

# TECHNICAL PROPOSAL

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### TECHNICAL PROPOSAL SUBMITTAL CHECKLIST

- Submittal in a sealed container identifying:**
  - Project Name & Number
  - Submittal Date
  - Technical Proposal Submittal
  - Identification Number
  - Submittal is properly addressed and delivered
  
- One (1) original and six (6) copies of the written portion of the TECHNICAL PROPOSAL**
  
- One (1) set of up to no more than five (5) PRESENTATION BOARDS, not larger than 30” x 42”**
  - Include:
    - Copies of boards within the technical proposal binder
    - Electronically on a flash drive in PDF format
  
- One (1) bound set of the SCHEMATIC DESIGN DRAWINGS shall not be smaller than 30” x 42”**
  - Include:
    - Within the technical proposal binder as 11” x 17” sheets
    - Electronically on a flash drive in Auto CAD
    - Electronically on a flash drive in PDF format

## 1. TECHNICAL PROPOSAL

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Proposers shall submit a Technical Proposal conforming to the format outlined herein and provide all requested information. **FAILURE TO COMPLY WITH THE REQUIRED FORMAT AND/OR PROVIDE THE INFORMATION REQUESTED MAY RESULT IN A NON-RESPONSIVE SUBMITTAL.**

Technical Proposals may be comprised of design narratives, drawings (no larger than 30" x 42"), presentation boards, outline specifications, preliminary sizing calculations, catalog cut sheets, and other information as required and appropriate. **ALL REFERENCES THAT MAY IDENTIFY THE DESIGN BUILD TEAM SHALL BE REMOVED.**

### 1.1 *Technical Proposal Delivery*

.1 Proposal Delivery Date

Refer to the Proposal Schedule for the Technical Proposal Submittal due date and time.

.2 Marking and Identification of Submittals

Proposer shall clearly mark the outside of each package to identify the following:

**CRII4 – Building 55 Major Building Maintenance  
Contract No. 9007190 / Project No. 5112289**

Marked: "Technical Proposal Submittal"

Date of Submittal:

Design Builder Identification Number:

If the Proposals are sent by mail, courier or delivery service, the sealed package shall be marked with the notation "SEALED PROPOSAL ENCLOSED" on the face thereof.

.3 Designated Location for Receipt of Technical Proposals

Proposer shall assume full responsibility for timely delivery of proposals. Proposals shall be properly addressed to be received at:

University of California, Irvine, Design & Construction Services  
101 Academy, Suite 200  
Irvine, CA 92697-2450

**LATE PROPOSALS: ANY PROPOSAL, MODIFICATION, OR REVISION, THAT IS RECEIVED AT THE DESIGNATED LOCATION AFTER THE EXACT TIME SPECIFIED FOR RECEIPT OF PROPOSALS IS "LATE" AND WILL NOT BE CONSIDERED UNLESS IT IS THE ONLY PROPOSAL RECEIVED. LATE PROPOSALS AND MODIFICATIONS THAT ARE NOT CONSIDERED WILL BE HELD UNOPENED, UNLESS OPENED FOR IDENTIFICATION, AND THEN RETURNED TO THE PROPOSER AFTER AWARD.**

.4 Technical Proposal Delivery Methods (*See marking instructions in 1.1.2 above*)

a. Mail

b. Courier (Hand Delivery)

c. Delivery service

.5 Unacceptable Delivery Methods

a. Oral

b. Telephonic

c. Facsimile

d. Email or other electronic means

## 1.2 **Technical Proposal Submittal Instructions**

### .1 Required Copies

**One (1) original and six (6) copies** of the written portion of the Technical Proposal shall be submitted in sealed boxes, envelopes, or other appropriate sealed containers. Include **one (1) electronic copy** of the written portion of the Technical Proposal and presentation boards (in PDF format).

### .2 Technical Proposal Format

All Technical Proposals shall be submitted in 8.5" x 11" or 11" x 17" 3-ring or spiral bound binders. Items not physically suitable for inclusion may be submitted separately with a clear proposal reference to the separately furnished items.

Technical proposal narrative shall be typed in Times New Roman or a comparable font that is easy to read utilizing 11 point font or larger.

### .3 Design Builder Identification Number

Prior to the Technical Proposal submittal, the University will assign a Design Builder Identification Number to each Proposer. The Design Builder Identification Number shall be used by each Proposer to identify its Technical Proposal submittal.

*Blind Evaluation:* To provide an impartial review of each Proposer's Technical Proposal submittal, the Technical Evaluation Committee will conduct a Blind Evaluation. Therefore, **the entire contents of the Technical Proposal submittal shall have all references to the Proposer's identity removed.** All references that may identify the Design Build team including, but not limited to, firm or team names, staff identification, consultant identification, addresses, telephone numbers, logos, letterhead, stationary, binders, or business cards or specifics about the firm or its size and history shall be removed.

## 1.3 **Presentation Boards Submittal Requirements**

Submit one (1) set of up to no more than **five (5)** stand-alone presentation boards, not larger than 30" x 42". Include copies of boards within the technical proposal binder **AND ELECTRONICALLY ON A FLASH DRIVE (in PDF format)**. Include the following perspectives:

- .1 Construction Site Logistics. Show ADA, emergency vehicle, and pedestrian access/patterns during construction. Include staging and laydown areas and phased construction through the facility.
- .2 Mechanical Plan. Show layout of all mechanical system components, including mechanical equipment and service clearance dimensions.
- .3 Roof Plan. Include all slope and drain locations.
- .4 Building Elevation. Show all visible mechanical equipment.
- .5 Alternates included in the Base Bid at no additional cost.

## 1.4 **Schematic Design Drawings**

**One (1)** bound set of the following drawings shall be submitted as follows: 1) Depicting the **Base Bid scope of work** and any **Alternate scope of work that is included in the Base Bid at no additional cost**, 2) Not smaller than 30" x 42", 3) Within the technical proposal binder as 11" x 17" sheets, and 4) **ELECTRONICALLY ON A FLASH DRIVE (in Auto CAD and PDF format)**. Room numbers shall be included on each floor plan.

- .1 **Roof Plans.** *Scale shall not be smaller than 1/8" = 1'. Place all information in this section over an architectural background and include the following:*
  - a. Dimensioned structural grid
  - b. Roof system and openings
  - c. Roof top equipment including accommodation of cell tower equipment.
  - d. Show roof and slope drain locations
  - e. Show walking pads

- .2 **Structural plans.** Scale shall not be smaller than  $1/8" = 1'$ . *Place all information in this section over an architectural background and include the following:*
- a. If modifications to the existing building structure are needed, show the necessary alterations to support the new mechanical equipment or new roof penetrations.
  - b. Dimensioned structural grid
  - c. Roof system and openings
  - d. Roof top equipment
- .3 **Mechanical Conceptual Floor Plans.** *Scale shall not be smaller than  $1/8" = 1'$  and  $1/4" = 1'$  for Details. Place all information in this section over an architectural background and include the following:*
- a. HVAC and exhaust equipment and associated system components layout
  - b. Identification of:
    - i. HVAC ducts and hydronic piping
    - ii. Equipment and valve locations
    - iii. Floor and roof drain locations
    - iv. Mechanical equipment
    - v. HVAC temperature control zones
  - c. Overall dimensions of mechanical equipment and service clearance dimensions
  - d. Show locations of new mechanical roof and/or mechanical room, including:
    - i. Layout of new and existing equipment and associated system components
    - ii. Locations of heat exchangers and steam generators
    - iii. Locations of control valves and converters/generators
    - iv. Identification and locations of floor drains servicing new equipment
    - v. Points of connection to existing ductwork and piping risers or mains
    - vi. Detailed cross sections of mechanical rooftop equipment and ductwork
    - vii. General notes to define the design intent
- .4 **Electrical Conceptual Floor Plans.** *Scale shall not be smaller than  $1/8" = 1'$ . Place all information in this section over an architectural background and include the following:*
- a. Show power and lighting modifications floor plans
  - b. Show locations of any new power connections or modifications to the existing single line diagram

**1.5 Technical Proposal Scoring**

The Technical Proposal will be scored as follows:

Description	Points Available
Executive Summary	0
TAB 1 – Building Mechanical Systems Design	25
TAB 2 – Roofing System Design	10
TAB 3 – Energy Savings	10
TAB 4 – Alternates, Project Enhancements and Added Value	20
TAB 5 – Mitigation of Negative Construction Impacts and Phasing	15
TAB 6 – Project Schedule	5
TAB 7 – Quality Control and Staffing Plan	5
TAB 8 – Deviations from Request for Proposal	0
Oral Presentation	10
<b>Subtotal:</b>	<b>100</b>
Best and Final Offer (if necessary)	20
<b>Total:</b>	<b>120</b>

**2. TECHNICAL PROPOSAL SUBMITTAL**

Each Proposer shall provide the following information in the content and format as described. Proposal shall be indexed with tabs numbered and labeled in bold type denoting the prescribed sections. Narratives may incorporate graphic information and/or presentation boards.

**EXECUTIVE SUMMARY****0 POINTS***Suggested Text Length: 1 page*

The Executive Summary should stand on its own to convey the primary design, program and technical elements of the proposal, and clearly describe why the project approach represents the overall **best value** to the University.

**TAB 1****25 POINTS***Suggested Text Length: 1 – 5 pages***BUILDING MECHANICAL SYSTEMS DESIGN**

Proposer shall:

1. Identify and describe the proposed building mechanical systems design, including equipment, manufacturer, associated accessories, and system advantages.
2. Demonstrate how the proposed building mechanical systems connect to existing systems.
3. Demonstrate how the proposed building mechanical systems design includes considerations for:
  - a. Energy efficiency and functionality
  - b. Direct digital control installation, coordination, and interface
  - c. Sound, vibration, and seismic events
  - d. Durability, extended deferred maintenance, and aesthetics
4. Demonstrate compliance with the Detailed Project Program, Specifications, and Campus Standards and Design Criteria.

**TAB 2****10 POINTS****Suggested Text Length: 1 – 3 pages****ROOFING SYSTEM DESIGN**

Proposer shall:

1. Identify and describe the proposed roofing system, its manufacturer, system advantages, all associated products, materials, and applications.
2. Confirm that the roofing system manufacturer provides a minimum 20 year No Dollar Limit warranty on roof material and 5-year labor warranty.
3. Demonstrate that the proposed design provides:
  - a. Durability, ease of maintenance, and proven waterproofing and drainage features and capabilities
  - b. How the waterproofing design will meet or exceed code compliance measures and industry standards
  - c. Termination of new overflow roof drainage system
4. Provide a roof phasing plan for new HVAC curbs, new roof drains and the roofing system to minimize exposure during the rainy season.

**TAB 3****10 POINTS****Suggested Text Length: 1 – 5 pages (Excluding Energy Savings Analysis Spreadsheet)****ENERGY SAVINGS**

Proposer shall:

1. Specify how the proposed design and construction of both the Base Bid scope of work and any Alternate scope of work that is included in the Base Bid *at no additional cost* achieve energy savings as outlined in the Detailed Project Program. Include any additional energy savings possibilities not included in the base bid with the remaining Alternate scopes of work.
2. Provide calculations to show energy savings using software approved for submission to Southern California Edison (SCE) and Southern California Gas Company (SCG) as approved by the California Public Utilities Commission (CPUC), such as Trane Trace. Provide complete printouts of each input used for base and proposed cases.
3. It shall be clear to the reviewing committee what each single proposed option will save the University in kWh per year and natural gas therms per year. Chilled water savings should be calculated at 0.74 kW/ton and shown in kWh. Natural gas savings shall be calculated using 74% heating efficiency and shown in therms.
4. Payback calculations shall use utility costs of \$0.105/kWh and \$0.78/therm.
5. Calculations for each measure shall include only the incremental energy savings for each measure beyond the base scope of work.
6. Each energy efficiency measure shall have a rough order of magnitude construction cost to determine payback.
7. Provide a narrative describing the benefits of utility incentives and participation in Savings by Design as part of TAB 3 of the technical proposal.

**TAB 4**

**20 POINTS**

*Suggested Text Length: 1 – 3 pages*

**ALTERNATES, PROJECT ENHANCEMENTS AND ADDED VALUE**

Proposer shall:

1. Submit the Alternates, Project Enhancements, and Added Value Matrix listing project enhancements and indicating whether project Alternates are included in the base bid, *at no additional cost*. Project enhancements provide the University with added value to the base bid requirements, *at no additional cost*.
2. Include at a minimum, details on the proposed manufacturer or product, system and/or product advantages, all associated materials and applications for each Alternate Description.

<b>ALTERNATES, PROJECT ENHANCEMENTS, AND ADDED VALUE MATRIX<sup>1</sup> (TAB 4)</b>		
<b>ALTERNATE NO.</b>	<b>ALTERNATE DESCRIPTION</b>	<b>INCLUDED IN BASE BID?</b>
1		YES <input type="checkbox"/> NO <input type="checkbox"/>
2		YES <input type="checkbox"/> NO <input type="checkbox"/>
3		YES <input type="checkbox"/> NO <input type="checkbox"/>
4		YES <input type="checkbox"/> NO <input type="checkbox"/>
5		YES <input type="checkbox"/> NO <input type="checkbox"/>
<b>PROJECT ENHANCEMENTS AND ADDED VALUE</b>		
<b>LIST OF PROJECT ENHANCEMENTS</b>	<b>DESCRIPTION</b>	

**TAB 5**

**15 POINTS**

*Suggested Text Length: 1 – 5 pages*

**MITIGATION OF NEGATIVE CONSTRUCTION IMPACTS AND PHASING**

Proposer shall:

1. Demonstrate that the plan will minimize or eliminate the risk of increased costs or adjustments to the Contract Time with respect to utility shut-downs, construction noise, and hazardous material abatement, etc. that may affect the campus community.
  - a. Identify what existing equipment will remain in operation and what will be shut down. Indicate the duration and number of shutdowns required.
  - b. Indicate any foreseeable utility shut-downs and specify the durations. Include a mitigation plan.
  - c. Specify the steps required to ensure a successful installation, inspection, and start-up of all equipment.
2. Identify locations of laboratory equipment, chemicals and contents to remain and method for protecting equipment from building temperature fluctuations, damage and dust / debris for the duration of the project. The University is seeking methods that result in minimal disruption to the labs. Identify ways that spaces can be made ready for construction with minimal pre and post construction work by the occupants.
3. Identify locations of laboratory equipment, chemicals and contents to be removed in order to execute the work. Describe methodology for packing, moving, storing and returning laboratories and offices to preconstruction order that will minimize downtime to researchers.
4. Include a sequence of work with minimal service interruption for the occupied facility. Include all hazardous and non-hazardous waste management and disposal work. Demonstrate that it will minimize the duration of downtime to building occupants with respect to laboratory research.

<sup>1</sup> Suggested format

5. Describe work activities and include graphics showing phasing of work connected to construction schedule. Include a phasing schedule that shows how building occupants will be impacted during all phases of construction including demolition, installation, programing, commissioning, punch list and closeout.
6. Provide a plan for providing a clean work environment. Identify how you will conduct progress cleaning throughout the project. This should include a narrative of what the progress cleaning will entail.

**TAB 6****5 POINTS***Suggested Text Length: 1 – 3 pages (Excluding Project Schedule)***PROJECT SCHEDULE**

Proposer shall submit a **Project Schedule** consistent with the staffing plan.

1. Identify the approach to the fast-track design and construction of the project; significant contract activities including shoulder to shoulder sessions; and procurement activities/durations required to complete Construction Documents and obtain required approvals.
2. Include a sequence of work with minimal interruption for the building occupants. Construction drawing packages should be limited to no more than five.
3. Identify shift differential, multiple shift, and weekend/holiday work that would be utilized at each phase of the project.
4. If contingency time is built into the work plan, identify it on the schedule.

**TAB 7****5 POINTS***Suggested Text Length: 1 – 2 pages***QUALITY CONTROL PLAN, STAFFING PLAN AND SAFETY PLAN**

Proposer shall:

1. Demonstrate compliance with **Specification Section 01 4000 – Quality Requirements**.
  - a. Describe organizational and reporting relationships of team members responsible for quality control.
  - b. Identify quality control procedures for design and construction document development (include internal QC and CDA processes) to assure compliance with program requirements and avoid scope expansion.
2. Submit a **Staffing Plan** indicating tasks and resources necessary to accomplish the work.
  - a. Identify key elements of project management and administration.
  - b. Indicate any special training and certifications held by proposed personnel.
  - c. If utilizing, identify shift differential, multiple shift, and weekend/holiday work that would be utilized at each phase of the project and who will be the Superintendent for each of those periods.
3. Describe your program to provide a safe work environment for all site workers and facility occupants.
  - a. Specify proposed safety provisions to minimize exposure to construction hazards for staff and students (i.e. temporary fencing, barricades, signage, etc.).
  - b. Include procedures and methods for mobilization, hazardous material abatement, and construction sequencing while maintaining safety and minimizing negative impacts to building occupants, valuable research and laboratory equipment.





**ORAL PRESENTATION****10 POINTS**

Proposer shall make an oral presentation of its proposal following the University's evaluation of Technical Proposals and prior to the public opening of the Lump Sum Base Price Proposals. However, if at the conclusion of the evaluation of Technical Proposals, the University determines that requesting a BAFO would be in its best interests, the University will defer the oral presentation and proceed with a BAFO phase. The University may elect to request written proposal clarifications from the Proposers prior to holding BAFO discussions.

During the oral presentation, Proposers will be allowed 15 minutes to present the most important aspects of their proposals and 45 minutes to answer questions and provide clarifications requested by the Technical Evaluation Committee. Discussions may cover any of the requirements described in the RFP.

Cost shall not be discussed during the oral presentation. The University's summation of Proposal Clarifications shall be accepted by signature of selected Proposer and incorporated into their Proposal by reference.

**BEST AND FINAL OFFER (BAFO)****20 POINTS**

The University may determine that clarifications to the initial proposals and additional discussions with Proposers are necessary to obtain proposals that are responsive to program and cost requirements, and to optimize the ability to obtain best value for this project. The University will conduct discussions with each Proposer following the technical evaluation with the intent of allowing Proposers to submit a BAFO. The University will request BAFO submittals from Proposers to clarify and document understandings reached during discussions.

The BAFO submittal will consist of two components:

1. A revised technical proposal or supplement covering all additions, changes, or clarifications to the original technical submittal. Revised drawings, presentation boards and other supplements may also be submitted.
2. A revised Lump Sum Base Price Proposal, Lump Sum Base Price Proposal Spreadsheet, and new Proposal Security.