

Engineering and systems management support for agriculture

# THE BRAE WEEKLY

The Weekly Newsletter for the BioResource & Agricultural Engineering Department



WEEK 4~ April 26<sup>th</sup>, 2018

## THE AES BANQUET

Saturday, May 19th, 2018 at the Madonna Inn

RSVPs Due on Friday, May 4th, 2018 to the front office

\$25 for Students

\$35 for Guests

AES Banquet!  
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THE AGRICULTURAL ENGINEERING SOCIETY  
CORDIALLY INVITES YOU TO OUR ANNUAL

# AES BANQUET

TO RECOGNIZE THE ACCOMPLISHMENTS OF STUDENTS,  
FACULTY, AND STAFF IN THE BRAE DEPARTMENT

SATURDAY MAY 19, 2018

SOCIAL HOUR AT 5PM  
DINNER AT 6PM

-AT-

THE MADONNA INN  
100 MADONNA RD,  
SAN LUIS OBISPO, CA 93405

CATERED DINNER: SALMON, RIBEYE, OR VEGETARIAN OPTION

PLEASE RSVP BY MAY 4, 2018 AT BLDG. 8-101

STUDENTS: \$25

GUESTS \$35

FOLLOWING DINNER:  
SCHOLARSHIP PRESENTATIONS  
DEPARTMENT AND CLUB AWARDS  
AND A SILENT AUCTION!

DIRECT ANY QUESTIONS TOWARDS MANVINDER GHUMAN, AES VICE PRESIDENT [MGHUMAN@CALPOLY.EDU](mailto:MGHUMAN@CALPOLY.EDU)

# April/May Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
22	23	24 CAFES Council 5:10PM 08-123	25 AES Election Meeting  PAAC Meeting 4:30-6:30 8A-3E	26 AES Barbecue BRAE Ramp  Chair of Central Coast Regional Water Quality Board Speaking Engagment 11AM	27	28 CAFES Council Sports Day
29	30	1 CAFES Council 5:10PM 08-123	2 PAAC Meeting 4:30-6:30 8A-3E	3 AES Barbecue BRAE Ramp	4 RSVP Deadline for BRAE/AES Banquet	5 FFA State Finals
6	7	8 CAFES Council 5:10PM 08-123	9 PAAC Meeting 4:30-6:30 8A-3E	10 AES Barbecue BRAE Ramp	11	12 BAE Day
13	14	15	16 PAAC Meeting 4:30-6:30 8A-3E	17 AES Barbecue BRAE Ramp	18	19 AES End of the Year Banquet Social Hour 5PM Dinner 6PM

# CAFES RESEARCH SEMINAR SERIES

CAL POLY  
College of Agriculture, Food & Environmental Sciences

April 26, 2018, 11:10 a.m. - Noon, 10-221

Dr. Jean-Pierre Wolff  
Wolff Vineyards, and Chair, Central Coast Regional  
Water Quality Board

An Introduction to the California Waterscape and  
its Challenges





Nicholas Construction Inc.  
 251 Carsen Way  
 Shafter CA 93263  
 Phone: (661) 391-8800 • Fax: (661) 391-8900  
 CA License# 843461

## PROJECT ENGINEER INTERN

Nicholas Construction, Inc. (NCI) is an established general engineering contractor in Shafter, CA (near Bakersfield) engaged in the bidding, management, and construction of transmission pipelines, pumping facilities, and water/sewer treatment projects. We are a non-union affiliated, family owned engineering contractor self-performing earthwork, shoring, underground, mechanical, and structural concrete.

### POSITION OBJECTIVE:

We are seeking a self-motivated individual to join our construction management team. This is an opportunity to learn all aspects of the Project Engineer job while working closely with our Senior Estimators and Project Managers handling real life scenarios. We are a fast-paced company with great opportunities for a self-starting, productive, and highly organized individual.

Interns are mentored to be an essential member of our project team and feel ownership of the projects with which you are involved. The intern will function as a liaison between the Project Manager and the Owner, Engineer, subcontractors, and the field crews. As an intern you will review drawings, ensure conformance to design specifications, oversee subcontract provisions, process change orders, and prepare progress billings. Additional responsibilities include managing material procurement, assisting with blue print takeoffs, hands on in trench work, and coordinating with local agencies to secure permits for our work.

Interested students may apply at MustangJOBS – <https://calpoly.joinhandshake.com/jobs/1319290>

### COMPETENCIES:

- Expert with Microsoft Office Suite (Excel and Word)
- Microsoft Project and/or PV6 – preferred but not required
- Requires excellent English communication skills, both written and verbal, including strong writing, editing and proofreading abilities
- Ability to stay organized and manage time effectively
- Able to effectively multitask and manage changes in priorities while still meeting tight deadlines
- Desire to work in a team environment, working towards common goal and objectives
- While performing the duties of this job, the Intern is required to work in wet, humid conditions, extreme heat, and work near moving mechanical parts.
- CAD – preferred but not required

Goodfellow Bros., Inc., a general contractor located in multiple regions throughout the Western United States and Hawaii, is looking for a **Project Engineer I** to add to our team on projects spanning the entire Bay Area. Our company is a fourth generation, family-owned business with more than 97 years of experience in the industry. We have earned a reputation for professionalism and integrity that reflects in our longstanding commitment to the individuals, businesses and resources of the communities in which we live and work.

The main Livermore office is located right off the 580 freeway and we also have an office in Folsom, CA. Goodfellow Bros. California, LLC has been involved in many exciting and high profile projects including paving the Golden Gate Bridge, San Francisco's Monster Park, The Great Mall in Milpitas, Bay Meadows, The Levi's stadium in Santa Clara, and the newly completed Apple Campus in Cupertino. Our line-up for 2018 includes Microsoft, Google, Folsom Ranch and the Chase Arena just to name a few.

If interested contact: Katherine Sullivan - [katherines@goodfellowbros.com](mailto:katherines@goodfellowbros.com)

#### Essential Functions

- Prepares, processes and submits project documentation, such as material submittals, RFI's, shop drawings and notification of changes.
- Maintains logs for RFIs, submittal, change proposals and plan revisions.
- Studies and understands the contract documents of each project, including provisions of the general or special conditions. Identifies ambiguities, conflicts, and discrepancies and brings them to the attention of the Project Manager or other supervisor.
- Reviews and obtains a working knowledge of the bid documents, estimate, budget, and ancillary owner-provided reports (such as soils investigations).
- Reviews and approves timecards and daily logs in a timely manner, ensuring accurate cost codes, hours, and quantities.
- Maintains cost reports, investigates cost overruns and underruns, ensures reporting is detailed and accurate. Tracks extra work and prepares reports in a timely manner.
- Prepares special reports as requested by Project Manager or other supervisor.
- Monitors daily, weekly and monthly job operation costs and production quantities. Assists Project Manager or other supervisor with preparation of monthly work-in-process cost forecast.
- Supports foremen and field supervisors to ensure timely and efficient performance. Coordinates labor resources, equipment resources, and third party service providers as needed.
- May coordinate material deliveries and subcontract work in accordance with progress schedule and adjust as necessary due to changes.
- Studies and understands the company's GPS technology practices. Manages GPS technology for all assigned jobs, including the site calibrations, topography measurement, volume calculations, and machine data management.
- Analyzes information gathered at site inspections, drawings, specifications, proposals, and other documentation.
- Maintains project files.
- Determines which submittals will be required, assures that details of the submittals are correct and complete.
- Acts as point of contact for project submittals from suppliers and subcontractors.
- May order supplies and other materials, as needed.
- Maintains and reinforces to field personnel a continued awareness of and conformance to safety policies and procedures with the goal of achieving zero incidents, lost time injuries, property damage, and claims.
- Attends and participates in project meetings, including, but not limited to preconstruction meetings, safety meetings, owner meetings, and subcontractor meetings.
- Demonstrates proficient knowledge of traffic control and flagging procedures and guidelines.
- Commuting to and from various jobsites. Driving on uneven surfaces within job sites.

#### Knowledge, Skills and Experience

- Bachelor's Degree (four year college or technical school) Preferred, Field of Study: Construction or Engineering.
- No prior experience necessary.
- Must have computer experience using Microsoft Word, Excel and Project.
- Valid Driver's License with clean driver's abstract.
- Obtains and maintains CPR, AED and First Aid certification, OSHA 30, MUTCD Technician.
- Proficiency in MS Office, Primavera and enterprise project management solutions.
- Must have excellent communication skills to work effectively with customers, employees, management, vendors, utility companies, and local state and federal agencies.
- Must have a basic understanding of surveying practices and accompanying equipment.
- Must be able to comprehend and follow occupational safety and health regulations, other state and federal regulations governing the construction industry, and Company practices and procedures.
- Must be able to accurately read blue prints, plans, specifications, contracts, bids, proposals and other construction documentation.
- Must have a basic understanding of drafting.
- Must be able to comprehend complex math concepts including geometry, algebra and trigonometry to measure calculate and forecast.
- Understand different signals used at construction sites.
- Must be able to drive.

Position Qualifications:

- Accountability - Ability to accept responsibility and account for his/her actions.
- Active Listening - Ability to actively attend to, convey, and understand the comments and questions of others.
- Analytical Skills - Ability to use thinking and reasoning to solve a problem.
- Business Acumen - Ability to grasp and understand business concepts and issues.
- Communication, Oral - Ability to communicate effectively with others using the spoken word.
- Communication, Written - Ability to communicate in writing clearly and concisely.
- Conceptual Thinking - Ability to think in terms of abstract ideas.
- Decision Making - Ability to make critical decisions while following company procedures.
- Detail Oriented - Ability to pay attention to the minute details of a project or task.
- Goal Oriented - Ability to focus on a goal and obtain a pre-determined result.
- Honesty / Integrity - Ability to be truthful and be seen as credible in the workplace.
- Judgment - The ability to formulate a sound decision using the available information.
- Organized - Possessing the trait of being organized or following a systematic method of performing a task.
- Problem Solving - Ability to find a solution for or to deal proactively with work-related problems.
- Time Management - Ability to utilize the available time to organize and complete work within given deadlines.
- Working Under Pressure - Ability to complete assigned tasks under stressful situations.

*We conform to all the laws, statutes, and regulations concerning equal employment opportunities and affirmative action. We strongly encourage women, minorities, individuals with disabilities and veterans to apply to all of our job openings. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, gender, sexual orientation, gender identity, or national origin, age, disability status, Genetic Information & Testing, Family & Medical Leave, protected veteran status, or any other characteristic protected by law. We prohibit Retaliation against individuals who bring forth any complaint, orally or in writing, to the employer or the government, or against any individuals who assist or participate in the investigation of any complaint or otherwise oppose discrimination.*

Goodfellow Bros., Inc., a general contractor located in multiple regions throughout the Western United States and Hawaii, is looking for a **Project Engineer – Summer Intern** to add to our team on projects spanning the entire Bay Area. Our company is a fourth generation, family-owned business with more than 97 years of experience in the industry. We have earned a reputation for professionalism and integrity that reflects in our longstanding commitment to the individuals, businesses and resources of the communities in which we live and work.

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The **Summer Intern** will assist the Project Manager/Project Engineers/Estimators with construction-related duties including, layout, form design, and subcontractor monitoring, as well as assisting in change order preparations, plan checking, document control, quality control and safety monitoring.

1. ESSENTIAL FUNCTIONS:

- Assists Project Manager/Project Engineers/Estimators with all construction related duties. Performs a variety of physical and mental tasks on construction projects.
- Assists Project Engineer and Project Manager in tracking manpower utilization and productivity.
- Maintains up-to-date file or library of material suppliers, current labor laws, equipment rental rates and qualified subcontractors by category.
- May assist field personnel in a variety of manual tasks on construction projects.
- Orders suppliers and other materials, as needed.
- May coordinate material deliveries and subcontract work in accordance with progress schedule and adjust as necessary due to changes.
- May resolve or assist Project Engineer and/or Project Manager in resolving, design and detail problems with owners, design agencies, suppliers and subcontractors.
- May attend subcontractor job meetings and other construction meetings, as needed.
- Prepares cost breakdown, reviews with Project Engineer and Project Manager for concurrence and makes adjustments as necessary.
- Prepares periodic completion data for job cost report and monitor printouts to correct mis-postings and other errors.
- Prepares data for monthly invoices, forced account sheets, pay estimates, monthly increases, back-charges, if applicable, and submits to Project Engineer and/or Project Manager in a timely manner.
- Assures that details and submittals are received, submitted and processed. Supervises submittal of control data.
- Prepares special reports as requested by Project Engineer and/or Project Manager.
- Reviews timecards daily and communicates any discrepancies to the payroll clerk.



- Answers the phones and performs other clerical work (such as screening telephone calls, taking accurate messages, faxing, copying and filing).
- Regular attendance is required for the position.
- Runs errands and visits jobsites.
- Performs other duties as assigned.

#### MENTAL DEMANDS:

- Requires good oral communication skills to communicate effectively with clients, employees, management and outside vendors.
- Requires concentration, alertness, and attention to detail.
- Requires the ability to work with others under minimal supervision.
- Must be able to comprehend and follow oral and written instructions and procedures.
- Must be able to work under pressure.
- Must be able to transfer from one task to another.
- Must be able to work with others and be a team player.
- Must be able to read and write the English language.
- Must be able to perform mathematical calculations.
- Duties are varied and regularly require analysis, judgment and discretion. Must be able to prioritize work.
- Requires the ability to compile information from records and prepare reports.
- Must present a courteous, efficient and professional demeanor, even under stressful situations.
- Must possess excellent organizational abilities.

#### SKILLS/TECHNICAL KNOWLEDGE:

- Currently enrolled in a university or other higher institution for education with a focus or major in engineering, business or construction management.
- Must have knowledge of MS Office, the Internet, and computer skills.
- Considerable ability to perform mathematical calculations by hand, adding machine and/or calculator.
- Considerable ability to follow complex oral and written instructions.
- Valid driver's license is required.
- Clean driver's abstract of record is required.

*We conform to all the laws, statutes, and regulations concerning equal employment opportunities and affirmative action. We strongly encourage women, minorities, individuals with disabilities and veterans to apply to all of our job openings. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, gender, sexual orientation, gender identity, or national origin, age, disability status, Genetic Information & Testing, Family & Medical Leave, protected veteran status, or any other characteristic protected by law. We prohibit Retaliation against individuals who bring forth any complaint, orally or in writing, to the employer or the government, or against any individuals who assist or participate in the investigation of any complaint or otherwise oppose discrimination.*



## Tulare Lake Basin Water Storage District

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### JOB DESCRIPTION AND PERFORMANCE EVALUATION

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**Position:** Staff Engineer  
**Reports To:** Assistant General Manager  
**Classification:** Non-Exempt  
**Employee Name:**  
**Evaluation Period: From:** \_\_\_\_\_ **To:** \_\_\_\_\_

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#### **Position Summary:**

The Staff Engineer is responsible for applying common core principles and procedures to analyze water and non-water related information; gather, analyze, write reports and present information accurately and concisely either verbally or in a formal document. Under general supervision, the Staff Engineer will perform a variety of moderately complex duties; assist with water related District functions and services; organize and analyze data related to water deliveries, water management, Land management and other administrative reporting; review maps and plans for conformance with District engineering and legal requirements; provide information to District, and other agencies.

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Dear CAFES faculty, staff, students, and friends:

I want to remind you that the 1st Annual CAFES Spring Student Research Symposium is taking place this Friday, April 27th, from 3 – 5 p.m. in the Advanced Technology Lab (bldg. 007, see below)! We have approximately 45 student posters to view, and there will be some nice refreshments. If you stay until the end, you will get to see who wins 1st, 2nd, and 3rd place in the graduate student and undergraduate student categories.

Come support our CAFES research students, see what is happening across the College, have some great conversations, and enjoy! I hope to see you there.

-Jim Prince

