

June 22<sup>nd</sup>, 2023

**Sean Boutwell**

Building Solutions

9401 Lyndon B Johnson Fwy # 410,

Dallas, TX 75243

**RE: Sacred Heart of Jesus Christ Catholic Parish – Schematic Design Report**

Dear Sean,

In order to produce a design that meets the needs of the church we have captured the scope of work as we understand it based on meetings with the owner and design team. We will need this scope approved in order to move further into the design phase. We will provide a more detailed narrative as we get further into design but need to ensure that we have captured the needs correctly at this phase.

**Audio**

A pair of line-array speakers and subwoofers will be suspended from the beams on either side of the altar to provide speech reinforcement and choir/instrumentation to the seating in the nave. Gooseneck microphones will capture speech at the ambo and cantor. Four headset wireless microphones will be provided for the priests. Recessed floor pockets will be provided for microphone and instrument connections for the choir. Hanging mics will be installed above the choir riser for reinforcement of the choir to the main speaker system. A stereo piano microphone and a small compliment of wired vocal microphones will be provided for the choir. An owner-furnished rack-mounted digital mixing console will be provided for an operator to mix sound for the choir system from an owner-provided iPad. An automixer, built into the mixer, will assist with the mix for the altar mics, wireless microphones, and choir inputs. A fill speaker will be installed to provide foldback audio to the choir and should be architecturally hidden as well. Note-the choir fill speaker should not include the choir mics otherwise feedback will occur.

Overflow speakers will be provided in the narthex and multi-function room. Wireless microphone antennas will be provided in the sanctuary and narthex for wireless microphone signal.

A speaker system will be provided for the bell tower instead of physical bells. An owner provided carillon system will be provided as the audio source for the bell system and will handle the chime and schedule.

Head-end gear for the system will be located in an equipment rack in the AV room house the DSP (digital signal processor), amplifiers, network switch, and more.

### **Video**

Two commercial displays will be provided in the narthex on swing arm mounts. A digital signage player will be provided to communicate general information on these displays. The displays will display the program camera feed during services. A local video input will be provided in the narthex for a laptop to connect to the displays.



### **Video Acquisition**

A single PTZ (pan/tilt/zoom) camera will be provided in the nave to capture video for online viewing. The existing switcher and livestream encoder will be moved from the existing sanctuary to the AV room. A camera controller will be provided to record/recall presets for the cameras as well as for manual control.



### **Alternates**

#### *Alternate #1: Projector System*

Two laser projectors will be provided at the back of the sanctuary to project lyrics and scriptures onto the altar walls, fed from a computer input in the AV room behind the altar.



#### *Alternate #2: Additional PTZ Cameras (3G)*

Two additional 1080p PTZ (pan/tilt/zoom) cameras will be installed in the sanctuary.



#### *Alternate #3: Theatrical Lighting*

We recommend that ALA handle the design for the theatrical lighting at the altar and include this in their existing scope for house lights and controls. The installation of the theatrical lighting should be handled by others. This alternate is included should Electro Acoustics provide the theatrical lighting.



A compliment of white-light LED theatrical fixtures will be provided to supply appropriate lighting levels for the altar. A relay panel will be provided to control power to the theatrical fixtures. Control for the theatrical lights will be from the architectural controls, designed by ALA and provided by others.

*Alternate #4: Broadcast Audio Mixer*

A secondary digital mixing console will be provided for an operator to mix audio for the broadcast livestream, separate from the speaker system. A pair of monitors and a subwoofer will be provided as reference monitors.






*Alternate #5: Exterior speakers*

Speakers will be provided on the exterior of the building for special services, with line inputs for additional connections.



**Opinion of Probable Cost (OPC):**

|  |                              |   |
|--|------------------------------|---|
| <b>Audio System Estimated Cost</b>             | <b>\$124,000 - \$131,000</b> |  |
| <b>Video System Estimated Cost</b>             | <b>\$ 35,000 - \$ 37,000</b> |  |
| <b>Video Acquisition System Estimated Cost</b> | <b>\$ 43,000 - \$ 45,000</b> |  |
| <b>Total AV System Estimated Cost</b>          | <b>\$202,000 - \$213,000</b> |   |

OPC includes applied design fees towards the cost of installation.

|  |                 |
|--|-----------------|
| <b>Alternate #1: Projector System</b>            | <b>\$57,000</b> |
| <b>Alternate #2: Additional PTZ Cameras (3G)</b> | <b>\$25,000</b> |
| <b>Alternate #3: Theatrical Lighting</b>         | <b>\$57,000</b> |
| <b>Alternate #4: Broadcast Audio Mixer</b>       | <b>\$8,000</b>  |
| <b>Alternate #5: Exterior speakers</b>           | <b>\$4,000</b>  |

Accepting Schematic Design Scope

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Sincerely,



Luke Jordan, PMP, CTS-I  
CEO & Co-Steward  
Electro Acoustics, Inc.

