



## RETRAINEE - JOB CREATION

**Training Proposal for:**

**ENGEO Incorporated**

**Agreement Number: ET17-0198**

**Panel Meeting of:** August 26, 2016

**ETP Regional Office:** San Francisco Bay Area

**Analyst:** A. Nastari

### PROJECT PROFILE

Contract Attributes:	Job Creation Initiative Priority Rate Retrainee Veterans HUA	Industry Sector(s):	Engineering Construction Technology/Other  Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Statewide	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Operating Engineers Local Union No. 3, Sacramento		
Number of Employees in:	CA: 150	U.S.: 150	Worldwide: 215
<u>Turnover Rate:</u>	15%		
<u>Managers/Supervisors:</u> (% of total trainees)	11%		

### FUNDING DETAIL

Program Costs	-	(Substantial Contribution)	(High Earner Reduction)	=	<b>Total ETP Funding</b>
\$168,304		\$0	\$0		\$168,304

<b>In-Kind Contribution:</b>	<b>100% of Total ETP Funding Required</b>	<b>\$297,070</b>
------------------------------	---	------------------

**TRAINING PLAN TABLE**

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate	Advanced Technology Skills, Business Skills, Commercial Skills, PL-Commercial Skills, Hazwoper	150	8 - 200	0 - 24	\$432	\$18.00
				Weighted Avg: 24			
2	Retrainee Job Creation Priority Rate	Advanced Technology Skills, Business Skills, Commercial Skills, PL-Commercial Skills, Hazwoper	34	8 - 200	0 - 24	\$2,240	\$18.00
				Weighted Avg: 112			
3	Retrainee Priority Rate Veterans	Advanced Technology Skills, Business Skills, Commercial Skills, PL-Commercial Skills, Hazwoper	5	8 - 200	0 - 24	\$2,288	\$18.00
				Weighted Avg: 104			
4	Retrainee Job Creation Priority Rate Veterans	Advanced Technology Skills, Business Skills, Commercial Skills, PL-Commercial Skills, Hazwoper	3	8 - 200	0 - 24	\$2,288	\$18.00
				Weighted Avg: 104			

**Minimum Wage by County:** \$17.02 for Alameda, Contra Costa, San Francisco, and Santa Clara counties; \$16.48 for Los Angeles County; \$16.51 for Orange County, and \$15.60 for San Joaquin and Placer counties

**Health Benefits:**  Yes  No This is employer share of cost for healthcare premiums – medical, dental, vision.

**Used to meet the Post-Retention Wage?:**  Yes  No  Maybe

Although employer provides health benefits, they are not being used to meet Post-Retention Wage.

**Wage Range by Occupation**

Occupation Titles	Wage Range	Estimated # of Trainees
<b>Job Number 1</b> Engineers & Geologists Level 1		50

Engineers & Geologists Level 2		3
Field Representatives Level 1		69
Field Representatives Level 2		2
Lab Representative		10
Managers		16

<b>Wage Range by Occupation</b>		
Occupation Titles	Wage Range	Estimated # of Trainees
<b>Job 2 – Retrainee - Job Creation:</b>		
Engineers & Geologists Level 1		6
Engineers & Geologists Level 2		6
Field Representatives Level 1		22
<b>Job 3 – Retrainee - Veterans</b>		
Field Representatives Level 1		5
<b>Job 4 – Retrainee – Job Creation - Veterans</b>		
Field Representatives Level 1		3

**INTRODUCTION**

Founded in 1971, ENGEO Incorporated (ENGEO) [www.ENGEO.com](http://www.ENGEO.com), provides specialized engineering services required for the design and construction of buildings, reservoirs, pipelines and commercial sites, such as sports arenas, medical facilities, and rail lines. ENGEO competes with international, national and local firms. ENGEO’s clients include city, county, state and local agencies and utility districts throughout California, public and private land developers, builders, financial institutions and land owners.

ENGEO meets out-of-state competition standards as a company providing engineering services. As an engineering services provider, ENGEO is also eligible for priority industry reimbursement.

ENGEO has nine California locations: Antioch, Irvine, Lathrop (HUA), Oakland, Rocklin, San Francisco, San Jose, San Ramon (headquarters) and Santa Clarita. The Company’s Engineers, Geologists and Field Representatives provide the following services: analysis of soil and rock for construction design, consultation and design to address environmental clean-up of contaminated groundwater and soil; grading of the land; soil testing; storm water management, including creation and implementation of Storm water Pollution Prevention Plans and Storm water Management Plans and permitting support.

This is ENGEO’s third ETP Proposal. Since its last Agreement, ENGEO increased its workforce by 20 employees (15%), expanded its business services, and added two facilities, Antioch and Oakland, as a result of significant increase in construction related activities. ENGEO is

geographically expanding its business to include other areas throughout California. Its Irvine facility has seen a business growth of 100% over the past two years. To meet business demands, the Company's goal is to hire 34 workers (Job Creation).

In previous ETP Agreements, ETP funds assisted the Company in developing the skills of its existing and newly-hired Engineers, Geologists, and Field Representatives. Training consisted of courses in regulatory changes regarding water quality, air quality, and permitting for geotechnical and environmental exploration. Workers were also trained in the utilization of highly technical equipment such as x-ray fluorescence equipment, vapor operated equipment, and meters to measure the pH of soil and water. Trainees learned how to use nuclear density gauges to measure and assess moisture and density of the soil or water being tested and report on their findings.

Today, ENGEO's Field Representatives, Engineers, and Geologists must possess knowledge in California's regulatory changes pertaining to seismic building codes, storm water management, and environmental assessment standards in order to clearly inform clients of its effects on the projects. Regulatory changes impact ENGEO's processes from project analysis, testing, inspection, costing, to field design implementation. During the proposed training plan, ENGEO will train on updated regulatory changes that impact construction improvement projects. These are updated every 2-4 years.

Due to the complexity of the subject matter, ENGEO will send its trainers to workshops delivered by the regulatory authors who discuss the changes and interpretations. ENGEO's trainers will train staff on the changes.

Additionally, ENGEO must continue to train Field Representatives, Engineers, and Geologists in the use of technical x-ray fluorescence equipment, vapor operated equipment, and meters used to measure the pH of soil and water. Trainees must learn how to accurately conduct tests by measuring and assessing moisture and density of the soil or water through the use of nuclear density gauges. They must then provide an accurate report on their findings.

### **Union Support**

ENGEO's Field Representatives are represented by Operating Engineers Local Union No. 3, from Sacramento. The union provided a letter supporting its training initiatives. It specifically supports site specific training or training conducted at a client's job site.

### **Retrainee - Job Creation**

In support of job creation, the Panel offers incentives to companies that commit to hiring new employees. Training for newly-hired employees will be reimbursed at a higher rate, and trainees will be subject to a lower post-retention wage.

ENGEO has committed to hiring 34 new employees (Job Number 2). It also plans to hire three Veterans (Job Number 4). The date-of-hire for all trainees will be within the three-month period before contract approval or within the term-of-contract. These trainees will be hired into "net new jobs" as a condition of contract. ENGEO facilities are equipped to accommodate the anticipated new hires.

### **Veterans Program**

The Panel has established a higher reimbursement rate and other incentives for training California veterans. Higher support costs are also available to reach participants for this program. ENGEO currently has five incumbent workers in Job Number 3 who are Veterans and

who will participate in the Company's training plan. Additionally, it plans to hire three new Veterans in Job Number 4 during the term of the Agreement.

### **High Unemployment Area**

Twenty five trainees (Job Number 1) work in a High Unemployment Area (HUA), a region with unemployment exceeding the state average by at least 25%. The Company's location in San Joaquin County qualifies for HUA status under these standards.

#### ➤ Wage Modification

For these trainees, the Panel may modify the ETP Minimum Wage by up to 25% if post-retention wages exceed the start-of-training wages. However, ENGEO is not asking for a wage modification.

### **Temporary to Permanent Hiring**

ENGEO intends to train 3-5 workers in Job Number 2 under Panel guidelines for the Temporary to Permanent program. The Company has retained these employees on a temporary basis, with the intention of hiring them into full-time, permanent positions after training. The average time for "converting" temporary workers into full-time permanent employment is six months. It is expected that these workers will receive employer-paid share-of-cost for healthcare premiums while on temporary status, and upon hire into full-time permanent employment.

Under Panel guidelines for the Temporary to Permanent program, these trainees must be eligible to participate in ETP-funded training pursuant to Unemployment Insurance Code Section 10201(c). Moreover, they cannot be enrolled as trainees until after they have been hired by ENGEO into full-time, permanent employment. Until they are so hired, retention and post-retention wage requirements cannot be satisfied and the Company will not receive progress payments.

## **PROJECT DETAILS**

### **Training Plan**

The courses in this Proposal build upon the skills delivered to incumbent and newly-hired workers in its previous ETP funded training Agreement. The majority of the courses have been designed by ENGEO's expert Engineers and Geologists. The courses consist of several levels and topics within a Master Series. Each trainee is required to complete Level 1 before participating in the next level of training in the specific topic. Each topic level is built upon the previous level and topic levels are added, as necessary, when code or industry practice changes occur.

Additionally, ENGEO has developed and added several new courses and series, such as Technical Acumen Series, Concrete and Post-Tension skills, advanced Soil and Materials Testing, which comprises of various materials from California regions.

Participating Engineers and Geologists must be employed with ENGEO for at least two years in order to obtain the foundation and experience in the Company's service offerings. Field Representatives are entry-level and intermediate positions. It's the Company's goals to provide workers the necessary skills and tools to develop a flexible team allowing for advancement opportunities in high-skilled, high-paying jobs.

**Advanced Technology (35%):** This training will be offered to all occupations in the areas of Commercial Skills in testing techniques, processes, analysis, storm water management, environmental site assessments and construction foundations.

**Business Skills (15%):** All occupations will receive some or all training in project management, managing projects in construction services, and technical acumen series.

**Commercial Skills (15%):** All occupations will receive training as pertinent to their job functions in the operation of storm water pollution prevention and management plans, concrete, field grading, and nuclear gauges, which is equipment used to measure and assess the moisture and density of soil or water.

**HAZWOPER (5%):** The Company plans to deliver this training via CBT. Training will be provided to all occupations as specific to their job functions.

### **Advanced Technology**

Training in AT will be provided to Engineers, Geologists and Field Representatives. Newly-hired Engineers and Geologist will receive training in utilizing highly technical sampling equipment used in soil and groundwater collection. The samples will be tested at ENGEO's laboratories which will be used in high-level engineering analysis for planned construction improvements.

These occupations require specialized skills and training to maintain high-level quality controls and quality assurance practices required to meet EPA and environmental standards and requirements prior to construction.

Training in the accurate use of the equipment and testing procedures is paramount because an improper technique or analysis could result in structural damage to a construction site. The cost to deliver this training may be as high as \$65 per hour per trainee.

The trainer-to-trainee ratio is 1:10 for AT, to allow in-depth coverage and personal attention from the instructor.

### **Productive Laboratory (30%)**

Trainees may produce goods for profit as part of PL training in the courses identified under the Curriculum. The instructor must be dedicated to training delivery during all hours of training.

Commercial skills are required by Engineers, Geologists, and Field Representatives and are very specialized and technical in nature. Training must be performed on the job site or at ENGEO's laboratories, where trainees apply hands-on procedures. During PL, trainees will use Nuclear Gauges, Field Stake Readings and equipment required for grading construction. Trainees will gather soil and water samples from the construction sites and learn to perform lab testing and analysis conducted at ENGEO's laboratories. Trainees will write reports based on their findings. The test results are used by Engineers to develop recommendations necessary to support land development.

A high level of proficiency can only be attained using actual materials at the job site. Therefore, ENGEO projects 75 trainees across all occupations will receive up to 60 hours of PL. Training will be delivered under the direction and guidance of ENGEO's Senior Engineers. The trainers' will provide specific tasks and conduct side-by-side testing and analysis. Training will be provided primarily at a 1:1 trainer-to-trainee ratio; and up to 1:2 ratio in a few situations.

Productive Lab training will be delivered to Field Representatives, both incumbent and newly hired, as well as new Engineers/Geologists, at the client's job site.

**Certified Safety Training**

Hazardous Waste Operations and Emergency Response Standard (HAZWOPER). This training is a series of courses specifically designed for workers who handle hazardous substances as first-responders, or clean-up as needed at a hazard disposal or emergency site. It consists of 8 - 24 hours of classroom or CBT training, for workers stationed at the hazard site; and 24 hours for workers who visit the site (e.g., engineers). Field training is also required, although not funded by ETP. Completion of the training results in a certificate that expands employment opportunities. Each certification requires an 8-hour annual refresher course. This coursework must be approved by Cal-OSHA, and the instructors must be certified by Cal-OSHA.

**Training Location**

ENGEO estimates that 90% of the class/lab curriculum will be provided at ENGEO’s facilities. The remaining 10% will be provided on construction sites, higher learning institutions, seminar locations and/or college campuses, to be determined as needed.

**Commitment to Training**

The training ENGEO proposes complements its programs already in place which proactively respond to industry demands that are in a state of constant and rapid change.

ENGEO’s annual training budget of \$950,000 provides training to workers throughout its facilities. Training includes new employee orientation and on-boarding, human resources related skills, company required safety training, management training in hiring, interviewing and employee relations. ETP funds will not displace the existing financial commitment to training. Safety training is, and will continue to be, provided in accordance with all pertinent requirements under state and federal law.

➤ Training Infrastructure

As with ENGEO’s previous Agreements, the Company has its dedicated administrative staff in place to enroll trainees, obtain rosters and enter the data into ETP’s online system. It has identified its internal trainers so that training will begin immediately following project approval by the Panel.

**RECOMMENDATION**

Staff recommends approval of this proposal.

**PRIOR PROJECTS**

The following table summarizes performance by ENGEO Incorporated under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET15-0191	Statewide	7/7/2014 – 7/6/2016	\$102,400	\$93,624 (91%)*
ET12-0398	San Ramon	5/11/2012 – 5/10/2014	\$49,920	\$49,920 (100%)

\*ET15-0191 ENGEO is in the process of closing out this Agreement. The ETP online Tracking system shows enough hours to earn \$93,624. Trainees have completed their 90-day retentions. Therefore, ENGEO expects to earn 91% of the approved amount of \$102,400.

### **DEVELOPMENT SERVICES**

N/A

### **ADMINISTRATIVE SERVICES**

N/A

### **TRAINING VENDORS**

To Be Determined

## Exhibit B: Menu Curriculum

### Class/Lab Hours

8 – 200

Trainees may receive any of the following:

#### BUSINESS SKILLS

- ✚ Master Series
- ✚ Project Management
- ✚ New Staff Engineer/Geologist Training
- ✚ Technical Acumen Series
- ✚ Construction Services Management Series
- ✚ Software/Application Marketing Training

#### COMMERCIAL SKILLS

- ✚ Nuclear Gauge Operator Training
- ✚ Qualified SWPPP Developer (QSD)
- ✚ Qualified SWPPP Practitioner (QSP)
- ✚ Field Representative Performance Training
- ✚ Field Representative Winter Field Training
- ✚ Field Representative Winter Office Internship
- ✚ ICC Reinforced Concrete Preparation Series
- ✚ ICC Post-Tension Preparation Series
- ✚ ACI Concrete Field Grade I Training

### AT Hours

0 – 60

#### ADVANCED TECHNOLOGY (ratio 1:10)

Geotechnical Engineers/Geologists:

- ✚ Soil Index/Strength Testing- Triaxial, Shear, Consolidation, Atterberg
- ✚ Construction Observation for Engineering/Geologists
- ✚ Foundation Construction Observation Introduction
- ✚ Geotechnical Exploration for Schools/Hospitals – CGS Note 48
- ✚ Grading Plan Review and Corrective Grading Plan Preparation
- ✚ Analysis Topic – Liquefaction/Lateral Spreading Analysis
- ✚ Analysis Topic – Compressible Soils/Bay Mud Analysis
- ✚ Analysis Topic – Developing Foundation Design Criteria
- ✚ Analysis Topic – Ground Improvement Techniques
- ✚ Analysis Topic – Stabilized Earth Retaining Wall Design
- ✚ Analysis Topic – Structural Retaining Wall Design
- ✚ Analysis Topic – Soil Structure Interaction Analysis

Environmental Engineers/Geologists:

- ✚ Phase II Environmental Site Assessment Scoping/Field Work
- ✚ Phase III Environmental Site Assessment Scoping/Field Work
- ✚ Analysis Topic – Environmental Risk Assessment
- ✚ Analysis Topic – Environmental Sustainability
- ✚ Analysis Topic – Green and Sustainable Remediation Practices

Water Resource Engineers/Geologists

- ✚ Stormwater Management Plan Analysis/C3 BMP Analysis
- ✚ Stormwater Pollution Prevention Plan/Erosion Control Plan
- ✚ Hydraulics/Hydrology – Creek Mitigation & Restoration Analysis
- ✚ Analysis Topic – Advanced Modeling Analysis
- ✚ Analysis Topic – Advanced AutoCAD for hydraulics
- ✚ Analysis Topic – Stormwater Design Guideline Development

**Field Representatives:**

- ✚ Advanced Remedial/Corrective Grading Techniques and Methods
- ✚ Geotechnical Product Installation and Observations - subdrainage, geotextiles, geogrid reinforcement
- ✚ Foundation Construction Observations – structural mat, piers, footings, piles, soil nail walls
- ✚ Advanced Soil Testing (Cyclic Direct Simple Shear, Constant Rate Strain Consolidation)
- ✚ Advanced Materials Testing (Cell-crete specimen preparation and testing, Lime/Cement Treated soil bench scale and production testing)

Safety Training is capped at 10% of a trainee's total training hours

**PL Hours**

0 – 60

**PRODUCTIVE LAB (PL)-COMMERCIAL (limited ratio 1:2)****New Hire Engineers/Geologists:**

- ✚ Laboratory Testing Introduction (Interpret, Assign Values for Analysis)
- ✚ Site USA and Field Exploration Types (Mud, Auger, Pitcher, Shelby)
- ✚ Environmental Site Reconnaissance (Greenfield, Brownfield, Commercial/Industrial)

**Field Representatives:**

- ✚ Nuclear Gauge – Usage, Testing/Corrections, Data to document
- ✚ Concrete/Grout Placement – Observations, Sampling, Data to document
- ✚ Adhesive Anchor Installations- Observations, Data to document
- ✚ Safety –Driving, Parking, Testing (grading, improvements, concrete)
- ✚ Field Test Locating and Stake Reading – Plans and Technology
- ✚ Moisture Only (Drybacks) and Fill Specification Selection
- ✚ Construction Observation Activities – Grading, Utilities, Streets, Walls
- ✚ Hot Mix Asphalt Placement – equipment/materials, temperatures, Data
- ✚ Foundation Construction - Pad Moisture Observations
- ✚ Construction Site BMP Monitoring and Sampling
- ✚ Lab Training (Construction Testing) – Curves, PI, Gradations, Sieves
- ✚ Soil Index Testing (Compaction Curve, Sieves, Atterberg, Sulfate, Durability)
- ✚ Soil Strength Testing (Unconfined, Triaxial UU, Direct Shear, R-Value)
- ✚ Cementitious Materials Testing (Mortar, Grout, Concrete)
- ✚ Materials Specification Testing (Hot Mix Asphalt and Aggregate Base)
- ✚ Laboratory Representative Certification Training (Caltrans)

**CBT Hours**

0 – 24

**COMPUTER BASED TRAINING (CBT)**

- ✚ OSHA Hazwoper (24-hour)
- ✚ OSHA Hazwoper (8-hour Refresher)

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery. CBT is capped at 50% of total training hours, per trainee excluding OSHA 10 and OSHA 30. PL is capped at 60 hours per-trainee.



# OPERATING ENGINEERS LOCAL UNION No. 3

3920 LENNANE DRIVE, SACRAMENTO, CA 95834 • (916) 993-2055 • FAX (916) 419-3491

Jurisdiction: Northern California, Northern Nevada, Utah, Hawaii, and the Mid-Pacific Islands

---

August 9, 2016

Ms. Valerie Davis  
ENGEO, Incorporated  
2010 Crow Canyon Place, Suite 250  
San Ramon, CA 94583-4634

**Re: California ETP Letter of Concurrence**

Ms Davis,

The Operating Engineers Local Union No. 3 is in receipt of your request for concurrence that employees covered by the collective bargaining agreement between ENGEO and the Operating Engineers Local Union No. 3, AFL-CIO participate in training funded by the State of California's Employment Training Panel (ETP).

The Operating Engineers prides itself on offering the finest training available to the Technical Engineering Industry but always encourage our employer-partners to offer as an option employer, or site specific training it deems beneficial. Please accept this letter as our concurrence for any and all additional training ENGEO believes beneficial to members of the ENGEO / Operating Engineers family.

Respectfully,

Michael Strunk  
Sr. Tech. Engineers Rep.  
IUOE Local Union No. 3