

Ledyard High School Auditorium Stage Renovation

Bid # 22-2

REQUEST FOR PROPOSAL FOR  
**PERFORMANCE SOUND SYSTEM**  
**THEATRICAL LIGHTING SYSTEM**  
**STAGE CURTAINS ALTERNATE #1**  
**STAGE FLOOR REPLACEMENT ALTERNATE #2,3,4,5**

FOR

Ledyard High School  
24 Gallup Hill Rd  
Ledyard, Ct

2/25/2022

Ledyard Public Schools will accept sealed bids from qualified parties to supply and install flooring, curtains, audio/video equipment, and stage lighting for the Ledyard High School auditorium.

The project is expected to begin installation in the summer of 2022 and be completed prior to August 31, 2022.

A mandatory walkthrough of the project school will take place on March 14, 2022 at 2:00 pm at:

Ledyard High School,  
24 Gallup Hill Rd.  
Ledyard CT, 06339.

Bid packages can be obtained by emailing Wayne Donaldson, Ledyard Public Schools Facilities Director, at [Wdonaldson@ledyard.net](mailto:Wdonaldson@ledyard.net). Sealed bid submissions are due on March 31, 2022 by 11 am. Bids must be received at the following address before the assigned date and time.

Ledyard Public Schools  
Attn: Wayne Donaldson  
4 Blonders Blvd.  
Ledyard, CT, 06339

Bids submitted after the deadline will not be considered. Please enclose your bid in a sealed envelope clearly marked with the bid number and name. Questions can be emailed to [wdonaldson@ledyard.net](mailto:wdonaldson@ledyard.net) until 3 PM on March 28, 2022.

*(All questions must be in writing or in an email addressed only to the Director of Facilities)*

Ledyard Public Schools reserves the right to waive minor discrepancies in bids; or to accept or reject all or part of any submission. All bid submissions are the property of Ledyard Public Schools and will not be returned to the bidder. Award notification to the successful bidder is expected on or before April 5, 2022

It is strongly urged that all prospective bidders notify Wayne Donaldson, Ledyard Public School Facilities Director, of their interest to ensure receipt of any addendums. Bid packages are available on the Ledyard Board of Education web site [www.ledyard.net](http://www.ledyard.net) (listed under district/finance/bids), The Town of Ledyard Website at [www.ledyardct.org](http://www.ledyardct.org) (listed under Finance), and the State of Connecticut DAS site. The response to all questions will be sent to all firms that have requested bid packages, registered with the Facilities Director, or attended the walk through.

*(Downloading the bid from the BoE website will not ensure receipt of any addendums)*

All bids must contain a certification stating that the bid amount is valid for a period of 90 days from bid opening date. The successful bidder will be required to provide a certificate of insurance and proof of manufacturers certification for the equipment being offered and any applicable State of Connecticut licenses for the work being performed. All bids must clearly state the equipment warranty information and the successful firm will supply a warranty on labor for a period of two years from the date of completion to cover installation issues or service under the length of the manufacturer's warranty.

## **BIDDER QUALIFICATIONS**

- Each bidder electing to bid shall be a company that maintains fabrication and technical services for production, installation, modification, continued contract maintenance, repair and operator training for professional sound /lighting system installations.
- Each bidder shall submit a completed reference list with their bid. These references shall be of other high-quality professional sound/lighting system installations completed by the bidder of equal complexity.
- Throughout the specified types of equipment installation and procedures there shall be skilled technicians, qualified in the appropriate areas. Personnel scheduled to work on this project must have 5 years or more experience in theatrical sound /lighting installations.
- The contractor must have the ability and prior experience to perform verification tests and initial adjustments prior to acceptance testing, participate in acceptance testing and perform final adjustments and calibrations as required with the consultant.
- Audio system programming shall be performed by a factory certified BSS London Architect programmer.
- The makes and models of equipment were selected to meet the usage of the room and the budget set for the project. Design deviations or substitutions are not permitted.

## **2.1) SCOPE OF WORK**

### **Performance Audio System**

- Suspension and installation of hanging speakers using certified fly ware from building structure from ceiling on stage left/right/center.
- Establish all wire/pipe routes, chases, openings etc., for all needed cabling
- Supply and installation of all microphone/speaker/ line level audio cables,
- Construct and pre-wire equipment racks.
- Install input/output custom jack plates on stage proscenium walls F. Provide all needed conduit for any exposed low voltage cabling as required by code.
- Fully program and adjust digital signal processors and wall mounted presentation controller for multi-use pre-sets.
- Wall mounted touch screen will have to following functions:
  - activate hot mics 1, with independent volume control of each

- turn on/off video projector and raise/lower projection screen
- activate Bluetooth with volume control
- volume control of video source
- Provide all high voltage electrical needed for the new audio system.
- Remove and discard all old audio equipment
  - Remove the old wall mounted PA system and provide a custom metal wall plate to cover the opening in the wall.
  - Provide a fully functioning and operational sound system as described in the equipment listed below.
- Provide a final “Working London architect design file” for the DSP processors.
- Obtain all needed permits.
- Install dedicated Wi-Fi network for iPad control of mixer
- Configure the system so the on-stage hot mics and Bluetooth audio are controlled via the wall mounted controller for a standalone presentation system.
- Provide full system programming and setup plus allow for 4 hours of end user training on the sound system proper use and care.

## **2.2) AUDIO EQUIPMENT LIST**

### **SPEAKERS**

- 9 JBL mini line array full range vrx-932la-white
- 3 JBL mini line array subwoofer vrx- 915s- white
- 2 JBL full range hanging stage speakers ac266/99 black
  - These speakers are hung from first electric for stage coverage
- JBL dual 8” full range under balcony speakers ac28/26 2 JBL array frames vrx-smaf 2 ATM swivel beams sb-18
- 2 JBL floor monitors prx412m
- BSS digital signal processor blu 160 8x8
- 1 AMX touch screen md1002
- 1 AMX system controller nx2200
- 3 Crown quad channel power amplifiers for mains dci 4/1250
- 4 Crown dual channel power amplifier dci 4/600

## **ELECTRONICS**

### **VIDEO INFRASTRUCTURE**

- 1 Kramer video mixer vs611dt
- 1 Kramer receiver for projector tp780rxr
- 3 Kramer HDMI transmitters stage l/r , booth wp211t
- 3 Kramer HDMI receivers tp789r

### **FRONT END**

- 1 Behringer digital mixing console x32
- 1 Switchcraft Bluetooth 318bt
- 1 Apple Ipad 10" gen 8 or better

### **MICROPHONES**

- 5 AKG overhead stage microphones chm99b
- 12 AKG handheld wireless systems wms470 vocal set c5
- 12 AKG beltpacks pt470
- 12 AKG lapel elements c417pp
- 8 AKG wired vocal microphones d7
- 8 AKG wired instrument microphones d40
- 3 AKG antenna distributors aps4
- 2 8" x8" input plates stage left/stage right
- 8 female XLR labeled 1 thru 8
- Decora cutout for Kramer transmitter
- Mount 18" off stage left/right proscenium wall
- 3 three gang input/output plates
- SL plate 1 -fxlr hot mic #1
- 1- f speak on mon #1
- 1 female rj45 for digital snake SR plate
- 1 -fxlr hot mic #2

### **WALL PLATES**

- 1- f speakon mon #2
- 1 female rj45 for digital snake
- Mount 18" off stage right and stage left proscenium walls
- Pit plate 2 speakon mon #1,mon #2
- 1 female rj45 for digital snake

- Mount center stage orchestra pit

## **SUPPORT EQUIPMENT**

- 1 HSA custom locking roll top desk for audio mixer extract-ii
- 2 Behringer digital snake box s16
- 1 road case for digital snake with front/back doors 2 space
- 1 Middle Atlantic portable rack on caster for wireless system ptrk 2726
- 2 Middle Atlantic rack drawers for portable wireless rack UD3
- 1 Middle Atlantic floor rack for booth equipment erk-3520
- 1 Middle Atlantic locking front door vfd-3d
- 2 Whirlwind duracat cable for digital snake box enc6sr-010
- 2 Hotwires speakon monitor cables sp14/25s
- 12 Hot wires microphone cables mc12-25
- 12 on-stage stands round base microphone stands ms7201b
- 12 on-stage boom arms msa7040tb
  - All needed 12/2 speaker cable
  - All needed signal cable, data cable, microphone cable
- 3 JBL yoke brackets for under balcony speakers mtu28
- 2 JBL yoke brackets for flown stage monitors mtu 266/99
- 1 Da-lite low voltage controller for projection screen control 99622
- All needed flyware, man lifts, electrical, pathways ect to provide a fully functioning system

## **3.1 THEATRICAL LIGHTING SYSTEM**

### **SCOPE OF WORK**

- Remove the following existing
  - Strip lights and recycle
  - remove existing stage electrics and power boxes
  - remove TTI dimmer and house light control
  - remove conduit and circuits to dimmer rack
  - remove small FOH pipe and temporary cabling
  - remove 5 existing entry stations
- re-route feeds and circuits to new wall mounted junction boxes
- install feed for new DRd rack, mezzanine level
- install DRd rack for house lighting, mezzanine level
- Terminate existing house light circuits in DRd rack.

- Install new conduit for (4) stage electrics to new grid iron junction boxes.
- Install connector strips on new rigging assemblies and positions
- Install flex connection to connector strip, install new wire and terminate.
- Re-use main FOH pipe, rigging, connector strip and existing circuit wiring.
- Install 4 outlet boxes on wall, install conduit from rack (DR, UR, UL, DL)
- Install equipment rack , mezzanine level stage left
- Install network cabling to 4 stage electrics, 1- FOH, 4- wall stage boxes (DR,UR, UL ,DL)
- Install new touch screen stations in booth and stage left
- Install new entry stations
- Install 48- 4' LED tubes in existing work light fixtures on stage
- Prepare, hang, cable, configure, and address new LED stage lighting fixtures.
- Install lighting console in booth
- Provide console patch, create site specific magic sheet
- Provide all high voltage and low voltage electrical labor and materials
- Provide system integration, commissioning, programming, and system training ( 4 hours)

### **3.2) THEATRICAL LIGHTING EQUIPMENT LIST**

- ETC lighting control console Element 2 1k w/ 1024 outputs, dust cover, two active display port to DVI adaptors, keyboard, mouse, mousepad, furman ss6b surge strip, locking power cord,
- LED little lite
- Dell 23.8" touch console monitors color black p2418ht 1- CBI net m/m rj45 extension cable 25' 7- ETC RSN-DMX1-0-p-4 response )
- port portable touring gateway w/ (1) XLR-d5f, c-clamp and safety cable
- ETC RSN-DMX2-0-p-4 response (2) port portable touring gateway w/ (1) xlr-d5f, c-clamp and safety cable
- 7- ETC ecpb net network plug-in station
- 7-ETC ecpb pb1 1-gang 2.5" deep back box, surface mount
- 7-CBI net m/m rj45 extension cable 25'

### **POWER SYSTEM**

- 1-ETC DRd6-12-120 dimming enclosure

- 1-ETC p-DRd-tk paradigm termination kit
- 1-ETC p-acp3 paradigm architectural control processor 1-ETC p-spm-e paradigm station power module
- 12-ETC d20 dual 20 amp dimmer module
- 13-ETC r20 dual 20 amp relay module
- 2-ETC cc20 dual 20 amp constant module

## **ARCHITECTURAL CONTROL**

- 5-ETC uh10005-s4 preset station w/ 4 presets and off buttons, surface mount
- 5-ETC Lbb1 single gang surface mount back box
- 5-ETC slc-1b unison 1 gang sliding locking cover
- ETC p-ts7-4 paradigm LCD touch screen, surface mount
- 1-ETC p-lcd-sbb lcd locking surface mount back box
- 1-ETC p-lcd-lc4 wall mount locking cover
- Network control equipment rack
  - 1-lowell 12 space rack with locking front door
  - 1-furman m8x2
  - 1-C2g 24 port cat6 patch panel
  - Lowell cbp-1 cable pass through w/ brush strip
  - 1-netgear fs728tp-100nas prosafe 24 port smart switch w/poe and 4-sfp ports
  - 24-cable matters cat6 patch cables 2'
  - 1-lowell udel-314
  - Tripp lite smartpro ups

## **ELECTRICAL DISTRIBUTION**

- 4-SSRC sm-3-2pgfl-1-520d surface mount outlets boxes w/ 2-2p&g flush mount connectors, on 1-20amp circuit
- 1-SSRC bal-40-6/12-2pgpt-4/8-l520pt-1 net connector strip 40' w/ 12- 18" 2p&g pigtails, on 6- 20 amp circuits, 8-18" Edison pigtails on 4- 20 amp circuits, 1 net rj45 and double pipe mounting hardware
- 3-SSRC bal-40-12/12-2pgpt-4/8-l520pt-1-net connector strip 40' w/12-18" 2p&g pigtails on 12-20 amp circuits, 1- netrj45 and double pipe mounting hardware 4-schedule
- 40 1.5" sleeved painted black batton pipe @42'
- 12-leviton 55266-b 5-15 Edison plug
- 48- LED tubes 48" t8 16 watt daylight



## **STAGE LIGHT FIXTURES & ACCESSORIES**

- 26-ETC csspots-a
- 26-ETC 400lt lens tubes degree TBD
- 15-ETC cspar-a
- 15-ETC selow 7.5 cspar
- 6-ETC cyc-a
- 50-CBI dmx m/f 5pin 10' ext cable
- 25-CBI Powercon-powercon jumper 10'
- 6-CBI xlr 5 pin terminator
- 1-HAS locking roll top desk for lighting console and monitors extrt-ii modified as needed to fit gear.

### **4.1) ALTERNATE #1 STAGE CURTAIN REPLACEMENT**

#### **SCOPE OF WORK**

- Removal and disposal of main traveler curtain, main valance, boarders, legs, US traveler
- Inspect traveler curtain tracks, vertical pulleys and ropes. Repair/replace as needed
- Remove existing drapery rigging points
- Install all new drapery rigging points and pipe
- Install all new fabric as listed

#### **CURTAIN EQUIPMENT LIST**

- 1-Main valance of IFR 25oz Prestige 4' x 40', lined with celtic cloth, 50% fullness, top hem
- 2-Main traveler of IFR 25oz Prestige 18' x 25', lined with celtic cloth. 50% fullness, snap hooks, top and side hems, weighted bottom, 1/2 width faceback
- 4-Boarders of IFR 23oz drama 4' x 40', unlined, 50% fullness,
- 8-Legs of 23oz drama 18' x 10', unlined, 50% fullness
- 2-US Traveler of 23oz drama, unlined, 50% fullness, snap hooks, 1/2 width faceback
- 1-Cyclorama of IFR muslin 16' x 48', white, seamless, unlined, 0% fullness, 2" double turned, top,side hemmed, bottom weighted
- 2-iWeiss r205 3/8" sash cord @ 125'

#### **DRAPERY RIGGING EQUIPMENT**

- 13- schedual 40 1.5" black batten pipe @ 42'
- 97- adjustable beam clamps rigging points w/ 1/4" grade 3- proof chain @10', center point beam clamp, 1/2" shoulder eyebolts,

- 2-chackles
- 1-iWeiss p305 pipe clamp

#### **DRAPERY TRACK**

- 2-iWeiss align series channel bi-parting track, CWANA @ 52'
- 1-iWeiss align series channel walk along track CWANA @ 50'
- 8-iWeiss align series channel walk along track CWANA @ 10'

#### **ALTERNATE #2**

- 2-Lycian ZOT 350 LED follow spot fixtures

#### **ALTERNATE #3**

- 4-Chauvet moving fixtures maverick force 2 profile
- 4-CBI DMX m/f 5 pin ext cable @ 10'
- All needed omega brackets, couplers, safety cables,
- Powercon cables

#### **ALTERNATE #4**

- 1-ETC PAD portable access device, ETCpad USB hub

#### **ALTERNATE #5**

- Removal and replacement of entire stage hardwood flooring, new floor and stairs to be stained black and sealed 3 times with matt finish sealer. Please provide pricing on the final floor finish to be Rose Brand Stage flooring. Quote Dura Teatro and Glide.

Note: This is a turnkey project, all services needed to provide the school with a 100% functioning audio/theatrical lighting system as depicted in the above pages should be included in vendor pricing.

Makes and models listed were chosen based on the project's budget and needs. Design/functionality deviations will not be permitted.

## REFERENCES

List below all requested information for at least five projects. Projects are to be similar in scope of work and contract amount to this project. This reference list must be completed and returned with the bid proposal.

### 1. Project Name (or description)

\_\_\_\_\_

Contract Amount \_\_\_\_\_ Completion Date \_\_\_\_\_

Owner \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

Architect/Consultant \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

### 2. Project Name (or description)

\_\_\_\_\_

Contract Amount \_\_\_\_\_ Completion Date \_\_\_\_\_

Owner \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

Architect/Consultant \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

### 3. Project Name (or description)

\_\_\_\_\_

Contract Amount \_\_\_\_\_ Completion Date \_\_\_\_\_

Owner \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

Architect/Consultant \_\_\_\_\_

Contact Name \_\_\_\_\_ Telephone \_\_\_\_\_

4. Project Name (or description)

\_\_\_\_\_

Contract Amount\_\_\_\_\_ Completion Date\_\_\_\_\_

Owner\_\_\_\_\_

Contact Name\_\_\_\_\_ Telephone\_\_\_\_\_

Architect/Consultant\_\_\_\_\_

Contact Name\_\_\_\_\_ Telephone\_\_\_\_\_

5. Project Name (or description)

\_\_\_\_\_

Contract Amount\_\_\_\_\_ Completion Date\_\_\_\_\_

Owner\_\_\_\_\_

Contact Name\_\_\_\_\_ Telephone\_\_\_\_\_

Architect/Consultant\_\_\_\_\_

Contact Name\_\_\_\_\_ Telephone\_\_\_\_\_

**Auditorium Sound, Theatrical lighting system completely installed**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Alternate #1 Stage Curtain supplied and completely installed**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Alternate # 2 followspot fixtures**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Alternate # 3 Moving yoke fixtures**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Alternate #4 wireless control of lighting**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Alternate #5 Stage floor replacement**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Rose Brand Flooring Dura**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Rose Brand Flooring Teatro**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)

**Rose Brand Flooring Glide**

For the lump sum of \_\_\_\_\_  
(Written in words)

\$ \_\_\_\_\_  
(Written in figures)