

ADDENDUM NO.2

WILLINGBORO PERFORMING ARTS CENTER- AUDITORIUM RENOVATION

TO: Prospective Bidders
FROM: Jim Mullan, PE
DATE: May 30, 2023
SUBJECT: **Willingboro Performing Arts Center – Auditorium Renovation
Project # WTCEX 21015**

In reference to the Technical Specifications for the Willingboro Performing Arts Center Auditorium Renovation, Addendum No. 2 is hereby issued to address changes to the contract documents.

Please find the following items to be **modified** in the design plans and specifications:

1. **Theatrical Lighting System and Theatrical Sound System**

Please see Attachment A for modified specification sections 265561 and 274101.

Note that edited Paragraphs are identified with a vertical line in the right border. Removed text is shown as ~~strike through~~. New text is shown as **bold** font.

The bid opening date shall be revised to read: June 13, 2023 at 10:00 A.M. prevailing time.

Clarifications

In addition to the specification **modifications** offered above, the following clarifications are also offered in response to submitted questions:

Question #1:

Under 1.4 Luminaires and Accessories, letter "C" has the Chauvet Ovation E-910FC fixture specified, which does not come with a required lens tube. There are several degrees to choose from - 19, 26, 36, 14, 10 & 5 - each with different pricing. Are there existing lens tubes that are to be used with these fixtures or were they forgotten in the specifications?

Response #1:

The question is not relevant per the modified specification noted above. Specifically, the fixture mentioned is no longer part of the bid spec. The Chauvet Professional COLORdash PAR-QUAD 18 is the only fixture specified.

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Question #2:

Is stage lighting controller programming and training required? If so, please specify what level of programming is required and how much training time is required.

Response #2:

Yes, programming and training on the **Theatrical Lighting System and Theatrical Sound System** will be required. Bidders should provide for eight (8) hours of programming and training.

Question #3:

Please refer to drawing FP100. On our site visit today, it was confirmed that the ductwork above the area behind the stage (i.e. left of the stage on the drawing) is accessible only via a ladder from a storage room at the basket board courts adjacent to the stage area. The area is completely enclosed in an attic space and there are no sprinklers installed.

Please confirm that the ductwork in this area needs to have sprinklers above and beneath the ductwork per FP documents as all of them are at least 48" wide. Also, there is a portion of ductwork which has been abandoned (It looks like it was replaced by another duct located above it) If it is not removed, it will need to have sprinklers as required.

Response #3:

The attic space described in the question above is not part of the Contract. See Attachment B for Clarification of the Note on plan FP100. Specifically, the note applies only to the hatched area on the Plan.

Question #4:

Is there a spec for the ADA seats in the very back of the auditorium? Or, please confirm that they are not part of this phase.

Response #2:

The ADA seating shown on plan is not part of this Phase currently being bid.

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Acknowledgement of Addendum #2

Bidders are required to sign and submit this page with the bid package as verification of receiving Addendum #2. The signed Addendum acknowledgement must be included with the bid submission packet.

Company Name

Print Name

Signature

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WILLINGBORO PERFORMING ARTS CENTER – AUDITORIUM RENOVATION

ATTACHMENT A

SECTION 265561

THEATRICAL LIGHTING SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes theatrical lighting fixtures, mounting hardware, wiring and control components.

1.2 ABBREVIATIONS

- A. NRTL: Nationally Recognized Test Laboratory.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A minimum of 15 years' experience manufacturing theatrical control systems.
- B. Installer Qualifications: A minimum of 5 years' experience installing theatrical control systems and luminaires.

1.4 WARRANTY

- A. Materials: Warranties vary by fixture. Warranty periods are identified in the Products Section, with each listed fixture.
- B. Workmanship: Three years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 LUMINAIRES AND ACCESSORIES

- A. General: Equipped with pigtail, yoke with pipe clamp, safety cable for batten mounting.
 - 1. Metal Parts: Steel, free of burrs, sharp corners and edges.
- B. Ellipsoidal Spotlights: Basis-Of-Design Manufacturer: Chauvet Professional; COLORdash PAR-Quad 18; or equal. Warranty: Two years from date of Substantial Completion.
 - 1. Provide ~~eight (8)~~ **twenty-one (21)** fixtures.
- C. ~~Zoom Ellipsoidal Spotlights: Basis-Of-Design Manufacturer: Chauvet Professional; Ovation E-910FC. Warranty: Three years from date of Substantial Completion.~~
 - 1. ~~Provide eight (8) fixtures.~~

- D. ~~Fresnel Lens Spotlights: Basis Of Design Manufacturer: Chauvet Professional; Ovation F-145WW. Warranty: Three years from date of Substantial Completion.~~
~~1. Provide eight (8) fixtures.~~
- E. Chauvet CTC-50 HC Half Couplers. Provide twenty-four (24), one for each fixture.

2.2 DISTRIBUTION COMPONENTS

- A. Connector Strip: Listed and labeled by an NRTL; factory-wired wireway and receptacle assembly.
- B. Plug-in Boxes: Listed and labeled by an NRTL; factory-wired wireway and receptacle assembly, 24-inches long unless otherwise indicated.
- C. Gridiron Junction Boxes: Listed and labeled by an NRTL, factory wired with terminal strips and concentric knock-outs on all sides.

2.3 LIGHTING CONTROL SYSTEM

- A. Chauvet Lighting: CHAMSYS MagicQ MQ70 compact console; or equivalent.
 - 1. Quantity Required: 1.
- B. ~~Chauvet Lighting: CHAMSS10SCGATE WAY, ; or equivalent.~~
 - 1. ~~Quantity Required: 1.~~

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Install luminaires with mounting hardware secured to structural steel framing members. See details on the drawings.
- B. During installation, test each luminaire to ensure full illumination, zoom features, and full luminaire maneuverability.

3.2 DEMONSTRATION AND TRAINING

- A. Engage installer to demonstrate and train Owner's personnel with theatrical lighting system operation procedures. Provide Owner all operating manuals for all installed equipment.

3.3 PROTECTION

- A. Install dust cover onto lighting control console.

END OF SECTION 265561

SECTION 274101

THEATRICAL SOUND SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. The sound system is a proprietary specification, based upon BOSE components selected for this specific application. The selected components were based upon an engineered audio analysis of the auditorium interior and wall surface texture.
 - 1. If the Bidder chooses to submit a complete sound system from another manufacturer, refer to Paragraph 1.2.B for submittal requirements.
- B. Section includes sound system consisting of the following:
 - 1. Control console components, Microphones, Amplifiers and Loudspeakers.
 - a. BOSE Loudspeaker System Design Report is included in this specification section. It immediately follows Part 3 – Execution I.

1.2 ACTION SUBMITTALS

- A. Submittal Requirements for BOSE designed sound system:
 - 1. Product Data for each sound system component, and its' location inside the control console.
- B. Submittal Requirements for sound systems from other manufacturers: See Paragraph 1.3 below.

1.3 DELEGATED DESIGN SUBMITTAL

- A. This submittal is only required if the sound system submitted is other than BOSE.
- B. Product Data for each sound system component, and its' location inside the control console.
- C. Provide a complete sound system design solution, prepared and signed by a Certified Audio Engineer.
- D. Provide an Audio Model, presented to the Owner and Architect, capable of providing audio playback from any designated seat within the auditorium.
- E. For each component submitted, provide a side-by-side comparison with the comparable product recommended by BOSE.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A minimum of 15 years' experience manufacturing theatrical sound components and control systems.

- B. Installer Qualifications: A minimum of 5 years' experience installing theatrical sound components and control systems.

1.5 WARRANTY

- A. Materials and Workmanship: Audio Controls: Five years.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Deliver sound system components in their original factory packaging, with manufacturers label clearly visible. Store products within the auditorium, at a location where they will not provide interference with ongoing construction activities.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. All products listed below are based upon the BOSE engineered audio analysis. Products from alternate manufacturers must meet or exceed the performance requirements of the products listed.
- B. Obtain all products from same manufacturer, or endorsed by same manufacturer to make their designed sound system a complete and fully functional installation.

2.2 SOUND SYSTEM CONTROL CONSOLE

- A. Middle Atlantic PD-915R; Rackmount Power, 9-outlet, 15A, Basic Surge.
 - 1. Quantity Required: ~~2~~ **1**.
- B. **Middle Atlantic BRK12; 12Space (21) Rack, 18 Deep.**
 - 1. **Quantity Required: 1.**
- C. **Middle Atlantic EWR-12-22SD; 12Space / 22D Econo Wallrack, Black Door.**
 - 1. **Quantity Required: 1.**
- D. **Allen-Heath AH-SQ-6; 96kHz XCVI FPGA processing, 48 Input Channels, DEEP Processing Ready, 25 Faders / 6 Layers, 12 Stereo mixes+LR, 3 Stereo Matrix, 7 capacitive touchscreen.**
 - 1. **Quantity Required: 1.**
- E. ~~Middle Atlantic LBP-1.5R90; 10 Pack 90 degree 1.5" offset.~~
 - 1. ~~Quantity Required: 1.~~
- F. ~~Strong SR-SCREWS-200JAR; 10-32 Rack Screws.~~
 - 1. ~~Quantity Required: 1.~~

- G. ~~Allen-Heath Avantis; AH-AVANTIS-WDPACK Mixer.~~
~~1. Quantity Required: 1.~~
- H. ~~Allen-Heath AH-GX4816-48x16 Audio Expander.~~
~~1. Quantity Required: 1.~~
- I. Tascam CD-400U; CD/SD/USB Player with Bluetooth Receiver and FM/AM Tuner.
1. Quantity Required: 1.
- J. **Allen-Heath AH 10887 CAT6 Cable, 100M, Drum w/ Locking Connectors.**
1. Quantity Required: 1.
- K. ~~Wirepath NST-122-PL-500-BL; 12-Gauge 2-Conductor Plenum Speaker Wire—500ft. Nest-In-Box (black).~~
~~1. Quantity Required: 4.~~

2.3 MICROPHONE SYSTEMS AND ACCESSORIES

- A. RF Venue D-ARCD9FRVENUE D-ARCD9; diversity architecture antenna.
1. Quantity Required: 1.
- B. Sense UHF Wireless Microphone Receiver SE-350-WR-1CHD, 1ch.
1. Quantity Required: ~~3~~ 2.
- C. Sense UHF Wireless Condenser Hand-Held Microphone; SE-350-WT HAND.
1. Quantity Required: ~~3~~ 2.
- D. Sense SE-350- WT-BODY; UHF Wireless Microphone Transmitter – Bodypack Lavalier.
1. Quantity Required: 2.
- E. ~~Sense SE-300-LAV-BLK; Miniature Lavalier Microphone—Black.~~
~~1. Quantity Required: 3 1.~~
- F. ~~Sense SE-500-SHE-T; Single Ear Headset Microphone—Tan.~~
~~1. Quantity Required: 3 1.~~
- G. ~~Sense SE-350-WT-CH; UHF 2-Slot Charger.~~
~~1. Quantity Required: 3 1.~~
- H. ~~Sense SE-300-SMB-ST; Universal XLR Shockmount Base with Screw Terminal.~~
~~1. Quantity Required: 2 1.~~
- I. ~~Sense SE-300-GM1B-C; 18” Condenser Gooseneck Microphone—Cardioid.~~
~~1. Quantity Required: 2 1.~~
- J. ~~Sense Handheld Dynamic Microphone with On/Off Switch.~~
~~1. Quantity Required: 3 1.~~
- K. ~~Binary sB6-XLR-3FM-50F Thure microphone cable.~~
~~1. Quantity Required: 6 2.~~

- L. SKB Cases 1SKB-R6UW 6U eSeries Rolling Rack.
 - 1. Quantity Required: 1.
- M. ~~Strong SR-FS-SYSTEM-DC-21U; Strong FS Series Rack System with DC Fans—24 inch depth |21U.~~
 - ~~1. Quantity Required: 1.~~
- N. Strong SR-DRAWER-2U; Lockable Rack Drawer | 2U.
 - 1. Quantity Required: 1.
- O. ~~Middle Atlantic RK12; 12 space (21) rack, 16 deep.~~
 - ~~1. Quantity Required: 1.~~
- P. ~~Wirepath SP-CAT6PS-1000-BLK; Cat 6 550MHz Shielded Plenum Wire—1000 ft spool—Black.~~
 - ~~1. Quantity Required: 1.~~

2.4 LOUDSPEAKERS AND ACCESSORIES

- A. BOSE Professional 730999-8860 ShowMatch SM20 DeltaQ Array Loudspeaker.
 - 1. Quantity Required: 4.
- B. BOSE Professional 730999-8850 ShowMatch SM10 DeltaQ Array Loudspeaker.
 - 1. Quantity Required: 2.
- C. BOSE Professional 766713-9610 ShowMatch SM20 WG12 Waveguide for SM20.
 - 1. Quantity Required: 2.
- D. BOSE Professional 734302-0110 ShowMatch SMS118 DeltaQ Subwoofer.
 - 1. Quantity Required: 4.
- E. **LEA Professional CONNECT 704; 4 Channel x 700 watt @ 4. 8. 70V and 100V per channel. Internal DSP w/ Crossovers, IoT Device with built in WiFi Hotspot, WiFi or FAST Ethernet connectivity and Highly Efficient Power Supply with Class D Output Stage.**
 - 1. **Quantity Required: 1.**
- F. **LEA Professional CONNECT 1504; 4 Channel x 1500 watt @ 4. 8. 70V and 100V per channel. Advanced DSP w/ FIR Crossovers, IoT Device with built in WiFi Hotspot, WiFi or FAST Ethernet connectivity and Highly Efficient Power Supply with Class D Output Stage.**
 - 1. **Quantity Required: 1.**
- G. **LEA Professional CONNECT 702; 2 Channel x 700 watt @ 4. 8. 70V and 100V per channel. Internal DSP w/ Crossovers, IoT Device with built in WiFi Hotspot, WiFi or FAST Ethernet connectivity and Highly Efficient Power Supply with Class D Output Stage.**
 - 1. **Quantity Required: 1.**
- H. ~~BOSE Professional 343546-1110 PowerMatch PM8500N Configurable Amplifier Network Model 120V NA.~~
 - ~~1. Quantity Required: 4.~~

- I. ~~BOSE Professional 361813-1110 PowerMatch PM4500N Configurable Amplifier Network Model 120V NA.~~
 - ~~1. Quantity Required: 1.~~
- J. ~~BOSE Professional 834317-1110 ControlSpace EX-1280 Processor.~~
 - ~~1. Quantity Required: 1.~~
- K. ~~BOSE Professional 772238-0110 PowerMatch Amplink 24 Channel Card.~~
 - ~~1. Quantity Required: 5.~~
- L. BOSE Professional 845332-0110 ShowMatch Array Frame Multipoint Bracket.
 - 1. Quantity Required: 2.
- M. BOSE Professional 770299-0110 ShowMatch T-Bar Array Frame.
 - 1. Quantity Required: 2.

2.5 CONTROL CONSOLE DUST COVER

- A. Provide nylon, non-padded, dust cover sized to accommodate control console. When installed, the bottom edge of the dust cover shall not exceed 4-inches above the finished floor.
 - 1. Allen-Heath AH AP11333; Dust Cover for SQ-6.**
 - a. Quantity Required: 1.**

PART 3 - EXECUTION

3.1 EXAMINATION

- A. With Installer present, examine components and substrates upon which components will be installed, for compliance with requirements and other conditions affecting performance of the Work. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install components as directed by manufacturer, in compliance with manufacturers' requirements.

3.3 FIELD QUALITY CONTROL

- A. With the Manufacturers' Representative, Owner and Architect present, perform a quality control audio test at a minimum of nine locations within the auditorium. Locations shall be as follows:
 - 1. Left Seating Section: Center of Rows A, F and M.
 - 2. Center Seating Section: Center of Rows A, F and M.
 - 3. Right Seating Section: Center of Rows A, F and M.
- B. If submitting a system other than BOSE, the installation audio test shall match the previously submitted shop-drawing audio test.

3.4 ADJUSTING

- A. Adjust speaker tilt and rotation to obtain optimal audio quality within the auditorium. Replace damaged and / or malfunctioning components which the manufacturer deems unrepairable.

3.5 DEMONSTRATION AND TRAINING

- A. Engage manufacturers' representative to provide on-site, hands-on, system operation demonstration and training exercises. Schedule training session with Owner, ensuring Owners' operation personnel availability.
- B. Turn over operation and maintenance manuals to Owner at time of demonstration and training instruction. Provide manufacturers and installers contact information for Owner's future reference.

3.6 CLEANING

- A. Follow manufacturers recommendations for cleaning console and individual components. Install control console dust cover prior to turning system over to the Owner.

3.7 MAINTENANCE

- A. Revisit site after 6 months, and after 12 months, to review operations and maintenance with Owner's personnel.

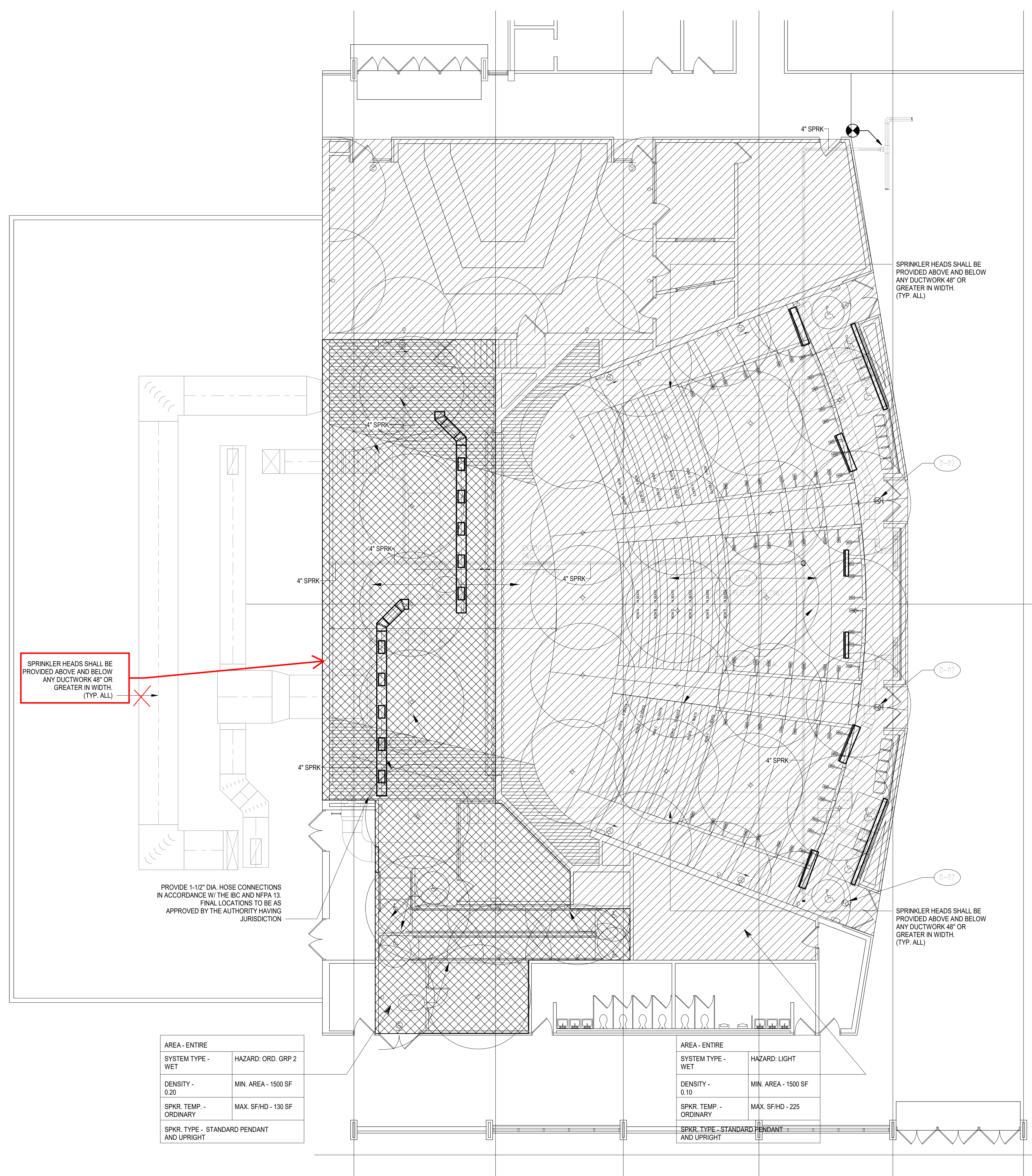
END OF SECTION 126100

ADDENDUM NO.2
WILLINGBORO PERFORMING ARTS CENTER – AUDITORIUM RENOVATION

ATTACHMENT B

GENERAL NOTES:

- REFER TO FP001 AND E001 FOR FIRE PROTECTION NOTES, LEGENDS AND ABBREVIATIONS.
- REFER TO SCHEDULES AND FIRE PROTECTION DETAILS PERTAINING TO THIS PROJECT.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED PIPING, VALVES, & APPURTENANCES TO PROVIDE A COMPLETE WORKING SYSTEM.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHALL MAINTAIN ALL CLEARANCES (INSTALLATION AND MAINTENANCE) AS NOTED WITHIN THE WRITTEN INSTRUCTIONS.
- ALL PENETRATIONS OF FIRE RATED CONSTRUCTION SHALL MAINTAIN THE FIRE RATING OF THE THE ASSEMBLY AS PER THE INTERNATIONAL BUILDING CODE.
- COORDINATE FIRE ALARM RELATED INSTALLATION WITH ELECTRICAL CONTRACTOR AND DESIGN DRAWINGS.
- ALL VALVES SHALL BE INSTALLED ACCESSIBLE.
- ALL PIPE SIZES REPRESENTED ON THE DRAWINGS AND RISER DIAGRAMS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE THE REQUIRED SIZE PER HYDRAULIC CALCULATIONS. COORDINATE WITH THE LOCAL FIRE DEPARTMENT FOR FDC SIZE.
- PIPE SIZES AND SPRINKLER HEAD LOCATIONS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE REQUIRED SIZE PER HYDRAULIC CALCULATIONS COORDINATE WITH LOCAL FIRE DEPARTMENT FOR FDC SIZE.



SPRINKLER HEADS SHALL BE PROVIDED ABOVE AND BELOW ANY DUCTWORK 48\"/>

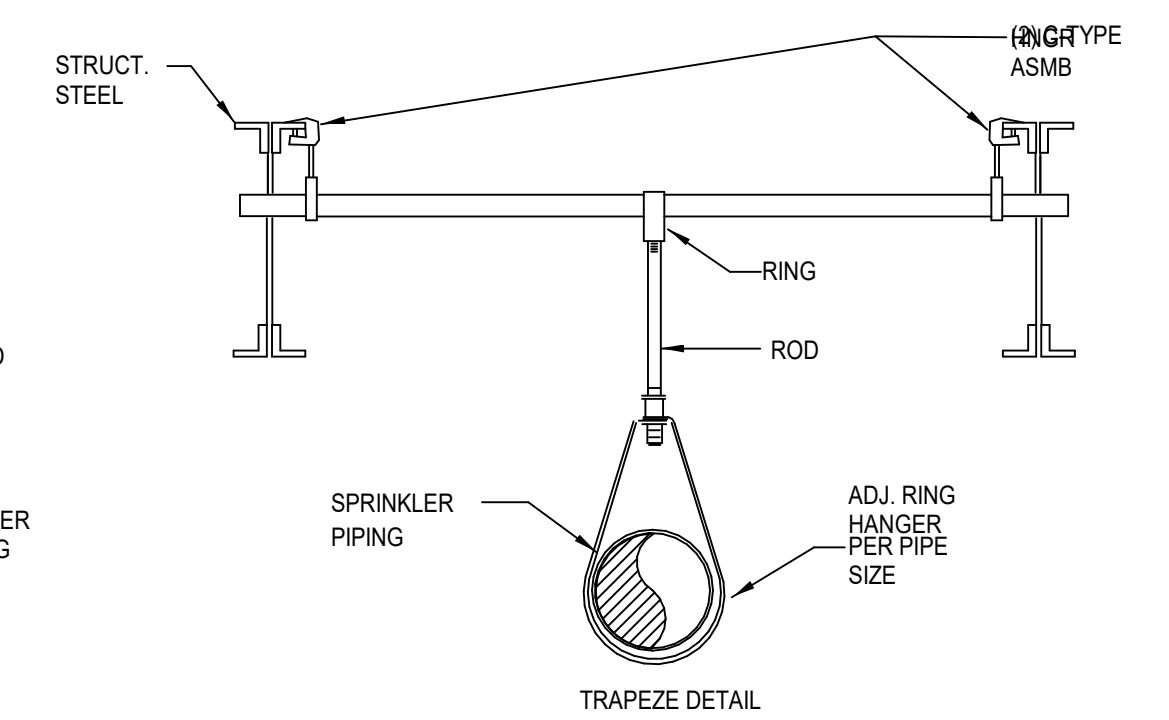
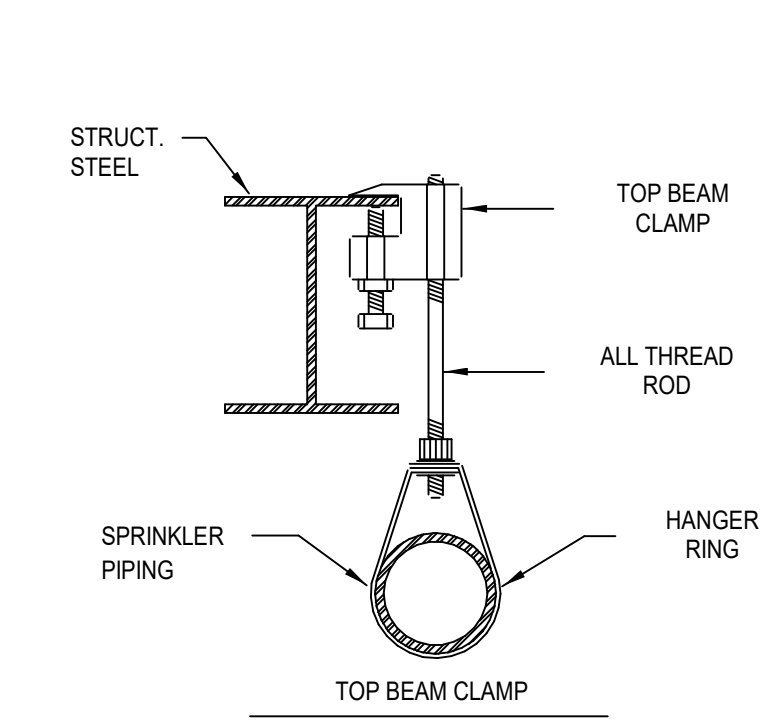
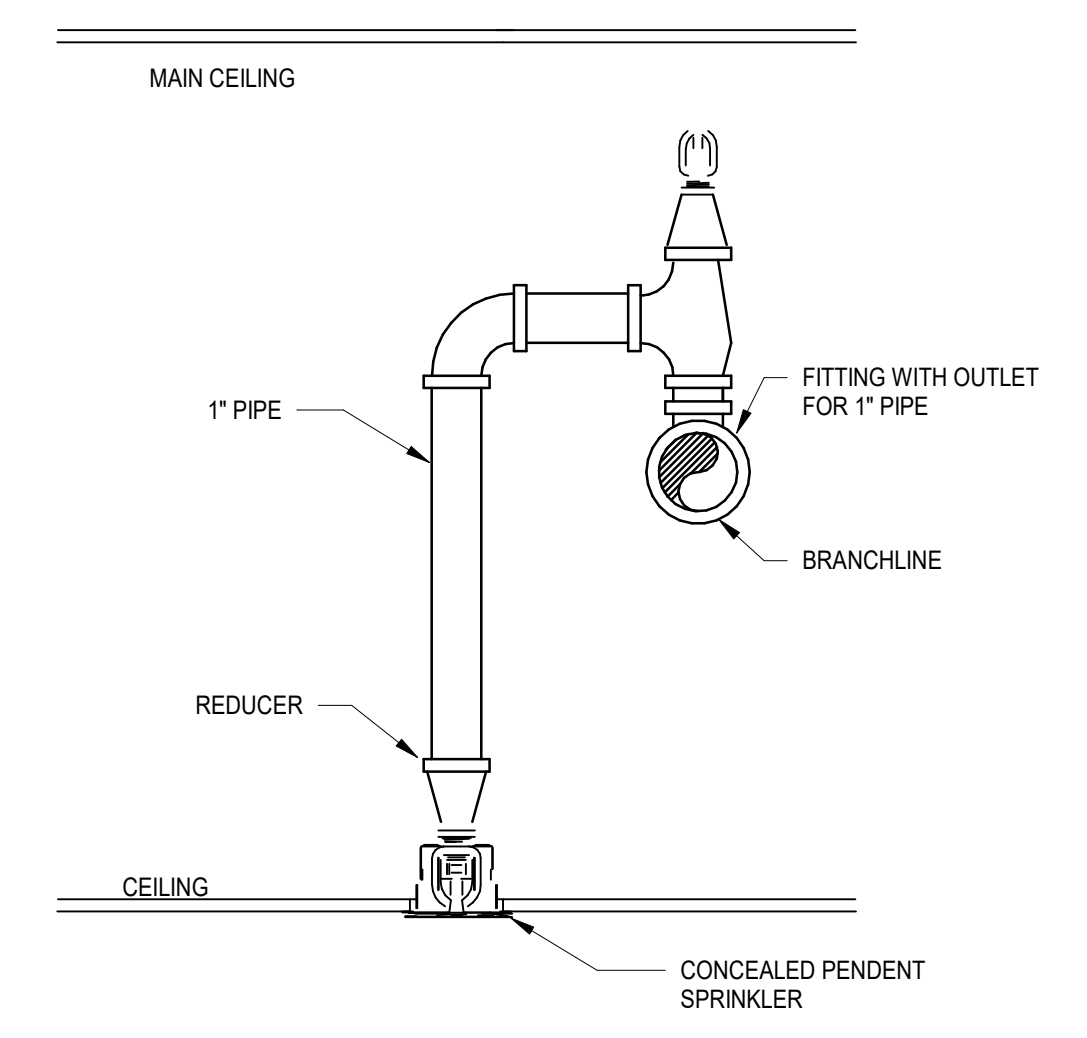
PROVIDE 1-1/2\"/>

AREA - ENTIRE	
SYSTEM TYPE - WET	HAZARD: ORD. GRP 2
DENSITY - 0.20	MIN. AREA - 1500 SF
SPKR. TEMP. - ORDINARY	MAX. SF/HD - 130 SF
SPKR. TYPE - STANDARD PENDANT AND UPRIGHT	

AREA - ENTIRE	
SYSTEM TYPE - WET	HAZARD: LIGHT
DENSITY - 0.10	MIN. AREA - 1500 SF
SPKR. TEMP. - ORDINARY	MAX. SF/HD - 225
SPKR. TYPE - STANDARD PENDANT AND UPRIGHT	

SPRINKLER HEADS SHALL BE PROVIDED ABOVE AND BELOW ANY DUCTWORK 48\"/>

SPRINKLER HEADS SHALL BE PROVIDED ABOVE AND BELOW ANY DUCTWORK 48\"/>



NO.	DATE	REVISIONS	BY

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PROJECT	WTCEX21015
DATE	03/02/2023
DRAWING SCALE	AS NOTED
DRAWN BY	LP
APPROVED BY	RMJM