 A	1			0.2 kVA	0.2 kVA			3	20 A	FURNITURE REC - SOLID WASTE 304	28
29	REC - WAITING 401	20 A	1					0.5 kVA	0.2 kVA	--	--	--	30
31	REF - WORK / COFFEE 405	20 A	1	0.4 kVA	0.2 kVA					--	--	--	32
33	COFFEE MAKER - WORK / COFFEE 405	20 A	1			1.5 kVA	1.1 kVA			1	20 A	REC - SOLID WASTE 301, 304, COPY 303	34
35	REC - WORK / COFFEE 405	20 A	1					0.7 kVA	0.4 kVA	1	20 A	REC - SOLID WASTE 301, STORAGE 306	36
37	DOOR ACTURATOR - VESTIBULE 20	20 A	1	0.5 kVA	1.6 kVA					1	20 A	PRINTER - COPY 303	38
39	Spare	20 A	1			0.0 kVA	0.0 kVA			1	20 A	Spare	40
41	Spare	20 A	1					0.0 kVA	0.0 kVA	1	20 A	Spare	42
		Total Load:		9 kVA		7 kVA		5 kVA					
		Total Amps:		78 A		59 A		41 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
RECEPTACLE	20 kVA	74.68%	15 kVA		
EQUIPMENT	1 kVA	100.00%	1 kVA	**Total Conn. Load:**	21 kVA
				Total Est. Demand:	16 kVA
				Total Conn. Current:	58 A
				Total Est. Demand Current:	43 A
				Non-Coincident HVAC Load:	0 A
				Total Est. Demand - NC:	43 A

Notes:

Existing Branch Panel: B3

Location:
Supply From: B1
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 WYE
Phases: 3
Wires: 4

A.I.C. Rating: 10kAIC
Mains Type: MLO
Mains Rating: 125 A
MCB Rating: 125 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	REC - SECTION MANAGER 302	20 A	1	0.9 kVA	0.5 kVA					1	20 A	REC - COFFEE / WORK 502, STORAGE 503	2
3	REC - COFFEE 305	20 A	1			0.7 kVA	1.5 kVA			1	20 A	COFFEE MAKER - COFFEE / WORK 502	4
5	COFFEE MAKER - COFFEE 305	20 A	1					1.5 kVA	0.4 kVA	1	20 A	REF - COFFEE / WORK 502	6
7	REF - COFFEE 305	20 A	1	0.4 kVA	1.6 kVA					1	20 A	PRINTER - COFFEE / WORK 502	8
9	REC - STR. 306, RECP. 202, GWIN. C&B. 203,...	20 A	1			0.9 kVA	0.3 kVA			3	20 A	FURNITURE REC - INTERNAL AUDIT 501	10
11	FURNITURE REC - RECEP. 202	20 A	3					0.3 kVA	0.3 kVA	--	--	--	12
13	--	--	--	0.3 kVA	0.3 kVA					--	--	--	14
15	--	--	--			0.3 kVA	0.9 kVA			1	20 A	REC - AUDITOR 504	16
17	REC - PROGRAM MANAGER 204	20 A	1					0.9 kVA	0.9 kVA	1	20 A	REC - AUDITOR 505	18
19	REC - DIRECTOR 205	20 A	1	0.9 kVA	0.9 kVA					1	20 A	REC - AUDITOR 506	20
21	TV - DIRECTOR 205	20 A	1			0.5 kVA	0.9 kVA			1	20 A	REC - AUDITOR 507	22
23	REC - COFFEE 206	20 A	1					0.4 kVA	0.5 kVA	1	20 A	TV -DIRECTOR 508	24
25	REF - COFFEE 206	20 A	1	0.4 kVA	0.9 kVA					1	20 A	REC - DIRECTOR 508	26
27	COFFEE MAKER - COFFEE 206	20 A	1			1.5 kVA	0.9 kVA			1	20 A	REC - DIVISION DIRECTOR 509	28
29	REC - WORK AREA 207	20 A	1					0.4 kVA	0.9 kVA	1	20 A	REC - DIVISION DIRECTOR 510	30
31	PRINTER - WORK AREA 207	20 A	1	1.6 kVA	0.5 kVA					1	20 A	TV/AV - CONF. 511	32
33	REC - INTERNAL AUDIT 501	20 A	1			0.5 kVA	0.2 kVA			1	20 A	FURNITURE REC - CONF. 511	34
35	FURNITURE REC - GWI. CLEAN & BEAUTIFUL...	20 A	3					0.3 kVA	1.1 kVA	1	20 A	REC - CONF. 511	36
37	--	--	--	0.3 kVA	0.0 kVA					1	20 A	Spare	38
39	--	--	--			0.3 kVA	0.0 kVA			1	20 A	Spare	40
41	Spare	20 A	1					0.0 kVA	0.0 kVA	1	20 A	Spare	42
		Total Load:		10 kVA		10 kVA		8 kVA					
		Total Amps:		83 A		82 A		66 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
RECEPTACLE	27 kVA	68.38%	19 kVA		
				Total Conn. Load:	27 kVA
				Total Est. Demand:	19 kVA
				Total Conn. Current:	75 A
				Total Est. Demand Current:	52 A
				Non-Coincident HVAC Load:	0 A
				Total Est. Demand - NC:	52 A

Notes:

Branch Panel: C

Location:
Supply From: EMC
Mounting: RECESSED
Enclosure: NEMA 1

Volts: 120/208 SINGLE
Phases: 1
Wires: 3

A.I.C. Rating: 10kAIC
Mains Type: MCB
Mains Rating: 60 A
MCB Rating: 60 A

Notes:

CKT	Circuit Description	Trip	Poles	A		C		Poles	Trip	Circuit Description	CKT
1	RACK - IT LAB 120	30 A	1	2.9 kVA	0.7 kVA			1	20 A	REC - MDF 29	2
3	RACK - IT LAB 120	30 A	1			2.9 kVA	0.5 kVA	1	20 A	REC - MDF 29	4
5	RACK - IT LAB 120	30 A	1	2.9 kVA	0.5 kVA			1	20 A	FIRE SUPRESSION SYSTEM - IT LAB 120	6
7	RACK - IT LAB 120	30 A	1			2.9 kVA	0.5 kVA	1	20 A	FIRE SUPRESSION SYSTEM - MDF 29	8
9	REC - IT LAB 120	20 A	1	1.1 kVA	0.0 kVA			1	20 A	Spare	10
11	Spare	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Spare	12
13	Spare	20 A	1	0.0 kVA	0.0 kVA			1	20 A	Spare	14
15	Spare	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Spare	16
17	Spare	20 A	1	0.0 kVA	0.0 kVA			1	20 A	Spare	18
19	Spare	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Spare	20
21	Spare	20 A	1	0.0 kVA	0.0 kVA			1	20 A	Spare	22
23	Spare	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Spare	24
25	Spare	20 A	1	0.0 kVA	0.0 kVA			1	20 A	Spare	26
27	Spare	20 A	1			0.0 kVA	0.0 kVA	1	20 A	Spare	28
29	Space	--	1	--	--			1	--	Space	30
31	Space	--	1			--	--	1	--	Space	32
33	Space	--	1	--	--			1	--	Space	34
35	Space	--	1			--	--	1	--	Space	36
37	Space	--	1	--	--			1	--	Space	38
39	Space	--	1			--	--	1	--	Space	40
41	Space	--	1	--	--			1	--	Space	42
		Total Load:		8 kVA		7 kVA					
		Total Amps:		76 A		66 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
RECEPTACLE	14 kVA	85.87%	12 kVA		
EQUIPMENT	1 kVA	100.00%	1 kVA	**Total Conn. Load:**	15 kVA
				Total Est. Demand:	13 kVA
				Total Conn. Current:	72 A
				Total Est. Demand Current:	62 A
				Non-Coincident HVAC Load:	0 A
				Total Est. Demand - NC:	62 A

Notes:

Existing Branch Panel: M1

Location:
Supply From: MSB
Mounting: SURFACE
Enclosure: Type 1

Volts: 120/208 WYE
Phases: 3
Wires: 4

A.I.C. Rating: 10kAIC
Mains Type: MLO
Mains Rating: 800 A
MCB Rating: 800 A

Notes:

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	EXISTING WATER HEATER	20 A	1	1.5 kVA	1.6 kVA					3	30 A	FPT-108	2
3	EWH-1A	50 A	2			3.1 kVA	1.6 kVA			--	--	--	4
5	--	--	--					3.1 kVA	1.6 kVA	--	--	--	6
7	EWH-2A	40 A	2	3.1 kVA	1.6 kVA					3	25 A	FPT-112	8
9	--	--	--			3.1 kVA	1.6 kVA			--	--	--	10
11	EWH-2B	40 A	2					3.1 kVA	1.6 kVA	--	--	--	12
13	--	--	--	3.1 kVA	1.2 kVA					3	25 A	FPT-135	14
15	EWH-3	20 A	2			1.0 kVA	1.2 kVA			--	--	--	16
17	--	--	--					1.0 kVA	1.2 kVA	--	--	--	18
19	FPT-26	30 A	3	1.6 kVA	1.6 kVA					3	25 A	FPT-136	20
21	--	--	--			1.6 kVA	1.6 kVA			--	--	--	22
23	--	--	--					1.6 kVA	1.6 kVA	--	--	--	24
25	FPT-106	40 A	3	2.3 kVA	1.8 kVA					3	30 A	FPT-139	26
27	--	--	--			2.3 kVA	1.8 kVA			--	--	--	28
29	--	--	--					2.3 kVA	1.8 kVA	--	--	--	30
31	FPT-107	25 A	3	1.4 kVA	3.1 kVA					2	20 A	EWH-1B	32
33	--	--	--			1.4 kVA	3.1 kVA			--	--	--	34
35	--	--	--					1.4 kVA	0.0 kVA	1	15 A	EWHS-1	36
37	M2	500 A	3	39.1...	0.0 kVA					1	20 A	Spare	38
39	--	--	--			38.4...	0.0 kVA			1	20 A	Spare	40
41	--	--	--					38.0...	0.0 kVA	1	20 A	Spare	42
		Total Load:		63 kVA		62 kVA		58 kVA					
		Total Amps:		530 A		520 A		487 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	182 kVA	100.00%	182 kVA		
RECEPTACLE	1 kVA	100.00%	1 kVA	**Total Conn. Load:**	183 kVA
EQUIPMENT	1 kVA	100.00%	1 kVA	**Total Est. Demand:**	183 kVA
				Total Conn. Current:	509 A
				Total Est. Demand Current:	509 A
				Non-Coincident HVAC Load:	0 A
				Total Est. Demand - NC:	509 A

Notes:

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS



DRAWN BY: SHD
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 01/09/2025
SHEET TITLE ELECTRICAL PANELBOARD SCHEDULES
SHEET NO. E6.02

FIRE ALARM GENERAL NOTES

1. FIRE ALARM SYSTEM IS A DELEGATED DESIGN. FIRE ALARM CONTRACTOR SHALL PERFORM AND PROVIDE FULL FIRE ALARM SHOP DRAWINGS SHOWING ALL INITIATING AND NOTIFICATION APPLIANCE DEVICES COMPLYING WITH NFPA 72, NFPA 101, AND LOCAL CODES. THE SHOP DRAWING SHALL INDICATE COMPLIANCE WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA INCLUDING DATA ANALYSIS SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION. FIRE ALARM DESIGN SHALL BE APPROVED BY AUTHORITY HAVING JURISDICTION PRIOR TO SUBMITTING THEM TO ENGINEER OF RECORDS.

   A. PROVIDE DRAWINGS SHOWING THE LOCATION OF EACH NOTIFICATION APPLIANCE, PULL STATION, SMOKE AND HEAT DETECTOR, RATINGS OF EACH AND INSTALLATION DETAILS AS NEEDED TO COMPLY WITH LISTING CONDITIONS OF THE DEVICE.

   B. PROVIDE DESIGN CALCULATIONS FOR SELECTING THE SPACING AND INTENSITIES FOR STROBE SIGNALS AND SOUND PRESSURE LEVELS FOR ALL AUDIBLE APPLIANCES.

2. ALL WIRING FOR THE FIRE ALARM SYSTEM SHALL BE AS FOLLOWS:

   A. ABOVE SUSPENDED CEILINGS: METAL CLAD CABLE, TWISTED PAIR, IN CONFORMANCE WITH SYSTEM MANUFACTURER'S REQUIREMENTS AND AS
   PER APPROVED SHOP DRAWINGS.

   B. FROM SUSPENDED CEILING TO SURFACE MOUNTED DEVICE: TWISTED PAIR, IN SURFACE MOUNTED RACEWAYS, IN CONFORMANCE WITH SYSTEM . MANUFACTURER'S REQUIREMENTS AND AS PER APPROVED SHOP DRAWINGS.

   C. CON CMU/CONCRETE WALLS AND CEILINGS: TWISTED PAIR, IN CONDUITS, IN CONFORMANCE WITH SYSTEM MANUFACTURER'S REQUIREMENTS AND AS
   PER APPROVED SHOP DRAWINGS.

3. ON PLASTERED WALLS/CEILINGS: METAL CLAD CABLE, TWISTED PAIR, IN CONFORMANCE WITH SYSTEM MANUFACTURER'S REQUIREMENTS AND AS PER APPROVED SHOP DRAWINGS.

4. ALL WALL MOUNT DEVICES (HORN/STROBES, MANUAL PULL STATIONS ETC.) SHALL BE INSTALLED AS FOLLOWS:

   A. FOR ALL PLASTERED WALLS:
   - MOUNT DEVICES ON A RECESSED BACK BOX IN WALL.
   - WIRING TO THE DEVICE SHALL BE CONCEALED IN WALL FROM THE SUSPENDED CEILING ABOVE.

   B. FOR ALL CMU/COMCRETE WALL:
   - MOUNT DEVICES ON A MANUFACTURER'S PROVIDED STEEL BACK BOX.

5. MOUNTING HEIGHT AND CANDELA RATING OF FIRE ALARM DEVICES SHALL BE IN COMPLETE COMPLIANCE WITH THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS (MAAB 521 CMR).

6. PRIOR TO FURNISHING AND INSTALLING FIRE ALARM SYSTEM EQUIPMENT, DEVICES, AND WIRING, THE ELECTRICAL CONTRACTOR SHALL CONFER WITH LOCAL FIRE AUTHORITY FOR ALL REQUIREMENTS.

7. ALL EXPOSED WIRING SHALL BE IN MINIMUM 1/2" CONDUIT.

8. RISER DIAGRAM DOES NOT SHOW ENTIRE FIRE ALARM SYSTEM. REFER TO FLOOR PLANS FOR LOCATIONS AND QUANTITIES OF DEVICES AND EQUIPMENT.

9. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL VISUAL NOTIFICATION DEVICES ARE SYNCHRONIZED.

10. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR ADD ANY NEW DETECTION OR NOTIFICATION DEVICES TO EXISTING BY MEANS OF T-TAPPING.

11. FOR EXACT QUANTITY AND LOCATIONS OF WATERFLOW SWITCHES, PRESSURE SWITCHES AND TAMPER SWITCHES, COORDINATE WITH FIRE PROTECTION SHOP DRAWINGS.

12. E.C. SHALL COORDINATE EXACT LOCATIONS AND QUANTITIES OF SMOKE DUCT DETECTORS WITH HVAC DRAWINGS. PROVIDE A REMOTE ALARM LIGHT AND TEST STATION FOR EACH SMOKE DUCT DETECTOR. DUCT DETECTORS SHALL BE PROVIDED BY E.C. AND INSTALLED BY HVAC CONTRACTOR. FINAL WIRING TERMINATIONS SHALL BE PERFORMED BY E.C.

13. PROVIDE SPARE CAPACITY FOR FIRE ALARM SYSTEM BATTERY SIZE AND QUANTITY OF CIRCUITS. THE QUANTITY OF DEVICES FOR SPARE CAPACITY SHALL BE BASED ON 30 SPEAKER/STROBES PER FLOOR AND 4 STROBE ONLY DEVICES PER FLOOR.

14. ACTIVATION OF DUCT SMOKE DETECTORS SHALL PRODUCE A SUPERVISORY SIGNAL TO THE FIRE ALARM CONTROL PANEL AND REMOTE ANNUNCIATORS.

FIRE ALARM LEGEND

FACP	FIRE ALARM CONTROL PANEL
FTC	FIRE ALARM TERMINAL CABINET
ANN	ANNUNCIATOR PANEL
RTS	REMOTE TEST STATION FOR DUCT MOUNTED SMOKE DETECTORS
KB	KNOX BOX
F	MASTER BOX
MM	ADDRESSABLE MONITOR MODULE
CM	CONTROL MODULE
DH	ELECTRO-MAGNETIC DOOR HOLD OPEN DEVICE
NPE	NOTIFICATION POWER EXTENDER
75	FIRE ALARM STROBE AND HORN, NUMERAL INDICATES CANDELA RATING
	FIRE ALARM MINI HORN
75	FIRE ALARM STROBE ONLY, NUMERAL INDICATES CANDELA RATING
75	FIRE ALARM CEILING STROBE AND HORN, NUMERAL INDICATES CANDELA RATING
75	FIRE ALARM CEILING STROBE ONLY, NUMERAL INDICATES CANDELA RATING
75	FIRE ALARM STROBE AND SPEAKER, NUMERAL INDICATES CANDELA RATING
75	FIRE ALARM CEILING STROBE AND SPEAKER, NUMERAL INDICATES CANDELA RATING
F	FIRE ALARM MANUAL PULL STATION
H R	HEAT DETECTOR. "R" INDICATES ELEVATOR RECALL INITIATION
H E	HEAT DETECTOR. "E" INDICATES ELEVATOR SHUNT TRIP
S D	SMOKE DETECTOR. "D" INDICATES DUCT MOUNTED SMOKE DETECTOR
S R	SMOKE DETECTOR. "R" INDICATES ELEVATOR RECALL INITIATION
S BT	SMOKE DETECTOR. "BT" INDICATES BEAM TRANSMITTER
S BR	SMOKE DETECTOR. "BR" INDICATES BEAM RECEIVER
S ASD	SMOKE DETECTOR. "ASD" INDICATES AIR SAMPLING DEVICE
S MS	SMOKE DETECTOR. "MS" INDICATES MULTI-STATION TYPE (120v)
S CO MS	COMBINATION SMOKE DETECTOR & CARBON MONOXIDE DETECTOR (120v) "MS" INDICATES MULTI-STATION WIRING "CO" CARBON MONOXIDE SENSOR ALARM
S SS 24	SMOKE DETECTOR. "SS" INDICATES SINGLE STATION SMOKE ALARM (24V)
S MS 24	SMOKE DETECTOR. "MS" INDICATES MULTI STATION SMOKE ALARM (24V)
CO MS	CARBON MONOXIDE DETECTOR. "MS" INDICATES MULTI-STATION TYPE (120V)
177 120	FIRE ALARM CEILING STROBE, NUMERAL INDICATES CANDELA RATING (120V)
	RED INDICATING LIGHT, EXTERIOR WEATHERPROOF
	FIREFIGHTERS PHONE JACK
	SMOKE DETECTOR WITH REMOTE TROUBLE LIGHT
TS	TAMPER SWITCH
FS	WATERFLOW SWITCH
LP	LOW PRESSURE SWITCH
PS	PRESSURE SWITCH
LA	LOW AIR SWITCH
RE	REMOVE EXISTING DEVICE
XR	RELOCATE EXISTING DEVICE
ETR	LIGHT LINE INDICATES EXISTING WORK TO REMAIN
XL	NEW LOCATION OF EXISTING DEVICE
LFAC	LIMIT OF FIRE ALARM CONTRACT
NIFAC	NOT IN FIRE ALARM CONTRACT

B

FIRE ALARM SYSTEM
INPUT/OUTPUT MATRIX

SYSTEM OUTPUTS

SYSTEM INPUTS	FACP ANNUNCIATION												NOTIFICATION												REQUIRED FIRE SAFETY CONTROL												
	ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTUATE ZONE DEVICE ADDRESS ALARM INDICATOR	ACTUATE ZONE GENERAL ALARM INDICATOR	DISPLAY CHANGE OF STATUS	TRANSMIT FIRE ALARM SIGNAL	TRANSMIT SUPERVISORY SIGNAL	TRANSMIT TROUBLE SIGNAL	RELEASE ALL DOORS HELD OPEN	CLOSE ALL SMOKE AND CONTROL DOORS	UNLOCK ALL DOORS	SHUT DOWN RESPECTIVE AIR HANDLING EQUIPMENT																							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																		
1 FIRE ALARM SYSTEM AC POWER FAILURE	●	●									●																											1
2 FIRE ALARM SYSTEM LOW BATTERY					●	●						●																										2
3 OPEN CIRCUIT					●	●						●																										3
4 GROUND FAULT					●	●						●																										4
5 NOTIFICATION APPLIANCE CIRCUIT SHORT					●	●						●																										5
6 BUILDING MANUAL PULL STATIONS	●	●					●	●	●	●			●		●																								6
7 CORRIDOR SMOKE DETECTORS	●	●					●	●	●	●			●	●	●																								7
8 AREA SMOKE DETECTORS	●	●					●	●	●	●			●	●	●																								8
9 HVAC AIR DUCT SMOKE DETECTORS			●	●			●				●						●																					9
10 AREA HEAT DETECTORS	●	●					●	●	●	●			●	●	●																								10
11 HOOD OR ROOM FIRE SUPPRESSION SYSTEM ALARM	●	●					●	●	●	●			●	●	●																								11
12 SPRINKLER TAMPER SWITCH			●	●			●				●																												12
13 SPRINKLER WATER FLOW IN BUILDING	●	●					●	●	●	●			●	●	●																								13
14 SPRINKLER WATER FLOW IN ELEV EQUIP RM OR SHAFT	●	●					●	●	●	●			●	●	●																								14
15 FIRE PUMP POWER FAILURE/PHASE REVERSAL			●	●			●				●																												15
16 FIRE PUMP RUNNING	●	●					●	●	●	●			●	●	●																								16
17 FIRE PUMP SYSTEM NOT IN AUTOMATIC			●	●			●				●																												17
18 LEGALLY REQUIRED GENERATOR SYSTEM LOW FUEL			●	●			●				●																												18
19 LEGALLY REQUIRED GENERATOR NOT IN AUTOMATIC			●	●			●				●																												19
20 -																																						20
21 -																																						21
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T																		

3 FA0.01 FIRE ALARM MATRIX
1/8" = 1'-0"

3700 Mansell Square
Mansell One, Suite 200
Alpharetta, GA 30022
770.992.8585
aha-engineers.com

AHA

CONSTRUCTION DOCUMENTS



DRAWN BY: Author
CHECKED BY: Checker

REV#	DATE	DESCRIPTION
B	01/09/2026	Addendum # 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

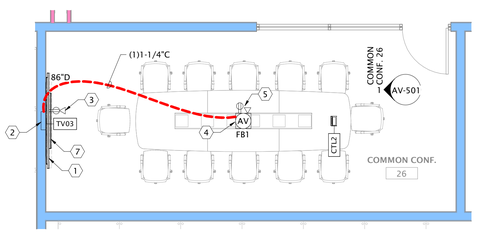
1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO.
20-24092.00

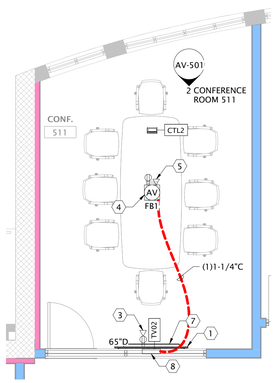
DATE
01/09/2025

SHEET TITLE
FIRE ALARM LEGEND & GENERAL NOTES

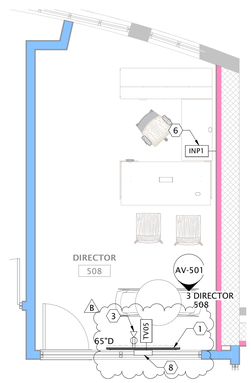
SHEET NO.
FA0.01



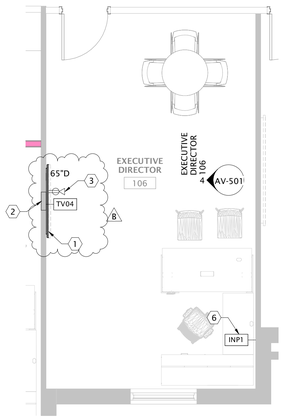
1 **COMMON CONF. 26**
1/4" = 1'-0"



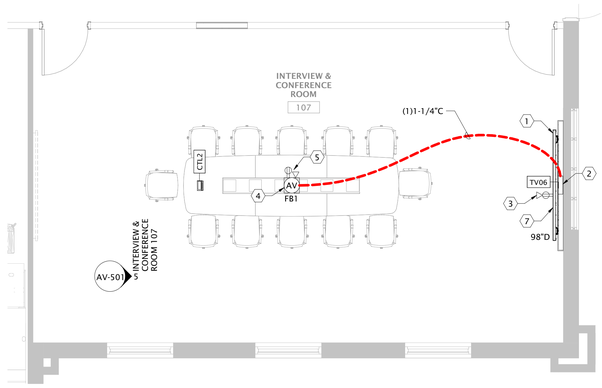
2 **CONFERENCE ROOM 511**
1/4" = 1'-0"



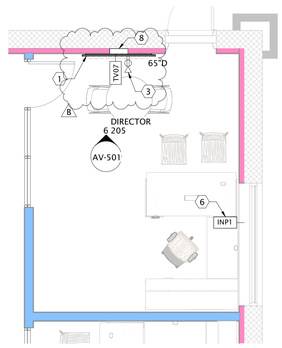
3 **DIRECTOR 508**
1/4" = 1'-0"



4 **EXECUTIVE DIRECTOR 106**
1/4" = 1'-0"



5 **INTERVIEW & CONFERENCE ROOM 107**
1/4" = 1'-0"



6 **DIRECTOR 205**
1/4" = 1'-0"

KEY NOTES:

1. FLAT PANEL DISPLAY LOCATION. AUDIO VISUAL CONTRACTOR TO PROVIDE AND INSTALL FLAT PANEL DISPLAY. PROVIDE WITH MOUNTING ACCESSORIES FOR ALL LOCATIONS AS SHOWN ON PLANS. GENERAL CONTRACTOR TO PROVIDE WALL BLOCKING FOR DISPLAY.
2. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL SHARED IN-WALL BACK BOX FSR 320 FLUSH MOUNTED AT LOCATION SHOWN ON PLANS (UNLESS OTHERWISE NOTED ON DRAWINGS.) ROUTE ONE(1) 1-1/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
3. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ONE(1) 120V/20A POWER TO FSR 320 IN-WALL BACK BOX FROM A 20A CIRCUIT IN HOUSE PANEL. SEE ELECTRICAL DRAWINGS FOR CIRCUITING. TELECOM CONTRACTOR TO PROVIDE AND INSTALL TWO(2) DATA OUTLETS IN ONE-GANG INSERT OF FSR IN-WALL BOX.
4. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL RECESSED FLOOR BOX AS SHOWN ON PLANS. REFERENCE AUDIO VISUAL LEGEND FOR ADDITIONAL INFORMATION ON FLOOR BOX. ROUTE ONE(1) 1-1/4" CONDUIT TO ABOVE ACCESSIBLE CEILING.
5. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL 120V/1-PHASE DUPLEX RECEPTACLE FROM A DEDICATED 20A/1-PHASE CIRCUIT IN HOUSE POWER PANEL. TELECOM CONTRACTOR TO PROVIDE AND INSTALL FOUR(4) DATA OUTLETS ADJACENT TO POWER DUPLEX IN RECESSED FLOOR BOX.
6. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL ONE(1) SINGLE-GANG BACK BOX FLUSH MOUNTED IN-WALL AT 18" AFF FOR AUDIO VISUAL INTERFACE, ROUTE ONE(1) 1" CONDUIT TO ABOVE ACCESSIBLE CEILING.
7. AUDIO VISUAL CONTRACTOR SHALL PROVIDE AND INSTALL USB MIC/CAM SOUNDBAR SPEAKER BELOW DISPLAY PANEL.
8. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL SHARED IN-WALL BACK BOX FSR 320 FLUSH MOUNTED AT LOCATION SHOWN ON PLANS (UNLESS OTHERWISE NOTED ON DRAWINGS.) ROUTE ONE(1) 1-1/4" CONDUIT THROUGH ADJACENT SIDE WALL TO ABOVE ACCESSIBLE CEILING WITH NLT SWEEP WITH 8" BEND RADIUS FOR CORNERS.

EST. 2003
J&A
ENGINEERING CONSULTANTS

GEORGIA REGISTERED No. PE24242 PROFESSIONAL ENGINEER JORGE E GOMEZ

CONSTRUCTION DOCUMENTS

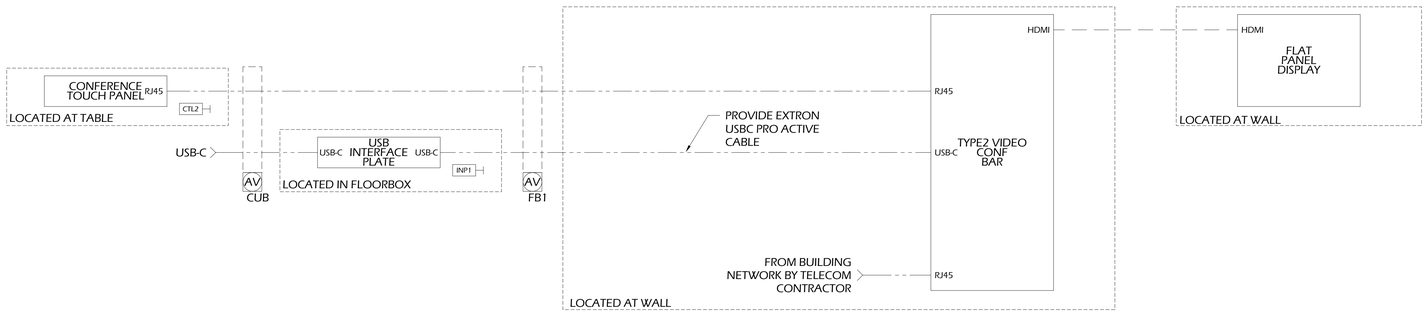
DRAWN BY:	VP
CHECKED BY:	MC

REV#	DATE	DESCRIPTION
B	01/09/26	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA
30046

PROJECT NO.	20-24092.00
DATE	12.01.2025
SHEET TITLE	LARGE SCALES
SHEET NO.	AV-301



NOTES:

A. REFERENCE FLOOR PLANS FOR LOCATION OF DISPLAY MONITORS.

B. AUDIO VISUAL ROUGH-IN FOR EQUIPMENT SHALL BE PROVIDED AND INSTALLED AS DESIGNED.

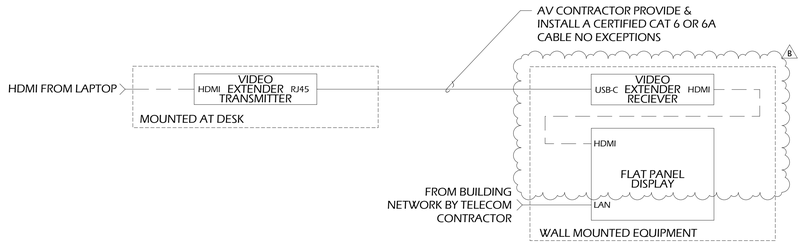
C. AV CONTRACTOR SHALL COORDINATE ALL MONITOR PLACEMENTS WITH GC, ARCHITECT, AND INTERIOR DESIGNER.

D. AV CONTRACTOR SHALL USE HDMI EXTENDERS FOR ANY HDMI RUN OVER 15 FEET

E. AV CONTRACTOR SHALL USE USB EXTENDERS FOR ANY USB RUN OVER 15 FEET

1 CONFERENCE ROOMS

12" = 1'-0"



NOTES:

A. REFERENCE FLOOR PLANS FOR LOCATION OF DISPLAY MONITORS.

B. AUDIO VISUAL ROUGH-IN FOR EQUIPMENT SHALL BE PROVIDED AND INSTALLED AS DESIGNED.

C. AV CONTRACTOR SHALL COORDINATE ALL MONITOR PLACEMENTS WITH GC, ARCHITECT, AND INTERIOR DESIGNER.

D. AV CONTRACTOR SHALL USE HDMI EXTENDERS FOR ANY HDMI RUN OVER 15 FEET

E. AV CONTRACTOR SHALL USE USB EXTENDERS FOR ANY USB RUN OVER 15 FEET

2 DIRECTOR'S OFFICE

12" = 1'-0"

EST. 2003

J&A ENGINEERING CONSULTANTS

GEORGIA REGISTERED No. PE24242 PROFESSIONAL ENGINEER JORGE E GOMEZ

CONSTRUCTION DOCUMENTS

DRAWN BY:	VP
CHECKED BY:	MC

REV#	DATE	DESCRIPTION
B	01.09.26	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

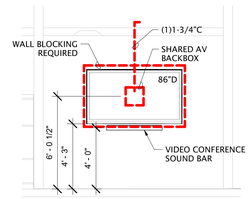
1001 Lawrenceville Hwy
Lawrenceville, GA
30046

PROJECT NO. 20-24092.00

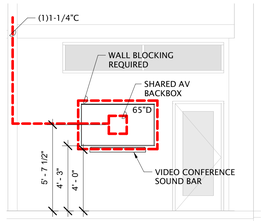
DATE 12.01.2025

SHEET TITLE ONE-LINE DIAGRAMS

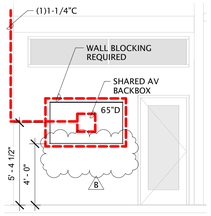
SHEET NO. AV-401



1 **COMMON CONF. 26**
1/4" = 1'-0"

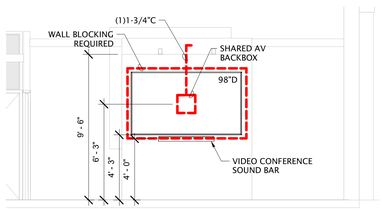


2 **CONFERENCE ROOM 511**
1/4" = 1'-0"

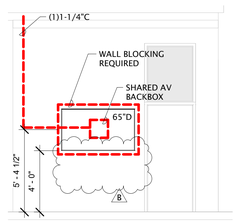


3 **DIRECTOR 508**
1/4" = 1'-0"

4 **EXECUTIVE DIRECTOR 106**
1/4" = 1'-0"



5 **INTERVIEW & CONFERENCE ROOM 107**
1/4" = 1'-0"



6 **DIRECTOR 205**
1/4" = 1'-0"

EST. 2003
J&A
ENGINEERING CONSULTANTS

GEORGIA REGISTERED No. PE24242 PROFESSIONAL ENGINEER JORGE E GOMEZ

CONSTRUCTION DOCUMENTS

DRAWN BY: VP
CHECKED BY: MC

REV#	DATE	DESCRIPTION
B	01/09/26	ADDENDUM 2

LIBRARY ADMINISTRATION HEADQUARTERS RENOVATION PROJECT

1001 Lawrenceville Hwy
Lawrenceville, GA 30046

PROJECT NO. 20-24092.00
DATE 12.01.2025
SHEET TITLE DETAILS
SHEET NO. AV-501

SUBSTITUTION REQUEST
(During the Bidding/Negotiating Stage)

Project: Old Lawrenceville Library Administration Renovation

Substitution Request Number:

From: J2 Systems

To: Poh+W Architects

Date: 12-23-25

Erin Hightower

A/E Project Number:

Re: erin.hightower@poharchitects.com

Contract For:

Specification Title: Sound-Absorbing Wall and Ceiling Units

Description: Sound-Absorbing Wall Units

Section: 098433 Page: 4

Article/Paragraph: 2.3

Proposed Substitution: J2 Wood Grain Batten Panel

Manufacturer: J2 Systems Address: Woods Cross, UT Phone: 801-701-7979

Trade Name: Model No.:

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Shandelle Carpenter

Signed by: Shandelle Carpenter

Firm: J2 Systems

Address: 2193 South 1200 West #105

Woods Cross, UT 84087

Telephone: 801-701-7979

A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Date:

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

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110 South Union St., Suite 100, Alexandria, VA 22314

Form Version: January 2013
CSI Form 1.5C

Project: Old Lawrenceville Library Administration Renovation

Specification Section: 098433 – Sound-Absorbing Wall and Ceiling Units

Manufacturer	Turf	J2 Systems
Product	Wall Scape Slat	J2 Batten Panel
Composition	PET Felt	PET Felt
Dimensions	4 blades – 3”OC – 2.5” W - .75” H - .5”gap	Standard Slat is 2” W, can do 2.5” to accommodate specifications
Core Thickness	9mm	9mm
NRC Rating	.50-.60	.50 -.90
Fire Classification	Class A	Class B or Class A on request
Installation	Z Clips or Construction Adhesive	Z Clips or Construction Adhesive
Warranty	5 years	4 years

2193 S 1200 W, Unit 105, Woods Cross, UT 84087
www.j2systems.net
801-701-7979

J2 PET Batten Panel

PRODUCT DATA AND SPECIFICATIONS

J2 Batten Panels not only look great, but will enhance acoustics and help prevent excessive noise and echo. Custom patterns can also be specified.

- Custom Patterns Optional
- Lightweight
- Varying Widths
- 7 Wood Grain Print Options
- Enhances Acoustics
- 28 Color Options

STYLE: Wall or ceiling mounted panels, slat width and spacing can be varied and customized.

COMPOSITION: 100% PET (>75% recycled PET material)

THICKNESS: 24mm, and other custom thicknesses available

PET DENSITY: 1900g/sqm-2400g/sqm (approx 12pcf)

DIMENSIONS: 47.5in x 95.5in, or custom within those dimensions

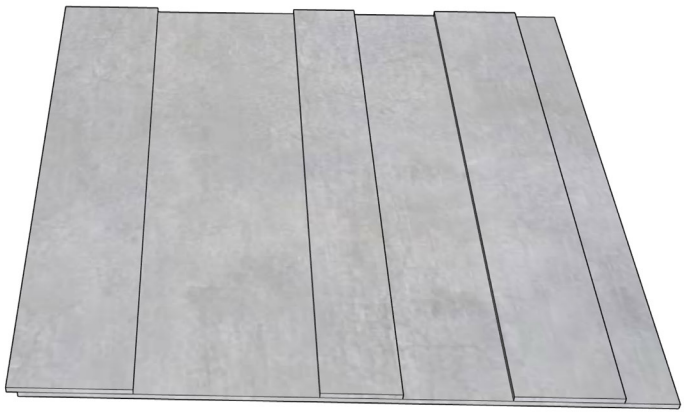
FIRE RATING: ASTM E84 – Class B (Class A panels available on request)

ACOUSTIC NRC: .40 to .90 - varies by pattern and thickness

APPLICATION: Ceiling or wall mount

HARDWARE & INSTALLATION: Panels may be applied directly to wall and ceiling surfaces using construction adhesive, z-clips, or finish nails. Optional hardware includes anodized or powder-coated aluminum J-Trim for panel perimeter, or H-Trim for joining panels.





J2 PET Printed Wood Grain

PATTERN OPTIONS



OPTION 1



OPTION 2



OPTION 3



OPTION 4

OPTION 5



OPTION 6



OPTION 7

All patterns can be scaled to customer specifications.
*Custom patterns available on request.
Note: Opt 5 and Opt 7 are printed on White 193 standard, all other options are printed on Khaki 111

SUBSTITUTION REQUEST
(During the Bidding/Negotiating Stage)

Project: Old Lawrenceville Library Administration Renovation

Substitution Request Number:

From: J2 Systems

To: Poh+W Architects

Date: 12-23-25

Erin Hightower

A/E Project Number:

Re: erin.hightower@poharchitects.com

Contract For:

Specification Title: Sound-Absorbing Wall and Ceiling Units

Description: Unlit Acoustical Ceiling Baffle

Section: 098433 Page: 5

Article/Paragraph: 2.4

Proposed Substitution: J2 Box Baffle Custom size to meet specifications

Manufacturer: J2 Systems Address: Woods Cross, UT Phone: 801-701-7979

Trade Name: Model No.:

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Shandelle Carpenter

Signed by: Shandelle Carpenter

Firm: J2 Systems

Address: 2193 South 1200 West #105

Woods Cross, UT 84087

Telephone: 801-701-7979

A/E's REVIEW AND ACTION

☐ Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: Date:

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

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110 South Union St., Suite 100, Alexandria, VA 22314

Form Version: January 2013
CSI Form 1.5C

Project: Old Lawrenceville Library Administration Renovation

Specification Section: 098433 – Sound-Absorbing Wall and Ceiling Units

Manufacturer	Focal Point	J2 Systems
Product	Seem 2 Acoustic Unlit	J2 PET Felt Box Baffle
Composition	PET Felt	PET Felt
Dimensions	8”, 12”, 16” H, 2’-93.5” L	2” W, 7.75” H, 2’4’8’L Or any customer length up to 8’
Core Thickness	9mm	12mm
NRC Rating	Not Available	.65-.85
Fire Classification	Class A	Class B or Class A on request
Installation	Cable Suspension	Aircraft cable connected to cable adjusters. (included)
Warranty	1 year	4 years

2193 S 1200 W, Unit 105, Woods Cross, UT 84087
www.j2systems.net
801-701-7979

J2 PET Felt Box Baffle

PRODUCT DATA AND SPECIFICATIONS



J2 PET Acoustic Felt Baffles are designed to trap noise and reverberation while adding style and substance to overhead spaces. Our ceiling systems are made from J2 PET Acoustic Felt.

- Eco-friendly
- Hard-Wearing
- Durable
- 34 Color Options

STYLE: Suspended Ceiling Baffle

COMPOSITION: 100% PET (>75% recycled PET material)

DENSITY: 1900g/sqm-2400g/sqm (approx 12pcf)

DIMENSIONS: Width: 2", Height: 7.75", Length: 2', 4' or 8', or custom length up to 8'

FIRE RATING: ASTM E84 – Class B (Class A availabe on request, color options may vary)

ACOUSTIC NRC: All acoustic panel systems offer diverse sound absorption characteristics. Similar baffle systems have an NRC of between 0.65-0.85, however not all systems have been tested for NRC ratings.

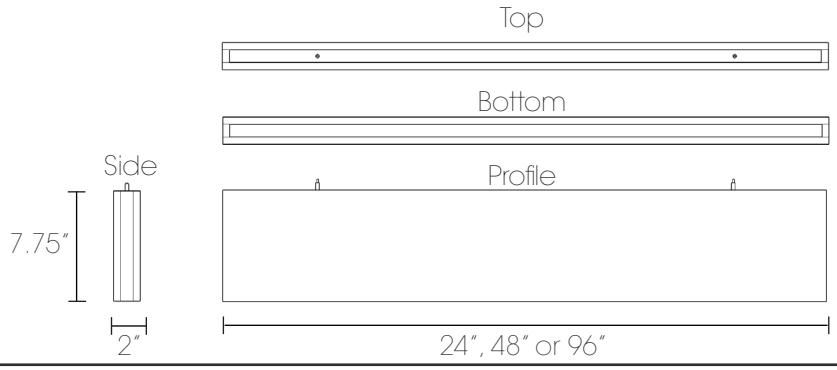
APPLICATION: Ceiling

CLEANING & CARE: Remove dust and dirt by dusting, vacuuming, or with a soft cloth or sponge and a solution of carpet or upholstery shampoo. Use a soft, damp cloth and blot dry. Spot cleaner can be used for lightly soiled areas.

WARRANTY: 4-year warranty against workmanship and manufacturing defects.

HARDWARE & INSTALLATION: Baffles are suspended using aircraft cable connected to cable adjusters. Each baffle includes 5ft lengths of 1/16" cable and cable adjusters–24" and 48" baffles include two (2), and 96" baffles include three (3). Due to varying ceiling layouts and substrates, contractor is required to supply ceiling mounting hardware. Specific hardware is available upon request.

PRODUCT DIAGRAMS:

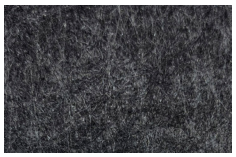


J2 PET Felt - 9mm & 12mm

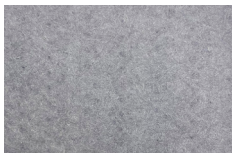
COLOR OPTIONS

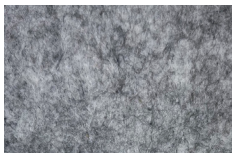

Black - 194

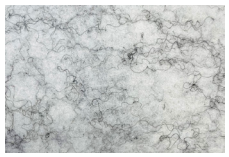

Charcoal Gray - 176

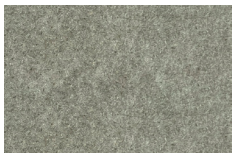

Graphite Gray - 172

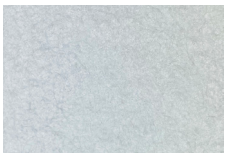

Quartz Gray - 179


Steel Gray - 174


Granite Gray - 171


Marble Gray - 177


Smoke Gray - 170


White - 193


Ivory - 113


Khaki - 111


Latte - 119


Mustard Yellow - 112


Canary Yellow - 117


Deep Orange - 121

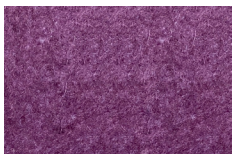

Rust Red - 136

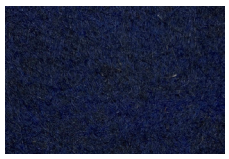

Brick Red - 137

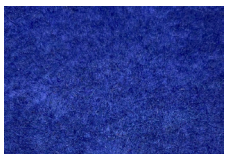

Candy Red - 131

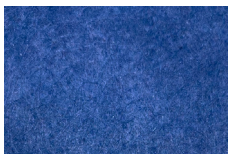

Fire Red - 231


Peach - 135

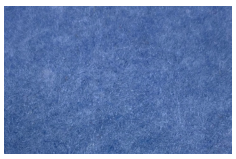

Aubergine - 147


Denim Blue - 151

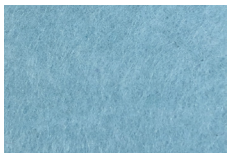

Cobalt Blue - 152


Twilight Blue - 157

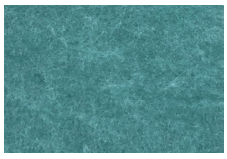

Sea Blue - 150

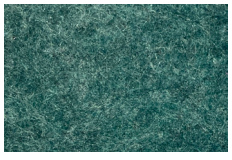

Sky Blue - 154


Azure - 252

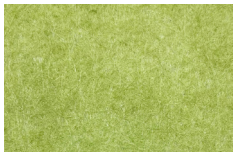

Aqua Blue - 164

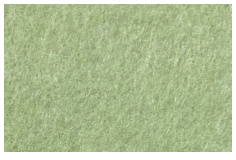

Iceberg Blue - 158


Turquoise - 160


Turtle Green - 162


Grass Green - 167


Pistachio Green - 161


Spearmint Green - 169

Custom colors available upon request. Minimum order quantities apply.