



HAWTHORNE MUNICIPAL AIRPORT

TASK ORDER NUMBER 4

TO: Guido Fernandez
Airport Manager
Hawthorne Municipal Airport
City of Hawthorne

RE: Rehabilitate Taxiway N & S Lighting, Rehabilitate Runway 7-25 Lighting, Rehabilitate Airfield Lighting Vault, Replace Airfield Signs & Install Airport Beacon Project

FILE: K44.004.004

1. AUTHORIZATION REQUEST:

In conformance to your instructions, and in accordance with the Agreement between the City of Hawthorne (SPONSOR) and C&S Engineers, Inc. (CONSULTANT) for providing professional services, for a time and material basis not to exceed for construction administration and observation services. This project will consist of rehabilitating runway and taxiway edge lights, guidance signs, vault building equipment and the airport beacon.

2. DESCRIPTION OF SERVICES:

As per Schedule 'A' Construction Administration and Observation Scope of Services
As per Schedule 'B' Assumed Time and Materials at a fixed not to exceed fee

3. SPONSOR'S RESPONSIBILITIES:

SPONSOR shall provide a written response (either authorizing or denying) within two business days of a request by CONSULTANT to provide services.

4. PERIOD OF SERVICES:

This Task Order shall be in effect for one year from the date of execution or when the fee total is expended, whichever comes first.

5. PAYMENTS:

Payments shall be made on a time and material basis in accordance with the agreed rates on the schedule B and or most current approved CONSULTANT rate schedule. The time and material fixed fee not to exceed (NTE) for this Task Order is \$443,255.50. Any items requested

by FAA or sponsor outside of the scope of work will be considered as an amendment.

6. GENERAL CONSIDERATIONS:

The CONSULTANT designates Richard Graham, P.E. as the person who will be responsible for the services rendered by the CONSULTANT for the Project.

Your signature, in the space provided below, will signify approval of the terms and conditions of this request which, together with the basic Agreement and Attachments identified below will constitute Task Order No. 4.

Please return this executed Task Order, which shall constitute your authorization to proceed, to our office together with the executed attachments.

Very truly yours,

CONSULTANT:

SPONSOR:

C&S ENGINEERS, INC.

CITY OF HAWTHORNE

Signed: _____

Signed: _____

By: Richard Graham, P.E.

By: _____

Title: Principal Engineer

Title: _____

Dated: _____

Dated: _____

SCOPE OF SERVICES

Project Title: **Rehabilitate Taxiway N & S Lighting, Rehabilitate Runway 7-25 Lighting, Rehabilitate Airfield Lighting Vault, Replace Airfield Signs & Install Airport Beacon Project**

Airport Name: **Hawthorne Municipal Airport (HHR)**

Sponsor: **City of Hawthorne**

Services Provided: **Bidding and Construction Administration and Observation Services**

PROJECT DESCRIPTION:

The CONSULTANT shall provide required bidding and construction administration and observation services for the Rehabilitate Taxiway N & S Lighting, Rehabilitate Runway 7-25 Lighting, Rehabilitate Airfield Lighting Vault, Replace Airfield Signs & Install Airport Beacon Project (the "Project"). The Project will be performed and constructed by the City of Hawthorne with grant assistance from the Federal Aviation Administration (FAA) Airport Improvement Program (AIP).

The Project was divided into four Elements during design to align with FAA work groups and the format in which the project will be advertised. The separation of items will be as follows:

Element 1:

1. Replacement of Taxiway Edge Lighting Fixtures.

Replace the taxiway edge fixtures, and associated cable and transformers. Wherever necessary evaluate the condition of the base cans and associated conduits and determine the replacement of the base can at locations necessary. At several locations the existing light fixtures are in-pavement and should be elevated edge light fixtures. This work may include replacement of the base cans. Project will include plans and specifications to upgrade the existing taxiway edge lighting system. Replace all taxiway lighting circuiting cable as required. Project will include plans and specifications to develop existing as-builts, circuiting, and all of the existing taxiway lighting cable.

Element 2:

1. Airfield Lighting Vault Modifications:

Project will replace all existing Constant Current Regulators (CCRs) in the airfield lighting vault. The work will include analysis of existing power distribution including associated backup power, if applicable. Project will include plans and specifications to upgrade the existing airfield lighting vault.

2. Airfield Lighting Control System Modifications:

Project will replace the existing ALCS hardware and software including modifications in the airfield lighting vault and ATCT. This work will include an additional computer, mobile system to be situated in the airport manager office to control/monitor the system. The upgrade will include an automated system that will measure the insulation resistance of the cable and provide/generate alarms as needed.

Element 3:

Replacement of Runway Edge Lighting Fixtures:

Replace the runway edge, threshold/end light fixtures, and associated cable and transformers. Wherever necessary evaluate the condition of the base cans and associated conduits and determine the replacement of the base can at locations necessary. Project will include plans and specifications to upgrade the existing runway edge lighting system. Replace all runway lighting circuiting cable as required. Project will include plans and specifications to develop existing as-builts, circuiting, and all of the existing runway lighting cable.

Element 4:

Airfield Signage

Project will replace all of the existing airfield signage in the entire airfield. This work will include replacement of the signs, transformers, and as needed the airfield guidance sign foundations and renaming all taxiways to conform to the naming convention proposed in the current ALP. The work will also include any drainage modifications required by the new guidance signs. Replace all airfield signage circuiting cable as required. Project will include plans and specifications to develop existing as-builts, circuiting, and all of the existing airfield signage cable.

Element 5:

Rotating Beacon

Project will replace the existing airfield beacon, including a new mounting pole and foundation and any necessary conduit. Replace all beacon circuiting cable as required. Project will include plans and specifications to develop existing as-builts, circuiting, and all of the existing beacon cable.

ANTICIPATED CONSTRUCTION SCHEDULE

Contract Execution	October 2026
Limited Notice to Proceed	November 2026
Notice to Proceed with Construction	March 2027
Construction Closeout Complete	August 2027

TASK 1- PROJECT MANAGEMENT

1.1 Project Management (C&S and Lean)

The CONSULTANT will manage and direct its staff and subconsultants for the duration of the construction project and required closeout period. The Project Manager will serve as the point of contact with SPONSOR and/or SPONSOR's designated representative and the CONSULTANT Team and provide timely dissemination of information, direction and reporting to and from SPONSOR, FAA and others as directed by SPONSOR for the successful production, technical quality and schedule performance of this scope of services. Perform project management duties such as project planning, budget evaluation, invoice preparation, and schedule coordination.

1.1.1 Communication with SPONSOR

Communicate with SPONSOR regularly. Assume (2) hours weekly (16 weeks) of Project Manager communication by email, phone, video, and/or conference calls using live file sharing.

1.1.2 Coordinate with Design and Construction Observation Team

Coordinate with the construction administration team including a kickoff meeting and periodic one-hour conference calls with all task leaders (4 total meetings). Attendees include 1 Construction Observer and 1 Principal Engineer from C&S and 1 Project Manager from Lean.

1.1.3 Monthly Invoice Preparation

Perform invoice preparation monthly (9 months).

1.2 Progress Reports (C&S)

The CONSULTANT will provide the following reports at the frequency stated;

1.2.1 FAA Form 5370-1 Construction Progress and Inspection Report

Weekly (8 Total) FAA Form 5370-1 Construction Progress and Inspection Reports will be completed and submitted to the SPONSOR.

1.2.2 Project Status Reports

Monthly (9 months) progress reporting in writing to SPONSOR outlining the status of the work effort relative to the scope, schedule and budget. Issues affecting the progress and corrective actions necessary will be identified and implemented as appropriate.

1.2.3 Weekly Project Snapshots

During construction, a weekly (8 total) non-technical graphic reports will be provided updating construction work completed, scheduled work for the next week, overall progress of the project, stakeholder information, and project photos.

1.3 Document Management and Record Keeping (C&S)

The CONSULTANT will utilize electronic construction applications for document management and project record keeping. The CONSULTANT will provide software training for SPONSOR's project manager and other staff who need to utilize the "e" construction applications.

1.3.1 Document Management

All project documents relating to Reporting, Design Directives, Submittals and Shop Drawings, Requests for Information, Test Results and Payrolls will be posted and stored on Doc Express, a web-based document management application. And will be made available to appropriate SPONSOR staff.

1.3.2 Item Administration

Daily Construction Record Keeping will be conducted on Appia, a web-based Construction Administration Application. Appia will be the location where Engineer's Diaries, Daily Inspection Reports, Change Orders, Progress Payments are developed and Material Certifications are stored.

1.3.3 Photo Management

All project photos documenting daily construction activities shall be taken by construction observation staff will be uploaded to Appia and be made available to appropriate SPONSOR staff.

1.3.4 Licensing

The CONSULTANT will provide all licenses and any necessary training for use of Doc Express and Appia to all stakeholders.

1.3.5 Document Storage Locations

Item	Stored Location		
	Doc Express	Appia	Newmetrix
Meeting Minutes	♦		
Weekly Progress Reports	♦		
Project Schedule	♦		
Weekly FAA Reports	♦		
Shop Drawings	♦		
Change Directives and Updated Plans	♦		
Material Testing Reports	♦		
Subcontractor Payment Forms	♦		
Certified Payrolls	♦		
Wage Rate Interviews	♦		
Project Closeout	♦		
RPR Daily Diary		♦	
Inspectors Daily Reports with Field Measurements		♦	
Material Certifications		♦	
Project Payments		♦	
Change Orders		♦	
Progress Photos		♦	
Record Plans and O & M Manuals	♦		

1.4 Meetings

The following meetings with anticipated attendance are included. Meetings are

Meeting	# of Mtgs	Est Mtg. Time*	C&S		Lean		
			Principal Eng		Sr. Des		Project Manager
			V	P	V	P	V
Preconstruction							
Pre-Bid Meeting	1	1		1		1	1
Preconstruction 1	1	2		1		1	1
Preconstruction 2	1	2		1		1	1
Construction							
Progress	4	1.5	4	4		8	8
Site Visits	4	8					4
Post Construction							
Final Inspection	1	1		1		1	1
Closeout	1	1	1			1	1
Subtotal Hours			7	12	0	19	51
Total Hours			19		19		51

* Does not include travel time

v. Consultant shall attend the meeting virtually

p. Consultant shall attend meeting in person.

When appropriate, meetings will be held at a location acceptable by the SPONSOR. In addition, the CONSULTANT will schedule all meetings on Teams to allow for online attendance.

The CONSULTANT will prepare and distribute minutes to all meeting attendees.

TASK 2 - BID PHASE

The Bid Phase is that time frame between completion of the design process and beginning of actual construction when the SPONSOR publicly advertises and receives bids, awards contracts to the lowest responsible bidder, and executes a construction contract to perform the work with the successful contractor(s). The CONSULTANT shall assist the SPONSOR during this Phase as required.

The specific services to be provided or furnished for this Phase of the Project are the following:

- 2.1** Assist SPONSOR with advertisement of the project.
- 2.2** Receive and respond, as required, to questions from potential bidders regarding the Contract Documents.
- 2.3** Prepare addenda to the bid documents after advertisement and prior to bidding as required upon the SPONSOR's approval.
- 2.4** Upon receipt of bids, perform bid reviews. The bid review shall include items such as a check of the contractor's bid extensions, bid security, execution of bid, non-collusive bidding certificate, EEO certification, statement of surety's intent, addenda receipt, "Buy American" certificate, subcontractors and suppliers list, Disadvantaged Business Enterprise (DBE) certification, eligibility certification, corporate bidder's certification, non-discrimination statement and nonsegregated facilities certificate. Request evidence of competency and evidence of financial responsibility from the contractor. Review contractor's list of personnel, list of equipment, and financial statement. Formal contact of the contractor's references shall be made upon SPONSOR's request or if the contractor has no past working relationship with the CONSULTANT, the SPONSOR or FAA.
- 2.5** Assist with final bid tabulation, recommendation/rejection of award to the SPONSOR, and a sample award letter, if requested. Assist with obtaining concurrence of award from FAA.
- 2.6** Prepare Limited NTP for submittals and administration documents.

TASK 3- CONSTRUCTION ADMINISTRATION

Construction Contract Administration includes the following services:

- 3.1** Coordinate and assist SPONSOR with issuance of Notice to Proceed to contractor for construction. (C&S)
- 3.2** Provide consultation and advice to SPONSOR during construction including matters related to FAA compliance and regulations. The CONSULTANT will Support SPONSOR in conversations with the FAA. (C&S)
- 3.3** Review, approve, or take other appropriate action on Contractor-required shop drawings, product data, catalog cuts, and samples. CONSULTANT will prepare a shop drawing/submittal log and responsibility matrix that defines primary and secondary responsibility for review of submittals by the design team. Shop Drawings and responses to be uploaded to Doc Express. (C&S and Lean)
- 3.4** Review alternative construction methods proposed by the Contractor and advise the SPONSOR of the impact of these methods and provide a recommendation on the schedule and quality of the Project. (C&S and Lean)
- 3.5** Prepare supplemental drawings and change orders necessary to execute the work properly within the intended scope. Assist SPONSOR in resolving contractor claims and disputes. (C&S and Lean)
- 3.6** Provide interpretation of the Contract Document requirements and advise the Contractor of these on behalf of SPONSOR when necessary.
- 3.7** Review and respond to Contractor submitted Request For Information (RFIs) and upload responses on Doc Express.
- 3.8** Conduct pre-final inspections in each construction phase (1 inspection) and final inspection of the completed Project with SPONSOR personnel, the FAA, and the Contractor. Develop and distribute a punch-list for each pre-final and final inspection.
- 3.9** Furnish the SPONSOR one reproducible set of the record drawings in PDF format for the completed Project taken from the annotated record drawings prepared by the Resident Project Representative (RPR) based upon Contractor-provided information.
- 3.10** Issue certificates of construction substantial completion to SPONSOR and the FAA for the end of construction.

3.11 The CONSULTANT shall aid the SPONSOR by acting as its grant coordinator with the FAA. In addition, the CONSULTANT shall assist SPONSOR in the preparation of paperwork required to secure funding. The specific services to be provided are the following:

3.11.1 Prepare quarterly progress reports for submission to the FAA.

- 1 year of quarterly progress reports at 4 hours per year for Grants Administrator.

3.11.2 Preparation of reimbursement request packages; coordination of their execution by the SPONSOR; and submission to the funding agencies.

- 9 reimbursement request packages at 2 hours per reimbursement package for Grants Administrator.

3.11.3 Preparation of the FAA grant closeout package for this project.

- 8 Hours for Grants Administrator

3.11.4 Monitoring of DBE participation and DBE monthly payments for life of the project.

- 2 hours per month for 3 months for the DBE participation for Grants Administrator.

TASK 4- CONSTRUCTION OBSERVATION

The CONSULTANT will provide the necessary qualified full time staff for the duration of the construction project and closeout to:

- 4.1** Maintain project records utilizing the e-Construction applications as listed in Task-1 PROJECT MANAGEMENT. No labor hours are included for this task in the fee proposal as this work is included in the daily observation time task 4.2.
- 4.2** Observe the work to determine general conformity with the Contract Documents and to ascertain the need for correction or rejection of the Work. The activities of the Resident Project Representative (RPR) staff or the presence of any of them at a construction/Project site shall not relieve Contractor nor make CONSULTANT responsible for, Contractor’s obligations, duties, and responsibilities, including, but not limited to, construction means, methods, sequences, techniques, or procedures necessary for performing, superintending, or coordinating the Work in accordance with the Contract Documents.

Anticipated days on site for RPR staff is provided in the tables below for each year of construction.

It is anticipated that the Contractor will conduct operations Seven (7) days per week, Eleven (11) hours per shift. Lean will provide 2 inspectors and C&S will provide 1 inspector during the two 5-day, 24-hour closures with each inspector covering an 11-hour shift. Lean and C&S will each provide 1 inspector during each nightly closure for 14 nights, 11 hours per night, and 1 inspector during each day for 30 days, 11 hours per day.

Title	Days on Site 2026		Days on Site 2027					
	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Sr. Designer (C&S)					15			
2 x Engineer III (Lean)					24	30		

Roundtrip Travel – Roundtrips between C&S Managing Office and Project Site = Four (4) Hours.
 Roundtrips between Lean Managing Office and Project Site = Four (4) Hours.

Title	Roundtrip Travel Each 2026		Roundtrip Travel Each 2027					
	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Sr. Designer (C&S)	1				4	4		
Engineer III (Lean)	1				4	4		

4.3 The lead RPR will serve as the airfield closure coordinator for the project. This will include coordination of all airfield closures with SPONSOR for each work area, coordination of reopening work areas with SPONSOR after SPONSOR approves work area to be opened, serving as the primary contact to monitor visitors to the project work areas, and coordination with other non-project related activities in the project work areas. The lead RPR will also be the 24-hour contact for the construction administration and observation team. No labor hours are included for this task in the fee proposal as this work is included in the daily observation time task 4.2.

4.4 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 general 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.

Prepare and submit inspection reports of construction activity and problems encountered as required by SPONSOR and the FAA. No labor hours are included for this task in the fee proposal as this work is included in the daily observation time task 4.2.

4.5 Monitor Contractors and Subcontractors compliance to the Davis Bacon Act by performing the following:

- Collecting and Review Certified Payrolls for general compliance.
- Perform Random Wage Rate Interviews and cross check results with Certified Payrolls.
 - Interviews to be conducted throughout the life of the project
 - Interviews will be conducted at a minimum on all major job classifications on the project including Owner Operators.
 - Report non-compliance issues to the SPONSOR.

4.6 Prepare, review, and approve monthly Progress Payments and Final Payments to Contractor.

4.7 Perform an orderly closeout of the Project as required by the SPONSOR and the FAA. This shall include the project test record book, test summary, project photo summary, FAA monthly project reports, FAA project summary letter and archiving of project records.

4.8 COMMISSIONING

- 4.8.1** LEAN will provide on-site commissioning of ALCS modifications and associated control system manufactured by ALCS. This includes being on-site to confirm the control sequence of the new CCRs and to ensure testing in the vault and the ATCT to verify control of the circuits.
- 4.8.2** Walk-through of airfield and turning on/off light fixtures as required to verify the work
- 4.8.3** Photometric Testing of runway lighting for compliance with FAA Advisory Circulars and associated work. This work includes utilizing a machine that has an array of sensors that will drive down the runway and test the photometric output in compliance with FAA ACS.

ASSUMPTIONS

- 1) Construction will progress in the phases defined in the Construction Safety and Phasing Plan
- 2) The Construction start and end dates are consistent with dates shown in this scope of services.
- 3) By submitting Certifying Payrolls, the Contractors and their Subcontractors assume responsibility for all classification determinations for the workforce and accuracy of information. Consultant will determine non-compliance issues from information collected during Wage Rate Interview process.
- 4) This agreement does not include services/work related in any way to PFAS chemicals or substances possibly containing PFAS chemicals. C&S Engineers, Inc. will only perform services/work related in any way to PFAS chemicals or substances possibly containing PFAS chemicals (including but not limited to sampling, handling and remediating) to the extent the City of Hawthorne specifically directs, in writing, for C&S Engineers, Inc. to perform such services/work, and C&S Engineers, Inc. shall not be liable for the nonperformance of such services/work.

**C&S ENGINEERS, INC.
ARCHITECTURAL/ENGINEERING
WORK SUMMARY**

PROJECT: Rehabilitate Taxiway N & S Lighting, Rehabilitate Runway 7-25 Lighting, Rehabilitate Airfield Lighting Vault, Replace Airfield Signs & Install Airport Beacon Project
 SERVICES: Bidding and Construction Management
 CLIENT: City of Hawthorne
 CLIENT MGR: Guido Fernandez

CONT NO.	PHASE NO.	TASK	Lean Engineering						C&S Engineers, Inc.			TOTAL LABOR HOURS	TOTAL LABOR	DIRECT COSTS	SERVICES BY OTHERS	TOTALS
			Principal Engineer / Project Manager	Engineer VII - Project Manager	Engineer VI	Engineer IV	Engineer III	Engineer I	Grants Administrator	Senior Designer	Principal Engineer					
		RATE	\$ 370.00	\$ 327.00	\$ 276.00	\$ 225.00	\$ 200.00	\$ 150.00	\$ 128.00	\$ 150.00	\$ 280.00					
		1. Administration Phase	16	76						76	118	286	\$ 75,212.00	\$ -	\$ -	\$75,212.00
		Project Management	16							4	45	65	\$19,120.00			\$19,120.00
		Progress Reports								16	9	25	\$4,920.00			\$4,920.00
		Document Management and Record Keeping								16	4	20	\$3,520.00			\$3,520.00
		Meetings		76						40	60	176	\$47,652.00			\$47,652.00
		2. Bidding and Award			6				8	24	34	72	\$ 15,794.00	\$ -	\$ -	\$15,794.00
		Assist Sponsor with Advertisement							4	4	8	16	\$3,352.00			\$3,352.00
		Attend Pre-Bid Meeting			6					6	12	24	\$5,910.00			\$5,910.00
		Respond as Required to Bidder Questions								4	4	8	\$1,720.00			\$1,720.00
		Prepare Adenda for Bid Documents							4	8	8	20	\$3,952.00			\$3,952.00
		Review Bids and Prepare Recommendation of Award								2	2	4	\$860.00			\$860.00
		3. Construction Administration	12	24	204				40	52	38	570	\$ 121,948.00	\$ -	\$ -	\$121,948.00
		Issue Notice to Proceed with Construction								2	2	4	\$860.00			\$860.00
		Sponsor Coordination								8	8	16	\$3,440.00			\$3,440.00
		Submittal, Shop Drawing, Methods Review			80			40		8	4	132	\$30,320.00			\$30,320.00
		Change Orders, RFIs	8	16	40			40	4	16	4	128	\$29,224.00			\$29,224.00
		Field Directives			80			80				160	\$34,000.00			\$34,000.00
		Pre-Final Inspection								2	14	16	\$4,220.00			\$4,220.00
		Final Inspection		4						8	2	14	\$3,068.00			\$3,068.00
		Record Drawings	4	4	4			40		8	4	64	\$12,208.00			\$12,208.00
		Grant Coordination/Closeout							36			36	\$4,608.00			\$4,608.00
		4. Full Time Construction Observation		4	56	32	784		14	185	6	1081	\$ 211,930.00	\$ -	\$ -	\$211,930.00
		Observation					704			165		869	\$165,550.00			\$165,550.00
		Davis-Bacon Compliance							6			6	\$768.00			\$768.00
		Prepare and Review Pay Requests								4	2	6	\$1,160.00			\$1,160.00
		Project Closeout Report							8	16	4	28	\$4,544.00			\$4,544.00
		Commissioning		4	56	32	80					172	\$39,908.00			\$39,908.00
		5. Direct Expenses											\$ -	\$ 18,372	\$ -	\$18,371.50
		C&S											\$9,889.00			\$9,889.00
		Lean											\$8,482.50			\$8,482.50
		All Tasks Total (Base Bid)	28	104	266	32	784	200	62	337	196	2009	\$ 424,884.00	\$ 18,371.50	\$ -	\$ 443,255.50



**CONSULTING/ENGINEERING
COST SUMMARY
SCHEDULE "B"**

PROJECT NAME: Rehabilitate Taxiway N & S Lighting, Rehabilitate Runway 7-25 Lighting, Rehabilitate Airfield Lighting Vault, Replace Airfield Signs & Install Airport Beacon Project
 PROJ DESCRIPTION: Bidding and Construction Management
 CLIENT: City of Hawthorne
 CLIENT MANAGER: Guido Fernandez

DATE: 5/6/2026
 A/E: C & S ENGINEERS, INC.

I. DIRECT SALARY , OVERHEAD & PROFIT COSTS:

	TITLE	RATE OF PAY			HOURS		COST
		(\$/HR)	@				
A.	Principal Engineer / Project Manager	\$ 370.00	X		28	=	\$10,360.00
B.	Engineer VII - Project Manager	\$ 327.00	X		104	=	\$34,008.00
C.	Engineer VI	\$ 275.00	X		266	=	\$73,150.00
D.	Engineer IV	\$ 225.00	X		32	=	\$7,200.00
E.	Engineer III	\$ 200.00	X		784	=	\$156,800.00
F.	Engineer I	\$ 150.00	X		200	=	\$30,000.00
G.	Grants Administrator	\$ 128.00	X		62	=	\$7,936.00
H.	Senior Designer	\$ 150.00	X		337	=	\$50,550.00
I.	Principal Engineer	\$ 280.00	X		196	=	\$54,880.00
TOTAL ESTIMATE OF LABOR:							\$424,884.00

II. ESTIMATE OF DIRECT EXPENSES:

A.	TRAVEL, BY AUTO (Lean):	75 mile* @	156 Trip(s) @	\$0.725 =	\$8,482.50
B.	TRAVEL, BY AUTO (C&S - Sr. Designer/Const. Observer) from San Diego	240 mile* @	11 Trip(s) @	\$0.725 =	\$1,914.00
C.	TRAVEL, BY AUTO (C&S - Principal Engineer) from Phoenix	800 mile* @	7 Trip(s) @	\$0.725 =	\$4,060.00
D.	PER DIEM (C&S)	15 DAYS @		\$261.00 =	\$3,915.00

TOTAL ESTIMATE OF DIRECT EXPENSES: \$ 18,371.50

III. TOTALS:

TOTAL RATE BASIS ENGINEERING SERVICES : \$443,255.50