



# Sacred Heart

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TECHNOLOGY BUDGET REV 5

Ray West – Project Manager  
WP ELECTRIC & COMMUNICATIONS, INC |



14198 Albers Way, Chino, CA 91710  
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June 7, 2023

Sean Boutwell, Assoc. AIA  
Senior Associate  
Building Solutions  
9401 LBJ Freeway, Suite 410  
Dallas, TX 75243

RE: Sacred Heart – Technology Budget REV 5

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Mr. Boutwell,

WP Electric and Communications, Inc. would like to thank you for this opportunity to provide a Technology budget for the Sacred Heart project. With this budget, WP has estimated in general material increases to assist with protecting budget. The budgets include Security Cameras, Wireless Network, Network Hardware, Technology Cabling including Category 6 Station cabling for network and fiber connection between new Telephone room, AV Rooms, and existing building. Final design and pricing will be based on the current market value once the building is ready for installation.

The WP team will assist with designating cable locations, conduit needs, and power needs for the technology installation as needed.

The budget now includes Access Control cabling or hardware and **removed all UPS** for budgeting purposes.

Added add alternate for (4) additional AP Units with cabling to pricing.

The budgets do not include Audio or Visual cameras, speakers, or other related hardware or cabling.

We appreciate the opportunity to work with you on this project.

Sincerely,

WP Project Team -

Ray West  
Chris Germany  
Robert Trimble, RCDD



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## **EXECUTIVE SUMMARY**

WP Electric & Communications, Inc. (WP) is pleased to provide the following Technology Budget for the Sacred Heart Project

The budget response which follows will show that WP has a thorough understanding of the project requirements and practices a business philosophy based on true “Customer Care” which is expressed throughout this response and is available in our customer references and letters.

WP understands that for our company to truly succeed, the entire project must come in on schedule and on budget. WP takes much pride in the fact that we have never missed a deadline in our 45-year history. A primary reason for that is because WP is a consummate Team Player, continually working with all players to facilitate expeditious design, procurement, and construction processes.

WP has always met or exceeded schedule commitments, even under the most stressful situations. In addition, WP understands that a contractor must be **flexible** when it comes to schedules, working with other contractors, and working to please our customers.

WP builds flexibility into our proposals so that every “bump in the road” does not turn into a change order. We will bend over backwards to minimize change orders, keep the project on schedule and, most importantly, **make the entire team a winner.**



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## **PROPOSED SCOPE OF SERVICES**

WP Electric and Communications, Inc. (WP) has developed the following scope as the basis of design and budgets for the Sacred Heart project.

### **Telecommunications Room Build**

The Sacred Heart new Telecommunications Room will host and support the new Sanctuary network hardware and cabling.

The room will be designed to have two (2) new 7-foot with 6" cable management. The rack space will allow proper space for the network hardware, cabling, UPS as well as additional space for future needs.

Overhead cable support structure will also be installed to support cabling for the technology installed for this new build as well as future needs.

### **AV Room – Technology Build**

The Sacred Heart new AV Rooms – Front (west side) and Rear (east side) will also have network hardware to support the needs of the AV solutions and additional network needs.

Each room will be designed to have one (1) new 7-foot 2-post rack with 3" cable management. The rack space will allow proper space for the network hardware, cabling, UPS as well as additional space for future needs.

Overhead cable support structure will also be installed to support cabling for the technology installed for this new build as well as future needs.



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**Fiber Installation – AV Rooms and Existing Building:**

The new Telecommunications closet will house the backbone cabling for the two (2) AV rooms in the new building and the backbone cabling to the existing building. The design for the fiber will be OM4 fiber between locations.

Each AV room has been designed to connect to the Telecommunications room with Plenum 24-Strand OM4 armored fiber cable.

The Rear (east) AV room will have min of 2” conduit installed from AV room to accessible ceiling area in the Telecommunication Room on the West side of the building.

The Front (west) AV room will have fiber installed in the accessible ceiling space to the Telecommunications closet.

The existing building fiber will be installed in a new conduit (conduit installed by others) from the Telecommunications closet to the existing building IDF.

The new OM4 fiber will be terminated to splice on LC-connectors. Each connector will be fusion spliced and set into a fiber housing in each of the appropriate rooms.

The Fiber housing will be mounted into the new racks in the Telecommunications room, the AV rooms, and in the existing building IDF. The housing will be 1U rack mounted units mounted in the top of the racks.



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### **Cable Pathway Locations**

The cabling pathways for the Sacred Heart project will have a designated location for current and future needs. The design is based on having future locations pathways and wall boxes installed. Locations will be identified in drawings.

### **Conduit Installation needs – Installed by others.**

- Each network, WIFI, Security box will require a minimum size of 4S box with a single gang P-Ring.
- Minimum ¾ EMT to each 4S box – stubbed to accessible area or home run to closest AV Room or Telecommunications closet.
- Minimum (1) 2” EMT conduit from AV Room East to Telecommunication closet.
- Minimum (2) 2” EMT conduits from Hallway 102 to Hallway 103 for data cable installation and future.

### **Sanctuary**

- WIFI Boxes
  - NW Wall (Active)
  - South Wall Narthex (Active)
- Security Camera Boxes
  - (1) East Dual Doors Narthex (Active)

### **Finance / Mechanical**

- Security Camera Boxes
  - Finance (1 Active)
- Network Cabling
  - Finance West (1 Active)
  - Finance South (1 Active)
  - AV Room (1 Active)



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## **Cable Pathway Locations (cont)**

### AV Room East

- Network Cabling
  - South (1 Active)

### Exterior Building

- Security Camera Boxes
  - SW Corner Front (1 Active)
  - NW Corner Front (1 Active)
  - SW Corner South (1 Active)
  - NW Corner North (1 Active)
  - Statue South Wall (1 Active)

### Miscellaneous

- Network Boxes
  - Fire Riser (1 Active)
- Network Boxes
  - Work Sacristy (1 Cable)



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## Cabling – Category 6

The Sacred Heart Technology cabling will be Category 6 Plenum cabling. The cabling will be installed to the Telecommunications or AV Room closest to the device – Camera, WIFI AP, or Wall Data Location

### Sanctuary – 3 Cables

- WIFI Boxes
  - NW Wall (1 Cable)
- Network Cabling
  - Entrance North (1 Cable)
  - Entrance South (1 Cable)

### Finance / Mechanical – 4 Cables

- Security Camera Boxes
  - Finance (1 Cable)
- Network Cabling
  - Finance West (1 Cable)
  - Finance South (1 Cable)
  - AV Room (1 Cable)

### AV Room East – 1 Cable

- Network Cabling
  - South (1 Cable)

### AV Room West – 1 Cable

- Network Cabling
  - South (1 Cable)

### Exterior Building – 5 Cables

- Security Camera Boxes
  - SW Corner Front (1 Cable)
  - NW Corner Front (1 Cable)
  - SE Corner Front (1 Cable)
  - NE Corner Front (1 Cable)
  - Statue South Wall (1 Cable)

### Miscellaneous – 2 Cable

- Network Boxes
  - Fire Riser (1 Cable)
- Network Boxes
  - Work Sacristy (1 Cable)



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## Security Cameras

The Sacred Heart project security cameras will consist of 90-degree, 270-degree, and 360-degree cameras. A designation will be included in the drawings.

The new cameras will be a cloud-based service with up to 30 days of storage space.

Cameras will be mounted to manufacture requirements.

### Exterior Building

- Security Camera
  - SW Corner Front
  - NW Corner Front
  - SW Corner South
  - NW Corner North
  - Statue South Wall

### Sanctuary

- Security Camera
  - (1) North Doorway Narthex

### Finance / Mechanical

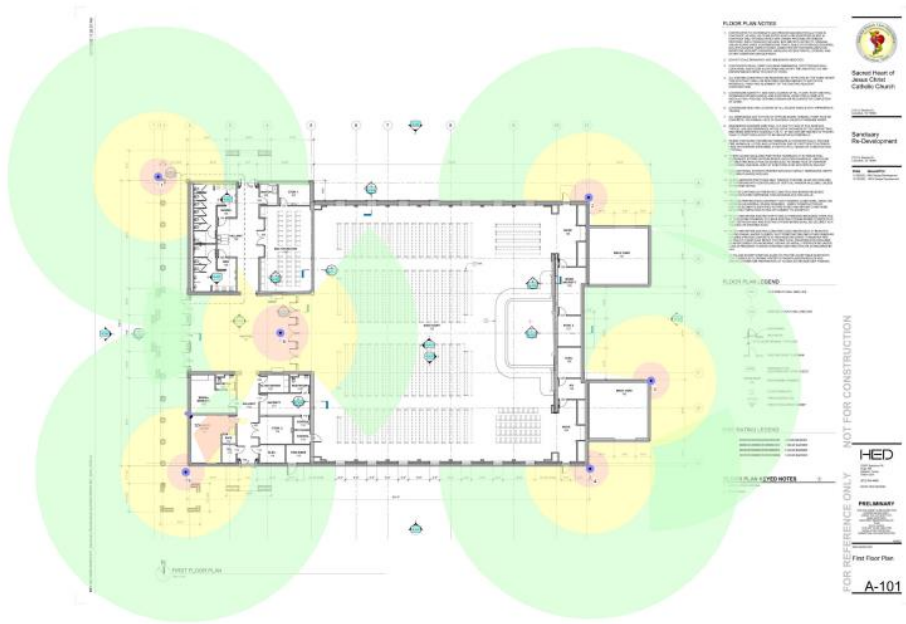
- Security Camera
  - Finance



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Security Camera Lay-out

Site Plan. WP Electric Suggested Placements





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## Network Hardware

The Sacred Heart project network will have new gateway/router, switches with fiber transceivers, and new wireless access points.

### Telecommunications Room

The Telecommunications room will host the new gateway router for managing traffic through the network. The design will be to manage the security cameras traffic, data network traffic, and other service (AV or Access Control) traffic. To connect the devices the Telecommunication room will have (2) 24-port managed switch.

- (1) 6-port Gateway with transceiver
- (2) 24-port Managed Switches with Transceivers

### AV Room West

The AV Room West will be remote access to the network. The AV Room West will have (1) 24-port managed switch to support security cameras and other network needs.

- (1) 24-port Managed Switches with Transceivers

### AV Room East

The AV Room East will be a remote access to the network. The AV Room East will have (1) 24-port managed switch to support security cameras and other network needs.

- (1) 24-port Managed Switches with Transceivers

### Wireless Access Points

The Sacred Heart project will have (3) new access points installed. The design pathways and network ports have been considered for the design.

### Sanctuary

- WIFI Boxes
  - NW Wall (1 Active)
  - SW Wall (1 Active)
  - South Wall Narthex (1 Active)

\*\*\*\*WP has included an add alternate for (4) additional AP to cover remainder of sanctuary (2), front offices, and multiuse area. Includes cabling.



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## Access Control

WP has designed a standard Paxton 10 Access Control system. The system will be an on-site Paxton 10 server. The Paxton 10 Server will control two (2) door controllers with card access and REX units as needed. Final door locks/electrified hinges, or electrified strike will be determined based on doors schedules and types.

### Access Controlled Doors

- Finance Door (Interior)
- Cash Door (Interior)

Door schedules and access will be determined with Sacred Heart team.





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### **Testing – Copper and Fiber**

WP Electric and Communications, Inc. will test the copper cable to meet TIA-industry standards. WP will have certified trained installers testing the copper and fiber. The technicians will be using Fluke Level IV testers. All copper and fiber will be 100% tested and passed upon completion.

All documentation will be provided in soft copies.



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## ***BUDGET SCHEDULE***

### **Sacred Heart Project**

<b>Copper Cabling including Room Builds</b>	<b>\$19,800.00</b>
<b>Fiber Cabling</b>	<b>\$28,500.00</b>
<b>Security Cameras</b>	<b>\$36,740.00</b>
<b>Network – Switches and (3) Wireless AP</b>	<b>\$19,520.00</b>
<b><u>Access Control – Paxton 10 Server and 2 Doors</u></b>	<b><u>\$ 6,200.00</u></b>
<b>Total Budget</b>	<b>\$109,770.00</b>
<b>Add Alternate</b>	
<b>(4) additional AP to cover Sanctuary/Multiuse/Office with cabling (pathways will need to be added to details)</b>	<b>\$6,128.00</b>

#### **Payment Terms:**

Payment terms are NET 30 days from the original invoice date. Balances beyond thirty (30) days will be subject to a 1.5% finance or interest charge per month (or the maximum rate permitted by law, whichever rate is lower) until the outstanding balances are paid.

An invoice for procurement of material of the Total Bid Price will be submitted within 48 hours of acceptance of proposal to cover material procurement and mobilization.

Any deviations or changes to the scope of work will constitute a written Change Order to be agreed upon and executed by both parties.

Pricing includes all storage, disposal and associated state and local taxes.



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## ***Budget AUTHORIZATION***

## ***Budget ACCEPTANCE***

### **Acceptance of Proposal:**

The above-listed prices, specifications and conditions are satisfactory and are hereby accepted. WP Electric and Communications is authorized to proceed and perform the work as specified. Payment will be made as outlined above.

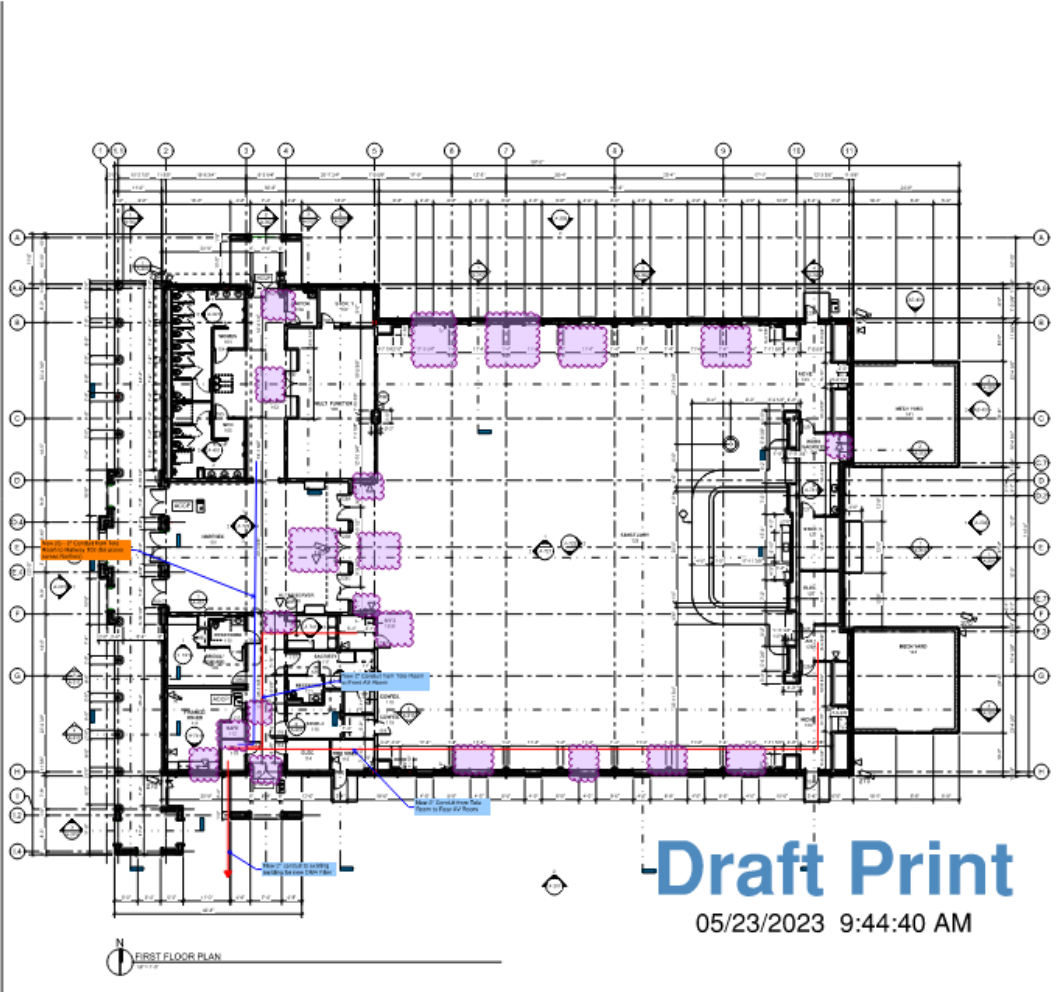
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

***\*\* Note: This proposal may be considered valid for a period of Thirty (30) days from the proposal date provided. Due to market volatility all commodity materials, i.e., metal conduit and copper wire are subject to pricing change based on market value at acceptance of proposal.***



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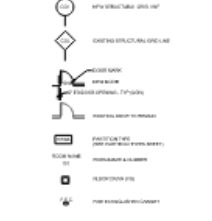


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**FLOOR PLAN NOTES**

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 CALIFORNIA ELECTRICAL CODE (CEC) AND THE 2019 CALIFORNIA MECHANICAL CODE (CMC).
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 CALIFORNIA FIRE CODE (FC) AND THE 2019 CALIFORNIA PLUMBING CODE (CPC).
3. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 CALIFORNIA BUILDING CODE (CBC) AND THE 2019 CALIFORNIA MECHANICAL CODE (CMC).
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**FLOOR PLAN LEGEND**



**FLOOR PLAN KEYED NOTES**

- 1. Access Control Panel
- 2. Access Control Door
- 3. Access Control Reader
- 4. Access Control Station
- 5. Access Control Unit
- 6. Access Control Zone
- 7. Access Control Zone Controller
- 8. Access Control Zone Controller
- 9. Access Control Zone Controller
- 10. Access Control Zone Controller

FOR REFERENCE ONLY NOT FOR CONSTRUCTION

**Sacred Heart of Jesus Christ Catholic Church**

**Sanctuary Re-Development**

1014 E. Foothill Blvd.  
 Chino, CA 91710

Site: Sacred Heart of Jesus Christ Catholic Church  
 Project: Sanctuary Re-Development

**HED**  
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**PRELIMINARY**  
 THIS DRAWING IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. IT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE CLIENT ACCEPTS THE RISK OF CONSTRUCTION OF THIS PROJECT.

05/23/2023  
 First Floor Plan

**A-101**



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### Site Plan. WP Electric Suggested Placements

