

CITY OF MANHATTAN BEACH

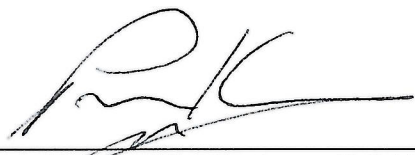
BID DOCUMENTS


PROJECT NO. P-914

SLURRY SEAL AND ARAM PROJECT
Areas 4, 5, and 6
NOVEMBER 2018



CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
ANASTASIA SEIMS
1400 HIGHLAND AVENUE
MANHATTAN BEACH, CA 90266


Prem Kumar, City Engineer C52463


Engineer/Architect of Record Approval


A circular professional engineer seal for Prem Kumar, No. C52463, State of California, Civil Engineering. The seal includes the text "REGISTERED PROFESSIONAL ENGINEER", "PREM KUMAR", "No. C52463", "EXP", "CIVIL", and "STATE OF CALIFORNIA".

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**NOTICE INVITING BIDS
FOR**

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

Project number: P-914 Bid Number: 1197-19.

NOTICE IS HEREBY GIVEN that the City of Manhattan Beach, California (“City”) invites sealed Bids for the Project. The City will receive such Bids at the City Clerk’s office, City Hall, 1400 Highland Avenue, Manhattan Beach, California 90266 up to 11:00 a.m. on January 8, 2019, at which time they will be publicly opened and read aloud.

All Bids must be made on the form furnished by the City. Each Bid must be submitted in a sealed envelope addressed to the City Clerk with the Project name and identification number typed or clearly printed on the lower left corner of the envelope. Bids must remain valid and shall not be subject to withdrawal for 90 calendar Days after the Bid opening date.

SCOPE OF WORK. The Project includes, without limitation, furnishing all necessary labor, materials, equipment and other incidental and appurtenant Work necessary to satisfactorily complete the Project, as more specifically described in the Contract Documents. This Work will be performed in strict conformance with the Contract Documents, permits from regulatory agencies with jurisdiction, and applicable regulations. The quantity of Work to be performed and materials to be furnished are approximations only, being given as a basis for the comparison of Bids. Actual quantities of Work to be performed may vary at the discretion of the City Engineer. Time for completion of the Work is 60 total Working Days from the date specified in the Notice to Proceed.

OBTAINING BID DOCUMENTS. Bidders may obtain free copies of the Plans, Specifications and other Contract Documents online by visiting <https://www.bidsync.com>.

OPTIONAL SITE VISITS. A pre-bid meeting will not be held. No allowances for cost adjustments will be made if a Bidder fails to adequately examine the Project site before submitting a Bid.

DEADLINE FOR QUESTIONS. Bidder questions must be submitted before or by noon on December 20, 2018.

REGISTRATION WITH THE DEPARTMENT OF INDUSTRIAL RELATIONS. In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or subcontractor shall be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5 [with limited exceptions for bid purposes only under Labor Code Section 1771.1(a)].

PREVAILING WAGES. In accordance with Labor Code Section 1770 *et seq.*, the Project is a “public work.” The selected Bidder (Contractor) and any Subcontractors shall pay wages in accordance with the determination of the Director of the Department of Industrial Relations (“DIR”) regarding the prevailing rate of per diem wages. Copies of those rates are on file with the Director of Public Works and are available to any interested party upon request. The Contractor shall post

a copy of the DIR's determination of the prevailing rate of per diem wages at each job site. This Project is subject to compliance monitoring and enforcement by the DIR.

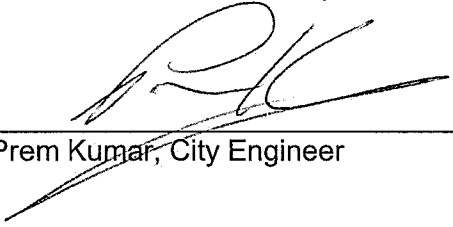
BONDS. Each Bid must be accompanied by a cash deposit, cashier's check, certified check or Bidder's Bond issued by a Surety insurer, made payable to the City and in an amount not less than ten percent of the total Bid submitted. Personal or company checks are not acceptable. Upon Contract award, the Contractor shall provide faithful performance and payment Bonds, each in a sum equal to the Contract Price, as well as a warranty or maintenance Bond that is valid for one year from Project acceptance in the amount of ten percent of the Contract Price. All Bonds must be issued by a California admitted Surety insurer using the forms set forth in the Contract Documents, or in any other form approved by the City Attorney. Failure to enter into the Contract with the City, including the submission of all required Bonds and insurance coverages, within ten calendar days after the date of the mailing of written notice of contract award to the Bidder, shall subject the Bid security to forfeiture to the extent provided by law.

LICENSES. Each Bidder shall possess a valid Class A Contractor's license issued by the California State Contractors License Board at the time of the Bid submission, unless this Project has any federal funding, in which case the successful Bidder must possess such a license at the time of Contract award. The successful Contractor must also possess a current City business license.

RETENTION SUBSTITUTION. Five percent of any progress payment will be withheld as retention. In accordance with Public Contract Code Section 22300 and at the request and expense of the Contractor, securities equivalent to the amount withheld may be deposited with the City or with a State or federally chartered bank as escrow agent, which shall then pay such moneys to the Contractor. Upon satisfactory completion of the Project, the securities shall be returned to the Contractor. Alternatively, the Contractor may request that the City make payments of earned retentions directly to an escrow agent at the Contractor's expense. No such substitutions shall be accepted until all related documents are approved by the City Attorney.

BIDDING PROCESS. The City reserves the right to reject any Bid or all Bids, and to waive any irregularities or informalities in any Bid or in the bidding, as deemed to be in its best interest.

By:


Prem Kumar, City Engineer

11/30/18
Date

INSTRUCTIONS TO BIDDERS

FORM OF BID. Bids shall be made on the Bid forms found herein. Bidders shall include all forms and fill in all blank spaces, including inserting "N/A" (for not applicable) where necessary. The Bid shall be enclosed in a sealed envelope bearing the Bidder's name and the Project name and identification number as described in the Notice Inviting Bids.

Any Bid not accompanied by a Contractor's Statement completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury may be deemed non-responsive and rejected. If the City determines that any information provided by a Bidder in the Contractor's Statement is false or misleading, or is so incomplete as to be false or misleading, the City may reject the Bid submitted by such Bidder as being non-responsive.

DELIVERY OF BIDS. The Bid shall be delivered by the time and date and to the place specified in the Notice Inviting Bids. No oral, faxed, emailed, or telephonic Bids or alternatives will be considered. Bidders are solely responsible for ensuring that their Bids are received in proper time, and Bidders assume all risks arising out of their chosen means of delivery. Any Bid received after the Bid submission deadline shall be returned unopened. Bidders are invited to be present for Bid opening. Accepted Bids shall become the property of the City.

AMENDED BIDS. Unauthorized conditions, limitations or provisos attached to a Bid may cause the Bid to be deemed incomplete and non-responsive.

WITHDRAWAL OF BID. A Bid may be withdrawn without prejudice upon written request by the Bidder filed with the City Clerk before the Bid submission deadline. Bids must remain valid and shall not be subject to withdrawal for 90 Days after the Bid opening date.

BIDDER'S SECURITY. Each Bid shall be accompanied by cash, a certified or cashier's check payable to the City, or a satisfactory Bid Bond in favor of the City executed by the Bidder as principal and an admitted surety insurer as Surety, in an amount not less than ten percent of the amount set forth in the Bid. The cash, check or Bid Bond shall be given as a guarantee that, if selected, the Bidder will execute the Contract in conformity with the Contract Documents, and will provide the evidence of insurance and furnish the specified Bonds, within ten calendar days after the date of delivery of the Contract Documents to the Bidder. In case of the Bidder's refusal or failure to do so, the City may award the Contract to the next lowest responsible bidder, and the cash, check, or Bond (as applicable) of the lowest Bidder shall be forfeited to the City to the extent permitted by law. No Bid Bond will be accepted unless it conforms substantially to the form provided in these Contract Documents.

QUANTITIES APPROXIMATE. Any quantities shown in the Bid form or elsewhere herein shall be considered as approximations listed to serve as a general indication of the amount of Work or materials to be performed or furnished, and as basis for the Bid comparison. The City does not guarantee that the actual amounts required will correspond with those shown. As deemed necessary or convenient, the City may increase or decrease the amount of any item or portion of Work or material to be performed or furnished or omit any such item or portion, in accordance with the Contract Documents.

ADDENDA. The City Engineer may, from time to time, issue Addenda to the Contract Documents. The Addenda shall be posted to BidSync at <https://www.bidsync.com>. The City shall also post all documents to the City's website at <http://www.ci.manhattan-beach.ca.us> or

<https://www.citymb.info>. Bidders are responsible for ensuring that they have received any and all Addenda. It is the Bidder's responsibility to actively check BidSync and/or the City's website for Addenda or bulletin updates. Each Bidder is responsible for verifying that it has received all Addenda issued. Bidders must acknowledge receipt of all Addenda, if any, using the Addenda Acknowledgement Form included in these Bid Documents. Failure to acknowledge receipt of all Addenda may cause a Bid to be deemed incomplete and non-responsive.

EMAIL ADDRESS. Bidders shall supply the City Engineer with an email address to facilitate transmission of Addenda and other information related to these Contract Documents. Failure to provide such email address may result in late notification. The City does not guarantee that it will provide any information by email, U.S. Mail, or both. A Bidder shall be responsible for all Addenda regardless of whether Bidder received any such email or U.S. Mail, and a Bidder shall have no recourse due to not receiving such email, U.S. Mail, or both.

DISCREPANCIES IN BIDS. Each Bidder shall set forth as to each item of Work, in clearly legible words and figures, a unit or line item Bid amount for the item in the respective spaces provided for this purpose.

In case of discrepancy between the unit price and the extended amount set forth for the item, the unit price shall prevail. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or if the unit price is the same amount as the entry in the "extended amount" column, then the amount set forth in the "extended amount" column for the item shall prevail in accordance with the following:

- (1) As to lump sum items, the amount set forth in the "extended amount" column shall be the unit price.
- (2) As to unit price items, the amount set forth in the "extended amount" column shall be divided by the estimated quantity for the item set forth in the Bid documents, and the price thus obtained shall be the unit price.

In case of discrepancy between words and figures, the words shall prevail.

COMPETENCY OF BIDDERS. In evaluating Bidder responsibility, consideration will be given not only to the financial standing, but also to the general competency of the Bidder for the performance of the Project. Each Bidder shall set forth in the designated area of the Bid form a statement of its experience. No Contract will be executed with a Bidder that is not licensed and registered with the DIR in accordance with State law, and with any applicable specific licensing requirements specified in these Contract Documents. These licensing and registration requirements for Contractors shall also apply to all Subcontractors.

BIDDER'S EXAMINATION OF SITE AND CONTRACT DOCUMENTS. The Bidder, at its sole cost and expense, is required to carefully examine the Contract Documents and the Project site to become fully acquainted with the conditions affecting the Work. The failure of a Bidder to receive or examine any of the Contract Documents or to inspect the site shall not relieve such Bidder from any obligation relating to the Bid, the Contract, or the Work required under the Contract Documents. The City assumes no responsibility or liability to any Bidder for, nor shall the City be bound by, any understandings, oral representations or oral agreements of the City's agents, employees or officers concerning the Contract Documents or the Work made prior to execution of the Contract. By submitting a Bid, Bidder represents: (1) that Bidder has read and understands the Contract Documents; (2) the Bid is made in compliance with the Contract

Documents and is based upon the labor, materials, equipment, and systems required by the Contract Documents; (3) that Bidder understands that all labor, materials, equipment, and systems to be furnished for the Work shall be furnished for the prices bid; (4) that it has visited the Project site, familiarized itself with the local conditions under which the Work is to be performed; (5) that it is fully experienced, qualified and competent to perform the Work set forth in the Contract Documents; (6) that it shall not damage or endanger and shall preserve and protect adjacent properties; (7) that it is properly equipped, organized, and financed to perform the Work; (8) that it is properly permitted and licensed by the California Contractors State Licensing Board to perform the Work; (9) that it has familiarized itself with all conditions bearing upon transportation, disposal, handling, and storage of materials; (10) that it has familiarized itself with the availability of labor, water, electric power, and roads; (11) that it has familiarized itself with uncertainties of weather, or similar physical conditions at the Project site; (12) that it has familiarized itself with the character of equipment and facilities needed preliminary to and during performance of the Work; (13) that it has familiarized itself with the staging and material storage constraints of the Project site and surrounding buildings and will confine its staging and storage operations to approved areas; and (14) that it will coordinate its construction activities with the other contractors performing work on the Project site, if any, including, but not limited to, any separate contractor retained by the City.

No information derived from an inspection of records or investigation will in any way relieve the Contractor from its obligations under the Contract Documents nor entitle the Contractor to any additional compensation. The Contractor shall not make any claim against the City based upon ignorance or misunderstanding of any condition of the Project site or of the requirements set forth in the Contract Documents. No claim for additional compensation will be allowed which is based on a lack of knowledge of the above items. Bidders assume all risks in connection with performance of the Work in accordance with the Contract Documents, regardless of actual conditions encountered, and waive and release the City with respect to any and all claims and liabilities in connection therewith, to the extent permitted by law.

The omission of any portion or item of Work from the Bid that is reasonably inferable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

DISQUALIFICATION OF BIDDERS. No Person shall be allowed to make, file or be interested in more than one Bid for the Project. A Person that has submitted a sub-bid to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or from making a prime Bid. If there is a reason to believe that collusion exists among the Bidders, all affected Bids will be rejected.

RETURN OF BID SECURITY. The successful Bidder's Bid security shall be held until the Contract is executed. Bid security shall be returned to the unsuccessful Bidders within a reasonable time, which in any case shall not exceed 90 Days after the successful Bidder has signed the Contract.

AWARD OF CONTRACT. The City reserves the right to reject any or all Bids or any parts thereof or to waive any irregularities or informalities in any Bid or in the bidding. The Contract award, if made, will be to the lowest responsible, responsive Bidder and is anticipated to occur within 90 calendar Days after the Bid opening. The Contract award may be made after that period if the selected Bidder has not given the City written notice of the withdrawal of its Bid.

DETERMINATION OF LOWEST BIDDER IF ADDITIVE OR DEDUCTIVE ITEMS. In accordance with Public Contract Code Section 20103.8, the lowest Bid shall be determined by comparing the

total Bid price of all Base Bid Items and Additive Alternate Bid Items, using the Engineer's estimate of quantities for the Work as set forth in the Bidder's Proposal. The amount of the contract award will be based on the available budget for the project. It may be only for the Base Bid or if the budget allows, include Additive Bid Items. In the event that any or all of the Alternate Bid Items are not awarded as part of the Contract, the City reserves the right to add any or all of the Alternate Bid Items by Change Order or Construction Change Directive at the prices set forth in the Bid.

TRENCHING. If the Project involves the construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are five feet deep or more, then each Bidder must submit, as a Bid item, adequate sheeting, shoring, and bracing, or an equivalent method, for the protection of life or limb, which shall conform to applicable safety orders. This final submission must be accepted by the City in advance of excavation and must include a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from caving ground during the excavation Work. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

LISTING SUBCONTRACTORS. Each Bidder shall submit a list of the proposed Subcontractors on the Project, as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, *et seq.*). The Contractor shall self-perform not less than 50% of the Work, as determined by the percentage of Work to be performed by listed Subcontractors.

WORK OF SUBCONTRACTORS. All Bidders are encouraged to disseminate all of the Specifications, Drawings, and other Contract Documents to all persons or entities submitting sub-bids to the Bidder.

INELIGIBLE SUBCONTRACTORS. The successful Bidder is prohibited from performing Work on the Project with any Subcontractor who is ineligible to perform work on a public works project pursuant to Sections 1777.1 or 1777.7 of the California Labor Code. By submitting a Bid, each Bidder certifies that it has investigated the eligibility of each and every listed Subcontractor and has determined that none is ineligible to perform Work pursuant to the Labor Code.

EXECUTION OF CONTRACT. The selected Bidder shall execute the Contract in the form included in these Contract Documents within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Additionally, the selected Bidder shall also secure all insurance and Bonds as herein specified, and provide copies to the City, within ten calendar days from the date of delivery of the Contract Documents to the Bidder. Failure or refusal to execute the Contract or to conform to any of the stipulated requirements shall be just cause for the annulment of the award and forfeiture of the Bidder's security. In such event, the City may declare the Bidder's security forfeited to the extent permitted by law, and the City may award the Contract to the next lowest responsible Bidder or may reject all bids.

SIGNATURES. The Bidder shall execute all documents requiring signatures, and shall cause to be notarized all documents that indicate such a requirement. The Bidder shall provide evidence satisfactory to the City, such as an authenticated resolution of its board of directors or a power of attorney, indicating the capacity of the person(s) signing the Bid to bind the Bidder to the Bid and any Contract arising therefrom.

INSURANCE AND BONDS. The Contractor shall not begin Work until it has given the City evidence of all required insurance coverage (including all additional insured endorsements), a Bond guaranteeing the Contractor's faithful performance of the Contract, and a Bond securing

the payment of claims for labor and materials. Where a Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO for review by the City.

TELEPHONES. Bidders are hereby notified that the City will not provide telephones for their use at the time of Bid submission.

INTERPRETATION OF CONTRACT DOCUMENTS. Any Bidder that is in doubt as to the intended meaning of any part of the Contract Documents, or that finds discrepancies in or omissions from the Contract Documents, may submit to the City Engineer a written request for an interpretation or correction not later than five Working Days before the Bid submission deadline. Requests for clarification received after this date will be disregarded. Please indicate the Project and identification number in the request for clarification. Telephonic requests will not be taken. Any interpretation or correction of the Contract Documents will be made only by a written Addendum. No oral interpretation of any provision in the Contract Documents shall be binding.

TRADE NAMES OR EQUALS. Requests to substitute an equivalent item for a brand or trade name item must be made by written request submitted no later than 14 calendar days before the Bid submission deadline. Requests received after this time shall not be considered. Requests shall clearly describe the product for which approval is requested, including all data necessary to demonstrate acceptability.

TAXES. Except as may be otherwise specifically provided herein, all sales and/or use taxes assessed by federal, State or local authorities on materials used or furnished by the Contractor in performing the Work shall be paid by the Contractor. The Bidder shall calculate payment for all sales, unemployment, pension and other taxes imposed by federal, State, and local law and shall include these payments in computing the Bid.

CHECKLIST FOR BIDDERS

The following information is required of all Bidders at the time of Bid submission:

- _____ Completed and Signed Bid Schedule, including cover sheet (page B-1)
- _____ Completed and Signed Contractor's Statement
- _____ Completed References Form
- _____ Completed Subcontractor Designation Form
- _____ Completed, Signed and Notarized Bid Bond or Other Security Form
- _____ Signed and Notarized Noncollusion Declaration Form
- _____ Completed and Signed Addenda Acknowledgement Form
- _____ Evidence satisfactory to the City indicating the capacity of the person(s) signing the Bid to bind the Bidder

Failure of the Bidder to provide all required information in a complete and accurate manner may cause the Bid to be considered non-responsive.

BID

CITY OF MANHATTAN BEACH

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

TO THE HONORABLE MAYOR AND CITY COUNCIL OF THE CITY OF MANHATTAN BEACH:

The undersigned, as Bidder, declares that: (1) this Bid is made without collusion with any other person and that the only persons or parties interested as principals are those named herein; (2) the undersigned has carefully examined the Contract Documents (including all Addenda) and the Project site; and (3) the undersigned has investigated and is satisfied as to the conditions to be encountered, the character, quality and quantities of Work to be performed, and the materials to be furnished. Furthermore, the undersigned agrees that submission of this Bid shall be conclusive evidence that such examination and investigation have been made and agrees, in the event the Contract be awarded to it, to execute the Contract with the City of Manhattan Beach to perform the Project in accordance with the Contract Documents in the time and manner therein prescribed, and to furnish or provide all materials, labor, tools, equipment, apparatus and other means necessary so to do, except as may otherwise be furnished or provided under the terms of the Contract Documents, for the following stated unit prices or lump-sum price as submitted on the Bid herein.

This Bid is made with the full knowledge of the kind, quantity, and quality of the materials and Work required and, if it is accepted by the City, the Bidder shall enter into a Contract and furnish the bonds, insurance, and other documents as required by the Contract Documents within ten calendar days after award of the Contract. The Bidder agrees that failure to execute and return the Contract or the required faithful performance bond, labor and materials payment bond, warranty bond, and insurance certificates to the City within the ten calendar day period shall be sufficient cause for the rescission of the award and forfeiture of the Bid Security to the City to the extent permitted by law.

Accompanying this Bid is cash, a cashier's check, a certified check or a Bid Bond in an amount equal to at least ten percent of the total aggregate Bid price based on the quantities shown and the unit prices quoted. The undersigned further agrees that, should it be awarded the Contract and thereafter fail or refuse to execute the Contract and provide the required evidence of insurance and Bonds within ten calendar days after delivery of the Contract to the undersigned, then the cash, check or Bid Bond shall be forfeited to the City to the extent permitted by law.

CITY OF MANHATTAN BEACH

BID SCHEDULE FOR

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

Bidder's Name: _____

Bidder's Address: _____

To the Honorable Mayor and Members of the City Council:

In compliance with the Notice Inviting Bids, the undersigned hereby agrees to execute the Contract to furnish all labor, materials, equipment and supplies for the Project in accordance with the Contract Documents to the satisfaction and under the direction of the City Engineer, at the following prices:

Bid Items as Follows:

BASE BID AMOUNT:

| ITEM NO. | CODE | DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT PRICES | EXTENDED AMOUNT |
|----------|------|--------------------------------------------------------|------|--------------------|-------------|-----------------|
| 1 | | Mobilization (5% maximum of Total Bid Items Amount) | LS | % | \$ | \$ |
| 2 | S | Traffic Control (5% maximum of Total Bid Items Amount) | LS | % | \$ | \$ |
| 3 | S | Stormwater Control, BMPs, NPDES Compliance, and Permit | LS | % | \$ | \$ |
| 4 | S, F | Monument Preservation, Restoration and Survey | LS | Complete | \$ | \$ |
| 5 | S | Spot Repairs | SF | 5,000 | \$ | \$ |
| 6 | S | Crack Seal | LS | % | \$ | \$ |
| 7 | S | Asphalt Rubber Aggregate Membrane (ARAM) | SY | 7,408 | \$ | \$ |

| ITEM NO. | CODE | DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT PRICES | EXTENDED AMOUNT |
|----------|------------------------------|----------------------|------|--------------------|-------------|-----------------|
| 8 | S | Slurry Seal | SY | 274,060 | \$ | \$ |
| 9 | S | Signing and Striping | LS | % | \$ | \$ |
| | TOTAL BASE BID ITEMS AMOUNT: | | | | | \$ _____ |

ADDITIVE A BID ITEMS:

The Additive A Bid Items apply to the following roadways:

- Blanche Rd. from Valley Dr. to Rosecrans Ave.
- 29th St. from Bell Ave. to Blanche Rd.
- 29th St. from Agnes Rd. to Laurel Ave.
- 31st St. from Bell Ave. to Blanche Rd.
- 33rd St. from Bell Ave. to Laurel Ave.

| ITEM NO. | CODE | DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT PRICES | EXTENDED AMOUNT |
|----------|------|--------------------------------------------------------|------|--------------------|-------------|-----------------|
| A1 | | Mobilization (5% maximum of Total Bid Items Amount) | LS | % | \$ | \$ |
| A2 | S | Traffic Control (5% maximum of Total Bid Items Amount) | LS | % | \$ | \$ |
| A3 | S | Stormwater Control, BMPs, NPDES Compliance, and Permit | LS | % | \$ | \$ |
| A4 | S, F | Monument Preservation, Restoration and Survey | LS | Complete | \$ | \$ |
| A5 | S | Crack Seal | LS | % | \$ | \$ |
| A6 | S | Slurry Seal | SY | 21,547 | \$ | \$ |

| ITEM NO. | CODE | DESCRIPTION | UNIT | ESTIMATED QUANTITY | UNIT PRICES | EXTENDED AMOUNT |
|----------|----------------------------------|----------------------|------|--------------------|-------------|-----------------|
| A7 | S | Signing and Striping | LS | % | \$ | \$ |
| | TOTAL ADDITIVE BID ITEMS AMOUNT: | | | | | \$ _____ |

NOTE: Estimated quantities are for the purpose of Bid comparison only; payments will be made on the basis of actual measurement of Work completed, except for lump sum (LS) and final pay (F) quantities. (S) denotes a specialty item. (F) and (S) will be specified in the "Code" Column. The Bid Price shall include, but not limited to, sales tax and all other applicable taxes and fees. See also Section 9-2 of the General Provisions.

NOTE: Items may be adjusted or deleted. Therefore, regardless of total actual volume (percentage) compared to estimated quantities, the unit prices provided above by the Bidder shall be applied to the final quantity when payment is calculated for these items. No adjustment in the unit prices will be allowed. The City reserves the right to not use any of the estimated quantities; and if this right is exercised, the Contractor will not be entitled to any additional compensation. Cost of all export of material shall be included in the above unit costs; no additional compensation will be granted for such expenses.

Total Bid Price = Base Bid Items Amount Plus (+) All Additive Bid Items Minus (-)
All Deductive Bid Items

TOTAL BID PRICE IN DIGITS: \$ _____

TOTAL BID PRICE IN WORDS: _____

The undersigned certifies to have a minimum of three consecutive years of current experience in the type of Work related to the Project and that this experience is in actual operation of the firm with permanent employees performing a part of the Work as distinct from a firm operating entirely by subcontracting all phases of the Work. The undersigned also certifies to be properly licensed by the State as a contractor to perform this type of Work. The undersigned possesses California Contractor's License

Number _____, Class _____, which expires on _____.

Signature: _____ Title: _____ Date: _____

Signature: _____ Title: _____ Date: _____

BIDDER'S PROPOSAL – CONTRACTOR'S STATEMENT

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

Fill out all of the following information. Attach additional sheets if necessary.

- (1) Bidder's Name: _____
- (2) If the Bidder's name is a fictitious name, who or what is the full name of the registered owner? If the Bidder's name is not a fictitious name, write "N/A" in the response to this question. If you are doing business under a fictitious name, provide a copy of the filed valid Fictitious Business Name Statement.

- (3) Business Address: _____
- (4) Telephone: _____ Email: _____
- (5) Type of Firm – Individual, Partnership, LLC or Corporation: _____
- (6) Corporation organized under the laws of the State of: _____
- (7) California State Contractor's License Number and Class: _____
Original Date Issued: _____ Expiration Date: _____
- (8) DIR Contractor Registration Number: _____
- (9) List the name and title of the person(s) who inspected the Project site for your firm:

- (10) Number of years experience the company has as a contractor in construction work: _____
- (11) List the names, titles, addresses and telephone numbers of all individuals, firm members, partners, joint venturers, and company or corporate officers having a principal interest in this Bid:

- (12) List all current and prior D.B.A.'s, aliases, and fictitious business names for any principal having interest in this Bid:

- (13) List the dates of any voluntary or involuntary bankruptcy judgments against any principal having an interest in this Bid:

- (14) For all arbitrations, lawsuits, settlements and the like (in or out of court) that the company or any principal having an interest in this Bid has been involved with in the past five years:

- a. List the names, addresses and telephone numbers of contact persons for the parties:

- b. Briefly summarize the parties' claims and defenses:

- c. State the tribunal (e.g., Superior Court, American Arbitration Association, etc.), the matter number, and the outcome:

- (15) Has the company or any principal having an interest in this Bid ever had a contract terminated by the owner or agency? If yes, explain.

- (16) Has the company or any principal having an interest in this Bid ever failed to complete a project? If yes, explain.

- (17) Has the company or any principal having an interest in this Bid ever been terminated for cause, even if it was converted to a "termination of convenience"? If yes, explain.

- (18) For projects that the company or any principal having an interest in this Bid has been involved with in the last five years, did you have any claims or actions:

- a. By you against the owner? Circle one: Yes No
- b. By the owner against you? Circle one: Yes No
- c. By any outside agency or individual for labor compliance?
Circle one: Yes No
- d. By Subcontractors? Circle one: Yes No
- e. Are any of these claims or actions unresolved or outstanding?
Circle one: Yes No

If your answer is "yes" to any part or parts of this question, explain.

- (19) Has the company or any of its principals ever been debarred by any agencies? Is yes, please explain.

(21) For all public agency projects in excess of \$15,000.00 that you are currently working on or have worked on in the past two years, provide the following information:

Project 1 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 2 Name/Number _____

Project Description _____

Approximate Construction Date From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 3 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 4 Name/Number _____

Project Description _____

Approximate Construction Dates From: _____ To: _____

Agency Name: _____

Contact Person: _____ Telephone: _____

Address: _____

Original Contract Amount: \$_____ Final Contract Amount: \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 5 Name/Number _____

Project Description _____

Approximate Construction Dates **From:** _____ **To:** _____

Agency Name: _____

Contact Person: _____ **Telephone:** _____

Address: _____

Original Contract Amount: \$_____ **Final Contract Amount:** \$_____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

Project 6 Name/Number _____

Project Description _____

Approximate Construction Dates **From:** _____ **To:** _____

Agency Name: _____

Contact Person: _____ **Telephone:** _____

Address: _____

Original Contract Amount: \$ _____ **Final Contract Amount:** \$ _____

If final amount is different from original amount, please explain (change orders, extra work, etc.).

Did you or any Subcontractor, file any claims against the Agency?

Circle one: Yes No

Did the Agency file any claims against you? Circle one: Yes No

If you answered yes to either of the above two questions, please explain and indicate outcome of claims.

[Continue to Next Page]

Upon request of the City, the Bidder shall furnish evidence showing a notarized financial statement, financial data, construction experience, or other additional information.

Failure to provide truthful answers to the questions above or in the following References Form may result in the Bid being deemed non-responsive.

Urban Runoff Certification. The Bidder certifies to the City that he/she has trained his/her employees and Subcontractors, if any, for Urban Runoff management and has included sufficient sums in the Bid Price to cover such costs of training as stipulated in the most current Regional Water Quality Control Board requirements, including the Municipal Separate Storm Sewer System NPDES Permit. The Contractor is responsible for all clean up and payment of all fines levied as a result of any illegal discharge (as defined in NPDES permit) occurring as a result of the Contractor's Work and/or operations.

I, the undersigned, certify and declare that I have read all the foregoing answers to the Bidder's Proposal – Contractor's Statement and know their contents. The matters stated in the Bidder's Proposal – Contractor's Statement answers are true of my own knowledge and belief, except as to those matters stated on information and belief, and as to those matters I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is correct.

Company

Signature: _____

Name: _____

Title: _____

Date: _____

Signature: _____

Name: _____

Title: _____

Date: _____

DESIGNATION OF SUBCONTRACTORS
[Public Contract Code Section 4104]

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

List all Subcontractors who will perform Work or labor or render service to the 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 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 percent of the 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 percent of the Contractor's total Bid or \$10,000.00, whichever is greater. If all Subcontractors do not fit on this page, attach another page listing all information for all other Subcontractors.

| Name under which Subcontractor is Licensed and Registered | CSLB License Number(s) and Class(es) | DIR Contractor Registration Number | Address and Phone Number | Type of Work (e.g., Electrical) | Percentage of Total Bid (e.g., 10%)* |
|-----------------------------------------------------------|--------------------------------------|------------------------------------|--------------------------|---------------------------------|--------------------------------------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

*The percentage of the total Bid shall represent the "portion of the work" for the purposes of Public Contract Code Section 4104(b).

Bond No. _____

BID BOND

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("Public Agency"), has issued an invitation for Bids for the Work described as follows: _____

WHEREAS _____
(Name and address of Bidder)

("Principal"), desires to submit a Bid to Public Agency for the Work.

WHEREAS, Bidders are required to furnish a form of Bidder's security with their Bids.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety"), a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency in the penal sum of _____ Dollars (\$_____), being not less than ten percent of the total Bid price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal is awarded the Contract for the Work by the Public Agency and, within the time and in the manner required by the bidding specifications, enters into the written form of Contract included with the bidding specifications, furnishes the required Bonds (one to guarantee faithful performance and the other to guarantee payment for labor and materials), and furnishes the required insurance coverage, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

In case suit is brought upon this instrument, Surety further agrees to pay all court costs incurred by the Public Agency in the suit and reasonable attorneys' fees in an amount fixed by the court. Surety hereby waives the provisions of Civil Code Section 2845.

IN WITNESS WHEREOF, this instrument has been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

Name: _____

Address: _____

Telephone No.: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

“Surety”

Company Name: _____

Address: _____

Telephone No.: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

NOTE: *This Bond must be dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached.*

**NONCOLLUSION DECLARATION FORM
TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID
[Public Contract Code Section 7106]**

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

The undersigned declares:

I am the _____ of _____, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from bidding. 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. All statements contained in the Bid are true. 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, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, to effectuate a collusive or sham Bid, and has not paid, and will not pay, any Person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____ [city], _____ [state].

Signature: _____ Signature: _____

Printed Name: _____ Printed Name: _____

Date: _____ Date: _____

This form must be notarized.

ADDENDA ACKNOWLEDGMENT FORM

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

Bidder's Name: _____

The Bidder shall signify receipt of all Addenda here, if any:

| Addendum Number | Date Received | Signature |
|------------------------|----------------------|------------------|
| | | |
| | | |
| | | |
| | | |
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| | | |
| | | |
| | | |

If there are more Addenda than there is room in the chart above, attach another page acknowledging receipt of the Addenda.

CONTRACT

CITY OF MANHATTAN BEACH CONTRACT FOR SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

THIS CONTRACT ("Contract") is made and entered this _____ day of _____, 20____ ("Effective Date"), by and between the CITY OF MANHATTAN BEACH, a California municipal corporation ("City") and _____, a _____ [Legal Form of Entity and state of formation, e.g., California corporation, limited partnership, limited liability company] ("Contractor"). The Contractor's California State Contractor's license number is _____.

In consideration of the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. Contract Documents. The Contract Documents consist of this Contract, the Notice Inviting Bids, Instructions to Bidders, Bid (including documentation accompanying the Bid and any post-Bid documentation submitted before the Notice of Award), the Bonds, permits from regulatory agencies with jurisdiction, General Provisions, Special Provisions, Plans, Standard Plans, Standard Specifications, Reference Specifications, Addenda, Change Orders, and Supplemental Agreements. The Contract Documents are attached hereto and incorporated herein by reference.

2. Scope of Services. The Contractor shall perform and provide all materials, tools, equipment, labor, and services necessary to complete the Work in a good and workmanlike manner for the project identified as Slurry Seal And ARAM Project – Areas 4, 5, & 6 ("Project"), as described in the Contract Documents.

3. Compensation.

3.1 Contract Price and Basis for Payment. In consideration for the Contractor's full, complete, and timely performance of the Work required by the Contract Documents, the City shall pay the Contractor for the actual quantity of Work required under the Bid Items awarded by the City performed in accordance with the lump sum prices and unit prices for Bid Items, set forth in the Bidder's Proposal submitted with the Bid. The sum of the unit prices and lump sum prices for the Bid Items, awarded by the City is \$_____ ("Contract Price"). It is understood and agreed that the quantities set forth in the Bidder's Proposal for which unit prices are fixed are estimates only and that the City will pay and the Contractor will accept, as full payment for these items of work, the unit prices set forth in the Bidder's Proposal multiplied by the actual number of units performed, constructed, or completed as directed by the Engineer.

3.2 Payment Procedures. Based upon applications for payment submitted by the Contractor to the City, the City shall make payments to the Contractor in accordance with Section 9 of the Standard Specifications, as modified by Section 9 of the General Provisions.

4. Contract Time.

4.1 Initial Notice to Proceed. The City shall issue the "Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials." The date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials constitutes the date of commencement of the Contract Time of 60 **Working Days**. The Contract Time includes the time necessary to fulfill preconstruction requirements, place the order for materials, and to complete construction of the Project (except as adjusted by subsequent Change Orders).

The Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials shall further specify that the Contractor must complete the preconstruction requirements and order materials within 10 **Working Days** after the date of commencement of the Contract Time; this duration is part of the Contract Time.

Preconstruction requirements include, but are not limited to, the following:

- Submitting and obtaining approval of Traffic Control Plans
- Submitting and obtaining approval of the Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Plan (WPCP)
- Submitting and obtaining approval of critical required submittals
- Installation of the approved Project Identification Signs
- Obtaining an approved no fee Encroachment Permit
- Obtaining a Temporary Use Permit for a construction yard
- Notifying all agencies, utilities, residents, etc., as outlined in the Contract Documents

4.2 Notice to Proceed with Construction. After all preconstruction requirements are met and materials have been ordered in accordance with the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials, the City shall issue the "Notice to Proceed with Construction," at which time the Contractor shall diligently prosecute the Work, including corrective items of Work, day to day thereafter, within the remaining Contract Time.

5. Liquidated Damages for Delay and Control of Work.

5.1 Liquidated Damages. The Contractor and the City have agreed to liquidate damages pursuant to Section 6-9 of the General Provisions.

6. Early Completion.

6.1 City Not Liable for Contractor Failure to Achieve Early Completion. While the Contractor may schedule completion of all of the Work, or portions thereof, earlier than the Contract Time, the City is exempt from liability for and the Contractor will not be entitled to an adjustment of the Contract Sum or to any additional costs, damages, including, but not limited to, claims for extended general conditions costs, home office overhead, jobsite overhead, and management or administrative costs, or compensation whatsoever, for use of float time or for the Contractor's inability to complete the Work earlier than the Contract Time for any reason whatsoever.

7. Work after Stop Work Notice. Any work completed by the Contractor after the issuance of a Stop Work Notice by the City shall be rejected and/or removed and replaced as specified in the applicable Section of the Special Provisions.

8. Antitrust Claims. In entering into this Contract, the Contractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. § 15) or under the Cartwright Act (Business and Professions

Code Section 16700 *et seq.*) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor without further acknowledgment by the parties.

9. Prevailing Wages. The City and the Contractor acknowledge that the Project is a public work to which prevailing wages apply.

10. Workers' Compensation. Labor Code Sections 1860 and 3700 provide that every contractor will be required to secure the payment of compensation to its employees. In accordance with the provisions of Labor Code Section 1861, by signing this Contract, the Contractor certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract.”

11. Titles. The titles used in this Contract are for convenience only and shall in no way define, limit or describe the scope or intent of this Contract or any part of it.

12. Authority. Any person executing this Contract on behalf of the Contractor warrants and represents that he or she has the authority to execute this Contract on behalf of the Contractor and has the authority to bind the Contractor to the performance of its obligations hereunder.

13. Entire Agreement. This Contract, including the Contract Documents and any other documents incorporated herein by specific reference, represents the entire and integrated Contract between the City and the Contractor. This Contract supersedes all prior oral or written negotiations, representations or agreements. This Contract may not be modified or amended, nor any provision or breach waived, except in a writing signed by both parties that expressly refers to this Contract.

14. Counterparts. This Contract may be executed in counterpart originals, duplicate originals, or both, each of which is deemed to be an original for all purposes.

IN WITNESS WHEREOF, the parties hereto have executed this Contract the day and year first above written.

CITY OF MANHATTAN BEACH

By: _____
City Manager

ATTEST:

APPROVED AS TO FORM:

By: _____
City Clerk

By: _____
City Attorney

Dated: _____

("CONTRACTOR")

By: _____
NAME TITLE

By: _____
NAME TITLE

PROOF OF AUTHORITY TO BIND
CONTRACTING PARTY REQUIRED

Bond No. _____

**PAYMENT BOND
(LABOR AND MATERIALS)**

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("Public Agency"), State of California, has awarded to _

(Name and address of Contractor) ("Principal")

a contract (the "Contract") for the Work described as follows:

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6
(Project name)

WHEREAS, under the terms of the Contract, the Principal is required before entering upon the performance of the Work, to file a good and sufficient payment Bond with the Public Agency to secure the claims to which reference is made in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety") a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency and all contractors, subcontractors, laborers, material suppliers, and other persons employed in the performance of the Contract and referred to in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code in the penal sum of _____ Dollars (\$ _____), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to this Work or labor, that the Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this Bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by Public Agency in successfully enforcing this obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this Bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this Bond.

Upon expiration of the time within which the California Labor Commissioner may serve a civil wage and penalty assessment against the principal, any of its subcontractors, or both the principal and its subcontractors pursuant to Labor Code Section 1741, and upon expiration of the time within which a joint labor management committee may commence an action against the principal, any of its subcontractors, or both the principal and its subcontractors pursuant to Labor Code Section 1771.2, if the condition of this Bond be fully performed, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or the Specifications accompanying the same shall in any manner affect its obligations on this Bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____

Signature: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

Bond No. _____

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("Public Agency"), has awarded to _____

("Principal")

(Name and address of Contractor)

a contract (the "Contract") for the Work described as follows:

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

(Project name)

WHEREAS, Principal is required under the terms of the Contract to furnish a Bond for the faithful performance of the Contract.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety") a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency in the penal sum of _____ Dollars (\$ _____), this amount being not less than the total Contract Price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors executors and administrators, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal, his, her or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and provisions in the Contract and any alteration thereof made as therein provided, on the Principal's part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Public Agency, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by Public Agency in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered. Surety hereby waives any statute of limitations as it applies to an action on this Bond.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or of the Work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the specifications. Surety hereby waives the provisions of California

Civil Code Sections 2845 and 2849. The City is the principal beneficiary of this Bond and has all rights of a party hereto.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____

Signature: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

Bond No. _____

WARRANTY BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("Public Agency"), State of California, has awarded to__

(Name and address of Contractor) ("Principal")

a contract (the "Contract") for the Work described as follows:

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

(Project name)

WHEREAS, under the terms of the Contract, the Principal is required before entering upon the performance of the Work, to file a good and sufficient warranty Bond with the Public Agency before final completion of the work and its acceptance by the Public Agency.

NOW, THEREFORE, we, the undersigned Principal, and _____

(Name and address of Surety)

("Surety") a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency in the penal sum of _____ Dollars (\$_____), lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bounded Principal, his, her or its heirs, executors, administrators, successors or assigns, shall remedy, without cost to the Public Agency, any defects which may develop during a period of one year from the date of completion and acceptance of the work performed under the Contract, caused by defective or inferior materials or workmanship, and shall indemnify, defend and hold harmless the Public Agency, its officers, agents, and employees for any and all claims, demands, causes of action, damages, injuries, liabilities, losses, costs or expenses, including attorneys' fees and costs of defense, which arise out of, pertain to, or relate to such defects or to the Principal's actions or inactions in remedying such defects, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

In case suit is brought upon this bond, Surety further agrees to pay, in addition to the Penal Sum, all costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by the Public Agency in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

FURTHER, Surety hereby waives the provisions of California Civil Code sections 2845 and 2849. The Public Agency is the principal beneficiary of this bond and has all rights of a party hereto.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

IN WITNESS WHEREOF, two identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety, on the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body.

Dated: _____

“Principal”

“Surety”

Signature: _____

Signature: _____

Print Name: _____

Print Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

Signature: _____

Print Name: _____

Title: _____

Date: _____

(Seal)

(Seal)

NOTE: *This Bond must be executed in duplicate and dated, all signatures must be notarized, and evidence of the authority of any person signing as attorney-in-fact must be attached. DATE OF BOND MUST NOT BE BEFORE DATE OF CONTRACT.* Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

CHECKLIST FOR EXECUTION OF CONTRACT

TO BE SUBMITTED BY SUCCESSFUL BIDDER:

- _____ Two executed copies of the Contract
- _____ Completed, signed and notarized Payment Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Performance Bond (original) in amount of the Contract
- _____ Completed, signed and notarized Warranty Bond (original) in the amount of 10% of the Contract
- _____ Workers' Compensation Certificate with attached Certificate of Insurance
- _____ General Liability insurance certificate naming the City as a co-insured
- _____ Automobile insurance naming the City as a co-insured
- _____ Umbrella/Excess Liability (General aggregate) insurance certificate naming the City as a co-insured, if applicable
- _____ Copy of City business license, if applicable
- _____ Additional insured endorsement – comprehensive general liability
- _____ Additional insured endorsement – automobile liability
- _____ Additional insured endorsement – excess liability
- _____ Waiver of Subrogation - general liability
- _____ Waiver of Subrogation - Worker's Compensation

ALL SUBMITTALS WILL BE RETAINED BY CITY, EXCEPT FOR ONE COPY OF THE FULLY EXECUTED CONTRACT

GENERAL PROVISIONS

SECTION 0. GENERAL PROVISIONS DEFINED

0-1 STANDARD SPECIFICATIONS

The 2015 edition of "Standard Specifications for Public Works Construction", including the 2016 Supplement ("Standard Specifications"), as amended by the Contract Documents, is incorporated into the Contract Documents by this reference. The Work described herein shall be done in accordance with the provisions of the Standard Specifications, as amended by the Contract Documents.

0-2 NUMBERING OF SECTIONS

The number of sections and subsections in these General Provisions are compatible with the numbering in the Standard Specifications. Subsections of architectural and/or other work may be numbered according to the Construction Specifications Institute (CSI) format.

0-3 SUPPLEMENTATION OF STANDARD SPECIFICATIONS

The Sections that follow supplement, but do not replace, the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these General Provisions, these General Provisions shall control.

SECTION 1. TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

The provisions below shall supplement, but not replace, those provisions in Section 1 of the Standard Specifications.

1-2 TERMS AND DEFINITIONS

Whenever in the Standard Specifications or in the Contract Documents the following terms are used, they shall be understood to mean the following:

Agency – The City of Manhattan Beach.

Applicable Law – All State, federal, and local laws, statutes, ordinances, codes, rules, and regulations governing the Work.

Bid Item – An item of Work listed on the Bid Schedule.

Board – The City Council of the City of Manhattan Beach.

City – The City of Manhattan Beach

City Council – The City Council of the City of Manhattan Beach

Contract Documents – As defined in Section 1 of the Contract.

Contract Time – The number of Working Days stated in the Contract for the completion of the Work.

County – County of Los Angeles, California

Detour – A temporary route for traffic (vehicular or pedestrian) around a closed portion of a road or travelway.

Engineer – The City Engineer, acting either directly or through properly authorized agents. Such agents shall act within the scope of the particular duties entrusted to them.

Estimated Quantities – The quantities of Work anticipated to be performed, as set forth in the Bid Schedule, designated as units or a lump sum.

Excavation – Any operation in which earth, rock, or other material in the ground is moved, removed, or otherwise displaced by means of tools, equipment, or explosives in any of the following ways: grading, trenching, digging, ditching, drilling, augering, tunneling, scraping, cable or pipe plowing and driving, or any other way (Cal. Gov. Code § 4216).

Inspector – An authorized representative of the City, assigned by the City to make inspections of Work performed by or materials supplied by the Contractor.

Notice of Completion – The notice authorized by Civil Code Section 9204.

Notice to Proceed or Notice to Proceed with Construction – A written notice issued by the City to the Contractor that authorizes the Contractor to perform the Work.

Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials – A written notice issued by the City to the Contractor that authorizes the Contractor to proceed with preconstruction requirements and the acquisition or purchase of materials that are to be incorporated into the Work and establishes the date of commencement of the Contract Time.

Project – See Work.

Punch List – A list of items of Work to be completed or corrected by the Contractor in order to complete the Work as specified in the Contract Documents.

Shop Drawings – All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier, or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

State – The State of California.

Submittal – Any drawing, calculation, specification, product data, samples, manuals, requests for substitutes, spare parts, photographs, survey data, traffic control plans, record drawings, Bonds or similar items required to be submitted to the City under the terms of the Contract.

Traffic Engineer – The representative of the Engineer who is assigned traffic-related matters.

Work – The construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, services provided or to be provided by the Contractor to fulfill the Contractor's obligations.

Working Day – See Subsection 6-7.2 of the General Provisions.

Work Directive – A unilateral written order issued by the City directing the Contractor to continue performance of the Work or a disputed item of Work pending resolution of a claim or dispute concerning the scope of Work.

1-3.3 Institutions

The institutions listed in Section 1-3.3 of the Standard Specifications shall be supplemented by the list below:

| <u>Abbreviation</u> | <u>Word or Words</u> |
|----------------------------|----------------------------------------------------------------------------------------------|
| AAN | American Association of Nurserymen |
| ACI | American Concrete Institute |
| AGCA | Associated General Contractors of America |
| APWA | American Public Works Association |
| ASME | American Society of Mechanical Engineers |
| CRSI | Concrete Reinforcing Steel Institute |
| CSI | Construction Specifications Institute |
| IEEE | Institute of Electric and Electronic Engineers |
| NEC | National Electric Code |
| NEMA | National Electrical Manufacturers Association |
| NFPA | National Fire Protection Association |
| SSS | State of California Standard Specifications, Latest edition, Department of Transportation |
| SSP | State of California Standard Plans, Latest edition, Department of Transportation |

SECTION 2. SCOPE AND CONTROL OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 2 of the Standard Specifications, unless specifically noted below.

2-2 ASSIGNMENT

Any purported assignment without written consent of the City shall be null, void, and of no effect, and the Contractor shall hold harmless, defend and indemnify the City and its officers, officials, employees, agents and representatives with respect to any claim, demand or action arising from or relating to any unauthorized assignment.

If the City opts to consent to assignment, the City's consent shall be contingent upon: (1) a letter from the Surety agreeing to the assignment and assigning all of the Bonds to the assignee without any reduction, or the assignee supplying all new Bonds in the amounts originally required under the Contract Documents; and (2) the assignee supplying all of the required insurance in the amounts required in the Contract Documents. Until the Surety assigns all of the Bonds or the assignee supplies all of the new Bonds, and until the assignee supplies all of the required

insurance, an assignment otherwise consented to in writing by the City shall not be effective. Even if the City consents to assignment, no assignment shall relieve the Contractor of liability under the Contract.

2-3.1.1 Subcontractors. Add the following sections:

Subcontractors shall be listed by the Bidder in accordance with these specifications and must be properly licensed under the laws of the State of California for the type of work which they are to perform. Copies of all Subcontracts shall be made available to the Engineer, upon request.

2-3.1.2 A Subcontractor whose prosecution of the work is not satisfactory shall be terminated immediately by the Contractor upon the receipt of a written notice by the Engineer. Subcontractors whose work was determined to be unsatisfactory shall not be allowed to perform any work on the job site.

2-4 *CONTRACT BONDS*

The Faithful Performance Bond shall remain in force until the date of recordation of the Notice of Completion. The Labor and Materials Bond shall remain in force until expiration of the time within which the California Labor Commissioner may serve a civil wage and penalty assessment against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1741, and until the expiration of the time within which a joint labor management committee may commence an action against the principal, any of its Subcontractors, or both the principal and its Subcontractors pursuant to Labor Code Section 1771.2.

The warranty or maintenance Bond shall be valid for one year from the date of recordation of Notice of Completion by the County Recorder, in the amount of ten percent of the Contract Price. Other than the details listed herein, the warranty or maintenance Bond shall adhere to the requirements for Bonds in Section 2-4 of the Standard Specifications. Nothing herein shall abridge or amend Section 6-8.3 of the Standard Specifications or the related provisions in these Contract Documents.

All Bonds must be submitted using the required forms, which are in the Contract Documents, or on any other form approved by the City Attorney.

2-5 *PLANS AND SPECIFICATIONS*

2-5.1 General

In addition to the requirements under Section 2-5.1 in the Standard Specifications, the Contractor shall maintain a control set of Plans and Specifications on the Project site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on the control set to show the as-built conditions. This control set of Plans shall also be edited for all Addenda, Requests for Information, Change Orders, field changes not involving cost, and any other variation that occurred during construction. Upon completion of all Work, the Contractor shall return the control set to the Engineer. Final payment will not be made until this requirement is met.

Where a work feature is shown on the drawings or identified in the Specifications but is not specifically indicated as an item in the Bid Schedule, and there is no ambiguity regarding the

requirement to construct, install, or construct and install that work feature, the Contractor is required to complete the work feature. All costs to the Contractor for constructing, installing, or both constructing and installing such a work feature shall be included in the Bid.

2-5.2 Precedence of the Contract Documents

The following shall replace Section 2-5.2:

With regard to Section 2-5.2 in the Standard Specifications, the General Provisions shall control over the Special Provisions, and the Notice Inviting Bids and Instructions to Bidders (in that order) shall control over the Bid, such that the order of precedence shall be as follows:

1. Requirements of law.
2. Permits issued by regulatory agencies with jurisdiction.
3. Change Orders and Supplemental Agreements, whichever occurs last.
4. Contract.
5. Addenda.
6. Notice Inviting Bids.
7. Instructions to Bidders.
8. Bid/Proposal.
9. General Provisions.
10. Special Provisions.
11. Plans.
12. Standard Plans.
13. Standard Specifications.
14. Reference Specifications.

2-5.2.1 Traffic Signal Work

Except as otherwise specified in the General Provisions or on the Plans, all Work relating to traffic signals and incidental illuminated street name signs and safety lighting, including all equipment, materials, components, and the installation thereof, shall be in accordance with the City's Technical Provisions for traffic signals, latest edition of the State Standard Plans (SSP) in effect and published at the Bid Deadline and Section 86 "Signals, Lighting and Electrical Systems" of the latest edition of the State Standard Specifications (SSS) in effect and published at the Bid Deadline, unless otherwise indicated in the Technical Provisions. With respect to traffic signal Work, the order of precedence, from highest to lowest, shall be: City Technical Provisions, Plans, Section 86 of the State Standard Specifications, State Standard Plans, Standard Plans, and Standard Specifications.

2-5.3 Submittals

2-5.3.1 General

The following paragraphs shall be added following the third paragraph:

The Contractor shall, at its own expense, transmit to the Engineer for review and acceptance, working drawings, shop drawings, supporting information, and/or other available instructive and descriptive information from the manufacturer, when and as required by the Plans or General Provisions or requested by the Engineer. Shop drawings will not be required for standard items

in common use for which adequate manufacturers' literature is available unless otherwise required by the Engineer.

The Contractor shall consecutively number, thoroughly check, approve and sign each submittal and transmit the submittals to the Engineer for review. In the event that certain submittals are submitted without the Contractor's approval signature or are unacceptable to the City, they shall be rejected by the Engineer. The Contractor shall thereafter correct the submittals and resubmit.

In the event that in the process of development of the submittals it is discovered that there are defects and/or errors on the Plans that result in conflict between the Plans and the submittals, or if the submittals show variation from the Plans or other Contract Documents, the Contractor shall thoroughly describe and explain any defects and/or conflicts in its transmittal letter to the Engineer.

The Engineer's review of the submittals will be for general design and arrangement only, and shall not relieve the Contractor from responsibility for errors of any sort in the submittals or of the responsibility for executing the work in accordance with the Contract Documents. The Contractor shall allow a minimum of 20 Working Days for review of submittals. The Contractor shall be solely responsible for the correctness of the submittals, for shop fits and field connections, and for the results obtained by use of such submittals. The Contractor shall verify and be fully responsible for all dimensions and job-site conditions affecting the Work and shall be responsible for furnishing and installing the proper materials required by the Contract Documents.

The Contract Time will not be extended due to the failure of the Contractor to provide submittals as required by the Contract Documents in a timely manner.

2-6 *WORK TO BE DONE*

The following paragraphs shall be added following paragraph one:

All work which is defective in its construction or deficient in any of the requirements of the Plans and Specifications shall be remedied or removed and replaced by the Contractor in an acceptable manner at his own expense. No compensation will be allowed for any work done beyond the lines and grades shown on the Plans or established by the Engineer. Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this article, the Engineer and the City may cause the defective work to be remedied or removed and replaced at the expense of the Contractor.

Any unauthorized or defective work, defective material or workmanship or any unfaithful or imperfect work that may be discovered before final acceptance of work by the Board shall be corrected immediately with no extra charge even though it may have been overlooked in previous inspections and estimates or may have been caused due to failure to inspect the work.

2-7 *SUBSURFACE DATA*

If the City or its consultants have made investigations of subsurface conditions in areas where the Work is to be performed, such investigations shall be deemed made only for the purpose of study and design. If a geotechnical or other report has been prepared for the Project, the Contractor may inspect the records pertaining to such investigations subject to and upon the conditions hereinafter set forth. The inspection of the records shall be made in the office of the Engineer. It is the Contractor's sole responsibility to determine whether such investigations exist,

and the City makes no affirmative or negative representation concerning the existence of such investigations.

The records of any such investigations are made available solely for the convenience of the Contractor. It is expressly understood and agreed that the City, the Engineer, their agents, consultants or employees assume no responsibility whatsoever with respect to the sufficiency or accuracy of any investigations, the records thereof, and the interpretations set forth therein. No warranty or guarantee is expressed or implied that the conditions indicated by any such investigations or records are representative of those existing in the Project area. The Contractor agrees to make such independent investigations and examination as necessary to be satisfied of the conditions to be encountered in the performance of the Work.

The Contractor represents that it has studied the Plans, Specifications and other Contract Documents, and all surveys and investigation reports of subsurface and latent physical conditions, has made such additional surveys and investigations as necessary for the performance of the Work at the Contract Price in accordance with the requirements of the Contract Documents, and that it has correlated the results of all such data with the requirements of the Contract Documents. No claim of any kind shall be made or allowed for any error, omission or claimed error or omission, in whole or in part, of any geotechnical exploration or any other report or data furnished or not furnished by the City.

2-9 SURVEYING

The Contractor shall verify all dimensions on the drawings and shall report to the City any discrepancies before proceeding with related Work. The Contractor shall perform all survey and layout Work per the benchmark information on the Project Plans. All surveying Work must conform to the Professional Land Surveyors' Act (Business and Professions Code Section 8700 *et seq.*). All Project surveying notes and "cut-sheets" are to be provided to the City after the completion of each surveying activity and all final surveying notes shall be provided before final payment to the Contractor.

The Contractor is responsible for hiring a Surveyor to set survey points to be used for re-establishments of disturbed monuments and submit Corner Records to the County Surveyor. Copy of the submitted Corner Records must be provided to the City prior to actual disturbance of the monuments. The Contractor shall also cause all disturbed survey monuments within the project work area to be re-established at the end of the project. This also includes filing Corner Records and Record of Survey with the County Surveyor within 7 days of substantial completion of the construction work and submitting a copy to the City of the filed paperwork receipt within 2 days of submission. The Contractor is required to provide a copy of the County Surveyor's acceptance within 2 days of receipt from the County Surveyor.

Construction stakes shall be set and stationed by the Contractor at its expense. Unless otherwise indicated in the Special Provisions, surveying costs shall be included in the price of items bid. No separate payment will be made. Re-staking and replacement of construction survey markers damaged as a result of the Work, vandalism, or accident shall be at the Contractor's expense.

2-11 INSPECTION

The Contractor shall arrange and pay for all off-site inspection of the Work required by any ordinance or governing authorities. The Contractor shall also arrange and pay for other inspections, including tests in connection therewith, as may be assigned or required.

Add the following paragraphs:

2-11.1 Inspection

An inspector shall in no case act as foreman or perform other duties for the Contractor, nor interfere with the Contractor's management of the Work. Any advice which an inspector may give the Contractor shall not be binding to the Engineer or to the City, or release the Contractor from fulfilling all the terms of the Contract.

No partial payment, inspection, taking possession of, or other act made or done by the Engineer or the City with respect to the work prior to final completion and acceptance thereof shall affect or prejudice the right of the Engineer or the City to reject any defective work or material or to require the complete fulfillment of all the provisions of the Contract.

If the Engineer deems it expedient and not in the best interest of the City to correct work injured or done not in accordance with the Contract, the defective work may be accepted subject to an equitable deduction from the Contract Price which may be made therefor by the City upon certification from the Engineer.

Reexamination of any work may be ordered by the Engineer at any time prior to final acceptance and, if so ordered, the work must be uncovered by the Contractor. If such work be found in accordance with the Contract, the City will pay the cost of reexamination and replacement. If such work be found defective or not in accordance with the Contract, the Contractor shall pay such costs.

SECTION 3. CHANGES IN WORK

3-1 CHANGES REQUESTED BY THE CONTRACTOR

3-1.1 General

Add the following paragraph to the end of Subsection 3-1.1:

If the Contractor alleges that instructions issued after the date of the Contract will result in increases to the Contract Price or Contract Time, if latent or unforeseen conditions require modification of the Contract Documents, or the Contractor otherwise becomes aware of the need for or desirability of a change in the Work, a Change Order Proposal ("COP") may be submitted to the City in writing, using the forms provided herein in Subsection 3-6.2 of the General Provisions, and must specify the reasons for such change, including relevant circumstances and impacts on the construction schedule. The Contractor may request additional compensation and/or time through a COP but not for instances that occurred more than ten calendar days prior to the COP. The Contractor's failure to initiate a COP within such period shall be deemed a waiver of the right to adjustment of the Contract Price or the Contract Time for the alleged change, unless such waiver is prohibited under state law. Any COP that is approved by the City will be incorporated in a Change Order or Construction Change Directive. If the City determines that the Work in question is not a change, the City shall issue a Work Directive, ordering the Contractor to proceed with the Work without delay. If the COP is denied but the Contractor believes that it does have merit, the Contractor may submit a claim to the City.

3-2 CHANGES INITIATED BY THE AGENCY

The City reserves the right, without notice to the Surety, to increase or decrease the quantity of any item or portion of the Work described in the Contract Documents or to alter or omit portions of the Work so described, as may be deemed necessary or expedient by the Engineer, without in any way making the Contract void. Such increases, alterations or decreases of Work shall be considered and treated as though originally contracted for, and shall be subject to all the terms, conditions and provisions of the original Contract. The Contractor shall not claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease, alteration or omission of any kind of Work to be done.

3-2.1 General

Add the following paragraphs at the end of Subsection 3-2.1:

The City reserves the right to make changes in the Work, including the elimination of any Bid Item, after execution of the Contract and without invalidating the Contract by:

A. Change Order approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy); or

B. Construction Change Directive approved by the City Council, City Manager, Public Works Director, or City Engineer (dollar value of approval authority for each as per City policy);

A change that causes the total value of all changes to exceed the Contract contingency amount established at the time of award of the Contract must be approved by the City Council. No payments in excess of the original Contract Price will be made until a Change Order is approved in the normal course of business. The City may, at any time, without notice to the Contractor's surety(ies), order changes in the Work within the general scope of the Contract. Such changes in the Work shall not relieve or release the surety(ies) of its(their) obligations under the Performance and Payment Bonds issued for the Project. Changes in the Work made pursuant to this Article 3 shall in no way release any guarantee or warranty provided by the Contractor.

The City may issue a Change Order Proposal Request ("COPR"), in writing, to the Contractor, describing a proposed change to the Work and requesting that the Contractor submit an itemized Change Order Proposal ("COP") to the City, using the forms provided herein in Subsection 3-6.2 of the General Provisions, within ten calendar days after the City's issuance of the COPR. If the Contractor fails to submit a COP within such period of time, it shall be presumed that the change described in the City's COPR will not result in an increase to the Contract Price or Contract Time and the change shall be performed by the Contractor without such increases. A COPR does not authorize the Contractor to commence performance of the changed work. The Contractor shall not perform any change until receipt of the City's written approval. If the City approves the Contractor's COP, City shall issue a Change Order.

Whenever a change is pending, the Contractor shall notify the City if it is necessary to halt other Work in the area of the change that would be affected thereby, until such time as the change is authorized.

Any change to the Contract Price shall be in a sum mutually agreed to by the Contractor and the City. When the cost for Extra Work cannot be agreed upon, the City will pay for Extra

Work based on the accumulation of costs as provided for in Subsection 3-3, "Extra Work," of the Standard Specifications and the General Provisions.

3-2.1.1 Change Order

A Change Order is a written instrument prepared by the City and signed by the City and the Contractor, stating their agreement upon all of the following:

- A. The scope of the change in the Work;
- B. The amount of the adjustment, if any, in the Contract Price; and
- C. The extent of the adjustment, if any, in the Contract Time.

3-2.1.1.1 Accord and Satisfaction

The Contractor's agreement on any Change Order shall be a full compromise and settlement of all adjustments to the Contract Time and Contract Price, and compensation for any and all delay, extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences, and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of the Impacts on the overall Work under the Contract arising directly or indirectly from the performance of Work described in the Change Order. By execution of any Change Order, the Contractor agrees that the Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of whatsoever nature, character or kind arising out of or incidental to the Change Order. No action, conduct, omission, product failure, or course of dealing by the City shall act to waive, modify, change, or alter the requirement that Change Orders must be in writing, signed by the City and the Contractor, and that such written Change Orders are the exclusive method for effectuating any change to the Contract Sum and/or Contract Time.

3-2.1.2 Construction Change Directive

A Construction Change Directive is a written order prepared and signed by the City, directing a change in the Work prior to the Contractor's agreement on adjustment, if any, in the Contract Price or Contract Time, or both. The City may, by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Price and Contract Time being adjusted accordingly. Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved. A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The City's form of Construction Change directive is provided in Subsection 3-6.2 of the General Provisions.

3-2.2.2 Increases of More than 25 Percent

Delete Subsection 3-2.2.2 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceed the Bid quantity by more than 25%, a Change Order will be issued and payment for the quantity in excess of 25% of the

Bid quantity will be made on the basis of an adjustment to the Contract Unit price mutually agreed to by the City and the Contractor or pursuant to Subsection 3-2.4 "Agreed Prices."

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price exceeds the bid quantity by more than 25%.

3-2.2.3 Decreases of More than 25 Percent

Delete Subsection 3-2.2.3 in its entirety and substitute the following:

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications be less than 75% of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, a Change Order shall be issued and payment shall be made on the basis of an adjustment to the Contract Unit Price mutually agreed to by the City and the Contractor, or pursuant to Subsection 3-2.4 "Agreed Prices"; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price.

For Minor Items of Work, the Contractor will be paid using the Contract Unit Price, regardless of whether the actual quantity of the Minor Item of Work covered by a Contract Unit Price is less than 75% of the Bid quantity.

3-2.2.4 Changes for Items Not Covered by Unit Prices

Payment for any change for an Item of Work not covered by a Contract Unit Price shall be made pursuant to Subsection 3-3 "Extra Work."

3-3 *EXTRA WORK*

New and unforeseen work will be classified as Extra Work only when the Work is not covered and cannot be paid for under any of the various items or combination of items for which a Bid price appears on the Bid. The Contractor shall not do any Extra Work except upon written order from the Engineer.

3-3.1 General

Add the following at the end of Subsection 3-3.1:

All Extra Work shall conform to the Plans and Specifications.

The Contractor shall furnish to the Engineer each Subcontractor's signed and detailed estimate of the cost for labor, materials, and equipment, including the markup by such Subcontractor for overhead and profit for Work added or deducted to a Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the sub-Subcontractor's signed detailed estimate of the cost for labor, materials, and equipment, including the markup by such sub-Subcontractor for overhead and profit for Work added or deducted to a sub-Subcontractor's scope of Work. The Contractor shall furnish to the Engineer the vendor or supplier's signed detailed estimate or quotation of the cost to the Contractor for Work added or deducted from a vendor or suppliers scope of Work.

3-3.2.1 General

Add the following at the end of Subsection 3-3.2.1

Any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid on the basis of the net total cost. The cost of deleted Work not covered by a Contract Unit Price shall be determined by the Engineer based on the schedule of lump sum prices submitted by the Contractor in accordance with Subsection 9-2, "Lump Sum Work," of the Standard Specifications and the General Provisions.

3-3.2.2.1 Labor

Delete Subsection 3-3.2.2.1 in its entirety and substitute the following:

The cost of labor will be the actual cost for wages prevailing locally for each craft or type of worker (including foreman when authorized by the Engineer) performing the Extra Work at the time the Extra Work is done, plus liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, as well as assessments or benefits required by lawful collective bargaining agreements.

To the actual wages, as defined above, will be added a labor surcharge set forth in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed. The labor surcharge shall constitute full compensation for all payments imposed by State and federal laws and for all other payments made to, or on behalf of, the workers, other than actual wages, subsistence and travel paid to the workers. The labor surcharge includes Workers' Compensation, Social Security, Medicare, Federal Unemployment, State Unemployment, and State Training taxes.

Except when direct supervision is provided by working foremen whose time is included in accordance with Subsection 3-2.2.2, the cost of direct supervision of Extra Work, when such direct supervision is provided exclusively for the Extra Work and not in conjunction with or at the same time as supervision for other Work, and when approved in advance in writing by the Engineer, may be charged to the Extra Work. Such cost includes only the actual cost of supervision labor, plus payroll taxes, insurance, and pension costs. The cost of transportation, use of vehicle, and other costs incurred by supervision will not be allowed.

3-3.2.2.2 Materials

Add the following to Subsection 3-3.2.2.2:

If the Contractor does not furnish satisfactory evidence of the cost of the materials from the actual supplier thereof within 7 days following delivery of materials to the Work site, the Engineer reserves the right to establish the cost of the materials at the lowest current wholesale prices at which the materials were available, in the quantities concerned, delivered to the location of the Work site, less any discounts.

3-3.2.2.3 Tool and Equipment Rental

Delete Subsection 3-3.2.2.3 in its entirety and substitute the following:

No payment will be made for individual pieces of equipment or tools not listed in the California Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" that is in effect on the date upon which the Extra Work is performed and that have a replacement value of \$200.00 or less, whether or not consumed by use. Such equipment or tools shall be considered to be small tools.

The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

Move in and out, or minimum charges other than the hourly rate, shall not apply to equipment available from the force already on the Project site.

For equipment that is rented from a local equipment agency, the Contractor will be paid at the hourly rate shown on the rental agency invoice or agreement for the time the equipment is used on Extra Work. If a minimum equipment rental amount is required by the local equipment rental agency, the actual amount charged will be paid to the Contractor.

If it is deemed necessary by the Engineer to use equipment not listed in the Labor Surcharge and Equipment Rental Rates publication, a suitable rental rate for that equipment will be established by the Engineer. The Contractor may furnish any cost data that might assist the Engineer in the establishment of the rental rate. If the rental rate established by the Engineer is \$10.00 per hour or less, the provisions above concerning rental of equipment from a local equipment agency shall apply.

Rental time will not be allowed while equipment is inoperative due to breakdowns.

When owner operated equipment is used to perform Extra Work to be paid on a force account basis, the Contractor will be paid for the equipment and operator as follows:

1. Payment for the equipment will be made at the rental rates listed for such equipment in the Labor Surcharge and Equipment Rental Rates publication that is in effect on the date upon which the Extra Work is performed.

2. Payment for the cost of labor will be made in conformance with the provisions in Subsection 3-3.2.2.1 "Labor" of the General Provisions.

3-3.2.3 Markup

Delete Subsection 3-3.2.3 in its entirety and substitute the following:

The markup for overhead and profit on Extra Work shall be in accordance with the following schedule.

3-3.2.3.1 Work by Contractor.

The following percentages shall be added to the Contractor's costs and shall constitute the markup for all overhead and profit:

1) Labor20

- 2) Materials15
- 3) Equipment Rental15
- 4) Other Items and Expenditures.....15

To the sum of the costs and markups provided for in this subsection, one percent shall be added as compensation for bonding.

3-3.2.3.2 Work by Subcontractor.

For Extra Work performed by a Subcontractor, the markup established in Subsection 3-3.2.3.1 of the General Provisions shall be applied to the Subcontractor's costs. An additional five percent shall be added to the Subcontractor's final cost, which shall reimburse the Contractor for administrative costs, including overhead and profit.

3-3.2.3.3 Work by Sub-Subcontractor.

For Extra Work performed by a sub-Subcontractor, the markup established in Subsection 3-3.2.3.1 of the General Provisions shall be applied to the sub-Subcontractor's costs. An additional ten percent shall be added to the sub-Subcontractor's final cost, five percent of which shall reimburse the Contractor for administrative costs, including overhead and profit, and five percent of which shall reimburse the Subcontractor for administrative costs, including overhead and profit.

3-3.2.3.4 Work by Specialist.

If the Engineer and the Contractor agree that a service or an item of Extra Work cannot be performed by the forces of the Contractor or those of any of its Subcontractors or sub-Subcontractors, such service or Extra Work item may be performed by a specialist. Invoices for such services or items of Extra Work calculated on the basis of current market prices may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such complete itemization.

If the Contractor is required to perform Extra Work that requires a fabrication or matching process in a fabrication or machine shop facilities away from the Project site, the charges for that portion of the Extra Work performed in such facility may, by agreement between the Contractor and Engineer, be accepted as a specialist billing.

For Extra Work performed by a specialist, 15% shall be added to the specialist's invoice price less a credit to the City for any cash or trade discount offered or available, whether or not such discount may have been taken; such percentage shall reimburse the Contractor for administrative costs, including overhead and profit.

3-3.2.3.5 Work not Covered by Unit Prices.

Markup for overhead and profit on any change in the Work for an Item of Work not covered by a Contract Unit Price that involves both added and deleted Work shall be paid, in accordance with this Subsection 3-3.2.3 of the General Provisions, only if the net cost increases the Contract Price (i.e., if the cost for added Work exceeds the cost for deleted Work).

3-3.3 Daily Reports by Contractor

Delete the first sentence of Subsection 3-3.3 and substitute the following:

The Contractor shall submit daily reports for Extra Work showing all labor, material, and equipment costs incurred.

Add the following at the end of Subsection 3-3.3:

The daily reports shall describe in detail the Extra Work that was performed and the location (station, etc.). Separate daily reports shall be submitted for Extra Work that is performed for more than one location and for different tasks that are performed on the same day. Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily reports, or if not available, they shall be submitted with subsequent daily reports. The Contractor shall maintain the Contractor's records in such a manner as to provide a clear accounting of the costs.

Upon completion of the Extra Work, the Contractor shall submit a summary of costs, including markup for overhead and profit. All costs shall be in accordance with Subsection 3-3.2, "Payment," of the Standard Specifications and the General Provisions. The signature of the City's Inspector on a daily report shall indicate agreement with the information reflected therein, not that the Contractor is entitled to payment of the costs in the report. The Engineer shall review the daily reports. The Engineer shall compare the Inspector's records with the completed daily reports furnished by the Contractor and make any necessary adjustments. When the daily reports are agreed upon and signed by both parties, these reports shall become the basis of payment for the Extra Work performed.

3-3.4 Extension of Time

Add the following as Subsection 3-3.4:

If the Contractor is delayed in completing the Extra Work due to a change ordered by the City, the time for completion of Work will be extended in accordance with Subsection 6-6.1 of these General Provisions.

3-5 *DISPUTED WORK*

Delete Subsection 3-5 in its entirety and substitute the following:

In the event of disputed Work, the City shall have the right to unilaterally issue a written Work Directive; and the Contractor shall continue performance pending resolution of the dispute and shall maintain cost data described in Subsection 3-3 of the Standard Specifications and the General Provisions. The City's form of Work Directive is provided in Subsection 3-6 of the General Provisions. Payment shall be made for such disputed Work as is later determined by negotiation between the parties or as is fixed by a court of law.

3-6 *FORMS*

Add Section 3-6 to incorporate the following forms, which appear in the succeeding pages.

3-6.1 Change Order Form

3-6.2 Change Order Proposal Forms

- (a) Change Order Proposal Summary Report
- (b) Labor Cost Report
- (c) Labor Rates Report
- (d) Material Cost Report
- (e) Equipment Cost Report
- (f) Special Forces/Services Cost Report

3-6.3 Construction Change Directive Form

3-6.4 Work Directive Form



**CITY OF MANHATTAN BEACH
PUBLIC WORKS DEPARTMENT
Engineering Division**

CONTRACT CHANGE ORDER NO. 1 (Final)

PROJECT NO.:

DESCRIPTION:

TO: Construction Company, Inc.

You are hereby instructed to comply with the following changes from the Contract Plans and Specifications:

| SUMMARY OF CHANGES | | | |
|---------------------------------------------------|------------------------------------------|------------------------|--|
| Description (Detailed Explanation Attached) | Change in Contract Price ¹ | Change in Work Days | |
| 1. | \$0.00 | | |
| 2. Adjustment in Final Bid Quantities | \$0.00 | | |
| Net Change in Contract Price and Work Days | \$0.00 | | |

¹Deduction or decrease in Contract Price is denoted in parentheses.

The following change is hereby made a part of the Contract Documents and shall be performed under the same terms and conditions as required by the original Contract Documents. Except as modified herein, the original Contract Documents and all prior amendments shall remain in full force and effect and all of the terms of the Contract Documents are hereby incorporated in this Change Order.

SUMMARY OF ALL CHANGE ORDERS

ORIGINAL CONTRACT AMOUNT\$000,000.00
CCO1 (FINAL)\$0.00
TOTAL\$000,000.00

SUMMARY OF WORKING DAYS

FIRST DAY OF WORK:Date
CONTRACT WORKING DAYS:X
TIME EXTENSION: CCO 1 (Final).....Y
NEW TOTAL WORKING DAYS:X+Y
LAST DAY OF WORK:New Date



CHANGE ORDER DETAIL

Change Order No.: 1 (Final)

Project No.: Description:

The changes or interpretations described and noted herein are hereby authorized. The signed original of this order is on file in the Department of Public Works. Shown as separate paragraphs: (A) Reason for Change; (B) Description of Change; (C) Change in Contract Costs; and (D) Change in Completion Date.

Item No. 1:

A. Reason for Change:

B. Description of Change:

| ITEM | DESCRIPTION | UNIT | UNIT PRICE | BID OR CURRENT APPROVED QTY | FINAL QTY | CHANGE | CHANGE IN COST ¹ |
|----------|-------------|------|------------|-----------------------------|-----------|--------|-----------------------------|
| New Item | | | | 0 | 0 | 0 | 0.00 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
Add Y Working Days

Item No. 2: Adjustment in Final Bid Quantities:

A. Reason for Change:
Due to conditions encountered during construction, modifications to the amount of Work were determined to be appropriate, and the changes were addressed by means of adjusting applicable contract quantities, as outlined below.



B. Description of Change:

| ITEM | DESCRIPTION | UNIT | UNIT PRICE | BID OR CURRENT APPROVED QTY | FINAL QTY | CHANGE | CHANGE IN COST ¹ |
|----------|-------------|------|------------|-----------------------------|-----------|--------|-----------------------------|
| New Item | | | | 0 | 0 | 0 | 0.00 |

¹Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:
Add \$0.00

D. Change in Completion Date:
No Change.

SIGNATURE PAGE TO FOLLOW:



The original Contract Price was (\$0.00). Contract Change Order No. 1 (Final) increased the Contract Price by (\$0.00). The new Contract Price will be \$00/100, resulting in an increase of approximately 0.00% to the original Contract.

The original Contract Time of X Working Days was extended by Y Working Days per Change Order No. 1 (Final). The last contract Working Day is new Date.

Ordered: _____ Date: _____
Public Works Director

Concurred by: _____ Date: _____
City Engineer

Concurred by: _____
Project Manager

Acceptance by the Contractor:

This Change Order is in full compromise and settlement of all adjustments to Contract Time and Contract Price, and compensation for any and all delay, extended or additional field and home office overhead, disruption, acceleration, inefficiencies, lost labor or equipment productivity, differing site conditions, construction interferences and other extraordinary or consequential damages (hereinafter called "Impacts"), including any ripple or cumulative effect of these Impacts on the overall Work under the Contract arising directly or indirectly from the performance of Work described in this Change Order. By execution of this Change Order, the Contractor agrees that this Change Order constitutes a complete accord and satisfaction with respect to all claims for schedule extension, Impacts, or any costs of any nature, character or kind arising out of or incidental to this Change Order.

Name: _____ Date: _____

Title: _____



CHANGE ORDER PROPOSAL FORM

3-6.2(a) CONTRACT CHANGE ORDER PROPOSAL SUMMARY REPORT

CCO Proposal No. _____ Date _____
Contractor _____
Item No. _____ Location _____

AMOUNT

General Contractor

1. Labor Cost:\$ _____
2. Material Cost:\$ _____
3. Equipment Cost:\$ _____
4. Special Forces/Services:\$ _____
Subtotal Contractor Cost•\$ _____

5. Subcontractor/Sub-Subcontractor Name _____
Labor Cost\$ _____
Material Cost\$ _____
Equipment Cost\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost

6. Subcontractor/Sub-Subcontractor Name _____
Labor Cost\$ _____
Material Cost\$ _____
Equipment Cost\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost\$ _____

TOTAL CONTRACT CHANGE ORDER COSTS\$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(b) LABOR COST REPORT Date _____

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

| CLASSIFICATION AND NAME | HOURS | HOURLY RATE | EXTENDED AMOUNTS |
|-------------------------|-------|-------------|------------------|
| Classification: | OT | \$ | \$ |
| Name: | REG | \$ | \$ |
| Classification: | OT | \$ | \$ |
| Name: | REG | \$ | \$ |
| Classification: | OT | \$ | \$ |
| Name: | REG | \$ | \$ |
| Classification: | OT | \$ | \$ |
| Name: | REG | \$ | \$ |
| Classification: | OT | \$ | \$ |
| Name: | REG | \$ | \$ |
| TOTAL LABOR | | | \$ |

Overhead/profit 20%.....\$ _____

Total labor/overhead/profit.....\$ _____

Subcontractor's mark-up of total Sub-Subcontractor
labor/overhead/profit (if applicable) 5%\$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor labor/overhead/profit (if applicable) 5%.....\$ _____

Total.....\$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(c) LABOR RATES REPORT Date

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

| | | |
|------------------------------------|-----------|-----------|
| CLASSIFICATION: | | |
| TAXABLE BASE: | | AMOUNT |
| Base Hourly Pay | | \$ |
| Vacation | | \$ |
| TOTAL TAXABLE BASE | | \$ |
| TAXES & INSURANCE | PERCENT | AMOUNT |
| Social Security Tax | | \$ |
| State Unemployment Tax | | \$ |
| Federal Unemployment Tax | | \$ |
| Workmen's Compensation | | \$ |
| Liability & Umbrella Insurance | | \$ |
| TOTAL TAXES & INSURANCE | | \$ |
| FRINGE BENEFITS | AMOUNT | |
| Pension | \$ | |
| Health & Welfare | \$ | |
| Training | \$ | |
| Other Fringe Benefits | \$ | |
| TOTAL FRINGE BENEFITS | \$ | |
| AMOUNT | \$ | |



CHANGE ORDER PROPOSAL FORM

3-6.2(d) MATERIAL COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

| INVOICE NO. | DESCRIPTION | AMOUNT |
|------------------------|---------------------------------------|--------|
| 1. | Material | \$ |
| | Sales Tax (Prevailing Tax Rate) 7.75% | \$ |
| | Subtotal | \$ |
| 2. | Material | \$ |
| | Sales Tax (Prevailing Tax Rate) 7.75% | \$ |
| | Subtotal | \$ |
| 3. | Material | \$ |
| | Sales Tax (Prevailing Tax Rate) 7.75% | \$ |
| | Subtotal | \$ |
| SUBTOTAL MATERIAL COST | | \$ |

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent data shall be submitted along with the material cost report.

Overhead/profit 15%.....\$ _____

Total material/overhead/profit.....\$ _____

Subcontractor's mark-up of total Sub-Subcontractor
material/overhead/profit (if applicable) 5%\$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor labor/overhead/profit (if applicable) 5%.....\$ _____

Total.....\$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2(e) EQUIPMENT COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

| EQUIPMENT NO. (Description, Type, Size) | HOURS | HOURLY RATE | EXTENDED AMOUNTS |
|--------------------------------------------|-------|-------------|---------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| SUBTOTAL EQUIPMENT COST | | | \$ |

Overhead/profit 15%.....\$ _____

Total equipment/overhead/profit.....\$ _____

Subcontractor's mark-up of total Sub-Subcontractor
equipment/overhead/profit (if applicable) 5%\$ _____

General contractor's mark-up of total Subcontractor
or Sub-Subcontractor equipment/overhead/profit (if applicable) 5%\$ _____

Total.....\$ _____



CHANGE ORDER PROPOSAL FORM

3-6.2 (f) SPECIAL FORCES/SERVICES COST REPORT

Date _____

CCO Proposal No. _____ Contractor or Subcontractor _____

Item No. _____ Location _____

| INVOICE NO. | DESCRIPTION | AMOUNT |
|------------------------|-------------|--------|
| 1. | | \$ |
| | | \$ |
| | Subtotal | \$ |
| 2. | | \$ |
| | | \$ |
| | Subtotal | \$ |
| 3. | | \$ |
| | | \$ |
| | Subtotal | \$ |
| SUBTOTAL MATERIAL COST | | \$ |

NOTE: An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent data shall be submitted along with the special forces/services cost report.

Overhead/profit 15%.....\$ _____

Total Special Forces/Services/Overhead/Profit.....\$ _____



3-6.3 CONSTRUCTION CHANGE DIRECTIVE

Distribution to: CITY ☐ CONTRACTOR ☐ OTHER ☐ PROJECT MANAGER ☐

| | |
|----------------|----------------|
| PROJECT: | DIRECTIVE NO.: |
| | DATE: |
| | CONTRACT DATE: |
| TO CONTRACTOR: | CONTRACT FOR: |

You are hereby directed to make the following change(s) to this Contract:

PROPOSED ADJUSTMENTS

1. The proposed basis of adjustment to the Contract Price is:
[] Lump Sum (increase) (decrease) of \$ _____
[] Unit Price of \$ _____ per _____
[] Daily time and materials records of actual costs plus a overhead and profit, as provided in Subsection 3-3, "Extra Work," the Standard Specifications and the General Provisions, [subject to a Not-To-Exceed Amount of \$ _____].\ as follows:
[] as follows:
2. The Contract Time is proposed to (be adjusted) (remain unchanged). The proposed adjustment, if any, is (an increase of ____ days) (a decrease of ____ days).

If the Contractor disagrees with the proposed adjustments, it must submit its own proposal within ten days of the date of this Construction Change Directive pursuant to Contract Documents or the proposed adjustment will become final and binding on the Contractor.

When signed by the City and received by the Contractor, this document becomes effective IMMEDIATELY as a Construction Change Directive (CCD), and the Contractor shall proceed with the change(s) described above.

Ordered: _____ Date: _____
Public Works Director

Concurred by: _____ Date: _____
City Engineer

Concurred by: _____ Date: _____
Project Manager



3-6.4 WORK DIRECTIVE

Distribution to: CITY ☐ CONTRACTOR ☐ FIELD ☐ OTHER ☐ PROJECT MANAGER ☐

PROJECT:

WORK DIRECTIVE NO.:

DATE:

CONTRACT DATE:

TO CONTRACTOR:

CONTRACT FOR:

You are hereby directed to continue performance of the following Work, without delay, pending resolution of the dispute concerning such Work and maintain the cost data described in Subsection 3-3, "Extra Work," of the Standard Specifications and the **General Provisions** to the Contract for the performance of such Work:

Neither the issuance of this Work Directive nor the requirement for the Contractor to maintain cost data constitutes approval by the City of a change in the Work or modification of the Contract Documents.

Ordered: _____ Date: _____
Public Works Director

Concurred by: _____ Date: _____
City Engineer

Concurred by: _____ Date: _____
Project Manager

SECTION 4. CONTROL OF MATERIALS

4-1 MATERIALS AND WORKMANSHIP

The provisions below shall supplement but not replace those provisions in Section 4-1 of the Standard Specifications, except that Subsection 4-1.4 shall be replaced in its entirety.

The first paragraph of Section 4-1 is replaced with the following:

Wherever applicable, materials shall conform to the latest Standards of the American Society for Testing Materials. All workmanship in the fabrication, assembly and construction of materials and equipment shall be neat and workmanlike in every respect. All equipment offered shall be of the manufacturer's latest design.

The Contractor and all Subcontractors, suppliers, and vendors shall guarantee that the Work will meet all requirements of this Contract as to the quality of materials, equipment, and workmanship.

4.1.1.1 Property Rights in Materials

Nothing in the Contract shall be construed as vesting in the Contractor any right, title, or interest in material used in the Work after it has been attached or affixed to the Work or the soil. All such material shall become the property of the City upon being so attached or affixed.

4-1.2 Protection of Work and Materials

Add the following at the end of Subsection 4-1.2:

Materials shall not be stored in the right-of-way unless written permission is given by the Engineer.

4-1.4 Test of Materials

Delete Subsection 4-1.4 in its entirety and substitute the following:

Unless otherwise called for in these General Provisions, all testing of materials will be performed by the City in such number and at such locations as deemed necessary by the Engineer to ensure compliance with the Contract Documents. The cost of all testing that can be performed within 50 miles of the Project will be borne by the City; the cost of all testing that must be performed 50 miles or more from the Project will be borne by the Contractor; the cost of all re-testing will be borne by the Contractor, and the amount due the City for the re-testing will be deducted from the Contract Price via Change Order.

The cost of rework material testing, overtime, travel and other related costs incurred by the City will be deducted from the Contract Price via Change Order.

4-1.6 Trade Names or Equals

If the Contractor requests to substitute an equivalent item for a brand or trade name item, the burden of proof as to the comparative quality and suitability of alternative equipment or articles or materials shall be upon the Contractor, and the Contractor shall furnish, at its own expense, all information necessary or related thereto as required by the Engineer. All requests for substitution shall be submitted, together with all documentation necessary for the Engineer to determine

equivalence, no later than ten calendar days after the award of the Contract, unless a different deadline is listed in the Special Provisions.

SECTION 5 UTILITIES

The provisions below shall supplement but not replace those provisions in Section 5 of the Standard Specifications.

5-1 LOCATION

The location and existence of any underground Utility or substructure has not been obtained. The methods used and costs involved to locate existing elements, points of connection and all construction methods are the Contractor's sole responsibility. Accuracy of information furnished, as to existing conditions, is not guaranteed by the City. The Contractor, at its sole expense, must make all investigations necessary to determine locations of existing elements, which may include contacting Underground Service Alert and other private underground locating firm(s), utilizing specialized locating equipment, hand trenching, or both. For every Dig Alert Identification Number issued by Underground Service Alert during the course of the Project, the Contractor must submit to the City the following form. The Contractor shall be responsible for preserving the integrity of the existing underground utilities at the site.

UNDERGROUND SERVICE ALERT IDENTIFICATION NUMBER FORM

SLURRY SEAL AND ARAM PROJECT – AREAS 4, 5, & 6

No excavation will be permitted until this form is completed and returned to the City.

Government Code Section 4216 *et seq.* requires a Dig Alert Identification Number to be issued before a permit to excavate will be valid.

To obtain a Dig Alert Identification Number, call Underground Service Alert at **811** a minimum of three Working Days before scheduled excavation. For best response, provide as much notice as possible up to ten Working Days.

Dig Alert Identification Number: _____

Dated: _____

("CONTRACTOR")

By: _____

Printed Name: _____

Title: _____

By: _____

Printed Name: _____

Title: _____

NOTE: This form is required for every Dig Alert Identification Number issued by Underground Service during the course of the Work. Additional forms may be obtained from the City upon request.

5-1.3 Entry by Utility Owners

The right is reserved to the owners of public Utilities or franchises to enter the Project site for the purpose of making repairs or changes in their property that may be necessary as a result of the Work as well as any other reason authorized by the City. When the Contract Documents provide for the Utility owners to alter, relocate or reconstruct a Utility, or when the Contract Documents are silent in this regard and it is determined by the Engineer that the Utility owners must alter, relocate or reconstruct a Utility, the Contractor shall schedule and allow adequate time for those alterations, relocations or reconstructions by the respective Utility owners. City employees and agents shall likewise have the right to enter upon the Project site at any time and for any reason or no reason at all.

5-2 PROTECTION

If Contractor damages or breaks the Utilities, it will be the Contractor's responsibility to repair the Utility at no cost to the utility company or the City. If not fixed in a timely manner as deemed by the City Engineer, the utility company has the right to complete the repairs and assess the Contractor for all applicable costs.

Add the following paragraphs at the end of Subsection 5-2:

At least two Working Days prior to commencing work within the area, the Contractor shall request the utility owners to identify or otherwise indicate the location of their subsurface facilities. It shall be the Contractor's responsibility to determine the location and depth of all utilities including service connections which have been marked by the representative owners and which he believes may affect or be affected by the work. Full compensation for the ascertainment of utility locations and depths shall be considered included in the prices bid for the other items of work.

All utilities shall be notified by the Contractor in advance, according to their respective advance notice requirements, prior to excavating adjacent to, altering, or in any way modifying their facilities. The Contractor, at his expense, shall maintain in service all existing utilities. Should interruption of such utilities become necessary, the property owners and residents affected shall be notified 48 hours before the interruption.

The Contractor shall protect, support, or perform any other work necessary in order to maintain the operation of utilities in the proximity of the work area. The Contractor shall inform the Engineer in writing of all utilities omitted from or shown incorrectly on the contract plans. The Contractor shall not be entitled to damages or additional payment for delays attributable to utility relocations or alterations not shown or incorrectly delineated on the contract plans. The Contractor shall conduct his operations so as to permit access to the work site by any affected utility necessary for the relocation or modification to the utility system at no cost to the City.

Any interference by the Contractor with City-owned facilities such as, but not limited to, sewer, water, or storm drain that, in the opinion of the Engineer, creates a safety or health hazard and is not quickly repaired, the damaged facilities may be repaired by City forces and all costs of repairs will be deducted from contract payments.

5-3 REMOVAL

Facilities encountered during the prosecution of the Work that are determined to be abandoned shall be removed by the Contractor as required for the Work, unless directed otherwise by the

Engineer. The remaining portion of the existing Utility which is left in place shall be accurately recorded, in elevation and plan, on the control set of Contract drawings.

5-4 RELOCATION

The Contractor shall cooperate fully with all Utility forces of the City or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities that interfere with the progress of the Work. The Contractor shall schedule the Work so as to minimize interference with the relocation, altering, or other rearranging of facilities.

5-6 COOPERATION

The Contractor's attention is directed to the fact that Work may be conducted at or adjacent to the site by other contractors during the performance of the Work under the Contract. The Contractor shall conduct its operations so as to cause a minimum of interference with the work of such other contractors, and shall cooperate fully with such contractors to provide continued safe access to their respective portions of the site, as required to perform work under their respective contracts. Compensation for compliance shall be included in the various items of the Work, and no additional compensation shall be allowed therefor.

5-7 NOTIFICATION

The Contractor shall notify the Engineer and the owners of all Utilities and substructures not less than 48 hours before starting construction. The following list of names and telephone numbers is intended for the convenience of the Contractor and is not guaranteed to be complete or accurate:

Agency: _____
Phone Number: _____
Contact Person: _____

Agency: _____
Phone Number: _____
Contact Person: _____

Agency: _____
Phone Number: _____
Contact Person: _____

SECTION 6. PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

The provisions below shall supplement but not replace those provisions in Section 6 of the Standard Specifications.

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

6-1.1 Construction Schedule

In addition to the construction schedule required pursuant to Section 6-1.1 of the Standard Specifications after notification of the Contract award and before any start of the Project, as well as the revised construction schedule in advance of beginning revised operations, the Contractor

shall submit an updated construction schedule with its monthly invoice every month. Progress payments shall be contingent upon the receipt of monthly updated construction schedules.

One week before the scheduled pre-construction meeting, the Contractor must submit a construction schedule to the Engineer for review and approval. The Contractor shall make revisions as required by the Engineer. The schedule must account for all subcontract work, as well as the work of the Contractor, submittals, coordination with the other contractors performing concurrent work and the Traffic Control Plan. The Contractor shall update this Construction Schedule when directed by the Engineer, or when:

a. A Change Order significantly affects the Contract completion date or the sequence of construction approach or activities; or

b. The actual sequence of the Work, or the planned sequence of the Work, is changed and does not conform to the Contractor's current accepted Project construction schedule.

6-1.1.1 Pre-Construction Conference

Approximately five Days before the commencement of Work at the site, a pre-construction conference will be held at the City and shall be attended by the Contractor's Project manager, its on-site field superintendent, and any Subcontractors that the Contractor deems appropriate. Attendance by the Contractor and any Subcontractors designated is mandatory.

Contractor shall submit its 24-hour emergency telephone numbers to the Engineer for approval a minimum of two Working Days before the pre-construction conference. Unless previously submitted to the Engineer, the Contractor shall bring to the pre-construction conference copies of each of the following:

- 1) Construction Schedule.
- 2) Procurement schedule of major equipment and materials and items requiring long lead time.
- 3) Shop drawing/sample submittal schedule.
- 4) Preliminary schedule of values (lump sum price breakdown) for progress payment purposes.
- 5) Written designation of the on-site field superintendent and the Project manager. Both daytime and emergency telephone numbers shall be included in the written designation.

The purpose of the conference is to designate responsible personnel and establish a working relationship. The parties will discuss matters requiring coordination and establish procedures for handling such matters. The complete agenda will be furnished to the Contractor before the meeting date. The Contractor shall be prepared to discuss all of the items listed below.

- 1) The Contractor's construction schedule.
- 2) Notification of local residents before starting any Work and keeping them informed throughout the Project.
- 3) Procedures for transmittal, review, and distribution of the Contractor's submittals.
- 4) Processing applications for payment.
- 5) Maintaining record documents.
- 6) Critical Work sequencing.

- 7) Maintaining sewage service during construction, including proposed by-passes.
- 8) NPDES requirements, if any.
- 9) Field decisions and Change Orders.
- 10) Use of Project site, office and storage areas, security, housekeeping, and the City's needs.
- 11) Major equipment deliveries and priorities.
- 12) Traffic control.
- 13) Any other item that the City representative states is relevant to the meeting.

6-1.1.2 Weekly Progress Meetings

Progress meetings will be held each week during the course of the Project. The meeting location, day of the week and time of day will be mutually agreed to by the City and the Contractor. The Contractor shall provide a two-week "look ahead" schedule for each meeting. The construction manager will preside at these meetings and will prepare the meeting agenda, meeting minutes and will distribute minutes to all persons in attendance. As the Work progresses, if it is determined by agreement of the attendees, that weekly meetings are not necessary, the weekly progress meetings may be changed to bi-weekly progress meetings.

Add the following to section 6-2:

6-2.1 Excess Cost of City Personnel and Inspection Personnel

For any overtime or emergency work beyond a regular eight-hour day and for any work performed on Saturday, Sunday, or holidays, the charges for City personnel, including inspection, required on the job site shall be the responsibility of the Contractor and all costs therefor shall be deducted from the payments due the Contractor. The cost of City personnel shall be computed pursuant to adopted City salary schedules, overtime policies, fringe benefits, and overhead costs.

6-3.1 General

Add the following paragraph following paragraph one:

In the event a suspension of work is ordered because of failure on the part of the Contractor to carry out orders given or to perform any provisions of the Work, such suspension of work shall not relieve the Contractor of its responsibility to complete the work within the time limit set forth herein and shall not be considered cause for extension of the time for completion, and further, such suspension of work shall not entitle the Contractor to any additional compensation.

6-5 *TERMINATION OF THE CONTRACT FOR CONVENIENCE*

In addition to the reasons for termination listed in Section 6-5 of the Standard Specifications, which allow termination upon any written notice, the City may cancel the Contract for any other reason or for no reason upon 30 Days' written notice. The rest of the procedure outlined in Section 6-5 shall apply to such situation, including the Contractor's required immediate notification of Subcontractors and suppliers and the payment. In no event (including termination for impossibility or impracticability, due to conditions or events beyond the control of the City, for any other reason or for no reason) shall the total amount of money to Contractor exceed the amount which would have been paid to the Contractor for the full performance of the services described in the Contract.

Furthermore, some of the City's projects are funded in whole or in part by funds other than the City's General Fund. If this Project is funded by such external funds in whole or in part, or if those external funds are terminated or reduced at any time and for any reason or for no reason at all, and the City determines at its discretion that no other funding is available for continuation of this Project, the City will not be obligated to continue funding for the services contained in these Contract Documents and may terminate the Project immediately. The City shall reimburse the Contractor for its work satisfactorily completed until the termination date. In no event shall the total amount of money to the Contractor exceed the amount which the City has received in funding from its external source. The Special Provisions may include further details in this regard.

6-6 *DELAYS AND EXTENSIONS OF TIME*

Unless otherwise agreed in writing, an adjustment to the Contract time by reason of a Change Order shall be agreed to at the time the Change Order is issued and accepted by the Contractor. If the Change Order does not reserve the right of the parties, or either of them, to seek an adjustment to the Contract time, then the parties forever relinquish and waive such right and there shall be no further adjustments to the Contract time.

6-6.1 Extensions of Time

In the event it is deemed appropriate by the City to extend the time for completion of the Work, any such extension shall not release any guarantee for the Work required by the Contract Documents, nor shall any such extension of time relieve or release the Sureties on the Bonds executed. In executing such Bonds, the Sureties shall be deemed to have expressly agreed to any such extensions of time. The amount of time allowed by an extension of time shall be limited to the period of the delay giving rise to the same as determined by the City. Notwithstanding any dispute which may arise in connection with a claim for adjustment of the Contract time, the Contractor shall promptly proceed with the Work.

6-6.2 Payment for Delays

Notwithstanding any other terms and conditions of the Contract Documents, the City shall have no obligation whatsoever to increase the Contract Price or extend the time for delays.

Unless compensation and/or mark up is agreed upon by the City, the Contractor agrees that no payment of compensation of any kind shall be made to the Contractor for damages or increased overhead costs caused by any delays in the progress of the Contract, whether such delays are avoidable or unavoidable or caused by any act or omission of the City or its agents. Any accepted delay claim shall be fully compensated for by an extension of time to complete the performance of the Work.

This Section shall not apply to compensable delays caused solely by the City. If a compensable delay is caused solely by the City, the Contractor shall be entitled to a Change Order that: (1) extends the time for completion of the Contract by the amount of delay caused by the City; and (2) provides equitable adjustment, as determined by the City, to the Contractor.

Add the following as section 6-7.2:

6-7.2 Working Day

The term "Working Day" shall mean any calendar day except Saturdays, Sundays, and the following holidays:

| | |
|-----------------------------------|--------------------------|
| New Year's Day | January 1 |
| Martin Luther King, Jr. Day | 3rd Monday in January |
| Presidents' Day | 3rd Monday in February |
| Memorial Day | Last Monday in May |
| Independence Day | July 4 |
| Labor Day | 1st Monday in September |
| Columbus Day | 2nd Monday in October |
| Veterans' Day | November 11 |
| Thanksgiving | 4th Thursday in November |
| Friday after Thanksgiving | 4th Friday in November |
| Christmas Day | December 25 |

If a holiday falls upon a Sunday, the following Monday shall be the day the holiday is observed, and if a holiday falls upon a Saturday, the preceding Friday shall be the day the holiday is observed.

6-7.3 Contract Time Accounting

Add the following at the end of Subsection 6-7.3:

The Contract Time for completion of the Work, including corrective items of Work, shall be in accordance with Section 4 of the Contract. Contract Time extensions, when granted by the Engineer, will be in Working Days and in accordance with the Contract Documents, and will be set forth in writing via Change Order.

Add the following as section 6-7.3.1:

6-7.3.1 Hours of Work

The Contractor shall not conduct any operations or perform any Work pertaining to the

Project as defined herein, between the hours of 4:30 p.m. and 7:30 a.m. on any day nor on Saturday, Sunday, or holidays at any time except as approved by the Engineer. In the event that the Contractor abuses the hours of work requirement, a written warning will follow. After each additional warning, a \$200.00 penalty will be deducted from the Contract amount. All operations or Work pertaining to the Project, shall be in conformance with Manhattan Beach Municipal Code Section 9.44.030 - "Construction Hours and Prohibited Days."

6-8 COMPLETION, ACCEPTANCE AND WARRANTY

The Contractor shall complete all Work under the Contract within the stipulated Working Days from the Notice to Proceed, as stated in the Contract. The Contractor shall not be allowed to begin any construction activity at the site before the issuance of the Notice to Proceed. Between the period of the Notice of Award and Notice to Proceed, the Contractor shall process Shop Drawings and begin procuring equipment and materials.

6-8.2 Acceptance

The Project will not be considered complete and ready for City Council direction to staff regarding recordation of the Notice of Completion until all Work required by the Contract Documents has been fully completed in compliance with the Contract Documents and all Applicable Laws including, but not limited to, correction or completion of all punch list items, the Work site is cleaned up in accordance with Section 7-8 of the Standard Specifications, the General Provisions, and the Special Provisions, and all of the following items have been received by the Engineer:

1. A form of Notice of Completion, with all information required by the California Civil Code;
2. All written guarantees, warranties, and special warranties if applicable;
3. All "as-builts" and record drawings;
4. Duly completed and executed forms of Conditional Waiver and Release On Final Payment from the Contractor, Subcontractors of any tier, suppliers, and other person eligible to file stop notices in connection with the Work; and
5. Duplicate copies of all operating instructions and manufacturer's operating catalogs and data, together with such field instructions as necessary to fully instruct City personnel in correct operation and maintenance procedures for all equipment installed listed under the electrical, air conditioning, heating, ventilating and other trades. This data and instructions shall be furnished for all equipment requiring periodic adjustments, maintenance or other operation procedures.

The Contractor shall allow at least seven Working Days notice for final inspection. Such notice shall be submitted to the Engineer in writing.

6-8.3 Warranty

For the purposes of the calculation of the start of the warranty period, the Work shall be deemed to be completed upon the date of recordation of the Notice of Completion. If that direction is contingent on the completion of any items remaining on a punchlist, the Work shall be deemed to be completed upon the date of the Engineer's acceptance of the final item(s) on that punchlist.

The Contractor shall repair or replace defective materials and workmanship as required in Section 6-8.3 of the Standard Specification at its own expense. Additionally, the Contractor agrees to defend, indemnify and hold the City harmless from claims of any kind arising from damage, injury or death due to such defects.

The parties agree that no certificate given shall be conclusive evidence of the faithful performance of the Contract, either in whole or in part, and that no payment shall be construed to be in acceptance of any defective Work or improper materials. Further, the certificate or final payment shall not terminate the Contractor's obligations under the warranty herein. The Contractor agrees that payment of the amount due under the Contract and the adjustments and payments due for any Work done in accordance with any alterations of the same, shall release the City, the City Council and its officers and employees from any and all claims or liability on account of Work performed under the Contract or any alteration thereof.

6-9 LIQUIDATED DAMAGES

For the purposes of the calculation of the start of the liquidated damages, the Work shall be deemed to be completed when the same has been completed in accordance with the Plans and Specifications therefor and to the satisfaction of the Engineer, and the Engineer has certified such completion in accordance with Section 6-8.1 of the Standard Specifications. The liquidated damages value is hereby amended to be \$300 per day.

SECTION 7. RESPONSIBILITIES OF THE CONTRACTOR

The first paragraph of Section 7-3.1 of the Standard Specifications shall not be incorporated and shall instead be replaced with the following:

The Contractor shall provide and maintain insurance naming the City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials as insureds or additional insureds regardless of any inconsistent statement in the policy or any subsequent endorsement whether liability is attributable to the Contractor or the City. The insurance provisions shall not be construed to limit the Contractor's indemnity obligations contained in the Contract. The City will not be liable for any accident, loss, or damage to the Work before completion, except as otherwise specified in Section 6-10.

The first sentence of Section 7-8.4.2 shall not be incorporated, and shall instead be replaced with the following:

Construction materials and equipment shall not be stored in Streets, roads, or highways unless otherwise specified in the Special Provisions or approved by the Engineer.

The first sentence of the second paragraph of Section 7-9 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

The Contractor shall relocate, repair, replace, or reestablish all existing improvements within the Project limits which are not designated for removal (e.g., curbs, sidewalks, driveways, signal loops, fences, walls, sprinkler systems, signs, Utility installations, pavements, structures, etc.) which are damaged or removed

as a result of the Contractor's or the Subcontractors' operations or as required by the Plans and Specifications.

The last paragraph of Subsection 7-9 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

All costs to the Contractor for protecting, removing, restoring, relocating, repairing, replacing, or reestablishing existing improvements shall be included in the Bid.

Section 7-12 of the Standard Specifications shall not be incorporated, and shall instead be replaced with the following:

The names, addresses and specialties of the Contractor, Subcontractors, architects or engineers may not be displayed on any signage within the public right-of-way. This signage prohibition includes advertising banners hung from truck beds or other equipment.

Otherwise, the provisions below shall supplement but not replace those provisions in Section 7 of the Standard Specifications.

7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES

The use of excessively loud equipment and warning signals shall be avoided, except in those cases required for the protection of personnel.

7-2 LABOR

7-2.2.1 Public Work

The Contractor acknowledges that the Project is a "public work" as defined in Labor Code Section 1720 *et seq.* ("Chapter 1"), and that this Project is subject to (a) Chapter 1, including without limitation Labor Code Section 1771 and (b) the rules and regulations established by the Director of Industrial Relations ("DIR") implementing such statutes. The Contractor shall perform all Work on the Project as a public work. The Contractor shall comply with and be bound by all the terms, rules and regulations described in (a) and (b) as though set forth in full herein.

7-2.2.2 Copies of Wage Rates

Pursuant to Labor Code Section 1773.2, copies of the prevailing rate of per diem wages for each craft, classification, or type of worker needed to perform the Project are on file at City Hall and will be made available to any interested party on request. By initiating any Work on this Project, the Contractor acknowledges receipt of a copy of the DIR determination of such prevailing rate of per diem wages, and the Contractor shall post such rates at each job site covered by these Contract Documents.

7-2.2.3 Failure to Pay Prevailing Rates

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty paid to the City, forfeit \$200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as

determined by the DIR for the work or craft in which the worker is employed for any public work done pursuant to these Contract Documents by the Contractor or by any Subcontractor.

7-2.2.4 Apprentices

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1777.5, 1777.6 and 1777.7 and California Code of Regulations Title 8, Section 200 *et seq.* concerning the employment of apprentices on public works projects. The Contractor shall be responsible for compliance with these Sections for all apprenticeable occupations. Before commencing Work on this Project, the Contractor shall provide the City with a copy of the information submitted to any applicable apprenticeship program. Within 60 Days after concluding Work, Contractor and each of its Subcontractors shall submit to the City a verified statement of the journeyman and apprentice hours performed under this Contract.

7-2.2.5 Debarment or Suspension

The Contractor shall not perform Work with any Subcontractor that has been debarred or suspended pursuant to California Labor Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. The Contractor and Subcontractors shall not be debarred or suspended throughout the duration of the Contract pursuant to Labor Code Section 1777.1 or any other federal or State law providing for the debarment of contractors from public works. If the Contractor or any Subcontractor becomes debarred or suspended during the duration of the Project, the Contractor shall immediately notify the City.

7-2.3 Payroll Records

The Contractor shall comply with and be bound by the provisions of Labor Code Section 1776, which requires the Contractor and each Subcontractor to (1) keep accurate payroll records and verify such records in writing under penalty of perjury, as specified in Section 1776, (2) certify and make such payroll records available for inspection as provided by Section 1776, and (3) inform the City of the location of the records. The Contractor has ten days in which to comply subsequent to receipt of a written notice requesting these records, or as a penalty to the City, the Contractor shall forfeit \$100.00 for each Day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

7-2.4 Hours of Labor

The Contractor acknowledges that eight hours labor constitutes a legal day's work. The Contractor shall comply with and be bound by Labor Code Section 1810. The Contractor shall comply with and be bound by the provisions of Labor Code Section 1813 concerning penalties for workers who work excess hours. The Contractor shall, as a penalty paid to the City, forfeit \$25.00 for each worker employed in the performance of this Project by the Contractor or by any Subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of Division 2, Part 7, Chapter 1, Article 3 of the Labor Code. Pursuant to Labor Code Section 1815, work performed by employees of the Contractor in excess of eight hours per day, and 40 hours during any one week shall be permitted upon public work upon compensation for all hours worked in excess of eight hours per day at not less than one and one-half times the basic rate of pay.

7-2.5 Registration with the DIR

In accordance with Labor Code Sections 1725.5 and 1771.1, no contractor or Subcontractor shall be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, unless currently registered and qualified to perform public work pursuant to Section 1725.5.

7-2.6 Compliance Monitoring and Posting Job Sites

This Project is subject to compliance monitoring and enforcement by the DIR. The Contractor shall post job site notices, as prescribed by regulation.

7-2.7 Subcontractors

For every Subcontractor who will perform Work on the Project, the Contractor shall be responsible for such Subcontractor's compliance with Chapter 1 and Labor Code Sections 1860 and 3700, and the Contractor shall include in the written Contract between it and each Subcontractor a copy of the provisions in this Section 7-2 of the General Provisions and a requirement that each Subcontractor shall comply with those provisions. The Contractor shall be required to take all actions necessary to enforce such contractual provisions and ensure Subcontractor's compliance, including without limitation, conducting a periodic review of the certified payroll records of the Subcontractor and upon becoming aware of the failure of the Subcontractor to pay its workers the specified prevailing rate of wages. The Contractor shall diligently take corrective action to halt or rectify any failure.

7-2.9 Prevailing Wage Indemnity

To the maximum extent permitted by law, the Contractor shall indemnify, hold harmless and defend (at the Contractor's expense with counsel reasonably acceptable to the City) the City, its officials, officers, employees, agents and independent contractors serving in the role of City officials, and volunteers from and against any demand or claim for damages, compensation, fines, penalties or other amounts arising out of or incidental to any acts or omissions listed in Section 7-2 of the General Provisions by any Person (including the Contractor, its Subcontractors, and each of their officials, officers, employees and agents) in connection with any Work undertaken or in connection with the Contract Documents, including without limitation the payment of all consequential damages, attorneys' fees, and other related costs and expenses. All duties of the Contractor under this Section 7-2.9 shall survive expiration or termination of the Contract.

7-3 *INSURANCE*

The Contractor shall at all times during the term of the Contract carry, maintain, and keep in full force and effect the insurance referenced in Section 7-3 of the Standard Specifications, as modified below.

7-3.1.1 Acceptability of Insurers.

The insurance policies required under this Section 7-3 shall be issued by an insurer admitted to write insurance in the State of California with a rating of A:VII or better in the latest edition of the A.M. Best Insurance Rating Guide. Self insurance shall not be considered to comply with the insurance requirements under this Section 7-3.

7-3.1.2 Additional Insured.

The City, its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials, shall be the insured or named as additional insureds covering the Work, regardless of any inconsistent statement in the policy or any subsequent endorsement, whether liability is attributable to the Contractor or the City. The commercial general and automobile liability policies shall contain an endorsement naming City, its officers, employees, agents and volunteers as additional insureds.

7-3.1.3 Primary and Non-Contributing.

The insurance policies required under this Section 7-3 shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance available to the City. Any insurance or self-insurance maintained by the City, its officers, employees, agents or volunteers, shall be in excess of the Contractor's insurance and shall not contribute with it.

7-3.1.4 Contractor's Waiver of Subrogation.

The insurance policies required under this Section 7-3 shall not prohibit the Contractor and the Contractor's employees, agents or Subcontractors from waiving the right of subrogation prior to a loss. The Contractor hereby waives all rights of subrogation against the City.

7-3.1.5 Deductibles and Self-Insured Retentions.

Any deductibles or self-insured retentions must be declared to and approved by the City. At the City's option, the Contractor shall either reduce or eliminate the deductibles or self-insured retentions with respect to the City, or the Contractor shall procure a bond guaranteeing payment of losses and expenses.

7-3.1.6 Cancellations or Modifications to Coverage.

The Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 7-3 during the term of the Contract. The commercial general and automobile liability policies required under the Contract shall be endorsed to state that should the issuing insurer cancel the policy before the expiration date, the issuing insurer will endeavor to mail 30 days' prior written notice to the City. If any insurance policy required under this Section 7-3 is canceled or reduced in coverage or limits, the Contractor shall, within two business days of notice from the insurer, phone, fax or notify the City via certified mail, return receipt requested, of the cancellation or changes to the policy.

7-3.1.7 City Remedy for Noncompliance.

If the Contractor does not maintain the policies of insurance required under this Section 7-3 in full force and effect during the term of the Contract, or in the event any of the Contractor's policies do not comply with the requirements under this Section 7-3, the City may either immediately terminate the Contract or, if insurance is available at a reasonable cost, the City may, but has no duty to, take out the necessary insurance and pay, at the Contractor's expense, the premium thereon. The Contractor shall promptly reimburse the City for any premium paid by the City or the City may withhold amounts sufficient to pay the premiums from payments due to the Contractor.

7-3.1.8 Evidence of Insurance.

The Contractor shall furnish the City's Risk Manager with a certificate or certificates of insurance and all original endorsements (both of which must reference the same Policy number), evidencing and effecting the coverages required under Section 7-3 of the Standard Specifications, as modified by this Section 7-3, prior to the execution of the Contract and by the deadlines stipulated in the "Instructions to Bidders". The endorsements are subject to approval by the City's Risk Manager. The Contractor may provide complete, certified copies of all required insurance policies to the City. The Contractor shall provide proof to the City's Risk Manager that insurance policies expiring during the term of the Contract have been renewed or replaced with other policies providing at least the same coverage. The Contractor shall furnish such proof at least two weeks prior to the expiration of the coverages.

The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements must specifically name the City of Manhattan Beach and its elected and appointed officials, officers, employees, attorneys, agents, designated volunteers, and independent contractors in the role of City officials as insureds or additional insureds. The Contractor shall maintain current insurance certificates and endorsements on file with the City's Risk Manager at all times during the term of this Contract. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

Where the Contractor has entered into an agreement with a Professional Employment Organization (PEO) to provide human resources, workers' compensation insurance, or other benefits to the Contractor's employees, the Contractor must also submit the agreement with the PEO. If the evidence of insurance submitted by the Contractor pursuant to this Section 7-3 evidences that the insurance is provided by the PEO, all such PEO-provided insurance coverages and indemnities must comply with the requirements of these Contract Documents.

7-3.1.9 Indemnity Requirements not Limiting.

Procurement of insurance by the Contractor shall not be construed as a limitation of Contractor's liability or as full performance of the Contractor's duty to indemnify the City under Section 7-4 of the Contract.

7-3.1.10 Subcontractor Insurance Requirements.

The Contractor shall require each of its Subcontractors that perform Services under the Contract to maintain insurance coverage that meets all of the requirements of this Section 7-3.

7-3.1.11 Replacement Insurance

The Contractor agrees that it will not cancel, reduce or otherwise modify the insurance coverage. The Contractor agrees that if it does not keep the required insurance in full force and effect, and such insurance is available at a reasonable cost, the City may take out the necessary insurance and pay the premium thereon, and the repayment thereof shall be deemed an obligation of the Contractor and the cost of such insurance may be deducted, at the option of the City, from payments due the Contractor. This shall be in addition to all other legal options available to the City to enforce the insurance requirements.

7-3.1.12 Subcontractors

The Contractor shall ensure all Subcontractors and their employees are listed as additional insureds on all of the Contractor's insurance.

7-3.2 General Liability Insurance

Instead of the minimum limits listed in Section 7-3.2 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If the Contractor is a limited liability company, the commercial general liability coverage shall be amended so that the Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

7-3.3 Workers' Compensation Insurance

Workers' Compensation Insurance as required by the State of California and Employer's Liability Insurance with a minimum limit of \$1,000,000.00 per accident for bodily injury or disease. If the Contractor has no employees while performing the Work under the Contract, a Workers' Compensation policy is not required, but the Contractor shall execute a declaration that it has no employees.

7-3.4 Automobile Insurance

Instead of the minimum limits listed in Section 7-3.4 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Automobile Liability Insurance for any owned, non-owned or hired vehicle used in connection with the performance of the Contract with a combined single limit of \$2,000,000.00 per accident for bodily injury and property damage. If the Contractor does not use any owned, non-owned or hired vehicles in the performance of the Work under this Contract, the Contractor shall obtain a non-owned auto endorsement to the Commercial General Liability policy required by Subsection 7-3.2.

7-4 *INDEMNIFICATION*

The following indemnity provisions shall supersede the indemnity in Section 7-3.1 of the Standard Specifications.

7-4.1 Indemnities for Third Party Claims.

To the fullest extent permitted by law, the Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate

to the acts or omissions of the Contractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. The Contractor shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. The Contractor shall reimburse the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

7-4.1.1 Taxes and Workers' Compensation

The Contractor shall pay all required taxes on amounts paid to the Contractor under the Contract, and indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract. The Contractor shall fully comply with the Workers' Compensation law regarding the Contractor and the Contractor's employees. The Contractor shall indemnify and hold the City harmless from any failure of the Contractor to comply with applicable Workers' Compensation laws. The City may offset against the amount of any fees due to the Contractor under the Contract any amount due to the City from the Contractor as a result of the Contractor's failure to promptly pay to the City any reimbursement or indemnification arising under this Subsection 7-4.1.1.

7-4.1.2 Subcontractor Indemnity Agreements

The Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 7-4 from each and every Subcontractor or any other person or entity involved by, for, with or on behalf of the Contractor in the performance of the Contract. If the Contractor fails to obtain such indemnity obligations, the Contractor shall be fully responsible and indemnify, hold harmless and defend the Indemnitees from and against any and all Liabilities at law or in equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor's Subcontractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor's Subcontractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties.

7-4.2 Workers' Compensation Acts not Limiting.

The Contractor's indemnifications and obligations under this Section 7-4, or any other provision of the Contract, shall not be limited by the provisions of any Workers' Compensation act or similar act. The Contractor expressly waives its statutory immunity under such statutes or laws as to the City, its officers, agents, employees and volunteers.

7-4.3 Insurance Requirements not Limiting.

The City does not, and shall not, waive any rights that it may possess against the Contractor because of the acceptance by the City, or the deposit with the City, of any insurance policy or

certificate required pursuant to the Contract. The indemnities in this Section 7-4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, tax, assessment, penalty or interest asserted against the City.

7-4.4 Survival of Terms.

The Contractor's indemnifications and obligations under this Section 7-4 shall survive the expiration or termination of the Contract.

7-4.5 Civil Code Exception.

Nothing in this Section 7-4 shall be construed to encompass Indemnitees' sole negligence or willful misconduct to the limited extent that the underlying Contract is subject to Civil Code Section 2782(a) or the City's active negligence to the limited extent that the underlying Contract Documents are subject to Civil Code Section 2782(b), provided such sole negligence, willful misconduct or active negligence is determined by agreement between the parties or by the findings of a court of competent jurisdiction.

7-4.6 Nonwaiver of Rights.

Indemnitees do not and shall not waive any rights that they may possess against the Contractor because the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to these Contract Documents. This indemnity provision is effective regardless of any prior, concurrent, or subsequent active or passive negligence by Indemnitees and shall operate to fully indemnify Indemnitees against any such negligence.

7-4.7 Waiver of Right of Subrogation.

The Contractor, on behalf of itself and all parties claiming under or through it, hereby waives all rights of subrogation and contribution against the Indemnitees, while acting within the scope of their duties, from all Claims arising out of or incident to the activities or operations performed by or on behalf of the Contractor regardless of any prior, concurrent or subsequent active or passive negligence by Indemnitees.

7-5 *PERMITS*

Before starting any construction work, the Contractor will be required to obtain all necessary permits from the City, which may include obtaining a no fee encroachment permit for Work within the public right-of-way, as well as all other permits required from all other agencies. Should this Project require construction of trenches or excavations which are five feet or deeper and into which a person is required to descend, the Contractor shall obtain a Cal/OSHA permit and furnish the City with a copy before Work can commence on this Project. The Contractor shall bear all cost for fees for all agencies except for the City's permit fees.

The Contractor shall procure all permits and licenses (including a City of Manhattan Beach business license), pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work. All City of Manhattan Beach permits required for the performance of the Contract shall be issued on a "no fee" basis. Permits required by other agencies shall be obtained by the City for all work within the City of Manhattan Beach.

7-7 COOPERATION AND COLLATERAL WORK

The Contractor shall be responsible for coordinating all Work with the City's street sweeping, trash pick-up, and street maintenance contractors, emergency services departments, utility companies' crews, and others when necessary. Payment for conforming to these requirements shall be included in other items of Work, and no additional payment shall be made thereof.

7-8 WORKSITE MAINTENANCE

Clean-up shall be done as Work progresses at the end of each day and thoroughly before weekends. The Contractor shall not allow the Work site to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction operation. Materials which need to be disposed shall not be stored at the Project site, but shall be removed by the end of each Working Day. If the job site is not cleaned to the satisfaction of the Engineer, the cleaning will be done or contracted by the City and shall be back-charged to the Contractor and deducted from the Contract Price.

The Contractor shall make arrangements for storing its equipment and materials. The Contractor shall make its own arrangements for any necessary off-site storage or shop areas necessary for the proper execution of the Work. Approved areas within Work site may be used for temporary storage; however, the Contractor shall be responsible for obtaining any necessary permits from the City. In any case, the Contractor's equipment and personal vehicles of the Contractor's employees shall not be parked on the traveled way or on any section where traffic is restricted at any time.

The Contractor shall deliver, handle, and store products in accordance with the manufacturer's written recommendations and by methods and means that will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at the Project site and overcrowding of construction spaces. In particular, the Contractor shall provide delivery and installation coordination to ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.

Storage shall be arranged to provide access for inspection. The Contractor shall periodically inspect to ensure products are undamaged and are maintained under required conditions.

The Contractor shall promptly remove from the vicinity of the completed Work, all rubbish, debris, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final acceptance of the Work by the City will be withheld until the Contractor has satisfactorily complied with the foregoing requirements for final clean-up of the Project site.

All costs associated with the clean-up and storage required to complete the Project shall be the sole responsibility of the Contractor.

Pursuant to the provisions of Section 7-8 and Section 7-10 of the Standard Specifications and these General Provisions, the Contractor is responsible for Project site maintenance and for public convenience and safety. Payment for compliance with these provisions is considered as included in the prices bid for other contract items.

The City, however, to maintain good public relations, may deem it necessary to require special Project site maintenance and public convenience and safety actions and work to be performed by the Contractor that are over and above those required by the provisions of Section 7-8 and Section 7-10 of the Standard Specifications and these General Provisions.

These actions and work shall be as directed by the Engineer in writing and payment for compliance therewith shall be on a cost plus basis for extra work per Section 3-3 of the Standard Specifications and applied against the not-to-exceed bid item for "Special Project Site Maintenance and Public Convenience and Safety."

7-10 SAFETY

The provisions below shall supplement but not replace those provisions in Subsection 7-10 of the Standard Specifications.

7-10.2 Haul Routes

Subsection 7-10.3 of the Standard Specifications shall be deleted and replaced as follows:

The Contractor must obtain the Engineer's approval before using any haul routes. Further detail requirements for haul traffic are delineated in the Special Provisions.

7-10.5.3 Steel Plate Covers

The Contractor shall cover all openings, trenches and excavations at the end of each Work Day with steel plate covers.

7-15 RECYCLING OF MATERIALS

Subsection 7-15 is hereby added to the Standard Specifications as follows:

7-15.1 Recycling of Asphalt Concrete, Portland Cement Concrete, Aggregate Base, and Green Waste are Required

The records of disposal, including scale tonnages, shall be furnished to the City on a monthly basis. Failure to comply with the requirements of this Section will result in delay of progress payment.

7-15.2 Contractor's Obligation

The City is committed to a recycling program. If available, it is the obligation of the Contractor, under the Contract, to recycle the waste material through an approved recycling plant. Records and reports of waste recycle will be submitted to the City on a regular monthly basis.

SECTION 8. FACILITIES FOR AGENCY PERSONNEL

The provisions of Section 8 of the Standard Specifications shall apply except as modified herein. No field offices for City personnel shall be required; however, City personnel shall have the right to enter upon the Project at all times and shall be admitted to the offices of the Contractor to use the telephone, desk and sanitary facilities provided by the Contractor for its own personnel.

SECTION 9. MEASUREMENT AND PAYMENT

The provisions below shall supplement but not replace those provisions in Section 9 of the Standard Specifications.

9-1.1 General

Add the following at the end of Subsection 9-1.1:

All items of Work which are not designated on the Bid Schedule by the letters "F" or "LS" or words "Final" or "Lump Sum" shall have final pay quantities measured and paid for in accordance with the Standard Specifications and these General Provisions.

9-1.2 Methods of Measurement

The Contract Price shall constitute full compensation for all labor, equipment, materials, tools and incidentals required to complete the Project as outlined in these Contract Documents and as directed by the Engineer.

9-2 LUMP SUM WORK

Delete the first sentence of Subsection 9-2 and substitute the following:

Items of Work which are designated by the letters "LS" or the words "Lump Sum" in the Estimated Quantities column of the Bid Schedule shall be paid for at the price indicated in the Bid, unless the dimensions of the Work, as shown on the Plans, are revised by the Engineer. If such dimensions are revised and such revisions result in an increase or decrease in the quantity of such Work, the final payment for the lump sum item will be revised in proportion to the change in dimensions authorized by Change Order.

Add the following at the end of Subsection 9-2:

The Contractor shall submit a Work item breakdown of the Bid, described in the second paragraph of Subsection 9-2, "Lump Sum Work," of the Standard Specifications, within ten Working Days after award of the Contract and/or at any other time as required by the Engineer.

No guarantee is made regarding the amount of Work required to complete a lump sum item of Work.

9-2.1 Progress Payments for Lump Sum Items of Work

The word "Complete" in the Estimated Quantities column of the Bid Schedule for a lump sum item of Work shall mean that payment for that item will only be made after all Work for that item has been completed. The "%" symbol in the Estimated Quantities column of the Bid Schedule for a lump sum item of Work shall mean that progress payments for that item will be allowed based on the percentage of completion as determined by the Engineer in each pay period, typically every 30 days. (See Subsection 9-3.2 of the Standard Specifications and these General Provisions.)

9-3 PAYMENT

9-3.1 General

In accordance with Public Contract Code Section 7107, if no claims have been filed and are still pending, the amount deducted from the final estimate and retained by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be withheld for any other lawful purposes.

Whenever the Contractor is required to perform work or furnish equipment, labor, tools, and materials of any class for which no price is fixed in the proposal, it shall be understood that such work, equipment, labor, tools, and materials shall be provided without extra charge, allowance, or direct payment of any kind. The cost of performing such work or furnishing such equipment, labor, tools, and materials shall be included in the unit bid prices in the proposal most closely related to the work and no additional compensation will be made thereof.

If any portion of the work done or materials furnished under the Contract shall prove defective or not in accordance with the Specifications and Contract drawings, and if the imperfection in the same is not of sufficient magnitude or importance to make the work dangerous or undesirable, the Engineer shall have the right and authority to retain the work instead of requiring it to be removed and reconstructed, but he shall make such deductions therefor in the payment due the Contractor as may be just and reasonable.

Delete the tenth paragraph of Subsection 9-3.1 and substitute the following:

Not later than 60 days from the date of Final Acceptance, the five percent deducted and retained from each progress estimate (see Subsection 9-3.2 of the Standard Specifications and these General Provisions) by the City will be paid to the Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract to be further retained.

9-3.2 Partial and Final Payment

9-3.2.1 Monthly Closure Date and Invoice Date

The Contractor shall prepare and submit the form attached herewith (see Appendix I), or its own form in an identical format, to the Engineer for all requests for progress payments for the work performed in accordance with the provisions of the Contract during the preceding month. The progress payment request shall be submitted monthly, and a maximum of one progress payment request may be submitted each month. The Contractor shall submit a Conditional Waiver and Release form (Civil Code Section 8132) with the applicable monthly progress payment request. Progress payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

9-3.2.2 Payments

The City shall make payments within 30 Days after receipt of the Contractor's undisputed and properly submitted payment request, including an updated construction schedule pursuant to Section 6-1.1 of the General Provisions. The City shall return to the Contractor any payment request determined not to be a proper payment request as soon as practicable, but not later than seven Days after receipt, and shall explain in writing the reasons why the payment request is not

proper. Acceptance by the Contractor of the payment made in accordance with the final estimate shall be a release to the City, its officers, agents, and employees excepting only claims against the City for any amount withheld by it at the time of such payment.

9-3.2.3 Retention

The City shall withhold not less than five percent from each progress payment. The City shall withhold not less than five percent of the Contract Price from the Final Payment Amount (defined in Section 9-3.2.4) until at least 35 days after recordation of the Notice of Completion, or recordation of a notice of cessation, but not longer than the period permitted by Public Contract Code Section 7107.

In addition to retained percentage and liquidated damages, the City may withhold payments to the Contractor including for defective work not remedied and other valid claims against the Contractor.

9-3.2.4 Final Invoice and Payment

Whenever the Contractor shall have completely performed the Contract in the opinion of the Engineer, the Contractor shall submit to the Engineer a written statement of the final quantities of Contract items in the form of the final invoice, which must have an identical format to the progress payment request form attached herewith (see Appendix I). Upon receipt of the final payment request, the Engineer shall check the quantities included therein and shall authorize a payment amount, which in the Engineer's opinion shall be just and fair, covering the value of the total amount of Work done by the Contractor, less all previous payments and all amounts to be retained under the provisions of the Contract Documents ("Final Payment Amount"). The Contractor shall submit a Conditional Waiver and Release form (Civil Code Section 8136) with the Final Payment request. The Engineer shall then request that the City accept the Work and that the City Clerk be authorized to file, on behalf of the City in the office of the County Recorder, a Notice of Completion of the Work herein agreed to be done by the Contractor. In addition, the final payment will not be released until the Contractor returns the control set of Plans and Specifications showing the redlined as-built conditions.

Final payment requests associated with work completed prior to June 30th (the end of the City's fiscal year), must be submitted no later than July 30th.

9-3.2.5 Substitute Security

In accordance with Public Contract Code Section 22300, the Contractor may request that it be permitted to substitute securities in lieu of having retention withheld by the City from progress payments when such payments become due or, in the alternative, the Contractor may request that the City make payments of earned retentions directly to an agreed upon designated escrow agent at the Contractor's expense. If the Contractor selects either one of these alternatives, the following shall control.

9-3.2.5.1 Substitution of Securities for Performance Retention

At some reasonable time before any progress payment would otherwise be due and payable to the Contractor in the performance of Work under these Contract Documents, the Contractor may submit a request to the City in writing to permit the substitution of retentions with securities equivalent to the amount estimated by the City ("estimated amount of retention") to be withheld.

The Contractor shall deposit such securities with the City or may, in the alternative, deposit such securities in escrow with a State or federally chartered bank in California, as the escrow agent, at the Contractor's expense. Such securities will be the equivalent or greater in value of the estimated amount of retention. If the Contract is modified by written Modifications or Change Orders or the Contractor otherwise becomes entitled to receive an amount more than the Contract Price at the time the securities are deposited, the Contractor shall, at the request of the City, deposit with the City or escrow agent, whichever is applicable, additional securities within a reasonable time so that the amount of securities on deposit with the City or escrow agent is equivalent or greater in value than the amount of retention the City would otherwise be entitled to withhold from progress payments due or to become due to the Contractor as the Work progresses. The City shall withhold any retention amount that exceeds the security amount until the additional securities are deposited and, if the deposit is with an escrow agent, the City has confirmation from that escrow agent of the new total value of securities. Upon satisfactory completion of the Contract, which shall mean, among other things, that the City is not otherwise entitled to retain proceeds from progress payments as elsewhere provided in the Contract or under applicable law, the securities shall be returned to the Contractor. The City shall, within its sole discretion, determine whether the amount of the securities on deposit with the City or escrow agent is equal to or greater than the amount of estimated retention of progress payments that could otherwise be held by the City if the Contractor had not elected to substitute same with securities.

9-3.2.5.2 Deposit of Retention Proceeds with an Escrow Agent

As an alternative to the substitution of securities, as provided above, or the City otherwise retaining and holding retention proceeds from progress payments, the Contractor may request the City to make payments of retentions earned directly to an escrow agent with the same qualifications as required in Section 9-3.2.5.1 above and at the expense of the Contractor. At its sole expense, the Contractor may direct the investment of such retention payments into only such securities as mentioned in Section 9-3.2.5.3 below and shall be entitled to interest earned on such investments on the same terms provided for securities deposited by the Contractor. Upon satisfactory completion of the Contract, which shall mean when the City would not otherwise be entitled to withhold retention proceeds from progress payments had the Contractor not elected to have such proceeds deposited into escrow, the Contractor shall be allowed to receive from the escrow agent all securities, interest and payments deposited into escrow pursuant to the terms of this Section. The Contractor shall pay to each Subcontractor, not later than ten Days of receipt of payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount withheld to ensure performance of the Contractor.

9-3.2.5.3 Subcontractor Entitlement to Interest

If the Contractor elects to receive interest on any moneys withheld in retention by the City, then the Subcontractor shall receive the identical rate of interest received by the Contractor on any retention moneys withheld from the Subcontractor by the Contractor, less any actual pro rata costs associated with administering and calculating that interest. In the event that the interest rate is a fluctuating rate, the rate for the Subcontractor shall be determined by calculating the interest rate paid during the time that retentions were withheld from the Subcontractor. If the Contractor elects to substitute securities in lieu of retention, then, by mutual consent of the Contractor and the Subcontractor, the Subcontractor may substitute securities in exchange for the release of moneys held in retention by the Contractor. The Contractor shall pay each Subcontractor, not later than ten Days after receipt of escrow moneys, the amount owed to each Subcontractor from the moneys plus the respective amount of interest earned, net of costs

attributed to the retention held from each Subcontractor, on the amount of retention withheld to ensure performance of the Subcontractor.

9-3.2.5.4 Securities Eligible for Investment

Securities eligible for investment shall include those listed in Government Code Section 16430, bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed upon between the Contractor and the City. The Contractor shall be the beneficial owner of any securities substituted for any monies withheld and shall receive any interest thereon.

9-3.2.5.5 Escrow Agreement for Security Deposits in Lieu of Retention

The escrow agreement that shall be used for the deposit of securities in lieu of retention shall substantially conform to the form prescribed in Public Contract Code Section 22300(f).

9-3.2.5.6 Inconsistencies with Prevailing Statutory Requirements

If there is any inconsistency between or differences in Public Contract Code Section 22300 and the terms of this provision, or any future amendments thereto, Section 22300 shall control.

9-4 *AUDIT*

The City or its representative shall have the option of inspecting and/or auditing all records and other written materials used by the Contractor in preparing its billings to the City as a condition precedent to any payment to the Contractor or in response to a construction claim or a Public Records Act (Government Code Section 6250 *et seq.*) request. The Contractor will promptly furnish documents requested by the City at no cost. Additionally, the Contractor shall be subject to State Auditor examination and audit at the request of the City or as part of any audit of the City, for a period of three and one-half years after Final Acceptance under the Contract. The Contractor shall include a copy of this Section 9-4 in all contracts with its Subcontractors, and the Contractor shall be responsible for immediately obtaining those records or other written material from its Subcontractors upon a request by the State Auditor or the City. If the Project includes other auditing requirements, those additional requirements will be listed in the Special Provisions.

SECTION 10. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

10.1 *GENERAL*

To ensure that solid waste generated in the City is reduced, reused or recycled, the Contractor shall submit a "Waste Management Plan" (WMP) to the Engineer for review and approval, using the form found at the end of this Section 10. After the WMP has been reviewed by the Engineer, it will be returned to the Contractor in one of the following four status conditions:

- "Approved"
- "Further Explanation Required": The Engineer will return the WMP to the Contractor with questions about the WMP. The Contractor shall resubmit plan with each of the City's questions answered thoroughly.

- “Denied”: The Engineer will indicate the reasons for denial. The Contractor shall then re-submit a new WMP that complies with the requirements of this Section or request an Infeasibility Exemption.
- “Infeasibility Exemption Approved”

The Contractor shall follow the WMP and document results during demolition and construction. Final documentation shall be submitted at the end of the project to the Engineer for review of compliance with the original WMP. The amount deducted from the final estimate and retained by the City in accordance with Section 9.3.1 and 9.3.2 shall be withheld until final WMP is submitted to the City and approved by the City.

10-2 DEFINITIONS

- a) “Construction” means the building of any facility or structure or any portion thereof including any tenant improvements to an existing facility or structure.
- b) “Construction and Demolition Debris” means used or discarded materials removed from premises during construction of the Project.
- c) “Conversion Rate” means the rate set forth in the standardized Conversion Rate Table approved by the City Council pursuant to this Section for use in estimating the volume or weight of materials identified in a Construction and Demolition Waste Reduction and Recycling Plan.
- d) “Divert” means to use material for any purpose other than disposal in a landfill. Diversion credit is given for source reduction (waste reduction), recycling, and composting.
- e) “Diversion Requirement” means the diversion of at least 65% of the total Construction and Demolition Debris generated by a Project via reduction (source reduction), reuse or recycling, unless the Contractor has been granted an Infeasibility Exemption, in which case the Diversion Requirement shall be the maximum feasible diversion rate established by the Engineer.
- f) “Recycling” means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- g) “Renovation” means any change, addition, or modification in an existing structure.
- h) “Reuse” means further or repeated use of Construction or Demolition Debris. An example is the reuse of crushed concrete as road base or as aggregate on the construction site.
- i) “Salvage” means the controlled removal of Construction or Demolition Debris from project for the purpose of recycling, reuse, or storage for later recycling or reuse.
- j) “Construction and Demolition Waste Management Plan” means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor/Contractor for any Covered or Noncovered Project that indicates the estimated diversion that the Contractor/Contractor anticipates in diverting from disposal.

k) “Construction and Demolition Waste Management Report” means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor for any Project that documents the disposal and diversion tonnages and destinations.

10-3 INFEASIBILITY EXEMPTION

a) Application. If the Contractor experiences unique circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement, the Contractor shall apply for an exemption at the time that it submits the WMP. The Contractor shall indicate on the WMP the maximum rate of diversion the Contractor believes is feasible for each material and the specific circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement.

b) The Engineer shall review the information supplied by the Contractor and may meet with the Contractor to discuss possible ways of meeting the Diversion Requirement. Based on the information supplied by the Contractor, the Engineer shall determine whether it is possible for the Contractor to meet the Diversion Requirement.

c) If the Engineer determines that it is infeasible for the Contractor to meet the Diversion Requirement due to unique circumstances, the Engineer shall determine the maximum feasible diversion rate for each material and shall indicate this rate on the WMP submitted by the Contractor. The Engineer shall return a copy of the WMP to the Contractor marked “Infeasibility Exemption Approved.”

d) Denial of Exemption. If the Engineer determines that it is possible for the Contractor to meet the Diversion Requirement, the Engineer shall so inform the Contractor in writing. The Contractor will have 15 days to resubmit a new WMP. If the Contractor fails to resubmit a new WMP, or if the resubmitted WMP does not comply with the requirements of the plan, the Engineer shall deny the WMP.

10-4 DIVERSION PROGRAM

The methodology used to calculate diversion is based on the Title 14, California Code of Regulations, Article 6.1 Solid Waste Generation Study, Section 18722 et seq, and is consistent with California Integrated Waste Management Board measurement protocols. The following equation defines the “Generation-Based Diversion Quantification Methodology”:

$$\begin{aligned}\text{Generation} &= \text{Disposal} + \text{Diversion} \\ \text{Diversion Rate (\%)} &= \frac{\text{Diversion Tons}}{\text{Generation Tons}}\end{aligned}$$

10-5 ADDITIONAL INFORMATION

Other materials to assist the Contractor in completing the WMP can be found on the City’s website at www.citymb.info.

- Construction and Demolition Debris Recycling Guide
- Construction and Demolition Recycling Brochure

The California Integrated Waste Management Board has also developed Technical Assistance Literature regarding construction and demolition waste reduction and recycling, which is available on-line at <http://www.ciwmb.ca.gov/ConDemo/>.

CITY OF MANHATTAN BEACH
Construction & Demolition Waste Management Plan

Manhattan Beach Municipal Code 5.26 requires construction projects to reuse or recycle 65% of all construction site waste (All Demo & Roof tear-off projects, and All construction with a total value of \$100,000+). All haulers and contractors MUST have a business license in the City of Manhattan Beach.

REQUIRED GOAL: REUSE OR RECYCLE A MINIMUM OF 65% OF ALL PROJECT WASTE

Instructions:

1. Complete entire WMP & submit to the Project Manager as a project submittal.
2. Reuse and/or recycle at least 65% of all construction site waste and keep good records of all facility waste tickets.
3. Submit a copy of this WMP and ALL recycling and landfill facility weight tickets before Final Inspection to the Project Manager as a new project submittal. **A COPY OF THIS WMP AND RECEIPTS OF ALL RECYCLING AND DISPOSAL SHALL BE SUBMITTED BEFORE FINAL PAYMENT WILL BE MADE BY THE CITY.**

Fines for Non-Compliance (MBMC 5.26.020): Demo projects up to \$5,000 and Construction projects up to \$10,000

Project Name: _____

Project Address: _____

Type of Project: ☐ Street Improvement ☐ Water Main ☐ Sewer Main
 ☐ Storm Drain ☐ Other

Total Bid Price: \$ _____

Requesting Infeasibility Exemption: ☐ Yes ☐ No

Contractor Name: _____ **Contract Name:** _____

Address: _____ **Contact Phone:** _____

Recycler: _____ **Recycler Contact:** _____

Recycler Address: _____ **Recycler Contact Phone:** _____

| | CITY USE ONLY | |
|-------------------------------------------|--------------------|--------------|
| | Application (Date) | Final (Date) |
| Approved | _____ | _____ |
| Further explanation needed (see attached) | _____ | _____ |
| Denied | _____ | _____ |
| Infeasibility Exemption Approved | _____ | _____ |
| Reviewed By | _____ | _____ |

Submit this form and the attached Waste Management Plan Table to:

**Engineering Division
City of Manhattan Beach
3621 Bell Avenue
Manhattan Beach, CA 90266**

CITY OF MANHATTAN BEACH
Construction & Demolition Waste Management Plan Table

Project Name: _____

Total Estimated Waste Generated by Project: _____ (**IN TONS**).
(Ask your hauler, recycler or site cleanup vendor to assist you. Use receipts from your previous jobs for estimates.)

| Complete and return with Building Permit Application | | | | Complete and return with receipts prior to final building approval | | |
|------------------------------------------------------|----------------------------|--------------------------------|---------------------------------------------|--------------------------------------------------------------------|-----------------------------|---------------------------------------|
| Material Type | Estimated Reused/ Recycled | Estimated Disposed/ Landfilled | Vendor or Facility to be Used (Destination) | Actual Reused/ Recycled | Actual Disposed/ Landfilled | Vendor or Facility Used (Destination) |
| Asphalt & Concrete | | | | | | |
| Bricks/Masonry/Tiles | | | | | | |
| Building Materials (doors, windows, fixtures, etc.) | | | | | | |
| Cardboard | | | | | | |
| Concrete Pavement and Grindings | | | | | | |
| Drywall (new, unpainted) | | | | | | |
| Asphalt Pavement Grindings | | | | | | |
| Landscape Debris (Plant & Tree Trimmings) | | | | | | |
| Scrap Metal | | | | | | |
| Unpainted Wood & Pallets | | | | | | |
| Other (painted wood & drywall, roofing, etc.) | | | | | | |
| Mixed C&D* | | | | | | |
| Trash/Garbage | | | | | | |
| TOTAL | | | | | | |

*Mixed C&D is defined as a mixture of three or more materials (e.g., wood, drywall, roofing, etc.) from construction or demolition sites that will be taken to a "qualified" facility for recycling. (See C&D Debris Recycling Guide.)

If you are requesting an infeasibility exemption and the estimated amount reused/recycled is less than 65%, please explain why (attach additional sheets if necessary):

If the actual amount reused/recycled is less than 65%, please explain why:

Prepared by (please print): _____

Date: _____

Contractor Signature: _____

Phone Number: _____

Conversion Rates

The following conversion rates are estimates. The ranges vary widely, depending on how the materials are handled (compacted, loose, chipped, etc.). Use the conversion factors and receipts from any previous projects to help you estimate the potential amount of materials and diversion. Take into consideration the type and load of vehicles that will be used to haul the materials. Ask your hauler or recycler to assist you in estimating these numbers.

| Material | Lbs/cy | Tons/cy |
|-------------------|-----------------------------------------------------|---------------------|
| Asphalt | 1,400 lbs/cy | 0.7 tons/cy |
| Brick | 2,430 lbs/cy | 1.21 tons/cy |
| Cardboard | 100 lbs/cy | 0.05 tons/cy |
| Concrete | 2,600 lbs/cy (Sources range from 1,000 to 4,000) | 1.3 tons/cy |
| Dirt/Soils | 2,660 lbs/cy | 1.33 tons/cy |
| Drywall | 700 lbs/cy | 0.35 tons/cy |
| Wood (chipped) | 300 – 650 lbs/cy | 0.15 – 0.3 tons/cy |
| Mixed C&D Debris | 900 lbs/cy | 0.45 tons/cy |
| Mixed Waste/Trash | 100 – 350 lbs/cy | 0.5 – 0.175 tons/cy |

SECTION 11. ADDITIONAL TERMS

11-1 NONDISCRIMINATORY EMPLOYMENT

The Contractor shall not unlawfully discriminate against any individual based on race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation or military and veteran status. The Contractor understands and agrees that it is bound by and will comply with the nondiscrimination mandates of all statutes and local ordinances and regulations.

11-2 NOTICE TO PROCEED

Upon award of the Contract and signing the Contract Documents, the City shall issue the Contractor a Notice to Proceed. The City will not authorize any Work to be done under these Contract Documents before the Contract has been fully executed. Any Work that is done by the Contractor in advance of such time shall be considered as being done at the Contractor's own risk and responsibility, and as a consequence will be subject to rejection.

11-3 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the final acceptance of the Work by the City as defined in Section 6-8.2 of the General Provisions, by written action of the Engineer, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part of the Work by the action of the elements, criminal acts, or any other cause. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the Work occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except for such injuries or damages arising from the sole negligence or willful misconduct of the City, its officers, agents or employees. In the case of suspension of Work from any cause whatever, the Contractor shall be responsible for all materials and the protection of Work already completed, shall properly store and protect them if necessary, and shall provide suitable drainage and erect temporary structures where necessary.

11-4 PROCEDURE IN CASE OF DAMAGE TO PUBLIC PROPERTY

Any portions of curb, gutter, sidewalk or any other City improvement damaged by the Contractor during the course of construction shall be replaced by the Contractor at its own cost. The cost of additional replacement of curb, gutter or sidewalk in excess of the estimated quantities shown in the Bid form and Specifications, and found necessary during the process of construction (but not due to damage resulting from carelessness on the part of the Contractor during its operation), shall be paid to the Contractor at the unit prices submitted in its Bid.

11-5 REMOVAL OF INTERFERING OBSTRUCTIONS

The Contractor shall remove and dispose of all debris, abandoned structures, tree roots and obstructions of any character encountered during the process of excavation. It is understood that the cost of any such removals are made a part of the unit price bid by the Contractor under the item for excavation or removal of existing Work.

11-6 SOILS ENGINEERING AND TESTING

An independent certified materials testing firm must be retained by the Contractor to perform materials tests and applicable special inspections during the Contractor's entire operation to ascertain compliance with the Contract requirements. . If the initial tests do not meet the Contract requirements, the Contractor shall bear the cost of all subsequent tests.

The Contractor shall provide a copy of the testing and inspection reports to the Engineer within 24 hours upon receipt.

If the City requires other tests or more specific requirements for testing regarding this Project, those details will be included in the Special Provisions.

11-7 ACCESS TO PRIVATE PROPERTY

Unless otherwise stated in the Special Provisions, the Contractor shall be responsible for all fees and costs associated with securing permission to access private property for any portion of the Project.

11-8 WORKING DAYS AND HOURS

The Contractor shall do all Work between the hours of 7:30 a.m. to 4:30 p.m., Monday through Friday. No Work will be allowed on Saturday, Sunday or City holidays listed on the City's website unless specifically mentioned in the Contract Documents or authorized by the City Engineer.

In addition, no Work will be allowed on any special election Day that may be declared. Should a special election Day be declared, a time extension of one Working Day will be granted for each such Day.

A permit may have other hours or Days for the Contractor to do the Work, and those hours and Days shall supersede any hours and Days written in this Section.

Whenever the Contractor is permitted or directed to perform night Work or to vary the period during which Work is performed during the Working Day, the Contractor shall give 24 hours' notice to the Engineer so that inspection may be provided. Also, a charge may be made to the Contractor for approved overtime or weekend inspections requested by the Contractor.

11-9 CLAIM DISPUTE RESOLUTION

In the event of any dispute or controversy with the City over any matter whatsoever, the Contractor shall not cause any delay or cessation in or of Work, but shall proceed with the performance of the Work in dispute. The Contractor shall retain any and all rights provided that pertain to the resolution of disputes and protests between the parties. The Disputed Work will be categorized as an "unresolved dispute" and payment, if any, shall be as later determined by mutual agreement or a court of law. The Contractor shall keep accurate, detailed records of all Disputed Work, claims and other disputed matters.

All claims arising out of or related to the Contract Documents or the Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code Section 810 *et seq.*) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 *et seq.* (Article 1.5), where

applicable. The Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and Article 1.5 (if applicable), and must then adhere to Article 1.5 and Section 9204, as applicable, pursuant to the definition of "claim" as individually defined therein.

11-10 THIRD PARTY CLAIMS

The City shall have full authority to compromise or otherwise settle any claim relating to the Project at any time. The City shall timely notify the Contractor of the receipt of any third-party claim relating to the Project. The City shall be entitled to recover its reasonable costs incurred in providing this notice.

11-11 COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable federal, State and local laws, ordinances, codes and regulations in force at the time the Contractor performs pursuant to the Contract Documents.

11-12 CONTRACTOR'S REPRESENTATIONS

By signing the Contract, the Contractor represents, covenants, agrees, and declares under penalty of perjury under the laws of the State of California that: (a) the Contractor is licensed, qualified, and capable of furnishing the labor, materials, and expertise necessary to perform the services in accordance with the terms and conditions set forth in the Contract Documents; (b) there are no obligations, commitments, or impediments of any kind that will limit or prevent its full performance under the Contract Documents; (c) there is no litigation pending against the Contractor that could adversely affect its performance of the Contract, and the Contractor is not the subject of any criminal investigation or proceeding; and (d) to the Contractor's actual knowledge, neither the Contractor nor its personnel have been convicted of a felony.

11-13 CONFLICTS OF INTEREST

The Contractor agrees not to accept any employment or representation during the term of the Contract or within 12 months after acceptance as defined in Section 6-8.2 of the General Provisions that is or may likely make the Contractor "financially interested," as provided in Government Code Sections 1090 and 87100, in any decisions made by the City on any matter in connection with which the Contractor has been retained pursuant to the Contract Documents.

11-14 APPLICABLE LAW

The validity, interpretation, and performance of these Contract Documents shall be controlled by and construed under the laws of the State of California, excluding California's choice of law rules. Venue for any such action relating to the Contract shall be in the Los Angeles County Superior Court.

11-15 TIME

Time is of the essence in these Contract Documents.

11-16 INDEPENDENT CONTRACTOR

The Contractor and Subcontractors shall at all times remain, as to the City, wholly independent contractors. Neither the City nor any of its officials, officers, employees or agents shall have control over the conduct of the Contractor, Subcontractors, or any of their officers, employees, or agents, except as herein set forth, and the Contractor and Subcontractors are free to dispose of all portions of their time and activities that they are not obligated to devote to the City in such a manner and to such Persons that the Contractor or Subcontractors wish except as expressly provided in these Contract Documents. The Contractor and Subcontractors shall have no power to incur any debt, obligation, or liability on behalf of the City, bind the City in any manner, or otherwise act on behalf of the City as agents. The Contractor and Subcontractors shall not, at any time or in any manner, represent that they or any of their agents, servants or employees, are in any manner agents, servants or employees of the City. The Contractor and Subcontractors agree to pay all required taxes on amounts paid to them under the Contract, and to indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract Documents. The Contractor shall include this provision in all contracts with all Subcontractors.

11-17 CONSTRUCTION

In the event of any asserted ambiguity in, or dispute regarding the interpretation of any matter herein, the interpretation of these Contract Documents shall not be resolved by any rules of interpretation providing for interpretation against the party who causes the uncertainty to exist or against the party who drafted the Contract Documents or who drafted that portion of the Contract Documents.

11-18 NON-WAIVER OF TERMS, RIGHTS AND REMEDIES

Waiver by either party of any one or more of the conditions of performance under these Contract Documents shall not be a waiver of any other condition of performance under these Contract Documents. In no event shall the making by the City of any payment to the Contractor constitute or be construed as a waiver by the City of any breach of covenant, or any default that may then exist on the part of the Contractor, and the making of any such payment by the City shall in no way impair or prejudice any right or remedy available to the City with regard to such breach or default.

11-19 TERM

The Contract is effective as of the Effective Date listed, and shall remain in full force and effect until the Contractor has fully rendered the services required by the Contract Documents or the Contract has been otherwise terminated by the City. However, some provisions may survive the term listed within this Section, as stated in those provisions.

11-20 NOTICE

Except as otherwise required by law, any notice or other communication authorized or required by these Contract Documents shall be in writing and shall be deemed received on (a) the day of delivery if delivered by hand or overnight courier service during the City's regular business hours or (b) on the third business day following deposit in the United States mail, postage prepaid, to the addresses listed on the Contractor's Bid and City Hall, or at such other address as one party may notify the other.

11-21 SEVERABILITY

If any term or portion of these Contract Documents is held to be invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions of these Contract Documents shall continue in full force and effect.

SPECIAL PROVISIONS

PART I: SPECIAL INSTRUCTIONS

I. CONSTRUCTION SCHEDULE

The Contractor shall coordinate construction activities with the City's refuse company and street sweeping company. Refuse pick-up is performed by Waste Management (310-830-7100), and street sweeping is performed by Athens Services (888-336-6100).

II. STORAGE OF EQUIPMENT AND MATERIALS

Spoils from excavation shall be immediately removed from the project site. Overnight storage of materials removed or equipment shall not be permitted on the traveled roadway surface.

Full compensation for compliance with these requirements shall be considered as included in the appropriate bid items.

III. CONSTRUCTION STAGING AREAS

Contractor shall be responsible for securing a construction staging area for this project.

The Contractor may elect to contact the Manhattan Beach Unified School District (MBUSD) in regards to using the parking lot on Peck Avenue above Begg Field and Begg Pool for a construction staging area for this project. Any coordination or agreement with the MBUSD is independent of this Contract and is not guaranteed. The City will not facilitate any coordination or agreement with the MBUSD regarding securing a construction staging area. If the Contractor elects to contract with the MBUSD, the MBUSD may require the Contractor to install "No Parking" signs or to resurface and stripe the MBUSD's lower parking lot adjacent to Begg Pool.

The cost of securing a staging area shall be considered as included in the Contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

IV. PROTECT IN PLACE MANHOLES, VALVE COVERS, AND SURVEY MONUMENT FRAMES, COVERS, AND SLEEVES

Contractor is responsible for clean-up of any debris on, around, or in the manholes or valve covers. Existing survey markers, monuments, and benchmarks shall also be protected in place. Contractor shall walk with the City's Inspector to inspect each manhole and valve at the end of the project to ensure compliance.

V. WORK HOURS

Work hours shall be 7:30 AM-4:30 PM, Monday through Friday, with the exception of City holidays. Contractor must obtain prior approval from the City and notify all business entities affected by the planned work for any work outside of these hours, including work during nights and weekends.

The application of slurry shall not commence until after 7:30 a.m., and shall conclude at 1:30 p.m. unless otherwise authorized by the Engineer. The slurry shall be sufficiently cured to be open to traffic by 4:30 p.m. The portions of streets to be slurried shall be closed from the time the application begins until the mixture has achieved sufficient set to be opened to traffic.

VI. TRAFFIC CONTROL REQUIREMENTS

1. The Contractor shall implement traffic control per the Traffic Control Plan submitted to and approved by Caltrans per Special Instructions Part A.3.
2. The Contractor shall maintain all existing pedestrian and vehicular access to all businesses and residences adjacent to the Project site at all times throughout the duration of the completion of the Work.
3. The Contractor shall obtain a City Permit for work performed in the right-of-way, and provide the City with evidence of insurance coverage in compliance with section 7-3 "Insurance" in the General Provisions of the Specifications for this project.
4. It is the responsibility of the Contractor performing work on a public street to install and maintain the traffic control devices according to the Caltrans Standard Traffic Control Plans, to insure the safe movement of traffic and pedestrians through or around the work area and provide maximum protection and safety to construction workers. The Contractor shall submit a traffic control plan for approval prior to start of work for any conditions not covered by the Caltrans Standard Traffic Control Plans.
5. For the duration of the onsite Work, excluding potholing, two (2) electronic changeable message board shall be procured, placed, and maintained to notify oncoming traffic of the Work in each direction on Sepulveda Blvd. The Contractor must submit an exhibit with the proposed locations to the City for review and approval prior to the placement of the message boards. The Contractor must submit the message that will be displayed on the message boards to the City for review and approval prior to the placement of the message boards.
6. FLASHING ARROW BOARD(S) ARE MANDATORY FOR LANE CLOSURES ON MAJOR STREETS. They shall operate until traffic control is removed.
7. All travel lanes shall be open between 5:00 a.m. and 8:30 a.m. and between 3:30 p.m. and 9:00 p.m. One travel lane in each direction shall be open at all times between 8:30 a.m. and 3:30 p.m. unless otherwise indicated on plan. Flaggers may be used if one lane in each direction cannot be kept open with the approval of the Traffic Engineer. All traffic lanes shall be open before and after work hours.
8. All open trenches shall be covered with non-skid steel plates or temporary asphalt pavement before and after work hours.
9. All signs, delineators, barricades, etc., shall conform to the State of California Standard Specifications latest edition, the California Department of Transportation "Manual of Traffic Control for Construction and Maintenance Work Zones: (latest edition), and the "WATCH", latest edition. All barricades shall be equipped with flashing/steady burn

warning lamps at night. All cones, delineators, barricades, and "k" rail shall be reflectorized. All traffic control shall be kept in their proper position at all times, and shall be repaired, replaced, or cleaned as necessary to preserve their appearance and continuity. Any devices not part of the required traffic control or detours shall be removed from the view of the travelling public immediately.

10. The Contractor shall notify the MTA Bus Stops and Zones Dispatcher and any other affected transit services at least two working days prior to construction and any impacts. Evidence of such notification shall be submitted to the City at least two working days prior to construction and any impacts.
11. Where necessary, properly post "TEMPORARY NO PARKING ANYTIME" signs at least 72 hours before start of work, and the type of sign and information included on the sign shall conform to the requirements included in the Right-of-Way Permit issued by the City. The Contractor shall notify the Police Department immediately upon posting signs.
12. Vehicular and pedestrian access to adjacent properties shall be provided at all times. Closed sidewalks shall be posted with "SIDEWALK CLOSED" signs at each approach to the closure and an approved alternate route provided.
13. Protect traffic signal detectors in place or replace within 5 calendar days of final paving. All detectors damaged by the work shall be replaced to the standards of the City Public Works Department.
14. Notify the Public Works Inspector at (310) 802-5306, at least 48 hours prior to any construction in right-of-way. Notify Fire and Police Dispatch at (310) 545-4566 prior to starting work or closing lanes/streets every day.
15. Contractor shall coordinate all work in the vicinity of schools with the school administrators to minimize construction impacts on special dismissal and school event days.
16. Any revisions to the traffic control plans or requirements shall be approved by the Traffic Engineer.
17. The contractor shall be responsible for the establishment, maintenance and decommission when considered appropriate by the Engineer of the following:
 - a. Protection and restoration of existing improvements: Contractor shall protect, relocate, repair, replace or re-establish all existing improvements within the project limits which are not designated for removal (i.e. signs, markings, striping, posts, curb, gutter, sidewalk, ADA detectable warning devices, asphalt, plants, irrigation infrastructure, fences, walls, structures, survey control monumentation, etc.) which are damaged or removed as a result of its operations or as required by the Plans and Specifications. Relocations, repairs, replacements or re-establishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions at contractor's expense to the satisfaction of the Engineer.
 - b. Paths of travel: Contractor is required to provide a pedestrian management plan to show how pedestrians are detoured around each construction area

c. Construction work within any designated safe route pedestrian pathways:

1. No travel lanes, pedestrian xings or other means of accesibility to any school facilities shall be disturbed by construction activities between 7:30 AM to 8:30 AM and 1:30 PM to 3:30 PM on school days unless otherwise approved by the City Traffic Engineer.

Contractor shall coordinate all work in the vicinity of schools with the school administrators to minimize construction impacts on special dismissal and school event days.

PART II: STANDARD AND SPECIAL TECHNICAL PROVISIONS

PROJECT SPECIFIC SCOPE OF WORK

The Base Bid scope of work includes, but is not limited to:

- Pavement rehabilitation as specified on the streets identified in Appendix II.
- Re-establishment of disturbed and impacted traffic striping, pavement markings, signs, utility covers (manholes, vaults, meters), etc.

Order or Staging of Work:

The contractor shall construct the project in the following four (4) phases for the project streets. One phase must be completed for all streets before subsequent phases can commence:

- Phase 1: Dig out spot repairs per Specifications.
- Phase 2: Crack seal per Specifications.
- Phase 3: Slurry Seal and ARAM per Specifications on the roadways identified in Appendix II.
- Phase 4: Installation of striping, markers, markings, signage, etc. per Specifications.

MOBILIZATION

Mobilization shall consist of preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings, construction yards, sanitary facilities, and any other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site, as well as the related demobilization costs anticipated at the completion of the project. The cost of all bonds and insurance policies, including premiums and incidentals, shall be included in Mobilization.

No additional compensation will be allowed for additional mobilizations required, including but not limited to, delays caused by the relocation of existing utility facilities shown on the plans or discovered during construction operations.

The amount credited for Mobilization on each monthly progress payment shall be based upon the percentage of the total of the amounts credited for work on all the other contract items for that monthly progress payment, up to a cumulative limit of eighty (80) percent of the contract item price for Mobilization. The remaining twenty (20) percent of the contract item price for Mobilization shall be paid with the final progress payment.

The deletion of work or the addition of extra work as provided for herein shall not affect the price paid for Mobilization.

The contract lump sum price paid for mobilization shall include full compensation for furnishing all labor, materials, tool, equipment, the cost of all bonds and insurance policies, and incidentals, and for doing the work involved in mobilization as specified herein.

SURVEYING

The Contractor is responsible for hiring an independent surveyor to tie-out all monuments before construction work begins and re-establish those monuments after work is done. Work shall include the filing of corner records at the County Surveyor's Office with copies sent to the City. Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

The square foot unit price paid per the Bid Item for spot repairs shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved in spot repairs as shown in the specifications, or as directed by the Engineer, and no additional compensation will be allowed therefor.

NOTIFICATION OF RESIDENTS AND BUSINESSES

The Contractor shall notify in person and with printed notification, at least ten (10) working days prior to commencing work, to all agencies, businesses, institutions, postal service, residents, hospital, transit agencies, schools, churches, stores, utilities, and waste disposal service fronting or affected by the work. Additional printed notification shall be given not less than forty-eight (48) hours prior to performing any work which will restrict property access, close or partially close the street, or which will restrict or disallow street parking. All schools, churches, hospitals, and businesses shall receive seven (7) working days notification prior to performing any work that will restrict property access.

The Contractor shall coordinate with the school district for pick-up and drop-off of school children, waste disposal collection, the postal service to ensure delivery of mail, and churches for weekly or special activities.

The printed notices shall contain a general description of the work to be done and the date that the work is to be done. The notices shall also include a statement that parking will be restricted as called for on the "NO PARKING" signs to be posted along the street. All public notices must be reviewed and approved by the Engineer prior to its distribution.

The Contractor shall also post printed "NO PARKING-TOW AWAY" signs at one-hundred-foot (100') maximum spacing along each side of the affected streets for seventy-two (48) hours prior to the commencement of the street improvement work. The Contractor shall document the day, date and time the "NO PARKING" signs were posted. The Contractor shall not post signs on trees and utility poles.

The signs shall contain the day, date, hours and municipal code that parking will be prohibited on that particular street, and shall meet the requirements of City of Manhattan Beach Standard Plan MBSI-NP-1. The signs shall be removed immediately upon completion of work that will prohibit parking.

The printed notices and the "NO PARKING" signs shall be furnished by the Contractor.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

STORMWATER POLLUTION CONTROL/BEST MANAGEMENT PRACTICES (BMP)

NPDES General Permit, Notice of Intent (NOI) and Notice of Termination (NOT).

Construction activities including clearing, grading and excavating that result in land disturbances of equal to or greater than one acre are covered by the National Pollutant Discharge Elimination System General Construction Permit, State Water Board Order No. 2012-0006-DWQ and any amendments thereto. A copy can be downloaded at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo12.shtml

Dischargers obtaining coverage will file electronically for coverage under Order No. 2012-0006-DWQ. Order No. 2012-0006-DWQ is a Risk Based permitting approach. The Contractor is required to review the State Water Resources Control Board website and determine this project's risk level.

Order No. 2012-0006-DWQ includes, in Attachment A, requirements for all Linear Underground/Overhead Projects (LUPs) that are covered under the Small LUP General Permit 2003-007-DWQ. LUPs will be broken into project segments designated as LUP Type 1, Type 2, and Type 3. These LUP Types are analogous to the risks levels for traditional construction projects.

This General Construction Permit regulates pollutants in discharges of storm water associated with construction activity. To obtain authorization for proposed storm water discharges, pursuant to this General Construction Permit, the City must submit to the Storm Water Multiple Application and Reporting Tracking System (SMARTS) a Notice of Intent (NOI), compliance and monitoring data and Annual Reports, when required, and a Notice of Termination (NOT). The Contractor shall provide to the City, at the required time, all required information necessary for the City to comply with these requirements.

The Contractor shall provide to the City its Storm Water Pollution Prevention Plan (SWPPP) both in hardcopy and pdf format, so the City may submit the SWPPP to the SMARTS online.

Following Construction and the Contractor's installation of any post-construction storm water Best Management Practices BMPs (for City approval), the Contractor shall notify the City in writing to request for consideration to terminate coverage under the General Construction Permit for a complete project and to submit a NOT via the SMARTS.

Full compensation for preparation, administration and all other work related of the NOI, NOT, required fees, construction, and post construction BMPs, sampling, analysis and reporting as required by Order No. 2012-0006-DWQ and all other related costs shall be considered as included in the bid for STORMWATER CONTROL, BMPS, NPDES COMPLIANCE, AND PERMIT.

Best Management Practices (BMPs). Replace Subsection 7-8.6.2 Best Management Practices (BMPs) of the Standard Specifications with the following:

Best Management Practices shall be defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces pollution. The Contractor shall obtain and refer to the California Stormwater Quality Association's: Stormwater Best Management Practice Handbook Portal: Construction. The publication is available from CASQA.

The Contractor shall have a minimum of two (2) readily accessible copies of each publication on the Work site at all times. The Contractor shall implement BMPs in conjunction with the following construction operation and activities:

| | |
|-------------------------------------|-------------------------------------|
| CONSTRUCTION PRACTICES | Clearing, Grading and Excavating |
| | Water Conservation Practices |
| | Dewatering |
| | Paving Operations |
| | Structure Construction and Painting |
| | |
| MATERIAL MANAGEMENT | Material Delivery and Storage |
| | Material Use |
| | Spill Prevention and Control |
| | |
| WASTE MANAGEMENT | Solid Waste Management |
| | Hazardous Waste Management |
| | Contaminated Soil Management |
| | Concrete Waste Management |
| | Sanitary/Septic Waste Management |
| | |
| VEHICLE AND EQUIPMENT MANAGEMENT | Vehicle and Equipment Cleaning |
| | Vehicle and Equipment Fueling |
| | Vehicle and Equipment Maintenance |

The Contractor shall implement the following BMPs in conjunction with the previously listed construction operation activities:

| | |
|--------------------------|-------------------------------------------------------|
| VEGETATIVE STABILIZATION | Scheduling of Planting |
| | Preservation of Existing Vegetation |
| | Temporary Seeding and Planting |
| | Mulching |
| PHYSICAL STABILIZATION | Geotextiles and Mats |
| | Soil Stabilizer/Dust Control |
| | Temporary Stream Crossing |
| | Stabilized Construction Roadway |
| | Stabilized Construction Entrance |
| | |
| RUNOFF DIVERSION | Sodding, Grass Plugging, and Vegetative Buffer strips |
| | Earth Dikes, Drainage Swales, and Lined Ditches |
| | Top and Toe of Slope Diversion Ditches/Berms |
| | Slope Drains and Subsurface Drains |

| | |
|--------------------|------------------------------------------------|
| VELOCITY REDUCTION | Flared Culvert End Sections |
| | Outlet Protection/Velocity Dissipation Devices |
| | Check Dams |
| | Slope Roughening/Terracing/Rounding |
| | |
| SEDIMENT TRAPPING | Silt Fences |
| | Straw Bale Barrier |
| | Sand Bag Barrier |
| | Brush or Rock Filter |
| | Storm Drain Inlet Protection |
| | Sediment Traps |
| | Sediment Basin |

Additional BMPs may be required as a result of a change in actual field conditions, contractor activities, or construction operations. When more than one BMP is listed under each specific BMP category, the Contractor shall select the appropriate and necessary number of BMPs within each category in order to achieve the BMP objective.

BMPs for contractor activities shall be continuously implemented throughout the year. BMPs for erosion control and sedimentation shall be implemented during the period from October 15 to April 15, and whenever the National Weather Service predicts rain within 24 hours. BMPs for erosion control and sedimentation shall also be implemented prior to the commencement of any contractor activity or construction operation that may produce run-off, and whenever run-off from other sources may occur.

The Contractor shall employ or subcontract with a Qualified SWPPP Practitioner (QSP), who must be responsible for the implementation of all elements of the SWPPP, including non-stormwater and stormwater visual observations, sampling and analysis, preparation and timely submittal of periodic inspection reports, Rain Event Action Plans and/or other documentation or actions prescribed by the SWPPP. The Qualifications, certifications and experience of the Contractor's

proposed QSP shall be included in the SWPPP submittal.

The City, as a permittee, is subject to enforcement actions by the State Water Resources Control Board, the Environmental Protection Agency and private citizens. The City may assess the Contractor a penalty of \$1,000 for each calendar day that the Contractor has not fully implemented the appropriate BMPs and/or is otherwise in noncompliance with these provisions. In addition, the City will deduct, from the final payment due the Contractor, the total amount of any fines levied on the City, plus legal and staff costs, as a result of the Contractor's lack of compliance with these provisions and/or less than complete implementation of the appropriate BMPs.

Full compensation for the implementation of BMPs, including the construction, removal, and the furnishing of all necessary labor, equipment, and materials, shall be considered as included in the price bid for STORMWATER CONTROL, BMPs, NPDES COMPLIANCE, AND PERMIT.

Storm Water Pollution Prevention Plan (SWPPP). Replace Subsection 7-8.6.3 Storm Water Pollution Prevention Plan (SWPPP) of the Standard Specifications with the following:

Construction activities covered by the General Permit require submittal by the Contractor of a Storm Water Pollution Prevention Plan (SWPPP) prior to the start of any clearing, demolition, grading or excavation. A Storm Water Pollution Prevention Plan (SWPPP) shall be defined as a report that includes site map(s), identification of construction and contractor activities that could pollute storm water, and a description of measures and practices to control the potential pollutants. The preparation and implementation of the SWPPP is intended to ensure that the Contractor will make every reasonable effort to prevent the pollution of water resources during the period of construction. The size and nature of this Contract place it under the regulations of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activity. In the State of California, these regulations are adopted by the State Water Resources Control Board. These regulations require a SWPPP for any work where clearing, grading, and excavation result in a land disturbance of one or more acres. As a result, the Contractor shall prepare, submit to the City for review and approval, and implement a SWPPP for this Contract in compliance with these regulations.

The Contractor must employ or subcontract with a Qualified SWPPP Developer (QSP) to prepare and administer the SWPPP, NOI, Annual reports and the NOT. The Qualifications, certifications and experience of the Contractor's QSD shall be included in the SWPPP submittal.

The Contractor must submit the initial SWPPP document (2 hard copies and one pdf copy) to the City no later than fifteen (15) working days following the approval by the City Council of the Contract. The City will review the SWPPP within seven (7) calendar days. Should revisions be required, the Contractor shall again submit 2 hard copies and one pdf copy of the revised SWPPP. The City may take up to three (3) working days to re-review each revision. After the City determines the SWPPP is acceptable and has no exceptions, the CONTRACTOR'S QSP will submit (upload) the SWPPP document to the online SMARTS system, and pay the required fees.

The Contractor will notify the City when the NOI has been uploaded and the City's LRP will then certify the SWPPP on the SMARTS system. The Contractor must allow for up to 7 calendar days for issuance of the WDID number, following upload of the document. No work may commence and no Notice to Proceed will be issued prior to the issuance of the WDID number. The Contractor shall consider this in its schedule in accordance with Section 6-1 of these Special Provisions. The SWPPP shall remain on the construction site while site is under construction, during working hours, commencing with the initial construction activity and ending with Notice of Termination.

If, during construction operations, field conditions change in a manner which, in the opinion of the Engineer, significantly deviates from how the SWPPP, as approved by the City, addressed the current construction operation, the Engineer may direct the Contractor to revise the current construction operation and/or the SWPPP. Such directions will be made in writing and will specify the items of work for which the SWPPP is inadequate. No further work on these items will be permitted until the Contractor revises the construction operations to the satisfaction of the Engineer and/or until the Contractor submits a revised SWPPP and receives City approval. The Engineer will notify the Contractor of the acceptance or rejection of the revised SWPPP within seven (7) working days from the date of submittal.

Following Construction and the Contractor's installation of any post-construction storm water Best Management Practices BMPs (for City approval), the Contractor must notify the City in writing to request for consideration to terminate coverage under the General Construction Permit for a complete project, and to submit a NOT via the SMARTS. Upon the City's approval, the Contractor shall submit the NOT via the SMARTS and notify the City when ready for certification by the City's LRP.

Full compensation for preparation of the SWPPP, all revisions to the SWPPP, and all other related costs, excluding the WDID permit fee from the State Water Resources Control Board, shall be considered as included in the bid price for STORMWATER CONTROL, BMPS, NPDES COMPLIANCE, AND PERMIT.

Full compensation for the WDID permit fee (Construction annual fee by acre), pursuant to the above requirements, shall be considered as included in the allowance price for STORM WATER POLLUTION CONTROL, BMPs, NPDES Compliance and Permit. The amount that will be paid to the Contractor will be the actual permit and inspection fees paid to the State and the cost of postage and/or delivery fee (FED EX; UPS; USPS, etc.) paid to the State with no other mark-up or extra costs, except the Contractor shall be solely responsible for any fee charged to re-inspect rejected or incomplete work. Permit fee amounts can be viewed at: http://www.swrcb.ca.gov/water_issues/programs/stormwater/gen_const_faq.shtml#4

TEMPORARY TRAFFIC CONTROL

Traffic controls, including but not limited to, vehicular and pedestrian traffic controls, maintenance of vehicular and pedestrian access, detours, and street closures shall be in accordance with these Standard and Special Technical Provisions; California Manual on Uniform Traffic Control Devices MUTCD (latest edition at the time of bid); the "Work Area Traffic Control Handbook" (WATCH – latest edition at the time of bid); and Section 7-10 and Part 6 of the Standard Specifications. Nothing in the Standard and Special Technical Provisions shall be construed as relieving the Contractor from his or her responsibility to provide for the safety and convenience of traffic and the public during construction.

In the event of conflict regarding temporary traffic control, the order of precedence shall be as follows:

1. Special Instructions
2. Standard and Special Technical Provisions
2. Temporary Traffic Control Plans (to be prepared by the Contractor)
3. California Manual on Uniform Traffic Control Devices

4. Work Area Traffic Control Handbook
5. Standard Specifications

Temporary Traffic Control shall be in accordance with the following Special Provisions:

- a. All streets shall remain open to through traffic at all times except when street closure is approved by the Engineer. Per subsection 7-10.1, "Safety", of these special provisions, overnight and long terms street closures can only be approved by City Council, which will require a minimum 4 week lead time. The Contractor shall make provisions to allow local traffic access to the closed streets. The local traffic consists of, but is not limited to, residences, church congregations, post offices, meter readers, transit operators, trash pickup, school buses, and emergency vehicles. The Contractor shall provide a smooth travel way and either a flagger and/or signing to direct traffic.
- b. The Contractor shall be responsible for the preparation of Temporary Traffic Control Plans as necessary for the work. The Temporary Traffic Control Plans shall be submitted on 24" X 36" bond paper, signed and stamped by a California Registered Traffic Engineer, and transmitted to the City for approval no later than fourteen (14) calendar days after the date of the Notice to Proceed with Preconstruction Requirements. The Temporary Traffic Control Plans shall conform to the requirements listed in these Technical Provisions, California MUTCD, the Work Area Traffic Control Handbook, and the Standard Specifications.
- c. All traffic controls and safety devices, equipment and materials, including but not limited to cones, channelizers, delineators, flashing warning lights, barricades, high level warning devices (telescoping flag trees), flags, signs, markers, portable barriers, temporary railing (Type-K), temporary fencing, flashing arrow signs, changeable message sign, markings, and flagging equipment shall be provided and maintained in "like new" condition.
- d. Consistent with the City's Right-of-Way Permit, traffic signal actuation shall be maintained at all times. In-pavement loop detectors damaged by construction shall be repaired within 72 hours, or a suitable temporary replacement system shall be provided. Approved alternatives include microwave or video detection systems (wireless allowed). Installation shall be accomplished by the Contractor, subject to the approval of the Engineer prior to the start of construction. After completion of the roadway construction and final paving in place, the inductive loops shall be restored and operable prior to the removal of the temporary detection system, unless otherwise shown on the Plans or required by the Technical Provisions.
- e. The Contractor shall furnish and properly install, construct, erect, use and continuously inspect and maintain, twenty-four (24) hours per day, seven (7) days per week, which includes holidays, all the devices, equipment and materials and all temporary and permanent pedestrian and driving surfaces as necessary to provide for the safety and convenience of, and to properly warn, guide, control, regulate, channelize and protect the vehicular traffic, pedestrian traffic, project workers, and the public throughout the entire limits of the work activity and beyond the limits as necessary to include areas affecting or affected by the work, from the date of Notice to Proceed to the completion and acceptance of the work.
- f. High-level warning devices (telescoping flag trees) are required to be maintained in an upright position at all times for work being performed within the roadway unless otherwise

specifically approved by the Engineer.

- g. All barricades shall be equipped with flashing warning lights, and all traffic cones shall be no less than 28 in. in height, except that shorter cones, 12 in. minimum height, may be permitted during striping maintenance operations where the only function of the cone is to protect the wet paint from the traffic.

The entire area of orange and white stripes for barricades shall be Type I, engineering grade, or Type II, super engineering grade, retro-reflective sheeting conforming to the requirements of ASTM Designation: D 4956-95.

- h. Type III barricades, no less than 6 ft. in length and equipped with two (2) Type “N” markers each and two (2) portable flashing beacons each, shall be used to close streets, except as otherwise specifically approved by the Engineer for minor maintenance work of no more than one (1) working day’s duration, on weekdays, or on holidays only, and limited to the hours between 8:30 a.m. and 3:30 p.m. The barricades shall be placed across the full roadway at each point of closure with the distance between barricades, or between barricades and curbs, not exceeding 3 ft. except that one (1) 11 ft. wide gap between barricades shall be provided at the center of the street. Barricades to the right of the street’s center, facing the inbound vehicular traffic, shall also be equipped with one (1) R11-2, “Road Closed” sign, one (1) R11-4, “Road Closed to Thru Traffic,” sign, and a Type P warning sign.
- i. Channelizers shall be surface mounted type and shall be furnished, placed and maintained at the locations shown on the Plans or as approved by the Engineer, and shall conform to the provisions in Subsection 12-3.05, “Channelizers,” of the 2015 State Standard Specifications and these Standard and Special Technical Provisions.

When no longer required for the work as determined by the Engineer, channelizers (except channelizers to be left in place), and underlying adhesive used to cement the channelizer bases to the pavement, shall be removed. Removed channelizers and adhesive shall become the property of the Contractor and shall be removed from the site of work.

- j. Reflectorized (both sides) temporary self-adhesive markers, 4 in. wide, shall be applied to unstriped pavement surface before opening the travel way to public traffic. Reflectorized temporary yellow markers shall be used for to delineate the centerline to separate opposing traffic. Reflectorized temporary white markers shall be used to delineate lanes of travel and placed in 24 in. intervals transverse to the road to delineate stop bars and limit lines.

The reflectorized temporary markers shall be removed the same day the first coat of striping has been placed on the pavement. The removal of the markers shall be done such a way that the pavement is not damaged.

- k. Except as otherwise approved by the Engineer, two-way vehicular traffic shall be maintained at all times within two (2) 10 ft. wide lanes on streets having an effective roadway width of 40 ft. or more with restricted parking. Other streets of lesser widths may be reduced to one (1) 12 ft. wide lane with work activity being limited to one side at a time, and the one-way vehicular traffic being maintained at all times by properly trained and experienced flaggers. All lane closures shall have flashing arrow signs to provide additional, high level, advanced warning.

- l. Properly trained and experienced flaggers shall be provided to direct traffic when the traffic is to be interrupted, when two-way traffic is to be reduced to one-way traffic, and at other such times as is necessary to safely pass traffic through or around the work area and when so directed by the Engineer.
- m. Vehicular access to occupied residential property may be restricted on weekdays, other than holidays, during working hours while essential work activity is taking place only upon approval by the Engineer and providing the Contractor gives the property owner or resident at least forty-eight (48) hour advance written and oral notice.

Convenient and safe pedestrian access to schools, churches, occupied residential and business property shall be maintained at all times. Access to mailboxes shall be maintained at all times such that the postal delivery service is not interrupted. Trash pick-up services shall not be interrupted. Access to vacant and unused property may be restricted when approved by the Engineer. Both vehicular and pedestrian access shall be maintained at all times to all other property except as otherwise specifically authorized in writing by the Engineer.

- n. Vehicular access to business, school, and church driveways shall be maintained at all times during construction.
- o. Traffic control and safety devices and equipment being used that becomes damaged, destroyed, faded, graffitied, encrusted, soiled, misplaced, worn out, inoperative, lost, or stolen shall be promptly repaired, refurbished, or replaced. Traffic control and safety devices and equipment that are displaced or not in an upright position from any cause shall be promptly returned or restored to their proper position.
- p. An unobstructed view of all signs and warning devices including, but not limited to, stop signs, stop ahead signs, street name signs, and other regulatory, warning and construction signs, markers, and warning devices shall be maintained at all times. All speed limit signs shall be black on white with signs at either end of the project notifying the motoring public that fines are doubled in construction zones. No trucks or other equipment or materials shall be stopped, parked, or otherwise placed so as to obscure the signs, markers and devices from the view of the vehicular and pedestrian traffic to which it applies. All signs used at night shall be either retroreflective with material that has a smooth, sealed outer surface or illuminated to show the same shape and similar color both day and night. The requirement for sign illumination shall not be considered to be satisfied by street, highway, or strobe lighting. Temporary Traffic Control (TTC) zone signs used at night shall maintain retroreflectivity at or above the minimum levels in MUTCD Table 2A-3 as follows.

| Table 2A-3. Use of Sign Shapes | |
|------------------------------------------------------------|------------------------------------------------------------------------------|
| Shape | Signs |
| Octagon | * Stop |
| Equilateral Triangle (1 point down) | * Yield |
| Circle | * Highway-Rail Grade Crossing (Advance Warning) |
| Pennant Shape/ Isosceles Triangle (longer axis horizontal) | * No Passing |
| Pentagon (pointed up) | * School Advance Warning Sign * County Route Sign |
| Crossbuck (two rectangles in an "X" configuration) | * Highway-Rail Grade Crossing |
| Diamond | Warning Series |
| Rectangle (including square) | Regulatory Series ** Guide Series Warning Series |
| Trapezoid | Recreational and Cultural Interest Area Series National Forest Route Sign |

* This sign shall be exclusively the shape shown

** Guide series includes general service, specific service, recreation, and emergency management signs

- q. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall yield to the public traffic at all times, except where the traffic is being controlled by police officers, fire officers, properly trained and experienced flaggers, or at traffic signalized intersections.
- r. Stockpiling or storage of materials on any public right of way or parking area will not be allowed without the specific written permission of the Engineer. Materials spilled along or on the right-of-way or parking area shall be removed completely and promptly. All stockpile and storage areas shall be maintained in a safe, neat, clean, and orderly condition, and shall be restored to equal or better than original condition upon completion of the work.
- s. On projects involving work on, closure of, or partial closure of existing streets, and where vehicular access to the abutting property must be restricted, the work shall be so selected, arranged and scheduled that the person(s) requiring access to the abutting property and residents along the streets affected will be able to park within a reasonable distance of not more than 500 ft. from their homes or destination. In addition, no two adjoining streets shall be closed at the same time, except as otherwise approved by the Engineer. Residents must be given written notice of such restrictions a minimum of 48 hours in advance.
- t. When work has been completed on a particular street or has been suspended or rescheduled, and the street is to be opened to vehicular traffic, all equipment, "NO PARKING" signs, other obstructions, and unnecessary traffic control devices and equipment shall be promptly removed from that street, except as otherwise approved by the Engineer.
- u. Should the Contractor be neglectful, negligent, or refuse, fail, or otherwise be unavailable to promptly, satisfactorily, and fully comply with the provisions specified and referred to

herein above, the City reserves the right to correct or mitigate any situation, that in the sole opinion of the Engineer, constitutes a serious deficiency or serious case of noncompliance, by any means at its disposal at the Contractor's or permittee's expense, and shall deduct the cost therefor from the Contractor's progress or final payments. Such corrective action taken by the City shall not reduce or abrogate the Contractor's legal obligations and liability for proper traffic control and safety measures and shall not serve to transfer the obligations and liabilities from the Contractor to the City or the City's agents.

- v. Violations of any of the above Provisions or provisions of the referenced publications, unless promptly and completely corrected to the satisfaction of the Engineer, shall, at the sole discretion of the City, be grounds for termination of the Contract, or shut down or partial shutdown of the work, without compensation to the Contractor or permittee, or liability to the City, all as prescribed by contractual obligation or State law, whichever is applicable.

The contract lump sum price paid for Traffic Control shall include full compensation for, but not limited to, furnishing all labor (including flagging costs), materials (including construction area signs), tools, equipment, temporary traffic control plans and revisions, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control including lights, loop detector repair, alternative wireless or video detection systems, channelizers (surface mounted), temporary railing (Type K) markers, delineators, temporary striping and pavement marking, barricades, portable flashing beacons, flashing arrow signs, portable changeable message signs, as shown on the Plans, as specified in the Specifications, and as directed by the Engineer, and no additional compensation will be allowed therefor..

Full compensation for removing and salvaging the traffic control equipment and materials that are to be reused or reset in the project shall be considered as included in the contract lump sum price paid for traffic control and no additional compensation will be allowed therefor.

Failure of the Contractor to maintain the required lane widths or failure to adhere to the work hours per the Project Specific Scope of Work and Traffic Control of the Technical Provisions will result in a permanent payment deduction of \$500 for each Incident that the Contractor fails to comply. An Incident is defined as the issuance of a written Correction Action Notice by the Engineer or his representative to the Contractor.

There will be a limit of one (1) Incident per four (4) hour time period and two (2) incidents per working day. The payment deduction is in addition to the City's right to suspend work per Section 7-10.4.7 of the General Provisions.

Partial payment for traffic control shall be based on the percentage of total value of work completed on the other items listed under each schedule as of each progress pay estimate.

The lump sum price paid per the Bid Item for traffic control shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved in traffic control as shown in the specifications, or as directed by the Engineer

COOPERATION AND COLLATERAL WORK

Cooperation shall be in accordance with Subsection 5-6, "Cooperation," and Subsection 7-7, "Cooperation and Collateral Work," of the Standard Specifications and these Standard and

Special Technical Provisions.

The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others and coordinating with the work by others. The City, other contractors and utilities shall have the right to operate within or adjacent to the work site during the performance of such work.

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Contractor shall cooperate with all the other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces.

The Contractor is to coordinate the work with utilities who maybe performing improvements to their facilities at no separate or additional cost.

Each contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

The Contractor shall include in its bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the City for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall re-deploy its work force to other parts of the work.

Should the Contractor be delayed by the City, and such delay could not have been reasonably foreseen or prevented by the Contractor, the Engineer will determine the extent of the delay, the effect on the project, and any extension of time. Should any agency or utility company's work result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idled equipment or additional payments over and above the agreed upon unit prices.

Compensation for compliance with all collateral work shall be considered, as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS

Protection and Restoration of Existing Improvements shall be in accordance with Subsection 7-9, "Protection and Restoration of Existing Improvements," of the Standard Specifications, and these Standard and Special Technical Provisions.

The Contractor may find it necessary to remove and replace some irrigation facilities during the process of construction. In such events, the Contractor shall make a written request to the Engineer in the field for the work and shall notify and cooperate with the resident and/or owner of the property affected. Any irrigation facilities in conflict with the proposed improvements which are removed, damaged, disturbed, or broken, shall be modified, repaired, and/or replaced to provide full irrigation coverage to the areas requiring irrigation, using new materials of equal or

better quality than the original materials.

All trees, shrubbery and lawns which are deprived of normal irrigation due to a disruption of service caused by the Contractor's operations shall be regularly and thoroughly irrigated by the Contractor so that the plantings will not be damaged. If any trees, shrubbery, lawns or their plants die or suffer unacceptable damage as a result of or precipitated by the Contractor's operations, the Contractor shall replace it with the same plant species and size. Existing grass lawns within the area which must be excavated and/or re-graded, shall be cut into approximately 300 mm (12 in.) squares, removed, protected, cared for and replaced as soon as possible. Dead, dying, and unacceptably damaged grass shall be replaced with new grass sod.

The upper 150 mm (6 in.) of all backfill in areas subject to planting and/or replanting shall be topsoil, free of rocks and debris. Backfill below this depth shall consist of native soil, free of rocks, and debris, and compacted to a relative compaction of 85 percent (85%).

Damaged or injured plants shall be removed and recycled through green waste processors. At the option of the Contractor, removed trees and shrubs may be reduced to chips and removed from the project.

Replacement planting of injured or damaged trees, shrubs and other plants shall be completed not less than 20 working days prior to completion of the work. Replacement plants shall be watered as necessary to maintain the plants in a healthy condition.

Existing hardscape that is not to be removed and is damaged due to the Contractor's operations shall be restored or replaced in as nearly the original condition and location as is reasonably possible.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

PROTECTION AND RESTORATION OF UNDERGROUND UTILITIES AND FACILITIES

All existing underground utilities and facilities such as electric utilities, gas utilities, telephone utilities, television utilities, water utilities, street lighting facilities, traffic signal facilities, sanitary sewers, storm drains, and irrigation systems may not have been shown on the Plans for this project. The Contractor shall assume that any of these underground utilities and/or facilities may be encountered during the removal and reconstruction work and shall protect and restore same in place in accordance with Section 5 of the Standard Specifications, Subsection 7-9 of the Standard Specifications, and the following requirements and provisions:

The Contractor shall protect utilities in any areas of excavation, including but not limited to, street widening, utility pole installation or relocation, light pole installation or relocation, pipe installation, catch basin installation, pavement reconstruction, and traffic signal equipment foundation installation. The Contractor shall submit pothole locations to the City five (5) working days ahead of USA notification for review and comment. The Contractor retains sole responsibility for utilities. The Contractor shall post hole a minimum of two (2) working days ahead of the construction or installation for the area in which the work is to be performed. The "potholes" shall be to a depth sufficient to satisfy the Contractor that the proposed construction work will not damage any underground utilities and/or facilities. The Contractor shall be solely responsible for the cost of repair

for any such damage to the underground utilities and/or facilities and shall, except for irrigation systems, make or cause to be made all repairs necessary to restore service the same day.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

CLEAN UP

Throughout all phases of construction, including suspension of work and until the final acceptance, the Contractor shall keep the site clean and free from rubbish and debris.

The Contractor shall remove and dispose of all loose material and debris caused by construction operations from the construction site on a daily basis.

Materials and equipment shall be removed from the site as soon as they are no longer necessary. Before the final inspection, the site shall be cleared of all rubbish, weeds, unwanted plants/trees, excess and unused materials, falsework, temporary structures, and equipment so as to present a satisfactory clean and neat appearance. All clean up costs shall be included in the Contractor's Bid.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Excess excavated material from catch basins or similar structures shall be removed from the site immediately. Sufficient material may remain for use as backfill if permitted by the Specifications or Engineer. Forms and form lumber shall be removed from the site as soon as practicable after striping.

Failure of the Contractor to comply with the Engineer's clean up orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.

Before final inspection of the work, the Contractor shall clean the right of way, private property, material sites, and all ground occupied by the Contractor in connection with the work of all rubbish, weeds, unwanted plants/trees, excess and unused materials, falsework, temporary structures, and equipment. All parts of the work shall be left in a neat and presentable condition.

Full compensation for collecting and disposing of loose material and debris from the job site shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

DUST CONTROL

Dust control shall be performed in accordance with Subsection 7-8.1, "Clean up and Dust Control," of the Standard Specifications, South Coast Air Quality Management District (SCAQMD) Rule 403, the General Provisions and the following Provision.

Dust resulting from the Contractor's performance of the work, either inside or outside the right-of-

way, shall be controlled by the Contractor. Dust control includes the action necessary to prevent, reduce or control dust within the work area as required to complete the work. The Contractor shall carry out proper and efficient measures to prevent his operations from producing dust in amounts damaging to property or causing a nuisance, or harm to persons living nearby or occupying buildings in the vicinity of the work. The Contractor shall control dust 24 hours a day, seven days a week. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the Engineer prior to starting any work. The Rule 403 Implementation Handbook published by the SCAQMD, contains a detailed listing of reasonably available dust control measures.

Dust or dirt accumulations generated by the Contractor's operations shall be cleaned and removed by the Contractor from all areas as designated by the Engineer. Areas to be cleaned shall include, but not be limited to swimming pools, interiors of any structures including residences and places of business, exteriors of any structures including roofs, patios, driveways, and any other areas as required. The Contractor shall retain a professional cleaning service for the cleaning of swimming pools, and the interior and exterior of structures. The cost for cleaning and removal of dust or dirt shall be at the Contractor's expense and no additional compensation will be made therefor.

Water for use in dust control shall, at the option of the Contractor, be potable or non-potable. Non-potable water shall consist of reclaimed waste water or non-potable water developed from other sources.

If the Contractor uses reclaimed waste water in the work, the sources and discharge of reclaimed waste water shall meet the California Department of Health Services Water Reclamation Criteria and the Regional Water Quality Control Board requirements. The Contractor shall obtain either a waste water discharge permit or a waiver from the Regional Water Quality Control Board. Copies of permits or waivers from the Regional Water Quality Control Board shall be delivered to the engineer before using reclaimed waste water in the work.

Water shall be applied in the amounts, at the locations, and for the purposes designated in the Special Provision and these Specifications, and as ordered by the Engineer.

Water for compacting embankment material, sub-base, base and surfacing material, and for laying dust, shall be applied by means of pressure-type distributors or pipe lines equipped with a spray system or hoses with nozzles that will ensure a uniform application of water.

All equipment used for the application of water shall be equipped with a positive means of shut-off.

Unless otherwise permitted by the Engineer or unless all the water is applied by means of pipe lines, at least one mobile unit with a minimum capacity of 3700 L (1,000 gallons) shall be available for applying water on the project at all times.

Chemical additives or binder may be used in water for compaction or dust palliative. If such additives are used, furnishing and applying the additives shall be at the Contractor's expense.

The right is reserved by the Engineer to prohibit the use of a particular type of additive, to designate the locations where a particular type of additive may not be used, or to limit the amount of a particular type of additive to be used at certain locations, all if the Engineer has reasonable ground for believing that such use will in any way be detrimental.

The additive or binder shall be either miscible in water or be some form of material that is directly applied to the surface without mixing with water.

Additives or binders that are miscible in water shall be either a resin emulsion, an SS1 type asphaltic emulsion, materials composed essentially of lignin sulfonate, or any other binder that is miscible in water in the proportions provided herein is non-corrosive, and is effective as a dust palliative.

Resin emulsion shall be composed of from 57 percent (57%) to 63 percent (63%) of semi-liquid petroleum resin and the remainder water to which a suitable emulsifying agent has been added. The resin emulsion shall be readily miscible with water and when diluted with any hard water in the proportions of one part of emulsion to 10 parts water shall show no signs of breakdown or separation of the petroleum resin base. Resin emulsion, which has been stored in closed containers at temperatures above freezing for a period up to 3 months, shall show no signs of separation. Any resin emulsion which has been stored for more than 3 months shall not be used until tested and approved.

SS1 type asphaltic emulsion shall conform to the provisions in Subsection 203-3, "Emulsified Asphalt."

Additives or binders that are miscible in water shall be mixed with additional water at the rate of from 4 to 19 parts of water to one part of binder, the exact rate to be determined by the Engineer. Mixing shall be accomplished by placing the binder and water in the spreading equipment simultaneously or by some other mixing method that will produce equivalent results.

The resulting mixture shall be applied with pressure type water distributor trucks equipped with a spray system or pressure type asphalt distributors at an approximate rate of from 0.9- to 3.6 L/m² (0.2 to 0.8 gallons per square yard).

Additives or binders that are directly applied to the surface without mixing with water shall be applied with equipment approved by the Engineer. The binder shall be applied at a rate of from 0.4- to 1.1 L/m² (0.10 to 0.25 gallons per square yard).

The exact rate and number of applications of binders will be determined by the Engineer.

Dust control ordered by the Engineer to be applied on Saturdays, Sundays or holidays will be included in the Contract price for dust control and no additional compensation will be allowed therefor.

No adjustment of compensation will be made for any increase or decrease in the quantity of dust control required, regardless of the reason for such increase or decrease.

Full compensation for all direct and indirect costs incurred for work performed or materials used to control dust resulting from the Contractor's performance of the work and caused by public traffic, either inside or outside the right of way shall be considered as included in the Contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

DIG OUT SPOT REPAIRS

The Contractor shall complete dig out spot repairs at various different locations as directed in the field by the Engineer.

Identified areas must be excavated a minimum of two (2) inches below the existing asphalt concrete, and a minimum total depth of six (6) inches. The footprint of the spot repair must be a minimum of three (3) feet by three (3) feet, and the exposed material shall be compacted to 95 percent relative compaction. Work shall meet the requirements of City of Manhattan Beach Standard Plan MBSI-102-01 (ST-10).

The square foot unit price paid per the Bid Item for sport repairs shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved in spot repairs as shown in the specifications, or as directed by the Engineer, and no additional compensation will be allowed therefor.

CRACK SEALING

Work shall consist of cleaning and sealing the existing transverse and longitudinal cracks and joints and random cracks in bituminous pavement surfaces.

The Contractor shall spray all weeds in cracks with Avenger Organic Weed Killer, Scythe Herbicide, or approved equal a minimum of fourteen (14) calendar days prior to crack sealing work. All weeds shall be re-sprayed if rain occurs within 48 hours after application. The herbicide mixture shall contain Blazon, or approved equal, a purple dye to easily confirm the herbicide has been applied. The Contractor shall remove any and all weeds that are growing through cracks from the project street located within the pavement or growing between the concrete gutter and the pavement. Payment for weed killing/herbicide application and weeds removal shall be included in the contract lump sum price paid for crack sealing and shall include full compensation for all labor, tools, materials, equipment, and incidentals for doing work involved and no additional compensation will be allowed therefor.

Pavement cracks 1/4" to 1" wide shall be cleared of all loose particles of dust, dirt and laitance by means of air blasting, followed by hot air blasting immediately preceding the sealing operation. Cracks shall be routed out as necessary to provide a reservoir for the sealer that will have a depth of 1" to 1-1/2".

The joint and crack cleaning equipment shall be a Crafcro Crack Vacuum unit (or approved equivalent) capable of thoroughly cleaning cracks and joints to a minimum depth of 1" (25 mm). The vacuum unit shall be capable of air routing hard to clean cracks and vacuuming dust and debris at the same time. The vacuum unit must be equipped with filtering system of 10 microns or smaller.

The crack filling material shall be a cold-applied, polymer modified petroleum emulsion (Western Emulsion Inc. "P.A.S.S." or approved equivalent). The crack filling material must not be modified or diluted in any way.

A wand and nozzle type application shall be used to fill all cracks with crack filling material. Crack filling material shall be applied in two applications with the possibility of additional applications to fill the crack within the allowable tolerance. The cracks must be filled to the surface and not overfilled or applied to the top of adjoining pavement or concrete surfaces. The cracks shall be squeegee

immediately after the sealant has been applied to insure conformity with the pavement surface. The crack filling material shall then be allowed to penetrate and sink into the crack area for a minimum of one hour. Each crack must then have a second application of crack filler material applied in the crack area only to within $\pm 0.01'$ of the adjoining pavement surface. If the material is a cold-applied, polymer modified petroleum emulsion, sand will be applied over the crack filling material after the second application, covering a minimum of 1 1/2 inches each side of the crack. Sealant installed in routed cracks shall be left 3/8-in low in the crack with no sealant in the surface. The Contractor shall be responsible for the removal of all excess sand which shall be removed within three hours after being applied.

Areas to be crack sealed will be as designated in the field by the Engineer.

The lump sum price paid per the Bid Item for crack sealing shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved in crack sealing complete in place as shown in the specifications, or as directed by the Engineer, and no additional compensation will be allowed therefor.

ASPHALT RUBBER AGGREGATE MEMBRANE (ARAM)

General

ARAM surfacing or interlayer shall involve cleaning and preparing the existing surface, spreading asphalt rubber and cover aggregate, rolling, and sweeping.

The construction sequence of an ARAM shall be as follows:

- 1) The surface shall be cleaned.
- 2) Asphalt-rubber shall be applied.
- 3) Screenings shall be placed, rolled, and loose material removed. Only then will the ARAM surface be opened to traffic. A minimum of 48 hours shall elapse after placement of the screenings before a type II slurry seal will be applied.
- 4) A type II slurry seal shall be applied on top of the ARAM surface after the screenings are placed. The type II slurry seal shall meet the requirements included in the Slurry Seal section of this Standard and Special Technical Provisions.

Materials

Materials used in the construction of ARAM shall be asphalt rubber and screenings as specified below. **Certified volume or weight slips shall be delivered to the Engineer for all materials supplied.**

A) Asphalt Rubber - Asphalt Rubber shall be Asphalt Rubber Hot Mix (ARHM) wet process. Asphalt Rubber Hot Mix shall consist of a mixture of paving asphalt, asphalt modifier, crumb rubber modifier (CRM), and aggregate mixed in a central mixing plant, all conforming to these specifications. **The Contractor shall submit test reports and Certificates of Compliance for the paving asphalt, asphalt modifier, and CRM to be used. In addition, when requested by the Engineer, the Contractor shall submit samples of the tested material along with the Certificate of Compliance.**

- 1) Paving Asphalt: Paving asphalt used for asphalt-rubber shall be PG 64-16 and shall be modified with an asphalt modifier. Performance Graded paving asphalts other than PG 64-16 may be used if so specified in the Special Provisions.
- 2) Asphalt Modifier: The asphalt modifier will be a resinous, high flash point, aromatic hydrocarbon compound and shall conform to the requirements in **Table 1**.

TABLE 1
REQUIREMENTS FOR ASPHALT MODIFIER

| Property | ASTM Test Method | Value |
|--------------------------------|------------------|---------------|
| Flash Point, C.L.O.C., °F (°C) | D 92 | 405 (207) min |
| Viscosity, cSt @ 212°F (100°C) | D 445 | X ± 3* |
| Molecular Analysis | | |
| Asphaltenes, Percent by mass | D 2007 | 0.1 Max |
| Aromatics, percent by mass | D 2007 | 55 min |

* The symbol "X": is the viscosity of the asphalt modifier the Contractor proposes to furnish. The Value "X" which the Contractor proposes shall be between the limits of 19 and 36 and shall be submitted in writing to the Engineer. Any proposed change requested by the Contractor in the value "X" shall require a new asphalt-rubber binder design.

- 3) Crumb Rubber Modifier (CRM): The material shall consist of a combination of scrap tire CRM and high natural CRM meeting the requirements of this subsection. Scrap tire CRM shall consist of ground or granulated rubber derived from any combination of automobile tires, truck tires or tire buffings. The high natural CRM shall consist of ground or granulated rubber derived from materials that utilize high natural rubber sources. Scrap tire CRM shall be derived from whole scrap tires generated within the State boundaries of the user agencies. The Certificate of Compliance required in previous section shall contain a statement confirming conformance with this requirement. The high natural CRM may consist of blended CRM.

CRM shall be ground or granulated at ambient temperature. Cryogenically produced CRM particles which can pass through the grinder or granulator without being ground or granulated shall not be used. Cryogenic separation, if utilized, shall be performed separately from and prior to grinding or granulating. Steel and fiber separation may employ any method.

CRM shall not contain more than 0.01 percent of wire by weight and shall be free of all other contaminants, except fabric. Fabric shall not exceed 0.05 percent by weight of CRM. A Certificate of Compliance certifying these percentages shall be furnished to the Engineer.

CRM shall be dry and free-flowing and not produce foaming when combined with the blended paving asphalt and asphalt modifier mixture. Calcium carbonate or talc may be added up to a maximum of 3 percent by weight of CRM to prevent CRM particles from sticking together. The CRM shall have a

specific gravity range from 1.1 minimum to 1.2 maximum as determined by ASTM D 297. Scrap tire CRM and high natural CRM shall be delivered to the production site in separate bags and shall be sampled and tested separately. Scrap tire CRM material shall conform to the following chemical analysis in Table 2.

TABLE 2
CHEMICAL REQUIREMENTS FOR SCRAP TIRE CRM

| Test | ASTM Test Method | Minimum | Maximum |
|------------------------|-------------------------|----------------|----------------|
| Acetone Extract | D 297 | 6.0% | 16.0% |
| Ash content | D 297 | — | 8.0% |
| Carbon Black Content | D 297 | 28.0% | 38.0% |
| Rubber Hydrocarbon | D 297 | 42.0% | 65.0% |
| Natural Rubber Content | D 297 | 22.9% | 39.0% |

The scrap tire CRM described above shall be mixed at the job site with high natural CRM so that 75% \pm 2% of the product used is derived from scrap tires and 25% \pm 2% from materials that utilize high natural rubber sources. The high natural rubber CRM may consist of blended CRM which, after blending, conforms to the following chemical analysis in Table 3.

TABLE 3
CHEMICAL REQUIREMENTS FOR HIGH NATURAL CRM

| Test | ASTM Test Method | Minimum | Maximum |
|------------------------|-------------------------|----------------|----------------|
| Acetone Extract | D 297 | 4.0% | 16.0% |
| Rubber | D 297 | 50.0% | — |
| Hydrocarbons | | | |
| Natural Rubber Content | D 297 | 40.0% | 48.0% |

With the approval of the Engineer, the High Natural Rubber per previous sections of these specifications may be eliminated. If High Natural Rubber is not used, then the full amount of required CRM shall be Scrap Tire CRM per Table 2. Asphalt Rubber binder without natural rubber shall be designated as Type I and ARHM manufactured with Type I binder shall be designated as ARHM-I.

CRM Gradations - CRM gradations shall conform to the requirements of Table 2 when tested in accordance with the requirements of ASTM C136, amended as follows:

Split or quarter 100 grams \pm 5 grams from the representative CRM sample and dry to a constant weight at a temperature of not less than 135°F (57°C) nor more than 145°F (63°C) and record the dry sample weight. Place the CRM sample and 5.0 grams of talc (or calcium carbonate) in a 1 pint jar. Seal the jar and shake it by hand for a minimum of one minute to mix the CRM and the talc (or calcium carbonate). Continue shaking or open the

jar and stir until particle agglomerates and clumps are broken and the talc (or calcium carbonate) is uniformly mixed.

A Rotap (or equivalent) test shaker shall be used for the sieve analysis. Place one rubber ball on each sieve. Each ball shall have a weight of 8.5 ± 0.5 grams, have a diameter of 24.5 ± 0.5 mm, and shall have a Shore Durometer "A" hardness of 50 ± 5 in accordance with the requirements in ASTM D2240. After sieving the combined material for 10 minutes ± 1 minute, disassemble the sieves. Any materials adhering to the bottom of a sieve shall be brushed into the next finer sieve. Weigh and record the weight of the material retained on the No. 8 (2.36 mm) sieve and leave this material (do not discard) on the scale or balance. Any observed fabric balls shall remain on the scale or balance and shall be placed together on the side of the scale or balance to prevent the fabric balls from being covered or disturbed when placing the material from finer sieves onto the scale or balance. The material retained on the next finer sieve (No. 10 (2.00 mm) sieve) shall be added to the scale or balance. Weigh and record that weight as the accumulative weight retained on that sieve (No. 10 (2.00 mm) sieve). Continue weighing and recording the accumulated weight retained on the remaining sieves until the accumulated weight retained in the pan has been determined. Prior to discarding the CRM sample, separately weigh and record the total weight of fabric balls in the sample.

Determine the weight of material passing the No. 200 (75 μ m) sieve (or weight retained in the pan) by subtracting the accumulated weight retained on the No. 200 (75 μ m) sieve from the accumulated weight retained in the pan. If the material passing the No. 200 (75 μ m) sieve (or weight retained in the pan) has a weight of 5 grams or less, cross out the recorded number for the accumulated weight retained in the pan and copy the number recorded for the accumulated weight retained on the No. 200 (75 μ m) sieve and record that number (next to the crossed out number) as the accumulated weight retained in the pan. If the material passing the No. 200 (75 μ m) sieve (or weight retained in the pan) has a weight greater than 5 grams, cross out the recorded number for the accumulated weight retained in the pan, subtract 5 grams from that number and record the difference next to the crossed out number. The adjustment to the accumulated weight retained in the pan is made to account for the 5 grams of talc (or calcium carbonate) added to the sample. For calculation purposes, the adjusted total sample weight is the same as the adjusted accumulated weight retained in the pan. Determine the percent passing based on the adjusted total sample weight and record to the nearest 0.1 percent.

TABLE 4
GRADING REQUIREMENTS FOR CRM

| Sieve Size | Scrap Tire CRM percent passing | High Natural CRM percent passing |
|------------------|-----------------------------------|----------------------------------------|
| No. 8 (2.36 mm) | 100 | 100 |
| No. 10 (2.00 mm) | 98 – 100 | 100 |
| No. 16 (1.18 mm) | 45 – 75 | 95 – 100 |
| No. 30 (600 µm) | 2 – 20 | 35 – 85 |
| No. 50 (300 µm) | 0 – 6 | 10 – 30 |
| No. 100 (150 µm) | 0 – 2 | 0 – 4 |
| No.200 (75 µm) | — | 0 – 1 |

* CRM from more than one source may be used provided the combined CRM gradation meets the specified limits. No particles shall exceed a length of 3/16 inch (5mm) as measured on any axis.

- 4) **Mixing:** Mixing of the asphalt and CRM shall be accomplished as specified herein.

The paving asphalt and asphalt modifier shall be combined into a blended mixture that is chemically compatible with the crumb rubber modifier to be used. The blended mixture is considered to be chemically compatible when it meets the requirements for asphalt rubber binder (after reacting) found in Table 5.

The asphalt modifier shall be proportionately added to the paving asphalt at the production site where the asphalt rubber binder is blended and reacted. Asphalt modifier shall be added at an amount of 2.5% to 6.0% by weight of the paving asphalt based on the recommendation of the asphalt rubber binder supplier. The paving asphalt shall be at temperature of not less than 375°F (190°C) nor more than 440°F (226°C) when the asphalt modifier is added. If the asphalt modifier is combined with the paving asphalt before being blended with the CRM, the combined paving asphalt and asphalt modifier shall be mixed by circulation for a period of not less than 20 minutes. This premixing of asphalt modifier and the paving asphalt will not be required when all ingredients of the asphalt rubber binder are proportioned and mixed simultaneously. Asphalt modifier and paving asphalt shall be measured for proportioning with meters conforming to the requirements of asphalt plant proportioning in 203-6.6.

The proportions of the materials, by total weight of asphalt-rubber binder, shall be 79% ± 1% combined paving asphalt and asphalt modifier, and 21% ± 1% CRM. However, the minimum amount of CRM shall not be less than 20%. Lower values shall not be rounded up. The temperature of the blended asphalt and modifier shall be between 375°F (190°C) minimum and 440°F (226°C) maximum when the CRM is added. The temperature shall not exceed 10°F (6°C) below the actual flash point of the mixture. The CRM shall be combined and mixed together in an asphalt-rubber mechanical blender meeting the requirements of the "Equipment for Production of Asphalt-Rubber" section below. The combined asphalt and CRM shall be pumped into a storage/reaction tank or distributor truck meeting the requirements of the "Equipment for Production of Asphalt-Rubber" section below. The required mixing/reaction time shall be 45 minutes minimum. The temperature of the asphalt-rubber

mixture shall be between 375°F (190°C) minimum to 425°F (218°C) maximum during the reaction period. After reacting, the asphalt rubber binder shall conform to the requirements in Table 5.

TABLE 5
REQUIREMENTS FOR ASPHALT RUBBER BINDER

| Test Parameter | Test Method | Specification Limit | |
|-----------------------------------------------------|----------------|---------------------|----------|
| | | Minimum | Maximum |
| Haake Field Viscosity @ 375°F (191°C), (Centipoise) | See 203-11.4.1 | 1500 | 4000 |
| Cone Penetration @ 77°F (25°C), mm | ASTM D 217 | 25 | 70 |
| Resilient @ 77°F (25°C), % Rebound | ASTM D 3407 | 18 | — |
| Field Softening Point, °F (°C) | ASTM D 36 | 125 (52) | 165 (74) |

The reacted asphalt rubber binder shall be maintained at a temperature of not less than 375°F (190°C) nor more than 425°F (218°C). If any of the material in a batch of asphalt rubber binder is not used within 4 hours after the 45-minute reaction period, heating of the material shall be discontinued. Any time the asphalt rubber binder cools below 375°F (190°C), and is then reheated, shall be considered a reheat cycle. The total number of reheat cycles shall not exceed 2. The material shall be uniformly reheated to a temperature of not less than 375°F (190°C) nor more than 425°F (218°C) prior to use. Additional scrap tire CRM meeting the requirements of 203-11.2.3 may be added to the reheated binder and reacted for a minimum of 45 minutes. The cumulative amount of additional scrap tire CRM shall not exceed 10 percent of the total binder weight. Reheated asphalt rubber binder shall conform to the requirements in Table 203-11.4(A).

When permitted by the Engineer, asphalt-rubber binder produced on another agency's project and defined here as "hold over material", may be used on the project if the initial agency certifies the following:

- a. The total weight and type of material being held over.
- b. The amount of CRM contained within the holdover load on a percentage basis.
- c. The grade of paving asphalt and asphalt modifier used and its source.
- d. Date of original mixing
- e. Number of reheat cycles.

In no case, will more than 20 tons of holdover material be allowed to be transferred from one project to another. In all cases, the holdover material when blended with new asphalt-rubber binder, shall conform to the requirements in Table 5.

Hand Held Viscometer Test. The Hand Held Viscometer Test shall be conducted as follows:

Precautions - This test method may involve hazardous materials, operations and equipment. This test method is not supposed to address all the safety issues associated with its use. It is the responsibility of the user of this test method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

Apparatus

- a. Viscometer: Haake Model VT-02 rotational viscometer or equivalent
- b. Spindle: Rotor No. 1, diameter 24 mm \pm 0.1 mm, height 53 mm \pm 0.1 mm or equivalent
- c. Thermometer: digital with metal-jacketed probe, 1°F (1°C) precision
- d. Sample Container: 1 gallon metal can with wire bale
- e. Standard Fluids: per fluid manufacturer recommendations calibrate viscometer in absolute viscosity (centipoise)

Calibration - The viscometer shall be calibrated per manufacturer recommendations. The accuracy of the viscometer shall be verified by comparing the viscosity results obtained with the hand held viscometer to 3 separate calibration fluids of known viscosity ranging from 1000 to 5000 centipoise. The viscometer will be considered accurate if the values obtained are within 300 centipoise of the known viscosity. The known viscosity value shall be based on the fluid manufacturer standard test temperature or the test temperature versus viscosity correlation table provided by the fluid manufacturer. The viscometer calibration may be performed at an offsite laboratory and Certificate of Compliance verifying the calibration shall be provided to the Engineer.

Test Procedures

- a. Obtain a representative sample of asphalt rubber binder from an appropriate sample valve during production. Prior to sampling, run a one-gallon (4 liter) sample of binder through the sampling valve and discard the sample. Place a clean one-gallon (4 liter) sample can under the sampling valve and fill the container to approximately 85% full.
- b. Transport the sample immediately to the testing location. The testing location should be reasonably close to the sampling location to avoid undue temperature loss. The temperature of the binder prior to sampling should be a minimum of 375°F (190°C). The sample container shall then be placed on a smooth, level support for testing.
- c. The binder shall be continuously stirred using an appropriate metal stirring rod. Use of the temperature probe is permitted. Insert the

temperature probe into the binder and check the temperature. Stirring shall continue until the binder reaches a temperature of $375^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($190^{\circ}\text{C} \pm 3^{\circ}\text{C}$).

- d. The viscometer spindle shall be cleaned in a suitable solvent and free of any binder material prior to test. While holding the viscometer over the sample container insert the spindle of the viscometer into the sample container near the side of the container and turn the viscometer on. While the spindle is rotating, move the spindle in and out of the binder three times to bring the spindle up the temperature of the binder. Continue stirring the binder.
- e. Determine the viscosity of the binder at $375^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($190^{\circ}\text{C} \pm 3^{\circ}\text{C}$) as follows. In one continuous operation, remove the spindle from the binder (after heating), discontinue stirring the binder and immediately insert the spindle back into the center of the binder sample. While holding the viscometer level, watch the needle on the viscometer dial and record the maximum value obtained on the dial. Record the test temperature and maximum viscosity. Subtract 100 centipoise from the maximum value recorded and report this as the viscosity of the asphalt rubber binder. (The viscometer shall be maintained and operated in accordance with the instructions from the manufacturer. However, this test method shall apply if there are any differences in the instructions for determination of the viscosity.)
- f. Report the following information for the viscosity test; technician performing viscometer test, date and location of plant, asphalt rubber binder supplier, binder test temperature and viscosity, spindle size and rotating speed in revolutions per minute, viscometer model and serial number.

5) Equipment for production of Asphalt-Rubber: The Contractor shall utilize the following equipment for production of asphalt-rubber binder:

- a. Asphalt Heating Tank - An asphalt heating tank equipped to heat and maintain the blended paving asphalt and asphalt modifier mixture at the necessary temperature before blending with the CRM. This unit shall be equipped with a thermostatic heat control device and a temperature reading device and shall be accurate to within $\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$) and shall be of the recording type.
- b. Blender Equipment - A mechanical mixer for the complete, homogeneous blending of paving asphalt, asphalt modifier, and CRM. Paving asphalt and asphalt modifier shall be introduced into the mixer through meters. The blending system shall be capable of varying the rate of delivery of paving asphalt and asphalt modifier proportionate with the delivery of CRM. During the proportioning and blending of the liquid ingredients, the temperature of paving asphalt and the asphalt modifier shall not vary more than $\pm 25^{\circ}\text{F}$ ($\pm 14^{\circ}\text{C}$). The paving asphalt feed, the asphalt modifier feed and CRM feed, shall be equipped with devices by which the rate of feed can be determined during the proportioning operation. Meters used for proportioning individual

ingredients shall be equipped with rate-of-flow indicators to show the rates of delivery and resettable totalizers so that the total amounts of liquid ingredients introduced into the mixture can be determined. The liquid and dry ingredients shall be fed directly into the mixer at a uniform and controlled rate. The rate of feed to the mixer shall not exceed that which will permit complete mixing of the materials. Dead areas in the mixer, in which the material does not move or is not sufficiently agitated, shall be corrected by a reduction in the volume of material or by other adjustments. Mixing shall continue until a homogeneous mixture of uniformly distributed and properly blended asphalt-rubber binder of unchanging appearance and consistency is produced. The Contractor shall provide a safe sampling device capable of delivering a representative sample of the completed asphalt-rubber binder of sufficient size to permit the required tests.

- c. Storage/Reaction/Tank - An asphalt-rubber binder storage/reaction tank equipped with a heating system that is equipped with a temperature reading device to maintain the proper temperature of the asphalt-rubber binder and an internal mixing unit capable of maintaining a homogeneous mixture of paving asphalt, asphalt modifier and CRM.
- d. Storage/Reaction/Tank - An asphalt-rubber binder storage/reaction tank equipped with a heating system that is equipped with a temperature reading device to maintain the proper temperature of the asphalt-rubber binder and an internal mixing unit capable of maintaining a homogeneous mixture of paving asphalt, asphalt modifier and CRM.
- e. Viscometers - The Contractor shall supply a Haake Viscometer per 203-11.4.1 (or equivalent) for use by the Engineer to verify the viscosity of the asphalt-rubber on all projects where a field laboratory is used. All asphalt concrete plants are required to have a field laboratory for use by the Engineer per 8-3.

B) Screenings - Screenings, when used as a cover aggregate for ARAM shall be crushed rock conforming to the following gradations in Table 6:

TABLE 6
SCREENINGS

| Sieve Size | Percentage Passing Sieve | | |
|------------------|----------------------------|---------------------------|-------------------------|
| | Coarse 1/2 in (12.5 mm) | Medium 3/8 in (9.5 mm) | Fine 3/8 in (9.5 mm) |
| 3/4 in (19.0 mm) | 100 | 100 | — |
| 1/2 in (12.5 mm) | 90 – 100 | 95 – 100 | 100 |
| 3/8 in (9.5 mm) | 50 – 80 | 70 – 85 | 85 – 100 |
| No. 4 (4.75mm) | 0 – 15 ¹ | 0 – 15 ¹ | 5 – 20 ¹ |
| No. 8 (2.36 mm) | 0 – 5 | 0 – 5 | 0 – 5 |
| No. 16 (1.18 mm) | — | — | — |
| No. 200 (75 µm) | 0 – 1 | 0 – 1 | 0 – 1 |

¹ Lower percentages are desirable.

Screenings shall be medium 3/8 inch (9.5 mm) unless otherwise specified. Screenings shall be preheated between 260°F (127°C) to 325°F (163°C) and adequately coated with 0.70 percent to 1 percent PG 64-10 paving asphalt at a central mixing plant to prevent free dust. The exact amount of asphalt shall be recommended by the Contractor and approved by the Engineer. Screenings shall conform to the requirements of Table 7.

TABLE 7

| Test | Test Method No. | Requirements in percent |
|-----------------|------------------------|--------------------------------|
| Percentage Wear | ASTM C 131 | |
| 100 Revolutions | | 15 Max. |
| 500 Revolutions | | 52 Max. |

Construction Methods for ARAM

Application - Asphalt rubber shall be placed upon a clean dry surface. The pavement surface temperature shall be a minimum of 55°F (13°C) including shaded areas; the atmospheric temperature shall be a minimum of 60°F (16°C); the wind shall not adversely affect spray distribution; and all necessary equipment shall be in position and ready to commence placement operations prior to starting work. The contractor shall take temperature readings with a temperature measuring device approved by Engineer.

Asphalt rubber shall be applied by distributor equipment meeting the requirements of the following:

- 1) Distributor trucks shall meet the requirements for distributing equipment of 203-2.5 and be equipped with an internal heating device capable of evenly heating the material to a temperature of 425°F (218°C).
- 2) The distributor shall have a platform on the rear of the vehicle and an observer shall accompany the distributor.
- 3) The observer shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur.
- 4) Material shall be applied at a rate between 0.55 to 0.65 gallons per square yard (2.5 to 3.0 L/m²) as directed by the Engineer.
- 5) Material spreading shall not be in excess of that which can be covered with aggregate within 15 minutes maximum.
- 6) At the time of delivery to the Work site, the temperature of the asphalt rubber shall be 300°F (149°C) minimum.

Distribution and spreading shall conform to 302-5.5.

The asphalt rubber mixture may be applied to the roadway immediately following mixing and reacting at a temperature between 375°F (191°C) minimum to 425°F (218°C) maximum. However, if the material is not to be used within 6 hours of mixing, the mixture shall be allowed to cool below 300°F (149°C) for 12 hours maximum, or to ambient temperature for longer periods, and shall be uniformly reheated to a temperature between

375°F (191°C) minimum to 425°F (218°C) maximum at time of placement and conform to the viscosity requirements.

When joining edges against areas with cover aggregate, the joint shall be swept clean of excess aggregate prior to the adjacent application of asphalt rubber material. Transverse joints of this type shall be constructed by placing building paper across and over the end of the previous asphalt rubber application. Once the spraying has progressed beyond the paper, the paper shall be removed immediately.

Joints between areas of asphalt rubber without cover aggregate shall be made by overlapping asphalt rubber distributions. The excess material shall be dispersed by spreading with a squeegee or rake over a larger area of freshly applied asphalt rubber. The longitudinal joint between adjacent applications of screenings shall coincide with the line between designated traffic lines. All longitudinal joints shall be overlapped for complete coverage. The overlap shall not exceed 4 inches (100 mm). At longitudinal joints, the edge shall be broomed back and blended so there are no gaps and the elevations are the same, free from ridges and depressions.

The application of asphalt rubber to areas not accessible with the distributor bar on the truck shall be accomplished by using pressurized hand wands or other means approved by the Engineer.

Application of asphalt rubber shall be discontinued sufficiently early in the workday to permit completion of initial sweeping prior to the termination of traffic control.

Screenings - Following the application of asphalt rubber, screenings shall be placed over all areas receiving asphalt rubber. Screenings shall be applied (within a maximum of 15 minutes) at a temperature between 260°F (127°C) minimum to 325°F (163°C) maximum at a rate of 28 to 40 pounds per square yard (15 to 22 kg/m²) as directed by the Engineer. Stockpiling of screenings after preheating and precoating with paving asphalt will not be permitted.

The contractor shall prevent any vehicle, including construction equipment, from driving on the uncovered asphalt rubber. Screenings shall be placed with a self-propelled aggregate-spreading machine that can be adjusted to accurately spread the specified amounts per square meter (yard). Trucks for hauling screening material shall conform to 302-2.3.

Initial rolling shall commence within 90 seconds following the placement of screenings. Rolling shall be accomplished by three self-propelled, pneumatic-tired rollers meeting the requirements of 302-5.6.1 except that the tires shall be inflated to 100 psi (690 kPa). The operating weight of each roller shall be a minimum of 16,000 pounds (7200 kg). If in the opinion of the Engineer, complete coverage may be provided by two rollers in one pass, then two pneumatic-tired rollers are sufficient. The initial rolling equipment shall maintain a distance of not more than 200 feet (60 m) behind the cover-aggregate spreader on the first pass. There shall be a least four complete coverages (single pass in one direction) by the pneumatic-tired rollers before final roller coverage. A steel-drum roller weighing 8 tons (7.2 tonnes) minimum to 10 tons (9.1 tonnes) maximum shall complete the final roller coverage.

Sweeping shall be a multi-step operation following final rolling of the aggregate. A power broom shall be used to remove loose material without dislodging aggregate set in the asphalt rubber. The initial sweeping shall be a light brooming on the same day as ARAM placement. The ARAM shall be maintained free of loose screenings for a minimum of 5 working days following placement. During this period, the surface shall be swept as necessary to remove any loose cover material as directed by the Engineer. Final sweeping shall be done and all loose aggregate shall be removed prior to acceptance. The sweeping operations shall be accomplished without the use of gutter brooms or steel-tined brooms.

Immediately upon opening the street to traffic, the Contractor shall start removing loose aggregate from parkways, sidewalks, and intersecting streets. Both operations shall continue until all excess or loose aggregate is removed from the roadway surface and abutting adjacent areas.

At the option of the Engineer, rock dust blotter material shall be applied immediately after the initial pass of the rollers or after sweeping, but prior to opening to traffic, to prevent bleeding and pickup of the asphalt rubber material. Rock dust blotter conforming to 200-1.2 shall be uniformly applied using a mechanical spreader at a rate of 2 lbs./yd² (1.1 kg/m²) minimum to 4 lbs./yd² (2.2 kg/m²) maximum. If the ARAM is to be used as a finished surface, a flush coat shall be used.

The Contractor shall protect all existing manhole, valve, survey monument, and other miscellaneous frames and covers. The Contractor shall cooperate with the owners of any frames and covers and shall cover and completely protect them with heavy roofing paper or other suitable material. Petroleum-based release agents shall not be used for this purpose.

Public Convenience and Traffic Control - The Contractor shall prohibit traffic on the street until the initial sweeping is complete. Prior to opening the streets to traffic, "Loose Gravel," C6 signs, and appropriate speed-reduction signs conforming to local, State, and Federal regulations shall be posted and maintained by the Contractor. These signs shall remain in place until there is no further dislodging of the cover aggregate.

Measurement and Payment

The contract unit price per square yard (SY) for ARAM shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in pavement preparation, placing materials, including rock dust blotter, and sweeping and cleaning up of streets complete in place.

The Contractor shall include in the contract unit price per square yard (SY) for ARAM the full cost of applying rock dust blotter to all areas of ARAM, as directed by the Engineer.

The Contractor shall include in the contract unit price per square yard (SY) for Slurry Seal the full cost for applying the slurry seal after the ARAM is completed, and it shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in slurry seal as specified herein and no additional compensation will be provide therefor.

SLURRY SEAL

Slurry seal shall be performed in accordance with Subsections 203-5 and 302-4, "Emulsion-Aggregate Slurry," of the Standard Specifications, and the following Provisions.

Materials

Emulsion aggregate slurry shall be Type II. Emulsified asphalt shall be CQS-1h.

Modify the following - Subsection 203-5.2, "Materials" of the Standard Specifications;

- (1) Admixtures, such as Portland Cement or aluminum sulfate may be mixed into the slurry material to adjust the curing time such that the applied slurry can support vehicular traffic within 2 hours.
- (2) Use of slag shall not be permitted.
- (3) Deliveries of aggregate and emulsion shall not be made without the engineer present. Emulsion is not to be transferred to an on-site storage tanker without the sieve test performed by the City.

Modify the first paragraph of Subsection 203-5.4, "Mix Design," of the Standard Specifications to include the following:

The Contractor shall submit a Mix Design for approval within fourteen (14) working days after "Notice to Submit Mix Design" is issued. The Contractor will receive a "Notice to Proceed with Construction" only after the Mix Design is approved. The Contractor shall provide materials for verification of the Mix Design. Periodically throughout the project, at the direction of the City Engineer, the City's Consultant will perform further testing as necessary to provide assurance of the Mix Design. The cost of the initial Mix Design testing and periodical testing will be borne by the City.

If the Contractor changes sources of material, i.e. aggregate and/or oil, a new Mix Design shall be resubmitted. The cost of all Mix Design retest and testing as a result of changes to the Mix Design shall be borne by the Contractor, and the amount due to the City for said retesting will be deducted from the Contractor's Progress Payments.

Prior to a change of emulsion, the Contractor shall thoroughly clean all emulsion tanks and mixing units to prevent any chemical reaction between the two emulsions.

Modify the second paragraph of Subsection 203-5.4, "Mix Design," of Standard Specifications to read as follows:

The Contractor shall allow ten (10) days prior to start of work for calibration and testing at a location designated by the Engineer. The City's testing laboratory will obtain field samples at the time of calibration for Extraction Test (ASTM D 2172), Consistency Test, Wet Track Abrasion Test (ASTM D 3910), a verification of the 60 minute set time previously specified. When the City's testing laboratory has determined that the field samples meet the requirements stipulated in these Specifications, the Engineer will notify the Contractor to start work. In the event that the product does not meet Specification,

another testing and calibration date shall be set ten (10) day prior to the start of work for a complete retest of the product at the expense of the Contractor.

Polymer Modified Emulsion: Polymer modified emulsion-aggregate slurry shall conform to Table 8 below.

Asphalt emulsions shall be composed of a paving asphalt base uniformly emulsified with water and an emulsifying or stabilizing agent. Polymer modified asphalt emulsions shall also contain a polymer.

The asphalt emulsion shall be homogeneous. Within 30 days after delivery and provided separation has not been caused by freezing, the asphalt emulsion shall be homogeneous after thorough mixing. The polymer used in the manufacture of polymer modified asphaltic emulsion shall be, at the option of the Contractor, either neoprene, ethylene vinyl acetate, or a blend of butadiene and styrene.

TABLE 8

| Requirements for Polymer Modified Cationic Quick Setting Emulsions (PMCQS1h) | | |
|------------------------------------------------------------------------------|-------------|-------------|
| <u>Properties</u> | <u>Min.</u> | <u>Max.</u> |
| Tests on Emulsions | | |
| Viscosity SSF, @ 77° F | 15.0 | 90.0 |
| Sieve Test, % | | 0.3 |
| Storage Stability, 1 day, % | | 1.0 |
| Residue by Evaporation | 57.0 | |
| Particle Charge | Positive | |
| Tests on Residue from Evaporation Test | | |
| Penetration, 77° F | 40.0 | 90.0 |
| Ductility, 77° F, cm | 40.0 | |
| Absolute Viscosity @ 140° F, poise | 2,250.0 | |
| Solubility in Trichloroethylene | 97.0 | |
| Quantitative Test for Polymer Content | | |
| Either; | | |
| Torsional Recovery, % | 18.0 | |
| or | | |
| Polymer Content in Residue, wt % | 2.5 | 3.0 |

The emulsion supplier shall certify that the asphalt residue contains at least 2.5 percent polymer (dry weight) and that the polymer has either been added as a solid polymer to the base asphalt, or has been added in the form of a latex at the time of emulsion manufacture.

Polymer modified emulsified asphalt shall be kept in a suspended state by an agitating mixer operated every 3 days.

The latex additive shall be Ultra Pave 70 (for anionic) or Ultra Pave 65 K (for cationic) or an approved equal. The latex shall be added at the emulsion plant after weighing the asphalt and before the addition of mixing water. The latex shall be added at a rate of **two (2)** parts to one-hundred (100) parts of emulsion by volume (or 2%).

Construction Methods for Slurry Seal

Stockpile

Prior to the beginning of slurry operations, the Contractor shall furnish, at no cost to the City, current licensed weigh master's certificates indicating the net weight capacity of the aggregate bin.

Prior to storing aggregate on private property, the Contractor shall submit to the Engineer written permission from the property owner for such stockpiling. The City may provide a stockpile area at the City Yard, 15670 Perris Boulevard, Moreno Valley, California 92556 only after arrangements have been made with the City's Maintenance and Operations Division, at (909) 413-3160.

Precautions shall be taken to ensure that stockpiles do not become contaminated with oversized rock, clay, silt, or excessive amounts of moisture. The stockpiles shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted.

The stockpile areas shall be thoroughly cleaned of all excess material and left in a neat, orderly appearance upon completion of slurry operations in any area.

Contractor shall schedule and coordinate the delivery of aggregate to the stockpile(s) such that: (1) deliveries originate at the plant and arrive at the stockpile site within normal work hours on the same calendar day, (2) delivery site and project name are explicitly stated on each delivery ticket, (3) successive deliveries on the same calendar day show the cumulative total for that day, (4) copies of all delivery tickets are delivered to the Engineer before the end of the working day, whereas any delivery tickets not so delivered may be rejected by the Engineer. Any deviation from this process must have the prior approval of the Engineer.

The Contractor is hereby advised that City streets, parking lots, or any City properties will not be allowed as a site for stockpiling and batching. Arrangements for an acceptable site shall be the sole responsibility of the Contractor.

Application

The pavement surface shall be cleaned by sweeping, flushing, or other means necessary to remove loose particles of paving, dirt, aggregate, and any other extraneous materials. This must be performed to the satisfaction of the Engineer before any slurry seal material is placed; including the placement of slurry seal test strips.

Modify the following Subsection 302-4.2.2, "Continuous-Flow Mixers," of the Standard Specifications to read as follows:

All slurry mixing machines shall be equipped with a Fines Feeder for the adding of cement or granular Aluminum Sulfate.

Transit mix trucks shall not be used.

The first paragraph of Subsection 302-4.3.1 of the Standard Specifications is hereby deleted and replaced with the following:

The work shall consist of preparation, mixing asphaltic emulsion, aggregate, accelerator and water, and spreading the mixture on the pavement where shown on the plans. Type II slurry shall be applied at a rate yielding a minimum 1,000 square feet per extra long ton and a maximum 1,200 square feet per extra long ton.

The first sentence of Subsection 302-4.3.2 is hereby deleted and replaced with the following:

Slurry seal shall be placed only when the ambient temperature is above 50 degrees and rising. No slurry will be placed during inclement weather or the threat of. Contractor will bear the responsibility of that may arise from non-cancellation. The maximum speed of the slurry machine shall not exceed 270 feet per minute (80 meters per minute).

The spreader box shall be equipped with a suitable drag to erase ridges. A minimum 2-foot length of burlap material shall be attached to the entire width of the drag. The spreader box shall be equipped with a steering device.

The slurry spreader box shall be maintained in a good state of repair at all times. The spreader box main strike off squeegee (rubber) shall be new at the beginning of the contract and shall be maintained in a good state of repair throughout the contract.

Equipment shall be available for inspection before the beginning of the contract and again before work is to be accomplished.

Each slurry crew shall be composed, at a minimum, of a coordinator at the project site at all times, a competent quick-set mixing man, a competent driver, two squeegee men, and sufficient laborers for any handiwork and cleanup.

Prior to commencement of work, Contractor shall perform test sections for review and approval by the Engineer. The area of the test sections shall be at least 5,000 square feet. The section locations shall be in the area of the work, to be specified prior to construction. In no case will the Contractor begin operations until the test sections have adequately cured and he has received written approval by the Engineer. The approved mix design and test section shall be considered the standard for the operation.

The slurry shall be applied in such a manner that no ripples or waves exist. If ripples or waves occur in the slurry during the application, the work shall cease and the Contractor shall correct the situation. The Contractor may use a drag to knock down ridges. If ripples or waves are not corrected to the Engineer's satisfaction, the street shall be reslurried at the Contractor's expense.

No slurry seal shall be placed on a wet street or crossing without the Engineer's consent.

Intersections and commercial driveways shall be completed in two parts to allow ingress and egress to traffic. Sand may be spread over the fresh slurry only with the permission of the Engineer.

Slurry shall not be applied over any manhole, valve, survey monument, or miscellaneous frames and covers. It shall be the Contractor's responsibility to place protective covering over, or to otherwise avoid slurry seal coating of manholes, utility covers, pavement markers (reflective and non-reflective), concrete gutters, concrete cross gutters, and drainage facilities, and survey monuments. Any material used to protect such devices shall be removed and disposed of lawfully by the Contractor.

Rubber Tire Rolling - Rolling shall be performed with two complete coverages by a 12-ton nine-wheel rubber tired roller with a tire pressure of 50 psi. Rolling shall be performed after slurry and as soon as it sets up enough to support the roller and not pick up on the tires.

Areas of shade on the pavement that set up more than 10 minutes later than other areas shall be rolled separately, but as soon as they set up sufficiently to meet the requirements herein. Insufficient rubber-tire rollers to meet these requirements shall be cause for termination of slurry operations until rolling can keep pace with slurry spread.

Contractor shall sweep the streets for two (2) consecutive days after the application of the slurry. A third and final sweeping shall be done five to eight days after the slurry is complete. Residual material picked up from the sweepings shall be removed to a legal disposal site.

The Contractor shall protect the wet slurry from traffic at all times and if damaged or defaced, the Contractor shall repair said damage at no additional cost to the City.

The placement of slurry seal may be suspended with the concurrence of the Engineer due to unsuitable weather, temperature conditions, or other conditions that are considered unfavorable for the prosecution of the work. The Contractor shall immediately comply with the order of suspension by the Engineer, and work shall not be resumed until authorized by the Engineer.

The days during which the suspension of work is in effect due to unsuitable weather shall not be considered working days and the date of completion shall be extended to allow for work and notification. In the event of a suspension of work, the Contractor shall remove all barricades, equipment and "No Parking" signs (if appropriate) upon the curing of the completed portion of slurry. No adjustment of unit prices of any items shall be allowed due to a suspension of work as described above.

It is anticipated that nuisance water, such as storm water runoff and irrigation water, will run in and across the right-of-way at various time throughout the period of construction. It shall be the responsibility of the Contractor, at their own expense, to provide for and protect the work from such water. In addition, the Contractor's responsibility shall include handling nuisance waters such that their operations do not cause them to damage existing improvements or properties adjacent to or near the site of work.

The Contractor shall, at the direction of the Engineer, repair or reseal to the entire street, or complete section thereof, as determined by the Engineer, which have not been sealed properly (includes areas that have failed to meet yield and mix design specifications) and completely. No compensation will be provided for slurry seal used in repair and reseal work.

The start and finish of slurry application shall be a straight line which, unless otherwise approved by the Engineer, shall be obtained by laying a strip of building paper or other material approved by the Engineer on the pavement surface. After application of slurry, the paper is to be removed leaving a straight edge. The entire street surface area shall be sealed the same day.

The Contractor shall sweep any raveled material on the street one (1) week after the initial placement. If the Engineer determines the raveling is excessive, the frequency of sweeping shall be adjusted to the field conditions of the raveling. If raveling continues within two (2) weeks of the initial placement, the street shall be swept and reslurried at no cost to the City. Raveling can be identified by the presence of "black pebbles" in the gutter.

Public Convenience and Traffic Control

The application of slurry shall not commence until after 7:30 a.m., and shall conclude at 1:30 p.m. unless other authorized by the Engineer. The slurry shall be sufficiently cured to be open to traffic by 4:00 p.m. The portions of streets to be slurried shall be closed from the time the application begins until the mixture has achieved sufficient set to be opened to traffic.

The spreading schedule shall list the streets in order of proposed application and denote which streets are to be completed each day.

Traffic control with ample barricades, flaggers, standard regulatory and warning signs, no parking signs, etc., shall be provided to protect the uncured slurry surface from all types of traffic. Any damage to the uncured slurry is the responsibility of the Contractor. Traffic control plan shall be submitted to and approved by the City Director of Public Works prior to commencing work. The Contractor's work will be done on successive adjacent streets during the same day of the operation. Adequate means shall be provided to protect the slurry seal from damage by traffic for a minimum of four (4) hours of application or until such time that the mixture has cured sufficiently so that the slurry seal will not adhere to and be picked up by tires of vehicles.

Contractor shall provide barricades and other traffic control devices as necessary to eliminate traffic on areas of fresh slurry that might sustain damage from such traffic. Any tracking of slurry seal on private property will be the responsibility of the Contractor to correct.

Slurry seal shall not be spread on the trash pickup day of each respective street.

Temporary striping devices shall be provided on all lane lines covered by slurry.

Measurement and Payment

The contract unit price per square yard (SY) for Slurry Seal shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in slurry seal as specified herein and no additional compensation will be provided therefor.

Full compensation for developing a water supply, for furnishing and placing all water required for work done in the Contract, including extra work shall be included in the prices paid for the various items of work requiring water; and no separate payment will be made therefor.

ASPHALT TRACKING PREVENTION AND MITIGATION

The purpose of this section is to address any tracking related problems caused by the Contractor. The City requires that all streets adjacent to the project remain track free during and after construction. Contractor shall prevent and mitigate asphalt tracking on all adjacent surfaces. The use of water or any other methods approved by the Engineer may be utilized. If tracking is present at the end of the work day, the Contractor shall use steam cleaning and a

vacuum truck to remove tracking from all affected areas to the satisfaction of the Engineer.

The Contractor shall replace any striping and pavement markings damaged or obscured by asphalt tracking in kind as determined by the Engineer. No additional payment shall be considered for this work.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

ROADWAY EXCAVATION

Roadway Excavation shall be completed in accordance with Section 300-2, "Unclassified Excavation," of the Standard Specifications.

Where a portion of existing surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power-driven saw to a minimum depth of 50 mm (2 in.) before removing the surfacing. The Contractor will be required to sawcut the pavement where the join line or cut line is cold milled, unless otherwise directed by the Engineer.

Full compensation for compliance with the preceding requirements shall be considered as being included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

SIGNING AND STRIPING

Existing striping shall be removed by wet sandblasting or grinding prior to completing the slurry seal scope of work.

Painted traffic stripes (lane lines and speed limit markings) and applying thermoplastic pavement markings (word and symbol markings, limit lines, crosswalk, etc.) shall conform to the provisions in Section 84, "Traffic Stripes and Pavement Markings," of the 2015 State Standard Specifications and these Standard and Special Technical Provisions.

The subparagraphs of the first paragraph in Section 84-2.02, "Materials," of the State of California Standard Specifications are amended to read:

| | State Specification No. |
|-------------------------------------------------------------|--------------------------------|
| Rapid Dry Water Base, Traffic Line.—White, Yellow and Black | PTWB-01 |

The second and third paragraphs in Section 84-2.02, "Materials," of the State of California Standard Specifications are amended to read:

State Specifications for traffic paint and glass beads may be obtained from the Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, CA 95819-4612, telephone number 916.227.7289.

Glass beads shall conform to 1-ACOT type beads or equal.

The Contractor shall layout and "cat-track" the alignment of the proposed striping at 15 ft. intervals

and “spot” the proposed pavement markings as called for on the Plans. Striping shall vary no more than 2 in. in 50 ft. from the specified alignment. The Engineer may waive minor variations.

The Contractor shall not proceed with the painting of any striping or applying thermoplastic pavement markings until the Engineer has checked and approved the cat-tracking and spotting, and has authorized the Contractor to proceed.

Traffic striping shall be applied with airless equipment. All traffic striping shall be performed with a road liner type striping machine. Where the configuration or location of a traffic stripe is such that the use of a road liner type striping machine is unsuitable, traffic paint and glass beads may be applied by other methods and equipment approved by the Engineer. The Engineer shall determine if the road liner type striping machine is unsuitable for a particular use.

Temporary tape or reflective markers utilized for the purposes of interim delineation of centerline, lane lines, limit lines, and crosswalk lines shall be applied upon completion of surfacing and shall be placed to the side of the final striping pattern in such a way so that it will not interfere with the first coat of paint. The first coat of paint shall not be until seven (7) calendar days after the first coat. The second coat of paint shall not be applied until seven (7) calendar days after the first coat. Each coat of paint shall be applied at the wet film thickness of 10-12 mils for white and yellow paint and 7 mils for black paint. All paint shall be applied at a relative humidity below seventy-five percent (75%) and an ambient temperature above 13° C (55° F), unless otherwise approved by the Engineer. Thermoplastic pavement markings shall be installed no earlier than (7) calendar days following the installation of final ARHM surface course.

Except for black paint, No. 1 reflective glass beads shall be uniformly incorporated in all coats of paint concurrently with the application of the paint. The glass beads shall be embedded in the coat of traffic paint being applied to a depth of at least one-half their diameters. The reflective glass beads shall be applied to the first coat of paint at the rate of 1.5 lb. of beads per 0.26 Gal of paint, and to the second coat of paint at the rate of 2 lb. of beads per 0.26 Gal of paint.

Except as otherwise noted on the Plans or as directed by the Engineer, all angle points, as shown on the striping Plans shall be painted as a smooth, tangent curve with a radius and length as approved in the field.

All temporary tape and reflective markers applied for the purpose of interim delineation shall be removed by the Contractor at no additional cost to the City upon completion of the first coat of striping and prior to the final striping.

Stencils used for pavement markings must conform to the latest Caltrans approved Metric Stenciling Standards.

Add to Subsection 84-1.04, “Protection from Damage,” of the State of California Standard Specifications the following:

Newly painted or existing striping or applied thermoplastic pavement markings which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be repainted or thermoplastic replaced, and any associated removals shall be performed as outlined in these Special Provisions at the sole expense of the Contractor and no separate compensation will be allowed therefor.

Existing traffic striping and pavement markings that do not conform to the approved Plans shall be removed by wet sandblasting. Other methods may be requested by the Contractor, but shall be submitted in writing to the Engineer for approval. Blackout of existing traffic striping or pavement markings, which do not conform to the approved Plan, shall not be allowed.

Painting traffic stripes and applying of thermoplastic pavement markings shall not be separately measured.

The contract lump sum price paid for Signing and Striping shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in painting traffic striping and applying thermoplastic pavement markings the items specified herein and no additional compensation shall be allowed therefor. Payment will be made on a basis of the percentage of work completed for this bid item.

**APPENDIX I
PROGRESS PAYMENT REQUEST FORM**

TO: CITY OF MANHATTAN BEACH
Engineering Division, 3621 Bell Avenue, Manhattan Beach, CA 90266

PROJECT TITLE _____

PROJECT NO. _____

FROM: CONTRACTOR _____

Date _____

Address _____

Telephone _____

Submitted by _____

Progress Estimate # _____

Contract Award Amount \$ _____

| No. | Description | Contract Quantity | Previous Quantity | Quantity This Estimate | Unit Price | Amount This Estimate | Total Quantity to Date | Total Amount to Date |
|-----|--------------------------|----------------------|----------------------|---------------------------|---------------|----------------------------|---------------------------|-------------------------|
| 1. | | | | | | | | |
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| 13. | | | | | | | | |
| 14. | | | | | | | | |
| | Total | | | | | | | |
| | Less Retention | | | | | | | |
| | Less Previous Billing(s) | | | | | | | |
| | Total Amount Due | | | | | | | |

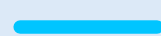
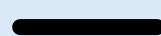
City Approval: _____

Date: _____

NOTE: An updated Project Schedule must be provided with each monthly progress payment in accordance with Section 6-1 of the General Provisions in addition to a Conditional Waiver and Release form per Section 9 -3.2.1

APPENDIX II
EXHIBIT OF STREETS INCLUDED IN THIS STREET RESURFACING PROJECT

Annual Slurry Seal Program FY18-19 Areas 4, 5, 6

-  Annual Slurry Seal Program FY18-19
-  ARAM Street Resurfacing Project

