

CONTRACT

**32495**

THIS CONTRACT is made and entered, in duplicate, as of January 23, 2012 for reference purposes only, pursuant to a minute order adopted by the City Council of the City of Long Beach at its meeting held on January 17, 2012, by and between MOALEJ BUILDERS, INC., a California corporation ("Contractor"), whose address is 4335 Van Nuys Blvd., #120, Sherman Oaks, California 91403, and the CITY OF LONG BEACH, a municipal corporation ("City").

WHEREAS, pursuant to a "Notice Inviting Bids for Civil Improvements at Long Beach Gas and Oil Department in the City of Long Beach, California," dated October 26, 2012, and published by City, bids were received, publicly opened and declared on the date specified in said Notice; and

WHEREAS, the City Manager accepted the bid of Contractor; and

WHEREAS, the City Council authorized the City Manager to enter a contract with Contractor for the work described in Project Specifications No. G-285;

NOW, THEREFORE, in consideration of the mutual terms and conditions herein, the parties agree as follows:

1. SCOPE OF WORK. Contractor shall furnish all necessary labor, supervision, tools, materials, supplies, appliances, equipment and transportation for the work described in "Project Specifications No. G-285 for Civil Improvements at Long Beach Gas and Oil Department in the City of Long Beach, California," said work to be performed according to the Contract Documents identified below. However, this Contract is intended to provide to City complete and finished work and, to that end, Contractor shall do everything necessary to complete the work, whether or not specifically described in the Contract Documents.

2. PRICE AND PAYMENT.

A. City shall pay to Contractor the amount(s) for materials and work identified in Contractor's "Bid for Civil Improvements at Long Beach Gas and

1 Oil Department in the City of Long Beach, California," attached hereto as Exhibit  
2 "A".

3 B. Contractor shall submit requests for progress payments and  
4 City will make payments in due course of payments in accordance with Section 9  
5 of the Standard Specifications for Public Works Construction (latest edition).

6 3. CONTRACT DOCUMENTS.

7 A. The Contract Documents include: The Notice Inviting Bids,  
8 Project Specifications No. G-285 (which may include by reference the Standard  
9 Specifications for Public Works Construction, latest edition, and any supplements  
10 thereto, collectively the "Standard Specifications"); the City of Long Beach  
11 Standard Plans; the California Code of Regulations; the various Uniform Codes  
12 applicable to trades; the prevailing wage rates; Instructions to Bidders; the Bid; the  
13 bid security; the City of Long Beach Disadvantaged, Minority and Women-Owned  
14 Business Enterprise Program; this Contract and all documents attached hereto or  
15 referenced herein including but not limited to insurance; Bond for Faithful  
16 Performance; Payment Bond; Notice to Proceed; Notice of Completion; any  
17 addenda or change orders issued in accordance with the Standard Specifications;  
18 any permits required and issued for the work; approved final design drawings and  
19 documents; and the Information Sheet. These Contract Documents are  
20 incorporated herein by the above reference and form a part of this Contract.

21 B. Notwithstanding Section 2-5.2 of the Standard Specifications,  
22 if any conflict or inconsistency exists or develops among or between Contract  
23 Documents, the following priority shall govern: 1) Permit(s) from other public  
24 agencies; 2) Change Orders; 3) this Contract (including any and all amendments  
25 hereto); 4) Addenda (which shall include written clarifications, corrections and  
26 changes to the bid documents and other types of written notices issued prior to bid  
27 opening; 5) Project Specifications; 6) Project Plans (including drawings); 7) the  
28 City of Long Beach Standard Plans; 8) Standard Specifications (as identified in

1 Section 3.A. hereof, the "Greenbook"); 9) other reference specifications; 10)  
2 other reference plans; 11) the bid; and 12) the Notice Inviting Bids.

3 4. TIME FOR CONTRACT. Contractor shall commence work on a date  
4 to be specified in a written "Notice to Proceed" from City and shall complete all work  
5 within sixty (60) working days thereafter, subject to strikes, lockouts and events beyond  
6 the control of Contractor. Time is of the essence hereunder. City will suffer damage if  
7 the work is not completed within the time stated, but those damages would be difficult or  
8 impractical to determine. So, Contractor shall pay to City, as liquidated damages, the  
9 amount stated in the Contract Documents.

10 5. ACCEPTANCE OF WORK NOT TO CONSTITUTE A WAIVER. The  
11 acceptance of any work or the payment of any money by City shall not operate as a  
12 waiver of any provision of any Contract Document, of any power reserved to City, or of  
13 any right to damages or indemnity hereunder. The waiver of any breach or any default  
14 hereunder shall not be deemed a waiver of any other or subsequent breach or default.

15 6. WORKERS' COMPENSATION CERTIFICATION. Concurrently  
16 herewith, Contractor shall submit certification of Workers' Compensation coverage in  
17 accordance with California Labor Code Sections 1860 and 3700, a copy of which is  
18 attached hereto as Exhibit "B".

19 7. CLAIMS FOR EXTRA WORK. No claim shall be made at any time  
20 upon City by Contractor for and on account of any extra or additional work performed or  
21 materials furnished, unless such extra or additional work or materials shall have been  
22 expressly required by the City Manager and the quantities and price thereof shall have  
23 been first agreed upon, in writing, by the parties hereto.

24 8. CLAIMS. Contractor shall, upon completion of the work, deliver  
25 possession thereof to City ready for use and free and discharged from all claims for labor  
26 and materials in doing the work and shall assume and be responsible for, and shall  
27 protect, defend, indemnify and hold harmless City from and against any and all claims,  
28 demands, causes of action, liability, loss, costs or expenses for injuries to or death of

1 persons, or damages to property, including property of City, which arises from or is  
2 connected with the performance of the work.

3 9. INSURANCE. Prior to commencement of work, and as a condition  
4 precedent to the effectiveness of this Contract, Contractor shall provide to City evidence  
5 of all insurance required in the Contract Documents.

6 In addition, Contractor shall complete and deliver to City the form  
7 ("Information Sheet") attached as Exhibit "C" and incorporated by reference, to comply  
8 with Labor Code Section 2810.

9 10. WORK DAY. Contractor shall comply with Sections 1810 through  
10 1815 of the California Labor Code regarding hours of work. Contractor shall forfeit, as a  
11 penalty to City, the sum of Twenty-five Dollars (\$25) for each worker employed by  
12 Contractor or any subcontractor for each calendar day such worker is required or  
13 permitted to work more than eight (8) hours unless that worker receives compensation in  
14 accordance with Section 1815.

15 11. PREVAILING WAGE RATES. Contractor is directed to the  
16 prevailing wage rates. Contractor shall forfeit, as a penalty to the City, Fifty Dollars (\$50)  
17 for each laborer, worker or mechanic employed for each calendar day, or portion thereof,  
18 that such laborer, worker or mechanic is paid less than the prevailing wage rates for any  
19 work done by Contractor, or any subcontractor, under this Contract.

20 12. COORDINATION WITH GOVERNMENTAL REGULATIONS.

21 A. If the work is terminated pursuant to an order of any Federal  
22 or State authority, Contractor shall accept as full and complete compensation  
23 under this Contract such amount of money as will equal the product of multiplying  
24 the Contract price stated herein by the percentage of work completed by  
25 Contractor as of the date of such termination, and for which Contractor has not  
26 been paid. If the work is so terminated, the City Engineer, after consultation with  
27 Contractor, shall determine the percentage of work completed and the  
28 determination of the City Engineer shall be final.

1 B. If Contractor is prevented, in any manner, from strict  
2 compliance with the Plans and Specifications due to any Federal or State law, rule  
3 or regulation, in addition to all other rights and remedies reserved to the parties  
4 City may by resolution of the City Council suspend performance hereunder until  
5 the cause of disability is removed, extend the time for performance, make changes  
6 in the character of the work or materials, or terminate this Contract without liability  
7 to either party.

8 13. NOTICES.

9 A. Any notice required hereunder shall be in writing and  
10 personally delivered or deposited in the U.S. Postal Service, first class, postage  
11 prepaid, to Contractor at the address first stated herein, and to the City at 333  
12 West Ocean Boulevard, Long Beach, California 90802, Attn: City Manager. Notice  
13 of change of address shall be given in the same manner as stated herein for other  
14 notices. Notice shall be deemed given on the date deposited in the mail or on the  
15 date personal delivery is made, whichever first occurs.

16 B. Except for stop notices and claims made under the Labor  
17 Code, City will notify Contractor when City receives any third party claims relating  
18 to this Contract in accordance with Section 9201 of the Public Contract Code.

19 14. BONDS. Contractor shall, simultaneously with the execution of this  
20 Contract, execute and deliver to City a good and sufficient corporate surety bond, in the  
21 form attached hereto and in the amount specified therein, conditioned upon the faithful  
22 performance of this Contract by Contractor, and a good and sufficient corporate surety  
23 bond, in the form attached hereto and in the amount specified therein, conditioned upon  
24 the payment of all labor and material claims incurred in connection with this Contract.

25 15. COVENANT AGAINST ASSIGNMENT. Neither this Contract nor  
26 any of the moneys that may become due Contractor hereunder may be assigned by  
27 Contractor without the written consent of City first had and obtained, nor will City  
28 recognize any subcontractor as such, and all persons engaged in the work of

1 construction will be considered as independent contractors or agents of Contractor and  
2 will be held directly responsible to Contractor.

3 16. CERTIFIED PAYROLL RECORDS.

4 A. Contractor shall keep and shall cause each subcontractor  
5 performing any portion of the work under this Contract to keep an accurate payroll  
6 record, showing the name, address, social security number, work classification,  
7 straight time and overtime hours worked each day and week, and the actual per  
8 diem wages paid to each journeyman, apprentice, worker, or other employee  
9 employed by Contractor or subcontractor in connection with the work, all in  
10 accordance with Division 2, Part 7, Article 2 of the California Labor Code. Such  
11 payroll records for Contractor and all subcontractors shall be certified and shall be  
12 available for inspection at all reasonable hours at the principal office of Contractor  
13 pursuant to the provisions of Section 1776 of the Labor Code. Contractor's failure  
14 to furnish such records to City in the manner provided herein for notices shall  
15 entitle City to withhold the penalty prescribed by law from progress payments due  
16 to Contractor.

17 B. Upon completion of the work, Contractor shall submit to the  
18 City certified payroll records for Contractor and all subcontractors performing any  
19 portion of the work under this Contract. Certified payroll records for Contractor  
20 and all subcontractors shall be maintained during the course of the work and shall  
21 be kept by Contractor for up to three (3) years after completion of the work.

22 C. The foregoing is in addition to, and not in lieu of, any other  
23 requirements or obligations established and imposed by any department of the  
24 City with regard to submission and retention of certified payroll records for  
25 Contractor and subcontractors.

26 17. RESPONSIBILITY OF CONTRACTOR. Notwithstanding anything to  
27 the contrary in the Standard Specifications, Contractor shall have the responsibility, care  
28 and custody of the work. If any loss or damage occurs to the work that is not covered by

1 collectible commercial insurance, excluding loss or damage caused by earthquake or  
2 flood or the negligence or willful misconduct of City, then Contractor shall immediately  
3 make the City whole for any such loss or pay for any damage. If Contractor fails or  
4 refuses to make the City whole or pay, then City may do so and the cost and expense of  
5 doing so shall be deducted from the amount due Contractor from City hereunder.

6 18. CONTINUATION. Termination or expiration of this Contract shall not  
7 terminate the rights or liabilities of either party which rights or liabilities accrued or existed  
8 prior to termination or expiration of this Contract.

9 19. TAXES AND TAX REPORTING.

10 A. As required by federal and state law, City is obligated to and  
11 will report the payment of compensation to Contractor on Form 1099-Misc.  
12 Contractor shall be solely responsible for payment of all federal and state taxes  
13 resulting from payments under this Contract. Contractor shall submit Contractor's  
14 Employer Identification Number (EIN), or Contractor's Social Security Number if  
15 Contractor does not have an EIN, in writing to City's Accounts Payable,  
16 Department of Financial Management. Contractor acknowledges and agrees that  
17 City has no obligation to pay Contractor until Contractor provides one of these  
18 numbers.

19 B. Contractor shall cooperate with City in all matters relating to  
20 taxation and the collection of taxes, particularly with respect to the self-accrual of  
21 use tax. Contractor shall cooperate as follows: (i) for all leases and purchases of  
22 materials, equipment, supplies, or other tangible personal property totaling over  
23 \$100,000 shipped from outside California, a qualified Contractor shall complete  
24 and submit to the appropriate governmental entity the form in Appendix "A"  
25 attached hereto; and (ii) for construction contracts and subcontracts totaling  
26 \$5,000,000 or more, Contractor shall obtain a sub-permit from the California Board  
27 of Equalization for the Work site. "Qualified" means that the Contractor purchased  
28 at least \$500,000 in tangible personal property that was subject to sales or use tax

1 in the previous calendar year.

2 C. Contractor shall create and operate a buying company, as  
3 defined in State of California Board of Equalization Regulation 1699, subpart (h),  
4 in City if Contractor will purchase over \$10,000 in tangible personal property  
5 subject to California sales and use tax.

6 D. In completing the form and obtaining the permit(s), Contractor  
7 shall use the address of the Work site as its business address and may use any  
8 address for its mailing address. Copies of the form and permit(s) shall also be  
9 delivered to the City Engineer. The form must be submitted and the permit(s)  
10 obtained as soon as Contractor receives a Notice to Proceed. Contractor shall not  
11 order any materials or equipment over \$100,000 from vendors outside California  
12 until the form is submitted and the permit(s) obtained and, if Contractor does so, it  
13 shall be a material breach of this Contract. In addition, Contractor shall make all  
14 purchases from the Long Beach sales office of its vendors if those vendors have a  
15 Long Beach office and all purchases made by Contractor under this Contract  
16 which are subject to use tax of \$500,000 or more shall be allocated to the City of  
17 Long Beach. Contractor shall require the same cooperation with City, with regards  
18 to subsections B, C and D under this section (including forms and permits), from  
19 its subcontractors and any other subcontractors who work directly or indirectly  
20 under the overall authority of this Contract.

21 E. Contractor shall not be entitled to and by signing this Contract  
22 waives any claim or damages for delay against City if Contractor does not timely  
23 submit these forms to the appropriate governmental entity. Contractor may  
24 contact the City Controller at (562) 570-6450 for assistance with the form.

25 20. ADVERTISING. Contractor shall not use the name of City, its  
26 officials or employees in any advertising or solicitation for business, nor as a reference,  
27 without the prior approval of the City Manager, City Engineer or designee.

28 21. AUDIT. If payment of any part of the consideration for this Contract



1 is made with federal, state or county funds and a condition to the use of those funds by  
2 City is a requirement that City render an accounting or otherwise account for said funds,  
3 then City shall have the right at all reasonable times to examine, audit, inspect, review,  
4 extract information from, and copy all books, records, accounts and other information  
5 relating to this Contract.

6 22. NO PECULIAR RISK. Contractor acknowledges and agrees that the  
7 work to be performed hereunder does not constitute a peculiar risk of bodily harm and  
8 that no special precautions are required to perform said work.

9 23. THIRD PARTY BENEFICIARY. This Contract is intended by the  
10 parties to benefit themselves only and is not in any way intended or designed to or  
11 entered for the purpose of creating any benefit or right of any kind for any person or entity  
12 that is not a party to this Contract.

13 24. SUBCONTRACTORS. Contractor agrees to and shall bind every  
14 subcontractor to the terms of this Contract; provided, however, that nothing herein shall  
15 create any obligation on the part of City to pay any subcontractor except in accordance  
16 with a court order in an action to foreclose a stop notice. Failure of Contractor to comply  
17 with this Section shall be deemed a material breach of this Contract. A list of  
18 subcontractor(s) submitted by Contractor in compliance with Public Contract Code  
19 Sections 4100 et seq. is attached hereto as Exhibit "D" and incorporated herein by this  
20 reference.

21 25. NO DUTY TO INSPECT. No language in this Contract shall create  
22 and City shall not have any duty to inspect, correct, warn of or investigate any condition  
23 arising from Contractor's work hereunder, or to insure compliance with laws, rules or  
24 regulations relating to said work. If City does inspect or investigate, the results thereof  
25 shall not be deemed compliance with or a waiver of any requirements of the Contract  
26 Documents.

27 26. GOVERNING LAW. This Contract shall be governed by and  
28 construed pursuant to the laws of the State of California (except those provisions of

1 California law pertaining to conflicts of laws).

2 27. INTEGRATION. This Contract, including the Contract Documents  
3 identified in Section 3 hereof, constitutes the entire understanding between the parties  
4 and supersedes all other agreements, oral or written, with respect to the subject matter  
5 herein.

6 28. COSTS. If there is any legal proceeding between the parties to  
7 enforce or interpret this Contract or to protect or establish any rights or remedies  
8 hereunder, the prevailing party shall be entitled to its costs, including reasonable  
9 attorney's fees.

10 29. NONDISCRIMINATION. In connection with performance of this  
11 Contract and subject to federal laws, rules and regulations, Contractor shall not  
12 discriminate in employment or in the performance of this Contract on the basis of race,  
13 religion, national origin, color, age, sex, sexual orientation, gender identity, AIDS, HIV  
14 status, handicap or disability. It is the policy of the City to encourage the participation of  
15 Disadvantaged, Minority and Women-Owned Business Enterprises, and the City  
16 encourages Contractor to use its best efforts to carry out this policy in the award of all  
17 subcontracts.

18 30. EQUAL BENEFITS ORDINANCE. Unless otherwise exempted in  
19 accordance with the provisions of the Ordinance, this Contract is subject to the applicable  
20 provisions of the Equal Benefits Ordinance ("EBO"), section 2.73 et seq. of the Long  
21 Beach Municipal Code, as amended from time to time.

22 A. During the performance of this Contract, the Contractor  
23 certifies and represents that the Contractor will comply with the EBO. The  
24 Contractor agrees to post the following statement in conspicuous places at its  
25 place of business available to employees and applicants for employment:

26 "During the performance of a Contract with the City of Long Beach,  
27 the Contractor will provide equal benefits to employees with spouses and its  
28 employees with domestic partners. Additional information about the City of

1 Long Beach's Equal Benefits Ordinance may be obtained from the City of  
2 Long Beach Business Services Division at 562-570-6200."

3 B. The failure of the Contractor to comply with the EBO will be  
4 deemed to be a material breach of the Contract by the City.

5 C. If the Contractor fails to comply with the EBO, the City may  
6 cancel, terminate or suspend the Contract, in whole or in part, and monies due or  
7 to become due under the Contract may be retained by the City. The City may also  
8 pursue any and all other remedies at law or in equity for any breach.

9 D. Failure to comply with the EBO may be used as evidence  
10 against the Contractor in actions taken pursuant to the provisions of Long Beach  
11 Municipal Code 2.93 et seq., Contractor Responsibility.


12 E. If the City determines that the Contractor has set up or used  
13 its contracting entity for the purpose of evading the intent of the EBO, the City may  
14 terminate the Contract on behalf of the City. Violation of this provision may be  
15 used as evidence against the Contractor in actions taken pursuant to the  
16 provisions of Long Beach Municipal Code section 2.93 et seq., Contractor  
17 Responsibility.


18 31. DEFAULT. Default shall include but not be limited to Contractor's  
19 failure to perform in accordance with the Plans and Specifications, failure to comply with  
20 any Contract Document, failure to pay any penalties, fines or charges assessed against  
21 Contractor by any public agency, failure to pay any charges or fees for services  
22 performed by the City, and if Contractor has substituted any security in lieu of retention,  
23 then default shall also include City's receipt of a stop notice. If default occurs and  
24 Contractor has substituted any security in lieu of retention, then in addition to City's other  
25 legal remedies, City shall have the right to draw on the security in accordance with Public  
26 Contract Code Section 22300 and without further notice to Contractor. If default occurs  
27 and Contractor has not substituted any security in lieu of retention, then City shall have  
28 all legal remedies available to it.

OFFICE OF THE CITY ATTORNEY  
ROBERT E. SHANNON, City Attorney  
333 West Ocean Boulevard, 11th Floor  
Long Beach, CA 90802-4664

1 IN WITNESS WHEREOF, the parties have caused this document to be duly  
2 executed with all formalities required by law as of the date first stated above.

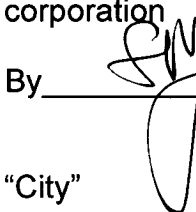
3 MOALEJ BUILDERS, INC., a California  
4 corporation

5 By 2/9, 2012  
6   
7 President,  
8 REZA MOALEJ  
9 Type or Print Name,

10 By 2/9, 2012  
11   
12 Secretary  
13 REZA MOALEJ  
14 Type or Print Name

15 "Contractor"

16 CITY OF LONG BEACH, a municipal  
17 corporation

18 By 2.29, 2012  
19   
20 Assistant City Manager  
21 EXECUTED PURSUANT  
22 TO SECTION 301 OF  
23 City Manager CHARTER.

24 "City"

25 This Contract is approved as to form on Feb. 23  
26  
27 2012.

28 ROBERT E. SHANNON, City Attorney

By   
Deputy

# EXHIBIT “A”

Contractor’s Bid

BIDDER'S NAME: McALEJ Builders, Inc.

# IMPORTANT

## READ CAREFULLY

### BEFORE MAKING OUT YOUR BID

#### INSTRUCTIONS TO BIDDERS

Do not remove any documents from, or add any documents to, this file. Any such removal or addition may invalidate your Bid.

DO NOT MAKE ANY ALTERATIONS OF ANY KIND IN THE BID FORM. The only figures to be placed on said Bid form are those necessary to appropriately fill in the blank spaces provided thereon.

The bidder shall set forth for each item of work, in clearly legible figures, a unit price and an item total for each item of work in the respective spaces provided for this purpose. The amount set forth under the "ITEM TOTAL" column shall be the extension of the unit price bid multiplied by the estimated quantity for the item. If the bidder fails to enter a unit price and enters only an item total, then the City will divide the item total by the estimated quantity to arrive at a unit price, and the bidder shall be bound by that unit price. If the unit price is less than one cent, be sure to include the proper number of zeros. If there is a discrepancy between the unit price and the item total, the unit price shall prevail over the item total, and the City will correct the item total.

The summation of all items in the "ITEM TOTAL" column shall be placed at the caption "TOTAL AMOUNT BID". The "TOTAL AMOUNT BID" is informational only and may be used for comparison in determining the apparent low Bid at time of Bid opening. The summation of the mathematically correct extended totals for each item under the "ITEM TOTAL" column is the intended bid. Any errors shall, at the option of the City, constitute grounds for the rejection of the Bid.

Each Bid shall be accompanied either by a certified check or bank draft payable to the City of Long Beach, and drawn on a solvent bank of the United States of America, or by a bidder's bond in an amount of not less than 10 percent of the total bid. In the event a bidder's bond is submitted, such bond must be on the form contained in this file.

Certified checks or bank drafts accompanying all Bids will be retained by the City until an award of contract has been made. Checks or bank drafts submitted with the Bid of the bidder to whom an award of contract is made, and with the next higher Bid, will be retained until a contract has been executed.

Each bidder shall guarantee its Bid for a period of 60 working days following the opening of Bids. If, within 60 working days following the opening of Bids, the City has not awarded a contract for the work, then the bidder may, upon request, withdraw its Bid without forfeiture of Bid security.

Each bidder shall record on its Bid the number and termination dates of all necessary licenses. A valid state license, sufficient to qualify the bidder to perform as prime contractor, is a pre-requisite for award of contract. Necessary City licenses may be secured after the Bids are opened, but prior to executing the contract.

It is absolutely essential that your Bid be properly signed.

All bids must be sealed within the self-addressed envelope provided, and filed in the office of the Director of Gas and Oil Department, 2400 East Spring Street, Long Beach, California 90806.

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2003, Edition, referred to herein, are on file in the City Engineer's Office, where prospective bidders may inspect them. Copies of said Standard Specifications may be purchased from the publisher, Building News, Inc., 1612 S. Clementine Street, Anaheim, California 92802, telephone (714) 517-0970.

CITY OF LONG BEACH STANDARD PLANS, JANUARY, 2003 Edition, referred to herein, may be inspected at the Engineering Records Section of the office of the City Engineer, 10th Floor, City Hall, 333 West Ocean Boulevard, Long Beach, California 90802. Copies of said Standard Plans may be purchased at that office for \$30.00.

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**NOTICE INVITING BIDS**  
**SPECIFICATION FOR THE CIVIL IMPROVEMENTS**  
**AT LONG BEACH GAS AND OIL DEPARTMENT**  
**LONG BEACH, CALIFORNIA**

NOTICE IS HEREBY GIVEN that sealed bids will be received at the office of the Director, Long Beach Gas and Oil, 2400 E Spring Street, Long Beach, California 90806, until 10:00 a.m. on Wednesday, OCTOBER 26, 2011, at which time said bids will be publicly opened and declared for furnishing all necessary labor, tools, appliances, equipment and engineering services for the civil improvements as per "Plans and Specification No. G-285 ".

Bids are required for the entire work described herein.

Copies of said plans and specifications may be obtained by prior arrangement on or after the following publication of this notice at LBGO, telephone (562) 570-2035, 2400 East Spring Street, Long Beach, California 90806. Electronic versions of the plans and specifications are available at no cost. Plans and specifications cannot be requested by mail.

The contractor shall possess a valid California class "A", General engineering contractors license at the time the bid is submitted.

The contractor shall commence work on dates to be specified in a written "Notice to Proceed" from the City.

Payment will be made in due course of payment of the City of Long Beach in accordance with the applicable provisions of Section 9 of the Standard Specifications.

In accordance with the Americans With Disabilities Act (ADA), the information contained in this notice and in the plans and specifications is available in an alternative format by request to the City Engineer or by Telephoning (562) 570-6771.

Pursuant to Chapter 1, Part 7, Division 2 of the Labor Code of the State of California, the Director of LBGO of the City of Long Beach by and on behalf of the City Council has obtained from the Director of the Department of Industrial Relations of the State of California, the general prevailing rate of per diem wages, and the general prevailing rate of holiday and overtime work in the locality in which the public work is to be performed for each craft, classification or type of workers needed to execute the contract.. It shall be mandatory upon the contractor to whom the contract is awarded, and his/her subcontractors, to pay not less than the said prevailing rate of wages to all workers employed by the contractor or said subcontractors in the execution of the contract.

Each bid shall be accompanied by a certified check or bank draft payable to the City Auditor of the City of Long Beach, and drawn on a solvent bank in the United States of America, or a satisfactory bond of an amount not less than ten percent (10%) of such bid, as a guarantee that the bidder, if awarded a contract, will execute and deliver to the Director of Long Beach Gas & Oil, within fifteen (15) calendar days after such contract is tendered, a contract for furnishing all necessary labor, tools, appliances and equipment for, and doing the work called for herein, together with a good and sufficient corporate surety bond in favor of the City of Long Beach, for an amount of not less than one hundred percent (100%) of such contract price for the faithful performance of such contract, and a good and sufficient



corporate surety bond in an amount of not less than one hundred percent (100%) of such contract price for the payment of all labor and material claims.

If the bidder to whom the contract is awarded fails or neglects to sign a contract with the City, including the filing of any required bonds and insurance documents, within fifteen (15) calendar days after the contract is tendered to him/her for signature, the City may, in its sole discretion, declare the bid security to be forfeited, and the money or bond for the bid security shall be deposited into the City Treasury.

In the event the contract to be awarded hereunder, including specifications and other documents incorporated therein by reference, provides for the withholding of monies by the City to ensure performance of such contract, the contractor may deposit with the City, as a substitute for said monies, securities listed in Section 16430 of the California Government Code or bank or savings and loan certificates of deposit, or both, equivalent to the amount withheld, provided contractor requests permission to make such substitution prior to award of the contract and bears all expenses in connection therewith. Contractor may deposit said monies with the City or a State of California or Federally chartered bank as escrow agent in accordance with the California Public Contract Code, Section 22300.

The City Manager reserves the right, in his discretion, to reject any and all bids and, to the extent not prohibited by law, to waive any minor irregularity in any bid that does not affect the validity of the bid or does not give the bidder a competitive advantage over other bidders.

(SEAL)

LARRY HERRERA  
CITY CLERK, CITY OF LONG BEACH, CALIFORNIA

DATE

PATRICK H. WEST  
CITY MANAGER

BID

SPECIFICATION FOR THE CIVIL IMPROVEMENTS

FOR LONG BEACH GAS AND OIL  
LONG BEACH, CALIFORNIA

In accordance with the Notice Inviting Bids for the above titled work for the City of Long Beach, California, a copy of which is attached hereto and is made a part hereof, to be opened on **Wednesday, October 26, 2011 at 10:00 a.m.**, we propose to furnish all necessary labor, tools, appliances, equipment and engineering services for and perform all work mentioned in said Notice Inviting Bids, in full compliance with the Plans and Specification No. **G-285** at the following prices:

DESCRIPTION	UNIT	METHOD OF CONSTRUCTION	ITEM TOTAL
Civil Improvements	Lump Sum		\$..743,652 <sup>00</sup> / <sub>100</sub>

NAME OF BIDDER MORLEY Builders, Inc.

BUSINESS ADDRESS 4335 van nuys blvd. #102

CITY AND ZIP CODE Sherman oaks CA 91403

TELEPHONE 310-926-2290

**SPECIFICATION FOR THE CIVIL IMPROVEMENTS**  
**FOR LONG BEACH GAS & OIL DEPARTMENT**  
**LONG BEACH, CALIFORNIA**

**CERTIFICATION OF SITE EXAMINATION**

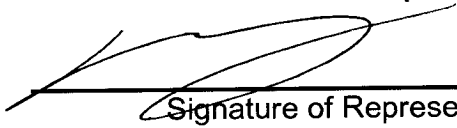
Each bidder shall be fully informed of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of this obligation to furnish all labor, equipment and tools necessary to carry out the provisions of this Contract. Each bidder shall examine the site for the work described herein.

This is to certify that I have examined the subject construction site and the bid is complete and there will be no additional payment for failure to examine the site thoroughly.

10/19/11  
Date of Site Examination

MOALEJ Builders, Inc.  
Company

REZA MOALEJ  
Printed Name of Company Representative

  
Signature of Representative

10/24/11  
Date

**TABLE OF CONTENTS**

SECTION 02010	PROJECT SURVEY AND LAYOUT
SECTION 02020	EROSION AND SEDIMENT CONTROL
SECTION 02230	SITE CLEARING
SECTION 02300	EARTHWORK
SECTION 02305	TRENCH EXCAVATION AND BACKFILL
SECTION 02400	AGGREGATE BASE COURSE
SECTION 02630	STORM DRAINAGE
SECTION 02741	HOT MIX ASPHALT PAVING
SECTION 02745	PAVEMENT MARKINGS AND REMOVAL
SECTION 02751	CONCRETE PAVEMENT CURB AND SIDEWALK
SECTION 02920	LANDSCAPING

**SECTION 02010 - PROJECT SURVEY AND LAYOUT****PART 1 - GENERAL****1.01 SUMMARY**

- A. The Contractor shall provide construction stakeout sufficient to construct the proposed improvement in accordance with the approved construction plans.
- B. All stakeout services shall be completed under the direct supervision of a Professional Land Surveyor licensed in the State where the project is located.
- C. The Owner shall provide the following prior to the commencement of any stake-out services:
  - 1. Construction site drawings and associated electronic files.
  - 2. Copies of the topographic survey that the approved site plans have been based on. The topographic survey shall include at least one benchmark, which shall be used for vertical control; and,
  - 3. Copies of the boundary survey that the approved site plans have been based on. The boundary survey shall be closed and monumented/ironed. These monuments/irons shall be used for horizontal control related to the site boundary and the dimensional control plan.
- D. Contractor shall verify existing grades prior to performing work under this section. If existing grades are at variance with the drawings, notify the Owner and receive instructions prior to proceeding. No additional compensation will be considered resulting from grade variances once site clearing has commenced.

**PART 2 - PRODUCTS****2.01 MATERIALS**

- A. The Contractor/Surveyor shall supply all stakeout materials.

**2.02 EQUIPMENT**

- A. The Contractor/Surveyor shall supply all equipment necessary to accomplish the work.

**PART 3 - EXECUTION****3.01 PERFORMANCE STANDARDS**

- A. Storm Drainage
  - 1. The Contractor shall provide an as-built survey of all constructed drainage structures prior to final acceptance, including a written certification verifying the inverts of the proposed drainage structures.
- B. Curb Layout
  - 1. Stakes shall be located at a minimum of 25 feet and a maximum of 50 feet intervals and also at points of curvature, points of tangency, radius points, and transitions, high and low points, and deflections. Offsets will be at 4 feet from face of curb, elevations to top of curb, elevations of top of curb to be provided at this 4 foot offset.
- C. Storm Sump Pump
  - 1. 15 feet and 25 feet offset stakes in the same direction will be set from the centerline opening of structure lath. One offset stake will have an elevation to top of rim and inverts. Intermediate grade stakes to pipe invert elevation will be provided if needed.  
(Note: These stakes are not to conflict with piping.)

- D. Catch Basins
    - 1. Set a centerline of structure lath with 10 foot offset HUB along the face of curb on either side of the lath at face of curb. One offset stake will have an elevation to top of grate and inverts.  
(Note: These stakes are not to conflict with piping.)
  - E. Utility Layout
    - 1. Water – Stakes shall be located at 50 foot intervals along centerline of pipe and at deflections with no offsets. One 10 foot offset stake to the center of hydrant with a grade ring elevation will be provided;
    - 2. Lighting – Centerline of lighting structure with a 5 foot offset will be staked. Offset stake elevation will be to finished grade; and,
    - 3. Centerline of pipes will be staked with no offset.
  - F. Roadway Layout
    - 1. Grade stakes shall be located at centerline of roadway at 50 foot intervals, including point of curvature, point on curve, point of tangency, and points of vertical curves. Grades shall be at finished grade.
  - G. Wall Layout
    - 1. Stakes with 10 feet offset shall be provided at 50 feet intervals, deflections, beginning and end of wall. Additional stakes may be required, depending on wall height and conditions.
  - H. Limits of Disturbance
    - 1. Clearing limits shall be staked at 100 feet  $\pm$  intervals and at all critical areas.
  - I. Grade Stakes
    - 1. Stakes will be provided at a 50 foot grid. Grade elevations shall be to finished grade.
- 3.02 CONTRACTOR VERIFICATION
- A. Contractor will field verify the utility location, size and invert elevations at points of connection in area of conflict, prior to construction and protect them from damage.
    - 1. Finished subgrades shall be verified by the Contractor to ensure proper elevation and conditions for construction above subgrade;
    - 2. Protect subgrade from excessive construction traffic and wheel loading including concrete and dump trucks; and,
  - B. Notify Owner if it is necessary to destroy or remove control points and/or benchmarks due to construction. Contractor shall be responsible for the protection of benchmarks, including the cost for relocation as required.
  - C. Advise Owner of any discrepancies between plans and field layout.
- 3.03 QUALITY ASSURANCE
- A. The survey crew shall discuss all layout procedures with the Contractor's supervisor prior to commencing work.
  - B. A survey crew daily report detailing that day's work, shall be completed and signed by the Contractor's supervisor at the end of that day's layout.
  - C. Copies of sketches, cut sheets, etc. shall be provided to the Contractor by the beginning of the next workday.
  - D. All costs related to re-staking due to construction or Contractors' work resulting in destruction or movement of stakes, shall be paid for by the Contractor and at no additional expense to the Owner.
  - E. Building dimensions shall be obtained only from the approved architectural/structural drawings. Dimensions are to be obtained only from the appropriate approved (engineering, architectural and structural) drawings. The surveyor shall report any conflicts to the Contractor and Owner.

END OF SECTION 02010

## SECTION 02020 – EROSION AND SEDIMENT CONTROL

## PART 1 - GENERAL

## 1.01 INTENT

- A. The main concern associated with erosion on a construction site is the movement of sediment off site and its impact on water quality. It is the Owner's intent that the Contractor install and maintain sufficient erosion control practices to retain sediment within the boundaries of the site in addition to complying with regulatory authorities having jurisdiction and local erosion and sedimentation control laws and ordinances. All erosion and sediment control methods and devices used shall conform to the latest requirements imposed by federal, state and local authorities. The Contractor shall be responsible for repair of any damage caused and shall be financially responsible for any penalties imposed.
- B. It shall be the Contractor's responsibility to review the erosion and sediment control drawings that have been included in the site construction drawings, prepared by the engineer, prior to implementation.

## 1.02 SUMMARY

- A. Work under this section shall include but not be limited to, installation and maintenance of both temporary and permanent soil erosion control measures, slope protection and stabilization measures, protection of all surface water and property both on and off site. This work shall include all labor, materials, and equipment necessary to meet all applicable requirements and as specified in the contract documents.

## 1.03 REFERENCE STANDARDS

- A. All applicable standards and requirements of all regulatory authorities having jurisdiction, including local soil conservation agencies

## 1.04 QUALITY ASSURANCE

- A. Soil erosion and sediment control measures shall be implemented in accordance with the requirements and procedures outlined in this specification, contract drawings and documents, state standards or guidelines for soil erosion and sediment control, and all regulatory authorities having jurisdiction. Where conflict between requirements exist, the more restrictive rules shall govern.
- B. The Contractor shall provide all temporary control measures shown on the drawings, or as directed by the Owner, Owner's representative, or soil conservation district for the duration of the contract. Erosion and sediment control drawings are intended to be a guide to address the stages of work shown. Additional measures not specified on the drawings may be necessary and shall be implemented to address intermediary stages of work and any conditions that may develop during construction at no cost to the Owner.
- C. Temporary control provisions shall be coordinated with permanent erosion control features to the extent practical to assure economical, effective and continuous erosion and sediment control throughout the construction and post-construction period.
- D. Soil erosion and sediment control measures shall at all times be satisfactory to the Owner's Representative. Owner's Representative will inform the Contractor of unsatisfactory construction procedures and operations if observed. If the unsatisfactory construction procedures and operations are not responded to and corrected within 48 hours, the Owner's Representative may suspend the performance of any or all other construction until the unsatisfactory condition has been corrected. Such suspension shall not be the basis of any claim by the Contractor for additional compensation nor for an extension of time to complete the work. Any complaints, fines, etc. relating to ineffective erosion control, shall be the sole responsibility of the Contractor.
- E. The Contractor shall inspect all soil erosion and sediment control measures at least at the beginning and end of each day to ascertain that all devices are functioning properly during construction. Maintenance of all soil erosion and sediment control measures on the project site shall be the responsibility of the Contractor until the project is 100% complete, and until the permanent soil erosion controls are established and in proper working condition.
- F. The Contractor shall protect adjacent properties and watercourses from soil erosion and sediment damage throughout construction.

## 1.05 SEQUENCE OF CONSTRUCTION

- A. The approved construction sequence, as permitted/approved shall be adhered to during the execution of work under this section. All soil erosion and sediment control measures shall be installed in accordance with the phasing sequence shown on the contract documents.

## PART 2 - PRODUCTS

## 2.01 MATERIALS

- A. Contractor shall provide all materials necessary to perform the work.

## PART 3 - EXECUTION

## 3.01 GENERAL REQUIREMENTS

- A. The Contractor shall comply with and implement the Stormwater Pollution Prevention Plan provided in the contract documents.
- B. Review the soil erosion and sediment control drawings as they apply to current site conditions. Any deviation from the drawings must be submitted for approval to the site engineer in writing at least 72 hours prior to commencing that work.
- C. Notify authority having jurisdiction, in writing at least 72 hours or sooner if required by local regulations prior to initial land disturbance.
- D. All Phase I soil sediment and erosion control devices shall be in place prior to any land disturbing activity, in their proper sequence, and maintained until permanent protection is established.
- E. The limit of the area of any earthwork operations in progress shall be commensurate with the Contractor's capability and progress in keeping the finished grading, mulching, seeding and other such permanent control measures current and in accordance with the accepted schedule for construction phasing. Should seasonal limitations make such coordination unrealistic, as determined by the Owner's Representative, temporary erosion control measures shall be provided immediately by the Contractor at no expense to the Owner.
- F. Temporary erosion control measures shall be used to correct conditions which develop during construction that are needed prior to installation of permanent control features, or that are temporarily needed to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.
- G. The Contractor shall incorporate all permanent erosion control features (stabilization) into the project at the earliest practical time to minimize the need for temporary controls.
- H. A temporary construction entrance pad shall be installed and maintained at any point where construction vehicles enter a public right-of-way, street or parking area. The pad shall be used to eliminate mud from the construction area onto public right-of-way. The pad shall be constructed as shown on the drawings. Any mud or debris tracked on streets shall be cleaned up immediately.
- I. Any disturbed or stockpiled areas that will be left exposed more than 14 days or less according to State NPDES General Stormwater Permits shall immediately receive temporary or permanent seeding. Mulch/straw shall be used if the season prevents the establishment of a temporary cover. Disturbed areas shall be limed and fertilized prior to temporary seeding.
- J. Permanent vegetation shall be established as specified on all exposed areas within 14 days or less according to State NPDES General Stormwater Permits after final grading. Mulch as necessary for seed protection and establishment. Lime and fertilize seedbed prior to permanent seeding.
- K. Slopes shall be permanently seeded and mulched as the excavation or fill proceeds to the extent possible. Slopes that erode easily shall be temporarily seeded and mulched. Any slopes steeper than 3:1 or steeper or as indicated on drawings shall be protected with stabilization fabric per specifications.
- L. All storm drainage outlets must be stabilized, as specified, before the discharge points become operational. Equip all inlets with inlet protection immediately upon construction.
- M. Discharge from de-watering operations for the excavated areas shall not be directed to surface waters without first properly removing the suspended sediment through filtration and/or settlement. The Contractor shall obtain any required permits associated with dewatering activities.



- N. The quantity of silt fence to be installed will be affected by the actual conditions that occur during the construction of the project. Silt fence shall be installed at locations shown on the drawings and any additional locations necessary for proper sediment control. The Contractor shall maintain the silt fence until the project is stabilized and shall remove and dispose of the silt fence and silt accumulations when 1/3 the height of the fence is reached.
- O. Soil erosion and sediment control shall include but not be limited to the approved measures. The Contractor shall be responsible for providing all additional measures that may be necessary to accomplish the intent of the drawings.
- P. Comply with all other requirements of authorities having jurisdiction.

END OF SECTION 02020

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**SECTION 02230 – SITE CLEARING****PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes the following:
  - 1. Protecting existing trees and vegetation that are to remain;
  - 2. Clearing and grubbing; and,
  - 3. Topsoil stripping.

**1.02 REFERENCED SECTIONS**

- 1. Section 02010 – Project Survey and Layout
- 2. Section 02020 – Erosion and Sediment Control
- 3. Section 02300 – Earthwork

**1.03 MATERIALS OWNERSHIP**

- A. Except for materials indicated to be stockpiled or to remain on Owner's property, cleared materials shall become the Contractor's property and shall be removed from the site.

**1.04 PROJECT CONDITIONS**

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
- B. Salvable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.
- C. Notify utility locator service for area where Project is located prior to site clearing.
- D. Contractor shall verify existing grades prior to performing work under this section. If existing grades are at variance with the drawings, notify the Owner and receive instructions prior to proceeding. No additional compensation will be considered resulting from grade variances once site clearing has commenced.
- E. All benchmarks and monuments shall be protected during construction. If disturbed or destroyed, they shall be replaced in original position by a licensed surveyor at the Contractor's expense.
- F. Protect areas outside limits of disturbance from encroachment by construction personnel or equipment, regardless of property Ownership. Access shall be by specific, written permission or easement only.

**PART 2 - PRODUCTS**

- A. Contractor shall provide and use all necessary equipment and materials to perform work.

**PART 3 - EXECUTION****3.01 PREPARATION**

- A. Provide erosion control measures in accordance with Section 02020, Erosion and Sediment Control, prior to any construction activity.
- B. Locate and clearly flag trees and vegetation to remain or to be relocated. All trees and vegetation to remain shall be barricaded and protected during the construction process per Article 3.02 of this section.
- C. Limit of clearing is to be staked in accordance with Section 02010, Project Survey and Layout, and verified by Owner prior to removal of any trees.
- D. All trees and shrubs not designated to remain within the area to be graded, whether shown or not on the drawings, shall be cut and the removal of stumps shall comply with Article 3.03 of this section. Burning on site is not permitted, unless otherwise approved by the Owner and authorities having jurisdiction.

**3.02 TREE PROTECTION**

- A. Protect existing site improvements to remain, from damage during construction. Restore damaged improvements to their original condition, as acceptable to the Owner.
- B. Erect and maintain a temporary fence around drip line of individual trees or around perimeter drip line of groups of trees to remain. Remove fence when construction is complete.
- C. Do not excavate within drip line of trees, unless otherwise indicated.

- D. Where excavation for new construction is required within drip line of trees, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks, comb soil to expose roots, and cleanly cut roots as close to excavation as possible.
  - E. Repair or replace trees and vegetation indicated to remain that are damaged by construction operations, in a manner approved by the Owner.
- 3.03 CLEARING AND GRUBBING
- A. Remove obstructions, trees, shrubs, grass, and other vegetation within the limit of disturbance to permit installation of new construction. Removal includes digging out stumps and obstructions and grubbing roots, unless otherwise specified. In areas outside the building limits where the depth of fill exceeds 8 feet in height, unless otherwise directed by the Owner, sound trees shall be cut at a height of not more than 6 inches above natural ground.
  - B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.
    - 1. Place fill material in horizontal layers and compact each layer to a density equal to adjacent original ground as in accordance with Section 02300, Earthwork.
- 3.04 TOPSOIL STRIPPING
- A. Strip topsoil to full depth encountered in areas indicated to be graded in a manner to prevent intermingling with underlying subsoil or waste materials.
  - B. Stockpile sufficient topsoil material to facilitate seeding and landscaping. Stockpile away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Provide adequate erosion and sediment controls.
  - C. Protect soil stockpiles as per Section 02020, Erosion Control.
- 3.05 DISPOSAL
- A. Disposal: Remove surplus soil material, unsuitable or excess topsoil, obstructions, demolished materials, and waste materials, including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 02230

**SECTION 02300 - EARTHWORK****PART 1 - GENERAL****1.01 SUMMARY**

- A. Cutting, proofrolling, filling and grading to required lines, dimensions, contours and elevations for proposed improvements as shown and implied on the drawings and required by these specifications.
- B. Scarifying, compaction, moisture content conditioning and control, and removal of unsuitable material to ensure proper preparation of areas for the proposed improvements.
- C. Undertake any special construction procedures for the site recommended in the geotechnical report for preparation of pavement areas.

**1.02 REFERENCED SECTIONS**

- A. Section 02010 - Project Survey and Layout

**1.03 RELATED DOCUMENTS**

- A. Geotechnical Engineering Study (Soils Report) and contract documents.

**1.04 REFERENCE STANDARDS**

- A. American Society for Testing and Materials (ASTM) - latest edition
  - 1. D 422 Standard Test Method for Particle-Size Analysis of Soils
  - 2. D 698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>))
  - 3. D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>))
  - 4. D 2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
  - 5. D 2321 Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications
  - 6. D 2922 Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
  - 7. D 3017 Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
  - 8. D 4318 Standard Test Methods for Plastic Limit, Liquid Limit, and Plasticity Index of Soils
  - 9. D 4429 Standard Test Method for CBR (California Bearing Ratio) of Soils in Place
- B. American Association of State Highway and Transportation Officials (AASHTO) - latest edition
  - 1. T 88 Standard Method of Test for Particle Size Analysis of Soils
  - 2. T 99 Standard Method of Test for Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop
  - 3. T 180 Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

**1.05 QUALITY ASSURANCE**

- A. A geotechnical engineer familiar with the requirements of the geotechnical engineering study, selected and paid by the Owner, shall be retained to perform construction inspection on site based on density testing, visual observation, and judgement. This inspection will not relieve the Contractor from his responsibility to complete the work in accordance with the drawings and specifications.
- B. Visual field confirmation and density testing of subgrade preparation and fill placement procedures shall be performed by the field geotechnical engineer as part of the construction testing requirements. The Contractor shall be informed as soon as possible of the test results.
- C. The geotechnical engineer shall prepare field reports that indicate compaction test location, elevation data, testing results and acceptability. The Owner and Contractor shall be provided with written copies of the results within 24 hours of time test was performed.

- D. All costs related to reinspection, due to failures, shall be paid for by the Contractor at no additional expense to Owner. The Owner reserves the right to direct any inspection that is deemed necessary. Contractor shall provide free access to site for inspection activities.

#### 1.06 SUBMITTALS

- A. Within 10 days after award of the contract, the Contractor shall submit to the Owner, with his bid package, a schedule detailing the sequence, and time of completion of all phases of work under this section.
- B. At least 2 weeks in advance of imported fill use, the Contractor shall submit the following laboratory test data to the geotechnical engineer for each type of imported soil/gravel material to be used as compacted fill.
  - 1. Moisture and Density Relationship: ASTM D1557 or D698 as required by project geotechnical engineering study;
  - 2. Mechanical Analysis: AASHTO T-88; and,
  - 3. Plasticity Index: ASTM D 4318.
- C. Together with the above test data, the Contractor shall submit a 5 pound sample of each type of off-site fill material in an air tight container for the approval of the geotechnical engineer and owner.
- D. Submit the name of each material supplier and specific type and source of each material. Any change in source or soil type throughout the job requires approval of the Owner and the geotechnical engineer.
- E. When applicable, a blasting plan/pre blast reports shall be submitted 2 weeks prior to blasting commencement for review and approval by the Owner.

#### 1.07 GEOTECHNICAL ENGINEERING STUDY (SOILS REPORT)

- A. The Owner employed a geotechnical engineer to investigate sub-surface soil conditions and make recommendations regarding sitework construction procedures. Perform all work in accordance with the recommendations and requirements therein. If conflicts exist between the geotechnical engineering study and the construction drawings and specifications, the more stringent requirements shall apply.

#### 1.08 CLASSIFIED EXCAVATION

- A. Classified excavation shall be defined as the excavation necessary to subgrade lines and grades as shown on the contract drawings, which shall be a lump sum bid. Any and all unsuitable material, undercut excavation, mass rock excavation, trench rock excavation, mechanical rock excavation and soil stabilization shall be paid in addition to the classified excavation lump sum bid, by unit prices measured in-place. In the event the Owner elects to change the lines and grades as shown on the contract drawings, unit prices shall be used to increase or decrease the contract amount in accordance with the change.

#### 1.09 UNCLASSIFIED EXCAVATION

- A. Unclassified excavation shall be defined as all material excavated to and below the lines and grades as shown on the contract drawings to provide a firm and unyielding subgrade, regardless of its nature or composition, which includes any and all on-site cut or fill, off-site import or export, topsoil removal, subgrade preparation, unsuitable material, undercut excavation, mass rock excavation, trench rock excavation, mechanical rock excavation, utility and storm drainage trench excavation, and soil stabilization. Unclassified excavation shall be a lump sum bid with a unit price per cubic yard for unclassified excavation. In the event the Owner elects to change the lines and grades as shown on the contract drawings, the unclassified excavation unit price shall be used to increase or decrease the contract amount in accordance with the change.

### PART 2 - PRODUCTS

#### 2.01 MATERIALS

- A. On-site fill
  - 1. On-site materials for use as fill shall consist of excavated soil from other portions of the site;
  - 2. The Contractor shall use the on-site soil judiciously to facilitate the construction schedule including the use of the most readily compactable soil as fill within 2 feet of pavement subgrade;
  - 3. Topsoil shall not be utilized as engineered fill;
  - 4. Excavated material containing rock, stone or masonry debris smaller than 6 inches in its largest dimension, may be mixed with suitable material and utilized inside the building limits up to 6 feet below proposed subgrade; up to 3 feet below proposed subgrade outside the building limits;

5. Excavated material containing rock, stone or masonry debris smaller than 6 inches in its largest dimension may be mixed with suitable material and utilized inside the building limits up to 3 feet below proposed subgrade; up to 18 inches below proposed subgrade outside the building limits;
  6. No material greater than 2 inches in its largest dimension may be utilized inside the building limits within 3 feet of proposed subgrade; within 18 inches of proposed subgrade for all other areas;
  7. No material greater than 3 inches in its largest dimension may be utilized as backfill for storm drainage or utility trenches.
  8. Prior to placement, on-site material to be used as fill shall not contain:
    - a. Debris other than crushed concrete and brick meeting the above requirements.
    - b. Timber or railroad ties.
    - c. Other deleterious materials such as steel rails, rebar, trash, etc.
    - d. Hazardous material - Unsuitable and deleterious materials and debris shall be disposed of off-site in accordance with all applicable regulations.
  9. Fill shall be clean, well graded granular soil which is non-expansive and non-collapsible and shall have less than 20% by weight passing the #200 sieve. The portion passing the #200 shall be non-plastic. Fill with less fines (less than #200) may be required on project specific bases and as required by geotechnical engineer. Likewise, fill with more than 20% fines may be acceptable on a project specific basis or as identified in the geotechnical engineering study.
- B. Off-site imported fill
1. If necessary, off-site fill shall be obtained and provided by the Contractor;
  2. Fill shall be clean, well graded granular soil which is non-expansive and non-collapsible and shall have less than 20% by weight passing the #200 sieve. The portion passing the #200 shall be non-plastic. Fill with less fines (less than #200) may be required on project specific basis and as required by geotechnical engineer. Likewise, fill with more than 20% fines may be acceptable on a project specific basis or as identified in the geotechnical engineering study;
  3. Imported fill shall be free of all hazardous substances. Certification of compliance and, if requested, test results substantiating compliance shall be furnished to the Owner and geotechnical engineer by the Contractor not less than 72 hours prior to its intended use;
  4. The Owner reserves the right to test off-site fill material for conformance with these specifications; and,
  5. The Contractor shall be responsible for all permits and regulatory requirements associated with offsite borrow sources.
- C. Rock is defined as follows:
1. General Excavation - Any material that cannot be excavated with a single-toothed ripper drawn by a crawler tractor having a minimum draw bar pull rated at not less than 71,000 lbs. (Caterpillar D9N or equivalent), and occupying an original volume of at least 2 cubic yards or more; and,
  2. Trench Excavation - Any material that cannot be excavated with a backhoe having a break out force rated at not less than 44,000 lbs. (Caterpillar 235D or equivalent), and occupying an original volume of at least 2 cubic yards.
  3. Mechanical Excavation - Any material that must be excavated by a minimum 10,000 lb. mechanical hammer and occupying an original volume of at least 2 cubic yards.
- D. Any bituminous concrete on the site shall be milled/removed prior to placing any fill and shall be reused only onsite immediately below the pavement stone base course.
- 2.02 EQUIPMENT
- A. Compactor for mass earthwork shall be minimum 5 ton static drum weight vibratory roller or 5 ton static drum weight sheeps footed compactor as appropriate for the type of soil material at the site or other compactor approved by the geotechnical engineer.
  - B. Compactor for trenches and where access or maneuverability is limited use, a double drum walk behind roller or "jumping jack" tampers.

### PART 3 - EXECUTION

#### 3.01 GENERAL

- A. Prior to bidding of all work within this section, the Contractor shall become thoroughly familiar with the geotechnical engineering study as well as the site, site conditions, and all portions of the work falling within this section.

- B. The Contractor shall refer to the erosion control drawings for staging of earthwork operations and for erosion control measures to be implemented prior to commencement of earthwork.
- C. Locate and identify existing utilities that are to remain and protect them from damage.
- D. Notify utility companies to allow removal and/or relocation of any utilities that are in conflict with the proposed improvements.
- E. Protect fences, structures, sidewalks, paving, curbs, etc to remain from equipment and vehicular traffic.
- F. Protect benchmarks, property corners and all other survey monuments from damage or displacement. If a marker needs to be removed/relocated it shall be referenced by a licensed land surveyor and replaced, as necessary, by the same at no additional cost to the Owner.
- G. Remove from the site, material encountered in grading operations that, in opinion of Owner or geotechnical engineer, is unsuitable or undesirable for backfilling in pavement or building areas as per Article 2.01.
- H. Identify required lines, levels, contours and datum to bring site grades to the proposed subgrade conditions inferred from the drawings.
- I. Do not perform any work associated with this section prior to completion of all required inspections, tests and approvals.
- J. When performing grading operations during periods of prolonged wet or dry weather, provide adequate measures for surface drainage and ground water control, and moisture control of soils (i.e., wetting or drying, scarify and discing) so as to place and compact the soil within the moisture content range a few percentage points of its optimum water content. Any disturbed areas should be proofrolled at the end of each day.
- K. Sloping, shoring, bracing, and fencing shall be installed in accordance with Federal OSHA requirements as well as the requirements of all regulatory authorities having jurisdiction.
- L. Allow no debris to accumulate on-site. Haul debris away from the site and dispose of at no cost to the Owner.
- M. Dispose of excess earth material from the site.
- N. Any material imported or exported from the site shall be hauled to or from a site that has obtained a permit or can be incorporated into the Owner's permit. If the borrow or waste site serves multiple construction projects then a copy of the permit must be included in permit eligibility documentation section of the Stormwater Pollution Prevention Plan Ledger.

### 3.02 COMPACTION OF SUBGRADE SURFACES

- A. In areas to receive fill and at the final cut subgrade, proofroll and compact the exposed ground surface following clearing and grubbing and any required excavation with a minimum of 4 passes of an approved compactor and obtain at least the density required in the geotechnical engineering study and as indicated below.

TABLE 3.02

Location or Area	Standard Proctor Density ASTM D698 (AASHTO T 99)	Modified Proctor Density ASTM D1557 (AASHTO T 180)	Testing Frequency 1 per lift per
Structures and Walkways	92%	90%	20,000 sf
Trenches	92%	90%	150 lf
Lawn or Unimproved Areas	92%	90%	20,000 sf
Pavement Subgrades	92%	90%	15,000 sf

- B. In addition to the above referenced table, proofrolling shall be completed in accordance with Section 3.06, "Proofrolling".
- C. Any soft areas exhibiting excessive weaving or unsatisfactory material identified during excavation, fill placement, compaction and proof testing shall be removed, replaced with suitable fill, and compacted as specified in Table 3.02 above.



- D. Prior to preparing the subgrade in low lying areas, perform the following procedures:
  - 1. Drain standing water by gravity or with a pump. Water should not be discharged directly to a storm drain system; discharge only to an approved sediment control BMP.
  - 2. After drainage of low area is complete, remove mulch, mud, debris, and other unsuitable material using equipment and methods that will minimize disturbance to the underlying soils;
  - 3. Thoroughly compact subgrade as specified in Article 3.02.A and Article 3.05 or 3.06 of this Section; and,
  - 4. If proposed for fill, all muck, mud and other materials removed from above low areas shall be dried on-site by spreading in thin layers for observation by Owner or Owners representative. If, after observation by Owner or Owners representative, material is found to be unsuitable, it shall be removed from the site.
- 3.03 UNDERCUT EXCAVATION
  - A. When approved by Owner and recommended by the geotechnical engineer, the Contractor may be required to remove natural soil materials in areas where fills are to be placed when determined to be undesirable in their location or condition. The Contractor shall be required to remove the undesirable material and backfill with approved material properly compacted.
  - B. At locations where unstable soil is shown on the drawings or identified within the geotechnical engineering study, the removal and replacement of such soil shall be as directed on the drawings or as directed by the geotechnical engineer and the Owner.
  - C. At locations where soil is wet of optimum moisture, the Contractor shall provide a "good faith" effort in drying and discing these areas prior to completing undercut excavation as approved by the geotechnical engineer and Owner.
  - D. Where undercutting is required adjacent or beneath the location of the proposed drainage structure, undercut and backfill shall be done over a sufficient distance adjacent to the installation to prevent future operations from disturbing the completed drainage structure.
  - E. All material removed in the work of undercut excavation will be classified by the geotechnical engineer and Owner as either suitable for other use without excessive manipulation and utilized by the Contractor elsewhere in the work, or unsuitable for future use and disposed of by the Contractor as directed by the geotechnical engineer in accordance with Article 3.01.N. of this specification.
  - F. The Contractor shall conduct undercut operations in such a way that the necessary measurements can be taken before any backfill is placed.
  - G. Backfill in undercut areas shall be placed as a continuous operation along with the undercutting operation. No backfill material shall be placed in water unless otherwise permitted by the geotechnical engineer.
- 3.04 ROCK EXCAVATION
  - A. General Rock Excavation & Blasting – The encountering and removal of rock as defined herein this section will be paid as part of the project excavation unless stated elsewhere in the contract documents.
    - 1. Rock Required Removal Lines:
      - a. Two feet outside of concrete work for which forms are required, except footings;
      - b. One foot outside perimeter of footings where forms are required. Additional depth may be required due to local codes or based on the geotechnical engineering study;
      - c. Neat outside dimensions of concrete work where no forms are required; and,
      - d. Under slabs on grade, 6 inches below subgrade.
  - B. Blasting Requirements:
    - 1. Perform blasting only after receiving written approval from Owner and authorities having jurisdiction. Provide as necessary heavy mats to minimize concussion. Handle, store, and use explosives in accordance with the Manual of Accident Prevention in Construction by the Associated General Contractors of America, Inc., 1978 edition;
    - 2. All blasting shall be performed by a certified, licensed blasting Contractor. Proof of applicable license and certifications must be provided to the Owner at least one month prior to any blasting operations beginning. The blasting Contractor shall carry the following insurance: **Workman's Compensation, Comprehensive General Liability, Broad Form Property Damage, Contractual Liability and Explosion, Collapse and Underground Hazard, (naming the Owner as additionally insured).**
    - 3. The blasting Contractor must indemnify and hold harmless the Owner for all claims for damages arising from the blasting operation;

4. The blasting Contractor shall obtain all Federal, State and Local permits that are applicable to the blasting operations. The blasting Contractor shall conduct the blasting operations according to all regulatory authorities having jurisdiction, laws, regulations and ordinances. The blasting Contractor shall conduct the blasting operations in accordance with all industry standards and shall coordinate with the grading Contractor to insure that appropriate safety procedures are followed, including signage and signaling devices. Nothing contained in this document shall limit the blasting Contractor's obligations or duties under regulatory authorities having jurisdiction laws, regulations and ordinances;
5. The blasting Contractor shall supply a pre-blast survey, covering a minimum of one-quarter of a miles radius, of the surrounding area to the Owner;
6. The Contractor shall provide seismograph recordation of each blast at all adjacent structures;
7. The blasting Contractor shall prepare, submit, and maintain a blasting plan/pre blast reports including, but not limited to, the number of holes drilled, the depth of holes, the burden and spacing, the amount of powder per hole, pound of powder per delay, the delay pattern, seismograph locations, and chronograph locations.
8. The blasting Contractor shall prepare and maintain post-blast reports which include the amount of material displaced by each blast, the amount of explosive utilized in each blast, and the number of shots detonated. All reports shall be forwarded to the Owner;
9. Contractor shall drill and blast so that the rock will be suitable for use on the site as fill. Rock size should not exceed 2 feet and have enough smaller size pieces to create void free matrix when placed and compacted.

### 3.05 EXCAVATION, FILL, AND SUBGRADE PREPARATION

#### A. GENERAL

1. Structures include embankment berms for storm water detention basins, slabs, tanks, curbs, mechanical and electrical appurtenances or other man-made stationary features constructed above or below the ground surface;
2. The Contractor shall cut or fill to the proposed subgrade elevations based on finished grades and the pavement thicknesses as shown on the drawings. Subgrade elevations shall be constructed to within 0 to minus ½ inch of the proposed grades specified.

#### B. EXCAVATION

1. Excavated on-site soils, which meet the requirements of the geotechnical engineering study may be used as area fill; and,
2. Unsuitable material, such as wood and any other deleterious materials determined to be unsuitable by the geotechnical engineer for use as on-site fill, shall be disposed of off site in accordance with Article 3.01.N. of this specification.

#### C. SUBGRADE PREPARATION FOR FILL

1. The Contractor shall remove existing lawn and top soil in these areas prior to placement of any fill; and,
2. All existing grades shall be proofrolled and compacted per Article 3.02.

#### D. FILL PLACEMENT

1. No fill material shall be placed in areas of standing water, in areas of frozen or thawing ground, or in areas that have not been approved by the geotechnical engineer;
2. No fill materials shall be placed during unfavorable weather conditions. When work is interrupted by heavy rains, fill operations shall not be resumed until all saturated surficial soils are returned to a satisfactory moisture content as determined by the geotechnical engineer;
3. Fill lift surfaces shall be made smooth and free from ruts or indentations at the end of any work day when precipitation is forecast to prevent saturation of surficial fill material. Fill surfaces shall be graded to drain and sealed with a smooth drum roller at the completion of each work day;
4. The fill shall be placed in uniform loose lifts not exceeding 6 inches for cohesive soils and shall be placed in loose lifts of 6 inches to 8 inches for granular materials and compacted in systemic method to achieve at least 6 passes of the compactor. Larger lift thickness, but no greater than 2 feet shall be permitted if broken rock is utilized and placed at least 6 feet below of finished grade;
5. Shot rock may be utilized as engineered fill as approved by the geotechnical engineer;
6. Each lift shall be compacted to the minimum densities listed in Table 3.02 as appropriate for the project and as specified in the geotechnical engineering study;
7. The Contractor shall adjust the water content by aeration or adding water to achieve the required density. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to achieve proper compaction and facilitate the construction schedule;

8. Wet, saturated material shall be air dried as necessary to achieve the field densities specified in this Section. Removal and replacement shall not occur without prior approval or Owner. Removal and replacement shall be used if necessary to facilitate the construction schedule;
9. Remove areas of finished subgrade found to have insufficient compaction density of depth necessary and replace with suitable compacted fill as approved by the Owner or Owners representative. Surface of subgrade after compaction shall be hard, uniform, smooth, stable, and true to grade and cross-section; and,
10. Fill placed on slopes greater than 1 vertical to 3 horizontal shall have each lift benched onto the slope at least 3 feet.

### 3.06 PROOFROLLING

- A. The work covered by this subsection consists of furnishing and operating, proofrolling equipment at the direction of the Owner's representative and/or geotechnical engineer.
- B. Proofrolling shall be under the observation of the Owner's representative and/or the geotechnical engineer as described herein and under the following schedule:
  1. Immediately following the completion of excavation to proposed subgrades in cut areas, proofrolling shall be performed as specified; and,
  2. Immediately **prior to and following** stone base course placement, in pavement and building pad areas for final floor slab preparation, all subgrade and stone base areas shall be proofrolled. Any areas which deflect, rut or pump under the loaded dump truck shall be undercut and replaced with compacted fill material or stone base course as directed by the geotechnical engineer and approved by the Owner, at no additional cost to the Owner.
- C. Proofrolling shall be done with 1 pass of a fully loaded tandem dump truck equal to or exceeding 50,000 lbs or other construction equipment if approved by the geotechnical engineer.
- D. Construction methods shall be as follows:
  1. After the subgrade or stone base course has been completed the subgrade or stone base course shall then be proofrolled. The coverage areas and methods will be identified by the geotechnical engineer;
  2. The equipment shall be operated at a speed that the geotechnical engineer can comfortably and slowly walk along side the equipment;
  3. If it becomes necessary to take corrective action, such as but not limited to underdrain installation, undercut and backfill of an unsuitable material, and aeration of excessively wet material in areas that have been proofrolled, see Article 3.03. These areas shall be proofrolled again following the completion of the necessary corrections. If the corrections are necessary due to the negligence of the Contractor, the corrective work and additional proofrolling shall be performed by the Contractor at no cost to the Owner; and,
  4. The Contractor shall protect all structural facilities on the project, such as but not limited to box culverts, pipe culverts, and utilities, from damage by the proofrolling equipment.

### 3.07 MAINTENANCE OF SUBGRADE

- A. Finished subgrades shall be verified by the Contractor to ensure proper elevation and conditions for construction above subgrade.
- B. Protect subgrade from excessive construction traffic and wheel loading including concrete and dump trucks.
- C. Remove areas of finished subgrade judged to be unsatisfactory to the depth necessary and replace in a manner that will comply with compaction requirements by use of material equal to or better than the best subgrade material on site. Surface of subgrade after compaction shall be hard, uniform, smooth, stable, and true to grade and cross-section.

END OF SECTION 02300

**SECTION 02305 - TRENCH EXCAVATION AND BACKFILL****PART 1 - GENERAL****1.01 SUMMARY**

- A. Work under this section shall include, but not be limited to excavating trenches for the installation of storm drains and utilities, backfilling trench with bedding material as specified and finish filling trenches with suitable material to proposed subgrade, compacting subgrade, bedding, and backfill materials, and compliance with all environmental and health and safety regulations.
- B. This work shall include all labor and materials and equipment necessary to meet all applicable requirements as specified in the contract documents.

**1.02 REFERENCED SECTIONS**

- A. Section 02300 - Earthwork
- B. Section 02510 - Water Distribution
- C. Section 02530 - Sanitary Sewer
- D. Section 02630 - Storm Drainage
- E. Section 02813 - Landscape Irrigation

**1.03 REFERENCE STANDARDS**

- A. American Society for Testing and Materials (ASTM) Latest Edition
  - 1. D 422 Method for Particle Size Analysis
  - 2. D 698 Test of Moisture Density Relations of Soils - Standard Proctor Method
  - 3. D 1557 Test for Moisture-Density Relations of Soils Using 10-lb. (4.5 Kg) Hammer and 18-inch (457 mm) Drop (Modified Proctor)
  - 4. D 2216 Laboratory Determination of Moisture Content of Soil
  - 5. D 2321 Installation of Thermoplastic Pipe for Sewer/Gravity-Flow Applications
  - 6. D 2922 Tests for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
  - 7. D 3017 Test for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
  - 8. D 4318 Test for Plastic Limit, Liquid Limit, & Plasticity Index of Soils
- B. American Association of State Highway and Transportation Officials (AASHTO) latest edition
  - 1. T 88 Mechanical Analysis of Soils
  - 2. M 43 Standard Sizes of Coarse Aggregate for Highway
- C. National Electric Code
  - 1. NEC 300-5
  - 2. NEC 710-36

**1.04 PROJECT RECORD DOCUMENTS**

- A. Accurately record actual locations of all subsurface utilities, structures and obstructions encountered.
- B. Accurately record any as-built variation from the construction drawings and specifications. The Contractor shall provide as-built drawings within 30 days of project completion.

**1.05 QUALITY ASSURANCE**

- A. A geotechnical engineer, selected and paid by the Owner, shall be retained to perform construction inspection and testing on backfilling operations as stated herein. This inspection will not relieve the Contractor from his responsibility to complete the work in accordance with the drawings and specifications.

**1.06 PROJECT CONDITIONS**

- A. Removal/Relocation of Existing Utilities: The contractor shall be responsible for removal and/or relocation of existing utilities, whether shown or not shown on the drawings, at locations where conflicts occur with proposed utility improvements at no additional cost to the owner.

## 1.07 SUBMITTALS

- A. The Contractor shall contact all utility companies and identify any requirements. Contractor shall provide written confirmation of the status of all utility construction to the Owner at the time of the preconstruction conference or no later than 30 days following the project possession date.
- B. Submit a sample of each type of offsite fill and/or bedding material that is to be used in backfilling in accordance with Section 02300 - Earthwork.

## PART 2 - PRODUCTS

## 2.01 MATERIALS

- A. Backfill material shall be as specified on trenching and bedding details and approved by the Owner and/or the geotechnical engineer.
- B. Bedding Material: Bedding material shall be as specified on trenching and bedding details and/or shall conform to local code. If a conflict exists the more stringent shall apply.

## PART 3 - EXECUTION

## 3.01 PREPARATION

- A. Set all lines, elevations, and grades for utility and drainage system work and maintain for the duration of work. Provide careful maintenance of benchmarks, property corners, monuments, or other reference points.
- B. Protect and maintain in operating condition, existing utilities encountered during utility installation. Repair any damage to surface or subsurface improvements shown on Drawings.
- C. Verify location, size, elevation, and other pertinent data required to make connections between existing utilities, drainage systems, and proposed construction indicated on Drawings. Coordinate all building utility connection locations and elevations with architectural drawings. Contractor shall comply with all local codes and regulations.
- D. Install dewatering systems that will be required to construct the proposed utilities to the design elevations. Water pumped out of excavations shall be disposed of on-site, and will not be discharged directly to the municipal storm drainage system or surface waters.
- E. Where the foundation material is found to be of poor supporting value or of rock, the Owner's engineer may make minor adjustments in the location of the pipe to provide a more suitable foundation. Where this is not practical, the foundation shall be conditioned by removing the existing foundation material by undercutting to the depth as directed by the geotechnical engineer and backfilling with either a suitable local material secured from unclassified excavation or borrow excavation at the nearest accessible location along the project, or foundation conditioning material consisting of crushed stone or gravel or a combination of sand and crushed stone or gravel approved by geotechnical engineer as being suitable for the purpose intended. The selection of the type of backfill material to be used for foundation conditioning will be made by the geotechnical engineer.

## 3.02 TRENCH EXCAVATION

- A. Contact regulatory authorities having jurisdiction and utility companies before excavation begins. Dig trenches at proper width and depth for laying pipe, conduit, or cable and in accordance with utility company and/or manufacturer requirements. Cut trench banks for safety and remove stones as necessary to avoid point-bearing.
- B. All trench excavation side walls shall be sloped, shored, sheeted, braced or otherwise supported by means of sufficient strength to protect the workmen within them in accordance with the applicable rules and regulations established for construction by the Department of Labor, Occupational Safety and Health Administration (OSHA), and by regulatory authorities having jurisdiction, codes and ordinances.
- C. All trench width requirements for pipe, conduit, or cable shall be the minimum practical width that will allow for proper compaction of trench backfill, complying with trenching and bedding details, and satisfy all safety utility company regulations.
- D. Provide uniform bearing and support for each section of pipe at every point along the entire length, except where necessary to excavate for bell holes, pipe joints, or other required connections. Dig bell holes and depressions for joints after trench bottom has been graded. Dig no deeper, longer, or wider than needed to make the joint connection properly.
- E. During excavation, stockpile excavated material suitable for backfilling in an orderly manner far enough from the trench to avoid overloading and slides.
- F. Remove excavated materials from the site which are not suitable for backfill.

- G. Any abandoned structures utilities or debris discovered during excavation shall be removed and disposed of, or capped.
  - H. Utility alignments have been designed to avoid expected obstructions wherever possible. If unanticipated significant obstructions are encountered during utility installation work immediately notify the Owner.
  - I. Prevent surface water from flowing into trenches or other excavations by temporary grading or other methods, as necessary. Remove accumulated water in trenches or other excavations by pumping or other acceptable methods. Discharge water only to approved sediment control BMPs.
  - J. Utility installation shall meet the following minimum pipe installation depths, or applicable codes and ordinances, measured from finished grade.
    - 1. Storm Sewer: Elevations, and grades as shown on drawings (24 inches minimum);
    - 2. Electrical Conduits: 24 inches to top of secondary service conduits, 36 inches minimum to the top of primary service conduits, or as required by NEC 300-5, NEC 710-36 codes, or the regulatory authorities having jurisdiction, and utility company requirements, whichever is deeper;
- 3.03 TRENCH ROCK EXCAVATION
- A. Trench Rock Excavation and Blasting – The encountering and removal of rock as defined herein this section will be paid as part of the corresponding utility items unless stated elsewhere in the contract documents.
    - 1. Rock Required Removal Lines: In utility trenches, 12 inches below invert elevation of pipe and a minimum of 12 inches wider than the outside surface of any pipe or conduit that is to be installed.
  - B. Blasting Requirements:
    - 1. Perform blasting only after receiving written approval from Owner. Provide as necessary heavy mats to minimize concussion. Handle, store, and use explosives in accordance with the Manual of Accident Prevention in Construction by the Associated General Contractors of America, Inc., 1978 edition;
    - 2. All blasting shall be performed by a certified, licensed blasting Contractor. Proof of applicable license and certifications must be provided to the Owner at least one month prior to any blasting operations beginning. The blasting Contractor shall carry the following insurance;
    - 3. The blasting Contractor must indemnify and hold harmless the Owner for all claims for damages arising from the blasting operation;
    - 4. The blasting Contractor shall obtain all Federal, State and Local permits that are applicable to the blasting operations. The blasting Contractor shall conduct the blasting operations according to all regulatory authorities having jurisdiction, laws, regulations and ordinances. The blasting Contractor shall conduct the blasting operations in accordance with all industry standards and shall coordinate with the grading Contractor to insure that appropriate safety procedures are followed, including signage and signaling devices. Nothing contained in this document shall limit the blasting Contractor's obligations or duties under regulatory authorities having jurisdiction laws, regulations and ordinances;
    - 5. The blasting Contractor shall supply a pre-blast survey of the surrounding area to the Owner;
    - 6. The Contractor shall provide seismograph recordation of each blast at all adjacent structures;
    - 7. The blasting Contractor shall prepare and maintain pre-blast report showing the number of holes drilled, the depth of holes, the burden and spacing, the amount of powder per hole, pound of powder per delay and the delay pattern. All reports shall be forwarded to the Owner;
    - 8. Contractor shall drill and blast so that the rock will be suitable for use on the site as fill. Rock size should not exceed 2 feet and have enough smaller size pieces to create void free matrix when placed and compacted;
    - 9. Particle velocity shall not exceed 2 inches per second, as measured by a chronograph.

**3.04 PIPE BEDDING**

- A. Accurately cut trenches for pipe or conduit to designated line and grade 4 inches below the bottom of the pipe, to width as specified previously.
- B. Over excavate wet or unstable soil, if encountered, from trench bottom as necessary to provide a suitable base for continuous and trench bottom. Compact trench bottoms a minimum of 92% of the maximum dry density as determined by ASTM D1557, Modified Proctor Test.
- C. Place bedding material as specified on trenching and bedding details as shown on drawings.

**3.05 BACKFILLING**

- A. The fill around the pipe shall be placed and compacted in accordance with the trenching and bedding details shown on the drawings, and shall be placed in layers not to exceed 8 inches loose unless otherwise approved by the geotechnical engineer. The geotechnical engineer shall approve all backfill material. Select material shall be used as specified by trenching and bedding details and where required by the geotechnical engineer.
- B. Care shall be taken during backfill and compaction operations to maintain alignment and prevent damage to the joints. The backfill shall be kept free from stones, frozen lumps, chunks of highly plastic clay, or other objectionable material.
- C. All pipe backfill areas shall be graded and maintained in such a condition that erosion or saturation will not damage the pipe bed or backfill.
- D. Heavy equipment shall not be operated over any pipe until it has been properly backfilled with a minimum 2 feet of cover. Where any part of the required cover is above the proposed finish grade, the Contractor shall place, maintain, and finally remove such material at no cost to the Owner. Pipe which becomes misaligned, shows excessive settlement, or has been otherwise damaged by the Contractor's operations shall be removed and replaced by the Contractor at no cost to the Owner.
- E. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen or spongy subgrade surfaces. Should these conditions exist, the areas should be removed, replaced and recompacted as per Section 02300, Earthwork.

END OF SECTION 02305

**SECTION 02400 – AGGREGATE BASE COURSE****PART 1 - GENERAL****1.01 SUMMARY**

- A. The work covered by this section consists of the construction of a stone base composed of an approved aggregate material, placed on parking lot areas, outside storage areas, driveways, and/or other identified areas, shaped to conform to the grades as provided on the contract drawings. The Contractor shall comply with any provisions of all applicable state and local regulatory authorities having jurisdiction, codes, regulations, and standards.

**1.02 REFERENCED SECTIONS**

- A. Section 02300 - Earthwork

**1.03 REFERENCE STANDARDS**

- A. American Association of State Highway and Transportation Officials (AASHTO)
  - 1. T-88 - Particle Size Analysis of Soils
- B. American Society of Testing and Materials (ASTM)
  - 1. D-1557 - Modified Proctor Test

**1.04 QUALITY ASSURANCE**

- A. The Contractor shall provide at least one supervisory person who shall be present at all times during execution of the work and who is thoroughly familiar with the type of work being performed and its best methods for completion. This person shall have the authority to act on behalf of the Contractor.
- B. A geotechnical engineer familiar with the requirements of the geotechnical engineering study, selected and paid by the Owner, will be retained to perform construction inspection on site based on density testing, visual observation, and judgment. This inspection will not relieve the Contractor from his responsibility to complete the work in accordance with the drawings and specifications.
- C. One compaction test per 2000 square yards for each lift, shall be performed within the pavement area.

**1.05 SUBMITTALS**

- A. At least two weeks in advance of imported aggregate use, the Contractor shall submit the following laboratory test data, in conformance with the specified DOT aggregate materials:
  - 1. Particle Size Analysis: AASHTO T-88; and,
  - 2. Density: Modified Proctor Test (ASTM D1557).
- B. Submit the name of aggregate base course material supplier and specific type and source of each material, including relevant DOT compaction or specifications. Any change in source or aggregate base course type throughout the job requires approval of the Owner and the geotechnical engineer.
- C. The geotechnical engineer shall prepare field reports that indicate compaction test location, elevation data, testing results and acceptability. The Owner and Contractor shall be provided with copies of reports within 24 hours of time test was performed.

**PART 2 - PRODUCTS****2.01 MATERIALS**

- A. All aggregate materials shall meet Specifications for Public Works Construction or CALTRANS Class II for gradation and other specified material requirements.
- B. Recycled Concrete Aggregate may be approved by the Owner for use in lieu of aggregate base course under the following conditions:
  - 1. The gradation, plasticity, soundness, and abrasion requirements of the material shall meet Public Works Construction or CALTRANS Class II for recycled concrete aggregate or aggregate base course;
  - 2. The Contractor shall be required to submit a sieve analyses to the Owner for review and approval;
  - 3. The recycled concrete aggregate shall not contain foreign materials, which includes reinforcing steel, wood, and other friable material; and,
  - 4. The Contractor shall obtain all required permits and report recycled materials usage as required by the regulatory authorities having jurisdiction.



- C. The Owner reserves the right to not approve usage of recycled concrete aggregate, for pavement base structure construction. Approval shall be granted on a project by project basis.

### PART 3 - EXECUTION

#### 3.01 PLACEMENT OF AGGREGATE BASE MATERIAL

- A. The subgrade shall be shaped to conform to the grades shown on the drawings and shall meet the requirements of Article 3.06, Section 02300, Earthwork.
- B. The aggregate material shall be placed in a uniform loose depth and without segregation. All stone base delivered to the site shall be spread and rolled by the end of each day.
- C. Where the required compacted thickness of base is 8 inches or less, the base material may be spread and compacted in one layer. The minimum compacted thickness of any one layer shall be 4 inches.
- D. Each layer of material shall have been sampled, tested, compacted, and approved prior to placing succeeding layers of base material or pavement.
- E. No base material shall be placed on frozen subgrade or base.
- F. The Contractor shall utilize methods of handling, hauling, and placing which will minimize segregation and contamination. Aggregate which is contaminated with foreign materials shall be removed and replaced by the Contractor at no additional cost to the Owner.

#### 3.02 COMPACTION OF AGGREGATE BASE MATERIAL

- A. Each stone layer/lift shall be maintained to the required cross section during compaction and each layer be compacted to the required density prior to placing the next layer.
- B. Each layer of the base shall be compacted to a density equal to at least **95%** of Modified Proctor density (ASTM D1557).
- C. The base material shall be compacted at a moisture content which is approximately that required to produce the maximum density, as determined by the geotechnical engineer and approved by the Owner. The Contractor shall dry or add moisture to the material when required to provide a uniformly compacted and acceptable base.
- D. The final layer of base material shall be shaped to conform to the lines, grades, and typical sections as shown on the drawings or established by the engineer. When completed, the base course shall be smooth, hard, dense, unyielding, and well bonded.
- E. All stoned areas shall be proofrolled in accordance with Article 3.06, Section 02300, Earthwork.

#### 3.03 QUALITY CONTROL

- A. The thickness of the base course shall be within a tolerance of plus or minus 1/2 inch of the required thickness as specified on the drawings for building pad and pavement areas.
- B. The elevation of the base course, within the building limits, shall be within a tolerance of 0 to minus 1/2 inch. All other areas shall be within a tolerance of +/- 0.10 feet.
- C. The Contractor shall be required to repair any areas which do not comply with this specification. Any repairs required shall be at no cost to the Owner, and shall meet these specifications.

END OF SECTION 02400

**SECTION 02630 - STORM DRAINAGE****PART 1 - GENERAL****1.01 SUMMARY**

- A. Work under this section shall consist of providing all labor, plant facilities, materials, tools, equipment, shop drawings and supervision necessary and required to install all of the storm drainage facilities, including piping, fittings, structures, bedding, and backfilling, as specified in accordance with the contract documents.

**1.02 REFERENCED SECTIONS**

- A. Section 02305 – Trench Excavation and Backfill

**1.03 REFERENCE STANDARDS**

- A. American Society For Testing and Materials (ASTM)
  - 1. A185 – Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
  - 2. A615 – Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
  - 3. A760 – Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
  - 4. A798 – Installation of Corrugated-Steel Pipe for Sewers and Other Applications
  - 5. A929 – Metallic-Coated by the Hot-Dip Process for Corrugated Steel Pipe
  - 6. C76 – Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
  - 7. C443 – Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
  - 8. C478 – Precast Reinforced Concrete Manhole Sections
  - 9. C913 – Precast Concrete Water and Wastewater Structures
  - 10. C1479 – Installation of Reinforced Concrete Pipe
  - 11. C990-01A – Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
  - 12. D1056 – Flexible Cellular Materials-Sponge or Expanded Rubber
  - 13. D2321 – Installation of Thermoplastic Pipe for Sewer/Gravity-Flow Applications
  - 14. D3034 – Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings
  - 15. D3212 – Joints for Drain and Sewer Plastic Pipes Using Elastomeric Seals
  - 16. F477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe
  - 17. F794 – Poly(Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter
  - 18. F949 – Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings
  - 19. F2418 – Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers
- B. American Association of State Highway and Transportation Officials (AASHTO)
  - 1. M36 – Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
  - 2. M198 – Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible Watertight Gaskets
  - 3. M252 – Corrugated Polyethylene Drainage Tubing
  - 4. M274 – Aluminum-Coated (Type 2), for Corrugated Steel Pipe
  - 5. M288 – Geotextile Specification for Highway Applications
  - 6. M294 – Corrugated Polyethylene Pipe.
  - 7. M36 – Metallic Coated Corrugated Steel Culverts and Underdrains
  - 8. M43 – Sizes of Aggregate for Road and Bridge Construction
  - 9. M190 – Bituminous Coated Corrugated Metal Culvert Pipe and Pipe Arches
  - 10. M199 – Standard Specification for Precast Reinforced Concrete Manhole Sections
  - 11. AASHTO LRFD Bridge Design Specifications Sections 3 & 12
- C. American Water Works Association (AWWA)
  - 1. C110 – Ductile-Iron and Gray-Iron Fittings, 3 in through 48 in (75 mm through 1200 mm), for Water and Other Liquids (revision of ANSI/AWWA C110/A21.10-93)
  - 2. C111 – Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
  - 3. C151 – Ductile-Iron Pipe, Centrifugally Cast, for Water
- D. American Concrete Institute (ACI)
  - 1. 301 – Structural Concrete for Buildings, Specifications for
  - 2. 318 – Building Code Requirements for Structural Plain Concrete

## 1.04 PROJECT RECORD DOCUMENTS

- A. Accurately record as-built locations of pipe runs, connections, catch basins, cleanouts, top elevations and invert elevations.
- B. Identify and describe unexpected variations of subsurface conditions and location of any utilities encountered.

## 1.05 QUALITY ASSURANCE

- A. All costs related to reinspection due to failures shall be paid for by the Contractor at no additional expense to the Owner. Owner reserves the right to direct any inspection that is deemed necessary. Contractor shall provide free access to site for inspection activities.

## 1.06 PROJECT CONDITIONS

- A. Removal/Relocation of Existing Utilities: The contractor shall be responsible for removal and/or relocation of existing utilities, whether shown or not shown on the drawings, at locations where conflicts occur with proposed storm drainage improvements at no additional cost to the owner.

## 1.07 SUBMITTALS

- A. The General Contractor and the Subcontractor shall execute the Conformance Submittal(s) at the end of this section.

## PART 2 - PRODUCTS

## 2.01 PIPES, CHAMBERS AND FITTINGS

- A. Polyvinyl Chloride Pipe (PVC)
  - 1. Pipe shall meet the requirements of ASTM D3034, SDR 35; and,
  - 2. Rubber gaskets shall meet the requirements of ASTM F477 with joints conforming to ASTM D3212.
- B. Corrugated Polyvinyl Chloride Pipe
  - 1. Pipe shall meet the requirements of ASTM F949 and F794;
  - 2. Rubber gaskets shall meet the requirements of ASTM F477 with joints conforming to ASTM D3212; and,
  - 3. Approved Manufacture: Contech "A2000", 1001 Grove Street, Middletown, OH 45044, (336) 854-2177.

## 2.02 DRAINAGE STRUCTURES, DROP INLETS, CATCH BASINS, MANHOLES AND JUNCTION BOXES (All structures shall be precast unless otherwise approved by the Owner)

- A. Structures:
  - 1. Precast Concrete Drainage Structures;
    - a. Heavy-duty traffic rated (H20) conforming to ASTM C478 or ASTM C913.
  - 2. Cast In-Place Concrete Drainage Structures; and,
    - a. Heavy-duty traffic rated in accordance with Department of Transportation Standards.
  - 3. Solid concrete Brick Masonry.
    - a. Heavy-duty traffic rated in accordance with Department of Transportation Standards.

- B. Cast Iron Frames, Hoods, and Grates per details shown on drawings. If available provide hood with stencil or casting per City of Long Beach requirements. Provide local casting if required. Provide 6 inch thick rectangular concrete apron, with 18 inch minimum width measured from the edge of structure frame to the end of concrete apron, around all structure frames in asphalt pavement areas. Provide saw cuts from each corner of the concrete apron to the frame of structure.
  - C. Steps
    1. Shall meet the requirements of AASHTO M199 for design, materials, and dimensions;
    2. Built into the walls of all structures over 3 feet 6 inches in height; and,
    3. Steps shall be 16 inches on center with lowest step being no more than 16 inches from the bottom.
  - D. Reinforcement
    1. Deformed reinforcing bars, grade 40 or 60, meeting the requirements of ASTM A615; and,
    2. Wire fabric meeting the requirements of ASTM A185.
- 2.03 BEDDING AND BACKFILL MATERIAL
- A. Where the foundation material is found to be of poor supporting value or of rock, the Owner may make minor adjustments in the location of the pipe to provide a more suitable foundation. Where this is not practical, the foundation shall be conditioned by removing the existing foundation material by undercutting to the depth as directed by the geotechnical engineer and backfilling with either a suitable local material secured from unclassified excavation or borrow excavation at the nearest accessible location along the project, or foundation conditioning material consisting of crushed stone or gravel or a combination of sand and crushed stone or gravel approved by geotechnical engineer as being suitable for the purpose intended. The selection of the type of backfill material to be used for foundation conditioning will be made by the geotechnical engineer.
- 2.04 CONCRETE
- A. No concrete or masonry shall be placed when the temperature is below 40 degrees Fahrenheit, or when indications are for lower temperatures within 24 hours, unless protection of concrete and masonry is approved by the Owner. Damage to the structure because of freezing shall be corrected by the Contractor at his own expense, to the satisfaction of the Owner.
  - B. Concrete shall conform to ACI 301 and applicable referenced specifications and shall have a 28 day compressive strength of 4,000 psi.

### PART 3 - EXECUTION

#### 3.01 GENERAL

- A. The Contractor shall install all drainage structures, pipe and chambers in the locations shown on the drawings and/or as approved by the Owner. Pipe shall be of the type and sizes specified on the drawings and shall be laid accurately to line and grade. Structures shall be accurately located and properly oriented.
- B. Excavation and Backfill – The provisions in Section 02305, Trench Excavation and Backfill shall govern all work under this Section.
- C. Storage and Handling of Pipe – All pipe shall be protected against impact, shock and free fall, and only equipment of sufficient capacity and proper design shall be used in the handling of the pipe. Storage of pipe on the job shall be in accordance with the pipe manufacturer's recommendations.
- D. Damage to Pipe or Chambers
  1. Pipe or chambers which are defective from any cause, including damage caused by handling, and determined by the Owner as unrepairable, shall be unacceptable for installation and shall be replaced at no cost to the Owner and as directed by the Owner; and,
  2. Pipe or chambers that are damaged or disturbed through any cause prior to acceptance of the work, shall be repaired realigned or replaced as directed by the Owner, at the Contractor's expense.
- E. Manholes, catch basins and drain inlets shall be constructed as soon as the pipe laying reaches the location of the structures. Should the Contractor continue his pipe laying without making provisions for completion of the structures, the Owner shall have the authority to stop the pipe laying operations until the structure is completed.
- F. Any structure, which is mislocated or oriented improperly, shall be removed and re-built in its proper location, alignment and orientation at the Contractor's expense.

## 3.02 BEDDING

- A. Bedding material shall be as specified by trenching and bedding details as shown on drawings.

## 3.03 PIPE AND CHAMBER INSTALLATION

- A. Comply with Section 02305, Trench Excavation and Backfill

- B. Laying Pipe and Chambers

1. Unloading and Handling: All pipes and chambers shall be unloaded and handled with reasonable care. Pipes and chambers shall not be rolled or dragged over gravel or rock during handling. The Contractor shall take necessary precautions to ensure the method used in lifting or placing the pipe or chambers does not induce stress fatigue in the pipe or chamber and the lifting device used uniformly distributes the weight of the pipe or chamber along its axis or circumference;
2. Each length of pipe or chamber shall be inspected for defects and cracks before carefully lowered into the trench. Any damaged or any pipe that has had its grade disturbed after laying shall be removed and replaced. Bituminous coated pipe shall be handled with special care and repair of damaged coating shall conform with AASHTO M190;
3. Lay pipe on prepared foundation starting at the downgrade end according to line and grade with the necessary drainage structures, fittings, bends and appurtenances as shown on the drawings. Pipes with bell/spigot connections shall be laid with the bell or groove ends upgrade with the spigot or tongue fully inserted. Lap joint pipes shall be laid with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Reinforced concrete pipe shall be installed in accordance with ASTM C1479. Corrugated metal/steel pipe and arch pipe shall be installed in accordance with ASTM A798. HDPE pipes shall be installed in accordance with pipe manufacture's installation guidelines for heavy duty drainage applications and ASTM D2321; and,
4. Pipe sections shall be firmly joined together with appropriate gaskets or bands.
5. Install chambers in accordance with the manufacturer's instructions. Rows of chambers shall be laid out using spacers or appropriate measurements and markings to ensure proper spacing between rows as specified by the manufacturer.

## 3.04 DROP INLET, CATCH BASIN, MANHOLE, AND JUNCTION BOX INSTALLATION

- A. Precast Drainage Structures

1. Structure units shall be assembled in accordance with the manufacturer's instructions to form a sound structural unit.

- B. Cast in Place Drainage Structures

1. Structures shall be installed in accordance with the details or referenced specifications shown on the drawings; and
2. Concrete shall comply with requirements of Article 2.06 of this section.

- C. Solid Concrete Brick Masonry Structures

1. Structures shall be installed in accordance with the details or referenced specifications shown on the drawings;
2. Only solid masonry units shall be utilized;
3. Minimum wall thickness shall be 8 inches; and,
4. Minimum bottom slab thickness shall be 6 inches and extended a minimum of 6 inches outside the structure.

- D. Fittings and Connections
    - 1. Pipe connections shall be made so that the pipe does not project 3 inches beyond the inside wall of the drainage structure, and shall be grouted as necessary to make smooth and uniform surfaces on the inside of the structure. Boxes to have bottoms filled with concrete to provide a bench between pipe inverts.
  - E. Frames, Grates and Hoods
    - 1. Shall be set to grade in accordance with the drawings;
    - 2. Firmly embedded in mortar approximately 1 inch thick and aligned to fit the top section of the structure; and,
    - 3. Brick set in mortar used to adjust the frame to finished grade shall be limited to no more than four courses for precast structures and have a minimum wall thickness of 8 inches.
  - F. Interface with Existing Facilities
    - 1. Compliance with Facility Owner Requirements: Connections made into existing drainage facilities shall be performed in accordance with the requirements of the Owner of the facility. The Contractor will be required to comply with all such requirements, including securing of all required permits, and paying the costs thereof. The cost of making the connections in accordance with the requirements of the Owner of the existing facility shall be included in the Contract Sum; and,
    - 2. Requirements: The Contractor shall make all required connections of the proposed drainage facilities into existing drainage facilities, where and as shown on the Drawings and/or as approved by the Owner.
- 3.05 CONSTRUCTION WITHIN THE PUBLIC R.O.W.
- A. Construction within the public right-of-way shall conform to all requirements of the regulatory authority having jurisdiction.
- 3.06 CONCRETE PLACEMENT
- A. Place cast-in-place concrete according to ACI 318 and ACI 350R.
- 3.07 PROTECTION AND CLEANING
- A. The Contractor shall maintain all pipe and chamber installations and drainage structures in a condition such that they will function continuously and shall be kept clean of silt, debris and other foreign matter until the project is accepted.
  - B. The Contractor shall use the erosion control and siltation prevention techniques necessary to ensure that construction sediments do not reach the stormwater chamber system.
- 3.08 FINAL INSPECTION
- A. Upon completion of the work and before final acceptance by the Owner, the entire drainage system shall be subject to a final inspection in the presence of the Owner and/or Site Engineer. The work shall not be considered as complete until all requirements for line, grade, cleanliness, and workmanship have been completed.

END OF SECTION 02630

**SECTION 02741 - HOT-MIX ASPHALT PAVING****PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes hot-mix asphalt paving, patching and overlay.

**1.02 REFERENCE STANDARDS**

- A. American Association of State Highway and Transportation Officials (AASHTO)
  - 1. M140 - Standard Specification for Emulsified Asphalt Nineteenth Edition; Revised Per Interim Specifications - Specifications - 1999 R(1998)
  - 2. M226 - Standard Specification for Viscosity Graded Asphalt Cement Nineteenth Edition R(1996)
  - 3. T245 - Standard Method of Test for Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus Nineteenth Edition; ASTM D1559-76
- B. American Society for Testing and Materials (ASTM)
  - 1. D1559 - Test Method for Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus.
  - 2. D2041 - Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
  - 3. D2171 - Standard Test Method for Viscosity of Asphalts by Vacuum Capillary Viscometer (RAP Asphalt Mixes)
- C. Asphalt Institute (AI)
  - 1. MS-2 - Mix Design Method for Asphalt Concrete and Other Hot Mix Types
  - 2. MS-22 - Principles of Construction of Hot-Mix Asphalt Pavement, Addendum

**1.03 SUBMITTALS**

- A. Job Mix Designs: Contractor shall submit a mix design using either the "Marshall Stability" or "Superpave" Mix Design Submittal Forms, included in this specification, for each pavement course proposed for construction for the Owner's review and approval 45 days prior to schedule production and lay down of the mix.
- B. "Marshall Stability" design mix submittals shall include type/name of mix, gradation analysis, grade of asphalt cement, Marshall Stability in pounds flow, effective asphalt content in percent (%), and corresponding copies of governing State Department of Transportation (DOT) material specifications or regulatory authorities having jurisdiction for each proposed material.
- C. "Superpave" design mix submittals may be submitted in lieu of a "Marshall Stability" design mix, meeting the specifications of the governing State Department of Transportation or regulatory authorities having jurisdiction.
- D. Material Certificates: Contractor shall submit certificates stating that asphalt mix to be supplied complies with the specifications of the governing State Department of Transportation (DOT) or regulatory authority having jurisdiction, as well as copies the regulatory specifications corresponding to the asphalt mix formula and material. The certificates shall be signed by the asphalt mix producer and the Contractor.

**1.04 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Manufacturer shall be registered with and approved by authorities having jurisdiction and the DOT of the state in which Project is located.
- B. Regulatory Requirements: Comply with applicable standards and requirements of the regulatory authority having jurisdiction and State DOT for asphalt paving work.
- C. Asphalt-Paving Publication: Comply with Asphalt Institute Manual MS-22, "Construction of Hot Mix Asphalt Pavements," unless more stringent requirements are indicated.

**1.05 PROJECT CONDITIONS**

- A. Environmental/Weather Limitations: Do not apply or produce asphalt materials if the underlying course is wet or excessively damp, the subgrade or base course is frozen, , during rainy weather, or if the air temperature, measured in the shade away from artificial heat at the location of the paving operations, does not meet the following requirements:
  - 1. Tack Coat and Prime Coat: Minimum ambient temperature in the shade has been 40 degree F for at least 12 hours, immediately prior to application;

2. Asphalt Base Course: Minimum surface temperature of 35 degree F and rising at time of placement;
3. Asphalt Binder (Intermediate) Course: Minimum surface temperature of 40 degree F and rising at the time of placement; and,
4. Asphalt Surface Course: Minimum surface temperature is above 50 degree F at time of placement for 1 inch lift or 40° F for all lifts greater than 1 inch in depth.

## PART 2 - PRODUCTS

### 2.01 ASPHALT MATERIALS

- A. Asphalt Cement – The type and grade of asphalt cement for the paving mixture shall comply with the applicable requirements of AASHTO Specification M226, Table 2, and meet governing DOT specifications.
- B. Prime Coat - emulsified asphalt applications shall meet the requirements of AASHTO M140, and the governing DOT specifications.
- C. Tack Coat - emulsified asphalt applications shall meet the requirements of AASHTO M140 and meet governing DOT specifications.
- D. Hot Mix Asphalt – Unless otherwise noted on the drawings, the design mix shall have the minimum stability base on 50-blow Marshall Mix Design in accordance with AASHTO T245 or ASTM D1559.
- E. Reclaimed Asphalt Pavement (RAP) – Reclaimed Asphalt Pavement is asphalt pavement design mixes may be utilized as approved by the Owner. No more than 25% (total mixture) of RAP material shall be utilized in proposed mixes and shall meet the governing State Department of Transportation specifications. The origin of the RAP material shall be clearly identified to the Owner prior to approval, including the RAP percentage identified in the pavement mix design submittal. RAP material shall be free of contamination, including dirt, debris, concrete, clean stone, etc.

## PART 3 - EXECUTION

### 3.01 COLD MILLING

- A. Milling of existing asphalt pavement shall be at the depth and location as indicated on the Construction Drawings or as directed by the Owner.
- B. The milled surface shall be reasonably smooth and free of excessive scarification marks, gouges, ridges, continuous grooves, or other damage. The milled pavement surface shall be thoroughly cleaned of all loose aggregate particles, dust, and other objectionable material by the use of power brooms, power blowers, power vacuums or other means.
- C. The Contractor shall coordinate the adjustment of manholes, meter boxes, drainage inlets, and valve boxes with the milling operation.
- D. All milled material shall become the property of the Contractor and shall be disposed of off-site or used in conformance with Section 02300, Earthwork, or for utilization as Reclaimed Asphalt Pavement, in conformance with the specification provided above, as approved by the Owner.

### 3.02 PATCHING

- A. Hot-Mix Asphalt Pavement: Saw cut perimeter patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into adjacent sound pavement, unless otherwise indicated or directed by the Owner. Re-compact existing unbound-aggregate base course to form new subgrade.
- B. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 0.05 gal/sy.
- C. Patching: Fill excavated pavements with hot-mix asphalt base mix, and while it is still hot, compact flush with adjacent surface.

### 3.03 SURFACE PREPARATION

- A. Proofroll stone base in conformance with Article 3.06, Section 02300 Earthwork, immediately prior to paving.
- B. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared substrate surface is ready to receive paving. Sweep loose granular particles from surface of unbound-aggregate base course. Do not dislodge or disturb aggregate embedded in compacted surface of base course.



- C. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 gal./sy.
    - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving; and,
    - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
    - 3. Adequate traffic control shall be provided to prohibit traffic from traversing applied area.
  - D. Prime Coat: Apply uniformly to non-asphalt surfaces when specified on the drawings at a rate of .20 Gal/Sy.
- 3.04 HOT-MIX ASPHALT PLACING
- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  - B. Spread mix at minimum temperature of 250°F and maximum temperature of 325°F.
  - C. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
  - D. Place paving in consecutive strips not less than 10 feet wide unless infill or edge strips of a lesser width are required. Joint patterns shall be constructed parallel to traffic flow.
  - E. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.
- 3.05 COMPACTION
- A. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct lay-down and rolling operations to comply with requirements.
  - B. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density.
  - C. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
  - D. Protection: After final rolling, erect barricades to protect paving from traffic until pavement has cooled and hardened.
  - E. Density: Compare density of in-place material against laboratory specimen of same mixture, subjected to 50 blows of a Standard Marshall hammer on each side of specimen. Minimum acceptable density of in-place material shall be:
    - 1. Density: **95%** of reference maximum theoretical density according to California Kneading Compactor (CAL 304).
- 3.06 INSTALLATION TOLERANCES
- A. Thickness: Compact each course to produce the thickness indicated within the following tolerances:
    - 1. Base Course:  $\pm 1/4$  inch;
    - 2. Binder (Intermediate) Course:  $\pm 1/4$  inch; and,
    - 3. Surface Course:  $\pm 1/8$  inch.
  - B. Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
    - 1. Base Course:  $1/2$  inch;
    - 2. Binder (Intermediate) Course:  $1/4$  inch; and,
    - 3. Surface Course:  $1/8$  inch.
  - C. Contractor's duties relating to testing include:
    - 1. Notify Owner 72 hours prior to asphalt paving;
    - 2. Notifying laboratory of conditions requiring testing; and,
    - 3. Coordinate with laboratory for field testing.
- 3.07 DISPOSAL
- A. Except for material indicated to be recycled, remove excavated or milled materials from Project site and legally dispose of them in an EPA-approved landfill.

**3.08 QUALITY CONTROL**

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests, inspections, and to prepare test reports. Testing agency shall be paid by the Owner.
- B. The Owner shall pay for and have testing agency take two 4-inch diameter cores per 5,000 sq. yds. of intermediate course, at locations selected by Owner, for thickness tests. Contractor shall repair holes resulting from coring to match existing paving. The Owner reserves the right to take additional testing and should these tests show insufficient thickness, all areas shall be remediated as prescribed by the Owner.
- C. The Owner shall provide on-site nuclear density testing at random locations during paving operations for all proposed asphalt courses.
- D. The Contractor may be required to remove and replace hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements, at not cost to the Owner.
- E. Cleaning of asphalt paving equipment and tools is not permitted on site.

END OF SECTION 02741

## SECTION 02745 – PAVEMENT MARKINGS AND REMOVAL

## PART 1 - GENERAL

## 1.01 SUMMARY

- A. This section includes specifications for proposed temporary and permanent pavement markings, including pavement marking removal.

## 1.02 PROJECT CONDITIONS

- A. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 50 degrees F not exceeding 90 degrees F and relative humidity at a maximum of 85%.
- B. Surface Preparation: The surface shall be clean and free of dirt, grease, oil, or other contaminants which could interfere with adhesion.

## PART 2 - PRODUCTS

## 2.01 MATERIALS

- A. Temporary and Permanent Pavement-Marking Paint:
  - 1. **Sherwin Williams Setfast Non- leaded Chlorinated Rubber** - White on asphalt (TM5126), yellow on concrete (TM5127), or as indicated on the drawing(s) is preferred.
  - 2. **Sherwin Williams “Setfast Acrylic Waterborne Traffic Marking Paint”** – White on asphalt (TM226, yellow on concrete (TM225), or as indicated on the drawing(s).
  - 3. **Valspar Enterprise Latex Traffic Marking Paint** – White on asphalt (#2540), yellow on concrete (#2541), or as indicated on the drawing(s).
  - 4. **PPG (Pittsburgh Paints) “SPEEDHIDE® Traffic and Zone Marking Flat Latex”** – White on asphalt (11-23), yellow on concrete, or as indicated on the drawing(s).

## PART 3 - EXECUTION

## 3.01 PERMANENT PAVEMENT MARKINGS

- A. Allow new asphalt paving to age a minimum of 48 hours before painting. New concrete pavement shall age a minimum of 30 days before painting, unless otherwise approved by the Owner.
- B. Sweep and clean surface to eliminate loose material and dust prior to application.
- C. Apply paint material at manufacturer’s recommended rates to provide a minimum wet film thickness of 15 mils and dry film thickness of 10 mils (each coat).
- D. Paint shall be applied in 2 coats to a clean, dry surface using template or a striping machine. Stripes shall be of uniform width of 4 inches wide, unless otherwise noted on the drawing(s). Other markings shall be provided as on the construction drawings.

## 3.02 TEMPORARY PAVEMENT MARKINGS

- A. Temporary paint shall be applied in accordance with permanent pavement marking specifications. However, only 1 coat of paint shall be required to a clean, dry surface using template or a striping machine. The Contractor may also propose to utilize temporary/removable pavement marking tape, as approved by the Owner.
- B. Markings shall be applied using butyl adhesive pads or paint to clean dry pavement surfaces which are free of cracking, checking, spalling, or failure of underlying base material.
- C. When required, removable marking tape or pavement marking paint shall be applied on clean dry surfaces at designated locations. Tape that has become damaged and is no longer serviceable shall be replaced without additional compensation.
- D. All temporary markings and striping shall be removed when no longer required. Any pavement area that has been determined to be damaged as a result of the removal operation shall be repaired at no cost to the Owner.

**3.03 PAVEMENT MARKING REMOVAL**

- A. Existing pavement marking lines and symbols shall be removed as to not materially or structurally damage the surface or texture of the pavement. A motorized abrasive device shall be utilized to remove existing markings. The Contractor shall repair any damage to the pavement at no expense to the Owner. The pavement surface shall be left in a condition that will not mislead or misdirect customers or motorists. Pavement marking removal within public rights of way shall be completed in accordance with the regulatory authority having jurisdiction and the specifications.

END OF SECTION 02745

**SECTION 02751 - CONCRETE PAVEMENT, CURB AND SIDEWALK****PART 1 - GENERAL****1.01 SUMMARY**

- A. This Section includes all portland concrete pavement outside the building limits, including but not limited to:
  - 1. Curbs and gutters
  - 2. Sidewalks
- B. For concrete located within the building limits: refer to Section 03300 – Cast-In-Place Concrete

**1.02 REFERENCE STANDARDS**

- A. American Society of Testing Materials (ASTM)
  - 1. A82 - Standard Specification for Steel Wire, Plain, for Concrete Reinforcement
  - 2. A185 - Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement
  - 3. A615/A615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
  - 4. C33 - Standard Specification for Concrete Aggregates
  - 5. C94 - Standard Specification for Ready-Mixed Concrete
  - 6. C150 - Standard Specification for Portland Cement
  - 7. C171 - Standard Specification for Sheet Materials for Curing Concrete
  - 8. C260 - Standard Specification for Air-Entraining Admixtures for Concrete
  - 9. C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete
  - 10. C494/C494M - Standard Specification for Chemical Admixtures for Concrete
  - 11. C979 - Standard Specification for Pigments for Integrally Colored Concrete
  - 12. C1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete
  - 13. D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)
  - 14. D1752 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction
  - 15. D3405 - Standard Specification for Joint Sealants, Hot-Applied, for Concrete and Asphalt Pavements
  - 16. D5249 - Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
  - 17. D5893 - Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements
- B. American Concrete Institute (ACI)
  - 1. 301R-99 – Specifications for Structural Concrete
  - 2. 304R – Placing and Handling Concrete, etc.
  - 3. 309R-96 – Guide for Consolidating of Concrete
  - 4. 330.1 – Standard Specifications for Plain Concrete Parking Lots
  - 5. 330R-92 – Guide for Design & Construction of Concrete Parking Lots
  - 6. 211.1R-91 – Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete
- C. American Association of State Highway and Transportation Officials (AASHTO)
  - 1. M182 – Standard Specifications for Burlap Cloth made from Jute for Kenaf
  - 2. M153 – Standard Specifications for Preformed Sponge Rubber and Cork Expansion Joint Filler

**1.03 SUBMITTALS**

- A. Mix Design: For each concrete mix indicated (see attached form).
- B. Material certificates and test reports.
- C. The General Contractor and the Subcontractor shall execute the Conformance Submittal(s) at the end of this section.

## PART 2 - PRODUCTS

## 2.01 STEEL REINFORCEMENT

- A. The type of steel reinforcement shall be as shown on the drawings.
  - 1. Plain-Steel Welded Wire Fabric: ASTM A 185, 6inches x 6inches #10 mesh fabricated from steel wire into flat sheets;
  - 2. Reinforcement Bars: ASTM A 615/A 615M, Grade 40, deformed;
  - 3. Plain Steel Wire: ASTM A 82, as drawn; and,
  - 4. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening steel reinforcement. Manufacture bar supports according to CRSI's Manual of Standard Practice.
  - 5. Diamond Dowels: ¼" x 4 ½" Diamond Dowels by PNA

## 2.02 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I, II or III.
- B. Aggregate: ASTM C 33. Combined aggregate gradation for concrete pavement and other designated concrete shall be 8% - 18% for large top size aggregates (1½") or 8% - 22% for smaller top size aggregates (1" or ¾") retained on each sieve below the top size and above the No. 100 sieve. Concrete pavements shall have a maximum aggregate size of 1½".
- C. Water/Ready Mix Concrete: ASTM C 94.
- D. Admixtures: Certified by manufacturer to contain not more than 0.1 % water-soluble chloride ions by mass of cement and to be compatible with other admixtures, as follows:
  - 1. Air-Entraining Admixture: ASTM C 260;
  - 2. Water-Reducing Admixture: ASTM C 494, Type A;
  - 3. Water-Reducing and High-Range Admixture: ASTM C 494, Type F;
  - 4. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E; and,
  - 5. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
- E. Fly Ash: The use of fly ash, slag and bottom ash is prohibited.
- F. Calcium Chloride: The use of calcium chloride or admixtures containing more than 0.05% chloride ions is prohibited.
- G. Curing Materials:
  - 1. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry;
  - 2. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet;
  - 3. Water: Potable;
  - 4. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete;
  - 5. Clear Solvent-Borne Liquid-Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B;
  - 6. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B;
  - 7. White Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B.

## 2.03 CONCRETE MIXES AND MIXING

- A. Concrete Mixes: Prepare design mixes, proportioned according to ACI 211.1R-91 and ACI 304, with the following properties:
  - 1. Compressive Strength (28 Days): 4,000 psi;
  - 2. Slump Limit: maximum of 5 inches at time of placement for pavement, 2 inch maximum for curb and sidewalk;
  - 3. Air Content: 5% to 8% for pavement, curb and sidewalk.
- B. Coloring Agent: When required, add coloring agent to mix according to manufacturer's written instructions.
  - 1. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork; and,
  - 2. Coloring Agent: ASTM C 979, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, nonfading, and resistant to lime and other alkalis.

- C. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94 and ASTM C 1116.
  - D. Project-Site Mixing: On-site mixing must be approved by the Owner. Comply with requirements and measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.
- 2.04 JOINTS, FILLERS, AND SEALANTS
- A. Joint-Sealant Backer Materials: ASTM D5249, Non-Staining, compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by joint sealant manufacturer based on field experience and laboratory testing.
  - B. Joint Sealant: Non-priming, pourable self-leveling silicone sealant for concrete and asphalt.
    - 1. Cold-Applied Joint Sealant ASTM D5893, self leveling silicone sealant. Crafcro Inc. "Roadwaver Silicone-SL"; Dow Corning "888, or 890-SL"; Sonneborn "Sonomeric 1 Sealant"; Tremco "Vulkem 45"; and,
    - 2. Hot-Applied Joint Sealant: ASTM D3405, Polymeric sealant. Crafcro Inc. "ROADSAVER 22"; W.R. Meadows, Inc. "SEALTIGHT HI-SPEC".
  - C. Joint Fillers: Resilient pre-molded bituminous impregnated fiberboard units complying with ASTM D 1751, asphalt-saturated cellulosic fiber, ASSHTO M 153, Type I: or ASTM D 1752, cork or self-expanding cork.
  - D. Exterior Concrete Sealant: Sonneborn "Kure-N-Seal 30" exterior acrylic sealer, or Euclid "Super Rez-Seal".

### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. Surface Preparation: Proofroll prepared subbase, per Section 02300 - Earthwork and remove loose material from surface.
- B. Forms: Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations, per Section 02010, Project Survey and Layout.
  - 1. Maintain sufficient quantity of forms to allow continuance of work so that forms remain in place a minimum of 24 hours after concrete placement;
  - 2. Forms shall be cleaned and casted with form release agent thoroughly after each use and before concrete is placed; and,
  - 3. Flexible or curved forms shall be used on curves. Forms shall be of full depth of the concrete and of a strength when staked, sufficient to resist the presence of the concrete and the loads resulting from the finish operations without springing, setting or losing their shape.
- C. Reinforcement: Accurately position and support reinforcement, and secure against displacement. Set wire ties with ends directly into concrete.
  - 1. Install welded wire fabric in lengths as long as practicable; lap at least one full mesh, and lace splices with wire; and,
  - 2. Support reinforcing steel on wire chairs to ensure that wire stays mid-depth of sidewalk section during concrete pour.
- D. Joints: Construct pre-molded expansion and contraction joints, tied construction joints, control joints, thickened edge expansion joints, isolation joints, and construction joints, straight with face perpendicular to concrete surface. Construct transverse joints perpendicular to centerline unless otherwise detailed.
  - 1. Expansion joints and Contraction joints: Pre-molded as indicated on the drawings;
    - a. Provide joint filler for the entire depth of the slab section and not less than 1 inch below finished surface so as to allow for joint sealer.
    - b. Provide thickened edge expansion joint as indicated on the drawings.
    - c. Provide 1/2 inch contraction joints for curb and gutter at 5 feet on center.
    - d. Provide 1/2 inch expansion joints for curb and gutter and sidewalk at 100 feet on center.
  - 2. Tied construction joints: As indicated on drawings;
  - 3. Control joints: Depth shall be equal to 1/4 of the concrete thickness or 1 inch, whichever is deeper. For sidewalks, control joint spacing shall be equal to the sidewalk width. For concrete pavement, control joint spacing shall be placed as shown on the drawings, no greater than 30 times the slab thickness on center either way;

- a. Form tooled joints in fresh concrete by grooving top portion with recommended tool and finishing edges with jointer.
- b. Form sawed joints using powered saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut joints into hardened concrete within 24 hours of the concrete placement and as soon as surface will not be torn, abraded, or otherwise damaged by cutting action.
4. Construction Joints: Place construction joints at end of placements and at locations where placement operations are stopped for period of more than ½ hour, except where such placements terminate at expansion joints. Provide ¼" x 4½" Diamond Dowels by PNA at 24" on center or as shown on the drawings;
5. Isolation Joints: Locate isolation joints as indicated on the drawings. Provide premolded joint filler for catch basins, manholes, inlets, structures, walks, light pole bases and other fixed objects;
6. Joint Fillers: Extend joint fillers full-width and depth of joint, and not less than ½inch or more than 1inch below finished surface where joint sealer is indicated. Furnish joint fillers in one-piece lengths for full width being placed, wherever possible. Where more than one length is required, lace or clip joint filler sections together; and,
7. Joint Sealants: All joints shall be sealed with approved exterior pavement joint sealants and shall be installed per manufacturer's recommendations.
- E. Concrete Placement: Comply with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete. Place concrete in a continuous operation within planned joints or sections.
  1. Moisten subbase to provide a uniform dampened condition at time concrete is placed;
  2. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping according to recommendations in ACI 309R;
  3. Screed and initial-float concrete surfaces with darby or bull float before excess moisture or bleed water appears on the surface;
  4. Protect concrete from cold or hot weather during mixing, placing, and curing; and,
  5. All concrete walks and aprons shall be a minimum of 4 inches thick as shown on the drawings, with a turned down edge as detailed.
- F. Evaporation Retarder: Apply to concrete surfaces if hot, dry, or windy conditions exist. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- G. Pavement Tolerances: Comply with tolerances in ACI 330.1, Specification for Plain Concrete Parking Lots.

### 3.02 FINISHES AND CURING

- A. All exterior concrete shall receive a medium broom finish.
- B. Curing: Begin curing after finishing concrete, but not before free water has disappeared from concrete surface. Cure concrete by one or a combination of the following methods:
  1. Moisture cure concrete by water, continuous fog spray, continuously wet absorptive cover, or by moisture-retaining-cover curing. Keep surfaces continuously moist for not less than 7 days; and,
  2. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
- C. All exterior concrete surface shall receive one coat of exterior sealer.

### 3.03 REPAIRS AND PROTECTION

- A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- B. Protect concrete from damage. Provide adequate traffic control to prevent traffic from pavement for at least 14 days after placement.
- C. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than 2 days before date scheduled for substantial completion inspections.

### 3.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
- B. ACI Publications: Comply with ACI 301R-99 and ACI330R-92, unless modified by the requirements of the Contract Documents.



- C. The owner shall provide and pay for testing services. A slump test and air test shall be performed for each load delivered. Four standard test cylinders shall be taken for each 55 cubic yards of concrete or each days pour, whichever is more frequent. Two cylinders shall be broken at 7 days and two cylinders shall be broken at 28 days.

END OF SECTION 02751

**SECTION 02920 – LANDSCAPING**

## PART 1 - GENERAL

## 1.01 WORK INCLUDED

- A. LANDSCAPING consists of furnishing transportation, labor, materials, and equipment to perform soil preparation.

## 2.01 RELATED WORK

- A. SITE CLEARING Section 02110
- B. EARTHWORK Section 02200
- C. TRENCHING, BACKFILLING, COMPACTING Section 02221

## 3.01 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM):
  - 1. ASTM D422 Standard Test Method for Particle-Size Analysis of Soils
  - 2. ASTM D2434 Standard Test Method for Permeability of Granular Soils
- B. Council of Tree and Landscape Appraisers: Manual for Plant Appraisers Handbook, Guide for Establishing Values of Trees and Other Plants.
- C. State of California Agricultural Code
- D. Sunset Western Garden Book
- E. U.S.A. Standards for Nursery Stocks (ANSI 260.1-1986)
- F. Uniform Building Code (UBC)
- G. Reference Specification (RS), "GREENBOOK" Standard Specifications for Public Works Construction – Current Edition

## 4.01 SUBMITTALS

- A. Make submittals no later than 30 calendar days prior to start of work.
- B. Submit 7 complete lists of landscape materials and equipment for approval by the Engineer. Include manufacturer's name and address, specific trade names; catalog numbers complete with installation instructions, illustrations and descriptive literature. Clearly mark or underline proposed items in red; list sources of landscape topsoils.
- C. Disapprovals: Resubmit for approval necessary data concerning a substitution for a disapproved item.

- D. Approval of an item, alternate, or substitute indicates only that the product or products appear to meet the requirements of Drawings and Specification on the basis of the information or samples submitted.
- E. Procurement List: Use the approved list of landscape materials and equipment for procurement without deviation unless otherwise authorized in writing by the Engineer.
- F. Certification: In addition to other required certification, furnish a certificate with each delivery of bulk material, including topsoil, stating its source, quantity, type of material furnished and that such item or material conforms to specification requirements.
- G. Submit for approval 3 copies of manufacturer's material specifications including installation instructions for proposed erosion control netting.
- H. Bonds: Contractor has the option of extending the original performance bond to include the plant establishment and guarantee periods or securing a new bond in an amount to cover the guarantees and replacement of plant materials.

#### 5.01 INSPECTION

- A. Notify the Engineer at least 48 hours prior to time of the following required inspections:
  - 1. Soils testing, soil certifications, soil quantities, soil origination, soil deliveries, soil preparation, and soil installation.
- B. The Engineer shall have the right to make periodic inspections prior to final inspection. Should plant materials, installation procedures, or other conditions be observed that are not in accordance with the contract drawings or specifications, the Engineer shall direct the Contractor to correct by repair and /or replacement as appropriate. The Engineer shall be the sole judge of the conditions of quality and acceptability and will direct all corrections by the Contractor. All rejected materials shall be immediately removed from the site and replaced with specified materials at no additional cost to Long Beach Gas & Oil.
- C. Notify the Engineer 7 calendar days prior to the time of final inspection.

#### 6.01 EXISTING UTILITIES AND PLANT MATERIALS

- A. Exercise care in excavating and working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by Contractor's operations or neglect. Check existing utility drawings for existing utility locations.
- B. Repair or replace existing improvements which are not designated for removal which are damaged or removed as a result of Contractor's operations. When a portion of a sprinkler system must be removed, cap the remaining lines. Repairs and replacements shall be equal to existing improvements, and shall match them in finish and dimension.
- C. Protect existing utilities, trees, lawns, and shrubbery that are not to be removed from damage or injury. If damaged or removed because of the Contractor's operations, they shall be restored or replaced in, as nearly the original condition and location as is reasonably possible. Lawns shall be reseeded and covered with suitable mulch.

Determine the cost of unreplaceable plant material according to the "square inch" method as described by the Council of Tree and Landscape Appraisers "Manual for Plant Appraisers" Handbook current edition and "Guide for Establishing Values of Trees and Other Plants."

- D. When existing planted areas are regraded, or removed and replaced because of Contractor's operations, the soil in these areas shall be prepared and replanted in kind. Materials, topsoils, soil preparation, and amendments, planting, and plant maintenance during the establishment period shall conform to this Specification. Existing topsoil shall be considered "unclassified". If the existing topsoil in the planted areas is not re-used, an approved "imported" topsoil shall be used.
- E. Contractor shall give 14 calendar days notice to tenants or owners of adjacent property to permit them to salvage or relocate existing plants, trees, fences, sprinklers, and other improvements within the right-of-way which are designated for removal and would be destroyed because of the work.
- F. Costs for protecting, removing, and restoring existing improvements shall be included in Contractor's Bid.

#### 7.01 VERIFICATIONS OF DIMENSIONS AND QUANTITIES

- A. Verify scaled dimensions and quantities prior to start of work.
- B. Notify the Engineer of discrepancies between Drawings and Specifications and actual job site conditions which would affect the execution of the landscaping work. Do not work in areas where discrepancies occur until instructed by the Engineer.

#### 8.01 GUARANTEE

- A. Should soil deficiencies affecting plant health develop within the specified guarantee periods, correct such deficiencies to the satisfaction of the Engineer at no cost to Long Beach Gas & Oil.

### PART 2 - PRODUCTS

#### 1.01 MATERIALS

- A. Topsoil: Designated as Class "A" (imported) or Class "C" (unclassified). The Engineer will determine the suitability of topsoil prior to use. Transport topsoil from the source to its final position unless stockpiling is called for.
- B. At least 30 days before scheduled use, submit the proposed source of topsoil to the Engineer for approval. Submit a written request for approval, accompanied by a written report from a soils testing laboratory registered by the State for agricultural soil evaluation which states that the proposed source complies with Specifications and that the soil is agriculturally suitable. Contractor shall comply with recommendation of the soils testing laboratory and add additional soil amendments, necessary to achieve nutrient levels to support healthy plant growth, at no cost to Long Beach Gas & Oil.

- C. Class "A" topsoil shall be from a source outside the limits of the project selected by Contractor and in compliance with the requirements. The Engineer may make inspections and require tests as deemed necessary to determine that the material meets the requirements.
- D. Class "A" topsoil shall be of a uniform composition and structure, fertile and friable sandy loam garden soil character suitable for sustaining and promoting the growth of the plants; and be free of roots, clods and stones, larger than 1-inch in greatest dimension, pockets of coarse sand, noxious weeds, sticks, brush and other litter and not be infested with nematodes or other undesirable insects and plant disease organisms. "Imported" topsoil shall meet the following additional requirements:
  - 1. Silt plus clay content shall not exceed 25 percent by weight. Coarse sand shall not exceed 25 percent with 100 percent of material passing the 2.0 millimeter sieve, as defined in ASTM D422.
  - 2. Electrical conductivity shall not exceed 3.0 ds/m at 25 degrees centigrade.
  - 3. Boron content shall be no greater than 1.0 part per million as measured on the saturation extract.
  - 4. Sodium Absorption Ratio (SAR) shall be less than 6.
  - 5. Permeability rate shall not be less than 0.5 inches per hour nor more than 2 inches per hour when tested in accordance with ASTM D2434, California Test 220, or other approved methods.
  - 6. Agricultural suitability of topsoil shall be suitable to sustain the growth of the plants specified.
  - 7. The PH shall be in the range of 6.0 to 8.0.
- E. Class "C" topsoil is soil found in place in the designated landscape areas, including soil compacted in place as part of the earthwork. When unclassified topsoil is indicated for use, test samples of on-site soils are required and shall be taken and processed by the Contractor. Test samples and test results, shall be approved by the Engineer prior to proceeding with work. Soil amendments shall be added in accordance to the soils testing laboratory's recommendation upon written approval of the Engineer.
- F. Fertilizers and conditioning materials shall comply with the applicable requirements of the State Agricultural Code. Fertilizing materials shall be packaged, first grade, commercial quality products identified as to source, type of material, weight, and manufacturer's guaranteed analysis. Fertilizing material shall not contain toxic ingredients or fillers in quantities harmful to human, animal, or plant life.
- G. Submit a certificate of compliance stating that the following material substantially meets the Specifications:
  - 1. Soil Sulfur: Guaranteed analysis of 99 percent sulfur. (Powder form)
  - 2. Iron Sulfate: Guaranteed analysis of 20 percent iron derived from ferric and ferrous sulfate and 10 percent sulfur.
  - 3. Gypsum: Hydrated calcium sulfate product containing 23 percent calcium and 18 percent sulfur with a guaranteed analysis of 84 percent calcium sulfate. (Powder form)
  - 4. Commercial Granular product having a chemical analysis of Fertilizer: 12-12-12 unless otherwise specified on Drawings; free-flowing material delivered in unopened sacks. Do not use material which becomes caked or otherwise damaged.

5. Nitrogen Fortified Wood Compost: Derived from ground or processed fir or cedar mulch, or from the bark of fir and pine treated with a non-toxic agent (guaranteed non-toxic at the rate used) to absorb water quickly, (Kellogg's Gro-power or Amend), and shall comply with the following requirements:

a.	Gradation	
	Sieve Size	Percent Passing
	1/4-inch	95 percent minimum
	No. 8	80 percent minimum
	No. 35	30 percent maximum
	Nitrogen Content	(Percent Dry Weight)
	Fir	0.56 to 0.84 percent
	Cedar	0.56 to 0.84 percent
	Fir Bark	0.8 to 1.2 percent
	Pine Bark	0.8 to 1.2 percent

6. Salinity: Maximum saturation extract conductivity 2.5 millimhos/centimeter at 77 degrees Fahrenheit.
7. Wettability: When 1 teaspoon of tap water is applied to 4 cubic inches of the air-dried product, the material shall become completely damp in a period not exceeding 2 minutes. (Kellogg KRA, Sequoia white fir, Long Beach soil prep., Bandini Soil Builder or nitrogenized wood amendment).
8. Organic Fertilizer: Treated dry friable organic compost derived from sewage sludge processed for agricultural use; containing at least 1 percent nitrogen by dry weight, 2 percent phosphoric acid, measure two or more cubic yards per ton and comply with the gradation listed in specification. (Milorganite, Kellogg's Nitrohumus).
9. Decorative Bark: Fir or redwood bark chips in the gradation specified on Drawings.
10. Sand: Washed concrete sand.

H. Tree and Shrub Backfill Planting Mix:

1. 60 percent sandy textured Class "A" top soil.
2. 40 percent nitrogen fortified wood compost.
3. 1 pound 12-12-12 commercial fertilizer per cubic yard of backfill mix.
4. 2 pounds iron sulfate per cubic yard of backfill mix

- I. Mulch: Mulch shall be designated Type 1, or 2 as described in Section 212-1.2.5 of the Reference Specification, Greenbook.
- J. Pre-Emergent Herbicides: Selected from the broad spectrum of commercial brands available subject to approval by the Engineer and not in conflict with regulations governing its use. (Surflan, Betasan, Ronstar, or Gallery).

## PART 3 - EXECUTION

## 1.01 GRADING AND SOIL PREPARATION

- A. Initial rough grading specified in EARTHWORK Section.
- B. Earth and topsoil placement shall include removing existing soil as required to allow for backfilling, spreading, densification, cultivation, raking, fertilization and conditioning of topsoil to within one tenth of a foot of the finish grade.
- C. Sub-soil preparation: After excavation and prior to backfilling, rototill into the top 10 inches of sub-soil 15 pounds of soil sulfur and 300 pounds of gypsum per 1000 square feet. Omit soil sulfur if backfill is deeper than 24 inches.
- D. After sub-soil preparation, backfill planting areas with an approved "Class A" topsoil 18 inches deep unless otherwise indicated on Drawings.
- E. Scarify and cultivate "unclassified" topsoil in planting areas to a finely divided condition to a minimum depth of 8 inches below finish grade. Remove during preliminary grading operation stones over 1 inch in greatest dimension.
- F. In previously paved areas designated for planting, remove the top 18 inches of existing soil and dispose of off the site or as directed by the Engineer. Prepare sub-soil in accordance with Paragraphs 3.1 C and D of this Section and replace with an approved "imported" topsoil.
- G. Do not work topsoil when it is so wet or dry as to cause excessive compaction or forming of hard clods or dust.
- H. After sub-soil preparation, bring planting areas to finish grade including mounds before the spreading of the following additional specified fertilizer and soil conditioning materials:
  - 1. Mechanically spread the following amounts of fertilizer or soil conditioning materials onto the top 6 inches of top soil at a uniform rate per 1,000 square feet of planting area:
    - a. 6 cubic yards of nitrogen fortified wood compost.
    - b. 10 pounds of soil sulfur.
    - c. 15 pounds of a 12-12-12 commercial fertilizer.
  - 2. The quantities of materials required for planting areas shall be at the job-site. Furnish the Engineer with delivery tickets before spreading to verify the source, kind, and quantities delivered.
  - 3. After spreading of fertilizer and soil conditioning materials, uniformly cultivate materials into the upper 6 inches of soil using equipment operated in at least 2 directions approximately at right angles. Make the resulting soil friable.

## I. Finish Grading:

1. Make finish grade smooth, uniform, and free of abrupt grade changes and depressions to ensure surface drainage.
2. Finish grade below adjacent paving, curbs, or headers shall be 2 inches in shrub or ground cover areas and one 1 inch in lawn areas.
3. Water soil after spreading of fertilizer and soil conditioning materials, and allow it to settle to a stable surface. After the soil has dried out to a workable condition, regrade, rake, and smooth to the required grades and contours. Finished surfaces to be clean of litter and debris prior to planting.

## J. Construct contour mounds with an approved "Class "A" topsoil and soil amendments on top of the specified top soil depth. Place mounds and water settle to the satisfaction of the Engineer and construct in a manner to minimize settlement and erosion and to provide footing for placement of boulders. Mound contours dimension refer to height above finish grade.

## K. Trenching when done after completion of soil conditioning or finish grading shall be backfilled so that the specified topsoil thickness in the trench is restored.

## 2.01 MULCHING

- A. Spread a 3" deep layer of shredded bark mulch in all landscaped areas except lawn areas.

## 3.01 APPLICATION OF PRE-EMERGENT HERBICIDES

- A. Immediately after planting, treat non-seeded planting areas with a pre-emergent weed and grass seed control agent; spray or spread on in accordance with the manufacturer's written recommendations.
- B. Check manufacturer's list of ornamental to determine toxicity with regard to selection of type of material used.

## 4.01 MAINTENANCE

- A. Maintain areas on a continuous basis as they are completed during the progress of the work and during the establishment period. Continue to maintain them until final acceptance by Long Beach Gas & Oil. Maintenance shall include continuous operation of watering, weeding, trimming, and rodent control, reseeding, plant replacement (irrespective of cause) or other operations necessary to assure normal plant growth.
- B. Keep planted area free of debris and weeds. Cultivate at intervals not to exceed 10 days.
- C. Depressions caused by vehicles or foot traffic shall be filled with topsoil and leveled.



**5.01 FINAL INSPECTION AND ACCEPTANCE**

- A. Upon completion of the plant establishment period, a final inspection for acceptance will be performed by the Engineer.
- B. If the plant establishment period is completed ahead of other work included in the Contract, the maintenance of planted areas shall be the responsibility of Contractor until other work has been completed and accepted by the Long Beach Gas & Oil.
- C. Upon completion of landscape work and before final acceptance, remove tools, surplus materials, apparatus, debris, weeds, and exterminate rodents from the site. Leave the site in a neat, clean condition, acceptable to the Engineer. Wash, clean, and leave paved areas without stains.

**END OF SECTION 02920**



City of Long Beach

Department of Financial Management  
Division of Procurement  
333 W Ocean Blvd. 7<sup>th</sup> floor, Long Beach, California 90802  
p 562.570.5384  
Lenore.Blueford@longbeach.gov

October 24, 2011

NOTICE TO BIDDERS

ADDENDUM NO. 7

G-285 Civil Improvements

The following are the questions and answers for the original Invitation to Bid No. G-285, Civil Improvements. Please acknowledge receipt of this addendum by signing and returning with your bid.

Questions and answers are as follows:

1Q. How much dirt will be left on-site by existing contractor?

1A. The existing contractor will not leave any extra dirt on site.

2Q. Per addendum 1, indicates to include Proforma Contract. Is that correct. Could you issue an exact list of documents you want included in the bid package?

- 2A. a. Notice to Bidders Addendum No. 1 dated 10/17/11  
b. Bidders Bond  
c. Equal Benefits Attachment "2" (4-pages)  
d. Reference page  
e. List of Subcontractors  
f. Information to Comply with Labor Code Sec 2810  
g. Noncollusion Affidavit  
h. Workers' Compensation Certification  
i. Addenda Acknowledgment / Signature Page  
Note: If in doubt send entire package.

3Q. In addendum 1 you have a form for Excess Liability Endorsement. Will this be a requirement for the contractor who is successful? What are the parameters of the coverage and cost?

3A. Yes. Please see insurance requirements attached. Check with your insurance agency for your cost, it must be built into you bid price.

If you have any questions please submit to [Lenore.Blueford@longbeach.gov](mailto:Lenore.Blueford@longbeach.gov)

Please take a moment to review these changes when developing your bid.

Prepared By: Lenore Blueford Date: October 24, 2011  
Buyer

Acknowledged By: [Signature] Date: 10/25/11  
President

Firm of: MOALEJ Builders, Inc.



City of Long Beach

Department of Financial Management  
Division of Procurement  
333 W Ocean Blvd. 7<sup>th</sup> floor, Long Beach, California 90802  
p 562.570.6200

October 17, 2011

NOTICE TO BIDDERS

ADDENDUM NO. 1

G-285 CIVIL IMPROVEMENT BID & SPECIFICATIONS

TO ALL PROSPECTIVE BIDDERS:

The following documents and forms will be uploaded as addendums for all prospective bidders to complete.

- Bid Bond
- Proforma Contract
- Equal Benefits Ordinance (EBO)
- Small Business Enterprise Program (SBE)
- Bid Protest Procedures
- References
- All other docs/forms that are standard but were not included in the specifications.

Acknowledged By: MOALET BUILDERS, INC.  
Company Name

REZA MOALET  
Print Name

President  
Title

[Signature]  
Signature

10/24/11  
Date

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

State of California  
County of Los Angeles } ss

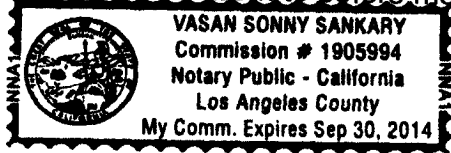
(1) REZA MOALEJ, being first duly sworn, deposes and says that he or she is (2) President of (3) MOALEJ Builders, Inc. the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

(4)  REZA MOALEJ

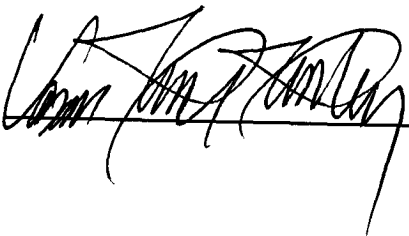
Subscribed and sworn to before me on

OCT 25, 2011

BY REZA MOALEJ



Notary Seal

(5) 

- (1) Name of person signing on behalf of Contractor (must be authorized to sign contracts)
- (2) Title
- (3) Name of Contractor
- (4) Signature of Contractor
- (5) Signature of Notary

## ADDENDA ACKNOWLEDGMENT / SIGNATURE PAGE

If Bidder is an individual, his/her signature shall be set forth below. If the Bidder is a joint venture, the name of the joint venture shall be set forth below, with the signature of an authorized representative of each venture. If the Bidder is a partnership, the name of the partnership shall be set forth below, together with the signature of the general partner. If the Bidder is a limited liability company, the legal name of the company shall be set forth below, with the signature of a member or manager authorized to bind the company. If the Bidder is a corporation, the legal name of the corporation shall be set forth below, together with the signature of an officer of the corporation.

Is the Bidder a Minority-Owned or Woman-Owned Business Enterprise?  
(Please check one or both, if applicable.)

Yes / No  
(Circle One)

Woman-Owned \_\_\_\_\_

Minority-Owned \_\_\_\_\_ Which Racial Minority? \_\_\_\_\_

This information will be used for statistical analysis only. The contract will be awarded to the lowest responsible bidder.

Bidder hereby acknowledges receipt of Addendum No. AIM AIM AIM  
1 2 3 4 5 6 7  
(Initial above all appropriate numbers)

Respectfully submitted,

MOALEJ BUILDERS, INC.  
Legal Name of Company

By [Signature]  
Signature

REZA MOALEJ / President  
Print Name / Title

\_\_\_\_ Individual  
\_\_\_\_ Joint Venture  
\_\_\_\_ Partnership (General)  
\_\_\_\_ Partnership (Limited)  
\_\_\_\_ Limited Liability Company  
☒ Corporation

\_\_\_\_  
Names of Other General Partners

\_\_\_\_  
Names of Other Partners

State Where Registered as LLC \_\_\_\_\_ Incorporated Under the Laws of the State of California

Business Address 4335 VAN NUYS BLVD. #102 SHERMAN OAKS CA 91403  
(Actual Address - Do NOT list a post office box)

Business Telephone: (310) 926-2290 Fax Number (310) 744-0106

Under Chapter 9 of Division 3 of the Business and Professions Code, (Contractors' License Law), of the State of California, the undersigned has been issued a Class A, B, C10, C21, C36 License, Number 933331; license termination date is 06/30/2013.

Contractor's Employer Identification Number or Social Security Number is [REDACTED]

Under Chapter 1, Article VI, Municipal Code of the City of Long Beach, the undersigned has been issued license number 933331; license termination date is 06/30/2013.

Address listed on license 4335 VAN NUYS BLVD #102 SHERMAN OAKS CA  
91403

## **EQUAL BENEFITS ORDINANCE DISCLOSURE**

As a condition of being awarded a contract with the City of Long Beach ("City"), the selected Contractor/Vendor ("Contractor") may be required during the performance of the Contract, to comply with the City's nondiscrimination provisions of the Equal Benefits Ordinance ("EBO") set forth in the Long Beach Municipal Code section 2.73 et seq. The EBO requires that during the performance of the contract, the Contractor shall provide equal benefits to its employees with spouses and employees with domestic partners. Benefits include but are not limited to, health benefits, bereavement leave, family medical leave, member ship and membership discounts, moving expenses, retirement benefits and travel benefits. A cash equivalent payment is permitted if an employer has made all reasonable efforts to provide domestic partners with access to benefits but is unable to do so. A situation in which a cash equivalent payment might be used if where the employer has difficulty finding an insurance provider that is willing to provide domestic partner benefits.

The EBO is applicable to the following employers:

- For-profit employers that have a contract with the City for the purchase of goods, services, public works or improvements and other construction projects in the amount of \$100,000 or more
- For-profit entities that generate \$350,000 or more in annual gross receipts leasing City property pursuant to a written agreement for a term exceeding 29 days in any calendar year

Contractors who are subject to the EBO must certify to the City before execution of the contract that they are in compliance with the EBO by completing the EBO Certification Form, attached, or that they have been issued a waiver by the City. Contractors must also allow authorized City representatives access to records so the City can verify compliance with the EBO.

The EBO includes provisions that address difficulties associated with implementing procedures to comply with the EBO. Contractors can delay implementation of procedures to comply with the EBO in the following circumstances:

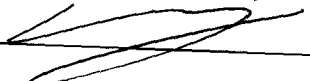
- 1) By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or
- 2) At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or
- 3) Upon expiration of the contractor's current collective bargaining agreement(s).

Compliance with the EBO

If a contractor has not received a waiver from complying with the EBO and the timeframe within which it can delay implementation has expired but it has failed to comply with the EBO, the Contractor may be deemed to be in material breach of the Contract. In the event of a material breach, the City may cancel, terminate or suspend the City agreement, in whole or in part. The City also may deem the Contractor an irresponsible bidder and disqualify the Contractor from contracting with the City for a period of three years. In addition, the City may assess liquidated damages against the Contractor which may be deducted from money otherwise due the Contractor. The City may also pursue any other remedies available at law or in equity.

By my signature below, I acknowledge that the Contractor understands that to the extent it is subject to the provisions of the Long Beach Municipal Code section 2.73, the Contractor shall comply with this provision.

Printed Name: REZA MOALEJ Title: President

Signature:  Date: 10/24/11

Business Entity Name: MOALEJ BUILDERS, INC.

## EQUAL BENEFITS ORDINANCE CERTIFICATION OF COMPLIANCE

### Section 1. CONTRACTOR/VENDOR INFORMATION

Name: MOALFJ Builders, Inc. Federal Tax ID No. [REDACTED]  
Address: 4335 Van Nuys Blvd #102  
City: Sherman Oaks State: CA ZIP: 91403  
Contact Person: REZA MOALFJ Telephone: 310-926-2290  
Email: REZA@MOALFJBUILDERS.COM Fax: 310-744-0106

### Section 2. COMPLIANCE QUESTIONS

- A. The EBO is inapplicable to this Contract because the Contractor/Vendor has no employees.        Yes   X   No
- B. Does your company provide (or make available at the employees' expense) any employee benefits?        Yes   X   No  
(If "yes," proceed to Question C. If "no," proceed to section 5, as the EBO does not apply to you.)
- C. Does your company provide (or make available at the employees' expense) any benefits to the spouse of an employee?  
       Yes   X   No
- D. Does your company provide (or make available at the employees' expense) any benefits to the domestic partner of an employee?  
       Yes   X   No (If you answered "no" to both questions C and D, proceed to section 5, as the EBO is not applicable to this contract. If you answered "yes" to both Questions C and D, please continue to Question E. If you answered "yes" to Question C and "no" to Question D, please continue to section 3.)
- E. Are the benefits that are available to the spouse of an employee identical to the benefits that are available to the domestic partner of an employee?  
       Yes        No  
(If "yes," proceed to section 4, as you are in compliance with the EBO. If "no," continue to section 3.)



Section 3. PROVISIONAL COMPLIANCE

- A. Contractor/vendor is not in compliance with the EBO now but will comply by the following date:

\_\_\_\_\_ By the first effective date after the first open enrollment process following the contract start date, not to exceed two years, if the Contractor/vendor submits evidence of taking reasonable measures to comply with the EBO; or

\_\_\_\_\_ At such time that the administrative steps can be taken to incorporate nondiscrimination in benefits in the Contractor/vendor's infrastructure, not to exceed three months; or

\_\_\_\_\_ Upon expiration of the contractor's current collective bargaining agreement(s).

- B. If you have taken all reasonable measures to comply with the EBO but are unable to do so, do you agree to provide employees with a cash equivalent? (The cash equivalent is the amount of money your company pays for spousal benefits that are unavailable for domestic partners.)

\_\_\_\_\_ Yes \_\_\_\_\_ No

Section 4. REQUIRED DOCUMENTATION

At time of issuance of purchase order or contract award, you may be required by the City to provide documentation (copy of employee handbook, eligibility statement from your plans, insurance provider statement, etc.) to verify that you do not discriminate in the provision of benefits.

Section 5. CERTIFICATION

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that I am authorized to bind this entity contractually. By signing this certification, I further agree to comply with all additional obligations of the Equal Benefits Ordinance that are set forth in the Long Beach Municipal Code and in the terms of the contract of purchase order with the City.

Executed this 24 day of October, 2011, at Sherman Oaks, CA

Name REZA MOALTI

Signature 

Title President

Federal Tax ID No. 

## **Bid Protest Procedures**

### **Section 1: Who May Protest**

Only a bidder who has actually submitted a bid proposal is eligible to protest a bid. The City will not accept or entertain bid protests from manufacturers, vendors, suppliers, subcontractors or the like. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.

### **Section 2: Time for Protest**

A bidder desiring to protest a bid shall file the protest within five (5) business days following the date on which bids were opened. The City Engineer must receive the protest by the close of business on the fifth (5<sup>th</sup>) business day following the bid opening.

### **Section 3: Form of Protest**

The protest must be in writing and signed by the individual who signed the bid or, if the bidder is a corporation, by an officer of the corporation, and addressed to the City Engineer. A protest shall not be made by e-mail or fax and the City will not accept such. A protest must set forth a complete and detailed statement of the grounds for the protest and include all relevant information to support the grounds stated, must refer to the specific portion(s) of the Contract Documents upon which the protest is based, and shall include a valid e-mail address, street address and phone number sufficient to ensure the City's response will be received.

### **Section 4: Additional Information**

Once the protest is received by the City Engineer, the City will not accept additional information on the protest unless the City itself requests it. In that case, the additional information must be submitted within three (3) business days after the request is made and must be received by the City Engineer by the close of business on the third (3<sup>rd</sup>) business day.

### **Section 5: City Response to Protest**

The City Engineer or designee will respond, by e-mail and regular mail to the addresses provided in the protest, with a decision regarding the protest within ten (10) business days following receipt of the protest or, if applicable, the receipt of requested additional information. This decision shall be final.

### **Section 6: Limitation of Remedy**

The procedure and time limits set forth herein are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest. The bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue a bid protest, including filing a Government Code Claim or initiation of legal proceedings.

Issued: \_\_\_\_\_

Director of Public Works

Date: \_\_\_\_\_

8/17/11

(To Be Filled In When Surety Is A Corporation)

Bond No. 1000855285-11  
Premium Included in BBSU

**BIDDER'S BOND**

CITY OF LONG BEACH

KNOW ALL MEN BY THESE PRESENTS: That we, Moalej Builders, Inc.,  
\_\_\_\_\_, as Principal, and American Contractors  
Indemnity Company, \_\_\_\_\_, a corporation, organized and existing under and by virtue of the  
laws of the State of California \_\_\_\_\_, with its principal place of business in the City of Los Angeles,  
\_\_\_\_\_, State of CA \_\_\_\_\_, with a paid up capital of not less than Two Hundred  
Fifty Thousand Dollars (\$250,000.00), incorporated, as aforesaid, for the purpose of making, guaranteeing or  
becoming a surety upon bonds and undertakings required or authorized by law, and having heretofore complied  
with all of the requirements of law of the State of California regulating the formation of admission of such  
corporation to transact business in this State, as Surety, are held firmly bound unto the City of Long Beach, a  
municipal corporation, organized under the laws of the State of California and situated in the County of Los  
Angeles, in the sum of Ten Percent of the Total Amount of the Bid in Dollars----  
\_\_\_\_\_, Dollars (\$ 10% \_\_\_\_\_), lawful money of the United States of America,  
for the payment whereof the Principal and sureties bind themselves, their heirs, executors, administrators,  
successors and assigns, jointly and severally, firmly by these presents

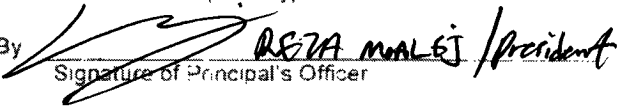
The condition of the above obligation is such that  
New Parking Lot Paving at 2400 E. Spring St., Long Beach, CA.

If the bid of said Principal hereto attached shall be accepted by the City of Long Beach and the contract  
for delivery of goods, material, equipment or supplies, or for the furnishing of services, materials, supplies, labor  
and performing work, all as specified in the specifications, notice inviting bids and bid, be awarded to the Principal,  
and if Principal shall enter into a contract therefore with the City of Long Beach within ten (10) days after the  
contract is delivered to Principal for signature, and Principal shall, in connection with said contract, furnish and  
deliver to the City of Long Beach a good and sufficient faithful performance bond if required in the notice inviting  
bids, and a good and sufficient labor and material (payment) bond if required in the notice inviting bids, with surety  
or sureties, then this obligation shall be void, otherwise it shall remain in full force and effect

Moalej Builders, Inc.

Name of Principal - Typed

By

  
Signature of Principal's Officer

American Contractors Indemnity Company

Name of Surety

By

  
Signature of Surety's

Attorney-in-Fact

Pietro Daniel Micciche  
Attorney-in-Fact

(Principal and Surety Shall Attach Notary's Certificate of Acknowledgement of Execution)

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Los Angeles

On October 20, 2011 before me, M. S. Rodriguez, Notary Public  
Date Here Insert Name and Title of the Officer

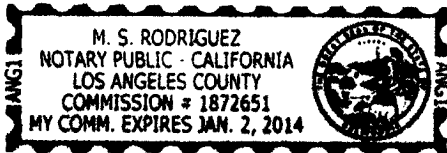
personally appeared PIETRO DANIEL MICCICHE  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature M. S. Rodriguez  
Signature of Notary Public



Place Notary Seal Above

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☒ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
Top of thumb here

Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☐ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
Top of thumb here

**POWER OF ATTORNEY**

**AMERICAN CONTRACTORS INDEMNITY COMPANY UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY**

KNOW ALL MEN BY THESE PRESENTS: That American Contractors Indemnity Company, a California corporation, United States Surety Company, a Maryland corporation and U.S. Specialty Insurance Company, a Texas corporation (collectively, the "Companies"), do by these presents make, constitute and appoint:

Patricia Zenizo or Pietro Daniel Micciche of Los Angeles, California

its true and lawful Attorney(s)-in-fact, each in their separate capacity if more than one is named above, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety, providing the bond penalty does not exceed \*\*\*\*\*Three Million\*\*\*\*\* Dollars (\$ \*\*3,000,000.00\*\*).

This Power of Attorney shall expire without further action on March 18, 2015. This Power of Attorney is granted under and by authority of the following resolutions adopted by the Boards of Directors of the Companies:

*Be it Resolved*, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

*Attorney-in-Fact* may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

*Be it Resolved*, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, The Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 31<sup>st</sup> day of March, 2011.

**AMERICAN CONTRACTORS INDEMNITY COMPANY UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY**

Corporate Seals



By:

  
Daniel P. Aguilar, Vice President

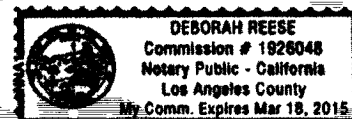
State of California

County of Los Angeles SS:

On this 31<sup>st</sup> day of March, 2011, before me, Deborah Reese, a notary public, personally appeared Daniel P. Aguilar, Vice President of American Contractors Indemnity Company, United States Surety Company and U.S. Specialty Insurance Company who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

Signature Deborah reese (Seal)



I, Jeannie J. Kim, Assistant Secretary of American Contractors Indemnity Company, United States Surety Company and U.S. Specialty Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Los Angeles, California this 20th day of October, 2011

Corporate Seals



Bond No. 1000855285-11  
Agency No. 3057

  
Jeannie J. Kim, Assistant Secretary

How long  
How much  
chg orders  
issues  
rating

Moalej

# REFERENCES:

The Contractor shall furnish a list of five current customers, including company name, street address, telephone number and contact person, which have been furnished service quoted. The City intends to contact these customers to determine reliability, contractor performance and other such information. Failure to include customer's references may void bid, if the City has no prior experience with bidder.

The following inventory is provided for information purposes only. The quantities stated herein are only an indication of the City's current inventory the City reserves the right to increase or decrease these quantities without penalty. There is no guarantee or representation that any or all of said inventory will require repair.

- 951-202-3451
- 1 

Business Name:	Ontario School District
Address:	950 West D Street Ontario CA 91762
Contact Name:	<del>John Simmons</del> John Simmons
Contact Phone #:	909-477-6915
Type of Work Performed:	Concrete, Asphalt paving
  - 2 

Business Name:	Anaheim Union School District
Address:	501 Crescent Way Anaheim CA 92801
Contact Name:	Ralph
Contact Phone #:	714-448-9158
Type of Work Performed:	Demo, parking lot site work

1-on project \$150K  
DSA project - inspector always on site. tried a couple of it. Change orders that weren't (2000) acceptable. 4 rate
  - 3 

Business Name:	City of Bellflower
Address:	9945 Flower St. Bellflower CA 90706
Contact Name:	Bernardo
Contact Phone #:	562-760-3250
Type of Work Performed:	ADA upgrades 5th a little sloppy on change order documents

3-4 month late last yr. 2 phases  
ADA & Gym window. \$100K  
4 rate 4 1/2 rate
  - 4 

Business Name:	County of San Bernardino
Address:	385 N. Arrowhead Ave. San Bernardino CA 92415
Contact Name:	Bob Marlin
Contact Phone #:	888-818-8988
Type of Work Performed:	Airport Hangers & Flat Concrete, Asphalt paving

1 project 1 1/2 yrs ago foundation work.  
\$400K; 3 1/2 \$4 rate
  - 5 

Business Name:	Conejo Recreation & Park District
Address:	403 W. Hillcrest Dr. Thousand Oaks CA 91360
Contact Name:	Shauna
Contact Phone #:	805-495-6471
Type of Work Performed:	Spreading concrete, Hardscape fencing

1-project 1 1/2 yr ago - easy to work with;  
5 rate \$134K

Moalej

## REFERENCES:

The Contractor shall furnish a list of five current customers, including company name, street address, telephone number and contact person, which have been furnished service quoted. The City intends to contact these customers to determine reliability, contractor performance and other such information. Failure to include customer's references may void bid, if the City has no prior experience with bidder.

The following inventory is provided for information purposes only. The quantities stated herein are only an indication of the City's current inventory the City reserves the right to increase or decrease these quantities without penalty. There is no guarantee or representation that any or all of said inventory will require repair.

- 1
 

Business Name:	Ontario School District
Address:	950 West D Street Ontario CA 91762
Contact Name:	<del>Robert</del> John Simmins
Contact Phone #:	909-477-6915
Type of Work Performed:	Concrete, Asphalt paving
- 2
 

Business Name:	Anaheim Union School District
Address:	501 Crescent Way Anaheim CA 92801
Contact Name:	Ralph
Contact Phone #:	714-448-9158
Type of Work Performed:	Demo, parking lot site work
- 3
 

Business Name:	City of Bellflower
Address:	9945 Flower St. Bellflower CA 90706
Contact Name:	Bernardo
Contact Phone #:	562-760-3250
Type of Work Performed:	ADA upgrades
- 4
 

Business Name:	County of San Bernardino
Address:	385 N. Arrowhead Ave. San Bernardino CA 92415
Contact Name:	Bob Marlin
Contact Phone #:	888-818-8988
Type of Work Performed:	Airport Hangars & Flat Concrete, Asphalt paving
- 5
 

Business Name:	Conejo Recreation & Park District
Address:	403 W. Hillcrest Dr. Thousand Oaks CA 91360
Contact Name:	Shauna
Contact Phone #:	805-495-6471
Type of Work Performed:	Concrete, Hardscape

# EXHIBIT “B”



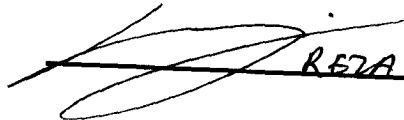
## WORKERS' COMPENSATION CERTIFICATION

In accordance with California Labor Code Sections 1860 and 3700, I certify that I am aware of the provisions of Section 3700 which requires every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with said provisions before commencing the performance of the Work of this contract.

Contractor's Name:

MOALEJ Builders, Inc.

Signature of Contractor, or a corporate officer of Contractor, or a general partner of Contractor

 REZA MOALEJ

Title: President

Date: 10/24/11

# EXHIBIT “C”

## INFORMATION TO COMPLY WITH LABOR CODE SEC. 2810

To comply with Labor Code Sec. 2810, Contractor shall complete and submit this Information Sheet which shall be incorporated into and be a part of the Contract:

1) Workers' Compensation Insurance:

- A. Policy Number: 238-0011947-10
- B. Name of Insurer (NOT Broker): State Fund
- C. Address of Insurer: 5860 Owens Dr. Pleasanton CA 94588
- D. Telephone Number of Insurer: 877-405-4545

2) For vehicles owned by Contractor and used in performing work under this Contract:

- A. VIN (Vehicle Identification Number): N/A
- B. Automobile Liability Insurance Policy Number: N/A
- C. Name of Insurer (NOT Broker): N/A
- D. Address of Insurer: N/A
- E. Telephone Number of Insurer: N/A

3) Address of Property used to house workers on this Contract, if any: N/A

4) Estimated total number of workers to be employed on this Contract: 3

5) Estimated total wages to be paid those workers: 5,000

6) Dates (or schedule) when those wages will be paid: 01/01/12

(Describe schedule: For example, weekly or every other week or monthly)

7) Estimated total number of independent contractors to be used on this Contract: 3

8) Taxpayer's Identification Number: [REDACTED]

# EXHIBIT “D”

## LIST OF SUBCONTRACTORS

In accordance with the requirements provided in the "Subletting and Subcontracting Fair Practices Act" Division 2 Part 1, Chapter 4 of the California Public Contract Code, the Bidder shall set forth hereon the name and location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater. The prime contractor shall set forth thereon the portion of the work (type and dollar value) that will be done by each subcontractor. The prime contractor shall list only one subcontractor for each portion as defined by the prime contractor in his or her bid. Information requested, other than the sub contractor's name and location of business and the portion of work that will be done by each subcontractor may be submitted by the prime contractor within 24 hours after the deadline for submission of bids.

Name	<u>Pioneer Paving</u>	Type of Work	<u>Paving</u>
Address	<u>1225 Buffalo trail</u>		
City	<u>Glendora CA 91740</u>	Dollar Value of Subcontract	<u>\$ 200,000</u>
Phone No.	<u>323-371-4459</u>		
License No.	<u>173804</u>		

Name	<u>E2 line Striping</u>	Type of Work	<u>Striping</u>
Address	<u>7286 melrose st. unit A</u>		
City	<u>Buena Park CA 90621</u>	Dollar Value of Subcontract	<u>\$ 15,000</u>
Phone No.	<u>714-994-1701</u>		
License No.	<u>921810</u>		

Name	<u>Clear water Services Inc.</u>	Type of Work	<u>Erosion control</u>
Address	<u>636 W. Southern Ave.</u>		
City	<u>Orange CA 92865</u>	Dollar Value of Subcontract	<u>\$ 10,000</u>
Phone No.	<u>714-575-5034</u>		
License No.	<u>929611</u>		

Name	_____	Type of Work	_____
Address	_____		
City	_____	Dollar Value of Subcontract	<u>\$</u> _____
Phone No.	_____		
License No.	_____		

Name	_____	Type of Work	_____
Address	_____		
City	_____	Dollar Value of Subcontract	<u>\$</u> _____
Phone No.	_____		
License No.	_____		

BOE-400-DP (FRONT) REV 2. (8-05)  
**APPLICATION FOR  
USE TAX DIRECT PAYMENT PERMIT**

STATE OF CALIFORNIA  
BOARD OF EQUALIZATION

*Please type or print clearly. Read instructions on reverse before completing this form.*

**SECTION I – BUSINESS INFORMATION**

NAME OF BUSINESS OR GOVERNMENTAL ENTITY	SALES/USE TAX PERMIT NUMBER
BUSINESS ADDRESS (street)	CONSUMER USE TAX ACCOUNT NUMBER
CITY, STATE, & ZIP CODE	If applicant is applying for either a sales/use tax permit or a consumer use tax account in addition to a use tax direct payment permit check here <input type="checkbox"/>
MAILING ADDRESS (street address or po box if different from business address)	
CITY, STATE, & ZIP CODE	NAME UNDER WHICH BUSINESS IS TO BE TRANSACTED IF DIFFERENT THAN ABOVE

**SECTION II – MULTIPLE BUSINESS LOCATIONS**

LIST BELOW THE BUSINESS AND MAILING ADDRESSES OF ALL LOCATIONS WHERE PROPERTY PURCHASED UNDER A USE TAX DIRECT PAYMENT CERTIFICATE WILL BE USED. IF ADDITIONAL SPACE IS NEEDED, ATTACH A SEPARATE SHEET

1. BUSINESS ADDRESS	4. BUSINESS ADDRESS
MAILING ADDRESS	MAILING ADDRESS
2. BUSINESS ADDRESS	5. BUSINESS ADDRESS
MAILING ADDRESS	MAILING ADDRESS
3. BUSINESS ADDRESS	6. BUSINESS ADDRESS
MAILING ADDRESS	MAILING ADDRESS

**SECTION III – CERTIFICATION STATEMENT**

I hereby certify that I qualify for a *Use Tax Direct Payment Permit* for the following reason: *(Please check one of the following)*

☐ I have purchased or leased for my own use tangible personal property subject to use tax at a cost of five hundred thousand dollars (\$500,000) or more in the aggregate, during the calendar year immediately preceding this application for the permit. I have attached a "Statement of Cash Flows" or other comparable financial statements acceptable to the Board for the calendar year immediately preceding the date of application and a separate statement attesting that the qualifying purchases were purchases that were subject to use tax.

☐ I am a county, city, city and county, or redevelopment agency.

I also agree to self-assess and pay directly to the Board of Equalization any use tax liability incurred pursuant to my use of a *Use Tax Direct Payment Permit*.

*The above statements are hereby certified to be correct to the knowledge and belief of the undersigned, who is duly authorized to sign this application.*

SIGNATURE	TITLE
NAME (typed or printed)	DATE

*(See reverse side for general information and filing instructions)*

## USE TAX DIRECT PAYMENT PERMIT (General Information and Filing Instructions)

Revenue and Taxation Code section 7051.3 authorizes the State Board of Equalization to issue a *Use Tax Direct Payment Permit* to qualified applicants. This permit allows purchasers and lessees of tangible personal property (other than lessees of motor vehicles the lease of which is subject to the terms of section 7205.1 of the Sales and Use Tax Law) to self-assess and pay use taxes directly to the Board instead of to the vendor or lessor from whom the property is purchased or leased.

Permit holders will be provided with a *Use Tax Direct Payment Exemption Certificate* which they can issue to retailers and lessors when they purchase tangible personal property subject to use tax or make qualified leases of tangible personal property. Vendors who timely take the certificate in good faith from a permit holder are relieved of the duty to collect use taxes on the sales for which the certificate was issued. Permit holders who acquire property under a certificate must self-assess and report the use taxes directly to the Board on their tax returns, and allocate the local taxes to the county, city, city and county, or redevelopment agency in which the property is first used. Permit holders who fail to properly pay any use taxes that are due on property for which a certificate was given are subject to interest and penalties assessments in addition to their tax liability.

To qualify for a *Use Tax Direct Payment Permit*, an applicant must meet the following conditions:

- (1) The applicant must agree to self-assess and pay directly to the Board any use tax which is due on property for which a use tax direct payment exemption certificate was given; and
- (2) The applicant must certify to the Board either of the following:
  - (A) The applicant has purchased or leased for its own use tangible personal property subject to use tax which cost five hundred thousand dollars (\$500,000) or more in the aggregate, during the calendar year immediately preceding the application for the permit; or
  - (B) The applicant is a county, city, city and county, or redevelopment agency.

Persons wishing to obtain a use tax direct payment permit must be pre-qualified and either hold a California seller's permit or a consumer use tax account.

Persons other than governmental entities who currently hold either a California seller's permit or a consumer use tax account must complete the application for a *Use Tax Direct Payment Permit*, sign the certification statement attesting that they qualify for a permit under conditions of Part (2)(A) above, and submit a "Statement of Cash Flows" or other comparable financial statements acceptable to the board for the calendar year immediately preceding the date of application which discloses total purchases of property and equipment for own use and a separate statement under company letterhead certifying that five hundred thousand dollars (\$500,000) or more of such purchases were subject to use tax.

Persons other than governmental entities who are not required to hold a seller's permit and who do not currently hold a consumer use tax account must obtain a consumer use tax account and then complete the application for a *Use Tax Direct Payment Permit*, sign the certification statement attesting that they qualify for a permit under the conditions of Part (2)(A) above and submit a "Statement of Cash Flows" or other comparable financial statements acceptable to the board for the calendar year immediately preceding the date of application which discloses total purchases of property and equipment for own use and a separate statement under company letterhead certifying that five hundred thousand dollars (\$500,000) or more of such purchases were subject to use tax.

Governmental entities who currently hold either a California seller's permit or a consumer use tax account must complete the application for a *Use Tax Direct Payment Permit*, sign the certification statement attesting that they qualify for a permit under the conditions of Part (2)(B) above, and submit an additional statement to that effect under official letterhead and signed by an authorized governmental representative.

Governmental entities who do not hold a California seller's permit or a consumer use tax account must obtain a consumer use tax account and then complete the application for a *Use Tax Direct Payment Permit*, sign the certification statement attesting that they qualify for a permit under the conditions of Part (2)(B) above, and submit an additional statement to that effect under official letterhead and signed by an authorized governmental representative.

The completed *Application for Use Tax Direct Payment Permit*, certification statement, and qualifying documentation should be returned to the address shown below. Upon determination that the applicant qualifies, a *Use Tax Direct Payment Permit* and a *Use Tax Direct Payment Exemption Certificate* will be mailed to the applicant.

If you would like additional information regarding the *Use Tax Direct Payment Permit* or need assistance in completing this application, you can call 916-445-5167, or write to the Board of Equalization, Compliance Policy Unit, P.O. Box 942879, Sacramento, CA 94279-0040.

BOND FOR FAITHFUL PERFORMANCE

Premium Based On  
Final Contract Price

KNOW ALL MEN BY THESE PRESENTS: That we, MOALEJ BUILDERS, INC., a California corporation, as PRINCIPAL, and \*, located at \*\*, incorporated under the laws of the State of California, admitted as a surety in the State of California, and authorized to transact business in the State of California, as SURETY, are held and firmly bound unto the CITY OF LONG BEACH, CALIFORNIA, a municipal corporation, in the sum of SEVEN HUNDRED FORTY-THREE THOUSAND SIX HUNDRED FIFTY-TWO DOLLARS (\$743,652), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our respective heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**\*American Contractors Indemnity Company**

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

**\*\*601 S. Figueroa St., Suite 1600, Los Angeles, CA. 90017**

WHEREAS, said Principal has been awarded and is about to enter the annexed contract (incorporated herein by this reference) with said City of Long Beach for the Civil Improvements at Long Beach Gas and Oil Department and is required by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal shall well and truly keep and faithfully perform all of the covenants, conditions, agreements and obligations of said contract on said Principal's part to be kept, done and performed, at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect;

PROVIDED, that any modifications, alterations or changes which may be made in said contract, or in the work to be done, or in the services to be rendered, or in any materials or articles to be furnished pursuant to said contract, or the giving by the City of any extension of time for the performance of said contract, or the giving of any other forbearance upon the part of either the City or the Principal to the other, shall not in any way release the Principal or the Surety, or either of them, or their respective heirs, administrators, executors, successors or assigns, from any liability arising hereunder, and notice to the Surety of any such modifications, alterations, changes, extensions or forbearances is hereby waived. No premature payment by said City to said Principal shall release or exonerate the Surety, unless the officer of said City ordering the payment shall have actual notice at the time the order is made that such payment is in fact premature, and then only to the extent that such payment shall result in actual loss to the Surety, but in no event in an amount more than the amount of such premature payment.

IN WITNESS WHEREOF, the above-named Principal and Surety have executed, or caused to be executed, this instrument with all of the formalities required by law on this 20th day of February, 2012.

Moalej Builders, Inc.

Contractor

By: [Signature]

Name: REGA MALET

Title: President

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to form this 27th day  
of February, 2012.

ROBERT E. SHANNON City Attorney

By: [Signature]

Deputy City Attorney

American Contractors Indemnity Company

SURETY, admitted in California

By: [Signature]

Name: Pietro Daniel Micciche

Title: Attorney-in-Fact

Telephone: 323)663-7814

Approved as to sufficiency this 29th day  
of February, 2012.

By: [Signature]

City Manager/City Engineer

- NOTE: 1. Execution of the bond must be acknowledged by both PRINCIPAL and SURETY before a Notary Public and a Notary's certificate of acknowledgment must be attached.
2. A corporation must execute the bond by 2 authorized officers or, if executed by a person not listed in Sec. 313, Calif. Corp. Code, then a certified copy of a resolution of its Board of Directors authorizing execution must be attached.



# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

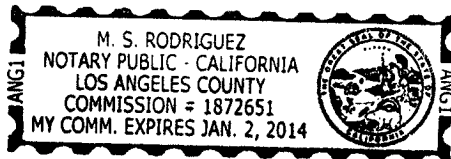
State of California

County of Los Angeles

On February 20, 2012 before me, M. S. Rodriguez, Notary Public  
Date Here Insert Name and Title of the Officer

personally appeared PIETRO DANIEL MICCICHE  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



Place Notary Seal Above

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature M. S. Rodriguez  
Signature of Notary Public

## OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☒ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
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Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☐ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
Top of thumb here

## LABOR AND MATERIAL BOND

Bond No.:1000855312  
 Premium Based On Premium included in  
 Final Contract Price Performance Bond

KNOW ALL MEN BY THESE PRESENTS: That we, MOALEJ BUILDERS, INC., a California corporation, as PRINCIPAL, and \*, located at \*\*, a corporation, incorporated under the laws of the State of California, admitted as a surety in the State of California, and authorized to transact business in the State of California, as SURETY, are held and firmly bound unto the CITY OF LONG BEACH, a municipal corporation, in the sum of SEVEN HUNDRED FORTY-THREE THOUSAND SIX HUNDRED FIFTY-TWO DOLLARS (\$743,652), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our respective heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

**\*American Contractors Indemnity Company**

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

**\*\*601 S. Figueroa St., Suite 1600, Los Angeles, CA 90017**

WHEREAS, said Principal has been awarded and is about to enter the annexed contract (incorporated herein by this reference) with said City of Long Beach for the Civil Improvements at Long Beach Gas and Oil Department as required by law and by said City to give this bond in connection with the execution of said contract;

NOW, THEREFORE, if said Principal, as Contractor of said contract, or any subcontractor of said Principal, fails to pay for any materials, provisions, equipment, or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon, of any kind, or for amounts due under the Unemployment Insurance Act, during the original term of said contract and any extensions thereof, and during the life of any guaranty required under the contract, or shall fail to pay for any materials, provisions, equipment, or other supplies, used in, upon, for or about the performance of the work to be done under any authorized modifications of said contract that may hereafter be made, or for any work or labor done of any kind, or for amounts due under the Unemployment Insurance Act, under said modification, said Surety will pay the same in an amount not exceeding the sum of money hereinabove specified and, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the court; otherwise this obligation shall be void;

PROVIDED, that any modifications, alterations or changes which may be made in said contract, or in any of the work or labor required to be done thereunder, or in any of the materials, provisions, equipment, or other supplies required to be furnished pursuant to said contract, or the giving by the City of any extension of time for the performance of said contract, or the giving of any other forbearance upon the part of either the City or the Principal to the other, shall not in any way release the Principal or Surety, or either of them, or their respective heirs, administrators, executors, successors or assigns, from any liability arising hereunder, and notice to the Surety of any such modifications, alterations, changes, extensions or forbearances is hereby waived. No premature payment by said City to said Principal shall release or exonerate the Surety, unless the officer of the City ordering the payment shall have actual notice at the time the order is made that the payment is in fact premature, and then only to the extent that such payment shall result in actual loss to the Surety, but in no event in an amount more than the amount of such premature payment.

This Bond shall inure to the benefit of any and all persons, companies and corporations entitled by law to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

IN WITNESS WHEREOF, the above-named Principal and Surety have executed, or caused to be executed, this instrument with all of the formalities required by law on this 20th day of February, 2012.

Moalej Builders, Inc.

Contractor

By: 

Name: ROBERT E. SHANNON

Title: President

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Approved as to form this 27th day of February, 2012.

ROBERT E. SHANNON, City Attorney

By: 

Deputy City Attorney

American Contractors Indemnity Company

SURETY, admitted in California

By: 

Name: Pietro Daniel Micciche

Title: Attorney-in-Fact

Telephone: 323)663-7814

Approved as to sufficiency this 27th day of February, 2012.

By: 

City Manager/City Engineer

- NOTE:**
1. Execution of the bond must be acknowledged by both PRINCIPAL and SURETY before a Notary Public and a Notary's certificate of acknowledgment must be attached.
  2. A corporation must execute the bond by 2 authorized officers or, if executed by a person not listed in Sec. 313, Calif. Corp. Code, then a certified copy of a resolution of its Board of Directors authorizing execution must be attached.

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Los Angeles

On February 20, 2012 before me, M. S. Rodriguez, Notary Public  
Date Here Insert Name and Title of the Officer

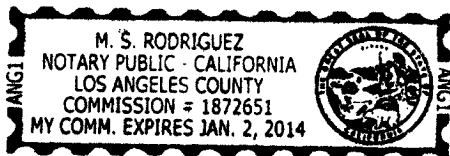
personally appeared PIETRO DANIEL MICCICHE  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature M. S. Rodriguez  
Signature of Notary Public



Place Notary Seal Above

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☒ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
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Signer's Name: \_\_\_\_\_

- ☐ Individual  
☐ Corporate Officer — Title(s): \_\_\_\_\_  
☐ Partner — ☐ Limited ☐ General  
☐ Attorney in Fact  
☐ Trustee  
☐ Guardian or Conservator  
☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
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**POWER OF ATTORNEY**

**AMERICAN CONTRACTORS INDEMNITY COMPANY UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY**

KNOW ALL MEN BY THESE PRESENTS: That American Contractors Indemnity Company, a California corporation, United States Surety Company, a Maryland corporation and U.S. Specialty Insurance Company, a Texas corporation (collectively, the "Companies"), do by these presents make, constitute and appoint:

Patricia Zenizo or Pietro Daniel Micciche of Los Angeles, California

its true and lawful Attorney(s)-in-fact, each in their separate capacity if more than one is named above, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety, providing the bond penalty does not exceed \*\*\*\*\*Three Million\*\*\*\*\* Dollars (\$ \*\*3,000,000.00\*\*).

This Power of Attorney shall expire without further action on March 18, 2015. This Power of Attorney is granted under and by authority of the following resolutions adopted by the Boards of Directors of the Companies:

*Be it Resolved*, that the President, any Vice-President, any Assistant Vice-President, any Secretary or any Assistant Secretary shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions:

*Attorney-in-Fact* may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements or indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be binding upon the Company as if signed by the President and sealed and effected by the Corporate Secretary.

*Be it Resolved*, that the signature of any authorized officer and seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signature or facsimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached.

IN WITNESS WHEREOF, The Companies have caused this instrument to be signed and their corporate seals to be hereto affixed, this 31<sup>st</sup> day of March, 2011.

**AMERICAN CONTRACTORS INDEMNITY COMPANY UNITED STATES SURETY COMPANY U.S. SPECIALTY INSURANCE COMPANY**

Corporate Seals



By:

Daniel P. Aguilar, Vice President

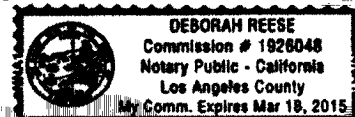
State of California

County of Los Angeles SS:

On this 31<sup>st</sup> day of March, 2011, before me, Deborah Reese, a notary public, personally appeared Daniel P. Aguilar, Vice President of American Contractors Indemnity Company, United States Surety Company and U.S. Specialty Insurance Company who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

Signature Deborah Reese (Seal)



I, Jeannie J. Kim, Assistant Secretary of American Contractors Indemnity Company, United States Surety Company and U.S. Specialty Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; furthermore, the resolutions of the Boards of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Los Angeles, California this 20th day of February, 2012.

Corporate Seals



Bond No. 1000855312  
Agency No. 3057

Jeannie J. Kim, Assistant Secretary

# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

CIVIL CODE § 1189

State of California

County of Los Angeles

On February 24, 2012 before me,

Toni Vukobratovic, Notary Public

Here Insert Name and Title of the Officer

personally appeared

Reza Moaleky

Name(s) of Signer(s)



who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature:

Toni Vukobratovic

Signature of Notary Public

Place Notary Seal Above

## OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

### Description of Attached Document

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_

Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

### Capacity(ies) Claimed by Signer(s)

Signer's Name: \_\_\_\_\_

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Individual

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
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Signer's Name: \_\_\_\_\_

☐ Corporate Officer — Title(s): \_\_\_\_\_

☐ Individual

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other: \_\_\_\_\_

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT  
OF SIGNER  
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