



March 20, 2015

Mr. Martin Fregoso
Los Gatos Union School District
17010 Roberts Road.
Los Gatos, CA 95032

Re: Scope and Fee Proposal for Commissioning Services for LGUSD Fisher Sports Complex

Dear Mr. Fregoso:

EXECUTIVE SUMMARY

Enovity, Inc. is pleased to submit this proposal for Commissioning Services for the Los Gatos Union School District, Fisher Sports Complex in Los Gatos, California.

Project Description

This project is the renovation of, and addition to, the existing Gymnasium including upgrade of all mechanical, electrical, and plumbing systems. Project includes construction of a new canopy attached to the gymnasium, a new locker room building, and a new fitness and dance studio building.

Proposed Services

Enovity will assume the role of Commissioning Authority for Commissioning Services for the project to satisfy the CHPS Abbreviated and Standard Commissioning requirements, as described below.

Project Documents

This proposal is based on the following documents:

1. DSA Submittal dated 2/23/15

Anticipated Project Schedule

Funding Status:	Approved
Construction Starts:	April 2015
Construction Complete:	July 2016

We reserve the right to adjust our proposal and fee should the schedule for this project be altered significantly. A construction delay of more than 120 days from the schedule above would be considered to be a significant alteration.

COMMISSIONING SERVICES

Systems to be Commissioned

At a minimum, the following critical building systems will be commissioned:

- Mechanical HVAC Systems and Controls
- Domestic Hot Water Systems
- Lighting Control Systems

The following building systems are excluded from the scope of work:

- All HVAC, lighting, hot water, exhaust systems, appliances, and fixtures serving the residential complex
- Duct testing, blower door testing, and QII/Thermal Bypass testing
- Electrical distribution system
- Electronic security systems
- Life safety systems (fire alarm, fire protection, sprinkler)
- Plumbing fixtures and systems not included above
- Water treatment system
- Renewable Energy Systems; i.e., solar thermal or PV, wind, etc.
- Stormwater management systems
- Communication systems (telecommunications, AV, paging, intercom, and sound controls)
- Building envelope, including fenestration and roofing systems

Scope of Work for CHPS Commissioning Services

The commissioning services described herein meet CHPS Commissioning Requirements for the gymnasium, new locker room building, and new fitness and dance studio building.

CHPS Building Systems Commissioning

The requirements for CHPS abbreviated and standard commissioning are as follows:

1. Assign an independent Commissioning Agent for the project
2. Review the Design intent documentation
3. Develop and implement a commissioning plan
4. Perform a construction documents design review
5. Develop and incorporate commissioning specifications into the construction documents
6. Witness pre-functional testing
7. Witness Functional Performance testing
8. Produce a Commissioning report
9. Verify O&M manual
10. Verify operator training
11. Produce a Systems Manual
12. Perform a one year warranty review
13. Complete a summary commissioning report

Detailed Scope of Work – Design Phase

Review Design Intent and Commissioning Specifications

Enovity will review the Design Intent Document and construction documents for the project and will develop commissioning specifications for the project. We will coordinate with design discipline leads to compile a commissioning specification in Construction Specification Institute (CSI) format. Specifications will include Division 0 specifications (General Commissioning Requirements), along with trade specifications for each system defined by the scope of work.

Task Deliverables and Milestones:

1. Division 1 and trade specifications for commissioning
2. Design review of construction documents

Detailed Scope of Work – Construction Phase

General Overview

During construction, our role on this project is to assist in the efforts to plan and organize commissioning activities; attending commissioning progress meetings; writing equipment pre-functional checklists and functional test procedures; verifying systems readiness; witnessing functional tests; working with the A/E of record to resolve design-related issues; and acting as arbiter of test results. We will not perform testing directly, but we will witness tests performed by the contractor and subcontractors. The following sub-sections are presented in a relative sequence that lays out a general schedule of activities and deliverables.

Coordination, Meetings, Planning, Administration, and Commissioning Issues List

The Enovity Commissioning Project Manager will coordinate the commissioning activities in a logical, sequential and efficient manner using consistent protocols and forms, centralized documentation, clear and regular communications and consultations with all necessary parties, frequently updated timelines and schedules and technical expertise. We will plan a Construction Phase Commissioning Kickoff Meeting and will attend one (1) commissioning progress meeting. We will update, produce, and distribute electronically and in hard copy a Commissioning Issues List that tracks ongoing commissioning issues, with their observed date, responsible party, and resolution.

Phase Activities and Deliverables:

1. Lead One (1) Construction Phase Commissioning Kickoff Meeting
2. Attend One (1) Construction Commissioning Progress Meeting
3. Publish, update, and maintain Commissioning Issues List

Development of a Commissioning Plan

Enovity will develop a Commissioning Plan for the project. The Commissioning Plan will include a list of all systems and specific equipment and components to be commissioned, relevant tests, procedures and template forms, a narrative procedural discussion on the commissioning process, communication protocols, reporting and documentation requirements, and a preliminary schedule for the commissioning process. The Commissioning Plan is a living document that will be updated throughout the construction phase of the project and includes the following:

- Narrative discussion and graphical outline of the commissioning process
- List of systems to be commissioned

- Management and responsibilities matrix
- Preliminary schedule of commissioning activities with major milestones
- Preliminary draft testing procedures and acceptance criteria

Task Deliverables and Milestones:

1. Construction Phase Commissioning Plan

Installation Verification and Pre-Start Inspections

Enovity will work with the contractor to document that system installation proceeds in accordance with the contract documents. Installation verification (IV) checklists are typically developed by the contractor based on equipment submittals and manufacturer's requirements. Completed forms from the contractor will be integrated into the Commissioning Report. The IV forms must be completed, signed, and submitted by the contractor prior to systems startup.

Phase Activities and Deliverables:

1. Collect Installation Verification/Pre-Start Forms prior to systems startup or systems energization

Systems Startup, TAB Witnessing and Completion of Systems Readiness Checklists (SRCs), and Review of Controls Programming

Verification of the proper startup procedures and parameter settings of the equipment are critical to the fundamental systems operation and are key to maintaining warranties. Equipment startup forms (manufacturer's recommended startup checklists) will be submitted by the contractor for integration into the Commissioning Plan. Completed startup forms from the contractor will be verified by Enovity prior to the start of functional testing.

Verification of TAB of air and water systems assures that proper procedures and tools are being utilized and that TAB measurements/settings are reliable. We will review the TAB report upon completion of TAB activities. TAB work must be 100% complete prior to the start of Functional Testing.

SRCs will be developed by Enovity and completed and signed off by each installing contractor to certify that systems are ready for functional performance tests. For HVAC systems, this typically includes documentation of completed equipment startups, completion of TAB and preliminary TAB report, and completion of all controls point-to-point verifications, final graphical programming and final sequence of operations.

Phase Activities and Deliverables:

1. Provide System Readiness Checklists (SRCs) to the contractor. Review and approve completed SRC forms and field verify SRC status.

Functional Performance Testing (FPT) and Completion of Commissioning Issues List

Enovity will assist the contractor in coordinating functional performance tests (FPTs) performed by installing subcontractors and we will witness FPTs for all major equipment. Tests on identical Electrical equipment (e.g., sensors), will be performed for all modes of operation on a representative sample of like systems; however the contractor will be responsible for testing 100% of all equipment. The functional testing will include operating and verifying the various systems and components through each of the written sequences of operations, and other significant modes and sequences, including startup; shutdown; unoccupied mode; all modes related to control set-points; energy efficiency features; manual mode. Functional testing will be performed on a component level manually by the contractor supported by the M/E subcontractors and witnessed by Enovity, together with extensive collection and review of BAS system-wide trend logs performed by Enovity staff, to provide a high level of confidence of proper system function. Enovity typically will witness one test and one re-test related to a particular component

or system in the scope of base commissioning. The Commissioning Issues List and a separate record of functional testing will be updated and maintained by Enovity throughout the functional testing period. All issues will be recorded as they occur, and written progress reports and test results with recommended actions will be provided directly to the Owner.

Phase Activities and Deliverables:

1. Provide Functional Performance Test forms (FPTs) to the contractor. Review and approve completed FPT forms.
2. Conduct one (1) day of witnessing of Component / Systems Functional Testing and one (1) day of Back-checks
3. Complete FPT forms
4. Provide an updated Commissioning Issues List to the team

Commissioning Report and Systems Manual

To conclude the project, Enovity will complete a Construction Phase Commissioning Report conforming to the Commissioning requirements within 60 days of Substantial Completion. The Report will organize and number all commissioning data, documents, tests and test results, and a systems manual in PDF format (bookmarked).

Phase Activities and Deliverables:

1. Final Commissioning Report to include:
 - Executive Summary
 - Final Commissioning Issues List
 - Final IV, Startup Forms, SRC, and FPT Forms
 - Final Commissioning Plan, OPR, BOD, and specifications
 - Final compiled commissioning documents (1 hard copy and bookmarked PDF soft copy on flash drive)
 - Systems Manual

PROJECT TEAM

The Enovity commissioning project team members are proposed as follows:

Project Manager

Kevin Quigley, PE, LEED AP, Senior Project Manager, will manage the project and serve as the main point of contact throughout all project phases. With more than 35 years of diversified design, construction, commissioning, and project management experience in the engineering field, Kevin is a highly experienced member of Enovity's commissioning group. He has managed and supported commissioning of new construction projects in commercial office, laboratory, high-tech, education, and transportation facilities continuously over the past 12 years. Kevin is a licensed Professional Engineer (Mechanical) in California and a LEED Accredited Professional.

Commissioning Engineer

David Seifert, EIT, LEED AP, Commissioning Engineer, will assist with the field commissioning and commissioning documentation for the project. David provides technical and administrative support for all phases of commissioning. He has experience commissioning HVAC systems, security/access controls,

plumbing systems and electrical systems. David holds a B.S. in Mechanical Engineering from Cal Poly University, San Luis Obispo and is a LEED Accredited Professional.

PROPOSED FEES

Fees for Commissioning Services

Per the scope of work for Commissioning Services described above, the lump sum fixed fee, which includes all direct project expenses, is as follows:

Nineteen thousand six hundred sixty dollars.....\$19,660.00

Hourly Rates

For any additional services, we will invoice at the following hourly rates:

Labor Category	Hourly Rate
Principal	\$235
Director	\$195
Senior Project Manager	\$185
Project Manager	\$175
Project Engineer III	\$165
Project Engineer II	\$155
Project Engineer I	\$145
Project Coordinator/Admin	\$95

Terms

This is a Lump Sum proposal. A Schedule of Values will be used to reflect the tasks identified in the above section. Invoices will be submitted on a monthly basis at the end of each month for percentage of completion for each task. Invoices will be due and payable in full within 30 days from the invoice date. This proposal is valid for 10 days.

Agreement

This work will be contracted by:
Los Gatos Union School District
Mr. Martin Fregoso
17010 Roberts Road
Los Gatos CA 95032
Phone: (408) 335-2030
Fax: (408) 395-6481
mfresgoso@lgusd.k12.ca.us

The Enovity point of contact for the contract is:
Enovity, Inc.
Mr. Greg Cunningham, AIA, LEED AP
100 Montgomery Street, Suite 600
San Francisco, CA 94104
Phone: (415) 974-0390 x101
Fax: (415) 974-0399
gcunningham@enovity.com

I am available to answer any questions you may have about this proposal and I look forward to an opportunity to discuss the project goals in person.

Respectfully,



Greg Cunningham, AIA, LEED AP
Principal
(415) 974-0390 x101

gcunningham@enovity.com

Cc: Kevin Quigley, Enovity
Marjan Khanzadeh, Kramer Project Development