September 25, 2019 Revised October 3, 2019

Owen Letcher, Vice Chancellor, Facilities/Bond Programs and Operations Chabot-Las Positas Community College District 7600 Dublin Blvd., 3rd Floor Dublin, CA 94568

Subject: Las Positas Temporary Faculty Village Proposal for Architectural Services LPAS Project Number: 863-0005

Dear Mr. Letcher,

LPAS looks forward to working with you on the development of your Temporary Faculty Village at Las Positas College. We have the resources available to begin this project as soon as we receive your authorization to do so.

This scope of work is to provide Architectural, Civil, limited Structural, Site Electrical, Low-Voltage design, Modular Fire Alarm design, and Cost Estimating services for the Schematic Design, Construction Documentation, Permitting/Bidding, Construction Administration, and Closeout phases. The overall terms of the agreement will be negotiated in an Owner / Architect agreement. LPAS will proceed with work on this project once a signed agreement is in place.

Project Description:

Our understanding of the project is based upon the provided Temporary Office Complex Basis of Design document. The project includes providing approximately 13 total modular buildings to accommodate 75 faculty offices, conference rooms, and support space(s). In addition, one (1) modular restroom unit will be provided to support the faculty members. A raised, covered walkway with ramps will be provided to connect the modular buildings and modular restroom unit.

A modular building manufacturer will be responsible for the construction documents and cost estimating associated with the modular construction. Their scope will include Architectural, Structural, Plumbing, Mechanical, Electrical, Low Voltage, Audio/Visual, and Fire Sprinkler engineering to first five feet of the building.

In addition to the raised, covered walkway, LPAS will be responsible for the site design including:

- Site code analysis.
- Civil design including selective site demolition as required, grading and utility plan, and erosion control plan.
- Site utilities including the installation of manholes, sanitary sewer line, domestic water service line, recycled water fire service line, and joint trench utility conduits/conductors.
- Site electrical including power to the modular buildings.
- Photometrics of existing lighting to verify no additional site lighting is required.
- The site is less than an acre and will not trigger SWPPP.

Owen Letcher Las Positas Temporary Faculty Village October 3, 2019 Page 2



SCOPE OF WORK

Schematic Design:

- 1. LPAS and Design Team will review Site Code Analysis and Site Accessibility Compliance and develop Site Plans.
- LPAS and Design Team will develop and coordinate an Overall Site Plan, Overall Modular Buildings Layout, Enlarged Typical Office, Conference Room and Support Space(s) Layouts, Enlarged Typical Modular Building Furniture Layouts, and Enlarged Covered Walkway Plan and provide to Client for approval prior to beginning Construction Documents.
- 3. LPAS and Design Team will develop outline specifications.
- 4. LPAS and Design Team will attend (1) meeting, in-person, with the Client.
- 5. LPAS and Design Team will attend (1) web-based coordination meetings with the Client.

Construction Documents:

- 1. LPAS and Design Team will continue to review and coordinate Site Accessibility and Code Analysis.
- 2. LPAS and Design Team will develop and coordinate the Overall Site Plan.
- 3. LPAS will coordinate office layouts and furniture layout with Modular Manufacturer.
- 4. LPAS and Design Team will coordinate utility needs with Modular Manufacturer.
- 5. LPAS will provide Site Details and coordinate with Design Team.
- 6. LPAS will provide Covered Walkway Sections, Elevations, and Details. LPAS will coordinate details with Design Team.
- 7. LPAS will assist the Client in reviewing the selection of interior finishes provided by the Modular Manufacturer.
- 8. LPAS and Design Team will provide design services for low-voltage within our proposal. The conduit and supporting infrastructure will be provided by the Modular Manufacturer. See attached proposal from Interface Engineering, Inc. for additional information.
- LPAS and Design Team to provide basis of design and performance specifications for audio/visual and security systems. The conduit and supporting infrastructure will be provided by the Modular Manufacturer. See attached proposal from Interface Engineering, Inc. for additional information.
- 10. LPAS and Design Team will produce Specifications Manual.
- 11. LPAS and Design Team will attend (1) meeting, in-person, with the Client.
- 12. LPAS and Design Team will attend (2) web-based coordination meetings with the Client.

Permitting/Bidding:

- 1. LPAS proposes submitting two separate increment packages to DSA for approval:
 - a. Modular building construction documents.
 - b. Site design and demolition.
- 2. LPAS proposes submitting two bid packages:
 - a. Modular manufacturer will be bid after the Schematic Design phase. The District may consider a piggy-back contract to award to the modular manufacturer.
 - b. Site design will be bid following DSA approval.

Construction Administration:

- 1. LPAS shall perform Construction Administration services as defined in the Standard Form of Master Agreement. Due to the nature of modular buildings, LPAS anticipates two (2) site trips to observe the general progress of the construction of the modular buildings.
- 2. LPAS shall respond to the Contractor's requests for information or clarification.

Owen Letcher Las Positas Temporary Faculty Village October 3, 2019 Page 3



3. LPAS shall review and approve or take other appropriate action upon the Contractor's submittals (including shop drawings, product data, and samples, etc.) as necessary to ascertain their conformance as set forth in the Contract Documents.

Assumptions and Clarifications:

- 1. Owner to provide a geotechnical report and geohazard report and submit each report to the California Department of General Services (DGS) for review and approval.
- 2. Owner to provide a current topographic survey of the existing conditions in .dwg format to the Design Team.
- 3. It is assumed within this proposal that the Owner will be selecting DSA Approved, Pre-Check (PC) modular buildings for the office modular and restroom modular.
- 4. This proposal is based on the assumption that the Owner approved, DSA Pre-Check (PC) modular buildings will have a standard above surface foundation system.

Additional Services:

- 1. Making revisions in drawings, specifications or other documents when such revisions are:
 - inconsistent with approvals or instructions previously given by the Client;
 - including revisions made necessary by adjustments in the Client's program or Project budget;
 - required by the enactment or revision of codes, laws or regulations subsequent to the preparation of and approval of such documents by the governmental entities with jurisdiction over the Project;
 - due to changes required as a result of the Client's failure to render decisions in a timely manner or due to program changes.
- 2. FF&E selection.
- 3. Provide fire sprinkler engineering design and construction administration for the modular buildings.

Compensation:

Compensation for services described in this proposal shall be on a fixed fee basis as listed below. Billings for services shall be monthly based on the level of completion of the work.

FIXED FEE SUMMARY	Architecture	Civil	Cost	Structural	Electrical	Plumbing	Fire/Life	Fire	Technology	Lighting Site	Total
			Estimating				Safety	Sprinkler	Systems	Verification	
Schematic Design	\$40,006	\$14,646	\$4,140	\$2,243	\$1,150	INCLUDED	\$4,600	INCLUDED	\$4,600	\$2,875	\$74,260
Construction Documents	\$27,134	\$26,701	\$5,290	\$6,728	\$16,100	\$1,150	\$16,100	\$12,363	\$13,800	N/A	\$125,365
Permitting	\$7,383	INCLUDED	N/A	\$2,243	\$1,150	INCLUDED	INCLUDED	INCLUDED	INCLUDED	N/A	\$10,775
Bidding	\$4,180	INCLUDED	N/A	INCLUDED	INCLUDED	INCLUDED	\$1,150	\$575	\$1,150	N/A	\$7,055
Construction Administration	\$21,660	\$13,368	N/A	\$3,738	\$4,600	\$575	\$5,750	\$2,875	\$5,750	N/A	\$58,315
Closeout	\$2,146	\$3,294	N/A	INCLUDED	\$1,150	INCLUDED	\$1,150	INCLUDED	\$1,150	N/A	\$8,890
Total	\$102,509	\$58,008	\$9,430	\$14,950	\$24,150	\$1,725	\$28,750	\$15,813	\$26,450	\$2,875	\$284,660

Fire Sprinkler System Design – Modular Units: \$52,440 Reimbursable expenses: \$6,000

Sincerely,

Tracy T. Hart, NCARB Market Sector Leader / Sr. Project Manager LEED AP



September 19, 2019 BKF Job No. P20181872-04

Ms. Tracy Hart, Project Director LPAS Architects 2484 Natomas Park Dr. Ste 100 Sacramento, Ca. 95811

RE: Las Positas College Temporary Faculty Village Civil Engineering Services Proposal

Dear Tracy:

We are pleased to submit this fee proposal for civil engineering design services for the design of the temporary temporary faculty village on the Las Positas Community College campus located in parking Lot G. For the purposes of defining the scope and fees, we have assumed the civil scope to include the design of civil site utility services (Domestic, Fire, and Sewer) to the proposed portable. We also anticipate including a site demolition, site paving, grading and striping plan for site accessibility requirements within limits of parking Lot G.

Our scope of services shall include the following tasks:

Schematic Design (DSA checkset) 6 weeks

- 1. Using the architectural site plan as a background we will prepare a schematic level site utility plan showing points of service for the portables.
- 2. We will coordinate the civil utility services design with the joint trench consultant and include their schematic utility service layouts cad file on the civil site utility plan for coordination.
- 3. We will prepare a schematic site demolition plan for the proposed accessibility pathway from Parking Lot G to the adjacent Campus Loop sidewalk.
- 4. We will prepare a schematic site ADA improvement plan including grading, paving and striping for the proposed accessibility pathway in Parking Lot G.
- 5. We will prepare a preliminary set of technical specifications based on campus standards that cover the civil scope of work. Please note the MEP and telecom technical specifications for the mechanical, electrical and telecom utilities will be prepared by the MEP/Joint trench consultant.
- 6. We have included time for 1 kick off meeting at the project site.
- 7. We have included 1 conference meetings in this phase to coordinate the civil design with the design team and the District.

Construction Documents (DSA Permit) 8 weeks

- 1. We will update our plans and specifications to incorporate schematic design comments from the District review.
- 2. We will update our plans and specifications to incorporate comments from initial DSA submittal.



- 3. Using the final updated site plan provided by the architect, we will update our backgrounds for the civil site utility plan, site demolition plan, and site ADA improvement plan. We will provide more detailed information about the exact location of the points of service into the building. All services shall be shown to face of portable building on the civil plans.
- 4. We will prepare a pump design/details for the sanitary sewer to pump sewage to the Manhole near building 1900. Electrical requirements will be provided to the electrical consultant. Electrical service to the pump/controller is assumed to be provided by the electrical consultant.
- 5. We will update our technical specifications that cover the civil work.
- 6. We will provide construction details that cover civil scope of work.
- 7. We will provide an erosion control plan.
- 8. We will provide submittals at the 100% CD Level.
- 9. We have included an additional 2 coordination meetings in this phase of work.

Construction Phase (6 months)

- 1. During the construction phase, we will respond to RFI's submitted by the contractor and provide clarifications to the construction documents.
- 2. We will provide technical review of materials submittals for the civil scope of work.
- 3. We have included 1 site visits during construction to review questions about the project design or site conditions.

Project Closeout/Record Documents

- 1. As part of the closeout phase we have included a (2) site visits to prepare a punch list of deficient items and a final punch.
- 2. Based on the redline sets of marked up construction drawings and specifications provided by the contractor, we will prepare a set of record drawings and specs for the District's use.
- 3. We have included 12 hours of engineering time to complete the tasks of this phase.



Please note that we will include the reimbursable expenses in our fees.

Please note that the following scope items have not been included in our scope or fee:

- 1. Geotechnical investigation, design guidelines for grading and pavement design recommendations.
- 2. Existing survey and utility potholing/locating. We have assumed that this information will be provided by the District.
- 3. Preparation of the site layout plan showing the layout of the proposed site improvements, landscape, and hardscape detailing.
- 4. Site lighting and irrigation design.
- 5. Site retaining walls and foundation drainage design.
- 6. Detailing accessible signage, handrails and ramps.
- 7. Booster Pump: It is assumed that if domestic water pressure is low that the MEP consultant will provide a booster pump design.
- 8. Chilled Water and Hot Water: Is assumed that Chilled Water and Hot Water will not be required for this project. We assume that CW and HW would assume that these site mechanical systems would be designed by Mechanical sub if required.
- 9. Joint trench design: We have assumed that the joint trench consultant will provide design of the gas, electrical, and communication services.
- 10. Stormwater management/design: Based on the RFP documents provided to us it assumed that stormwater treatment/management will not be required for this project.
- 11. Storm drainage design: Based on the RFP documents it assumed that storm drainage design is not required, the portables will have roof drains that daylight to paving and accessibility improvements will overland flow.
- 12. Construction staking services.
- 13. SWPPP (QSD and QSP services): It is assumed that land disturbance is less than an acre and a SWPPP will not be required for this project.

Thank you for the opportunity to provide you with a proposal for this project. We look forward to working with the LPAS team and the District on this project. If you have any questions, feel free to give me a call at (925) 396-7723.

Sincerely, BKF ENGINEERS

Steve Reynolds, P.E. Project Manager Attachment: 2019 BKF Rates



1777 Oakland Blvd., Suite 103 Walnut Creek, CA 94596 TEL: 415-291-3200 FAX: 415-291-3201 www.lelandsaylor.com

September 25, 2019

Tracy Hart LPAS Architecture + Design 5 Third Street, Suite 1117 San Francisco, CA 94105

RE: Las Positas College Building Temporary Village LSA Quote #Q19-228r1

Dear Ms. Hart:

We are pleased to submit our proposal for consulting services for the above-referenced project as follows:

1. <u>**Project Description:**</u> Project includes sitework only for preparation of existing parking lot to receive temporary portables to house displaced workers while building 2100 is being constructed. 10 working day windows for all estimate levels. Any estimating periods that fall between the last week of November and the 2nd week of January will add another 2-5 working days to the estimate period to accommodate for staff vacations.

2. <u>Fee Proposal:</u>

- 2.1 Schematic Estimate.
- 2.2 Construction Documents

3. Supplemental Consulting: All work not specifically covered by the fixed fees above shall be billed on a time and materials basis in accordance with LSA's current schedule of fees and the terms of this agreement. Additional work includes any work not included in this agreement which may be requested by agencies and/or owners, such as preparation for meetings or attendance of meetings, additional estimates not in scope, reconciliation of LSA's estimate(s) with other estimate(s), value engineering services and services related to litigation. Requests for such meetings, studies and additional estimates not in scope must be authorized in writing.

Via email:

September 23, 2019

Mr. Curtis Owyang Director of Design, Vice President LPAS 5 3rd Street San Francisco, CA 94103

RE: PROPOSAL FOR STRUCTURAL ENGINEERING SERVICES Las Positas College Temporary Faculty Village

Dear Curtis,

We are excited to submit this proposal for structural engineering services for the Temporary Faculty Village Project (the Project) at Las Positas College in Livermore, California.

Thornton Tomasetti (TT) offers this Proposal based on the Basis of Design from the Chabot Las Positas Community College District (the Owner) and also correspondence with LPAS (the Client). The project delivery method is Design-Bid-Build.

I. PROJECT DESCRIPTION

TT will provide structural engineering for the 3000 square foot covered walkway and its foundation. There are also ramps at the covered walkway. TT will provide drawings and calcs as required for the ramps unless it makes more sense for the project civil engineer to show them.

TT understands that the supplier of the modular buildings in the project, which includes faculty offices, a restroom, conference and administrative space, will provide structural engineering for them and their foundations. Their engineer will stamp the associated drawings and calcs with a California Professional or Structural Engineer's stamp. In addition, the modular building supplier will serve as structural engineer of record for those buildings during Division of the State Architect review.

The governing code is anticipated to be CBC 2016 with A amendments from the DSA.

II. THORNTON TOMASETTI PROJECT TEAM

Thornton Tomasetti's team has top-flight expertise for this Project:

- Principal in Charge and Project Manager: Justin Fahey
- Project Engineer: Katie Hansan
- Quality Assurance/Quality Control: Steve Ratchye

TT has more than 30 years of experience on DSA projects of all types, including new design, retrofits and contracted plan checking. Thornton Tomasetti, Inc. (TT) is a leader in structural engineering, sustainability consulting and façade design serving clients worldwide on projects of all sizes and complexity.

RE: Las Positas College Temp Faculty Village, revised2 September 23, 2019

III. SCOPE OF SERVICES

The scope of services for this project follow below:

- A. Schematic Design Phase
 - 1. Narrative Prepare a narrative describing the structural design of the elements in TT's scope.
 - 2. Facilitate selection of optimum structural and foundation systems with Design Team and Owner.
 - 3. Drawings At the completion of Schematic Design, prepare plans for foundations and the superstructure. Identify structural systems and typical member dimensions to the extent that allows general dimensional coordination and for schematic cost estimation by others.
 - 4. Specifications—Provide structural outline specifications.
 - 5. Feasibility and optimization studies will be documented in the form of structural framing plans and narrative descriptions sufficient for cost estimating by others.
 - 6. Project cost Review preliminary project cost estimates provided by others.
 - 7. Meetings—Attend a kick-off meeting in person and other web-based meetings.
- A. Construction Documents Phase
 - 1. Drawings Provide progress foundation and superstructure construction drawings for review at some point in CD phase. After addressing comments, submit final stamped and signed Construction Documents for submission to plan check review, bidding, and for production of shop drawings.
 - 2. Provide consulting services to the Architect in the preparation of contract documents for the anchorage or bracing of architectural features for the walkway. Assist in preparing conceptual details and performance specifications for any pre–engineered building elements.
 - 3. Specifications Provide structural specifications for use as contract documents, for bidding, and for producing shop drawings.
 - 4. Structural Calculations Prepare signed and stamped structural calculations as required for submission to the Division of the State Architect (DSA).
 - 5. Meetings Participate one meeting in person and more web-based meetings.
 - 6. Construction Quality Assurance Assist in establishing testing and inspection requirements and fill out DSA forms specifying these requirements.
- B. Permitting Phase
 - 1. Permitting Assist in obtaining building permits for the Structural Construction Documents package from the agency with jurisdiction, the Division of the State Architect (DSA).
 - 2. Address structural comments and, if necessary, by meeting with DSA plan checker over the counter, to obtain approval for same. Assist Architect, Mechanical, Electrical and Plumbing Engineers in responding to anchorage comments.
- C. Construction Administration Phase

- RE: Las Positas College Temp Faculty Village, revised2 September 23, 2019
 - Construction Administration Provide administration of the Contract for Construction as set forth below and in the edition of AIA Document A201, General Conditions of the Contract for Construction, current as of this date, unless otherwise provided in this Agreement.
 - 2. Submittal Review Review the structural submittals required by the Contract Documents and approved by the Contractor, and approve or disapprove with comments, as appropriate, for general conformance with the information given and the design intent of the Contract Documents. The review of submittals shall be conducted only after the Contractor has coordinated the submittals to indicate field conditions, proposed Contractor deviation from the Contract Documents, and other requirements which affect design intent.
 - 3. Review of Performance–Designed Systems For structural systems specified by performance specification such as, but not limited to, cladding systems, etc. the Contract Documents shall provide that the sub–contractor will design the performance specified systems, under the supervision of a California–licensed professional engineer, based on TT's loading information. TT's review and acceptance of the designs will not relieve the sub–contractor and its professional engineer of their responsibility for the design services they perform.
 - 4. Field Observation TT shall visit the site at intervals appropriate to the stage of construction to observe the structural construction, limited to two trips, including a report on each visit. The frequency of visits shall not necessarily correspond to the Architect's contractual commitment to the owner.
 - 5. Review testing and inspection reports, and initiate appropriate action to those reports as necessary.
 - 6. Fill out, sign and/or stamp DSA forms typical for project closeout.

IV. PROJECT DELIVERY METHOD AND SCHEDULE

A. Project Delivery Method

Our Basic Fee listed below is based on a traditional delivery method: defined here as the simultaneous issuance of construction/bid documents from all design consultants.

If a fast track schedule is eventually required, we reserve the right to request additional fees.

B. Schedule

We understand that architectural programming has already started and we look forward to establishing the rest of the schedule with LPAS and the District.

RE: Las Positas College Temp Faculty Village, revised2 September 23, 2019

EXHIBIT B ADDITIONAL SERVICES

While TT is capable of performing many of the following services, they are not included in the proposed Scope of Services and are not included in the Basic Fee. If requested, we would be pleased to provide separate proposals for these services.

- 1. Performance-based seismic design if specific earthquake performance objectives beyond code-based design are desired for the buildings. In addition, design and/or analysis with respect to blast, structural hardening or progressive collapse would be an additional service as well.
- 2. Providing design for elements outside the building footprint, such as site structures monuments, permanent seating, signage structures, lighting structures, and related foundations, landscape walls, retaining walls, security structures and foundation (bollards and planters), pads, and pavements.
- 3. Addressing future facilities, systems, and equipment and tenant modifications that are not identified in the scope of work.
- 4. Addressing existing conditions at the Project site and the adjacent sites not identified to TT prior to this proposal.
- 5. Accommodating significant scope changes including, but not limited to, difference in the Project scope, area, cost, schedule, or delivery method, delegated design changes from performance criteria and design assumptions included in the Construction Documents, and revisions to architectural and/or MEP components that affect the structural system.
- 6. Indicating measurements of existing conditions on TT drawings.
- 7. Providing an as-built set of drawings.
- 8. Providing full-time observation of the structural work or performing Special Inspections.
- 9. Performing site visits or attending site meetings beyond the number listed in the Scope of Service.
- 10. Processing submittals from the Contractor, which have not been solicited by the Contract Documents, including but not limited to, those related to loads imposed by the Contractor's temporary work, temporary equipment, construction cranes, and/or construction hoists, or the processing of submittals related to alternate designs and/or contractor substitutions.
- 11. Time and expenses related to serving as an expert witness or consultant in connection with any public or private hearing, arbitration, or legal proceeding.
- 12. Revisions to work that have already been completed and approved.
- 13. Services provided either after the issuance of the final Certificate of Payment for construction or 60 days after the date of Substantial Completion of the work, whichever occurs first.
- 14. Services made necessary during the construction phase by the default of the Contractor or corrections required due to deficiencies in the work of the Contractor.
- 15. Value-added services, as described in Thornton Tomasetti's Capabilities and Services, can be provided by TT as additional services.
- 16. Building Information Models for Contractor's use may be provided for the fees and conditions of use as mutually agreed upon at later date.

RE: Las Positas College Temp Faculty Village, revised2 September 23, 2019

EXHIBIT C ASSUMPTIONS AND LIMITATIONS

- 1. Structural design of the modular buildings, their foundations and bracing of architectural items in those buildings will be by others.
- 2. TT will consider existing structural drawings as a reliable representation of as-built conditions. Detailed inspections to verify as-built construction is not in the scope of Basic services. TT will also rely upon the structural materials information provided in the original construction documents, and will not be performing any field testing, or existing materials sampling in this scope of work.
- 3. Miscellaneous Architectural Elements: TT will assist the Architect in specifying performance criteria and dimensional requirements for items that are indicated on the Architectural Drawings and that benefit from structural engineering input, such as exterior walls, cold formed steel, and miscellaneous steel. TT will assist with items that are specifically identified to TT during the design phase as requiring the Structural Engineer's input.
- 4. Thornton Tomasetti will provide anchorage/bracing drawings and supporting calculations for cladding, window walls and skylights. Architect will select a single supplier of each system during the design phase to provide Thornton Tomasetti input.
- 5. Dimensional control of locations and sizes for openings, slab edges, curbs, and depressions will be provided on drawings by others.
- 6. The anchorage/bracing of mechanical/electrical distribution systems and equipment, and obtaining Building Department approval, will be the responsibility of the Mechanical and Electrical Engineers of Records.
- 7. TT will design and detail equipment pads and supports for roof mounted and/or ground supported mechanical equipment.
- 8. Masonry partitions, curbs, and housekeeping pads: These items will be indicated on the Architectural/MEP Drawings. TT will assist the Architect by providing design recommendations in response to specific inquiries.
- 9. Temporary Conditions: The temporary excavation and dewatering systems and any other temporary system required for construction will be entirely designed and detailed by the Contractor.



Interface Engineering 135 Main Street, Suite 400 San Francisco, CA 94105 TEL 415.489.7240 www.interfaceengineering.com

October 2, 2019

Tracy Hart LPAS Architecture + Design (Sacramento) 2484 Natomas Park Dr, Suite 100 Sacramento, CA 95833

Re: Las Positas College Temporary Faculty Village Professional Services Proposal

Dear Tracy:

Thank you for the opportunity to provide you with our proposal for the referenced project. Your project is important to us and we have made an effort to address detailed scopes for all disciplines.

This proposal is based on our Standard Provisions of Agreement for Professional Services, which is attached and incorporated by this reference.

PROJECT DESCRIPTION

Project Owner Chabot Las Positas Community College District

Project Location Las Positas College Livermore, CA

Building/Project Description

The project is limited to approximately 16,000 GSF of temporary portable structures to support housing the faculty and administrative functions at Las Positas College.

Sustainable Design Requirements

None. Energy modeling scope is excluded from this proposal.

INFORMATION SOURCE

Email from LPAS dated September 18, 2019 and a revision request email October 01, 2019.

ASSUMPTIONS

Based on our conversation, information received, documents provided, we understand that this project:

- Will have a single bid/construction packet.
- Existing site lighting is adequate. Interface will provide photometric testing to validate this assumption, however new lighting is not included.

Mechanical and Electrical Engineering Building Technologies Commissioning Energy Consulting Fire/Life Safety Lighting Design Sustainable Design Portland San Francisco Los Angeles Honolulu Chicago Washington, DC



• Project Funding: We have assumed and understand that funding for this project has been secured or will be in place when project design starts. We have not assumed that payment for services will be held or delayed due to any funding delays or issues.

PROJECT SCHEDULE

- Design: Four (4) months estimated.
- Permitting: Six (6) months estimated (DSA only).
- Construction: Six (6) months estimated.

Note: Dates listed above are approximate based on information provided. However, substantial changes to the schedule above, and start/stops to project progress may result in additional services and fees.

MEETINGS

One (1) in-person kick-off meeting and one (1) in-person meeting either at the beginning of SD or CD phases. Internal design team meetings as necessary via electronic virtual meeting formats.

DESIGN SUBMITTALS

Schematic, DSA / Permit, DSA Backcheck, Final Construction Documents

CONSTRUCTION COSTS

Not provided

ENGINEERING SERVICES DESCRIPTION

Our scope of services is limited to the following. Services not included are additional services.

Mechanical Engineering Services

Heating, Ventilating, and Air Conditioning Systems

- 1. Air conditioning and heating systems design.
- 2. Space heating and ventilation design for areas not requiring air conditioning.
- 3. Building exhaust systems design.
- 4. Performance specifications for temperature control or building energy management system.
- 5. Heating and cooling load calculations.
- 6. State Energy Code calculations for building envelope and mechanical systems.

Plumbing Systems

- 1. Sanitary drainage, vent, and domestic water design for first 5 feet outside each building.
- 2. Plumbing fixture specifications.
- 3. State Energy Code calculations for building plumbing systems.



Electrical Engineering Services

Electrical Utilities Coordination

1. Power Utility: Site raceway system, vault/pedestal locations and sizes, revenue meter location/requirements, transformer pad location(s), and available fault current.

Building Power Distribution

- 1. Design for normal power based on power requirements provided to Interface Engineering from the portable building manufacturer.
- 2. Design for connection to interior and exterior signage based on information provided by others.

Electrical Engineering Studies

- 1. Design life safety power distribution system for life safety loads such as egress lighting utilizing central battery inverter as the backup source.
- 2. Preliminary fault current analysis. Final fault current and arc flash study to be performed by others.

Lighting Design Services

1. Interface Engineering will provide site readings of the existing lighting and a report to determine if the assumption that additional is not required is a valid assumption.

Fire/Life Safety Engineering Services

Fire Detection and Alarm Services

- 1. Performance specifications based on the following:
 - a. State and local code requirements.
- 2. We will provide permit drawings per the DSA requirements. Contractor will develop working / shop drawings from our DSA permit approved level drawings.
- 3. Shop drawings suitable for permit, including:
 - a. Layout of the notification appliances.
 - b. Layout of the initiating devices and equipment.
 - c. Layout of main and remote-control equipment.
 - d. Details for control of mechanical equipment and other fire life safety functions.
 - e. Block and riser diagrams.
 - f. Battery calculations.
 - g. Voltage drop calculations.
 - h. Wiring diagrams.
 - i. Wiring schedules.
 - j. Point-to-point wiring.



Fire Protection Sprinkler Services – Covered Walkway

- 1. Performance specifications based on the following:
 - a. State and local code requirements.
- 2. Provide a piping and head layout that is coordinated with the structural and architectural elements of the building.
- 3. We will provide permit drawings per the DSA requirements. Contractor will develop working / shop drawings from our DSA permit approved level drawings.
- 4. Our design package includes:
 - a. Piping and head layout.
 - b. Center to center pipe lengths and pipe sizes.
 - c. Hydraulic calculations.
 - d. Sway brace calculations.
 - e. Materials submittal package for Architect's review.
 - f. Details.

Building Technologies Systems Design

- 1. Telephone Utility for the new Temporary Faculty Village: Site raceway system, vault/pedestal location, and demarcation location.
- 2. CATV Utility for the new Temporary Faculty Village: Site raceway system, vault/pedestal locations and sizes, and demarcation location.

Design of the following systems, including construction documents and specifications.

- 1. Data/Telecommunications System Design:
 - a. Layout of outlets on drawings.
 - b. Rack sizing, specification, and layout.
 - c. Backbone cabling design of building distribution cabling and connecting hardware.
 - d. Horizontal cabling design of building distribution cabling and connecting hardware.
 - e. Spaces: Including sizing and layout of telecom equipment room.
 - f. Pathways: Including raceway system, conduit, sleeves, cable trays, and wireways.
 - g. Grounding system for technology systems.
 - h. Outside plant cabling system.
- 2. Security Systems:
 - a. Electronic access control entry system.
 - b. Intrusion detection.
 - c. Video surveillance system using IP or analog video and digital recording.

CONSTRUCTION ADMINISTRATION: BIDDING AND NEGOTIATIONS

- 1. Answer questions during bidding phase.
- 2. Issue addenda as may be required under the original design scope.



- 3. Two reviews of the system submittals are included and are to be provided per Interface standard specifications; additional reviews and piece meal submittals will be billed at our hourly rates with prior written approval.
- 4. Answer RFI's and construction questions.
- 5. Construction observation site visits:
 - a. One final construction review site visit/punch list.
- 6. Issue of ASIs, change orders, plan revisions, etc. generated by others is not included. Additional fees will be submitted for prior approval for these services.
- 7. Review of change order costs initiated by others will be billed hourly, on prior approval.
- 8. Preparation of construction record drawings from contractor's BIM field drawings. Contractor's floor plan PDF changes will be inserted into Interface's documents, drawings will not be redrawn to match Contractor as-builts which are required to be delivered per our specifications in a format that is able to be integrated into the design BIM model.

EXCLUSIONS AND CLARIFICATIONS

- 1. Construction cost estimates will be by construction cost estimator. We will provide a cost opinion or review cost estimator's pricing.
- 2. Shop drawings, fabrication drawings, and construction coordination drawings are not included.
- 3. Life cycle cost analysis for alternate mechanical/electrical systems are not included beyond the requirements of the District's deliverables.
- 4. Structural calculations for the seismic restraint of mechanical and electrical equipment are not included.
- 5. Waterproofing details/requirements for building components by others are not included.
- 6. Commissioning of systems is not included unless proposed and accepted.
- 7. Cost reduction requiring redesign after approved (District approved based on budget and scope as well as any desired District modifications) systems have been designed is not included.
- 8. Determination/interpretation of egress lighting paths with local officials is not included.
- 9. Change order issues, ASIs, and revisions requiring redesign and additional design are not included.
- 10. Lighting design.
- 11. HVAC and Plumbing design. We assume any site related booster pump stations, etc. would be provided by the project civil engineer.