



Training Proposal for:
**Sheet Metal & Air Conditioning Apprenticeship &
 Journeymen Joint Training Fund of San Diego**

Agreement Number: ET16-0925

Panel Meeting of: May 26, 2016

ETP Regional Office: San Diego

Analyst: H. Bernard

PROJECT PROFILE

Contract Attributes:	Priority Rate Retrainee Apprenticeship Veterans	Industry Sector(s):	Construction Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	San Diego, Imperial	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Turnover Rate:	≤20%		
Managers/Supervisors: (% of total trainees)	N/A		

FUNDING DETAIL:

Program Costs	+	Support Costs	=	Total ETP Funding
\$260,400		\$18,000 8%		\$278,400

In-Kind Contribution:	50% of Total ETP Funding Required	Inherent
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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 Journeyman	Commercial Skills Computer Skills	40	8-200	0	\$705	\$35.30
				Weighted Avg: 30			
2	Retrainee Apprentice	Commercial Skills OSHA 10	85	8-210	0	\$2,780	\$21.28
				Weighted Avg: 200			
3	Retrainee Apprentice Veterans	Commercial Skills OSHA 10	5	8-210	0	\$2,780	\$21.28
				Weighted Avg: 200			

Minimum Wage by County: SET Priority Industry: \$21.28 per hour.

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

Up to \$1.37 per hour may be used to meet the Post-Retention Wage for Job Numbers 2 & 3.

Wage Range by Occupation

Occupation Titles	Wage Range	Estimated # of Trainees
Journeymen Sheet Metal (Job Number 1)		40
Apprentice Sheet Metal (Job Number 2)		85
Veterans Apprentice Sheet Metal (Job Number 3)		5

INTRODUCTION

Established in 1941, the Sheet Metal & Air Conditioning Apprenticeship & Journeymen Joint Training Fund of San Diego (SMJTF) (www.smjatc.org) is a joint effort by the Sheet Metal Workers' International Local 206 and the Sheet Metal and Air Conditioning Contractors National Association whose mission is to provide up-to-date industry skills training and secure high-quality job opportunities for its members.

Located in San Diego, the SMJTF training center has a total of seven classrooms and labs; a computer center with 20 stations; and a welding shop with 16 welding booths. All training under this Agreement will be center based. SMJTF serves 110 Apprentices and 425 Journeymen within San Diego and Imperial Counties. There are 34 signatory employers who contribute to the Sheet Metal Trust fund. These employers perform specialized construction work ranging from the design, layout, fabrication and installation of duct systems to architectural sheet metal fabrication, metal roofing construction, and a variety of other shop or sheet metal work.

PROJECT DETAILS

This is the fourth ETP Agreement with SMJTF. However, this is the first time Veterans have been introduced as a distinct cohort of Apprentice trainees.

SMJTF recruits and trains Apprentices to meet the needs of San Diego and Imperial Counties' sheet metal fabrication and heating, ventilation and air conditioning (HVAC) industry. SMJTF also provides skills upgrade training to Journeymen in the latest sheet metal technologies.

Apprenticeship Program

The Panel is authorized to fund Apprentice training that does not displace any other source of government funds, or replace an existing apprenticeship program approved by the Division of Apprenticeship Standards (DAS). The Panel adopted the Apprenticeship Training Program as a pilot in March 2012. It is designed to supplement cost of delivery for the Related and Supplemental Instruction (RSI) portion of DAS-approved apprenticeship training. Depending on the type of trade, apprenticeship programs vary in length. In this case the program is five years.

RSI is traditionally delivered as class/lab and ETP does not reimburse CBT delivery for apprenticeship training. The curriculum is developed with input from DAS and a designated Local Educational Agencies (in this case Palomar Community College). The Apprenticeship Program allows reimbursement for up to 200 hours of RSI plus OSHA 10, per-apprentice (Journeymen are capped at 200 hours).

For the building trades, it is not customary for workers to be employed for a standard retention period of 90 consecutive days with one employer. In that instance, the Panel may substitute non-consecutive hours worked for retention. This modified retention period must be no less than 500 hours within 272 days with more than one employer. Both the standard and modified retention periods will apply to this proposal.

To ensure ETP does not displace Montoya Funds, Apprenticeship reimbursement is reduced by \$5, reducing the priority industry rate from \$18 to \$13 per hour. In addition, the Panel adopted a "blended rate" for Journeymen, reflecting the fact that they may be employed by a variety of contractors over the two-year term of contract ranging from large employers, to small (≤ 100 employees).

In addition, the Panel adopted a "blended rate" for Journeymen reflecting the fact that these workers may be employed by a variety of contractors over the two-year term of contract ranging from large employers, to small (< 100 employees). This is \$22 per hour, midway between the Priority Industry standard rate (\$18) and Small Business rate (\$26).

The ETP wage for Apprentices is no less than \$21.28 per hour, tracking the Special Employment Training wage as modified for priority industries. However, the actual wages paid are shown in the Training Plan Table and contract when they exceed \$21.28, for both Apprentices and Journeymen.

DAS Completion Rates

The DAS Completion rate for the SMJTF for the years 2009-2013 was 65.58%. This is slightly lower than apprenticeship retention for the industry sector as a whole, which has an aggregated average of 68.10%. However, SMJTF still meets ETP standards with greater than 50% retention rate of the industry average.

Employer Demand

The local hiring demands in San Diego and Imperial counties were considered for this funding request. Employers report the need to implement cost saving measures; a reduction in waste due to rework and delays; implementation of new state energy efficient standards;

implementation of new green/clean technologies; and new skills needed due to aggressive non-union competition. Additionally there has been a substantial need for training in three-dimensional, virtual-building modeling.

According to SMJTF there has been an increase in new Project Labor Agreements (PLA's) in the San Diego area. Upcoming projects include Petco Park Baseball Park Village; San Ysidro International Border Crossing; Kaiser Hospital; San Diego State University House and Laboratory Projects; Valhalla High School Retrofits; and San Diego City College Retrofits. These projects are expected to employ from 10 to 80 sheet metal workers for each job depending on the size of the project.

Curriculum Development

Employers submit program needs to all the training centers, which receive additional union input at labor/management and industry meetings. Curriculum development is further customized for local area employers, and employer members are involved in journeyman, pre-apprentice, and apprenticeship training plan design. Training topics are customized to include new equipment and to meet new industry standards/materials.

The SMJTF has two full-time and four part-time trainers who assist with training. The trainers are former or current members of the trade and experts in the subject matter.

Training Plan

Commercial Skills (95% for Journeymen & 95% for Apprentices): Training will be provided to both Journeymen and Apprentices. Courses will include Pattern Development in which trainees learn to draw, calculate mathematic configurations, fabricate, and install products out of a piece of flat metal. There will also be courses on the Plans and Specifications of mechanical, architectural, structural and electrical drawings and how to accurately read these documents to ensure that work is completed to specifications required. Training will also focus on welding and installation practices, HVAC systems, and new green technologies required by employers.

In the last ETP contract, SMJTF added AutoCAD classes to the curriculum due to high employer demand for the courses. Attendance for these classes was very high. SMJTF will continue to offer these courses to ensure that all workers are able to meet the needs of employers.

Computer Skills (5% for Journeymen): Training will be offered to Journeymen. Training will include three-dimensional virtual construction software. SMJTF reports that there are too few workers who are able to use this software and as a result, many of these jobs are sent offshore. Trainees will also train in software applications with capabilities to schedule, plan and track jobs.

Certified Safety Training

OSHA 10: (5% for Apprentices): This training is a series of courses "bundled" by industry sector and occupation. Completion of the training results in a certificate that expands employment opportunities. Training consists of OSHA 10 for Apprentices. Note: To ensure that each trainee receives certification, ETP will only consider payment earned upon completion of the full 10-hour. OSHA 10 is not included in the 10% limitation on safety training. The trainer-to-trainee ratio is 1:40 for OSHA 10.

Impact/Outcome

Certifications that may be earned through the training delivered in this project include: TAB (Testing and Adjusting and Balancing), MATT (Mechanical Acceptance Testing Technician), Hoisting, Rigging, Forklift, Aerial Lifts, Scaffolding, Safety, OSHA 10, welding and fall protection.

Commitment to Training

ETP funding will not displace SMJTF's financial commitment to training. Employers will continue to make contributions to the training trust for every hour worked by Apprentices, Pre-Apprentices, and Journeymen. Safety training is, and will continue to be, provided by the participating employers in accordance with all pertinent requirements under state and federal law.

Marketing and Support Costs

SMJTF is requesting 8% in support costs to promote training opportunities for Journeymen and Apprentices with the 34 signatory employers, 60% of which are small businesses. Support costs will also be used by the Trust in recruiting Apprentices from schools, employment centers and community organizations; and in the recruitment of Veterans.

ETP-funded training will be discussed at all labor management meetings and pertinent trade, industry, and apprenticeship events. SMJTF routinely meets with stake-holders to ensure training plans meet business needs. Marketing and training evaluations are conducted to via face-to-face meeting, email and regular contact with employers and unions.

Staff recommends the approval of the 8% support costs.

Veterans Program

SMJTF has committed to training 5 Veterans (Job Number 3) at the regular apprenticeship rate and without additional support costs above the 8%. [Note: All Apprentice reimbursement is at the \$13 rate.] SMJTF training programs are registered with Helmets to Hardhats. Additionally they work with Veterans Village of San Diego and a myriad of locally based non-profit organizations that serve Veterans.

RECOMMENDATION

Staff recommends approval of this proposal.

ACTIVE PROJECTS

The following table summarizes performance by SMJTF under an active ETP Agreement:

Agreement No.	Approved Amount	Term	No. Trainees (Estimated)	No. Completed Training	No. Retained
ET15-0906	\$248,421	07/28/2014– 07/27/2016	116	81	16*

Based on ETP Systems, 18,247 reimbursable hours have been tracked. Provided SMJTF meets all terms and conditions of the Agreement, the Contractor will earn 100% of the Agreement amount.

PRIOR PROJECTS

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

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET11-0262	San Diego	06/06/2011– 06/05/2013	\$65,864	\$62,144 (94%)

DEVELOPMENT SERVICES

California Labor Federation in Sacramento, in conjunction with Strategy Workplace Communications in Oakland, assisted with development of this proposal at no charge.

ADMINISTRATIVE SERVICES

Strategy Workplace Communications will perform administrative services in connection with this proposal for a fee not to exceed 13% of payment earned.

TRAINING VENDORS

N/A

Exhibit B: Menu Curriculum**Class/Lab Hours**

8 – 200 (Job 1) Trainees may receive any of the following:

Journeyman Training**COMMERCIAL SKILLS**

- Introduction to Welding
- MIG Welding (GMAW)
- TIG Welding (GTAW)
- Stick Welding (SMAW)
- Architectural & General Sheet Metal Skills

COMPUTER SKILLS

- AutoCAD (Introduction, Intermediate, Advanced)
- Benchmark Certification (CAD)
- Beginning HVAC
- EPA Certification
- Fire, Life, Safety Certification (1 & 2)
- Mechanical Acceptance Testing Training (Title 24)
- Service & Start-Up
- TAB Certification

Class/Lab Hours

8 – 210 (Jobs 2 & 3) Trainees may receive any of the following:

Apprentice Training**COMMERCIAL SKILLS**

- **Core I (Safety/Tools)**
 - Shop Safety
 - Hand Tools
 - Geometric Construction
 - Lines and Lettering
 - Field Safety
 - Communication
 - Emergency Procedures
 - Hazard Communication
 - Hoisting and Rigging
 - Safety in Field Installation
- **Core II (Beginning Layout)**
 - Introduction to Parallel Lines
 - Sheet Metal and Metal Products
 - Pictorial Drawings
 - Freehand Sketchings
- **Core III (Advanced Layout)**
 - Duct S Offsets
 - Introduction to Triangulation

- Duct Change Elbows
- Change Ogee Offsets
- Y Branches
- **Core IV (Architectural Principles)**
 - Introduction to Architectural Sheet Metal
 - Architectural Sheet Metal Practices
 - Roof Drainage Systems
 - Flashings
 - Waterproofing Roof Edges & Walls
 - Additional Architectural Sheet Metal Work
- **Plans and Specifications**
 - The Contract Documents
 - Specifications
 - Architectural Drawings
 - Structural Drawings
 - Mechanical Drawings
 - Electrical Drawings
 - Sheet Metal Shop Drawings
- **Architectural Installation**
 - Planning Architectural Installation
 - Installing Architectural Sheet Metal Items
 - Architectural Sheet Metal Shop Drawings
 - Creating Shop Details
 - Advanced Sheet Metal Fabrication
 - Advanced Roof Drainage Systems
- **HVAC I**
 - Introduction to HVAC Systems
 - Air and Air Properties
 - Ventilation
 - Heating
 - Cooling
 - Duct Systems
 - Duct Design
 - Indoor Air Quality
 - Refrigerant Cycle
 - Servicing HVAC Equipment
 - Start-Up and Commissioning Systems
 - Energy Management Systems
- **HVAC II**
 - TAB Work
 - TAB Instrument Use
 - Refrigerant Cycle
 - Electricity
 - Controls
 - Servicing HVAC Systems
 - Start-Up and Commissioning Systems

- **Sheet Metal Welding**
 - Introduction to Welding
 - Welding Safety
 - Welding Equipment Safety
 - Welding Equipment Set-Up
 - Codes and Symbols
 - GMAW Process
 - SMAW Process
 - GTAW Process

 - **Foreman and Project Management Training**
 - Introduction to Supervision
 - Supervisory Training
 - Human Relations
 - Planning and Organizing
 - Personnel Records
 - Foreman Training
 - Project Management

 - **First Aid/CPR**
- OSHA 10** (OSHA Certified Instructor)
- OSHA 10 (requires completion of 10-hour course)

Note: Reimbursement for Job Number 1 is capped at 200 total training hours per trainee. Reimbursement for Job Numbers 2 & 3 is capped at 200 total training hours per trainee in Commercial Skills and 10 hours of OSHA 10 for a total of 210 hours.