

1 **THIRD AMENDMENT TO AGREEMENT NO. 30954**

2 **30954**

3 THIS THIRD AMENDMENT TO AGREEMENT NO. 30954 ("Amendment")
4 is made and entered, in duplicate, for reference purposes as of March 1, 2011, pursuant
5 to a minute order adopted by the City Council of the City of Long Beach on March 1,
6 2011, by and between the CITY OF LONG BEACH, a municipal corporation ("City") and
7 C & S ENGINEERS, INC., a New York corporation ("Consultant").

8 WHEREAS, City and Consultant previously entered into an Agreement
9 dated October 20, 2008 (as previously amended, the "Agreement"), pursuant to which
10 Consultant agreed to perform certain services implementing Phase One of the
11 Residential Sound Attenuation Program for City; and

12 WHEREAS, City and Consultant now desire to amend the Agreement to
13 provide for Consultant's provision of certain services implementing Phase Two of the
14 Residential Sound Attenuation Program for City under the terms of the Agreement;

15 NOW, THEREFORE, City and Consultant mutually agree as follows:

16 1. This Amendment shall be effective as of the date on which this
17 Amendment is executed by both parties (the "Effective Date").

18 2. In addition to the services described in Exhibit "A" and Exhibit "A-1"
19 to the Agreement, Consultant shall also provide the services described in Exhibit "A-2" to
20 this Amendment (the "Phase Two Services"), and City shall pay for the Phase Two
21 Services in the manner described in the Agreement, not to exceed Four Hundred
22 Thousand Dollars (\$400,000), at the rates or charges shown in Exhibit "A-2". Exhibit "A-
23 2" to this Amendment is hereby added as Exhibit "A-2" to the Agreement, and all the
24 terms and conditions of the Agreement shall apply to Consultant's provision of the Phase
25 Two Services.

26 3. The Term of the Agreement shall be extended for one (1) year, and
27 shall expire on September 30, 2012.

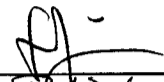
28 4. All terms, covenants, and conditions of the Agreement, except as

1 amended herein, shall remain unchanged and in full force and effect.

2 IN WITNESS WHEREOF, the parties have caused this document to be duly
3 executed with all formalities required by law as of the date first stated above.

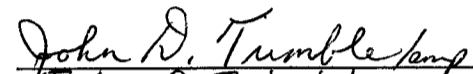
4 "City"

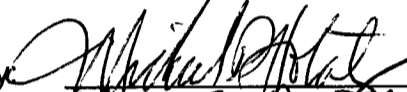
5 CITY OF LONG BEACH, a California municipal
6 corporation Assistant City Manager

7 By:  EXECUTED PURSUANT
8 Name: Patrick H. Webster TO SECTION 301 OF
9 Title: City Manager CITY CHARTER.

10 "Consultant"

11 C & S ENGINEERS, INC.,
12 a New York corporation

13 By: 
14 Name: John D. Trumble
15 Title: President & COO

16 By: 
17 Name: MICHAEL D. TRATALING
18 Title: VICE PRESIDENT

19 This Third Amendment to Contract No. 30954 is approved as to form on

20 April 5, 2011.

21 ROBERT E. SHANNON, City Attorney

22 By: 
23 Deputy

24 OFFICE OF THE CITY ATTORNEY
25 ROBERT E. SHANNON, City Attorney
26 333 West Ocean Boulevard, 11th Floor
27 Long Beach, CA 90802-4664

EXHIBIT A-2



Long Beach Airport Quieter Home Program Scope of Consultant Services Phase 2

This Scope of Work outlines the tasks to be performed by C&S Engineers, Inc. (Consultant) related to the Quieter Home Program (Program) for the **Long Beach Airport** (Airport) for 17 residences/eligible structures and in accordance with the terms and conditions of the Professional Services Contract by and between the Airport and the Consultant; the Scope of Work will be implemented in compliance with applicable Local, State and Federal Guidelines and requirements.

This Scope of Work applies to:

Phase 2 Design and Construction Services for 17 Homes – Program Management, Pre and Post Acoustical Testing, Design of up to 17 homes and Construction Management of up to 17 homes with (2) construction starts per week, with a maximum of one (1) Building/Planning Design package. **Fifteen (15) month duration.**

Feasibility Study for (1) Potentially Eligible Educational Facility.

Prime Consultant Fees and Schedule of Payments – Define the fees and schedule of payments to the Consultant for this Scope of Work.

Task 1 - Program Administration

Task 1.1 Comprehensive Program Schedule (FP) - The Prime Consultant shall develop and maintain a written program schedule showing the major elements of program tasks; and design and construction for each phase of the Program. The schedule shall be prepared and maintained in Microsoft Project and delivered as an attachment to email.

Task 1.2 Policies and Procedures Manual (FP) - The Consultant shall amend the Policies and Procedures Manual drafted for Phase 1 of the Program. The Manual will provide guidance to those engaged in the implementation of the Program, serve as a training tool for the Airport and Consultant staff new to the Program, and clearly establish the methods and approach for activities related to the Program.

Task 1.2.1 Airport Review and Final Manual - The Consultant shall provide copies (printed and bound) of the Policies and Procedures Manual to the Airport and one copy will be provided to each member of the Consultant's team. Consultant will maintain a list of Manual holders and updates will be distributed to that list as they are completed. The Manual will also be provided to the Airport in electronic, PDF format.

Task 1.3 Reporting (FP) – Consultant will develop a comprehensive reporting structure consisting of the following:

Task 1.3.1 Progress Reports – Progress reports shall be prepared and distributed to the Airport and other designated parties. The format of the Progress Report will be developed consistent with the Airport's requirements and may include monthly program status reports and cost summary reports.

Task 1.3.2 Meetings – Meetings shall be conducted by the Consultant to coordinate with the Airport on the program and other relevant issues. This task shall include up to three (3) meetings at the Airport offices or in that vicinity. Additional meetings may be conducted via phone-conference.

Task 1.4 Parcel File System (FP) – The Consultant shall create a parcel file for each individual property identified by the Airport and a copy of pertinent personal information will be included in each file. All written communications will be contained in this parcel file.

Task 1.5 Community Outreach Program (FP) – The Consultant shall support the Airport on community outreach efforts to inform the parties that are affected by the Program. The Consultant will provide access to staff to allow direct contact between Program participants and the project team.

Task 1.5.1 Program Materials – The Consultant will use all program materials created for Phase 1, they will consist of the following elements:

Task 1.5.1.1 Informational Brochure – The Consultant shall support the Airport on editing of this document if required. The brochure will be printed and distributed by the Airport.

Task 1.5.1.2 Homeowners Handbook – The Consultant shall support the Airport on editing of this document if required. The Handbook will guide the homeowner participant through the process and provide answers to many of the common questions related to the Program. The handbook will be printed and distributed by the Airport.

Task 1.5.2 Program Forms – The Consultant shall use the forms created in Phase 1 as follows:

Pre-Construction Questionnaire – This questionnaire will be utilized to gauge the pre-construction noise concerns of the homeowner.

Pre-Construction Brochure – The Consultant shall support the Airport on editing of this document if required. This outlines the construction process for the benefit of the homeowners in the Program. This brochure will include a location for the Construction Inspector's name/phone, what is expected from the homeowner in order for construction to begin on their property, and other general information. The handbook will be printed and distributed by the Airport.

Post-Construction Homeowner Satisfaction Survey – Survey to measure the level of satisfaction of the participants of the program, to include suggestions on

program updates, and benchmarking of the level of service of the Residential Sound Attenuation Program.

Task 2 - Phase 2 – (up to) 17 Homes

Task 2 - Program Management, Pre and Post Acoustical Testing, Design of up to 17 homes and Construction Management of up to 17 homes with (2) construction starts per week, with a maximum of one (1) Building/Planning Design package. This scope will be further evaluated and verified after conclusion of the Pilot Phase, per City request.

Task 2.1 Inventory and Design Process (FP) – The Consultant shall prepare acoustical modification packages for the homes selected for this phase by the Airport. The process shall consist of the following subtasks:

Task 2.1.1 Inventory Process – The Consultant shall visit each home at a time to be coordinated by the Airport. The meetings will be scheduled in a consecutive fashion to be as efficient, consistent and cost effective as possible. For planning purposes the Consultant assumes 4 consecutive days of inventory, the schedule will begin at 8:30am and ends at 5:00pm with a one hour lunch. The Airport will be invited to attend these visits. Several tasks will be accomplished during the visits, which typically last one and a half hours (1 ½).

The first portion of the visit will be spent explaining the details of the program to the resident. A summary of the project process will be described to supplement the information previously sent with the application package, and covered in the Homeowner workshop. Details concerning the design phase and what to expect during construction will be discussed.

The Consultant design team will include:

- Homeowner liaison / Data technician
- Architectural technician
- Electrical technician
- Mechanical technician
- Design technician

While the program is being described to the resident, and the Homeowner's questions and concerns are being addressed, the design team will conduct an inventory of the home. This inventory will generally include collection of window, skylight, and door data (number, location, type, size, condition, etc.), examination of existing insulation in the attic space, and data related to the existing ventilation system. This task will include the identification of potentially hazardous materials (*that would be visible without opening walls and other cavities*) such as asbestos, lead and mold, and identification of potential building code violations. Digital still photographs of the interior and exterior of each home will be collected during the visit for use in the design phase and will provide a pre-construction record of the property should any disputes arise during or after construction.

As a result of the inventory visit, the Consultant shall prepare proposed modifications for each home to improve the Noise Level Reduction (NLR) consistent with FAA criteria and the Policies and Procedures Manual. Preliminary design for windows, doors, attic and wall insulation, basement or crawl spaces, attic hatches and pull-down stairs, attic vents,

and mechanical HVAC (heating, ventilation and air conditioning) system will be prepared in the form of a design package.

Gathering existing electrical information for each home will be included as part of the inventory process. Information gathered will be limited to determining the existing electrical panel and service entrance cable condition and capacity, and readily and apparent residential code violations, to the extent possible. Actual electrical capacity for each circuit/panel will not be established. A review of the types of electrical appliances generally or routinely used in the home will also be part of the process.

The inventory process will include a visual structural review in the areas of the home that are expected to be directly impacted by the construction activity of the Sound Attenuation Program. The structural review will be limited to a visual overview of apparent code violations. Apparent structural deficiencies will be noted and brought to the attention of the Airport in writing for further action. *Note that structural reviews will not be a comprehensive structural analysis nor will they be performed by a licensed engineer.*

Subsequent to the completion of the Homeowner's review of the design package, the Homeowners' selections for door and window style and color choices will be discussed and noted. The participants' door selections will be documented on a style choice form. Exceptions to the program offerings (if allowed) shall be recorded as a "waiver" executed between the Airport and the Homeowner.

Task 2.1.2 Pre-Construction and Post Construction Acoustical Monitoring – The Consultant shall conduct all pre- and post-construction acoustical monitoring in each of the homes selected for this phase. For planning purposes the Consultant assumes 2 consecutive days of testing for both pre and post testing. The testing shall be coordinated by the Airport and scheduled in a consecutive fashion. Testing in each home typically takes one (1) hour. The results of this monitoring shall be summarized in a project memorandum and consolidated into a final report.

Task 2.1.3 Draft Design Packages – The Consultant shall prepare copies of draft design packages for submittal to and approval by the Airport. The draft design documents that the Consultant shall provide will consist of proposed acoustical modifications for each home in the group. Sufficient copies will be provided to the Airport for review and regulatory approval.

The Airport will submit the design documents to the City's Building and Planning for approval. Approval must be received prior to the 2nd visit to each home. The Consultant shall coordinate relevant City of Long Beach plan check review comments. Plan review fees shall be paid by the Airport. Site plan preparation for each property is included in this task.

Task 2.1.4 Standard Construction Details – The Consultant shall produce a set of Standard Details based upon the Policies and Procedures Manual. The Details will generally cover typical installations for windows, doors, vents, attic hatches and enclosures at the attic stair, roof vent baffles, combustion vents, ceiling or wall treatments, and mechanical/electrical upgrades as deemed applicable for this Program. Sufficient copies will be provided to the Airport for review and approval.

Task 2.1.5 Design Review Meeting – The Consultant may attend one (1) design review meeting, if needed, with the Airport to discuss any comments or questions related to the draft design documents. The Airport's comments shall be incorporated into the final Design documents. The frequency of Design Review meetings will be dependent upon the need for corrections to the Design packages. The Consultant will be available to discuss the Design until all Design packages have been approved by all regulatory agencies, such as the Building and Planning department. For planning purposes the Consultant assumes (1) meeting and additional phone calls to complete this task.

Task 2.1.6 Homeowner Approval of Design Package – The Consultant shall conduct a return (2nd) visit to each home to review the acoustical modification recommendations with the homeowner, and obtain signatures on the Design package. Approximately one week prior to this meeting a copy of the City approved Design package recommendations will be mailed by Consultant to the homeowner for their review and to provide them the opportunity to become familiar with Program recommendations on their home. The meetings shall be coordinated by the Airport. The meetings will be scheduled in a consecutive fashion to be as efficient, consistent and cost effective as possible. For planning purposes the Consultant assumes 4 consecutive days of meetings, the schedule will begin at 8:30am and ends at 5:00pm with a one hour lunch. The Airport will be invited to attend these visits. This visit typically lasts one and a half hours (1 ½).

Task 2.1.7 90% Bid Documents – The Consultant shall use the Contract General Conditions approved by the Airport for the previous phase of the Program. This task will be evaluated at the end of the Pilot Phase to verify whether it is a necessary component, per City request.

The Consultant shall prepare complete Design documents in an 8½-inch by 11-inch format, with technical specifications bound in one book. The Consultant will provide two (2) original sets of Design package documents for each home. The Consultant will provide all of the previously listed documents on two (2) DVD's with all documents in a PC compatible format, such as Adobe Acrobat, or another format approved by the City.

Task 2.2 Bidding and Award Assistance (N/A) – The Consultant has no effort or responsibility under this task. The Airport shall facilitate the Pre-Bid Meeting and issue the Preliminary Notice to Proceed to the Contractor.

Task 2.3 Pre-Construction Phase Services (T&M) - The Consultant shall complete the following tasks to assist the Airport during the pre-construction phase process. This task is budgeted as a not to exceed (T&M), any additional services not covered in this task will be discussed and approved by the Airport prior to the additional work being performed by the Consultant.

Task 2.3.1 Measurement Walk Through Visit – This visit shall be coordinated by the Airport, the Consultant shall accompany the City's contractor and document a "Measurement Walk Through Visit" of each home as provided for in the Construction Contract. This will be a single visit for the Consultant. The meetings will be scheduled in a consecutive fashion to be as efficient, consistent and cost effective as possible. For planning purposes the Consultant assumes 4 consecutive days of visits. At the conclusion of the measurement walk through visit, notes and/or amendments to the approved Design package will be prepared in a format acceptable to the Airport,

indicating any changes to the status of the Contract, potential change orders and other relevant issues.

Task 2.3.2 Shop Drawing Reviews - The Consultant shall review Contractor submittals of materials and equipment for general compliance with the Contract. This effort is continued through the Construction phase.

Task 2.3.3 Pre-Construction Conference(s) – The Consultant shall submit to the Airport an agenda for approval, and conduct a pre-construction conference with each successful Contractor in accordance with the guidelines set forth by Local, State and Federal Standards. The Consultant shall prepare and distribute minutes from this meeting. This task will be evaluated at the end of the Pilot Phase to verify whether it is a necessary component, per City request.

Task 2.3.4 Inventory Verification – The Consultant shall review the inventory of materials for each home with the Contractor for compliance with the contract documents. The materials for a minimum of 5 homes, maximum of 15 homes is required, with a maximum of two (2) inventory verifications provided by Consultant. Authorization to proceed with actual construction will be granted by the Airport after the Contractor has successfully demonstrated that all materials necessary to begin construction are on site.

Task 2.3.5 Notice to Proceed – The Consultant has no effort or responsibility under this task. The Airport shall issue the Notice to Proceed authorizing the Contractor to begin construction.

Task 2.4 Construction Phase Services (T&M) - The Consultant assumes (2) construction starts per week for Construction Services. The Consultant shall complete the following tasks to assist the Airport during the Construction phase process. This task is budgeted as a not to exceed (T&M), any additional services not covered in this task will be discussed and approved by the Airport prior to the additional work being performed by the Consultant. This scope will be further evaluated and verified after conclusion of the Pilot Phase, per City request.

Task 2.4.1 Construction Observation – The Consultant, on behalf of the Airport, shall provide construction observation for the entire period of the construction process. This is subject to modification or removal pending on workload of available City Inspectors. Construction observation consists of:

- An inspector that has qualifications acceptable to both Consultant and Airport. Acceptable experience will include relevant Residential Sound Attenuation Program experience as an inspector. An inspector will visit each home to observe the general progress of the work.
- Maintain a written daily project record which documents an inspector's daily observations including: Contractor staffing, work progress, critical issues, issue resolution, schedule observations, and other pertinent information. Copies of these records will be submitted to the Airport.
- Observe the work to determine substantial conformity with the contract documents and to ascertain the need for correction or rejection of the work.

- Observe testing and inspection. Arrange for, conduct, or witness field, laboratory, or shop tests of construction materials as required by the plans and specifications for the Project; monitor the suitability of materials on the Project site or brought to the Project site to be used in construction; interpret the contract plans and specifications and check the construction activities for substantial compliance with the design intent; measure, compute, or check quantities of work performed and quantities of materials in-place for partial and final payments to the Contractor.

Task 2.4.2 Construction Management – The Consultant shall provide Construction Management Services that will include:

- Monitor contractors' schedule for each home and advise the Airport on schedule delay issues.
- Shop drawing review and coordination including preparation of shop drawing logs for each Contract, receipt and forwarding of submittals, submittal review tracking and expediting, as necessary to meet established schedules.
- Provide consultation and advice to the Airport during construction, including the holding of weekly construction progress meetings and other field meetings required during the course of construction. Prepare and distribute all minutes.
- Review, monitor and make recommendations to the Airport to enforce contract conditions.
- Review alternative construction methods proposed by the Contractor and advise the Airport of the impact of these methods on the schedule and quality of the Project.
- Negotiate and prepare the supporting documentation for change orders necessary to execute the work properly within the intended scope. Submit recommended change orders to the Airport for approval and execution. Provide advice to the Airport in resolving Contractor claims and disputes.
- Provide interpretation of the Contract Document requirements and advise the Contractor of these on behalf of the Airport when necessary.
- Review and recommend percentage complete of progress payment applications submitted by the Contractor.
- Conduct substantial completion inspections of the completed homes, and prepare a punch list of items to be completed or corrected by the Contractor.
- Conduct a final inspection to verify completion of the punch list items.
- Consultant will issue final acceptance of completed construction at each residential unit to the Contractor and the Airport.

Task 2.4.3 Final Summary Report – The Consultant shall prepare a final summary report for this phase. This report shall contain a description of the project, identification of treatments, analysis of the average acoustical reductions achieved in this phase, and photographs of the project.

Task 2.5 Project Closeout/Warranty Period (T&M) – The Consultant shall perform an orderly closeout of the Project and oversee the Warranty process as required by the Airport, including maintaining a project record and all files documenting the Program. Construction records, including submission of record drawings and manufacturer's instructions will be filed.

Task 3 – Feasibility Study for Potentially Eligible Educational Facilities (T&M)

The Consultant shall be available for a variety of tasks associated with options to be considered for treatment of potentially eligible educational facilities. Tasks will be authorized on an as-needed basis and are expected to include planning sessions with the Long Beach Airport staff, meetings with FAA personnel, and preparation of a feasibility study. If the results of the Phase 1 acoustical testing indicate that the existing noise levels exceed the FAA's goals for interior noise levels, this task will determine conceptual building envelope, roof, window and door proposed modifications necessary to achieve the goals. One (1) school, Minnigantt, appears to be a potential candidate at this time.

- Prepare sketches and preliminary estimates for options proposed and procure manufacturer literature to present to the client.
- Develop criteria for HVAC requirements per applicable law and codes.
- Determine electrical system modifications and additional distribution required to power mechanical requirements.
- Determine the extent of environmental investigation that will be required for mitigation of asbestos, lead and any other hazardous materials affected by the proposed treatments.
- Submit a report including plans showing existing and proposed Architectural, Electrical and Mechanical systems. All rooms that are "eligible" under the FAA Sound Proofing Program shall be made distinct by placing a bold black dot in the center of the room on the plans. Report shall include existing conditions report and photographs, acoustical test report, proposed modifications reports by the Electrical, Mechanical, and Architectural consultants, finalized listing of rooms eligible for FAA funding, construction cost estimates and schedules for design and construction.
- Schematic Design Presentation – (1) meeting with Airport to review and discuss the Phase 1 acoustical testing report.

Effort against these tasks will be billed on a time and materials basis.

Prime Consultant Fees and Schedule of Payments – The fee format shall be Fixed Price (FP) per task, unless designated as not to exceed Time and Material (T&M), with monthly invoicing by the Consultant to the Airport. The Consultant will be billing on a percent complete basis. Required costs incurred by the Consultant for the benefit of the project are eligible for reimbursement at cost if authorized in advance by the Airport.

END OF SCOPE.

**Long Beach Airport
Residential Sound Attenuation Program
Phase 2 Design & Construction Services for 17 Homes, Feasibility Study**



Task	Description	C&S Engineers, Inc.	Semenza Engineering (electrical)	Landrum & Brown (acoustical)	ICON Planning (Construction)	Task Totals
Program Tasks						
1.1	Comprehensive Program Schedule (FP)	\$1,314	\$0	\$0	\$0	\$1,314
1.2	Policies & Procedures Manual (FP)	\$3,781	\$0	\$0	\$0	\$3,781
1.3	Reporting (FP)	\$10,187	\$0	\$0	\$0	\$10,187
1.4	Parcel File System (FP)	\$7,076	\$0	\$0	\$0	\$7,076
1.5	Community Outreach Program (FP)	\$3,534	\$0	\$0	\$0	\$3,534
1.6	Design Process Application Distribution (N/A)	\$0	\$0	\$0	\$0	
1.7	Workshop for Eligible Homeowners (N/A)	\$0	\$0	\$0	\$0	
	Sub Total	\$25,892	\$0	\$0	\$0	\$25,892
Design and Construction (17 Homes)						
2.1	Inventory & Design Process (FP)	\$66,682	\$20,408	\$32,620	\$0	\$119,711
2.2	Bidding & Award Assistance (N/A)	\$0	\$0	\$0	\$0	
2.3	Pre-Construction Phase Services (T&M)	\$61,399	\$3,214	\$0	\$0	\$64,613
2.4	Construction Phase Services (T&M)	\$98,324	\$2,892	\$0	\$0	\$101,216
2.5	Project Closeout / Warranty Period (T&M)	\$6,400	\$0	\$0	\$0	\$6,400
	Sub Total	\$232,805	\$26,514	\$32,620	\$0	\$291,939
Feasibility Study (T&M)						
3	Feasibility Study (T&M)	\$67,841	\$0	\$0	\$0	\$67,841
	Sub Total	\$67,841	\$0	\$0	\$0	\$67,841
Grand Totals		\$326,538	\$26,514	\$32,620	\$0	\$385,672

**Long Beach Airport
Residential Sound Attenuation Program
Phase 2 Design & Construction Services for 17 Homes, Feasibility Study**

Task	Description	C&S Engineers, Inc.	Semenza Engineering (electrical)	Landrum & Brown (acoustical)	ICON Planning (Construction)	Task Totals
Total		\$326,538.00	\$26,514.26	\$32,620.10	\$0.00	\$385,672
1 Program Tasks						
1.1	Comprehensive Program Schedule (FP)	\$1,314.00	\$0.00	\$0.00	\$0.00	\$1,314
	Expenses					
	Labor	\$1,314.00				\$1,314
1.2	Policies & Procedures Manual (FP)	\$3,781.00	\$0.00	\$0.00	\$0.00	\$3,781
	Expenses	\$0.00				
	Labor	\$3,781.00				\$3,781
1.2.1	Draft Manual Submission	\$1,668.00				\$1,668
	Expenses					
	Labor	\$1,668.00				\$1,668
1.2.2	Authority Review & Final Manual	\$2,113.00				\$2,113
	Expenses					
	Labor	\$2,113.00				\$2,113
1.3	Reporting (FP)	\$10,187.00	\$0.00	\$0.00	\$0.00	\$10,187
	Expenses	\$330.00				\$330
	Labor	\$9,857.00				\$9,857
1.3.1	Progress Reports	\$7,578.00				\$7,578
	Expenses					
	Labor	\$7,578.00				\$7,578
1.3.2	Progress Meetings	\$2,609.00				\$2,609
	Expenses	\$330.00				\$330
	Labor	\$2,279.00				\$2,279
1.4	Parcel File System (FP)	\$7,076.00	\$0.00	\$0.00	\$0.00	\$7,076
	Expenses					
	Labor	\$7,076.00				\$7,076

**Long Beach Airport
Residential Sound Attenuation Program
Phase 2 Design & Construction Services for 17 Homes, Feasibility Study**

Task	Description	C&S Engineers, Inc.	Semenza Engineering (electrical)	Landrum & Brown (acoustical)	ICON Planning (Construction)	Task Totals
1.5 Community Outreach Program (FP)		\$3,534.00	\$0.00	\$0.00	\$0.00	\$3,534
	Expenses	\$0.00				
	Labor	\$3,534.00				\$3,534
1.5.1 Program Materials		\$2,156.00				\$2,156
	Expenses					
	Labor	\$2,156.00				\$2,156
1.5.2 Program Forms		\$1,008.00				\$1,008
	Expenses					
	Labor	\$1,008.00				\$1,008
1.5.3 Program Correspondence Standards		\$370.00				\$370
	Expenses					
	Labor	\$370.00				\$370
1.5.4 Program Newsletter (N/A)						
	Expenses					
	Labor					
1.5.5 Additional Community Outreach Services (N/A)						
	Expenses					
	Labor					
1.5.6 Support for Non-Eligible Homeowners (N/A)						
	Expenses					
	Labor					
1.6 Design Process Application Distribution (N/A)		\$0.00	\$0.00	\$0.00	\$0.00	
	Expenses					
	Labor					
1.7 Workshop for Eligible Homeowners (N/A)		\$0.00	\$0.00	\$0.00	\$0.00	
	Expenses					
	Labor					

**Long Beach Airport
Residential Sound Attenuation Program
Phase 2 Design & Construction Services for 17 Homes, Feasibility Study**

Task	Description	C&S Engineers, Inc.	Semenza Engineering (electrical)	Landrum & Brown (acoustical)	ICON Planning (Construction)	Task Totals
2 Design and Construction (17 Homes)						
2.1	Inventory & Design Process (FP)	\$66,682.00	\$20,408.42	\$32,620.10	\$0.00	\$119,711
	Expenses	\$3,298.00	\$515.00	\$6,107.90	\$0.00	\$9,921
	Labor	\$63,384.00	\$19,893.42	\$26,512.20	\$0.00	\$109,790
2.1.1	Inventory Process	\$23,556.00	\$7,832.12			\$31,388
	Expenses	\$1,576.00	\$515.00			\$2,091
	Labor	\$21,980.00	\$7,317.12			\$29,297
2.1.2	Pre- & Post- Acoustical Monitoring	\$472.00		\$32,620.10		\$33,092
	Expenses			\$6,107.90		\$6,108
	Labor	\$472.00		\$26,512.20		\$26,984
2.1.3	Draft Design Packages & Plan Check Process	\$12,632.00	\$5,479.60			\$18,112
	Expenses	\$220.00				\$220
	Labor	\$12,412.00	\$5,479.60			\$17,892
2.1.4	Standard Construction Details	\$4,618.00	\$1,569.72			\$6,188
	Expenses					
	Labor	\$4,618.00	\$1,569.72			\$6,188
2.1.5	Design Review Meeting	\$4,056.00				\$4,056
	Expenses	\$110.00				\$110
	Labor	\$3,946.00				\$3,946
2.1.6	Homeowner Approval of Design Packages	\$14,492.00				\$14,492
	Expenses	\$1,292.00				\$1,292
	Labor	\$13,200.00				\$13,200
2.1.7	90% Bid Documents	\$6,856.00	\$5,526.98			\$12,383
	Expenses	\$100.00				\$100
	Labor	\$6,756.00	\$5,526.98			\$12,283
2.1.8	Engineer's Opinion of Costs (N/A)					
	Expenses					
	Labor					
2.2	Bidding & Award Assistance (N/A)	\$0.00	\$0.00	\$0.00	\$0.00	
	Expenses					
	Labor					
2.2.1	Project Bid Support					
	Expenses					
	Labor					

**Long Beach Airport
Residential Sound Attenuation Program
Phase 2 Design & Construction Services for 17 Homes, Feasibility Study**

Task	Description	C&S Engineers, Inc.	Semenza Engineering (electrical)	Landrum & Brown (acoustical)	ICON Planning (Construction)	Task Totals
2.3	Pre-Construction Phase Services (T&M)	\$61,399.00	\$3,213.60	\$0.00	\$0.00	\$64,613
	Expenses	\$1,100.00	\$0.00			\$1,100
	Labor	\$60,299.00	\$3,213.60			\$63,513
2.3.1	Measurement Walk Through Visit	\$38,881.00				\$38,881
	Expenses	\$880.00				\$880
	Labor	\$38,001.00				\$38,001
2.3.2	Shop Drawing Reviews	\$19,398.00	\$3,213.60			\$22,612
	Expenses	\$0.00				
	Labor	\$19,398.00	\$3,213.60			\$22,612
2.3.3	Pre-Construction Conferences	\$894.00				\$894
	Expenses	\$110.00				\$110
	Labor	\$784.00				\$784
2.3.4	Inventory Verification	\$2,226.00				\$2,226
	Expenses	\$110.00				\$110
	Labor	\$2,116.00				\$2,116
2.3.5	Notice to Proceed	\$0.00				
	Expenses	\$0.00				
	Labor	\$0.00				
2.4	Construction Phase Services (T&M)	\$98,324.00	\$2,892.24	\$0.00	\$0.00	\$101,216
	Expenses	\$5,525.00	\$0.00			\$5,525
	Labor	\$92,799.00	\$2,892.24			\$95,691
2.4.1	Construction Observation	\$67,360.00	\$2,570.88			\$69,931
	Expenses	\$4,450.00				\$4,450
	Labor	\$62,910.00	\$2,570.88			\$65,481
2.4.2	Construction Management	\$27,320.00	\$321.36			\$27,641
	Expenses	\$1,075.00				\$1,075
	Labor	\$26,245.00	\$321.36			\$26,566
2.4.3	Final Summary Report	\$3,644.00				\$3,644
	Expenses	\$0.00				
	Labor	\$3,644.00				\$3,644
2.5	Project Closeout / Warranty Period (T&M)	\$6,400.00	\$0.00	\$0.00	\$0.00	\$6,400
	Expenses	\$0.00				
	Labor	\$6,400.00				\$6,400
3	Feasibility Study (T&M)	\$67,841.00	\$0.00	\$0.00	\$0.00	\$67,841
	Expenses	\$8,884.00				\$8,884
	Labor	\$58,957.00				\$58,957
	Total	\$326,538.00	\$26,514.26	\$32,620.10	\$0.00	\$385,672