ADDENDUM NO. 1
DPW Project #2025263
DWA Project #25062
September 25, 2026

To the Plans and Specifications for: **DPW/UI – Life Science South Building**
Classroom & Teaching Lab Improvements
University of Idaho; Moscow, Idaho

TO ALL CONTRACTORS SUBMITTING BIDS ON THE ABOVE SUBJECT: This Addendum is hereby made a part of the Contract Documents pertaining to the above project and shall be binding upon each contractor submitting bids. Bids submitted shall be for the full and complete cost of incorporating these changes into the contract, no further claims shall be allowed for work associated with this addendum. It shall further be the responsibility of each Contractor to notify his sub-contractors concerning the contents of this addendum as they specifically apply to them. The following changes hereby become a part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Proposal. Failure to do so may subject Bidder to disqualification.
GENERAL NOTE: The additions, revisions, clarifications and corrections contained herein shall be made to drawings and specifications for the project and shall be included in scope of work and proposals to be submitted. Reference made below to specification and drawings shall be as a general guide only. Bidder shall determine the work affected by Addendum items.

GENERAL:

1.1 BIDDING AND CONTRACT REQUIREMENTS

INFORMATION: A Pre-Bid Meeting was held on Wednesday, September 23rd. The meeting minutes including sign-in sheets from that meeting are attached to this Addendum. The information contained in these pre-bid meeting minutes are hereby incorporated into the contract and are binding upon all bidders.

1.2 ALL DOCUMENTS

INFORMATION: The project is being accomplished in an occupied building; all work shall be coordinated to minimize the disruption to the Owner's activities and existing schedules. Disruptive work, including but not limited to material delivery, loud noise or vibration causing work will need to be coordinated with the Owner. All utility and building shutdowns must be scheduled in advance, as defined in the contract documents. Existing life safety systems shall be maintained throughout the construction, coordinate in advance with Authorities Having Jurisdiction and Owner for any temporary interruption in service. Any premium costs to accomplish this shall be a part of the bid.

CLARIFICATION: The contractor shall accomplish construction activities to not interfere with emergency egress, and disabled accessible pathways. The General Contractor is responsible for putting in place temporary facilities (ramps, pathways, barricades, tunnels, signage etc.,) to assure that all life/safety egress routes and accessible pathways are available if the work of this project obstructs egress or disabled accessible routes.

CLARIFICATION: Contractor shall coordinate and complete all necessary cutting, patching, drilling and similar work. Any connections, or penetrations required to accomplish the scope of finished work reflected in the documents are a part of the contract. Contractor shall protect existing finishes and utilities during cutting and drilling work, and shall repair any damage to existing building and return to like-new condition without additional cost to the Owner.

INFORMATION: No surface mount conduit will be allowed. All existing surface mount conduit will be removed, and all new conduit runs shall be routed to be concealed below floors, ceilings or within walls.

CLARIFICATION: Not all demolition is shown on the drawings. Contractor shall include all demolition work required to accomplish new work shown in the

Architectural, Mechanical, Plumbing, and Electrical drawing sheets. Review complete set of new construction documents prior to starting demolition.

SPECIFICATIONS:

1.3 SECTION 06 20 00 – INTERIOR FINISH CARPENTRY
REVISION: Delete entire section from Project Manual.

1.4 SECTION 09 00 00 – FINISH SCHEDULE AND MATERIAL LEGEND
REVISION: See attached revised Finish Schedule and Material Legend

1.5 SECTION 09 51 23 – ACOUTICAL PANEL CEILINGS
REVISION: Under bid alternate #3, all ceiling tiles are to replaced in existing grid. New tiles are to be 24”x24”x5/8”. See attached revised section.

List of Documents:	Size	No. Of Pages:
Addendum 1	8-½” x 11”	2
Pre-Bid Meeting Minutes and Sign-In Sheet	8-½” x 11”	4
Existing Pipe Tunnel Plan	8-½” x 11”	1
Revised Finish Schedule & Material Legend	8-½” x 11”	2
Revised Specification Section 09 51 23	8-½” x 11”	7

END OF ADDENDUM NO. 1.

Pre-Bid Meeting Agenda
DPW & University of Idaho
Life Science South Building
Classroom & Teaching Lab Improvements

DPW Project #2025263
DWA Project # 25062
September 23, 2026 – 1:00 PM

Participants:
Sign-in sheet
Minutes in blue

PROJECT OVERVIEW ITEMS

1. *Meeting's Purpose: The* Pre-Bid Meeting and Walk-Through is to acquaint potential bidders with the DPW and the University of Idaho Life Science South Building Classroom & Teaching Lab Improvements project. Questions will be directed to the owner's representative and design team and tours conducted, allowing the bidders to see firsthand the scope of work.

2. *Introductions:*
   - DPW Project Manager, Elaine Hill, 208-332-1925, Elaine.Hill@adm.idaho.gov
   - DPW Construction Field Representatives, Brad Frazier, 208-999-0242, brad.frazier@adm.idaho.gov

   - University of Idaho Project Manager: Bret Dillon, 208-885-7358, bdillon@uidaho.edu
   - University of Idaho Construction Manager: Matt Proctor, 208-885-6246, mproctor@uidaho.edu
   - University of Idaho Construction Inspector: Aaron Rice, 208-885-6249, agrice@uidaho.edu

   - Architect: Design West Architects, 509-332-3113, Isadora Lambert, ilambert@designwestpa.com, and Ned Warnick, nwarnick@designwestpa.com

3. *Project Summary – scope, cost, and schedule:*
   - The project consists of, but is not limited to, demolition of floor risers and partial height walls in the project area, finishes and lighting upgrades, new acoustic wall panels and whiteboards. The base bid work area of upgrades is approximately 1,195 SF.
     - Bid Alternate No. 1: Replacement of existing projector with new Panasonic PT-FRZ50U projector and reroute projector data connection above ceiling.
     - Bid Alternate No. 2: Provide (6) 4" Legrand evolution series floor boxes (FB#2-FB#7).
     - Bid Alternate No. 3: Replacement of all acoustical panel ceiling tiles in existing grid.
   - The preliminary project estimate for the Base Bid scope is in the approximate range of $316,000.
   - Review of the project schedule - bidders/contractors will be expected to provide sufficient resources to comply with the project duration requirements contained in the bidding documents.
     - Issue Notice-to-Proceed to Contractor: approx. Nov. 16, 2026.
     - The complete project scope shall be completed withing one hundred and twenty (120) consecutive calendar days. Substantial completion approximately on March 16, 2027.

   - Work that is not complete within the contractual performance period shall be subject to Liquidated Damages penalties as defined in the contractual performance scheduled until substantial completion is attained. Following that the contractor is allowed an additional 30 calendar days to attain final completion.
   - The design and owner/agency team have every intention of working with the contractor to minimize submittal review periods and to remain as flexible as possible when it comes to the coordination of items expected to have long lead times.

4. *Bidding & Contract Procedures:* Sealed proposals will be received at the University of Idaho Facilities Architectural & Engineering Services, 875 Perimeter Drive, University of Idaho, Moscow Idaho 83843 until **2:00 PM prevailing local time on Thursday, October 01, 2026**. Late bids will not be accepted.
   - The following is required to be submitted with your bid, **NO EXCEPTIONS.** If any of the items below are not submitted the bid will be considered **NON-RESPONSIVE.**
     1. **License Number as a Contractor in the state of Idaho. A public works contractors license for the State of Idaho is required to bid on this work.**
     2. **Bid Proposal forms completed & signed by Contractor, including related Subcontractor Listing.**

3. **All blanks, on all bid form documents are to be filled out.**
4. **Include affidavit concerning alcohol and drug-free workplace, Bidder's Acknowledgement Statement and the**
5. **Include Bid Bond for 5% of the total bid amount.**
6. **No qualifications may be added to the bid form.**
7. **All addendums are required to be acknowledged on the bid.**

- **Review insurance and bonding requirements with your provider prior to submitting bid. See General Conditions for insurance and bonding requirements.**
- **Contract will be through Idaho Department of Public Works via a single prime contract (example provided in the specifications). Contractor must provide proof of Idaho workman's compensation coverage, Idaho unemployment insurance and a copy of the contractor's certificate of insurance showing general business liability insurance in the amount of $200,000 each occurrence, valid in the state of Idaho.**

5. *Addenda Schedule:*
   - One addendum is anticipated to be issued September 25, 2026.
   - Substitution requests can be submitted to the office of the Architect (Design West - 254 East Main Street, Pullman, Washington 99163) or via email (cholstad@designwestpa.com). The cut-off for substitution requests is the end of the business day on **September 24, 2026.**
   - A list of plan holders is available upon request, from the office of the architect. Contact Chelsea Holstad, 509-332-3113, cholstad@designwestpa.com

6. *Project General Items:*
   - A list of plan holders is available upon request, from the office of the architect. Contact Chelsea Holstad, 509-332-3113, cholstad@designwestpa.com
   - One set of documents may be obtained by licensed general contractors and by licensed mechanical and electrical subcontractors from the Architect for a refundable deposit of $250.00. Others may obtain documents at cost, non-refundable. To obtain a set, please contact Chelsea Holstad, Design West Architects, by email at cholstad@designwestpa.com
   - The contractor will be responsible for paying the Idaho Division of Occupational and Professional Licenses (IDOPL) inspection and general building permit fees and other related costs. The plan check fees, also required by IDOPL, have already been paid. Contractor will also be responsible for all other permits required to complete the Work. Permit fees are expected to be approximately $1,550.00
   - The existing building will be occupied and fully operational. The contractor must coordinate their work to minimize disruption to the owner's occupancy of the existing building. All utility shutdowns must be scheduled in advance, with minimum 14 days of advance notice to the owner, as defined in the contract documents. Any access to additional building interior locations must be coordinated with the UI with a 5 day notice as well.
   - Contractor shall be aware of the site constraints, including accessibility and staging requirements in the vicinity of the building. The contractor will be allowed the use of some parking and staging area surrounding the building. The contractor is responsible for security and safety within these areas.
   - A pre-construction meeting will be conducted prior to the commencement of the work.
   - The Owner will not provide pricing adjustments to reflect fluctuations in material market prices. All bid prices must be fixed, and held as defined in the bidding and contract documents
   - The General Conditions of the Contract limit the way in which cost proposals are calculated, including limits on contractor overhead and profit mark-ups.
   - The work on the project shall be done under the supervision of the general contractor. Any time a sub-contractor is on site, there shall be a representative of the general contractor available to oversee and supervise this work. The contractor shall provide a phone number for a superintendent, who is locally available, as well as email to receive any job-related documents.

7. *Project Specific items*
   - The Owner will remove any loose equipment and stored material salvage in the project area that the Owner deems worthy of salvage. This will take place prior to the contractor taking possession

of the site. All substrates and building conditions will be maintained in the condition as visible on this date except for areas affected by abatement; the bidders shall include all necessary costs to improve or modify the substrates to achieve the work shown in the construction documents.

- The existing building shall be protected and maintained throughout the course of construction. Any damage caused by the work of this project shall be repaired and returned to the current condition without additional cost to the Owner. Should any cleaning or repair work be required and not accomplished by the contractor the cost of the cleaning and repair shall be back-charged to the contractor.
- The contract includes specific University provided requirements for staging areas, parking on campus, and building access. This information will be covered at the pre-construction meeting. It is also covered in the University Supplemental Agency Guidelines issued in the specifications.
- We must emphasize the requirements that the job site be kept clean, organized and all locations open to the public will be immediately cleaned upon completion of contractor's work. The safety of the public, staff and students in the building are paramount.

PROJECT SITE VISIT & CONTRACTOR QUESTIONS:

- The building has an active elevator, but the contractor is not expected to use it. The project area is on the main floor with easy access from the courtyard.
- During the pre-construction meeting, periods and areas of low and no noise will be defined. The contractor shall account for it in the construction calendar and plan accordingly.
- The Gibb Hall loading dock shall always be unobstructed during construction.
- Road closures and traffic updates:
  - 6th street is scheduled to finalize next week
  - Blake Ave. will be closed for 2 weeks in October
- Other projects:
  - LSS and Gibb Controls project – Summer '27
- Contractor questions:

  Q: Is there any work for lighting controls?
  A: No. Lighting scope of project is replacing fixtures only

  Q: Where are the new receptacles in the floor box being fed from?
  A: There is an electrical panel inside the project area where receptacles shall be fed from.

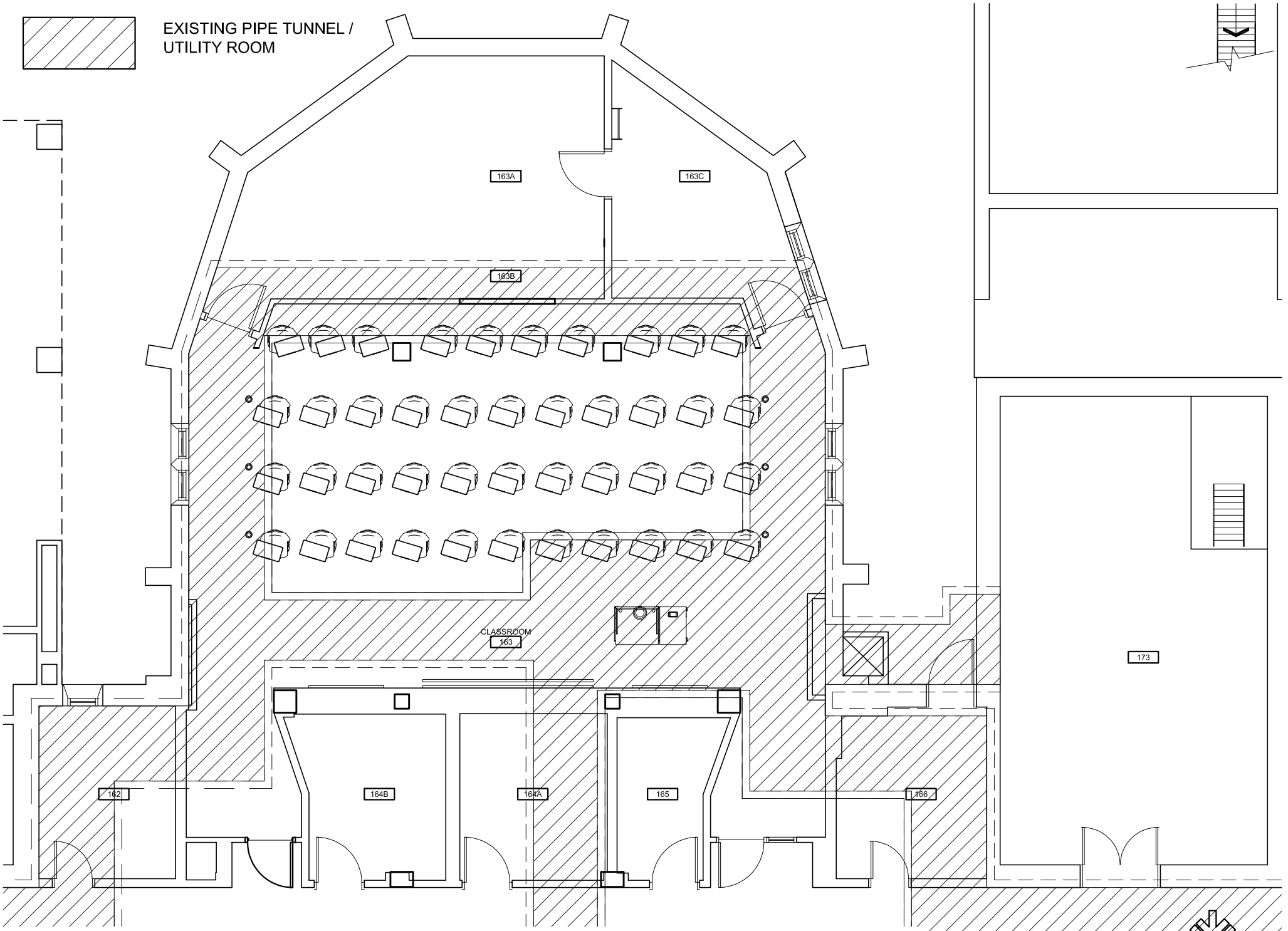
  Q: How thick is the slab deck?
  A: The slab deck on the areas to receive floor boxes is 7" thick. A floor plan outlining the existing tunnels below the project area is attached to this document for contractor reference.

  Q: Will laydown be allowed in the courtyard?
  A: Yes. The contractor will have some space available for laydown in the courtyard.



DPW & UI Life Science South Building
Classroom & Teaching Lab Improvements
Pre-Bid Sign In Sheet
September 23, 2026 01:00 PM

	Name	Company	Phone	E-mail (required for minutes distribution)
1	Ned Warnick	Design West Architects	509-332-3113	nwarnick@designwestpa.com
2	Isadora Lambert	Design West Architects	509-332-3113	ilambert@designwestpa.com
3	Brad Frazier	DPW	2089990242	brad.frazier@adm.idaho.gov
4	~~Bret Dills~~	~~HET AES~~	~~208 [illegible]~~	~~[illegible]~~
5	Jerry Hansen	Gropp Electric	986/600/7755	JHansen@[illegible].com
6	Sean Dorio	Sprenger Const.	509.432.3935	Sean.Dorio@gmail.com
7	~~Rafe Hewett~~	Kenaston Corp	208-513-3980	rafe@kenaston.com
8	Aaron Mansum	Mansum Construction	509-254-4034	aaron@mansum-construction.com
9	Mike Blankenship	IRS Environmental	509-998-2595	mblankenship@irsenviro.com
10	Gannon Reynolds	NNAL INC.	208-635-5400	Gannon.Reynolds@nnalinc.com
11	Lane Burnette	University of Idaho	208-790-2745	lburnette@uidaho.edu
12	Matt Proctor	UI AES	208-885-8888	mproctor@uidaho.edu
13				
14	Via Video conference:			
15	Aaron Rice - UI AES			
16	Kelvin Daniels - UI EHS			
17	Kenneth Schmidt - UI OIT			
18	Gina Tingley - UI COS			
19	Conner Wiench - UI OIT			
	Amy Thompson - UI AES			



DPW 25263 - LSS CLASSROOM & TEACHING LAB IMPROVEMENTS
Outline of existing pipe tunnels underneath project area
Scale: 1/8" = 1'-0"

ROOM No.	ROOM Name	FLOOR Finish	BASE Matl	N. WALL Matl	Finish	E. WALL Matl	Finish	S. WALL Matl	Finish	W. WALL Matl	Finish	CEILING Matl	Finish	REMARKS
163	Teaching Lab	CPT-1	RB-1	GYB/ E	PT-1	EXISTING	PT-1	EXISTING	PT-1	EXISTING	PT-1	E/ACT-1	E/FF	ACT-1 under bid alternate #3 - For base bid, match existing ceiling tiles

ABBREVIATIONS KEY (not all may apply)

ACT	Suspended Acoustic Ceiling	**CPT**	Carpet			**HW**	Hardwood Flooring			**PLYWD**	Plywood		**STRUC**	Open to Structure
BRK	Brick	**E**	Existing			**MDF**	Medium Density Fiberboard			**PT**	Paint		**WC**	Vinyl Wall Covering
CMU	Concrete Masonry Unit	**FF**	Factory Finish			**NC**	No Finished Ceiling			**RB**	Rubber Base		**WALK**	Walk Off Tile
CONC	Concrete Floor Paint	**FRP**	Fiber Reinforced Plastic			**NF**	No Finish			**STL**	Steel		**WD**	Wood Floor System
CMS	Clear Masonry Sealer	**GB**	Gypsum Wall Board			**P&R**	Patch and Repair Existing						**VCT**	Vinyl Composition Tile
CS	Clear Sealer	**GLASS**	Glazing System			**PLAM**	Plastic Laminate							

Material Legend / Key
09 00 00

Reference ABBREVIATION KEY above in Finish Schedule					
Spec.	**Section/Item**	**Reference**	**Mfgr./Product**	**Finish Color**	**Remarks**
Div. 5	**Metals**				
05 50 00	Metal Fabrications	-	None	Paint Exposed Steel Fabrications - see division 09 below	
Div. 6	**Wood and Plastics**				
06 20 00	Interior Finish Carpentry	-	None	Match architect's sample for wood species, stain color, and finish	
Div.7	**Thermal & Moisture Protection**				
07 92 00	Joint Sealants	-	See Sealant Requirements - Various Mnfr	Match adjacent material color being sealed	
Div. 8	**Doors and Windows**				
Div. 9	**Finishes**				
09 29 00	Gypsum board assemblies	-	None	Typical finish - Level 2, Level 5, per specs	
09 51 23	Acoustical Panel Ceilings	ACT-1	Armstrong, Cortega	White - 24" x 24" x 5/8"	
09 65 13	Resilient Base and Accessories				
	Rubber Base	RB-1	Johnsonite Rubber Wall Base	40 Black B	
09 68 13	Tile Carpeting				
	Carpet Tile	CPT-1	Mohawk Group - Learn & Live collection	Proficient GT432 12" x 36" - Brick Ashlar installation	
09 84 00	Sound Absorbing Wall Units	SP-1	Hush Acoustics	Oyster	48"x12" panels staggered 12"
		SP-2	Hush Acoustics	Sunflower	48"x12" panels staggered 12"
		SP-3	Hush Acoustics	Slate	48"x12" panels staggered 12"
09 91 00	Painting				
	Standard Paint (Interior)	PT-1	Sherwin Williams	Custom Color: Campus Off White (COW) - All intetior spaces including walls and gypsum board ceilings	

SECTION 09 51 23 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes modifications to the acoustic panels and exposed suspension systems for ceilings. Base bid scope includes replacing damaged acoustical panel ceiling tiles.
B. Bid Alternate #3: include the replacement of all acoustical panel ceiling tiles.
C. Products furnished, but not installed under this Section, include anchors, clips, and other ceiling attachment devices to be cast in concrete at ceilings.

1.2 DEFINITIONS

A. AC: Articulation Class.
B. CAC: Ceiling Attenuation Class.
C. LR: Light Reflectance coefficient.
D. NRC: Noise Reduction Coefficient.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.
B. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
    1. Ceiling suspension system members.
    2. Method of attaching hangers to building structure.
        a. Furnish layouts for cast-in-place anchors, clips, and other ceiling attachment devices whose installation is specified in other Sections.
    3. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.
    4. Minimum Drawing Scale: 1/4 inch = 1 foot.
C. Samples for Verification: For each component indicated and for each exposed finish required, prepared on Samples of size indicated below.
    1. Acoustical Panel: Set of 6-inch- square Samples of each type, color, pattern, and texture.
    2. Exposed Suspension System Members, Moldings, and Trim: Set of 12-inch- long Samples of each type, finish, and color.
D. Qualification Data: For testing agency.
E. Field quality-control test reports.
F. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each acoustical panel ceiling.
G. Research/Evaluation Reports: For each acoustical panel ceiling and components and anchor and fastener type.
H. Maintenance Data: For finishes to include in maintenance manuals.
I. Sustainable Design Criteria: Product Data for acoustical ceiling panel to be Greenguard certified or specified as no added ureaformaldehyde resins used during manufacturing.

1.4 QUALITY ASSURANCE

A. Acoustical Testing Agency Qualifications: An independent testing laboratory, or an NVLAP-accredited laboratory, with the experience and capability to conduct the testing indicated. NVLAP-accredited laboratories must document accreditation, based on a "Certificate of Accreditation" and a "Scope of Accreditation" listing the test methods specified.
B. Source Limitations:
    1. Acoustical Ceiling Panel: Obtain each type through one source from a single manufacturer.
    2. Suspension System: Obtain each type through one source from a single manufacturer.
C. Source Limitations: Obtain each type of acoustical ceiling panel and supporting suspension system through one source from a single manufacturer.

D. Fire-Test-Response Characteristics: Provide acoustical panel ceilings that comply with the following requirements:
   1. Surface-Burning Characteristics: Provide acoustical panels with the following surface-burning characteristics complying with ASTM E 1264 for Class A materials as determined by testing identical products per ASTM E 84:
      a. Smoke-Developed Index: 450 or less.
E. Seismic Standard: Provide acoustical panel ceilings designed and installed to withstand the effects of earthquake motions according to the following:
   1. Standard for Ceiling Suspension Systems Requiring Seismic Restraint: Comply with ASTM E 580.
   2. CISCA's Recommendations for Acoustical Ceilings: Comply with CISCA's "Recommendations for Direct-Hung Acoustical Tile and Lay-in Panel Ceilings--Seismic Zones 0-2."
   3. ASCE 7, "Minimum Design Loads for Buildings and Other Structures": Section 9, "Earthquake Loads."
F. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
   1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING
A. Deliver acoustical panels, suspension system components, and accessories to Project site in original, unopened packages and store them in a fully enclosed, conditioned space where they will be protected against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.
B. Before installing acoustical panels, permit them to reach room temperature and a stabilized moisture content.
C. Handle acoustical panels carefully to avoid chipping edges or damaging units in any way.

1.6 PROJECT CONDITIONS
A. Environmental Limitations: Do not install acoustical panel ceilings until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, work above ceilings is complete, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
   1. Pressurized Plenums: Operate ventilation system for not less than 48 hours before beginning acoustical panel ceiling installation.
   2. Do not install acoustical ceilings until building is enclosed, sufficient heat is provided, dust generating activities have terminated and overhead mechanical work is completed, tested and approved
   3. Permit wet work to dry or cure prior to commencement of installation
   4. Maintain temperatures of 61 degrees F to 78 degrees F and humidity of 20% to 40% prior to, during and after installation

1.7 COORDINATION
A. Coordinate layout and installation of acoustical panels and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.
B. Coordinate and provide 30 days notice for Owner installed equipment above ceilings
C. Following installation of metal grid, allow up to 14 days for Owner installation of above ceiling items before tile installation

1.8 EXTRA MATERIALS
A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Acoustical Ceiling Panels: Provide six extra cartons (12 each) of tile of each size for each type of ceiling tile and store as directed.

2. Suspension System Components: Quantity of each exposed component equal to 2.0 percent of quantity installed.
3. Hold-Down Clips: Equal to 2.0 percent of quantity installed.

PART 2 - PRODUCTS

2.1 ACOUSTICAL PANELS, GENERAL

A. Acoustical Panel Standard: Provide manufacturer's standard panels of configuration indicated that comply with ASTM E 1264 classifications as designated by types, patterns, acoustical ratings, and light reflectance, unless otherwise indicated.
   1. Mounting Method for Measuring NRC: Type E-400; plenum mounting in which face of test specimen is 15-3/4 inches away from test surface per ASTM E 795.

B. Acoustical Panel Colors and Patterns: Match appearance characteristics indicated for each product type.
   1. Where appearance characteristics of acoustical panels are indicated by referencing pattern designations in ASTM E 1264 and not manufacturers' proprietary product designations, provide products selected by Architect from each manufacturer's full range that comply with requirements indicated for type, pattern, color, light reflectance, acoustical performance, edge detail, and size.

C. Broad Spectrum Antimicrobial Fungicide and Bactericide Treatment: Provide acoustical panels treated with manufacturer's standard antimicrobial formulation that inhibits fungus, mold, mildew, and gram-positive and gram-negative bacteria and showing no mold, mildew, or bacterial growth when tested according to ASTM D 3273 and evaluated according to ASTM D 3274 or ASTM G 21.

D. Antimicrobial Fungicide Treatment: Provide acoustical panels with face and back surfaces coated with antimicrobial treatment consisting of manufacturer's standard formulation with fungicide added to inhibit growth of mold and mildew and showing no mold or mildew growth when tested according to ASTM D 3273 and evaluated according to ASTM D 3274 or ASTM G 21.

2.2 ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING

A. **Bid Alternate #: ACT-1 -** Lay-in Acoustical Ceiling Tile Products: Subject to compliance with requirements, Provide panels complying with the following:
   1. Manufacturer and product:
      a. Basis of Design: Armstrong, Cortega, White - 2’ x 2’ x 5/8”
      b. Celotex; equivalent to above
      c. BPB USA; equivalent to above.
      d. Chicago Metallic Corporation; equivalent to above.
      e. Ecophon CertainTeed, Inc.; equivalent to above.
      f. USG Interiors, Inc.; equivalent to above.
   2. Classification: Provide panels complying with ASTM E 1264 for type, form, and pattern as follows:
      a. Type and Form: Type III, mineral base with painted finish; Form 2, cast or molded.
      b. Color: White.
      c. LR: Not less than 0.84.
      d. NRC: Not less than 0.55.
      e. Edge/Joint Detail: Square Lay In.
      f. Thickness: 5/8 inch.
      g. Modular Size: 24 by 24 inches.

Base Bid: ACT-2 - Lay-in Acoustical Ceiling Tile Products: 24”x 24” <u>to match existing adjacent tiles</u> and subject to compliance with requirements. Provide panels complying with the following:
   3. Manufacturer and product:
      a. Armstrong
      b. Celotex

c. BPB USA
d. Chicago Metallic Corporation
e. Ecophon CertainTeed, Inc.
f. USG Interiors

4. Classification: Provide panels complying with ASTM E 1264 for type, form, and pattern as follows:
   a. Type and Form: Type III, mineral base with painted finish; Form 2, cast or molded.
   b. Color: White.
   c. LR: Not less than 0.84.
   d. NRC: Not less than 0.55.
   e. Edge/Joint Detail: Square Lay In.
   f. Thickness: 5/8 inch.
   g. Modular Size: 24 by 24 inches.

2.3 METAL SUSPENSION SYSTEMS, GENERAL

A. Metal Suspension System Standard: Provide manufacturer's standard direct-hung metal suspension systems of types, structural classifications, and finishes indicated that comply with applicable requirements in ASTM C 635.

B. Finishes and Colors, General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Provide manufacturer's standard factory-applied finish for type of system indicated.
   1. High-Humidity Finish: Comply with ASTM C 635 requirements for "Coating Classification for Severe Environment Performance" where high-humidity finishes are indicated.

C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.
   1. Anchors in Concrete: Anchors of type and material indicated below, with holes or loops for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to five times that imposed by ceiling construction, as determined by testing per ASTM E 488 or ASTM E 1512 as applicable, conducted by a qualified testing and inspecting agency.
      a. Type: Postinstalled expansion anchors.
      b. Corrosion Protection: Carbon-steel components zinc plated to comply with ASTM B 633, Class Fe/Zn 5 (0.005 mm) for Class SC 1 service condition.
      c. Corrosion Protection: Stainless-steel components complying with ASTM F 593 and ASTM F 594, Group 1 Alloy 304 or 316 for bolts; Alloy 304 or 316 for anchor.
      d. Corrosion Protection: Components fabricated from nickel-copper-alloy rods complying with ASTM B 164 for UNS No. N04400 alloy.
   2. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers of type indicated, and with capability to sustain, without failure, a load equal to [10] times that imposed by ceiling construction, as determined by testing per ASTM E 1190, conducted by a qualified testing and inspecting agency.

D. Wire Hangers, Braces, and Ties: Provide wires complying with the following requirements:
   1. Zinc-Coated, Carbon-Steel Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper.
   2. Stainless-Steel Wire: ASTM A 580/A 580M, Type 304, nonmagnetic.
   3. Nickel-Copper-Alloy Wire: ASTM B 164, nickel-copper-alloy UNS No. N04400.
   4. Size: Select wire diameter so its stress at 3 times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire but provide not less than 0.106-inch- diameter wire.

E. Hanger Rods: Mild steel, zinc coated or protected with rust-inhibitive paint.

F. Angle Hangers: Angles with legs not less than 7/8 inch wide; formed with 0.04-inch- thick, galvanized steel sheet complying with ASTM A 653/, G90 coating designation; with bolted connections and 5/16-inch- diameter bolts.

G. Seismic Stabilizer Bars: Manufacturer’s standard perimeter stabilizers designed to accommodate seismic forces.

H. Seismic Struts: Manufacturer’s standard compression struts designed to accommodate seismic forces.
I. Seismic Clips: Manufacturer’s standard seismic clips designed and spaced to secure acoustical panels in-place.
J. Hold-Down Clips: Where indicated, provide manufacturer's standard hold-down clips spaced 24 inches o.c. on all cross tees.

2.4 METAL SUSPENSION SYSTEM FOR ACOUSTICAL PANEL CEILING

A. Available Products: Subject to compliance with requirements, provide one of the following:
1. Basis of Design: Armstrong World Industries, Inc.; Prelude Grid
2. BPB USA; equivalent to above
3. Chicago Metallic Corporation; equivalent to above
4. Ecophon CertainTeed, Inc.; equivalent to above
5. USG Interiors, Inc.; equivalent to above

B. Wide-Face, Capped, Double-Web: Steel Suspension System: Main and cross runners roll formed from cold-rolled steel sheet, prepainted, electrolytically zinc coated, or hot-dip galvanized according to ASTM A 653/A 653M, not less than G30 coating designation, with prefinished 15/16-inch- wide metal caps on flanges.
1. Structural Classification: Intermediate-duty system.
2. End Condition of Cross Runners: Override (stepped) or butt-edge type.
3. Face Design: Flat, flush.
4. Cap Material: Steel cold-rolled sheet.
5. Cap Finish: Painted white.

C. Provide hold-down clips at all panels.
D. Provide identification rivets at panels for access to all maintenance items including but not limited to valves, dampers, disconnects, etc. as required by Owner. Reference Division 22 specification for Identification for Plumbing and Equipment for rivet colors corresponding with service equipment.

2.5 METAL EDGE MOLDINGS AND TRIM

A. Available Products: Subject to compliance with requirements, provide one of the following:
1. Basis of Design: Armstrong World Industries, Inc.; Prelude Grid
2. BPB USA; equivalent to above
3. Chicago Metallic Corporation; equivalent to above
4. Ecophon CertainTeed, Inc.; equivalent to above
5. USG Interiors, Inc.; equivalent to above

B. Roll-Formed, Sheet-Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.
1. Provide manufacturer's standard edge moldings that fit acoustical panel edge details and suspension systems indicated and that match width and configuration of exposed runners, unless otherwise indicated.
2. For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

2.6 ACOUSTICAL SEALANT

A. Available Products: Subject to compliance with requirements, provide one of the following:
1. Acoustical Sealant for Exposed and Concealed Joints:
a. Pecora Corporation; AC-20 FTR Acoustical and Insulation Sealant.
b. USG Corporation; SHEETROCK Acoustical Sealant.
2. Acoustical Sealant for Concealed Joints:
a. OSI Sealants, Inc.; Pro-Series SC-175 Rubber Base Sound Sealant.
b. Pecora Corporation; BA-98.
c. Tremco, Inc.; Tremco Acoustical Sealant.

B. Acoustical Sealant for Exposed and Concealed Joints: Manufacturer's standard nonsag, paintable, nonstaining latex sealant, with a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24), complying with ASTM C 834 and effective in reducing airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

C. Acoustical Sealant for Concealed Joints: Manufacturer’s standard nondrying, nonhardening, nonskinning, nonstaining, gunnable, synthetic-rubber sealant, with a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24), recommended for sealing interior concealed joints to reduce airborne sound transmission.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, including structural framing to which acoustical panel ceilings attach or abut, with Installer present, for compliance with requirements specified in this and other Sections that affect ceiling installation and anchorage and with requirements for installation tolerances and other conditions affecting performance of acoustical panel ceilings.

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

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders, and comply with layout shown on reflected ceiling plans.

3.3 INSTALLATION

A. General: Install acoustical panel ceilings to comply with ASTM C 636 and seismic design requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Suspend ceiling hangers from building's structural members and as follows:

1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structure or of ceiling suspension system.
2. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
3. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.
4. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers at spacings required to support standard suspension system members, install supplemental suspension members and hangers in form of trapezes or equivalent devices.
5. Secure wire hangers to ceiling suspension members and to supports above with a minimum of three tight turns. Connect hangers directly either to structures or to inserts, eye screws, or other devices that are secure and appropriate for substrate and that will not deteriorate or otherwise fail due to age, corrosion, or elevated temperatures.
6. Secure flat, angle, channel, and rod hangers to structure, including intermediate framing members, by attaching to inserts, eye screws, or other devices that are secure and appropriate for both structure to which hangers are attached and type of hanger involved. Install hangers in a manner that will not cause them to deteriorate or fail due to age, corrosion, or elevated temperatures.
7. Do not support ceilings directly from permanent metal forms or floor deck. Fasten hangers to cast-in-place hanger inserts, postinstalled mechanical or adhesive anchors, or power-actuated fasteners that extend through forms into concrete.
8. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.
9. Do not attach hangers to steel deck tabs.

10. Do not attach hangers to steel roof deck. Attach hangers to structural members.
11. Space hangers not more than 48 inches o.c. along each member supported directly from hangers, unless otherwise indicated; provide hangers not more than 8 inches from ends of each member.
12. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced standards and publications.

C. Secure bracing wires to ceiling suspension members and to supports with a minimum of four tight turns. Suspend bracing from building's structural members as required for hangers, without attaching to permanent metal forms, steel deck, or steel deck tabs. Fasten bracing wires into concrete with cast-in-place or postinstalled anchors.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels.
1. Apply acoustical sealant in a continuous ribbon concealed on back of vertical legs of moldings before they are installed.
2. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
3. Do not use exposed fasteners, including pop rivets, on moldings and trim.

E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
1. Arrange directionally patterned acoustical panels as follows:
   a. As indicated on reflected ceiling plans.
2. For square-edged panels, install panels with edges fully hidden from view by flanges of suspension system runners and moldings.
3. For reveal-edged panels on suspension system runners, install panels with bottom of reveal in firm contact with top surface of runner flanges.
4. For reveal-edged panels on suspension system members with box-shaped flanges, install panels with reveal surfaces in firm contact with suspension system surfaces and panel faces flush with bottom face of runners.
5. Paint cut edges of panel remaining exposed after installation; match color of exposed panel surfaces using coating recommended in writing for this purpose by acoustical panel manufacturer.
6. Install hold-down clips in areas indicated, in areas required by authorities having jurisdiction, and for fire-resistance ratings; space as recommended by panel manufacturer's written instructions, unless otherwise indicated.
7. Install clean-room gasket system in areas indicated, sealing each panel and fixture as recommended by panel manufacturer's written instructions.
8. Protect lighting fixtures and air ducts to comply with requirements indicated for fire-resistance-rated assembly.

3.4 CLEANING

A. Clean exposed surfaces of acoustical panel ceilings, including trim, edge moldings, and suspension system members. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage. Remove and replace ceiling components that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION 09 51 23