Invitation For Quote (Bid)

Bid Data

- **Bid Number:** 810124
- **Commodity Code:** 810-00
- **Commodity Title:** PRE-FABRICATED STEEL BUILDING PROJECT
- **Buyer:** Mark Masoner
- **Buyer Phone:** 805-568-2692
- **Fax:** 805-568-2705
- **E-mail:** masoner@co.santa-barbara.ca.us
- **Issue Date:** November 29, 2018

Bid Opening

- **Day / Date:** Friday, January 4, 2019
- **Time:** 2:00 PM
- **Location / Mail Address:** Purchasing Division
  105 E. Anapamu Street, Rm B-5
  Santa Barbara CA 93101-2070

Bid Contents

1.0 **Introduction**
2.0 **Primary Specifications** describing what is needed
3.0 **Ancillary Requirements** related to this Bid
4.0 **Terms & Conditions** that are general in scope
5.0 **Instructions & Forms** for submitting a Reply

Sealed written Replies to this Invitation must be received by Purchasing no later than the date, time and location indicated above for the Bid Opening. Submittal by fax is not acceptable.

Note: This Invitation does not constitute an order for the goods or services specified.
To enhance your odds for positive delivery and proper handling of your Reply, you may use the following label and affix it to the outside of your submittal envelope.

Bid #810124 – Due: 1/4/19
County Purchasing Division
105 E Anapamu St, Rm B-5
Santa Barbara CA 93101-2070

See Section 5 for additional instructions regarding Reply submittal. It is your complete responsibility to meet the submittal requirements. We recommend you verify the label data with the title page; the latter prevails.

(Note: the barcode has been tested and verified for United States Postal Service first class mail. However, since most Replies are submitted via express or by hand, the barcode may not be useful, and may therefore optionally be omitted from the label.)
1. **INTRODUCTION**

1.1. **INVITATION** - Thank you for your interest in this bid process. The County of Santa Barbara, through the County Purchasing Division, invites Replies which offer to provide the goods and/or services identified on the title page and described in greater detail in Sections 2 through 5 below.

1.2. **DEFINITIONS** - We will speak with you relatively informally throughout the Invitation in order to help the process be a little more human and friendly. Even though the language is informal, we intend to express our expectations clearly, and they are to be legally interpreted to accomplish the outcome summarized in this document.

1.2.1. **We / Us / Our** - These terms refer to the County of Santa Barbara, a duly organized public entity. They may also be used as pronouns for various subsets of the County organization, including, as the context will indicate: *Purchasing* - the Purchasing Division of the General Services Department, including its Purchasing Manager (also known as Purchasing Agent) and staff of professional Buyers.

*Department/s* - The County department/s for which this bid is prepared, and which will be the end user/s of the goods and/or services sought.

*Designee* - the County employee assigned as your primary contact for interaction regarding Contract performance.

1.2.2. **You / Your** - These terms refer to all recipients of this Invitation. The term may apply differently to different classes of entities, as the context will indicate. For instance, "you" as a Supplier would have different obligations than "you" as a Vendor or Bidder may have. We'll be specific whenever it seems warranted.

*Vendors* - All business entities, which may provide the subject goods and/or services.

*Bidder* - Any business entity submitting a Reply to this Invitation. Vendors that may be invited to respond or which express interest in this Invitation, but which do not submit a Reply, have no obligations with respect to the Bid requirements.

*Supplier* - The Bidder who’s Reply to this Invitation is found by Purchasing to suit the best interests of the County. Supplier will be selected for award, and will enter into an agreement for provision of the goods and/or services described in the Invitation.

1.2.3. **Bid** - refers to the entire process we’re embarking on here. It includes the Invitation, the Reply, and any other related activities and documentation until the award is consummated.

1.2.4. **Invitation** - includes this document, and any related attachments or amendments. An Invitation may be used to solicit various kinds of information. The kind of information this Invitation seeks is indicated by the title appearing at the top of the first page. An “Invitation For Quote” is used when we have a pretty well defined need to fulfill. An “Invitation For Proposal” is used when multiple alternative ways of meeting the need may be considered.

1.2.5. **Reply** - is the document submitted according to the Invitation instructions, plus any written clarifications we may request. Reply does not include any verbal or documentary interaction you may have with us apart from submittal of a formal Reply or of responses to our written request for clarification.

1.3. **INVITATION CLARIFICATION** - Questions regarding this Invitation should be directed in writing, preferably by fax, to the Buyer specified on the title page, as soon as possible after you receive the Invitation. Answers, citing the question asked but not identifying the questioner, will be distributed simultaneously to all known prospective Bidders. Note: written requirements in the Invitation or its amendments are binding, but any oral communications between you and us are not.

1.3.1. **Bidder Responsibility** - We expect you to be thoroughly familiar with all specifications and requirements of this Invitation. Your failure or omission to examine any relevant form, article, site or document will not relieve you from any obligation regarding this Invitation. By submitting a Reply, you are presumed to concur with all terms, conditions and specifications of the Invitation unless you have raised objection as instructed in Section 5. Objections we consider excessive or affecting vital terms may reduce or eliminate your prospects for award. If at any time we discover deviations in your Reply that are not identified as instructed, you will be subject to disqualification from consideration or cancellation of contract.

1.3.2. **Invitation Amendment** - If it becomes evident that this Invitation must be amended, we will issue a formal written amendment to all known prospective Bidders. If necessary, a new due date will be established.

1.4. **AWARD** - Award will be made to the Low Bidder whose offer is the most advantageous to the County from the standpoint of suitability to purpose, quality, service, previous experience, price and ability to deliver.

1.5. **CONTRACT EXECUTION** - This Invitation and the Supplier's Reply (pertinent sections) will be made part of any resultant Contract and will be incorporated in the Contract as set forth, verbatim. Additional Contract terms may be negotiated between Supplier and County.

1.5.1. **Precedence** - In the event of contradictions or conflicts between the provisions of the documents comprising this
County of Santa Barbara  Purchasing Division

Bid # 810124 Page 4 Due: January 4, 2019

Contract, they will be resolved by giving precedence in the following order:
1) the provisions of the Contract (as it may be amended);
2) the provisions of the Supplier's Reply (as it may be clarified);
3) the provisions of the Invitation (as it may be supplemented).

2. PRIMARY SPECIFICATIONS

2.1. SCOPE – Provide labor, material and equipment to construct one (1) Pre-Fabricated Steel Storage Building for the Fire Department per attached specification.

Technical Contact: Kent Boisen Ph 805-755-3120 or: kent.boisen@sbcfire.com

2.1.1. Mandatory Job Walk – A mandatory job walk is scheduled for 9:00 AM on December 12, 2018, at Fire Station #11 located at 6901 Frey Way, Goleta, Ca. Please contact Kent Boisen for directions if needed.

3. ANCILLARY REQUIREMENTS

3.1. BILLING ARRANGEMENTS - A Contract will be issued for the contract period to the selected bidder for the requirements as needed for the term of the contract. All departments will utilize the same contract number; however, each department must be issued separate account numbers by the supplier for billing purposes and each department shall be individually responsible for payment for goods or services received.

PAYMENT MAY BE DELAYED OR DISALLOWED if you fail to obtain at time of each transaction, from County employee placing order, the signature, printed name, department and account number, and proper billing address.

3.1.1. Prompt Payment Discounts - Cash discount time will be defined as beginning only after the product(s) have been inspected, delivered, and accepted by the receiving agency, or from the date a correct invoice, whichever is later. Payment is deemed to be made, for the purpose of earning the discount, on the date of mailing the warrant or check. Normally acceptance will be accomplished within twenty (20) normal business hours after products are delivered, unless otherwise stated in this request. Invoices not reflecting the cash discount will be returned to the supplier immediately for correction, with the discount time starting from the date the corrected invoice is received.

3.2. CONTRACTOR’S LICENSE – You must be licensed to perform such work in accordance with local, state and federal laws.

3.3. APPLICABLE TERMS & CONDITIONS - PUBLIC Project Contracts Specifications and General Conditions attached.

3.4. PROTECTION OF PROPERTY - The Contractor shall take all needed precautions to protect the property both real and personal of the County and private individuals and shall safeguard the passing public from harm and from any eventualities arising during the course of the work. He shall make certain that these safeguards are used both during and after the hours of work.

3.5. DAMAGE – You shall be required to repair/replace all damaged areas as they happen and/or occur.

3.6. WORKMANSHIP - The standards of workmanship shall conform to your governing contractor’s license board and related laws & regulations. All work shall be performed in a neat and workmanlike manner, using the best recognized practices of the particular trade involved and shall be accomplished by workman skilled and trained to properly complete the work required. The work shall proceed vigorously to completion once it is started. You shall work on the job each consecutive working day, until completed, unless otherwise directed by us.

4. TERMS & CONDITIONS

4.1. COMPLIANCE WITH PUBLIC PROJECT CONTRACTS SPECIFICATIONS AND GENERAL CONDITIONS - You agree to be bound by the Purchasing Division’s “Specifications and General Conditions”, a sample of which is attached to this Invitation.

Department of Industrial Relations requirements:
No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after
March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

4.2. **MEANINGFUL CONSEQUENCES** - In lieu of our terminating the contract as may be provided elsewhere in the Invitation, we may at our sole discretion invite you to negotiate with us to establish alternative or additional consequences, beyond any specified herein, for failure to fulfill any requirement of this Bid. By submitting a Reply, you agree to engage in such negotiations, if invited, in good faith. Any agreed consequences must be significant enough to 1) incent your future compliance and 2) mitigate satisfactorily for us for any loss or inconvenience occasioned by your failure. The consequences would be reasonable, fitting to the breach, and mutually established prior to being invoked.

4.3. **“NO SURPRISES”** - You will implement no changes to prices, or interpretations of contract terms, without the express, advance concurrence and consent of the Purchasing Manager.

5. **REPLY PRESENTATION & REVIEW**

5.1. **REPLY CONTENT** - In order to enable direct comparison of competing Replies, you must submit your Reply in strict conformity to the requirements stated here. Failure to adhere to all requirements may result in your Reply being disqualified as non-responsive.

5.1.1. **Reply Assembly** - Assemble your Reply in the following order, with sections marked by Item letter (Item A, Item B, ... ) and title, as appropriate. In order to conserve paper, please include multiple Items on a page wherever practical. Items marked with asterisk (*) may not exceed one page (apprx 600 words) in length. Succinctness will be favored throughout.

### Cover Letter *
A standard business letter may be included as an option.

### Item A. Summary of Distinguishing Features *
Highlight the main features that distinguish your company from your competitors in this industry.

### Item B. Company Profile *
Brief history of your company.

### Item C. Deviations
State on a point-by-point basis any proposed deviations from full compliance with the requirements described throughout the Invitation. You must cite the paragraph numbers from the Invitation, or describe the specific location of a requirement specified in any attachment, for each deviation proposed. Deviations may be considered, provided that you submit adequate explanation and justification for any proposed. If none, so state under a heading for this section. (See Paragraph 1.3.1 for important information on this.)

### Item Z. Bidder Feedback (Optional)
We aim to continuously improve our bid documents and procedures. We welcome your input about your experience of replying to this Invitation, whether as a compliment or as a suggestion for future bids. Please offer any comments in a separate sealed envelope marked *Item Z. Bidder Feedback*, which will remain unopened until after award; we do not wish to be perceived as influenced in the award decision, pro or con, based on this information. (If you note a material flaw in the Invitation that could affect the outcome, it should be reported as specified in paragraph 1.3.)

5.1.2. **Forms & Schedules** - All forms and schedules must be completed on [or in the identical format of] the forms included with this Invitation and according to the instructions provided.

5.1.3. **Pre-Submittal Corrections** - Replies should be free of erasures. Errors may be crossed out with corrections printed in ink or typed adjacent, and must bare dated initials of person signing the Reply.

5.2. **SUBMITTAL OF REPLIES** - Unfortunately, some Bidders in the past have done everything correctly up until this last stage. Replies have been turned in minutes late, or to the wrong office - and all the investment in preparing the Reply has gone down the drain. Don't let that happen to you.

5.2.1. **Submittal Package** - Submit, to the location specified on the title page, two (2) complete copies of your Reply in a sealed envelope, clearly marked on the outside with the proposal number and due date.

5.2.2. **Advice of Award** - If you wish to be advised of the outcome of this Bid, enclose with your Reply a self-addressed stamped return envelope (size 10, first-class one-ounce postage) for our use in mailing a copy of the summary recap
of the award. Notification will be by mail only, except to awarded Bidder.

5.2.3. **Submittal Deadline** - We must receive your Reply as directed no later than the date and time shown on the title page. Any Reply received after that deadline will not be considered unless you obtain the express consent of all other competing and timely replying Bidders. Absent that unlikely scenario, you will find us merciless in this. Traffic, parking, courier service or other problems (including erroneous delivery to any other County office) are not excusable. We recommend you set for yourself an earlier deadline.

5.3. **Bid Opening** - On the date and time and at the location specified on the title page, all Replies will be opened in public. Brief summary information from each will be read aloud, and any person present will be allowed, under supervision, to scan any Reply. The Replies will then be sealed and not again available for public inspection until the award is announced.

5.4. **Reply Clarification** - We reserve the right to request additional written or oral information from Bidders in order to obtain clarification of their Replies.

5.4.1. **Rejection or Correction of Replies** - We reserve the right to reject any or all Replies. Minor irregularities or informalities in any Reply which are inmaterial or inconsequential in nature, and are neither affected by law nor at substantial variance with Invitation conditions, may be waived at our discretion whenever it is determined to be in the County’s best interest. In such cases, we may allow a Bidder to make minor corrections to any part of their Reply, with the exception of price data that could affect price comparisons between Bidders.

5.5. **Evaluation Process** - Our sole purpose in the evaluation process is to determine from among the Replies received which one is best suited to meet the County’s needs. Any final analysis or weighted point score does not imply that one Bidder is superior to another, but simply that in our judgment the Supplier selected appears to offer the best overall solution for our current and anticipated needs.

5.5.1. **Investigation** - Submittal of a Reply authorizes us to investigate without limitation the background and current performance of you and your present staff. Discovery of any material misstatement of fact may lead to disqualification of a Bidder or to cancellation of any resulting Contract.

5.5.2. **Method of Evaluation** - We will evaluate submitted Replies in relation to all aspects of this Invitation, and using the input of all references consulted regarding your capacity to fulfill its terms.

5.5.3. **Acceptability** - We reserve the sole right to determine whether goods and/or services offered are acceptable for our use.

5.5.4. **Endurance of Pricing** - Your pricing must be held until award, and may only be changed after award, if at all, according to terms specified elsewhere in this Bid.

5.6. **Award Criteria** - The evaluation will be in accord with, but not limited to, the results of our inquiries regarding the following criteria:

1) Your experience in the subject industry;
2) Your expertise in the subject industry;
3) Our perception of your understanding of our stated needs and specifications, as evidenced by your Reply, and possibly by interviews with your personnel; and
4) Evaluation of cost in relationship to the foregoing criteria.

5.7. **Bidder Questionnaire** - Complete & Return with your bid (including separate Bid Item List sheet).

5.8. **References - Optional** - Complete & Return with your bid.

5.9. **Public Project Contracts Specification and General Conditions** - Apply to your bid

6.0 Fire Station 11 Apparatus Bay Building – Specifications, Bid Detail Quotation Sheet & Geotechnical Report
### 5.7 Bidder Questionnaire

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<th>Company Name</th>
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<td>Q-2.</td>
<td>Address</td>
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<td>Q-3.</td>
<td>City/Zip</td>
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<td>Q-7.</td>
<td># years in industry</td>
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<td>Q-8.</td>
<td>Prompt Payment Discount? [% or &quot;None&quot;]</td>
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<td>Q-9.</td>
<td>Are you currently registered with the DIR (Department of Industrial Relations)</td>
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<td>Q-10.</td>
<td>Contractor's License Information</td>
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<td>License #</td>
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<td>Q-11.</td>
<td>Total Bid $</td>
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<td>Q-12.</td>
<td>Estimated Completion Timeframe /Days from issuance of award</td>
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If selected for award, I/we agree to furnish the items and/or services specified at the prices and under the conditions indicated.

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## 5.8 References (optional)

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<th>Account Name</th>
<th>Address</th>
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Comments:
THESE TERMS & CONDITIONS apply to the Contract established between the County of Santa Barbara, a political subdivision of the State of California (“we/us/our/County”) by its Purchasing Division (“Purchasing”), and the individual or entity identified as “Vendor” on the Contract form to which this document is attached (“you/you/Contractor”), including your agents, employees or sub-contractors. Your signature means you have read and accepted these terms and conditions.

SPECIFICATIONS

The contractor shall furnish all tools, equipment, apparatus, labor, materials, workmanship, transportation, and services necessary to perform and complete the job at the designated location according to the contract specifications.

1. **EXAMINATION OF SITE.** The contractor shall have examined the site of work and shall be responsible for having acquired full knowledge of the job and of all problems affecting it. No variations or allowance from the contract sum will be made because of lack of such examination.

2. **RESPONSIBILITIES OF THE CONTRACTOR.** It shall be the responsibility of the Contractor to establish knowledge of the general area and the specific site to familiarize himself with the access and egress, construction or building difficulties and method of delivery and installation, all of which could affect his ability to perform the work. It shall be the responsibility of the Contractor to cope with all these eventualities.

3. **PROTECTION OF PROPERTY.** The Contractor shall take all needed precautions to protect the property both real and personal of the County and private individuals and shall safeguard the passing public from harm and from any eventualities arising during the course of the work. He shall make certain that these safeguards are used both during and after the hours of work.

4. **WORKMANSHIP.** All work shall be performed in a neat and professional manner using the best recognized practices of the particular trade involved and shall be accomplished by mechanics and workers skilled and trained to properly complete the work required. The work shall proceed vigorously to completion once it is started.

5. **COSTS.** The contract price is to include all materials and all labor and shall cover all costs of the use of the usual machinery and tools required in the work and shall include all of the Contractor's profits, supervision, and other expenses. This amount shall include all of the Contractor's costs of insurance for property damage and public liability protection, social security benefits, unemployment insurance for workers, and any other benefits, costs, or charges required to be forwarded by the Contractor.

GENERAL CONDITIONS

1. **LOSS OR DAMAGE.** The County or its authorized representative shall not in any way or manner be answerable or suffer loss, damage, expense or liability for any loss or damage that may happen to said work, or part thereof, or in or about the same during the work and before acceptance and the said Contractor shall assume all liability of every kind or nature arising from said work, either by accident, negligence, theft, vandalism, or any causes whatever; and shall hold the County and its authorized representatives harmless from all liability of every kind and nature arising from accident, negligence or any cause whatever.

2. **INSURANCE.** **BEFORE COMMENCING ANY WORK UNDER THIS CONTRACT,** the Contractor shall file with the County Purchasing Division a policy, or certificate of:

   a) Public Liability Insurance and Property Damage Insurance, including vehicle coverage, in an amount not less than $1,000,000.00 combined single limit naming the County of Santa Barbara as additional insured. Said insurance policy shall be issued by a company licensed to transact business in the State of California, SHALL NAME THE COUNTY AND THE CONTRACTOR AS ADDITIONAL INSUREDS and shall be issued for operations under this contract.
A copy of the endorsement evidencing that the COUNTY has been added as a named additional insured on the policy, must be attached to the certificate of insurance. Said policy shall be issued at the expense of the Contractor and shall be maintained by the Contractor during the entire life of the contract.

b) Proof of the maintenance of adequate Worker’s Compensation Insurance.

3. **BONDS.** For contracts of $10,000.00 or more, the contractor will furnish the following bonds IF AND WHEN REQUIRED:

   a) Labor and Material Bond of 50% of the Contract price.

   b) Faithful Performance Bond for 100% of the Contract price.

4. **HOURS OF WORK.** Eight (8) hours of labor shall constitute a legal day’s work upon all work done hereunder, and it is expressly stipulated that no worker employed at any time for the Contract, or by any sub-contractor under this Contract, upon the work, shall be required or permitted to work thereon more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except as provided in Sections 1810 to 1815, inclusive, of the Labor Code of the State of California, all the provisions whereof are deemed to be incorporated herein as if fully set out; and it is further expressly stipulated that for each and every violation for said last named stipulation, said Contractor shall forfeit, as a penalty to the County, Twenty-five Dollars ($25,00) for each worker employed the Contractor in the execution of this contract; or by any sub-contractor under this Contract, for each calendar day during which said worker is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of said section of the Labor Code.

5. **WAGE RATES.** In accordance with the requirements of Section 1770 of the Labor Code, the Director of the Department of Industrial Relations, has determined the general prevailing rate of per diem wages for workmen required to perform the subject work. A copy of such prevailing wage rate is on file with the Director of Public Works, County Engineering Building, 123 E Anapamu St., Santa Barbara, California and is available for inspection.

It shall be mandatory upon the Contractor to whom the contract is awarded, and upon any sub-contractor under his direction, to pay not less than the said specified rates to all laborers, workmen, and mechanics employed by them in the execution of the Contract.

It is hereby further agreed that the Contractor shall forfeit to the County, as a penalty, Twenty-Five Dollars ($25,00) for each laborer, worker or mechanic employed for each calendar day or portion thereof, who is paid less than the said stipulated rates for any work done under the contract, by him or by any sub-contractor under him. The difference between said stipulated rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than said stipulated rate shall be paid to each worker by the Contractor.

6. **NON-DISCRIMINATION IN EMPLOYMENT.** Federal and State Laws prohibit discrimination in employment.

The California Fair Employment Practices Act (Labor Code Section 1410 to 1433) prohibits discrimination in employment on the basis of race, religion, color, sex, physical handicap, medical conditions, marital status, age, national origin or ancestry, and applies to all employers, employment agencies and labor organizations.

Title VII of the Federal 1964 Civil Rights Act (42 U.S.C. Section 1000c-2000c-17) prohibits employment or discrimination on the basis of race, color, sex, religion, or national origin, and applies to all employers that employ at least 15 workers during each working day in each of 20 or more calendar weeks in the current or preceding year.

In addition to these two laws of general application, there are other Federal and state laws that prohibit employment discrimination.

7. **TERMINATION OF CONTRACT.** The County of Santa Barbara Purchasing Agent may, by giving ten (10) days written notice to the vendor, terminate the contract, prior to the designated ending date, FOR DUE CAUSE. Due cause for termination of contract shall be, but not limited to, the best interest of the County, failure of the product to meet specifications and/or for reasons of unsatisfactory service.

The County may, upon giving thirty (30) days written notice to the Contractor, terminate the contract with or without cause.
6.0
THE COUNTY OF SANTA BARBARA
FIRE DEPARTMENT
REQUEST FOR QUOTATION
FOR
FIRE STATION 11
APPARATUS BAY BUILDING CONSTRUCTION

MANDATORY JOB WALK: DECEMBER 12, 2018

RFP RETURN ADDRESS:
County of Santa Barbara
Purchasing Division
105 E Anapamu Street, B5
Santa Barbara, CA 93101-2070
(805) 681-5500

POINT OF CONTACT:
Kent Boisen
County Fire Department
Phone: (805) 755-3120
Fax: (805) 681-5563
Email: Kent.Boisen@sbcfire.com

Request for Quotation (RFQ)
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PROJECT REQUIREMENTS

1.0 PROJECT SUMMARY
The County of Santa Barbara Fire Department, hereinafter referred to as “COUNTY”, is soliciting Quotations for the Construction of a Prefabricated Steel Apparatus Bay Building Project.

2.0 PROJECT DESCRIPTION
The COUNTY wishes to construct a new Prefabricated Steel Apparatus Bay Building at Fire Station No. 11, located in Goleta CA, 93117. The COUNTY hereby requests quotations as outlined herein from interested and qualified Contractors to provide the turnkey construction of this Prefabricated Steel Building.

Prefabricated steel buildings are connected with high-strength bolts and screws that hold tight, keeping the building strong and straight. The prefabricated rigid-frame metal building Apparatus Bay is constructed by attaching steel columns to steel rafter beams to create a single “frame.” The Frames are attached to the foundation every 21’-3” OC. The space between two frames is called a “bay.” The steel frames are connected across the bay with steel members called “girts” on the wall columns and “purlins” on the roof rafters. Then exterior sheathing is attached to the metal girts and purlins with self-drilling screws.

Prefabricated building details are provided in Attachment II of this RFQ. Additionally, for more building details, DESCRIPTION.

- County Fire Station 11 is located at:
  - County Fire Station 11
  - 6901 Frey Way
  - Goleta, CA 93117

- This is a Department of Industrial Relations “Prevailing Wage” Project.

- The Contractor must have a verifiable California General “B” Contractors License.

- This is an Active FireStation that responds to Emergency’s 24/7. Contractor must allow for 24/7 Hour Access to/from Fire Station 11 during construction.

- Mandatory (ON TIME ONLY) Job Walk. To qualify for submitting a Quotation, the Contractor Must Be On Time and Present at Fire Station 11 Job Walk.

- Project Point of Contact:
  Kent Boisen
  County Fire Department
  Phone: (805) 755-3120
  Fax: (805) 681-5563
  Email: Kent.Boisen@sbcfire.com

All questions regarding this RFQ shall be submitted in writing (E-mail or FAX is acceptable).

- An Aerial view of Fire Station 11 facilities showing the proposed locations of the
New Apparatus Bay Building is provided below in Figure 1. The New 35 feet by 85 Feet Building highlighted in Red and the new paved Access Driveway is highlighted in Green.

Figure 1: Aerial View of Fire Station 11 New 35 feet x 85 Feet Apparatus Bay Building is highlighted in RED and New Access Driveway is highlighted in GREEN.

2.2 PROJECT SCHEDULE
- Mandatory On-Time Job Walk – WED. DECEMBER 12 Request for Quotation (RFQ) Due – FRIDAY, JANUARY 4th, 2019. This schedule is subject to change as necessary.

3.0 PROJECT SCOPE OF WORK
Prefabricated Apparatus Bay Building. The COUNTY will procure the complete turn-key design, materials, and labor for the construction of this Prefabricated Apparatus Bay Building from the selected Contractor.

The scope of work includes the Contractor purchasing the Prefabricated Apparatus Bay Building engineering design drawings, prefabricated steel building kit, walk-in doors, windows, gutters, downspouts. The Contractor will review the Geotechnical Report provided in Attachment II to create the appropriate concrete pad design, site excavation and water erosion run-off engineering drawings. The concrete pad design and erosion control drawings will be added to the Engineering Drawing package. The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building including the installation of concrete pad, pad footings and specified building truss pylon footings, concrete access driveway, Rhino building construction, roll-up doors, entry doors, windows, 200 Amp Electrical Service, Interior/Exterior LED Lighting.

PLEASE NOTE – YOUR QUOTATION WILL BE BASED ON PREVAILING WAGES.

The following provides the General project specifications and requirements for this RFQ:

1. The turn-key design and construction of Firestation 11's New Apparatus Bay.

2. The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building including the installation of concrete pad, pad footings and specified building truss pylon footings, concrete access driveway, building construction, roll-up doors, entry doors, windows, 200 Amp Electrical Service, Interior/Exterior LED Lighting. For bidding purposes the following preliminary drawing package provides insight into construction scope of work.
Drawing 1 – Prefabricated Apparatus Bay Truss, Girts, and Purlins
Drawing 1 – Prefabricated Apparatus Bay Concrete Pad, Truss Pylon Footings

Drawing 3 – Prefabricated Apparatus Bay Sheeting and Trim Frame
3. The Contractor will review the Geotechnical Report provided in Attachment III to create the appropriate concrete pad design, concrete PSI, site excavation and watershed erosion control engineering drawings.

4. The contractor will provide site excavate for Apparatus bay concrete pad, footings, truss pylons and watershed erosion control.

5. The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building concrete pad, pad footings and specified building truss pylon footings, concrete access driveway. Contractor will install and finish Apparatus Bay Concrete Pad with the engineering specified concrete PSI, rebar support, etc...

6. The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building including, Rhino building construction, roll-up doors, entry doors, windows, 200 Amp Electrical Service, Interior/Exterior LED Lighting.

7. This is a Department of Industrial Relations “Prevailing Wage” Project. Contractor must be registered DIR Contractor

8. The Contractor must have a verifiable California General “B” Contractors License.

9. This is an Active Firestation that responds to Emergency’s 24/7. Contractor must allow for 24/7 Hour Access to/from Fire Station 11 during construction.

10. The contractor shall provide bid costs in Bid Quotation Sheet provided in Attachment I
ATTACHMENT I

BID QUOTATION SHEET

Please provide your Quotation for All the labor, materials, and equipment to complete the prefabricated Apparatus Bay scope of work in a professional manner for the following:

<table>
<thead>
<tr>
<th><strong>BID OPTION A:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement of Prefabricated Kit Apparatus Bay</strong> Contractor will procure the prefabricated Apparatus Bay Building final engineering design drawing and prefabricated building kit material.</td>
<td>$</td>
</tr>
<tr>
<td><strong>Concrete Pad Installation (excavation and installation)</strong> The contractor will provide site excavate for Apparatus bay concrete pad, footings, truss pylons and watershed erosion control. The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building including the installation of concrete pad, pad footings and specified building truss pylon footings, concrete access driveway</td>
<td>$</td>
</tr>
<tr>
<td><strong>Construction of Prefabricated Apparatus Bay Building</strong> The Contractor will to provide all labor, materials, and equipment to complete construction of the new apparatus building including Rhino building construction, roll-up doors, entry doors, windows, 200 Amp Electrical Service, Interior/Exterior LED Lighting.</td>
<td>$</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>$</td>
</tr>
</tbody>
</table>

Page 9
WINDOWS

standard windows are aluminum frame horizontal slide style. These windows are both attractive and practical, enhancing the look, light, and ventilation of your structure—and are virtually maintenance free. They are available in insulated or non-insulated styles. Choose from sizes 30” x 30”, 40” x 30”, and 60” x 30” in white, bronze, or mill.

WALK IN DOORS

Doors for metal buildings are available in 30” x 70”, 40” x 70”, and 60” x 70” double doors, with or without glass openings. Choose from three styles of steel building doors in white or bronze. All doors come standard with insulation, lever-style lock and key, steel frame, and threshold. Options include heavy-duty door closers, panic device and hardware, and mortise (dead bolt) locks.

OVERHEAD DOORS – ROLL UP SECTIONAL DOORS – 2

ATTACHMENT III

18-8320
GEOTECH REPORT FIRE STATION 11 FREY RD GOLETA
GEOTECHNICAL INVESTIGATION
PROPOSED BUILDING
FIRE STATION 11, 8901 FREY ROAD
GOLETA, CALIFORNIA

June 29, 2018
PROJECT
18-8320

FOR
PETE NEWMAN
PACIFIC DEVELOPMENT
5680 OAKHILL DRIVE
SANTA MARIA, CA 93455
June 29, 2018
Project 18-8320

Pete Newman
Pacific Development
5680 Oakhill Drive
Santa Maria, CA 93455

Subject: Geotechnical Investigation, Proposed Building, Fire Station No. 11, 6901 Frey Road, Goleta, California.

Dear Pete:

Pacific Coast Testing (PCT) is pleased to submit this Geotechnical Investigation Report for the proposed building at Fire Station No. 11, 6901 Frey Road, Goleta, California. This report was prepared in accordance with the scope of services presented in our proposal. The report provides geotechnical recommendations for site preparation, foundations, retaining walls, pavement sections etc.

As discussed in the report, the primary concern from a geotechnical standpoint is the soft condition of the near surface soils and the expansivity of these materials. It is therefore important that the foundation for the proposed building be supported on select compacted import soils.

Please contact the undersigned if you have any questions concerning the findings or conclusions provided in this report.

Sincerely,

PACIFIC COAST TESTING INC.

Ron J. Church
GE #2164
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   Logs of Exploratory Borings

APPENDIX B

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   Direct Shear Test
   R-Value Test
   Expansion Index Test
GEOTECHNICAL INVESTIGATION
PROPOSED BUILDING
FIRE STATION NO. 11, 6901 FREY ROAD
GOLETA, CALIFORNIA
PROJECT 18-8320

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed building at Fire Station No. 11, 6901 Frey Road, Goleta, California. A site location map is presented in Figure 1.

The fire station is located south of Frey Road and west of Storke Road, approximately 500 feet south of the intersection of Hollister Avenue and Storke Road. Topographically, the property is relative level with gradients of less than 5 percent and an elevation of around 20 feet above mean sea level (MSL) in the proposed building area. The main apparatus building is located near the middle of the property. The proposed new building will be located in the southwest corner of the site approximately 40 feet southwest of the apparatus building. At the time of our field exploration the pad area was generally void of vegetation with some trees to the south. A C-train was located in the vicinity of the proposed building.

It is our understanding that the new building will be a wood framed structure with a concrete slab-on-grade floor and will be used for storage of light auxiliary fire equipment. Footing loads for the proposed building are presently unavailable. For the purpose of this report, loads on the order of 25 kips (columns) and 1.5 kip per lineal foot (continuous) have been estimated.

The project description is based on a site reconnaissance performed by a Pacific Coast Testing, Inc., and information provided by Pete Newman of Pacific Development. An aerial photograph forms the basis for the "Site Plan", Figure 2.

In the event that there is change in the nature, design or location of improvements, or if the assumed loads are not consistent with actual design loads, the conclusions and recommendations contained in this report should be reviewed and modified, if required. Evaluations of the soils for hydrocarbons or other chemical properties are beyond the scope of the investigation.
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2.0 PURPOSE AND SCOPE

The purpose of this study was to explore and evaluate the surface and subsurface soil conditions at the site and to develop geotechnical information and design criteria for the proposed project. The scope of this study included the following items:

1. A review of available soil and geologic information for this area of Goleta.

2. A field study consisting of a site reconnaissance and an exploratory boring program to formulate a description of the subsurface conditions.

3. A laboratory testing program performed on representative soil samples collected during our field study.

4. Engineering analysis of the data gathered during our field study, laboratory testing, and literature review. Development of recommendations for site preparation, and geotechnical design criteria for foundations, slabs-on-grade, retaining walls, pavement design and underground facilities.

5. Preparation of this report summarizing our findings, conclusions, and recommendations regarding the geotechnical aspects of the project site.

3.0 SUBSURFACE SOIL CONDITIONS

The near surface materials in the area of the proposed building consist of brown sandy clays in the upper 3 to 4 feet. These soils were found in a soft to firm condition and in a moist state. Stiff to hard sandy clays and silty clays were encountered below the surface clays to a depth of 20 feet. These materials were found in a moist to very moist state. Laboratory testing indicates that the near surface soils have low to moderate expansivity.

No free ground water was encountered to a depth of 20 feet during our field exploration. However, very moist soils were found at a depth of 18 feet and based on previous borings in this area of Goleta, groundwater levels have historically been in the range of 20 to 25 feet below...
existing grades. A more detailed description of the soils encountered is presented graphically on the "Exploratory Boring Logs," B-1 and B-2, Appendix A. An explanation of the symbols and descriptions used on these logs are presented on the "Soil Classification Chart.

The soil profile described above is generalized; therefore, the reader is advised to consult the boring logs (Appendix A) for soil conditions at specific locations. Care should be exercised in interpolating or extrapolating subsurface conditions between or beyond borings. On the boring logs, we have indicated the soil type, moisture content, grain size, dry density, and the applicable Unified Soil Classification System Symbol.

The locations of our exploratory borings, shown on Site Plan, Figure 2, were approximately determined from features at the site. Hence, accuracy can be implied only to the degree that this method warrants. Surface elevations at boring locations were not determine.

4.0 **SEISMIC CONSIDERATIONS**

4.1 **Seismic Coefficients**

Structures should be designed to resist the lateral forces generated by earthquake shaking in accordance with the building code and local design practice. This section presents seismic design parameters for use with the California Building Code (CBC) and ASCE 7-10. The site coordinates and the USGS Interactive web page were used to obtain the seismic design criteria. The peak ground acceleration was estimated for a 2 percent probability of occurrence in 50 years using the USGS online deaggregation tool.

<table>
<thead>
<tr>
<th>Seismic Data</th>
<th>Values for Site Class D</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Building Code Seismic Parameter</td>
<td></td>
</tr>
<tr>
<td>Latitude, degrees</td>
<td>34.425385</td>
</tr>
<tr>
<td>Longitude, degrees</td>
<td>-119.870515</td>
</tr>
<tr>
<td>Site Class</td>
<td>Sd, Stiff Soil</td>
</tr>
<tr>
<td>Site Specific Response Parameter for Site Class at 0.2 sec</td>
<td>2.922</td>
</tr>
</tbody>
</table>

3
June 29, 2018

4.2 **Liquefaction Analysis**

Liquefaction is described as the sudden loss of soil shear strength due to a rapid increase of pore water pressures caused by cyclic loading from a seismic event. In simple terms, it means that the soil acts more like a fluid than a solid in a liquefiable event. In order for liquefaction to occur, the following are generally needed; granular soils (sand, silty sand and sandy silt), groundwater and low density (very loose to medium dense) conditions. A liquefaction study was not part of our scope for this project, however an opinion can be provided based on the results of our soil borings and experience in this area of Goleta. In general, stiff to hard sandy clay and silty clay soils were encountered below a depth of 5 feet. Based on our experience similar clays and silts in a stiff to hard condition can be expected from 20 to 50 feet below existing grades. Groundwater depths historically have been in the range of 20 to 25 feet below existing grades in this area of Goleta. However, the presence of the clays soils would help mitigate the potential settlements. Therefore, the potential for liquefaction would, in our opinion, in the low category. Liquefaction induced total settlements are anticipated to be on the order of 1-inch with differential settlements of 3/4-inch over 20 feet. However, this is a preliminary assessment and a detailed liquefaction study and site specific seismic analysis would be required to fully investigate the potential for liquefaction.

4.3 **Lateral Spreading**

Due to the near level terrain, the predominately clayey soils encountered and the lack of liquefiable soil zones, the potential for lateral spreading displacements in the building area would be negligible.
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4.4  **Slope Stability**
The building pad area is located in near level terrain with gradients of less than five (5) percent. The potential for slope movement to influence the proposed construction would be negligible.

4.5  **Faulting**
There are no active or potentially active faults in the direct vicinity of the building pad area. The nearest known faults (Encanto & More Ranch Faults) are located just to the north and south of the site (see Figure 3). The site is not within a State of California Fault Hazards Zone (Alquist-Priolo). It is our opinion that there is a low potential for fault rupture to impact the proposed structure based on review of the published maps.

5.0  **CONCLUSIONS AND RECOMMENDATIONS**

1. The site is suitable from a geotechnical standpoint for the proposed construction provided the recommendations presented in this report are incorporated into the project plans and specifications.

2. All grading and foundation plans should be reviewed by Pacific Coast Testing Inc., hereinafter described as the Geotechnical Engineer, prior to contract bidding. This review should be performed to determine whether the recommendations contained within this report are incorporated into the project plans and specifications.

3. The Geotechnical Engineer should be notified at least two (2) working days before site clearing or grading operations commence and should be present to observe the stripping of deleterious material and provide consultation to the Grading Contractor in the field.

4. Field observation and testing during the grading operations should be provided by the Geotechnical Engineer so that a decision can be formed regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent
to which the earthwork construction and the degree of compaction comply with the project geotechnical specifications. Any work related to grading performed without the full knowledge of, and under direct observation of the Geotechnical Engineer, may render the recommendations of this report invalid.

5.1 Clearing and Stripping
1. All surface and subsurface deleterious materials should be removed from the proposed building and driveway areas and disposed of off-site. This includes but is not limited to any trees and associated rootballs, buried utility lines, loose fills, septic systems, debris, building materials, and any other surface and subsurface structures within proposed building areas. Voids left from site clearing, should be cleaned and backfilled as recommended for structural fill.

2. Once the site has been cleared, the exposed ground surface should be stripped to remove surface vegetation and organic soil. The surface may be disced, rather than stripped, if the organic content of the soil is not more than three percent by weight. If stripping is required, depths should be determined by a member of our staff in the field at the time of stripping. Strippings may be either disposed of off-site or stockpiled for future use in landscape areas if approved by the landscape architect.

5.2 Site Preparation
1. The intent of these recommendations is to overexcavate the soils in the upper 3 to 4 feet and support the building on compacted select import soils.

2. The building pad area should be excavated to a minimum depth of three (3) feet below existing grade or finish pad grade or one (1) foot below the bottom of the deepest footing, whichever is deeper. All excavations should be approved by the geotechnical engineer prior to placing fill. After approval, the exposed surface should then be scarified, wetted to slightly above optimum moisture and compacted to at least ninety (90) percent of maximum dry density. The removed materials can then be replaced and similarly compacted; however, the upper 30
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inches of the pad should consist of a suitable non-expansive import material such as decomposed granite or Class II/III base. The lateral limits of overexcavation, scarification and fill placement should be at least 3 feet beyond the perimeter building and footing lines.

3. If soft or unstable soils are encountered at the bottom of the excavation, these soft areas should be further excavated (18-inches minimum) and a layer of stabilization fabric (Mirafl HP570 or equivalent) and Class II/III Base placed prior to placing fill. The base should be compacted to 90 percent of ASTM D1557-02.

4. In order to help minimize potential settlement problems associated with structures supported on a non-uniform thickness of compacted fill, the soils engineer should be consulted for specific site recommendations during grading. In general, all proposed construction should be supported by a uniform thickness of compacted soil.

5. The above grading is based on the strength characteristics of the materials under conditions of normal moisture that would result from rain water and do not take into consideration the additional activating forces applied by seepage from springs or subsurface water. Areas of observed seepage should be provided with subsurface drains to release the hydrostatic pressures.

6. The near-surface soils may become partially or completely saturated during the rainy season. Grading operations during this time period may be difficult since the saturated materials may not be compactable, and they may not support construction equipment. Consideration should be given to the seasonal limit of the grading operations on the site.

7. All final grades should be provided with a positive drainage gradient away from foundations. Final grades should provide for rapid removal of surface water runoff. Ponding of water should not be allowed on building pads or adjacent to foundations.
5.3 **Preparation of Paved Areas**

1. Pavement areas should be scarified to a depth of 12 inches below existing grade or finished subgrade. The soil should then be wetted to slightly above optimum moisture content and compacted with heavy equipment such that the upper one (1) foot is at a minimum of 90 percent of maximum dry density.

2. The upper 9 inches of subgrade beneath all paved areas should be compacted to at least 95 percent relative compaction. Subgrade soils should not be allowed to dry out or have excessive construction traffic between the time of water conditioning and compaction, and the time of placement of the pavement structural section.

5.4 **Structural Fill**

1. On-site sandy and silty clay soils are not suitable for use as fill; however, they may be used in landscape areas.

2. Select import (decomposed granite or Class II/III Base) should be free of organic and other deleterious material and should be non-expansive with a plasticity index of 10 or less and a sand equivalent of at least 30. Before delivery to the site, a sample of the proposed import should be tested in our laboratory to determine its suitability for use as structural fill.

3. Structural fill using approved import should be placed in layers, each not exceeding eight inches in thickness before compaction. The imported soil should be conditioned with water, or allowed to dry, to produce a soil water content at approximately optimum value and should be compacted to at least 90 percent relative compaction based on ASTM D1557-02.

5.5 **Foundations**

1. Conventional stiffened continuous footings and spread footings may be used for support of the proposed building. All of the foundation materials should be competent after preparation in accordance with the grading section of this report.
2. The perimeter footings should be at least 15 inches wide and embedded a minimum of 24 inches below pad grade or below adjacent finished grade, whichever is lower. Spread footing should be a minimum of 18 inches square and 24 inches deep and tied to the perimeter footings with grade beams (min. 12" wide by 24" deep). The reinforcement for the footings should be designed by the structural engineer; however, a minimum of four (4) No. 5 bars should be provided, two (2) on the top and two (2) on the bottom for continuous footings and grade beams. Dowels (#3 rebar @ 18" o.c.) should also be provided to tie the footings and grade beams to the slab.

3. An allowable dead plus live load bearing pressure of 1,600 psf may be used for design. A total settlement of less than 1-inch is anticipated with differential settlements being 50 percent of this value.

4. The above allowable pressures are for support of dead plus live loads and may be increased by one-third for short-term wind and seismic loads.

5. Lateral forces on structures may be resisted by passive pressure acting against the sides of shallow footings and/or friction between the soil and the bottom of the footing. For resistance to lateral loads, a friction factor of 0.35 may be utilized for sliding resistance at the base of the spread footings in engineered fill. A passive resistance of 350 psf equivalent fluid weight may be used against the side of shallow footings. If friction and passive pressures are combined, the lesser value should be reduced by 33 percent.

5.8 Slab-On-Grade & Flatwork Construction

1. Concrete slabs-on-grade and flatwork should not be placed directly on unprepared loose fill materials. Preparation of subgrade to receive concrete slabs-on-grade and flatwork should be processed as discussed in the preceding sections of this report.
2. To minimize floor dampness a section of capillary break material at least 4 inches thick and covered with a 15-mil Stego-Type vapor barrier should be provided between the floor slab and compacted soil subgrade. All seams through the vapor barrier should be overlapped and sealed. Where pipes extend through the vapor barrier, the barrier should be sealed to the pipes. The capillary break should be a clean free-draining material such as clean gravel or permeable aggregate complying with Caltrans Standard Specifications 68, Class I, Type A or Type B, to service as a cushion and a capillary break. It is suggested that a 2-inch thick sand layer be placed on top of the membrane to assist in the curing of the concrete. The sand should be lightly moistened prior to placing concrete.

3. Concrete slabs-on-grade should be a minimum of 4 inches thick and should be reinforced with at least No. 3 reinforcing bars placed at 18 inches on-center both ways at or slightly above the center of the structural section. Reinforcing bars should have a minimum clear cover of 1.5 inches, and hot bars should be cooled prior to placing concrete. The aforementioned reinforcement may be used for anticipated uniform floor loads not exceeding 100 psf. If floor loads greater than 100 psf are anticipated, the slab should be evaluated by a structural engineer.

4. All slabs should be poured at a maximum slump of less than 5 inches. Excessive water content is the major cause of concrete cracking. For design of concrete floors, a modulus of subgrade reaction of k = 100 psi per inch would be applicable to on-site engineered fill soils.

5.7 Retaining Walls
1. Retaining walls should be designed to resist lateral pressures from adjacent soils and surcharge loads applied behind the walls.
### Lateral Pressure and Condition (Compacted Fill) vs. Equivalent Fluid Pressure, psf

<table>
<thead>
<tr>
<th>Lateral Pressure and Condition (Compacted Fill)</th>
<th>Equivalent Fluid Pressure, psf</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unrestrained Wall</td>
</tr>
<tr>
<td>Active Case, Drained</td>
<td>Level-native soils</td>
</tr>
<tr>
<td></td>
<td>Level-granular backfill</td>
</tr>
<tr>
<td>At-Rest Case, Drained</td>
<td>Level-native soils</td>
</tr>
<tr>
<td></td>
<td>Level-granular backfill</td>
</tr>
<tr>
<td>Passive Case, Drained</td>
<td>Level 2:1 Sloping Down</td>
</tr>
<tr>
<td></td>
<td>2:1 Sloping Down</td>
</tr>
</tbody>
</table>

For sloping backfill add 1 psf for every 2 deg. (Active case) and 1.5 psf for every 2 deg. (At-rest case)

2. Isolated retaining wall foundations should extend a minimum depth of 30 inches below lowest adjacent grade. An allowable toe pressure of 2,000 psf is recommended for footings supported on 12 inches of compacted soil (90%). A coefficient of friction of 0.30 may be used between native soils and concrete footings.

3. For retaining walls greater than 6 feet, as measured from the top of the foundation, a seismic horizontal surcharge of \(10H^2\) (pounds per linear foot of wall) may be assumed to act on retaining walls. The surcharge will act at a height of 0.33H above the wall base (where H is the height of the wall in feet). This surcharge force shall be added to an active design equivalent fluid pressure of 50 pounds per square foot of depth for the seismic condition.

4. In addition to the lateral soil pressure given above, retaining walls should be designed to support any design live load, such as from vehicle and construction surcharges, etc., to be supported by the wall backfill. If construction vehicles are required to operate within 10 feet of a wall, supplemental pressures will be induced and should be taken into account through design.

5. The above-recommended pressures are based on the assumption that sufficient subsurface drainage will be provided behind the walls to prevent the build-up of
hydrostatic pressure. To achieve this, we recommend that a filter material be placed behind all proposed walls. The blanket of filter material should be a minimum of 12 inches thick and should extend from the bottom of the wall to within 12 inches of the ground surface. The top 12 inches should consist of water conditioned, compacted native soil. A 4-inch diameter drain pipe should be installed near the bottom of the filter blanket with perforations facing down. The drain pipe should be underlain by at least 4 inches of filter type material. Adequate gradients should be provided to discharge water that collects behind the retaining wall to an adequately controlled discharge system with suitably projected outlets. The filter material should conform to Class I, Type B permeable material as specified in Section 88 of the California Department of Transportation Standard Specifications, current edition. A typical 1" x #4 concrete coarse aggregate mix approximates this specification.

6. For hydrostatic loading conditions (i.e. no free drainage behind walls), an additional loading of 45 pcf equivalent fluid weight should be added to the above soil pressures. If it is necessary to design retaining structures for submerged conditions, allowed bearing and passive pressures should be reduced by 50 percent. In addition, soil friction beneath the base of the foundations should be neglected.

7. Precautions should be taken to ensure that heavy compaction equipment is not used immediately adjacent to walls, so as to prevent undue pressure against, and movement of, the walls. The use of water-stops/impermeable barriers should be considered for any basement construction, and for building walls, which retain earth.

5.8 Pavement Design
1. The following table provides recommended pavement sections based on an R-Value of 8 for the near surface sandy clay soils encountered at the site.
2. R-value samples should be obtained and tested at the completion of rough grading and the pavement sections confirmed or revised. All asphaltic concrete pavement sections and all sections should be crowned for good drainage.

3. All asphalt pavement construction and materials used should conform with Sections 26 and 39 of the latest edition of the Standard Specifications, State of California, Department of Transportation. Aggregate bases and sub-bases should also be compacted to a minimum relative compaction of 95 percent based on ASTM D1557-02.

5.9 Underground Facilities Construction
1. The attention of contractors, particularly the underground contractors, should be drawn to the State of California Construction Safety Orders for "Excavations, Trenches, Earthwork". Trenches or excavations greater than 5 feet in depth should be shored or sloped back in accordance with OSHA Regulations prior to entry.

2. For purposes of this section of the report, bedding is defined as material placed in a trench up to 1 foot above a utility pipe and backfill is all material placed in the trench above the bedding. Unless concrete bedding is required around utility pipes, free-draining sand should be used as bedding. Sand proposed for use as
bedding should be tested in our laboratory to verify its suitability and to measure its compaction characteristics. Sand bedding should be compacted by mechanical means to achieve at least 90 percent relative compaction based on ASTM Test D1557-02.

3. On-site inorganic soil, or approved import, may be used as utility trench backfill. Proper compaction of trench backfill will be necessary under and adjacent to structural fill, building foundations, concrete slabs and vehicle pavements. In these areas, backfill should be conditioned with water (or allowed to dry), to produce a soil water content of about 2 to 3 percent above the optimum value and placed in horizontal layers each not exceeding 8 inches in thickness before compaction. Each layer should be compacted to at least 90 percent relative compaction based on ASTM Test D1557-02. The top lift of trench backfill under vehicle pavements should be compacted to the requirements given in report section 5.3 for vehicle pavement subgrades. Trench walls must be kept moist prior to and during backfill placement.

6.10 Surface and Subsurface Drainage

1. Concentrated surface water runoff within or immediately adjacent to the site should be conveyed in pipes or in lined channels to discharge areas that are relatively level or that are adequately protected against erosion.

2. Water from roof downspouts should be conveyed in pipes that discharge in areas a safe distance away from structures. Surface drainage gradients should be planned to prevent ponding and promote drainage of surface water away from building foundations, edges of pavements and sidewalks. For soil areas, we recommend that a minimum of five (5) percent gradient be maintained.

3. Maintenance of slopes is important to their long-term performance. It is recommended that (where disturbed) slope surfaces be planted with appropriate drought-resistant vegetation as recommended by a landscape architect, and not over-irrigating, a primary source of surficial failures. In addition, an erosion
control blanket (Greenfix CF072RR or equivalent) should be placed over the slopes to protect the vegetation while it becomes established. In addition, water should not be allowed to run over the sides of the slopes.

4. Careful attention should be paid to erosion protection of soil surfaces adjacent to the edges of roads, curbs and sidewalks, and in other areas where "hard" edges of structures may cause concentrated flow of surface water runoff. Erosion resistant matting such as Miramat, or other similar products, may be considered for lining drainage channels.

5. Subdrains should be placed in established drainage courses and potential seepage areas. The location of subdrains should be determined during grading. The subdrain outlet should extend into a suitable protected area or could be connected to the proposed storm drain system. The outlet pipe should consist of an unperforated pipe the same diameter as the perforated pipe.

5.11 Geotechnical Observation and Testing

1. Field exploration and site reconnaissance provides only a limited view of the geotechnical conditions of the site. Substantially more information will be revealed during the excavation and grading phases of the construction. Stripping & clearing of vegetation, overexcavation, scarification, fill and backfill placement and compaction should be reviewed by the geotechnical professional during construction to evaluate if the materials encountered during construction are consistent with those assumed for this report.

2. Special inspection of grading should be provided in accordance with California Building Code Section 1705.6 and Table 1705.6. The special inspector should be under the direction of the engineer.
CBC TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS

<table>
<thead>
<tr>
<th>VERIFICATION AND INSPECTION TASK</th>
<th>CONTINUOUS DURING TASK LISTED</th>
<th>PERIODIC DURING TASK LISTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Verify excavations are extended to proper depth and have reached proper material</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>3. Perform classification and testing of compacted fill</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

3. The validity of the recommendations contained in this report are also dependent upon a prescribed testing and observation program. Our firm assumes no responsibility for construction compliance with these design concepts and recommendations unless we have been retained to perform on-site testing and review during all phases of site preparation, grading, and foundation/slab construction. The Geotechnical Engineer should be notified at least two (2) working days before site clearing or grading operations commence to develop a program of quality control.

6.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. It should be noted that it is the responsibility of the owner or his/her representative to notify Pacific Coast Testing Inc. a minimum of 48 hours before any stripping, grading, or foundation excavations can commence at this site.

2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed during our study. Should any variations or undesirable conditions be encountered during grading of the site, Pacific Coast Testing Inc. will provide supplemental recommendations as dictated by the field conditions.

3. This report is issued with the understanding that it is the responsibility of the owner or his/her representative to ensure that the information and
recommendations contained herein are brought to the attention of the architect and engineer for the project and incorporated into the project plans and specifications. The owner or his/her representative is responsible for ensuring that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.

4. As of the present date, the findings of this report are valid for the property studied. With the passage of time, changes in the conditions of a property can occur whether they are due to natural processes or to the works of man on this or adjacent properties. Legislation or the broadening of knowledge may result in changes in applicable standards. Changes outside of our control may find this report to be invalid, wholly or partially. Therefore, this report should not be relied upon after a period of three (3) years without our review nor is it applicable for any properties other than those studied.

5. Validity of the recommendations contained in this report is also dependent upon the prescribed testing and observation program during the site preparation and construction phases. Our firm assumes no responsibility for construction compliance with these design concepts and recommendations unless we have been retained to perform continuous on-site testing and review during all phases of site preparation, grading, and foundation/slab construction.
APPENDIX A

Field Investigation
Key to Boring Logs
Boring Logs
FIELD INVESTIGATION

Test Hole Drilling

The field investigation was conducted on June 3, 2018. Two (2) exploratory borings were drilled at the approximate locations indicated on the Site Plan, Figure 2. The locations of these borings were approximated in the field.

Undisturbed and bulk samples were obtained at various depths during test hole drilling. The undisturbed samples were obtained by driving a 2.4-inch inside diameter sampler into soils. Bulk samples were also obtained during drilling.

Logs of Boring

A continuous log of soils, as encountered in the borings was recorded at the time of the field investigation. The Exploration Boring Logs are attached.
## Unified Soil Classification Systems

<table>
<thead>
<tr>
<th>MAJOR DIVISION</th>
<th>SYMBOLS</th>
<th>TYPICAL NAMES</th>
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<tr>
<td>GRAVELS</td>
<td>GR</td>
<td>WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES</td>
</tr>
<tr>
<td></td>
<td>GS</td>
<td>POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES</td>
</tr>
<tr>
<td></td>
<td>GP</td>
<td>POORLY GRADED GRAVELS, GRAVEL-SAND MUD MIXTURES</td>
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<td>SANDS</td>
<td>SM</td>
<td>GRAVELY MUD, GRAVELY SAND</td>
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<tr>
<td></td>
<td>SP</td>
<td>GRAVELY SAND, GRAVELY Silt</td>
</tr>
<tr>
<td></td>
<td>SW</td>
<td>GRAVELY SAND, POORLY GRADED SAND-SILT MUD MIXTURES</td>
</tr>
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<td>Silt and Clay</td>
<td>ML</td>
<td>SANDY CLAY, MUDY CLAY, OR CLAY-LY CLAY</td>
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<td></td>
<td>MC</td>
<td>CLAYY CLAY, OR CLAYY MUD</td>
</tr>
<tr>
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<td>CH</td>
<td>CLAYY HUMUS, OR CLAYY ORGANIC MUD</td>
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<td></td>
<td>CHS</td>
<td>CLAYY ORGANIC Silt, OR CLAYY ORGANIC MUD</td>
</tr>
<tr>
<td>HIGHLY ORGANIC CLAYS</td>
<td>P</td>
<td>CLAYY ORGANIC OR CLAYY AND OTHER MOIST ORGANIC SOILS</td>
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## Soils Grain Size

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<tr>
<th>Boulders</th>
<th>Cobble</th>
<th>Gravel</th>
<th>Sand</th>
<th>Silt</th>
<th>Clay</th>
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<tr>
<td>150</td>
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## Sample Driving Record

### Blows per Foot

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<tr>
<td>25</td>
<td>25 BLOWS DRIVE SAMPLER 12 INCHES, AFTER INITIAL 6 INCHES OF SEATING</td>
</tr>
<tr>
<td>50&quot;</td>
<td>30 BLOWS DRIVE SAMPLER 7 INCHES, AFTER INITIAL 4 INCHES OF SEATING</td>
</tr>
<tr>
<td>Ref&quot;</td>
<td>50 BLOWS DRIVE SAMPLER 3 INCHES OR AFTER INITIAL 5 INCHES OF SEATING</td>
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### Key to Test Data

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<th>Description</th>
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<tr>
<td>Bag Sample</td>
<td>CONS (Consolidation ASTM D2435)</td>
</tr>
<tr>
<td>Drive, No Sample Collected</td>
<td>DS (Cons. Drained Direct Shear ASTM D3086)</td>
</tr>
<tr>
<td>2 1/2&quot; O.D. Mod. California Sampler, Not Tested</td>
<td>PP (Pocket Penetrometer)</td>
</tr>
<tr>
<td>3 1/2&quot; O.D. Mod. California Sampler, Tested</td>
<td>GSD (Grain Size Distribution ASTM D422)</td>
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<tr>
<td>Standard Penetration Test</td>
<td>CP (Compression Test ASTM D1557)</td>
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<td>Sample Attempted with No Recovery</td>
<td>EI (Expansion Index ASTM D4229)</td>
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<tr>
<td>Water Level at Time of Drilling</td>
<td>LL (Liquid Limit in percent)</td>
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<td>Water Level at Time of Drilling</td>
<td>PI (Plasticity Index)</td>
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## Relative Density

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<th>Sand, Gravel, and Non-Plastic Silt</th>
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<tr>
<td>Very Loose</td>
<td>4 - 9</td>
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<td>Loose</td>
<td>6 - 12</td>
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<tr>
<td>Medium Loose</td>
<td>13 - 30</td>
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<tr>
<td>Dense</td>
<td>31 - 59</td>
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<tr>
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<td>OVER 50</td>
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<table>
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<tr>
<td>Medium</td>
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## Soil Classification Chart

**Project No.: 18-B320**

**Proposed Building: Goleta, California**

**Figure No.: A-1**

**Date Drilled:** 6/3/2018
**GROUNDWATER DEPTH (FT):**

<table>
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<tr>
<th>ELEVATION (FT)</th>
<th>DESCRIPTION</th>
<th>SOIL TYPE</th>
<th>SAMPLE</th>
<th>WET CONTENT</th>
<th>DRY DENSITY</th>
<th>LIQUID LIMIT</th>
<th>PLASTIC INDEX</th>
<th>DRAINAGE CLASS</th>
<th>COMMENTS AND ADDITIONAL TESTS</th>
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<tr>
<td>19</td>
<td>Sandy Clay: brown, moist, some gravel, soft to firm</td>
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**EXPLORATORY BORING LOGS**

PROPOSED BUILDING
FIRE STATION 11, 6901 FREY ROAD

<table>
<thead>
<tr>
<th>PROJECT NO.</th>
<th>DATE</th>
<th>FIGURE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-8320</td>
<td>June-18</td>
<td>A-2</td>
</tr>
</tbody>
</table>

Boring terminated at 20 feet
**Groundwater Depth (ft):**

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<th>Elevation (ft)</th>
<th>Description</th>
<th>Soil Type</th>
<th>Sample</th>
<th>Coned Blown</th>
<th>Water Content</th>
<th>Liquid Limit</th>
<th>Plastic Limit</th>
<th>Unconfined (psi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Sandy Clay: brown, moist, some gravel, soft to firm</td>
<td>CL</td>
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**Exploratory Boring Logs**

---

**Proposed Building**

**Fire Station 11, 6901 Frey Road**

*Pacific Coast Testing, Inc.*

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Date</th>
<th>Figure No.</th>
</tr>
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<tbody>
<tr>
<td>18-8320</td>
<td>June-18</td>
<td>A-3</td>
</tr>
</tbody>
</table>

*Bid # 810124*  
*Page 53*  
*Due: January 4, 2019*
APPENDIX B

Moisture-Density Tests
Direct Shear Test
R-Value Test
Expansion Index Test
LABORATORY TESTING

Moisture-Density Tests
The field moisture content, as a percentage of the dry weight of the soil, was determined by weighing samples before and after oven drying. Dry densities, in pounds per cubic foot, were also determined for the undisturbed samples. Results of these determinations are shown in the Exploration Drill Hole Logs.

Direct Shear Test
Direct shear tests were performed on undisturbed samples, to determine strength characteristics of the soil. The test specimens were soaked prior to testing. Results of the shear strength tests are attached.

Resistance (R) Value Test
An R-Value test was estimated based on selve analysis and plasticity on a bulk sample obtained from boring B-1. The results of the tests indicate that the sandy clay soils have an R-Value of 8.

Expansion Index Test
An expansion index of 47 was obtained for the native sandy clay soils encountered in boring B-1. The test procedure was performed in accordance with ASTM D4829 – Standard Test Method for Expansion Index of Soils.
DIRECT SHEAR TEST

ASTM D3080-11 (Modified for unconsolidated-undrained conditions)

---

Shear Strength Diagram

---

Project: PROPOSED BUILDING  Project No.  18-8520
Sample Location: B-1 @ 4 Feet  Initial Dry Density (pcf)  103.9
Soil Description: Sandy Clay  Initial Moisture (%)  14.2
Sample Type:  ○ Remolded  Peak Shear Angle  28
            ④ Ring  Cohesion (psf)  22.0