

# CITY OF MANHATTAN BEACH

## BID DOCUMENTS

PROJECT NO. SD-279  
BID NO. E1288-23C

**SANTA MONICA BAY TOTAL MAXIMUM DAILY LOAD  
HIGH-FLOW CAPACITY TRASH TREATMENT  
CONTROL DEVICE (SMB TMDL HFCTTCD) PROJECT**

**VARIOUS LOCATIONS IN MANHATTAN BEACH  
DECEMBER 2023**



**CITY OF MANHATTAN BEACH  
PUBLIC WORKS**

**TIM BIRTHISEL, P.E.**

**1400 HIGHLAND AVENUE  
MANHATTAN BEACH, CA 90266**



Katherine Doherty, City Engineer C76589

Engineer/Architect of Record Approval

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REQUIRED/APPLICABLE SPPWC SPECIFICATIONS NOT LISTED IN SPECIAL PROVISIONS:  
The following sections do not include modifications/provisions herein, while the Contractor shall follow guidance in these sections of the Greenbook (along with others not specifically mentioned).

PART 2 - CONSTRUCTION MATERIALS

    SECTION 207. GRAVITY PIPE (for RCP and CMP work)

    SECTION 217. BEDDING AND BACKFILL MATERIALS (for bedding/trenching)

PART 3 - CONSTRUCTION METHODS

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**NOTICE INVITING BIDS  
FOR**

**Santa Monica Bay Stormwater TMDL Trash Treatment Project**

Santa Monica Bay Total Maximum Daily Load High-Flow Capacity Trash Treatment Control Device  
("The Project")

**Project Number: SD-279 Bid Number: E1288-23C**

**NOTICE IS HEREBY GIVEN** that the City of Manhattan Beach, California ("City") invites sealed Bids for the Project. The City will receive **ELECTRONIC BIDS ONLY** up to 11:00 a.m. on January 24, 2024 at which time the **ELECTRONIC** bids will be opened and posted on PlanetBids. The deadline to submit questions related to the bid documents is January 16, 2024 at 11:00 a.m.

Bids shall be received electronically only on the PlanetBids Portal accessible through the City of Manhattan Beach Public Works Department Bid Opportunities webpage at <https://www.manhattanbeach.gov/departments/public-works/bid-opportunities>. To submit your bid electronically and to review Bid tabulation results ("Bid Opening"), please visit the following link: <https://pbsystem.planetbids.com/portal/48136/bo/bo-detail/112840>

Contract Documents in PDF format (including City Special Provisions and Project Plans, but not including Standard Plans, Standard Specifications, or Reference Specifications) shall be obtained from the link/website above.

Total Cost per set: **\$106.00**

All fees listed above are non-refundable. The Contract Documents must be purchased online; they cannot be purchased or mailed from City Hall. Bidders are solely responsible for on time submission of their electronic bid. The City will only consider bids that have been transmitted successfully and have been issued an ebid confirmation number with a time stamp from the bid management system indicating that the bid was submitted successfully. Transmission of bids by any other means will not be accepted. Bidders shall be solely responsible for informing themselves with respect to the proper utilization of the bid management system, for ensuring the capability of their computer system to upload the required documents, and for the stability of their internet service. Failure of the bidders to successfully submit electronic bids shall be at the bidders' sole risk and no relief will be given for late and/or improperly submitted bids. Bidders experiencing any technical difficulties with the bid submission process may contact PlanetBids at (818) 992-1771. Neither the City, nor PlanetBids, makes any guarantee as to the timely availability of assistance, or assurance that any given problem will be resolved by the bid submission deadline.

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 **120 total Working Days** from the date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials.

**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.

**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:   
\_\_\_\_\_  
Katherine Doherty, City Engineer

12/27/2023  
\_\_\_\_\_  
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 City shall post all documents to the City's website at <https://www.manhattanbeach.gov>. The Addenda may also be posted to PlanetBids at

<https://www.manhattanbeach.gov/departments/public-works/bid-opportunities>. Bidders are responsible for ensuring that they have received any and all Addenda. It is the Bidder's responsibility to actively check PlanetBids 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.

**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.*).

**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 the date specified in the Notice Inviting Bids. 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 ten calendar days after the award of contract. 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 Noncollusion Declaration Form
- \_\_\_\_\_ Signed copies of all Addenda (if any)
- \_\_\_\_\_ 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**

**SMB TMDL HFCTCD PROJECT ("PROJECT")**

**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

SMB TMDL HFCTTCD PROJECT ("PROJECT")Bidder's Name: Clarke Contracting CorporationBidder's Address: 4646 Manhattan Beach Blvd. Lawndale, CA 90260

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:

Base Bid Items as Follows:

## BASE BID SCHEDULE:

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
<b>General Items: Applicable to All Sites</b>						
1	%	Mobilization (10% maximum of Total Bid Price)	LS	1	N/A	\$ 300,000. <sup>00</sup>
2	%	Traffic Control	LS	1	N/A	\$ 15,000. <sup>00</sup>
3	C	Project Surveying	LS	1	N/A	\$ 6,500. <sup>00</sup>
4	%	Stormwater Pollution Control - Best Managements Practices (BMP)	LS	1	N/A	\$ 5,000. <sup>00</sup>
5	%	Special Project Site Maintenance and Public Convenience and Safety	LS	1	N/A	\$20,000
6	%	Soil Testing and Inspection	LS	1	N/A	\$ 6,000. <sup>00</sup>
<b>1<sup>st</sup> Street Improvements (Sheet C-6)</b>						
7	%	Temporary Utility Support	EA	5	\$ 1,000. <sup>00</sup>	\$ 5,000. <sup>00</sup>

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
8	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 300. <sup>00</sup>
9	S	HDS and Diversion/ Connection Structures (1st St)	LS	1	N/A	\$ 500,000. <sup>00</sup>
10	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	4	\$ 7,500. <sup>00</sup>	\$ 30,000. <sup>00</sup>
11	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 30,000. <sup>00</sup>
12	%	Pavement Restoration	SF	750	\$ 60. <sup>00</sup>	\$ 45,000. <sup>00</sup>
13	%	Sewer Bypass	LS	1	N/A	\$ 25,000. <sup>00</sup>
14	C	Reconnect Sewer Laterals to Sewer Main (Per City Std. ST-5)	FA	2	\$ 1,500. <sup>00</sup>	\$ 3,000. <sup>00</sup>
15	%	Coordinate with Property Owners/Tenants	LS	1	N/A	\$ 1,000. <sup>00</sup>
<b>14<sup>th</sup> Street Improvements (Sheet C-7)</b>						
16	%	Temporary Utility Support	EA	1	\$ 1,000. <sup>00</sup>	\$ 1,000. <sup>00</sup>
17	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 500. <sup>00</sup>
18	C	ADA Curb Ramp and Signage (14 <sup>th</sup> Street)	EA	1	\$ 15,000. <sup>00</sup>	\$ 15,000. <sup>00</sup>
19	%	Relocate Utility Lines (City-Owned)	LS	1	N/A	\$ 4,500. <sup>00</sup>
20	S	HDS and Diversion/ Catch Basin Structure (14th St)	LS	1	N/A	\$ 300,000. <sup>00</sup>
21	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$ 7,500. <sup>00</sup>	\$ 15,000. <sup>00</sup>
22	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 14,000. <sup>00</sup>

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
23	%	Pavement Restoration	SF	230	\$ 50. <sup>00</sup>	\$ 11,500. <sup>00</sup>
24	%	Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	N/A	\$ 6,000. <sup>00</sup>
<b>24<sup>th</sup> Street Improvements (Sheet C-8)</b>						
25	%	Temporary Utility Support	EA	1	\$1,000. <sup>00</sup>	\$ 1,000. <sup>00</sup>
26	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 500. <sup>00</sup>
27	S	HDS and Diversion Structure (24th St)	LS	1	\$310,000. <sup>00</sup>	\$ 310,000. <sup>00</sup>
28	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500. <sup>00</sup>	\$ 15,000. <sup>00</sup>
29	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 16,000. <sup>00</sup>
30	%	Pavement Restoration	SF	200	\$ 50. <sup>00</sup>	\$ 10,000. <sup>00</sup>
31	%	Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	N/A	\$ 2,500. <sup>00</sup>
<b>27<sup>th</sup> Street Improvements (Sheet C-9)</b>						
32	%	Temporary Utility Support	EA	1	\$1,000. <sup>00</sup>	\$ 1,000. <sup>00</sup>
33	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 300. <sup>00</sup>

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
34	%	Relocate Utility Lines (City-Owned)	LS	1	N/A	\$ 15,000. <sup>00</sup>
35	S	HDS and Diversion/ Catch Basin Structure (27th St)	LS	1	\$340,000. <sup>00</sup>	\$ 340,000. <sup>00</sup>
36	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500. <sup>00</sup>	\$ 15,000. <sup>00</sup>
37	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 13,000. <sup>00</sup>
38	%	Pavement Restoration	SF	320	\$ 40. <sup>00</sup>	\$ 12,800. <sup>00</sup>
39	%	Coordinate with Property Owners/Tenants	LS	1	N/A	\$ 1,000. <sup>00</sup>
<b>32<sup>nd</sup> Street Improvements (Sheet C-10)</b>						
40	%	Temporary Utility Support	EA	1	\$ 1,000. <sup>00</sup>	\$ 1,000. <sup>00</sup>
41	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 300. <sup>00</sup>
42	S	HDS and Diversion Structure (32 <sup>nd</sup> St)	LS	1	N/A	\$465,000. <sup>00</sup>
43	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500. <sup>00</sup>	\$ 15,000. <sup>00</sup>
44	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 25,000. <sup>00</sup>
45	%	Pavement Restoration	SF	260	\$ 50. <sup>00</sup>	\$ 13,000. <sup>00</sup>
46	%	Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	N/A	\$ 6,000. <sup>00</sup>

ITEM NO.	CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICES	EXTENDED AMOUNT
<b>39<sup>th</sup> Street Improvements (Sheet C-11)</b>						
47	%	Remove and Replace Traffic Striping, Markings, and Markers	LS	1	N/A	\$ 1,500. <sup>00</sup>
48	S	HDS and Diversion Structure (39th St)	LS	1	N/A	\$ 360,000. <sup>00</sup>
49	C	Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500. <sup>00</sup>	\$ 15,000. <sup>00</sup>
50	%	Sheeting, Shoring, and Bracing	LS	1	N/A	\$ 14,000. <sup>00</sup>
51	%	Pavement Restoration	SF	320	\$ 40. <sup>00</sup>	\$ 12,800. <sup>00</sup>
52	%	24-inch CMP	LS	1	N/A	\$ 15,000. <sup>00</sup>
53	%	Coordinate with Property Owners/Tenants	LS	1	N/A	\$ 1,000. <sup>00</sup>
<b>Catch Basin Improvements (Sheets C-4A/B and C-5)</b>						
54	%	Channel Filter System	EA	8	\$ 1,000. <sup>00</sup>	\$ 8,000. <sup>00</sup>
55	%	Connector Pipe Screen (CPS)	EA	24	\$ 4,000. <sup>00</sup>	\$ 96,000. <sup>00</sup>
56	%	Curb Inlet Filter Basket	EA	3	\$ 4,000. <sup>00</sup>	\$ 12,000. <sup>00</sup>
57	%	Inlet Filter Insert	EA	13	\$ 4,000. <sup>00</sup>	\$ 52,000. <sup>00</sup>
TOTAL BASE BID SCHEDULE:						\$ _____

**NOTES:**

- 1) In the CODE column (S) denotes a specialty item, (%) denotes progress payments for that lump sum item will be allowed based on the percentage of completion in each pay period, and (C) denotes payments will be made after the completion of the lump sum item. See Subsection 9-2.1 of the General Provisions for details.
- 2) In the UNIT column (LS) denotes a lump sum item. See Section 9 of the General Provisions for details.

- 3) 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) items. For lump sum items, see Note 1. The Bid Price shall include, but not limited to, sales tax and all other applicable taxes and fees.
- 4) 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 Schedule Amount

TOTAL BID PRICE IN DIGITS: \$ 3,225,000.<sup>00</sup>

TOTAL BID PRICE IN WORDS: Three Million, Two Hundred Twenty-five Thousand -  
and zero cents

## Bid Results

### Bidder Details

**Vendor Name** Clarke Contracting Corporation  
**Address** 4646 Manhattan Beach Blvd.  
 Lawndale, California 90260  
 United States  
**Respondee** Mark Cuneo  
**Respondee Title** Estimator/Project Manager  
**Phone** 310-542-7724  
**Email** mark18ccc@gmail.com  
**Vendor Type** CADIR  
**License #** 325884  
**CADIR** 1000001461

### Bid Detail

**Bid Format** Electronic  
**Submitted** 01/24/2024 10:58 AM (PST)  
**Delivery Method**  
**Bid Responsive**  
**Bid Status** Submitted  
**Confirmation #** 360966

### Respondee Comment

### Buyer Comment

### Attachments

File Title	File Name	File Type
Proposal (Clarke Contracting Corp).pdf	Proposal (Clarke Contracting Corp).pdf	Bidder's Proposal - Contractor's Statement
Noncollusion Declaration (Clarke Contracting Corp).pdf	Noncollusion Declaration (Clarke Contracting Corp).pdf	Noncollusion Declaration Form
Corporate Resolution - Evidence of Capacity of the Person Signing Bids (Clarke Contracting Corp).pdf	Corporate Resolution - Evidence of Capacity of the Person Signing Bids (Clarke Contracting Corp).pdf	Evidence of capacity of the person(s) signing the Bid to bind the Bidder
Bid Bond (Clarke Contracting Corp).pdf	Bid Bond (Clarke Contracting Corp).pdf	Bid Bond

## Subcontractors

No Subcontractors

## Line Items

**Discount Terms** No Discount

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
<b>General Items: Applicable to All Sites</b>							<b>\$352,500.00</b>		
1	%		Mobilization (10% maximum of Total Bid Price)	LS	1	\$300,000.00	\$300,000.00	Yes	
2	%		Traffic Control	LS	1	\$15,000.00	\$15,000.00	Yes	
3	C		Project Surveying	LS	1	\$6,500.00	\$6,500.00	Yes	
4	%		Stormwater Pollution Control - Best Managements Practices (BMP)	LS	1	\$5,000.00	\$5,000.00	Yes	
5	%		Special Project Site Maintenance and Public Convenience and Safety	LS	1	\$20,000.00	\$20,000.00	Yes	
6	%		Soil Testing and Inspection	LS	1	\$6,000.00	\$6,000.00	Yes	
<b>1st Street Improvements (Sheet C-6)</b>							<b>\$639,300.00</b>		
7	%		Temporary Utility Support	EA	5	\$1,000.00	\$5,000.00	Yes	
8	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$300.00	\$300.00	Yes	
9	S		HDS and Diversion/ Connection Structures (1st St)	LS	1	\$500,000.00	\$500,000.00	Yes	
10	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	4	\$7,500.00	\$30,000.00	Yes	
11	%		Sheeting, Shoring, and Bracing	LS	1	\$30,000.00	\$30,000.00	Yes	
12	%		Pavement Restoration	SF	750	\$60.00	\$45,000.00	Yes	
13	%		Sewer Bypass	LS	1	\$25,000.00	\$25,000.00	Yes	
14	C		Reconnect Sewer Laterals to Sewer Main (Per City Std. ST-5)	EA	2	\$1,500.00	\$3,000.00	Yes	
15	%		Coordinate with Property Owners/Tenants	LS	1	\$1,000.00	\$1,000.00	Yes	
<b>14th Street Improvements (Sheet C-7)</b>							<b>\$367,500.00</b>		
16	%		Temporary Utility Support	EA	1	\$1,000.00	\$1,000.00	Yes	
17	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$500.00	\$500.00	Yes	
18	C		ADA Curb Ramp and Signage (14th Street)	EA	1	\$15,000.00	\$15,000.00	Yes	
19	%		Relocate Utility Lines (City-Owned)	LS	1	\$4,500.00	\$4,500.00	Yes	
20	S		HDS and Diversion/ Catch Basin Structure (14th St)	LS	1	\$300,000.00	\$300,000.00	Yes	
21	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500.00	\$15,000.00	Yes	
22	%		Sheeting, Shoring, and Bracing	LS	1	\$14,000.00	\$14,000.00	Yes	
23	%		Pavement Restoration	SF	230	\$50.00	\$11,500.00	Yes	
24	%		Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	\$6,000.00	\$6,000.00	Yes	
<b>24th Street Improvements (Sheet C-8)</b>							<b>\$355,000.00</b>		
25	%		Temporary Utility Support	EA	1	\$1,000.00	\$1,000.00	Yes	
26	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$500.00	\$500.00	Yes	
27	S		HDS and Diversion Structure (24th St)	LS	1	\$310,000.00	\$310,000.00	Yes	
28	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500.00	\$15,000.00	Yes	
29	%		Sheeting, Shoring, and Bracing	LS	1	\$16,000.00	\$16,000.00	Yes	
30	%		Pavement Restoration	SF	200	\$50.00	\$10,000.00	Yes	
31	%		Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	\$2,500.00	\$2,500.00	Yes	
<b>27th Street Improvements (Sheet C-9)</b>							<b>\$398,100.00</b>		
32	%		Temporary Utility Support	EA	1	\$1,000.00	\$1,000.00	Yes	
33	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$300.00	\$300.00	Yes	
34	%		Relocate Utility Lines (City-Owned)	LS	1	\$15,000.00	\$15,000.00	Yes	
35	S		HDS and Diversion/ Catch Basin Structure (27th St)	LS	1	\$340,000.00	\$340,000.00	Yes	
36	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500.00	\$15,000.00	Yes	
37	%		Sheeting, Shoring, and Bracing	LS	1	\$13,000.00	\$13,000.00	Yes	
38	%		Pavement Restoration	SF	320	\$40.00	\$12,800.00	Yes	
39	%		Coordinate with Property Owners/Tenants	LS	1	\$1,000.00	\$1,000.00	Yes	
<b>32nd Street Improvements (Sheet C-10)</b>							<b>\$525,300.00</b>		
40	%		Temporary Utility Support	EA	1	\$1,000.00	\$1,000.00	Yes	
41	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$300.00	\$300.00	Yes	
42	S		HDS and Diversion Structure (32nd St)	LS	1	\$465,000.00	\$465,000.00	Yes	
43	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500.00	\$15,000.00	Yes	
44	%		Sheeting, Shoring, and Bracing	LS	1	\$25,000.00	\$25,000.00	Yes	

Item #	Item Code	Type	Item Description	UOM	QTY	Unit Price	Line Total	Response	Comment
45	%		Pavement Restoration	SF	260	\$50.00	\$13,000.00	Yes	
46	%		Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, etc. In Kind to City Satisfaction	LS	1	\$6,000.00	\$6,000.00	Yes	
39th Street Improvements (Sheet C-11)							\$419,300.00		
47	%		Remove and Replace Traffic Striping, Markings, and Markers	LS	1	\$1,500.00	\$1,500.00	Yes	
48	S		HDS and Diversion Structure (39th St)	LS	1	\$360,000.00	\$360,000.00	Yes	
49	C		Pipe Connection to Existing Storm Drains (Per Detail or SPPWC Std. 335-2 or Detail)	EA	2	\$7,500.00	\$15,000.00	Yes	
50	%		Sheeting, Shoring, and Bracing	LS	1	\$14,000.00	\$14,000.00	Yes	
51	%		Pavement Restoration	SF	320	\$40.00	\$12,800.00	Yes	
52	%		24-inch CMP	LS	1	\$15,000.00	\$15,000.00	Yes	
53	%		Coordinate with Property Owners/Tenants	LS	1	\$1,000.00	\$1,000.00	Yes	
Catch Basin Improvements (Sheets C-4A/B and C-5)							\$168,000.00		
54	%		Channel Filter System	EA	8	\$1,000.00	\$8,000.00	Yes	
55	%		Connector Pipe Screen (CPS)	EA	24	\$4,000.00	\$96,000.00	Yes	
56	%		Curb Inlet Filter Basket	EA	3	\$4,000.00	\$12,000.00	Yes	
57	%		Inlet Filter Insert	EA	13	\$4,000.00	\$52,000.00	Yes	

### Line Item Subtotals

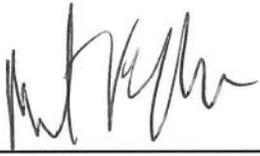
Section Title	Line Total
General Items: Applicable to All Sites	\$352,500.00
1st Street Improvements (Sheet C-6)	\$639,300.00
14th Street Improvements (Sheet C-7)	\$367,500.00
24th Street Improvements (Sheet C-8)	\$355,000.00
27th Street Improvements (Sheet C-9)	\$398,100.00
32nd Street Improvements (Sheet C-10)	\$525,300.00
39th Street Improvements (Sheet C-11)	\$419,300.00
Catch Basin Improvements (Sheets C-4A/B and C-5)	\$168,000.00
<b>Grand Total</b>	<b>\$3,225,000.00</b>

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 325884, Class A & B, which expires on 12/31/24.

Signature: 

Title: Brian A. Clarke, Date: 1/15/24  
President

Signature: 

Title: Robert F. Clarke Date: 1/15/24  
Vice President

**BIDDER'S PROPOSAL – CONTRACTOR'S STATEMENT**

**SMB TMDL HFCTTCD PROJECT ("PROJECT")**

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

- (1) Bidder's Name: Clarke Contracting Corporation
  
- (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. N/A
  
- (3) Business Address: 4646 Manhattan Beach Blvd. Lawndale, CA 90260
- (4) Telephone: 310-542-7724 Email: ccclawndale@yahoo.com  
clarkecontracting@gmail.com
- (5) Type of Firm Individual, Partnership, LLC or Corporation: Corporation
- (6) Corporation organized under the laws of the State of: California
- (7) California State Contractor's License Number and Class: 325884  
Original Date Issued: 09/28/1976 Expiration Date: 12/31/24
- (8) DIR Contractor Registration Number: 332897-0001-9
- (9) List the name and title of the person(s) who inspected the Project site for your firm:  
Mark Cuneo
  
- (10) Number of years' experience the company has as a contractor in construction work: 47
  
- (11) List the names, titles, addresses and telephone numbers of all individuals, firm members, partners, joint ventures, and company or corporate officers having a principal interest in this Bid:  
Brian A. Clarke, President, 4646 Manhattan Beach Blvd. Lawndale CA 90260, 310-542-7724  
Robert F. Clarke, Vice President, 4646 Manhattan Beach Blvd. Lawndale CA 90260, 310-542-7724
  
- (12) List all current and prior D.B.A.'s, aliases, and fictitious business names for any principal having interest in this Bid:  
N/A

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

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(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:

N/A

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b. Briefly summarize the parties' claims and defenses:

N/A

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

N/A

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(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.

No

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

No

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(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.

No

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(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.

N/A

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

No

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PLEASE SEE ATTACHED DOCUMENT

(20) 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.).

\_\_\_\_\_

## CLARKE CONTRACTING CORP.

PROJECT NAME	START COMPLETED	CONTRACT AMOUNT	AGENCY	CONTACT INFORMATION
Mullholland Hwy Retaining Wall	8/19/21 12/20/21	\$ 858,828.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Joel Zaragoza T: 626-458-4973 <a href="mailto:jzara@dpw.lacounty.gov">jzara@dpw.lacounty.gov</a>
La River Low Flow Diversion Project	10/16/21 In Progress	\$ 8,200,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Robert Samonte, PE T: 213-478-4762 <a href="mailto:brian.samonte@lacity.org">brian.samonte@lacity.org</a>
Downey Avenue	9/15/21 9/29/21	\$ 48,175.49	LA County Sanitation District 24501 S. Figueroa Street Carson, CA 90745	Troy Arashiro T: 562-908-4288 <a href="mailto:troyarashiro@lacsds.org">troyarashiro@lacsds.org</a>
ESR - Wilshire Blvd	9/24/21 2/24/22	\$ 148,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Jack Baisley T: 213-485-1187 <a href="mailto:jack.baisley@lacity.org">jack.baisley@lacity.org</a>
Briartree - La Canada Flintridge	9/28/21 10/4/21	\$ 28,733.98	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	James Flannigan T: 310-618-3058 <a href="mailto:jflannigan@torraceCA.gov">jflannigan@torraceCA.gov</a>
ESR - Vista Del Mar	10/20/21 3/9/22	\$ 165,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Bobby Pason T: 213-485-3020 <a href="mailto:bobby.pasos@lacity.org">bobby.pasos@lacity.org</a>
Lomita -Various Locations	11/17/21 12/23/21	\$ 220,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Alexander Sun T: 626-300-3387 <a href="mailto:alsun@dpw.lacounty.gov">alsun@dpw.lacounty.gov</a>
Pioneer Blvd - Whittier Chimney Blockage	12/30/21 1/4/22	\$ 31,900.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Sandra Medina T: 626-632-7305 <a href="mailto:nedina@dpw.lacounty.gov">nedina@dpw.lacounty.gov</a>
ESR - Temple Street	1/6/22 2/9/22	\$ 80,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Bobby Pason T: 213-485-3020 <a href="mailto:bobby.pasos@lacity.org">bobby.pasos@lacity.org</a>
216th Street - Carson	2/3/22 3/15/22	\$ 356,221.10	LA County Sanitation District 24501 S. Figueroa Street Carson, CA 90745	Alex Manesh <a href="mailto:amanesh@lacsds.org">amanesh@lacsds.org</a>

ESDR - Rosebud Avenue	2/3/22 3/4/22	\$ 145,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Hugo Rico T: 213-485-4564 <a href="mailto:hugo.rico@lacity.org">hugo.rico@lacity.org</a>
Rancho Palos Verdes -Various Loc	2/22/22 4/12/22	\$ 178,599.40	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Teagan Ferdinandsen T: 626-632-8132 <a href="mailto:tferfinandsen@dpw.lacounty.gov">tferfinandsen@dpw.lacounty.gov</a>
ESR - 41st Drive	3/8/22 4/11/22	\$ 115,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Alice Nguyen T: 213-847-2035 <a href="mailto:alice.nguyen@lacity.org">alice.nguyen@lacity.org</a>
Zoo Drive	7/22/22 7/29/22	\$ 164,335.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Wai Q.Yip T: 213-485-5441 <a href="mailto:wai.yip@lacity.org">wai.yip@lacity.org</a>
ESR - Woodley Ave	4/12/22 4/28/22	\$ 115,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Danny Morales T: 213-847-1911 <a href="mailto:danny.morales@lacity.org">danny.morales@lacity.org</a>
Glencoe Way Bulkhead	8/12/22 10/31/22	\$ 728,896.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Charles Entz <a href="mailto:charles.entz@lacity.org">charles.entz@lacity.org</a>
ESR - Oakwood Ave	5/9/22 7/27/22	\$ 125,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	David Calderon T: 213-847-0304 <a href="mailto:david.calderon@lacity.org">david.calderon@lacity.org</a>
Carson - Various Locations	10/3/22 12/17/22	\$ 340,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Alexander Sun T: 626-300-3387 <a href="mailto:alsun@dpw.lacounty.gov">alsun@dpw.lacounty.gov</a>
ESR - Valley Circle Blvd	6/2/22 6/17/22	\$ 80,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	David Lopez T: 213-485-5728 <a href="mailto:david.o.lopez@lacity.org">david.o.lopez@lacity.org</a>
ESR - Division Street	6/15/22 8/31/22	\$ 65,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Ryan Porras T: 213-847-0276 <a href="mailto:edgar.a.alcaraz@lacity.org">edgar.a.alcaraz@lacity.org</a>
ESDR - Sierra Bonita	8/1/22 8/5/22	\$ 55,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Edgar Alonso Alcaraz T: 213-485-4564 <a href="mailto:ryan.porras@lacity.org">ryan.porras@lacity.org</a>
ESR - Terrace R/W	8/10/22 8/15/22	\$ 95,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Ryan Porras T: 213-847-0276 <a href="mailto:ryan.porras@lacity.org">ryan.porras@lacity.org</a>

Inwood Dr. Bulkhead	11/17/22 2/16/23	\$ 608,244.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Daniel Orris T: 213-847-0488 <a href="mailto:daniel.orris@lacity.org">daniel.orris@lacity.org</a>
ESR - E. Edgeware Rd.	7/27/22 8/19/22	\$ 100,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	David Calderon T: 213-847-0304 <a href="mailto:david.calderon@lacity.org">david.calderon@lacity.org</a>
Culver City - Att Alley	9/12/22 9/28/2022	\$ 172,205.89	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>
ESR - San Fernando Rd. Tiny Village Home	9/19/22 10/17/2022	\$ 120,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Mark Jiang <a href="mailto:Mark.Jiang@lacity.org">Mark.Jiang@lacity.org</a>
21230 Poema Pl - Horse Trail	9/26/2022 9/29/2022	\$ 26,303.42	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Teagan Ferdinandsen T: 626-632-8132 <a href="mailto:tferinandsen@dpw.lacounty.gov">tferinandsen@dpw.lacounty.gov</a>
ESR - Morro Dr.	10/4/2022 11/2/2022	\$ 65,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Ryan Porras T: 213-847-0276 <a href="mailto:ryan.porras@lacity.org">ryan.porras@lacity.org</a>
Jasmin Ave	10/14/2022 10/14/2022	\$ 3,000.00	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>
4112 Lincoln Ave	10/17/2022 10/19/2022	\$ 8,400.58	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>
ESR - Obama Dr	10/20/2022 12/31/2022	\$ 120,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Alice Nguyen T: 213-847-2035 <a href="mailto:alice.nguyen@lacity.org">alice.nguyen@lacity.org</a>
Walteria Slope Repair	10/18/2022 10/18/2022	\$ 3,463.02	City of Torrance 3031 Torrance Blvd Torrance CA 90503	James Flannigan T: 310-618-3058 <a href="mailto:jflannigan@torranceCA.gov">jflannigan@torranceCA.gov</a>
MLK - 118th Street	11/17/2022 12/16/2022	\$ 220,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Teagan Ferdinandsen T: 626-632-8132 <a href="mailto:tferinandsen@dpw.lacounty.gov">tferinandsen@dpw.lacounty.gov</a>
La Selle & Madison Ave	11/7/2022 11/18/2022	\$ 21,817.59	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>

4315 Jackson Ave	3/22/2023 3/23/2023	\$	23,817.00	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>
ESR - Evanview Dr	11/11/2022 12/9/2022	\$	45,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Danny Morales T: 213-847-1911 <a href="mailto:danny.morales@lacity.org">danny.morales@lacity.org</a>
ESR - Remmet Ave	11/29/2022 12/12/2022	\$	20,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	David Lopez T: 213-485-5728 <a href="mailto:david.o.lopez@lacity.org">david.o.lopez@lacity.org</a>
Bankfield Pump Stration	1/6/2023 1/7/2023	\$	25,000.00	Culver City - Public Works Dept 9770 Culver Blvd. Culver City, CA 90232	Hong Wang T: 310-253-5604 <a href="mailto:hong.wang@culvercity.org">hong.wang@culvercity.org</a>
ESR - Venice Pumping Plant	1/30/2023 2/6/2023	\$	40,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Jack Baisley T: 213-847-1215 <a href="mailto:jack.baisley@lacity.org">jack.baisley@lacity.org</a>
Monteith Park & View Park Green Alley	In Progress	\$	7,200,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Louis Romero T: 626-611-6510 <a href="mailto:loromero@dpw.lacounty.gov">loromero@dpw.lacounty.gov</a>
ESR - Alley Pico Blvd	1/17/2023 2/7/2023	\$	34,860.74	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Jack Baisley T: 213-847-1215 <a href="mailto:jack.baisley@lacity.org">jack.baisley@lacity.org</a>
Admiralty Way	2/7/2023 2/7/2023	\$	11,741.17	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Jared Abegg T: 626-300-4711 <a href="mailto:JAbegg@dpw.lacounty.gov">JAbegg@dpw.lacounty.gov</a>
10926 Truro Ave - Lennox	2/6/2023 3/7/2023	\$	39,098.68	County of Los Angeles Flood Control 900 S. Fremont Avenue Alhambra, CA 91803	Chien-Hao Chen T: 562-861-0316 <a href="mailto:CHICHEN@dpw.lacounty.gov">CHICHEN@dpw.lacounty.gov</a>
ESR - 53rd Street	2/8/2023 3/9/2023	\$	75,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Danny Morales T: 213-847-1911 <a href="mailto:danny.morales@lacity.org">danny.morales@lacity.org</a>
Knoll View Dr.	2/21/2023 2/27/2023	\$	10,846.23	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Jared Abegg T: 626-300-4711 <a href="mailto:JAbegg@dpw.lacounty.gov">JAbegg@dpw.lacounty.gov</a>

Hawthorne Blvd. Sinkhole	3/6/2023 4/19/2023	\$ 287,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Alan Braavedt T: 310-525-0684 <a href="mailto:alan@SunBeamTech.net">alan@SunBeamTech.net</a>
ESR - Fletcher Dr.	2/28/2023 8/31/2023	\$ 4,500,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Jack Baisley T: 213-847-1215 <a href="mailto:jack.baisley@lacity.org">jack.baisley@lacity.org</a>
Westshire Blvd Bulkhead	5/1/2023 6/5/2023	\$ 267,995.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Daniel Orris T: 213-847-0488 <a href="mailto:daniel.orris@lacity.org">daniel.orris@lacity.org</a>
ESDR - Carborra Storm Drain	3/17/2023 4/25/2023	\$ 27,500.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Edgar Alcaraz T: 213-485-4295 <a href="mailto:edgar.a.alcaraz@lacity.org">edgar.a.alcaraz@lacity.org</a>
ESR - Glenalbyn Dr.	3/20/2023 6/5/2023	\$ 35,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Jack Baisley T: 213-847-1215 <a href="mailto:jack.baisley@lacity.org">jack.baisley@lacity.org</a>
Balboa Blvd Bulkhead	6/26/2023 9/12/2023	\$ 608,084.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Daniel Orris T: 213-847-0488 <a href="mailto:daniel.orris@lacity.org">daniel.orris@lacity.org</a>
Appian Way Bulkhead	In Progress	\$ 498,159.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Rene Ramirez T: 213-847-0474 <a href="mailto:rene.ramirez@lacity.org">rene.ramirez@lacity.org</a>
Wilson Park	4/10/2023 4/28/2023	\$ 167,400.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Jacob Almazan T: 310-618-3055 <a href="mailto:jalmazan@torranceca.gov">jalmazan@torranceca.gov</a>
Temple Hill Dr. Bulkhead	9/27/2023 11/22/2023	\$ 511,897.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Elaine Lei T: 213-847-0490 <a href="mailto:elaine.lei@lacity.org">elaine.lei@lacity.org</a>
Yuma Place Bulkhead	In Progress	\$ 1,104,254.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Elaine Lei T: 213-847-0490 <a href="mailto:elaine.lei@lacity.org">elaine.lei@lacity.org</a>
Sunset Plaza Bulkhead	7/18/2023 10/20/2023	\$ 1,312,997.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Kristen Ly T: 213-847-0477 <a href="mailto:kristen.ly@lacity.org">kristen.ly@lacity.org</a>
Larissas Dr. Slope Repair	11/13/2023 12/29/2023	\$ 419,450.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Kristen Ly T: 213-847-0477 <a href="mailto:kristen.ly@lacity.org">kristen.ly@lacity.org</a>

Los Altos Dr.	11/28/2023 12/1/2023	\$	75,000.00	County of Los Angeles Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803	Jared Abegg T:626-300-4711 <a href="mailto:JAbegg@dpw.lacounty.gov">JAbegg@dpw.lacounty.gov</a>
Rancho Palos Verdes	In Progress	\$	40,000.00	Rancho Palos Verdes Department of Public Works 30940 Hawthorne Blvd. Rancho Palos Verdes CA 90275	Juan Hernandez T: 310-935-8605 <a href="mailto:jhernandez@rpvca.gov">jhernandez@rpvca.gov</a>
ESDR - Zitola Dr. Storm Drain	In Progress	\$	35,000.00	City of Los Angeles 200 N. Spring St. Room 355 Los Angeles, CA 90012	Alice Nguyen T: 213-847-2035 <a href="mailto:alice.nguyen@lacity.org">alice.nguyen@lacity.org</a>

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.

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**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.).

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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.

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[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 National Pollutant Discharge Elimination 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: Brian A. Clarke

Title: President

Date: 1/15/24

Signature: 

Name: Robert F. Clarke

Title: Vice President

Date: 1/15/24

**DESIGNATION OF SUBCONTRACTORS  
[Public Contract Code Section 4104]**

**SMB TMDL HFCTTCD PROJECT (“PROJECT”)**

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 of one 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 of one 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%)*

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\*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. N/A

**BID BOND**

**SMB TMDL HFCTTCD PROJECT ("PROJECT")**

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), has issued an invitation for Bids for the Work described as follows: Santa Monica Bay Stormwater TMDL Trash Treatment Project

WHEREAS Clarke Contracting Corporation 4646 Manhattan Beach Blvd., Lawndale, CA 90260  
*(Name and address of Bidder)*

("Principal"), desires to submit a Bid to City 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 Federal Insurance Company  
202B Halls Mill Road, Whitehouse Station, NJ 08889 (Home Office)  
*(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 City in the penal sum of Ten percent of the total amount of the bid Dollars (\$ 10%), 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 City 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 City 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: January 05, 2024

“Principal”

Name: Clarke Contracting Corporation

Address: 4646 Manhattan Beach Blvd.

Lawndale, CA 90260

Telephone No.: 310-542-7724

Signature: 

Print Name: Brian A. Clarke

Title: President

Date: 1/15/24

Signature: 

Print Name: Robert F. Clarke

Title: Vice President

Date: 1/15/24

“Surety”

Company Name: Federal Insurance Company

Address: 202B Halls Mill Road

Whitehouse Station, NJ 08889

Telephone No.: 908-903-3485

Signature: 

Print Name: Douglas G. Rapp

Title: Attorney in Fact

Date: January 05, 2024

**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.*

### ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Orange )

On January 05, 2024 before me, Debra Swanson, Notary Public  
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.



Signature Debra Swanson (Seal)



Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company  
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Douglas A. Rapp and Timothy D. Rapp of Ladera Ranch, California -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 5<sup>th</sup> day of April, 2021.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY  
County of Hunterdon

SS.

On this 5<sup>th</sup> day of April, 2021 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 2316685  
Commission Expires July 16, 2024

*Katherine J. Adelaar*  
Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this January 5, 2024



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:  
Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@chubb.com

# CERTIFICATE OF ACKNOWLEDGMENT

State of California

} ss.

County of Los Angeles

On January 15, 2024 before me, Wendy Sapiens Vega, Notary Public,  
Date Name, Title of Officer (e.g. "Jane Doe, Notary Public")

personally appeared Brian A. Clarke and Robert F. Clarke, who proved to me  
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.



Wendy Sapiens Vega  
Signature of Notary Public

(Notary Seal)

----- OPTIONAL -----

Although the information requested below is OPTIONAL, it could prevent fraudulent reattachment of this certificate to unauthorized documents.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

INDIVIDUAL  
 CORPORATE OFFICER  
President and Secretary  
Title(s)

Santa Monica Bay Storm water TMDL Trash Treatment  
City of Manhattan Beach  
Bid Bond

PARTNER(S)  LIMITED  
 GENERAL  
 ATTORNEY-IN-FACT  
 TRUSTEE(S)  
 GUARDIAN/CONSERVATOR  
 OTHER: \_\_\_\_\_

\_\_\_\_\_  
TITLE OR TYPE OF DOCUMENT

\_\_\_\_\_  
NUMBER OF PAGES                      DOCUMENT DATE

SIGNER IS REPRESENTING:  
Name of Person(s) or Entity(ies)  
Clarke Contracting Corporation

SIGNER(S) OTHER THAN NAMED ABOVE

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

**SMB TMDL HFCTTCD PROJECT ("PROJECT")**

The undersigned declares:

I am the President of Clarke Contracting Corporation, 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 January 15, 2024 [date], at Lawndale [city], California [state].

Signature: 

Printed Name: Brian A. Clarke, President

Date: 1/15/24

Signature: 

Printed Name: Robert F. Clarke, President

Date: 1/15/24

# CERTIFICATE OF ACKNOWLEDGMENT

State of California

} ss.

County of Los Angeles

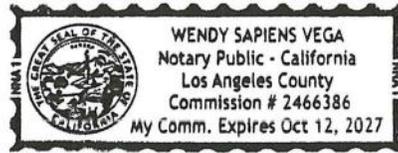
On January 15, 2022 before me, Wendy Sapiens Vega, Notary Public,  
Date Name, Title of Officer (e.g. "Jane Doe, Notary Public")

personally appeared Brian A. Clarke and Robert F. Clarke, who proved to me  
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.



Wendy Sapiens Vega  
Signature of Notary Public

(Notary Seal)

----- OPTIONAL -----

Although the information requested below is OPTIONAL, it could prevent fraudulent reattachment of this certificate to unauthorized documents.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

INDIVIDUAL  
 CORPORATE OFFICER  
President and Secretary  
Title(s)

Santa Monica Bay Storm water TMDL Trash Treatment  
City of Manhattan Beach  
Non-Collusion Affidavit

PARTNER(S)  LIMITED  
 GENERAL  
 ATTORNEY-IN-FACT  
 TRUSTEE(S)  
 GUARDIAN/CONSERVATOR  
 OTHER: \_\_\_\_\_

TITLE OR TYPE OF DOCUMENT

NUMBER OF PAGES

DOCUMENT DATE

SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies)  
Clarke Contracting Corporation

SIGNER(S) OTHER THAN NAMED ABOVE

**ADDENDA ACKNOWLEDGMENT FORM**

**SMB TMDL HFCTTCD PROJECT ("PROJECT")**

Bidder's Name: Clarke Contracting Corporation

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

<b>Addendum Number</b>	<b>Date Received</b>	<b>Signature</b>
None		

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 SMB TMDL HFCTTCD PROJECT (“PROJECT”)**

THIS CONTRACT (“Contract”) is made and entered this 20th day of February 2024 (“Effective Date”), by and between the CITY OF MANHATTAN BEACH, a California municipal corporation (“City”) and CLARKE CONTRACTING CORPORATION, a California corporation (“Contractor”). The Contractor’s California State Contractor’s license number is 325884.

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 SMB TMDL HFCTTCD Project (“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 **\$3,225,000.00** (“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 7 of the Standard Specifications, as modified by Section 7 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 **120 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 **120 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 Baseline Schedule
- 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 approved Permits from all applicable agencies
- Obtaining a Temporary Use Permit for a construction yard, if applicable
- Notifying all agencies, utilities, residents, etc., as outlined in the Contract Documents
- Submitting and obtaining approval of a Project Staffing List with contact information and a Project Emergency Contact List.

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. 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.

7. 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.

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

9. 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.”

10. 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.

11. 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.

12. 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.

13. 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:

City of Manhattan Beach,  
a California municipal corporation

DocuSigned by:  
By: Bruce Moe, City Manager  
D1A13C36864A441... 4/2/2024  
Name: Bruce Moe  
Title: City Manager

CONTRACTOR:

Clarke Contracting Corporation  
a California corporation

DocuSigned by:  
By: [Signature]  
42925F8F0AE1476... 3/21/2024  
Name: Brian A. Clarke  
Title: President

ATTEST:

DocuSigned by:  
By: Liza Tamura, City Clerk  
973D2FFB9D84165... 4/2/2024  
Name: Liza Tamura  
Title: City Clerk

DocuSigned by:  
By: Robert F. Clarke, Vice President  
9F958038FC40460... 3/22/2024  
Name: Robert F. Clarke  
Title: Vice President

APPROVED AS TO FORM:

DocuSigned by:  
By: Quinn M. Barrow, City Attorney  
C24C6E263945443... 4/1/2024  
Name: Quinn M. Barrow  
Title: City Attorney

APPROVED AS TO FISCAL IMPACT:

DocuSigned by:  
By: Steve S Charelian, Finance Director  
3801E617B4124E9... 3/25/2024  
Name: Steve S. Charelian  
Title: Finance Director

APPROVED AS TO CONTENT:

DocuSigned by:  
By: Erick Lee  
8FDAAFB234CA492... 3/25/2024  
Name: Erick Lee  
Title: Public Works Director

Bond No. K4056438A

**PAYMENT BOND  
(LABOR AND MATERIALS)**

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), State of California, has awarded to \_\_\_\_\_  
Clarke Contracting Corporation  
4646 Manhattan Beach Blvd., Lawndale, CA 90260 ("Principal")  
*(Name and address of Contractor)*

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

\_\_\_\_\_ **SMB TMDL HFCTTCD PROJECT** \_\_\_\_\_  
*(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 City 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 Federal Insurance Company  
202B Halls Mill Road, Whitehouse Station, NJ 08889  
\_\_\_\_\_  
*(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 City 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 Three million two hundred twenty five thousand and 00/100 Dollars (\$ 3,225,000.00 ), 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 City 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: March 11, 2024

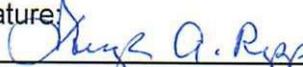
"Principal"

"Surety"

Clarke Contracting Corporation

Federal Insurance Company

Signature:   
Print Name: Brian A. Clarke  
Title: President  
Date: 3/12/24

Signature:   
Print Name: Douglas A. Rapp  
Title: Attorney in Fact  
Date: March 11, 2024

Signature:   
Print Name: Robert F. Clarke  
Title: Vice President  
Date: 3/12/24

(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.*

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

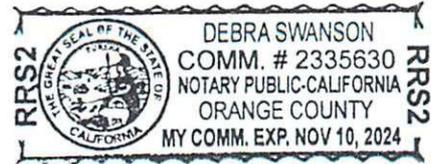
State of California  
County of Orange )

On March 11, 2024 before me, Debra Swanson, Notary Public  
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.



Signature Debra Swanson (Seal)



Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company  
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Douglas A. Rapp and Timothy D. Rapp of Ladera Ranch, California -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 5<sup>th</sup> day of April, 2021.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY  
County of Hunterdon

SS.

On this 5<sup>th</sup> day of April, 2021 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 2318685  
Commission Expires July 16, 2024

*Katherine J. Adelaar*

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

\*RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this March 11, 2024



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:  
Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@chubb.com

# CERTIFICATE OF ACKNOWLEDGMENT

State of California

} ss.

County of Los Angeles

On March 12, 2024 before me, Wendy Sapiens Vega, Notary Public,  
Date Name, Title of Officer (e.g. "Jane Doe, Notary Public")  
personally appeared Brian A. Clarke and Robert F. Clarke, who proved to me  
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Wendy Sapiens Vega  
Signature of Notary Public



(Notary Seal)

----- OPTIONAL -----

Although the information requested below is OPTIONAL, it could prevent fraudulent reattachment of this certificate to unauthorized documents.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

   INDIVIDUAL  
   X CORPORATE OFFICER  
   President and Vice President  
Title(s)

SMB TMDL HFCTTCD Project  
City of Manhattan Beach  
Payment Bond

   PARTNER(S)    LIMITED  
   GENERAL  
   ATTORNEY-IN-FACT  
   TRUSTEE(S)  
   GUARDIAN/CONSERVATOR  
   OTHER: \_\_\_\_\_

\_\_\_\_\_  
TITLE OR TYPE OF DOCUMENT

\_\_\_\_\_  
NUMBER OF PAGES

\_\_\_\_\_  
DOCUMENT DATE

SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies)  
Clarke Contracting Corporation

SIGNER(S) OTHER THAN NAMED ABOVE

Bond No. K4056438A

**PERFORMANCE BOND**

KNOW ALL PERSONS BY THESE PRESENTS that:

WHEREAS the City of Manhattan Beach ("City"), has awarded to \_\_\_\_\_  
Clarke Contracting Corporation  
4646 Manhattan Beach Blvd., Lawndale, CA 90260 ("Principal")  
*(Name and address of Contractor)*

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

\_\_\_\_\_ SMB TMDL HFCTTCD PROJECT  
*(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 Federal Insurance Company  
202B Halls Mill Road, Whitehouse Station, NJ 08889  
*(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 City in the penal sum of Three million two hundred twenty five thousand and 00/100 Dollars (\$ 3,225,000.00), 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 City, 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 City 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: March 11, 2024

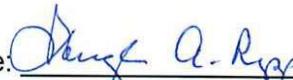
“Principal”

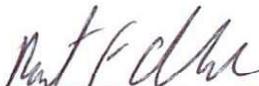
“Surety”

Clarke Contracting Corporation

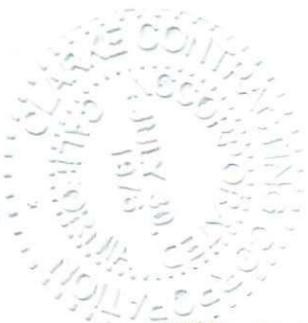
Federal Insurance Company

Signature:   
Print Name: Brian A. Clarke  
Title: President  
Date: 3/12/24

Signature:   
Print Name: Douglas A. Rapp  
Title: Attorney in Fact  
Date: March 11, 2024

Signature:   
Print Name: Robert F. Clarke  
Title: Vice President  
Date: 3/12/24

(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.*

### ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Orange )

On March 11, 2024 before me, Debra Swanson, Notary Public  
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.

Signature Debra Swanson (Seal)





Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company  
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Douglas A. Rapp and Timothy D. Rapp of Ladera Ranch, California -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 5<sup>th</sup> day of April, 2021.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY  
County of Hunterdon SS.

On this 5<sup>th</sup> day of April, 2021 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 2316685  
Commission Expires July 16, 2024

*Katherine J. Adelaar*  
Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this March 11, 2024



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:  
Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@chubb.com

# CERTIFICATE OF ACKNOWLEDGMENT

State of California

} ss.

County of Los Angeles

On March 12, 2024 before me, Wendy Sapiens Vega, Notary Public,  
Date Name, Title of Officer (e.g. "Jane Doe, Notary Public")  
personally appeared Brian A. Clarke and Robert F. Clarke, who proved to me  
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Wendy Sapiens Vega  
Signature of Notary Public



(Notary Seal)

----- OPTIONAL -----

Although the information requested below is OPTIONAL, it could prevent fraudulent reattachment of this certificate to unauthorized documents.

CAPACITY CLAIMED BY SIGNER	DESCRIPTION OF ATTACHED DOCUMENT
<input type="checkbox"/> INDIVIDUAL	
<input checked="" type="checkbox"/> CORPORATE OFFICER President and Vice President <small>Title(s)</small>	SMB TMDL HFCTTCD Project City of Manhattan Beach Performance Bond
<input type="checkbox"/> PARTNER(S) <input type="checkbox"/> LIMITED	
<input type="checkbox"/> GENERAL	
<input type="checkbox"/> ATTORNEY-IN-FACT	
<input type="checkbox"/> TRUSTEE(S)	
<input type="checkbox"/> GUARDIAN/CONSERVATOR	
<input type="checkbox"/> OTHER: _____	
	TITLE OR TYPE OF DOCUMENT
	NUMBER OF PAGES      DOCUMENT DATE

SIGNER IS REPRESENTING:  
Name of Person(s) or Entity(ies)  
Clarke Contracting Corporation

SIGNER(S) OTHER THAN NAMED ABOVE

Bond No. K4056438A

**WARRANTY BOND**

KNOW ALL PERSONS BY THESE PRESENTS that:

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

Clarke Contracting Corporation  
4646 Manhattan Beach Blvd., Lawndale, CA 90260 ("Principal")  
*(Name and address of Contractor)*

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

SMB TMDL HFCTTCD PROJECT  
*(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 City.

NOW, THEREFORE, we, the undersigned Principal, and Federal Insurance Company  
202B Halls Mill Road, Whitehouse Station, NJ 08889  
*(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 City in the penal sum of Three hundred twenty two thousand five hundred and 00/100 Dollars (\$ 322,500.00 ) this amount being not less than 10% of the total Contract Price, 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 City, 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 City, 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 City 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 City 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: March 11, 2024

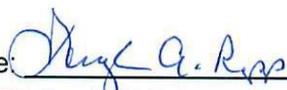
“Principal”

“Surety”

Clarke Contracting Corporation

Federal Insurance Company

Signature: 

Signature: 

Print Name: Brian A. Clarke

Print Name: Douglas A. Rapp

Title: President

Title: Attorney in Fact

Date: 3/12/24

Date: March 11, 2024

Signature: 

Print Name: Robert F. Clarke

Title: Vice President

Date: 3/12/24

(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.

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Orange

On March 11, 2024 before me, Debra Swanson, Notary Public  
(insert name and title of the officer)

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

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

WITNESS my hand and official seal.

Signature Debra Swanson (Seal)



# CHUBB

## Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company

Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that FEDERAL INSURANCE COMPANY, an Indiana corporation, VIGILANT INSURANCE COMPANY, a New York corporation, PACIFIC INDEMNITY COMPANY, a Wisconsin corporation, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Douglas A. Rapp and Timothy D. Rapp of Ladera Ranch, California -----

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY have each executed and attested these presents and affixed their corporate seals on this 5<sup>th</sup> day of April, 2021.

*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

*Stephen M. Haney*

Stephen M. Haney, Vice President



STATE OF NEW JERSEY  
County of Hunterdon

SS

On this 5<sup>th</sup> day of April, 2021 before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal



KATHERINE J. ADELAAR  
NOTARY PUBLIC OF NEW JERSEY  
No. 2310885  
Commission Expires July 16, 2024

*Katherine J. Adelaar*  
Notary Public

### CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

\*RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

- (1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.
- (2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.
- (3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.
- (5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested.

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

- (i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
- (ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this March 11, 2024



*Dawn M. Chloros*

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:  
Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@chubb.com

# CERTIFICATE OF ACKNOWLEDGMENT

State of California

} ss.

County of Los Angeles

On March 12, 2024 before me, Wendy Sapiens Vega, Notary Public,  
Date Name, Title of Officer (e.g. "Jane Doe, Notary Public")  
personally appeared Brian A. Clarke and Robert F. Clarke, who proved to me  
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.

Wendy Sapiens Vega  
Signature of Notary Public



(Notary Seal)

----- OPTIONAL -----

Although the information requested below is OPTIONAL, it could prevent fraudulent reattachment of this certificate to unauthorized documents.

CAPACITY CLAIMED BY SIGNER

DESCRIPTION OF ATTACHED DOCUMENT

   INDIVIDUAL  
   GENERAL  
   ATTORNEY-IN-FACT  
   TRUSTEE(S)  
   GUARDIAN/CONSERVATOR  
   OTHER: \_\_\_\_\_  
\_\_\_\_\_  
Title(s)

SMB TMDL HFCTTCD Project  
City of Manhattan Beach  
Warranty Bond

\_\_\_\_\_  
TITLE OR TYPE OF DOCUMENT

\_\_\_\_\_  
NUMBER OF PAGES

\_\_\_\_\_  
DOCUMENT DATE

SIGNER IS REPRESENTING:

Name of Person(s) or Entity(ies)  
Clarke Contracting Corporation

SIGNER(S) OTHER THAN NAMED ABOVE

### 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
- \_\_\_\_\_ Additional insured endorsement – comprehensive general liability
- \_\_\_\_\_ Additional insured endorsement – automobile liability
- \_\_\_\_\_ Additional insured endorsement – excess liability
- \_\_\_\_\_ Primary and Non-Contributory Endorsement- General Liability Policy
- \_\_\_\_\_ 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

## **PART 1 - GENERAL PROVISIONS**

### **SECTION 0. GENERAL PROVISIONS DEFINED**

#### *0-1 STANDARD SPECIFICATIONS*

The 2021 edition of “Standard Specifications for Public Works Construction”, 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.

#### *0-3 SUPPLEMENTATION OF STANDARD SPECIFICATIONS*

The Sections that follow supplement, but do not replace, the corresponding provisions in Part 1 (General Provisions) of 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. GENERAL, 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 travel way.

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).

Final Acceptance- Acceptance of the Work by the City Council and direction to staff to cause recordation of the Notice of Completion, pursuant to Section 3-13.1 these General Provisions.

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

HDS System – Trash capture system (DSBB or HDS) including the diversion structure (with weir and potentially catch basin infrastructure), piping to treatment, and internal components.

Major Item of Work – A bid item amount that is at least 10% of the total contract award amount.

Minor Item of Work – A bid item amount that is less than 10% of the total contract award amount.

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 - 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.

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 ABBREVIATIONS

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
AGCA .....	Associated General Contractors of America
APWA .....	American Public Works Association
CRSI .....	Concrete Reinforcing Steel Institute
CSI .....	Construction Specifications Institute
ICBO .....	International Conference of Building Officials
NEC .....	National Electric Code
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

1-7 AWARD AND EXECUTION OF THE CONTRACT

1-7.2. Contract Bonds. The following paragraphs shall be added following the seventh paragraph:

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 1-7.2 of the Standard Specifications. Nothing herein shall abridge or amend Section 3-13.3 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.

## **SECTION 2. SCOPE OF THE WORK**

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

### **2-1 WORK TO BE DONE**

The following paragraphs shall be added at the end of Subsection 2-1:

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.

### **2-2 PERMITS**

Before starting any construction work, the Contractor will be required to obtain all necessary permits from the City, which may include obtaining an 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. Permits, including but not limited to, will be required from Los Angeles County Public Works (LACPW) for a Connection Permit (two permits as indicated below), City of Hermosa Beach for encroachment into their jurisdiction, and the City of Redondo Beach for encroachment into their jurisdiction.

The Contractor shall procure all permits and licenses, 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.

#### **2-2.1 Los Angeles County Department of Public Works Permit**

Two permits are required from the Los Angeles County Department of Public Works ("LACPW") and must be secured by the Contractor for connections to LACPW storm drains (FCDP2022000451) and work in LACPW-owned catch basins (FCDP2023000028). The Contractor shall prepare documentation, if necessary, and obtain required bonds and insurance. The Contractor shall inform the City of required inspection fees, for which the Contractor will issue payment directly to LACPW, unless the City states otherwise. The approved plans and permit may be obtained from Los Angeles County Department of Public Works, 900 South Fremont Avenue, 3<sup>rd</sup> Floor, Alhambra, California 91803, (626) 458-4936.

Engineering plan checks have been completed (City is finalizing agreements) and the following permit/plan check numbers apply to the Project: FCDP2022000451 and for the proposed HFCTTCDs on storm drains owned/maintained by LACPW and FCDP2023000028 for implementation at catch basins owned/maintained by LACPW. Each of the permits requires the City to enter into a maintenance agreement with LACPW, which are being coordinated by the City. Once the maintenance agreements are finalized, the City will provide an additional Notice to Proceed for LACPW work and the Contractor will be able to pull the permits. The Contractor must complete LACPW-related work within **120 working days (separate count from the original Notice to Proceed)**. LACPW Permit Approval is expected to be completed in the first quarter of 2024 and is not expected to impact the Contractor's schedule, as there are restrictions by LACPW that dictate when work can be performed (must be outside of the rain season as indicated below). Full compensation for complying with the above requirements shall be considered as included in the Contract Lump Sum and Unit Prices for the work necessitating the permit (HDS units and related catch basin implementation). Unless otherwise authorized by the LACPW Permit and approved plan, all storm drain work shall be performed in accordance with the Plans and Specifications.

The following comments/conditions shall apply to work on LACPW facilities:

- No portion of the LACFCD storm drain(s), including catch basins, shall be removed during the period of October 15 to April 14. During the period from April 15 to October 14, capacity to convey flows around any obstruction or opening in the storm drain shall be provided as follows:
  - April 15 to May 31: 33% of design capacity
  - June 1 to August 31: 5% of design capacity
  - September 1 to October 14: 33% of design capacity
- A temporary water diversion plan and hydraulic calculations (prepared by a Professional Engineer) substantiating the above criteria must be submitted to LACFCD at least 60 days from the scheduled start of construction. A copy of the construction schedule must be submitted along with the diversion plans.
- The temporary water diversion plan shall include the following:
  - Schedule of temporary diversion work dates
  - Plan and profile views of the temporary diversion structures
  - Location and placement of temporary improvements, such as sandbags and piping, with respect to the storm drain
  - Direction of flow of water
  - Hydraulic calculations showing how the diversion plan would bypass a volume of at least the scheduled requirements above
- LACFCD identification must not appear on the proposed manhole covers that is "to be maintained by the City of Manhattan Beach". The manhole covers should follow City requirements as indicated in these specifications.

#### 2-4 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.

## 2-5 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.

### 2-5.4 Haul Routes

Subsection 2-5.4 of the Standard Specifications shall be deleted and replaced as follows:

The Contractor must obtain the Engineer's approval before using any haul routes. The Contractor shall submit the haul route map to the City for City approval prior to commencing excavation.

## 2-6 CHANGES REQUESTED BY THE CONTRACTOR

Add the following paragraph:

### 2-6.1 General

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 2-7.1.1 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.

## 2-7 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.

### 2-7.1 General

Add the following paragraphs at the end of Subsection 2-7.1:

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: 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

A. 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. The Contractor shall submit the COP to the City Engineer, using the forms provided herein in Subsection 2-11.2 of these 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, the 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 7-4, "Payment for Extra Work," of the Standard Specifications and the General Provisions.

#### 2-7.1.1 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.

##### 2-7.1.1.1 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.

#### 2-7.1.2 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 2-11 of the General Provisions.

#### 2-8 *EXTRA WORK*

Subsection 2-8 of the Standard Specifications shall be deleted and replaced as follows:

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.

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.

#### 2-10 *DISPUTED WORK*

Delete Subsection 2-10 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 2-8 of the Standard Specifications and the

General Provisions. The City's form of Work Directive is provided in Subsection 2-11 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.

## 2-11 FORMS

Add Section 2-11 to incorporate the following forms, which appear in the succeeding pages.

### 2-11.1 Change Order Form

### 2-11.2 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

### 2-11.3 Construction Change Directive Form

### 2-11.4 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:

<b>SUMMARY OF CHANGES</b>		
<b>Description (Detailed Explanation Attached)</b>	<b>Change in Contract Price<sup>1</sup></b>	<b>Change in Work Days</b>
1.	\$0.00	
2. Adjustment in Final Bid Quantities	\$0.00	
<b>Net Change in Contract Price and Work Days</b>	<b>\$0.00</b>	

<sup>1</sup>Deduction 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:

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 <sup>1</sup>
New Item				0	0	0	0.00

<sup>1</sup>Deduction 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:**

A. Reason for Change:



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
New Item				0	0	0	0.00

<sup>1</sup>Deduction 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: \_\_\_\_\_  
Public Works Director

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

Concurred by: \_\_\_\_\_  
City Engineer

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

Concurred by: \_\_\_\_\_  
Project Manager

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

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**

**2-11.2(a) CONTRACT CHANGE ORDER PROPOSAL SUMMARY REPORT**

Date \_\_\_\_\_

CCO Proposal No. \_\_\_\_\_ Contractor \_\_\_\_\_

Item No. \_\_\_\_\_ Location \_\_\_\_\_

General Contractor	AMOUNT
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**

**2-11.2(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	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
<b>TOTAL LABOR</b>			\$

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**

**2-11.2(c) LABOR RATES REPORT Date**

Date \_\_\_\_\_

CCO Proposal No. \_\_\_\_\_ Contractor or Subcontractor \_\_\_\_\_

Item No. \_\_\_\_\_ Location \_\_\_\_\_

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



**CHANGE ORDER PROPOSAL FORM**

**2-11.2(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) 9.50%	\$
	Subtotal	\$
2.	Material	\$
	Sales Tax (Prevailing Tax Rate) 9.50%	\$
	Subtotal	\$
3.	Material	\$
	Sales Tax (Prevailing Tax Rate) 9.50%	\$
	Subtotal	\$
<b>SUBTOTAL MATERIAL COST</b>		<b>\$</b>

**NOTE:** An itemized list of materials, manufacturers, serial numbers, invoices, and other pertinent date 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**

**2-11.2(e) EQUIPMENT COST REPORT**

Date \_\_\_\_\_

CCO Proposal No. \_\_\_\_\_ Contractor or Subcontractor \_\_\_\_\_

Item No. \_\_\_\_\_ Location \_\_\_\_\_

<b>EQUIPMENT NO. (Description, Type, Size)</b>	<b>HOURS</b>	<b>HOURLY RATE</b>	<b>EXTENDED AMOUNTS</b>
<b>SUBTOTAL EQUIPMENT COST</b>			<b>\$</b>

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**

**2-11.2 (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 date shall be submitted along with the special forces/services cost report.

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

**Total Special Forces/Services/Overhead/Profit.....\$ \_\_\_\_\_**



**2-11.3 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 2-8, "Extra Work," the Standard Specifications and the General Provisions, [subject to a Not-To-Exceed Amount of \$ \_\_\_\_\_].\   
 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



**2-11.4 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 2-8, "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: \_\_\_\_\_  
Public Works Director

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

Concurred by: \_\_\_\_\_  
City Engineer

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

Concurred by: \_\_\_\_\_  
Project Manager

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

## **SECTION 3. CONTROL OF THE WORK**

### **3-1 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.

### **3-3 SUBCONTRACTORS**

3-3.1 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.

3-3.2 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.

### **3-5 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:

#### **3-5.1 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.

### 3-7 CONTRACT DOCUMENTS

#### 3-7.1 General

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.

#### 3-7.2 Precedence of the Contract Documents

The following shall replace Section 3-7.2:

With regard to Section 3-7.2 in the Standard Specifications, the Special Provisions shall control over the General 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. Special Provisions.
10. General Provisions.
11. Plans.
12. Standard Plans.
13. Standard Specifications.
14. Reference Specifications.

### 3-8 SUBMITTALS.

#### 3-8.1 General

The following paragraphs shall be added at the end of Subsection 3-8.1:

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.

#### 3-8.2 Working Drawings

The following shall hereby be added to Table 3-8.2 of the Standard Specifications:

Item	Subsection No.	Title	Subject
15	PDS and DSBB (Technical Specification)	Debris Separating Baffle Box (HDS at 1 <sup>st</sup> Street)	Stormwater treatment device installation and operation and maintenance procedures
16	PDS and HDS (Technical Specification)	Hydrodynamic Separator (HDS at other locations)	Stormwater treatment device installation and operation and maintenance procedures
17	CBI (Technical Specification)	CPS Unit	CPS unit installation and operation and maintenance procedures

<b>Item</b>	<b>Subsection No.</b>	<b>Title</b>	<b>Subject</b>
18	CBI (Technical Specification)	Channel Filter System	System installation and operation and maintenance procedures
19	CBI (Technical Specification)	Curb Inlet Filter Basket	System installation and operation and maintenance procedures
20	CBI (Technical Specification)	Inlet Filter	System installation and operation and maintenance procedures

The fourth paragraph of Section 3-8.2 is revised with the following:

Working drawings listed in Table 3-8.2 as Items 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and 20 shall be prepared, wet stamped, and signed by a Civil or Structural Engineer registered by the State of California.

### 3-8.3 Shop Drawings

The following shall hereby be added to Table 3-8.3 of the Standard Specifications:

<b>Item</b>	<b>Subsection No.</b>	<b>Title</b>	<b>Subject</b>
5	PDS and DSBB (Technical Specification)	Debris Separating Baffle Box (HDS at 1 <sup>st</sup> Street)	Fabrication and Dimensional Details
6	PDS and HDS (Technical Specification)	Hydrodynamic Separator (HDS at other locations)	Fabrication and Dimensional Details
7	CBI (Technical Specification)	CPS Unit	Fabrication and Dimensional Details
8	CBI (Technical Specification)	Channel Filter System	Fabrication and Dimensional Details
9	CBI (Technical Specification)	Curb Inlet Filter Basket	Fabrication and Dimensional Details
10	CBI (Technical Specification)	Inlet Filter	Fabrication and Dimensional Details

The following shall be added after Table 3-8.3 in Section 3-8.3:

Shop drawings listed in Table 3-8.3 as Items 5, 6, 7, 8, 9, and 10 shall be prepared, wet stamped, and signed by a Civil or Structural Engineer registered by the State of California.

### 3-8.4 Supporting Information

The following shall hereby be added to the list in the second paragraph of Section 3-8.4:

- n) Control set of plans per 3-7.1.
- o) Sample contract sign per 3-11.
- p) Lump sum breakdowns (if requested) per 7-2.
- q) City-owned utility relocation alignments and details per 306-15.1 and 402-4,

- r) Storm Drain Bypass Plan per 306-16.
- s) Sewer Bypass/Relocation Plan per 402-2.
- t) HFCTTCD (stormwater treatment device/HDS/baffle box) manufacturer's performance certificates per DSBB and HDS (Technical Specifications).
- u) Work Plan per Part 9 (Special Instructions).
- v) All written manufacturer's warranties.

### 3-9 SUBSURFACE DATA

The following paragraphs shall be added at the end of Subsection 3-9:

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.

### 3-10 SURVEYING

The following paragraph shall be added before the first paragraph of Section 3-10.1:

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. Payment for construction surveying shall be included in the Contract Lump Sum Bid price for "Project Surveying" and shall include all construction surveying and related activities required to construct the Project, including re-establishment of survey monuments, survey records, and other survey-related work. 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.

### *3-11 CONTRACT INFORMATION SIGNS*

Section 3-11 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. Signage shall include language as required by funding agreements that the City has in place at the time of construction (to be confirmed by the City). Language is expected to be something like "funding for this project has been provided in part from the Department of Water Resources from the Water Quality, Supply, and Infrastructure Improvement Act of 2014." Signage shall also include color logos of the agencies/programs contributing funding to the Project, including the Department of Water Resources (Proposition 1). The Contractor shall submit a sample sign to the Agency for approval in accordance with Section 3-8.4.

### *3-12 WORKSITE MAINTENANCE*

The following paragraphs shall be added at the end of Section 3-12.1:

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 3-12 and Section 5-7 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 included in the Lump Sum Bid price for "Special Project Site Maintenance and Public Convenience/Safety" and shall include all measures necessary to maintain a safe and clean worksite in accordance with these Specifications and City requirements.

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 3-12 and Section 5-7 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 7-4 of the Standard Specifications and applied against the not-to-exceed bid item for "Special Project Site Maintenance and Public Convenience and Safety."

The first sentence of Section 3-12.4.2 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 following paragraph shall be added at the end of Section 3-12.5.2:

Additional requirements pertaining to sewer bypass and restoration are included in Section 402-2, including payment and other details.

The following paragraph shall be added at the end of Section 3-12.5.3:

The contractor shall submit a Spill Contingency Plan to the City detailing precautions to be

implemented to prevent sewage spills, including specific responses and control measures to following during overflow resulting from breakage or blockage and maintenance and inspection schedules to detect potential problems and mitigate potential release resulting from overflows, bypass pipe ruptures, pipe ruptures, blockages and backups. The sewer spill contingency plan shall also identify and describe the size and type of pump system to be used based on the quantity of identified sewer flows, locations of bypass operations including manholes and hose length/size, time of operations, total duration days of work, construction work team, etc. including how the entire operations will be conducted, all improvements constructed/tied-in, removal of demolished manholes and pipes, to ensure a clean no-spill site, all standby pumps and appurtenance at hand during the by-pass operations, contingency plan if by-pass operation system and standby appurtenances fail, such as pump failure, hose rupture, sewer overflow/spill, seeking third party contractor assistance, notification process to schools, county, agencies, city, adjacent residents, response personnel and time, health hazards and protective/clean up equipment and procedures.

Replace Section 3-12.6.5 with the following:

A formal SWPPP is not anticipated to be required based on the Plans, while the Contractor shall review the plans and associated SWPPP requirements to confirm that is the case. The Contractor shall implement Best Management Practices (BMPs) in accordance with the Specifications and jurisdictional requirements. At a minimum, BMPs are expected to include the following as applicable: inlet protection to prevent sediment discharge to the storm drain; street sweeping to prevent sediment discharge; perimeter controls; etc. Payment for stormwater BMPs is considered included in the Lump Sum Bid price for "Stormwater Pollution Control – Best Management Practices (BMPs)" and shall include development of a BMP plan (if required by the City), implementation of BMPs, BMP maintenance, and removal.

Payment for dewatering shall be considered in the Bid as part of the items requiring it.

### *3-13 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.

#### *3-13.2 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 3-12 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.

### 3-13.3 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 3-13.3 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.

## **SECTION 4. CONTROL OF MATERIALS**

### 4-1 GENERAL

The provisions below shall supplement but not replace those provisions in Section 4-1 of the Standard Specifications.

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 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.

#### 4-2 PROTECTION

Add the following at the end of Subsection 4-2:

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

#### 4-4 TESTING

Delete the third and fourth sentence of the first paragraph of Subsection 4-4 and substitute the following:

Testing of soils shall be performed by the Contractor in such number and at such locations as deemed necessary by the Engineer to ensure compliance with the Contract Documents (compaction testing anticipated at a minimum). The cost of all re- testing will be borne by the Contractor. Payment for soil testing and related inspection is considered included in the Lump Sum Bid price for "Soils Testing and Inspection" and shall include soil compaction testing, related inspection, coordination with the City to share and review results, and necessary re-testing.

#### 4-6 TRADE NAMES

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.

#### 4-9 RECYCLING OF MATERIALS

Subsection 4-9 is hereby added to the Standard Specifications as follows:

##### 4-9.1 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.

##### 4-9.2 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.

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

## **SECTION 5 LEGAL RELATIONS AND RESPONSIBILITIES**

### **5-3 LABOR**

#### **5-3.1.1 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.

#### **5-3.2.1 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.

#### **5-3.2.2 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.

#### **5-3.2.3 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.

#### **5-3.3 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.

#### 5-3.4 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.

#### 5-3.5 Apprentices

The following paragraph should be added at the end of Subsection 5-3.5:

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 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.

#### 5-3.6 Registration with the DIR

Subsection 5-3.6 is hereby added to the Standard Specifications as follows:

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.

#### 5-3.7 Compliance Monitoring and Posting Job Sites

Subsection 5-3.7 is hereby added to the Standard Specifications as follows:

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

### 5-3.8 Subcontractors

Subsection 5-3.8 is hereby added to the Standard Specifications as follows:

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 5-3 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.

### 5-3.9 Prevailing Wage Indemnity

Subsection 5-3.9 is hereby added to the Standard Specifications as follows:

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 5-3 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 5-3.9 shall survive expiration or termination of the Contract.

## 5-4 INSURANCE

The first paragraph of Section 5-4.1 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 6-5.

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 5-4 of the Standard Specifications, as modified below.

*The following provisions are hereby added to Section 5-4.1 of the Standard Specifications:*

5-4.1.1 Acceptability of Insurers.

The insurance policies required under this Section 5-4 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 5-4.

5-4.1.2 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. This provision shall also apply to any excess/umbrella liability policies.

5-4.1.3 Primary and Non-Contributing.

The insurance policies required under this Section 5-4 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. This provision shall also apply to any excess/umbrella liability policies.

5-4.1.4 Contractor's Waiver of Subrogation.

The insurance policies required under this Section 5-4 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.

5-4.1.5 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.

5-4.1.6 Cancellations or Modifications to Coverage.

The Contractor shall not cancel, reduce or otherwise modify the insurance policies required by this Section 5-4 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 5-4 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 of or changes to the policy

5-4.1.7 City Remedy for Noncompliance.

If the Contractor does not maintain the policies of insurance required under this Section 5-4 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 5-4, 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.

#### 5-4.1.8 Evidence of Insurance.

At least two Working Days prior to the performance of Services under the Contract, 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 5-4 of the Standard Specifications, as modified by this Section 5-4. 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 5-4 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.

#### 5-4.1.9 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 5-8 of the Contract.

#### 5-4.1.10 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 -5-4.

#### 5-4.1.11 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.

#### 5-4.1.12 Subcontractors

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

*The provisions below shall supplement but not replace those provisions in Sections 5-4.2, 5-4.3, and 5-4.4 of the Standard Specifications.*

#### 5-4.2 General Liability Insurance

Instead of the minimum limits listed in Section 5-4.2 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.

#### 5-4.3 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.

#### 5-4.4 Automobile Insurance

Instead of the minimum limits listed in Section 5-4.4 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 5-4.2.

#### 5-4.5 Insurance Requirements not Limiting

Subsection 5-4.5 is hereby added to the Standard Specifications as follows:

If the Contractor maintains broader coverage and/or higher limits than the minimums required above, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City. No representation is made that the minimum insurance requirements of this Contract are sufficient to cover the

obligations of the Contractor under this Contract.

## 5-7 SAFETY

The provisions below shall supplement but not replace those provisions in Subsection 5-7 of the Standard Specifications.

### 5-7.2 Safety Orders

#### 5-7.2.3 Payment

Payment for shoring shall be included in the Bid item provided therefore, except for shoring that is required for HDS installation. Sheeting, shoring, and bracing related to HDS installation shall be paid for separately. Payment for sheeting, shoring, and bracing is considered included in the Lump Sum Bid price for "Sheeting, Shoring, and Bracing" and shall include development of associated shoring plans; implementation of sheeting, shoring, and bracing; perimeter fencing; surface stabilization, and other items necessary to safely shore/brace areas for HDS installation. All deep excavations (required for HDS installation) shall be enclosed by perimeter fencing to keep the site clear and safe. Perimeter fencing shall implemented at all HDS locations, unless otherwise indicated by the City.

### 5-7.8 Steel Plate Covers

#### 5-7.8.1 General

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

## 5-8 INDEMNIFICATION

The following indemnity provisions shall supersede the indemnity in Section 5-4.1 of the Standard Specifications.

### 5-8.1 Contractor's Duty.

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.

#### 5-8.1.1 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 5-8.1.1.

#### 5-8.1.2 Subcontractor Indemnity Agreements

The Contractor shall obtain executed indemnity agreements with provisions identical to those in this Section 5-8 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.

#### 5-8.2 Workers' Compensation Acts not Limiting.

The Contractor's indemnifications and obligations under this Section 5-8, 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.

#### 5-8.3 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 5-8 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.

#### 5-8.4 Survival of Terms.

The Contractor's indemnifications and obligations under this Section 5-8 shall survive the expiration or termination of the Contract.

#### 5-8.5 Civil Code Exception.

Nothing in this Section 5-8 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.

#### 5-8.6 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.

#### 5-8.7 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.

### **SECTION 6. PROSECUTION AND PROGRESS 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

Subsection 6-1.1.1 is hereby added to the Standard Specifications as follows:

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

Subsection 6-1.1.2 is hereby added to the Standard Specifications as follows:

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.

## *6-2 PROSECUTION OF THE WORK*

Add the following as Section 6-2.1:

### 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 and City consultants/independent contractors, 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 and City consultants/independent contractors shall be computed pursuant to the actual costs incurred by City, including but not limited to, overtime costs, fringe benefits, and overhead costs.

## *6-3 TIME OF COMPLETION*

### 6-3.2 Contract Time Accounting

Add the following at the end of Subsection 6-3.2:

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 6-3.2.1:

#### 6-3.2.1 Hours of Work

The Contractor shall not conduct any operations or perform any Work pertaining to the Project outside the working days and hours as defined in Section 10-8 Working Days and Hours. 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.

## *6-4 DELAYS AND EXTENSIONS OF TIME*

Add the following at the end of Subsection 6-4:

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.

#### 6-4.2 Extensions of Time

Add the following at the end of Subsection 6-4.2:

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.

#### 6-4.3 Payment for Delays

Add the following at the end of Subsection 6-4.3:

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.

### 6-6 *SUSPENSION OF THE WORK*

#### 6-6.1 General

Add the following paragraph following paragraph at the end of Subsection 6-6.1:

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.

### 6-8 *TERMINATION OF THE CONTRACT FOR CONVENIENCE*

In addition to the reasons for termination listed in Section 6-8 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 6-8 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.

#### *6-9 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 3-13.1 of the Standard Specifications. The liquidated damages value is hereby amended to be \$500 per day.

### **SECTION 7. MEASUREMENT AND PAYMENT**

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

#### *7-1 MEASUREMENT OF QUANTITIES OF UNIT PRICE WORK*

##### *7-1.1 General*

Add the following at the end of Subsection 7-1.1:

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.

##### *7-1.2 Methods of Measurement*

Add the following at the end of Subsection 7-1.2:

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.

#### *7-2 LUMP SUM WORK*

Delete the first sentence of Subsection 7-2 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 7-2:

The Contractor shall submit a Work item breakdown of the Bid, described in the second paragraph of Subsection 7-2, "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.

#### 7-2.1 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 7-3.2 of the Standard Specifications and these General Provisions.)

### 7-3 PAYMENT

#### 7-3.1 General

Add the following at the end of Subsection 7-3.1:

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. The following shall be considered as included in the bid price for items listed in the Bid Schedule (including, but not limited to):

- a) Completing Work in a safe and orderly manner, including, but without being limited to, safety measures, hoists, flagmen, clean-up, barricades, fences, temporary utilities, utility fees and charges, parking for the Contractor's and subcontractor's personnel, and temporary facilities as may apply to this Work;
- b) All insurance in accordance with the insurance requirements;
- c) Maintain and update current record drawings onsite (Section 3-7.1). Upon completion, provide the City a legible set of record drawings, operations and maintenance manuals, warranties, and guarantees;
- d) Required permits;
- e) Weekly meeting attendance;
- f) Engineering, testing, and inspection costs for defective Work and work performed outside

- of Work hours;
- g) Repair or replacement of all existing improvements (public or private) damaged by the Contractor. The Contractor is responsible for providing evidence of pre-Project conditions;
  - h) Scheduling of utility connections to turn on/off including, but not limited to, electrical, water, and wastewater services;
  - i) Watchman or security service, as necessary;
  - j) Perimeter fencing of work zones, staging areas, and large excavations (required for HDS installation) as necessary for public safety and protection of equipment and materials;
  - k) Dust control, street sweeping, and protection and/or replacement of existing surfaces or properties;
  - l) Submittal log of all submittals required to the City including, but not limited to, material, products, concrete testing data, batch plant testing data, shop drawings, and traffic control and phasing plans. Logs shall be updated for each weekly project meeting.

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 7-3.1 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 7-3.2 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.

### 7-3.2 Partial and Final Payment

#### 7-3.2.1 Monthly Closure Date and Invoice Date

Subsection 7-3.2.1 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.2 Payments

Subsection 7-3.2.2 is hereby added to the Standard Specifications as follows:

The City shall make payments within 30 Working 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 Working 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.

#### 7-3.2.3 Retention

Subsection 7-3.2.3 is hereby added to the Standard Specifications as follows:

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 7-3.2.4) 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.

#### 7-3.2.4 Final Invoice and Payment

Subsection 7-3.2.4 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.5 Substitute Security

Subsection 7-3.2.5 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.5.1 Substitution of Securities for Performance Retention

Subsection 7-3.2.5.1 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.5.2 Deposit of Retention Proceeds with an Escrow Agent

Subsection 7-3.2.5.2 is hereby added to the Standard Specifications as follows:

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 7-3.2.5.1 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 7-3.2.5.3 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.

#### 7-3.2.5.3 Subcontractor Entitlement to Interest

Subsection 7-3.2.5.3 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.5.4 Securities Eligible for Investment

Subsection 7-3.2.5.4 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.2.5.5 Escrow Agreement for Security Deposits in Lieu of Retention

Subsection 7-3.2.5.5 is hereby added to the Standard Specifications as follows:

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).

#### 7-3.2.5.6 Inconsistencies with Prevailing Statutory Requirements

Subsection 7-3.2.5.6 is hereby added to the Standard Specifications as follows:

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.

#### 7-3.4 Mobilization

Subsection 7-3.4 shall be replaced with the following:

When a Bid item is included in the Bid for "Mobilization", the costs of Work in advance of construction operations and not directly attributable to any specific Bid item will be included in the progress estimate.

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 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.

Payments for mobilization will be made as follows:

- a) When the monthly progress payment estimate of the amount earned, not including the amount earned for mobilization, is 5 percent or more of the Contract Price, the total amount earned for mobilization shall be 50 percent of the Contract Unit Price for mobilization or 5 percent of the Contract Price, whichever is less, and said amount will be included in said estimate for payment.
- b) When the monthly progress payment estimate of the amount earned, not including the amount earned for mobilization, is 10 percent or more of the Contract Price, the total amount earned for mobilization shall be 75 percent of the Contract Unit Price for mobilization or 7.5 percent of the Contract Price, whichever is less, and said amount will be included in said estimate for payment.
- c) When the monthly progress payment estimate of the amount earned, not including the amount earned for mobilization, is 20 percent or more of the Contract Price, the total amount earned for mobilization shall be 95 percent of the Contract Unit Price for mobilization or 9.5 percent of the Contract Price, whichever is less, and said amount will be included in said estimate for payment.
- d) When the monthly progress payment estimate of the amount earned, not including the amount earned for mobilization, is 50 percent or more of the Contract Price, the total amount earned for mobilization shall be 100 percent of the Contract Unit Price for mobilization or 10 percent of the Contract Price, whichever is less, and said amount will be included in said estimate for payment.
- e) After completion of the Contract Work, the amount, if any, of the Contract Unit Price for mobilization in excess of 10 percent of the Contract Price will be included in the final progress payment.

#### 7-3.5.2. Increases of More than 25 Percent

Delete Subsection 7-3.5.2 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 7-3.7 "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%.

#### 7-3.5.3 Decreases of More than 25 Percent

Delete Subsection 7-3.5.3 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 7-3.7 "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.

#### 7-3.5.4 Changes for Items Not Covered by Unit Prices

Subsection 7-3.5.4 is hereby added to the Standard Specifications as follows:

Payment for any change for an Item of Work not covered by a Contract Unit Price shall be made pursuant to Subsection 7-4 "Payment for Extra Work."

### 7-4 PAYMENT FOR EXTRA WORK

#### 7-4.1 General

Add the following at the end of Subsection 7-4.1

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 7-2, "Lump Sum Work," of the Standard Specifications and the General Provisions.

#### 7-4.2.1 Labor

Delete Subsection 7-4.2.1 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 7-4.2.2, 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.

#### 7-4.2.2 Materials

Add the following to the end of Subsection 7-4.2.2:

If the Contractor does not furnish satisfactory evidence of the cost of the materials from the actual supplier thereof within **120 Working 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.

#### 7-4.2.3 Tool and Equipment Rental

Delete Subsection 7-4.2.3 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 7-4.2.1 "Labor" of the General Provisions.

7-4.3 Markup

Delete Subsection 7-4.3 in its entirety and substitute the following:

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

7-4.3.1 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) Labor.....20%
- 2) Materials .....15%
- 3) Equipment Rental .....15%
- 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.

7-4.3.2 Work by Subcontractor.

For Extra Work performed by a Subcontractor, the markup established in Subsection 7-4.3.1 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.

7-4.3.3 Work by Sub-Subcontractor.

Subsection 7-4.3.3 is hereby added to the Standard Specifications as follows:

For Extra Work performed by a sub-Subcontractor, the markup established in Subsection 7-4.3.1 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.

7-4.3.4 Work by Specialist.

Subsection 7-4.3.4 is hereby added to the Standard Specifications as follows:

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.

#### 7-4.3.5 Work not Covered by Unit Prices.

Subsection 7-4.3.5 is hereby added to the Standard Specifications as follows:

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 7-4.3 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).

#### 7-4.4 Daily Reports by Contractor

Delete the first sentence of Subsection 7-4.4 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 7-4.4:

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 this Section 7-4 "Payment for Work." 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.

#### 7-4.5 Extension of Time

Add the following as Subsection 7-4.5:

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 Section 6-4 of these General Provisions.

## 7-6 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 7-6 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 8. FACILITIES FOR AGENCY PERSONNEL**

### 8-1 GENERAL

The following paragraph shall be added following the first paragraph of Section 8-1:

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.

Sections 9 and 10 are hereby added to Part 1 of the Standard Specifications, as follows:

## **SECTION 9. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN**

### 9.1 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 9. 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 7.3.1 and 7.3.2 shall be withheld until final WMP is submitted to the City and approved by the City.

## 9-2 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.

## 9-3 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.

**9-4 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 CalRecycle measurement protocols. The following equation defines the "Generation-Based Diversion Quantification Methodology":

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

**9-5 ADDITIONAL INFORMATION**

Other materials to assist the Contractor in completing the WMP can be found on the City's website at [www.manhattanbeach.gov](http://www.manhattanbeach.gov).

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

**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 demolition and roof tear-off projects, and all construction with a total value of \$100,000).

**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:** \_\_\_\_\_                      **Contact 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:                      **Project Manager by email or 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						
<b>TOTAL</b>						

\*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.

<b>Material</b>	<b>Lbs/cy</b>	<b>Tons/cy</b>
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 10. ADDITIONAL TERMS**

### **10-1 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.

### **10-2 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.

### **10-3 CONTRACTOR'S RESPONSIBILITY FOR WORK**

Until the final acceptance of the Work by the City as defined in Section 3-13.2 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.

### **10-4 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.

### **10-5 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.

#### *10-6 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.

#### *10-7 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.

#### *10-8 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 election or special election day that may be declared within a 300-foot radius of any voting location or in any location that will disturb access to any voting location, as determined and directed by the City Engineer. If the Work is within the 300-foot radius or disturbs access to any voting location, as determined by the City Engineer, a time extension of one Working Day will be granted for each such Day that Work cannot be performed.

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. Charges to the Contractor for inspection will be incurred as stated in Section 6-2.1.

#### *10-9 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.

#### *10-10 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.

#### *10-11 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.

#### *10-12 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.

#### *10-13 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 3-13.2 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.

#### *10-14 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.

#### *10-15 TIME*

Time is of the essence in these Contract Documents.

#### *10-16 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.

#### *10-17 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.

#### *10-18 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.

#### *10-19 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.

#### *10-20 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.

*10-21 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.

## **PART 2 - CONSTRUCTION MATERIALS**

**The corresponding provisions in Part 2 (Construction Materials) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.**

### **SECTION 203 BITUMINOUS MATERIALS**

The provisions below shall supplement but not replace those provisions in Section 203 of the Standard Specifications.

#### *203-6 ASPHALT CONCRETE.*

##### 203-6.1 General

Add the following as Subsection 203-6.1 General:

Asphalt concrete within the public right-of-way shall be per Greenbook SSPWC and the City Pavement Management Plan for surface courses.

### **SECTION 206 MISCELLANEOUS METAL ITEMS**

The provisions below shall supplement but not replace those provisions in Section 206 of the Standard Specifications.

#### *206-3 GRAY IRON AND DUCTILE IRON CASTINGS*

##### 206-3.3 Manufacturing and Finishing

##### 206-3.3.2 Manhole Frame and Cover Sets and Grates

##### 206-3.3.2.1 Manhole Cover Labels

Add the following as Subsection 206-3.3.2.1:

All manhole covers installed within public right-of-way shall be labeled according to City requirements, similar to the details shown in City of Manhattan Beach Standard Plans MBSS-210A-0 (ST-19) and MBFE-312A-0 (ST-7), while the lids should show a "D" for Drain.

**PART 3 - CONSTRUCTION METHODS**

**The corresponding provisions in Part 3 (Construction Methods) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.**

**SECTION 300      EARTHWORK**

The provisions below shall supplement but not replace those provisions in Section 300 of the Standard Specifications.

*300-2 UNCLASSIFIED EXCAVATION*

300-2.1 General

Subsection 300-2.1 shall be replaced with the following:

Unclassified excavation shall consist of all excavation, including roadways, bituminous pavement, concrete pavement, curb, walk, gutters, cross gutters, driveways, access ramps, and improvements on adjacent private property areas. Additional requirements related to unclassified excavation (removal) are included in Section 401-3.

300-2.8 Measurement

The second sentence in the third paragraph of Subsection 300-2.8 shall be replaced with the following:

The Contractor shall backfill and compact unauthorized excavated areas to the original ground elevation or authorized section at its own expense.

300-2.9 Payment

The first sentence in the first paragraph of Subsection 300-2.9 shall be replaced with the following:

Payment for unclassified excavation performed as part of the Work for various Bid items, including removal of extra AC thickness, shall be paid for as part of the Work for that item and no additional compensation will be allowed therefor.

Add the following as Subsection 300-2.9:

Payment for unclassified excavation is considered included in the Bid under each Bid item requiring unclassified excavation and includes excavation, hauling, and disposal. No separate payment will be made.

**SECTION 301      SUBGRADE PREPARATION, TREATED MATERIALS, AND PLACEMENT OF BASE MATERIALS**

The provisions below shall supplement but not replace those provisions in Section 301 of the Standard Specifications.

*301-2 UNTREATED BASE*

301-2.4 Measurement and Payment

Add the following to Subsection 301-2.4:

Payment for construction of untreated base under curb, curb and gutter, driveways, sidewalks, HFCTTCDs/HDSs, ramps, and all other hardscape shall be considered as included in the Bid price for related items of Work and no additional compensation will be allowed therefor.

**SECTION 303 CONCRETE AND MASONRY CONSTRUCTION**

The provisions below shall supplement but not replace those provisions in Section 303 of the Standard Specifications.

*303-1 CONCRETE STRUCTURES*

303-1.11 Measurement

Add the following to Subsection 303-1.11:

Measurement for HDS, Diversion, and Catch Basin structures related to trash capture are defined in the Bid as Lump Sum payment items, which are further detailed in the Technical Specifications. Measurement shall include all work, materials, and other items necessary to install complete-in-place.

303-1.12 Payment

Add the following after the first paragraph of Subsection 303-1.12:

Payment for HDS, Diversion, and Catch Basin structures related to trash capture are further detailed in the Technical Specifications. Payment for pipe connections to existing storm drains shall be made at the Contract Bid price for Each "Pipe Connection to Existing Storm Drains (per Detail or SPPWC Std. 335-2)" and shall include labor, materials, equipment, and incidentals required to connect the existing storm drains to the proposed improvements. If the existing storm drain is cut less than 5 feet from the nearest existing joint, then the Contractor will need to construct a concrete collar or other approved improvements to connect the system and no additional compensation will be allowed therefor.

*303-5 CONCRETE CURBS, WALKS, GUTTERS, CROSS GUTTERS, ALLEY INTERSECTIONS, ACCESS RAMPS, AND DRIVEWAYS*

303-5.1 Requirements

303-5.1.1 General

Replace the second paragraph of Subsection 303-5.1.1 with the following:

Unless otherwise specified on the Plans or the City's Standard Plans, the minimum thickness of walks shall be 4 inches. The thickness of gutters, cross gutters, alley intersections, access ramps, and driveway aprons shall be as shown on the Plans or as specified in referenced standard plans.

Add the following to Subsection 303-5.1.1:

All concrete flatwork areas behind sidewalks, driveways, and right-of-way shall be considered as walks. Detectable warning surface (truncated domes) for curb ramps shall be Cast-in-Place System per Armor Tile Part No. ADA-C-3648 or City approved equal. Color shall be federal yellow or per the City's selection.

### 303-5.7 Repairs and Replacements

Add the following to Subsection 303-5.7:

The Contractor shall be responsible to protect all new concrete work from being etched, scratched or otherwise marked following replacement thereof. If new concrete work is marked, the Contractor shall replace it at its expense and no extra costs will be allowed.

### 303-5.9 Measurement and Payment

Add the following to Subsection 303-5.9:

Payment for curb ramps and surrounding approach shall be included in the Contract Bid price for Each "ADA Curb Ramp and Signage (14<sup>th</sup> Street)" and includes the removal and construction of a new curb ramp per the details included in the Plans. This payment item includes sawcutting, complete removal of adjacent pavement and subgrade, underlying subgrade and base, disposal, subgrade preparation and compaction, truncated domes, and all labor and equipment necessary to complete the required removal (in accordance with 401-3). The Bid item also includes the removal and relocation of signage (including sign and post) as indicated in the Plans in accordance with City requirements. The Contractor shall also prepare a certificate of compliance for the ramp, which must be signed by a licensed civil engineer. An example of the certificate of compliance is included in Appendix V for reference. Additional details are included in Part 9.

Payment for concrete walks, sidewalks, access ramps, and curb/gutter along proposed HDS system construction shall be included in the Bid under the corresponding Bid item.

## **SECTION 306 - OPEN TRENCH CONDUIT CONSTRUCTION**

The provisions below shall supplement but not replace those provisions in Section 306 of the Standard Specifications.

### *306-3 TRENCH EXCAVATION*

#### 306-3.1 General

Pursuant to Public Contract Code Section 7104, if the project involves trenching more than four (4) feet deep, Contractor shall promptly and before the following conditions are disturbed notify the City in writing of any:

- a. Material that Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code Section 25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; and/or
- b. Subsurface or latent physical conditions at the site differing from those indicated; and/or

c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

d. As required by Labor Code Section 6705 and in addition thereto, whenever work under the Contract that involves an estimated expenditure in excess of twenty-five thousand dollars (\$25,000) for the excavation of any trench or trenches five (5) feet or more in depth, Contractor shall submit for acceptance by City in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by Contractor, and all costs therefor shall be included in the price of the Contract. Nothing in this provision shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this provision shall be construed to impose tort liability on the City or on any City officer, agent, consultant, representative, or employee. All plans, processing and shoring costs are Contractor's responsibility and must be included in Contractor's bid.

*306-13 TRENCH RESURFACING*

306-13.2 Permanent Resurfacing

Add the following to Subsection 306-13.2:

Trench resurfacing in paved areas shall be performed according to the Plans and City Standard Plans (and associated requirements).

If any surface features are disturbed during construction of open trench conduit construction such as curbs, gutters, sidewalks, utility covers, landscape/irrigation components, traffic detector loops, adjacent site features, planters, and other existing improvements, the features must be repaired or replaced to original working condition at no additional cost to the Agency.

*306-14 MEASUREMENT*

306-14.1 Shoring and Bracing

Replace Subsection 306-14.1 with the following:

Shoring and bracing, if necessary, will not be measured separately for payment. Shoring and bracing shall be considered as included in the prices in the Bid for the items of Work necessitating it.

306-14.3 Gravity Pipe

Replace the first sentence in Subsection 306-14.3 with the following:

Gravity pipe will be measured in a horizontal plane along the pipe centerline between the ends as laid and shall include the length of the actual pipe in-place, including the lay-lengths of in-line tees, fittings, valves, meters, manholes, and appurtenances.

306-14.7 Temporary Resurfacing

Replace Subsection 306-14.7 with the following:

Temporary resurfacing, if necessary, will not be measured separately for payment. Temporary resurfacing shall be considered as included in the prices in the Bid for the items of Work necessitating it.

306-15 PAYMENT

306-15.1 General

Replace item o) and add the following to the alphabetized list included in Subsection 306-15.1. Items listed are as applicable/necessary.

- o) Shoring and bracing;
- p) Bedding material and placement;
- q) Trench dewatering;
- r) Over-excavation, refilling, and compaction of suitable material;
- s) Temporary resurfacing;
- t) Steel plates;
- u) Manholes along pipeline;
- v) Bypass plans as required;
- w) Utility support and encasement across, within, and adjacent to trench;
- x) Repair or replacement of any surface features impacted, including, but not limited to, curbs, gutters, sidewalks, curb ramps, utility covers, landscape/irrigation components, traffic detector loops, and other existing improvements; and
- y) All other work necessary to install the pipe or conduit complete-in-place.

Add the following to Subsection 306-15.1:

Payment for pipe and conduit will be made at the Contract Lump Sum Price for "Relocate Utility Lines (City-Owned)" and shall include necessary relocations as indicated on the Plans. The Contractor shall submit detailed drawings of City-owned utility relocations in advance for City review and approval, as indicated in Section 402-4. Payment for Corrugated Metal Pipe (CMP) removal and replacement will be made at the Contract Price per Linear Foot for "24-inch CMP" and shall include removal, replacement, encasement per the detail included in the plans, and the items listed in this section.

306-15.2 Shoring and Bracing

Replace Subsection 306-15.2 with the following:

No separate payment for shoring and bracing of piping shall be made. Shoring and bracing, as needed, shall be considered as included in the prices in the Bid for the items of Work necessitating it.

306-15.3 Dewatering

Replace the Subsection 306-15.3 with the following:

No separate payment for dewatering shall be made. Dewatering, as needed, shall be considered as included in the prices in the Bid for the items of Work necessitating it.

306-15.5 Valves

Remove the words “excluding temporary resurfacing” from the second sentence.

306-15.6 Hydrants

Remove the words “excluding temporary resurfacing” from the second sentence.

306-15.7 Buried Structures

Remove the words “excluding temporary resurfacing” from the third sentence.

306-15.8 Pipeline Appurtenances

Remove the words “excluding temporary resurfacing” from the second sentence of the second paragraph.

306-15.9 Temporary Resurfacing

Replace Subsection 306-15.9 with the following:

No separate payment for temporary resurfacing shall be made. Temporary resurfacing, as needed, shall be considered as included in the prices in the Bid for the items of Work necessitating it.

Subsection 306-16 shall be added as follows:

306-16 STORM DRAIN BYPASS

306-16.1 General

Bypass pumping may be required to divert the flow in existing storm drains around proposed improvements. Work in storm drains shall be limited to the dry season (April 15th to September 30th), unless otherwise indicated in the LACPW permit or approved by the Engineer. Requirements related to sewer bypass and spill contingency are included in Section 3-12.5.3 and 402-2.

306-16.2 Submittals

The Contractor shall submit for the Agency's approval, a written Storm Drain Bypass Plan at least ten (10) working days prior to the beginning of any individual construction process where bypass is needed. The plan shall contain a contingency plan in the event of pump(s) failure, the sequence of construction, and a list of all piping, pumps, plugs, etc. required for each site. The plan shall indicate the locations and capacities of all pumps, sumps, suction lines, and discharge lines.

306-16.3 Requirements

When bypass pumping is required, the Contractor shall supply the pumps, conduits, and other equipment to divert flows around the pipe section in which Work is to be performed. The bypass system shall be of sufficient capacity to handle existing flow plus additional flow that may occur. The Contractor shall have onsite backup pumps capable of pumping 150% of the existing flow. Each standby backup pump shall be a complete unit with its own suction and discharge piping. Bypass capacities must conform to the requirements set forth in the LACPW permit for all facilities (even the storm drains owned by the City of Manhattan Beach), unless approved by the City

otherwise.

All pump(s) drives shall have noise suppresser exhaust systems to mitigate the noise levels to within acceptable levels per the Agency's guidelines.

Bypass piping, when crossing areas subject to traffic loads, shall be constructed in trenches with adequate cover and otherwise protected from damage due to traffic. Lay-flat hose or aluminum piping with an adequate casing and/or traffic plates may be allowed if so approved by the Engineer. Bypass pump suction and discharge lines that extend into manholes shall be rigid hose or hard pipe. Lay-flat hose will not be allowed to extend into manholes.

The Contractor will be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system.

#### 306-16.4 Payment

Payment for storm drain bypass shall be included in the Contract Price for the items necessitating it (as further detailed in the Technical Specifications).

## **PART 4 - EXISTING IMPROVEMENT**

The corresponding provisions in Part 4 (Existing Improvement) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

### **SECTION 400 - PROTECTION AND RESTORATION**

#### **400-1 GENERAL**

Add the following to Subsection 400-1:

All costs to the Contractor for protecting, removing, restoring, relocating, repairing, replacing, or reestablishing existing improvements shall be included in the Bid. Existing improvements damaged or removed without written authorization from the City shall be replaced by the Contractor at no expense to the City. The Contractor shall leave the Work area in the same or better condition as compared to before beginning Contract Work.

The Contractor shall remove and restore traffic striping, markings, and markers in-kind following construction. If the proposed Work requires the removal of pavement that includes traffic striping, markings, or markers, then it shall be restored prior to Project completion. Traffic striping, markings, and markers shall be restored within the Project area plus an additional 50-feet to ensure a smooth transition. The limits of removal and restoration shall be agreed upon with the City in advance of construction. The Contractor shall take pictures of the Project area prior to construction, such that the existing conditions can be documented and then restored. Traffic striping, markings, and markers shall conform to these Specifications and local requirements. Traffic striping, markings, and marker restoration shall be considered as included in the Contract Lump Sum Bid price for "Remove and Replace Traffic Striping, Markings, and Markers," and shall include demolition/removal, restoration, photo documentation, new implementation, and other items required to restore existing conditions within the Work area an additional 50-feet (unless otherwise specified by the City).

### **SECTION 401 – REMOVAL**

#### **401-5 OTHER IMPROVEMENTS**

Replace the entire subsection with the following:

##### **401-5.1 Remove and Reinstall Items**

In locations indicated on the Plans, Bid, and Specifications, or where directed by the Engineer, the Contractor shall remove items, protect them, and then restore them once conflicting Work is completed. The Contractor shall place back features to match conditions at the at the start of the Work, or better. The Contractor shall take photographs of existing features to be reinstalled prior to removal and once restored, which shall be available if requested by the Agency or Engineer. The Contractor is responsible for recording existing layouts, locations, and feature characteristics, such that they can be restored. If the Contractor identifies conditions that may make it difficult to restore the infrastructure, it shall be brought to the immediate attention of the Engineer. If the Contractor identifies any permanent conflicts that will arise between the restored items and proposed Work, it shall be brought to the immediate attention of the Engineer (within five days from removing the infrastructure). The Contractor is responsible for storing and protecting infrastructure in such a manner that will not degrade quality and performance. The Contractor shall also be responsible for coordination with the property owners and/or tenants.

#### 401-6 MEASUREMENT

Replace Subsection 401-6 with the following:

Removal and replacement of surface improvements on residential properties for the purpose of installing/constructing Project components (specifically HDS systems [trash capture systems]) will not be measured separately, as the Payment item (indicated below) is Lump Sum. Removal and replacement of surface pavement (sidewalk, AC pavement, or concrete pavement) will be measured by the Square Foot, as indicated in the following subsection.

#### 401-7 PAYMENT

Replace Subsection 401-7 with the following:

Payment for surface restoration due to HDS system installation, specifically at and around residential homes shall be included in the Contract Lump Sum Bid price for “Coordinate with Property Owners/Tenants, Restore Landscape, Hardscape, Walkway Surfaces, Patios, Etc. In Kind to City Satisfaction” and “Coordinate with Property Owners/Tenants” and includes the removal, protection, restoration, and/or construction of improvements to match existing conditions. This payment item may include sawcutting, complete removal of surfaces and subgrade, salvaging materials, disposal, subgrade preparation and compaction, surface restoration, coordination with property owner/tenant, photo documentation, and all labor and equipment necessary to complete the Work. At sites without specific restoration shown on the plans, the Contractor is responsible for coordinating with property owners/tenants that will be impacted by the work.

Payment for surface restoration due to HDS system installation, specifically within public right-of-way shall be included in the Contract Price per Square Foot for “Pavement Restoration” and includes the removal, restoration, and/or construction of improvements to match existing conditions. This item includes AC pavement, concrete sidewalks, and concrete pavement along with associated base to match existing conditions. Surface improvements shall be constructed in accordance with City standard plans and the associated Greenbook sections to the satisfaction of the City.

### **SECTION 402 - UTILITIES**

#### 402-1 LOCATION

Add the following to Subsection 402-1:

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. Potholing performed in the City of Hermosa Beach must be approved by the City of Hermosa Beach in advance and must include open trench or hand dig methods only, as required by the City of Hermosa Beach.

### UNDERGROUND SERVICE ALERT IDENTIFICATION NUMBER FORM

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 (3) Working Days before scheduled excavation. For best response, provide as much notice as possible up to ten (10) 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.

#### 402-1.2 Payment

Add Subsection 402-1.2 to the Specifications as follows:

Payment for utility locating shall be considered as included in the Bid items necessitating it and no additional compensation will be allowed therefor.

#### 402-1.3 Entry by Utility Owners

Add Subsection 402-1.3 as follows:

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 City 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.

#### 402-2 PROTECTION

Add the following to Subsection 402-2:

If Contractor damages or breaks the Utilities, it will be the Contractor's responsibility to repair the Utility at no cost to the Utility or the City.

The Contractor shall identify locations where the project area and proposed construction is crossed by overhead utilities. The Contractor shall place a sign that reads "DANGER OVERHEAD POWER LINES" (or similar) at each of the locations identified as being crossed by existing overhead utilities. If the Contractor damages overhead utilities within the project area during the course of the Work, then the Contractor must restore them to existing condition or better at no additional cost to the City.

Utilities crossing the Work area shall be protected and supported during construction, as indicated on the Plans. In some instances, utilities are shown to be protected, while temporary relocation may be required (specifically at 1<sup>st</sup> Street). The sewer over the existing storm drain on 1<sup>st</sup> Street shall be temporarily relocated during construction. A Sewer Bypass/Relocation Plan shall be submitted to the City in advance for approval (must meet requirements of Section 3-12.5.2). The sewer shall be temporarily relocated through the full Project area (rather than temporarily relocating two segments where conflicts exist). The Contractor shall consider and address related laterals within the relocation plan. Sewer system bypass shall be considered as included in the Contract Lump Sum Bid price for "Sewer Bypass System," and shall include the development of a Sewer Bypass/Relocation Plan, plan review/coordination with the City, implementation, restoration of sewer main, and other items required to bypass conflicting sewer lines and no additional compensation will be allowed therefor. Following implementation of the HDS structures, bypassed sewer laterals shall be reconnected to the sewer main per the City's Standard Plan ST-5. Sewer lateral connections back to the main shall be considered as included in the Contract Bid price per Each for "Reconnect Sewer Laterals to Sewer Main (Per City Std. ST-5)" and no additional compensation will be allowed therefor.

Utility support, including temporary relocations, shall be considered as included in the Contract Bid price per Each for "Temporary Utility Support" and no additional compensation will be allowed therefor. The utility support bid item shall include planning, submittals, materials, equipment, and incidentals required to protect and restore the utility to existing conditions or better.

#### 402-3 REMOVAL

Add the following to Subsection 402-3:

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 City 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. In at least one location, the Plans show that the Contractor is to support a utility that is noted as abandoned. The Contractor shall confirm the utility is abandoned at the start of the Work, at which time the Contractor can confirm with the City that the interfering portion will be removed rather than supported. If the City feels the utility may be used in the future, then it shall be supported by the Contractor during construction.

#### 402-4 RELOCATION

Add the following to Subsection 402-4:

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.

The Contractor shall be responsible for City-owned utility relocations, as indicated in the Plans. The Contractor shall submit exhibits illustrating proposed utility relocations for City review and approval prior to the Work being performed. Payment for City-owned utility relocations shall be considered as included in the Contract Bid under the Lump Sum bid item "Relocate Utility Lines (City-Owned)", as indicated in Section 306-15.1. The Standard Specifications and related Special Provisions of Section 306-15 shall apply to the proposed relocations. Relocations shown to be the responsibility of others will be coordinated with the City. The Contractor will need to protect relocated utilities, which shall be considered included as part of the Bid.

#### 402-6 COOPERATION

Add the following to Subsection 402-6:

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 this 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.

#### 402-7 NOTIFICATION

Add Subsection 402-7 to the Specifications as follows:

The Contractor shall notify the City Engineer and the owners of all Utilities and substructures not less than forty-eight (48) hours before starting construction.

## **PART 5 - PIPELINE SYSTEM REHABILITATION**

Incorporated by Reference

## **PART 6 - TEMPORARY TRAFFIC CONTROL**

The corresponding provisions in Part 6 (Temporary Traffic Control) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

### **SECTION 600 - ACCESS**

#### 600-1 GENERAL

Add the following to Subsection 600-1:

The Contractor may choose to comply with the requirements of WATCH (Work Area Traffic Control Handbook) or MUTCD (Manual on Uniform Traffic Control Devices) in providing devices and signage for pedestrian and vehicular traffic. The Contractor shall provide flagman as necessary.

Overnight parking of construction equipment in the project site shall comply with City parking restriction/guidelines. Contractor shall provide adequate flashing barricades.

### **SECTION 601 – TEMPORARY TRAFFIC CONTROL FOR CONSTRUCTION AND MAINTENANCE WORK ZONES**

#### 601-1 GENERAL

Add the following to Subsection 601-1:

The Contractor shall implement any measure requested by the City Engineer, as deemed necessary to ensure the proper flow of traffic and the protection of the public and the safety of the workers. The Contractor shall maintain, at all times, the ability to respond to calls from the Manhattan Beach Police Department during non-working hours to replace or provide additional traffic control or safety devices as shall be required by the Police Department.

#### 601-2 TEMPORARY TRAFFIC CONTROL PLANS (TCP)

##### 601-2.1 General

Replace the first sentence with the following:

The Contractor shall submit a TCP in accordance with 3-8.2.

##### 601-2.2 Payment

Replace the Subsection 601-2.2 with the following:

Payment for preparation of the TCP shall be considered as included in the Bid under the Lump Sum Bid Price for "Traffic Control", which includes preparation of traffic control plans, full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in placing and maintaining temporary pedestrian paths of travel and placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of traffic control systems as specified in Part 6. The Lump Sum Price shall also include all associated temporary signs, flashing arrow signs, flagging and/or flagmen, project notifications, and striping/pavement marking restoration.

## 601-3 TEMPORARY TRAFFIC CONTROL (TTC) ZONE DEVICES

### 601-3.5 Signs and Signage

#### 601-3.5.2 Payment

Replace Subsection 601-3.5.2 with the following:

Payment for signs and signage for temporary traffic control shall be considered as included in the Bid under the Lump Sum Price for "Traffic Control", which includes overall traffic control, as further defined in Section 601-2.2.

### 601-3.6 Channelizing Devices

#### 601-3.6.6 Measurement

Replace Subsection 601-3.6.6 with the following:

Cones, tubular markers, channelizers, drums, barricades, temporary traffic barriers, and end treatments will not be measured separately for payment.

#### 601-3.6.7 Payment

Replace Subsection 601-3.6.7 with the following:

No separate or additional payment will be made for cones, tubular markers, channelizers, drums, barricades, temporary traffic barriers, and end treatments, as they shall be considered as included in the Bid under the Lump Sum Bid Price for "Traffic Control", which includes overall traffic control, as further defined in 601-2.2.

### 601-3.7 Traffic Sign Enhancement Devices

#### 601-3.7.8 Measurement

Replace Subsection 601-3.7.8 with the following:

Flags, high-level warning devices, warning lights, flashing directional bars, PCMS, and flashing arrow signs will not be measured separately for payment.

#### 601-3.7.9 Payment

Replace Subsection 601-3.7.9 with the following:

No separate or additional payment will be made for flags, high-level warning devices, warning lights, flashing directional bars, PCMS, and flashing arrow signs, as they shall be considered as included in the Bid under the Lump Sum Bid Price for "Traffic Control", which includes overall traffic control, as further defined in 601-2.2.

## 601-4 TEMPORARY TRAFFIC STRIPING AND PAVEMENT MARKINGS

### 601-4.5 Payment

Add the following to Subsection 601-4.5:

Temporary traffic striping and pavement markings included in the Contractor-developed TCP shall be included in the Bid under the Lump Sum Bid Price for "Traffic Control", which includes overall traffic control, as further defined in 601-2.2.

## **PART 7 - STREET LIGHTING AND TRAFFIC SIGNAL SYSTEM**

The corresponding provisions in Part 7 (Street Lighting and Traffic Signal System) of the Standard Specifications, except as otherwise indicated herein. In the event of any conflict between the Standard Specifications and these Special Provisions, these Special Provisions shall control.

### ***SECTION 701 - CONSTRUCTION***

#### **701-1 GENERAL**

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, City Standard Plans, Section 86 of the State Standard Specifications, State Standard Plans, County Standard Plans, and County Standard Specifications.

**PART 8 - LANDSCAPE AND IRRIGATION**

Incorporated by reference.

## **PART 9 - SPECIAL INSTRUCTIONS**

### **I. CONSTRUCTION STAGING AREA**

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

### **II. DRIVEWAY ACCESS**

All driveway access must remain open at all times although flagging operations may be required during work hours. Outside work hours, steel plates or other measures may be put in place to facilitate full unrestricted access.

The Contractor shall minimize impacts to nearby driveway approaches and intersection traffic in the vicinity of the Work. All open trenches shall be either backfilled or the work area shall be adequately covered with steel plates at the end of each Working Day. All loose gravel from the plate being secured by temporary AC must be swept and cleaned up daily to ensure a clean and tidy environment.

### **III. WORK SITE CLEANLINESS OUTSIDE OF THE WORK AREA**

The Contractor is required to keep the pavement in the area around the Project area acceptably clean daily. The Engineer may require the use of a self-loading motor sweeper with spray nozzles to meet this performance requirement. Full compensation for compliance with this requirement shall be included in the Contract prices paid for the various items of Work involved and no additional compensation will be allowed therefor.

Spoils from excavation shall be immediately removed from the Project site. Overnight storage of materials removed or to be incorporated into the construction shall not be permitted on the traveled roadway surfaces.

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

### **IV. PROJECT WORK PLAN**

The Project Work plan shall include:

1. Work sequence and schedule duration for all required Work.
2. Listing and layout of equipment to be used on site.
3. Designated storage location that will protect infrastructure improvements (HDS or catch basin systems).
4. Emergency Plan that includes the following and shall be kept on site during the entire duration of the Work:
  - a. The procedures that will be followed in event of a health and safety emergency or sewer spillage.
  - b. Addresses the dangers associated with sewer work.
  - c. Identifies the on-site designated Health and Safety Officer.
  - d. The Emergency Plan shall also include availability and accessibility of backup

equipment.

V. SPILL CONTINGENCY PLAN

The contractor shall submit a Spill Contingency Plan to the City detailing precautions to be implemented to prevent sewage spills. Additional details related to Sewer Bypass and development of a Spill Contingency Plan are included in Sections 3-12.5.3 and 402-2.

VI. RIGHT-OF-WAY

It shall be the responsibility of the Contractor to conduct all of their activities and operations within the rights-of-way provided by the City and within the confines of the Work site.

If, for any reason, the Contractor encroaches upon other lands adjoining rights-of-way or adjoining the Work site, such as the private patios located on walkways being affected by Work, they shall first obtain written permission from the owner thereof and provide evidence of such permission in writing to the Engineer prior to entering upon such lands.

The Contractor shall be responsible for documenting existing improvements via photo and video, to notify, coordinate and schedule the work with the property owner and tenant at the appropriate time and, to complete the Work and restore the existing surface improvements in pre-work condition to the maximum extent possible (additional details included in Section 401).

The Contractor shall indemnify and hold the City harmless from all claims for damages occasioned by such work or activity, whether done in compliance with this section and with permission or in violation of this section and without permission.

VII. DEWATERING, DUST, AND SOUND CONTROL REQUIREMENTS

Dewatering

It is anticipated that storm, surface, groundwater, or other water may be encountered at various locations during the Work and may require dewatering. The Contractor, by submitting a bid, acknowledges that they investigated the risks arising from surface, ground, or other waters, and acknowledges that their bid was prepared assuming that water is present and the dewatering work will be conducted accordingly. *The Contractor, by submitting a bid, assumes all of the said risk and payment for dewatering shall be considered as included in the various contract items of Work. No separate payment will be allowed.*

When water is encountered, the Contractor shall provide and maintain dewatering during construction in accordance with the requirements of the Order No. R4-2018-0125, NPDES No. CAG994004 issued by the Los Angeles Regional Water Quality Control Board (LARWQCB).

The Contractor shall provide and maintain ample means and devices with which to promptly remove and properly dispose of water entering the excavations or other parts of the Work at all times during construction. Dewatering shall be accomplished by methods which will ensure a dry excavation and preservation of the final lines and grades of the bottoms of excavations. The chosen method that may include sump pumps, deep wells, well points, temporary pipelines, and other means shall be designed by the Contractor's civil engineer and shall be the sole responsibility of the Contractor.

The Contractor shall dispose of the water from the Work in accordance with the Water Pollution Control Act without damaging or soiling adjacent City, County, State, or private property.

Water shall be disposed of in such a manner as not to be a menace to the public health and such disposal shall be performed in accordance with Environmental Protection Agency and State Water

Quality Control Board Standards (NPDES permit). Any testing and reports required under NPDES permit shall be performed by the Contractor and submitted to the appropriate agency and the Engineer for approval at no additional cost to the City.

Conveyance of the water shall not interfere with traffic flow or sewer treatment facilities operations. No water shall be drained into the Work under construction without prior consent of the Engineer

The Contractor shall conduct their operation such that storm or other waters may proceed uninterrupted along their existing street or drainage courses. Diversion of water for short reaches to protect construction in progress will be permitted if in the opinion of the Engineer, public or private properties are not subject to damage. The Contractor shall obtain and submit to the City written permission from the applicable public agency or property owner before the Engineer will permit any diversion of water outside the right-of-way.

It shall be the Contractor's responsibility to control the surface water entering the Work area at no additional cost to the City. *The Contractor shall correct damage to the work area as the result of surface water at no cost to the City.*

If groundwater testing during construction is found to be contaminated, the Contractor shall provide, install, maintain, and operate the equipment necessary to treat the contaminated groundwater to bring it to compliance with the dewatering and discharging permits from the Los Angeles Regional Water Quality Control Board.

Full compensation for dewatering and conforming to the requirements of this Article shall be considered as included in the prices paid for the various items of Work and shall include all related materials, labor, tools, equipment, standby pump, coordination, and approval processing. No separate payment will be allowed.

#### Dust Control

Dust control shall consist of applying water in conformance with Section 7-8 of the Standard Specifications, with the following modification:

The Contractor shall furnish and operate a water truck and self-loading motor vacuum sweeper with spray nozzles applied at least twice each calendar day (including holidays and weekends), first during construction to keep paved areas reasonably clean, and second at the end of day. The Contractor shall never leave the construction premises dirty or dusty.

All spillage and any excessive dirt or debris resulting from hauling operations, moving of equipment along or across any private or public property or public traveled way, shall be removed immediately at the Contractor's expense.

Whenever the Contractor fails to control dust resulting from the performance of the Work, the Engineer may cause such dust to be controlled. The costs of controlling dust shall be deducted from moneys due or to become due the Contractor.

No separate payment will be made for any work performed or material used to control dust resulting from the Contractor's performance of the work, or by public traffic, either inside or outside the right-of-way. Full compensation for such dust control will be considered as included in the price paid for the various items of Work involved.

#### Sound Control

The Contractor shall comply with all local sound control and noise level rules, regulations, and ordinances, which apply to any Work performed pursuant to the contract.

Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion

engine shall be operated on the project without said muffler.

The noise level from the Contractor's operations shall not exceed 86 DBA at a distance of fifty feet (50'). This requirement in no way relieves the Contractor from responsibility for complying with local ordinances regulating noise level.

Said noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers, or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of sound control shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

#### VIII. CONSTRUCTION WATER

Construction water may be taken only at locations approved by the City. The City will install a construction meter and eddy valve at these locations at the Contractor's expense. This valve shall be operated when taking construction water with the fire hydrant remaining open during the day. Contractor will be charged for construction water on an as-used basis.

The Contractor shall make application to the City for installation of a fire hydrant water meter for their construction water and shall make appropriate meter deposits to cover cost of relocation or damage to the meter.

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

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

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 pipelines, at least one mobile unit with a minimum capacity of 1,000 gallons shall be available for applying water on the project all times.

Payment for applying water, including all labor, tools, equipment, and incidentals required for the application of water shall be considered as included in the various contract items of work involving the use of water, and no additional compensation will be allowed.

#### IX. GEOTHECNICAL EXPLORATION

The City conducted a geotechnical exploration (see Appendix IV) where the Project Work is to be performed. Each prospective bidder shall carefully review this document to familiarize themselves with existing soil conditions and recommendations. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils exploration report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever test it deems appropriate to determine the underground condition of the soil.

Contractor shall be aware that the soil conditions in the Project area are very sandy and collapsible. Contractor shall use appropriate construction methods for this soil type when installing all pipe, manholes, structures, and any other below-ground appurtenances.

By submitting a bid, the Contractor acknowledges that he/she has satisfied himself/herself as to the nature of the Work, including but not restricted to the conditions affecting handling and storage of materials, disposal of excess material, *level and amount of groundwater*, and ascertaining existing conditions that affect labor, materials, and equipment costs.

All costs for geotechnical testing other than compaction testing shall be considered as included in the price paid for the various contract items of work involved and no additional compensation will be allowed therefore.

X. EXISTING SURFACE IMPROVEMENTS

Portions of existing storm drain pipes with HDS system improvements are located in City of Manhattan Beach's right-of-way (encroachment area). Contractor shall note existing encroachment areas include private improvements and appurtenances including but not limited to, AC/PCC pavement, decorative or integral-colored stamped paving, pavers, bricks, stone tile, wood, stones/rocks, fencing, finished walls & footings (retaining or otherwise), stairs, planters, various landscaping and irrigation, synthetic lawns, etc.

Contractor shall support and protect in place existing improvements. Where the Contractor's activities damage or adversely affect any private improvements, the Contractor shall provide an acceptable solution to the satisfaction of the affected property owner(s). Additional related requirements are included in Section 401.

XI. SUBMITTAL BY CONTRACTOR OF DAILY REPORT CITY

Contractor is required to submit a completed "Contractor's daily report to City" form to the City every working day by 5:30 p.m. The referenced form is included in Appendix II.

I. ADA CURB RAMP/DRIVEWAY COMPLIANCE AND INSTALLATION

The Contractor shall hire a registered civil engineer to custom design the one (1) ramp, as shown in plans, to ensure ADA compliance. If ramps/driveway cannot achieve ADA compliance, then the contractor needs to re-construct them to the "maximum extent possible" as designed by his/her engineer, and the engineer shall sign and stamp an ADA memo similar to the example included in Appendix IV.

Work under the "ADA Curb Ramp and Signage (14<sup>th</sup> Street)" bid item shall include full compensation for furnishing labor, materials, tools and incidentals, and for performing all work involved in the design of the curb ramp by a registered civil engineer to ensure ADA compliance, complete as specified herein; including but not limited to research of record drawings, survey, design, ensuring ADA compliance, or if not achievable due to existing site conditions design to the maximum extent possible, coordination, submittals, and approval with/from the City, construction support, prepare, sign, stamp the as-built memorandum (see Appendix IV), and other appurtenance to complete work. Payment for custom design curb ramps and driveway is per each upon full completion of all work associated with this bid item (additional details included in Section 303-5.9.

Work under bid item, sawcut, remove, & replace existing curb ramp with ADA compliant curb ramp shall include full compensation for furnishing labor, materials, tools and incidentals, and for performing all work involved in the construction of a new ADA curb ramp, complete as specified herein; including but not limited to, mobilization, traffic control, construction survey, saw-cutting, removal and disposal, excavation, forming, pavement restoration, detectable warning surface, support of adjacent structures including (protection, restoration, grading, irrigation turf replacement), furnish and install concrete to construct new ADA ramp, signage, and backfill and

compaction to the satisfaction of the Engineer. Payment for each ramp is each upon full completion of all work associated with the ramp.

## **PART 10 - STANDARD AND SPECIAL TECHNICAL PROVISIONS**

The following Technical Provisions/Specifications are included:

- Precast Diversion Structure (PDS)
- Debris Separating Baffle Box (DSBB) Stormwater Treatment Unit
- High Flow Offline Stormwater Treatment Unit (HDS)
- Catch Basin Trash Capture System/Catch Basin Insert (CBI)

## ***PRECAST DIVERSION STRUCTURES (PDS)***

### **SECTION 1 – GENERAL**

#### **PDS1-1 Description**

The work of this section consists of furnishing and installing precast concrete diversion structures with covers, and catch basins (dependent on the site location), as shown on the Contract Drawings or specified herein.

#### **PDS1-2 Related Work Specified Elsewhere**

The Greenbook 2021 Edition shall apply to the entirety of the Work and installation of Precast Diversion Structure (PDS), along with related Special Provisions.

#### **PDS1-3 Submittals**

The following submittal requirements apply (in accordance with Section 3-8):

- A. Submit manufacturer's literature and drawings showing complete layout, dimensions, design loadings, materials of construction, and other information the manufacturer determines to be appropriate.
- B. For all manufactured precast items the Contractor shall also submit a list of the design criteria used by the manufacturer. At a minimum this will consist of the unit weight of soil, flow rate, traffic loading criteria, internal hydrostatic loads, and groundwater if applicable.
- C. The Contractor shall submit approved ICBO reports for all lifting inserts, showing allowable design loads on the inserts.
- D. Verification of concrete compressive strength shall be submitted. Such verification may be laboratory trial batch test results with a minimum of three test cylinders or a series of production compression tests with a minimum of 20 sets of test data which fall within the evaluation and acceptance criteria specified herein. Such tests must have been made within the previous two years on the identical concrete mix submitted.
- E. For vaults larger than 4'-0" in any dimension, drawings and calculations shall be signed by a Civil or Structural Engineer registered in California. Loads and design criteria shall be as shown on the Contract Drawings and project Geotechnical Reports. Calculations shall be based on the soil pressures provided in the Geotechnical Reports.

#### **PDS1-4 Quality Assurance**

Test methods and criteria for evaluation and acceptance of concrete shall be as specified in Section 201 – Concrete, Mortar, and Related Materials.

### **SECTION 2 – MATERIALS**

#### **PDS2-1 Precast Box Design and Manufacture**

Dimensions for precast boxes/diversion/related structure are as shown on the Plans.

Design Loads: Design loads shall consist of live load, dead load, impact load, hydrostatic load, and other loads that may occur. Live loads shall be for H20. Earth loads shall include a 2-foot soil surcharge.

Forms: All forms used in placing concrete shall be sufficiently designed and braced to maintain alignment under pressures of concrete placement.

Concrete: Aggregates used in the concrete mix (either coarse or fine), excluding light weight aggregates, shall conform to specifications as outlined by ASTM C33. All light weight aggregates, fine or coarse, shall conform to specifications as outlined by ASTM C33. Both types of aggregates shall be properly graded and free of any deleterious substances and organics, so as to produce a homogeneous concrete mix when blended with cement.

Cement: The cement shall be Type II low alkali portland cement and shall meet ASTM C150 Type II standards.

Compressive Strength: Sufficient cement content shall be used per batch so as to produce a minimum strength of 4,000 psi at 28 days.

Batching: A central batching facility shall be used to assure accurate weighing and mixing of materials to obtain a suitable concrete mix.

Placing: Concrete shall be made by properly proportioned parts of sand, aggregate and cement with sufficient water to produce a concrete mix of uniform quality and slump. Handling from the mixer or the transport vehicle to the forms for deposit will be in a continuous manner, as rapidly as practicable without segregation or loss of ingredients, until the unit or segment pouring is completed. Compaction by either external or internal mechanical vibration shall be used during the placement of the concrete mix.

Curing: Concrete while still in the forms may be steam cured after an initial set has taken place. Steam temperature shall not exceed 160°F, nor raised from normal ambient temperature at a rate exceeding 40°F per hour. Steam curing shall be considered complete after sufficient time has elapsed to produce adequate strength to withstand any structural strain that may be subjected during the form stripping operation. Additional curing may be applied by means of water spraying or membrane curing compound to reach the ultimate strength requirements.

Reinforcing Steel: All reinforcing steel, including welded wire mesh, shall be of the size and in the location required for design loads and conforming to ASTM A185. All reinforcing shall be sufficiently tied to withstand any displacement during the pouring operation. All bars shall be intermediate grade, or as specified, billet steel conforming to ASTM A615.

Preformed Joint Sealant: The joint sealing compound shall be Quik-Seal, a preformed, cold applied, ready to use plastic joint sealing compound as supplied by Quikset Utility Vaults, Santa Ana, California; Ram-Neck by K.T. Syder Company; or approved equal.

Manufacturers: Jensen; Contech, or City approved equal.

## SECTION 3 – EXECUTION

### PDS3-1 Installation

Vaults shall be installed as shown on the Contract Drawings and as recommended by the Manufacturer. Catch basins shall be placed on 6-inch compacted Class 2 aggregate base. Vaults deeper than 10 feet below grade shall be placed on 12-inches of crushed rock wrapped in an approved geotextile fabric. Vaults less than 10 feet below grade shall be placed on 12-inches of compacted class 2 aggregate base. Install level with top at grade in roadways and two to three inches above grade outside of roadways.

### PDS3-2 Precast Vault

The above-mentioned precast item shall be installed in accordance with the manufacturer's recommendations, unless otherwise required by the drawings. All joints shall be sealed by the use of preformed sealant and mortar or non-shrink grout so as to be water tight. Interior joints shall be tooled flush.

### PDS3-3 Connections

Connections to manufactured precast items shall be made by casting sections of pipe into the items using non-shrink grout as shown on the drawings, and/or using an approved resilient connector. All such connections shall be water tight.

### PDS3-4 Payment

Payment for PDSs shall be considered as included in HDS Bid Items by location. Technical Specification Sections DSBB3-5 and HDS3-3 include additional details regarding payment. Labor, materials, equipment, and incidentals required to install PDSs (such as excavation, trenching, base materials, PDS, hatches/lids, grates, ladders, sealants, backfill, export, and more) shall be considered included in the Bid and no additional compensation will be allowed therefor. Sheeting, shoring, and bracing will be paid separately, as indicated in Section 5-7.2.3.

**DEBRIS SEPARATING BAFFLE BOX (DSBB) STORMWATER TREATMENT UNIT (SWTU)**

## SECTION 1 – GENERAL

## DSBB1-1 Description

The Contractor shall install a precast Stormwater Treatment Unit (SWTU), specifically a Debris Separating Baffle Box (DSBB) in accordance with the notes and details shown on the Drawings and in conformance with these Specifications. The precast stormwater treatment unit shall be a Debris Separating Baffle Box (DSBB), to be installed at one site (1<sup>st</sup> Street) with the following information as shown in the table below.

Table 1. DSBB SWTU Site Information

Site Name	Model (Contech or Approved Equal)	Design/Bypass Flow (cfs)	Screen System Storage Capacity (cubic feet)	Sediment Storage Capacity (cubic feet)
1 <sup>st</sup> Street	DSBB-6-12-108	45.6/381	53.2	204

The DSBB SWTU is an offline pre-engineered hydrodynamic separation system composed of multiple sediment chambers, a screening system designed to capture and store solid debris such as foliage and litter in a dry state, and an oil skimmer to remove free floating hydrocarbons. The Contractor shall furnish all labor, equipment, and materials necessary to install the SWTU along with any required appurtenances.

The Contractor must have approval of the product before the SWTU can be installed.

## DSBB1-2 Related Work Specified Elsewhere

The following reference standards apply to the installation of this SWTU (DSBB):

- ASTM A 615 - Standard Specifications for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- ASTM F 716.07 - Standard Test Methods for Sorbent Performance of Absorbents
- ASTM D 3787 - Standard Test Method for Bursting Strength of Textiles-Constant-Rate-of-Traverse (CRT) Ball Burst Test

The Greenbook 2021 Edition shall apply to the entirety of the Work and installation of SWTU DSBB, along with related Special Provisions.

## DSBB1-3 Submittals

The following submittal requirements apply (in accordance with Section 3-8):

- A. Shop Drawings & Catalog Cut Sheets Details: the Contractor shall submit shop drawings for approval by the Engineer. Submittal drawings are to detail the SWTU and all components required and the sequence for installation, including system configuration with primary dimensions, interior components, and any accessory equipment called out on submittal drawings. Inspection and maintenance documentation submitted upon request.
- B. Warranty: the manufacturer shall guarantee the SWTU(s) components against all manufacturer originated defects in materials or workmanship for a period of twelve (12) months from the date of installation. The manufacturer shall be notified of repair/replacement issues in writing within the referenced warranty period. The

manufacturer shall, upon its determination: repair, correct or replace any manufacturer originated defects identified by the written notice within the referenced warranty period. The use of SWTU components shall be limited to the application for which it was specifically designed.

- C. Manufacturer's Performance Certificate: The SWTU manufacturer shall submit a "Manufacturer's Performance Certification" certifying that each SWTU is capable of achieving the specified removal efficiencies as listed in these specifications and meets the State Water Resources Control Board requirements as a certified full capture system. Independent third-party research of the continuous deflective treatment process shall be included in the submittal, as available.

## SECTION 2 – MATERIALS

### DSBB2-1 Performance

Function - The SWTU is a pre-engineered inline hydrodynamic separation system composed of multiple sediment removal chambers, a screening system designed to capture and store solid debris such as foliage and litter in a dry state above the static water line, and an oil skimmer to capture oils, grease, and other hydrocarbons.

Removal Efficiencies - The SWTU must be capable of capturing and retaining 100% of all trash or debris equal to or greater than 4.7 mm. The SWTU shall not release material during flow events greater than the design flow rate.

Hydraulic Capacity - The SWTU shall provide a rated hydraulic capacity, which is consistent with governing water treatment regulations. The hydraulic capacity must be supported by independent third-party review or other documentation.

Storage Capacity - The SWTU must have multiple sediment removal chambers for storage of sediments and other non-floatable pollutants. The volume of each sediment removal chamber shall be called out on the submittal drawings. The SWTU must have an oil skimmer to capture hydrocarbons. The skimmer shall be equipped with storm booms per Section DSBB2-2. The storm boom must be capable of capturing up to 180% of its weight in oils & grease along with other emulsified and free floating hydrocarbons.

Pollution Separation - The SWTU must be equipped with a screening system capable of capturing and storing solid debris such as foliage and litter in a dry state above the static water line. The debris captured by the screening system must be stored a minimum of 3.5" above the static water line. The screening system must be located directly under the systems access hatch(s) to allow easy maintenance and removal of captured debris.

### DSBB2-2 Materials

The SWTU and all of its components shall be self-contained within a concrete structure constructed with a minimum 28 day compressive strength of 4,000 psi, with reinforcing per ASTM A 615, Grade 60, and supports a minimum H-20 loading as indicated by AASHTO. All seams and connection points shall be sealed water tight with non-shrink grout in accordance with manufactures recommendations and project specifications. Access shafts shall be gasketed to create an airtight system (prevent odors from escaping).

## DSBB2-2.1 Manhole Covers and Hatches

Manhole Covers: Manhole cast iron frames and covers shall withstand AASHTO H-20 loadings and cast-iron material shall conform to ASTM A 48 Class 30.

Hatches shall be:

- A. Fabricated from aluminum 5086 H34, 6063-T5 or 6061-T6, unless otherwise indicated.
- B. Hatch hardware shall be fabricated from Type 316 stainless steel, and shall be of the gutter-type.
- C. Designed to meet H-20 loading requirements unless indicated otherwise.
- D. Unless indicated otherwise, hinges shall be located on the longer dimension side.
- E. Door leaves shall be fabricated from a minimum of 1/4-inch thick checkered-pattern plate.
- F. Channel frames shall be fabricated from a minimum 1/4-inch material with an anchor flange around the perimeter.
- G. Hatches shall be provided with an automatic hold-open arm with release handle.
- H. Hatches shall be designed for easy opening from both inside and outside.
- I. Hatches shall be designed to be water-tight and shall be equipped with a joint gutter, a moat-type edge drain, and drain piping of the length and size necessary to remove the drain water from all dry spaces accessed by the hatch.
- J. Hatches shall be Halliday, Bilco, Babcock-Davis, or approved equal.

## DSBB2-2.2 Screening System

The screening system shall meet the following:

- A. Screen Frame shall be constructed of 100% stainless steel. All joints and seams are to be welded or fastened together with stainless steel hardware. All sides of screen frame shall be fixed. The top section of the screen frame shall have one of the following, open top, hinged top section, or a track guided sliding top section per drawings. The bottom section of the basket frame shall be a minimum of 3" above static.
- B. Screens shall be manufactured of 100% louver expanded stainless steel grade 304. The screen shall be capable of capturing and retaining 100 percent of pollutants greater than or equal to 4.7 mm regardless of specific gravity for flows up to the device's rated treatment capacity. Screens shall have openings that face opposite the flow of passing stormwater to provide continuous shielding and prevent clogging.

## DSBB2-2.3 Oil Skimmer

The Oil Skimmer shall be mounted to the skimmer wall and located between the end of the screening system and the outlet pipe. Skimmer wall shall be constructed of concrete with a minimum 28 day compressive strength of 5,000 psi, with reinforcing per ASTM A 615, Grade 60. The following additional requirements apply:

- A. Oil Skimmer Cage shall be constructed of stainless steel frame with flattened expanded stainless steel. Housing shall have a hinged top section. Oil Skimmer Cage shall be secured to the skimmer wall with aluminum or stainless steel hardware.
- B. Media Filtration Boom shall be made up of granulated oil absorbing polymers that have been tested in accordance with section 11.2 of ASTM F 716.07 and held within a netting.
  - 1. Oil absorbing polymers must be proven to absorb 180% of its weight within a 300 second contact time, and at this absorption percentage the physical increase in the size of the granules is not more than 50%.
  - 2. Netting shall be 100% polyester with a number 16 sieve size, and strength tested

per ASTM D 3787.

3. Filter netting shall be 100% polyester with a number 16 sieve size, and strength tested per ASTM D 3787.

#### DSBB2-2.4 Sediment Chambers

Baffle Walls shall be constructed of concrete with a minimum 28 day compressive strength of 5,000 psi, with reinforcing per ASTM A 615, Grade 60.

Turbulence Deflectors shall be manufactured of 100% marine grade polyester resin and fiberglass strands or stainless steel and be mounted to the concrete baffles with stainless steel hardware. The turbulence deflectors should be sized to effectively eliminate scouring and re-suspension of previously captured sediments in the sediment removal chambers and creates a flow pattern that encourages suspended solids in influent flows to settle out and accumulate at the bottom of the SWTU.

The fiberglass deflectors must be coated with a polyester gel coating with ultra violet inhibitors incorporated into the coating for maximum ultra violet protection. Fiberglass must have a minimum thickness of 3/16”.

#### DSBB2-3 Manufacturer or Equal

In accordance with these specifications and the Drawings, the SWTU DSBB shall be manufactured by Contech or City approved equal.

Alternative manufacturers of the SWTU shall be vetted to confirm their suitability to provide an acceptable SWTU. At a minimum, alternative manufacturers shall have been regularly engaged in the engineering design and production of stormwater treatment systems deployed for at least five (5) years with a proven record of providing quality SWTUs as well as a history of successful production and delivery.

### SECTION 3 – EXECUTION

#### DSBB3-1 General

The installation of the SWTU shall conform to all applicable national, state, state highway, municipal and local specifications.

#### DSBB3-2 Shipping, Storage, and Handling

Shipping – SWTU shall be shipped to the Contractor’s address or job site, and shall be the responsibility of the Contractor to offload the unit(s) and place in the exact site of installation.

Storage and Handling – The Contractor shall exercise care in the storage and handling of the SWTU and all components prior to and during installation. Any repair or replacement costs associated with events occurring after delivery is accepted and unloading has commenced shall be borne by the Contractor. The SWTU(s) and all components shall always be stored indoors and transported inside the original shipping container until the unit(s) are ready to be installed. The SWTU shall always be handled with care and lifted according to OSHA and NIOSA lifting recommendations and/or contractor’s workplace safety professional recommendations.

### DSBB3-3 Installation

The Contractor shall furnish all labor, equipment, materials and incidentals required to install the (SWTU) device(s) and appurtenances in accordance with the drawings and these specifications.

Grading and Excavation site shall be properly surveyed by a registered professional surveyor, and clearly marked with excavation limits and elevations. After site is marked it is the responsibility of the contractor to contact local utility companies and/or DigAlert to check for underground utilities. All grading permits shall be approved by governing agencies before commencement of grading and excavation. Soil conditions shall be tested in accordance with the governing agencies requirements. All earth removed shall be transported, disposed, stored, and handled per governing agencies standards. It is the responsibility of the contractor to install and maintain proper erosion control measures during grading and excavation operations.

Compaction – All soil shall be compacted per registered professional soils engineer’s recommendations and per governing agencies standards, prior to installation of SWTU.

Backfill shall be placed according to a registered professional soils engineer’s recommendations and per governing agencies standards, and with a minimum of 12” of ½-inch crushed rock (or as recommended by the manufacturer) under all concrete structures.

Concrete Structures – After backfill has been inspected by the governing agency and approved the concrete structures shall be lifted and placed in proper position per plans.

### DSBB3-4 Inspection

Inspection – After installation, the contractor shall demonstrate that the SWTU has been properly installed at the correct location(s), elevations, and with appropriate components. All components associated with the SWTU and its installation shall be subject to inspection by the engineer at the place of installation. In addition, the contractor shall demonstrate that the SWTU has been installed per the manufacturer’s specifications and recommendations.

### DSBB3-5 Payment

Payment for the SWTU DSBB shall be made at the Lump Sum Bid Price for “HDS and Diversion/Connection Structures (1<sup>st</sup> Street)” and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals involving excavation, backfill, grading, compaction, aggregate base, removal of interfering portions of pipe, sealant, export, and other appurtenances as required to implement the system as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor. The Bid Item shall include the Precast Diversion System as defined in Section PDS and piping between the diversion boxes and treatment system. Sheeting, shoring, and bracing will be paid separately, as indicated in Section 5-7.2.3. Surface restoration of planters, landscape, irrigation, bricks, ornamental paving, etc. will be paid for separately, as indicated in Section 401-7.

**HIGH FLOW OFFLINE STORMWATER TREATMENT UNIT (HDS)**

## SECTION 1 – GENERAL

## HDS1-1 Description

The Contractor shall install a precast storm water treatment unit(s) (SWTU) in accordance with the notes and details shown on the Drawings and in conformance with these Specifications. The precast SWTU shall be a hydrodynamic separator (HDS), to be installed at five sites with various treatment flow capacities as shown in the table below.

Table 1. SWTU Site Information

Site Name	Model (Contech or Approved Equal)	Design/Bypass Flow (cfs)	Screen System Storage Capacity (cubic feet)	Sediment Storage Capacity (cubic feet)
14 <sup>th</sup> Street	JDS72-3630	2.4/13.7	63	185.0
24 <sup>th</sup> Street	JDS72-3642	3.8/15.0	63	237.9
27 <sup>th</sup> Street	JDS72-3636	3.0/27.0	63	211.4
32 <sup>nd</sup> Street	JDS120-6748	9.0/51.9	157	770.7
39 <sup>th</sup> Street	JDS96-4848	6.0/11.4	125	530.7

The SWTU HDS shall be non-mechanical and gravity driven, requiring no external power. The SWTU shall come equipped with a stainless steel expanded metal screen cylinder assembly having openings of 2400-micron. The separation screen cylinder assembly shall be self-cleaning and non-blocking for all flows diverted to it, even when flows within the pipe exceed the SWTU's treatment flow capacity listed above.

The Contractor shall furnish all labor, equipment, and materials necessary to install the SWTU along with any required appurtenances. The SWTU shall be a precast underground structure capable of achieving the treatment and hydraulic performance and materials requirements of these Specifications.

The Contractor must have approval of the product before the SWTU can be installed.

## HDS1-2 Related Work Specified Elsewhere

The Greenbook 2021 Edition shall apply to the entirety of the Work and installation of SWTU HDS, along with related Special Provisions.

## HDS1-3 Submittals

The following submittal requirements apply (in accordance with Section 3-8):

- A. Shop Drawings & Catalog Cut Sheets Details: The Contractor shall submit shop drawings for approval by the Engineer. Shop drawings shall be annotated to indicate all materials to be used and all applicable standards for materials, required tests of materials and design assumptions for structural analysis. The shop drawings shall detail horizontal and vertical dimensioning, reinforcement, and pipe type and locations. Supporting Catalog Cut Sheets of associated components and appurtenances shall also be included in the submittal packet substantiating materials and dimensions.
- B. Warranty: The manufacturer shall guarantee the SWTU(s) components against all manufacturer originated defects in materials or workmanship for a period of twelve (12)

months from the date of installation. The manufacturer shall be notified of repair/replacement issues in writing within the referenced warranty period. The manufacturer shall, upon its determination: repair, correct or replace any manufacturer originated defects identified by the written notice within the referenced warranty period. The use of SWTU components shall be limited to the application for which it was specifically designed.

- C. Manufacturer's Performance Certificate: The SWTU manufacturer shall submit a "Manufacturer's Performance Certification" certifying that each SWTU is capable of achieving the specified removal efficiencies as listed in these specifications and meets the State Water Resources Control Board requirements as a certified full capture system. Independent third-party research of the continuous deflective treatment process shall be included in the submittal, as available.

## SECTION 2 – MATERIALS

### HDS2-1 Performance

The following performance requirements shall be met:

- A. Solid Removal Efficiencies (RE%)
1. The SWTU shall be capable of achieving an 80 percent average annual reduction in the total suspended solids (TSS).
  2. The SWTU shall be capable of capturing and retaining 100 percent (%) of pollutants greater than or equal to ( $\geq$ ) 4.7-millimeters (mm) regardless of the specific gravity of the pollutant, whether the pollutant is a floatable or neutrally buoyant for flows up to the SWTU's water quality design treatment flow rate capacity.
  3. There shall be no flow conditions up to the minimum treatment flow capacity in which a flow path through the SWTU that can be identified that allows the passage of a 4.7-mm or larger neutrally buoyant object. The SWTU must have a non-blocking screening process.
  4. The SWTU shall be designed to retain all previously captured pollutants even during bypass flow conditions.
  5. At the SWTU's treatment capacity listed above in these specs, SWTU device shall be capable of achieving greater than 65% removal efficiency (RE%) of particles typically found in roadside sediments. This RE% shall be supported by independent third-party research (or other documentation).
  6. The SWTU shall be capable of capturing and retaining total petroleum hydrocarbons (TPH). The SWTU shall be capable of achieving a RE% of 92% and 78% when hydraulically loaded at 25% and 50% percent of its rated-treatment capacity. These RE% shall be based on independent third-party research (or other documentation) for influent oil concentrations representative of stormwater runoff ( $20 \pm 5$  mg/L). The SWTU shall be greater than 99% effective in controlling oil spills during dry-weather.

The SWTU shall be capable of utilizing sorbent media to enhance removal and retention of petroleum based pollutants.

- B. Treatment Sizing Criteria: The treatment sizing mythology and design criteria for this SWTU conforms to the following:
1. The specified SWTU, is a swirl concentrating non-blocking screening hydrodynamic separator designed in accordance with governing tenants of the continuous deflective separation treatment process for the full treatment of the runoff rate at a loading rate not to exceed the critical flow in the inlet, in order to achieve 80% TSS removal efficiency. (80% TSS removal based on an average particles size of  $D_{50}=63$ -microns ( $-\mu\text{m}$ )).

2. This hydrodynamic, vortex type separation system has been designed so the surface hydraulic loading rate in the plan view of the separation chamber does not exceed 24-gpm/ft<sup>2</sup>, at any time of operation up to the SWTU's treatment flow rate.
- C. Consideration of Alternative SWTUs: Alternative SWTU may be considered and must be approved before implementation. At a minimum, alternative SWTU system shall have treatment sizing mythology and design criteria that conform with these entire specifications to include the following:
  1. Alternative Gravity based separation systems based on "Stokes Law" for gravity settling of particles shall not have a surface hydraulic loading rate in their primary sedimentation chamber that exceeds 6-gpm/ft<sup>2</sup>, at the peak of the treatment flow rate. Solids RE% claims of 80% TSS removal based on an average particles size of D50=63- $\mu$ m when the unit has a surface hydraulic loading rate, in the plan view, in excess of 6-gpm/ft<sup>2</sup> will not be accepted.

These gravity units shall not exceed laminar flow condition parameters in their primary treatment chamber. Additionally, they will be designed to include a bypass system to prevent turbulence from occurring in their primary treatment, sedimentation chamber.

2. The performance of alternative treatment processes shall have been evaluated by a third party and verified in a program that allows a reasonable comparison to other technologies on an essentially equal particle size distribution (PSD) basis (or through alternative documentation).

Solids RE% performance should be third party verified, and removal efficiencies across the spectrum of particle sizes reported, at a range of hydraulic loading rates varying over a range of at least 25 to 125% of the manufacturer's advertised 'water treatment' loading rate.

D. Hydraulic Treatment and Bypass Capacity

1. The SWTUs shall have rated-treatment capacities as stated in Table 1 before bypass flow is allowed.
2. The SWTU shall maintain the peak conveyance capacity of the drainage network as defined by the Engineer (included in the table above).

E. Solids and Oil Storage Capacity

1. The SWTU shall be designed with a sump chamber for the storage of captured sediments and other negatively buoyant pollutants in between maintenance cycles. The minimum storage capacity provided by the sump chamber shall be as stated in Table 1 for each site.

The sump chamber shall be separate from the treatment processing portion of the SWTU to minimize any possible re-suspension of fine particles.

2. The SWTUs shall have an oil storage capacity as stated in Table 1 for retention of oil and fuel spills during dry-weather.

## HDS2-2 Materials

### HDS2-2.1 Precast Concrete Components

Precast concrete components shall conform to applicable sections of ASTM C 478, ASTM C 857 and ASTM C 858 and the following:

- A. Concrete shall achieve a minimum 28-day compressive strength of 4,000 pounds per square-inch (psi);
- B. Unless otherwise noted, the precast concrete sections shall be designed to withstand lateral

- earth and AASHTO H-20 traffic loads;
- C. Cement shall conform to ASTM C 150;
- D. Aggregates shall conform to ASTM C 33;
- E. Reinforcing steel shall be deformed billet-steel bars, welded steel wire or deformed welded steel wire conforming to ASTM A 615, A 706, A 185 or A 497; and
- F. Joints shall be sealed with preformed joint sealing compound conforming to ASTM C 990.

#### HDS2-2.2 Internal Components and Appurtenances

Internal Components and Appurtenances shall conform to the following:

- A. Screen and support structure shall be manufactured of Type 316 and 316L stainless steel;
- B. Connection hardware shall be manufactured of Type 316 stainless steel;
- C. Inlet Weir shall be manufactured from stainless steel 316 ; and
- D. Access system(s) shall conform to the following:
  - 1. Manhole cast iron frames and covers shall withstand AASHTO H-20 loadings and cast-iron material shall conform to ASTM A 48 Class 30.
  - 2. Hatch systems shall be designed to withstand the site loading conditions, and shall be manufactured from aluminum and must be approved before implementation.
  - 3. Grating shall be stainless steel 316 and shall withstand AASHTO H-20 loadings.

#### HDS2-3 Manufacturer or Equal

In accordance with these specifications and the Drawings, the SWTU HDS shall be manufactured by Jensen or City approved equal.

Alternative manufacturers of the SWTU shall be vetted to confirm their suitability to provide an acceptable SWTU. At a minimum, alternative manufacturers shall have been regularly engaged in the engineering design and production of stormwater treatment systems deployed for at least five (5) years with a proven record of providing quality SWTUs as well as a history of successful production and delivery.

Alternative manufacturers' Full Capture certifications shall also be supported by independently verified Scour testing confirming that previously capture trash and debris will not be washed out of the unit, burped out during high flow conditions or when the unit is completely full of trash and debris.

### SECTION 3 – EXECUTION

#### HDS3-1 Handling and Storage

The Contractor shall exercise care in the handling and storage of the SWTU components upon receipt prior to and during installation. Any repair or replacement costs associated with events occurring after delivery is accepted and unloading has commenced shall be the responsibility of the Contractor.

#### HDS3-2 Installation

The SWTU shall be installed in accordance with the manufacturer's recommendations, these specifications and per the drawings. The manufacturer shall provide the Contractor installation instructions and offer guidance during critical stages of the installation. Reasonable notice shall be provided to the manufacturer prior to installation to coordinate onsite guidance.

The Contractor shall grout fill all voids in the precast concrete that are associated with lifting connection pockets in the concrete sections. Use non-shrink grout to fill pockets and strike flush with adjacent finished surfaces. The Contractor shall trim all protruding lifting provisions flush with the adjacent concrete surface in a leaving no sharp points or edges.

Inspection: All components shall be subject to inspection by the Engineer at the place of manufacture and/or installation. All components are subject to be rejected or identified for repair if the quality of materials and manufacturing do not comply with the requirements of this specification. Components which have been identified as defective may be subject for repair. Final acceptance of the component is at the discretion of the Engineer.

### HDS3-3 Payment

Payment for the SWTU HDS shall be made at the Lump Sum Bid Price for:

- “HDS and Diversion/Catch Basin Structure (14<sup>th</sup> Street)”
- “HDS and Diversion Structure (24<sup>th</sup> Street)”
- “HDS and Diversion/Catch Basin Structure (27<sup>th</sup> Street)”
- “HDS and Diversion Structure (32<sup>nd</sup> Street)”
- “HDS and Diversion Structure (39<sup>th</sup> Street)”

The Bid Items listed above shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals involving excavation, backfill, grading, compaction, aggregate base, removal of interfering portions of pipe, sealant, export, and other appurtenances as required to implement the system as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor. The Bid Item shall include the Precast Diversion System (with weir) as defined in Section PDS and piping between the diversion boxes and treatment systems (as applicable). The Bid Item shall also include catch basin tops, grates, local depression, and neighboring curb/gutter as necessary (different for each location). It is recommended that the Contractor visit each site prior to submitting the Bid, as surface conditions may vary from site to site. The Bid Items also include related coordination, submittals, and other actions needed to implement the proposed improvements. Sheet piling, shoring, and bracing will be paid separately, as indicated in Section 5-7.2.3. Surface restoration of planters, landscape, irrigation, bricks, ornamental paving, etc. will be paid for separately, as indicated in Section 401-7.

## **CATCH BASIN TRASH CAPTURE SYSTEM/CATCH BASIN INSERT (CBI)**

### SECTION 1 – GENERAL

#### CBI1-1 Description

The purpose of this Specification section is to establish generally acceptable criteria for devices manufactured to remove pollution from stormwater within a catch basin.

California passed a law in 2017 called the Trash Amendments. The State of California State Water Resources Control Board (SWRCB) requires that all catch basin inserts inserted into California storm drains must be certified as full trash capture and be certified vector control accessible by the Mosquito Vector Control Association of California (MVCAC). The Contractor shall only use components that are certified full trash capture and vector control accessible by the SWRCB and MVCAC. To comply with the law, the catch basin insert must be on the State Water Resources Control Board certified full capture system list of trash treatment control devices.

A Catch Basin Insert (CBI) is a certified manufactured device that filters target pollutants from stormwater runoff within a catch basin. The CBI may include a Filter Frame, an overflow bypass, and a Filter Element designed to remove target pollutant(s) through screening, separation, or Filtration Media. A Drop Inlet Filter is a CBI that fits within a round, square, or rectangular drop inlet type or a combination drop inlet type catch basin. A Curb Inlet Filter is a CBI that fits within a curb inlet type catch basin. The CBI shall be a SWRCB certified device that removes sediment, trash, microplastic, hydrocarbons, from dry-weather and wet-weather runoff entering the project catch basins.

The Plans show several different types of catch basin inserts, including channel filter systems, Connector Pipe Screens (CPS), curb inlet filter baskets, and inlet filter inserts. The Contractor shall confirm the feasibility of the specified full capture system based on field conditions. In the case that the specified full capture system is not feasible, alternatives shall be proposed that meet the Project intent (to meet trash reduction requirements).

#### CBI1-2 Related Work Specified Elsewhere

The Greenbook 2021 Edition shall apply to the entirety of the Work and installation of CBIs, along with related Special Provisions.

#### CBI1-3 Submittals

The following submittal requirements apply (in accordance with Section 3-8):

- A. Submittal Drawings: The Contractor shall submit submittal drawings for approval by the Engineer. Submittal drawings shall be annotated to indicate all materials to be used and all applicable standards for materials, components, and dimensions. Supporting Catalog Cut Sheets of associated components and appurtenances shall also be included in the submittal packet substantiating materials and dimensions.
- B. Additional Documentation: The Contractor shall submit installation, maintenance, and operating manuals for each CBI.
- C. Warranty: The manufacturer shall guarantee the CBI components against all manufacturer originated defects in materials or workmanship for a period of three (3) years from the date of installation. The manufacturer shall be notified of repair/replacement issues in writing within the referenced warranty period. The manufacturer shall, upon its determination: repair, correct or replace any manufacturer originated defects identified by the written notice

within the referenced warranty period. The use of CBI components shall be limited to the application for which it was specifically designed.

## SECTION 2 – MATERIALS

### CBI2-1 Materials

CBIs shall include all related components necessary to function as intended and as approved by the State Water Resources Control Board. Materials shall include filter frames, filter elements, filter media, etc., such that the system can be installed correctly. In cases where there are alternative products or methods of trash capture are available, then the Contractor shall work with the Manufacturer to provide guidance to the City to correctly chose the size and model of the CBI. The Contractor/Manufacturer shall provide guidance related to the type of filter/media used. The Contractor shall review each site in advance to confirm the feasibility of different types of CBIs. It is possible that custom CBIs will be required in some locations.

CBI components shall be stainless steel, specifically the CPS, filter frames, etc. Framing components shall not contain plastic. Filter components shall be insertable and removable. Filters/screens shall be capable of capturing trash, microplastics, sediment, debris, and other pollutants conveyed in stormwater or dry-weather runoff. Filter elements (excluding the CPS) shall be made of a propylene or polypropylene fabric to make them durable, feasible, adjustable, recyclable, and able to filter pollutants from water.

### CBI2-2 Performance

CBIs shall be positioned such that stormwater runoff will be forced through them and unable to bypass trash/debris. CBIs shall function by gravity and shall not require any mechanical components for operation. Filter elements shall have backflow prevention, such that previously captured trash is retained and unable to be released. In some locations, multiple devices may be required due to the catch basin configuration (specifically for the channel filter systems). CBIs must be capable of retaining 100% trash and debris (5 mm particle or larger).

### CBI2-3 Manufacturer or Equal

In accordance with these specifications and the Drawings, the CBIs shall be manufactured by Frog Creek Partners (Gutter Bin Curb Inlet Filter Baskets and Channel Filter Systems), G2 Construction Inc. (CPS-Mod Series), United Stormwater (CPS), Old Castle (Inlet Filter Insert), or City approved equal.

Alternative manufacturers of CBIs shall be vetted to confirm their suitability to provide an acceptable CBI. At a minimum, alternative manufacturers shall have been regularly engaged in the engineering design and production of stormwater treatment systems deployed for at least five (5) years with a proven record of providing quality SWTUs as well as a history of successful production and delivery. Systems shall also be listed on the State Water Resources Control Board's list of certified full capture systems.

## SECTION 3 – EXECUTION

### CBI3-1 Installation

The Contractor shall follow manufacturer's written instructions for the installation of CBIs. Catch basins proposed to have inserts shall be field reviewed by the Contractor in advance of installation to confirm the configuration and sizing. CBIs shall not obstruct flows. Filter baskets/inserts shall

not block the outlet pipe or conveyance in a way that can be harmful during larger flow events.

### CBI3-2 Inspection

After installation, the Contractor shall demonstrate that the CBI was installed at the correct location(s), elevations, and with appropriate supports and fasteners. All components associated with the CBI and its installation shall be subject to inspection by the Engineer, City, and the Manufacturer at the place of installation. The Contractor shall coordinate inspections with the listed parties simultaneously (all shall be present at the same time) and the City and/or their representative will be responsible for final acceptance. In addition, the Contractor shall demonstrate that the CBI was installed per the Manufacturer's specifications and recommendations.

### CBI3-3 Payment

Payment for the CBIs shall be made at the Contract Unit Price for Each:

- "Channel Filter System"
- "Connector Pipe Screen (CPS)"
- "Curb Inlet Filter Basket"
- "Inlet Filter Insert"

The Bid Items listed above shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals involving site review, submittals, component placement/installation, coordination, and other appurtenances as required to implement the systems as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefor. The design team took into consideration the type of inlet and sizing (as available) to identify the proposed improvements, while verifications must be made in the field. If standard components are restricted, the Contractor shall work with the Manufacturer for a custom solution, which shall be included in the unit price presented in the bid. The Channel Filter System is identified at several locations, while the bid quantity is greater than the number of locations, as multiple filters are expected at each site based on the drainage system configuration. Payment for the items above shall also include updated catch basin stenciling about drainage to the ocean if the existing stencil is deteriorated or difficult to read. The City will confirm during construction as to whether or not the stencil shall be re-painted.

**APPENDIX I  
PROGRESS PAYMENT REQUEST FORM**

TO: CITY OF MANHATTAN BEACH  
 Engineering Division, 1400 Highland Avenue, Manhattan Beach, CA 90266  
 PROJECT TITLE \_\_\_\_\_  
 PROJECT NO. \_\_\_\_\_

FROM: CONTRACTOR \_\_\_\_\_ Date \_\_\_\_\_  
 Address \_\_\_\_\_  
 Telephone \_\_\_\_\_ Progress Estimate # \_\_\_\_\_  
 Submitted by \_\_\_\_\_ 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.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
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 III  
APPLICABLE STANDARD PLANS (CITY AND OTHER)**

**City Standard Plans are available here:**

**<https://www.manhattanbeach.gov/departments/public-works/engineering-division/consultants>**

**Referenced SPPWC Standard Plans are included in the Contract Plans.**

**APPENDIX IV  
GEOTECHNICAL OR OTHER REPORTS**



# Geotechnical Engineering Report

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**Manhattan Beach SMB TMDL HFCTTCD Design  
Manhattan Beach, California**

July 20, 2022

Terracon Project No. 60215261

**Prepared for:**



Fullerton, California

**Prepared by:**

Terracon Consultants, Inc.  
Carson, California



July 20, 2022



1561 E. Orangethorpe Avenue, Suite 240  
Fullerton, California 92831



Attn: Ms. Katie Harrel  
P: (714) 732-8180  
E: kharrel@cwecorp.com

Re: Geotechnical Engineering Report  
Manhattan Beach SMB TMDL HFCTTCD Design  
Various Locations Adjacent to The Strand  
Manhattan Beach, California  
Terracon Project No. 60215261

Dear Ms. Harrel:

We have completed the Geotechnical Engineering services for the above referenced project. This study was performed in general accordance with CWE Work Order No. 21437W06ss dated May 25, 2022. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

**Terracon Consultants, Inc.**

A handwritten signature in blue ink that reads 'Victor V. Nguyen'.

Victor V. Nguyen, E.I.T.  
Senior Staff Engineer

Keith P. Askew, P.E., G.E.  
Geotechnical Department Manager

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Note: This report was originally delivered in a web-based format. **Orange Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the [GeoReport](#) logo will bring you back to this page. For more interactive features, please view your project online at [client.terracon.com](http://client.terracon.com).

## ATTACHMENTS

- EXPLORATION AND TESTING PROCEDURES**
- SITE LOCATION AND EXPLORATION PLANS**
- EXPLORATION RESULTS**
- SUPPORTING INFORMATION**

**Geotechnical Engineering Report**  
**Manhattan Beach SMB TMDL HFCTTCD Design**  
**Various Locations Adjacent to The Strand**  
**Manhattan Beach, California**  
**Terracon Project No. 60215261**  
**July 20, 2022**

## INTRODUCTION

This report presents the results of our subsurface exploration and geotechnical engineering services performed for the proposed high flow capacity trash treatment control devices (HFCTTCD) to be located at various locations adjacent to The Strand in Manhattan Beach, California. The purpose of these services is to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Lateral earth pressures and temporary shoring
- Foundation design and construction
- Site preparation and earthwork

The geotechnical engineering Scope of Services for this project included the advancement of seven borings to an approximate depth of 26½ feet below existing site grades (bgs). The depth and approximate locations of the borings were provided by CWE. After completion of subsurface exploration, Terracon was informed that one of the proposed trash treatment control devices will have an excavation bottom of approximately 30 feet bgs. Such depth is beyond the depth of exploration conducted by Terracon. As such, caution should be exercised when applying design parameters to this depth. Terracon should be contacted if conditions encountered at this depth differs from conditions described in our report as our recommendations may need to be revised.

Our scope also included laboratory testing, and the preparation of this report.

Maps showing the site and boring locations are shown in the **Site Location** and **Exploration Plan** sections, respectively. The results of the laboratory testing performed on soil samples obtained from the site during the field exploration are included on the boring logs and as separate graphs in the **Exploration Results** section.

## SITE CONDITIONS

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

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Item	Description
<b>Parcel Information</b>	<p>The project is located at various locations adjacent to The Strand in Manhattan Beach, California.</p> <p>Adjacent cross streets to the boring/trash treatment control device locations are as follows:</p> <ul style="list-style-type: none"> <li>■ B-1 – Ocean Drive and 1st Street</li> <li>■ B-2 – Ocean Drive and 14th Street</li> <li>■ B-3 – The Strand and 24th Street</li> <li>■ B-4 – The Strand and 27th Street</li> <li>■ B-5 – The Strand and 32nd Street</li> <li>■ B-6 – The Strand and 39th Street</li> <li>■ B-7 – The Strand and 43rd Street</li> </ul>
<b>Existing Improvements</b>	Existing improvements consist of asphalt/concrete paved parking and drive areas and concrete paved pedestrian pathways
<b>Current Ground Cover</b>	Concrete and asphalt concrete
<b>Existing Topography</b> (from Google Earth and Available Topographic Maps)	The sites are relatively flat with approximate elevations ranging from 30 to 50 feet.

## PROJECT DESCRIPTION

Item	Description
<b>Proposed Structures</b>	The project will include construction of high flow capacity trash treatment control devices. The devices will consist of precast concrete vaults with the majority between approximate diameters of 8 to 10 feet, and one with an approximate diameter of 20 feet.
<b>Grading/Excavations</b>	<p>Grading to anticipated to consist of remedial grading for support of the proposed concrete vaults.</p> <p>Based on correspondence with the client, we anticipate that excavations will be on the order of 20 to 30 feet bgs.</p>
<b>Pavements</b>	Based on correspondence with the client, we understand that pavements, where removed for construction of the proposed devices will be replaced to match existing pavement sections.

## GEOTECHNICAL CHARACTERIZATION

We have developed a general characterization of the subsurface soil and groundwater conditions based upon our review of the data and our understanding of the geologic setting and planned construction.

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The geotechnical characterization forms the basis of our geotechnical calculations and evaluation of site preparation and foundation options. As noted in **General Comments**, the characterization is based upon widely spaced exploration points across the site, and variations are likely.

Surface cover (pavement) generally consisted of a 3- to 4-inch- thick layer of asphalt concrete overlying a 5 to 6-inch-thick layer of concrete, or a 5- to 7-inch-thick layer of concrete overlying no base with the exception of B-4 where a 4-inch-thick layer of aggregate base course was encountered beneath the concrete.

Subsurface soils at the site generally consisted of loose to dense sand with varying amounts of silt. A very dense poorly graded sand with silt layer was encountered in boring B-5 at an approximate depth of 25 feet bgs.

After completion of subsurface exploration, Terracon was informed that one of the proposed trash treatment control devices will have an excavation bottom of approximately 30 feet bgs. Such depth is beyond the depth of exploration conducted by Terracon. As such, caution should be exercised when applying design parameters to this depth. Terracon should be contacted if conditions encountered at this depth differs from conditions described in our report as our recommendations may need to be revised.

Conditions encountered at each boring location are indicated on the individual boring logs shown in the **Exploration Results** section and are attached to this report. Stratification boundaries on the boring logs represent the approximate location of changes in native soil types; in situ, the transition between materials may be gradual.

**Lab Results**

Laboratory tests were conducted on selected soil samples and the test results are presented in the **Exploration Results** section and on the boring logs. Direct shear and collapse testing conducted on samples retrieved from various depths within the borings are summarized in the following tables.

Direct Shear Test Results				
Boring	Sample Depth (ft)	Soil Description	Friction Angle	Cohesion (psf)
B-2	5	Silty sand	30	0
B-3	20	Silty sand	27	160
B-4	20	Poorly graded sand with silt	27	170
B-5	10	Silt with sand	20	440
B-6	10	Silty sand	24	150
B-7	20	Poorly graded sand with silt	30	0

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Collapse Potential Test Results			
Boring	Sample Depth (ft)	Soil Description	Approximate Collapse Potential (Percent) <sup>1, 2</sup>
B-1	20	Silty sand	Slight (1.2)
	25	Silty sand	Slight (0.5)
B-2	20	Silty sand	Slight (0.5)
	25	Silty sand	Moderate (2.7)
	25 (Retest)	Silty sand	Moderate (2.3)
B-3	20	Silty sand	Slight (0.9)
	25	Silty sand	Slight (0.8)
B-4	20	Poorly graded sand with silt	Moderate (2.5)
B-4	25	Poorly graded sand with silt	Slight (0.9)
B-5	20	Poorly graded sand with silt	Slight (1.9)
	25	Poorly graded sand with silt	Slight (1.5)
B-6	20	Silty sand	Slight (0.3)
	25	Silty sand	Slight (0.9)
B-7	20	Poorly graded sand	Slight (0.4)
	25	Poorly graded sand	Slight (0.6)

1. Severity of collapse based on the Naval Facilities Engineering Command (NAVFAC) Design Manual.  
2. Samples were saturated under normal footing loads of 2,000 psf during collapse determination.

**Groundwater Conditions**

Groundwater was not observed in the borings while drilling, or for the short duration the boring remained open. These observations represent groundwater conditions at the time of the field exploration and may not be indicative of other times, or at other locations.

According to historic groundwater data collected from the Los Angeles County Public Works Water Data Library, historic groundwater measured from year 2000 varied from 65 to 108 feet bgs at the locations of the wells measured. Based on the elevations of the wells, the groundwater elevations (at the points measured) varied from 8 to 16.5 feet. We estimate the surface elevation where our borings were drilled are on the order of 30 to 50 feet based on available topographic maps, and Google Earth.

The locations of the wells are provided in the table below and are located generally ¼ to 1 mile further inland than the proposed trash treatment control device locations. Groundwater elevations at the area of the trash treatment control devices may be shallower than the depths provided in the following table given their proximity to the Pacific Ocean.

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Boring	Nearest Cross Streets	Well Number	Well Reference Point Elevation (feet)	Historic Groundwater Depth Measured from Year 2000 (feet, bgs)	Year Recorded	Approximate Distance from Well to Boring (mi)
B-1	Ocean Drive and 1st Street	692K	73	65	2007	0.24 SE
B-2	Ocean Drive and 14th Street	691U	82.7	77	2001	0.20 E
B-3	The Strand and 24th Street	691BB	124.5	108	2001	0.47 SE
B-4	The Strand and 27th Street	690C	93.6	83	2001	0.48 NE
B-5	The Strand and 32nd Street	690C	93.6	83	2001	0.54 SE
B-6	The Strand and 39th Street	690C	93.6	83	2001	0.76 SE
B-7	The Strand and 43rd Street	690C	93.6	83	2001	0.90 SE

Groundwater level fluctuations occur due to seasonal variations in the amount of rainfall, runoff and other factors not evident at the time the borings were performed. Therefore, groundwater levels during construction or at other times in the life of the structure may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

## SEISMIC CONSIDERATIONS

The 2019 California Building Code (CBC) Seismic Design Parameters have been generated using the SEAOC/OSHPD Seismic Design Maps Tool. This web-based software application calculates seismic design parameters in accordance with ASCE 7-16 and 2019 CBC. The 2019 CBC requires that a site-specific ground motion study be performed in accordance with Section 11.4.8 of ASCE 7-16 for Site Class D sites with a mapped  $S_1$  value greater than or equal 0.2.

However, Section 11.4.8 of ASCE 7-16 includes an exception from such analysis for specific structures on Site Class D sites. The commentary for Section 11 of ASCE 7-16 (Page 534 of Section C11 of ASCE 7-16) states that "In general, this exception effectively limits the requirements for site-specific hazard analysis to very tall and or flexible structures at Site Class

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D sites.” Based on our understanding of the proposed structures, it is our assumption that the exception in Section 11.4.8 applies to the proposed structures for this project. However, the structural engineer should verify the applicability of this exception.

Based on this exception, the spectral response accelerations were calculated using the site coefficients ( $F_a$  and  $F_v$ ) from Tables 1613.2.3(1) and 1613.2.3(2) presented in Section 16.4.4 of the 2019 CBC. Seismic design and faulting parameters were summarized at each boring location and presented in the **Supporting Information** section of this report.

Typically, a site-specific ground motion study may generate less conservative coefficients and acceleration values which may reduce construction costs. We recommend consulting with a structural engineer to evaluate the need for such study and its potential impact on construction costs. Terracon should be contacted if a site-specific ground motion study is desired.

## LIQUEFACTION

Liquefaction is a mode of ground failure that results from the generation of high pore water pressures during earthquake ground shaking, causing loss of shear strength. Liquefaction is typically a hazard where loose sandy soils exist below groundwater. The California Geological Survey (CGS) has designated certain areas as potential liquefaction hazard zones. These are areas considered at a risk of liquefaction-related ground failure during a seismic event, based upon mapped surficial deposits and the presence of a relatively shallow water table.

The project sites are located in/adjacent to a liquefaction hazard zone as designated by the California Geologic Survey (CGS). However, the proposed improvements are considered non-human occupancy structures and it is our understanding that assessment of liquefaction and associated hazards are not required. Terracon should be notified if liquefaction and related seismic hazards should be assessed.

## CORROSIVITY

The results of laboratory sulfides, soluble sulfate, soluble chloride, electrical resistivity, redox potential, total salts, and pH testing are presented in our appendix within the **Exploration Results** section. The values may be used to estimate potential corrosive characteristics of the on-site soils with respect to contact with the various underground materials which will be used for project construction.

Results of soluble sulfate testing indicate samples of the on-site soils tested possess negligible sulfate concentrations when classified in accordance with Table 19.3.1.1 of the ACI Design Manual. Concrete should be designed in accordance with the exposure class S0 provisions of the ACI Design Manual, Section 318, Chapter 19.

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**GEOTECHNICAL OVERVIEW**

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in the test borings, provided that the recommendations provided in this report are implemented in the design and construction phases of this project.

The proposed trash treatment control devices may be supported on 12 inches of moisture conditioned and properly compacted Class II aggregate base. Subgrade soils beneath the bottom of the aggregate base layer should be overexcavated to a minimum depth of 1 foot below the bottom of the aggregate base layer, moisture conditioned, and properly placed as compacted engineered fill. Moisture conditioning and compaction of aggregate base and subgrade should be conducted in accordance to the **Fill Materials and Placement** section of this report.

Laboratory hydro-collapse testing resulted in 0.4% to 2.5% collapse for the samples tested and at the loading they were subjected to. Per NAVFAC, this correlates to a slight to moderate severity of collapse. Provided the subgrade soils beneath bottom of the proposed trash treatment control devices are prepared as recommended in this report, hydro-collapse of the subsurface soils are not a significant design concern for the project.

Historic groundwater depths are likely greater than the depths proposed for the structures. Additionally, groundwater wasn't encountered in the borings drilled for this study; however, depending upon depth of excavation and seasonal conditions, groundwater may be encountered in excavations on the site. Pumping from sumps may be utilized to control water within excavations. Well points may be required for significant groundwater flow, or where excavations penetrate groundwater to a significant depth. Excavation contractors are responsible for dewatering the planned temporary excavations.

Based on the findings summarized in this report, it is our professional opinion that the proposed construction will not be subjected to a significant hazard from settlement, slippage, or landslide, provided the recommendations of our report are incorporated into the proposed construction. It is also our opinion that the proposed construction will not adversely affect the geologic stability of the site or adjacent properties provided the recommendations contained in our report are incorporated into the proposed construction.

The recommendations contained in this report are based upon the results of field and laboratory testing (presented in the **Exploration Results** section), engineering analyses, and our current understanding of the proposed project.

The **General Comments** section provides an understanding of the report limitations.

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## EARTHWORK

The following recommendations include site preparation, excavation, subgrade preparation and placement of engineered fills on the project. The recommendations presented for design and construction of earth supported elements such as foundations are contingent upon following the recommendations outlined in this section.

Earthwork on the project should be observed and evaluated by Terracon. The evaluation of earthwork should include observation and testing of engineered fill, subgrade preparation, foundation bearing soils, and other geotechnical conditions exposed during the construction of the project.

### Site Preparation

Strip and remove existing debris, pavements, and other deleterious materials from new construction areas. Exposed surfaces should be free of mounds and depressions which could prevent uniform compaction. Areas to receive fill soils should be initially graded to create a relatively level surface to receive fill and provide for a relatively uniform thickness of fill beneath proposed improvements.

Although no evidence of fills or underground facilities such as septic tanks, cesspools, basements, and utilities was observed during the site reconnaissance, such features could be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

### Subgrade Preparation

The proposed trash treatment control devices may be supported on 12 inches of moisture conditioned properly compacted Class II aggregate base. Subgrade soils beneath the bottom of the aggregate base layer should be overexcavated to a minimum depth of 1 foot below the bottom of the aggregate base layer moisture conditioned, and properly placed as compacted engineered fill. Moisture conditioning and compaction of aggregate base and subgrade should be conducted in accordance to the **Fill Materials and Placement** section of this report.

Exposed areas which will receive fill, once properly cleared and benched where necessary, should be scarified to a minimum depth of 10 inches, moisture conditioned, and compacted per the compaction requirements in this report.

Based upon the subsurface conditions determined from the geotechnical exploration, subgrade soils exposed during construction are anticipated to be relatively workable. However, the workability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unworkable conditions develop, workability may be improved by scarifying and drying.

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**Excavation**

We anticipate that excavations for the proposed construction can be accomplished with conventional earthmoving equipment. The bottom of excavations should be thoroughly cleaned of loose soils and disturbed materials prior to backfill placement and/or construction.

According to review of historic groundwater data collected from the Los Angeles County Public Works Water Data Library, historic groundwater elevations indicate that groundwater is likely greater than the depths proposed for the structures. Additionally, groundwater wasn't encountered in the borings drilled for this study; however, depending upon depth of excavation and seasonal conditions, groundwater may be encountered in excavations on the site. Pumping from sumps may be utilized to control water within excavations. Well points may be required for significant groundwater flow, or where excavations penetrate groundwater to a significant depth. Excavation contractors are responsible for dewatering the planned temporary excavations.

Due to the presence of nearby structures, care should be taken in determining any dewatering procedures. Lowering groundwater beneath nearby structures may cause unwanted settlements. However, while locating recharge points close to the excavation may maintain groundwater levels beneath surrounding structures, groundwater levels may rise surrounding the excavation. Additional hydrostatic loads should be accounted for in the design of shoring with adjacent recharge points.

Onsite soils consist of cohesionless sandy soils. Such soils have the tendency to cave and slough during excavations.

We recommend that the excavations for the proposed trash treatment control devices be over-excavated in plan area to provide adequate access around the excavation for trash treatment control device construction. The walls of the proposed excavation should be shored or sloped in conformance with OSHA excavation and trench safety standards. Excavations extending to a depth of more than 20 feet will have to have the side slopes designed by a professional engineer; however, as each site has space restrictions horizontally, we anticipate shoring will be used to stabilize the excavations at each of the locations.

Soils from the excavation should not be stockpiled higher than six 6 feet or within ten 10 feet of the edge of an open trench. Construction of open cuts adjacent to existing structures, including underground pipes, is not recommended within a 1½ H:1V plane extending beyond and down from the perimeter of the structure. Cuts that are proposed within five 5 feet of light standards, other utilities, underground structures, and pavement should be provided with temporary shoring.

It may be necessary for the contractor to retain a geotechnical engineer to monitor the soils exposed in all excavations and provide engineering services for slopes. This will provide an opportunity to monitor the soils encountered and to modify the excavation slopes as necessary. It also offers an opportunity to verify the stability of the excavation slopes during construction.

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Individual contractors are responsible for designing and constructing stable, temporary excavations. Excavations should be sloped or shored in the interest of safety following local, and federal regulations, including current OSHA excavation and trench safety standards.

**Fill Materials and Placement**

All fill materials should be inorganic soils free of vegetation, debris, and fragments larger than 6 inches in size. Pea gravel or other similar non-cementitious, poorly-graded materials should not be used as fill or backfill without the prior approval of the geotechnical engineer.

Clean on-site soils or approved imported materials may be used as fill material for the following:

- general site grading
- structure backfill
- foundation areas

Imported soils for use as fill material should conform to low volume change materials as indicated in the following specifications:

<u>Gradation</u>	<u>Percent Finer by Weight (ASTM C 136)</u>
3" .....	100
No. 4 Sieve .....	50-100
No. 200 Sieve .....	10-40
■ Liquid Limit .....	30 (max)
■ Plasticity Index .....	15 (max)
■ Maximum expansion index* .....	20 (max)

\*ASTM D 4829

The contractor shall notify the Geotechnical Engineer of import sources sufficiently ahead of their use so that the sources can be observed and approved as to the physical characteristic of the import material. For all import material, the contractor shall also submit current verified reports from a recognized analytical laboratory indicating that the import has a "not applicable" (Class S0) potential for sulfate attack based upon current ACI criteria and is "mildly corrosive" to ferrous metal and copper. The reports shall be accompanied by a written statement from the contractor that the laboratory test results are representative of all import material that will be brought to the job.

Engineered fill should be placed and compacted in horizontal lifts, using equipment and procedures that will produce recommended moisture contents and densities throughout the lift. Fill lifts should not exceed 10 inches loose thickness.

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**Compaction Requirements**

Recommended compaction and moisture content criteria for engineered fill materials are as follows:

Material Type and Location	Per the Modified Proctor Test (ASTM D 1557)		
	Minimum Compaction Requirement (%)	Range of Moisture Contents for Compaction Above Optimum	
		Minimum	Maximum
On-site soils and low volume change imported fill:			
Beneath foundations:	90	0%	+3%
Miscellaneous backfill:	90	0%	+3%
Utility Trenches:	90	0%	+3%
Bottom of excavation receiving fill:	90	0%	+3%
Aggregate base (beneath trash treatment control devices):	95	-1%	+3%

**Grading and Drainage**

Positive drainage should be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations should be prevented during construction.

**Utility Trenches**

We anticipate that the on-site soils and fill materials will provide suitable support for underground utilities and piping that may be installed. Any soft and/or unsuitable material encountered at the bottom of excavations should be removed and be replaced with an adequate bedding material. A non-expansive granular material with a sand equivalent greater than 30 should be used for bedding and shading of utilities, unless allowed or specified otherwise by the utility manufacturer.

On-site materials are considered suitable for backfill of utility and pipe trenches from one foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Where trenches are placed beneath slabs or footings, the backfill should satisfy the gradation and expansion index requirements of engineered fill discussed in this report. Flooding or jetting for placement and compaction of backfill is not recommended.

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## Construction Considerations

Upon completion of filling and grading, care should be taken to maintain the subgrade moisture content prior to construction. Construction traffic over the completed subgrade should be avoided to the extent practical. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become desiccated, saturated, or disturbed, the affected material should be removed, or these materials should be scarified, moisture conditioned, and recompacted prior to construction.

## Construction Observation and Testing

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during subgrade preparation, proof-rolling, placement and compaction of controlled compacted fills, backfilling of excavations to the completed subgrade.

The exposed subgrade and each lift of compacted fill should be tested, evaluated, and reworked as necessary until approved by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the structural areas. One density and water content test for every 50 linear feet of compacted utility trench backfill. This testing frequency criteria may be adjusted during construction as specified by the geotechnical engineer of record.

In areas of foundation excavations, the bearing subgrade should be evaluated under the direction of the Geotechnical Engineer. In the event that unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

## FOUNDATIONS

Provided the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for the gravel bed foundation.

### Shallow Foundation Design Recommendations

We understand that the proposed structure will consist of a precast concrete unit with a bottom depth at approximately 20 to 30 feet bgs.

The precast concrete units should be supported on 12 inches of compacted and moisture conditioned Class II aggregate base. Subgrade soils beneath the bottom of the aggregate base

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layer should be overexcavated to a minimum depth of 1 foot below the bottom of the aggregate base layer and recompacted and moisture conditioned. The prepared soils and base may support a maximum net allowable bearing pressure of 2,000 psf.

Foundation excavations should be observed by the geotechnical engineer. If the soil conditions encountered differ significantly from those presented in this report, supplemental recommendations will be required.

## LATERAL EARTH PRESSURES AND TEMPORARY SHORING

Recommended equivalent fluid pressures against the trash treatment control devices and shoring systems are as follows:

ITEM	VALUE
Active Case (Cantilever Shoring)	45 psf/ft <sup>1</sup>
Passive Case (Cantilever Shoring)	270 psf/ft <sup>1</sup>
At-Rest Case (Backfill Against Trash Treatment Control Device)	69 psf/ft <sup>2, 3</sup>
Braced Shoring Earth Pressure	30H psf <sup>1, 4, 5</sup>
Surcharge Coefficient	0.41 * (Surcharge)
Coefficient of Friction	0.30

1. The values are based on in-situ materials behind shoring systems with an approximate unit weight of 110 pcf.
2. The values are based on engineered fill materials used as backfill.
3. Uniform, horizontal backfill, compacted to at least 90% of the ASTM D 1557 maximum dry density, rendering a maximum unit weight of 120 pcf.
4. H is the total height of the excavation
5. Based on a rectangular pressure distribution

The lateral earth pressures herein do not include any factor of safety and are not applicable for submerged soils/hydrostatic loading. Additional recommendations may be necessary if such conditions are to be included in the design.

The design of any shoring system should consider surcharge loads imposed by the existing structures and vehicular loads in the vicinity of the shoring. In general, surcharge loads should be considered where they are located within a horizontal distance behind the shoring equal to the height of the shoring.

Surcharge loads acting at the top of the shoring should be applied to the shoring over the backfill as a uniform pressure over the entire shoring height and should be added to the static earth pressures. Surcharge stresses due to point loads, line loads, and those of limited extent, such as compaction equipment, should be evaluated using elastic theory.

The design of the shored excavation should be performed by an engineer knowledgeable and experienced with the on-site soil conditions. The contractor should be aware that slope height,

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slope inclination or excavation depths should in no case exceed those specified in local, state or federal safety regulations, e.g. OSHA Health and Safety Standards for Excavation, 29 CFR Part 1926, or successor regulations. Such regulations are strictly enforced and, if not followed, the owner or the contractor could be liable for substantial penalties.

## GENERAL COMMENTS

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Natural variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence or collaboration through this system are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly impact excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety, and cost estimating including, excavation support, and dewatering requirements/design are the responsibility of others. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

## **ATTACHMENTS**

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**EXPLORATION AND TESTING PROCEDURES****Field Exploration**

Number of Borings	Boring Depth (feet)	Planned Location
7	26½	On or adjacent to trash treatment control device footprint

**Boring Layout and Elevations:** Borings locations and depths were provided by the client and relocated during site reconnaissance by Terracon based on accessibility and utility conflicts. Coordinates were obtained with a handheld GPS unit (estimated horizontal accuracy of about ±10 feet) and approximate elevations were obtained from the Google Earth. If elevations and a more precise boring layout are desired, we recommend borings be surveyed following completion of fieldwork.

**Subsurface Exploration Procedures:** We advanced the borings with a truck-mounted drill rig using continuous flight augers hollow stem augers. Four samples were generally obtained in the upper 10 feet and at intervals of 5 feet thereafter. Test samples were collected during drilling in general accordance with the appropriate ASTM methods using Standard Penetration Testing (SPT) and sampling using either standard split-spoon or Modified California samplers. A sampling spoon is driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value, also referred to as N-values. The N-values are indicated on the boring logs at the test depths. We did not encounter groundwater in our borings during drilling and sampling. For safety purposes, all borings were backfilled with cement grout slurry upon completion. Surfaces were patched with concrete and black dye.

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials encountered during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

**Laboratory Testing**

The project engineer reviewed the field data and assigned laboratory tests to understand the engineering properties of the various soil strata, as necessary, for this project. Procedural standards noted below are for reference to methodology in general. In some cases, variations to

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methods were applied because of local practice or professional judgment. Standards noted below include reference to other, related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D7263 Standard Test Methods for Laboratory Determination of Dry Density (Unit Weight) of Soil Specimens
- ASTM D4546 Standard Test Methods for One-Dimensional Swell or Collapse of Soils
- ASTM D1140 Standard Test Methods for Determining the Amount of Material Finer than 75- $\mu\text{m}$  (No. 200) Sieve in Soils by Washing
- ASTM D3080 Standard Test Method for Direct Shear Test of Soils Under Consolidated Drained Conditions
- Corrosivity Testing will include pH, chlorides, sulfates, sulfides, Redox potential, and electrical lab resistivity

The laboratory testing program included examination of soil samples by an engineer. Based on the material's texture and plasticity, we described and classified the soil samples in accordance with the Unified Soil Classification System.

## **SITE LOCATION AND EXPLORATION PLANS**

### EXPLORATION PLAN OVERVIEW

CWE - Santa Monica Bay HFC Trash Treatment Control Devices ■ Manhattan Beach, CA  
July 20, 2022 ■ Terracon Project No. 60215261

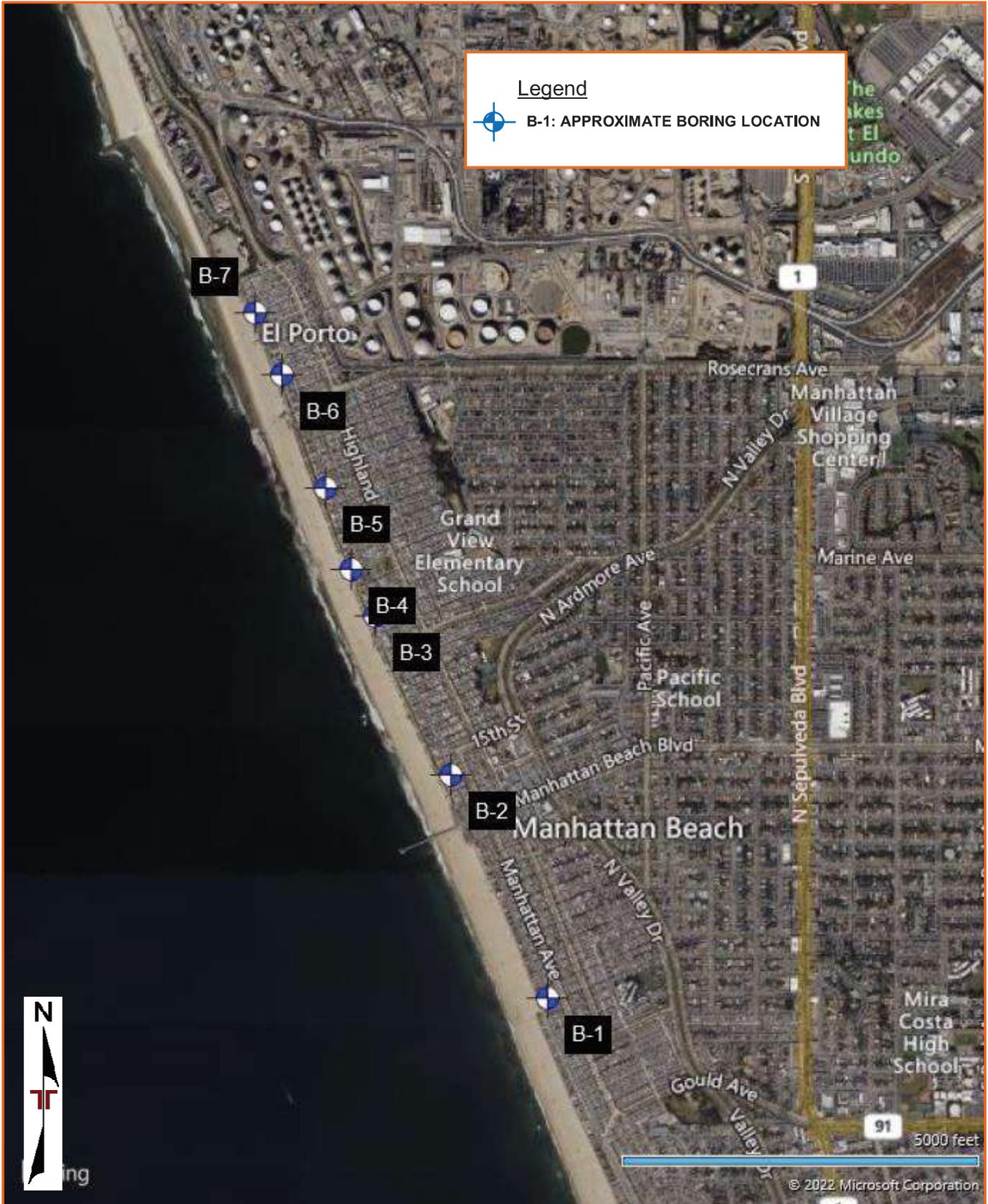


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

TOPOGRAPHIC MAP IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY QUADRANGLES INCLUDE: VENICE, CA (1/1/1981) and REDONDO BEACH, CA (1/1/1996).

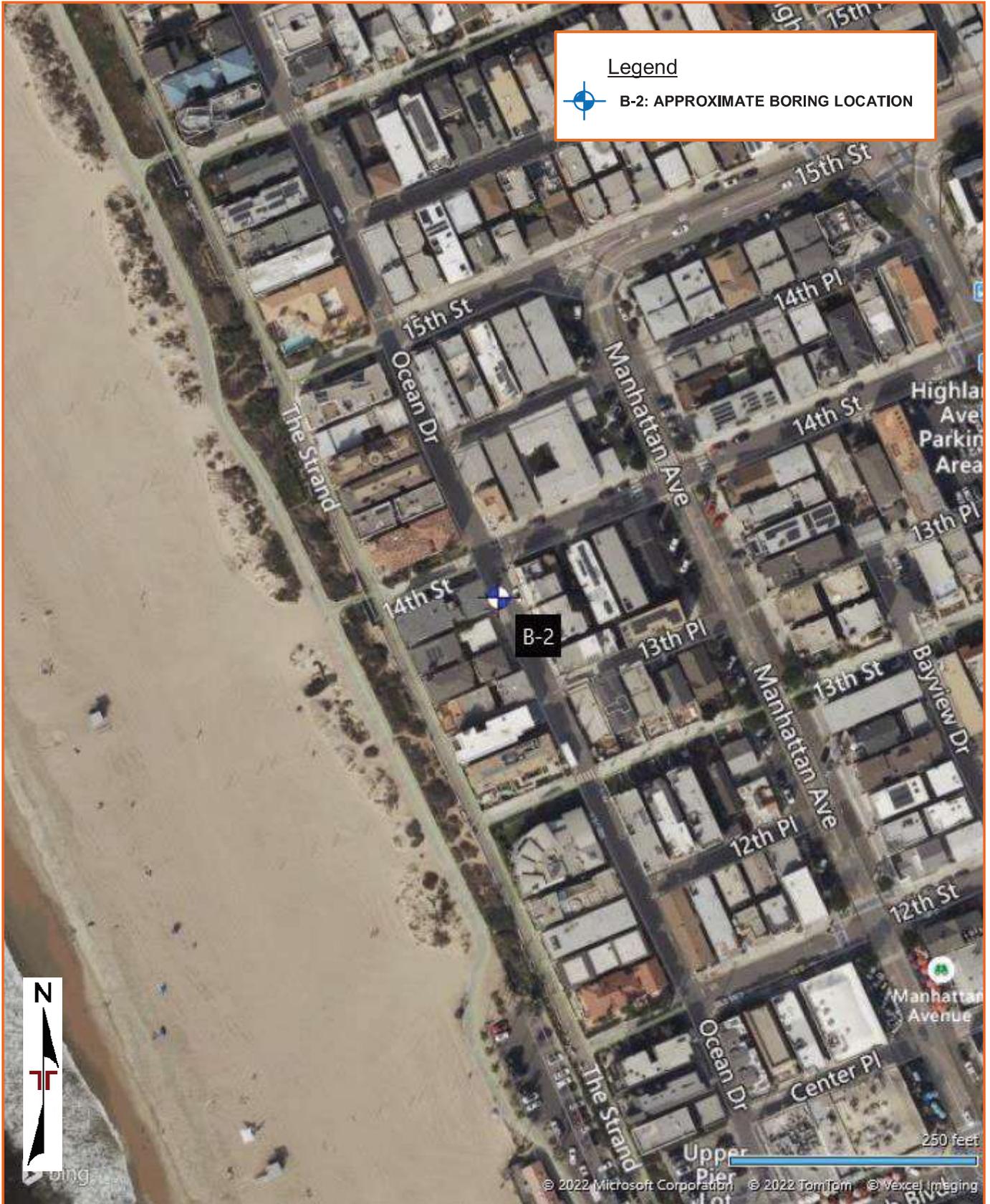
**EXPLORATION PLAN**

CWE - Santa Monica Bay HFC Trash Treatment Control Devices ■ Manhattan Beach, CA  
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**EXPLORATION PLAN**

CWE - Santa Monica Bay HFC Trash Treatment Control Devices ■ Manhattan Beach, CA  
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**EXPLORATION PLAN**

CWE - Santa Monica Bay HFC Trash Treatment Control Devices ■ Manhattan Beach, CA  
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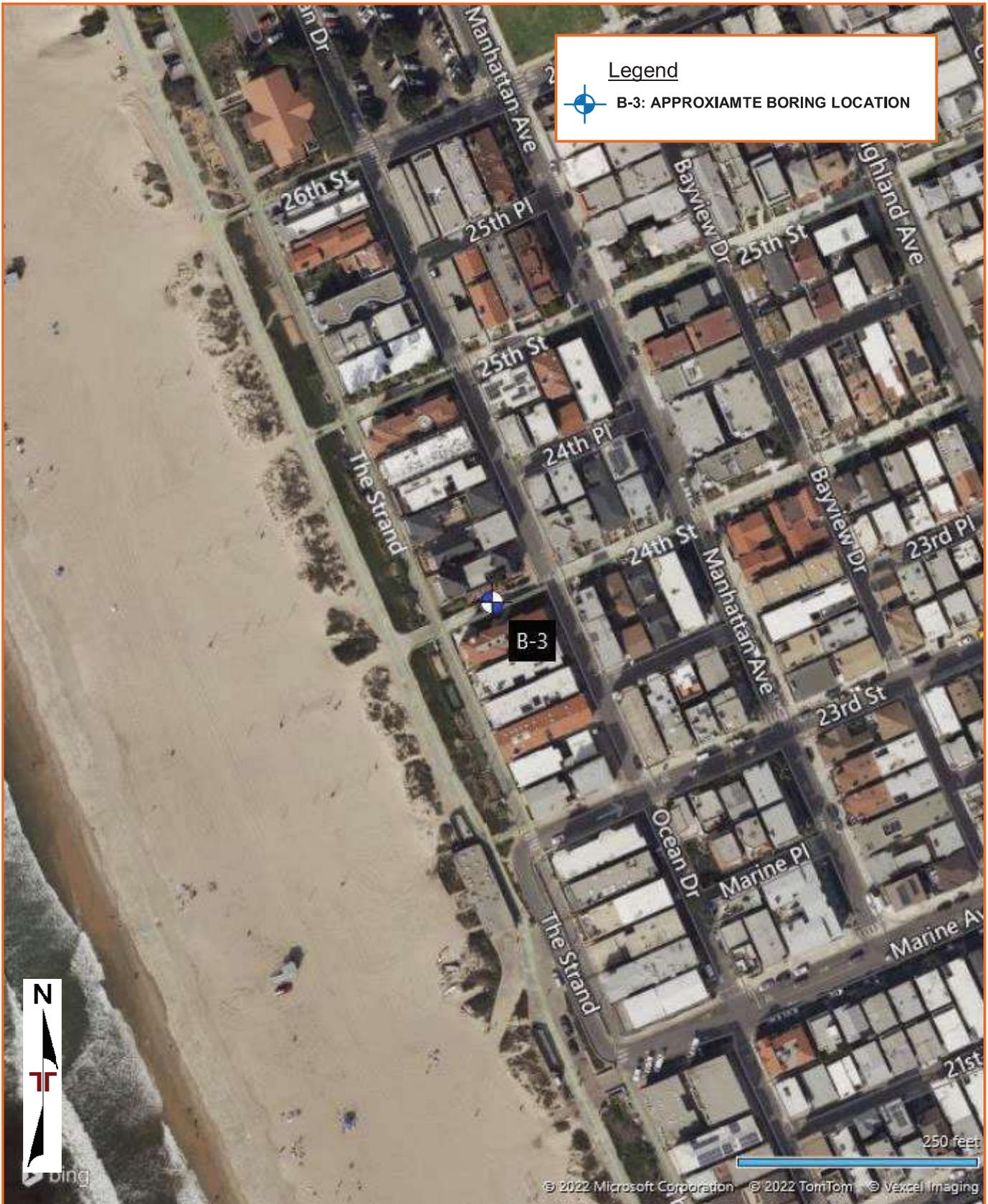


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

AERIAL PHOTOGRAPHY PROVIDED BY MICROSOFT BING MAPS

**EXPLORATION PLAN**

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**EXPLORATION PLAN**

CWE - Santa Monica Bay HFC Trash Treatment Control Devices ■ Manhattan Beach, CA  
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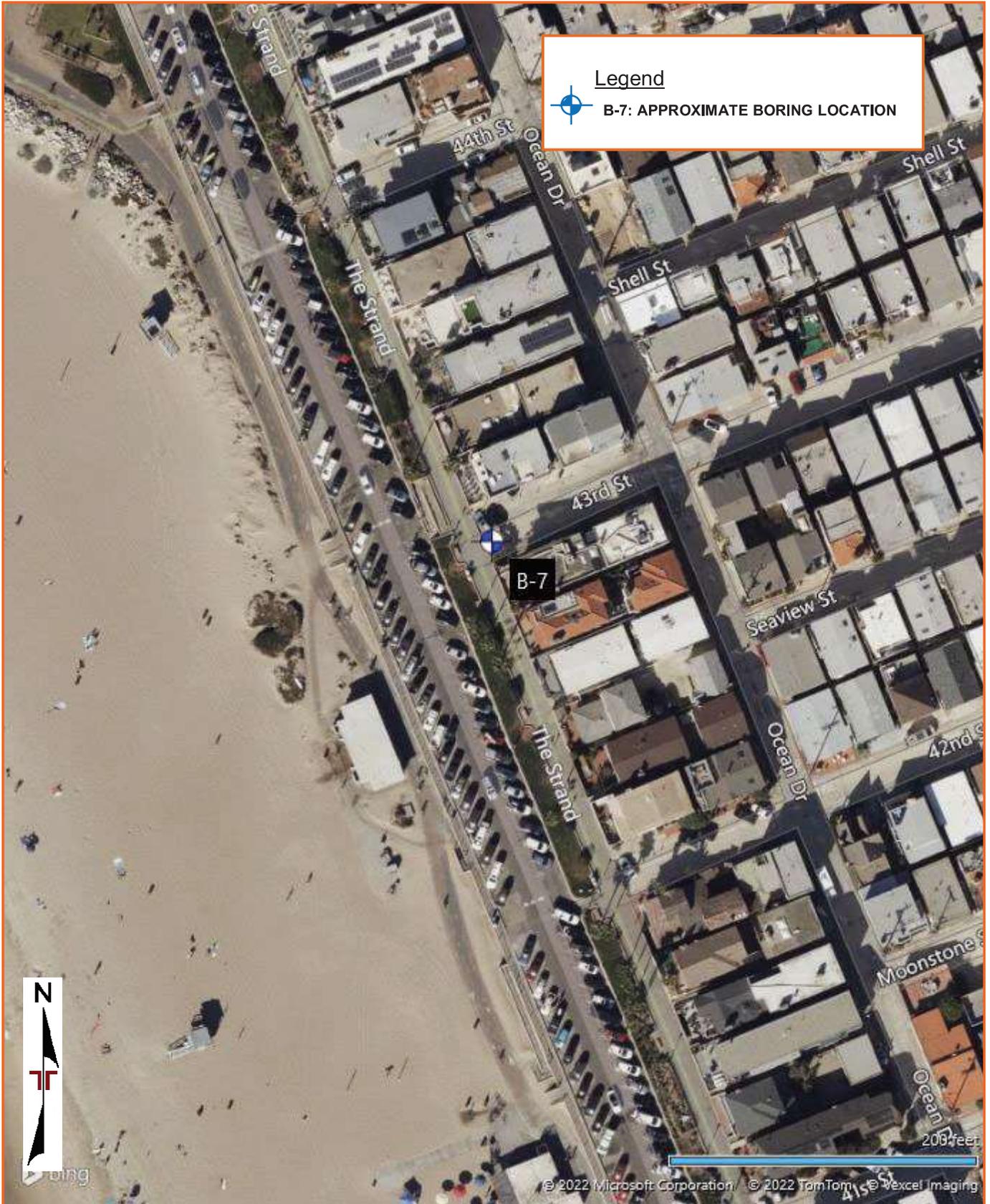
**EXPLORATION PLAN**

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**EXPLORATION PLAN**

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## EXPLORATION RESULTS

# BORING LOG NO. B-1

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp Fullerton, CA**

**SITE: The Strand Manhattan Beach, CA**

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.8777° Longitude: -118.4079°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
DEPTH									
0.3	<b>ASPHALT</b> , 3" thickness								
0.7	<b>CONCRETE</b> , 5" thickness								
	<b>SILTY SAND (SM)</b> , light brown			✋					
	medium dense	5		✕	5-9-14	2.7	98		
	loose			✕	5-8-10	6.0	115		17
	medium dense	10		✕	4-7-13	5.1	106		
15.0	<b>POORLY GRADED SAND (SP)</b> , trace silt, light brown, medium dense	15		✕	6-17-18	2.9	111		4
20.0	<b>SILTY SAND (SM)</b> , light brown, medium dense	20		✕	8-28-26	3.3	105		
	dense	25		✕	11-25-37	3.0	102		
26.5	<b>Boring Terminated at 26.5 Feet</b>								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**

Groundwater not encountered



Boring Started: 05-10-2022

Boring Completed: 05-10-2022

Drill Rig: CME-75

Driller: 2R Drilling

Project No.: 60215261

# BORING LOG NO. B-2

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp  
Fullerton, CA**

**SITE: The Strand  
Manhattan Beach, CA**

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.8863° Longitude: -118.4124°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
	DEPTH									
	0.3 <b>ASPHALT</b> , 4" thickness									
	0.8 <b>CONCRETE</b> , 6" thickness									
	<b>SILTY SAND (SM)</b> , brown									
	loose	5		✎	3-6-8	2.8	100			
	medium dense	10			4-7-9	7.0	116			18
	light brown	15			4-8-13					
		20			5-10-16					
		25			6-16-21	4.6	105			
		26.5			16-20-25	4.6	103			
<b>Boring Terminated at 26.5 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**  
Groundwater not encountered



Boring Started: 05-10-2022

Boring Completed: 05-10-2022

Drill Rig: CME-75

Driller: 2R Drilling

Project No.: 60215261

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# BORING LOG NO. B-3

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp  
Fullerton, CA**

**SITE: The Strand  
Manhattan Beach, CA**

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.8924° Longitude: -118.4159°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
DEPTH									
0.4	<b>CONCRETE</b> , 5" thickness								
	<b>POORLY GRADED SAND (SP)</b> , trace silt, light brown			✋					2
	brown, loose	5		✕	3-6-7	1.0	100		
				✕	3-6-8	2.6	101		
	brown to light brown	10		✕	4-6-10	7.3	119		
				✕	5-8-12	5.6	113		12
15.0	<b>SILTY SAND (SM)</b> , brown, medium dense	15		✕	16-20-32	4.3	110		
	light brown to tan	20		✕	10-27-38	6.5	107		
	dense	25		✕					
26.5	<b>Boring Terminated at 26.5 Feet</b>								

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**  
Groundwater not encountered



Boring Started: 05-13-2022

Boring Completed: 05-13-2022

Drill Rig: CME-75

Driller: 2R Drilling

Project No.: 60215261

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22

# BORING LOG NO. B-4

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp  
Fullerton, CA**

**SITE: The Strand  
Manhattan Beach, CA**

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.8942° Longitude: -118.4170°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	DEPTH								
	0.5 <b>CONCRETE, 6" thickness</b>								
	0.8 <b>AGGREGATE BASE COURSE, 4" thickness</b>								
	<b>POORLY GRADED SAND WITH SILT (SP-SM), brown to dark brown</b>								
	brown, medium dense	5		✎	8-14-15	8.0	124		5
	light brown, loose	10		✎	4-6-9	3.1	113		
		10		✎	4-6-9	4.7	102		
	dense	15		✎	12-36-48	4.2	107		6
	light tan, medium dense	20		✎	6-13-23	2.8	97		
		25		✎	7-14-24	1.3	101		
	26.5								

**Boring Terminated at 26.5 Feet**

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**  
Groundwater not encountered



Boring Started: 05-12-2022

Boring Completed: 05-12-2022

Drill Rig: CME-75

Driller: 2R Drilling

Project No.: 60215261

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



# BORING LOG NO. B-6

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp  
Fullerton, CA**

**SITE: The Strand  
Manhattan Beach, CA**

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.9017° Longitude: -118.4202°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
	0.5 <b>CONCRETE</b> , 5.5" thickness									
	<b>SILTY SAND (SM)</b> , light brown									
	loose	5		✋	5-7-11	1.5	103			
	medium dense	10			5-7-10	4.9	111			17
		15			5-9-13	5.9	110			
		20			9-16-30	8.8	107			
	dense	25			5-25-37	6.6	106			
		26.5			15-24-40	4.0	101			
<b>Boring Terminated at 26.5 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**  
*Groundwater not encountered*



Boring Started: 05-12-2022

Boring Completed: 05-12-2022

Drill Rig: CME-75

Driller: 2R Drilling

Project No.: 60215261

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22

# BORING LOG NO. B-7

**PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design**

**CLIENT: CWE Corp  
Fullerton, CA**

**SITE: The Strand  
Manhattan Beach, CA**

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL\_60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22

GRAPHIC LOG	LOCATION See <a href="#">Exploration Plan</a> Latitude: 33.9041° Longitude: -118.4214°	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	ATTERBERG LIMITS		PERCENT FINES
								LL-PL-PI		
	0.6 <b>CONCRETE</b> , 7" thickness									
	<b>SILTY SAND (SM)</b> , brown									
	loose	5		✎	4-6-10	2.6	97			
		10		✎	4-7-11	6.0	114			16
		10		✎	4-6-10	6.8	112			
	15.0	15		✎	4-12-25	4.9	101			5
	<b>POORLY GRADED SAND (SP)</b> , trace silt, light brown with orangish brown, medium dense	20		✎	6-14-23	5.2	98			
		25		✎	8-25-30	3.6	101			
	26.5									
<b>Boring Terminated at 26.5 Feet</b>										

Stratification lines are approximate. In-situ, the transition may be gradual.

Hammer Type: Automatic

Advancement Method:  
8" Hollow Stem Auger

See [Exploration and Testing Procedures](#) for a description of field and laboratory procedures used and additional data (if any).

Notes:

Abandonment Method:  
Borehole backfilled with cement grout slurry patched with concrete and black dye

See [Supporting Information](#) for explanation of symbols and abbreviations.

**WATER LEVEL OBSERVATIONS**

Groundwater not encountered



Boring Started: 05-12-2022

Boring Completed: 05-12-2022

Drill Rig: CME-75

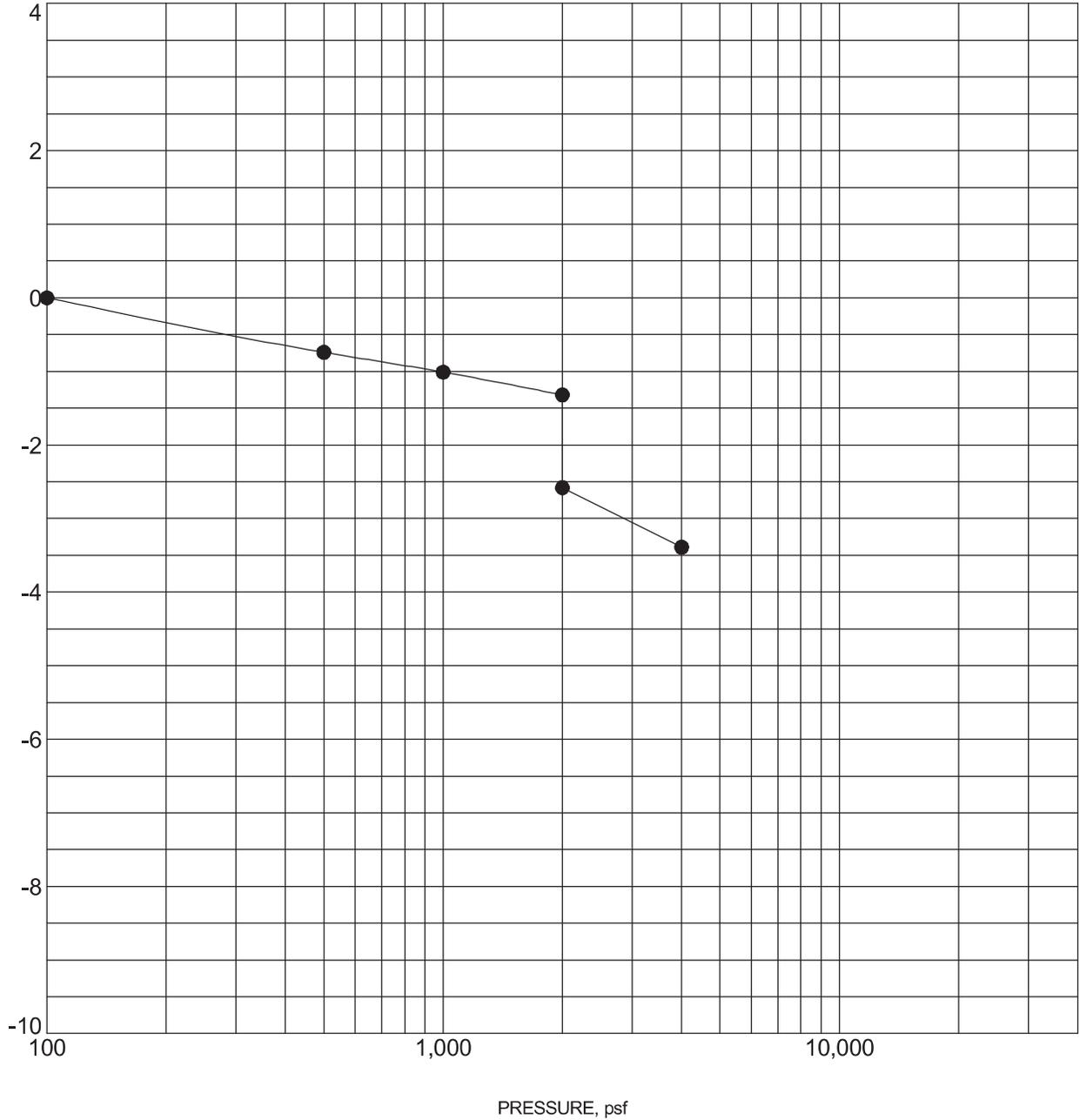
Driller: 2R Drilling

Project No.: 60215261

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-1    20 - 21.5 ft	SILTY SAND	105	3.3

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



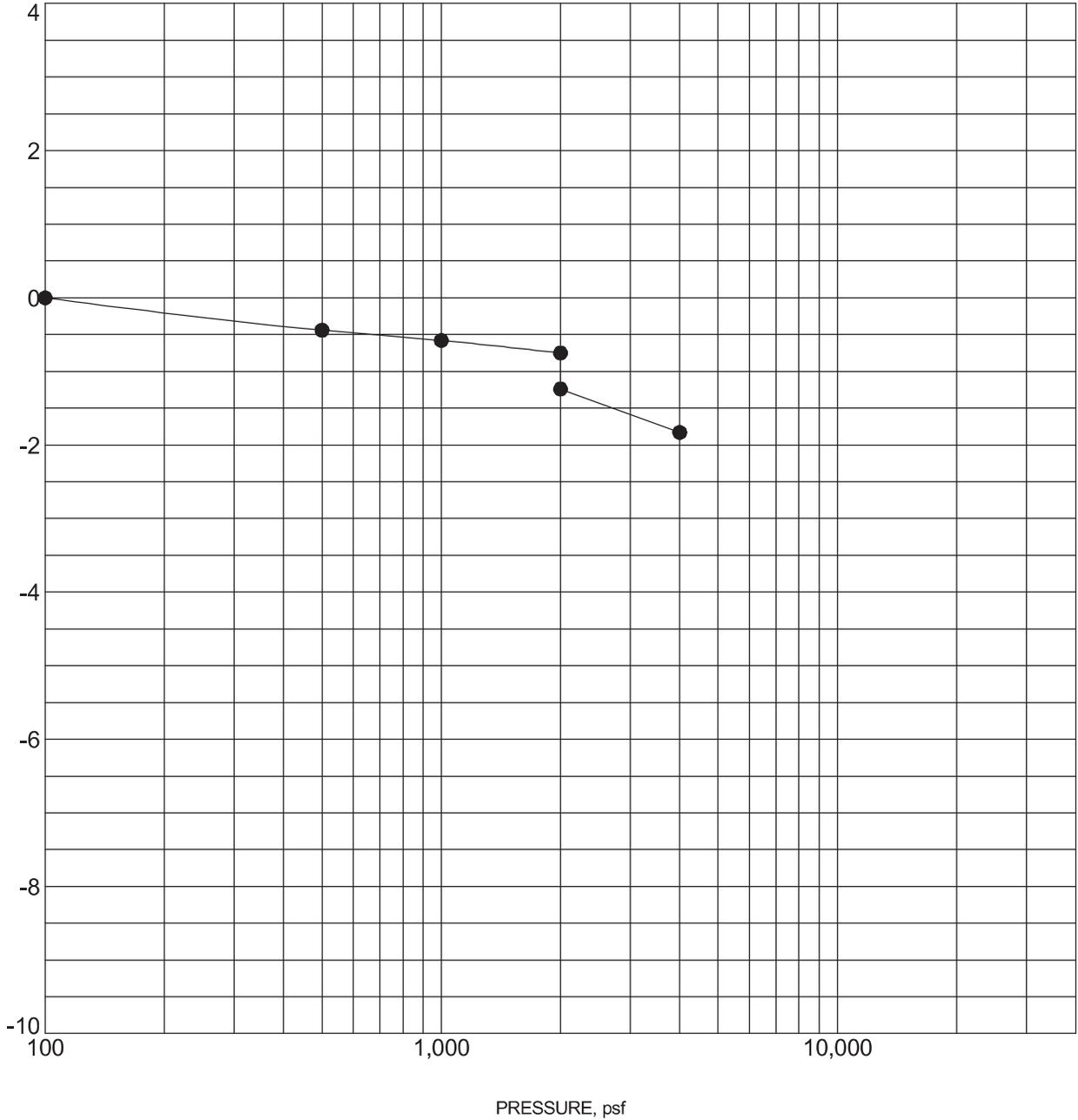
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

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Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-1    25 - 26.5 ft	SILTY SAND	102	3.0

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



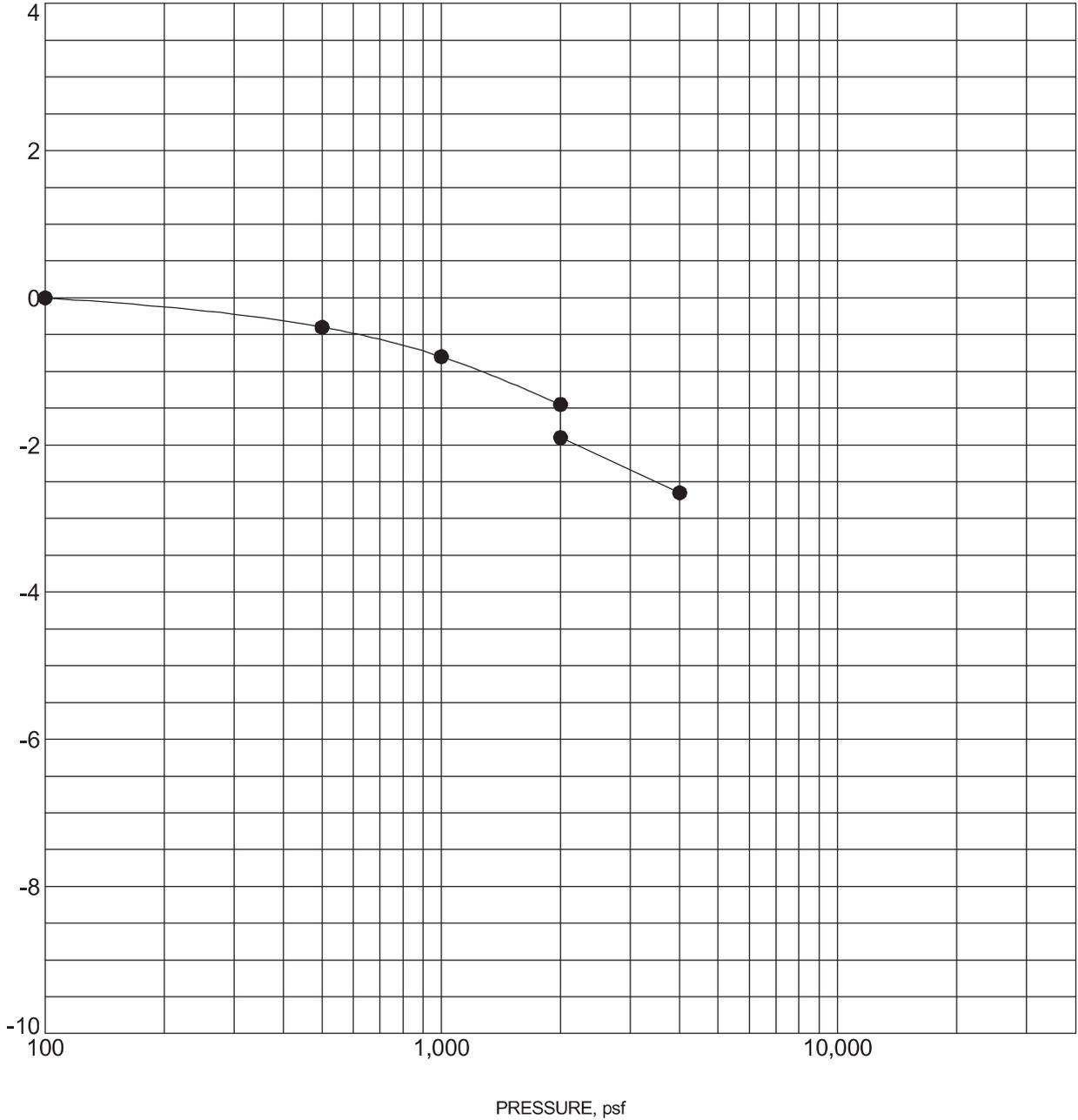
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

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LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-2    20 - 21.5 ft	SILTY SAND	105	4.6

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



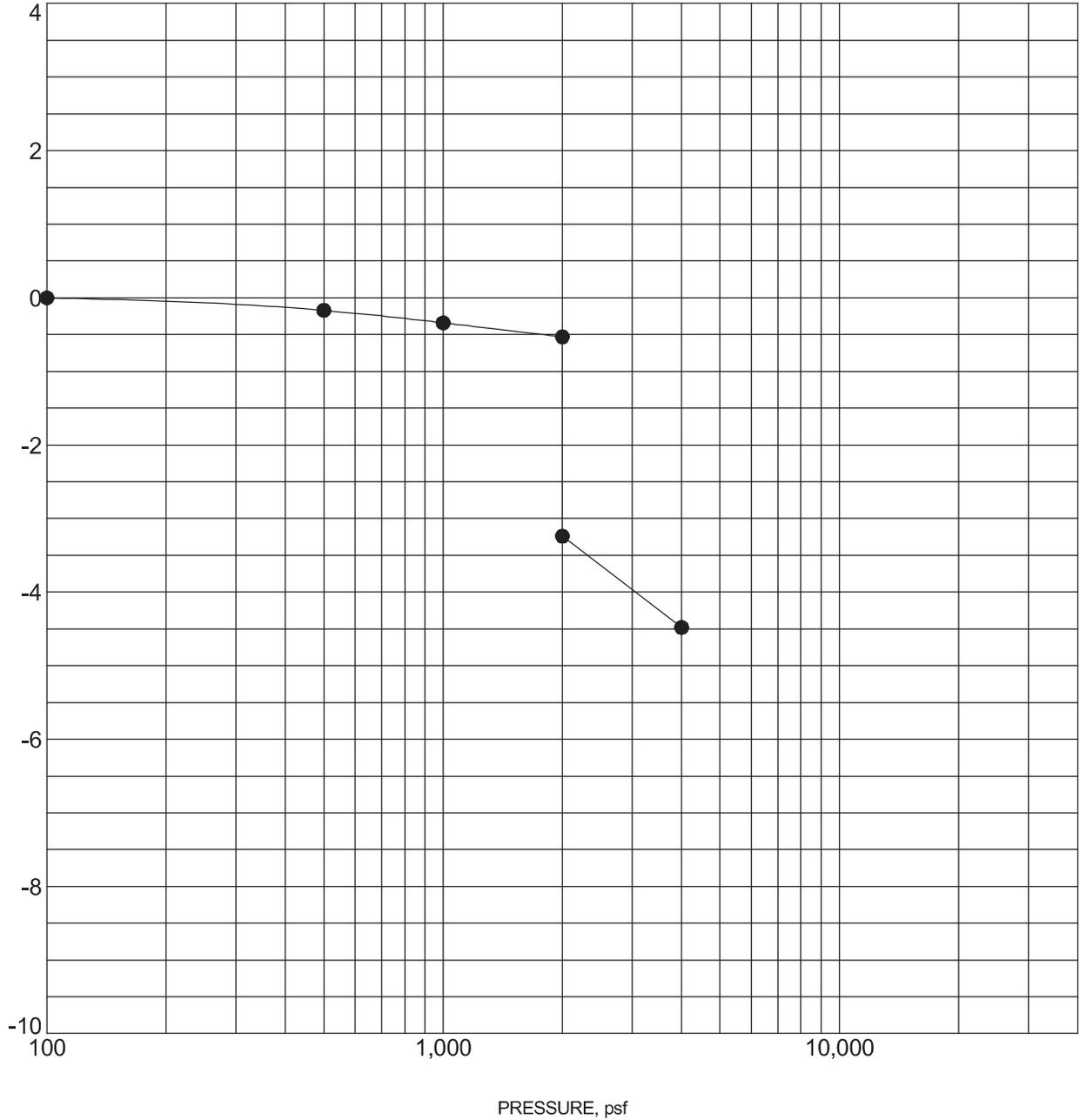
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

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ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-2 25 - 26.5 ft	SILTY SAND	103	4.6

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



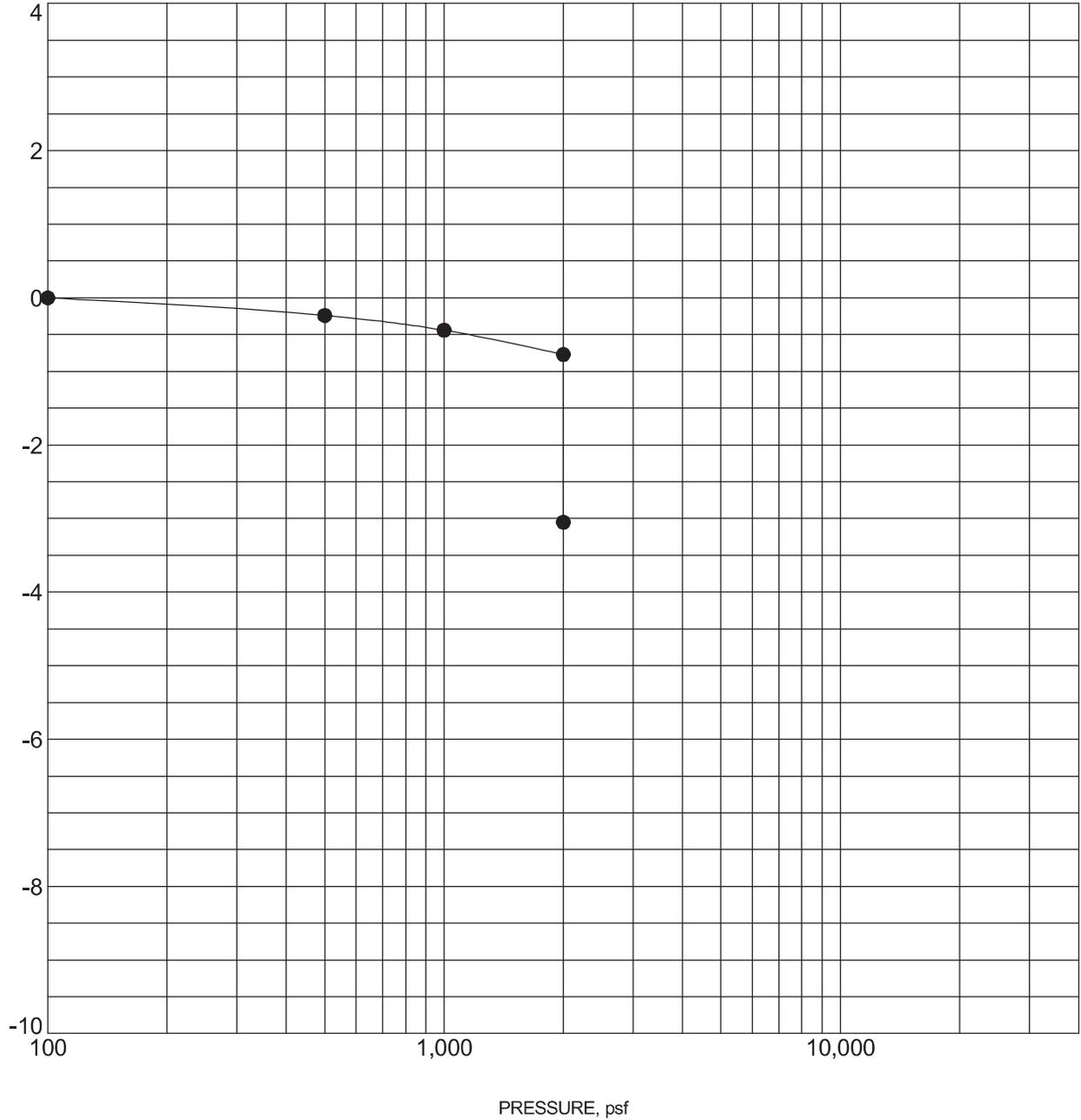
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/20/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-1 25 - 26.5 ft	SILTY SAND	102	3.0

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



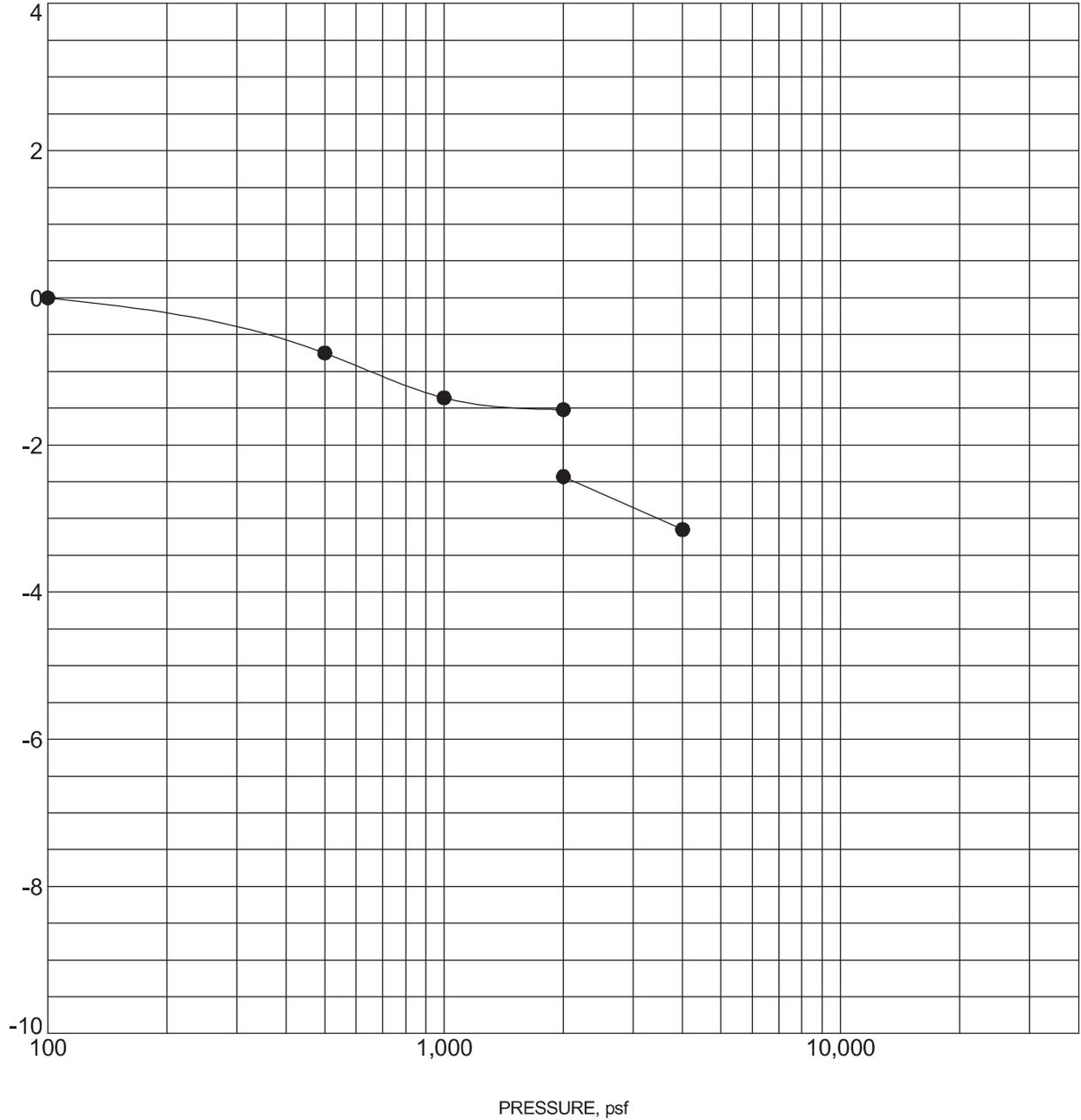
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

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ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-3 20 - 21.5 ft	SILTY SAND	110	4.3

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



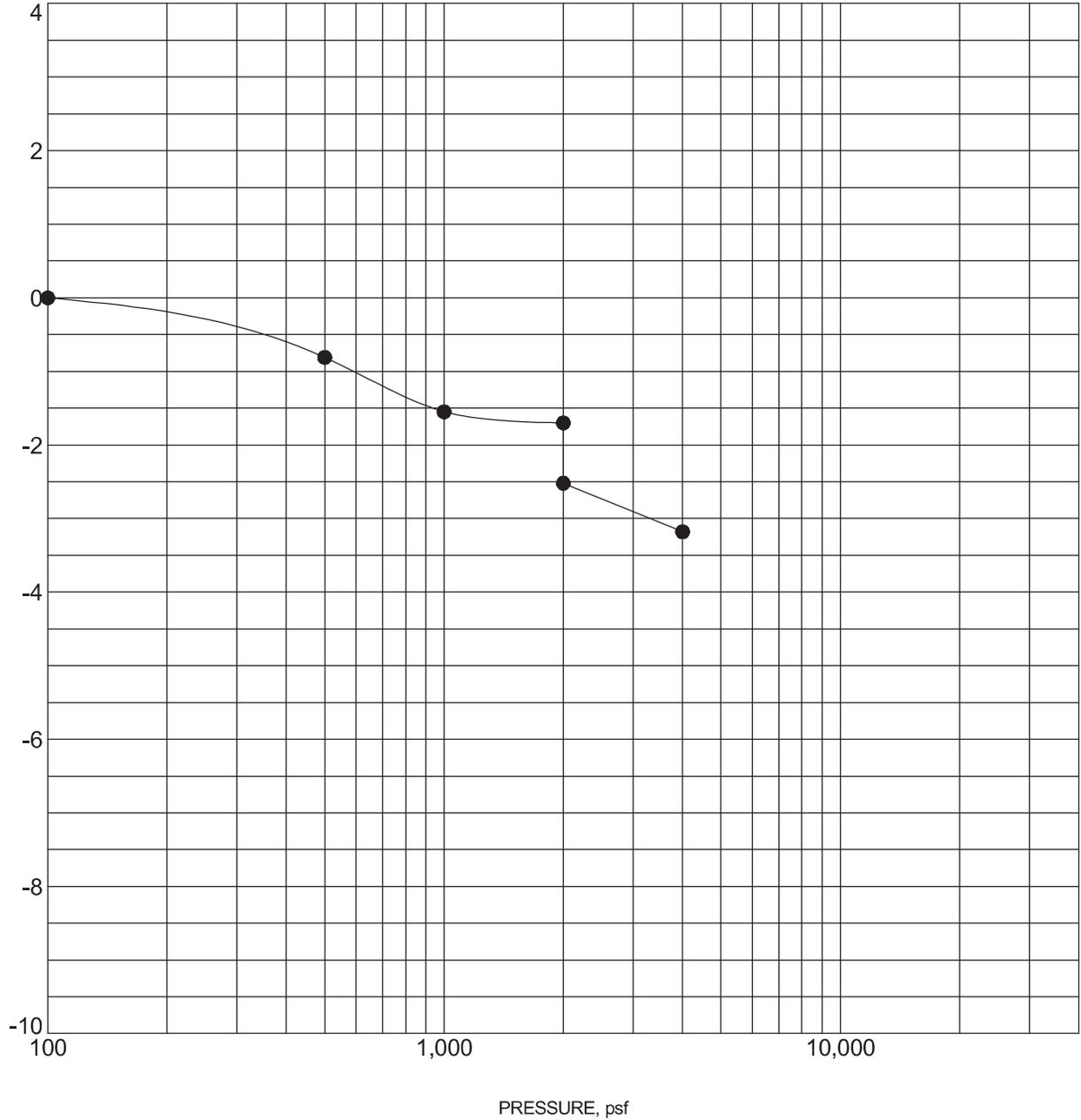
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

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Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-3 25 - 26.5 ft	SILTY SAND	107	6.5

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



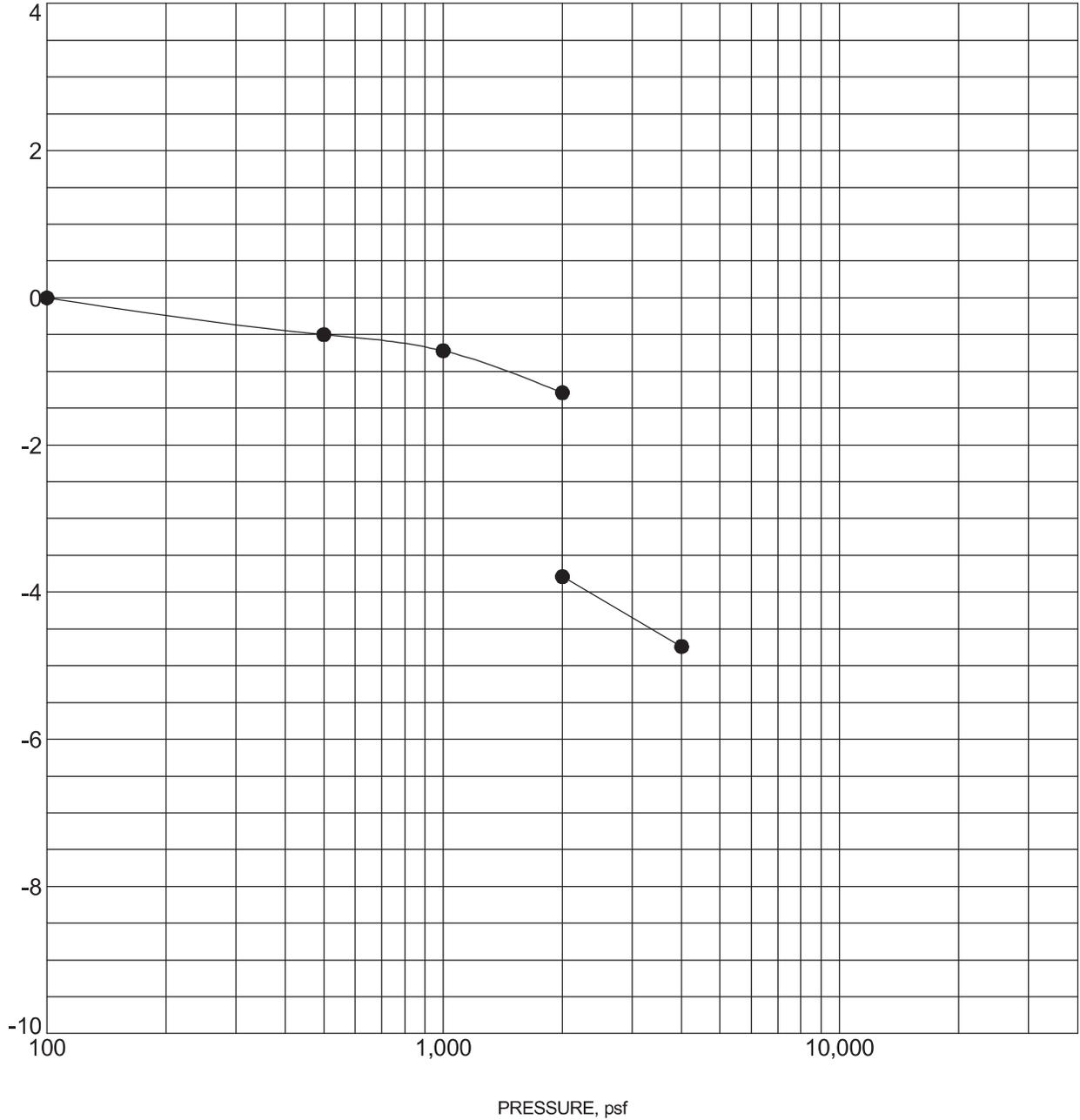
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

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ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-4 20 - 21.5 ft	POORLY GRADED SAND WITH SILT	97	2.8

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



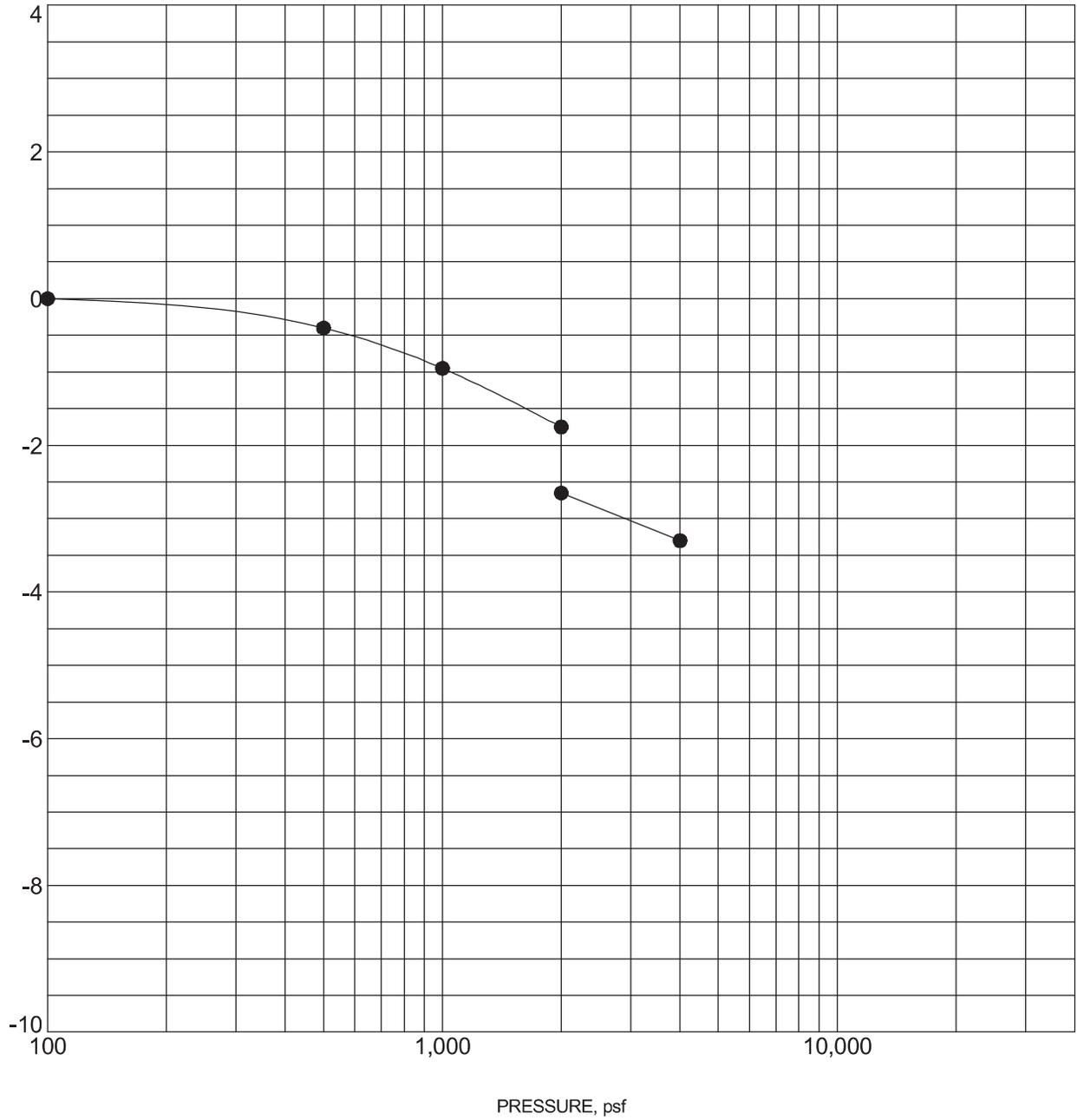
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-4 25 - 26.5 ft	POORLY GRADED SAND WITH SILT	101	1.3

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



PROJECT NUMBER: 60215261

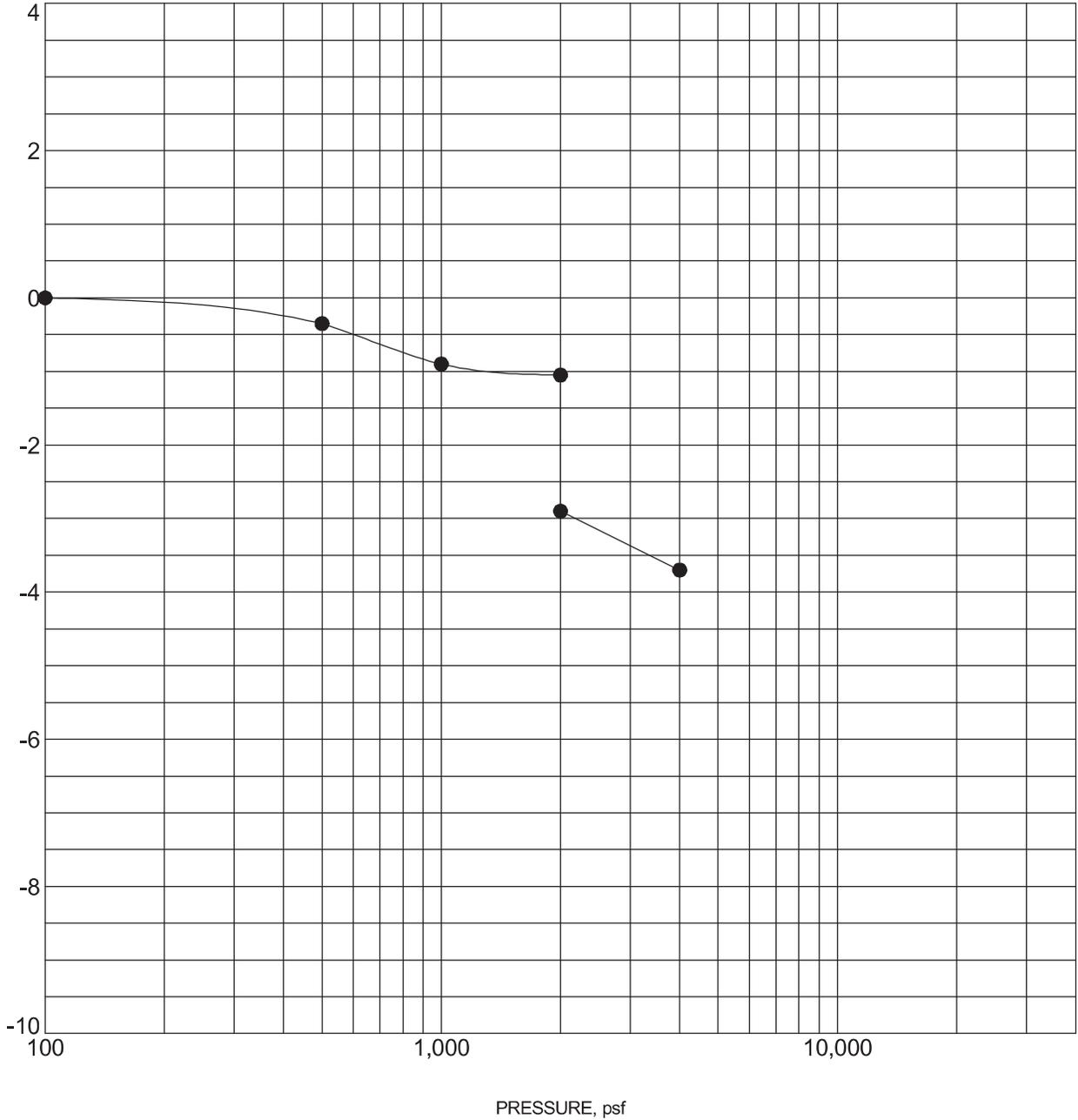
CLIENT: CWE Corp  
Fullerton, CA

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ASTM D2435

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AXIAL STRAIN, %



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-5    20 - 21.5 ft	POORLY GRADED SAND WITH SILT	103	3.2

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



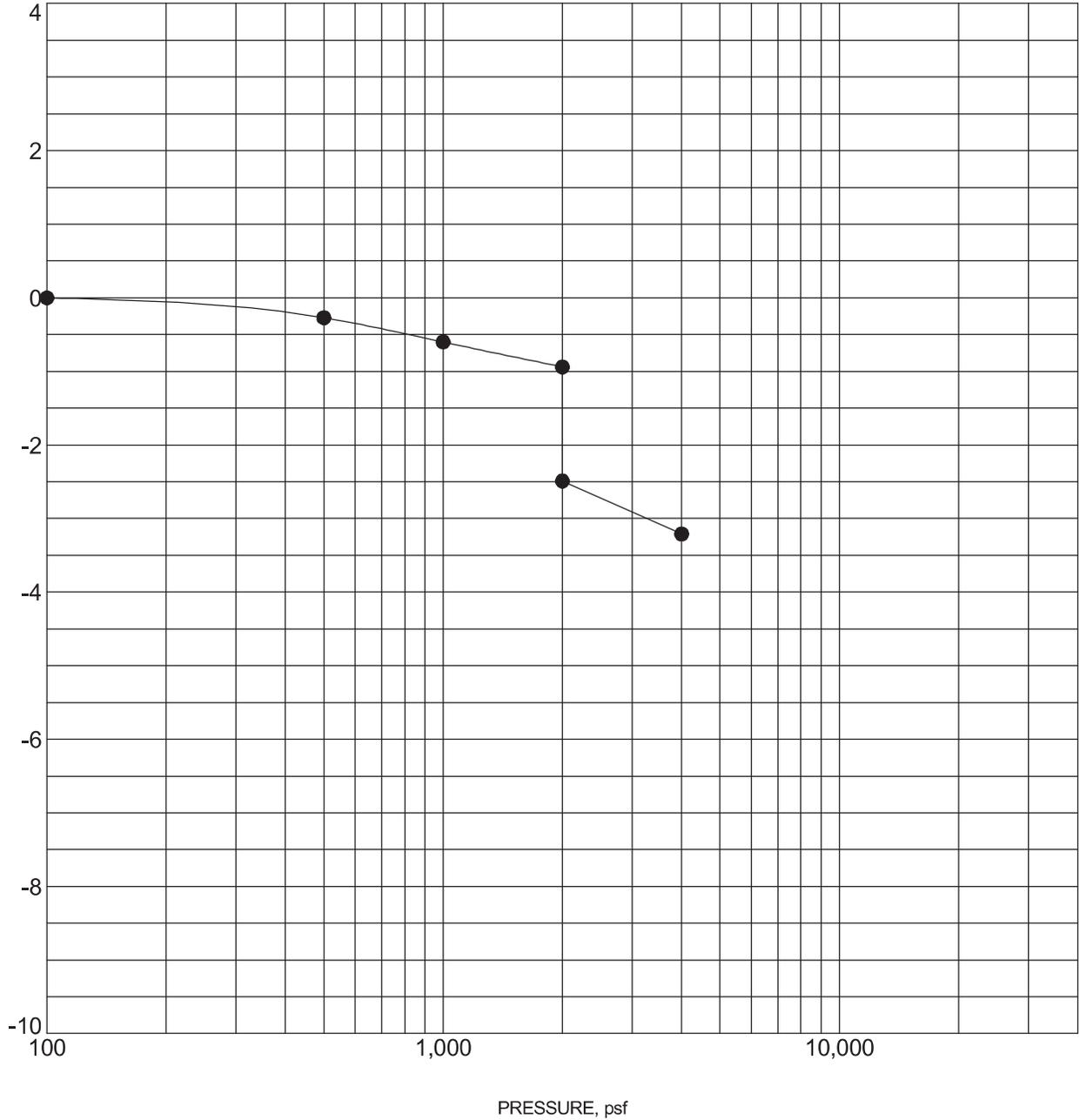
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-5 25 - 26.42 ft	POORLY GRADED SAND WITH SILT	102	3.7

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



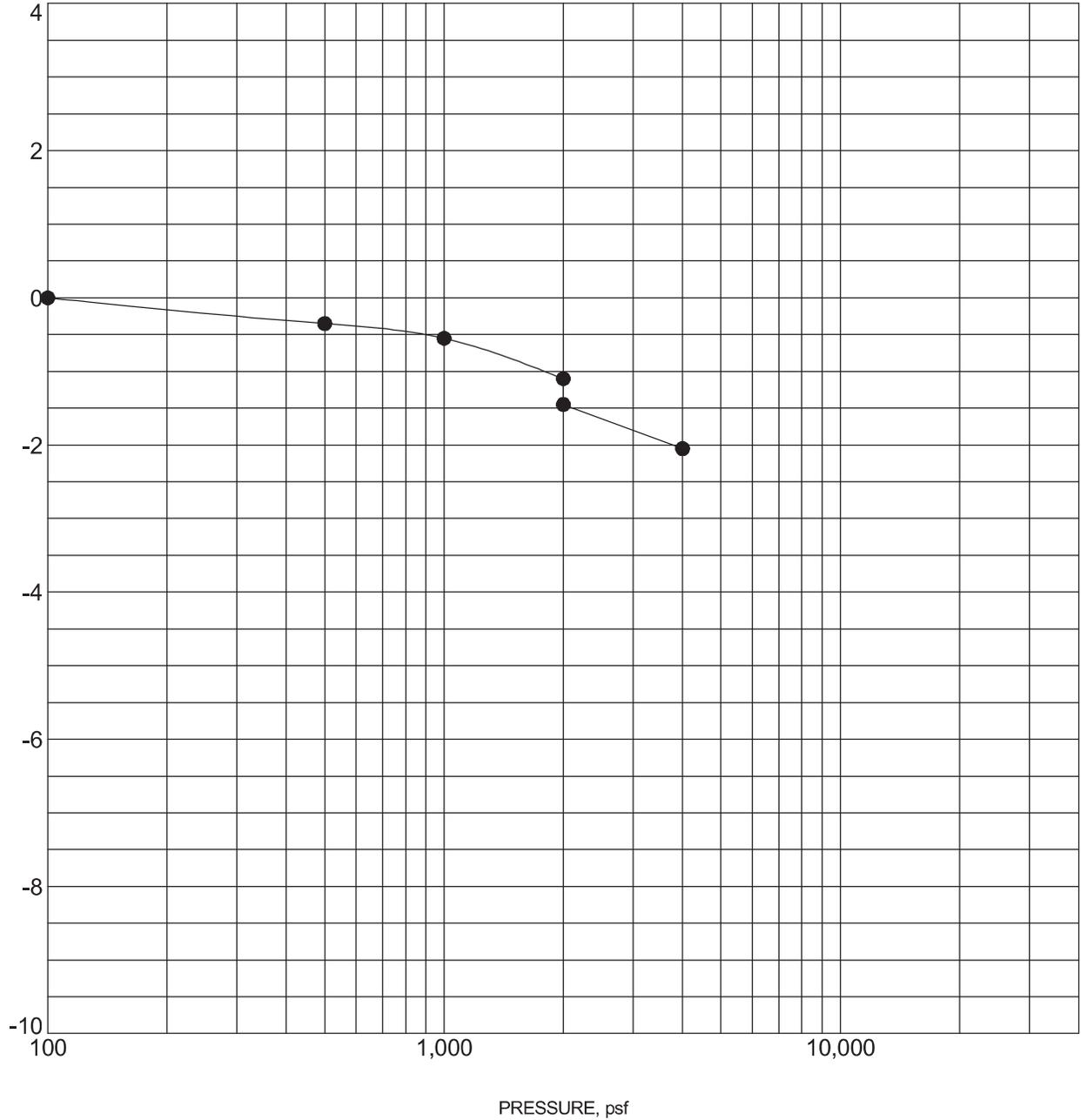
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

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ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-6    20 - 21.5 ft	SILTY SAND	106	6.6

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



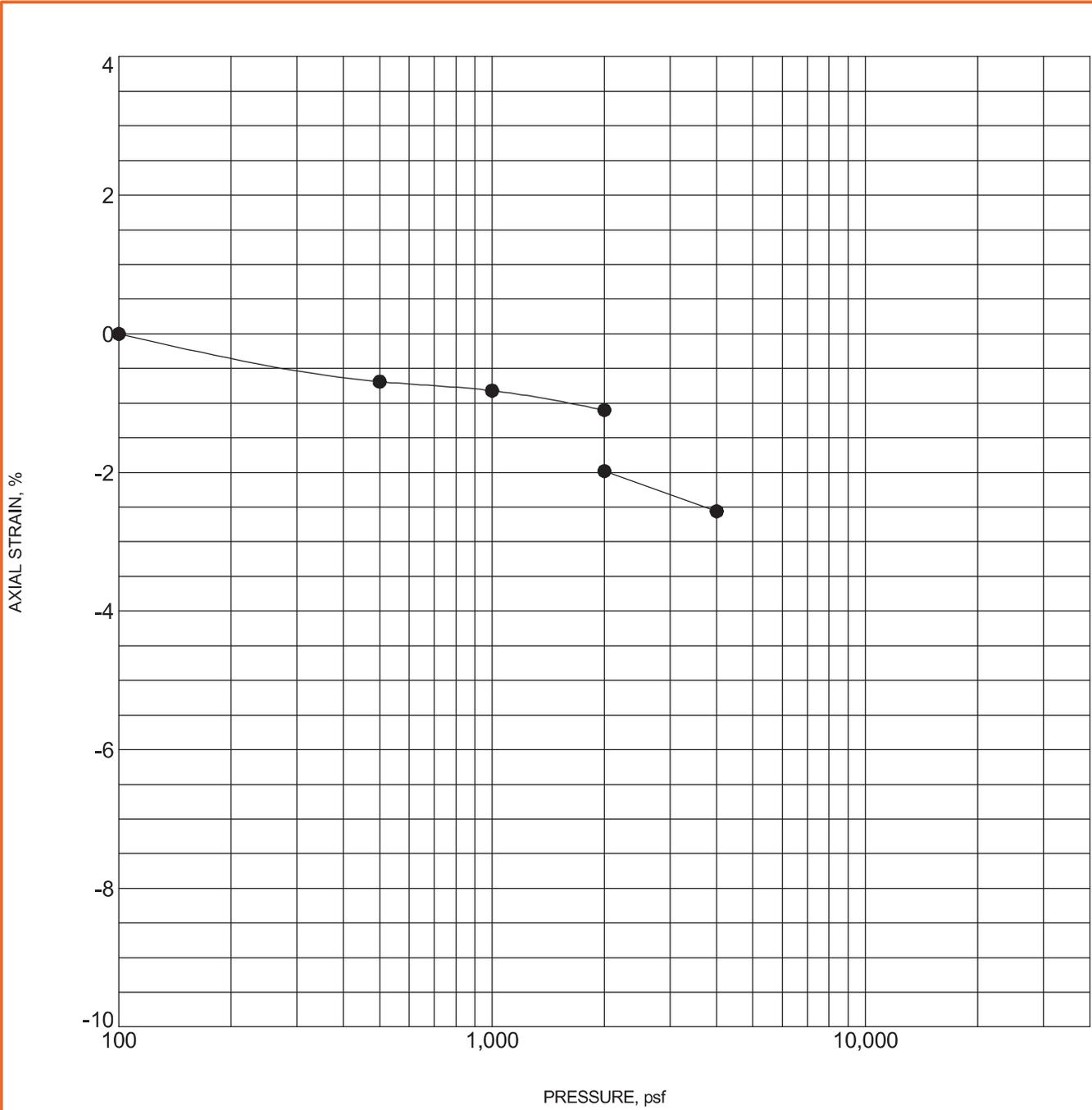
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

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Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-6    25 - 26.5 ft	SILTY SAND	101	4.0

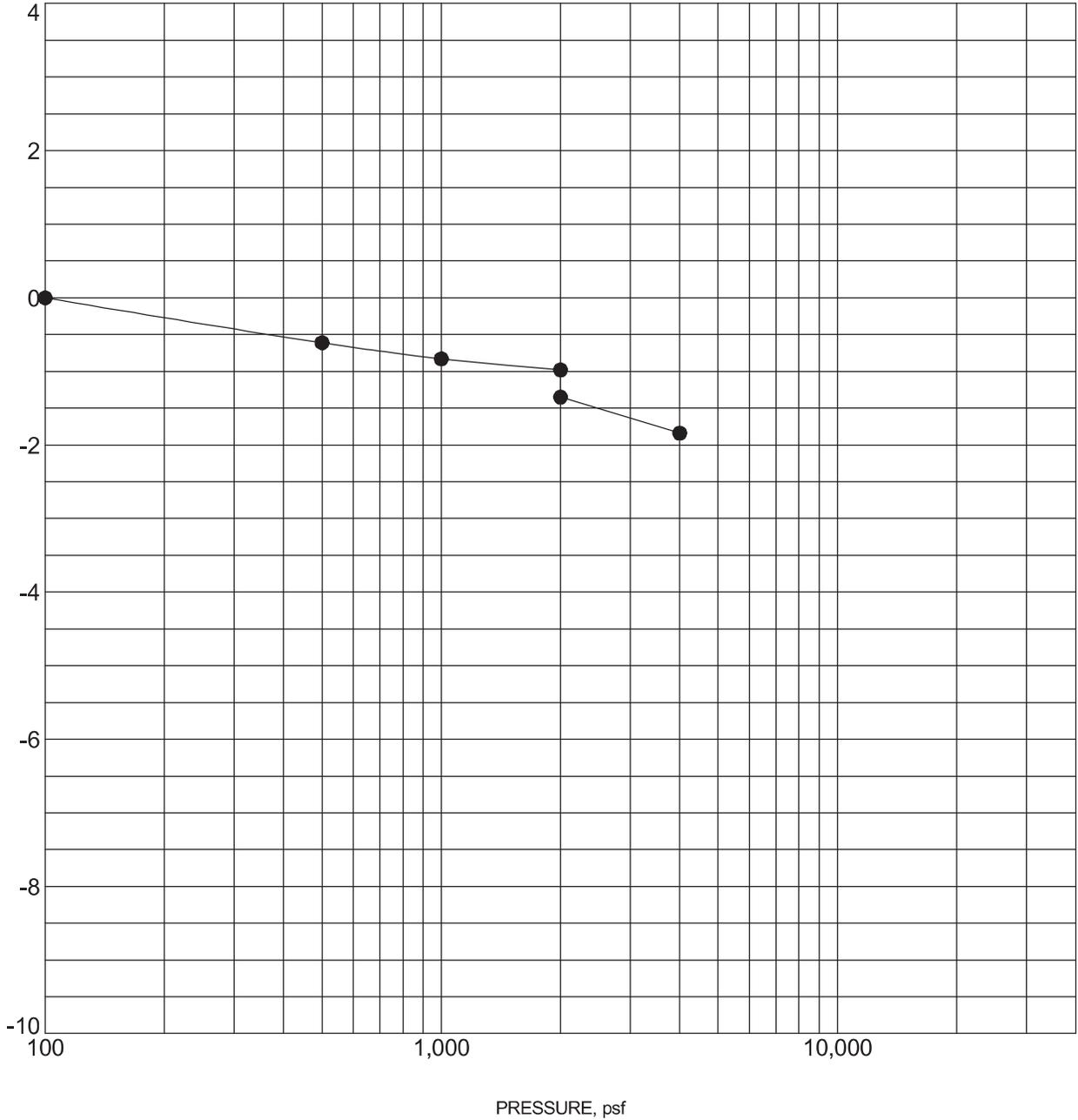
NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL HFCTCD Design	 <small>1421 Edinger Ave, Ste C Tustin, CA</small>	PROJECT NUMBER: 60215261
SITE: The Strand Manhattan Beach, CA		CLIENT: CWE Corp Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-7 20 - 21.5 ft	POORLY GRADED SAND WITH SILT	98	5.2

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

SITE: The Strand  
Manhattan Beach, CA



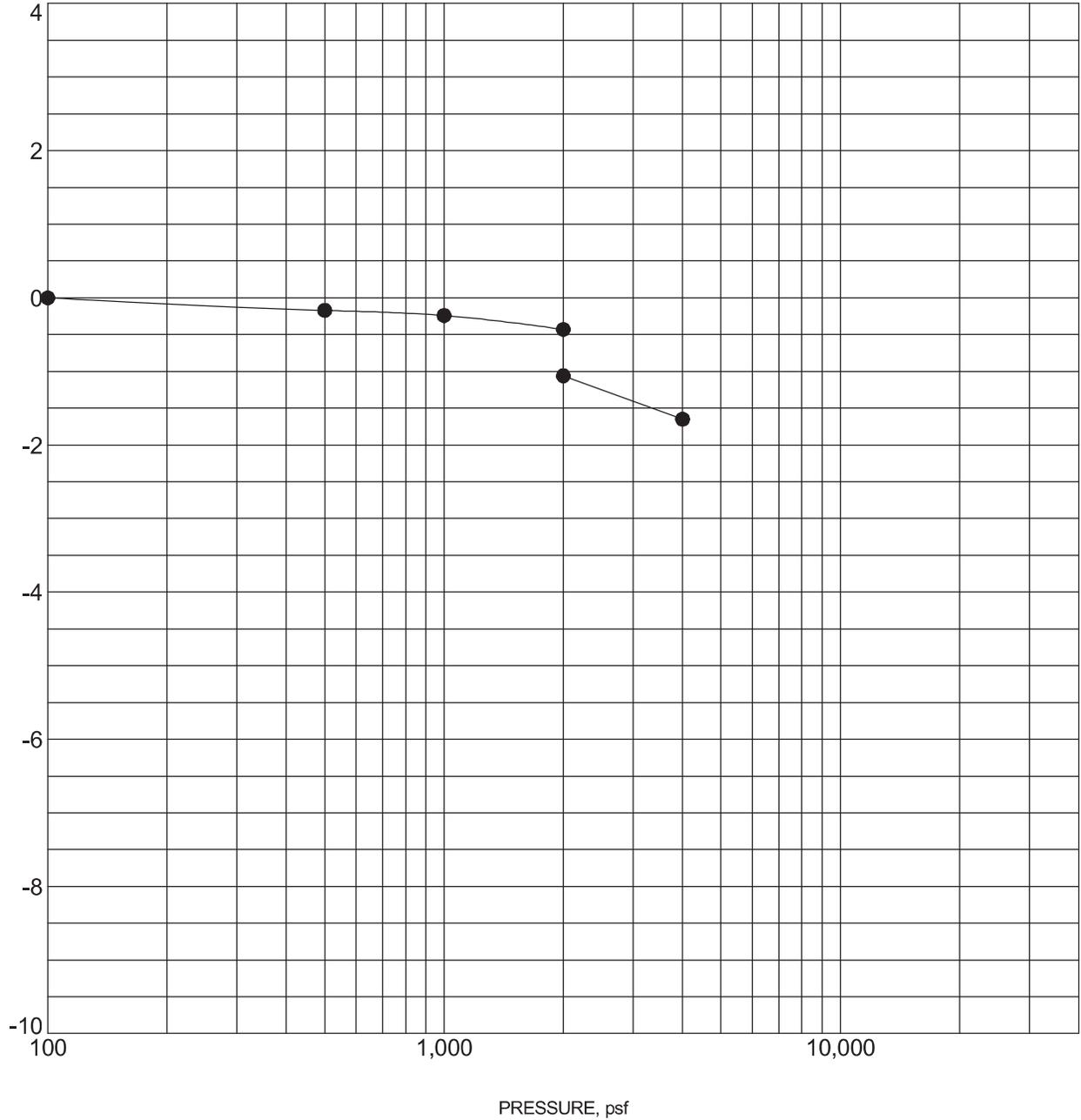
PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

# SWELL CONSOLIDATION TEST

ASTM D2435

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_CONSOL\_STRAIN-USCS 60215261 CWE - SANTA MONIC.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22



Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %
● B-7 25 - 26.5 ft	POORLY GRADED SAND WITH SILT	101	3.6

NOTES: water added at 2,000 psf.

PROJECT: Manhattan Beach SMB TMDL  
HFCTCD Design

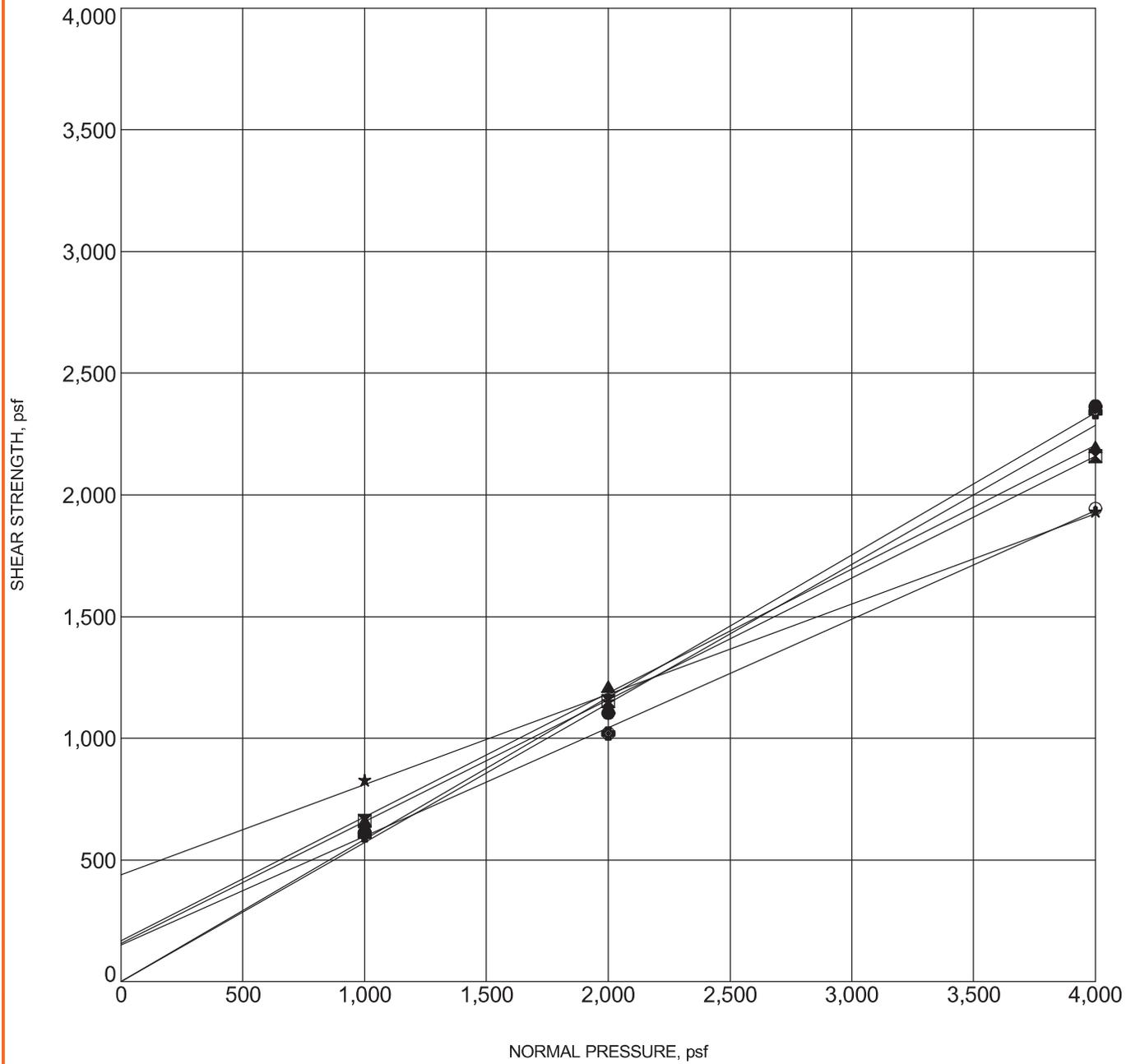
SITE: The Strand  
Manhattan Beach, CA



PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

### DIRECT SHEAR TEST ASTM D3080



LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. TC\_DIRECT\_SHEAR\_60215261\_CWE - SANTA MONICA.GPJ TERRACON\_DATATEMPLATE.GDT 7/14/22

Specimen Identification	Classification	$\gamma_d$ , pcf	WC, %	c, psf	$\phi^\circ$
● B-2 5.0ft	SILTY SAND (SM)	100	3	0	30
▣ B-3 20.0ft	SILTY SAND (SM)	110	4	156	27
▲ B-4 20.0ft	POORLY GRADED SAND WITH SILT (SP-SM)	97	3	168	27
★ B-5 10.0ft	SILT WITH SAND (ML)	113	6	438	20
⊙ B-6 10.0ft	SILTY SAND (SM)	110	6	150	24
⊕ B-7 20.0ft	POORLY GRADED SAND WITH SILT (SP-SM)	98	5	0	30

PROJECT: Manhattan Beach SMB TMDL  
HFCTTCD Design

SITE: The Strand  
Manhattan Beach, CA



PROJECT NUMBER: 60215261

CLIENT: CWE Corp  
Fullerton, CA

750 Pilot Road, Suite F  
Las Vegas, Nevada 89119  
(702) 597-9393



**Client**  
CWE Corp

**Project**  
Manhattan Beach SMB TMDL HFCTTCD Design

**Sample Submitted By:** Terracon (60)

**Date Received:** 7/12/2022

**Lab No.:** 22-0494

### Results of Corrosion Analysis

Sample Number	--	--	--
Sample Location	B-2	B-3	B-6
Sample Depth (ft.)	20.0	25.0	15.0
pH Analysis, ASTM G 51	8.67	8.63	8.40
Water Soluble Sulfate (SO <sub>4</sub> ), ASTM C 1580 (percent %)	0.02	<0.01	0.01
Sulfides, AWWA 4500-S D, (mg/kg)	Nil	Nil	Nil
Chlorides, ASTM D 512, (mg/kg)	27	67	100
Red-Ox, ASTM G 200, (mV)	+728	+735	+733
Total Salts, AWWA 2540, (mg/kg)	435	142	273
Saturated Minimum Resistivity, ASTM G 57, (ohm-cm)	16490	13580	5238

**Analyzed By:**

Nathan Campo  
Engineering Technician II

The tests were performed in general accordance with applicable ASTM and AWWA test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

## **SUPPORTING INFORMATION**

## Summary of Seismic Design Parameters

Manhattan Beach SMB TMDL HFCTTCD Design ■ Manhattan Beach, California  
July 20, 2022 ■ Terracon Project No. 60215261



Description	Boring B-1	Boring B-2	Boring B-3	Boring B-4	Boring B-5	Boring B-6	Boring B-7
<b>2019 California Building Code Site Classification (CBC)</b> <sup>1</sup>	D <sup>2</sup>						
<b>Site Latitude (°N)</b>	33.8777	33.8863	33.8924	33.8942	33.8973	33.9017	33.9041
<b>Site Longitude (°W)</b>	118.4079	118.4124	118.4159	118.4170	118.4182	118.4202	118.4214
<b>S<sub>s</sub> Spectral Acceleration for a 0.2-Second Period</b>	1.915	1.912	1.913	1.914	1.914	1.913	1.911
<b>S<sub>1</sub> Spectral Acceleration for a 1-Second Period</b>	0.683	0.681	0.680	0.680	0.679	0.678	0.677
<b>F<sub>a</sub> Site Coefficient for a 0.2-Second Period</b>	1.0	1.0	1.0	1.0	1.0	1.0	1.0
<b>F<sub>v</sub> Site Coefficient for a 1-Second Period</b>	1.7	1.7	1.7	1.7	1.7	1.7	1.7
<b>Nearest Known Active Fault</b>	Palos Verdes						
<b>Nearest Fault Mean Magnitude</b> <sup>3,4</sup>	7.1	7.1	7.1	7.1	7.1	7.1	7.1
<b>Nearest Fault Mean Distance (km)</b> <sup>3,4</sup>	3.53	3.78	4.09	4.16	4.33	4.60	4.72
<b>Project Site Mean Magnitude</b> <sup>4</sup>	6.76	6.73	6.71	6.71	6.71	6.71	6.73
<b>Site Modified Peak Ground Acceleration (PGA<sub>m</sub>)</b> <sup>5</sup>	0.920	0.917	0.916	0.916	0.915	0.914	0.913

1. Seismic site classification in general accordance with the *2019 California Building Code*.
2. The 2019 California Building Code (CBC) requires a site soil profile determination extending to a depth of 100 feet for seismic site classification. The current scope does not include the required 100-foot soil profile determination. Borings were extended to maximum depths of 41 to 51½ feet, and this seismic site class definition considers that similar or denser soils continue below the maximum depth of the subsurface exploration. Additional exploration to deeper depths would be required to confirm the conditions below the current depth of exploration.
3. This fault is considered to have the most significant effect at the site from a design standpoint based on deaggregations.
4. Based on USGS deaggregations.
5. Based on USGS U.S. Seismic Design Maps using the 2016 ASCE 7.

# GENERAL NOTES

## DESCRIPTION OF SYMBOLS AND ABBREVIATIONS

<b>SAMPLING</b>				<b>WATER LEVEL</b>		Water Initially Encountered	<b>FIELD TESTS</b>	(HP) Hand Penetrometer
						Water Level After a Specified Period of Time		(T) Torvane
						Water Level After a Specified Period of Time		(b/f) Standard Penetration Test (blows per foot)
						Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.		(PID) Photo-Ionization Detector
								(OVA) Organic Vapor Analyzer
								(WOH) Weight of Hammer

## DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

## LOCATION AND ELEVATION NOTES

Unless otherwise noted, Latitude and Longitude are approximately determined using a hand-held GPS device. The accuracy of such devices is variable. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

<b>STRENGTH TERMS</b>	RELATIVE DENSITY OF COARSE-GRAINED SOILS (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance Includes gravels, sands and silts.			CONSISTENCY OF FINE-GRAINED SOILS (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance			
	Descriptive Term (Density)	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.	Descriptive Term (Consistency)	Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-Value Blows/Ft.	Ring Sampler Blows/Ft.
	Very Loose	0 - 3	0 - 6	Very Soft	less than 500	0 - 1	< 3
	Loose	4 - 9	7 - 18	Soft	500 to 1,000	2 - 4	3 - 4
	Medium Dense	10 - 29	19 - 58	Medium-Stiff	1,000 to 2,000	4 - 8	5 - 9
	Dense	30 - 50	59 - 98	Stiff	2,000 to 4,000	8 - 15	10 - 18
	Very Dense	> 50	≥ 99	Very Stiff	4,000 to 8,000	15 - 30	19 - 42
				Hard	> 8,000	> 30	> 42

## RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 15
With	15 - 29
Modifier	> 30

## RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	< 5
With	5 - 12
Modifier	> 12

## GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300 mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75 mm)
Sand	#4 to #200 sieve (4.75mm to 0.075mm)
Silt or Clay	Passing #200 sieve (0.075mm)

## PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1 - 10
Medium	11 - 30
High	> 30

## UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests <sup>A</sup>				Soil Classification		
				Group Symbol	Group Name <sup>B</sup>	
<b>Coarse-Grained Soils:</b> More than 50% retained on No. 200 sieve	<b>Gravels:</b> More than 50% of coarse fraction retained on No. 4 sieve	<b>Clean Gravels:</b> Less than 5% fines <sup>C</sup>	$Cu \geq 4$ and $1 \leq Cc \leq 3$ <sup>E</sup>	GW	Well-graded gravel <sup>F</sup>	
			$Cu < 4$ and/or [ $Cc < 1$ or $Cc > 3.0$ ] <sup>E</sup>	GP	Poorly graded gravel <sup>F</sup>	
		<b>Gravels with Fines:</b> More than 12% fines <sup>C</sup>	Fines classify as ML or MH	GM	Silty gravel <sup>F, G, H</sup>	
			Fines classify as CL or CH	GC	Clayey gravel <sup>F, G, H</sup>	
	<b>Sands:</b> 50% or more of coarse fraction passes No. 4 sieve	<b>Clean Sands:</b> Less than 5% fines <sup>D</sup>	$Cu \geq 6$ and $1 \leq Cc \leq 3$ <sup>E</sup>	SW	Well-graded sand <sup>I</sup>	
			$Cu < 6$ and/or [ $Cc < 1$ or $Cc > 3.0$ ] <sup>E</sup>	SP	Poorly graded sand <sup>I</sup>	
		<b>Sands with Fines:</b> More than 12% fines <sup>D</sup>	Fines classify as ML or MH	SM	Silty sand <sup>G, H, I</sup>	
			Fines classify as CL or CH	SC	Clayey sand <sup>G, H, I</sup>	
<b>Fine-Grained Soils:</b> 50% or more passes the No. 200 sieve	<b>Silts and Clays:</b> Liquid limit less than 50	<b>Inorganic:</b>	$PI > 7$ and plots on or above "A" line	CL	Lean clay <sup>K, L, M</sup>	
			$PI < 4$ or plots below "A" line <sup>J</sup>	ML	Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	$< 0.75$	OL	Organic clay <sup>K, L, M, N</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, O</sup>
	<b>Silts and Clays:</b> Liquid limit 50 or more	<b>Inorganic:</b>	$PI$ plots on or above "A" line	CH	Fat clay <sup>K, L, M</sup>	
			$PI$ plots below "A" line	MH	Elastic Silt <sup>K, L, M</sup>	
		<b>Organic:</b>	Liquid limit - oven dried	$< 0.75$	OH	Organic clay <sup>K, L, M, P</sup>
			Liquid limit - not dried			Organic silt <sup>K, L, M, Q</sup>
<b>Highly organic soils:</b>	Primarily organic matter, dark in color, and organic odor			PT	Peat	

<sup>A</sup> Based on the material passing the 3-inch (75-mm) sieve.

<sup>B</sup> If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

<sup>C</sup> Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

<sup>D</sup> Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

$$E \quad Cu = D_{60}/D_{10} \quad Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$$

<sup>F</sup> If soil contains  $\geq 15\%$  sand, add "with sand" to group name.

<sup>G</sup> If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

<sup>H</sup> If fines are organic, add "with organic fines" to group name.

<sup>I</sup> If soil contains  $\geq 15\%$  gravel, add "with gravel" to group name.

<sup>J</sup> If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

<sup>K</sup> If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

<sup>L</sup> If soil contains  $\geq 30\%$  plus No. 200 predominantly sand, add "sandy" to group name.

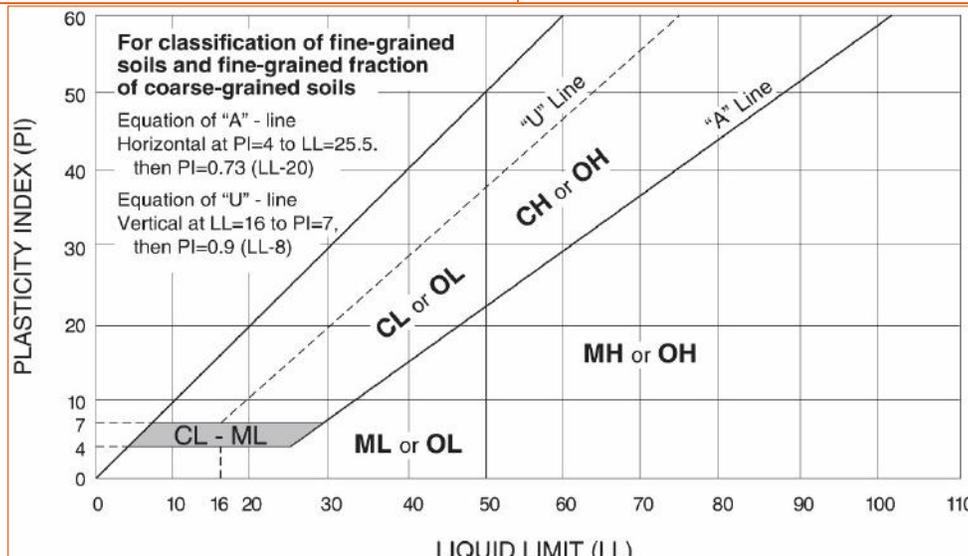
<sup>M</sup> If soil contains  $\geq 30\%$  plus No. 200, predominantly gravel, add "gravelly" to group name.

<sup>N</sup>  $PI \geq 4$  and plots on or above "A" line.

<sup>O</sup>  $PI < 4$  or plots below "A" line.

<sup>P</sup>  $PI$  plots on or above "A" line.

<sup>Q</sup>  $PI$  plots below "A" line.



**APPENDIX V  
SAMPLE ADA COMPLIANCE MEMO**

**MEMORANDUM**

DATE: September 07, 2017

TO: PREM KUMAR, PE, CITY ENGINEER

FROM: FRANK BIGDELI, PE  
PROJECT ENGINEER  
QUANTUM CONSULTING

SUBJECT: CURB RAMPS CONSTRUCTION PROJECT – “AS-BUILT” MEMO WITH  
CERTIFICATE OF COMPLIANCE  
PROJECT NUMBER S-261  
RAMP LOCATION – 13<sup>TH</sup> STREET/OCEAN DR – EAST & WEST RAMPS

The City of Manhattan Beach completed the construction of two ADA ramps at the intersection of 13<sup>th</sup> Street and Ocean Drive. The installation of Americans with Disabilities Act (ADA) curb ramps followed the Caltrans 2015 Revised Standard Plan RSP A88A, City of Manhattan Beach Standard Curb Ramp Removal Limits, Sheet D and Sheet E. Normal circumstances allow application of the design parameters of the standard plans without deviation from the printed standard plans.

Upon completion of construction, both ramps were inspected, photographed, and documented. Slope measurements were taken utilizing a four foot (4') smart level, yielding the noted slopes in the photographs attached. These annotated photographs are considered the “As-Built” ramp document. The review of the “As-Built” slopes follow the Federal ADA design guidelines for maximum allowable slopes. These slopes values are documented in the Standard Plan for Public Works Construction, Standard Plan 111-5. The field measurement, conditions and photographs were provided by the staff at the City of Manhattan Beach.

Several items can impact the design parameters of the standard plans which are street slopes, site conditions and other factors. For this ramp location, the following two items describe their impacts of deviations from the standard plans.

**Item 1 – Street Slopes**

The above referenced project is located in the City of Manhattan Beach, in several hillside neighborhoods that have street slopes greater than 5%. It was mutually agreed upon and determined to use the Standard Plans for Public Works Construction, Standard Plan 111-5, Sheet 9 of 10, Table 2, Slope Adjustments to address the ramp conditions with street slopes in excess of 5%. In order to address street slope values larger than the 5%, engineering judgement, site conditions, constructability and ADA compliance are factored into the following recommended implementation methodology for constructing ADA compliant ramps.

For streets with a slope greater than 5%, application of the Street Slope Adjustment shall be as follows;

“X” Up Dimension shall the End of Curb Return (EC). This complies with City of Manhattan Beach Standard Curb Ramp Removal Limits, Sheet D and Sheet E.

All other standards identified in the Standard Plans shall be implemented to the greatest extent practicle during construction as applicable. This recommendation provides compliance with the intent of the ADA Curb Ramp Standards and a provides a logical termination for the ramp construction where the street slope exceeds 5%.

## Item 2 – Site Conditions

The street slope is in excess of the 5% on 13<sup>th</sup> Street. This allowed the western ramp a slope of 7.5% or less, the cross gutter less than 5% and sidewalk ramp slopes less than 9% along Ocean Drive, which are in compliance with the standard. This, however, required the eastern ramp to have a ramp slope greater than 7.5%. The ramp slope along 13th Street is in excess of the standard due to the transition from the flat intersection to the steep uphill slope. The impacts of the grades are technically unachievable, however, it was determined and mutually agreed to maintain the back of the slopes as an acceptable solution to address the sloping street grades. The as-built field conditions and actual slopes, as directed and provided by city staff, provide compliance with the intent of the ADA Curb Ramp Standards and a logical termination to address the site conditions.

## Conclusion:

The street slopes and site conditions contribute to the constructed ramp meeting the intent of the ADA Curb Ramp Standard by allowing access from the sidewalk to the roadway and that are not in compliance with maximum slope values noted on the standard plans due to the documents items.

Attachments: “As-Built” Photographs with Slope Notations

## Certificate of Compliance:

This Certificate of Compliance is prepared after completion of construction activities for the Ramps located at the intersection of 13<sup>th</sup> Street and Ocean Drive, that created, altered, or affected pedestrian facilities constructed in accordance with the policies, standards and project specifications in compliance with the intent of the standards of the ADA.

I, (Project Engineer), a California Licensed Professional Engineer do hereby certify that the project has been constructed in accordance with the project specifications, standard plans, “As- Built” Memorandum describing construction exceptions due to the individual site conditions.



Frank Bigdeli, PE  
Project Engineer,  
No. C 51973, Exp Date 06-30-18





3.8%

19.6%

3.7%

0.7%

4.8%



7.4%

0.3%

6.4%

1.0%

0.2%



CITY OF MANHATTAN BEACH PUBLIC WORKS  
ENGINEERING DIVISION  
3621 Bell Avenue, Manhattan Beach, CA 90266

WEBSITE: [www.citymb.info](http://www.citymb.info) PHONE: (310) 802-5353 FAX: (310) 802-5351 TDD: (310) 546-3501

**DOCUSIGN CONTRACT SIGNOR FORM**

Date: 3/7/24

Vendor: Clarke Contracting Corporation

Contract: Santa Monica Bay Total Maximum Daily Load high-Flow Capacity Trash Treatment Control Device (SMB TMDL HFCTTCD) Project

Please list the representative(s) from your organization that will be **signing the agreement** and **attach proof of signature authority** by providing articles of incorporation, corporate resolution, etc.

1) Name: Brian A. Clarke

Title: President

Email: brianclarke68@yahoo.com

2) Name: Robert F. Clarke

Title: Vice President

Email: clarkebobccc@yahoo.com

Please list the representative(s) from your organization that would like to receive a **copy of the executed agreement**:

1) Name: Wendy Sapiens

Title: Assistant Manager

Email: office@clarke-contracting.com

2) Name: \_\_\_\_\_

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

Email: \_\_\_\_\_



## DESCRIPTIONS (Continued from Page 1)

policies that include general liability, auto liability, and employers liability policies subject to terms, conditions, definitions and exclusions of the policy.

Clarke Contracting Corporation

POLICY NUMBER: NBA100874300

XIC 421 1013

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**XL PLUS BUSINESS AUTO EXTENSION ENDORSEMENT**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

COVERAGE DESCRIPTION

- A. Temporary Substitute Auto Physical Damage**
- B. Who Is An Insured**
  - 1. Broad Form Insured**
  - 2. Employees As Insureds**
  - 3. Additional Insured By Contract, Agreement or Permit**
  - 4. Employee Hired Autos**
- C. Supplementary Payments**
- D. Amended Fellow Employee Exclusion**
- E. Physical Damage Coverage**
  - 1. Rental Reimbursement**
  - 2. Extra Expense – Broadened Coverage**
  - 3. Personal Effects Coverage**
  - 4. Lease Gap**
  - 5. Glass Repair – Waiver Of Deductible**
- F. Physical Damage Coverage Extensions**
  - 1. Additional Transportation Expense**
  - 2. Hired Auto Physical Damage**
- G. Business Auto Conditions**
  - 1. Notice Of Occurrence**
  - 2. Waiver Of Subrogation**
  - 3. Unintentional Failure To Disclose Hazards**
  - 4. Primary Insurance**
- H. Bodily Injury Redefined**
- I. Extended Cancellation Condition**

**A. Temporary Substitute Auto Physical Damage**

**SECTION I – COVERED AUTOS, C. Certain Trailers, Mobile Equipment And Temporary Substitute Autos** is changed by adding the following:

If Physical Damage coverage is provided by this Coverage Form, the following types of vehicles are also covered “autos” for Physical Damage coverage:

1. Any “auto” you do not own while used with the permission of its owner as a temporary substitute for a covered “auto” you own that is out of service because of its:
  - a. Breakdown;
  - b. Repair;
  - c. Servicing;
  - d. “Loss”; or
  - e. Destruction.

**B. Who Is An Insured**

**SECTION II – COVERED AUTOS LIABILITY COVERAGE, A. Coverage, 1. Who Is An Insured** is changed by adding the following:

**1. Broad Form Insured**

For any covered “auto”, any subsidiary, affiliate or organization, other than a partnership or joint venture, as may now exist or hereafter be constituted over which you assume active management or maintain ownership or majority interest, provided that you notify us within ninety (90) days from the date that any such subsidiary or affiliate is acquired or formed and that there is no similar insurance available to that organization. However, coverage does not apply to “bodily injury” or “property damage” that occurred before you acquired or formed the organization.

**2. Employees As Insureds**

Any “employee” of yours is an “insured” while using a covered “auto” you don’t own, hire or borrow, in your business or your personal affairs.

**3. Additional Insured By Contract, Agreement Or Permit**

Any person or organization with whom you have agreed in writing in a contract, agreement or permit, to provide insurance such as is provided under this policy, provided that the “bodily injury” or “property damage” occurs subsequent to the execution of the written contract, agreement or permit.

**4. Employee Hired Autos**

An “employee” of yours is an “insured” while operating an “auto” hired or rented under a contract or agreement in that “employee’s” name, with your permission, while performing duties related to the conduct of your business.

**SECTION IV – BUSINESS AUTO CONDITIONS, B. General Conditions, 5. Other Insurance, b.** is replaced with the following:

- b.** For Hired Auto Physical Damage Coverage, the following are deemed to be covered “autos” you own:
  - (1)** Any covered “auto” you lease, hire, rent or borrow; and
  - (2)** Any covered “auto” hired or rented by your “employee” under a contract in that individual “employee’s” name, with your permission, while performing duties related to the conduct of your business.

However, any “auto” that is leased, hired, rented or borrowed with a driver is not a covered “auto”.

**C. Supplementary Payments**

**SECTION II – COVERED AUTOS LIABILITY COVERAGE, A. Coverage, 2. Coverage Extensions, a. Supplementary Payments** is changed as follows:

Item **(2)** is deleted and replaced by the following:

- (2)** Up to \$3,500 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.

Item **(4)** is deleted and replaced by the following:

- (4)** All reasonable expenses incurred by the “insured” at our request, including actual loss of earnings up to \$500 a day because of time off from work.

**D. Amended Fellow Employee Exclusion**

**SECTION II – COVERED AUTOS LIABILITY COVERAGE, B. Exclusions, 5. Fellow Employee** does not apply.

The insurance provided under this Provision **D.** is excess over any other collectible insurance.

**E. Physical Damage Coverage**

**SECTION III – PHYSICAL DAMAGE COVERAGE, A. Coverage** is changed by adding the following:

**1. Rental Reimbursement**

- a.** We will pay for rental reimbursement expenses incurred by you for the rental of an “auto” because of “loss” to a covered “auto”. Payment applies in addition to the otherwise applicable amount of each coverage you have on a covered “auto”. No deductibles apply to this coverage.
- b.** We will pay only for those expenses incurred during the policy period beginning twenty-four (24) hours after the “loss” and ending, regardless of the policy’s expiration, with the lesser of the following number of days:

- (1) The number of days reasonably required to repair or replace the covered "auto". If "loss" is caused by theft, this number of days is added to the number of days it takes to locate the covered "auto" and return it to you.
    - (2) Thirty (30) days.
  - c. Our payment is limited to the lesser of the following amounts:
    - (1) Necessary and actual expenses incurred.
    - (2) \$50 any one day per private passenger "auto";  
\$100 any one day per truck;  
\$1,500 any one period per private passenger "auto";  
\$3,000 any one period per truck; or  
Higher limits if shown elsewhere in this policy.
  - d. This coverage does not apply while there are spare or reserve "autos" available to you for your operations.
  - e. If "loss" results from the total theft of a covered "auto" of the private passenger type, we will pay under this coverage only that amount of your rental reimbursement expenses which is not already provided for under the Physical Damage Coverage Extension.

**2. Extra Expense – Broadened Coverage**

We will pay for the expense of returning a stolen covered "auto" to you.

**3. Personal Effects Coverage**

If you have purchased Comprehensive Coverage on this policy for an "auto" you own and that "auto" is stolen, we will pay, without application of a deductible, up to \$500 for "personal effects" stolen from the "auto".

As used in this endorsement, "personal effects" means tangible property that is worn or carried by an "insured". "Personal effects" does not include tools, jewelry, money or securities.

**4. Lease Gap**

In the event of a total "loss" to a covered "auto" shown in the Declarations, we will pay any unpaid amount due on the lease or loan for a covered "auto", less:

- a. The amount paid under the Physical Damage Coverage Section of the policy; and
- b. Any:
  - (1) Overdue lease/loan payments at the time of the "loss";
  - (2) Financial penalties imposed under a lease for excessive use, abnormal wear and tear or high mileage;
  - (3) Security deposits not returned by the lessor;
  - (4) Costs for extended warranties, Credit Life Insurance, Health, Accident or Disability Insurance purchases with the loan or lease; and
  - (5) Carry-over balances from previous loans or leases.

**5. Glass Repair – Waiver Of Deductible**

No deductible applies to glass damage if the glass is repaired rather than replaced.

**F. Physical Damage Coverage Extensions**

**SECTION III – PHYSICAL DAMAGE COVERAGE, A. Coverage, 4. Coverage Extensions** is amended by the following:

**1. Additional Transportation Expense**

**Sections a. and b.** are amended to provide a limit of \$50 per day and a maximum limit of \$1,000.

**2. Hired Auto Physical Damage**

The following section is added:

Any “auto” you lease, hire, rent or borrow is deemed to be a covered “auto” for physical damage coverage. The most we will pay for each covered “auto” is the lesser of:

- (1) the actual cash value;
- (2) the cost for repair or replacement; or
- (3) \$50,000, or higher limit if shown on the Declarations for Hired Auto Physical Damage Coverage.

For each covered “auto” a deductible of \$100 for Comprehensive Coverage and \$1,000 for Collision Coverage will apply.

**G. Business Auto Conditions**

**SECTION IV – BUSINESS AUTO CONDITIONS, A. Loss Conditions** is changed by the following:

**1. Notice Of Occurrence**

**Section 2. – Duties In The Event Of Accident, Claim, Suit Or, Loss, a.** is changed by adding the following:

If you report an injury to an “employee” to your workers’ compensation carrier and if it is subsequently determined that the injury is one to which this insurance may apply, any failure to comply with this condition will be waived if you provide us with the required notice as soon thereafter as practicable after you know or reasonably should have known that this insurance may apply.

**2. Waiver Of Subrogation**

**Section 5. Transfer Of Rights Of Recovery Against Others To Us** is changed by adding the following:

However, this Condition does not apply to any person(s) or organization(s) with whom you have a written contract, but only to the extent that subrogation is waived prior to the “accident” or the “loss” under such contract with that person or organization.

**SECTION IV – BUSINESS AUTO CONDITIONS, B. General Conditions** is changed by the following:

**3. Unintentional Failure To Disclose Hazards**

The following condition is added:

Your unintentional failure to disclose all hazards as of the inception date of the policy shall not prejudice any insured with respect to the coverage afforded by this policy.

**4. Primary Insurance**

**Condition 5. Other Insurance** is changed by adding the following:

For any covered "auto" this insurance shall apply as primary and not contribute with any other insurance where such requirement is agreed in a written contract executed prior to a "loss".

**H. Bodily Injury Redefined**

**SECTION V – DEFINITIONS, C.** "Bodily injury" is replaced by the following:

"Bodily injury" means bodily injury, sickness or disease sustained by a person including mental anguish, mental injury, shock, fright or death resulting from any of these at any time.

**I. Extended Cancellation Condition**

**COMMON POLICY CONDITIONS (Form IL 00 17), A. Cancellation, 2.b.** is replaced by the following:

The greater of sixty (60) days or the time required by any applicable state amendatory endorsement before the effective date of cancellation if we cancel for any other reason.

All other terms and conditions of this policy remain unchanged.

Clarke Contracting Corporation  
 POLICY NUMBER: LA24CGLZ01AWYIC

**COMMERCIAL GENERAL LIABILITY**  
**CG 20 10 07 04**

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
 CONTRACTORS – SCHEDULED PERSON OR  
 ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Any person or organization for whom you are performing operations during the policy period when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

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Clarke Contracting Corporation  
 POLICY NUMBER: LA24CGLZ01AWYIC

**COMMERCIAL GENERAL LIABILITY**  
**CG 20 37 07 04**

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

<b>Name Of Additional Insured Person(s) Or Organization(s):</b>	<b>Location And Description Of Completed Operations</b>
Any person or organization for whom you are performing "commercial construction" during the period of this policy and have agreed in a written contract to add as an additional insured for products-completed operations. "Commercial construction" does not include any habitational or residential construction other than hotels or apartments	.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**Section II - Who Is An Insured** is amended to include as an additional insured the person(s) or organization (s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

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Clarke Contracting Corporation  
POLICY NUMBER: LA24CGLZ01AWYIC

**COMMERCIAL GENERAL LIABILITY**  
**CG 24 04 05 09**

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

### **SCHEDULE**

**Name Of Person Or Organization:**

Any person or organization when you and such person or organization have agreed in writing in a contract or agreement that you will waive any right of recovery against such person or organization.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV - Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

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**WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY**

**WC 04 03 06  
(Ed. 04-84)**

**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT - CALIFORNIA**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2% of the California workers' compensation premium otherwise due on such remuneration.

**Schedule**

**Person or Organization**

Any person or organization as required by written contract.

**Job Description**

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.  
**(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)**

Endorsement Effective 03/01/2024  
Insured Clarke Contracting Corporation  
Insurance Company

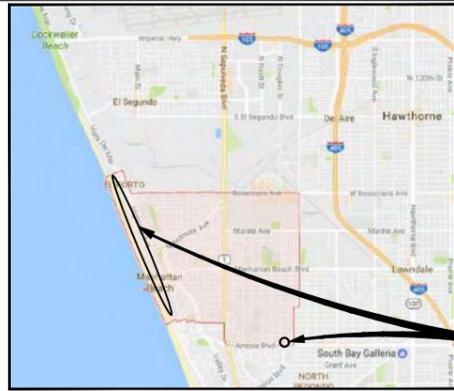
Policy No. CTP1002230

Endorsement No.  
Premium \$

Countersigned by \_\_\_\_\_

**WC 04 03 06  
(Ed. 04-84)**

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**VICINITY MAP**  
NOT TO SCALE

**PROJECT SITE**

# CITY OF MANHATTAN BEACH

## PLANS FOR

### SANTA MONICA BAY TMDL HFCTTCD PROJECT



**PUBLIC WORKS DEPARTMENT**  
3621 BELL AVENUE  
MANHATTAN BEACH, CALIFORNIA 90266

INDEX OF DRAWINGS		
SHEET NO.	DWG NO.	DESCRIPTION
1	C-1	TITLE SHEET
2	C-2	GENERAL NOTES
3	C-3	GENERAL NOTES
4A	C-4A	CITY BMP IMPLEMENTATION
4B	C-4B	COUNTY BMP IMPLEMENTATION
5	C-5	CHANNEL FILTER SYSTEM
6	C-6	1st STREET HDS PLAN
7	C-7	14th STREET HDS PLAN
8	C-8	24th STREET HDS PLAN
9	C-9	27th STREET HDS PLAN
10	C-10	32nd STREET HDS PLAN
11	C-11	39th STREET HDS PLAN
12	C-12	DETAILS
13	C-13	DETAILS
14	C-14	DETAILS
15	C-15	BORING LOGS
16	C-16	BORING LOGS

**STANDARD PLANS:**

- CITY OF MANHATTAN BEACH**  
 MBSI-110C-1(ST-1) RESIDENTIAL DRIVEWAY APPROACH  
 MBSI-112A-0(ST-2) STANDARD SIDEWALK  
 MBSI-120A-0(ST-3) STANDARD CURB AND GUTTER  
 MBSI-132A-0(ST-10) STREET EXCAVATION AND PAVEMENT RESTORATION  
 MBWS-700A-0(ST-15) 3/4" SERVICE FOR 3/4" WATER METER, 1" SERVICE FOR 1" WATER METER
- STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION**  
 111-5 CURB RAMP  
 308-3 MONOLITHIC CATCH BASIN CONNECTION  
 335-2 PIPE CONNECTIONS TO EXISTING STORM DRAINS

**COORDINATES:**

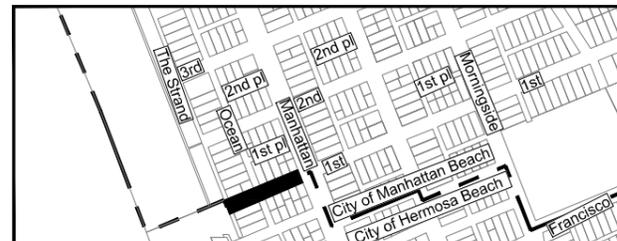
COORDINATES ARE BASED UPON C.C.S. 83, STATE PLANE COORDINATE SYSTEM, ZONE 5.

**BASIS OF BEARING:**

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P799" AND "WRHS" BEING NORTH 72° 59' 41" WEST, DISTANCE OF 38417.57 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON MARCH 20TH, 2022, WAS USED AS THE BEARINGS FOR THIS SURVEY.

**BENCHMARKS:**

- 1ST STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 10274; 2013 ADJ  
 NAVD 88 ELEVATION =(27.23) FEET  
 DPW BM TAG IN ELY CB 4FT W/O C.B. 16FT N/O & 7FT E/O C/L THE STRAND @ & 1ST ST.
- 14TH STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 12102; 2013 ADJ  
 NAVD 88 ELEVATION =(44.95) FEET  
 DPW TAG IN WALK 8FT S/O C/L PROD 16TH & 6FT E/O THE STRAND.
- 24TH STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 8392; 2013 ADJ  
 NAVD 88 ELEVATION =(37.17) FEET  
 USC & GS MON FL IN 1ST STEP BELOW CONC WK @ STAIR TO BEACH 7FT W/O C/L THE STRAND & NR C/L PROD MARINE AVE MKD (J 1052 1960)
- 27TH STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 12100; 2013 ADJ  
 NAVD 88 ELEVATION =(10.368) FEET  
 DPW TAG IN E. CB THE STRAND @ C/L PROD 28TH STREET.
- 32ND STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 12100; 2013 ADJ  
 NAVD 88 ELEVATION =(10.368) FEET  
 DPW TAG IN E. CB THE STRAND @ C/L PROD 28TH STREET.
- 39TH STREET**  
 CITY OF TORRANCE QUAD  
 BM: QY 6877; 2013 ADJ  
 NAVD 88 ELEVATION =(29.744) FEET  
 USC & GS MON 2ND STEP FR BOTTOM LEADING TO BEACH @ ROSECRANS AVE 18FT S/O C/L PROD & 26.2 FT W/O C/L THE STRAND MKD (Y-614 1941) CO ENG #21-24



**LOCATION MAPS**  
NOT TO SCALE  
WORK SITE LOCATION



**811**  
Know what's below.  
Call before you dig.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

- SUPPLEMENTAL NOTES:**
1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
  2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
  3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

**REGISTERED PROFESSIONAL ENGINEER**  
 KATHY HARREL  
 CIVIL ENGINEER  
 STATE OF CALIFORNIA  
 EXPIRES 9/30/2024  
 DATE SIGNED: **DECEMBER 19, 2023**

**PREPARED BY:**  
**CWE**  
 1561 E. ORANGETHORPE AVE.  
 SUITE 240  
 FULLERTON, CA 92831  
 (714) 526-7500  
 www.cwecorp.com

REVIEWED BY	DATE

REFERENCES		
NO.	BY	DATE

REVISIONS		
NO.	DATE	DESCRIPTION

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL TITLE SHEET**

APPROVED BY:  PROJECT MANAGER TIM BIRTISEL DATE: 12/26/23	APPROVED BY:  CITY ENGINEER KATHERINE DOHERTY DATE: 12/26/2023
SCALE: AS SHOWN DATE: MARCH 2023	DRAWING NO.: <b>C-1</b>

SHEET 1 OF 16

**PROJECT UTILITY CONTACTS**

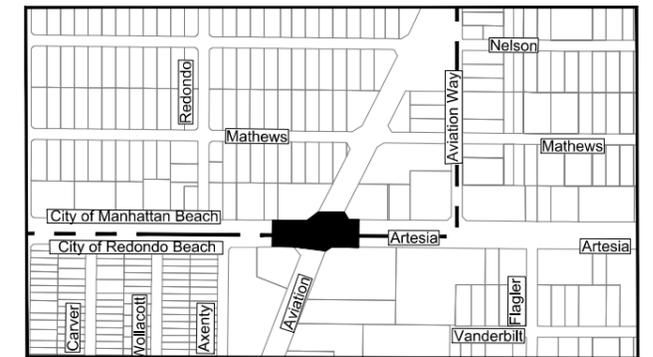
CITY OF MANHATTAN BEACH (PUBLIC WORKS DEPARTMENT)...STEPHANIE KATSOULEAS...	(310) 802-5303
CITY OF MANHATTAN BEACH (POLICE DEPARTMENT)...DERRICK ABELL.....	(310) 802-5103
CITY OF MANHATTAN BEACH (FIRE DEPARTMENT).....	(310) 802-5203
COUNTY SANITATION DISTRICT (COMPTON)...ENGINEERING COUNTER.....	(562) 908-4288 (Ext. 1204 or 1205)
AT&T DISTRIBUTION...SUBSTRUCTURE RECORDS REQUEST CONSTRUCTION & ENGINEERING.....	(510) 645-2929
CALIFORNIA WATER SERVICE...FRANK SCOTTY.....	(310) 257-1400
LA COUNTY PUBLIC WORKS - FLOOD MAINTENANCE...EDUARDO IVASAN or AHMET TATLILIOVLO.....	(562) 861-0316
NEXTLAVEN NETWORK...BRYANT LOWE.....	(724) 416-2193
SHELL OIL...CLARINDA MALDONADO.....	(310) 816-2063
SOUTHERN CALIFORNIA GAS COMPANY...GUILLERMO TEJEDA.....	(310) 687-2014
SOUTHERN CALIFORNIA EDISON...KRIS WALSH.....	(949) 533-6137
SPECTRUM (TIME WARNER CABLE)...ANTHONY XANPHIS.....	(310) 750-9185
T-MOBILE...SHAWN HENDERSON.....	(805) 279-3513
FRONTIER COMMUNICATION (PREVIOUSLY VERIZON)...DAN HAYES.....	(310) 793-4159
XO COMMUNICATIONS.....	(949) 417-7841

**PROFESSIONAL ENGINEER'S NOTE:**

THE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY THE ENGINEER OF RECORD USING AVAILABLE RECORD PLANS AND MAPS AND BASED ON FIELD RECONNAISSANCE OF EXISTING CONDITIONS. KNOWN UTILITIES AND OWNERS OF OTHER STRUCTURES HAVE BEEN GIVEN WRITTEN NOTICE OF THE PROJECT. HOWEVER, THE ENGINEER OF RECORD AND CITY OF MANHATTAN BEACH ARE NOT RESPONSIBLE FOR THE TOTAL ACCURACY AND/OR CORRECTNESS OF THE SHOWN INFORMATION. THE CONTRACTOR, BY SIGNING THE CONSTRUCTION CONTRACT FOR THIS PROJECT, ACCEPTS AND ASSUMES FULL RESPONSIBILITY FOR THE WORK AND ITS IMPACT ON THE EXISTING FACILITIES WHETHER SHOWN OR NOT ON THESE PLANS AND DESCRIBED IN THE SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE TO MAKE THEIR OWN INVESTIGATION AND INSPECTION INCLUDING POTHOLES AND SUCH OTHER METHODS HE DEEMS NECESSARY TO ALLOW THEM TO PROCEED ON THE CONSTRUCTION OF THIS PROJECT IN COMPLIANCE WITH THE LAWS, ORDINANCES, REGULATIONS AND CITY STANDARDS APPLICABLE TO THE PROJECT, INCLUDING STATE SAFETY ORDERS AND PROCEDURES OF USA.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY SURVEYS REQUIRED TO ESTABLISH HORIZONTAL AND VERTICAL CONTROLS PRIOR TO AND DURING CONSTRUCTION, AND TO REPLACE DISTURBED OR COVERED EXISTING SURVEY MONUMENTS AT HIS EXPENSE. MONUMENT RESTORATION/REPLACEMENT TO BE RECORDED.



DECLARATION OF DESIGN ENGINEER OF RECORD

I HEREBY DECLARE THAT THE DESIGN OF THE IMPROVEMENTS AS SHOWN ON THESE PLANS COMPLIES WITH PROFESSIONAL ENGINEERING STANDARDS AND PRACTICES, AS THE ENGINEER IN RESPONSIBLE CHARGE OF THE DESIGN OF THESE IMPROVEMENTS, I ASSUME FULL RESPONSIBILITY FOR SUCH DESIGN. THE PLAN CHECK IS NOT A DETERMINATION OF THE TECHNICAL ADEQUACY OF THE DESIGN OF THE IMPROVEMENTS. SUCH CHECK DOES NOT, THEREFORE RELIEVE ME OF MY RESPONSIBILITY FOR THE DESIGN OF THESE IMPROVEMENTS. I ALSO HEREBY DECLARE THAT I HAVE COMPARED THESE PLANS WITH ALL APPLICABLE ADA TITLE II REQUIREMENTS FOR DISABILITY ACCESS FOR THIS PROJECT AND THESE PLANS ARE IN FULL COMPLIANCE WITH THOSE REQUIREMENTS.

*Kathryn Harrel* SIGNATURE      12/19/23 DATE

THE PLANS HAVE BEEN APPROVED BY THE MANHATTAN BEACH DIRECTOR OF PUBLIC WORKS.  
*Katie Harrel* for      12/26/2023 DATE  
 PUBLIC WORKS DIRECTOR  
 ERICK LEE

**GENERAL NOTES:**

- ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF MANHATTAN BEACH, LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION AND CALTRANS STANDARDS AS APPLICABLE. ALL WORK SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.
- WORK NOT DONE IN THE PRESENCE OF THE CITY INSPECTOR IS SUBJECT TO REJECTION.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE COMPLETED WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO TRAVELING PUBLIC.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FROM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORMWATER RUNOFF AND/OR DEPOSITION OF DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH PROJECT CONSTRUCTION.
- ANY WALLS, FENCE STRUCTURES AND/OR APPURTENANCE ADJACENT TO THIS PROJECT SHALL BE PROTECTED IN PLACE. IF THE CONTRACTOR'S ACTIVITIES DAMAGE OR ADVERSELY AFFECT SAID ITEMS IN ANY WAY, THE CONTRACTOR IS RESPONSIBLE FOR WORKING OUT AN ACCEPTABLE SOLUTION TO THE SATISFACTION OF THE AFFECTED PROPERTY OWNER(S).
- ALL DAMAGED AND/OR REMOVED DRIVEWAY APPROACH, P.C.C. SIDEWALK OR CURB AND GUTTER SHALL BE RECONSTRUCTED ACCORDING TO THE CITY OF MANHATTAN BEACH STANDARD DRAWINGS MBSI-110C-1(ST-1), MBSI-112A(ST-2), MBSI-120A(ST-3), RESPECTIVELY (UNLESS NOTED OTHERWISE).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND CLEANING OF THE PROPOSED WORK AREA.
- THE CONTRACTOR IS RESPONSIBLE FOR OVERALL JOBSITE MAINTENANCE; INCLUDING, BUT NOT LIMITED TO: STREET/SITE SWEEPING, TRASH AND/OR CONSTRUCTION-RELATED DEBRIS/WASTE, STORMWATER POLLUTION PREVENTION BMP, ETC...
- NO TRENCHES MAY BE LEFT OPEN OVERNIGHT UNLESS APPROVED IN WRITING BY THE CITY ENGINEER. SHOULD THE CONTRACTOR REQUEST TO LEAVE THE TRENCHES OPEN A PLAN FOR PROTECTING THE TRENCH AND THE PUBLIC SHALL BE SUBMITTED TO THE CITY ENGINEER IN WRITING FOR APPROVAL BEFORE BEING IMPLEMENTED. PLATING IS REQUIRED.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AS REQUIRED PRIOR TO THE START OF THE WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY. IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- ALL TRAFFIC CONTROL DEVICES AND SIGNS SHALL BE IN PLACE PRIOR TO BEGINNING OF EXCAVATION. TRAFFIC CONTROL SHALL BE APPROVED BY THE CITY ENGINEER. STREET STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.
- CONSTRUCTION SITE SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. DISCHARGES OF MATERIAL OTHER THAN STORMWATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/ EQUIPMENT WASH WATER AND HEAVY METAL WASTES, DETERGENT OR FLATABLE WASTES; WASTES FROM ANY ENGINE/ EQUIPMENT STEAM CLEARING OR CHEMICAL DEGREASING; AND SUPERIOR ORIGINATED POTABLE WATER LINE FLUSHING. DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
- DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (ORDER NO. R4-2018-0125 AND/OR ANY SUCCESSOR PERMIT) FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO THE PROJECT BETWEEN 4:30 P.M. AND 7:30 A.M. ON ANY WEEK DAY AND NOT ON SATURDAY, OR SUNDAY, OR HOLIDAYS AT ANY TIME EXCEPT AS APPROVED IN WRITING BY THE CITY ENGINEER.
- CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY/SUBSTRUCTURE CROSSINGS AND WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTING ANY UTILITIES. THE CONTRACTOR SHALL PROTECT IN PLACE ALL EXISTING UTILITIES/SUBSTRUCTURES ON THESE PLANS AND THOSE FOUND DURING CONSTRUCTION (SEE GENERAL NOTE NO 32).
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME THEIR PROPERTY FOR BACKFILL SUBJECT TO APPROVAL OF SOILS ENGINEER AND ANY UNUSED MATERIAL SHALL BE REMOVED FROM THE JOB UNLESS INSTRUCTED BY THE CITY ENGINEER TO DO OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE DURING ALL PHASES OF THE WORK TO PROVIDE FOR PUBLIC SAFETY AND CONVENIENCE. THE CONTRACTOR SHALL ESTABLISH ADEQUATE ACCESS TO ALL ENTRIES/DRIVEWAYS/GARAGES AND PARKING LOTS DURING THE WORKING DAY TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL GIVE COURTESY NOTICE (KNOCK ON DOOR) TO AN ADJACENT PROPERTY IMMEDIATELY PRIOR TO BLOCKING ENTRY/DRIVEWAY/GARAGE ACCESS. PEDESTRIAN ACCESS IS TO BE PROVIDED AND MAINTAINED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL ADJUST MANHOLES AND VALVE COVERS TO FINISHED GRADE. THE CONTRACTOR SHALL ADJUST, TIGHTEN AND/OR REPAIR MANHOLES, LIDS AND COVERS BY THE END OF EACH WORKING DAY TO ENSURE MINIMAL IMPACT (NOISE AND OTHERWISE) TO ADJACENT PROPERTY OWNERS.
- THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR THE COMPLETION OF THE PROPOSED IMPROVEMENTS PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CALIFORNIA (LATEST EDITION) TO THE SATISFACTION OF THE CITY ENGINEER. ALL STREETS IN THE PROJECT SHALL MAINTAIN AT LEAST 2 LANES (1 LANE IN EACH DIRECTION).

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. FLAGGERS MAY BE USED IF ONE LANE IN EACH DIRECTION CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE TRAFFIC ENGINEER. ALL TRAFFIC LANES SHALL BE OPEN BEFORE AND AFTER WORK HOURS. WHERE NECESSARY, PROPERLY POST "TEMPORARY NO PARKING ANYTIME" SIGNS AT LEAST 72 HOURS BEFORE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE POLICE DEPARTMENT IMMEDIATELY UPON POSTING SIGNS. REFER TO THE CITY OF MANHATTAN BEACH TRAFFIC CONTROL REQUIREMENTS FOR MORE INFORMATION.

USE OF TRENCH PLATING MAY BE APPROVED BY THE CITY ENGINEER UPON SUBMITTAL OF A PLATING PLAN AND APPROVAL OF PLAN BY THE CITY ENGINEER. ALL PLATES SHALL BE FIRMLY SUPPORTED ON ADJACENT PAVEMENT OR BEAMS. ALL PLATES IN A.C. PAVEMENT SHALL BE STUDDED INTO PAVEMENT WITH TOP OF PLATES FLUSH WITH PAVEMENT SURFACE. THERE SHALL BE NO OPENINGS BETWEEN PLATES. PLATES SUPPORTED ON BEAMS SHALL BE BOLTED TO OR WELDED TO BEAMS BY TACK WELDING. TACK WELDING SHALL BE REQUIRED OF CONTIGUOUS PLATES. PLATES SHALL BE SECURED SO AS TO NOT MOVE, SLIP OR SLIDE AND CAPABLE OF CARRYING H-20 LOADING. ALL PLATE SURFACES SHALL BE ROUGHENED OR RAISED TO MINIMIZE TIRE SLIPPAGE. FOR CONCRETE SECTION OF STREETS THE PLATES MAY BE PLACED ON SURFACE AND HELD IN PLACE WITH ASPHALT CONCRETE EDGE BERMS AND STUDS INTO DRILLED HOLES.

THE CONTRACTOR SHALL PROVIDE A 72-HOUR WRITTEN NOTIFICATION TO AFFECTED PROPERTIES (IN A DOOR-HANGER FORMAT), POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A STREET CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES OR IMPLEMENTATION OF PARKING RESTRICTIONS. THE CONTRACTOR SHALL COORDINATE THE PROJECT WORK AND ASSOCIATED PICK-UP ROUTES WITH THE CITY REFUSE COLLECTION COMPANY (WASTE MANAGEMENT) PRIOR TO THE COMMENCEMENT OF WORK.

THE CONTRACTOR SHALL FURNISH AND OPERATE A SELF-LOADING STREET SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION, IS IN PROGRESS OR INCOMPLETE.

ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALT CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT, COLD JOINT, SCORE MARK OR EDGE OF PAVEMENT. NO "FLOATER" SLABS WILL BE PERMITTED. SAWCUT SLURRY SHALL BE REMOVED WITH A VACUUM MACHINE AND DISPOSED OF PROPERLY. NO SLURRY SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM.

A PERMIT IS REQUIRED FOR ALL WORK ON CITY STREETS. THE CITY WILL ISSUE A "NO FEE" PERMIT TO THE CONTRACTOR. SHOULD THE CONTRACTOR OPERATION INVOLVE ANOTHER AGENCY'S JURISDICTION OR INFRASTRUCTURE A PERMIT AND INSPECTION SHOULD BE OBTAINED THEREFOR FROM THAT AGENCY. THERE MAY BE A FEE THEREFOR PAYABLE BY CONTRACTOR.

IN SOME CASES MATCH LINES MAY OVERLAP FROM PLAN SHEET TO PLAN SHEET. CONTRACTOR SHOULD REVIEW PLANS THOROUGHLY.

ALL PORTIONS OF STREET AFFECTED BY CONSTRUCTION, AS DETERMINED BY CITY ENGINEER, OUTSIDE OF TRENCH INCLUDING T-CUT SHALL BE RESTORED PER CITY OF MANHATTAN BEACH STD DWG MBSI-132A(ST-10). SHOULD ANY LINEAR OR AREA TRENCH JOINT BE LOCATED WITHIN 36" OF AN EXISTING PAVEMENT PATCH AND/OR CURB AND GUTTER ALIGNMENT, THE ADJACENT PAVEMENT SECTION/PATCH MUST BE REMOVED AND REPAVED ALONG WITH THE TRENCH PAVEMENT RESTORATION. ALL STRIPING & PAVEMENT MARKING SHALL BE REPLACED IN EXISTING & IN NEW PAVEMENT. GRINDING TO BE PERFORMED PER CITY ENGINEER INSTRUCTION. ALL TRAFFIC SIGNAL LOOPS DAMAGED BY PROJECT WORK SHALL BE REPLACED IN THEIR ENTIRETY BACK TO CONTROL PANEL. CONTRACTOR SHALL TUNNEL UNDER AND PROTECT IN PLACE STAMPED CONCRETE OR PAVERS, CROSSWALKS, CURB & GUTTERS. SHOULD CROSSWALKS BE DAMAGED ENTIRE CROSSWALK FROM CURB TO CURB SHALL BE REPLACED IN KIND WITHOUT ANY ADDITIONAL COMPENSATION TO THE CONTRACTOR.

CONTRACTOR AND ALL SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS". PRIOR TO COMMENCING THE EXCAVATION OF A TRENCH 5 FEET IN DEPTH OR GREATER AND INTO WHICH A PERSON WILL BE REQUIRED TO DESCEND, THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT TO DO SO FROM THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA (CAL OSHA) PURSUANT TO 7-10.4.1. CONTRACTOR SHALL SUBMIT A COPY OF THE SHORING PLAN SIGNED AS REQUIRED AND PERMIT TO THE ENGINEER PRIOR TO EXCAVATION.

THE CITY ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTOR'S AND SUBCONTRACTORS' COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".

THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 732.05, 1492-5, 1810-5 OF THE STREETS AND HIGHWAY CODE REQUIRE THAT EXISTING SURVEY MONUMENTS SHALL BE PROTECTED AND PERPETUATED. IF DAMAGED THEY ARE TO BE REPLACED AND A RECORD OF SURVEY IS TO BE PREPARED BY THE PROJECT SURVEYOR AND FILED WITH THE CITY ENGINEER AND THE COUNTY SURVEYOR.

CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.

- THERE SHALL BE A MINIMUM OF 1 CERTIFIED EMPLOYEE ON SITE AT ALL TIMES OF CONSTRUCTION WITH RED CROSS FIRST AID TRAINING INCLUDING CPR TRAINING FOR THIS PROJECT. ALL EMPLOYEES ON THE PROJECT ARE TO HAVE CERTIFIED TRAINING FOR CONFINED SPACE WORK IN VICINITY OF SEWER. COPIES OF THE EMPLOYEE CERTIFICATES SHALL BE PROVIDED TO THE CITY ENGINEER. ALL EQUIPMENT NEEDED TO ENTER CONFINED SPACE/SEWER MANHOLES SHALL BE STORED ON THE PROJECT SITE AND USED FOR ANY AND ALL SUCH INSTANCES.
- BASED ON INFORMATION OBTAINED FROM UTILITY/SUBSTRUCTURE OWNERS POSSIBLE CONFLICT LOCATIONS HAVE BEEN SHOWN ON THE PLANS. HOWEVER, THERE MAY BE OTHER CONFLICT LOCATIONS. THE INFORMATION PROVIDED BY UTILITY/SUBSTRUCTURE OWNERS IN VARIOUS INSTANCES DOES NOT INDICATE DEPTHS TO THEIR FACILITIES. WHERE DEPTH INFORMATION WAS NOT AVAILABLE, ENGINEER HAS PLOTTED THE UTILITIES/SUBSTRUCTURES AT DEPTHS AT WHICH SUCH UTILITIES/SUBSTRUCTURES ARE COMMONLY FOUND. HOWEVER, ENGINEER CANNOT VERIFY SUCH LOCATION. IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY. SOME POTHOLING WAS COMPLETED BY THE ENGINEER, BUT THE CONTRACTOR SHALL CONFIRM UTILITY LOCATIONS AND DEPTHS.
- TREES, FOLIAGE, SIGNS, PARKING METERS AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS, PUBLIC OR PRIVATE, SHALL BE REPLACED IN KIND.
- THE CONTRACTOR IS ADVISED TO POTHOLE WHERE THEY BELIEVE IS NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.
- ENGINEER HAS NOT OBTAINED PLANS FOR THE UNDERGROUND FACILITIES OF LOOPS, CONDUITS, ETC. NOR HAVE SUCH FACILITIES BEEN FULLY PLOTTED ON THE PLANS. THE CONTRACTOR IS ADVISED TO LOCATE THE TRAFFIC SIGNAL UNDERGROUND FACILITIES BEFORE EXCAVATION OF THE TRENCH AND PROTECT IN PLACE. CONTRACTOR SHOULD CONTACT THE LOS ANGELES COUNTY'S TRAFFIC SIGNAL MAINTENANCE DEPARTMENT AND COORDINATE THE WORK.
- FOR WORK UNDER ANY EXISTING CONCRETE (PCC) BUS PADS THE CONTRACTOR SHALL REMOVE BUS PAD AND REPLACE AFTER INSTALLATION OF PIPES (SEE SSPWC FOR DETAILS OF REPLACEMENT BUS PAD). TRENCHLESS METHOD MAY BE USED TO CROSS UNDER BUS PAD.
- FOR ANY UNDER CROSSINGS ENTRY OF APPROACHES TO STORM DRAIN CATCH BASINS CONTRACTOR SHALL TUNNEL UNDER THESE AND SUPPORT APPROACH. UPON INSTALLATION OF PIPE AND COMPACTION OF TRENCH A 2 SACK SAND CEMENT SLURRY SHALL BE PLACED UNDER THE APPROACH.
- IN SHOWING UTILITIES ENGINEER HAS PROVIDED INFORMATION RECEIVED FROM THE UTILITIES. IN SOME CASES SERVICE CONNECTIONS ARE SHOWN. HOWEVER PLANS FROM UTILITIES MAY NOT HAVE INCLUDED ALL SERVICE CONNECTIONS AND OTHER FEATURES SUCH AS FIRE HYDRANT LATERALS AND VAULTS AND BOXES. CONTRACTOR SHOULD BE PREPARED TO LOCATE SUCH AND TO PROTECT IN PLACE.
- ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- LATERALS FOR EXISTING STORM DRAIN AND SEWER SYSTEMS MAY BE CONCRETE ENCASED (OVERPOUR). AS PART OF TRENCHING WORK CONTRACTOR SHALL REMOVE AND REPLACE ENCASEMENT (OVERPOUR) AS PART OF UNIT OR FIXED PRICE FOR INSTALLATION OF PIPING.

**PRIVATE ENGINEERS NOTICE TO CONTRACTOR:**

- ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.
- CONTRACTOR FURTHER AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- UTILITIES: THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS AND BEST RECOLLECTION OF FACILITY STAFF. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATIONS OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR POTHOLE TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OR PROTECTION OF ALL EXISTING UTILITY LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND/OR BELOW GROUND UNLESS OTHERWISE NOTED. ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND/OR STATE LAWS AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.
- ALL JOIN LINES SHALL BE SAWCUT BY A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO JOINING.
- ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENT INCLUDING, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, UTILITIES AND APPURTENANCES, TREES, SIGNS, AND STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR AT NO COST TO THE OWNER, UNLESS OTHERWISE INDICATED HEREIN, OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY THEIR OPERATIONS. ANY CURBS DAMAGED DURING THEIR OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING PAVING IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL MATERIALS, AND ALL ASSOCIATED COSTS.
- DEMOLITION PLAN BY SEPARATE PERMIT.

**NPDES NOTES:**

- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE. DESIGNATED TRUCK WASHOUT AREA REQUIRED.
- TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. ACCIDENTAL DEPOSITIONS MUST BE SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA 2003, OR THE LATEST REVISED EDITION, MAY APPLY DURING CONSTRUCTION (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY INSPECTOR)

NS-2	DEWATERING OPERATIONS	SC-21	VEHICLE AND EQUIPMENT CLEANING
NS-3	PAVING & GRINDING OPERATIONS	SC-20	VEHICLE AND EQUIPMENT FUELING
WM-1	MATERIAL DELIVERY AND STORAGE	SC-22	VEHICLE AND EQUIPMENT REPAIRS
WM-2	MATERIAL USE	EC-2	PRESERVATION OF EXISTING VEGETATION
WM-4	SPILL PREVENTION AND CONTROL	WE-1	WIND EROSION CONTROL
WM-5	SOLID WASTE MANAGEMENT	SE-8	SAND BAG BARRIER
WM-8	CONCRETE WASTE MANAGEMENT	SE-10	STORM DRAIN INLET PROTECTION
		WM-9	SANITARY / SEPTIC WASTE MANAGEMENT

CONTRACTOR SHALL ENSURE THAT FIELD AND SUPERVISORY STAFF ARE TRAINED TO UNDERSTAND THE POTENTIAL FOR CONSTRUCTION ACTIVITIES TO POLLUTE STORMWATER AND/OR SURFACE WATERS, RECOGNIZE OPPORTUNITIES TO PROACTIVELY IMPLEMENT ACTIVITY-SPECIFIC BEST MANAGEMENT PRACTICES TO PREVENT SPILLS AND PREVENT THE DISCHARGE OR DEPOSITION OF POLLUTANTS IN THE COURSE OF CONSTRUCTION ACTIVITIES, AND IDENTIFY AND REPORT ILLIOT DISCHARGES TO THE CITY REGARDLESS OF THE SOURCE

<p>NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.</p>	<p><b>SUPPLEMENTAL NOTES:</b></p> <ol style="list-style-type: none"> <li>THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.</li> <li>DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.</li> <li>THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SDC, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.</li> </ol>	<p>DECEMBER 19, 2023 DATE SIGNED</p>	<p>PREPARED BY:</p> <p>1561 E. ORANGETHORPE AVE. SUITE 240 FULLERTON, CA 92831 (714) 526-7500 www.cwecorp.com</p>	<p>REVIEWED BY</p> <p>DATE</p>
	<p>DATE SIGNED</p>		<p>DATE</p>	

**UTILITY NOTES:**

- ALL LANDSCAPE IRRIGATION BACKFLOW DEVICES MUST MEET CURRENT CITY REQUIREMENTS FOR PROPER INSTALLATION.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CALL DIG ALERT TO IDENTIFY THE LOCATION OF ALL UTILITIES
- NO DISCHARGE OF CONSTRUCTION WASTEWATER, BUILDING MATERIALS, DEBRIS, OR SEDIMENT FROM THE SITE IS PERMITTED. NO REFUSE OF ANY KIND GENERATED ON A CONSTRUCTION SITE MAY BE DEPOSITED IN RESIDENTIAL, COMMERCIAL, OR PUBLIC REFUSE CONTAINER AT ANY TIME. THE UTILIZATION OF WEEKLY REFUSE COLLECTION SERVICE BY THE CITY'S HAULER FOR ANY REFUSE GENERATED AT THE CONSTRUCTION SITE IS STRICTLY PROHIBITED. FULL DOCUMENTATION OF ALL MATERIALS/TRASH LANDFILLED AND RECYCLED MUST BE SUBMITTED TO THE PERMITS DIVISION IN COMPLIANCE OF THE CITY'S CONSTRUCTION AND DEMOLITION RECYCLING ORDINANCE.
- A CLAY 6" PROPERTY LINE CLEANOUT MUST BE INSTALLED ON A CLAY 6" SANITARY SEWER LATERAL. IF THERE IS NO 6" SEWER LATERAL, THEN A NEW ONE MUST BE INSTALLED. THE PROPERTY LINE CLEANOUT MUST STAY WITHIN THE JOB SITE'S PROPERTY LINES. SEE CITY STANDARD PLAN ST-5. CLEANOUT MUST BE ADDED TO THE SITE PLAN.
- A BACKWATER VALVE IS REQUIRED ON THE SANITARY SEWER LATERAL IF THE DISCHARGES FROM FIXTURES WITH FLOOD LEVEL RIMS ARE LOCATED BELOW THE NEXT UPSTREAM MANHOLE COVER OF THE PUBLIC SEWER. SEE CITY STANDARD PLAN ST-24. MUST BE SHOWN ON THE PLAN IF APPLICABLE.
- IF ANY EXISTING SEWER LATERAL IS USED, IT MUST BE TELEVIEWED TO CHECK ITS STRUCTURAL INTEGRITY. THE TAPE MUST BE MADE AVAILABLE FOR REVIEW BY THE PUBLIC WORKS DEPARTMENT AND MUST SHOW PROOF OF THE LOCATION OF WHERE IT WAS SHOT. THE PUBLIC WORKS DEPARTMENT WILL REVIEW THE TAPE AND DETERMINE AT THAT TIME IF THE SANITARY LATERAL NEEDS REPAIRING, REPLACED, OR THAT IT IS STRUCTURALLY SOUND AND CAN BE USED IN ITS PRESENT CONDITION. VIDEOING OF LATERAL MUST BE IN ITS ORIGINAL STATE. NO CLEANING FLUSHING OR ALTERING PRIOR TO VIDEOING IS PERMITTED.
- ANY UNUSED WATER OR SANITARY SEWER LATERALS MUST BE ABANDONED AT THE CITY MAIN.
- RESIDENTIAL PROPERTIES MUST PROVIDE AN ENCLOSED STORAGE AREA FOR REFUSE CONTAINERS. THESE AREAS MUST BE CONSTRUCTED TO MEET THE REQUIREMENTS OF M.B.M.C. 5.24.030. THE AREA MUST BE SHOWN IN DETAIL ON THE PLANS BEFORE A PERMIT IS ISSUED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL THE STREET SIGNS, STREET LAMPS/LIGHTS, PARKING METERS, AND/OR TREES AROUND THE PROPERTY. IF THEY ARE DAMAGED, LOST OR REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE THEM AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ANY STREET MARKINGS THAT ARE DAMAGED OR REMOVED BY THE CONTRACTOR'S OPERATIONS. CONTACT THE PUBLIC WORKS INSPECTOR FOR SIGN SPECIFICATION AND SUPPLIERS.
- THE BACK OF DRIVEWAY APPROACH MUST BE SIX INCHES HIGHER THAN THE FLOW LINE ON THE STREET. M.B.M.C. 9.76.030.
- SIDEWALK, DRIVEWAY, CURB, AND GUTTER REPAIR OR REPLACEMENT MUST BE COMPLETED PER PUBLIC WORKS SPECIFICATIONS. SEE CITY STANDARD PLAN MBSI-110C (ST-1), MBSI-112A(ST-2), MBSI-120A(ST-3), AND MBSI-132A(ST-10). THE PLANS MUST HAVE A PROFILE OF THE DRIVEWAY, PERCENTAGE (%) OF SLOPE ON DRIVEWAY, AND DRIVEWAY ELEVATIONS FOR EACH SIDE AND THE MIDDLE. IN THE CASE WHERE THE GARAGE LEVEL IS BELOW THE STREET DRAINAGE FLOW LINES, THE COMBINED SLOPE OF PUBLIC AND PRIVATE APPROACH SHALL NOT EXCEED 15% (CITY RECOMMENDS THAT GARAGE FINISH FLOOR ELEVATIONS SLOPE AT 1% MINIMUM TO THE PROPERTY LINE AT THE DRIVEWAY APPROACH WHICH WOULD MINIMIZE POSSIBILITY OF ANY FUTURE FLOODING IN THE GARAGE). CITY PLANS/SURVEYS MUST SHOW ELEVATIONS FOR EACH ADJOINING PROPERTY. NO DEVIATIONS IN ELEVATIONS BETWEEN PROPERTIES SHALL EXCEED MORE THAN ¼".
- WATER METERS MUST REMAIN ACCESSIBLE FOR METER READERS DURING CONSTRUCTION. WATER METERS SHALL BE PLACED NEAR THE PROPERTY LINE AND OUT OF THE DRIVEWAY APPROACH WHENEVER POSSIBLE. WATER METER PLACEMENT MUST BE SHOWN ON THE PLANS. SEE CITY STANDARD PLAN ST-15.
- IF WATER METER BOX IS DAMAGED DURING CONSTRUCTION, OR THE CITY DETERMINES THAT IT IS IN NEED OF REPLACEMENT, A NEW WATER METER BOX MUST BE PURCHASED FROM THE CITY. THE WATER METER BOX SHALL HAVE A TRAFFIC RATED LID.
- ALL STORM WATER, NUISANCE WATER, ETC. DRAIN LINES INSTALLED WITHIN THE STREET RIGHT OF WAY MUST BE CONSTRUCTED OF DUCTILE IRON PIPE AND LABELED ON THE SITE PLAN. DRAINS MUST BE SHOWN ON PLANS.
- PLAN HOLDER MUST HAVE THE PLANS RECHECKED AND STAMPED FOR APPROVAL BY THE PUBLIC WORKS DEPARTMENT BEFORE THE BUILDING PERMIT IS ISSUED.

**ROADWAY RECONSTRUCTION GENERAL NOTES:**

- CURB AND GUTTER AND RAMP TO BE REPLACED TO MATCH EXISTING AND IN ACCORDANCE WITH CITY STANDARD DRAWING AND "GREEN BOOK" STANDARDS.
- JOIN NEW CURB AND GUTTER TO ASPHALT PAVEMENT PER DETAILS SHOWN OR REFERENCED. CONSTRUCT CURB AND GUTTER PER THE "GREEN BOOK" STD PLAN 120-2 AND CITY REQUIREMENTS UNLESS OTHERWISE SHOWN.
- JOIN NEW ASPHALT PAVING TO CURB AND GUTTER PER DETAILS SHOWN OR REFERENCED. PRIME ALL AREAS TO BE JOINED. SAW CUT ALL CONCRETE AND ASPHALT PAVING TO BE JOINED PRIOR TO DEMOLITION AND REMOVALS.
- ANY NEW CURB AND GUTTER CONSTRUCTED AT EXISTING ASPHALT WEARING COURSE SHALL BE JOINED WITH A MINIMUM SIX INCH NOTCH PER STANDARD DETAIL.
- DRIVEWAY APPROACHES DISTURBED BY THE WORK SHALL BE REPLACED PER DETAILS HEREIN OR GREEN BOOK STANDARDS.
- STREET EXCAVATION AND PAVEMENT RESTORATION SHALL BE PER CITY OF MANHATTAN BEACH STANDARD DRAWING MBSI-132A (ST-10) AND ALL REFERENCED STANDARDS. AC SHALL BE SAW CUT. ALL STREET TRENCHING SHALL BE RESTORED USING "T" CUT.
- PCC STREET EXCAVATION AND PCC PAVEMENT RESTORATION IN PCC ROADWAY AND WALKING STREETS SHALL BE EXTENDED TO THE SCORE LINES IN THE PAVEMENT. ALL SECTIONS TO BE REMOVED SHALL BE SAW CUT PRIOR TO DEMOLITION AND REMOVAL. NEW PCC SHALL BE CONSTRUCTED ON NATIVE SUBGRADE COMPACTED TO 90% FINISH SHALL MATCH CITY SIDEWALK STANDARDS OR AS DIRECTED BY THE ENGINEER. EXPANSION JOINTS AND CONTRACTION JOINTS AS DIRECTED BY THE ENGINEER, AND AT MAXIMUM OF 20 FEET. SCORE PATTERN AS DIRECTED.
- MANHOLE FRAME AND COVERS, UTILITY VAULTS, VALVE BOXES, AND OTHER UTILITY ACCESS STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH SURFACE IN ACCORDANCE WITH STANDARD SPECIFICATIONS, CITY, AND COUNTY REQUIREMENTS.
- BLUE REFLECTORS SHALL BE INSTALLED ON THE ROADWAY SURFACE AT THE REQUIRED LOCATIONS TO INDICATE THE LOCATION OF EACH HYDRANT. REFLECTORS SHALL BE IN ACCORDANCE WITH FIRE DEPARTMENT REGULATIONS.
- THE EXISTENCE AND LOCATION OF MANHOLE, UTILITIES, VAULTS, BOXES, WATER METERS, VALVES AND OTHER STRUCTURES AND UTILITIES HAVE BEEN DETERMINED FROM AVAILABLE RECORDS AND SURFACE SURVEY PERFORMED. THESE ARE TO BE PROTECTED AND RESTORED/REPLACED IF DAMAGED OR DISTURBED AT CONTRACTOR'S SOLE EXPENSE.
- TRAFFIC STRIPING AND PAVEMENT MARKING REPAIR SHALL BE THERMOPLASTIC AS SPECIFIED, PER CAL TRANS 84 AND PER CITY REQUIREMENTS.
- THICKNESS OF PAVEMENT SHOWN IN THE PAVEMENT RESURFACING SCHEDULE APPLIES WITHIN THE LIMITS OF EXCAVATION. THE CONTRACTOR SHALL NOTE THAT FAILED PCC PAVEMENT SUBGRADE MAY BE PRESENT. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO PAVEMENT OUTSIDE THE LIMITS OF EXCAVATION AS A RESULT OF HEAVY TRAFFIC LOADING AND/OR INADEQUATE SHORING.
- STRAND WALKWAY SHALL BE RECONSTRUCTED IN FULL PANEL FROM JOINT TO JOINT. RESURFACING PAVEMENT SECTION SHALL BE FULLY REINFORCED AND DOWELED INTO EXISTING PAVEMENT WITH #4-EPOXY COATED REBAR @ 12" O.C. EACH WAY (MIN. 6" EMBEDMENT).
- ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.

**GENERAL SIGNAGE AND STRIPING NOTES:**

- ALL REQUIRED STRIPING AND SIGNAGE SHALL CONFORM WITH THE LATEST APPLICABLE CALTRANS STANDARD PLANS AND LATEST CALTRANS STANDARD SPECIFICATIONS, INCLUDING SECTION 84 AND CITY AND COUNTY STANDARDS AND REQUIREMENTS.
- COMPLY WITH ALL MARKING REQUIREMENTS OF AGENCY HAVING JURISDICTION. PAVEMENT LEGENDS SHALL CONFORM TO CITY OR AGENCY STENCILS, SIGNS, STRIPES, AND PAVEMENT LEGENDS SHALL BE REFLECTORIZED.
- TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
- REPLACE ALL SIGNAGE AND STRIPING DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.

<p><b>CITY OF MANHATTAN BEACH</b> PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION</p>			
<p><b>SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL GENERAL NOTES</b></p>			
<p>REVISED BY</p> <p>DATE</p>	<p>DATE</p>	<p>DATE</p>	<p>DATE</p>
<p>PROJECT MANAGER TIM BIRTHISEL</p>	<p>12/26/23</p>	<p>12/26/2023</p>	<p>DATE</p>
<p>APPROVED BY</p> <p>DATE</p>	<p>DATE</p>	<p>DATE</p>	<p>DATE</p>
<p>PROJECT MANAGER - CWE KATIE HARREL</p>	<p>12/19/23</p>	<p>DATE</p>	<p>DATE</p>
<p>SCALE</p> <p>AS SHOWN</p>	<p>DATE</p> <p>MARCH 2023</p>	<p>DRAWING NO.</p> <p>C-2</p>	<p>SHEET 2 of 16</p>

**TRAFFIC CONTROL REQUIREMENTS:**

- THE CONTRACTOR SHALL OBTAIN A CITY PERMIT FOR WORK PERFORMED IN THE RIGHT-OF-WAY, AND PROVIDE THE CITY WITH GENERAL LIABILITY INSURANCE IN THE AMOUNT OF \$2,000,000.00, NAMING THE CITY AS ADDITIONALLY INSURED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK ON A PUBLIC STREET TO INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES ACCORDING TO THE "WORK AREA TRAFFIC CONTROL HANDBOOK", LATEST EDITION, OR CALIFORNIA MUTCD, 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 WATCH OR CA MUTCD.
- FLASHING ARROW BOARD(S) ARE MANDATORY FOR LANE CLOSURES ON MAJOR STREETS. THEY SHALL OPERATE UNTIL TRAFFIC CONTROL IS REMOVED.
- 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 CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE ENGINEER. ALL TRAFFIC LANES SHALL BE OPEN BEFORE AND AFTER WORK HOURS.
- ALL OPEN TRENCHES SHALL BE COVERED WITH NON-SKID STEEL PLATES OR TEMPORARY ASPHALT PAVEMENT BEFORE AND AFTER WORK HOURS.
- 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.
- 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.
- WHERE NECESSARY, PROPERLY POST "TEMPORARY NO PARKING ANYTIME" SIGNS AT LEAST 72 HOURS BEFORE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE POLICE DEPARTMENT IMMEDIATELY UPON POSTING SIGNS.
- 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.
- 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.
- NOTIFY PUBLIC WORKS INSPECTOR (310) 802-5306, AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION IN RIGHT-OF-WAY. NOTIFY FIRE AND POLICE DISPATCH (310) 802-5103 PRIOR TO STARTING WORK OR CLOSING LANES/STREETS EVERY DAY.
- ANY REVISIONS TO THE TRAFFIC CONTROL PLANS OR REQUIREMENTS SHALL BE APPROVED BY THE ENGINEER.

**WATER NOTES:**

**GENERAL:**

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER, FIRE AND POLICE DEPARTMENT AT LEAST 72 HOURS PRIOR TO SHUTTING DOWN ANY WATER MAINS, FIRE HYDRANTS OR BLOCKING ACCESS TO ANY AREA. FIRE HYDRANT SHALL NOT BE OUT OF SERVICE FOR MORE THAN FOUR (4) HOURS AND NONE SHALL BE OUT OF SERVICE OVERNIGHT OR DURING WEEKENDS.
- THE CONTRACTOR SHALL FIELD VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, ELECTRICAL, TELEPHONE, TELEVISION, STORM DRAIN, SEWER AND WATER AT ALL INTERSECTIONS PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS. DAMAGED UTILITIES SHALL BE REPLACED IN KIND UNDER THE SUPERVISION OF THE OWNER AT CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING SEWER, GAS LATERALS AND/OR ELECTRICAL UNDERGROUNDING MAY NOT BE AT LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- PRIOR TO SHUT DOWN AND CUTTING OF ANY EXISTING WATER MAIN, ALL EXISTING VALVES SHALL BE EXERCISED BY CITY PERSONNEL. THE CONTRACTOR SHALL NOTIFY THE CITY'S DEPARTMENT OF PUBLIC WORKS, WATER DIVISION INSPECTION SUPERVISOR A MINIMUM OF FOUR DAYS PRIOR TO COORDINATE THE SHUT DOWN OF ANY WATER MAIN.
- CONTRACTOR SHALL PROTECT IN PLACE THE EXISTING SURVEY MONUMENTS DURING WATER MAIN CONSTRUCTION. IF MONUMENTS ARE DESTROYED, THE CONTRACTOR SHALL SURVEY AND RESET RECORDED MONUMENTS.

**DUCTILE IRON PIPE:**

- ALL D.I.P. WATER LINES AND FITTINGS SHALL BE CEMENT LINED DOUBLE THICKNESS, CLASS 50 PRESSURE CLASS WITH POLYETHYLENE ENCASEMENT AND COMPLY WITH ANSI A.21.51 (AWWA C 151).
- STATIC WATER PRESSURE IN VICINITY IS SHOWN FOR LOW AND HIGH ELEVATIONS ON THE PLANS. (REFER TO TOP OR BOTTOM OF SHEETS)
- PIPE MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH THESE CONSTRUCTION DOCUMENTS AND THE MANUFACTURER'S RECOMMENDATIONS.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES EXCEPT AT POINTS OF CONNECTION TO EXISTING WATER MAINS.
- THE CONTRACTOR MAY VARY THE GRADE IN THE ALIGNMENT OF THE WATERLINE IF FIELD CONDITIONS WARRANT WITH THE APPROVAL OF THE ENGINEER.
- PIPE DEFLECTIONS SHALL NOT EXCEED 80% OF THE MANUFACTURER'S RECOMMENDED ALLOWABLE DEFLECTIONS FOR DUCTILE IRON PIPE AND FITTINGS INSTALLATION.
- A MINIMUM OF 12-INCHES CLEARANCE BETWEEN THE EXISTING UTILITIES AND PROPOSED PIPELINES SHALL BE MAINTAINED AT CROSSINGS. UTILITIES SHALL BE SUPPORTED AS REQUIRED BY THE ENGINEER AND IN ACCORDANCE WITH APWA STD. DWG. 224-2 AND CITY OF MANHATTAN BEACH STD. DWG. ST-26.
- THE OPEN ENDS OF ALL ABANDONED WATER LINES SHALL BE PLUGGED WITH CONCRETE. THE LOCATION OF THE CONCRETE PLUGS SHALL BE APPROVED BY THE CITY ENGINEER IN THE FIELD.
- ALL EXCAVATIONS FOR THE INSTALLATION OF THE MAIN LINE PIPE AND SERVICES, INSTALLATION OF COMBINATION AIR VACUUM AND AIR RELEASE VALVES, INSTALLATION OF END OF LINE FLUSH-OUTS, AND ABANDONMENT OF EXISTING WATER MAINS SHALL BE BACKFILLED PER CITY OF MANHATTAN BEACH STD. DWG. MBSI-132A(ST-10).

**FITTINGS:**

- ALL FITTINGS AND MECHANICAL JOINTS SHALL BE DUCTILE IRON UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. ALL RESTRAINED JOINTS AS SHOWN SHALL BE CONSTRUCTED WITH RESTRAINTS (MEGALUG OR FIELD-LOK GASKETS).
- ALL DUCTILE IRON TEES AND CROSSES SHALL BE CLASS 350 FLANGE FITTINGS UNLESS OTHERWISE NOTED ON PLANS. ALL OTHER DUCTILE IRON FITTINGS SHALL BE CLASS 350 WITH PUSH-ON JOINTS UNLESS OTHERWISE NOTED PLANS. PROVIDED FITTINGS WITH ENDS THAT ARE COMPATIBLE WITH MECHANICAL RESTRAINTS WHERE RESTRAINED JOINTS ARE REQUIRED.
- ALL "TEE" INSTALLATIONS SHALL BE PER CITY STANDARDS, UNLESS SHOWN OTHERWISE ON PLANS.
- CONTRACTOR SHALL FURNISH ALL FITTINGS NECESSARY FOR DEVIATION OF PIPE ALIGNMENT NOT SHOWN ON PLANS.

**VALVES:**

- ALL VALVES SHALL BE GATE VALVES. VALVE ASSEMBLIES SHALL BE PER CITY STANDARDS.
- GATE VALVES SHALL BE PLACED WITH OPERATING NUT EITHER NORTH OR WEST OF THE WATER MAIN.
- ALL VALVES CONNECTING TO TEES, CROSSES AND REDUCERS SHALL HAVE FLANGED OR FLANGED X PUSH-ON ENDS.
- NO VALVE SHALL BE LOCATED WITH A GUTTER OR OTHER CONCRETE DRAINAGE DEVICE, ALLEY GUTTERS, DRIVEWAY AND ALLEY APPROACHES OR SIDEWALKS, UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL ADJUST ALL VALVE SLEEVES TO FINISH GRADE UPON COMPLETION OF REPAVING.
- EXISTING PIPE, TEES, CROSSES AND OTHER FITTINGS WHICH INTERFERE WITH THE PROPOSED WATER SYSTEM IMPROVEMENTS SHALL BE REMOVED AND DISPOSED OF PROPERLY OR SALVAGED AS DIRECTED BY THE ENGINEER.
- EXISTING VALVES SHALL BE SALVAGED UNDER DIRECTION OF THE ENGINEER. VALVE CANS SHALL BE REMOVED, BACKFILLED AND PAVED OVER.

**AIR VALVES AND PUMP WELLS:**

- THE CONTRACTOR SHALL CONSTRUCT A COMBINATION AIR/VAC AIR RELEASE VALVE ASSEMBLY PER CITY STANDARDS AT ALL HIGH POINTS IN THE ALIGNMENT WHETHER OR NOT SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL CONSTRUCT A BLOW-OFF ASSEMBLY PER CITY STANDARDS AT ALL LOW POINTS IN THE ALIGNMENT WHETHER OR NOT SHOWN ON THESE DRAWINGS.

**FIRE HYDRANTS:**

- ALL FIRE HYDRANTS, VALVES AND OTHER ASSOCIATED FACILITIES SHALL BE LOCATED IN THE FIELD AS DIRECTED BY THE ENGINEER. THE LOCATION SHOWN ON THESE PLANS ARE APPROXIMATE.
- REMOVAL OF THE EXISTING FIRE HYDRANTS WILL INCLUDE CUTTING FIRE HYDRANT BURY TWO FEET (2'-0") BELOW EXISTING GRADE AND BACKFILLING WITH CONCRETE. SALVAGED FIRE HYDRANTS SHALL BE DELIVERED TO THE CITY WATER DIVISION.
- FIRE HYDRANT INSTALLATIONS SHALL INCLUDE NEW 6--INCH LATERALS, VALVES WITH 6" X 6" X 6" OR 8" X 6" X 8" TEE. SEE CITY OF MANHATTAN BEACH STD DWG MBWS-701A(ST-16).

**WATER SERVICES AND METERS:**

- ALL WATER SERVICES AND FIRE LINES SHALL BE REPLACED FROM THE NEW WATER LINE UP TO THE METER PER DETAILS MODIFIED ST-15 AND ST-22.
- CONTRACTOR SHALL LOCATE AND FIELD VERIFY ALL WATER SERVICE CONNECTIONS AND FIRE LINE SERVICES SIZES AND LOCATIONS PRIOR TO COMMENCING WORK ON PROJECT.
- WATER SERVICE SHALL NOT BE CONSTRUCTED LESS THAN 18 INCHES FROM ANOTHER WATER SERVICE AND WATER MAIN JOINT.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, ADAPTERS, REDUCERS, AND/OR COUPLINGS NECESSARY TO CONNECT TO EXISTING PIPING AND METERS.

**POTHOLING/UTILITIES:**

- THE CONTRACTOR SHALL POTHOLE ALL TIE IN CONNECTION LOCATIONS, PRIOR TO CONSTRUCTION TO FIELD VERIFY THE ACTUAL SIZE, DEPTH, AND ROUNDNESS OF THE EXISTING WATER SYSTEM. THE TIE IN WILL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE UNLESS OTHERWISE SHOWN.
- THE CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS A MINIMUM DISTANCE OF 200 FEET IN ADVANCE OF WATER MAIN TRENCHING TO DETERMINE THE EXACT LOCATION AND VERIFY THE MATERIAL, SIZE, DEPTH AND ROUNDNESS OF ALL PARALLEL AND CROSSING UTILITIES WITHIN THE ALIGNMENTS OF THE NEW WATER MAIN. PIPE JOINTS SHALL BE DEFLECTED A MAXIMUM 80% OF MANUFACTURER'S RECOMMENDATION TO CLEAR INTERFERENCES WITH KNOWN OBSTRUCTIONS OR OTHER UTILITIES WHICH ARE SHOWN OR NOT SHOWN ON THE PLAN UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY INFORMATION GATHERED DEVIATING FROM PLANS SHALL BE CONVEYED TO THE ENGINEER IN WRITING.
- FAILURE TO COMPLY WITH ANY OF THE ABOVE ITEMS SHALL BE SUFFICIENT CAUSE FOR THE AGENCY TO ARRANGE FOR THE NECESSARY WORK TO BE PERFORMED BY OTHERS. ANY COSTS INCURRED TO COMPLETE THE NECESSARY WORK WILL BE CHARGED TO THE CONTRACTOR.

**CONNECTIONS:**

- CONTRACTOR SHALL RECONNECT ALL EXISTING SERVICES INCLUDING WATER SERVICE AND FIRE PROTECTION SERVICE CONNECTIONS FROM THE ABANDONED OR REPLACED WATER MAIN TO THE NEW WATER MAIN. THE CONTRACTOR SHALL ALSO PROVIDE ALL REQUIRED TEES, BLIND FLANGES, CAPS, FITTINGS, PIPE AND RESTRAINED JOINT CONNECTIONS REQUIRED TO RECONNECT ALL SERVICES CONNECTIONS TO THE NEW WATER MAIN PER CITY OF MANHATTAN BEACH STANDARDS. WATER AND FIRE SERVICE CONNECTIONS HAVE NOT BEEN SHOWN IN DETAIL FOR PLAN CLARITY.
- AT CONNECTION POINTS, THE CONTRACTOR SHALL REMOVE INTERFERING EXISTING PIPING AND VALVES AND INSTALL FITTINGS, VALVES AND MAKE UP SPOOL PIECES AND JOIN PIPE ENDS WITH TRANSITION COUPLINGS.
- CONNECTIONS TO EXISTING WATER MAIN SHALL BE ACCORDING TO TYPICAL CITY STANDARDS.
- REFER TO CONNECTIONS SHOWN ON CITY STANDARDS.
- THRUST BLOCK OR RESTRAINING DEVICES SHALL BE INSTALLED ON BOTH SIDES OF ALL FITTINGS, VALVES, PLUGS, AND DEAD ENDS, AND ALL DIRECTION CHANGES. THRUST BLOCKS SHALL BE PER CITY OF MANHATTAN BEACH STD. DWG. (ST-20). THE REQUIRED RESTRAINED LENGTH FITTINGS SHALL BE PER CITY STANDARDS, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER.
- DUAL PURPOSE COUPLING TRANSITION FITTINGS SHALL BE USED FOR CIP/DIP TRANSITIONS FOR 12" OR LARGER.

**RESTRAINTS/THRUST BLOCKS:**

- THRUST BLOCKS SHALL BE CONSTRUCTED PER CITY OF MANHATTAN BEACH STD. DWG. ST-20.
- ALL NEW AND EXISTING WATER MAINS SHALL BE PROPERLY RESTRAINED BY THE CONTRACTOR DURING CONSTRUCTION AND HYDROSTATIC TESTING.
- ALL FIRE SERVICE CONNECTIONS SHALL BE RESTRAINED.

**TESTING/DISINFECTION:**

- THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT ALL WATER MAINS HAVE BEEN RELIEVED OF ENTRAPPED AIR BY HOLDING HYDROSTATIC PRESSURE IN PIPELINES BEING TESTED A MINIMUM OF 4 HOURS PER AWWA C600.
- ALL WATER LINE INSTALLATIONS SHALL BE FREE OF DEBRIS AND ORGANIC MATERIALS. THE PIPE SHALL BE PRESSURE AND LEAKAGE TESTED, FLUSHED AND CHLORINATED. CHLORINATING SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA HEALTH DEPARTMENT, CONSISTING OF NOT LESS THAN 50 PPM INITIAL DOSAGE, WITH NOT LESS THAN 25 PPM RESIDUAL DOSAGE AFTER 24 HOURS. INSTALLATIONS SHALL BE FLUSHED AND A 48 HOUR BACTI TEST SHALL BE REQUIRED PRIOR TO PRESSURE TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE ALL BACTERIOLOGICAL TESTING BY A CERTIFIED LABORATORY. THE CONTRACTOR SHALL NOT HAVE CUSTODY OF THE WATER SAMPLES AT ANY TIME. ALL TESTING METHODS AND RESULTS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO CONNECTING THE NEW WATER MAIN TO THE CITY'S WATER SYSTEM.
- ALL BACTI AND PRESSURE TESTS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO PLACEMENT OF PERMANENT RESURFACING.

**HIGH LINING (BY-PASS):**

- THE CONTRACTOR SHALL INSTALL BY-PASS LINES AS SHOWN AND PER SPECIFICATIONS. THE MINIMUM BY-PASS PIPING SIZE SHALL EQUAL THE SIZE OF THE MAIN TO BE REPLACED.
- BY-PASS WATER PLANS SHALL BE PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER FOR ALL WATER MAINS TO BE REMOVED AND REPLACED PER PLAN. ALL BY-PASS PLANS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND COORDINATED AND APPROVED WITH THE CITY FIRE MARSHALL.

**ABANDONMENT:**

- WHERE THE NEW WATER MAIN REPLACES AN EXISTING MAIN, THE EXISTING MAIN SHALL BE ABANDONED IN PLACE AND THE ENDS SHALL BE FILLED WITH 2 FEET MINIMUM OF SLURRY, CAPPED OR PLUGGED PROPERLY AND SECURED WITH CONCRETE PRIOR TO BACKFILLING.
- REPLACED WATER SERVICES SHALL BE REMOVED.

**SEPARATIONS:**

- ALL WATER MAIN SEPARATIONS SHALL COMPLY WITH DEPARTMENT OF HEALTH SERVICES GUIDANCE CRITERIA AND DIVISION OF DRINKING WATER (DDW) FOR THE SEPARATION OF WATER MAINS AD NON-POTABLE PIPELINES (LATEST ADDITION) AND CITY OF MANHATTAN BEACH STD. DWG. ST-26. THE MORE STRINGENT OF THE TWO SHALL GOVERN.
- WHEREVER A WATER LINE CROSSES A SEWER LINE, VERTICAL SEPARATION SHALL NOT BE LESS THAN 4 INCHES. WHERE THE SEPARATION IS BETWEEN 4 INCHES AND ONE (1) FOOT, THE CONTRACTOR SHALL INSTALL THE WATER MAIN SO THAT A 16 FOOT SECTION OF PIPE IS CENTERED AT THE SEWER LINE, AND THERE SHALL NOT BE A PIPE JOINT WITHIN 8 FEET. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.
- IN AREAS WHERE THE PIPELINE IS INSTALLED ABOVE AN EXISTING STORM DRAIN, THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 12 INCHES BETWEEN THE TOP OF STORM DRAIN AND THE BOTTOM OF THE PIPELINE. IF A 12 INCH CLEARANCE CANNOT BE MAINTAINED, PIPE SHALL BE CONCRETE ENCASED ACROSS THE STORM DRAIN, PLUS 3 FEET ON BOTH SIDES. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.
- WHERE THE NEW WATER MAIN ENCLOSES WITH 4 FEET OF AN EXISTING SEWER OUTER DIAMETER SPECIAL CONSTRUCTION WILL BE REQUIRED BY CONSTRUCTING A CASING PIPE FOR THE NEW WATER MAIN. SEE CITY OF MANHATTAN BEACH STD. DWG. ST-26.

**TRENCHING AND BACKFILLING:**

- NO MECHANICAL EQUIPMENT IS PERMITTED TO OPERATE WITHIN THREE FEET OF A GAS LINE AND ANY CLOSER WORK MUST BE DONE BY HAND.

**SEWER NOTES:**

- THE CONTRACTOR'S ATTENTION IS CALLED TO CONTRACT SPECIFICATION'S SPECIAL PROVISION, PART 3, SECTION 306--1.2.15 CONVEYANCE OF SEWAGE FLOWS.
- THE LOCATIONS OF EXISTING UTILITIES AND HOUSE LATERALS SHOWN ARE BASED ON CCTV INSPECTIONS AND PREVIOUS RECORDS. IT MAY OR MAY NOT BE ACCURATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND EXPOSE ALL EXISTING LATERALS TO DETERMINE EXACT LOCATION AND DEPTHS TO WHICH THE CONNECTIONS ARE TO BE MADE.
- AN EXISTING SEWER TO BE REPLACED SHALL BE CUT AND PLUGGED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 306-5 AND 306-6.

	<b>SUPPLEMENTAL NOTES:</b> 1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. 2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING. 3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.		<b>PREPARED BY:</b> 1561 E. ORANGETHORPE AVE. SUITE 240 FULLERTON, CA 92831 (714) 526-7500 www.cwecorp.com	REVIEWED BY _____ DATE _____

- EXISTING DOWNSTREAM MANHOLES SHALL BE BULKHEADED WITH BRICK AND MORTAR OR PLUGS APPROVED BY THE ENGINEER AT NEW INLET DURING CONSTRUCTION OF NEW UPSTREAM LINES. BRICK AND MORTAR OR PLUG SHALL BE REMOVED IN THE PRESENCE OF THE ENGINEER DURING CLEARING OF THE FIRST UPSTREAM SECTION OF THE NEW SYSTEM.
- THE NEW MAIN AND LATERALS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 306.1.4.4 OF THE STANDARD SPECIFICATIONS.
- MANHOLE FRAMES AND COVERS SHALL HAVE NO LOCKING FEATURES AND CONFORM TO THE CITY OF MANHATTAN BEACH STANDARD DWG. MBSS-210A (ST-19). A FOUNDRY IDENTIFICATION MARK SHALL BE LOCATED ON THE BOTTOM OF THE COVER AND INSIDE THE FRAME.
- WHENEVER THE INVERT ELEVATION OF THE EXISTING AND THE NEW SEWER ARE THE SAME, THE LATERALS SHALL BE ANGLED TOWARD THE DOWNSTREAM DIRECTION AT THE MAXIMUM SLOPE POSSIBLE.
- THE CONTRACTOR SHALL ADJUST ALL NEW SEWER MANHOLE FRAME COVERS TO FINISHED PAVEMENT GRADE.
- ALL LATERAL LOCATIONS SHALL BE CLEARLY MARKED WITH A 2 INCH HIGH "S" CHISELED IN THE CURB FACE BY THE CONTRACTOR, WITH EXCEPTION AT PRIVATE IMPROVEMENTS IN ENCROACHMENT AREAS.
- STATIONS SHOWN THUS 0+00 AS SHOWN ON THE PLAN AND PROFILE ARE SEWER STATIONS FROM RECORDED DRAWINGS AND ARE INDEPENDENT OF STREET STATIONS AND ARE STATIONS ALONG CENTERLINE OF SEWER. THESE MAY VARY FROM CCTV DERIVED DISTANCES.
- SEWER LINE DISTANCE SHOWN IN PLAN AND PROFILE IS THE HORIZONTAL DISTANCE MEASURED BETWEEN MANHOLES.
- SEWER MAIN CONSTRUCTION SHALL BE MONITORED BY VIDEOTAPE EQUIPMENT & THE VIDEOTAPE SHALL BE PROVIDED TO CITY ENGINEER. STATIONING IS TO SHOW ON VIDEOTAPE.
- MANHOLE CONES FOR REPLACEMENT MANHOLES SHALL BE SET STRAIGHT SIDE UPSTREAM. MANHOLE STEPS SHALL BE MADE OF STEEL REINFORCED POLYPROPYLENE.
- ALL VCP AND FITTINGS SHALL BE CLASS DESIGNATED "EXTRA-STRENGTH" AND TESTED IN ACCORDANCE WITH ASTM C-700 AND PER CITY STANDARDS.
- IF A POWERPOLE IS WITHIN THREE FEET OF THE SEWER, THE SEWER SHALL BE ENCASED PER LACDPW STANDARD PLAN 2023-2, CASE II, TWO FEET ON EACH SIDE FROM THE POINT OF INTERFERENCE.
- ALL JOINTS BETWEEN VITRIFIED CLAY PIPE AND OR PVC SEWER PIPE SHALL BE MADE WITH A RUBBER SLEEVE JOINT, TYPE "D" (WITH BUSHING IF NECESSARY) PER "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" SECTION 208-2.
- WYE FITTINGS SHALL BE USED FOR LATERAL CONNECTIONS TO THE MAINLINE SEWERS EXCEPT AS NOTED.
- NEW PIPE AND NEW MANHOLE BEDDING SHALL BE INSTALLED PER CITY OF MANHATTAN BEACH STANDARD DWG MBSI-132A (ST-10).
- CONTRACTOR TO COAT OUTSIDE OF ALL NEW SANITARY SEWER MANHOLES WITH WATERPROOF MEMBRANES.
- ALL NEW SANITARY SEWER MANHOLE FRAMES AND COVERS SHALL BE WATERTIGHT.
- PRIOR TO ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH, AN INSPECTION OF SAID LINE BY VIDEO INCLUDING MANHOLES SHALL BE REQUIRED PER PROVISIONS OF SECTION 500-1.1.15 OF THE SSPWC. THE RESULTS OF THE VIDEO AND MANDREL INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY. THIS INCLUDES REPAIRED, LINED & REPLACED SEWERS.

- PRIOR TO THE ACCEPTANCE OF ANY SANITARY SEWER LINE BY THE CITY OF MANHATTAN BEACH AN INSPECTION OF SAID LINE BY VIDEO SHALL BE REQUIRED AS PART OF COST FOR PROJECT TO THE CITY. ALL NEW REPAIRED & LINED SEWERS SHALL BE VIDEO INSPECTED. THE CCTV INSPECTION SHALL BE COMPLETED BY A CERTIFIED NATIONAL ASSOCIATION OF SEWER SERVICE COMPANY (NASSCO). PIPELINE ASSESSMENT AND CERTIFICATION PROGRAM (PACP) SHALL BE PERFORMED BY TRAINED OPERATORS(S) USING ESTABLISHED PACP CODING AND OBSERVATIONS. THE RESULTS OF THE VIDEO INSPECTION SHALL BE RECORDED IN DVD FORMAT AND A COPY SHALL BE PROVIDED TO THE CITY DEPARTMENT OF PUBLIC WORKS FOR REVIEW AND APPROVAL. ANY NOTED DEFICIENCIES SHALL BE CORRECTED, THEN FOLLOWED BY A POST CORRECTION VIDEO TO BE SUBMITTED FOR REVIEW AND APPROVAL. THE CONTRACTOR OF THE PROJECT SHALL NOTIFY THE CITY OF MANHATTAN BEACH IN WRITING AT LEAST 48 HOURS (2 WORKING DAYS) IN ADVANCE OF THE SCHEDULED DATE AND TIME OF ANY VIDEO INSPECTIONS.
- THE CONTRACTOR SHALL CHECK EACH LATERAL FOR THE PRESENCE OF A BACKWATER VALVE, WHICH SHALL BE REPLACED IF DAMAGED.
- THE CONTRACTOR SHALL REVIEW CCTV TO LOCATE EXISTING SEWER LATERALS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- WHERE KNOWN, LOCATIONS OF SEWER LATERALS ARE SHOWN ON PLANS. HOWEVER, CONTRACTOR SHALL RECONNECT ALL FOUND LATERALS.
- AS DIRECTED BY THE ENGINEER, CONTRACTOR SHALL SALVAGE ALL EXISTING MANHOLE COVERS AND FRAMES AND DELIVER THEM TO THE CITY YARD.
- CONNECTION TO EXISTING CITY MANHOLES, WHERE STUBS DO NOT EXIST OF CORRECT SIZE, SHALL BE DONE BY CORE DRILLING.
- MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION IN SEWER MAINS AND LATERALS BY USE OF BYPASS SYSTEM INCLUDING PUMPING.
- ANY EXISTING BACKWATER VALVE BWV SHALL BE REPLACED AS PART OF THIS PROJECT. INSTALL NEW BWV WHERE REQUIRED PER SECTION 710 OF THE PLUMBING CODE.

**CONCRETE REMOVAL NOTES:**

WHERE REINFORCEMENT IS REQUIRED TO EXTEND THROUGH THE NEW JOINT, CONCRETE SHALL BE REMOVED IN THE FOLLOWING SEQUENCE.

- A SAWCUT SHALL BE MADE ONE AND ONE-HALF INCHES DEEP AT THE REMOVAL LIMITS. CARE SHALL BE EXERCISED IN SAWING AT THE REMOVAL LIMITS SO AS NOT TO CUT THE REINFORCING STEEL IN THE REMAINING SLAB. THE EXISTING REINFORCING STEEL SHALL BE RETAINED AND EXTENDED INTO THE NEW CONSTRUCTION AS INDICATED ON THE PLANS.
- USING HANDHELD EQUIPMENT, THE CONCRETE SHALL BE CAREFULLY REMOVED FOR THE FULL DEPTH OF THE WALL OR SLAB AND FOR A MINIMUM DISTANCE FROM THE SAWCUT EQUAL TO THE LONGEST EXTENSION OF THE EXISTING BARS TO BE EXTENDED INTO THE NEW CONSTRUCTION. THIS EXTENSION SHALL BE 30 BAR DIAMETERS, UNLESS OTHERWISE SHOWN.
- EXISTING REINFORCEMENT SHALL BE CUT TO THE REQUIRED BAR EXTENSION.
- THE REMAINING CONCRETE MAY BE REMOVED BY ANY SUITABLE METHOD UPON APPROVAL OF THE ENGINEER, WHO SHALL BE THE SOLE JUDGE OF THE USE OF ANY CONCRETE REMOVAL EQUIPMENT. EXPLOSIVES, WRECKING BALL, OR OTHER SIMILAR DEVICES, WHICH ARE LIKELY TO DAMAGE THE CONCRETE TO BE LEFT IN PLACE, SHALL NOT BE USED.

<b>CITY OF MANHATTAN BEACH</b> PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION			
<b>SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL GENERAL NOTES</b>			
REFERENCES NO. _____ BY _____ DATE _____		APPROVED BY:  12/26/23 DATE PROJECT MANAGER TIM BIRTISEL	
REVISIONS NO. _____ BY _____ DATE _____		APPROVED BY:  12/26/23 DATE CITY ENGINEER KATHERINE DOHERTY	
DRAWING NO. <b>C-3</b>		SCALE: AS SHOWN DATE: MARCH 2023 SHEET 3 OF 16	

Z:\21437\06 Tasks\01 Design\50 Storm Drain\21437 - C2-3 GENERAL NOTES.dwg

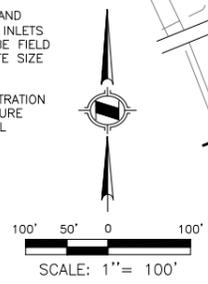
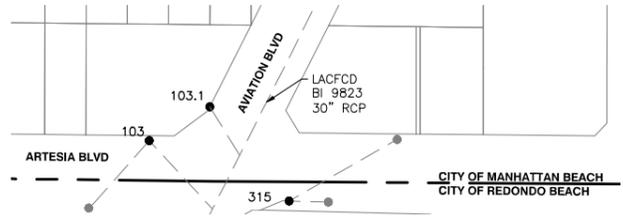


CATCH BASIN LOCATIONS FOR BMP IMPLEMENTATION									
ID	STREET	NEAREST X-STREET	CORNER	BMP TYPE	CB TYPE	W (FT)	V (FT)	PIPE (OUT)	
103.1	AVIATION BLVD	ARTESIA BLVD	NW	CPS	SPPWC 300-4	3.5	4.75	18" RCP	
103	ARTESIA BLVD	AVIATION BLVD	NW	CPS	LACFCD NO. 6	CONTRACTOR TO VERIFY		18" RCP	
315	ARTESIA BLVD	AVIATION BLVD	SE	CPS	SPPWC 300-4	14	UNKNOWN	18" RCP	
454	OCEAN DR	18TH ST	SW	CPS	SPPWC 300-4	7	3.5	18" RCP	
456	OCEAN DR	17TH ST	NW	CPS	SPPWC 300-4	7	4	18" RCP	
457	16TH PL	OCEAN DR	ALLEY	FILTER INSERT	SPPWC 305-4	41"x65"	3.5	24" RCP	
458	HIGHLAND AVE	16TH PL	NW	CPS	SPPWC 300-4	7	4	18" RCP	
459	HIGHLAND AVE	16TH PL	ALLEY	FILTER INSERT	SPPWC 305-4	41"x78.5"	6	18" RCP	
460	HIGHLAND AVE	16TH PL	SW	CPS	SPPWC 300-4	3.5	4	18" RCP	
461	HIGHLAND AVE	15TH PL	NW	CPS	SPPWC 300-4	7	4	18" RCP	
462	HIGHLAND AVE	15TH PL	ALLEY	FILTER INSERT	SPPWC 305-4	6.5	6	18" RCP	
463	HIGHLAND AVE	15TH PL	SW	CPS	SPPWC 300-4	3.5	4	18" RCP	
1F14-WEST	THE STRAND	21ST ST	-	CURB INLET FILTER BASKET	LACFCD NO. 2	7	2.58	24" RCP	
711.1	THE STRAND	28TH ST	-	CPS	LACFCD NO. 3	4.5	4.67	24" RCP	
710	THE STRAND	27TH ST	-	CURB INLET FILTER BASKET	SPPWC 300-4	7	3	18" RCP	
732	PARKING LOT	44TH ST & THE STRAND	WEST	CPS	TRENCH INLET	30'L x 2.5'W x 3'D		24" RCP	
733	PARKING LOT	43RD ST & THE STRAND	WEST	FILTER INSERT	LACFCD NO. 4	24"x39"	3.67	18" RCP	
734	PARKING LOT	41ST ST & THE STRAND	WEST	FILTER INSERT	LACFCD NO. 4	26"x41"	4.33	18" RCP	
737	PARKING LOT	39TH ST & THE STRAND	WEST	FILTER INSERT	LACFCD NO. 4	24"x42"	2.83	24" CMP	

TRENCH INLET LOCATIONS FOR CHANNEL FILTER SYSTEM									
ID	STREET	NEAREST X-STREET	LOCATION	BMP TYPE	CB TYPE	W (FT)	V (FT)	PIPE (OUT)	
728	43RD ST	THE STRAND	END OF THE STREET NEAR THE STRAND	GUTTER BIN CHANNEL FILTRATION SYSTEM WITH MUNDUS BAG WATER FILTER OR APPROVED EQUAL	TRENCH INLET	26'L x 1.5'W x 3'D		18" CMP	
731	41ST ST	THE STRAND	END OF THE STREET NEAR THE STRAND	GUTTER BIN CHANNEL FILTRATION SYSTEM WITH MUNDUS BAG WATER FILTER OR APPROVED EQUAL	TRENCH INLET	26'L x 1.5'W x 3'D		18" CMP	

- LEGEND**
- XXX CPS UNIT REQUIRED FOR EXISTING CATCH BASIN
  - XXX FILTER INSERT REQUIRED FOR EXISTING GRATE INLET
  - ★XXX CURB INLET BASKET REQUIRED FOR EXISTING CATCH BASIN
  - ▲XXX CHANNEL FILTRATION SYSTEM (SEE SHEET 5 FOR DETAILS)
  - COUNTY BMP IMPLEMENTATION PER SHEET 4B
  - EXISTING CATCH BASIN (TO BE PROTECTED)
  - HDS UNIT
  - EXISTING STORM DRAIN LINE

- NOTES**
- CONTRACTOR TO FIELD VERIFY THE SIZE OF THE EXISTING INLETS PRIOR TO INSTALLING TRASH CAPTURE SYSTEMS.
  - IF CPS UNITS OR FILTER INLETS ARE NOT FEASIBLE, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY IMMEDIATELY.
  - CATCH BASIN/INLET NUMBERING IS BASED ON THE CITY'S GIS DATASET, WITH MINOR MODIFICATIONS AS REQUIRED TO CREATE A UNIQUE ID.
  - DATA INCLUDED IN THE TABLES IS BASED ON A FIELD REVIEW AND SUPPLEMENTED BY THE CITY'S GIS DATASET, AS SOME OF THE INLETS WERE NOT ACCESSIBLE. DIMENSIONS AND INLET TYPES SHALL BE FIELD REVIEWED BY THE CONTRACTOR TO DETERMINE THE APPROPRIATE SIZE AND CONFIGURATION OF THE FULL TRASH CAPTURE SYSTEM.
  - CPS, FILTER INSERTS, CURB INLET BASKETS, AND CHANNEL FILTRATION UNITS USED FOR THE PROJECT MUST BE CERTIFIED FULL CAPTURE SYSTEMS APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD, WHICH CAN BE FOUND HERE: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/trash\\_implementation.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html).



**811**  
Know what's below.  
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NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

- SUPPLEMENTAL NOTES:**
- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
  - DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
  - THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

**REGISTERED PROFESSIONAL ENGINEER**  
KATHY HARREL  
No. 85752  
Exp. 9/30/2024  
CIVIL  
STATE OF CALIFORNIA  
DECEMBER 19, 2023  
DATE SIGNED

PREPARED BY:  
**CWE**  
1561 E. ORANGETHORPE AVE.  
SUITE 240  
FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY	DATE

REFERENCES		
NO.	BY	DATE
REVISIONS		

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL CITY BMP IMPLEMENTATION**

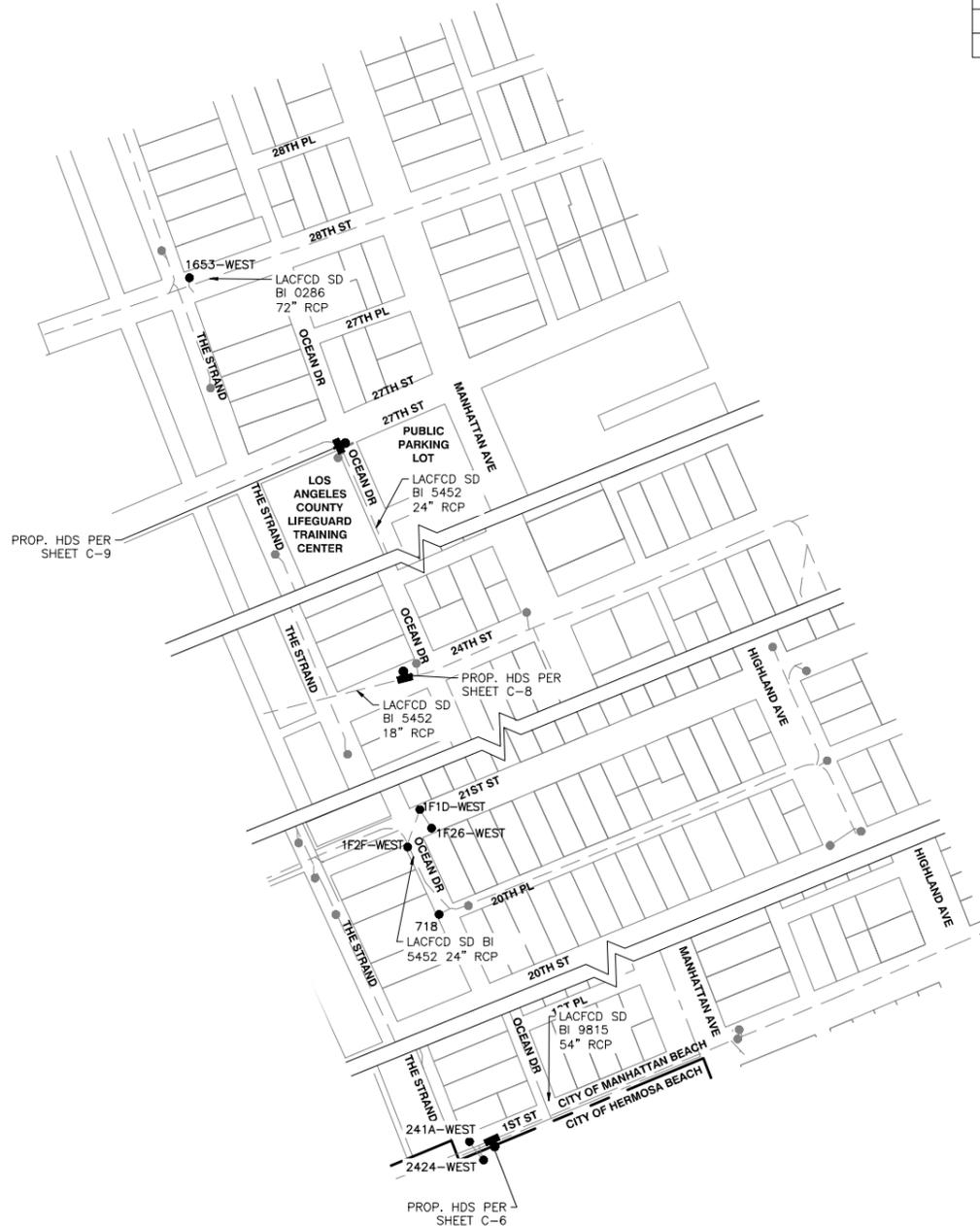
REVIEWED BY <i>Tim Birtisael</i> PROJECT MANAGER TIM BIRTISEL	DATE 12/26/23	APPROVED BY <i>Kathy Harrel</i> CITY ENGINEER KATHERINE DOHERTY	DATE 12/26/2023
SCALE AS SHOWN	DATE MARCH 2023	DRAWING NO. <b>C-4A</b>	

SHEET 4A OF 16

**100% CONSTRUCTION PLAN**

Z:\21437\06 Taskis\01 Design\50 Storm Drain\21437 - C4A BMP IMP.dwg

CATCH BASIN LOCATIONS FOR BMP IMPLEMENTATION									
COUNTY ID	CITY ID	STREET	NEAREST X-STREET	CORNER	BMP TYPE	CB TYPE	W (FT)	V (FT)	PIPE (OUT)
1487011	241A-WEST	1ST ST	THE STRAND	NE	CPS	301-2	7	3.5	18" RCP
1487012	2424-WEST	1ST ST	THE STRAND	SE	CPS OR CURB INLET FILTER BASKET	301-2	7	7.25	18" RCP
1486020	1F2F-WEST	OCEAN DR	21ST ST	SW	CPS	303-2	26.5"x41"	3.58	18" RCP
1486019	1F26-WEST	21ST ST	OCEAN DR	SE	CPS	300-2	7	3.33	18" RCP
1486018	1F1D-WEST	21ST ST	OCEAN DR	NE	CPS	300-2	7	4.2	18" RCP
1486045	1653-WEST	THE STRAND	28TH ST	-	CPS	300-2	4.5	4.67	24" RCP
1486021	718	OCEAN DR	20TH PL	NW	CPS	303-2	26"x41"	3.12	18" RCP

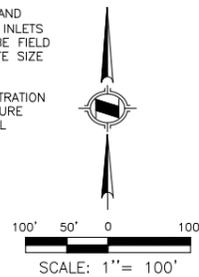


**LEGEND**

- XXX CPS UNIT REQUIRED FOR EXISTING CATCH BASIN
- EXISTING CATCH BASIN (TO BE PROTECTED)
- HDS UNIT
- EXISTING STORM DRAIN LINE

**NOTES**

- CONTRACTOR TO FIELD VERIFY THE SIZE OF THE EXISTING INLETS PRIOR TO INSTALLING TRASH CAPTURE SYSTEMS.
- IF CPS UNITS OR FILTER INLETS ARE NOT FEASIBLE, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY IMMEDIATELY.
- CATCH BASIN/INLET NUMBERING IS BASED ON THE CITY'S GIS DATASET, WITH MINOR MODIFICATIONS AS REQUIRED TO CREATE A UNIQUE ID.
- DATA INCLUDED IN THE TABLES IS BASED ON A FIELD REVIEW AND SUPPLEMENTED BY THE CITY'S GIS DATASET, AS SOME OF THE INLETS WERE NOT ACCESSIBLE. DIMENSIONS AND INLET TYPES SHALL BE FIELD REVIEWED BY THE CONTRACTOR TO DETERMINE THE APPROPRIATE SIZE AND CONFIGURATION OF THE FULL TRASH CAPTURE SYSTEM.
- CPS, FILTER INSERTS, CURB INLET BASKETS, AND CHANNEL FILTRATION UNITS USED FOR THE PROJECT MUST BE CERTIFIED FULL CAPTURE SYSTEMS APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD, WHICH CAN BE FOUND HERE: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/trash\\_implementation.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html).



NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

**SUPPLEMENTAL NOTES:**

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

DECEMBER 19, 2023  
DATE SIGNED

PREPARED BY:  
**CWE**  
1561 E. ORANGETHORPE AVE.  
SUITE 240  
FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY	DATE

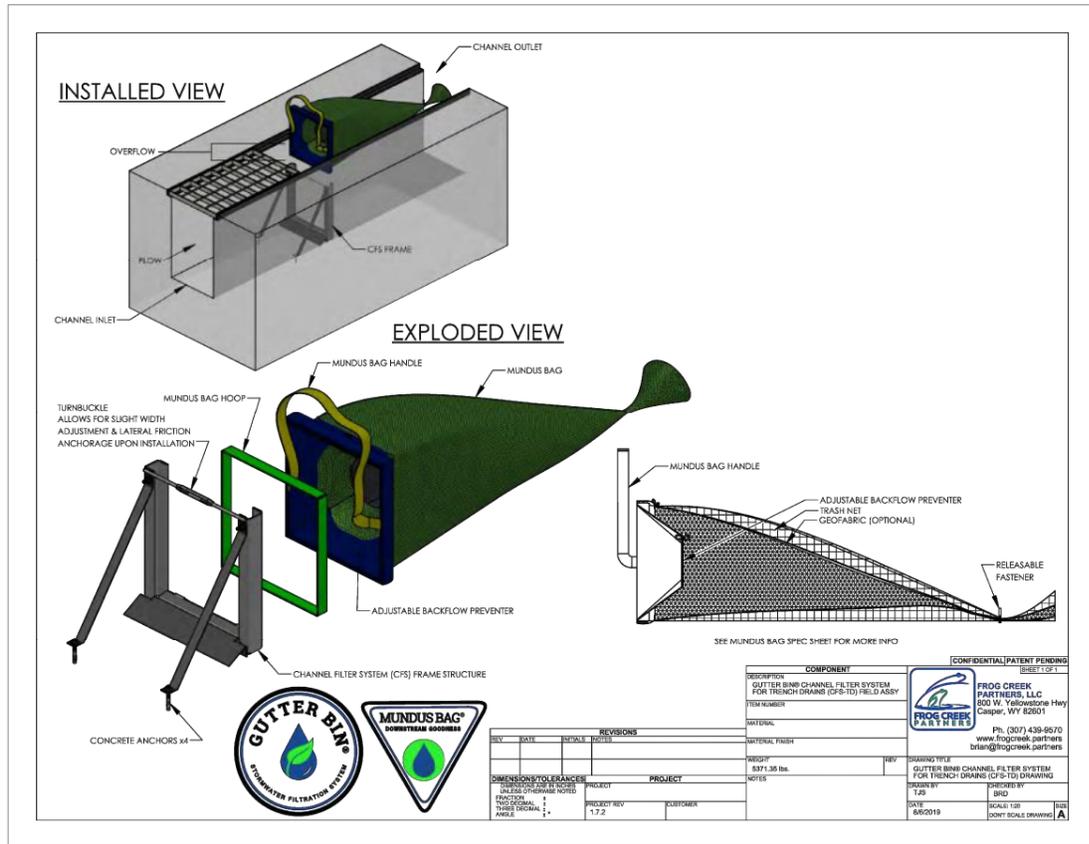
NO.	REFERENCES	BY	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL COUNTY BMP IMPLEMENTATION**

REVIEWED BY:  PROJECT MANAGER TIM BIRTISEL	DATE: 12/26/23	APPROVED BY:  CITY ENGINEER KATHERINE DOHERTY	DATE: 12/26/2023
DESIGNED BY:  PROJECT MANAGER – CWE KATIE HARREL	DATE: 12/19/23	SCALE: AS SHOWN	DATE: MARCH 2023

DRAWING NO. **C-4B**



**CHANNEL FILTER SYSTEM**  
NTS

REVISIONS	
REV	DATE
1	1/7/23

DESCRIPTION	COMPONENT	DATE	BY
GUTTER BIN® CHANNEL FILTER SYSTEM FOR TRENCH DRAIN (CFS-TD) FIELD ASSEMBLY			
ITEM NUMBER			
MATERIAL			
QUANTITY			
UNIT			
NOTES			

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

**SUPPLEMENTAL NOTES:**

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DECEMBER 19, 2023  
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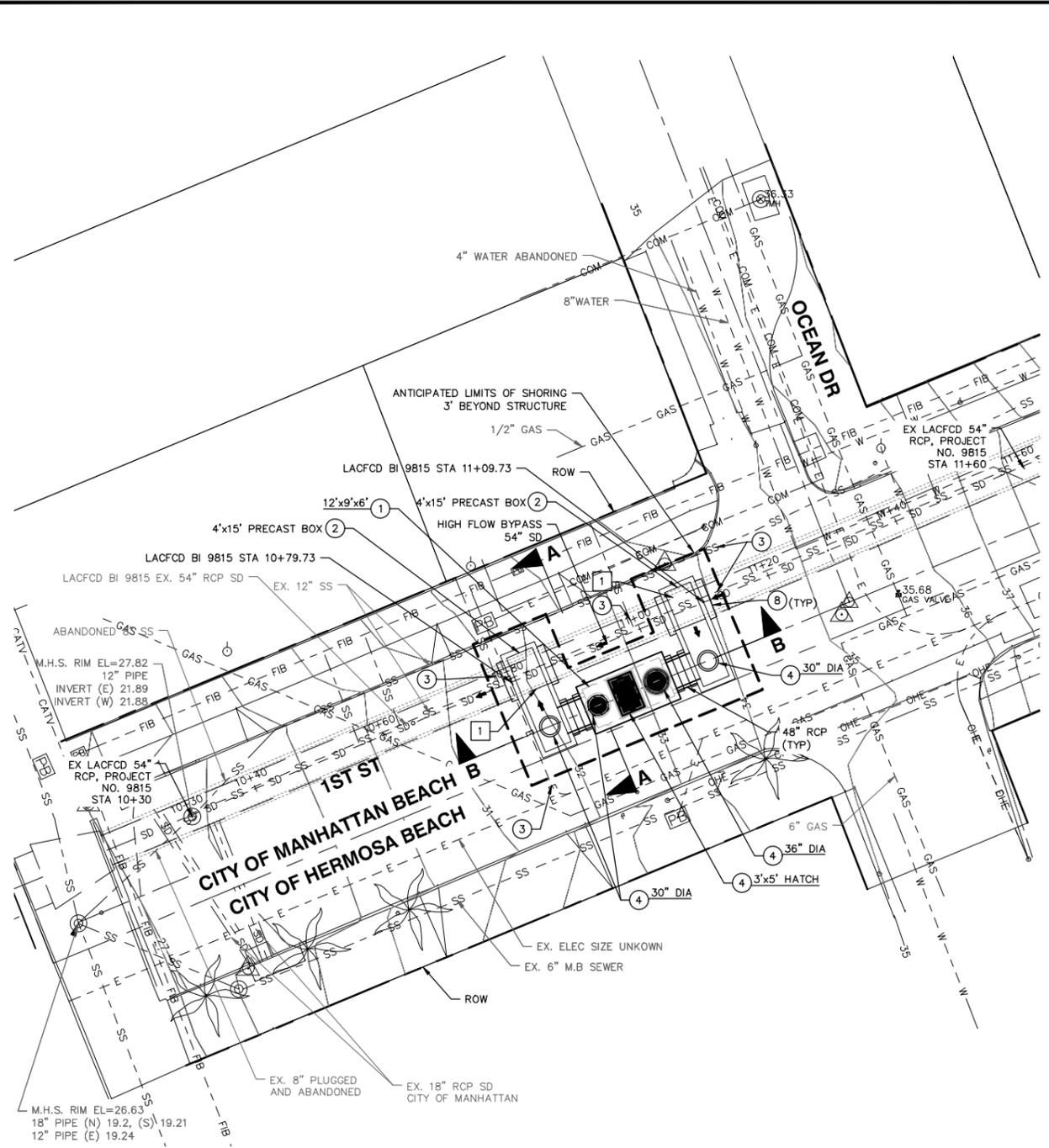
REVIEWED BY	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL CHANNEL FILTER SYSTEM**

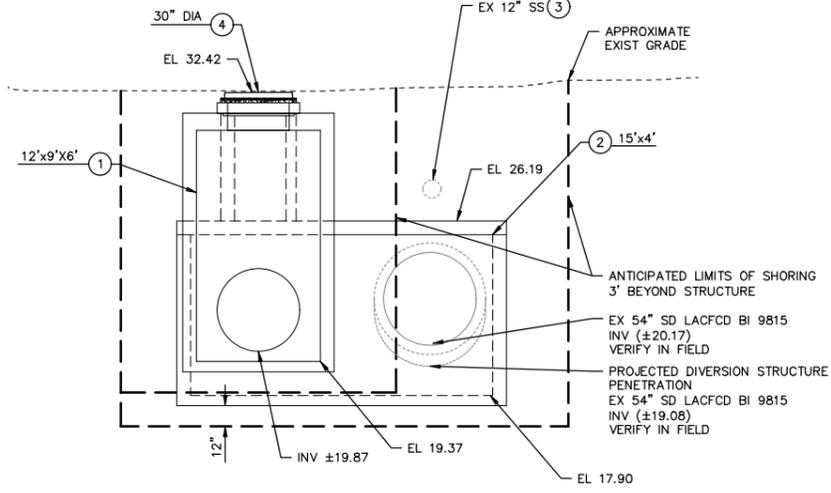
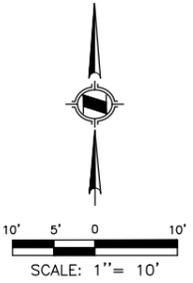
REFERENCES NO. BY DATE REVISIONS	REVIEWED BY: <i>Tim Birtisael</i> 12/26/23 PROJECT MANAGER TIM BIRTISEL	APPROVED BY: <i>Katherine Doherty</i> 12/26/2023 CITY ENGINEER KATHERINE DOHERTY
DESIGNED BY: <i>Kathy Harris</i> 12/19/23 PROJECT MANAGER – CWE KATIE HARREL	SCALE: AS SHOWN DATE: MARCH 2023 SHEET 5 of 16	DRAWING NO.: C-5

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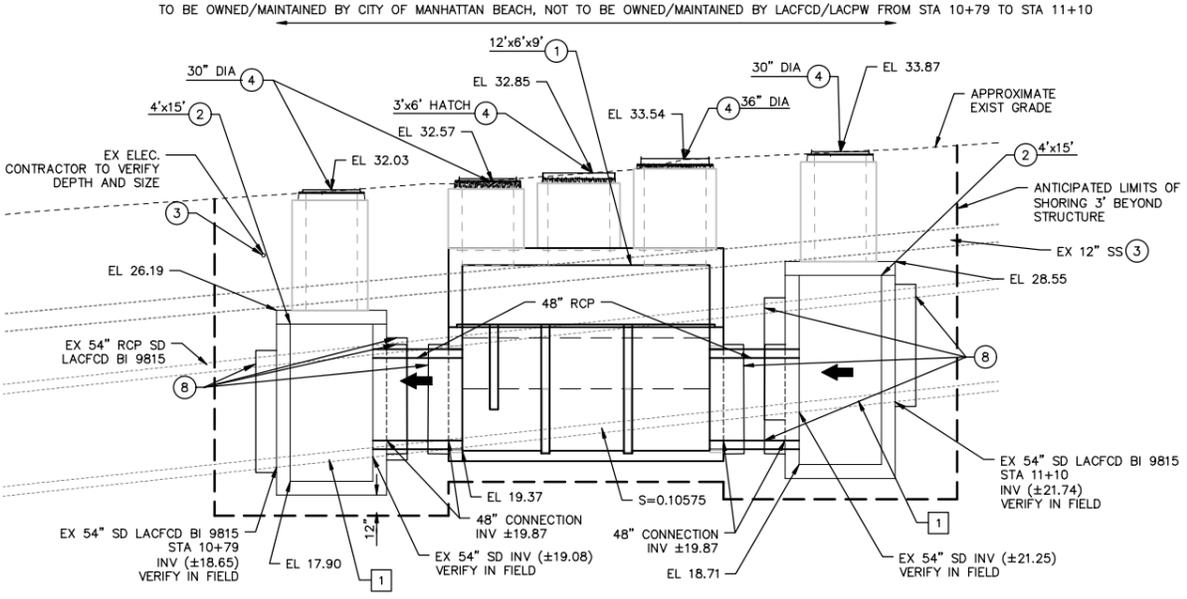
- NOTES:**
1. PROPOSED IMPROVEMENTS ARE TO BE MAINTAINED BY THE CITY OF MANHATTAN BEACH. LACFCD WILL NOT BE RESPONSIBLE FOR MAINTAINING THE DIVERSION AND HDS UNIT (STA 10+80 TO STA 11+10). UPSTREAM AND DOWNSTREAM SD MAINTENANCE WILL BE CONDUCTED BY THE CITY FROM STA 10+30 TO 11+60.
  2. CONTRACTOR RESPONSIBLE FOR TEMPORARY SEWER RELOCATION/BYPASS DURING CONSTRUCTION.

**PLAN**  
1"=10'

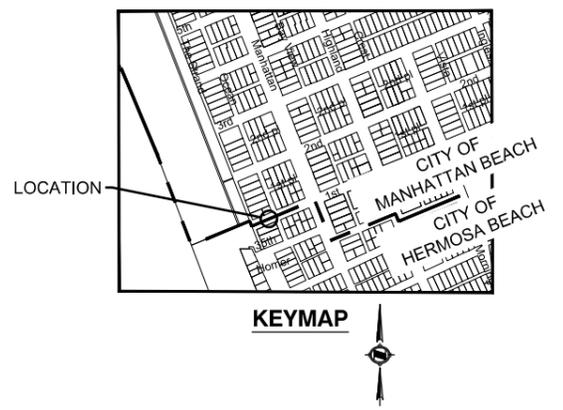


- NOTES:**
1. SEE SPECIFICATIONS FOR DESIGN FLOW AND MODEL TYPE.
  2. EXISTING UTILITIES SHOWN WITH APPROXIMATELY 2' TO 3' COVER. CONTRACTOR TO VERIFY.
  3. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY UTILITY SUPPORT.

**SECTION A-A**  
1"=4' HORIZ  
1"=4' VERT



**SECTION B-B**  
1"=4' HORIZ  
1"=4' VERT



**CONSTRUCTION NOTES:**

- 1 HDS UNIT (BAFFLE BOX). CONTECH OR APPROVED EQUAL.
- 2 HDS DIVERSION STRUCTURE. CONTECH OR APPROVED EQUAL.
- 3 TEMPORARY UTILITY SUPPORT, BY CONTRACTOR.
- 4 MH OR HATCH LID. CONTRACTOR TO GRADE SURROUNDING SURFACES TO MH LID.
- 8 PIPE CONNECTION - PER SPPWC 333-2.

**DEMOLITION NOTES:**

- 1 REMOVE 5.3' OF EX LACFCD 54" RCP PIPE INSIDE PROPOSED STRUCTURES.

TO BE OWNED/MAINTAINED BY CITY OF MANHATTAN BEACH, NOT TO BE OWNED/MAINTAINED BY LACFCD/LACPW FROM STA 10+79 TO STA 11+10

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

**SUPPLEMENTAL NOTES:**

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3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SDC, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

DECEMBER 19, 2023  
DATE SIGNED

PREPARED BY:  
**CWE**  
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FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY	DATE

NO.	REFERENCES	BY	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

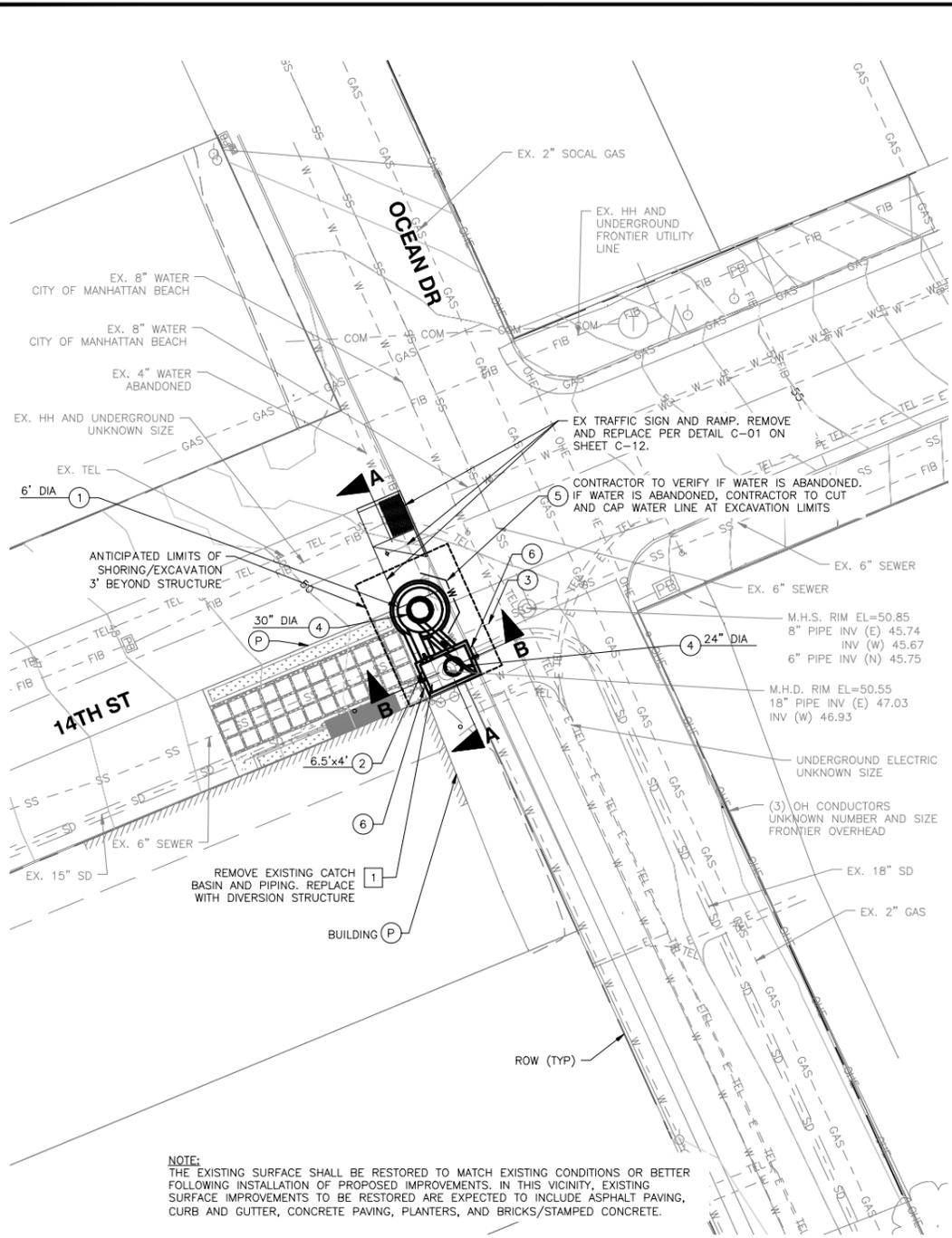
**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL 1st STREET HDS PLAN**

REVIEWED BY: *Tim Birtisael* 12/26/23  
PROJECT MANAGER  
TIM BIRTISEL

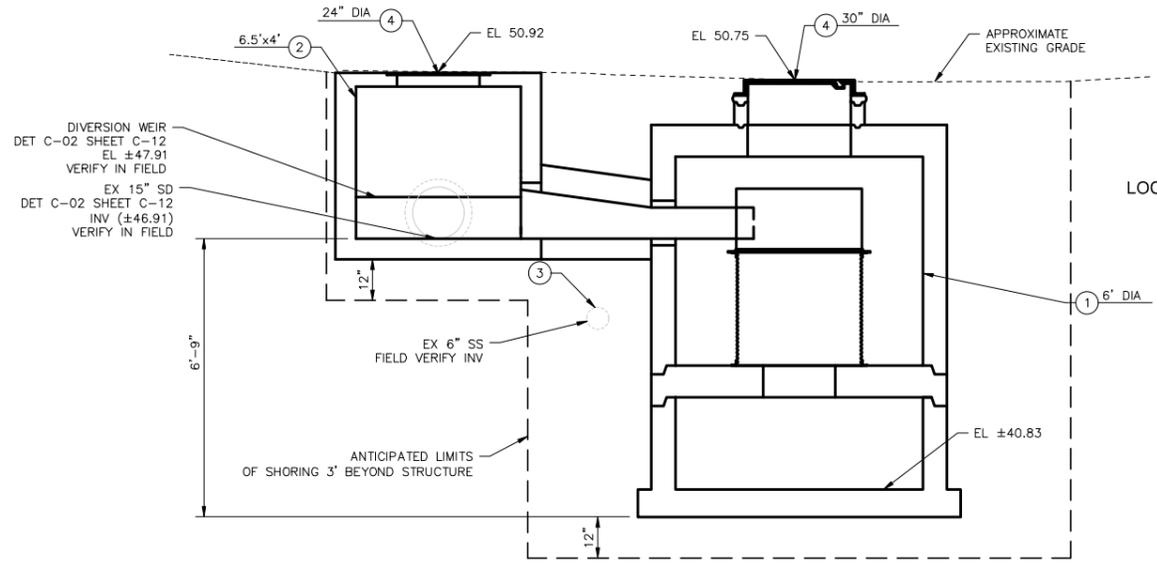
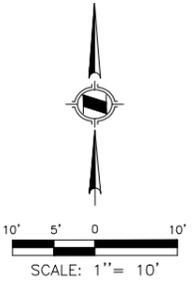
APPROVED BY: *Katherine Doherty* 12/26/2023  
CITY ENGINEER  
KATHERINE DOHERTY

DESIGNED BY: *Christopher Mote* 12/19/23  
PROJECT ENGINEER - STANTEC  
CHRISTOPHER MOTE

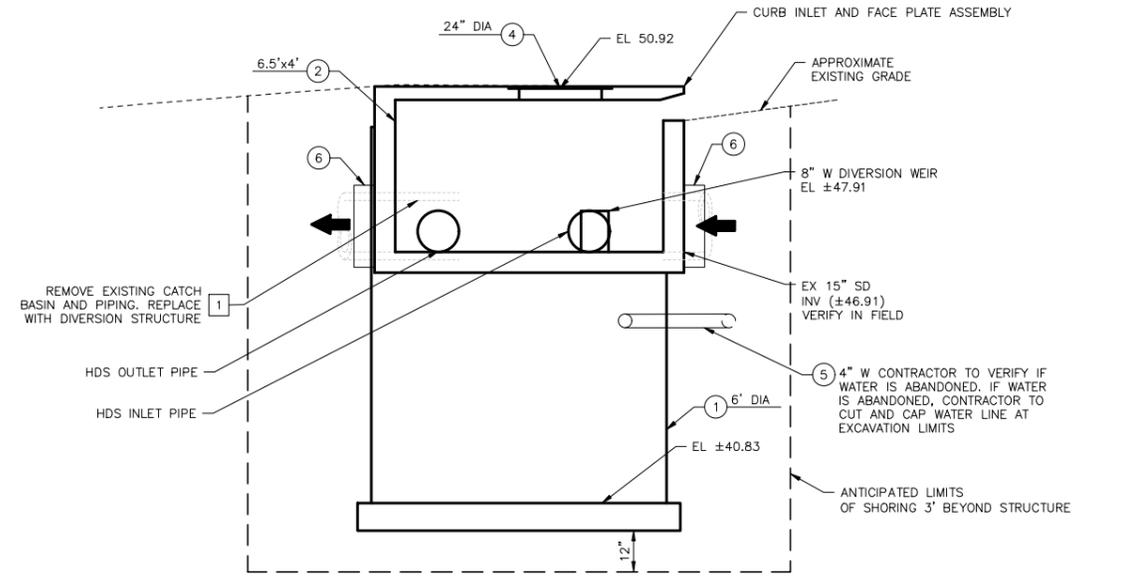
SCALE	DATE	DRAWING NO.
AS SHOWN	DECEMBER 2023	C-6
SHEET 6 OF 16		



**PLAN**  
1"=10'



**SECTION A-A**  
1"=2' HORIZ  
1"=2' VERT



**SECTION B-B**  
1"=2' HORIZ  
1"=2' VERT



**KEYMAP**

**CONSTRUCTION NOTES:**

- (P) PROTECT IN PLACE
- (1) HDS UNIT, JENSEN OR APPROVED EQUAL
- (2) HDS DIVERSION STRUCTURE, JENSEN OR APPROVED EQUAL
- (3) TEMPORARY UTILITY SUPPORT
- (4) MH OR HATCH LID, CONTRACTOR TO GRADE SURROUNDING SURFACES TO MH LID
- (5) RELOCATE UTILITY
- (6) PIPE CONNECTION - PER SPPWC 335-2

**DEMOLITION NOTES:**

- (1) REMOVE PIPE INSIDE PROPOSED STRUCTURES

- NOTES:**
- SEE SPECIFICATIONS FOR DESIGN FLOW AND MODEL TYPE.
  - A CONCRETE COLLAR MAY BE REQUIRED TO CONNECT THE EXISTING PIPE TO THE DIVERSION STRUCTURE. CONCRETE COLLAR WILL BE REQUIRED IF THE DIVERSION STRUCTURE IS NEAR AN EXISTING JOINT.
  - EXISTING UTILITIES SHOWN WITH APPROXIMATELY 2' TO 3' COVER, CONTRACTOR TO VERIFY.

**NOTE:**  
THE EXISTING SURFACE SHALL BE RESTORED TO MATCH EXISTING CONDITIONS OR BETTER FOLLOWING INSTALLATION OF PROPOSED IMPROVEMENTS. IN THIS VICINITY, EXISTING SURFACE IMPROVEMENTS TO BE RESTORED ARE EXPECTED TO INCLUDE ASPHALT PAVING, CURB AND GUTTER, CONCRETE PAVING, PLANTERS, AND BRICKS/STAMPED CONCRETE.

NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

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REVIEWED BY	DATE

REFERENCES		
NO.	BY	DATE

REVISIONS

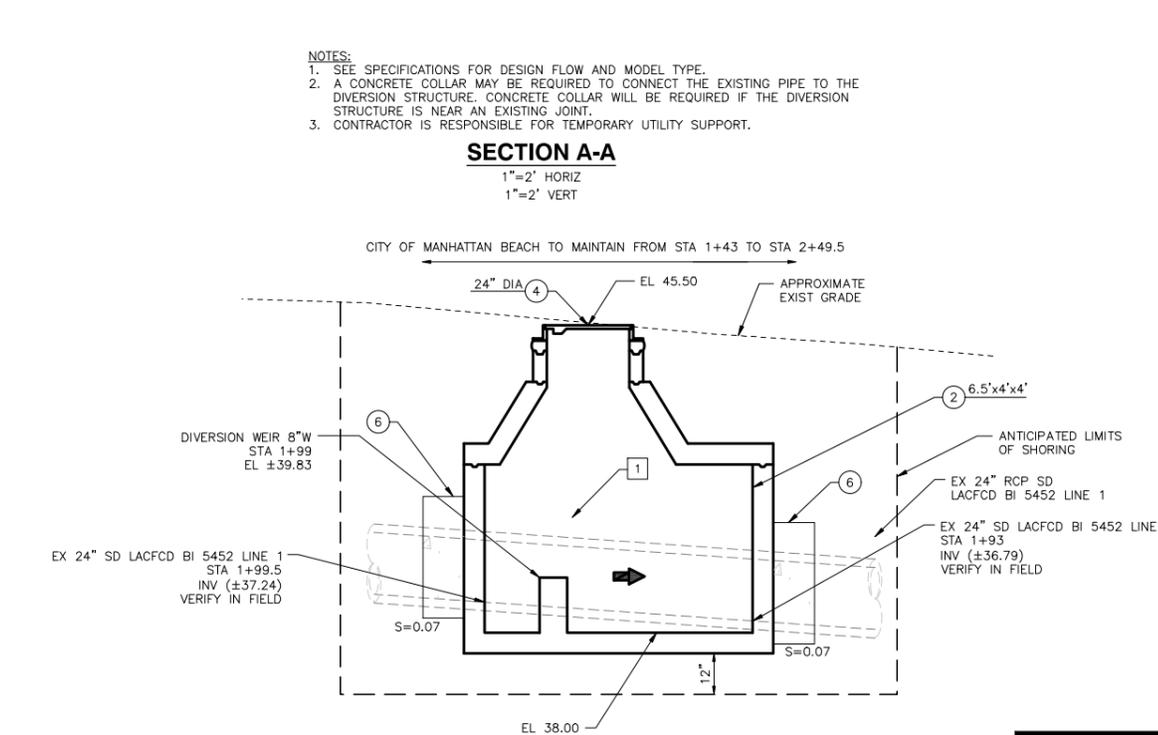
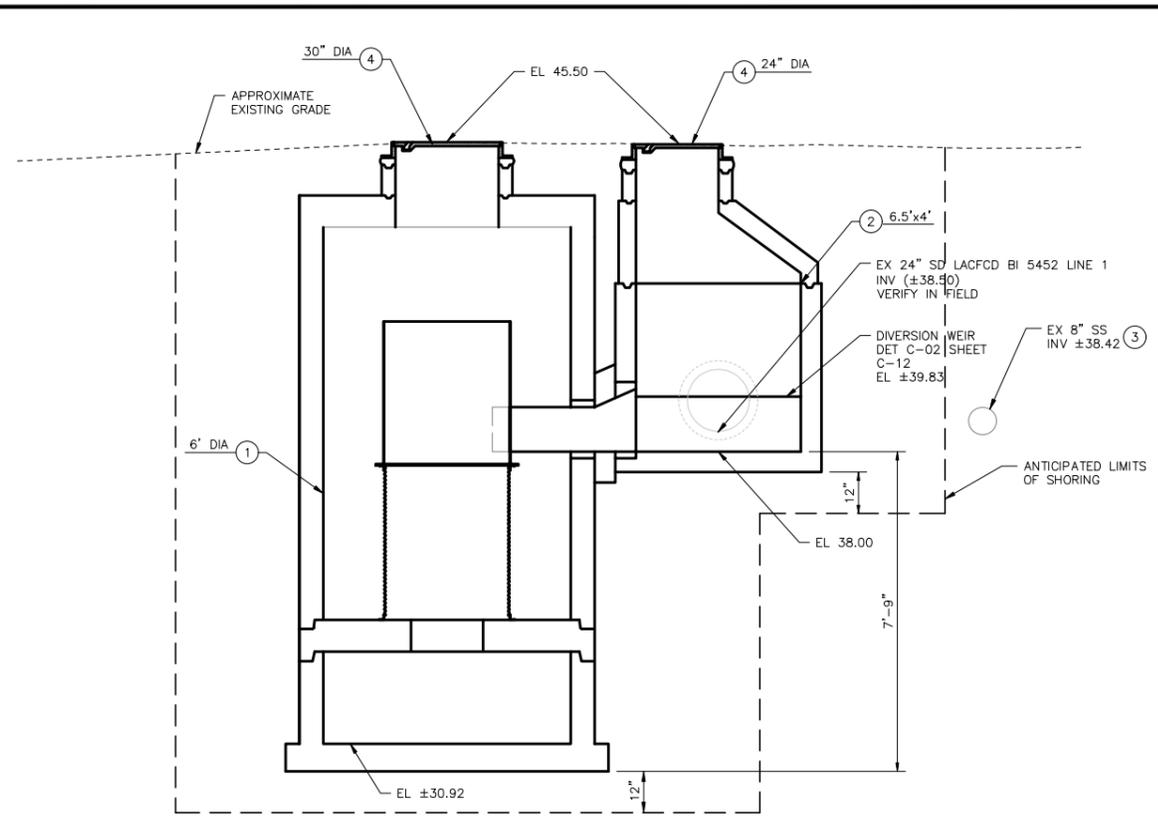
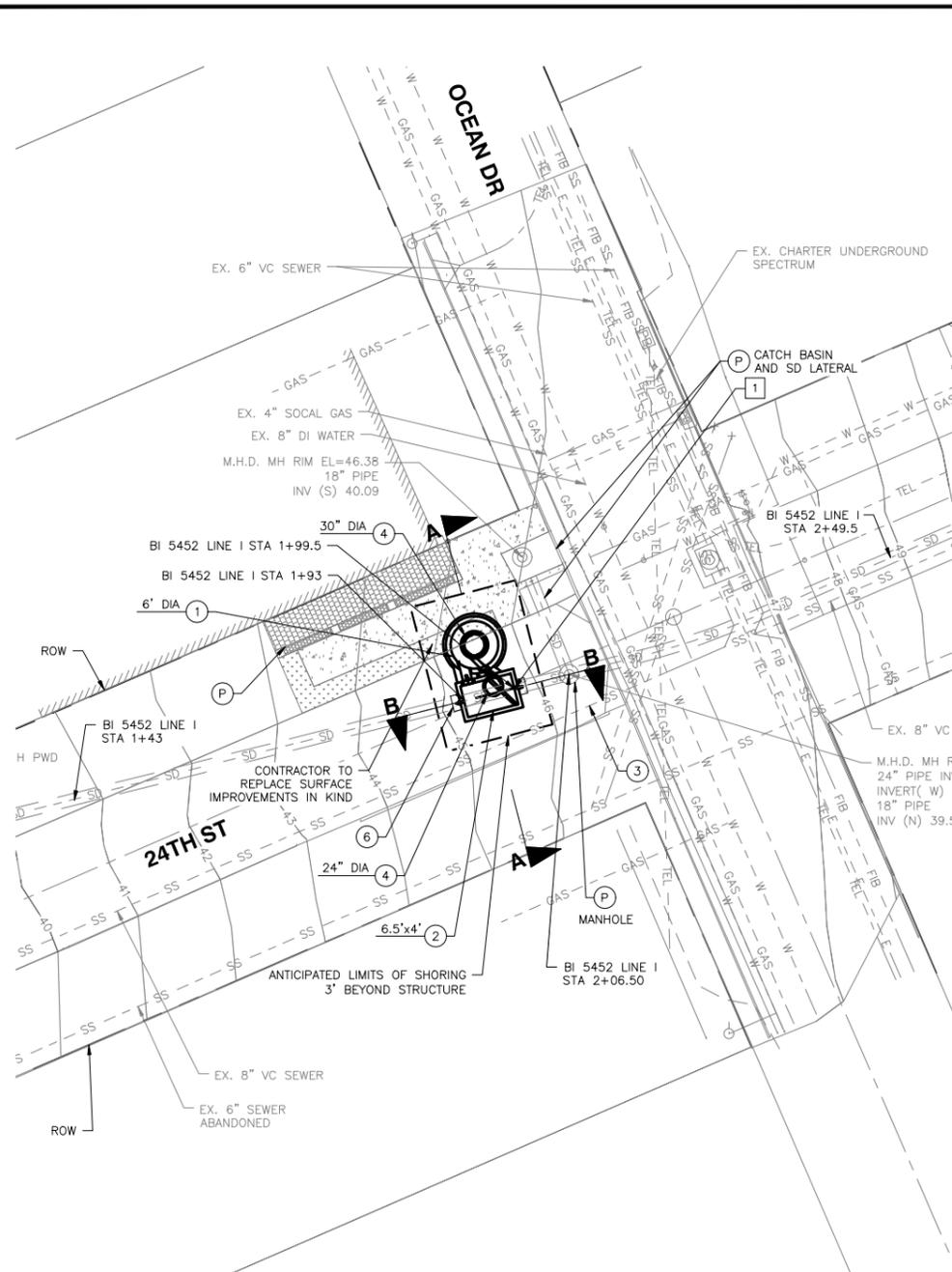
NO.	DESCRIPTION	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL**  
**14th STREET HDS PLAN**

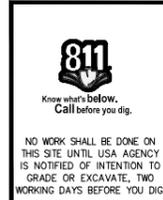
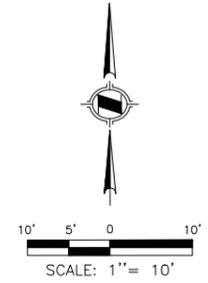
REVIEWED BY:  PROJECT MANAGER TIM BIRTISEL	DATE: 12/26/23	APPROVED BY:  CITY ENGINEER KATHERINE DOHERTY	DATE: 12/26/2023
DESIGNED BY:  PROJECT ENGINEER - STANTEC CHRISTOPHER MOTE	DATE: 12/19/23	SCALE: AS SHOWN	DATE: DECEMBER 2023
SHEET 7 OF 16		DRAWING NO. <b>C-7</b>	

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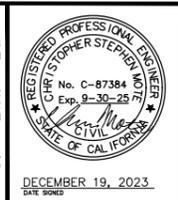
- CONSTRUCTION NOTES:**
- ① PROTECT IN PLACE
  - ② HDS UNIT. JENSEN OR APPROVED EQUAL
  - ③ HDS DIVERSION STRUCTURE. JENSEN OR APPROVED EQUAL
  - ④ TEMPORARY UTILITY SUPPORT
  - ⑤ MH OR HATCH LID. CONTRACTOR TO GRADE SURROUNDING SURFACES TO MH LID
  - ⑥ PIPE CONNECTION - PER SPPWC 355-2

- DEMOLITION NOTES:**
- ① REMOVE PIPE INSIDE PROPOSED STRUCTURES



**SUPPLEMENTAL NOTES:**

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NO.	DATE	DESCRIPTION

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

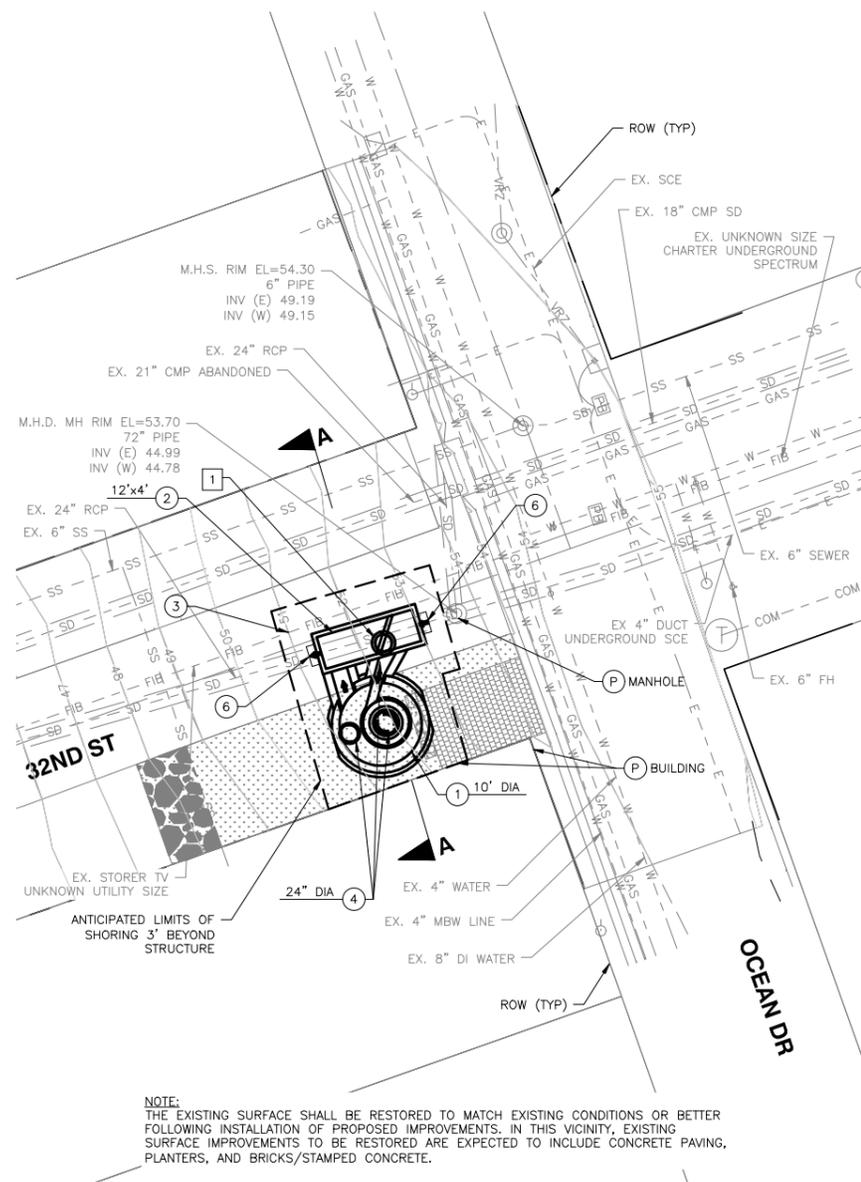
**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL**  
**24th STREET HDS PLAN**

REVIEWED BY:  PROJECT MANAGER TIM BIRTISEL	DATE: 12/26/23	APPROVED BY:  CITY ENGINEER KATHERINE DOHERTY	DATE: 12/26/2023
DESIGNED BY:  PROJECT ENGINEER - STANTEC CHRISTOPHER MOTE	DATE: 12/19/23	SCALE: AS SHOWN	DATE: DECEMBER 2023

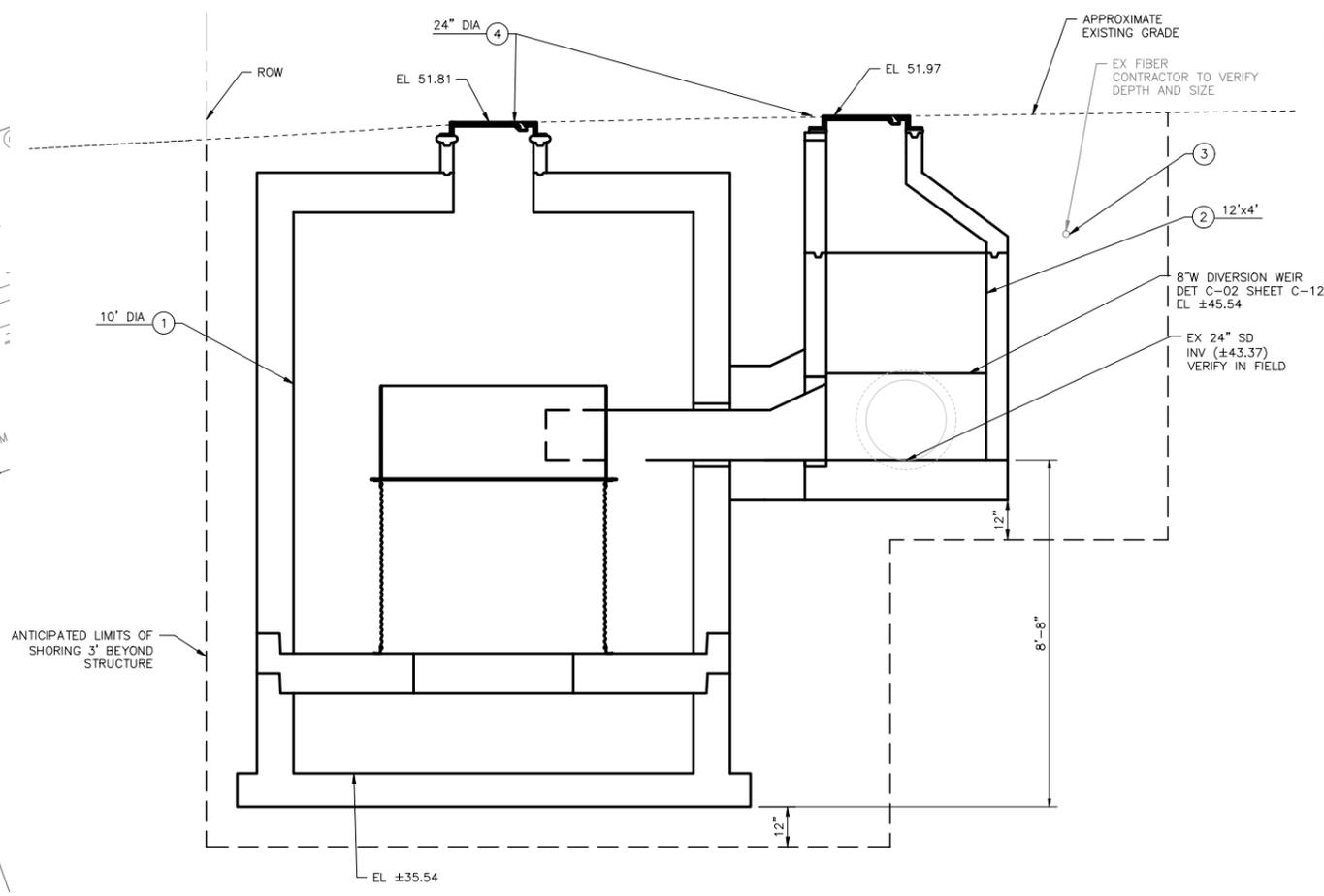
DRAWING NO. **C-8**  
SHEET 8 OF 16

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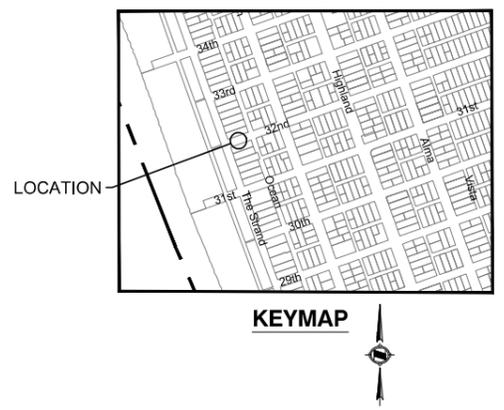




**PLAN**  
1"=10'



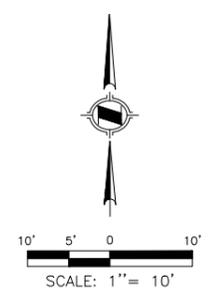
**SECTION A-A**  
1"=2' HORIZ  
1"=2' VERT



- CONSTRUCTION NOTES:**
- (P) PROTECT IN PLACE
  - (1) HDS UNIT. JENSEN OR APPROVED EQUAL
  - (2) HDS DIVERSION STRUCTURE. JENSEN OR APPROVED EQUAL
  - (3) TEMPORARY UTILITY SUPPORT
  - (4) MH OR HATCH. CONTRACTOR TO GRADE SURROUNDING SURFACES TO MH LID
  - (6) PIPE CONNECTION - PER SPPWC 335-2

- DEMOLITION NOTES:**
- (1) REMOVE PIPE INSIDE PROPOSED STRUCTURES

- NOTES:**
- SEE SPECIFICATIONS FOR DESIGN FLOW AND MODEL TYPE.
  - A CONCRETE COLLAR MAY BE REQUIRED TO CONNECT THE EXISTING PIPE TO THE DIVERSION STRUCTURE. CONCRETE COLLAR WILL BE REQUIRED IF THE DIVERSION STRUCTURE IS NEAR AN EXISTING JOINT.
  - EXISTING UTILITIES SHOWN WITH APPROXIMATELY 2' TO 3' COVER. CONTRACTOR TO VERIFY.



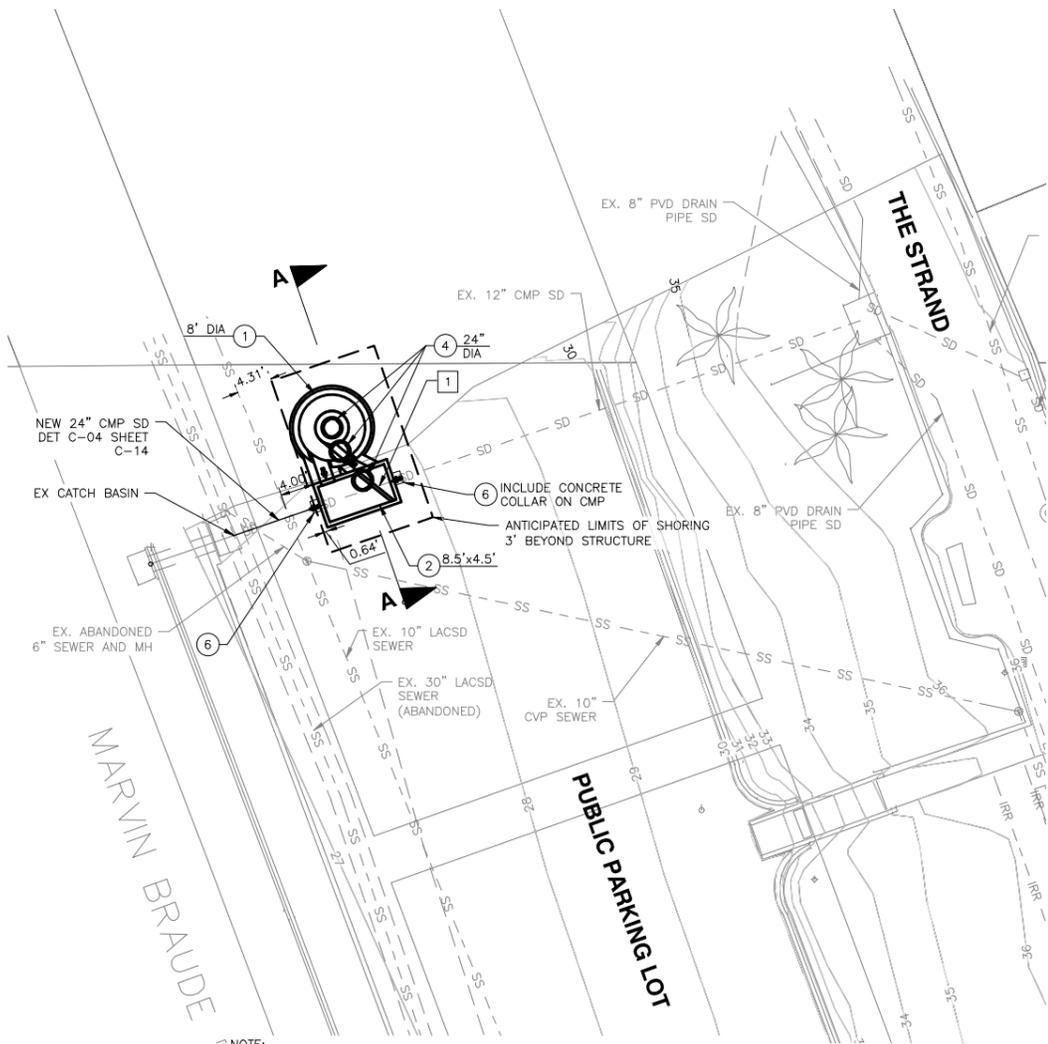
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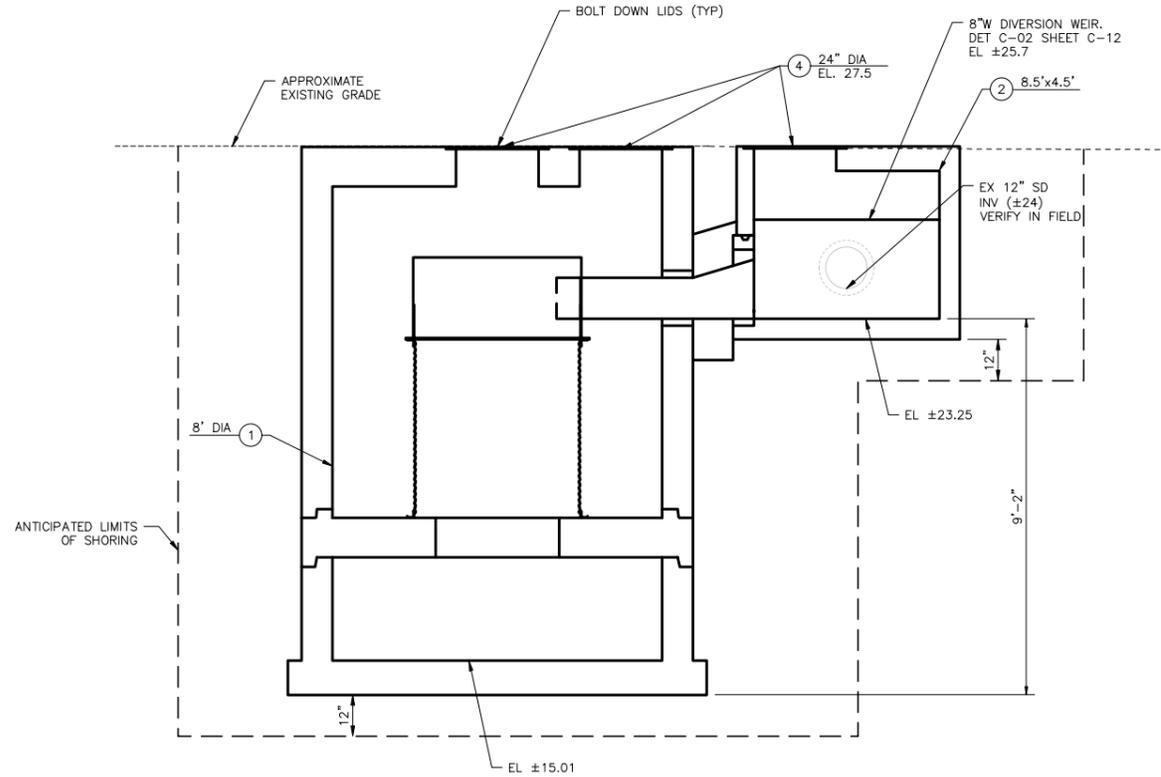
REVIEWED BY	DATE

<b>CITY OF MANHATTAN BEACH</b> PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION													
<b>SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL</b> <b>32nd STREET HDS PLAN</b>													
REFERENCES <table border="1"> <thead> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	BY	DATE				REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION			
NO.	BY	DATE											
NO.	DATE	DESCRIPTION											
REVIEWED BY: <i>Tim Birtseil</i> PROJECT MANAGER TIM BIRTSEIL DATE: 12/26/23	APPROVED BY: <i>Katherine Doherty</i> CITY ENGINEER KATHERINE DOHERTY DATE: 12/26/2023												
DESIGNED BY: <i>Christopher Mote</i> PROJECT ENGINEER - STANTEC CHRISTOPHER MOTE DATE: 12/19/23	SCALE: AS SHOWN DATE: DECEMBER 2023 SHEET 10 OF 16 DRAWING NO. <b>C-10</b>												



NOTE:  
THE EXISTING SURFACE SHALL BE RESTORED TO MATCH EXISTING CONDITIONS OR BETTER FOLLOWING INSTALLATION OF PROPOSED IMPROVEMENTS. IN THIS VICINITY, EXISTING SURFACE IMPROVEMENTS TO BE RESTORED ARE EXPECTED TO INCLUDE ASPHALT CONCRETE PAVING, BASE, AND PAVEMENT STRIPING.

**PLAN**  
1"=10'



NOTES:  
1. SEE SPECIFICATIONS FOR DESIGN FLOW AND MODEL TYPE.  
2. A CONCRETE COLLAR MAY BE REQUIRED TO CONNECT THE EXISTING PIPE TO THE DIVERSION STRUCTURE. CONCRETE COLLAR WILL BE REQUIRED IF THE DIVERSION STRUCTURE IS NEAR AN EXISTING JOINT.

**SECTION A-A**  
1"=2' HORIZ  
1"=2' VERT



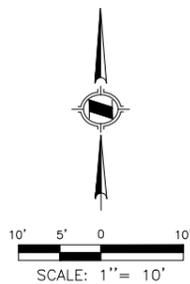
**KEYMAP**

**CONSTRUCTION NOTES:**

- ① HDS UNIT. JENSEN OR APPROVED EQUAL
- ② HDS DIVERSION STRUCTURE. JENSEN OR APPROVED EQUAL
- ④ MH OR HATCH. CONTRACTOR TO GRADE SURROUNDING SURFACES TO MH LID
- ⑥ PIPE CONNECTION - PER SPPWC 335-2

**DEMOLITION NOTES:**

- ① REMOVE PIPE INSIDE PROPOSED STRUCTURES



NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

**SUPPLEMENTAL NOTES:**

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
- DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.
- THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

DECEMBER 19, 2023  
DATE SIGNED

PREPARED BY:  
**CWE**  
1561 E. ORANGETHORPE AVE.  
SUITE 240  
FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY	DATE

REFERENCES		
NO.	BY	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL 39th STREET HDS PLAN**

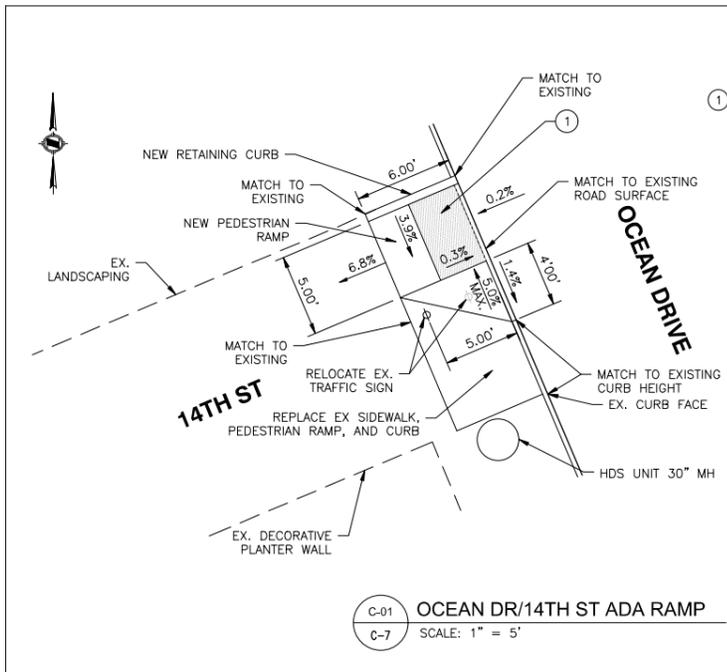
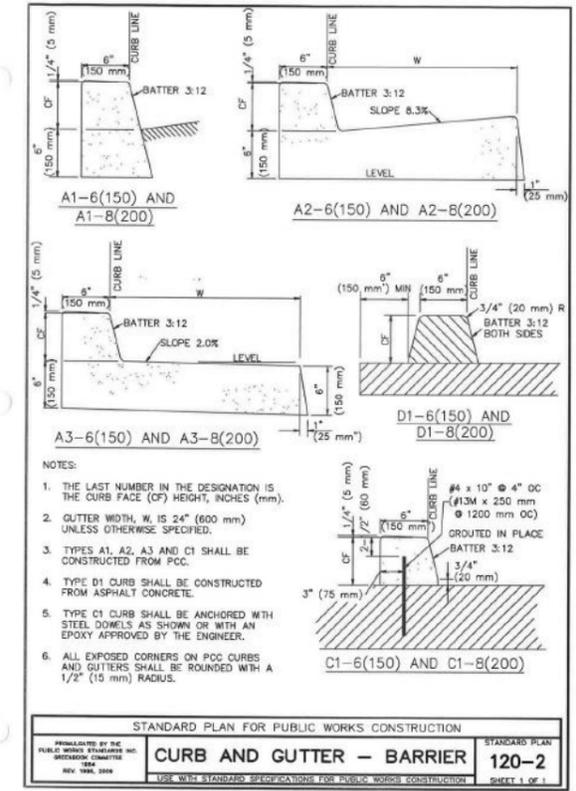
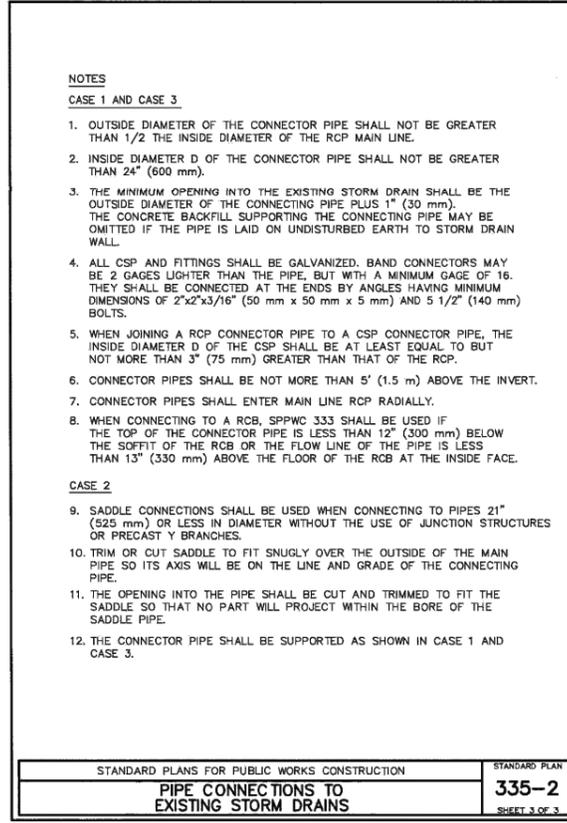
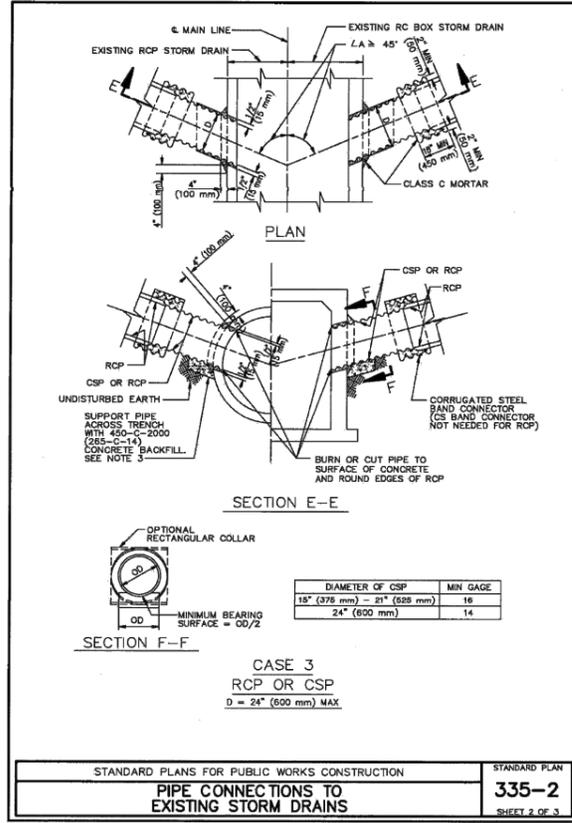
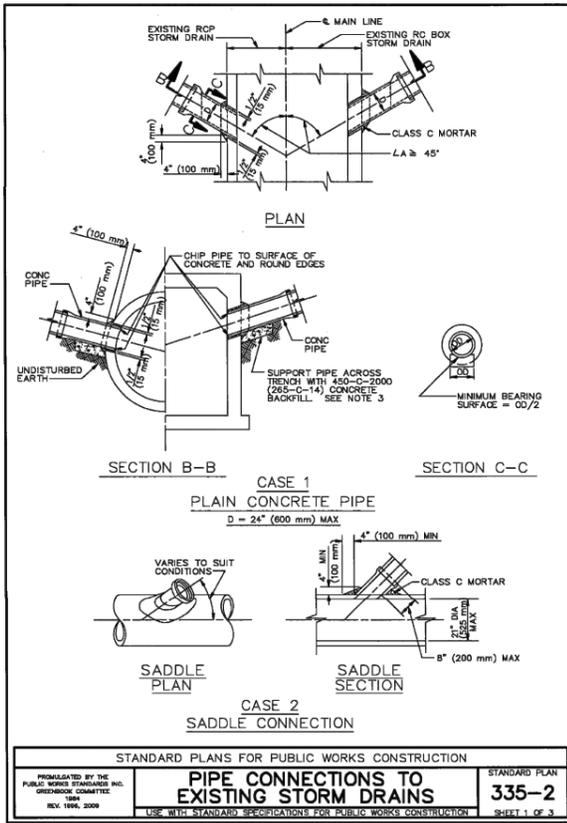
REVIEWED BY: *Tim Birtisael* 12/26/23  
PROJECT MANAGER  
TIM BIRTISEL

DESIGNED BY: *Christopher Mote* 12/19/23  
PROJECT ENGINEER - STANTEC  
CHRISTOPHER MOTE

APPROVED BY: *Katherine Doherty* 12/26/2023  
CITY ENGINEER  
KATHERINE DOHERTY

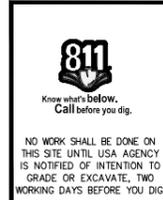
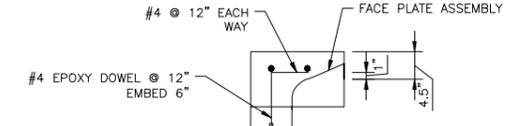
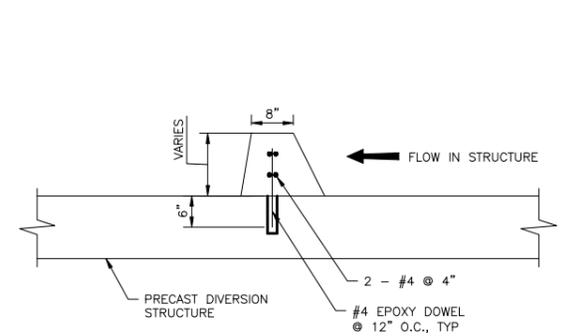
SCALE: AS SHOWN  
DATE: DECEMBER 2023

DRAWING NO.: **C-11**  
SHEET 11 OF 16



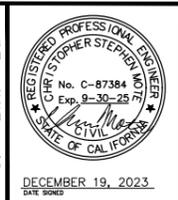
**CONSTRUCTION NOTES:**

- INSTALL ADA COMPLIANT DETECTABLE WARNING SURFACE



**SUPPLEMENTAL NOTES:**

- THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
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PREPARED BY:  
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 1561 E. ORANGETHORPE AVE.  
 SUITE 240  
 FULLERTON, CA 92831  
 (714) 526-7500  
 www.cwecorp.com

REVIEWED BY	DATE

NO.	BY	DATE

**CITY OF MANHATTAN BEACH**  
 PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL DETAILS**

APPROVED BY: *Tim Birtisael* 12/26/2023  
 PROJECT MANAGER  
 TIM BIRTISEL

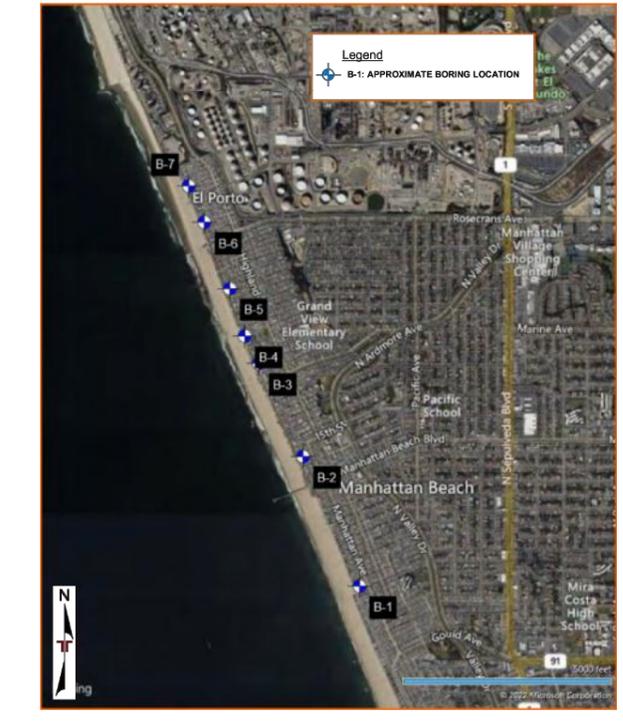
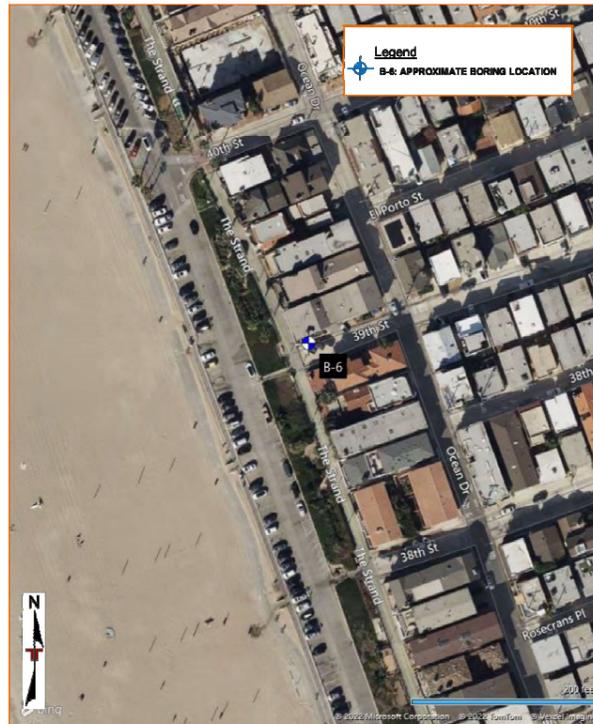
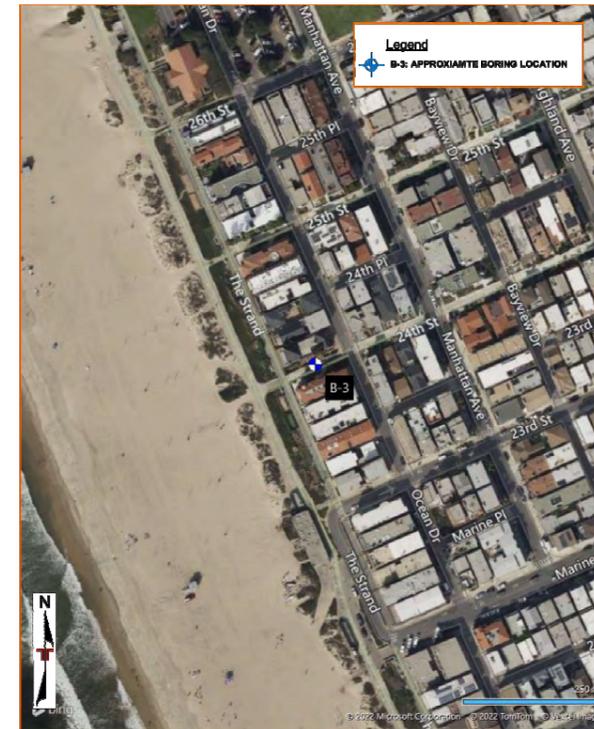
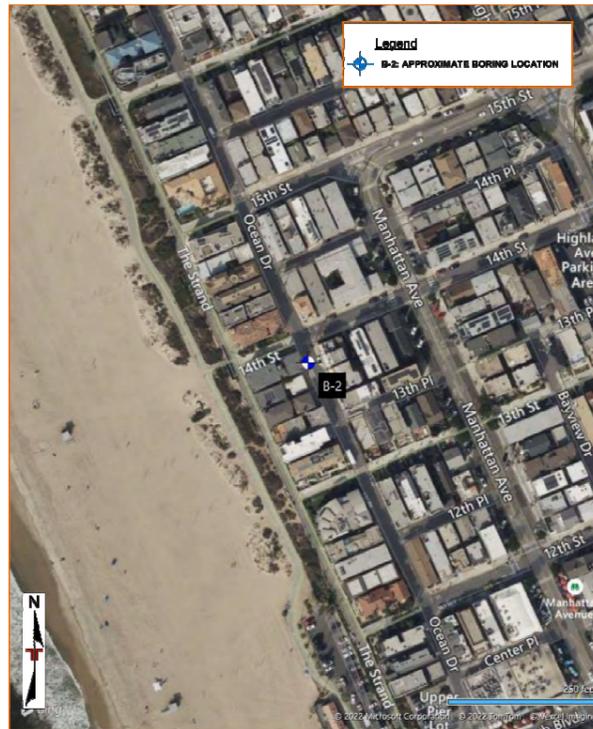
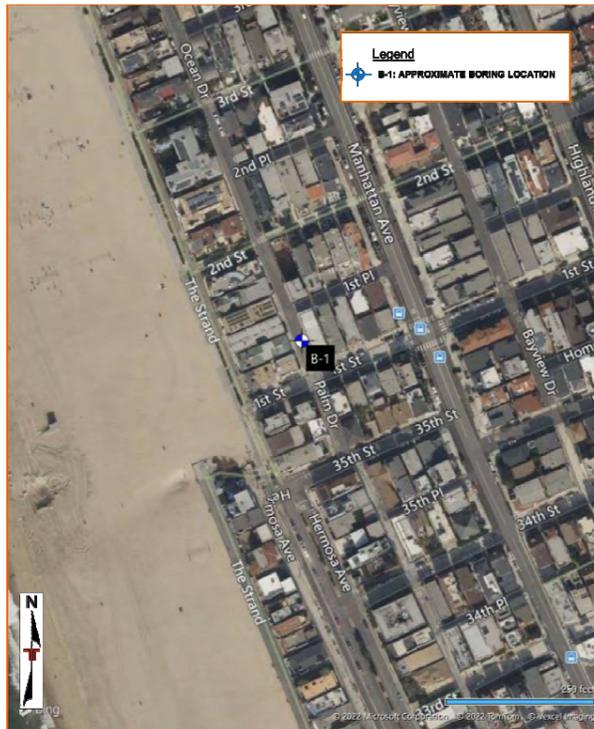
APPROVED BY: *Katherine Doherty* 12/26/2023  
 CITY ENGINEER  
 KATHERINE DOHERTY

SCALE: AS SHOWN  
 DATE: DECEMBER 2023  
 SHEET 12 OF 16

DRAWING NO.: **C-12**







**811**  
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NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.

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  3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SEE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

**REGISTERED PROFESSIONAL ENGINEER**  
Katherine Doherty  
No. 85702  
Exp. 9/30/2024  
CIVIL  
STATE OF CALIFORNIA  
DECEMBER 19, 2023  
DATE SIGNED

**PREPARED BY:**  
**CWE**  
1561 E. ORANGETHORPE AVE.  
SUITE 240  
FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY	DATE

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL BORING LOGS**

NO.	BY	DATE

REVISIONS

REVIEWED BY	DATE	APPROVED BY	DATE

PROJECT MANAGER	DATE	CITY ENGINEER	DATE

SCALE	DATE	DRAWING NO.

SHEET 15 OF 16

**C-15**

BORING LOG NO. B-1										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.8777° Longitude: -118.4079°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.3	ASPHALT, 3" thickness										
0.3-0.7	CONCRETE, 6" thickness SILTY SAND (SM), light brown										
5	medium dense				5-9-14	2.7	98			17	
10	loose				5-8-10	6.0	115				
10	medium dense				4-7-13	5.1	106				
15.0	POORLY GRADED SAND (SP), trace silt, light brown, medium dense				6-17-18	2.9	111			4	
20	SILTY SAND (SM), light brown, medium dense				8-28-28	3.3	105				
25	dense				11-25-37	3.0	102				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-10-2022 Boring Completed: 05-10-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-2										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.8807° Longitude: -118.4134°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.8	ASPHALT, 4" thickness CONCRETE, 6" thickness SILTY SAND (SM), brown										
5	loose				3-6-8	2.8	100			18	
10	medium dense				4-7-9	7.0	118				
15	light brown				4-8-13						
20					5-10-16						
25					6-16-21	4.6	105				
25					16-20-25	4.6	103				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-10-2022 Boring Completed: 05-10-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-3										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.8824° Longitude: -118.4159°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.4	CONCRETE, 6" thickness POORLY GRADED SAND (SP), trace silt, light brown										
5	brown, loose				3-6-7	1.0	100			2	
10	brown to light brown				3-6-8	2.6	101				
15	SILTY SAND (SM), brown, medium dense				4-6-10	7.3	119				
20	light brown to tan				5-8-12	5.6	113			12	
25	dense				16-20-32	4.3	110				
25					10-27-38	6.5	107				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-13-2022 Boring Completed: 05-13-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-4										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.8842° Longitude: -118.4179°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.5	CONCRETE, 6" thickness AGGREGATE BASE COURSE, 4" thickness POORLY GRADED SAND WITH SILT (SP-SM), brown to dark brown										
5	brown, medium dense				8-14-15	8.0	124			5	
10	light brown, loose				4-6-9	3.1	113				
15	dense				4-6-9	4.7	102				
20	light tan, medium dense				12-36-48	4.2	107			6	
25					6-13-23	2.8	97				
25					7-14-24	1.3	101				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-12-2022 Boring Completed: 05-12-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-5										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.8979° Longitude: -118.4182°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.5	CONCRETE, 6" thickness SILTY SAND (SM), brown to light brown										
5	SILT WITH SAND (ML), brown to light brown, medium stiff				3-3-4	4.1	95			84	
10	brown, stiff				5-7-9	1.9	108				
15	POORLY GRADED SAND WITH SILT (SP-SM), light brown, medium dense				5-7-8	6.3	113				
20	dense				5-8-12	6.5	107			11	
25	very dense				9-31-40	3.2	103				
25					12-39-50.5"	3.7	102				
Boring Terminated at 26.4 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-12-2022 Boring Completed: 05-12-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-6										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.9017° Longitude: -118.4202°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.5	CONCRETE, 5.5" thickness SILTY SAND (SM), light brown										
5	loose				5-7-11	1.5	103			17	
10	medium dense				5-7-10	4.9	111				
15					5-9-13	5.9	110				
20	dense				9-16-30	8.8	107				
25					5-25-37	6.6	106				
25					15-24-40	4.0	101				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-12-2022 Boring Completed: 05-12-2022 Drill Rig: CME-75 Driller: 2R Drilling											

BORING LOG NO. B-7										Page 1 of 1	
PROJECT: Manhattan Beach SMB TMDL HFCTTCD Design					CLIENT: CWE Corp Fullerton, CA						
SITE: The Strand Manhattan Beach, CA											
GRAPHIC LOG	LOCATION: See Exploration Plan Latitude: 33.9041° Longitude: -118.4214°	DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	FIELD TEST RESULTS	WATER CONTENT (%)	DRY UNIT WEIGHT (pcf)	LL, PL, PI	ATTERBERG LIMITS	PERCENT FINES	
0.0-0.8	CONCRETE, 7" thickness SILTY SAND (SM), brown										
5	loose				4-6-10	2.6	97			16	
10					4-7-11	6.0	114				
15	POORLY GRADED SAND (SP), trace silt, light brown with orangish brown, medium dense				4-6-10	6.8	112				
20					4-12-25	4.9	101			5	
25					6-14-23	5.2	98				
25					8-25-30	3.6	101				
Boring Terminated at 26.5 Feet											
Stabilization lines are approximate. In-situ, the transition may be gradual.											
Hammer Type: Automatic											
Advancement Method: 6" Hollow Stem Auger Notes: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any). Abandonment Method: Borehole backfilled with cement grout slurry patched with concrete and back site. WATER LEVEL OBSERVATIONS: Groundwater not encountered. Terracon 1421 Edgar Ave., Ste C Tustin, CA Project No.: 80215281 Boring Started: 05-12-2022 Boring Completed: 05-12-2022 Drill Rig: CME-75 Driller: 2R Drilling											

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL BORING LOGS**

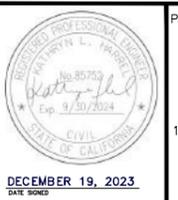
REVISED BY	DATE	APPROVED BY	DATE
<i>Tom Birkhead</i>	12/26/23	<i>Katherine Doherty</i>	12/26/2023
PROJECT MANAGER	DATE	CITY ENGINEER	DATE
TIM BIRTHESEL		KATHERINE DOHERTY	
SCALE	DATE	DRAWING NO.	
AS SHOWN	MARCH 2023	C-16	
PROJECT MANAGER – CWE	DATE	SHEET	OF
KATIE HARREL	12/19/23	16	16

**811**  
Know what's below.  
Call before you dig.

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**SUPPLEMENTAL NOTES:**

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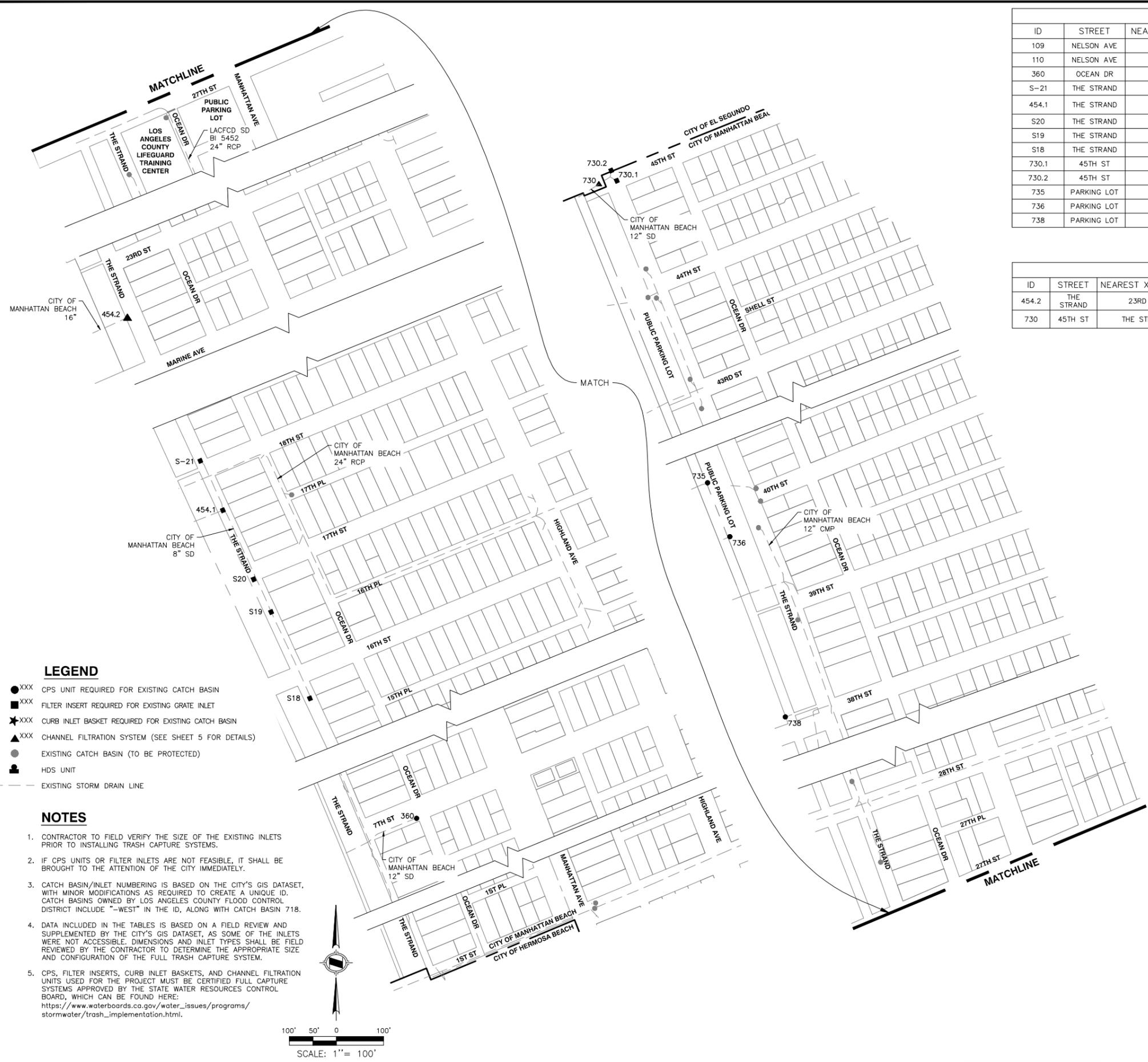


PREPARED BY:

**CWE**

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SUITE 240  
FULLERTON, CA 92831  
(714) 526-7500  
www.cwecorp.com

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

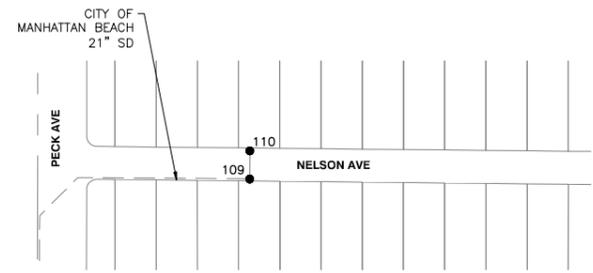
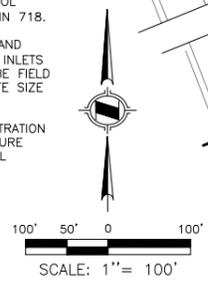


CATCH BASIN LOCATIONS FOR BMP IMPLEMENTATION								
ID	STREET	NEAREST X-STREET	CORNER	BMP TYPE	CB TYPE	W (FT)	V (FT)	PIPE (OUT)
109	NELSON AVE	PECK AVE	S	CPS	CURB INLET	36"	30"	21"
110	NELSON AVE	PECK AVE	N	CPS	CURB INLET	48"	30"	8"
360	OCEAN DR	7TH ST	SW	CPS	CURB INLET	48"	26"	12"
S-21	THE STRAND	18TH ST	NW	FILTER INSERT	GRATE INLET	12"x12"	4"	8"
454.1	THE STRAND	17TH PL	NW	FILTER INSERT	CURB INLET	36"	12"	N/A - NO OUTLET PIPE
S20	THE STRAND	17TH ST	SW	FILTER INSERT	GRATE INLET	12"x12"	4"	8"
S19	THE STRAND	16TH PL	NW	FILTER INSERT	GRATE INLET	12"x12"	4"	8"
S18	THE STRAND	16TH ST	SW	FILTER INSERT	GRATE INLET	12"x12"	4"	8"
730.1	45TH ST	THE STRAND	S	FILTER INSERT	GRATE INLET	36"x8"	24"	8"
730.2	45TH ST	THE STRAND	N	FILTER INSERT	GRATE INLET	18"x18"	24"	8"
735	PARKING LOT	40TH ST	NW	CPS	CURB INLET	93"	28"	8"
736	PARKING LOT	40TH ST	SW	CPS	GRATE INLET	24"x36"	24"	14"
738	PARKING LOT	38TH ST	NW	CPS	GRATE INLET	40"	34"	18"

TRENCH INLET LOCATIONS FOR CHANNEL FILTER SYSTEM								
ID	STREET	NEAREST X-STREET	LOCATION	BMP TYPE	CB TYPE	W (FT)	V (FT)	PIPE (OUT)
454.2	THE STRAND	23RD ST	SW	CHANNEL FILTER SYSTEM	TRENCH INLET	77"x27"	40"	16"
730	45TH ST	THE STRAND	NW	CHANNEL FILTER SYSTEM	TRENCH INLET	240"x18"	12"	12"

- LEGEND**
- XXX CPS UNIT REQUIRED FOR EXISTING CATCH BASIN
  - XXX FILTER INSERT REQUIRED FOR EXISTING GRATE INLET
  - ★XXX CURB INLET BASKET REQUIRED FOR EXISTING CATCH BASIN
  - ▲XXX CHANNEL FILTRATION SYSTEM (SEE SHEET 5 FOR DETAILS)
  - EXISTING CATCH BASIN (TO BE PROTECTED)
  - HDS UNIT
  - EXISTING STORM DRAIN LINE

- NOTES**
- CONTRACTOR TO FIELD VERIFY THE SIZE OF THE EXISTING INLETS PRIOR TO INSTALLING TRASH CAPTURE SYSTEMS.
  - IF CPS UNITS OR FILTER INLETS ARE NOT FEASIBLE, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY IMMEDIATELY.
  - CATCH BASIN/INLET NUMBERING IS BASED ON THE CITY'S GIS DATASET, WITH MINOR MODIFICATIONS AS REQUIRED TO CREATE A UNIQUE ID. CATCH BASINS OWNED BY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT INCLUDE "-WEST" IN THE ID, ALONG WITH CATCH BASIN 718.
  - DATA INCLUDED IN THE TABLES IS BASED ON A FIELD REVIEW AND SUPPLEMENTED BY THE CITY'S GIS DATASET, AS SOME OF THE INLETS WERE NOT ACCESSIBLE. DIMENSIONS AND INLET TYPES SHALL BE FIELD REVIEWED BY THE CONTRACTOR TO DETERMINE THE APPROPRIATE SIZE AND CONFIGURATION OF THE FULL TRASH CAPTURE SYSTEM.
  - CPS, FILTER INSERTS, CURB INLET BASKETS, AND CHANNEL FILTRATION UNITS USED FOR THE PROJECT MUST BE CERTIFIED FULL CAPTURE SYSTEMS APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD, WHICH CAN BE FOUND HERE: [https://www.waterboards.ca.gov/water\\_issues/programs/stormwater/trash\\_implementation.html](https://www.waterboards.ca.gov/water_issues/programs/stormwater/trash_implementation.html).



**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION  
**SANTA MONICA BAY TMDL HIGH FLOW CAPACITY TRASH TREATMENT CONTROL BMP IMPLEMENTATION**

<p><b>SUPPLEMENTAL NOTES:</b></p> <ol style="list-style-type: none"> <li>THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.</li> <li>DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.</li> <li>THE CONTRACTOR SHALL DETERMINE THE DEPTH OF GAS, SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.</li> </ol>			<p>NO WORK SHALL BE DONE ON THIS SITE UNTIL USA AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG. <b>811 Know what's below. Call before you dig.</b></p>
SCALE	DATE	DRAWING NO.	
AS SHOWN	MARCH 2023	<b>E-01</b>	
SHEET 1 OF 1			

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

**CONTRACT CHANGE ORDER NO. 1**

PROJECT NO.: **SD-279**

PROJECT TITLE: ***Santa Monica Bay TMDL HFCTTCD Trash Capture Project***

DESCRIPTION: Change Order No. 1 accounts for the following changes in this project and including service-related work: subgrade preparation changes in scope, additional time and materials (T&M) needed to construct added work beyond plans and scope, additional costs for added permits and re-mobilization, added T&M for permeable concrete not on plans, added T&M to adapt the desired work to field conditions, additional effort and material needed to complete the asphalt and concrete work requested by the city, improvements to convert a stormceptor unit, a new grated catch basin and piping, changes in design that relocated an HDS Unit bid item, catch basin treatment system plan changes, and additions to other drainage related work. This change order also documents credits for work that was changed or removed from the project scope as well as added contract days due to design revision delays and other project delays.

TO: Clarke Contracting, Inc.

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

<b>SUMMARY OF CHANGES</b>			
<b>Description (Detailed Explanation Attached)</b>		<b>Change in Contract Price<sup>1</sup></b>	<b>Change in Work Days</b>
1.	Subgrade Preparation Changes to Scope of Work (COR #1 - 2025-05-25)	\$4,916.92	1
2.	Construct New Catch Basin at 14 <sup>th</sup> Street (COR #2 - 2025-01-25)	\$26,369.00	5
3.	Additional Permits, Re-Mobilization, Data Collection (COR #3 - 2025-05-29)	\$28,542.38	25
4.	Permeable Concrete at 39 <sup>th</sup> Street – Not on Plans (COR #4 - 2025-05-28)	\$46,923.39	5
5.	Pipe to Box Connections at 24 <sup>th</sup> Street – Not on Plans (COR #5 - 2025-05-05)	\$3,178.88	0
6.	Pipe Invert Elevations at 39 <sup>th</sup> Street – Plan Change (COR #6 - 2025-06-25)	\$84,760.33	15
7.	Finish Grade Elevations & Curb Ramp at 24 <sup>th</sup> Street (COR #7 – 2025-06-19)	\$44,805.92	5
8.	Added Asphalt paving at 14 <sup>th</sup> Street and 24 <sup>th</sup> Street (COR #8 – 2025-05-09)	\$17,478.13	5
9.	Stormceptor Conversion at 32 <sup>nd</sup> Street (COR #9 – 2025-05-13)	\$85,290.30	15



10.	New Grated Catch Basin Inlet & Pipe at 14 <sup>th</sup> Street (COR # 10 – 2025-05-28)	\$48,408.00	10
11.	1 <sup>st</sup> Street HDS Unit Relocation per Revised Plans (COR #11R – 2025-07-11)	\$210,720.00	30
12.	Catch Basin Treatment Systems per Plan Change (COR #12 – 2025-07-11)	(-\$793,400.00)	15
13.	7 <sup>th</sup> Street Drainage Improvements - Additional Work (COR #13 – 2025-07-14)	\$90,496.00	15
14.	14 <sup>th</sup> Street & Magnolia – Drainage Improvements (COR #14 – 2025-07-25)	\$89,789.00	15
15.	Working Days due to Plan Revision Delays from work stoppage on March 10, 2025 to August 30, 2025.*Tentative restart on September 1, 2025.	\$0.00	127
<b>Net Change in Contract Price and Work Days</b>		<b>-\$11,721.75</b>	<b>288</b>

<sup>1</sup>Deduction 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 ..... \$3,225,000.00  
 CCO No.1 ..... \$(11,721.75)  
 TOTAL ..... \$3,213,278.25

**SUMMARY OF WORKING DAYS**

FIRST DAY OF WORK: .....09/30/2024  
 CONTRACT WORKING DAYS: ..... 120  
 TIME EXTENSION: CCO 1 .....288  
 NEW TOTAL WORKING DAYS: .....308  
 LAST DAY OF WORK:.....03/25/2026



**CHANGE ORDER DETAIL**

Change Order No.: 1

Project No.: SD-279

Project Title: Santa Monica Bay TMDL HFCTTCD Trash Capture Project

Description: Change Order No. 1 accounts for the following changes in this Storm Drain and Trash Capture project and service-related work and includes: Subgrade preparation changes in scope, additional time and materials T&M needed to construct added work beyond plans and scope, additional costs for added permits and re-mobilization, added T&M for permeable concrete not on plans, added T&M to adapt the desired work to field conditions, additional effort and material needed to complete the asphalt and concrete work requested by the city, improvements to convert a stormceptor unit, a new grated catch basin and piping, changes in design that relocated an HDS Unit bid item, catch basin treatment system plan changes, and additions to other drainage related work. This change order also documents credits for work that was changed or removed from the project scope as well as added contract days due to design revision delays and other project delays.

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 – COR #1 - 2025-05-25 - Subgrade Preparation Changes to Scope of Work**

A. Reason for Change: Clarke Contracting Corp. requested this change in conditions to furnish and install filter fabric around the additional 12-inch-thick crushed rock subgrade under the precast diversion structures, as discussed in RFI No. 5-R1. The specification does not require filter fabric for installations less than 10 feet deep, however, the additional requirement was specified by the soils and materials inspector, directed by the materials testing firm, recommended by the design engineer, and approved by City staff. The extra cost for subgrade preparation/installation of filter fabric, including all allowable markup and bond, is detailed in the supporting documentation. One (1) additional day was added to the contract working days.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QUANTITY	CHANGE	CHANGE IN COST <sup>1</sup>
1	SUBGRADE PREPARATION CHANGES TO SCOPE	LS	T&M	0	1	1	\$4,916.92

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$4,916.92



D. Change in Completion Date:  
1 Day(s)

**Item No. 2 – COR #2R - 2025-01-25 – Construct New Catch Basin at 14<sup>th</sup> Street**

A. Reason for Change: Clarke Contracting Corp. requested this change in scope of work at 14<sup>th</sup> Street to add a catch basin per the City’s request due to the designed installation of a combination precast concrete diversion structure/curb inlet catch basin that matched existing grades not being feasible as outlined in RFI No. 3, per the design engineer, and per Submittal No. 18. The change is an addition to the contractor’s scope of work and added costs associated with the construction of the new catch basin, and the tie-in to the diversion structure. The added cost for the new catch basin with grating per SPPWC 302-4 adjacent to the precast concrete diversion structure, including allowable markup and bond, is detailed in the attached cost breakdown and documentation (COR #2R-2025-01-25). Five (5) additional days were added to the contract working days.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	CATCH BASIN EXCAVATION AND BACKFILL	LS	\$12,048.00	0	1	1	\$12,048.00
2.	CONSTRUCT CATCH BASIN (SUB-CONTRACTOR)	LS	\$14,060.00	0	1	1	\$14,060.00
3.	BOND (1%)	LS	\$281.00	0	1	1	\$261.00

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$26,369.00

D. Change in Completion Date:  
5 Days

**Item No. 3 – COR #3 - 2025-05-29 – Additional Permits, Re-Mobilization and Data Collection**

A. Reason for Change: Clarke Contracting Corp. needed to pull separate permits for Los Angeles County Flood Control District and Beaches and Harbors due to redesigns from the original plans. The cost of these permits was not in the original contract. The change of the plans also caused the contractor to demobilize from the site and remobilize after the designs were revised. This change order request also includes labor for field data that needed to be gathered outside of the scope of work, and all allowable mark-ups and bonds, which are all detailed in the supporting documentation. Twenty-five (25) days were added to the contract due to the delays.



- 1) Permit Fees – Los Angeles County Flood Control Permit at 24<sup>th</sup> Street not in original contract - \$7,000.00 See Receipt attached.
- 2) Permit Fees – Los Angeles County Beaches and Harbors Permit at 39<sup>th</sup> Street not in original contract - \$841.00. See Receipt attached.
- 3) Catch basin Data Collection as per the City’s request - \$8,804.69 per attached estimate / proposal No. 16283
- 4) Demobilize and Remobilize at 24<sup>th</sup> Street after changes to Plans - \$11,613.69 per attached estimate / proposal No. 16283
- 5) Bond (1%)

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	Permit – Los Angeles County Flood Control	LS	\$7,000.00	0	1	1	\$7,000.00
2.	Permit – Los Angeles County Beaches and Harbors	LS	\$841.00	0	1	\$841.00	\$841.00
3.	Catch Basin Data Collection	LS	\$8,804.69	0	1	\$8,804.69	\$8,804.69
4.	Demobilize and Remobilize	LS	\$11,613.69	0	1	\$11,613.69	\$11,613.69
5.	Bond (1%)	LS	\$283.00	0	1	\$283.00	\$283.00

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$28,542.38

D. Change in Completion Date:  
25 Days

**Item No. 4 – COR 4#2025-05-28 – Permeable Concrete at 39<sup>th</sup> Street – Not on Plans**

A. Reason for Change: Clarke Contracting Corp. requested a change in material costs and quantities at 39<sup>th</sup> Street within the El Porto parking lot because the original plans specified the restoration of asphalt, but the existing parking lot condition was permeable concrete. Therefore, City staff requested 10” thick permeable concrete paving be installed. Additionally, City staff instructed the contractor to replace extra paving to align with existing joints thus avoiding a patchwork effect that would diminish the overall visual integrity. This caused a change in unit prices and scope of work for the Contractor who provided a proposal, which included new unit pricing, credits from the original bid item, allowable markups, and bond. Approved by the City’s Project Manager, the work was completed within the estimated budget.. This work added five (5) working days to the contract.



- 1) Permeable concrete pavement at 39<sup>th</sup> Street that included the installation and compaction of native materials (Sand) at \$8,911.92 and the installation of 908' SF of permeable Concrete Pavement at \$36,801.92 for a Total of \$45,713.16. as per Pages 1, 2, and Invoice No. 56644 from EBS General Engineering from Proposal / Estimate No. 16236 from Clarke Contracting.
- 2) Bid Item No. 51 – **Credit** issued per contract unit price of \$40 / foot at 320' SF for a credit of –(\$12,800.00) See Page 3 of 5 on Proposal / Estimate
- 3) Removal and Disposal of existing pavement (Additional 588' SF) as per pages 4 – 5 from Proposal / Estimate No. 16236 from Clarke Contracting.
- 4) Cost of Bond (1%)

**B. Description of Change:**

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	PERMEABLE CONCRETE PAVEMENT AT 39 <sup>TH</sup> STREET W/EXCAVATION & GRADING	SF	\$50.35	0'	908	908	\$45,713.16
2.	BID ITEM NO. 51 - CREDIT	SF	\$40.00	320'	0	(320')	-(12,800)
3.	REMOVAL AND DISPOSAL OF EXISTING PAVEMENT	LS	\$13,545.64	0'	1	1	\$13,545.64
4.	COST OF BOND (1%)	LS	\$464.59	0	1	1	\$464.59

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

**C. Change in Contract Cost:  
Add \$46,923.39**

**D. Change in Completion Date:  
5 Days**

**Item No. 5 – COR #5 - 2025-05-05 – Pipe to Box Connections at 24<sup>th</sup> Street – Not on Plans**

A. Reason for Change: Clarke Contracting Corp. constructed the pipe connections to the precast Diversion Structure Box at 24th Street using Standard Plan SPPWC 333-2, as directed by the LA County Flood District Inspector. This differed from the originally specified Standard Plan SPPWC 335-2 shown in the contract documents. The inspector-required revision necessitated additional labor and materials to construct reinforced concrete connections between the existing storm drainpipes and the weir box. This extra work was performed on a time-and-materials (T&M) basis, as authorized by the Construction Manager and City on December 4, 2024. The associated costs include approved mark-ups and fees, with supporting documentation and material tickets attached. This change did not add any working days to the contract.



- 1) EWR #3627 from December 4, 2024 and accompanying Daily – Time and Materials Sheets (T&M) – For Extra work completed to construct the pipe connections to the Precast Diversion Structure as per the LA County Flood Inspector direction which varied from the standard shown on the plans.
- 2) Cost of Bond (1%)

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	EWR #3627 TICKET ADDITIONAL WORK	LS	LS	0	1	1	\$3,147.41
2.	COST OF BOND (1%)	LS	\$31.47	0	1	1	\$31.47

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$3,178.88

D. Change in Completion Date:  
0 Days

**Item No. 6 – COR #6-2025-06-25 – Pipe Invert Elevations at 39<sup>th</sup> Street – Plan Change**

- A. Reason for Change: At 39th Street within the El Porto parking lot, Contracting Corp. requested a design revision due to the existing storm drain pipe elevation being higher than indicated on the approved plans, as noted in RFI No. 07. This elevation discrepancy prevented the stormwater treatment unit from operating as intended. To restore proper functionality, several field modifications were required, including demolition and reconstruction of the catch basin located downstream of the treatment system, installation of new piping to the outlet structure, and the addition of a new catch basin/drop structure upstream of the unit. This work was completed on T&M between December 11, 2024 to January 14, 2025 and was approved by The City staff and overseen in the field by the Construction Manager and the Inspector. The extra work included approved labor, equipment and materials as tracked in Daily inspection reports. The cost summary and all documentation are attached as supporting documentation and includes allowable mark-ups and bond fees. This work added fifteen (15) working days to the contract for extra work and time delays for redesign.
- 1) EWR on 12/11/2024 – Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Plan out temporary bypass for water flow during construction of pipe tie-ins.
  - 2) EWR on 12/12/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Excavate and remove existing pipe in concrete slurry, start on catch basin removal.



- 3) EWR on 12/13/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Break out Catch Basin, sawcut sidewalk to remove existing 12" to install larger pipe.
- 4) EWR on 12/16/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Continue to remove existing catch basin and install new pipe at lower invert.
- 5) EWR on 12/17/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Continue to excavate by hand to break out and remove damaged lower catch basin and dig beyond to tie in new pipe at lower invert.
- 6) EWR on 12/18/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Remove existing 12" pipe encased in concrete, cut out larger hole in unit to offset the 18" HDPE out of the wier box.
- 7) EWR on 12/19/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Work to re-install 18" HDPE Pipe and grout outlet area, backfill only between the catch basin and outside wall on downstream side towards beach.
- 8) EWR on 12/20/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Reconstruct Catch Basin and minor excavation around pipe outlet to allow room for concrete pour.
- 9) EWR on 12/23/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Continue to lay 18" pipe and breakout larger hole in diversion box to allow for pipe install into box.
- 10) EWR on 12/24/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Form New catch Basin, remove and relocate shoring to break out more of the diversion box to modify for 18" pipe connection, and break out section of box to adjust for pre-cast catch basin.
- 11) EWR on 12/26/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Excavate and rearrange shoring, compact bottom, install bottom of Pre-cast 24" x 24" Catch Basin, start to form for pour-in-place catch basin walls.
- 12) EWR on 12/27/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Pour 25" x 36" new CB to 8" above 18" HDPE, work on 24" x 24" concrete bottom.
- 13) EWR on 12/30/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Form and pour upper section of Catch Basin and break out more concrete encasement to allow for construction of form for collar.



- 14) EWR on 12/31/2024 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Strip new catch basin forms, set grate, set pre-cast section and cut out hole to add 12" pipe and patch part of outside opening.
- 15) EWR on 1/06/2025 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Remove forms at catch basin on 39th Street and patch concrete, set cluster and cut out hole for pipe.
- 16) EWR on 1/07/2025 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Rise Pre-cast to grade and patch joint and patch new catch basin inside smooth.
- 17) EWR on 1/09/2025 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Jet backfill and compact between wall and around new catch basin.
- 18) EWR on 1/14/2025 - Modifications to the newly installed HDS Treatment Unit due to existing pipe elevations that differed from plan design. Hand Mix and pour concrete bottom between wider wall and inlet diversion structure, clean up and close for concrete top preparation.

**B. Description of Change:**

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	PIPE INVERT ELEVATION BUST WORK ON T&M PER EWR TICKETS FROM 12/11/24 – 1/14/2025	LS	T&M	0	1	1	\$83,921.12
2.	Cost of Bond (1%)	LS	\$839.21	0	1	1	\$839.21

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

**C. Change in Contract Cost:**  
Add \$84,760.33

**D. Change in Completion Date:**  
15 Days

**Item No. 7 – COR #7-2025-06-19 - Finish Grade Elevations & Curb Ramp at 24<sup>th</sup> Street**

- A. Reason for Change: This Change Order request was for three items. First, a curb ramp reconstruction at 24<sup>th</sup> Street and Ocean Avenue not shown on contract plans. Second, pavement restoration quantity was increased by 203' square feet of (at the contract unit price) due to the to the ramp reconstruction. Finally, the precast riser/cone on top of the diversion structure had to be replaced with a concrete flat top and grade rings due to the elevation difference per plan at the sidewalk surface. The extra work costs for the work was performed between December 13<sup>th</sup> – December 23<sup>rd</sup>, 2024 on T&M and included



labor, equipment, and materials and was tracked in the field by the Inspector and CM. Work hours were verified in the field with the project inspector and the Construction Manager. The costs were based on the T&M work plus the quote of the sub-contractor for the added ramp as approved by the City and includes all allowable mark-up and fees. This work adds five (5) days to the original contract time.

- 1) EWR on 12/13/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Excavate and remove top of shafting that is too high, reset top and backfill and compact.
- 2) EWR on 12/16/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Set new flat grate top on unit, sand backfill and compact
- 3) EWR on 12/17/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Backfill and compact, extend manhole shaft and partly re-patch shaft joints, bring fill sand in and take soils tests.
- 4) EWR on 12/18/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Backfill dirt from yard and compact, patch grade rings.
- 5) EWR on 12/19/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Repatch shafting risers, break out existing walkway.
- 6) EWR on 12/20/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Grade for ramp, set lines and measure for ramp.
- 7) EWR on 12/23/2024 – 24<sup>th</sup> Street HDS Treatment Modifications due to elevation issues at finished surface. Layout ADA Ramp, remove curb and gutter, form ramp.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVE QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1.	FINISH GRADE ELEVATION ISSUES AND ADA RAMP TO INCLUDE LABOR , EQUIPMENT & MATERIALS (T&M)	LS	T&M	0	1	1	\$34,212.30
2.	ITEM NO. 30 – PAVEMENT RESTORATION EXTRA	SF	\$50.00	200	403	203'	\$10,150.00
3.	COST OF BOND	LF	\$443.62	0	1	1	\$443.62

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$44,805.92

D. Change in Completion Date:  
5 Days



**Item No. 8 - COR #2025-05-09 – Added Asphalt paving at 14<sup>th</sup> Street and 24<sup>th</sup> Street**

A. Reason for Change: The contractor, Clarke Contracting was directed by the City to grind and overlay additional asphalt at both locations to improve the intersections from existing damage and patches from previous work. Work also included additional striping beyond contract and a credit for partial slot paving and striping that was already included in the contract. This work also included 35’ SF of concrete pavement restoration that exceeded to contract plan quantity. Work was verified in the field and included labor, equipment, and material costs and was approved by the City on Time & materials (T&M).

- 1) EWR on 2/03/2024 – Asphalt Paving at 24<sup>th</sup> Street and 14<sup>th</sup> Street. Grind existing asphalt and install new cap course 2” to eliminate existing trenches, aging and spalling asphalt as per the City’s request to grind and overlay the walk intersection. Additional asphalt work and striping was charged at contract unit prices. A credit for a half day of slot paving was included in this cost as well. All material tickets were included in the supporting documentation and verified in the field as well.
- 2) Bid Item # 23 - At 14<sup>th</sup> Street, the contract square footage of the existing asphalt to be removed was 230’ SF and the actual amount paved was 265’ SF at the contract unit price of \$50.00 / SF.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	Labor, Equipment & Materials (T&M), Including Mark-up: per attached T&M Summary and Daily Reports	LS	T&M	0	1	1	\$15,555.08
2	Item No. 23 – Added Quantity of Pavement Restoration Above Contract	SF	\$50.00	230’	265’	35’	\$1,750.00
3	Cost of Bond (1%)	LS	173.05	0	1	1	\$173.05

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$17,478.13

D. Change in Completion Date:  
5 Days



**Item No. 9 - COR #2025-05-13 – Stormceptor Conversion at 32<sup>nd</sup> Street**

A. Reason for Change: The contractor, Clarke Contracting was requested by the City to convert the existing Stormceptor manhole at 32<sup>nd</sup> Street and The Strand to a trash compliant stormwater treatment unit. The costs and changes in the scope are based on the approved proposal dated January 23, 2025 and approved in the February 13<sup>th</sup>, 2025 project meeting. Additional work was required to encase a lighting conduit that was less than 1’ from the surface an unforeseen condition. The extra work was verified in the field and included labor, equipment, and material costs and was approved by the City on Time & Materials (T&M). Zero (0) days were added to the contract days.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APRVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	Stormceptor Conversion	LS	T&M	0	1	1	\$80,600.00
2	Extra Work to Repair Street Light Conduit (Unforeseen)	LS	T&M	0	1	1	\$4,643.86
3	Bond on T&M Only (1%)	LS	\$46.44	0	1	1	\$46.44

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$85,290.30

D. Change in Completion Date:  
15 Days

**Item No. 10 - COR #10B - 2025-05-28 – Install New Grated Storm Drain Inlet at 14<sup>th</sup> Street**

A. Reason for Change: The contractor, Clarke Contracting at the request by the City proposed to construct a new grated inlet catch basin, pipe connection to existing storm drain box, decking the existing drop inlet basin, and reconstructing the local depression at 14<sup>th</sup> Street to eliminate the depression and reduce the catch basin opening near a homeowner driveway for safety. Some materials from the existing catch basin will be re-used to save costs. Work will be verified in the field and includes labor, equipment, and material costs and was approved by the City per the Proposal #16302 on July 3, 2025. Proposal and supporting documentation attached along with a proposed Cost Breakdown schedule are included in the attached documentation. This proposed work will add ten (10) additional contract days to the work schedule .



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	New Grated Storm Drain Inlet at 14 <sup>th</sup> Street	LS	\$48,408.00	0	1	\$48,408.00

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:

Add \$48,408.00

D. Change in Completion Date:

10 Days

**Item No. 11-COR #11R-2025-07-11 – 1<sup>st</sup> Street HDS Treatment Unit Relocated (Revised Plan)**

A. Reason for Change: The contractor, Clarke Contracting, Inc. was directed by the City to prepare a cost proposal for the revised Storm Water Treatment Unit that was redesigned and relocated on 1<sup>st</sup> street and Ocean Drive per the revised plan sheet No. C-6, dated 6/10/2025. The scope of the work includes demolition of the existing PCC paving; temporary relocation and restoration of the conflicting sanitary sewer main line and laterals; supporting the existing utility lines (as shown on the plans) during construction; demolition of approximately 6’ LF of existing 54” RCP storm drain at two (2) locations; constructing a cast-in-place Diversion Structure and Junction Structure; installation of 6’ x 12’ HDS stormwater Treatment Unit; installation of 36” diameter RCP and all concrete collars; and PCC pavement restoration. The cost for the Lump Sum breakdown is attached and includes credits for the original contract work that was removed, and includes labor, equipment, and material costs.

Pricing was based on the deletion of Bid Item’s no’s. 7 – 15 of the original bid schedule and the replacement of the attached bid schedule. Cost included for PCC Pavement is based on 1,100’ SF and actual quantity of PCC pavement to be measured in the field and paid per the listed unit prices. Price is based on Preliminary plans; any changes to the plans requested by Hermosa Beach or LA County Flood Control Districts as part of the permitting process that may require added costs or price revisions. Permit Fees, including parking meter and parking permits are not included and will be reimbursed at actual costs. Pricing is subject and conditioned on completing all work prior to December 31<sup>st</sup>, 2025 and the time impact on this work is thirty (30) working days.



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APRVED QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	1 <sup>st</sup> Street HDS Unit per (Revised Plans - NEW)	LS	\$850,020.00	0	1	\$850,020.00
2	<b>BID ITEMS 7-15</b>	var.	var.	\$639,300.00	var.	\$(639,300.00)

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$210,720.00

D. Change in Completion Date:  
30 Days

**Item No. 12 - COR #12-2025-07-11 – Catch Basin Treatment Systems - Revisions**

A. Reason for Change: The contractor, Clarke Contracting, Inc. was directed by the City to prepare a proposal / Change Order request (COR-12) to install full trash capture catch basin systems (Filter Basket and Connector Pipe Screens) in existing City and County catch basins identified on the attached revised plan sheet C-4C in lieu of the originally proposed end of pipe hydrodynamic separators at 27<sup>th</sup> Street and 32<sup>nd</sup> Streets per plan sheets C-9 and C-10. An additional 36 catch basin treatment systems are to be installed in existing catch basins. The cost will be based upon the actual quantity installed at the proposed unit prices of \$4,500/each. Work will be verified in the field and includes labor, equipment, and material costs and was approved by the City on July 18<sup>th</sup>, 2025. This proposed work will add fifteen (15) additional contract days to the work schedule .

The original plans included 48 ea. Catch basin treatment systems comprised of 8 ea.– Channel Filter Systems, 24 ea.- Connector Pipe Screens, and 16 ea. – Filter Basket/Inserts. The original plans have been revised due to field conditions to include 37 ea. Catch basins treatment systems consisting of 4 ea.– Channel Filter Systems, 18 ea.- Connector Pipe Screens, and 15 ea. – Filter Basket/Inserts.

\*Pricing is based on the deletion of Bid Items No’s. 32-46 (**CREDITS**) of the original bid item schedule and replacement with unit prices noted above. Cost includes an additional 36 catch basin in the City’s storm drain system. Also there are (**CREDITS**) for Bid Items No’s 54, 55, 56 as shown below.



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APRVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	CATCH BASIN SYSTEMS UNIT PRICE	EA	\$4,500	36	36	\$162,000.00	\$162,000.00
2	CHANNEL FILTERS <b>CREDIT</b> (BID ITEM NO. 54)	EA	\$1,000	8	4	(\$4,000.00)	-\$4,000.00)
3	CP SCREENS <b>CREDIT</b> (BID ITEM NO 55)	EA	\$4,000	24	18	(\$24,000.00)	-\$24,000.00)
4	FILTER INSERTS <b>CREDIT</b> (BID ITEM NO 56)	EA	\$4,000	3	2	(\$4,000.00)	-\$4,000.00)
5	27 <sup>TH</sup> STREET HDS – ORIGINAL PRICES <b>CREDIT</b> (Bid Items 32–39)	LS	Varies	\$398,000.00	0	(\$398,000.0)	-\$398,000.0)
6	32 <sup>ND</sup> STREET HDS – ORIGINAL PRICES <b>CREDIT</b> (Bid Items 40–46)	LS	Varies	\$525,300.00	0	(\$525,300.0)	-\$525,300.0)

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Delete (\$793,400.00)

D. Change in Completion Date:  
15 Days

**Item No. 13R - COR #13R-2025-05-09 – 7<sup>TH</sup> Street & Ocean Avenue Drainage Improvements**

A. Reason for Change: The contractor, Clarke Contracting, Inc. was directed by the City to prepare a proposal / Change Order request (COR-13) to construct drainage improvements at 7<sup>th</sup> Street and Ocean Avenue per the conceptual plan dated 6/09/2025 prepared by the City of Manhattan Beach. The scope of work includes demolition of the existing catch basin and local depression; construction of one (1) new curb opening catch basin with 2-grates and two filter baskets; re-construction of the local depression; asphalt concrete slot paving; and site restoration.. The cost is attached in the detailed cost breakdown. Work to be verified in the field and includes all labor, equipment, and material costs and was approved by the City on 7/24/2025. This work will add fifteen (15) days to the contract working days.

B. Description of Change:



ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APRVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	7 <sup>TH</sup> STREET DRAINAGE IMPROVEMENTS	LS	\$90,496.00	0	1	1	\$90,496.00

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$90,496.00

D. Change in Completion Date:  
15 Days

**Item No. 14 - COR #14 - 2025-05-09 – 14<sup>TH</sup> Street & Magnolia – Drainage Improvements**

A. Reason for Change: The contractor, Clarke Contracting, Inc. was directed by the City to prepare a proposal / Change Order request (COR-14) to construct drainage improvements at 14<sup>th</sup> Street and Magnolia Avenue per the conceptual plan dated 6/09/2025 and prepared by the City of Manhattan Beach. The scope of work includes demolition of the existing catch basin; local depression and the construction of one (1) new curb opening catch basin with grating and debris skimmer with 1-grate; construction of the concrete local depression; asphalt concrete slot paving; and all site restoration. The cost is attached in the detailed cost breakdown as a lump sum item. Work to be verified in the field and includes all labor, equipment, and material costs and was approved by the City on 7/31/2025.

The work was approved by the City to be incorporated as part TMDL – Santa Monica Trash Capture Project and to help meet the permit requirements for this project and will be added to the contractor’s scope of work for this project. This identified work will add fifteen (15) days to the contract working days.

B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APRVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <sup>1</sup>
1	14 <sup>TH</sup> STREET & MAGNOLIA DRAINAGE IMPROVEMENTS	LS	\$89,789.00	0	1	1	\$89,789.00

<sup>1</sup>Deduction or decrease in Contract Price is denoted in parentheses.

C. Change in Contract Cost:  
Add \$89,789.00

D. Change in Completion Date:  
15 Days





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.

DocuSigned by:  
  
Signature: \_\_\_\_\_ Date: 8/7/2025

Name / Title: Brian A. Clarke, President and CEO