

# CITY OF MANHATTAN BEACH

## BID DOCUMENTS

PROJECT NO. P-897

### ROSECRANS AVENUE STREET RESURFACING IMPROVEMENT PROJECT

FEBRUARY 2020



CITY OF MANHATTAN BEACH  
PUBLIC WORKS DEPARTMENT  
ADILIA MILLER, P.E.  
1400 HIGHLAND AVENUE  
MANHATTAN BEACH, CA 90261



  
\_\_\_\_\_  
City Engineer Approval

  
\_\_\_\_\_  
Engineer of Record Approval

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**NOTICE INVITING BIDS  
FOR**

**ROSECRANS AVENUE STREET RESURFACING PROJECT**

**Project number: P-897 Bid number: 1231-20**

**NOTICE IS HEREBY GIVEN** that the City of Manhattan Beach, California ("City") invites sealed Bids for the Project. The City will receive such Bids at the City Clerk's office, City Hall, 1400 Highland Avenue, Manhattan Beach, California 90266 up to 11:00 a.m. on Tuesday, March 31<sup>st</sup>, 2020 at which time they will be publicly opened and read aloud.

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

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

**OBTAINING BID DOCUMENTS.** Bidders may obtain free copies of the Plans, Specifications and other Contract Documents online by visiting <https://www.bidsync.com>. The City does not provide hard copies of Plans and Specifications for projects.

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

**PREVAILING WAGES.** In accordance with Labor Code Section 1770 *et seq.*, the Project is a "public work." The selected Bidder (Contractor) and any Subcontractors shall pay wages in accordance with the determination of the Director of the Department of Industrial Relations ("DIR") regarding the prevailing rate of per diem wages. Copies of those rates are on file with the Director of Public Works and are available to any interested party upon request. The Contractor shall post a copy of the DIR's determination of the prevailing rate of per diem wages at each job site. This Project is subject to compliance monitoring and enforcement by the DIR.

**BONDS.** Each Bid must be accompanied by a cash deposit, cashier's check, certified check or Bidder's Bond issued by a Surety insurer, made payable to the City and in an amount not less than ten percent of the total Bid submitted. Personal or company checks are not acceptable. Upon Contract award, the Contractor shall provide faithful performance and payment Bonds, each in a sum equal to the Contract Price, as well as a warranty or maintenance Bond that is valid for

one year from Project acceptance in the amount of ten percent of the Contract Price. All Bonds must be issued by a California admitted Surety insurer using the forms set forth in the Contract Documents, or in any other form approved by the City Attorney. Failure to enter into the Contract with the City, including the submission of all required Bonds and insurance coverages, within ten calendar days after the date of the mailing of written notice of contract award to the Bidder, shall subject the Bid security to forfeiture to the extent provided by law.

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

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

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

By:

\_\_\_\_\_  
Michael Guerrero, Principal CivilEngineer      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.citymb.info>. Bidders are responsible for ensuring that they have received any and all Addenda. It is the

Bidder's responsibility to actively check the City's website for Addenda or bulletin updates. Each Bidder is responsible for verifying that it has received all Addenda issued. Bidders must acknowledge receipt of all Addenda, if any, using the Addenda Acknowledgement Form included in these Bid Documents. Failure to acknowledge receipt of all Addenda may cause a Bid to be deemed incomplete and non-responsive.

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

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

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

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

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

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

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

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

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

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

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

**RETURN OF BID SECURITY.** The successful Bidder's Bid security shall be held until the Contract is executed. Bid security shall be returned to the unsuccessful Bidders within a reasonable time, which in any case shall not exceed 60 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.

**ADDITIVE OR DEDUCTIVE ITEMS.** In accordance with Public Contract Code Section 20103.8, the lowest Bid shall be determined by comparing the total Bid price of all Base Bid Items and Additive Alternate Bid Items, using the Engineer's estimate of quantities for the Work as set forth

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

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

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

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

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

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

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

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

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

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

**TRADE NAMES OR EQUALS.** Requests to substitute an equivalent item for a brand or trade name item must be made by written request submitted no later than ten calendar days after the award of the 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, and a Bid Cover Form (Sheet B-1)
- Completed and Signed Contractor's Statement
- Completed References Form
- Completed Subcontractor Designation Form
- Completed, Signed and Notarized Bid Bond or Other Security Form
- Signed and Notarized Noncollusion Declaration Form
- Completed and Signed Addenda Acknowledgement Form
- Evidence satisfactory to the City indicating the capacity of the person(s) signing the Bid to bind the Bidder

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

**BID**

**CITY OF MANHATTAN BEACH  
ROSECRANS AVENUE STREET RESURFACING 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**  
**ROSECRANS AVENUE STREET RESURFACING PROJECT**

Bidder's Name: \_\_\_\_\_

Bidder's Address: \_\_\_\_\_

To the Honorable Mayor and Members of the City Council:

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

Base Bid Items as Follows:

**BASE BID AMOUNT:**

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
1		Mobilization (5% maximum of Total Base Bid Items Amount)	%	LS	\$	\$
2	S	Stormwater Control, BMPs NPDES Compliance, and Permit (5% maximum of Total Base Bid Items Amount)	%	LS	\$	\$
3	S	Traffic Control (Including construction signs and message boards)	%	LS	\$	\$
4	S	Monument Preservation, Restoration and Survey	%	LS	\$	\$
5		Curb Ramp including Removal, New Ramp with	8	EA	\$	\$

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
		Detectable Surface all Complete in Place in Accordance with ADA and Accepted by the City per Location.- High Early Strength Concrete Mix.				
6		Furnished and Install Detectable Warning Surface Onto Existing Ramp	1	EA	\$	\$
7	S	Remove Push Button and Standalone Post	1	EA	\$	\$
8	S	Furnish and Intall New Free Standing Ped Buttons Complete and Operational in Place	5	EA	\$	\$
9		2" Cold Mill	20,517	SY	\$	\$
10		Full Depth Removal (8" Minimal)	245	SF	\$	\$
11		Type III B-2 PG64-10 AC Pavment	12	TONS	\$	\$
12		Asphalt Rubber Hot Mix (2" Thick)	2,363	TONS	\$	\$
13		Tensar GLASPAVE50	20,671	SY	\$	\$
14	S	Double Adjust Sewer Manhole To Grade	3	EA	\$	\$

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
15	S	Double Adjust Storm Drain Manhole To Grade	1	EA	\$	\$
16	S	Double Adjust Galvanized Slip Water Valve Can and Cover To Grade	19	EA	\$	\$
17	F	Scan Street to Locate any Buried Water Valve and/or Manhole Covers Prior to Milling Operations	%	LS	\$	\$
18	F	Field Walk with City, Clean-up Debris in Water Valves and Manhole Covers	%	LS	\$	\$
19	F, S	Profilograph	%	LS	\$	\$
20	S	Signing and Striping	%	LS	\$	\$
21		Adjust Utility Pullboxes to Grade	6	EA	\$	\$
22	S	Type "E" Loop Detector (Round 6' diameter)	44	EA	\$	\$
	TOTAL BASE BID ITEMS AMOUNT					\$ _____

**NOTE:** Estimated quantities are for the purpose of Bid comparison only; payments will be made on the basis of actual measurement of Work completed, except for lump sum (LS) and final pay (F) quantities. (S) denotes a specialty item. (F) and (S) will be specified in the "Code" Column. The Bid Price shall include, but not limited to, sales tax and all other applicable taxes and fees. Lump sum Bid Items 1 and 2 of Base Bid list shall be inclusive and shall assume performing all works required under Base and Alternate Bid Items below. See also Section 9-2 of the General Provisions.

**ADDITIVE ALTERNATE BID SCHEDULE A ITEMS: COMMERCIAL DRIVEWAY AND RAMPS IMPROVEMENTS AT 1230 ROSECRANS AVENUE**

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
1		Mobilization (5% maximum of Total Bid Schedule A Items Amount)	%	LS	\$	\$
2	S	Stormwater Control, BMPs NPDES Compliance, and Permit (5% maximum of Total Bid Schedule A Items Amount)	%	LS	\$	\$
3	S	Traffic Control (Including construction signs and message boards)	%	LS	\$	\$
4	S	Monument Preservation, Restoration and Survey	%	LS	\$	\$
5		Remove Existing and Construct New 8" Thick PCC Commercial Driveway Approach. Per City of Manhattan Beach Standard Plans. High Early Strength Concrete Mix.	500	SF	\$	\$
6		Curb Ramp including Removal, New Ramp with Detectable Surface All Complete in accordance with ADA and Accepted by the City. High Early Strength Concrete Mix.	2	EA	\$	\$
	TOTAL ALTERNATE BID SCHEDULE A ITEMS AMOUNT					\$ _____

**ADDITIVE ALTERNATE BID SCHEDULE B ITEMS: COMMERCIAL DRIVEWAY AND RAMPS IMPROVEMENTS AT 1440 ROSECRANS AVENUE**

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
1		Mobilization (5% maximum of Total Bid Schedule B Items Amount)	%	LS	\$	\$
2	S	Stormwater Control, BMPs NPDES Compliance, and Permit (5% maximum of Total Bid Schedule B Items Amount)	%	LS	\$	\$
3	S	Traffic Control (Including construction signs and message boards)	%	LS	\$	\$
4	S	Monument Preservation, Restoration and Survey	%	LS	\$	\$
5		Remove Existing and Construct New 8" Thick PCC Commercial Driveway. Per City of Manhattan Beach Standard Plans. High Early Strength Concrete Mix.	850	SF	\$	\$
6		Curb Ramp including Removal, New Ramp with Detectable Surface All Complete in accordance with ADA and Accepted by the City. High Early Strength Concrete Mix.	2	EA	\$	\$
7		Median Island Curb reconstruction. High Early Strength Concrete Mix	20	LF	\$	\$
	TOTAL ALTERNATE BID SCHEDULE B ITEMS AMOUNT					\$ _____

**ADDITIVE ALTERNATE BID SCHEDULE C ITEMS:RAMP IMPROVEMENT AT 1500  
ROSECRANS AVENUE -SOUTH EAST CORNER OF ROSECRANS AVE AND MARRIOT DR**

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
1		Mobilization (5% maximum of Total Bid Schedule C Items Amount)	%	LS	\$	\$
2	S	Stormwater Control, BMPs NPDES Compliance, and Permit (5% maximum of Total Bid Schedule C Items Amount)	%	LS	\$	\$
3	S	Traffic Control (Including construction signs and message boards)	%	LS	\$	\$
4	S	Monument Preservation, Restoration and Survey	%	LS	\$	\$
5		Curb Ramp including Removal, New Ramp with Detectable Surface All Complete in accordance with ADA and Accepted by the City. High Early Strength Concrect Mix.	1	EA	\$	\$
	TOTAL ALTERNATE BID SCHEDULE C ITEMS AMOUNT					\$ _____

**ADDITIVE ALTERNATE BID SCHEDULE D ITEMS: RAMP IMPROVEMENT AT 1600  
ROSECRANS AVENUE -SOUTH WEST CORNER OF ROSECRANS AND REDONDO AVE**

ITEM NO.	CODE	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICES	AMOUNT
1		Mobilization (5% maximum of Total Bid Schedule D Items Amount)	%	LS	\$	\$
2	S	Stormwater Control, BMPs NPDES Compliance, and Permit (5% maximum of Total Bid Schedule D Items Amount)	%	LS	\$	\$
3	S	Traffic Control (Including construction signs and message boards)	%	LS	\$	\$
4	S	Monument Preservation, Restoration and Survey	%	LS	\$	\$
5		Curb Ramp including Removal, New Ramp with Detectable Surface All Complete in accordance with ADA and Accepted by the City. High Early Strength Concrect Mix.	1	EA	\$	\$
	TOTAL ALTERNATE BID SCHEDULE D ITEMS AMOUNT					\$_____

**NOTE:** Items may be adjusted or deleted. Any changes to the quantities for these items shall not constitute a substantial change as referenced in Section 3-2.2.1 of the Standard Specifications. Therefore, regardless of total actual volume (percentage) compared to estimated quantities, the unit prices provided above by the Bidder shall be applied to the final quantity when payment is calculated for these items. No adjustment in the unit prices will be allowed. The City reserves the right to not use any of the estimated quantities; and if this right is exercised, the Contractor will not be entitled to any additional compensation. Cost of all export of material shall be included in the above unit costs; no additional compensation will be granted for such expenses.

Total Bid Price = Base Bid Items Amount Plus (+) All Additive Alternate Bid  
(Schedule A+B+C+D) Items Amounts

**TOTAL BID PRICE IN DIGITS:** \$ \_\_\_\_\_

**TOTAL BID PRICE IN WORDS:** \_\_\_\_\_

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

Number \_\_\_\_\_, Class \_\_\_\_\_, which expires on \_\_\_\_\_.

Signature: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

**BIDDER'S PROPOSAL – CONTRACTOR'S STATEMENT**  
**ROSECRANS AVENUE STREET RESURFACING PROJECT**

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

(1) Bidder's Name: \_\_\_\_\_

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

(3) Business Address: \_\_\_\_\_

(4) Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

(5) Type of Firm – Individual, Partnership, LLC or Corporation: \_\_\_\_\_

(6) Corporation organized under the laws of the State of: \_\_\_\_\_

(7) California State Contractor's License Number and Class: \_\_\_\_\_  
Original Date Issued: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

(8) DIR Contractor Registration Number: \_\_\_\_\_

(9) List the name and title of the person(s) who inspected the Project site for your firm:  
\_\_\_\_\_

(10) Number of years experience the company has as a contractor in construction work: \_\_\_\_\_

(11) List the names, titles, addresses and telephone numbers of all individuals, firm members, partners, joint venturers, and company or corporate officers having a principal interest in this Bid:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

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

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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:

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b. Briefly summarize the parties' claims and defenses:

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

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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.

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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.

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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.

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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.

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

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(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.).

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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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**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.).

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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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**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.).

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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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**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.).

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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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**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.).

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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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**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 NPDES Permit. The Contractor is responsible for all clean up and payment of all fines levied as a result of any illegal discharge (as defined in NPDES permit) occurring as a result of the Contractor's Work and/or operations.

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

Company

Signature: \_\_\_\_\_

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

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

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

Signature: \_\_\_\_\_

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

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

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

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

**ROSECRANS AVENUE STREET RESURFACING 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 percent of the Contractor's total Bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half percent of the Contractor's total Bid or \$10,000.00, whichever is greater. If all Subcontractors do not fit on this page, attach another page listing all information for all other Subcontractors.

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

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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. \_\_\_\_\_  
**BID BOND**

**ROSECRANS AVENUE STREET RESURFACING PROJECT**

KNOW ALL PERSONS BY THESE PRESENTS that:

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

WHEREAS \_\_\_\_\_  
(*Name and address of Bidder*)

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

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

NOW, THEREFORE, we, the undersigned Principal, and \_\_\_\_\_  
\_\_\_\_\_  
(*Name and address of Surety*)

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

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

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

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

Dated: \_\_\_\_\_

“Principal”

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

Telephone No.: \_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
\_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

“Surety”

Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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

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

**ROSECRANS AVENUE STREET RESURFACING PROJECT**

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or to refrain from bidding. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the Bid price, or of that of any other Bidder. All statements contained in the Bid are true. The Bidder has not, directly or indirectly, submitted his or her Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, Bid depository, or to any member or agent thereof, to effectuate a collusive or sham Bid, and has not paid, and will not pay, any Person or entity for such purpose.

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

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

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

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

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

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

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

**This form must be notarized.**

**ADDENDA ACKNOWLEDGMENT FORM**  
**ROSECRANS AVENUE STREET RESURFACING PROJECT**

Bidder's Name: \_\_\_\_\_

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

Addendum Number	Date Received	Signature

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 ROSECRANS AVENUE STREET RESURFACING PROJECT

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

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

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

2. Scope of Services. The Contractor shall perform and provide all materials, tools, equipment, labor, and services necessary to complete the Work in a good and workmanlike manner for the project identified as **ROSECRANS AVENUE STREET RESURFACING 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 \$\_\_\_\_\_ ("Contract Price"). It is understood and agreed that the quantities set forth in the Bidder's Proposal for which unit prices are fixed are estimates only and that the City will pay and the Contractor will accept, as full payment for these items of work, the unit prices set forth in the Bidder's Proposal multiplied by the actual number of units performed, constructed, or completed as directed by the Engineer.

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

4. Contract Time.

4.1 Initial Notice to Proceed. The City shall issue the "Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials." The date specified in the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials constitutes the date of commencement of the Contract Time of **60 Working Days**. The Contract Time includes the time

necessary to fulfill preconstruction requirements, place the order for materials, and to complete construction of the Project (except as adjusted by subsequent Change Orders).

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

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

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

4.2 Notice to Proceed with Construction. After all preconstruction requirements are met and materials have been ordered in accordance with the Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials, the City shall issue the "Notice to Proceed with Construction," at which time the Contractor shall prosecute the Work within **10 working days**, 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 liquidated damages pursuant to Section 6-9 of the General Provisions. The liquidated damages is hereby amended to **\$1,000 per day.**

6. Early Completion.

"NOT USED"

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

8. Antitrust Claims. In entering into this Contract, the Contractor offers and agrees to assign to the City all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. § 15) or under the Cartwright Act (Business and Professions Code Section 16700 *et seq.*) arising from purchases of goods, services, or materials pursuant to the Contract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor without further acknowledgment by the parties.

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

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

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

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

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

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

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

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

CITY OF MANHATTAN BEACH

By: \_\_\_\_\_  
City Manager

ATTEST:

APPROVED AS TO FORM:

By: \_\_\_\_\_  
City Clerk

By: \_\_\_\_\_  
City Attorney

Dated: \_\_\_\_\_

\_\_\_\_\_  
("CONTRACTOR")

By: \_\_\_\_\_  
NAME TITLE

By: \_\_\_\_\_  
NAME TITLE

PROOF OF AUTHORITY TO BIND  
CONTRACTING PARTY REQUIRED

Bond No. \_\_\_\_\_

**PAYMENT BOND  
(LABOR AND MATERIALS)**

KNOW ALL PERSONS BY THESE PRESENTS that:

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

\_\_\_\_\_ ("Principal")

*(Name and address of Contractor)*

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

**ROSECRANS AVENUE STREET RESURFACING PROJECT**

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

NOW, THEREFORE, we, the undersigned Principal, and \_\_\_\_\_

*(Name and address of Surety)*

("Surety") a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency and all contractors, subcontractors, laborers, material suppliers, and other persons employed in the performance of the Contract and referred to in Title 3 (commencing with Section 9000) of Part 6 of Division 4 of the Civil Code in the penal sum of \_\_\_\_\_ Dollars

(\$\_\_\_\_\_), for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to this Work or labor, that the Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this Bond, will pay, in addition to the face amount thereof, costs and reasonable expenses and fees, including reasonable attorneys' fees, incurred by Public Agency in successfully enforcing this obligation, to be awarded and fixed by the court, and to be taxed as costs and to be included in the judgment therein rendered.

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

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

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

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

Dated: \_\_\_\_\_

“Principal”

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Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

“Surety”

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Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

(Seal)

(Seal)

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

Bond No. \_\_\_\_\_

## PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS that:

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

(“Principal”)

*(Name and address of Contractor)*

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

### ROSECRANS AVENUE STREET RESURFACING PROJECT

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

NOW, THEREFORE, we, the undersigned Principal, and \_\_\_\_\_

*(Name and address of Surety)*

(“Surety”) a duly admitted surety insurer under the laws of the State of California, as Surety, are held and firmly bound unto the Public Agency in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_),

this amount being not less than the total Contract Price, in lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors executors and administrators, jointly and severally, firmly by these presents.

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

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

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or of the Work to be performed thereunder or the specifications accompanying the same shall in anywise affect its obligations under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work or to the specifications. Surety hereby waives the provisions of California Civil Code Sections 2845 and 2849. The City is the principal beneficiary of this Bond and has all rights of a party hereto.

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

Dated: \_\_\_\_\_

“Principal”

---

---

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

“Surety”

---

---

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

(Seal)

(Seal)

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

Bond No. \_\_\_\_\_

## **WARRANTY BOND**

KNOW ALL PERSONS BY THESE PRESENTS that:

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

\_\_\_\_\_ ("Principal")

*(Name and address of Contractor)*

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

### **ROSECRANS AVENUE STREET RESURFACING PROJECT**

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

NOW, THEREFORE, we, the undersigned Principal, and \_\_\_\_\_

*(Name and address of Surety)*

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

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

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

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

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications

accompanying the same shall in anywise affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications.

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

Dated: \_\_\_\_\_

“Principal”

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---

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

“Surety”

---

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Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

(Seal)

(Seal)

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

# WORKERS' COMPENSATION CERTIFICATE OF INSURANCE

## ROSECRANS AVENUE STREET RESURFACING PROJECT

WHEREAS, the City of Manhattan Beach ("City") has required certain insurance to be provided by:

NOW THEREFORE, the undersigned insurance company does hereby certify that it has issued the policy or policies described below to the following named insureds and that the same are in force at this time:

1. This certificate is issued to:

City of Manhattan Beach  
City Hall  
1400 Highland Avenue  
Manhattan Beach, California 90266

The insureds under such policy or policies are:

2. Workers' Compensation Policy or Policies in a form approved by the Insurance Commissioner of California covering all operations of the named insureds as follows:

**Policy Number**

Effective Date

Expiration Date

By: \_\_\_\_\_  
Its Authorized Representative

## **CHECKLIST FOR EXECUTION OF CONTRACT**

### **TO BE SUBMITTED BY SUCCESSFUL BIDDER:**

- Two executed and notarized copies of the Contract
- Payment Bond in amount of the Contract
- Performance Bond in amount of the Contract
- Warranty Bond
- Workers' Compensation Certificate
- Liability insurance certificate naming the City as a co-insured
- Automobile insurance naming the City as a co-insured
- General aggregate insurance certificate naming the City as a co-insured
- Copy of City business license
- Additional insured endorsement – comprehensive general liability
- Additional insured endorsement – automobile liability
- Additional insured endorsement – excess liability

## **GENERAL PROVISIONS**

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

#### **0-1 STANDARD SPECIFICATIONS**

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

#### **0-2 NUMBERING OF SECTIONS**

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

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

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

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

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

#### **1-2 TERMS AND DEFINITIONS**

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

Agency – The City of Manhattan Beach.

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

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

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

City – The City of Manhattan Beach

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

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

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

County – County of Los Angeles, California

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

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

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

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

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

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

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

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

Project – See Work.

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

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

State – The State of California.

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

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

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

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

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

### 1-3.3 Institutions

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

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

## SECTION 2. SCOPE AND CONTROL OF THE WORK

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

### 2-2 ASSIGNMENT

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

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

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

2-3.1.1 Subcontractors. Add the following sections:

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

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

#### 2-4 CONTRACT BONDS

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

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

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

#### 2-5 PLANS AND SPECIFICATIONS

##### 2-5.1 General

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

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

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

## 2-5.2 Precedence of the Contract Documents

The following shall replace Section 2-5.2:

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

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

### 2-5.2.1 Traffic Signal Work

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

## 2-5.3 Submittals

### 2-5.3.1 General

The following paragraphs shall be added following the third paragraph:

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

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

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

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

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

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

## 2-6 WORK TO BE DONE

The following paragraphs shall be added following paragraph one:

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

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

## 2-7 SUBSURFACE DATA

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

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

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

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

## 2-9 SURVEYING

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

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

## 2-11 INSPECTION

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

Add the following paragraphs:

### 2-11.1 Inspection

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

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

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

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

### **SECTION 3. CHANGES IN WORK**

#### **3-1 CHANGES REQUESTED BY THE CONTRACTOR**

##### **3-1.1 General**

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

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

#### **3-2 CHANGES INITIATED BY THE AGENCY**

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

### 3-2.1 General

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

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

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

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

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

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

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

Any change to the Contract Price shall be in a sum mutually agreed to by the Contractor and the City. When the cost for Extra Work cannot be agreed upon, the City will pay for Extra Work based on the accumulation of costs as provided for in Subsection 3-3, "Extra Work," of the Standard Specifications and the General Provisions.

#### 3-2.1.1 Change Order

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

A. The scope of the change in the Work;

B. The amount of the adjustment, if any, in the Contract Price; and

C. The extent of the adjustment, if any, in the Contract Time.

3-2.1.1.1 Accord and Satisfaction

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

3-2.1.2 Construction Change Directive

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

3-2.2 Increases of More than 25 Percent

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

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications exceed the Bid quantity by more than 25%, a Change Order will be issued and payment for the quantity in excess of 25% of the Bid quantity will be made on the basis of an adjustment to the Contract Unit price mutually agreed to by the City and the Contractor or pursuant to Subsection 3-2.4 "Agreed Prices."

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

3-2.2.3 Decreases of More than 25 Percent

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

Should the actual quantity of a Major Item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications be less than 75% of the Bid

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

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

### 3-2.2.4 Changes for Items Not Covered by Unit Prices

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

## 3-3 *EXTRA WORK*

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

### 3-3.1 General

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

All Extra Work shall conform to the Plans and Specifications.

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

### 3-3.2.1 General

Add the following at the end of Subsection 3-3.2.1

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

### 3-3.2.2.1 Labor

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

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

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

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

### 3-3.2.2.2 Materials

Add the following to Subsection 3-3.2.2.2:

If the Contractor does not furnish satisfactory evidence of the cost of the materials from the actual supplier thereof within **3 days** following delivery of materials to the Work site, the Engineer reserves the right to establish the cost of the materials at the lowest current wholesale prices at which the materials were available, in the quantities concerned, delivered to the location of the Work site, less any discounts.

### 3-3.2.2.3 Tool and Equipment Rental

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

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

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

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

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

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

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

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

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

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

### 3-3.2.3 Markup

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

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

#### 3-3.2.3.1 Work by Contractor.

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

1)	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.

### 3-3.2.3.2 Work by Subcontractor.

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

### 3-3.2.3.3 Work by Sub-Subcontractor.

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

### 3-3.2.3.4 Work by Specialist.

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

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

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

### 3-3.2.3.5 Work not Covered by Unit Prices.

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

## 3-3.3 Daily Reports by Contractor

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

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

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

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

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

### 3-3.4 Extension of Time

Add the following as Subsection 3-3.4:

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

## 3-5 *DISPUTED WORK*

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

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

## 3-6 *FORMS*

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

### 3-6.1 Change Order Form

### 3-6.2 Change Order Proposal Forms

- (a) Change Order Proposal Summary Report
- (b) Labor Cost Report

- (c) Labor Rates Report
- (d) Material Cost Report
- (e) Equipment Cost Report
- (f) Special Forces/Services Cost Report

3-6.3 Construction Change Directive Form

3-6.4 Work Directive Form



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

**CONTRACT CHANGE ORDER NO. 1 (Final)**

PROJECT NO.:

DESCRIPTION:

TO: Construction Company, Inc.

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

<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:

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: Adjustment in Final Bid Quantities:

A. Reason for Change:

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



B. Description of Change:

ITEM	DESCRIPTION	UNIT	UNIT PRICE	BID OR CURRENT APPROVED QTY	FINAL QTY	CHANGE	CHANGE IN COST <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

Acceptance by the Contractor:

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

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

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



**CHANGE ORDER PROPOSAL FORM**

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

	Date	_____
CCO Proposal No.	Contractor	_____
Item No.	Location	_____
		AMOUNT
General Contractor		
1. Labor Cost:	.....	\$ _____
2. Material Cost:	.....	\$ _____
3. Equipment Cost:	.....	\$ _____
4. Special Forces/Services:	.....	\$ _____
Subtotal Contractor Cost:	.....	\$ _____
5. Subcontractor/Sub-Subcontractor Name	.....	
Labor Cost:	.....	\$ _____
Material Cost	.....	\$ _____
Equipment Cost	.....	\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost	.....	
6. Subcontractor/Sub-Subcontractor Name	.....	
Labor Cost	.....	\$ _____
Material Cost	.....	\$ _____
Equipment Cost	.....	\$ _____
Subtotal Subcontractor/Sub-Subcontractor Cost	.....	\$ _____
TOTAL CONTRACT CHANGE ORDER COSTS	.....	\$ _____



**CHANGE ORDER PROPOSAL FORM**

**3-6.2(b) LABOR COST REPORT Date**

Date \_\_\_\_\_

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

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

CLASSIFICATION AND NAME	HOURS	HOURLY RATE	EXTENDED AMOUNTS
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
Classification:	OT	\$	\$
Name:	REG	\$	\$
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**

**3-6.2(c) LABOR RATES REPORT Date**

Date \_\_\_\_\_

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

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

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



**CHANGE ORDER PROPOSAL FORM**

**3-6.2(d) MATERIAL COST REPORT**

Date \_\_\_\_\_

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

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

INVOICE NO.	DESCRIPTION	AMOUNT
1.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
2.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
3.	Material	\$
	Sales Tax (Prevailing Tax Rate) 7.75%	\$
	Subtotal	\$
<b>SUBTOTAL MATERIAL COST</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**

**3-6.2(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**

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

Date \_\_\_\_\_

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

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

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

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

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

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



### 3-6.3 CONSTRUCTION CHANGE DIRECTIVE

Distribution to: CITY  CONTRACTOR  OTHER  PROJECT MANAGER

---

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

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

#### PROPOSED ADJUSTMENTS

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

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

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

Ordered: \_\_\_\_\_ Date: \_\_\_\_\_  
Public Works Director

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

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



### 3-6.4 WORK DIRECTIVE

Distribution to: CITY  CONTRACTOR  FIELD  OTHER  PROJECT MANAGER

---

PROJECT:	WORK DIRECTIVE NO.:
	DATE:
	CONTRACT DATE:
TO CONTRACTOR:	CONTRACT FOR:

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

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

Ordered: _____ Public Works Director	Date: _____
Concurred by: _____ City Engineer	Date: _____
Concurred by: _____ Project Manager	Date: _____

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

### **4-1 MATERIALS AND WORKMANSHIP**

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

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

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

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

#### **4.1.1.1 Property Rights in Materials**

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

#### **4-1.2 Protection of Work and Materials**

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

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

#### **4-1.4 Test of Materials**

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

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

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

#### **4-1.6 Trade Names or Equals**

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

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

## **SECTION 5 UTILITIES**

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

### **5-1 LOCATION**

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

## UNDERGROUND SERVICE ALERT IDENTIFICATION NUMBER FORM

### ROSECRANS AVENUE STREET RESURFACING PROJECT

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

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

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

***Dig Alert Identification Number:*** \_\_\_\_\_

Dated: \_\_\_\_\_  
(“CONTRACTOR”)

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

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

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

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

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

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

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

### 5-1.3 Entry by Utility Owners

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

### 5-2 PROTECTION

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

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

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

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

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

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

### 5-3 REMOVAL

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

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

#### 5-4 RELOCATION

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

#### 5-6 COOPERATION

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

#### 5-7 NOTIFICATION

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

Agency: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_

Agency: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_

Agency: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Contact Person: \_\_\_\_\_

### **SECTION 6. PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK**

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

#### 6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

##### 6-1.1 Construction Schedule

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

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

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

- a. A Change Order significantly affects the Contract completion date or the sequence of construction approach or activities; or
- b. The actual sequence of the Work, or the planned sequence of the Work, is changed and does not conform to the Contractor's current accepted Project construction schedule.

#### 6-1.1.1 Pre-Construction Conference

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

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

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

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

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

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

#### 6-1.1.2 Weekly Progress Meetings

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

Add the following to section 6-2:

#### 6-2.1 Excess Cost of City Personnel and Inspection Personnel

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

#### 6-3.1 General

Add the following paragraph following paragraph one:

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

### 6-5 TERMINATION OF THE CONTRACT FOR CONVENIENCE

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

or for no reason) shall the total amount of money to Contractor exceed the amount which would have been paid to the Contractor for the full performance of the services described in the Contract.

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

## 6-6 DELAYS AND EXTENSIONS OF TIME

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

### 6-6.1 Extensions of Time

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

### 6-6.2 Payment for Delays

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

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

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

Add the following as section 6-7.2:

#### 6-7.2 Working Day

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

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

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

#### 6-7.3 Contract Time Accounting

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

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

Add the following as section 6-7.3.1:

##### 6-7.3.1 Hours of Work

The Contractor shall conduct any operations and perform all Work pertaining to the Project, between the hours of 9:00 p.m. and 5:00 a.m., and shall not perform any Work pertaining to the Project on Saturday, Sunday, or holidays at any time except as approved by the Engineer. In the event that the Contractor abuses the hours of work requirement, a written warning will follow. After each additional warning, a \$200.00 penalty will be deducted from the Contract amount. Except as required by this section 6-7.3.1, all operations or Work pertaining to the Project, shall be in conformance with Manhattan Beach Municipal Code Section 9.44.030

“Construction Hours and Prohibited Days.”

## 6-8 COMPLETION, ACCEPTANCE AND WARRANTY

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

### 6-8.2 Acceptance

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

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

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

### 6-8.3 Warranty

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

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

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

#### 6-9 *Liquidated Damages*

For the purposes of the calculation of the start of the liquidated damages, the Work shall be deemed to be completed when the same has been completed in accordance with the Plans and Specifications therefor and to the satisfaction of the Engineer, and the Engineer has certified such completion in accordance with Section 6-8.1 of the Standard Specifications. The liquidated damages value is hereby amended to be **\$1,000 per day**.

### **SECTION 7. RESPONSIBILITIES OF THE CONTRACTOR**

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

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

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

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

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

The Contractor shall relocate, repair, replace, or reestablish all existing improvements within the Project limits which are not designated for removal (e.g., curbs, sidewalks, driveways, signal loops, fences, walls, sprinkler systems, signs, Utility installations, pavements, structures, etc.) which are damaged or removed as a result of the Contractor's or the Subcontractors' operations or as required by the Plans and Specifications.

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

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

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

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

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

## **7-1 THE CONTRACTOR'S EQUIPMENT AND FACILITIES**

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

## **7-2 LABOR**

### **7-2.2.1 Public Work**

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

### **7-2.2.2 Copies of Wage Rates**

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

### **7-2.2.3 Failure to Pay Prevailing Rates**

The Contractor shall comply with and be bound by the provisions of Labor Code Sections 1774 and 1775 concerning the payment of prevailing rates of wages to workers and the penalties for failure to pay prevailing wages. The Contractor shall, as a penalty paid to the City, forfeit \$200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates as determined by the DIR for the work or craft in which the worker is employed for any public work done pursuant to these Contract Documents by the Contractor or by any Subcontractor.

#### 7-2.2.4 Apprentices

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

#### 7-2.2.5 Debarment or Suspension

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

#### 7-2.3 Payroll Records

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

#### 7-2.4 Hours of Labor

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

### 7-2.5 Registration with the DIR

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

### 7-2.6 Compliance Monitoring and Posting Job Sites

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

### 7-2.7 Subcontractors

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

### 7-2.9 Prevailing Wage Indemnity

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

## 7-3 INSURANCE

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

### 7-3.1.1 Acceptability of Insurers.

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

#### 7-3.1.2 Additional Insured.

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

#### 7-3.1.3 Primary and Non-Contributing.

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

#### 7-3.1.4 Contractor's Waiver of Subrogation.

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

#### 7-3.1.5 Deductibles and Self-Insured Retentions.

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

#### 7-3.1.6 Cancellations or Modifications to Coverage.

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

#### 7-3.1.7 City Remedy for Noncompliance.

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

#### 7-3.1.8 Evidence of Insurance.

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 this Section 7-3. 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.

#### 7-3.1.9 Indemnity Requirements not Limiting.

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

#### 7-3.1.10 Subcontractor Insurance Requirements.

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

#### 7-3.1.11 Replacement Insurance

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

#### 7-3.1.12 Subcontractors

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

### 7-3.2 General Liability Insurance

Instead of the minimum limits listed in Section 7-3.2 of the Standard Specifications, the Contractor shall procure and at all times during the term of the Contract carry, maintain, and keep in full force and effect Commercial General Liability Insurance with a minimum limit of \$2,000,000.00 per

occurrence for bodily injury, personal injury and property damage and a general aggregate limit of \$2,000,000.00 per project or location. If the Contractor is a limited liability company, the commercial general liability coverage shall be amended so that the Contractor and its managers, affiliates, employees, agents and other persons necessary or incidental to its operation are insureds.

#### 7-3.3 Workers' Compensation Insurance

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

#### 7-3.4 Automobile Insurance

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

### 7-4 INDEMNIFICATION

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

#### 7-4.1 Indemnities for Third Party Claims.

To the fullest extent permitted by law, the Contractor shall, at its sole cost and expense, defend, hold harmless and indemnify the City and its elected officials, officers, attorneys, agents, employees, designated volunteers, successors, assigns and those City agents serving as independent contractors in the role of City officials (collectively "Indemnitees"), from and against any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, expenses, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants, attorneys, or other professionals and all costs associated therewith and the payment of all consequential damages (collectively "Liabilities"), in law or equity, whether actual, alleged or threatened, which arise out of, are claimed to arise out of, pertain to, or relate to the acts or omissions of the Contractor, its officers, agents, servants, employees, Subcontractors, materialmen, contractors or their officers, agents, servants or employees (or any entity or individual that the Contractor shall bear the legal liability thereof) in the performance of the Contract, including the Indemnitees' active or passive negligence, except for Liabilities arising from the sole negligence or willful misconduct of the Indemnitees, as determined by final arbitration or court decision or by the agreement of the Parties. The Contractor shall defend the Indemnitees in any action or actions filed in connection with any Liabilities with counsel of the Indemnitees' choice, and shall pay all costs and expenses, including all attorneys' fees and experts' costs actually incurred in connection with such defense. The Contractor shall reimburse

the Indemnitees for any and all legal expenses and costs incurred by Indemnitees in connection therewith.

#### 7-4.1.1 Taxes and Workers' Compensation

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

#### 7-4.1.2 Subcontractor Indemnity Agreements

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

#### 7-4.2 Workers' Compensation Acts not Limiting.

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

#### 7-4.3 Insurance Requirements not Limiting.

The City does not, and shall not, waive any rights that it may possess against the Contractor because of the acceptance by the City, or the deposit with the City, of any insurance policy or certificate required pursuant to the Contract. The indemnities in this Section 7-4 shall apply regardless of whether or not any insurance policies are determined to be applicable to the Liabilities, tax, assessment, penalty or interest asserted against the City.

#### 7-4.4 Survival of Terms.

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

#### 7-4.5 Civil Code Exception.

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

#### 7-4.6 Nonwaiver of Rights.

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

#### 7-4.7 Waiver of Right of Subrogation.

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

### 7-5 PERMITS

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

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

### COOPERATION AND COLLATERAL WORK

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

### 7-7 WORKSITE MAINTENANCE

Clean-up shall be done as Work progresses at the end of each day and thoroughly before weekends. The Contractor shall not allow the Work site to become littered with trash and waste

material, but shall maintain the same in a neat and orderly condition throughout the construction operation. Materials which need to be disposed shall not be stored at the Project site, but shall be removed by the end of each Working Day. If the job site is not cleaned to the satisfaction of the Engineer, the cleaning will be done or contracted by the City and shall be back-charged to the Contractor and deducted from the Contract Price.

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

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

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

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

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

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

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

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

## 7-10 SAFETY

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

### 7-10.2 Haul Routes

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

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

### 7-10.5.3 Steel Plate Covers

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

## 7-15 RECYCLING OF MATERIALS

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

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

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

### 7-15.2 Contractor's Obligation

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

## **SECTION 8. FACILITIES FOR AGENCY PERSONNEL**

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

## **SECTION 9. MEASUREMENT AND PAYMENT**

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

### 9-1.1 General

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

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

### 9-1.2 Methods of Measurement

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

## 9-2 LUMP SUM WORK

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

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

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

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

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

### 9-2.1 Progress Payments for Lump Sum Items of Work

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

## 9-3 PAYMENT

### 9-3.1 General

In accordance with Public Contract Code Section 7107, if no claims have been filed and are still pending, the amount deducted from the final estimate and retained by the City will be paid to the

Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment, or as may be withheld for any other lawful purposes.

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

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

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

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

### 9-3.2 Partial and Final Payment

#### 9-3.2.1 Monthly Closure Date and Invoice Date

In accordance with these Specifications, the monthly payment date is hereby set as the second Wednesday following the first Tuesday of each month. If the above date falls on a holiday, the payment date shall be the first subsequent working day.

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 no later than 13 Working Days prior to the monthly payment dates established above. Late submittals shall be held for consideration by the City Council at the next regularly scheduled meeting.

#### 9-3.2.2 Payments

The City shall make payments within 30 Days after receipt of the Contractor's undisputed and properly submitted payment request, including an updated construction schedule pursuant to Section 6-1.1 of the General Provisions. The City shall return to the Contractor any payment request determined not to be a proper payment request as soon as practicable, but not later than seven Days after receipt, and shall explain in writing the reasons why the payment request is not proper. Acceptance by the Contractor of the payment made in accordance with the final estimate shall be a release to the City, its officers, agents, and employees excepting only claims against the City for any amount withheld by it at the time of such payment.

### 9-3.2.3 Retention

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

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

### 9-3.2.4 Final Invoice and Payment

Whenever the Contractor shall have completely performed the Contract in the opinion of the Engineer, the Contractor shall submit to the Engineer a written statement of the final quantities of Contract items for inclusion in the final invoice. Upon receipt of such statement, 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 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.

### 9-3.2.5 Substitute Security

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

#### 9-3.2.5.1 Substitution of Securities for Performance Retention

At some reasonable time before any progress payment would otherwise be due and payable to the Contractor in the performance of Work under these Contract Documents, the Contractor may submit a request to the City in writing to permit the substitution of retentions with securities equivalent to the amount estimated by the City ("estimated amount of retention") to be withheld. The Contractor shall deposit such securities with the City or may, in the alternative, deposit such securities in escrow with a State or federally chartered bank in California, as the escrow agent, at the Contractor's expense. Such securities will be the equivalent or greater in value of the estimated amount of retention. If the Contract is modified by written Modifications or Change Orders or the Contractor otherwise becomes entitled to receive an amount more than the Contract Price at the time the securities are deposited, the Contractor shall, at the request of the City, deposit with the City or escrow agent, whichever is applicable, additional securities within a reasonable time so that the amount of securities on deposit with the City or escrow agent is equivalent or greater in value than the amount of retention the City would otherwise be entitled to withhold from progress payments due or to become due to the Contractor as the Work progresses.

The City shall withhold any retention amount that exceeds the security amount until the additional securities are deposited and, if the deposit is with an escrow agent, the City has confirmation from that escrow agent of the new total value of securities. Upon satisfactory completion of the Contract, which shall mean, among other things, that the City is not otherwise entitled to retain proceeds from progress payments as elsewhere provided in the Contract or under applicable law, the securities shall be returned to the Contractor. The City shall, within its sole discretion, determine whether the amount of the securities on deposit with the City or escrow agent is equal to or greater than the amount of estimated retention of progress payments that could otherwise be held by the City if the Contractor had not elected to substitute same with securities.

#### 9-3.2.5.2 Deposit of Retention Proceeds with an Escrow Agent

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

#### 9-3.2.5.3 Subcontractor Entitlement to Interest

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

#### 9-3.2.5.4 Securities Eligible for Investment

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

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

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

### 9-3.2.5.6 Inconsistencies with Prevailing Statutory Requirements

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

## 9-4 AUDIT

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

## **SECTION 10. CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN**

### 10.1 GENERAL

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

- “Approved”
- “Further Explanation Required”: The Engineer will return the WMP to the Contractor with questions about the WMP. The Contractor shall resubmit plan with each of the City’s questions answered thoroughly.
- “Denied”: The Engineer will indicate the reasons for denial. The Contractor shall then resubmit a new WMP that complies with the requirements of this Section or request an Infeasibility Exemption.
- “Infeasibility Exemption Approved”

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

## 10-2 DEFINITIONS

- a) "Construction" means the building of any facility or structure or any portion thereof including any tenant improvements to an existing facility or structure.
- b) "Construction and Demolition Debris" means used or discarded materials removed from premises during construction of the Project.
- c) "Conversion Rate" means the rate set forth in the standardized Conversion Rate Table approved by the City Council pursuant to this Section for use in estimating the volume or weight of materials identified in a Construction and Demolition Waste Reduction and Recycling Plan.
- d) "Divert" means to use material for any purpose other than disposal in a landfill. Diversion credit is given for source reduction (waste reduction), recycling, and composting.
- e) "Diversion Requirement" means the diversion of at least 50% of the total Construction and Demolition Debris generated by a Project via reduction (source reduction), reuse or recycling, unless the Contractor has been granted an Infeasibility Exemption, in which case the Diversion Requirement shall be the maximum feasible diversion rate established by the Engineer.
- f) "Recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace.
- g) "Renovation" means any change, addition, or modification in an existing structure.
- h) "Reuse" means further or repeated use of Construction or Demolition Debris. An example is the reuse of crushed concrete as road base or as aggregate on the construction site.
- i) "Salvage" means the controlled removal of Construction or Demolition Debris from project for the purpose of recycling, reuse, or storage for later recycling or reuse.
- j) "Construction and Demolition Waste Management Plan" means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor/Contractor for any Covered or Noncovered Project that indicates the estimated diversion that the Contractor/Contractor anticipates in diverting from disposal.
- k) "Construction and Demolition Waste Management Report" means a completed form, approved by the Engineer for the purpose of compliance with this Section, submitted by the Contractor for any Project that documents the disposal and diversion tonnages and destinations.

## 10-3 INFEASIBILITY EXEMPTION

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

specific circumstances that the Contractor believes make it infeasible to comply with the Diversion Requirement.

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

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

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

#### **10-4 DIVERSION PROGRAM**

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

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

#### **10-5 ADDITIONAL INFORMATION**

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

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

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

**CITY OF MANHATTAN BEACH**  
**Construction & Demolition Waste Management Plan**

The Contractor shall list all materials that will be reused, recycled or disposed from the Project.

**The required goal is to reuse or recycle at least 50% of project waste.**

Use **tons** to quantify total estimated waste and percentages of materials (see conversion table below). Ask your hauler, recycler or site cleanup vendor to assist you with the WMP.

**A COPY OF THIS WMP AND RECEIPTS OF ALL RECYCLING AND DISPOSAL SHALL BE SUBMITTED BEFORE FINAL PAYMENT WILL BE MADE BY THE CITY.**

**Project Name:** **STREET RESURFACING IMPROVEMENT PROJECT – CYCLE 1**

**Location:** \_\_\_\_\_

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

**Total Bid Price:** \$\_\_\_\_\_

**Requesting Infeasibility Exemption:**  Yes  No

**Contractor Name:** \_\_\_\_\_ **Contract Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Contact Phone:** \_\_\_\_\_

**Recycler:** \_\_\_\_\_ **Recycler Contact:** \_\_\_\_\_

**Recycler Address:** \_\_\_\_\_ **Recycler Contact Phone:** \_\_\_\_\_

<b>CITY USE ONLY</b>		
	<b>Application (Date)</b>	<b>Final (Date)</b>
Approved	_____	_____
Further explanation needed (see attached)	_____	_____
Denied	_____	_____
Infeasibility Exemption Approved	_____	_____
Reviewed By	_____	_____

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

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

## CITY OF MANHATTAN BEACH

## Construction &amp; Demolition Waste Management Plan Table

Project Name: **STREET RESURFACING IMPROVEMENT PROJECT – CYCLE 1**

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	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>					

If you are requesting an infeasibility exemption and the estimated amount reused/recycled is less than 50%, please explain why (attach additional sheets if necessary):

---

If the actual amount reused/recycled is less than 50%, please explain why:

---

Prepared by (please print): \_\_\_\_\_ Date: \_\_\_\_\_

Contractor Signature: \_\_\_\_\_ Phone Number: \_\_\_\_\_

---

\*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.)

## 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 that 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 estimated these numbers.

Material	Lbs/cy	Tons/cy
Asphalt	1,400 lbs/cy	0.7 tons/cy
Brick	2.430 lbs/cy	1.21 tons/cy
Cardboard	100 lbs/cy	0.05 tons/cy
Concrete	2,600 lbs/cy (Sources range from 1,000 to 4,000)	1.3 tons/cy
Dirt/Soils	2,660 lbs/cy	1.33 tons/cy
Drywall	700 lbs/cy	0.35 tons/cy
Wood (chipped)	300 – 650 lbs/cy	0.15 – 0.3 tons/cy
Mixed C&D Debris	900 lbs/cy	0.45 tons/cy
Mixed Waste/Trash	100 – 350 lbs/cy	0.5 – 0.175 tons/cy

## **SECTION 11. ADDITIONAL TERMS**

### **11-1 NONDISCRIMINATORY EMPLOYMENT**

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

### **11-2 NOTICE TO PROCEED**

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

### **11-3 CONTRACTOR'S RESPONSIBILITY FOR WORK**

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

### **11-4 PROCEDURE IN CASE OF DAMAGE TO PUBLIC PROPERTY**

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

### **11-5 REMOVAL OF INTERFERING OBSTRUCTIONS**

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

## **11-6 SOILS ENGINEERING AND TESTING**

A certified materials testing firm may be retained by the City to perform materials tests during the Contractor's entire operation to ascertain compliance with the Contract requirements. The City shall be responsible for the first series of tests. If the initial tests do not meet the Contract requirements, the Contractor shall bear the cost of all subsequent tests.

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

## **11-7 ACCESS TO PRIVATE PROPERTY**

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

## **11-8 WORKING DAYS AND HOURS**

The Contractor shall do all Work between the hours of 9:00 p.m. to 5:00 a.m., Monday through Friday. No Work will be allowed on Saturday, Sunday or City holidays listed on the City's website unless specifically mentioned in the Contract Documents or authorized by the City Engineer.

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

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

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

## **11-9 CLAIM DISPUTE RESOLUTION**

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

All claims arising out of or related to the Contract Documents or the Project, and the consideration and payment of such claims, are subject to the Government Claims Act (Government Code Section 810 *et seq.*) with regard to filing claims. All such claims are also subject to Public Contract Code Section 9204 and Public Contract Code Section 20104 *et seq.* (Article 1.5), where applicable. The Contract hereby incorporates those provisions as though fully set forth herein. Thus, the Contractor or any Subcontractor must file a claim in accordance with the Government Claims Act as a prerequisite to filing a construction claim in compliance with Section 9204 and

Article 1.5 (if applicable), and must then adhere to Article 1.5 and Section 9204, as applicable, pursuant to the definition of "claim" as individually defined therein.

#### **11-10 THIRD PARTY CLAIMS**

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

#### **11-11 COMPLIANCE WITH LAWS**

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

#### **11-12 CONTRACTOR'S REPRESENTATIONS**

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

#### **11-13 CONFLICTS OF INTEREST**

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

#### **11-14 APPLICABLE LAW**

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

#### **11-15 TIME**

Time is of the essence in these Contract Documents.

#### **11-16 INDEPENDENT CONTRACTOR**

The Contractor and Subcontractors shall at all times remain, as to the City, wholly independent contractors. Neither the City nor any of its officials, officers, employees or agents shall have control over the conduct of the Contractor, Subcontractors, or any of their officers, employees, or

agents, except as herein set forth, and the Contractor and Subcontractors are free to dispose of all portions of their time and activities that they are not obligated to devote to the City in such a manner and to such Persons that the Contractor or Subcontractors wish except as expressly provided in these Contract Documents. The Contractor and Subcontractors shall have no power to incur any debt, obligation, or liability on behalf of the City, bind the City in any manner, or otherwise act on behalf of the City as agents. The Contractor and Subcontractors shall not, at any time or in any manner, represent that they or any of their agents, servants or employees, are in any manner agents, servants or employees of the City. The Contractor and Subcontractors agree to pay all required taxes on amounts paid to them under the Contract, and to indemnify and hold the City harmless from any and all taxes, assessments, penalties, and interest asserted against the City by reason of the independent contractor relationship created by the Contract Documents. The Contractor shall include this provision in all contracts with all Subcontractors.

#### **11-17 CONSTRUCTION**

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

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

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

#### **11-19 TERM**

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

#### **11-20 NOTICE**

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

#### **11-21 SEVERABILITY**

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

## **SPECIAL PROVISIONS**

## PART I: SPECIAL INSTRUCTIONS

### I. CONSTRUCTION SCHEDULE

The Contractor shall conduct any operations and perform all Work pertaining to the Project, between the hours of 9:00 p.m. and 5:00 a.m., and shall not perform any Work pertaining to the Project on Saturday, Sunday, or holidays at any time except as approved by the Engineer.

No work shall be performed on the following City observed holidays:

New Year's Day	Wednesday	January 1, 2020
Martin Luther King Jr.'s Birthday	Monday	January 20, 2020
Presidents Day	Monday	February 17, 2020
Memorial Day	Monday	May 25, 2020
Independence Day	Friday	July 3, 2020
Labor Day	Monday	September 7, 2020
Columbus Day	Monday	October 12, 2020

Night or Nighttime – is equivalent of “darkness” defined by California Vehicle Code (CVC) Section 280: “Darkness” is any time from one-half hour after sunset to one-half hour before sunrise and any other time when visibility is not sufficient to render clearly discernible any person or vehicle on the highway at a distance of 1000 feet.

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

#### Order or Staging of Work

The contractor shall construct the project in the following four (4) phases for the project streets. Construction work must begin within 30 calendar days from the 1<sup>st</sup> Notice to Proceed, “Notice to Proceed to Fulfill Preconstruction Requirements and Order Materials” issued by the City. **Failure to begin construction within 30 calendar days shall result in a \$200 per day penalty beginning on Day 31. Additionally, failure by the Contractor to complete the project within the 60 working days shall result in liquidated damages of \$1,000 per day.**

One phase must be completed for all streets before subsequent phases can commence:

- Phase 1: All demolition, clearing, grubbing, removals, monument preservation survey, and other preparations. Reconstruction of curb ramps, curbs, driveways, and sidewalk.
- Phase 2: Reconstruction of curb ramps, curbs, driveways, and sidewalk.
- Phase 3: AC digouts, Utility cover adjustments, Cold Mill, AC base course, AC surface course and other pavement works per Plans and Specifications, and Profilograph. **Paving must be completed within 48 hours after cold milling**

**a street. No Street will be allowed to be milled without new pavement over a weekend.**

- Phase 4: Installation of striping, markers, markings, signage, and traffic loops.

**II. STORAGE OF EQUIPMENT AND MATERIALS**

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

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

**III. CONSTRUCTION STAGING AREAS**

Contractor shall be responsible 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.

**IV. TEMPORARY TRAFFIC CONTROL / NOTIFICATION OF AFFECTED SCHOOLS**

Temporary traffic control and/or the queuing of construction vehicles (including delivery trucks) will be prohibited on residential streets during construction hours.

The Contractor shall conduct any operations and perform all Work pertaining to the Project, between the hours of 9:00 p.m. and 5:00 a.m., and shall not perform any Work pertaining to the Project on Saturday, Sunday, or holidays at any time except as approved by the Engineer.

Contractor shall notify the all impacted businesses of the start of paving operations at least five (5) working days before paving begins.

**V. CONTRACTOR'S RESPONSIBILITY**

1. The Contractor shall take all necessary measures to obtain a normal flow of traffic to prevent accidents and to protect the work throughout the construction stages until completion of the work. The Contractor shall make the necessary arrangements to provide and maintain barriers, cones, guards, barricades, and construction warnings and regulatory signs. The Contractor shall take measures necessary to protect all other portions of the work during construction and until completion, providing and maintaining all necessary barriers, barricade lights, guards, temporary crossovers and watchmen.

In addition to the foregoing traffic control and safety measures, the Contractor shall undertake immediately to implement any measures 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.

2. When nighttime work is being performed, enhance traffic controls to provide added visibility and driver guidance, increase protection for workers, and floodlights should be used to illuminate the work area, equipment crossings, and other areas. Temporary Traffic Control (TTC) zone and approaches may be lighted.
  - a. Guidance: Care should be taken to ensure that the lighting used for nighttime work does not cause blinding. Refer to California Vehicle Code (CVC) 21466.5 for light impairing driver's vision. The adequacy of the floodlight placement and elimination of potential glare should be determined by driving through and observing the floodlighted area from each direction on all approaching roadways after the initial floodlight setup, at night, and periodically.
  - b. Support: For construction lighting Refer to Construction Safety Order in the California Code of Regulations (Title 8, Division 1, Chapter 4, Subchapter 4, Article 3, Section 1523 - Illumination). See CAMUTCD Section 1A.11 for information regarding this publication. Desired illumination levels vary depending upon the nature of the task involved. An average horizontal luminance of 10 foot candles (108 lux) can be adequate for general activities. Tasks requiring high levels of precision and extreme care can require an average horizontal luminance of 20 foot candles.
  - c. Special Devices: These include changeable message board signs, hazard identification beacons, flags, and warning lights. Intrusion warning devices may be used to alert workers to the approach of errant vehicles.
3. For nighttime activity, flaggers shall wear high-visibility safety apparel that meets the Performance Class 3 requirements of the ANSI/ISEA 107-2004 publication entitled "American National Standard for High-Visibility Apparel and Headwear" (see CAMUTCD Section 1A.11), or equivalent revisions, and labeled as meeting the ANSI 107-2004, or equivalent revisions, standard performance for Class 3 risk exposure. The apparel background (outer) material color shall be fluorescent orange-red, fluorescent yellow-green, or a combination of the two as defined in the ANSI standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. The retroreflective safety apparel shall be designed to clearly identify the wearer as a person. At night, flagger stations shall be illuminated
4. All signs used at night shall be either retroreflective with a material that has a smooth, sealed outer surface or illuminated to show the same shape and similar color both day and night. TTC zone signs used at night shall maintain retroreflectivity at or above the minimum levels in CAMUTCD Table 2A-3.
5. For nighttime use, cones shall be retroreflectorized or equipped with lighting devices for maximum visibility. Retroreflectorization of cones that are 28 to 36 inches in height shall be provided by a 6-inch wide white band located 3 to 4 inches from the top of the cone and an additional 4-inch wide white band located approximately 2 inches below the 6-inch band. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.

6. The Contractor shall notify the MTA Bus Stops and Zones Dispatcher and any other affected transit services at least two working days prior to construction and any impacts. Evidence of such notification shall be submitted to the City at least two working days prior to construction and any impacts. Impacted bus Metro 125 and Beach Cities Transit bus 109.
7. 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.
8. Contractor shall coordinate all work in the vicinity of schools with the school administrators to minimize construction impacts on special dismissal and school event days.
9. The contractor shall be responsible for the establishment, maintenance and decommission when considered appropriate by the Engineer of the following:
  - a. Protection and restoration of existing improvements: Contractor shall protect, relocate, repair, replace or re-establish all existing improvements within the project limits which are not designated for removal (i.e. signs, markings, striping, posts, curb, gutter, sidewalk, ADA detectable warning devices, asphalt, plants, irrigation infrastructure, fences, walls, structures, survey control monumentation, etc.) which are damaged or removed as a result of its operations or as required by the Plans and Specifications. Relocations, repairs, replacements or re-establishments shall be at least equal to the existing improvements and shall match such improvements in finish and dimensions at contractor's expense to the satisfaction of the Engineer.
  - b. Paths of travel: Contractor is required to provide a pedestrian management plan to show how pedestrians are detoured around each construction area
  - c. Construction work within any pedestrian pathways: No travel lanes, pedestrian xings or other means of accessibility to any school facilities shall be disturbed by construction activities between 9:00 PM to 5:00 AM on school days unless otherwise approved by the Engineer.
10. Contractor shall coordinate all work in the vicinity of schools with the school administrators to minimize construction impacts on special dismissal and school event days.
11. The contractor shall protect the new concrete for sufficient time to avoid vandalism or traffic damage to the surface. Contract shall use steel plates to protect fresh concrete if left overnight along with appropriate and safe traffic control devices.
12. Protection of existing utility infrastructure, conduits, landscape planting and irrigation systems. Repairs to damaged irrigation lines or sprinkler heads shall be made within 48 hours.
13. Finish grading of the soil adjacent to new sidewalk and areas disturbed during construction operations if excavation was required. Parkway fill materials shall be

Class A topsoil. Repair lawn areas that may have been damaged with suitable top soil and reseeding.

14. Do not cause any damage to landscaping, retaining walls, curbs, sprinkler heads, utility covers or other objects adjacent to sidewalks. If your equipment does cause damage to any existing improvements, the City's Project Manager/Supervising Public Works Inspector must be notified immediately and damages must be repaired at the CONTRACTOR's expense within 24 hours of the time the damage occurred.
15. The Contractor shall repair and replace all landscaped areas damaged by construction activity within 48 hours to the satisfaction of the City Engineer. The Contractor shall re-sod lawns (with like materials) that have been damaged or removed using suitable topsoil. Plant material shall be replaced with like size and material.
16. The Contractor shall clean and sweep all work areas by the end of each workday. No tree roots are to be trimmed/cut without prior written approval from the city's arborist Ernest Area: (310-802-5305). The Contractor shall remove all debris (including tree roots that have been approved for cutting by Ernest Area) by the end of each workday. The Contractor shall remove any barricades used to protect the construction site in a timely fashion. No open excavation will be permitted to extend into a weekend or holiday.
17. The Contractor shall furnish and install all necessary striping, markings and plastic reflective pavement markers (white or yellow) to provide temporary pavement striping, markers and markings while construction operations are underway. The temporary pavement markers shall be placed ten (10) feet on center. The temporary striping, markers and markings shall be maintained until the permanent striping and markings are applied. The work to furnish, install and maintain ALL temporary striping, markers and markings shall be included under the various items of work.
18. The Contractor shall maintain the construction site during non-working hours in a clean and safe condition. The Contractor will replace any newly laid concrete that is damaged or scarred. The Contractor shall be available for immediate mitigation measures should the City Engineer decide that appropriate action is necessary during non-working hours.
19. At the Pre-Construction meeting; the City will require the Contractor to furnish a cellular phone number that will be furnished to residents with questions or complaints regarding the Contractor's work. The Contractor should designate a public liaison person to handle all resident inquiries. The Contractor shall respond to residents' inquiries within one hour of the call during normal working hours (7:30am to 4:30 pm). When dealing with residents, common courtesy is required.
20. The Contractor will be responsible for delivering City prepared construction notification letters to all residents or business owners affected by any of the contract work. The expected time between the delivery of the notification and the start of work is seven to ten calendar days. Special consideration should be paid

to residents or business owners whose access will be affected by the work such that these people know exactly which day operations will start and end. It is imperative that the Contractor follow through on construction schedules that have been shared with city staff, residents and business owners. Changes to previously published information will necessitate the distribution of additional notices and could result in a delay in the work at no cost to the City.

21. Reflective tape shall be used at the edges of all steel plates in sidewalk or crosswalk areas. The Contractor shall control his work so as to minimize the use of steel plates within sidewalk and crosswalk areas.
22. Thermoplastic striping and markings shall be used and may be applied a minimum of seven (7) days after the paving operations. Raised pavement markers shall be applied after the striping.
23. Dust control ordered by the Engineer to be applied on Saturdays, Sundays or holidays will be included in the Contract price for dust control and no additional compensation will be allowed therefor.
24. The Contractor shall be responsible to identify all survey markers prior to start construction and submit to Resident Engineer. Any damage survey marker during construction must be restored by License Land Surveyor and record of survey filed with County and evidence provided to the City.

## **PART II: STANDARD AND SPECIAL TECHNICAL PROVISIONS**

# **STANDARD & SPECIAL TECHNICAL PROVISIONS**

PROJECT NO. P-897

## **ROSECRANS AVENUE STREET RESURFACING PROJECT**

### **PROJECT SPECIFIC SCOPE OF WORK**

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

- Reconstruction of PCC curb access ramps to ADA standards and driveways at designated locations.
- Pavement rehabilitation as specified on Rosecrans Avenue from Aviation Blvd to Village Dr.
- Re-establishment of disturbed and impacted traffic striping, pavement markings, signs, utility covers (manholes, vaults, meters), traffic loops, etc.

### **MOBILIZATION**

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

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

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

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

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

## **MONUMENT PRESERVATION, RESTORATION AND SURVEYING**

The Contractor is responsible for hiring an independent surveyor to tie-out all monuments before construction work begins and re-establish those monuments after work is done. Work shall include the filing of corner records at the County Surveyor's Office with copies sent to the City. Additionally, the Contractor's Surveyor shall provide any necessary construction staking associated with the plans. Contractor to complete and submit the Monument Inventory List in Appendix II within 2 weeks of receiving the City's NTP.

Full compensation for compliance with the preceding requirements shall be considered as being included in the bid price for MONUMENT PRESERVATION, RESTORATION, AND SURVEYING and no additional compensation will be allowed therefor.

## **NOTIFICATION OF RESIDENTS AND BUSINESSES**

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

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

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

The Contractor shall also post printed "NO PARKING-TOW AWAY" signs at one-hundred-foot (100') maximum spacing along each side of the affected streets for seventy-two (72) hours prior to the commencement of the street improvement work. The Contractor shall document the day, date and time the "NO PARKING" signs were posted. Posting of signs on trees and utility poles will not be allowed.

The signs shall contain the day, date, hours and municipal code that parking will be prohibited on that particular street and shall meet the requirements of City of Manhattan Beach Standard Plan MBSI-182A-0. The signs shall be removed immediately upon completion of work that will prohibit parking.

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

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

## **STORMWATER POLLUTION CONTROL/BEST MANAGEMENT PRACTICES (BMP)**

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

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

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/wqo12.shtml](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo12.shtml)

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

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

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

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

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

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

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

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

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

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

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

VEGETATIVE STABILIZATION	Scheduling of Planting Preservation of Existing Vegetation Temporary Seeding and Planting Mulching
PHYSICAL STABILIZATION	Geotextiles and Mats Soil Stabilizer/Dust Control Temporary Stream Crossing Stabilized Construction Roadway Stabilized Construction Entrance
RUNOFF DIVERSION	Sodding, Grass Plugging, and Vegetative Buffer strips Earth Dikes, Drainage Swales, and Lined Ditches Top and Toe of Slope Diversion Ditches/Berms Slope Drains and Subsurface Drains
VELOCITY REDUCTION	Flared Culvert End Sections Outlet Protection/Velocity Dissipation Devices Check Dams Slope Roughening/Terracing/Rounding
SEDIMENT TRAPPING	Silt Fences Straw Bale Barrier Sand Bag Barrier Brush or Rock Filter Storm Drain Inlet Protection Sediment Traps Sediment Basin

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

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

The Contractor shall employ or subcontract with a Qualified SWPPP Practitioner (QSP), who must be responsible for the implementation of all elements of the SWPPP, including non-stormwater and stormwater visual observations, sampling and analysis, preparation and timely submittal of

periodic inspection reports, Rain Event Action Plans and/or other documentation or actions prescribed by the SWPPP. The Qualifications, certifications and experience of the Contractor's proposed QSP shall be included in the SWPPP submittal.

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

Full compensation for the implementation of BMPs, including the construction, removal, and the furnishing of all necessary labor, equipment, and materials, shall be considered as included in the price bid for STORM WATER POLLUTION CONTROL, BMPs, NPDES Compliance and Permit.

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

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

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

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

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

SWPPP shall remain on the construction site while site is under construction, during working hours, commencing with the initial construction activity and ending with Notice of Termination.

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

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

Full compensation for preparation of the SWPPP, all revisions to the SWPPP, and all other related costs, excluding the WDID permit fee from the State Water Resources Control Board, shall be considered as included in the bid price for STORM WATER POLLUTION CONTROL, BMPs, NPDES Compliance and Permit.

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

## **TEMPORARY TRAFFIC CONTROL**

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

Night or Nighttime – is equivalent of "darkness" defined by California Vehicle Code (CVC) Section 280: "Darkness" is any time from one-half hour after sunset to one-half hour before sunrise and any other time when visibility is not sufficient to render clearly discernible any person or vehicle on the highway at a distance of 1000 feet.

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

1. Standard and Special Technical Provisions
2. Temporary Traffic Control Plans (to be prepared by the contractor)
3. California Manual on Uniform Traffic Control Devices
4. Work Area Traffic Control Handbook
5. Standard Specifications

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

1. All streets shall remain open to through traffic at all times except when street closure is approved by the Engineer. Per subsection 7-10.1, "Safety", of these special provisions, overnight and long terms street closures can only be approved by City Council, which will require a minimum 4 week lead time. The Contractor shall make provisions to allow local traffic access to the closed streets. The local traffic consists of, but is not limited to, residences, church congregations, post offices, meter readers, transit operators, trash pickup, school buses, and emergency vehicles. The Contractor shall provide a smooth travel way and either a flagger and/or signing to direct traffic.
2. The Contractor shall be responsible for the preparation of Temporary Traffic Control Plans as necessary for the work. The Temporary Traffic Control Plans shall be submitted on 24" X 36" bond paper, signed and stamped by a California Registered Traffic Engineer, and transmitted to the City for approval no later than fourteen (14) calendar days prior to the scheduled commencement of work. Comments and corrections shall be returned to the Contractor within five (5) working days. The Temporary Traffic Control Plans shall conform to the requirements listed in these Technical Provisions; California MUTCD; the Work Area Traffic Control Handbook; and the Standard Specifications.
3. When nighttime work is being performed, enhance traffic controls to provide added visibility, driver guidance, and increase protection for workers, and floodlights should be used to illuminate the work area, equipment crossings, and other areas. Temporary Traffic Control (TTC) zone and approaches may be lighted.
  - a. Guidance: Care should be taken to ensure that the lighting used for nighttime work does not cause blinding. Refer to California Vehicle Code (CVC) 21466.5 for light impairing driver's vision. The adequacy of the floodlight placement and elimination of potential glare should be determined by driving through and observing the floodlighted area from each direction on all approaching roadways after the initial floodlight setup, at night, and periodically.
  - b. Support: For construction lighting Refer to Construction Safety Order in the California Code of Regulations (Title 8, Division 1, Chapter 4, Subchapter 4, Article 3, Section 1523 - Illumination). See CAMUTCD Section 1A.11 for information regarding this publication. Desired illumination levels vary depending upon the nature of the task involved. An average horizontal luminance of 10 foot candles (108 lux) can be adequate for general activities. Tasks requiring high levels of precision and extreme care can require an average horizontal luminance of 20 foot candles.
  - c. Special Devices: These include changeable message board signs, hazard identification beacons, flags, and warning lights. Intrusion warning devices may be used to alert workers to the approach of errant vehicles.

- d. For nighttime activity, flaggers shall wear high-visibility safety apparel that meets the Performance Class 3 requirements of the ANSI/ISEA 107-2004 publication entitled "American National Standard for High-Visibility Apparel and Headwear" (see CAMUTCD Section 1A.11), or equivalent revisions, and labeled as meeting the ANSI 107-2004, or equivalent revisions, standard performance for Class 3 risk exposure. The apparel background (outer) material color shall be fluorescent orange-red, fluorescent yellow-green, or a combination of the two as defined in the ANSI standard. The retroreflective material shall be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and shall be visible at a minimum distance of 1,000 feet. The retroreflective safety apparel shall be designed to clearly identify the wearer as a person. At night, flagger stations shall be illuminated
- e. All signs used at night shall be either retroreflective with a material that has a smooth, sealed outer surface or illuminated to show the same shape and similar color both day and night. TTC zone signs used at night shall maintain retroreflectivity at or above the minimum levels in CAMUTCD Table 2A-3 and CAMUTCD section 2A.07.
- f. For nighttime use, cones shall be retroreflectorized or equipped with lighting devices for maximum visibility. Retroreflectorization of cones that are 28 to 36 inches in height shall be provided by a 6-inch wide white band located 3 to 4 inches from the top of the cone and an additional 4-inch wide white band located approximately 2 inches below the 6-inch band. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.

4. Consistent with the City's Right of Way Permit, traffic signal actuation shall be maintained at all times. In-pavement loop detectors damaged by construction shall be repaired within 72 hours, or a suitable temporary replacement system shall be provided. Approved alternatives include microwave or video detection systems (wireless allowed). Installation shall be accomplished by the Contractor, subject to the approval of the Engineer prior to the start of construction. After completion of the roadway construction and final paving in place, the inductive loops shall be restored and operable prior to the removal of the temporary detection system, unless otherwise shown on the Plans or required by the Technical Provisions.
5. The Contractor shall furnish and properly install, construct, erect, use and continuously inspect and maintain, twenty-four (24) hours per day, seven (7) days per week, which includes holidays, all the devices, equipment and materials and all temporary and permanent pedestrian and driving surfaces as necessary to provide for the safety and convenience of, and to properly warn, guide, control, regulate, channelize and protect the vehicular traffic, pedestrian traffic, project workers, and the public throughout the entire limits of the work activity and beyond the limits as necessary to include areas affecting or affected by the work, from the date of Notice to Proceed to the completion and acceptance of the work.
6. High-level warning devices (telescoping flag trees) are required to be maintained in an upright position at all times for work being performed within the roadway unless otherwise specifically approved by the Engineer.

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

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

8. Type III barricades, no less than 6 ft. in length and equipped with two (2) Type "N" markers each and two (2) portable flashing beacons each, shall be used for lane closure, except as otherwise specifically approved by the Engineer for minor maintenance work of no more than one (1) working day's duration, on weekdays, or on holidays only, and limited to the hours between 9:00 p.m. and 5:00 a.m. The barricades shall be placed across the full roadway lane at each point of closure with the distance between barricades, or between barricades and curbs, not exceeding 3 ft. except that one (1) 11 ft. wide gap between barricades shall be provided at the center of the street. Barricades to the right of the street's center, facing the inbound vehicular traffic, shall also be equipped with one (1) R11-2, "Road Closed" sign, one (1) R11-4, "Road Closed to Thru Traffic," sign, and a Type P warning sign.
9. Channelizers shall be surface mounted type and shall be furnished, placed and maintained at the locations shown on the Plans or as approved by the Engineer, and shall conform to the provisions in Subsection 12-3.05, "Channelizers," of the 2015 State Standard Specifications and these Standard and Special Technical Provisions.

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

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

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

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

No reduction of the traveled way width shall be permitted on any City street before 9:00p.m. nor after 5:00 a.m., on weekends or holidays, or when active work is not being done, unless otherwise approved by the Engineer.

12. Properly trained and experienced flaggers shall be provided to direct traffic when the traffic is to be interrupted and at other such time as is necessary to safety through or around the work area and when so directed by the Engineer.
13. Convenient and safe pedestrian access to schools, churches, occupied residential and business property shall be maintained at all times. Access to mailboxes shall be maintained at all times such that the postal delivery service is not interrupted. Trash pick-up services shall not be interrupted. Access to vacant and unused property may be restricted when approved by the Engineer. Both vehicular and pedestrian access shall be maintained at all times to all other property except as otherwise specifically authorized in writing by the Engineer.
14. Vehicular access to business, school, and church driveways shall be maintained at all times during construction.
15. Traffic control and safety devices and equipment being used that becomes damaged, destroyed, faded, graffitied, encrusted, soiled, misplaced, worn out, inoperative, lost, or stolen shall be promptly repaired, refurbished, or replaced. Traffic control and safety devices and equipment that are displaced or not in an upright position from any cause shall be promptly returned or restored to their proper position.
16. An unobstructed view of all signs and warning devices including, but not limited to, stop signs, stop ahead signs, street name signs, and other regulatory, warning and construction signs, markers, and warning devices shall be maintained at all times. **All speed limit signs shall be black on white with signs at either end of the project notifying the motoring public that fines are doubled in construction zones.** Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles. No trucks or other equipment or materials shall be stopped, parked, or otherwise placed so as to obscure the signs, markers and devices from the view of the vehicular and pedestrian traffic to which it applies. All signs used at night shall be either retroreflective with material that has a smooth, sealed outer surface or illuminated to show the same shape and similar color both day and night. The requirement for sign illumination shall not be considered to be satisfied by street, highway, or strobe lighting. **Temporary Traffic Control (TTC) zone signs used at night shall maintain retroreflectivity at or above the minimum levels in MUTCD Table 2A-3 as follows.**

**Table 2A-3. Minimum Maintained Retroreflectivity Levels<sup>1</sup>**

Sign Color	Sheeting Type (ASTM D4956-04)					Additional Criteria		
	Beaded Sheeting			Prismatic Sheeting				
	I	II	III	III, IV, VI, VII, VIII, IX, X				
White on Green	W*; G ≥ 7	W*; G ≥ 15	W*; G ≥ 25	W ≥ 250; G ≥ 25		Overhead		
	W*; G ≥ 7	W ≥ 120; G ≥ 15				Post-mounted		
Black on Yellow or Black on Orange	Y*; O*	Y ≥ 50; O ≥ 50				2		
	Y*; O*	Y ≥ 75; O ≥ 75				3		
White on Red	W ≥ 35; R ≥ 7				4			
Black on White	W ≥ 50				—			

<sup>1</sup> The minimum maintained retroreflectivity levels shown in this table are in units of cd/lx/m<sup>2</sup> measured at an observation angle of 0.2° and an entrance angle of -4.0°.

<sup>2</sup> For text and fine symbol signs measuring at least 48 inches and for all sizes of bold symbol signs

<sup>3</sup> For text and fine symbol signs measuring less than 48 inches

<sup>4</sup> Minimum sign contrast ratio ≥ 3:1 (white retroreflectivity ÷ red retroreflectivity)

\* This sheeting type shall not be used for this color for this application.

Bold Symbol Signs		
<ul style="list-style-type: none"> <li>W1-1,2 – Turn and Curve</li> <li>W1-3,4 – Reverse Turn and Curve</li> <li>W1-5 – Winding Road</li> <li>W1-6,7 – Large Arrow</li> <li>W1-8 – Chevron</li> <li>W1-10 – Intersection in Curve</li> <li>W1-11 – Hairpin Curve</li> <li>W1-15 – 270 Degree Loop</li> <li>W2-1 – Cross Road</li> <li>W2-2,3 – Side Road</li> <li>W2-4,5 – T and Y Intersection</li> <li>W2-6 – Circular Intersection</li> <li>W2-7,8 – Double Side Roads</li> </ul>	<ul style="list-style-type: none"> <li>W3-1 – Stop Ahead</li> <li>W3-2 – Yield Ahead</li> <li>W3-3 – Signal Ahead</li> <li>W4-1 – Merge</li> <li>W4-2 – Lane Ends</li> <li>W4-3 – Added Lane</li> <li>W4-5 – Entering Roadway Merge</li> <li>W4-6 – Entering Roadway Added Lane</li> <li>W6-1,2 – Divided Highway Begins and Ends</li> <li>W6-3 – Two-Way Traffic</li> <li>W10-1,2,3,4,11,12 – Grade Crossing Advance Warning</li> </ul>	<ul style="list-style-type: none"> <li>W11-2 – Pedestrian Crossing</li> <li>W11-3,4,16-22 – Large Animals</li> <li>W11-5 – Farm Equipment</li> <li>W11-6 – Snowmobile Crossing</li> <li>W11-7 – Equestrian Crossing</li> <li>W11-8 – Fire Station</li> <li>W11-10 – Truck Crossing</li> <li>W12-1 – Double Arrow</li> <li>W16-5P,6P,7P – Pointing Arrow Plaques</li> <li>W20-7 – Flagger</li> <li>W21-1 – Worker</li> </ul>

Fine Symbol Signs (symbol signs not listed as bold symbol signs)
Special Cases

- W3-1 – Stop Ahead: Red retroreflectivity ≥ 7
- W3-2 – Yield Ahead: Red retroreflectivity ≥ 7; White retroreflectivity ≥ 35
- W3-3 – Signal Ahead: Red retroreflectivity ≥ 7; Green retroreflectivity ≥ 7
- W3-5 – Speed Reduction: White retroreflectivity ≥ 50
- For non-diamond shaped signs, such as W14-3 (No Passing Zone), W4-4P (Cross Traffic Does Not Stop), or W13-1P,2,3,6,7 (Speed Advisory Plaques), use the largest sign dimension to determine the proper minimum retroreflectivity level.

17. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall yield to the public traffic at all times, except where the traffic is being controlled by police officers, fire officers, properly trained and experienced flaggers, or at traffic signalized intersections.
18. Stockpiling or storage of materials on any public right of way or parking area will not be allowed without the specific written permission of the Engineer. Materials spilled along or on the right-of-way or parking area shall be removed completely and promptly. All stockpile and storage areas shall be maintained in a safe, neat, clean, and orderly condition, and shall be restored to equal or better than original condition upon completion of the work.
19. On projects involving work on, closure of, or partial closure of existing streets, and where vehicular access to the abutting property must be restricted, the work shall be so selected, arranged and scheduled that the person(s) requiring access to the abutting property and

residents along the streets affected will be able to park within a reasonable distance of not more than 500 ft. from their homes or destination. In addition, no two adjoining streets shall be closed at the same time, except as otherwise approved by the Engineer. Residents must be given written notice of such restrictions a minimum of 48 hours in advance.

20. When work has been completed on a particular street or has been suspended or rescheduled, and the street is to be opened to vehicular traffic, all equipment, "NO PARKING" signs, other obstructions, and unnecessary traffic control devices and equipment shall be promptly removed from that street, except as otherwise approved by the Engineer.
21. Should the Contractor be neglectful, negligent, or refuse, fail, or otherwise be unavailable to promptly, satisfactorily, and fully comply with the provisions specified and referred to herein above, the City reserves the right to correct or mitigate any situation, that in the sole opinion of the Engineer, constitutes a serious deficiency or serious case of noncompliance, by any means at its disposal at the Contractor's or permittee's expense, and shall deduct the cost therefor from the Contractor's progress or final payments. Such corrective action taken by the City shall not reduce or abrogate the Contractor's legal obligations and liability for proper traffic control and safety measures and shall not serve to transfer the obligations and liabilities from the Contractor to the City or the City's agents.
22. Placement of a traffic control device should be within the road user's view so that adequate visibility is provided. To aid in conveying the proper meaning, the traffic control device should be appropriately positioned with respect to the location, object, or situation to which it applies. **The location and legibility of the traffic control device should be such that a road user has adequate time to make the proper response in both day and night conditions.**  
Traffic control devices should be placed and operated in a uniform and consistent manner. Unnecessary traffic control devices should be removed. The fact that a device is in good physical condition should not be a basis for deferring needed removal or change. Traffic control devices, which are used on a part-time basis, should be in operation only during the time periods that they are required.
23. Violations of any of the above Provisions or provisions of the referenced publications, unless promptly and completely corrected to the satisfaction of the Engineer, shall, at the sole discretion of the City, be grounds for termination of the Contract, or shut down or partial shutdown of the work, without compensation to the Contractor or permittee, or liability to the City, all as prescribed by contractual obligation or State law, whichever is applicable.

The contract lump sum price paid for Traffic Control shall include full compensation for, but not limited to, furnishing all labor (including flagging costs), materials (including construction area signs), tools, equipment, temporary traffic control plans and revisions, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the day and night traffic control including floodlights, loop detector repair, alternative wireless or video detection systems, channelizers (surface mounted), temporary railing (Type K) markers, delineators, temporary striping and pavement marking, barricades, portable flashing beacons, flashing arrow signs, portable changeable message signs, as shown on the Plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

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

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

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

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

## **COOPERATION AND COLLATERAL WORK**

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

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

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

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

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

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

Should the Contractor be delayed by the City, and such delay could not have been reasonably

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

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

## **PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS**

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

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

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

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

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

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

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

Full compensation for compliance with the preceding requirements shall be considered as being

included in the various Contract items in the bid schedule and no additional compensation will be allowed therefor.

## **PROTECTION AND RESTORATION OF UNDERGROUND UTILITIES AND FACILITIES**

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

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

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

## **CLEAN UP**

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

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

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

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

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

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

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

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

## **DUST CONTROL**

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

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

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

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

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

Water shall be applied in the amounts, at the locations, and for the purposes designated in the

Special Provision and these Specifications, and as ordered by the Engineer.

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

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

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

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

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

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

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

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

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

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

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

Additives or binders that are directly applied to the surface without mixing with water shall be

applied with equipment approved by the Engineer. The binder shall be applied at a rate of from 0.10 to 0.25 gallons per square yard.

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

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

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

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

## **CLEARING, GRUBBING, AND REMOVALS**

Clearing and grubbing shall be performed in accordance with the plans, of the provisions of Section 300-1, "Clearing and Grubbing," of the Standard Specifications and these Special Provisions, and shall include, but not be limited to, the following:

1. Removal and disposal of tree stumps, shrubs, ground cover, and other vegetative material.
2. All trees and shrubs less than 10 ft. directly above the entire sidewalk surface shall be trimmed and removed by the Contractor to allow a clear path of travel for pedestrians.
3. Removal and disposal of decorative landscape rocks, edging, brick, pavers, railroad ties, or any other decorative landscape treatments.
4. Removal and disposal of boulders, rock or Portland Cement Concrete (PCC).
5. Removal and disposal of signs, poles, and posts, including foundations. Holes resulting from removal of existing poles and posts shall be filled or patched with like materials.
6. Existing inlets, slotted drains, drainage pipes, bulkheads, drop inlet structures, and where any portion of such structure is within 3 ft. of the grading plane in the excavation areas, or within 1 ft. of original ground in embankment areas, or where shown on the plans to be removed, shall be completely removed and disposed of accordingly.
7. Removal and disposal of existing drainage inlet structure, catch basins, and PCC Local Depression or asphalt concrete (AC) apron.
8. Any and all saw cutting.
9. Removal and disposal of existing AC berms, miscellaneous AC, and PCC.

10. Removal of all curb and gutter, retaining curb, cross gutters, and spandrels shall be replaced within three (3) calendar days. The AC patch shall be placed within two (2) working days after the curb and gutter, cross gutters, and spandrels are replaced. Removal of all sidewalks shall be replaced within three (3) calendar days.
11. Removal and disposal of any abandoned utilities that may interfere with the improvements, including plugging of pipes or conduits.
12. Removal and disposal of steel vent pipe of the abandoned waterline or irrigation line, and cap three (3) feet below grade.
13. Removal and disposal of banner poles and footings.
14. Removal, relocation, and disposal of existing bus shelter benches and structures as noted on the project plans.
15. Removal and disposal of all raised pavement markers not conforming to the approved plan or conflicting with the proposed striping as shown on the plans in accordance with Subsection 312-3, "Removal," of the Standard Specifications.
16. Removal and disposal of existing striping conflicting with Stage Construction temporary striping.
17. The Contractor shall dispose of all materials not being salvaged outside of the right of way and shall pay for all costs of disposal. These materials include, but are not limited to, masonry walls, AC paving, PCC, and conflicting striping.
18. Irrigation system relocation. Any irrigation systems in conflict with the proposed improvements that are removed, damaged, disturbed, or broken shall be modified, repaired, and/or replaced to be operable and provide full irrigation coverage to the areas requiring irrigation using new materials, equal or better than the original materials, with 3/4 in Schedule 40 PVC being the minimum acceptable for underground lines and 1/2 in Schedule 80 being minimum acceptable for risers and with the systems not being out of operation for more than two (2) days.
19. Removal of abandoned street light and signal pole foundations complete and including backfill of the site with material of similar consistency as the native material.

All trees, shrubbery and lawns deprived of normal irrigation watering due to a disruption of service caused by the Contractor's operations shall be regularly and thoroughly irrigated by the Contractor so that the plantings will not be damaged. If any trees, shrubbery or lawns die or suffer unacceptable damage as a result of or precipitated by the Contractor's operations, the Contractor shall replace same with the same plant species and size. Existing grass lawns within areas that must be excavated and/or re-graded shall be cut into approximate 1 ft. squares, removed, protected, cared for, and replaced as soon as possible. Dead, dying, and unacceptably damaged grass shall be replaced with new grass sod.

Stockpiling of materials within the right of way, City parking lots, or other City improved property shall not be allowed unless otherwise approved by the Engineer.

20. Cleaning of all under-sidewalk drain pipes.
21. Self-propelled drop hammers will not be allowed for removals.

PCC, AC, trees, and green waste that have been removed shall be disposed of at a recycling plant. The Contractor shall provide the City with the weight certification of recycling and the required monthly Solid Waste Disposal and Recycling Reports.

Full compensation for all costs involved in removal and recycling of PCC and AC removed from the project site shall be considered as included in the Contract prices paid for the various items of work involved, and no additional compensation will be allowed therefor.

### **GREEN WASTE RECYCLING**

Work shall consist of removal of green waste (grass clippings, sod, leaves, shrubs, and any other vegetation) in conformance with Section 300-1 "Clearing and Grubbing," of the Standard Specifications. The Contractor shall be responsible for recycling the green waste through a green waste processor.

Subsection 300-1.3.1 "General" of the Standard Specifications shall include as follows:

The Contractor shall make all arrangements for removal and recycling of the material at offsite locations and provide the City with the weight certification in tons of recycling green waste and the required monthly Solid Waste Disposal and Recycling Reports.

Holes resulting from the removal shall be backfilled with soil from the surrounding area the same day and compacted to a minimum relative compaction of ninety percent (90%).

All removed material shall be removed from the project site the same day.

Stockpiling of materials within the right of way, City parking lots, or other City-improved property shall not be allowed unless written permission is given by the Engineer.

Full compensation for all costs involved in removing and recycling of green waste 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.

### **ADJUST STORM DRAIN MANHOLE RINGS AND COVERS, SEWER MANHOLE COVERS, AND GALVANIZED SLIP WATER VALVE CAN AND COVERS TO GRADE**

Adjustment of storm drain/sewer manhole covers, galvanized slip water valve can and cover, and survey monument covers to grade shall be in accordance with the plans and Subsection 301-1.6, "Adjustment of Manhole Frame and Cover Sets to Grade," of the Standard Specifications and the agency or utility standards and policies that owns or has control of the manhole.

The Contractor shall have the option of installing American Highway Products Ltd. (or approved equal) Pivoted Turnbuckle Manhole Riser Rings and Water Gas Valve Riser Rings. Contact information: American Highway Products Ltd., 11723 Strasburg Bolivar Rd. N.W., Bolivar, OH 44612, Office: (888) 272.2397, Fax: (330) 874.3800, Web Site: [www.ahpl.com](http://www.ahpl.com), Email:

[sales@ahpl.com](mailto:sales@ahpl.com). This usage is applicable to City-owned storm drain manholes only. The contractor is responsible for obtaining timely written approval from other applicable agencies who have jurisdiction over other manhole and valve covers found within the work area for the usage of the pivoted turnbuckle manhole and valve cover riser rings.

For all new manhole rings and covers furnished by the Contractor, certification shall include the test results from test Method B as called for in Subsection 206-3 "Gray Iron Castings," of the Standard Specifications.

Raised manhole rings and covers shall have a Type II barricade with two flashing lights placed over each manhole until it is paved.

After the pavement has been completed, the necessary portions of the sub-grade, base, and pavement shall be neatly removed, the structure built-up, and the manhole frame set to be backfilled with PCC concrete and Type III-C3-PG 64-16 asphalt concrete. The asphalt concrete shall be placed and compacted in a workmanlike manner to conform to the appearance of the surrounding pavement. The asphalt concrete shall be placed within two (2) days after the manhole ring and cover has been adjusted to final grade, unless otherwise approved by the Engineer. The Contractor shall so schedule this work that adjusted manholes and rings shall not remain unpaved over holidays and weekends.

All new and existing galvanized slip water valve can and cover and gas valve covers shall be adjusted to grade during paving. The Contractor shall furnish all slip sleeves or cans where none exist. The Contractor shall loosen all valve covers immediately after paving. The Contractor shall paint all water valve covers blue.

**The Contractor shall also be responsible for locating any buried water valve, storm drain and/or sewer manhole covers by means of scanning prior to the milling operations. The locations shall be noted and covers exposed prior to the milling operations. The covers will be adjusted to finish grade after final paving. The Contract unit price paid per lump sum for "Scan Street to Locate any Buried Water Valves and/or Manhole Covers" shall include providing all the necessary scanning equipment, labor, materials, locating of buried water valves and/or manhole covers and no additional compensation will be allowed therefore.**

**Payment for adjusting buried water valve and/or manhole covers will be at the unit price paid for "Double Adjust Sewer Manhole to Grade," "Double Adjust Storm Drain Manhole to Grade," or "Double Adjust Water Valve Cover to Grade."**

**Contractor is responsible for clean-up of any debris within the manholes or valve covers. Contractor shall walk with the Inspector to inspect each manhole and water valve at the end of the project to ensure compliance. Contractor shall remedy any deficiencies noted by the Inspector. Payment for coordination with Inspector and valve/manhole clean-up shall be per the Lump Sum bid for "Field Walk with City, Clean-up Debris in water valves and manhole." Payment shall include the field walk and subsequent field walks, furnishing all labor, tools, and materials, and no additional compensation will be allowed therefore.**

The Contract unit price paid per each for double adjusting or adjusting galvanized slip valve can and covers, gas valve covers, storm drain manhole covers, and sewer manhole covers to finished grade shall be measured in accordance with Bid Schedule, and shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved.

## **PROTECT AND ADJUST SURVEY MONUMENT FRAMES, COVERS, AND SLEEVES**

Existing survey markers, monuments, and benchmarks shall be protected in place. Monument frames, covers, and sleeves shall be furnished and adjusted to finished grade.

Existing survey markers, monuments, and benchmarks not conforming to the proposed roadway finish surface shall remain accessible by means of an approved sleeve and lid per City of Manhattan Beach Standard Drawing MBSI-170A-0 ST-4, or by other methods approved by the Engineer. Contractor to complete and submit the Monument Inventory List in Appendix II within 2 weeks of receiving the City's NTP.

The Contract unit price paid per each for adjusting monument frames, covers, and sleeves to finished grade shall be measured in accordance with "Monument Preservation, Restoration and Survey" Lump Sum Bid Item, per Standard Specifications, and shall include full compensation for furnishing all labor, materials, tools, and equipment, and for doing all the work involved in adjusting monument frames, covers, and sleeves to finished grade, complete in place, and no additional compensation will be allowed therefor.

## **PORLAND CEMENT CONCRETE FOR STREET IMPROVEMENTS**

### **A. Portland Cement Concrete Pavement**

Portland Cement Concrete (PCC) shall meet the requirements of Section 201, "Concrete, Mortar, and Related Materials," Subsection 302-6, "Portland Cement Concrete Pavement," and Section 303, "Concrete and Masonry Construction," of the Standard Specifications, and these Special Provisions:

Add to Subsection 201-1.1.1, "General", of the Standard Specifications, the following:

The Contractor shall furnish the Engineer in the field with a copy of the mix design to be used, and with a legible certified weighmasters certificate for each load of PCC delivered to the project. PCC delivered to the project site having a water content and/or slump greater than that specified in the mix design shall be rejected and removed from the project site.

Revise the table in Subsection 201-1.1.2, "Concrete Specified by Class and Alternate Class," of the Standard Specifications as follows:

Except as otherwise specified, all PCC used on this project shall be Class 560-C-3250 with a maximum slump of 4 in for all PCC and with the exact mix proportions being determined by the Contractor except for trench backfill slurry, air-placed Concrete-Method B, and as specified by the Engineer.

Replace the first sentence in Paragraph 6, Subsection 201-1.4.3, "Transit Mixers," of the Standard Specifications, with the followings:

The total elapsed time between addition of water at the batch plant and the completion of the discharge of the PCC from the mixer shall not exceed ninety (90) minutes or before 250 revolutions of the drum, whichever occurs first. All PCC remaining in the mixer after the ninety (90) minutes time limit shall be rejected and

removed from the project site. When the temperature of the PCC is 86° F or greater or any conditions contributing to quick stiffening of the PCC, it shall be removed from the project site.

Replace the last paragraph, Subsection 303-5.1.1, "General," of the Standard Specifications, with the following:

When removals of curb and/or sidewalk are located at curb return, the Contractor shall install access ramps with cast in place American Disability Act (ADA) Standards / California Code of Regulations (CCR) Title 24 – Accessibility Regulations approved detectable warning panels (truncated domes) and per the latest edition of applicable City Standard Plans.

The Contractor is to construct all sidewalks, access ramps, and gutters in accordance with ADA Standards / CCR Title 24 – Accessibility Regulations and the latest edition of applicable City Standard Plans. The Contractor shall ensure that all newly constructed PCC improvements comply with ADA Standards / CCR Title 24 – Accessibility Regulations and the latest edition of applicable City Standard Plans for cross slope and slope percentage requirements. The Contractor shall measure access ramps, sidewalks, curb and gutter, etc. for compliance using a digital level, also known as an electronic level or "smart level" of two feet (2') in length.

Access ramp cross slope shall be checked for the entire ramp width from back of curb to top of landing. Sidewalk cross slope shall be checked for entire sidewalk width, as well as longitudinally.

If the sidewalks, access ramps, and gutters constructed by the Contractor are found to be in non-compliance with ADA Standards / CCR Title 24 – Accessibility Regulations, the Contractor will be required to remove and replace the sidewalks, access ramps, and gutters to ADA Standards / CCR Title 24 – Accessibility Regulations at the Contractor's expense.

All removed curb and gutter, cross gutters, spandrels, driveway approaches, and sidewalks shall be replaced within three (3) calendar days, unless the contractor provides reasonable documentation to exceed the three (3) day limit five (5) working days before removal and approved in writing by the Engineer. The Asphalt Concrete patch shall be placed within five (5) working days after the curb and gutters and cross gutter and spandrels are replaced.

No PCC shall be ordered and/or placed until the forms and subgrade have been inspected and approved by the Engineer in the field.

All traffic signal pull boxes, water meter boxes, galvanized slip valve water valve can and covers, street light boxes, and other utility boxes shall be adjusted to proposed finish grade and approved by the Engineer in the field prior to placement of the PCC.

Integral color PCC placed for sidewalk construction shall be continuous pours from the same daily batch. No cold joint between daily pours of PCC will be allowed.

Add to the first paragraph of Subsection 303-5.1.2, "Drainage Outlets Through Curb," of the Standard Specifications, the following:

Coring shall be required for all drains through existing curbs.

Replace the last paragraph of Subsection 303-5.1.3, "Driveway Entrances," of the Standard Specifications, with the following:

Driveway approaches including walk shall be 6 in. thick for single family residential areas and 8 in. thick with a minimum of 6 in thick aggregate base for commercial driveways.

Add to Subsection 303-5.3, "Placing Concrete," of the Standard Specifications, the following:

All temporary storage of PCC liquid residues and mixer wash out on the project site shall be deposited within a self-containment area or bin. The Contractor may elect to allow the moisture to evaporate and dispose of the material as a solid or dispose of the material as a liquid. The Contractor shall notify the engineer in writing, as a preconstruction meeting submittal, what method of disposal will be utilized.

If disposal of the material in liquid form is chosen, the Contractor must provide in writing, as part of the preconstruction meeting submittal, the name, location, telephone number, and a copy of the California Regional Water Quality Control Board (RWQCB) permit for disposal of PCC liquid residue, or if the disposal site is located outside of the State of California, a copy of a permit issued by that state is required. The engineer will verify the information before the Notice to Proceed is issued.

All PCC and related work, including grading and forming, shall be suspended if the Contractor does not have a PCC liquid residue or mixer wash out containment area or bin on site one (1) working day before the scheduled placement of PCC. The Contractor will not be allowed any additional compensation or extension of time for suspended operations due to not having a containment area or bin on site. The containment area or bin shall have sufficient room for two (2) days deposit of material.

The Contractor shall provide the engineer with a copy of the landfill receipts or disposal site receipt and weight ticket showing disposal of PCC liquid residues and wash out within five working days of disposal.

Add to Subsection 303-5.4.3, "Weakened Plane Joints, (a) General," of the Standard Specifications, the following:

All weakened plane joints shall be spaced at a maximum of 10 ft. for curbs, gutters, and sidewalks. Scoring lines shall conform to those prevailing in the area and be uniform in spacing.

Revise Subsection 303-5.5.2, "Curb," of the Standard Specifications, as follows:

Delete the first sentence in Paragraph 1 and add the following:

The curb and gutter surface shall not vary more than 0.01 ft. from 10 ft. straightedge except at the grade changes. Prior to the removal of the forms, the surface shall be finished true to grade by means of a straightedge float of not less than 10 ft. in length, and operated longitudinally over the surface of the concrete. Form clamps shall be so constructed as not to interfere with the operation of the float. The form on the front of the curbs shall not be removed less than one (1) hour, or more than six (6) hours after the concrete has been placed. In no event shall forms be removed while the concrete is sufficiently plastic to slump. The top and face of the finished curb shall be true and straight and top surface of curbs shall be of uniform width, free from humps, sags, blemishes, or other irregularities.

Add to Subsection 303-5.5.2, "Curb" of the Standard Specifications, the following:

Two component construction grade structural epoxy adhesive shall be used to bond fresh PCC curb to existing asphalt concrete or PCC.

All surfaces to be bonded must be free of standing water, moisture, completely clean of dirt, curing compounds, grease, oil, paint, and unsound materials, which would prevent a solid bond. Smooth surfaces shall be sand blasted or mechanically abraded. All dust shall be vacuumed or swept.

Epoxy components shall be stored at 65° F - 85° F for 24 hours prior to use. The mixed epoxy shall be uniform in color, not show streaks, and not have air entrapment. The Contractor shall mix only the amount of epoxy that can be applied within the product's pot life. Pot life will decrease as the ambient temperature and/or mass size increases.

Add to Subsection 303-5.5.3, "Walk," of the Standard Specifications, the following:

The sidewalk surface shall not exceed one and one-half percent (1.5%) cross fall and not vary more than 0.01 ft. from the 10 ft. straightedge except at grade changes, and the finished surface shall be free from humps, sags, blemishes or other irregularities. All sidewalks shall be a minimum of 4 in. thick, except at driveways where the sidewalks shall be a minimum of 6 in. thick for single family residential areas and 8 in. thick for all other areas and 6 in. thick for curb return landings including access ramps.

Add to Subsection 303-5.5.4, "Gutter," of the Standard Specifications, the following:

A Water Test shall be performed for all new gutter/spandrels and at joins with existing gutter/spandrels to ensure positive flow. The test shall be performed in the presence of a City representative and within 48 hours of the gutter/spandrels being placed. Any sections of gutter/spandrel that do not exhibit positive flow (i.e. ponding, spillover onto AC Pavement, etc.) shall be removed and replaced by the Contractor prior to paving at no cost to the City, and no additional time shall be allowed.

Add to Subsection 303-5.6, "Curing," of the Standard Specifications, the following:

Curing compound shall be translucent with white pigmented fugitive dye, Type 2,

in accordance with Subsection 201-4, "Concrete Curing Materials," of the Standard Specifications.

Add to Subsection 303-5.7, "Repairs and Replacements," of the Standard Specifications, the following:

In order to minimize vandalism damage to the finished PCC surfaces, the Contractor shall plan his work so that no PCC is poured after 1:00 p.m., unless otherwise authorized by the Engineer in the field.

The Contractor shall barricade and protect placed Portland Cement Concrete from all damages, marks, mars, and/or graffiti. Any Portland Cement Concrete damaged, defaced, discolored, or defective shall be replaced to the satisfaction of the Engineer at the Contractor's expense, and no additional time will be allowed.

Grading, patching, or other remedies to correct the situation will not be accepted unless in the opinion of the Engineer the vandalized area is so small that it does not warrant replacement. Concrete replacement areas shall be from score mark or control joint to score mark or control joint, and full width of the sidewalk. All replacement areas shall be saw cut.

Add to Subsection 303-5.8, "Backfilling and Cleanup," of the Standard Specifications, the following:

A minimum of 12 in. wide full depth asphalt concrete pavement repair patch is required when cross gutter, spandrel, driveways, curb, and gutter are placed adjacent to existing asphalt concrete pavement. The asphalt concrete pavement repair patch shall be placed within five (5) working days after the cross gutters, spandrels, driveways, curb and gutter are replaced. The asphalt concrete pavement shall be sawcut.

On Subsection 308-4.10.3 **Root Barrier and Pruning**. Roots shall be pruned immediately adjacent to the edge of the sidewalk and the back of curb. Cuts shall be 7.5 in. adjacent to sidewalk and 18 in. deep adjacent to curb and gutter. The cuts shall extend 6 ft. in each direction along the curb from the center of the tree trunk for a total length of 12 ft. or as directed by the Engineer.

Root pruning equipment shall be specifically designed for this purpose, sharpened adequately to sever roots in a clean manner, and equipped with padded tracks or rubber tires to prevent scraping or marking of the roadway or curbs.

Areas root pruned shall be backfilled with Class "C" topsoil either immediately upon completion of root pruning or upon completion of the adjacent work provided that adequate safety and warning devices are placed and maintained at each location.

The Contractor shall repair or replace all utility service connections and sprinkler systems within the right-of-way which are damaged or removed as a result of the root pruning operation. Repairs shall be initiated immediately upon the occurrence of damage or removal and completed by the end of each working day. Repairs and replacements shall be the equivalent of, or better than, the existing improvements in material, dimension, and function. All repairs shall be at the Contractor's expense and to the satisfaction of the Engineer.

Root sealer shall be approved by the Engineer a minimum of two (2) working days prior to the start of root pruning operations and shall be applied to all cut root areas which are larger than 50 mm (2 in.) in diameter. The approved sealer shall be applied as soon as practical after the cuts have been made.

When constructing or replacing driveway approaches, roots shall not be cut by means of mechanical root cutting machines. If root removal is essential to driveway construction, roots shall be manually cut using hand implements with guidance from the CA.

Exposed tree roots shall be covered with mulch and watered from a period immediately following curb and gutter removal, until the area is backfilled following construction.

Concrete curb and gutter, and transitions for local depressions, shall be measured by the foot for the length in place including curb depressions and excluding commercial driveway curbs and gutter sections. "Median Nots" (center turn lane pavement), cross walk pavement, and intersection pavement shall be measured by the square foot from edge to edge and end to end. Commercial driveways shall be measured by the square foot from beginning of curb return to end of curb return from lip of gutter to the exterior edge of the driveway within the limits of the back of curb lines. Residential driveways shall be measured by the square foot measured from the back of curb or curb and gutter to the exterior edge of the driveway and from the beginning of the driveway depression (top of "X") to the end of the driveway depression (top "X"). Sidewalks shall be measured by the square foot, from edge to edge of back of curb, and end to end and shall include replacement and adjustment of No. 6 traffic signal pullbox. Curb return landings shall be measured by each location, from edge to edge back of curb and end to end, and shall include replacement of No. 6 traffic signal pullbox. Access ramps including detectable warning panels shall be included in the curb ramp per each location from exterior score lines to the back of curb. Surface grooves, horizontal sawcutting, and textures of pattern in the concrete shall not be separately measured or paid for. Local Depressions for catch basins shall be measured by the square foot. Spandrels integral with the curb shall be measured by the square foot from the back of curb to edges and end to end. Dowel bars shall not be separately measured or paid for. All measurements are to be on a horizontal plane.

For curb ramp removal and reconstruction, unless otherwise approved by the Engineer, the entire affected curb and gutter portion shall be removed by sawcutting the adjacent AC pavement one (1) foot from the edge of the PCC gutter. Where applicable, the contractor shall reconstruct this one (1) foot wide section with a 1.5-inch section of ARHM on 6-inch thick section of AC base pavement (B PG 64-10) and sand slurry mix. If the affected curb and gutter is located in a spandrel, the spandrel shall be removed and reconstructed. No extra payment will be allowed for the PCC spandrel construction.

PCC Access Ramps shall be constructed at locations shown on the Plans and per the 2018 Caltrans Standard Plan A88A, PCC Access Ramps shall not be poured monolithically with concrete curb.

Curing: Provide high early strength set-accelerating admixture options. The set-accelerating admixture shall be non-chloride set accelerator and shall not contain purposely added chlorides or contribute to steel corrosion.

Chemical admixture shall be used in accordance with 201-1.2.4 and at the manufacturer's specified dosage rate.

The contract unit price paid for the various items of PCC work shall include full compensation for all labor, tools, materials, equipment, and incidentals including, but not limited to construction survey and staking, root pruning and barrier installation, all removals, formwork, finishing, high early strength set-accelerating admixture, aggregate base under commercial driveways, cast in place and adhesive ADA / CCR Title 24 – Accessibility Regulations approved installed detectable warning panels, reinforcing steel, earthwork (excavation and backfill), temporary AC, AC pavement patching (full section per detail), disposal of PCC liquid residues and mixer wash out, and for doing all the work involved for the placement of the various items of PCC. No separate or additional compensation shall be allowed therefor.

Payment for PCC shall be made as called for on the bid schedule for various PCC concrete items. Payment for the various PCC concrete items that fail to meet the cross slope and slope requirements will be withheld until compliance is met. Payment for asphalt concrete pavement repair patch which includes the sawcutting, removal and restoration of AC pavement associated with curb ramp demolition and construction shall be considered included in the bid cost for the various associated PCC items.

Payment for concrete curbs and gutter, sidewalks, cross gutters, driveways and access ramps will be made as shown in the bid schedule and shall include all related debris removal, construction survey/staking, root pruning, grading, high early strength set-accelerating admixture, edge form work, mobilization, traffic control and erosion control, parking striping, removal and restoration of adjacent asphalt (Type III C3-PG64-16) slot cut patch restoration, saw cutting, expansion joint filler, joint sealer, base material, and other related appurtenances integral to the proposed PCC rehabilitation and shall be considered full compensation for furnishing all labor, materials, tools equipment and incidental to accomplish the work as specified in these project plans and provision and no additional compensation shall be allowed.

The contract unit price paid for Adjust Manhole Frame and Cover to Grade, Galvanized Water Slip Valve Can and Cover to Grade, Miscellaneous Utility Covers/Boxes to Grade and Water Meter Boxes to Grade within curb return areas shall include full compensation for all labor, tools, materials, equipment, and incidentals required to perform such work as intended by design, and shall be considered included in the contract price for the various items of PCC work and no separate or additional compensation shall be allowed therefor.

Add the following:

Material which is delivered to project site and not used or is rejected and specifically, material which is delivered to the site in excess of that actually needed, will not be paid for.

## **ASPHALT CONCRETE PAVEMENT REMOVAL AND RECYCLING**

The outline area of the asphalt concrete pavement to be removed shall be cut on a neat and straight line, to the satisfaction of the Engineer, with a power-driven saw to full depth before removing the surfacing. The Contractor will not be required to sawcut the pavement where the join line or cut line is cold milled.

The Contractor may encounter existing pavement fabric underneath existing asphalt concrete. The Contractor shall account for its removal and disposal at no additional cost.

If the Contractor chooses to remove the asphalt concrete by cold milling then the existing asphalt concrete shall be cold milled or ground in accordance with Subsection 302-1.1, "Cold Milling of

Existing Pavement," of the Standard Specifications and these Specifications.

Add to Subsection 302-1.2, "Milling Machine," the following:

At least two full time flag persons shall be assigned to the milling machine for traffic control when working on streets open to traffic.

The Contractor shall take care not to contaminate the millings with non-aggregate base material, including disintegrated granite.

The asphalt concrete, including aggregate base, shall be disposed of at a recycling plant. The Contractor shall provide the City with the weight certification of recycling in tons of asphalt concrete and the required monthly Solid Waste Disposal and Recycling Reports.

Asphalt concrete removal associated with curb and gutter, cross gutter and local depression, sidewalk and driveway work will be considered as miscellaneous removals and payment will be considered as included in the price paid for Clearing, Grubbing, and Removals.

**Cold Milled Asphalt Concrete** - Existing asphalt concrete pavement shall be cold milled, crushed and screened to conform to the following gradation before mixing with emulsified recycling agent:

Sieve Sizes	Percentage RAP Passing
1-inch	100

Graded millings/reclaimed asphalt pavement (RAP) shall uniformly be incorporated into the recycled pavement mixture and oversized or deleterious material shall be disposed of.

Rubberized crack filler, pavement markers, loop wires, thermoplastic markers, fabric and other like materials that may be incorporated into the RAP as it is removed from the roadway shall be removed by the screening process. A minor amount of these residual materials that cannot be completely removed from the processed RAP may be incorporated into the recycled mix if the Contractor can demonstrate that those added materials will not adversely affect the performance of the recycled asphalt pavement. Any such materials retained in the mix shall be appropriately sized and blended so as not to adversely affect the appearance or strength of the recycled pavement.

The contract unit price paid per square foot of Asphalt Concrete Pavement Cold Mill shall include full compensation for, but not limited to, furnishing all labor, materials, tools, equipment, saw cutting, loading, hauling, recycling, providing recycling weight certification, reports, and incidentals, for doing all work involved in asphalt concrete removal and recycling, and no additional compensation will be allowed therefor. If the Contractor does not provide the weight certification of recycling and the required monthly Solid Waste Disposal and Recycling Reports, then payment will be withheld until the weight certification and reports are provided.

## **ROADWAY EXCAVATION**

Roadway Excavation shall be completed in accordance with Section 300-2, "Unclassified Excavation," of the Standard Specifications.

Where a portion of existing surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power-driven saw to a minimum depth of 2 inches before removing the surfacing. The Contractor will be required to sawcut the pavement where the join line or cut line is cold milled, unless otherwise directed by the Engineer.

Full compensation for removal of base and asphalt concrete surfacing not cold milled, excavating, loading, hauling, depositing, spreading, and for scarifying and recompacting subgrade shall be considered as included in the contract item for Unclassified Excavation, and no additional compensation will be allowed therefor.

## **SUBGRADE PREPARATION**

Subgrade Preparation shall conform to the requirements of Subsection 301-1, "Subgrade Preparation" and these Technical Provisions.

Replace the second and third paragraph of Subsection 301-1.2, "Preparation of Subgrade," with the following:

The site soils shall be removed to the subgrade level as shown on the plans in the areas to receive the pavement structural section. After rough grading has been completed, the exposed subgrade shall be scarified to a depth of 8 to 12 inches. The loosened material shall then be worked to a finely divided condition and all rocks larger than 3 inches in diameter shall be removed. The moisture content shall be brought to minus 1 percent of optimum or wetter by the addition of water, by the addition and blending of dry suitable material, or by the drying of existing material. The material shall then be compacted by approved equipment to the specified relative compaction.

Replace the first paragraph of Subsection 301-1.3, "Relative Compaction," with the following:

The subgrade soils shall be compacted to 90 percent of the maximum dry density (ASTM D1557). The upper six inches of the subgrade soils shall be compacted to 95 percent relative compaction (ASTM D1557) and should be well moisture conditioned to near optimum and kept in this condition until the pavement section is constructed.

Subgrade will be certified by the City's surveyor prior to placement of aggregate base.

Payment for subgrade preparation will be considered as included in the item of work for which the subgrade is prepared and no additional compensation will be allowed therefor.

## **TENSAR GLASPAVE50 OR APPROVED EQUAL**

Once cold milling is complete, the streets will be cleaned prior to the placement of the GlasPave50 Paving Mat (or approved equal). The contract unit price paid per square yard shall include full compensation for, but not limited to, furnishing all labor, materials, tools, equipment, surface preparation and installation of the paving mat, no additional compensation will be allowed

therefore.

## **HOT MIX ASPHALT CONCRETE**

Asphalt concrete (AC) shall meet the requirements of Section 400 of the Standard Specifications and these Technical Provisions:

Asphalt concrete shall be Type III-B2-PG64-10 for the base course, Type III-D-PF64-10 for level course and Type III-C3-PG64-16 for surface course or as specified herein.

The Engineer may substitute Type III-D-PG64-10 in place of Type III-C3-PG64-16 for feathering and for "thin" overlays equal to or less than 0.15' in thickness.

The Contractor is to construct all AC sidewalks, access ramps, and gutters in accordance with American Disability Act (ADA) Standards / California Code of Regulations (CCR) Title 24 – Accessibility Regulations and the latest edition of applicable City Standard Plans. The Contractor shall ensure that all newly constructed AC improvements comply with ADA Standards / CCR Title 24 – Accessibility Regulations and the latest edition of applicable City Standard Plans for cross slope and slope percentage requirements. The Contractor shall measure access ramps, sidewalks, curb and gutter, etc. for compliance using a digital level, also known as an electronic level or "smart level" of two feet (2') or less in length.

Access ramp cross slope shall be checked for the entire ramp width from back of curb to top of landing. Sidewalk cross slope shall be checked for entire sidewalk width, as well as longitudinally.

Delete Item 3, "Crushed Slag," of Subsection 400-1.2, "Asphalt Concrete Aggregates," of the Standard Specifications. The use of slag aggregate for asphalt concrete is expressly prohibited.

Coarse aggregate shall consist of material of which at least seventy-five percent (75%) by weight shall be crushed particles in lieu of the requirements of Subsection 400-4.2.3, "Coarse Aggregate."

The individual test result requirements shall be as specified in Subsection 400-4.3, "Combined Aggregates" of the Standard Specifications:

Add to Subsection 302-5.1, "General," of the Standard Specifications, the following:

The combined aggregate grading for asphalt concrete placed on miscellaneous areas shall conform to the gradation for the asphalt concrete placed on the traveled way, unless otherwise directed by the Engineer. The amount of asphalt binder used in the asphalt concrete placed in dikes, gutters, gutter flares, oversize drains and aprons at the ends of drainage structures, unless otherwise directed by the Engineer, shall be increased one per cent (1%) by weight of the aggregate over the amount of asphalt binder used in the asphalt concrete placed on the traveled way.

The asphalt concrete to be placed in areas which are designated on the Plans as miscellaneous areas may be spread in one layer. The material shall be compacted to the required lines, grades

and cross section.

Miscellaneous asphalt concrete replacement shall be constructed as shown on the Contract Plans. Miscellaneous replacement areas shall be placed on subgrade which has been compacted to 95% relative compaction. Payment for construction of the areas shall be included in the unit price paid per tonne (ton) for asphalt concrete and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and no additional compensation will be allowed therefor

If the finished surface of the asphalt concrete on the traffic lanes does not meet the specified surface tolerances, it shall be brought within tolerances by either: (1) abrasive grinding (followed by fog seal coat on the areas which have been ground), (2) placing an overlay of asphalt concrete, or (3) removal and replacement. The method shall be selected by the Engineer. In accordance with Profilograph Asphalt Concrete Pavement, a profilograph shall be done in the presence of the Engineer for all corrective work.

Replace the second paragraph of Subsection 302-5.4, "Tack Coat," of the Standard Specifications, with the following:

A similar tack coat shall be applied to all surfaces that are to be overlaid unless otherwise directed by the Engineer.

Add to Subsection 302-5.5, "Distribution and Spreading," of the Standard Specifications, the following:

Tarpaulins shall be used to cover all loads when directed by the Engineer.

In advance of spreading asphalt concrete over asphalt concrete base course, or asphalt concrete surface, asphalt concrete leveling course shall be spread by any mechanical means that will produce a uniform smoothness and texture. Asphalt concrete leveling shall include, but is not limited to, the filling and leveling of irregularities and ruts. Asphalt concrete used to change the cross slope or profile of an existing surface shall not be considered as asphalt concrete leveling.

Unless otherwise permitted by the Engineer, the top layer of asphalt concrete for shoulders, tapers, transitions, road connections, private drives, curve widening, turnouts, left-turn pockets, and other such areas, shall not be spread before the top layer of asphalt concrete for the adjoining through lane has been spread and compacted. At locations where the number of lanes are changed, the top layer for the through lanes shall be paved first. Tracks or wheels of spreading equipment shall not be operated on the top layer of asphalt concrete in any area until final compaction has been completed or unless directed by the Engineer.

The base layer of asphalt concrete shall not be less than 0.20 feet and the top layer of asphalt concrete shall not exceed 0.20 feet in compacted thickness. Each lane of the top layer, once commenced, shall be placed without interruption.

All screed extensions for paving machines shall be provided with a tamper, roller, or other suitable compacting devices.

Asphalt pavers shall be equipped with automatic screed controls and a sensing

device or devices. Automatic grade and slope control shall be used for overlays.

All joints shall be sealed after rolling.

When placing asphalt concrete to the lines and grades noted in the plans or as approved by the Engineer, the automatic screed controls shall control the longitudinal grade and transverse slope of the screed. Grade and slope references shall be furnished, installed, and maintained by the Contractor. The Contractor shall use a ski device, the minimum length of the ski device shall be 30 feet. The ski device shall be a rigid one-piece unit and the entire length shall be utilized in activating the sensor. The Contractor may use a laser to control the screed.

When placing the initial mat of asphalt concrete on existing pavement, the end of the screed nearest the center line shall be controlled by a sensor activated by a ski device not less than 30 feet long. The end of the screed farthest from center line shall be controlled by an automatic transverse slope device set to reproduce the cross slope approved by the Engineer.

When paving contiguously with previously placed mats, the end of the screed adjacent to the previously placed mat shall be controlled by a sensor that responds to the grade of the previously placed mat and will reproduce the grade in the new mat within a 0.01 feet tolerance. The end of the screed farthest from the previously placed mat shall be controlled in the same manner as when placing the initial mat.

Should the automatic screed controls fail to operate properly during any day's work, the Contractor may use manual control of the spreading equipment for the remainder of that day; however, the equipment shall be corrected or replaced with alternative automatically controlled equipment conforming to the requirements in this section before starting the next day's work.

Should the methods and equipment furnished by the Contractor fail to produce a layer of asphalt concrete conforming to the requirements, including straightedge tolerance, of Subsection 302-5.6.2, "Density and Smoothness," of the Standard Specifications, the paving operation shall be discontinued and the Contractor shall modify his equipment or furnish substitute equipment.

A drop-off of more than 0.15 feet will not be allowed at any time between adjacent lanes open to public traffic.

The Contractor shall schedule his/her paving operations such that each layer of asphalt concrete is placed on all contiguous lanes of a traveled way each work shift. At the end of each work shift, the distance between the ends of the layers of asphalt concrete on adjacent lanes shall not be greater than 10 feet nor less than 5 feet. Additional asphalt concrete shall be placed along the transverse edge at the end of each lane and along the exposed longitudinal edges between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.

Add to Subsection 302-5.6.1, "General (Rolling)," of the Standard Specifications, the following:

The Contractor shall furnish a sufficient number of rollers to obtain the specified compaction and surface finish required by the Standard Specifications and these Special Provisions.

Pneumatic rollers shall be required on lower layer only.

Initial breakdown compaction shall consist of a minimum of three (3) coverages of a layer of asphalt mixture. A pass shall be a movement of rolling in both directions over the same path. Coverage shall consist of as many passes as are necessary to cover the entire width being paved. Overlap between passes during coverage, made to ensure compaction without displacement of material in accordance with good rolling practice, shall be considered to be part of the coverage being made and not part of a subsequent coverage.

Each coverage shall be completed before subsequent coverages are started.

Add to the first paragraph of Subsection 302-5.6.2, "Density and Smoothness," of the Standard Specifications, the following:

The completed surfacing shall be thoroughly compacted, smooth and free from ruts, humps, depressions or irregularities. Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete shall be eliminated by rolling or other means. The use of any equipment that leaves humps, ridges, irregularities, indentations or other objectionable marks in the asphalt concrete shall be discontinued, and acceptable equipment shall be furnished by the Contractor.

The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than 0.01 feet are present when tested with a straightedge 10 feet long, laid in a direction transverse to the center line.

If the test results for any lot of asphalt concrete indicate that the relative compaction is below 95.0 percent (95%), the Contractor will be advised that he is not attaining the required relative compaction and that his materials, procedures, or both, need adjustment. Asphalt concrete spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the required compaction.

Add to Subsection 302-5.7, "Joints," of the Standard Specifications, the following:

Before placing the top layer adjacent to cold transverse construction joints, the joints shall be trimmed to a vertical face and to a neat line. Longitudinal joints shall be trimmed to a vertical face and to a neat line if the edges of the previously laid surfacing are, in the opinion of the Engineer, in such condition that the quality of the completed joint will be affected. Longitudinal and transverse joints shall be tested with a 3 m (10') straightedge and shall be cut back as required to conform to the provisions in Subsection 302-5.6.2, "Density and Smoothness," for surface smoothness. Connections to existing surfacing shall be feathered to conform to the provisions for smoothness.

Longitudinal joints in the top layer shall correspond with the edges of proposed traffic lanes (striping). Longitudinal joints in all other layers shall be offset not less than 0.5 feet alternately each side of the edges of traffic lanes.

All feathered joints shall be sealed after rolling.

Replace the third paragraph of Subsection 302-5.8, "Manholes," of the Standard Specifications, with the following:

Manholes, water valve and survey monument covers shall be adjusted to grade in accordance with the plans, and Subsection 301-1.6, "Adjustment of Manhole Frame and Cover Set to Grade," of the Standard Specifications.

After the pavement has been completed, the necessary portions of the sub-grade, base, and pavement shall be neatly removed, the structure built up, and the manhole frame set to be backfilled with Type III-C3-PG64-16 asphalt concrete. The asphalt concrete shall be placed and compacted in a workmanlike manner to conform to the appearance of the surrounding pavement, within two days of raising the manhole to grade.

All new and/or existing valve and survey monument covers shall be adjusted to grade during paving. When required, the Contractor shall install survey monument covers before paving. The Contractor shall furnish all slip sleeves or cans where none exist. The Contractor shall loosen and paint blue all water valve covers immediately after paving.

During asphalt concrete paving operations, it shall be the Contractor's responsibility to place protective covering over, or to otherwise avoid paving over survey markers, monuments, and benchmarks, and to remove the covering and/or asphalt concrete after paving operations have been completed.

The unit price paid per ton of Type III C3-PG64-16 Asphalt Concrete Pavement shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing asphalt concrete complete in place, and no additional compensation will be allowed therefor.

## **2" ARHM-GG-C PAVEMENT OVERLAY:**

Asphalt Rubber Hot Mix (ARHM) shall be ARHM-GG-C, conforming to the provisions of subsection 203-11 of the Greenbook. The viscosity grade of paving asphalt shall be PG 64-16 per Section 203-1 of the Greenbook or as determined by the Engineer. The Contractor shall only use the "Wet Process" in the manufacture of rubberized asphalt in accordance with Section 203-11 of the Greenbook.

Composition and Grading shall be per Section 203-11.3 of the Standard Specifications. The Contractor shall submit a copy of the asphalt concrete mix design, a sample of the asphalt concrete, a sample of the aggregate, and a sample of the paving asphalt PG 64-16 to the Engineer or its designated laboratory.

Prior to constructing the ARHM surface course, all cracks in existing pavement less than 1/2-inch in width shall be routed, cleaned and sealed per section entitled "Crack Routing and Sealing" and to the satisfaction of the Engineer. After crack sealing, no paving shall occur for two (2) days.

Construction will not be allowed before the completion and approval of all pavement preparation work including, but not limited to, cold milling, crack sealing, asphalt concrete deep lift repair and removal of old pavement markers and sweeping of pavement.

All surfaces to be paved shall be cleaned by the use of a broom and a vacuum sweeper to the satisfaction of the Engineer. The AC surface shall be free of water, dust, or foreign material before tack is applied. All raised pavement markers shall be removed prior to the placement of any ARHM. Removal of all AC slurry seal residue from gutter lip should be completed prior to paving.

Paint binder (tack coat) shall be SS-1h Type asphaltic emulsion conforming to Section 203.3 of the Greenbook.

The surface course shall be spread in one layer with the use of a self-propelled paving machine and shall be spread to the after compaction thickness as shown on the Plans.

The existing surface to receive the ARHM surface course shall be clean, to the satisfaction of the Engineer and paint binder (tack coat) shall be applied at the rate of 0.10 gallons per square yard conforming to the provisions of Section 302-5.4 of the Greenbook. Similarly, paint binder (tack coat) shall be applied to all vertical surfaces to be joined.

Distribution, spreading and compacting shall conform to the provisions of Section 302-5 of the Greenbook and these Special Provisions.

The completed asphalt rubber resurfacing shall be thoroughly compacted to be free from humps, depressions or irregularities. Any ridges, indentations or other objectionable marks left on the surface of the asphalt rubber shall be eliminated by roller or other means.

The longitudinal and transverse joints shall be constructed to have a uniform finished surface throughout. The joints shall be constructed straight, neat, smooth, tight and seamless, irregular joints will not be accepted. Any finished surface with rugged appearance will be rejected.

A certificate of compliance for Asphalt Rubber binder shall be required from the materials supplier.

Tarpaulins shall be used to cover all loads from plant to project.

ARHM surface course shall be thoroughly compacted by rolling. The number of rollers necessary will be established in accordance with Section 302-9.4 of the Standard Specifications. All compacted ARHM surface course shall have a relative compaction of not less than 95 percent in accordance with Section 302-5.6.2 of the Greenbook Specifications.

Rolling along a joint shall be such that the widest part of the roller is on the hot side of the joint. Join lines between successive runs shall be within 5 inches of lane lines or a minimum of 12 feet outside of the outer most lane line.

Lots consisting of 500 tons will be established for ARHM surface course areas to be tested. The Contractor's or its designated laboratory shall perform density testing utilizing a properly calibrated nuclear asphalt-testing device. The Contractor shall pay for all initial testing and reasonable amount of retesting utilizing the nuclear asphalt-testing device. If the test results for any lot of ARHM surface course indicate that the relative compaction is below 95 percent, the Contractor will be advised that he is not attaining the required relative compaction and that his materials or his procedures, or both, need adjustment. ARHM-GG spreading operations shall not continue until the Contractor has notified the Engineer of the adjustment that will be made in order to meet the required compaction. Core testing of areas not meeting the 95 percent requirement will be conducted by the Contractor's designated lab. Any and all testing will be at the sole expense of

the Contractor.

If the test results for any lot of ARHM surface course continue to indicate that the relative compaction is less than 95 percent after adjustments have been made, the ARHM represented by that lot may be required to be removed and replaced at the Contractor's expense and the Contractor shall suspend all further paving operations until the Contractor can demonstrate to the City that relative compactions of 95 percent can be obtained. It shall be the sole judgment of the City Engineer to determine adequate remedy and/or a reduction in compensation for any lot failing to meet 95 percent relative compaction.

The Contractor shall provide for adequate quality control measures to insure that delivery of asphalt rubber shall be neither too slow nor too fast to prevent stopping of the paving operation and/or cooling of the asphalt rubber material. Material delivery scheduling and handling is critical to provide for optimum compaction opportunity and maximize ride quality performance.

#### Section 12.16.1 ROCK DUST BLOTTER:

Where traffic will have access to rubberized asphalt concrete prior to complete cooling, a rock dust blotter shall be placed as directed by the Engineer to avoid tracking per Section 302-9.6 of the Greenbook. Rock dust blotter shall be uniformly applied using a mechanical spreader at a rate of two pounds minimum and four pounds maximum per square yard.

The cost of Rock Dust Blotter shall be included in the unit price bid for "Asphalt Rubber Hot Mix (ARHM)" of these Specifications, and no additional compensation will be made therefore.

Full compensation for complying with the work contained in this section shall be included in the contract for CONSTRUCT 2" ARHM-GG-C PAVEMENT OVERLAY shall be at the unit price per TON (TN), and shall include all labor, tools, materials and appurtenances necessary to complete the work and to construct the asphalt pavement complete in place. Weight certification tickets are required for payment

### **PROFILOGRAPH ASPHALT CONCRETE PAVEMENT**

Profiles of asphalt concrete pavement shall be performed using a California Profilograph or equivalent in conformance with the requirements in California Test 526 "Operation of California Profilograph and Evaluation of Profiles" and as specified in these Technical Provisions. Prior to beginning profiles, the profilograph shall be calibrated in the presence of the Engineer.

The Contractor, in the presence of the Engineer, shall profilograph the surface of the existing pavement surface, and also the asphalt concrete overlay or the final pavement surface.

The pavement surface shall be profilographed throughout the length of each traveled lane, turn lane, parking lane or bicycle lane, ensuring that all paved areas are profilographed. Two profiles shall be obtained for each lane, as well as two profiles for the center continuous turn lane, and one profile in the parking lane. The profiles shall be approximately 3 feet from and parallel with the edge of the lane.

All areas that require corrective work shall be marked out by the Contractor to the satisfaction of the Engineer. A profilograph shall be done in the presence of the Engineer for all corrective work.

Profilograph operations shall be in conformance with lane closure requirements.

Areas of paved surfaces that do not meet the specified surface smoothness tolerances shall be brought within tolerance by abrasive grinding. Abrasive grinding shall conform to the Caltrans standard specifications, section 42-3.03, "Construction."

Areas of capped paved surfaces that do not meet the specified surface smoothness tolerances shall be brought within tolerance by abrasive grinding. Abrasive grinding shall conform to the Caltrans standard specifications, section 42-3.03, "Construction." These grinded areas will be immediately fog sealed as directed by the City Engineer. The City Engineer will require the Contractor to slurry seal the full lane width for a minimum length of 50-foot intervals per abrasive grinded spot, including refreshing any affected striping.

The contract lump sum price paid for profilographing existing asphalt concrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in profilographing existing asphalt concrete, as specified in these Technical Provisions and as approved by the Engineer, and no additional compensation will be allowed therefor.

## **CRUSHED AGGREGATE OR MISCELLANEOUS BASE**

Aggregate base shall conform to the requirements of Subsection 200-2.2, "Crushed Aggregate Base," or Subsection 200-2.4, "Crushed Miscellaneous Base," and Subsection 301-2, "Untreated Base" of the Standard Specifications and these Special Provisions.

Add to Subsection 200-2.4.1, "General" of the Standard Specifications the following:

Disintegrated granite, glass, porcelain, brick, wood, steel (reinforcing, nails, etc) or slag, shall not be used for aggregate base. If any detrimental material or deleterious substance is found, it shall be cause for rejection and be removed from the site.

Add to Subsection 200-2.4.2, "Grading" of the Standard Specifications the following:

Grading or blending of the material shall be done through a screening process.

Add to Subsection 301-2.1, "General," of the Standard Specifications the following:

Untreated base material shall be either crushed aggregate base as specified in Subsection 200-2.2, or crushed miscellaneous base as specified in Subsection 200-2.4.

Add to the second paragraph of Subsection 301-2.2, "Spreading" of the Standard Specifications, as follows:

Tailgate spreading by dump truck will not be permitted except for spot dumping and in areas not readily accessible to spreading equipment.

Payment for aggregate base will be considered as included in the item of work for which the subgrade is prepared and no additional compensation will be allowed therefor.

## TRAFFIC SIGNAL LOOP DETECTORS

Subsection 86-5.01A (3), "Construction Materials", of the State Standard Specifications, the preferred choices shall be as follows:

Loop wire shall be Type "2" (THWN AWG #14)

The lead-in cable shall conform to Type "B"

The second paragraph of Subsection 86-5.01A (4) "Installation Details" of the State Standard Specifications shall be deemed revised as follows:

Type "E" inductive loop detector shall consist of four turns of loop wire of the type indicated above. Type "D" inductive loop detector shall consist of five turns of loop wire of the type indicated above.

Subsection 86-5.01A (4), of the State Standard Specifications, shall be deemed to include the following additional requirements:

Type "D" loops shall be physically constructed by sawcutting two slots 21 inches apart, centered on a Type "E" (round) loop, oriented at a 45 degree angle to the direction of travel

Minimum conductor coverage shall be one inch

Loop sawcut shall be backfilled using "hot melt rubberized asphalt sealant" and no other backfill material shall be used

The Contractor shall test each Type D detector with a bicycle wheel made of ferromagnetic material, weighing not more than three pounds exclusive of tire and inner tube. If a frame is used to hold the wheel upright, it shall be made of a non-ferromagnetic material such as wood. Special features, components, or vehicles designed to activate the detector will not be permitted. The Contractor shall place or hold the wheel vertically over each Type D detector. The loop detector must register and hold the presence of the bicycle wheel for a continuous period of time of at least two minutes in order for the Engineer to accept the detector test and installation.

The Contractor shall test each Type E detector with a motor driven cycle, as defined in the California Vehicle Code that is licensed for street use by the Department of Motor Vehicles of the State of California. The unladen weight of the vehicle shall not exceed 220 pounds and the engine displacement shall not exceed 100 cubic centimeters. Special features, components or vehicles designed to activate the detector will not be permitted. The Contractor shall provide an operator licensed to drive such vehicle who shall drive the motor driven cycle through the response or detection area of the detector at not less than 3mph nor more than 7 mph. The loop detector must detect the motor driven vehicle without the call being held in order for the Engineer to accept the detection test and installation.

The Contract unit price paid per each traffic signal loop installed shall include, but not be limited to the complete installation of the loop detectors, to the termination of pull box, conduits, slot cutting, lead-in cable loop wire, and application of sealant. The price shall

Include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, as directed by the Engineer, and all other appurtenant as shown on the plans and per the specifications, and no additional compensation will be made therefor.

**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

APPENDIX II  
APPLICABLE CITY STANDARD PLANS

1. Contractor's Daily Report to City
2. Monument Inventory List
3. Location Map
4. Sample – Notice to Residents
5. Manhattan Beach Standard Plans
  - MBSI-116A Commercial Driveway Approach : Type I
  - MBSI-116B Commercial Driveway Approach : Type II
  - MBSI-116C Commercial Driveway Approach : Type III
  - MBSI-116D Commercial Driveway Approach : Type IV
  - MBSI-111A-0 (ST-9) Curb Ramp – **Not Currently in Use (Please refer to latest Caltrans Standard A88A Curb Ramps)**
  - MBSI-112A-0 (ST-2) Standard Sidewalk
  - MBSI-120A-0 (ST-3) Standard Curb and Gutter
  - MBSI-122A-0 (ST-12) Standard Cross Gutter
  - MBSI-133A-0 Concrete Pavement Replacement
  - MBSI-170A-0 (ST-4) Monument in Roadway
  - MBSS-210A-0 (ST-19) 24" Sewer Manhole Frame and Cover
  - MBFE-312A-0 (ST-7) Manhole Frame and Cover for Catch Basin
  - Caltrans Standard Plan A88A (Curb Ramps)
  - Caltrans Standard Plan ES-5B (Loop Detectors)

## **CONTRACTOR'S DAILY REPORT TO CITY**

(Only the Contractor's Foreman or Superintendent is authorized to complete this form)

Project Name: \_\_\_\_\_ Project Location: \_\_\_\_\_  
Date: \_\_\_\_\_ Report No: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

Contractor's foreman / Superintendent: \_\_\_\_\_ Name \_\_\_\_\_ Signature \_\_\_\_\_

## Work accomplished

Note: it is the responsibility of the Contractor to provide this completed form to the City every working day by 5:30 p.m. without fail. Failure to do so may result in the corresponding payment application processing to be delayed.



**CITY OF MANHATTAN BEACH**  
**Project No. P-897**  
**Rosecrans Avenue Street Resurfacing Project**

# MONUMENT PRESERVATION AND RESTORATION

## Monument Inventory List

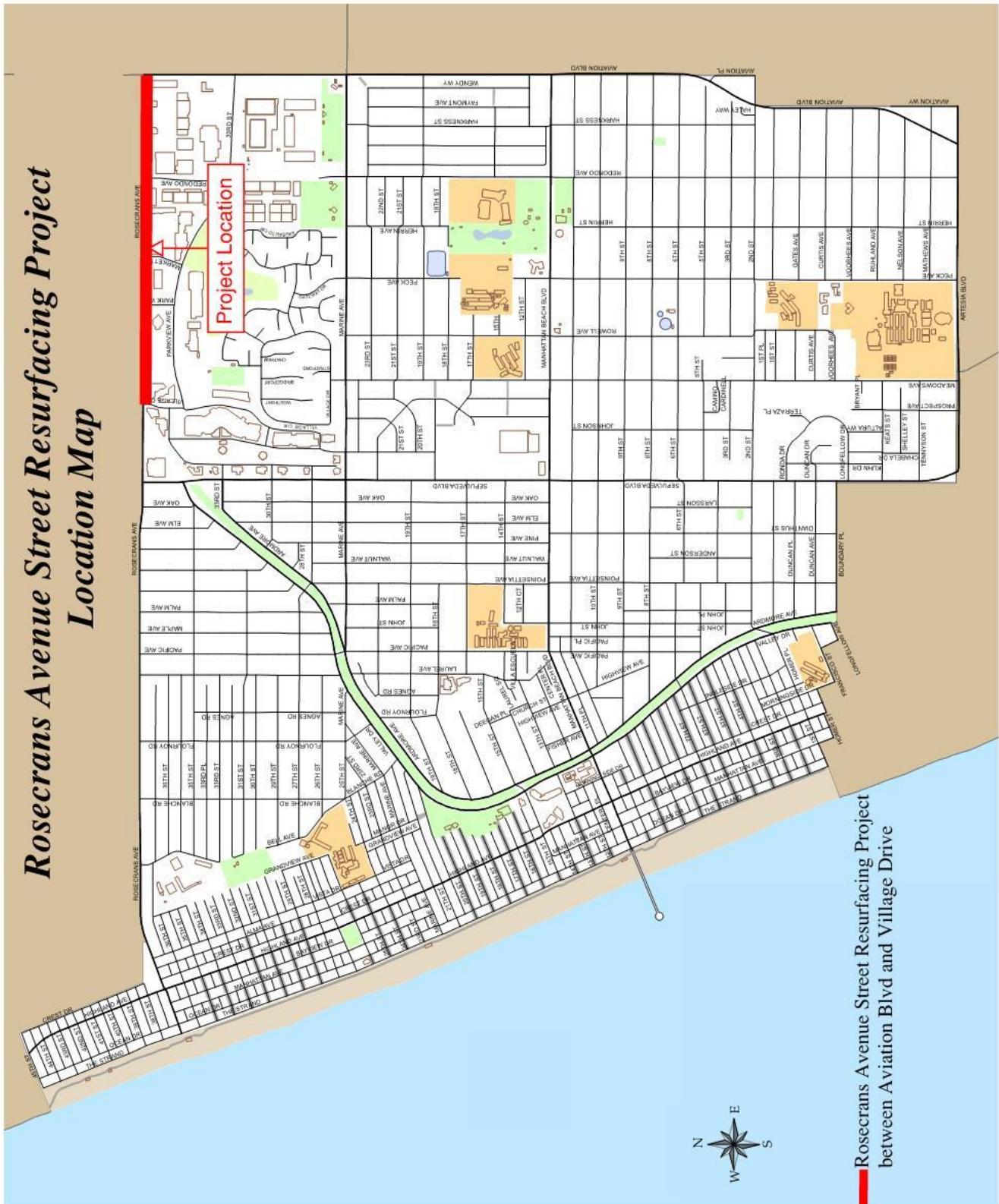
Contractor's Licensed Surveyor shall review the project limits in order to locate existing monuments, centerline ties and other monuments observed. Surveyor shall prepare an inventory of monuments found, approximate location, monument character and whether it will be destroyed during construction.

Contractor shall provide the City with the inventory list two weeks from the Notice to Proceed. Contractor will be required to file a record of survey to re-establish all damage monuments

## Appendix II

# *Rosecrans Avenue Street Resurfacing Project*

## *Location Map*



## Appendix II

**Date, 20XX**

*SAMPLE RESIDENT NOTICE*

**NOTICE OF  
CONSTRUCTION**

**Project:** Project name  
SOLICITATION #####-##

**Project Dates:** *Date, 20XX to Date, 20XX*

The City of Manhattan Beach Public Works Department has contracted with **Contractor's Name** for the improvements on **Street names**.

The project entails removal and replacement of select curb ramps, sidewalk, curb and gutter, asphalt concrete removal and replacement, and street resurfacing (**describe work been done**).

Normal working hours will be between 9:00 pm and 5:30 am, Monday through Friday. Roadways are subject to reduced travel lanes between working hours, Monday through Friday.

Temporary "NO PARKING" signs will be posted at least 72 hours in advance of the actual work on your street with the dates and times that parking is restricted. Access for emergency vehicles, pedestrians and traffic will be maintained at all times. Also, trash pickup and mail service will not be impacted. We ask that you refrain from running excess water into the gutter during construction as it may delay improvements. Rain could have an impact on project schedule.

Please keep children and pets away from construction zones. **Please note that asphalt paving products contain oil and are very hot and sticky to the touch when applied.** Once asphalt is placed it needs ample time to cool down.

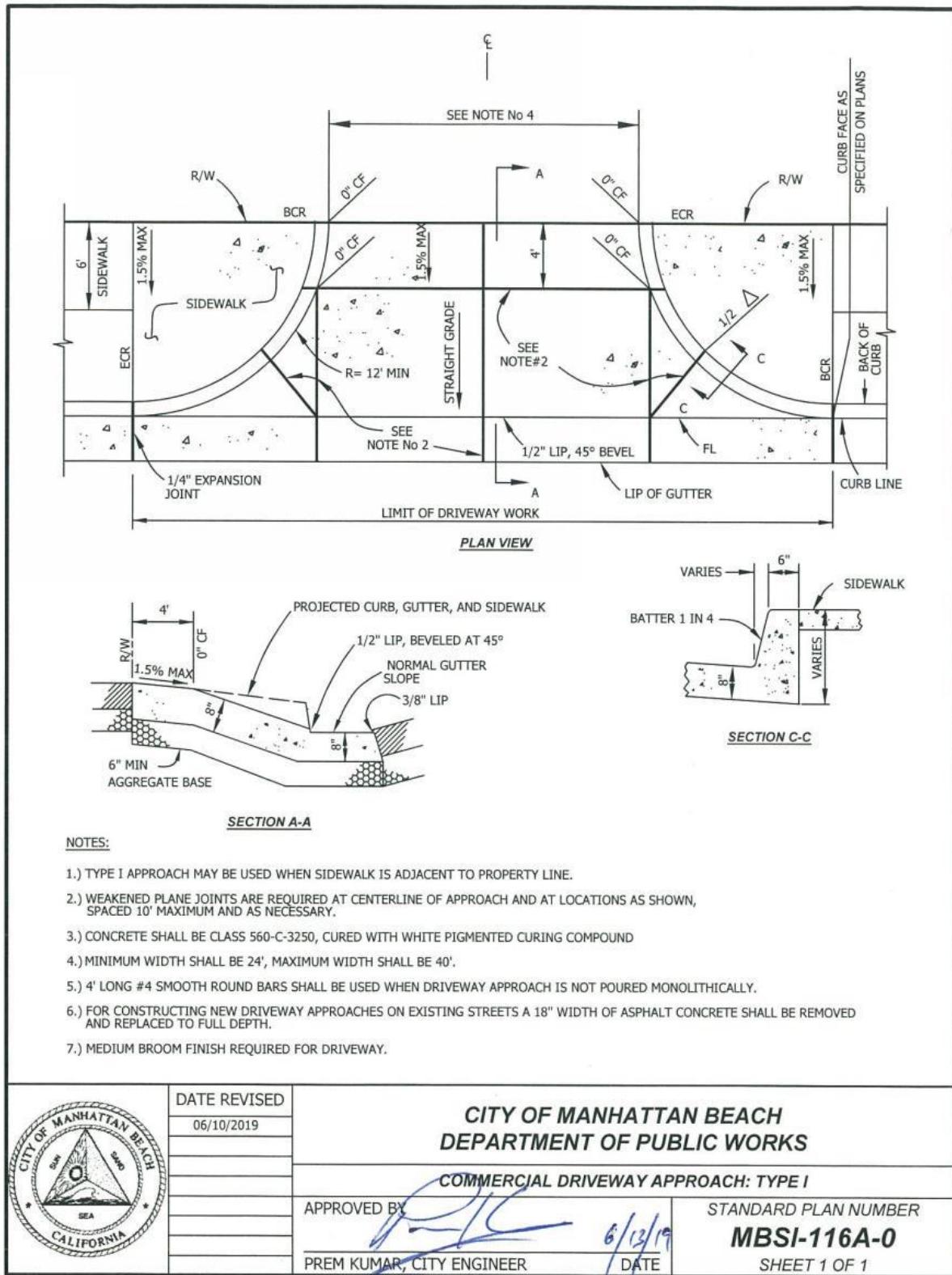
If you have any questions or concerns please call the contacts below:

<b>Contractor's phone #,</b>	(xxx)xxx-xxxx
<b>Name of the Project Foreman</b>	(xxx)xxx-xxxx

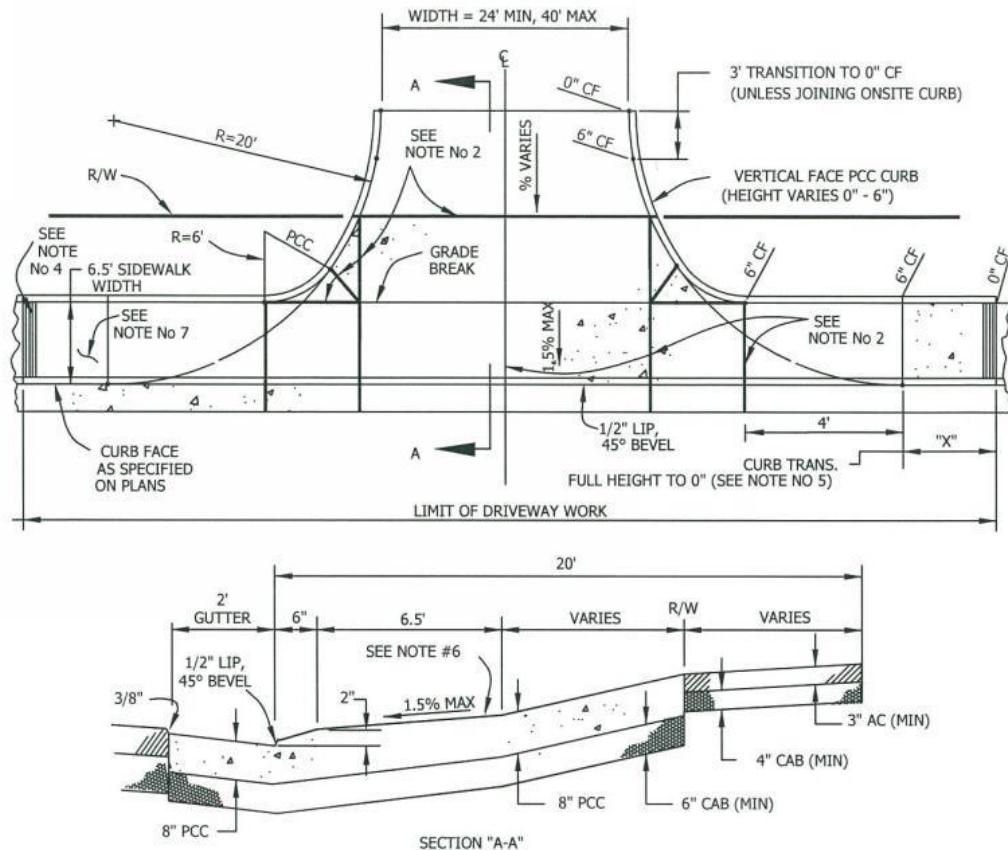
**Thank you**

Contractor's Information

**Appendix II**



## Appendix II



**NOTES:**

- 1.) TYPE II APPROACH SHALL BE USED INSTEAD OF TYPE III OR TYPE IV APPROACH FOR SITES REQUIRING SMALL SEMITRAILER (AASHTO DESIGN VEHICLE WB-40) ACCESS.
- 2.) WEAKENED PLANE JOINTS ARE REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAX AND AS NECESSARY.
- 3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
- 4.) TOP OF SIDEWALK RAMP SHALL HAVE 12" WIDE BORDER WITH GROOVES  $\frac{1}{8}$ " DEEP, WITH  $\frac{1}{8}$ " RADIUS, AND SPACED AT  $\frac{3}{4}$ " OC.
- 5.) "X" SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%), AND A MINIMUM SLOPE OF 1:15 (6.67%).
- 6.) RAMP SURFACE SHALL BE SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK (ROUGH BROOM FINISH OR EQUIVALENT).
- 7.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENT OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
- 8.) 4' LONG #4 SMOOTH ROUND BARS SHALL BE USED WHEN DRIVEWAY APPROACH IS NOT POURED MONOLITHICALLY.
- 9.) MEDIUM BROOM FINISH REQUIRED FOR DRIVEWAY.
- 10.) FOR CONSTRUCTING NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 18" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.



DATE REVISED

06/10/2019

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

**COMMERCIAL DRIVEWAY APPROACH: TYPE II**

APPROVED BY

PREM KUMAR, CITY ENGINEER

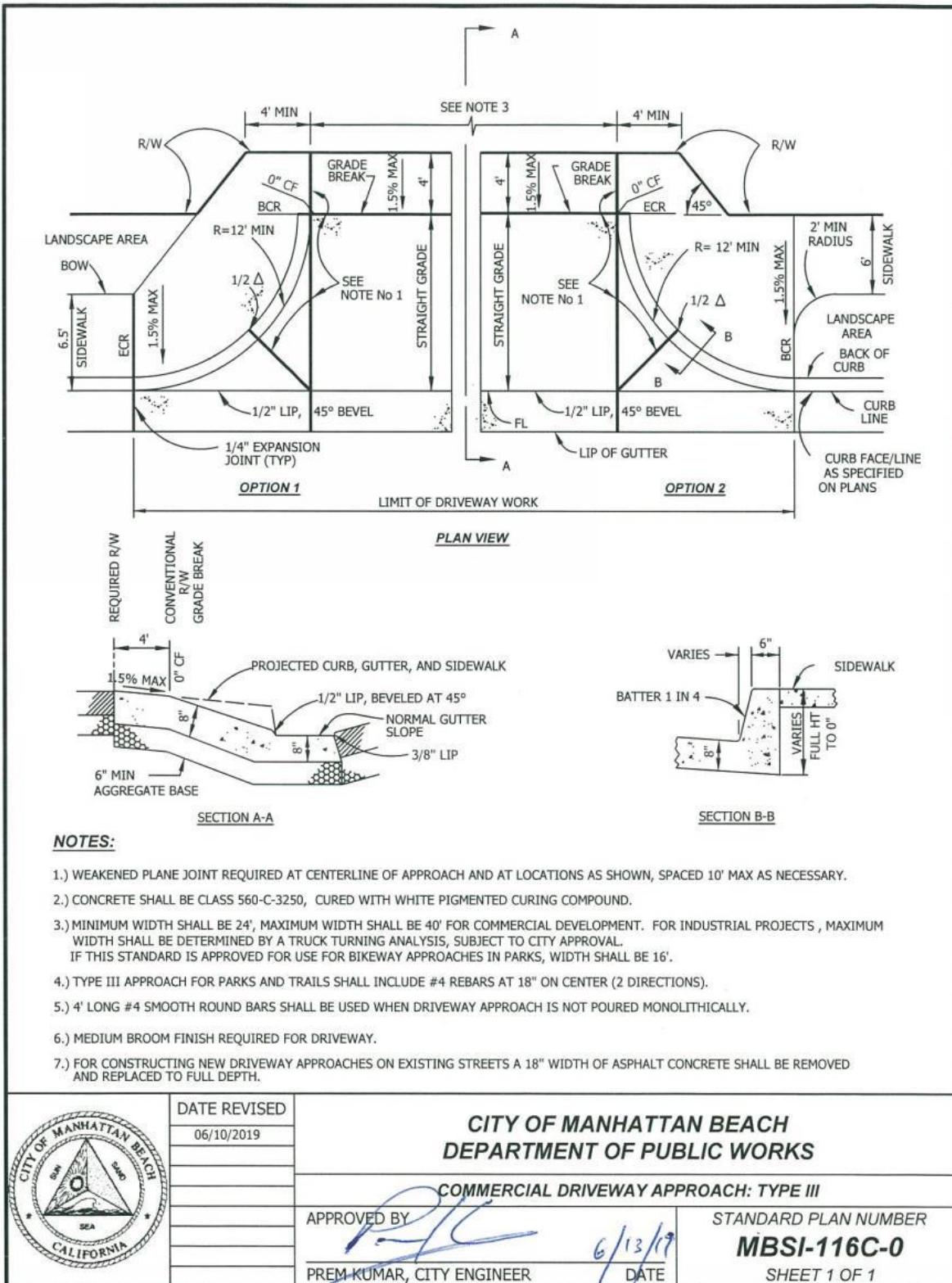
6/13/19  
DATE

STANDARD PLAN NUMBER

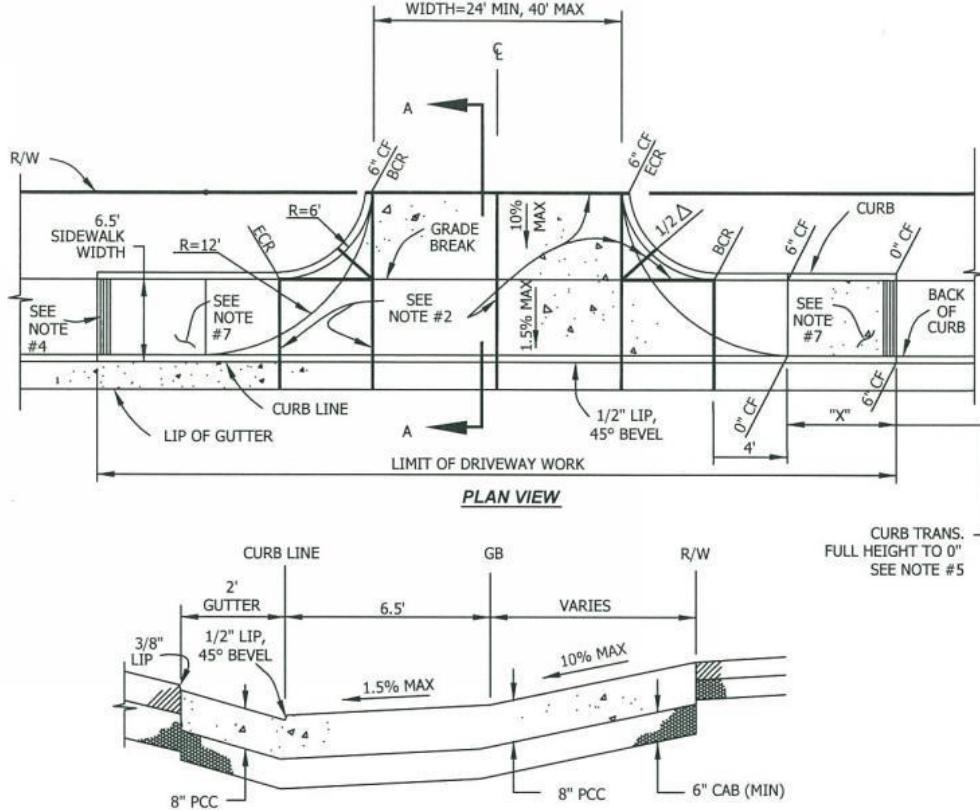
**MBSI-116B-0**

SHEET 1 OF 1

**Appendix II**



## Appendix II



NOTES:

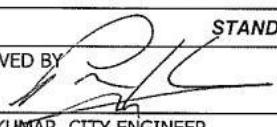
- 1.) TYPE IV APPROACH SHALL BE USED WHEN SIDEWALK IS ADJACENT TO CURB AND RIGHT-OF-WAY IS NOT AVAILABLE TO BUILD A TYPE III APPROACH.
- 2.) WEAKENED PLANE JOINT REQUIRED AT CENTERLINE OF APPROACH AND AT LOCATIONS AS SHOWN, SPACED 10' MAX. AND AS NECESSARY.
- 3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND.
- 4.) TOP OF SIDEWALK RAMP SHALL HAVE A 12" WIDE BORDER WITH GROOVES  $\frac{1}{4}$ " DEEP, WITH  $\frac{1}{8}$ " RADIUS, AND SPACED AT  $\frac{3}{4}$ " OC.
- 5.) "X" SHALL HAVE A MAXIMUM SLOPE OF 1:12 (8.33%), AND A MINIMUM SLOPE OF 1:15 (6.67%).
- 6.) RAMP SURFACE SHALL BE SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM ADJACENT SIDEWALK (ROUGH BROOM FINISH OR EQUIVALENT).
- 7.) ALL ACCESS RAMPS SHALL BE CONSTRUCTED TO THE MOST CURRENT REQUIREMENT OF THE AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS/CALIFORNIA CODE OF REGULATIONS TITLE 24-ACCESSIBILITY REGULATIONS. ADJUSTMENTS SHALL BE MADE IN THE FIELD TO ACHIEVE RAMP CONDITIONS.
- 8.) FOR NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 12" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.
- 9.) MEDIUM BROOM FINISH REQUIRED FOR DRIVEWAY.
- 10.) FOR CONSTRUCTING NEW DRIVEWAY APPROACHES ON EXISTING STREETS A 18" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH.

	DATE REVISED	<b>CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS</b>	
	06/10/2019		
<b>COMMERCIAL DRIVEWAY APPROACH: TYPE IV</b>		APPROVED BY	STANDARD PLAN NUMBER
			6/13/19
PREM KUMAR, CITY ENGINEER		DATE	SHEET 1 OF 1

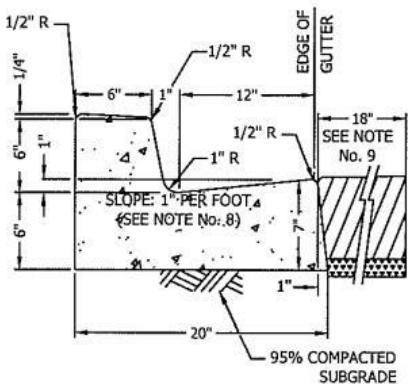
**Appendix II**

**NOTES:**

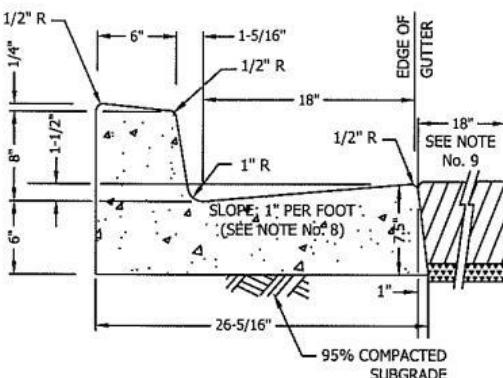
- 1.) THICKNESS OF SIDEWALK SHALL BE 4" EXCEPT IN DRIVEWAY APRONS, WHERE 6" IS REQUIRED FOR SINGLE FAMILY RESIDENTIAL DRIVEWAYS, AND 8" IS REQUIRED FOR COMMERCIAL DRIVEWAYS.
- 2.) SIDEWALK SHALL HAVE 1/2" WIDE PREMOLDED EXPANSION JOINTS AND 1- 1/2" DEEP WEAKENED PLANE JOINTS AT INTERVALS SHOWN HEREON. JOINTS SHALL HAVE EDGES WITH 1/4" RADIUS.
- 3.) CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND OVER 90% RELATIVE COMPACTED SUBGRADE. ALTERNATIVELY, IF APPROVED BY THE CITY ENGINEER, PERVERIOUS PCC MAY BE USED. PERVERIOUS PCC AND SUBGRADE SHALL MEET THE REQUIREMENTS OF SECTIONS 303-8 AND 201-1.1.6 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- 4.) 18" MOISTURE PENETRATION REQUIRED PRIOR TO PLACING CONCRETE IN SIDEWALK AREA (NON-EXPANSIVE SOIL AS DETERMINED BY SOILS TEST ARE EXEMPT AND REQUIRE ONLY SURFACE WETTING).
- 5.) SIDEWALKS SHALL BE FORMED IN SUCH A MANNER AS TO MAINTAIN 48" MINIMUM OF UNOBSTRUCTED PEDESTRIAN WAY AT ALL LOCATIONS, INCLUDING BUT NOT LIMITED TO STREET LIGHTS, ELECTROLIERS, POWER POLES, AND FIRE HYDRANTS. SEE STANDARD MBSI-115D-0.
- 6.) FOR NEW DEVELOPMENT, CURB ADJACENT SIDEWALK WIDTH SHALL BE 6.5' MINIMUM. SIDEWALK WIDTH OF LESS THAN 6.5' MAY BE USED TO REPLACE SHORT LENGTH OF EXISTING SIDEWALK TO MATCH EXISTING AS APPROVED BY CITY ENGINEER.
- 7.) PARKWAY FROM CURB TO PROPERTY LINE TO BE BROUGHT TO GRADE BY CONTRACTOR BEFORE FINAL APPROVAL.
- 8.) WHERE NEW WIDE SIDEWALK JOINS EXISTING NARROWER SIDEWALK, A 5:1 TRANSITION IS REQUIRED.
- 9.) PROVIDE BONDING AGENT TO ALL EXISTING EXPOSED CONCRETE SURFACE PRIOR TO POURING FRESH CONCRETE. BONDING AGENT SHALL BE SIKA ADHESIVE OR APPROVED EQUAL. SURFACE TO RECEIVE BONDING AGENT SHALL BE CLEAN AND FREE OF DIRT OR LOOSE MATERIAL.

	DATE REVISED	CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS	
	5/22/2019	STANDARD SIDEWALK	STANDARD PLAN NUMBER
	APPROVED BY  PREM KUMAR, CITY ENGINEER	5/22/19 DATE	MBSI-112A-0(ST-2) SHEET 2 OF 2

**Appendix II**



STANDARD 6" CURB AND 12" GUTTER



STANDARD 8" CURB AND 18" GUTTER

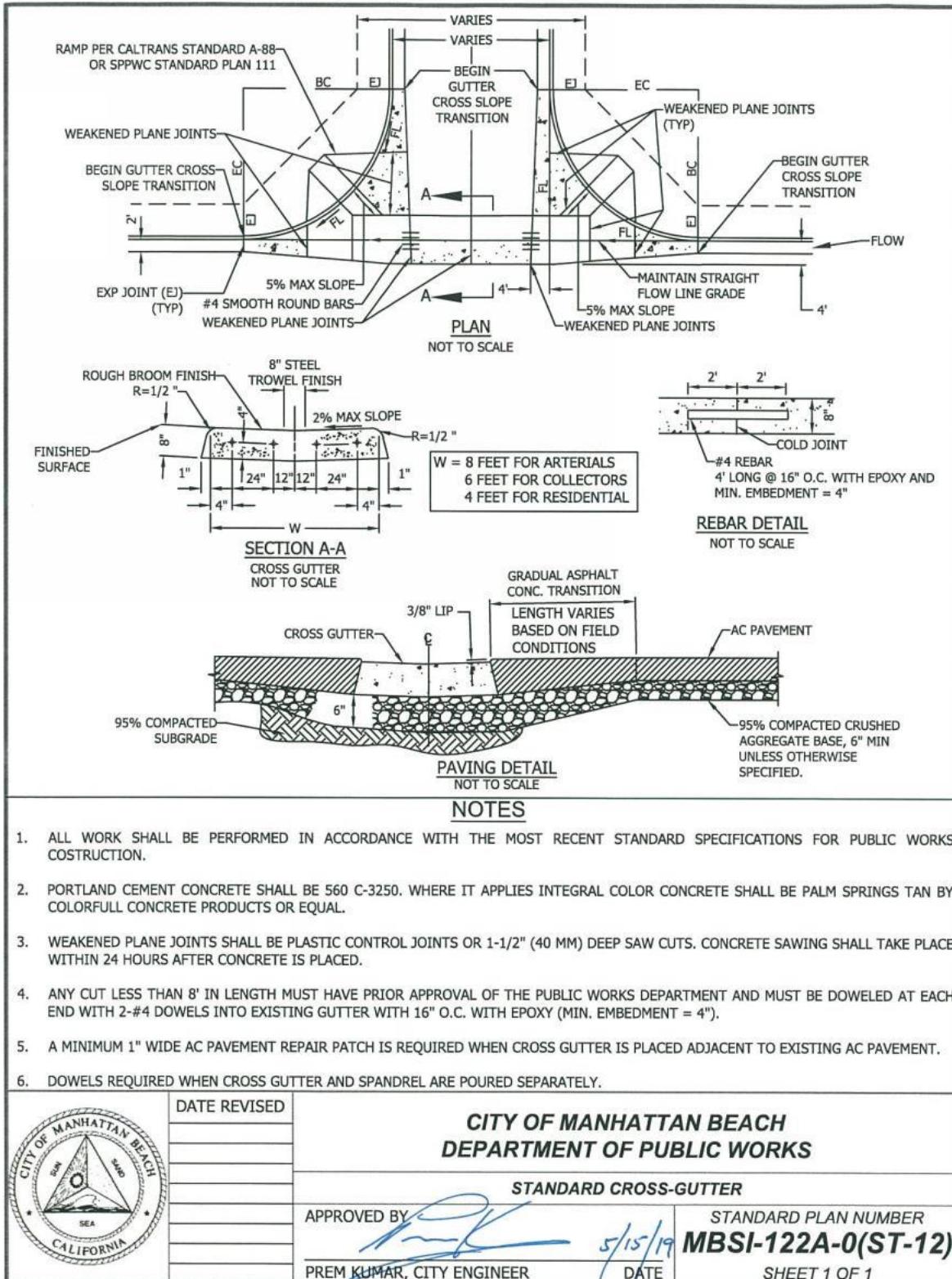
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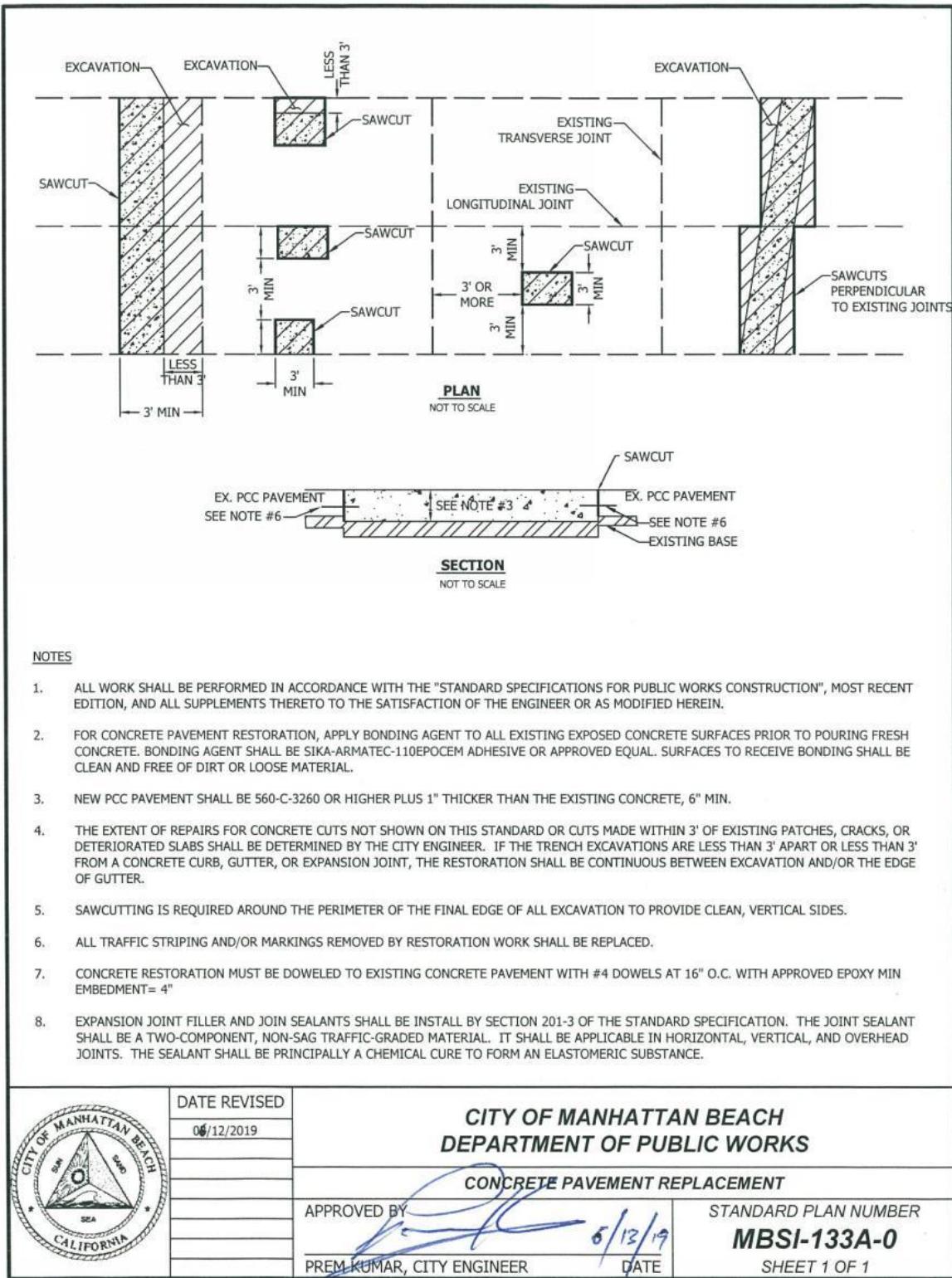
1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION." MOST RECENT EDITION, AND ALL SUPPLEMENTS THERETO TO THE SATISFACTION OF THE ENGINEER.
2. PORTLAND CEMENT CONCRETE SHALL BE CLASS 560-C-3250, CURED WITH WHITE PIGMENTED CURING COMPOUND, 4" MAX SLUMP.
3. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF 10' OR AS DESIGNATED BY THE ENGINEER AND SHALL BE A MINIMUM OF 1" IN DEPTH AND SHALL, WHERE PRACTICABLE, COINCIDE WITH THE SCORE LINES ON ADJACENT SIDEWALK SURFACES. ALSO, WEAKENED PLANE JOINTS SHALL BE SAWED BETWEEN 10 AND 24 HOURS AFTER THE CONCRETE HAS BEEN PLACED .
4. THE EXPANSION JOINTS WHERE APPLICABLE SHALL BE 1/2" THICK ASPHALTIC FELT COMPOUND AND SHALL GENERALLY BE PLACED AT LINES WHERE THE SECTION CHANGES IN THICKNESS OF WIDTH. AFTER THE CONCRETE HAS BEEN FINISHED, AN EDGER OF 1/4" RADIUS SHALL BE USED ON EACH SIDE OF THE EXPANSION JOINT FILLER.
5. FINISH SHALL BE FINE BRUSH PARALLEL TO THE CURB LINE AND TROWEL SMOOTH FINISH FOR THE 4 INCH WIDE GUTTER FLOWLINE.
6. CURB CUTS LESS THAN 8' IN LENGTH MUST HAVE PRIOR APPROVAL OF THE PUBLIC WORKS DEPARTMENT AND MUST BE DOWELED AT EACH END WITH #4 DOWEL INTO EXISTING CURB WITH APPROVED EPOXY (MIN. EMBED = 6").
7. WHERE IT APPLIES, INTEGRAL COLORED CONCRETE SHALL BE PALM SPRING TAN BY COLORFUL CONCRETE PRODUCTS OR EQUAL.
8. ACROSS THE PEDESTRIAN ROUTE AT CURB RAMP LOCATION, THE GUTTER PAN SLOPE SHALL NOT EXCEED 5%.
9. FOR CONSTRUCTING NEW CURB AND GUTTER ON EXISTING STREETS, AND 18" WIDTH OF ASPHALT CONCRETE SHALL BE REMOVED AND REPLACED TO FULL DEPTH. PAVEMENT SURFACE NEAR BOTTOM OF ACCESS RAMP SHALL BE FLUSH WITH EDGE OF GUTTER (NO LIP) AND PAVEMENT SLOPE SHALL NOT EXCEED 5% IN ANY DIRECTION.

	DATE REVISED	<b>CITY OF MANHATTAN BEACH</b> <b>DEPARTMENT OF PUBLIC WORKS</b>	
	5/22/2019		
		<b>STANDARD CURB AND GUTTER</b>	
	APPROVED BY		<b>STANDARD PLAN NUMBER</b> <b>MBSI-120A-0(ST-3)</b>
	PREM KUMAR, CITY ENGINEER		
	5/28/19	DATE	SHEET 1 OF 1

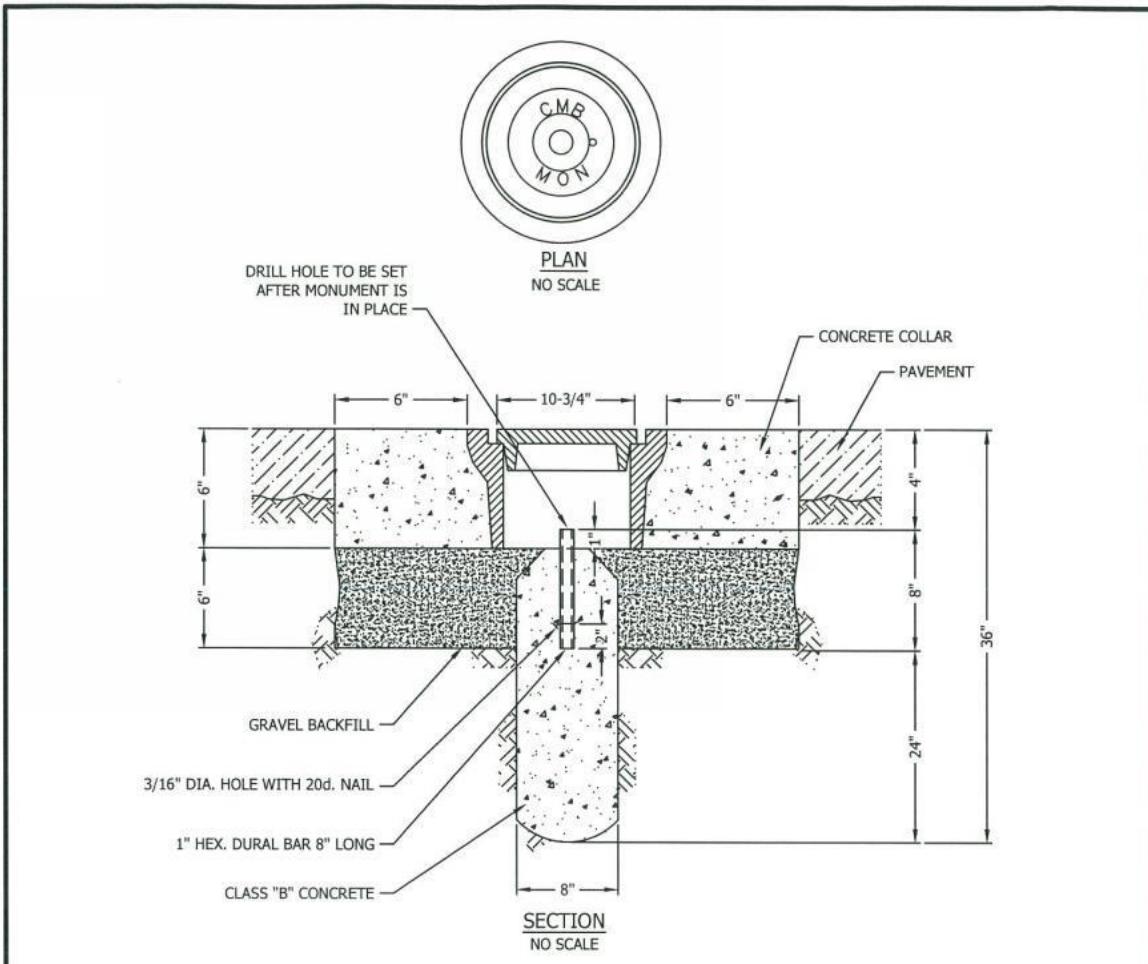
**Appendix II**



## Appendix II



## Appendix II

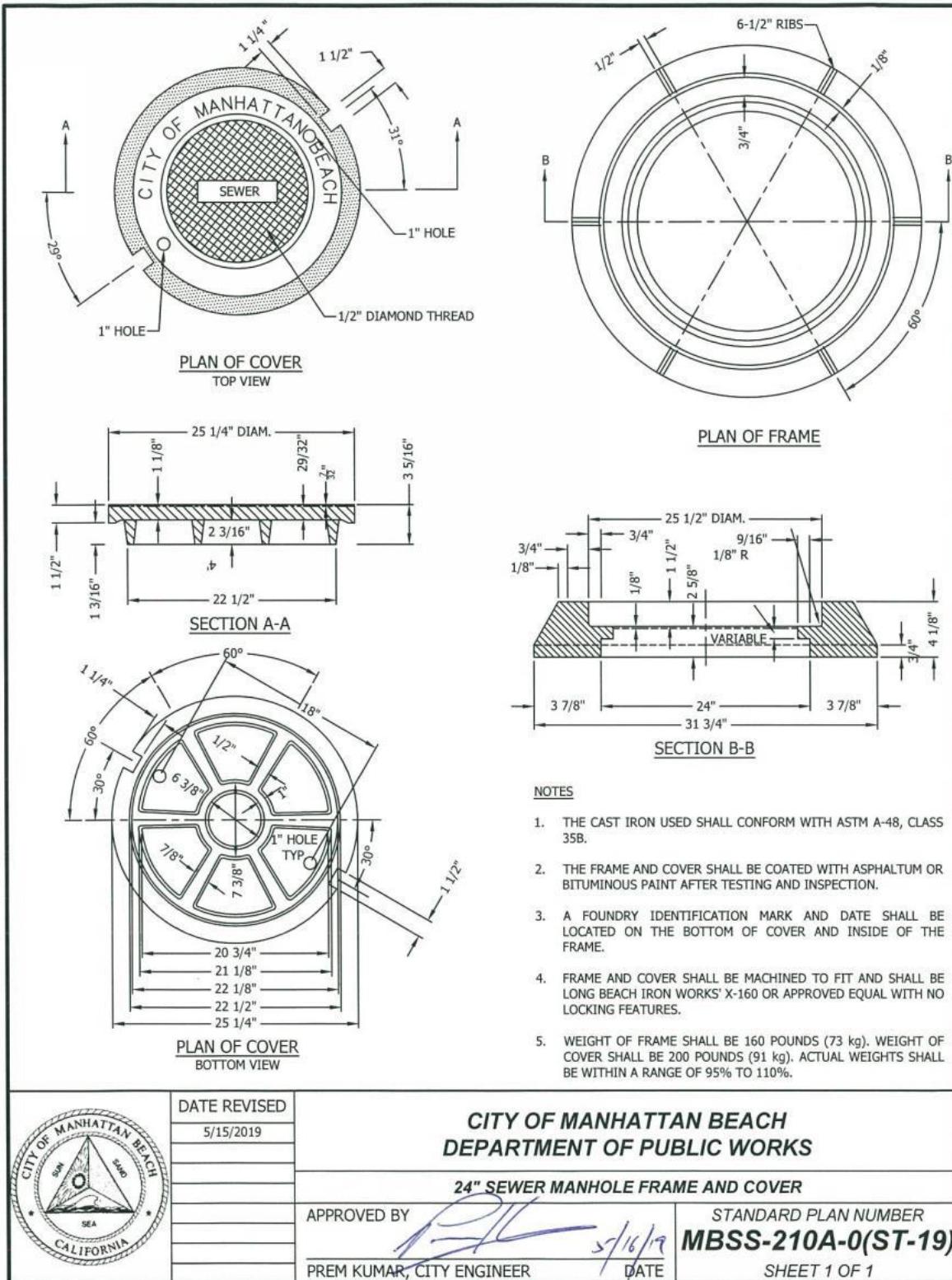


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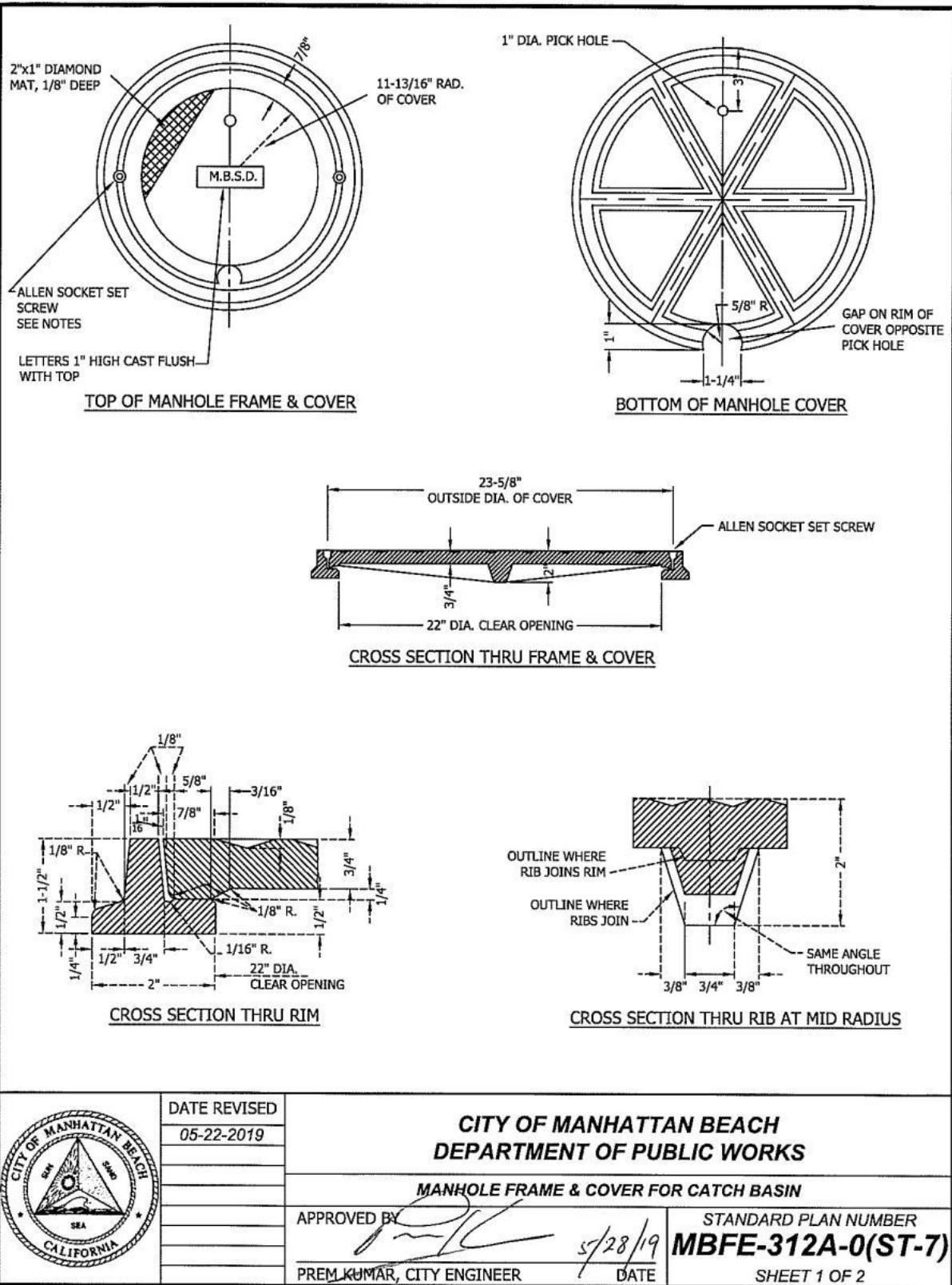
1. MONUMENT HANDHOLE FRAME AND COVER SHALL BE ALHAMBRA FOUNDRY NO. A-2925 OR APPROVED EQUAL.
2. THE 1" HEXAGONAL 2024 ALUMINUM BAR SHALL BE DRILLED WITH 3/16" DIA. HOLE 2" FROM BOTTOM AND A 20d. NAIL INSERTED TO FORM ANCHOR.
3. FRAME AND COVER SHALL BE BITUMINOUS PAINTED BY FOUNDRY.
4. GRAVEL BACKFILL SHALL BE NO. 3 ROCK HAND TAMPED IN PLACE.

	DATE REVISED	<b>CITY OF MANHATTAN BEACH</b> <b>DEPARTMENT OF PUBLIC WORKS</b>	
	05/15/2019		
		<b>MONUMENT IN ROADWAY</b>	
APPROVED BY		STANDARD PLAN NUMBER	
PREM KUMAR, CITY ENGINEER		5/16/19	<b>MBSI-170A-0 (ST-4)</b>
		DATE	
		SHEET 1 OF 1	

**Appendix II**



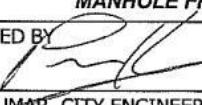
## Appendix II



## Appendix II

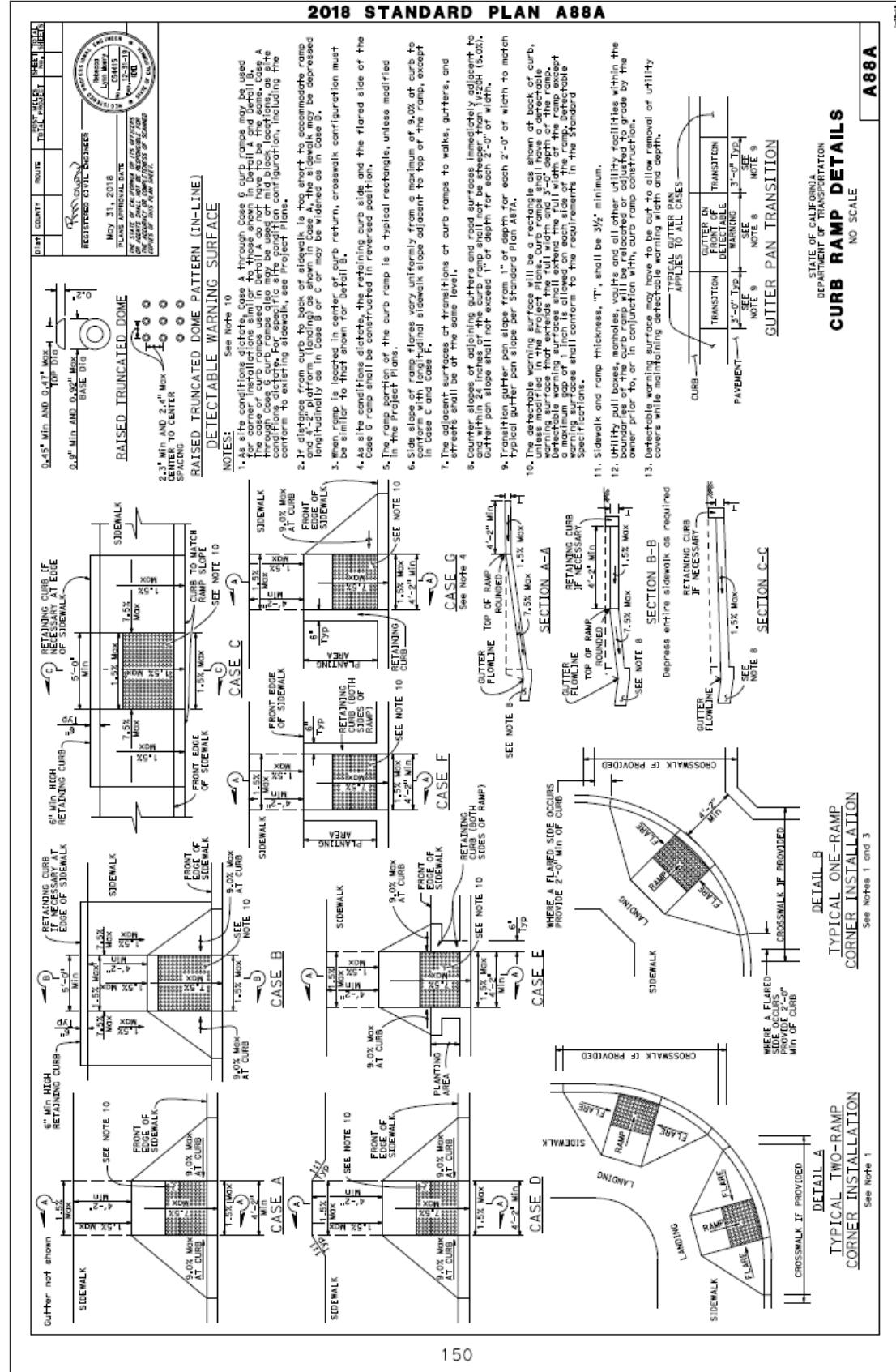
NOTES

1. TRAFFIC RATED FRAME AND COVER SHALL BE GRAY CAST IRON CONFORMING TO THE LATEST A.S.T.M. STANDARD A48, CLASS 35B. ANTI-SIEZE LUBRICANT MUST BE APPLIED TO SET SCREWS BEFORE INSTALLATION.
2. INSTALL TWO 3/4" x 3/4" ALLEN SOCKET SET SCREWS, 90° TO PICK HOLE, IN HOLES DRILLED AND TAPPED 1" IN DEPTH.
3. ALL PARTS OF THE FRAME AND COVER EXCEPT MACHINED SURFACES SHALL BE BITUMINOUS PAINTED BY FOUNDRY.
4. FRAME AND COVER SHALL BE TESTED FOR ACCURACY OF FIT AND SHALL BE MARKED IN SETS BEFORE DELIVERY.
5. FRAME AND COVER SHALL BE POSITIONED SUCH THAT THE IDENTIFICATION LETTERING IS PARALLEL WITH AND READABLE FROM STREET SIDE OF CURB.
6. WEIGHT OF FRAME SHALL BE 30 POUNDS. WEIGHT OF COVER SHALL BE 85 POUNDS. ACTUAL WEIGHT SHALL BE WITHIN A RANGE OF 95% TO 110%.

	DATE REVISED	<b>CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS</b>	
	05-22-2019		
MANHOLE FRAME & COVER FOR CATCH BASIN		APPROVED BY	STANDARD PLAN NUMBER
			5/28/19
PREM KUMAR, CITY ENGINEER		DATE	SHEET 2 OF 2

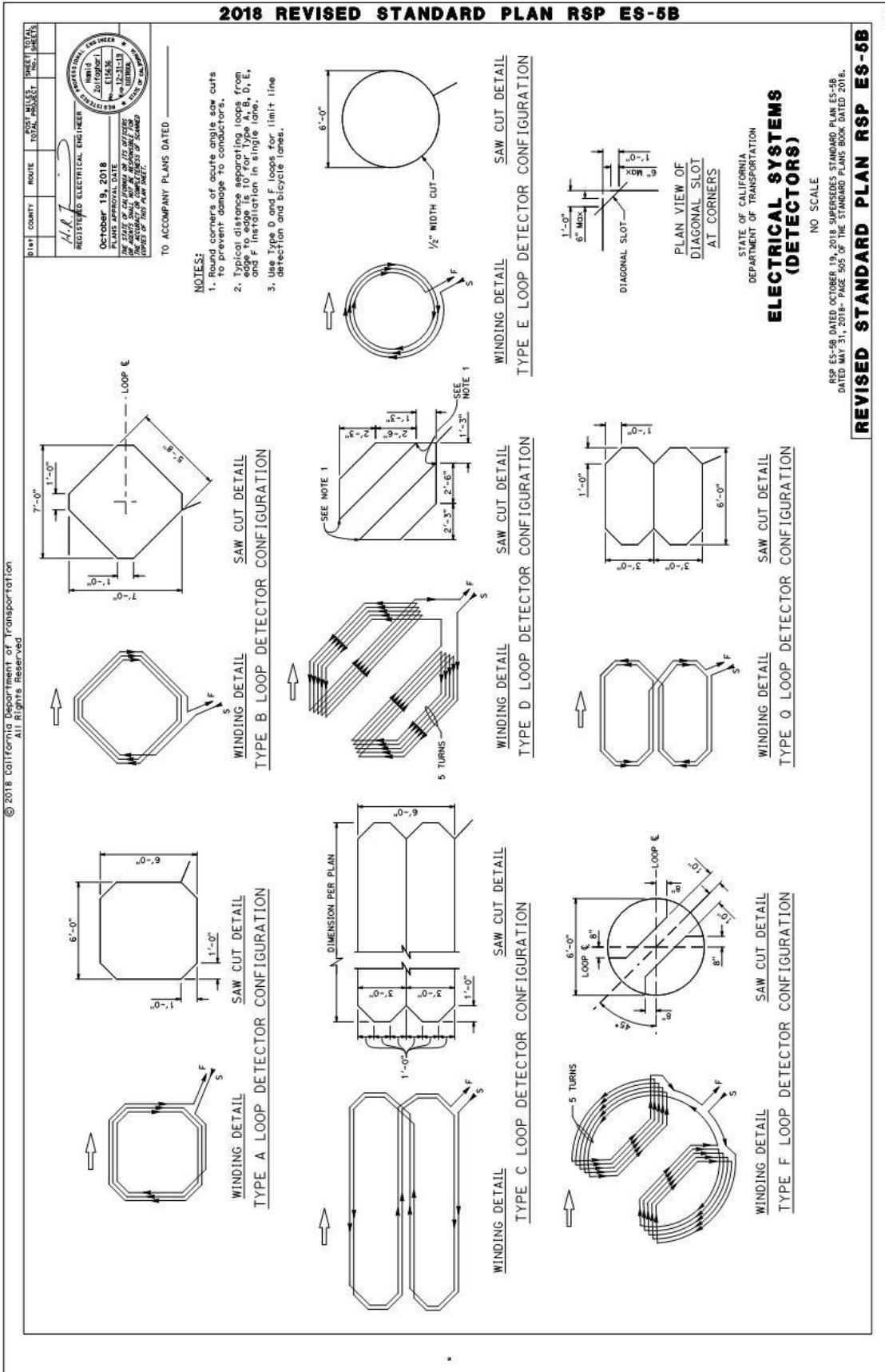
**Appendix II**

2018 STANDARD PLAN A88A



## Appendix II

## 2018 REVISED STANDARD PLAN RSP ES-5B



## Appendix II

**CITY OF MANHATTAN BEACH  
STANDARD & SPECIAL TECHNICAL  
PROVISIONS  
FOR  
STRIPING AND ADA RAMPS**

PROJECT NO. P-897

ROSECRANS AVENUE STREET  
RESURFACING PROJECT  
FEBRAURY 2020

CITY OF MANHATTAN BEACH  
PUBLIC WORKS DEPARTMENT  
ADILIA MILLER, P.E.  
1400 HIGHLAND AVENUE  
MANHATTAN BEACH, CA 90266



## **ADJUST UTILITY PULLBOXES TO GRADE**

Adjustment of Utilities shall meet the requirements of Section 301, "Subgrade Preparation, Treated Materials, and Placement of Base Materials" of the Standard Specifications, and these Special Provisions:

Add to Subsection 301-1.6 "Adjustment of Manhole Frame and Cover Sets to Grade" of the Standard Specifications, with the following:

Contractor shall adjust all utility pull boxes, valve covers, survey monument covers and affected pull boxes within the area to be paved or graded shall be set to finish grade as required by the Plans and Specifications. In the case of Portland cement concrete paving, the concrete utility or survey monument cover shall be set to finish grade prior to paving.

Replace the entire Subsection 301-1.7, "Payment," of the Standard Specifications, with the followings:

The contract unit price paid for Adjust Utility Pullboxes to Grade shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in adjusting utilities adjacent to or within the new access ramp within the curb return, including but not limited to, saw cutting, excavation, removal, disposal, subgrade preparation, furnishing and compacting of backfill, placement of concrete, surveying, testing, clean up and all other incidental and necessary work and appurtenances required for a complete and in place and proper operating installation shall be considered as included in the contract price bid and no additional compensation will be allowed therefore.

## **SIGNING AND STRIPING**

Apply thermoplastic pavement markings and traffic stripes (lane lines, word and symbol markings, limit lines, crosswalk, etc.) shall conform to the provisions in Section 84, "Markings," of the 2018 State Standard Specifications and these Standard and Special Technical Provisions.

The Contractor shall layout and "cat-track" the alignment of the proposed striping at 15 ft. intervals and "spot" the proposed pavement markings as called for on the Plans. Striping shall vary no more than 2 in. in 50 ft. from the specified alignment. The Engineer may waive minor variations.

The Contractor shall not proceed with the application of thermoplastic striping or pavement markings until the Engineer has checked and approved the cat-tracking and spotting, and has authorized the Contractor to proceed.

Traffic striping shall be applied with airless equipment. All traffic striping shall be performed with a road liner type striping machine.

Temporary tape or reflective markers utilized for the purposes of interim delineation of centerline, lane lines, limit lines, and crosswalk lines shall be applied upon completion of surfacing and shall be placed to the side of the final striping pattern in such a way so that it will not interfere with the thermoplastic striping. Thermoplastic pavement markings and marker shall be installed no earlier than (7) calendar days following the installation of final AC surface course.

Except as otherwise noted on the Plans or as directed by the Engineer, all angle points, as shown on the striping Plans shall be painted as a smooth, tangent curve with a radius and length as approved in the field.

All temporary tape and reflective markers applied for the purpose of interim delineation shall be removed by the Contractor at no additional cost to the City upon completion of the first coat of striping and prior to the final striping.

Stencils used for pavement markings must conform to the latest Caltrans approved Metric Stenciling Standards.

Add to Subsection 84-1.04, "Protection from Damage," of the State of California Standard Specifications the following:

Newly applied thermoplastic pavement markings which are damaged as a result of the construction, including wheel markings by public traffic and the construction equipment, shall be replaced, and any associated removals shall be performed as outlined in these Special Provisions at the sole expense of the Contractor and no separate compensation will be allowed therefor.

Existing traffic striping and pavement markings that do not conform to the approved Plans shall be removed by wet sandblasting. Other methods may be requested by the Contractor, but shall be submitted in writing to the Engineer for approval. Blackout of existing traffic striping or pavement markings, which do not conform to the approved Plan, shall not be allowed.

Payment for Continental Crosswalks, Turn Arrows Left or Right, Thermoplastic Striping per Detail 9, Thermoplastic Striping per Detail 22, Thermoplastic Striping per Detail 38, Thermoplastic Striping per Detail 38B, and Thermoplastic Striping per Detail 29 shall be at the contract lump sum (LS) and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in applying thermoplastic pavement markings the items specified herein and no additional compensation shall be allowed therefor. Payment will be made on a basis of the percentage of work completed for these bid items.

## **REFLECTIVE PAVEMENT MARKERS**

All reflective pavement markers shall conform to the provisions in Section 81-3, "Pavement Markings," of the 2018 State Standard Specifications and these Standard and Special Technical Provisions.

Payment for Two-Way Blue Reflective Raised Pavement Marker and Detail 26 will be at the contract lump sum (LS) and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in applying pavement markings and no additional compensation shall be allowed therefor.

## **PEDESTRIAN PUSH BUTTONS**

All equipment, materials, and components for new pedestrian push buttons and the installation thereof, shall conform to the provisions in Section 56-3, "Standards, Poles, Pedestal, and Posts", Section 86-1.02J, "Standards, Poles, Pedestals, and Posts" and Section 87, "Electrical Systems" of the 2018 State Standard Specifications and these Standard and Special Technical Provisions.

Replace the first paragraph of Subsection 56-3.01C(2) "Foundations" with the following:

Concrete for foundations for controller cabinets, posts, standards, and pedestals shall conform to subsection 303-1 of the Standard Specifications, and Caltrans Standard Plans.

The new locations of Pedestrian pushbutton posts shall be laid out by the Contractor and approved by the City during construction per the 2014 CA-MUTCD and applicable ADA guidelines.

New pedestrian push button assembly shall include all necessary sidewalk removals, installation of new conduit and wiring, connection to and testing of existing system, and replacement of the removed additional concrete surface in order to accommodate the new location of the push button. The contractor shall verify existing conditions to confirm the amount of material needed.

The new push button posts shall be installed per Caltrans Std. Plan ES-7A Detail B and shall include the necessary footing. New push buttons are to be installed per Caltrans Std. Plan ES-5C Type B. The push button and sign shall attach to and be securely supported by the framework. Fasteners used shall be stainless steel tamper proof screws for pedestrian push button assemblies.

Standards, steel pedestals, and posts shall not be erected or installed until the service enclosure is installed, metered and energized, and the controller cabinet wired, controller test period completed and passed, and the controller assembly installed and loops, conduits, pullboxes, and other underground installations complete and in place; and signal faces, push buttons, signs, luminaries, and other materials required to complete the installation in its entirety have been inspected, passed inspection, and are in the Contractor's possession and are available for immediate installation. Possible delays in materials delivery are figured in the number of days required to complete the project.

Add to Subsection 87-21.03B "Maintaining Existing Electrical Systems (2) Maintaining Existing Traffic Management System Elements During Construction" of the State of California Standard Specifications the following:

Traffic signal system shutdowns shall be limited to periods between the hours of 9:30 a.m. and 2:30 p.m., unless otherwise permitted by the Engineer.

The third paragraph shall be deleted and replaced with the following:

Work and materials required to keep the existing traffic signal systems operational will be considered as included in the prices bid and no additional compensation will be allowed therefore. Such work and materials may include, but shall not be limited to, overhead or underground temporary wiring and temporary signal standards and indications.

Electrical service equipment installations, modifications, and conduit run details shall be as specified by the serving utility company, and written proof of their approval by the utility shall be submitted to the Engineer prior to installation. The Contractor shall be responsible for all service details, expenses, and scheduling far in advance of need.

Payment for Furnish and Install New Free standing Pedestrian Buttons Complete and Operational in place will be at the contract unit price bid per Each item (EA) and shall include full compensation for the furnishing of all labor, equipment, materials and performing all of the work shown on the Plans and/or specified herein to remove existing button/post, obtain approval for layout location, install necessary conduit, construct new footings (as applies) and install/connect the existing pedestrian push button assembly to the traffic signal system while maintaining electrical system during construction.



## GENERAL NOTES: (MUST USE ALL NOTES ON THIS SHEET FOR ALL PLANS)

- 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 STORM WATER 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-0(ST-2), MBSI-120A-0(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 STORM WATER 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 CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED 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 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 5:00 A.M. AND 9:00 P.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 HIS 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 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 9:00 P.M. AND 5:00 A.M. FLAGGERS MAY BE USED IF ONE LANE IN EACH DIRECTION CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE TRAFFIC ENGINEER. ALL TRAVEL 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 CONTOUR 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 SLIPAGE. FOR CONCRETE SECTION OF STREETS, THE PLATES MAY BE PLACED ON SURFACE AND HELD IN PLACE WITH ASPHALT CONCRETE EDGE BERRMS 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-0 (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 ON 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.

28. 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".

29. THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 7320.5, 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.

30. CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.

31. 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.

32. 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 AND ENGINEER DID NOT PERFORM ANY POTHoling, IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.

33. 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.

34. THE CONTRACTOR IS ADVISED TO POTHOLE WHERE HE BELIEVES NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.

35. 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.

36. FOR WORK UNDER ANY EXISTING CONCRETE (PCC) BUS PADS THE CONTRACTOR SHALL REMOVE BUS PAD AND REPLACE AFTER INSTALLATION OF SEWER PIPES (SEE SSPWC FOR DETAILS OF REPLACEMENT BUS PAD). TRENCHLESS METHOD MAY BE USED TO CROSS UNDER BUS PAD.

37. FOR ANY UNDER CROSSINGS ENTRY OF APPROACHES TO STORM DRAIN CATCH BASINS CONTRACTOR SHALL TUNNEL UNDER THESE AND SUPPORT APPROACH. UPON INSTALLATION OF SEWER AND COMPACTION OF TRENCH A 2 SACK SAND CEMENT SLURRY SHALL BE PLACED UNDER THE APPROACH.

38. 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.

39. ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

40. LATERALS FOR STORM DRAIN SYSTEM AND EXISTING SEWER 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 SEWER.

## PRIVATE ENGINEERS NOTICE TO CONTRACTOR:

1. 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.

2. CONTRACTOR FURTHER AGREES THAT HE 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.

3. 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.

4. 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.

5. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.

6. ALL JOIN LINES SHALL BE SAWCUT ON 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.

7. 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.

8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS 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.

9. 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.

10. DEMOLITION PLAN BY SEPARATE PERMIT.

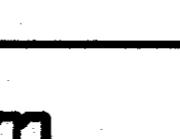
## NPDES NOTES:

1. 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.

2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.

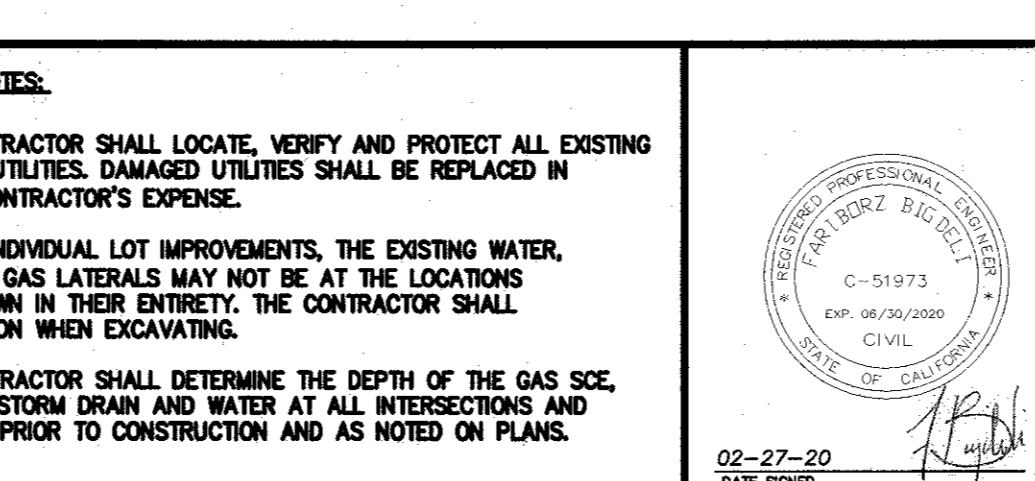
3. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.

4. 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.



Know what's below.  
Call 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 LINES 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 THE GAS LINE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



QUANTUM QUALITY CONSULTING, INC.  
2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891-3994  
FAX: (310) 891-3995  
02-27-20  
DATE SIGNED

5. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION BY RAINWATER AND DISPERAL BY WIND.

6. 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.

7. 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 IN

## 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-0 (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 COMPAKTED 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.
- ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.

## 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 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 9:00 P.M. AND 5:00 A.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.

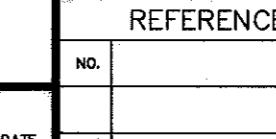
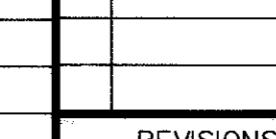
## GENERAL NOTES FOR SIGNING AND STRIPING:

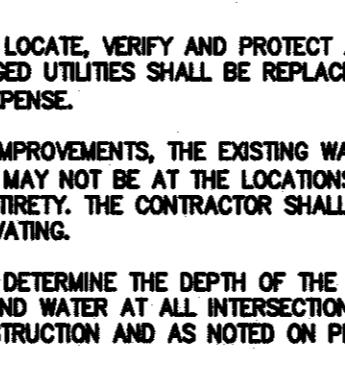
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION" LATEST EDITION, AND ALL APPLICABLE STANDARDS AND SPECIFICATIONS TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (811) AS REQUIRED PRIOR TO THE START OF WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES WITHIN THE LIMITS OF THE PROJECT, AND IN THE EVENT OF SUBSTRUCTURE DAMAGE, HE SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO PROJECT BETWEEN 5:00 A.M. TO 9:00 P.M. ON ANY DAY NOR ON SATURDAY, SUNDAY, HOLIDAY AT ANY TIME EXCEPT AS APPROVED BY THE CITY ENGINEER. WORK WILL BE PERFORMED AT NIGHT TIME FROM 9:00 P.M. AND 5:00 A.M.
- TREES, FOLIAGE, SIGNS, PARKING METERS, AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACED IN-KIND.
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY AND SHALL BE REMOVED FROM JOB SITE UNLESS INSTRUCTED BY 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 DRIVEWAYS AT THE END OF EACH WORKING DAY TO THE SATISFACTION OF THE ENGINEER.
- PRIOR TO STRIPING, THE CONTRACTOR SHALL PERFORM CAT-TRACKING THE STRIPING PLAN AND PLACE RAISED TEMPORARY REFLECTOR (SELF ADHESIVE) TO IDENTIFY LANE LINES (WHITE) AND CROSSWALK LINES (YELLOW) AND CENTERLINES (ORANGE) - PERTAINING TO APPROVAL OF CITY ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A 72-HOUR NOTIFICATION TO THE AFFECTED PROPERTIES, POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A CHANGE IN LANE CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES, AND PARKING RESTRICTION.
- AS REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE FURNISH AND OPERATE A SELF-LOADING MOTOR SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION IS INCOMPLETE.
- ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALTIC CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT.
- ANY EXISTING STRIPING MARKED OR DAMAGED BY THE WORK ON ADJACENT STREETS SHALL BE REPLACED BY THE CONTRACTOR. REPLACE ALL SIGNAGE AND STRIPING DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.
- STRIPING LAYOUT SHALL BE MARKED ON PAVEMENT AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
- TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
- 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.
- CONTRACTOR TO USE THE LATEST VERSION OF THE CA-MUTCD AS A STANDARD PLAN FOR SIGN AND STRIPING INSTALLATION AS NOTED IN DRAWINGS.
- ALL CROSSWALKS SHALL BE CONTINENTAL STYLE AS SHOWN BY CITY OF MANHATTAN BEACH STANDARD PLAN MBSI-174-0(ST-27).
- ALL CONFLICTING LINES AND MARKINGS SHALL BE REMOVED BY WET SANDBLASTING AND INCLUDES REMOVAL OF RAISED PAVEMENT MARKERS. REMOVAL BY GRINDING METHOD REQUIRES PRIOR APPROVAL OF CITY ENGINEER.
- ALL TURN ARROW MARKINGS SHALL BE TYPE IV (L OR R) UNLESS OTHERWISE NOTED.
- ALL LANE STRIPING AT INTERSECTION APPROACHES WITHOUT CROSSWALKS OR LIMIT LINES SHALL END 10 FEET FROM THE EXTENSION OF THE INTERSECTING CURB LINE.
- ALL LANE LINES AT INTERSECTION APPROACHES AND DEPARTURES SHALL BEGIN AND END WITH 50 FEET OF SOLID 4-INCH SOLID WHITE LINE WITH TYPE G REFLECTORS AT EACH END.
- LANE WIDTHS SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH ADJACENT SINGLE OR DOUBLE STRIPE OF CURB AS APPROPRIATE.
- PROPOSED LIMIT LINE SHOULD BE INSTALLED AT A MINIMUM OF 4 FEET BEHIND THE EXISTING CURB EXTENSION OR EDGE OF TRAVEL WAY (NO EXISTING CURB ACCESS RAMP). IN THE CASE OF INTERSECTION WITH CURB ACCESS RAMP, THE LIMIT LINE SHALL BE PLACED BEHIND THE RAMP'S LANDING AREA, BUT IN NO CASE GREATER THAN THIRTY FEET BACK.
- EXISTING RAISED PAVEMENT MARKERS DAMAGED DURING THE REMOVAL SHALL BE REPLACED BY CONTRACTOR AT NO COST TO THE CITIES OF MANHATTAN BEACH AND EL SEGUNDO.
- ALL SIGNING DAMAGED DURING THE REMOVAL SHALL BE REPLACE BY CONTRACTOR AT NO COST TO THE CITIES OF MANHATTAN BEACH AND EL SEGUNDO.
- ALL STRIPING AND SIGNAGE REQUIRED TO RESTORE DAMAGE TO EXISTING SHALL BE DONE IN CONFORMANCE WITH THE APPLICABLE CALTRANS STANDARD PLANS AND PROVISIONS OF THE 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.
- REPLACE ALL SIGNAGE DAMAGED BY THE WORK IN KIND WITH NEW PER APPLICABLE CITY, AGENCY, JURISDICTION REQUIREMENTS.

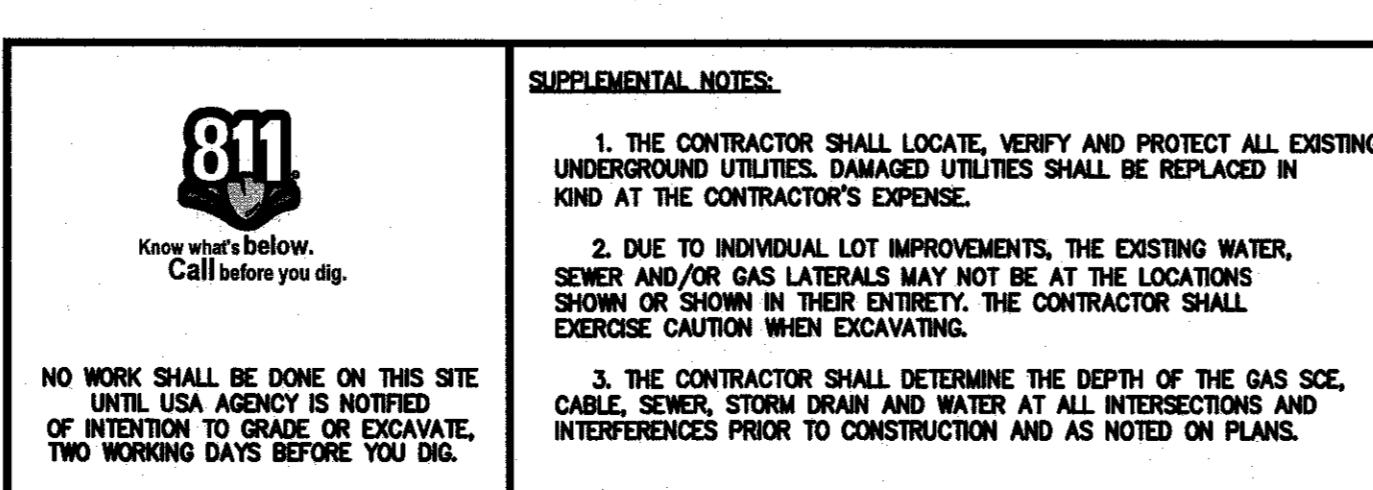
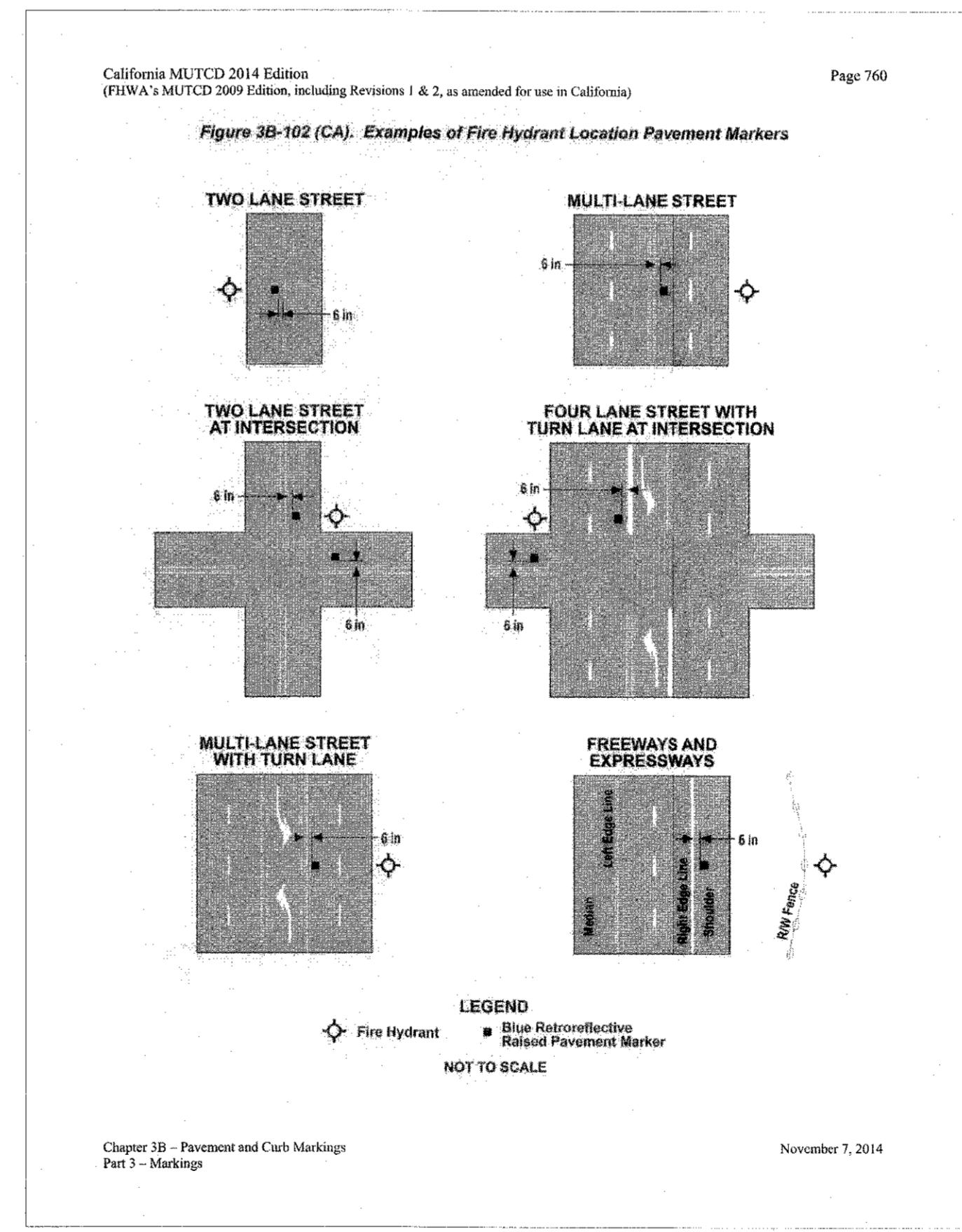
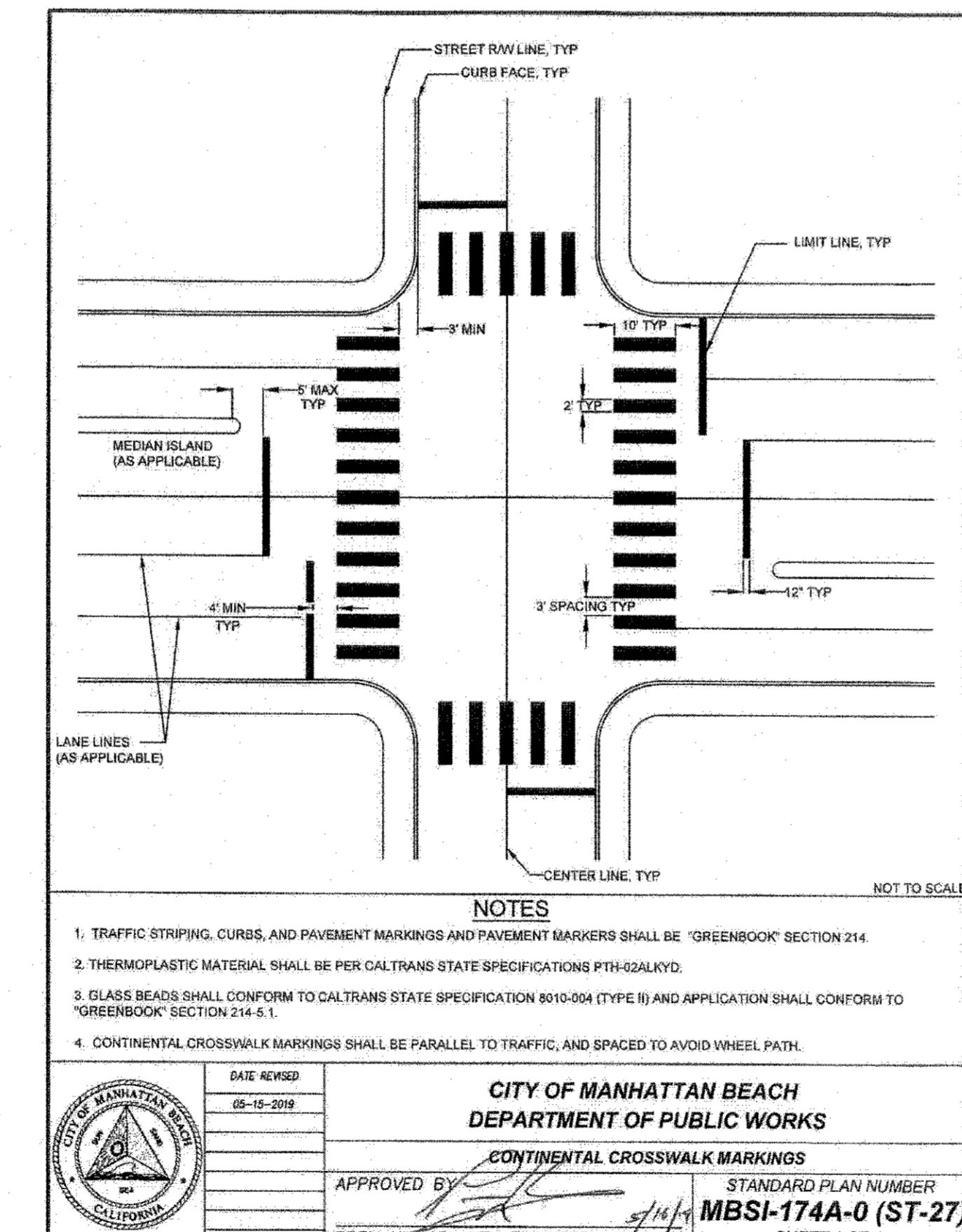
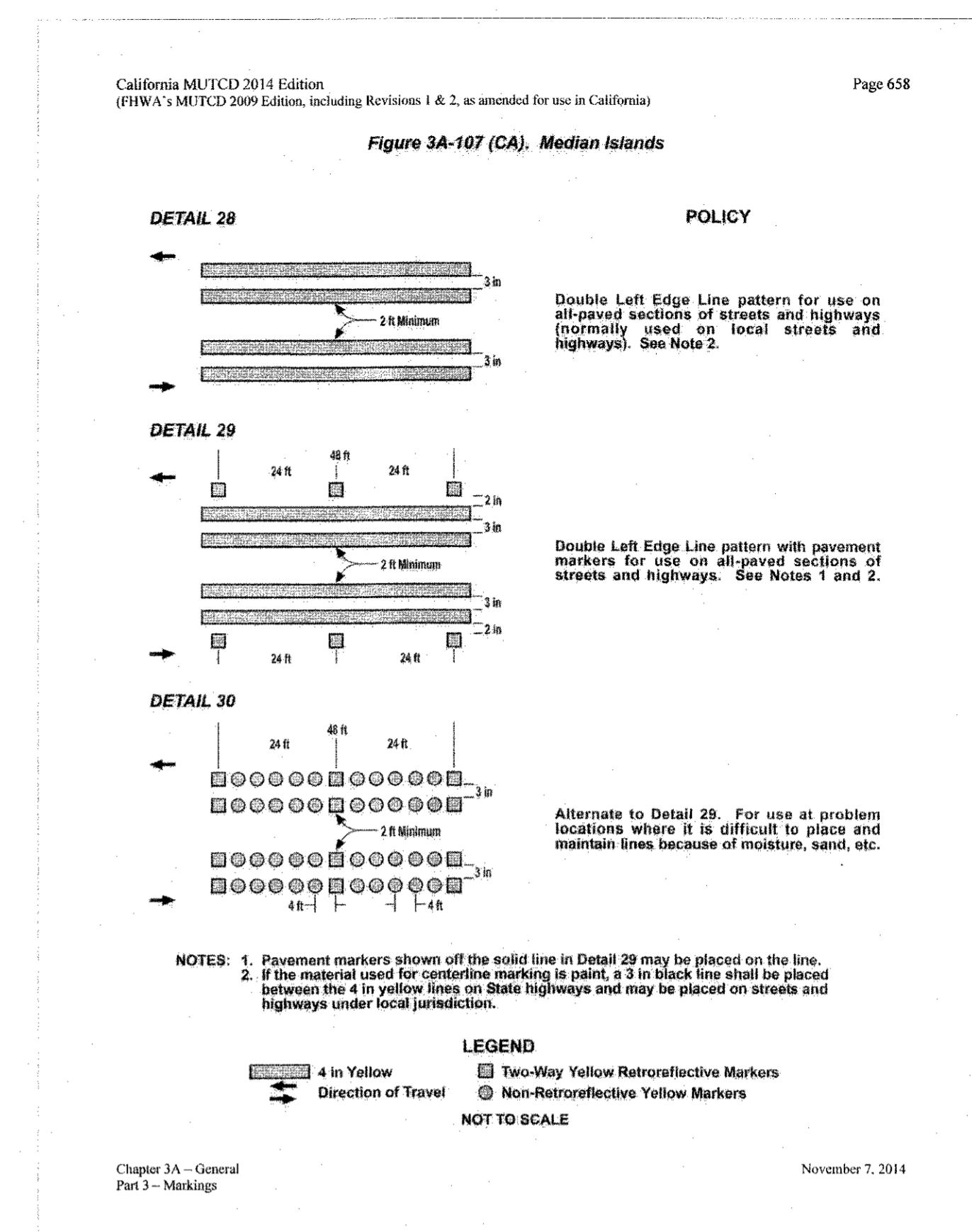
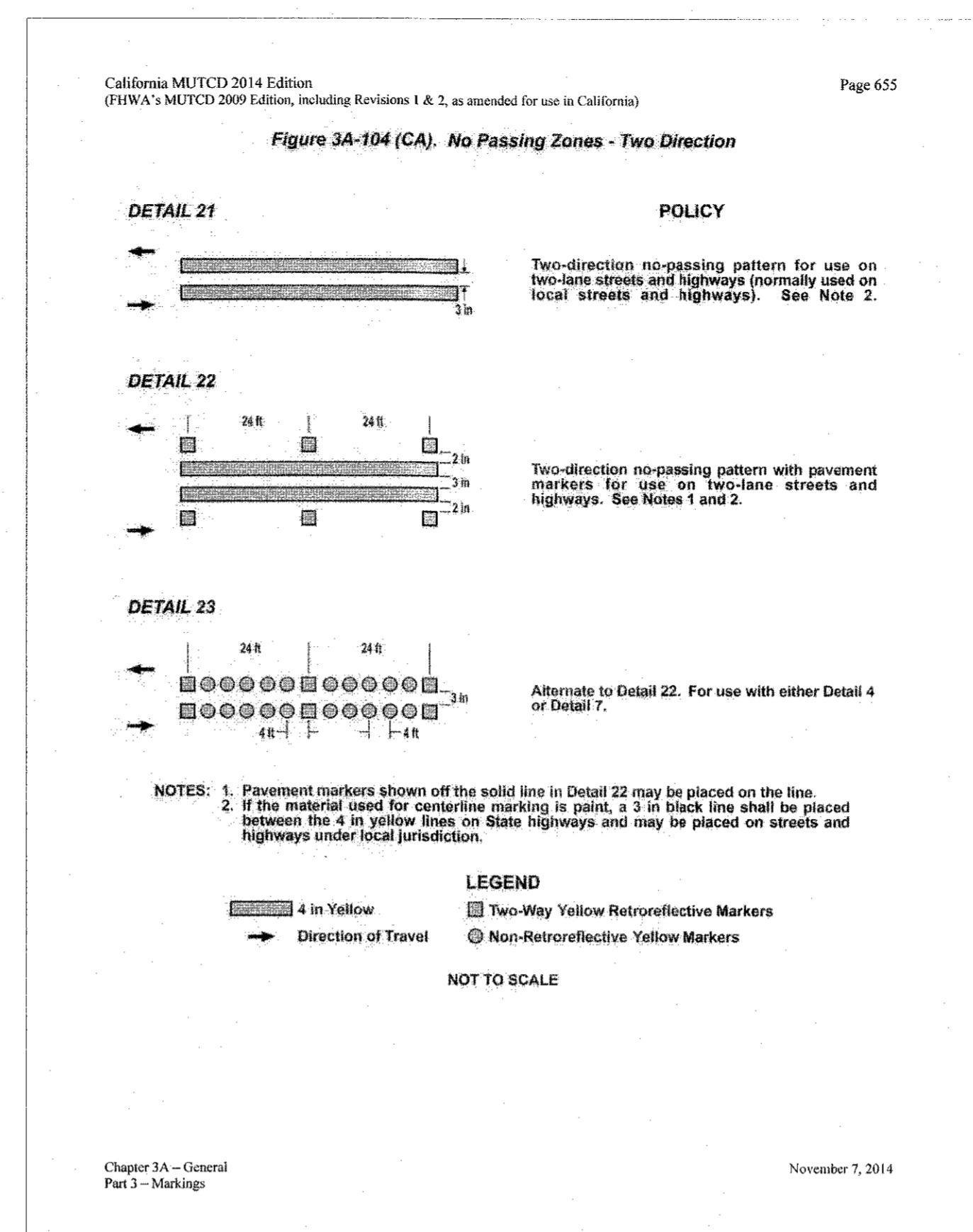
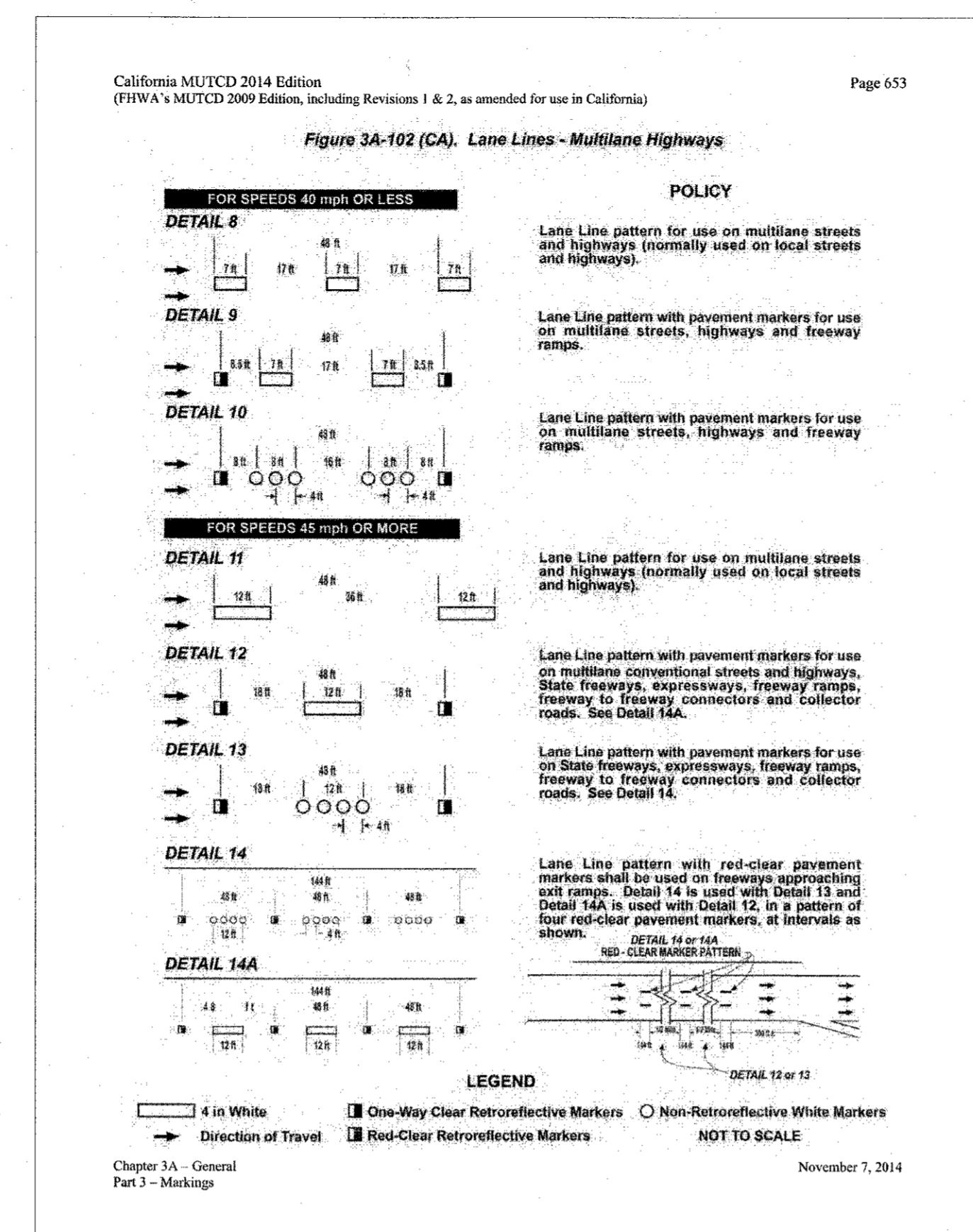
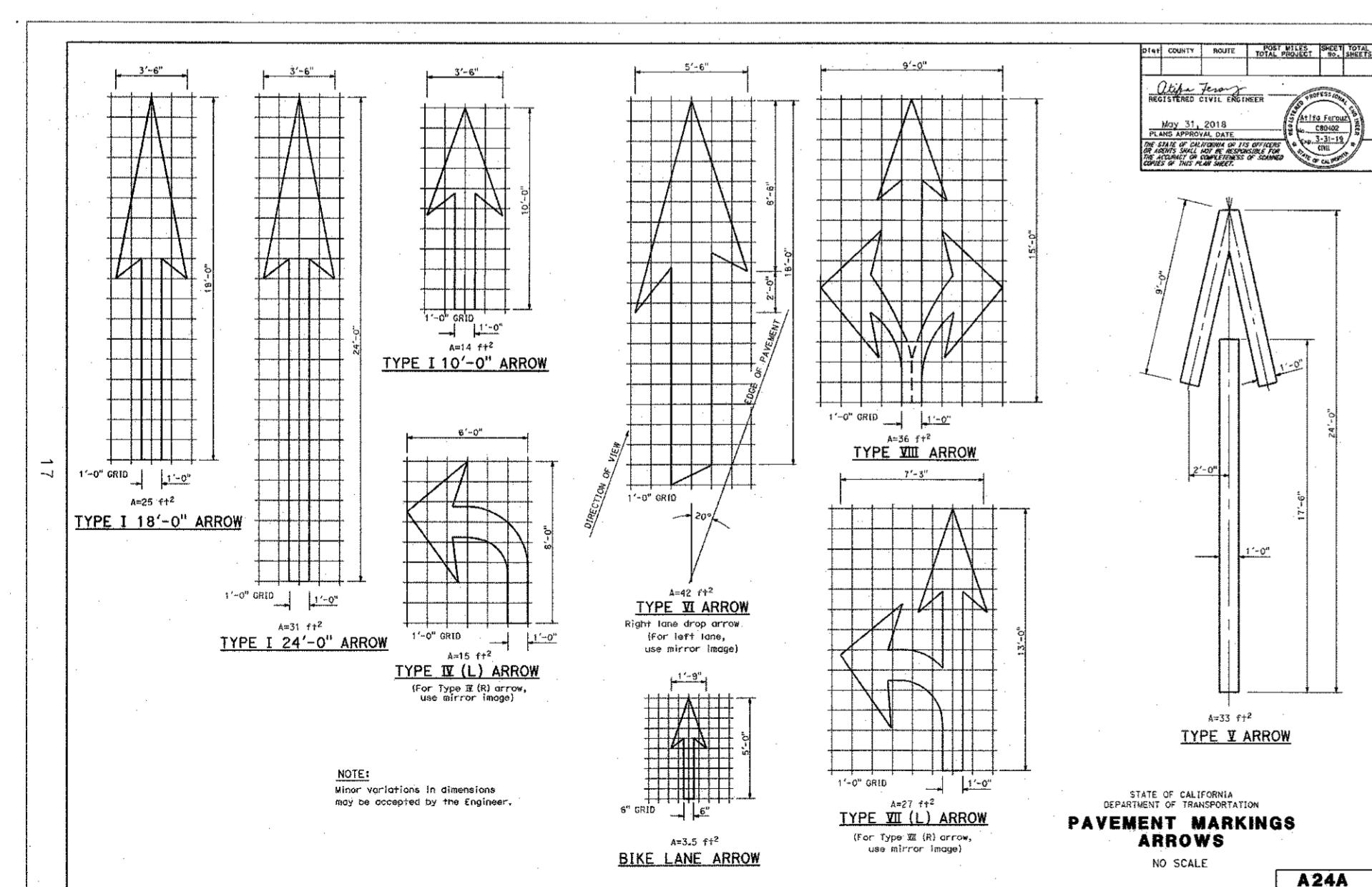
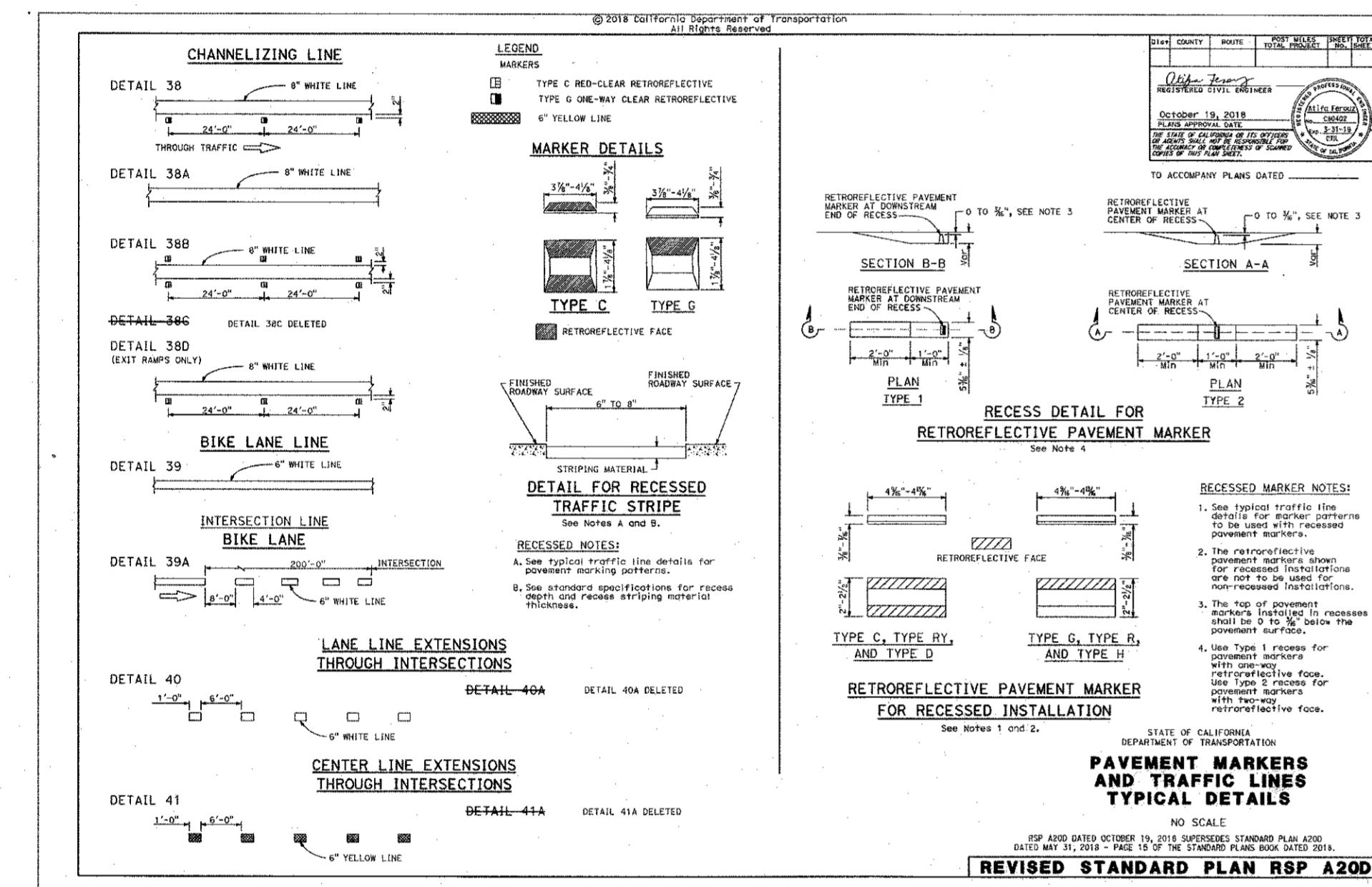
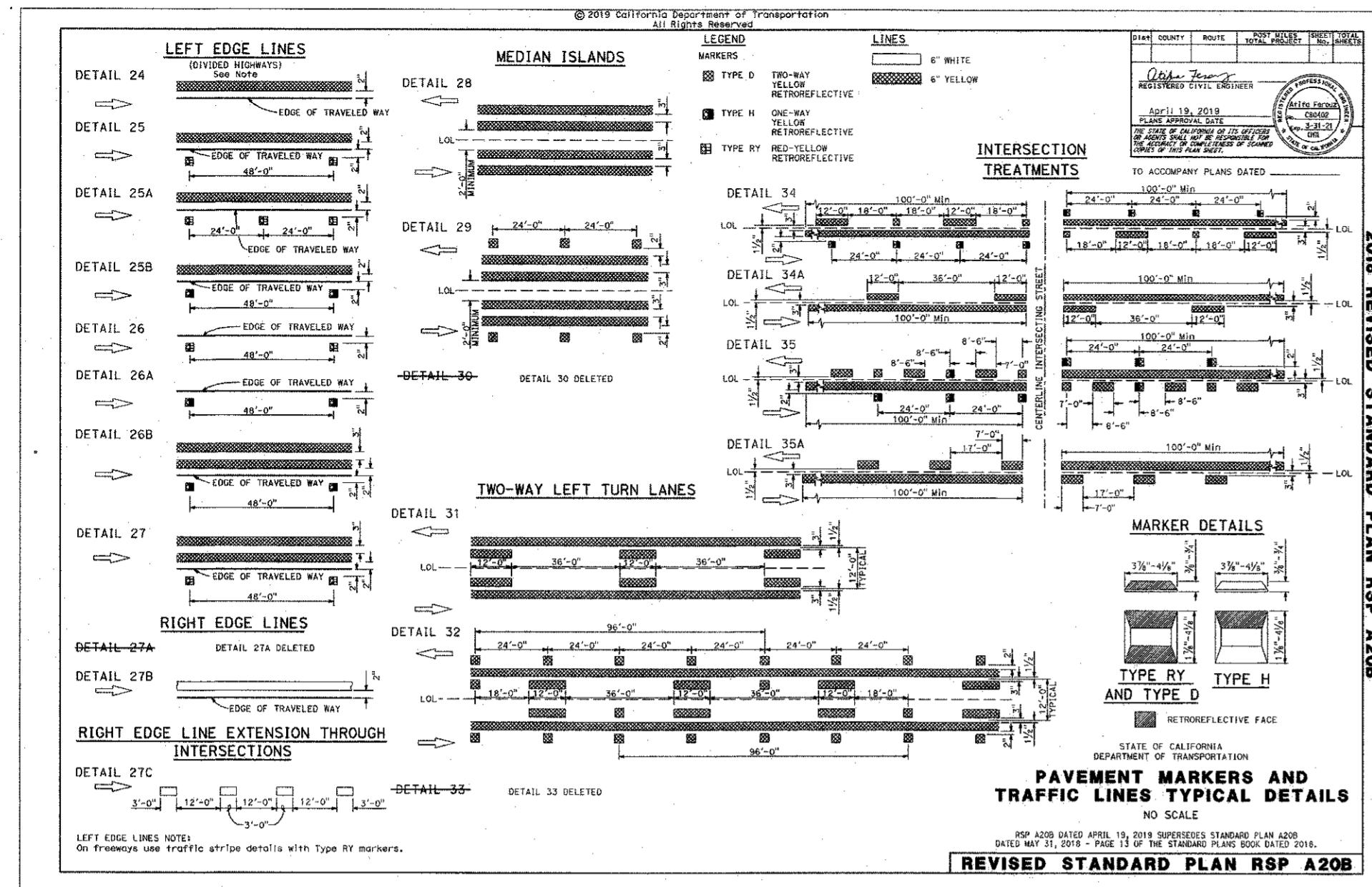
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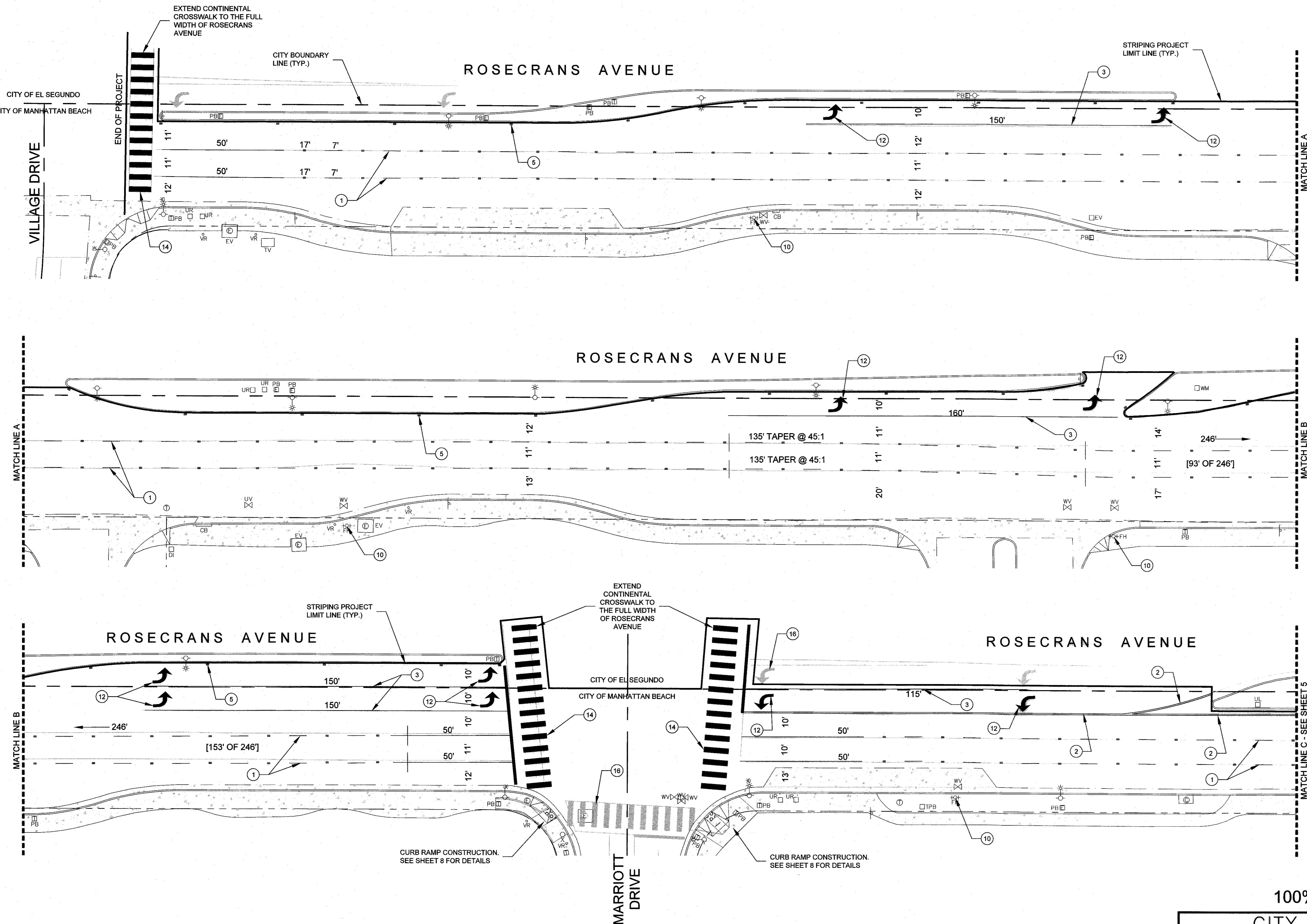
CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

REFERENCES			ROSECRANS AVE STREET RESURFACING PROJECT		
NO.	BY	DATE	SIGNING AND STRIPING NOTES		
			RECOMMENDED BY  CITY ENGINEER PREM KUMAR DATE: 02/27/20		
			APPROVED BY  DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOLAS DATE: 02/27/20		
			REVIEWED BY ADILIA MILLER PROJECT MANAGER DATE: 02/27/20		
			REVIEWED BY D. PREBLE PROJECT ENGINEER DATE: 02/11/20		
			REVISIONS	SCALE	DATE
				02-11-20	DRAWING NO.
					P-897
					Sheet 3 of 9

	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 THE GAS LINE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.	
NO WORK SHALL BE DONE ON THIS SITE UNTIL THE AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.	
02-27-20 DATE SIGNED	
 REGISTERED PROFESSIONAL ENGINEER C-51975 EXPIRED 06/06/2020 CIVIL STATE OF CALIFORNIA 2020	
QUANTUM QUALITY CONSULTING, INC.	
2720 SEPULVEDA BLVD. SUITE 100 TORRANCE, CA 90505 PHONE: (310) 891-3994 FAX: (310) 891-3995	





## **STRIPING CONSTRUCTION NOTES:**

- 1 INSTALL CA\_MUTCD DETAIL 9 FOR LANE STRIPING. SEE SHEET 4 FOR DETAIL
- 2 INSTALL CA\_MUTCD DETAIL 22. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL
- 3 INSTALL CALTRANS DETAIL 38. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL
- 4 NOT USED
- 5 INSTALL CALTRANS DETAIL 26. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL
- 6 NOT USED
- 7 NOT USED
- 8 INSTALL 12" THICK LIMIT LINE
- 9 NOT USED
- 10 INSTALL BLUE REFLECTIVE MARKER ADJACENT TO ALL FIRE HYDRANTS PER MUTCD 3B-102(CA). SEE SHEET 4 FOR DETAIL
- 11 NOT USED
- 12 INSTALL THERMOPLASTIC WHITE "TYPE IV" LEFT ARROW PER CALTRANS STANDARD PLAN A24A. SEE SHEET 4 FOR DETAIL
- 13 INSTALL THERMOPLASTIC WHITE "TYPE IV" RIGHT ARROW PER CALTRANS STANDARD PLAN A24A. SEE SHEET 4 FOR DETAIL
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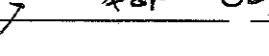
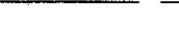
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4. STRIPING OF LIMIT LINES PER CITY STANDARD MBSI-174A-0(ST-27)

## 100% FOR CONSTRUCTION

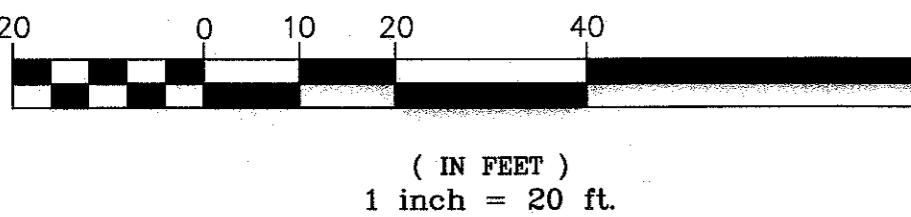
# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT — ENGINEERING DIVISION

REFERENCES			
NO.	BY	DATE	ATE
REVISIONS			
<p>RECOMMENDED BY</p>  <p>Prem Kumar</p> <p>CITY ENGINEER PREM KUMAR</p> <p>DATE</p>			
<p>APPROVED BY</p>  <p>Stephanie Katsouleas</p> <p>DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS</p> <p>DATE</p>			
<p>REVIEWED BY</p>  <p>Adilia Miller</p> <p>PROJECT MANAGER</p> <p>DATE</p>			
<p>DESIGNED BY</p>  <p>Bijan Vaziri</p> <p>PROJECT ENGINEER</p> <p>DATE</p>			
SHEET 5 OF 9		DRAWING NO. P-897	



## GRAPHIC SCALE

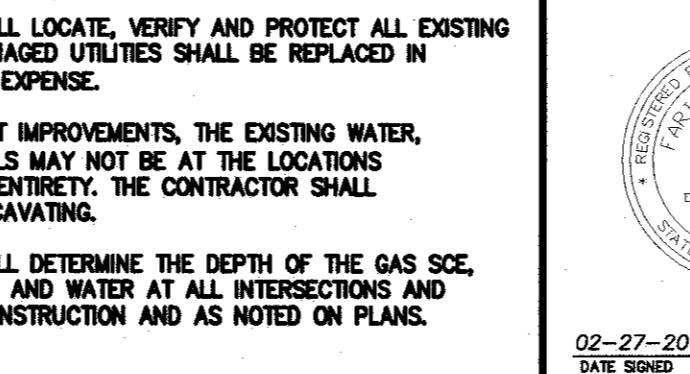


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**SUPPLEMENTAL NO.**

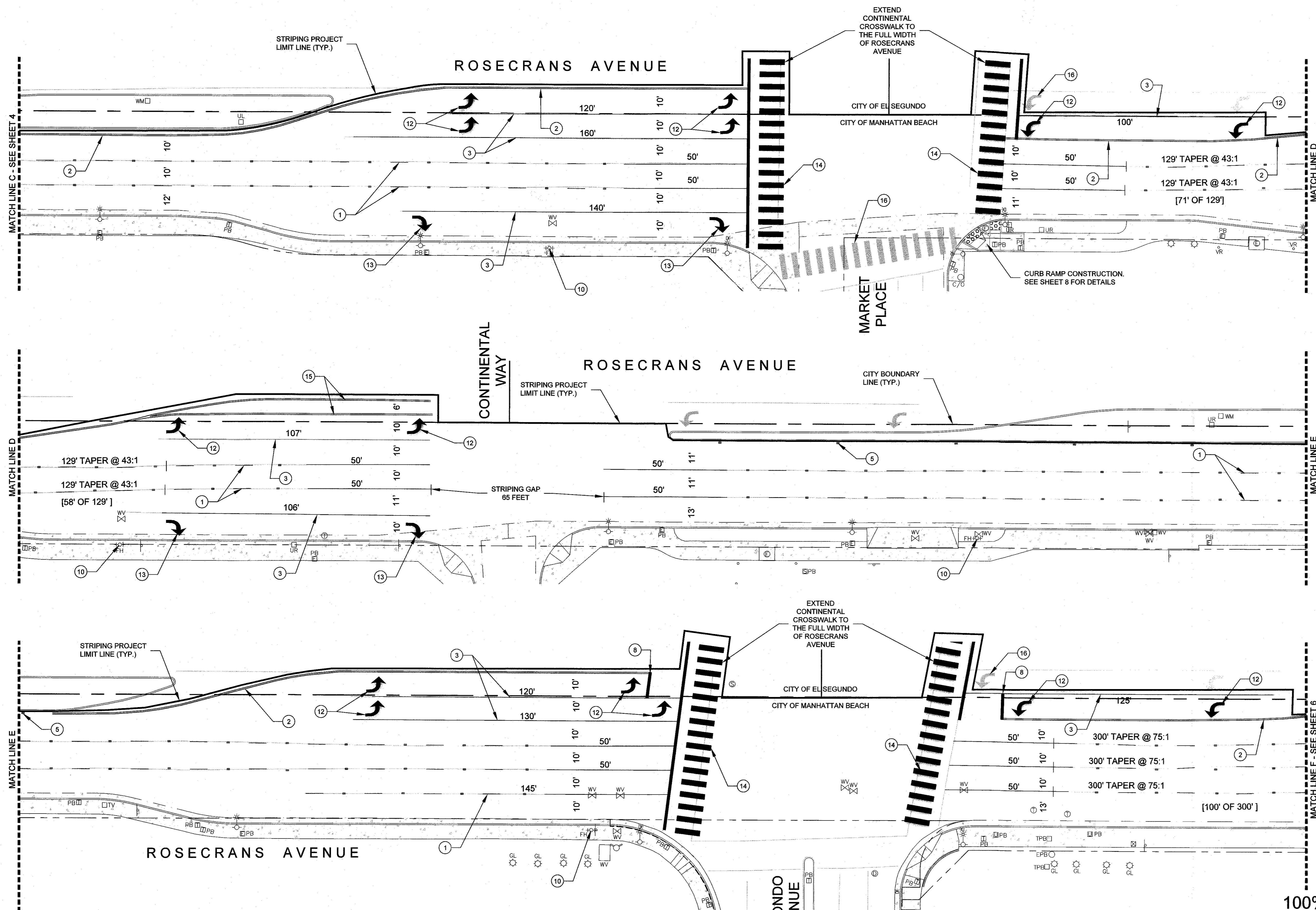
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QC QUANTUM QUALITY  
CONSULTING, INC.

2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891 - 3994  
FAX: (310) 891 - 3995

**FAX: (310) 891 - 3995**



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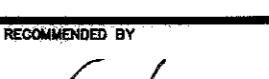
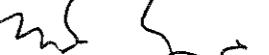
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## 100% FOR CONSTRUCTION

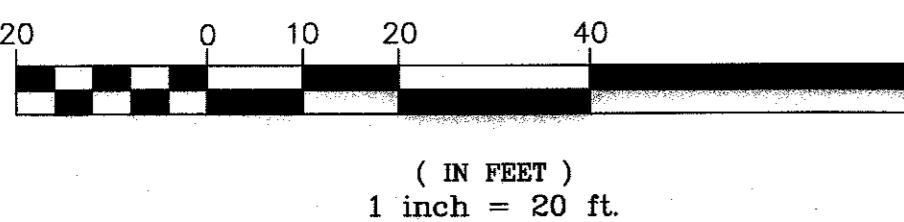
# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT      ENGINEERING DIVISION

REFERENCES			ROSECRANS AVE STREET RESURFACING PROJECT STRIPING PLAN: BETWEEN MARRIOTT DR. AND REDONDO AVE.					
NO.	BY	DATE	RECOMMENDED BY		APPROVED BY			
			 CITY ENGINEER PREM KUMAR		 DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS			
REVISIONS			PREM KUMAR 		 2/27/20			
			ADILIA MILLER  PROJECT MANAGER		3/27/20 		1"=20' 02-11-20	
			BIJAN VAZIRI  PROJECT ENGINEER		02-11-20 		SHEET 6 OF 9 P-897	



## GRAPHIC SCALE

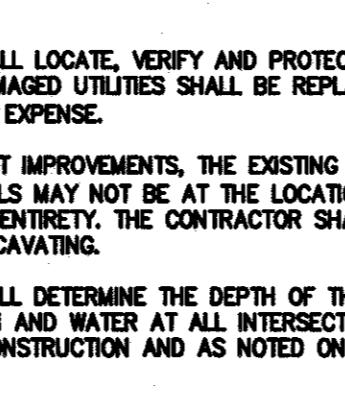


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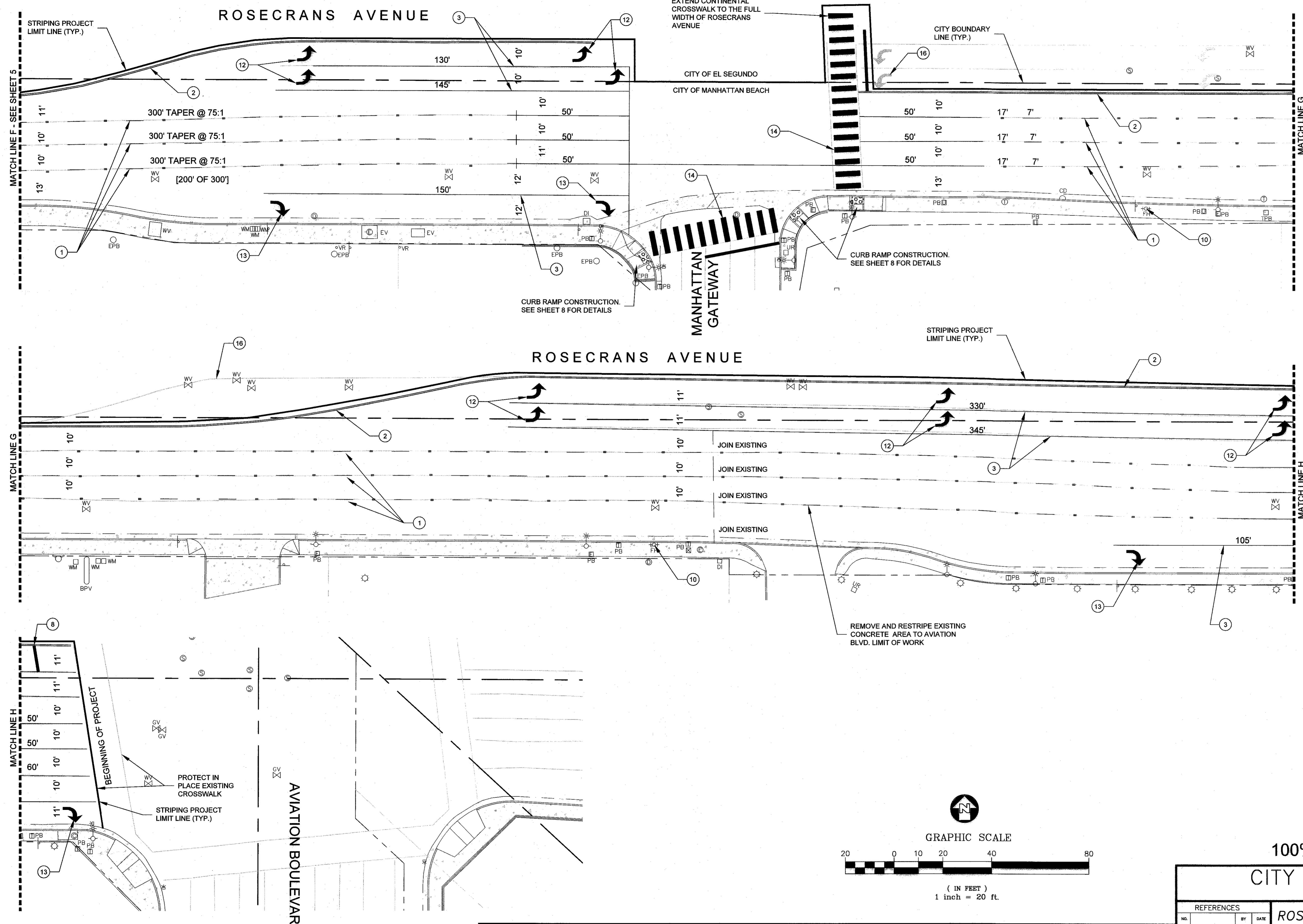
2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891 - 3994  
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REVIEWED BY

ROSECRANS AVE STREET RESURFACING PROJECT  
STRIPPING PLAN: BETWEEN MARRIOTT DR. AND PERONDO AVE.

STRIPING PLAN: BETWEEN MARRIOTT DR. AND REDUNDO AVE.

DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS		DATE
SCALE 1"=20'	DATE 02-11-20	DRAWING NO. P-897
SHEET 6 OF 9		



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## 100% FOR CONSTRUCTION

# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION

ROSECRANS AVE STREET RESURFACING PROJECT  
STRIPING PLAN: BETWEEN REDONDO AVE AND AVIATION BLVD

STRIPING PLAN: BETWEEN REDONDO AVE. AND AVIATION BLVD.

CITY ENGINEER PREM KUMAR		DATE 4/27/00	DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS		DATE 4/27/00
REVIEWED BY	<u>11</u>		SCALE	DATE	DRAWING NO.

ADILIA MILLER PROJECT MANAGER		2/27/20 DATE	SCALE 1"=20'	DATE 02-11-20	DRAWING NO. P-897
DESIGNED BY BIJAN VAZIRI		02-11-20	SHEET 7	OF 9	



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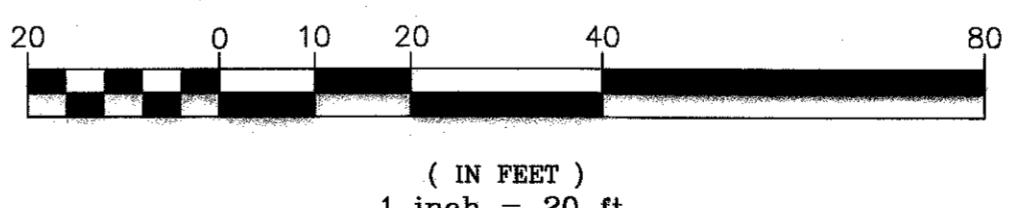
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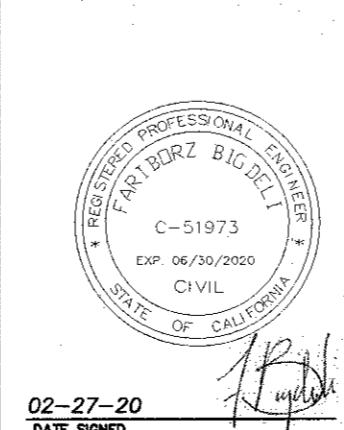
CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND  
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### GRAPHIC SCALE

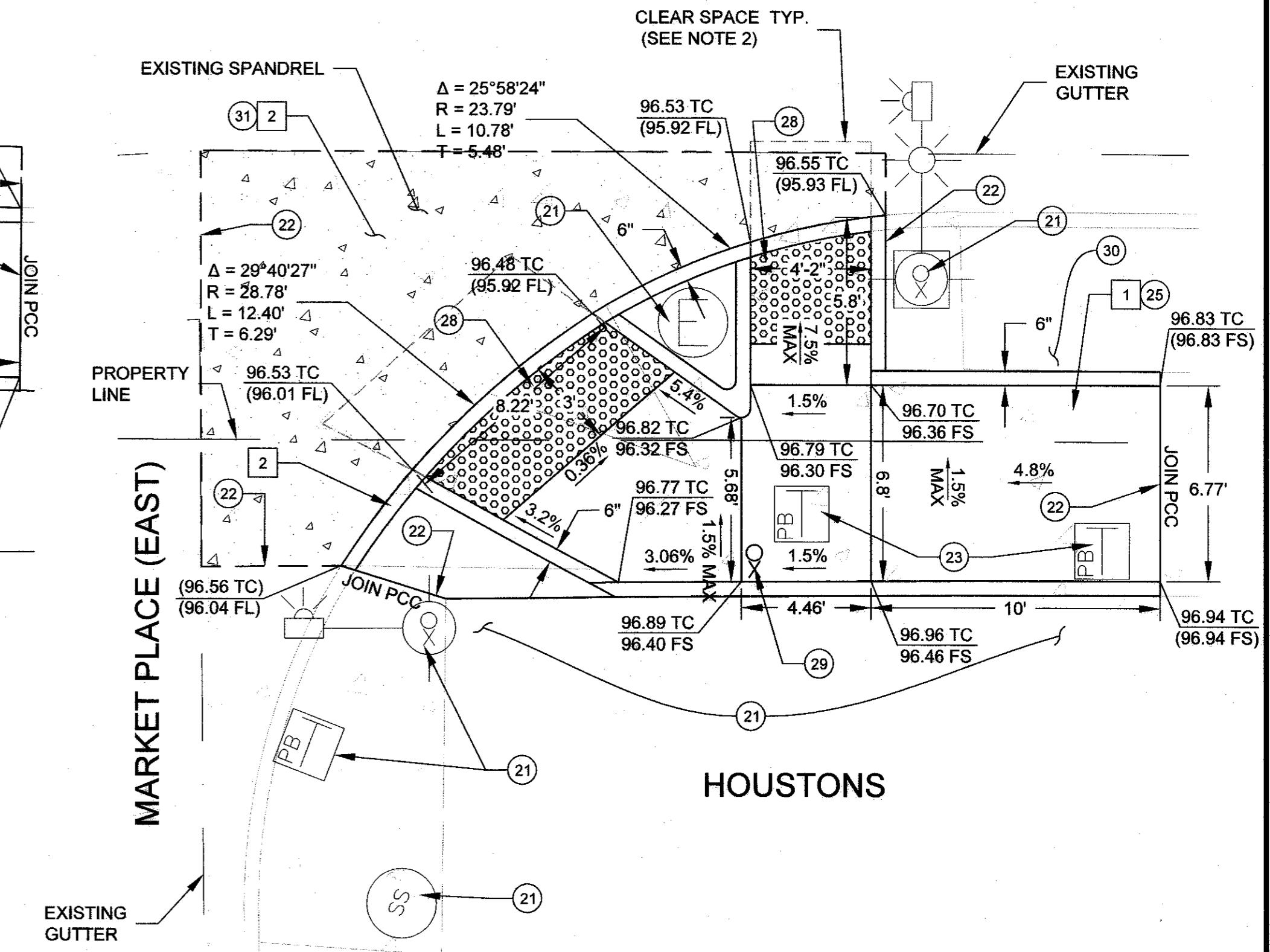
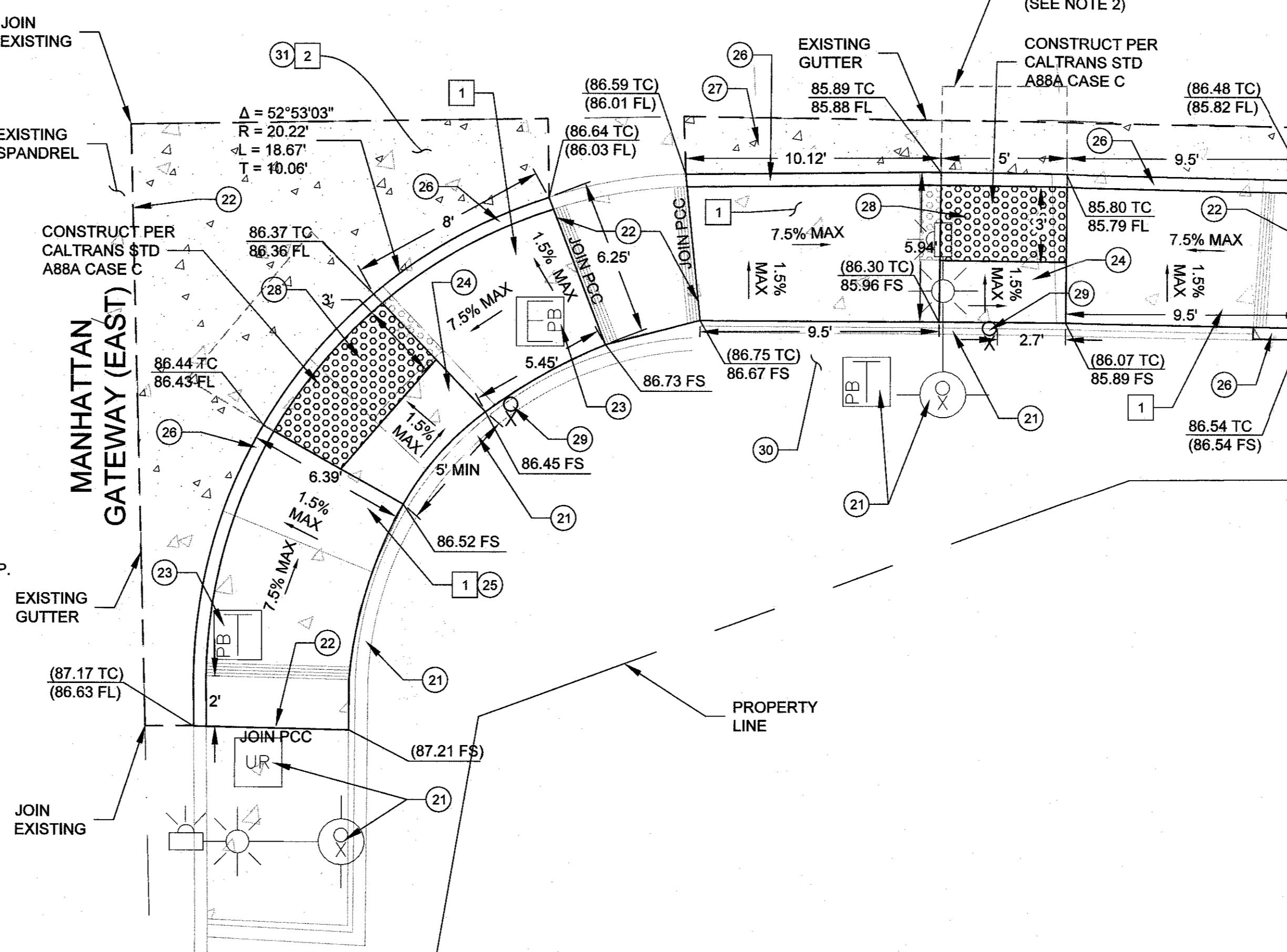
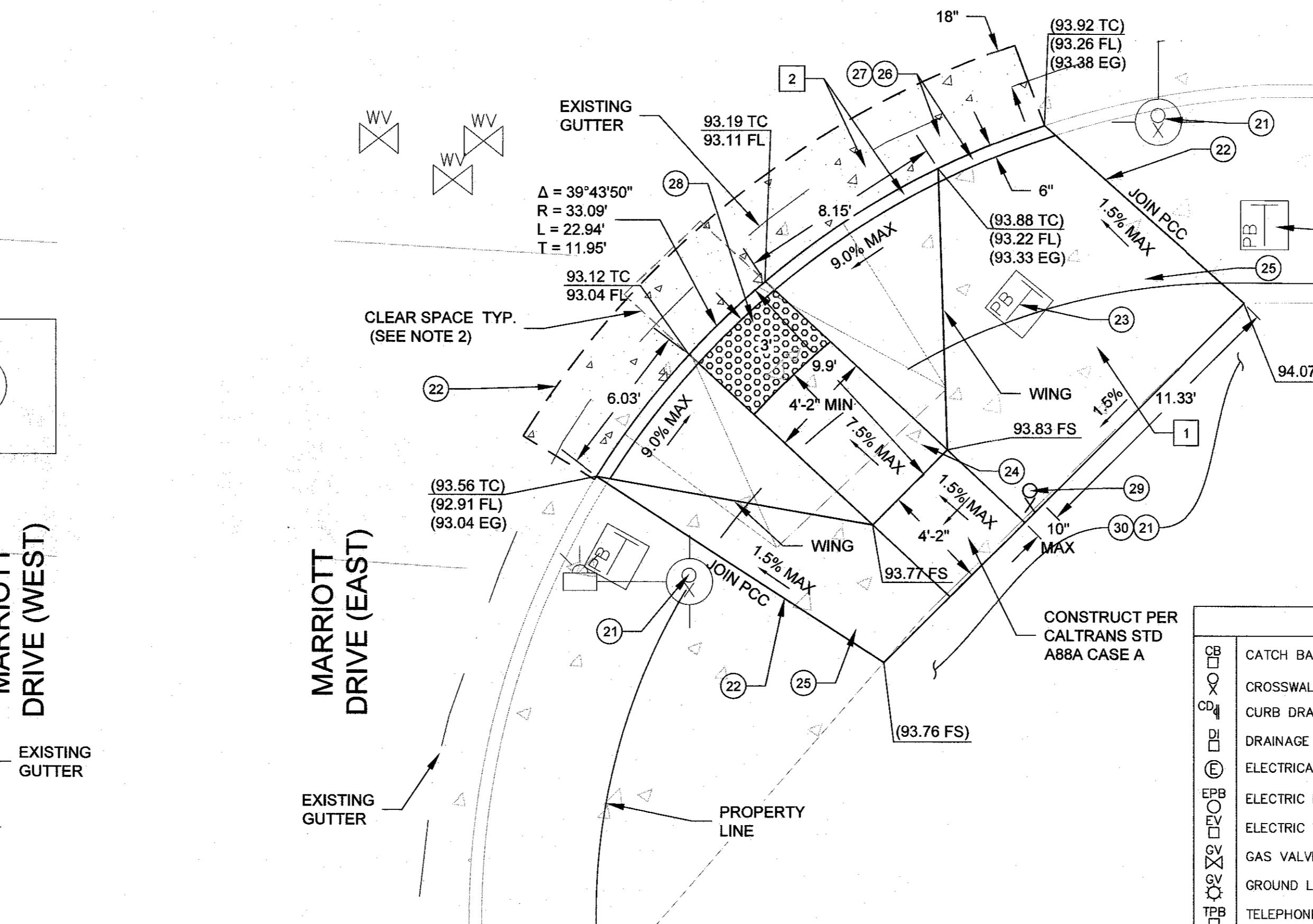
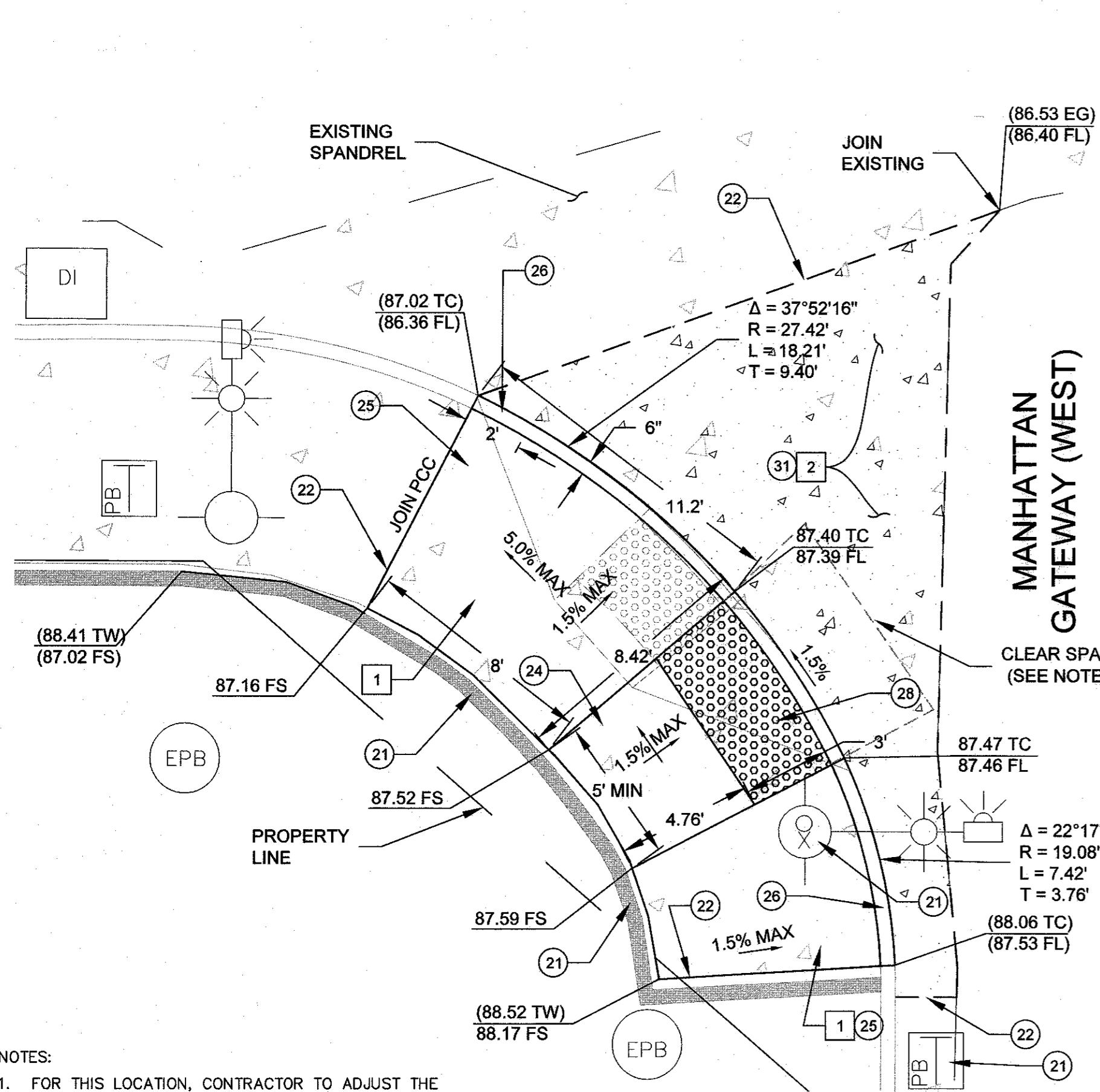
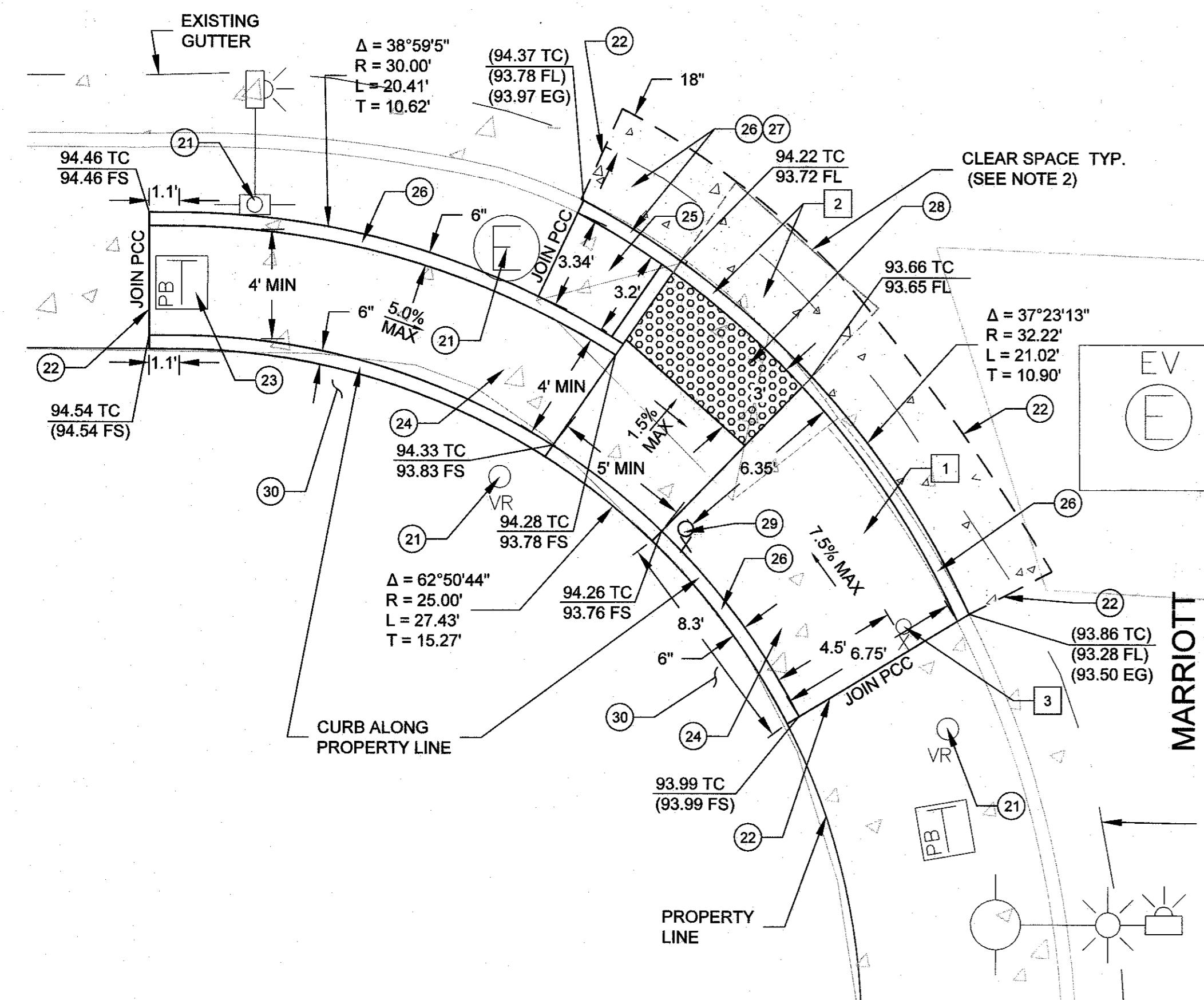


( IN FEET )



**QUANTUM QUALITY  
CONSULTING, INC.**

1. *Leucosia* (Leucosia) *leucosia* (L.) (Fig. 1)



## **CONSTRUCTION NOTES:**

- 21 PROTECT IN PLACE
- 22 SAWCUT
- 23 ADJUST BOX FACE & COVER TO NEW GRADE
- 24 CONSTRUCT CURB RAMP PER CALTRANS STANDARD A88A OR A88B AS NOTED. SEE SHEET 9 FOR STANDARD PLANS
- 25 CONSTRUCT 4" CONCRETE SIDEWALK PER CITY STD MBSI-112A-0
- 26 CONSTRUCT 6" CURB PER CITY STD MBSI-120A-0 (ST-3)
- 27 CONSTRUCT 18" GUTTER. SEE DETAIL MBSI-120A-(ST-3)
- 28 INSTALL DETECTABLE WARNING SURFACE
- 29 INSTALL NEW PEDESTRIAN BUTTON TYPE B WITH POST (EXTEND CONNECTION FROM EXISTING). BUTTON TO BE 42" ABOVE FS. SEE SHEET 9 FOR STANDARD PLANS ES-5C DETAIL B AND ES-7A DETAIL B.
- 30 RESTORE LANDSCAPING AS REQUIRED
- 31 REPLACE CONCRETE SPANDREL

## **DEMOLITION NOTES:**

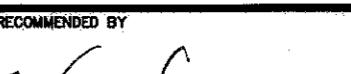
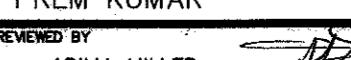
- 1 REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK PAVEMENT AND BASE
- 2 REMOVE AND DISPOSE EXISTING CONCRETE CURB AND GUTTER AND/OR SPANDREL
- 3 REMOVE PEDESTRIAN BUTTON AND POST

## NOTES:

1. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.
2. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4 FT MINIMUM BY 4 FT MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND FULLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
3. PUSH BUTTONS TO BE AT LEAST 10" MAXIMUM FROM THE LANDINGS.

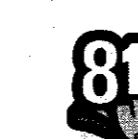
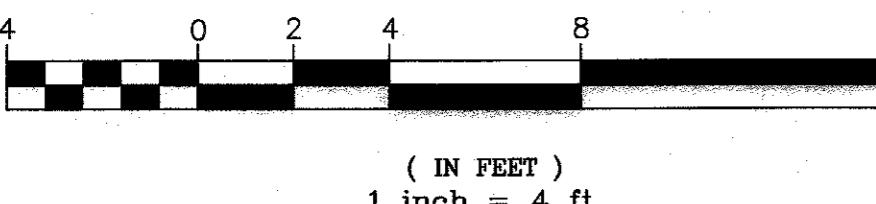
## 100% FOR CONSTRUCTION

**CITY OF MANHATTAN BEACH**  
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

REFERENCES				ROSECRANS AVE STREET RESURFACING PROJECT CURB RAMPS						
NO.		BY	DATE							
DATE										
REVISIONS				RECOMMENDED BY		APPROVED BY			DRAWING NO.	
				 CITY ENGINEER PREM KUMAR		 DATE 02-11-20			 DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS	2/27/20 DATE
				REVIEWED BY					SCALE	DATE
				 ADILIA MILLER PROJECT MANAGER		2/27/20 DATE			1"=4'	02-11-20
				DESIGNED BY					SHEET	8 OF 9
				 DOUGLAS PREBLE PROJECT ENGINEER		02-11-20 DATE			P-917	



## GRAPHIC SCALE

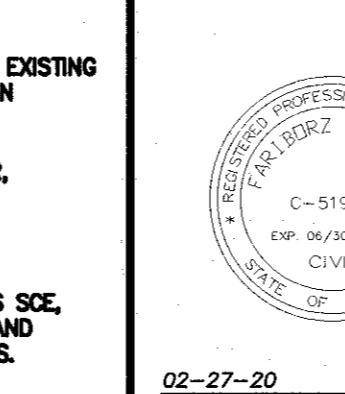


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2720 SEPULVEDA  
SUITE 100  
TORRANCE, CA  
PHONE: (310) 895-  
FAX: (310) 895-

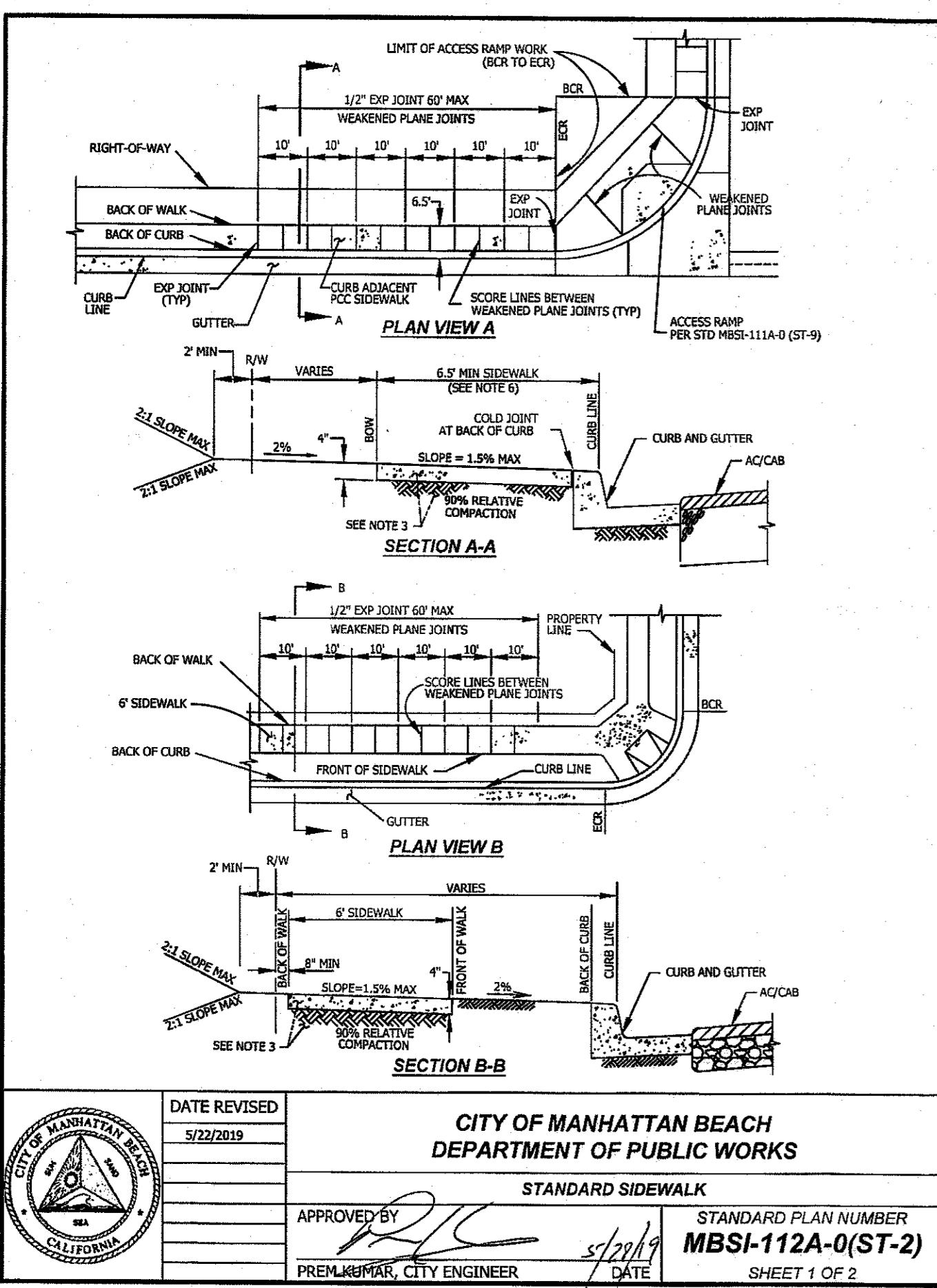
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BY	DATE

# ROSECRANS AVE STREET RESURFACING PROJECT

## CURB RAMPS

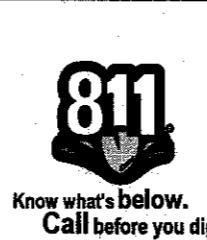
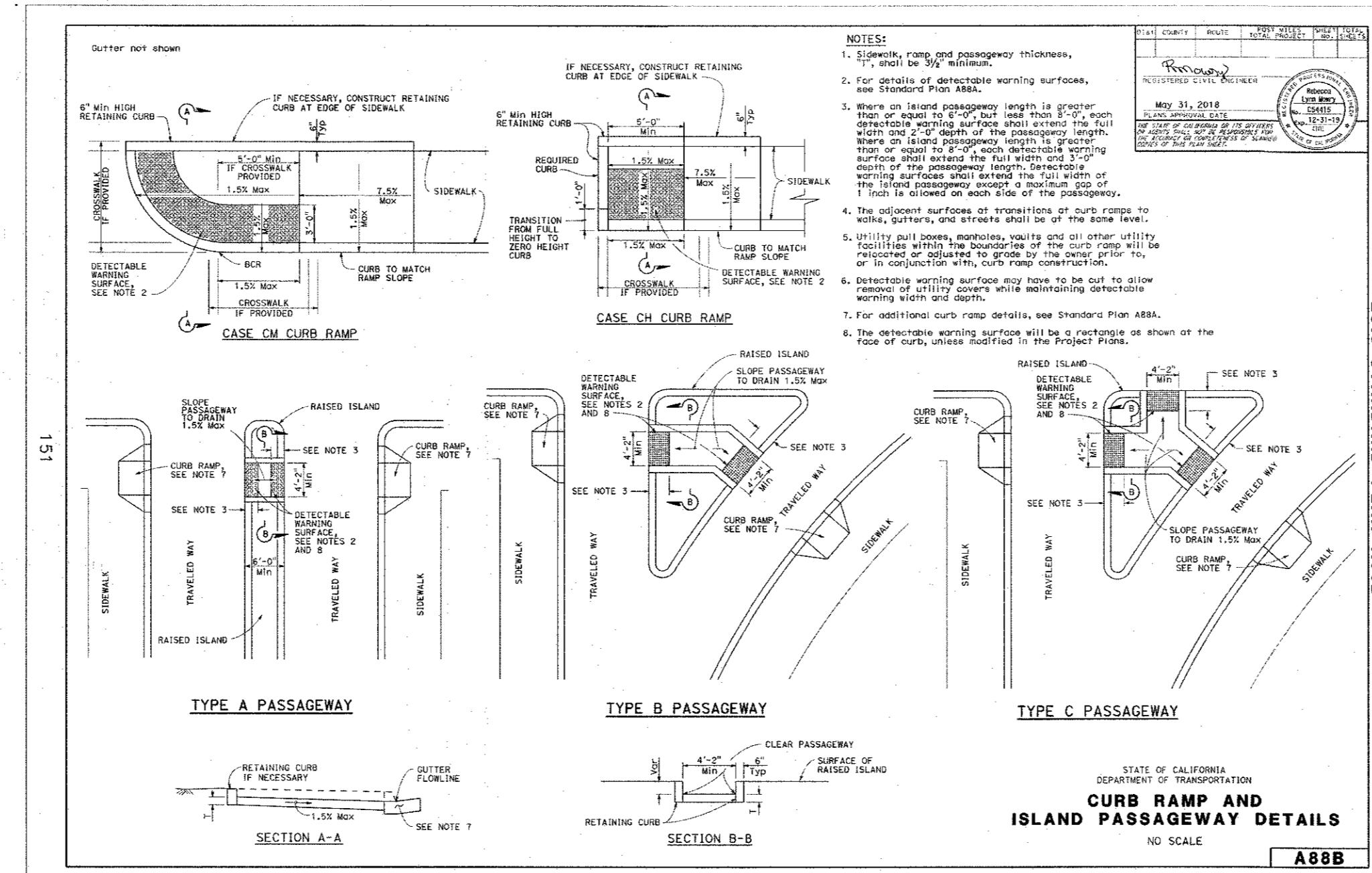
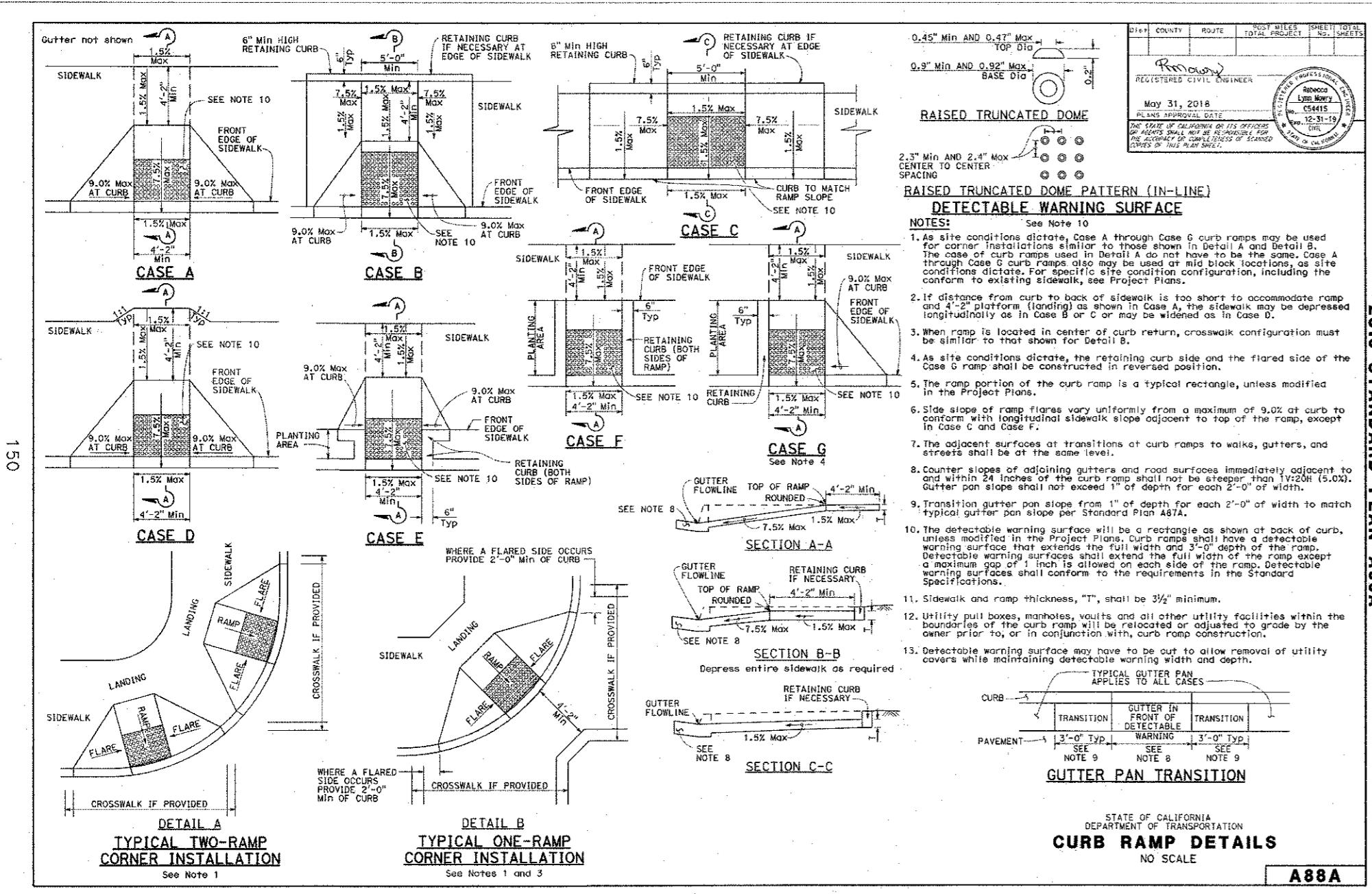
P-917



	DATE REVISED	<b>CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS</b>  <b>STANDARD SIDEWALK</b>				
	5/22/2019					
	APPROVED BY		<b>STANDARD PLAN NUMBER</b> <b>MBSI-112A-0(ST-2)</b>			
	PREM KUMAR, CITY ENGINEER					
	DATE	5/29/19		SHEET 1 OF 2		
	SHEET 1 OF 2					

	DATE REVISED	<b>CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS</b>  <b>STANDARD SIDEWALK</b>	
	5/22/2019		
APPROVED BY		STANDARD PLAN NUMBER <b>MBSI-112A-0(ST-2)</b>	
PREM KUMAR, CITY ENGINEER			
	DATE <i>5/28/19</i>		
	SHEET 2 OF 2		

	DATE REVISED	CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS	
	5/22/2019		
STANDARD CURB AND GUTTER			
APPROVED BY			STANDARD PLAN NUMBER <b>MBSI-120A-0(ST-)</b>
PREM KUMAR, CITY ENGINEER			
		5/28/19	DATE
SHEET 1 OF 1			



K SHALL BE DONE ON THIS  
TIL USA AGENCY IS NOTIFIED  
ENTION TO GRADE OR EXCAV/  
ORKING DAYS BEFORE YOU D

#### SUPPLEMENTAL NOTE

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 THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



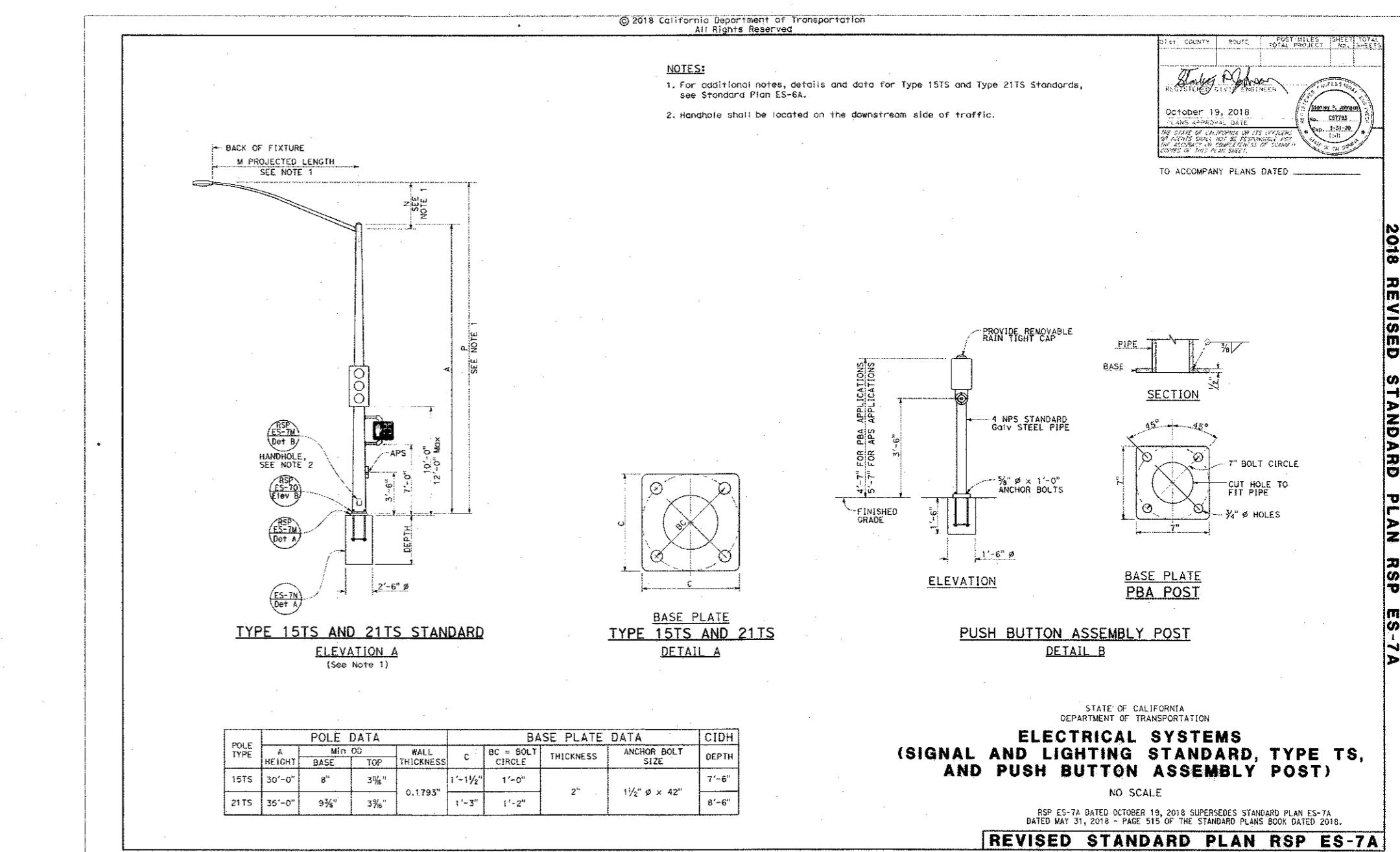
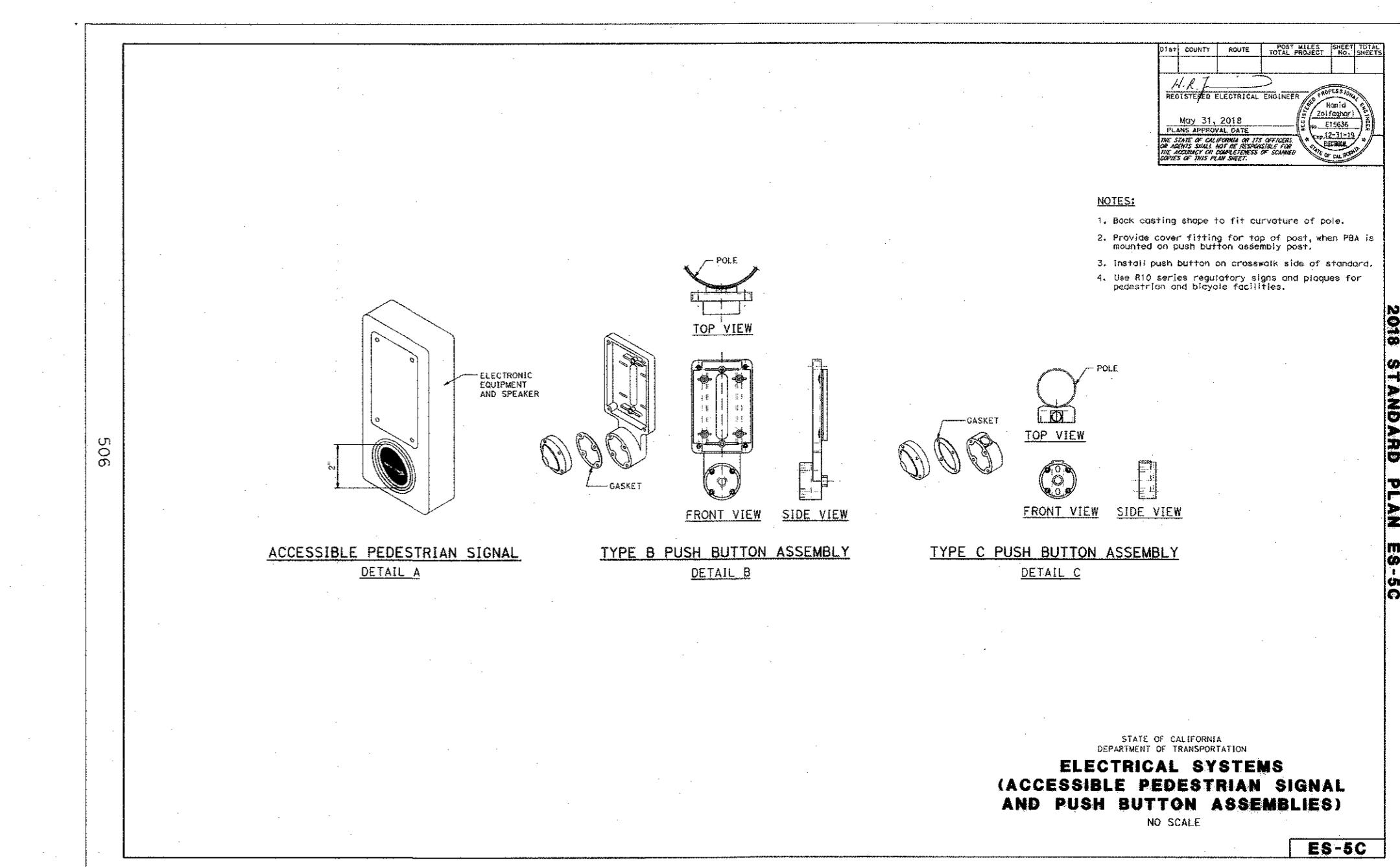
2720 SEPULVEDA BLVD  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891 - 3994  
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2720 SEPULVEDA BLVD  
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## 100% FOR CONSTRUCTION

# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION



# CITY OF MANHATTAN BEACH

## PLANS FOR

### ROSECRANS AVENUE STREET RESURFACING PROJECT



VICINITY MAP

NOT TO SCALE

PROJECT SITE



## PUBLIC WORKS DEPARTMENT

3621 BELL AVENUE

MANHATTAN BEACH, CALIFORNIA 90266

INDEX OF DRAWINGS	
DWG. NO.	DESCRIPTION
P-897	
1 OF 9	STRIPING PLAN TITLE SHEET
2 OF 9	GENERAL NOTES
3 OF 9	SIGNING AND STRIPING NOTES
4 OF 9	STRIPING STANDARD PLANS
5 OF 9	STRIPING PLAN: BETWEEN VILLAGE DR. AND MARRIOTT DR.
6 OF 9	STRIPING PLAN: BETWEEN MARRIOTT DR. AND REDONDO AVE.
7 OF 9	STRIPING PLAN: BETWEEN REDONDO AVE. AND AVIATION BLVD.
8 OF 9	CURB RAMPS
9 OF 9	STANDARD CONCRETE REPAIR PLANS AND PUSH BUTTON ASSEMBLY
	TOTAL SHEETS = 9

#### STANDARD PLANS:

##### CITY OF MANHATTAN BEACH STANDARD PLANS

MBSI-112A-0 (ST-2) STANDARD SIDEWALK  
MBSI-120A-0 (ST-3) STANDARD CURB AND GUTTER  
MBSI-174A-0 (ST-27) CONTINENTAL CROSSWALK MARKINGS

##### CALTRANS STANDARDS

A20B PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS  
A20D PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS  
A24A PAVEMENT MARKINGS ARROWS  
A88A CURB RAMP DETAILS  
A88B CURB RAMP AND ISLAND PASSAGEWAY DETAILS  
ES-5C ELECTRICAL SYSTEMS (ACCESSIBLE PEDESTRIAN SIGNAL AND PUSH BUTTON ASSEMBLIES)  
ES-7A ELECTRICAL SYSTEMS (SIGNAL AND LIGHTING STANDARD, TYPE TS, AND PUSH BUTTON ASSEMBLY POST)

##### STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

2015 EDITION

##### CA-MUTCD

3A-102(CA) LANE LINES - MULTILANE HIGHWAYS  
3A-104(CA) NO PASSING ZONES - TWO DIRECTION  
3A-107(CA) MEDIAN ISLAND  
3B-102(CA) EXAMPLES OF FIRE HYDRANT LOCATION PAVEMENT MARKERS

##### BENCHMARKS:

MANHATTAN BEACH B.M. # 9314 ELEV = 94.40' NAVD 88  
BRASS DISK AT BCR, AT THE SOUTHWEST CORNER OF ROSECRANS AVENUE & PARK WAY.

MANHATTAN BEACH B.M. # L326 ELEV = 90.145' NAVD 88  
LEAD RIVET AT BCR, AT THE SOUTHWEST CORNER OF ROSECRANS AVENUE & DOUGLAS STREET.

##### 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 RESPONSIBLE CHARGE 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.



##### 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 THE GAS LINE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

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.

02-27-20  
SIGNATURE DATE

02-27-20

DATE SIGNED

02-27-20

DATE

## GENERAL NOTES: (MUST USE ALL NOTES ON THIS SHEET FOR ALL PLANS)

- 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 STORM WATER 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-0(ST-2), MBSI-120A-0(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 STORM WATER 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 CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED 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 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 5:00 A.M. AND 9:00 P.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 HIS 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 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 9:00 P.M. AND 5:00 A.M. FLAGGERS MAY BE USED IF ONE LANE IN EACH DIRECTION CAN NOT BE KEPT OPEN WITH THE APPROVAL OF THE TRAFFIC ENGINEER. ALL TRAVEL 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 CONTOUR 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 SLIPAGE. FOR CONCRETE SECTION OF STREETS, THE PLATES MAY BE PLACED ON SURFACE AND HELD IN PLACE WITH ASPHALT CONCRETE EDGE BERRMS 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-0 (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 ON 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.

28. 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".

29. THE LAND SURVEYORS ACT, SECTION 8771 OF THE BUSINESS & PROFESSIONAL CODE, AND SECTIONS 7320.5, 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.

30. CONTRACTOR MUST HOLD A VALID CALIFORNIA CONTRACTOR'S LICENSE FOR THE APPLICABLE SCOPE OF WORK. ALL SUBCONTRACTOR'S MUST BE LICENSED.

31. 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.

32. 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 AND ENGINEER DID NOT PERFORM ANY POTHoling, IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT AT NO ADDITIONAL COST TO THE CITY.

33. 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.

34. THE CONTRACTOR IS ADVISED TO POTHOLE WHERE HE BELIEVES NECESSARY IN ADVANCE OF OPENING A TRENCH TO VERIFY LOCATIONS OF UTILITY/SUBSTRUCTURES AND ADJACENT WALL FOOTINGS AT NO EXTRA COST TO THE CITY.

35. 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.

36. FOR WORK UNDER ANY EXISTING CONCRETE (PCC) BUS PADS THE CONTRACTOR SHALL REMOVE BUS PAD AND REPLACE AFTER INSTALLATION OF SEWER PIPES (SEE SSPWC FOR DETAILS OF REPLACEMENT BUS PAD). TRENCHLESS METHOD MAY BE USED TO CROSS UNDER BUS PAD.

37. FOR ANY UNDER CROSSINGS ENTRY OF APPROACHES TO STORM DRAIN CATCH BASINS CONTRACTOR SHALL TUNNEL UNDER THESE AND SUPPORT APPROACH. UPON INSTALLATION OF SEWER AND COMPACTION OF TRENCH A 2 SACK SAND CEMENT SLURRY SHALL BE PLACED UNDER THE APPROACH.

38. 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.

39. ABANDONMENT AND/OR REMOVAL OF CONDUITS AND STRUCTURES SHALL BE PER SECTION 306-5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

40. LATERALS FOR STORM DRAIN SYSTEM AND EXISTING SEWER 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 SEWER.

## PRIVATE ENGINEERS NOTICE TO CONTRACTOR:

1. 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.

2. CONTRACTOR FURTHER AGREES THAT HE 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.

3. 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.

4. 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.

5. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING HARDCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT AFFECTED BY THESE PLANS.

6. ALL JOIN LINES SHALL BE SAWCUT ON 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.

7. 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.

8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STREETS FROM DAMAGES CAUSED BY HIS OPERATIONS. ANY CURBS DAMAGED DURING HIS 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.

9. 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.

10. DEMOLITION PLAN BY SEPARATE PERMIT.

## NPDES NOTES:

1. 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.

2. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.

3. 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.

4. 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.

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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 LINES 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 THE GAS LINE, SEWER, GROUNDWATER AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.

QUANTUM QUALITY CONSULTING, INC.

2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891-3994  
FAX: (310) 891-3995

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## 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-0 (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 COMPAKTED 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.
- ALL WALKWAY RESURFACING SHALL MATCH EXISTING FINISHES TO THE SATISFACTION OF THE ENGINEER.

## 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 9:00 P.M. ONE TRAVEL LANE IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES BETWEEN 9:00 P.M. AND 5:00 A.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.

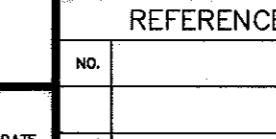
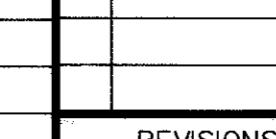
## GENERAL NOTES FOR SIGNING AND STRIPING:

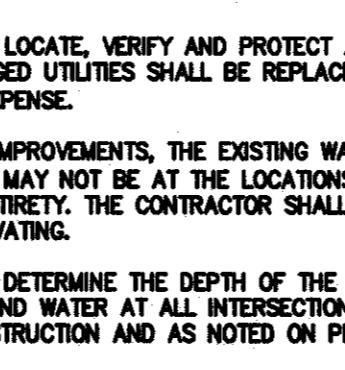
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION" LATEST EDITION, AND ALL APPLICABLE STANDARDS AND SPECIFICATIONS TO THE SATISFACTION OF THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (811) AS REQUIRED PRIOR TO THE START OF WORK. UPON EXPOSING ANY UTILITY'S UNDERGROUND FACILITY, THE CONTRACTOR SHALL NOTIFY THAT UTILITY IMMEDIATELY.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES WITHIN THE LIMITS OF THE PROJECT, AND IN THE EVENT OF SUBSTRUCTURE DAMAGE, HE SHALL BEAR THE TOTAL COST OF REPAIR OR REPLACEMENT.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO PROJECT BETWEEN 5:00 A.M. TO 9:00 P.M. ON ANY DAY NOR ON SATURDAY, SUNDAY, HOLIDAY AT ANY TIME EXCEPT AS APPROVED BY THE CITY ENGINEER. WORK WILL BE PERFORMED AT NIGHT TIME FROM 9:00 P.M. AND 5:00 A.M.
- TREES, FOLIAGE, SIGNS, PARKING METERS, AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACED IN-KIND.
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY AND SHALL BE REMOVED FROM JOB SITE UNLESS INSTRUCTED BY 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 DRIVEWAYS AT THE END OF EACH WORKING DAY TO THE SATISFACTION OF THE ENGINEER.
- PRIOR TO STRIPING, THE CONTRACTOR SHALL PERFORM CAT-TRACKING THE STRIPING PLAN AND PLACE RAISED TEMPORARY REFLECTOR (SELF ADHESIVE) TO IDENTIFY LANE LINES (WHITE) AND CROSSWALK LINES (YELLOW) AND CENTERLINES (ORANGE) - PERTAINING TO APPROVAL OF CITY ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A 72-HOUR NOTIFICATION TO THE AFFECTED PROPERTIES, POLICE DEPARTMENT, AND FIRE DEPARTMENT IN THE EVENT OF A CHANGE IN LANE CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES, AND PARKING RESTRICTION.
- AS REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE FURNISH AND OPERATE A SELF-LOADING MOTOR SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLY CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION IS INCOMPLETE.
- ALL PORTLAND CEMENT CONCRETE (P.C.C.) AND ASPHALTIC CONCRETE (A.C.) SHALL BE REMOVED TO A SAWCUT.
- ANY EXISTING STRIPING MARKED OR DAMAGED BY THE WORK ON ADJACENT STREETS SHALL BE REPLACED BY THE CONTRACTOR. REPLACE ALL SIGNAGE AND STRIPING DAMAGED BY THE WORK IN KIND WITH NEW PER CITY, AGENCY, JURISDICTION REQUIREMENTS.
- STRIPING LAYOUT SHALL BE MARKED ON PAVEMENT AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
- TRAFFIC STRIPING AND PAVEMENT MARKING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 84 AND PROJECT BID DOCUMENTS.
- 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.
- CONTRACTOR TO USE THE LATEST VERSION OF THE CA-MUTCD AS A STANDARD PLAN FOR SIGN AND STRIPING INSTALLATION AS NOTED IN DRAWINGS.
- ALL CROSSWALKS SHALL BE CONTINENTAL STYLE AS SHOWN BY CITY OF MANHATTAN BEACH STANDARD PLAN MBSI-174-0(ST-27).
- ALL CONFLICTING LINES AND MARKINGS SHALL BE REMOVED BY WET SANDBLASTING AND INCLUDES REMOVAL OF RAISED PAVEMENT MARKERS. REMOVAL BY GRINDING METHOD REQUIRES PRIOR APPROVAL OF CITY ENGINEER.
- ALL TURN ARROW MARKINGS SHALL BE TYPE IV (L OR R) UNLESS OTHERWISE NOTED.
- ALL LANE STRIPING AT INTERSECTION APPROACHES WITHOUT CROSSWALKS OR LIMIT LINES SHALL END 10 FEET FROM THE EXTENSION OF THE INTERSECTING CURB LINE.
- ALL LANE LINES AT INTERSECTION APPROACHES AND DEPARTURES SHALL BEGIN AND END WITH 50 FEET OF SOLID 4-INCH SOLID WHITE LINE WITH TYPE G REFLECTORS AT EACH END.
- LANE WIDTHS SHALL BE MEASURED BETWEEN THE CENTERLINES OF EACH ADJACENT SINGLE OR DOUBLE STRIPE OF CURB AS APPROPRIATE.
- PROPOSED LIMIT LINE SHOULD BE INSTALLED AT A MINIMUM OF 4 FEET BEHIND THE EXISTING CURB EXTENSION OR EDGE OF TRAVEL WAY (NO EXISTING CURB ACCESS RAMP). IN THE CASE OF INTERSECTION WITH CURB ACCESS RAMP, THE LIMIT LINE SHALL BE PLACED BEHIND THE RAMP'S LANDING AREA, BUT IN NO CASE GREATER THAN THIRTY FEET BACK.
- EXISTING RAISED PAVEMENT MARKERS DAMAGED DURING THE REMOVAL SHALL BE REPLACED BY CONTRACTOR AT NO COST TO THE CITIES OF MANHATTAN BEACH AND EL SEGUNDO.
- ALL SIGNING DAMAGED DURING THE REMOVAL SHALL BE REPLACE BY CONTRACTOR AT NO COST TO THE CITIES OF MANHATTAN BEACH AND EL SEGUNDO.
- ALL STRIPING AND SIGNAGE REQUIRED TO RESTORE DAMAGE TO EXISTING SHALL BE DONE IN CONFORMANCE WITH THE APPLICABLE CALTRANS STANDARD PLANS AND PROVISIONS OF THE 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.
- REPLACE ALL SIGNAGE DAMAGED BY THE WORK IN KIND WITH NEW PER APPLICABLE CITY, AGENCY, JURISDICTION REQUIREMENTS.

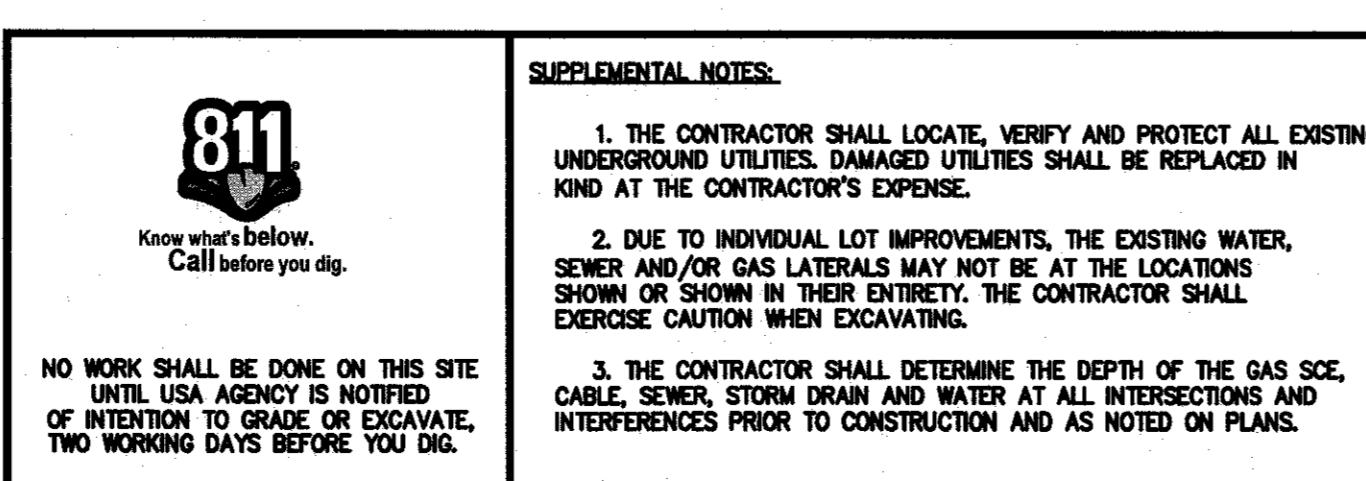
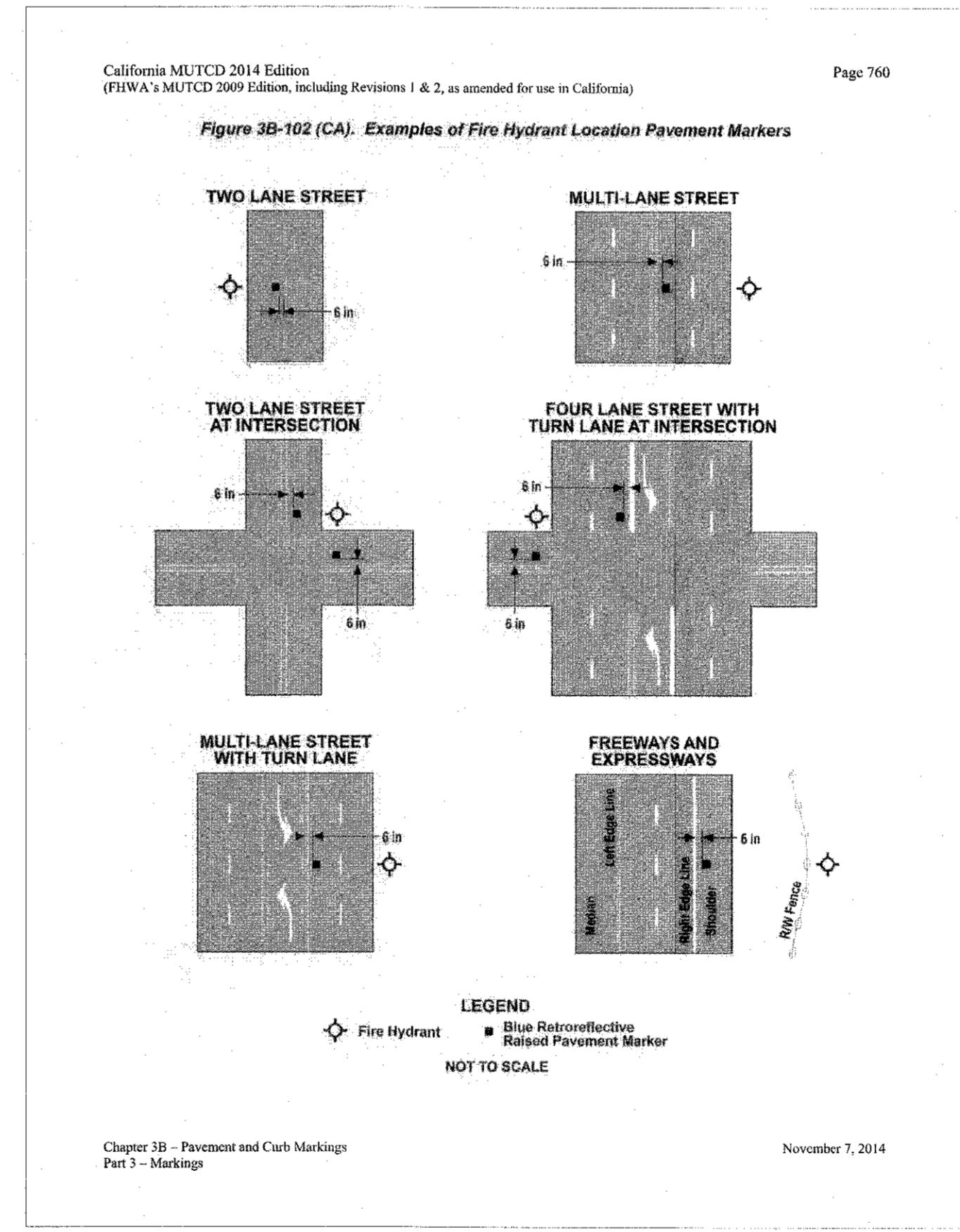
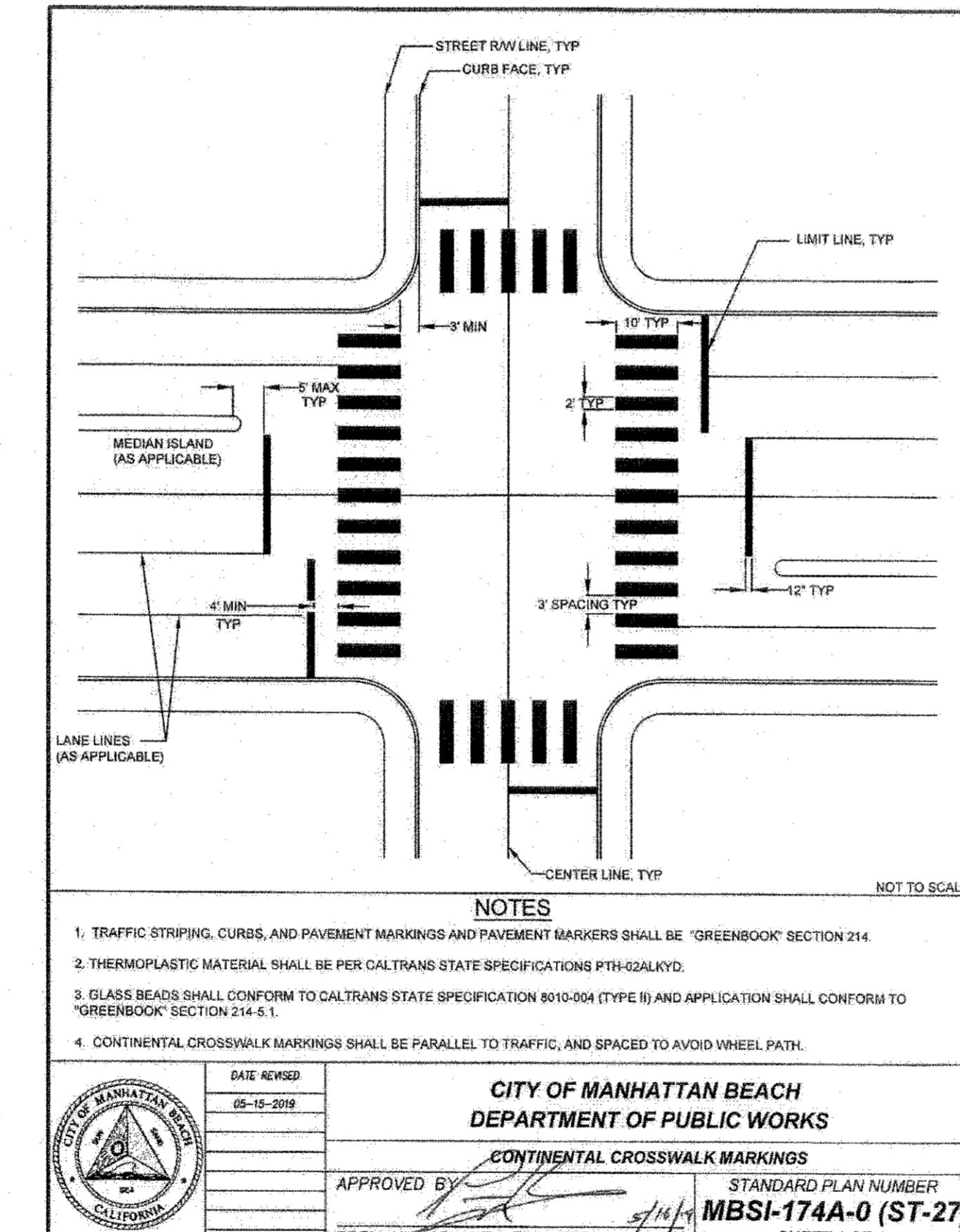
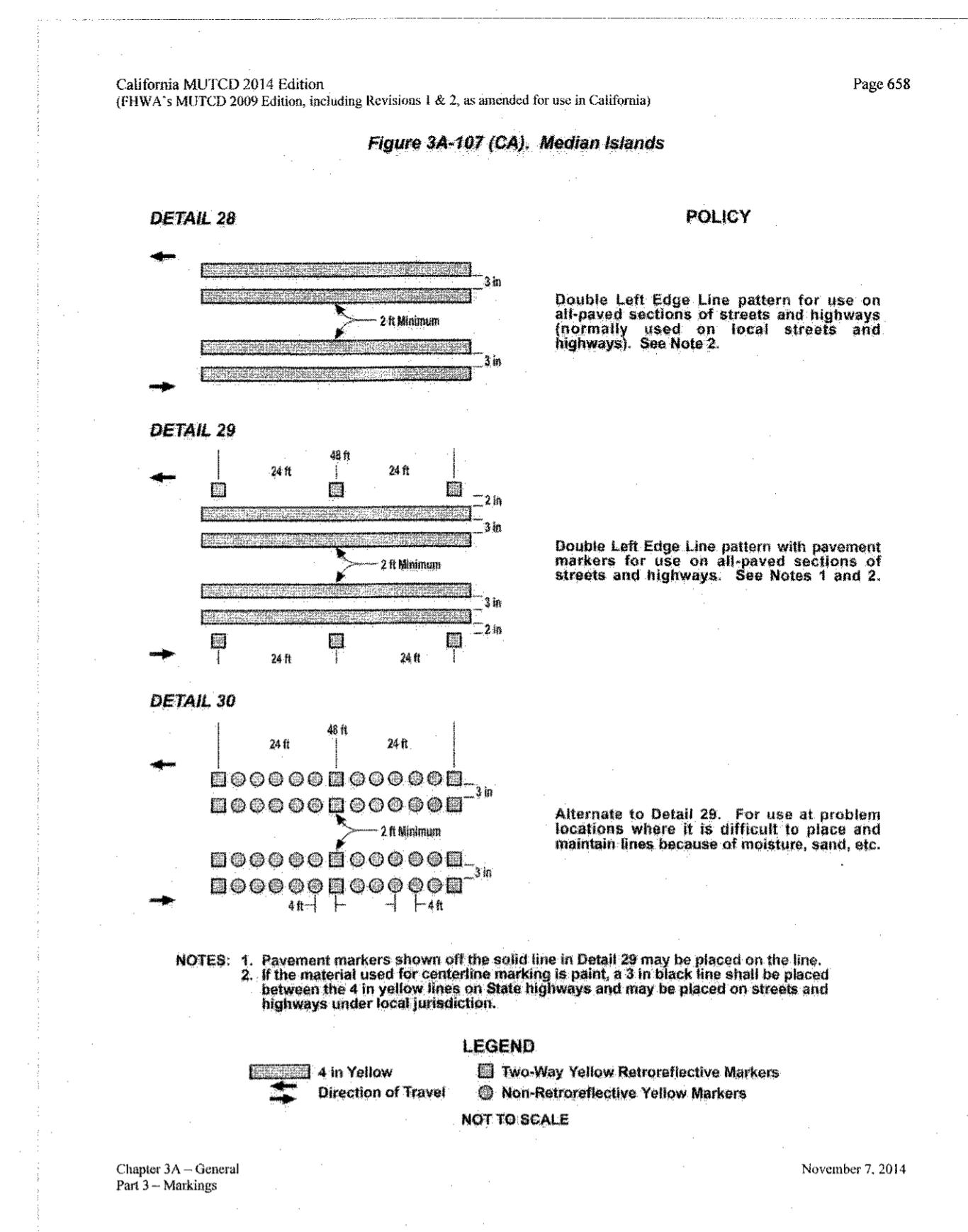
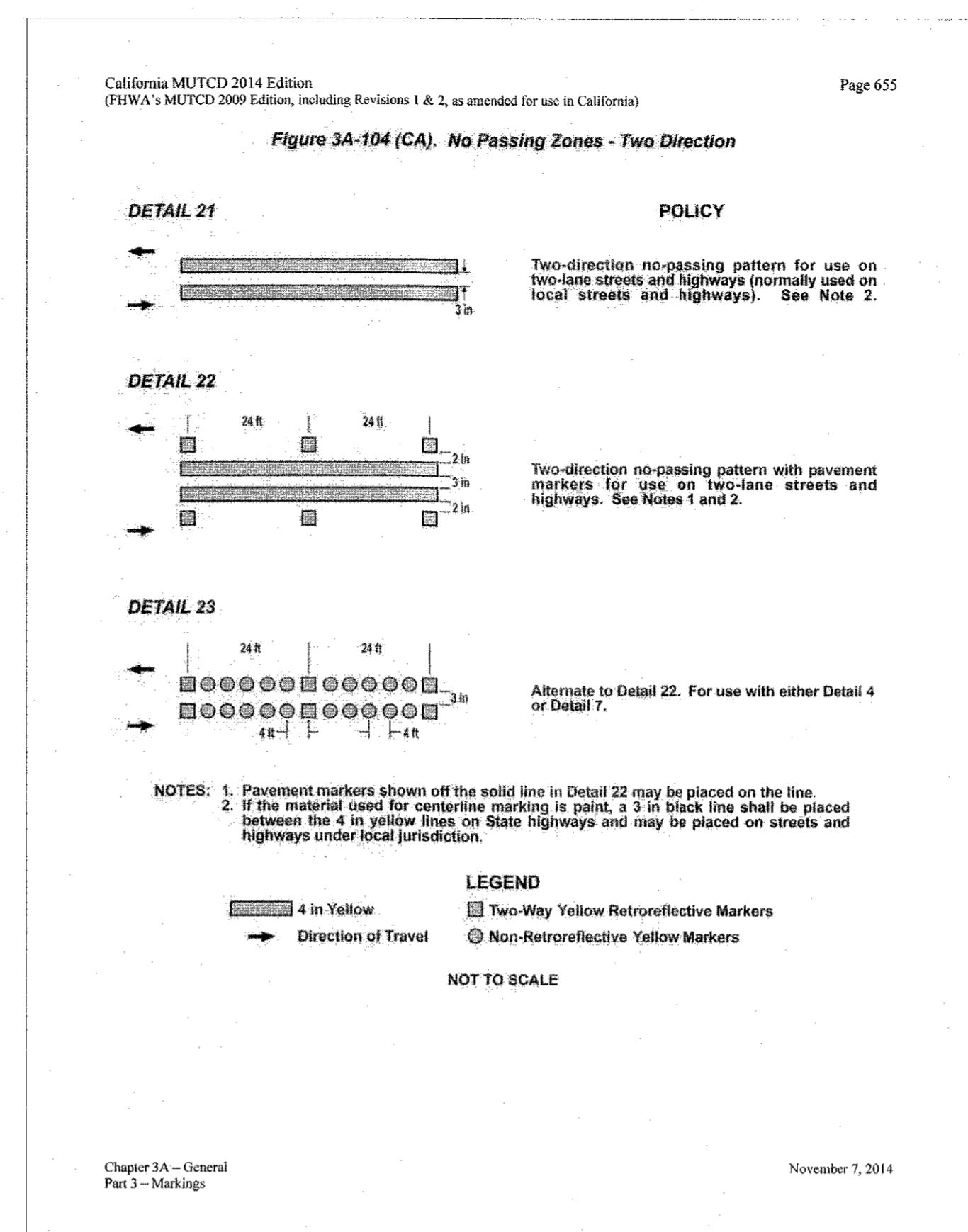
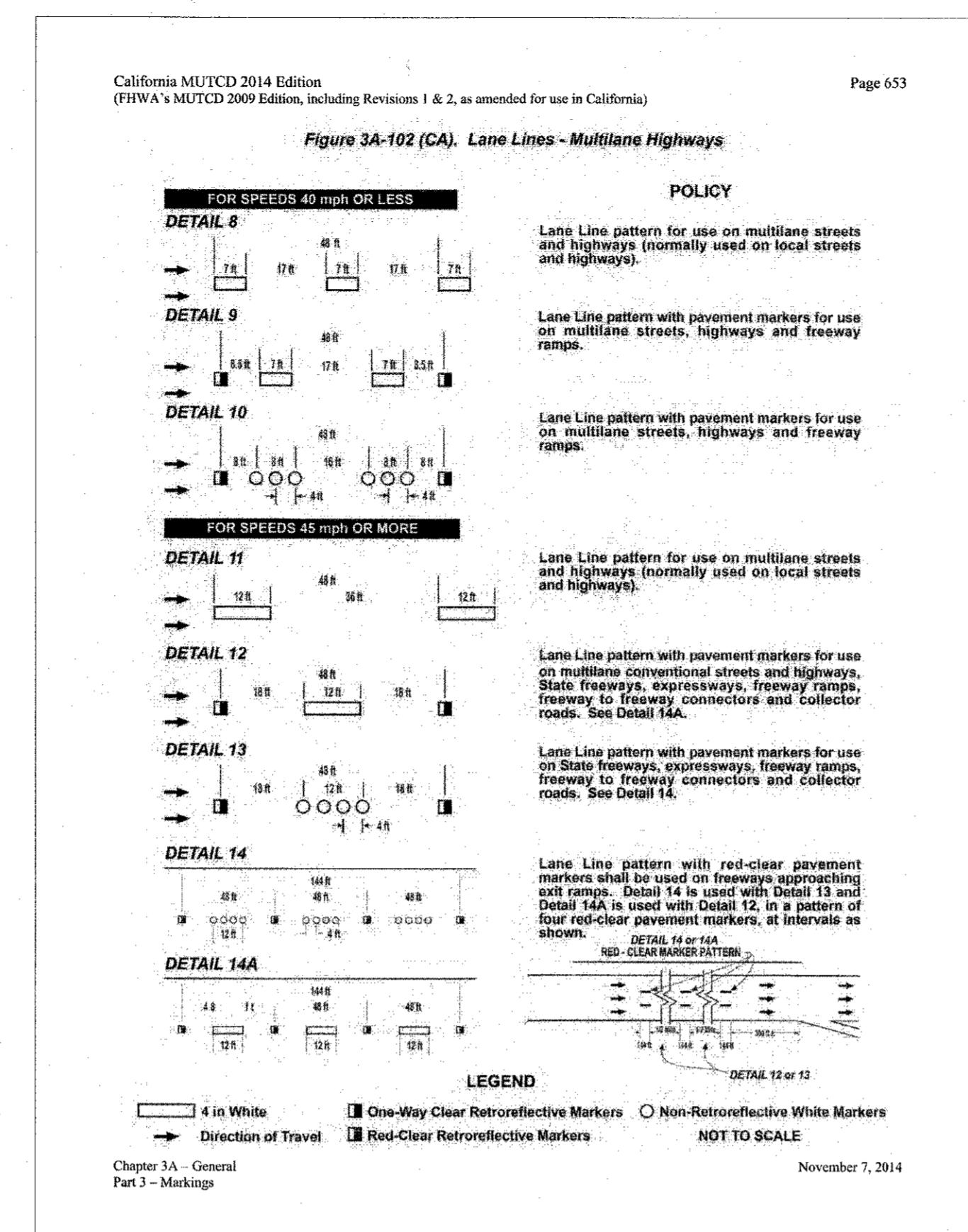
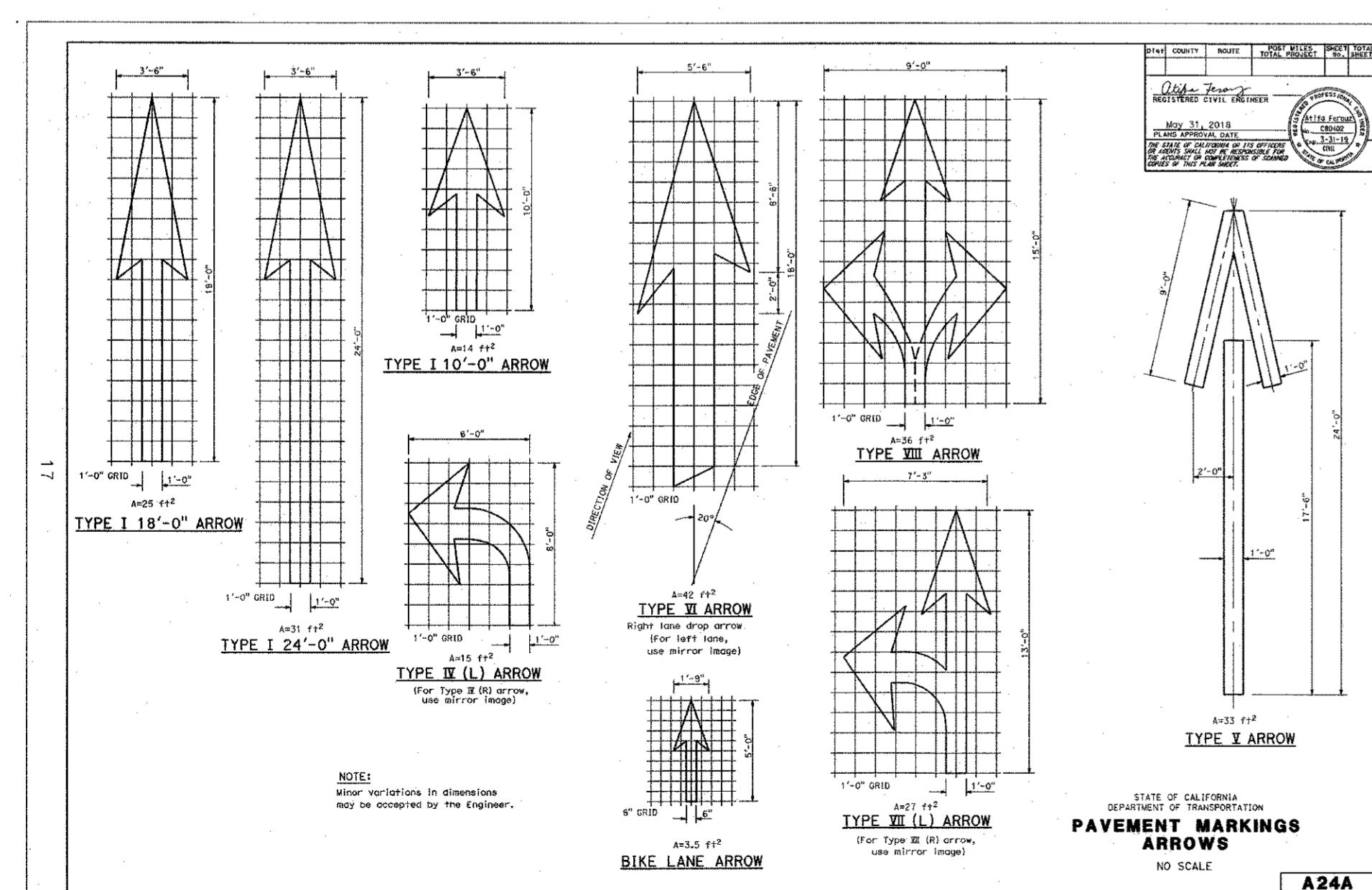
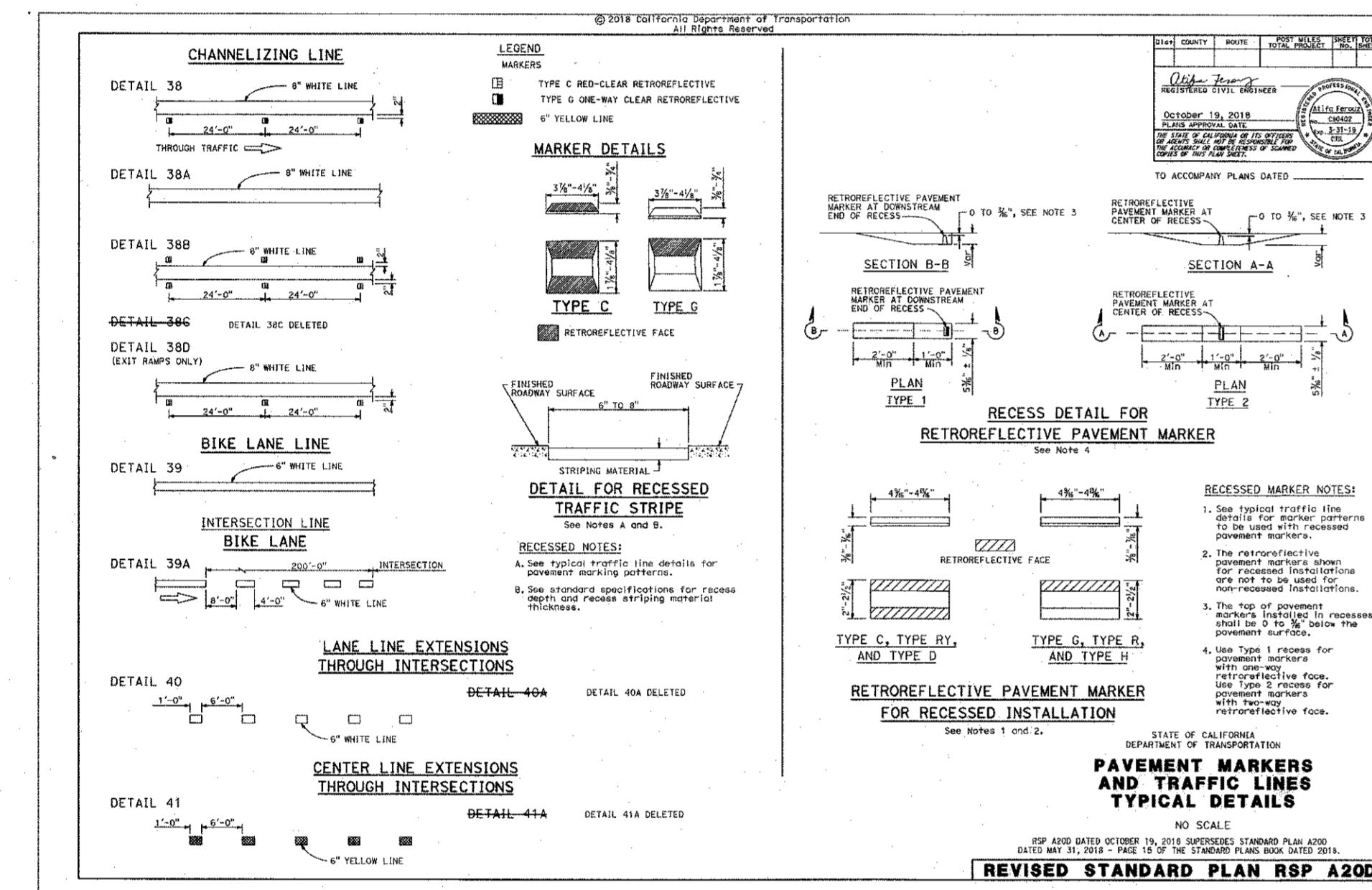
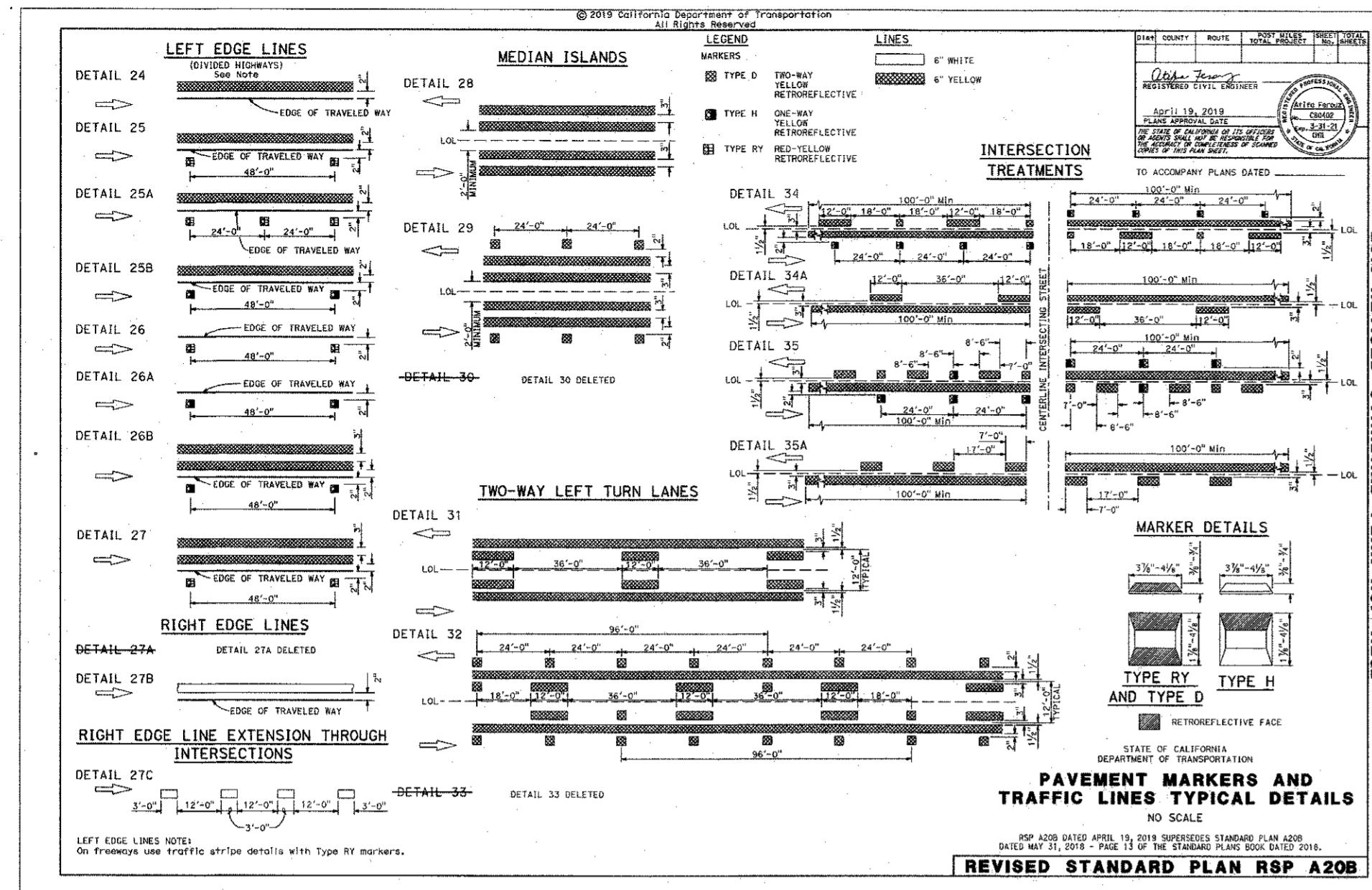
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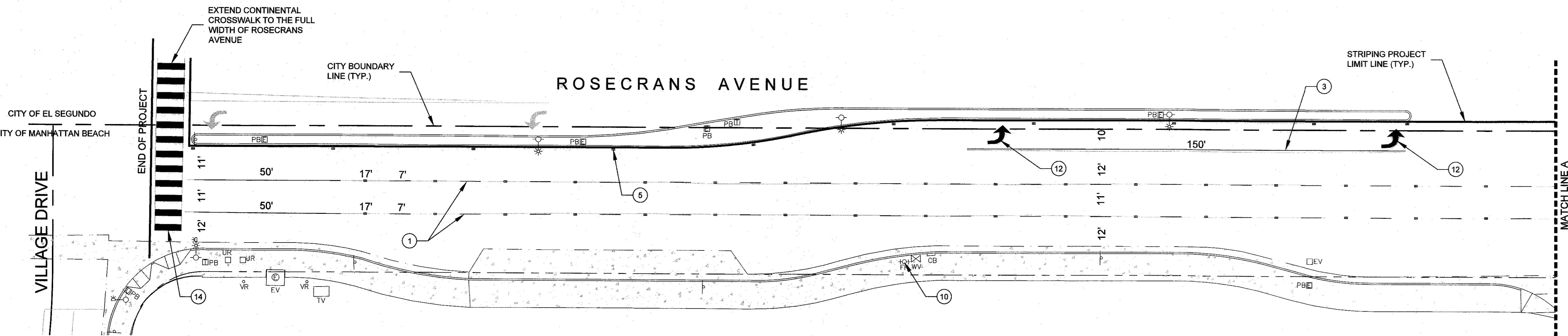
CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

REFERENCES			ROSECRANS AVE STREET RESURFACING PROJECT		
NO.	BY	DATE	SIGNING AND STRIPING NOTES		
			RECOMMENDED BY  CITY ENGINEER PREM KUMAR DATE: 02/27/20		
			APPROVED BY  DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOLAS DATE: 02/27/20		
			REVIEWED BY ADILIA MILLER PROJECT MANAGER DATE: 02/27/20		
			REVIEWED BY D. PREBLE PROJECT ENGINEER DATE: 02/11/20		
			REVISIONS	SCALE	DATE
				02-11-20	DRAWING NO.
					P-897
					SHEET 3 OF 9

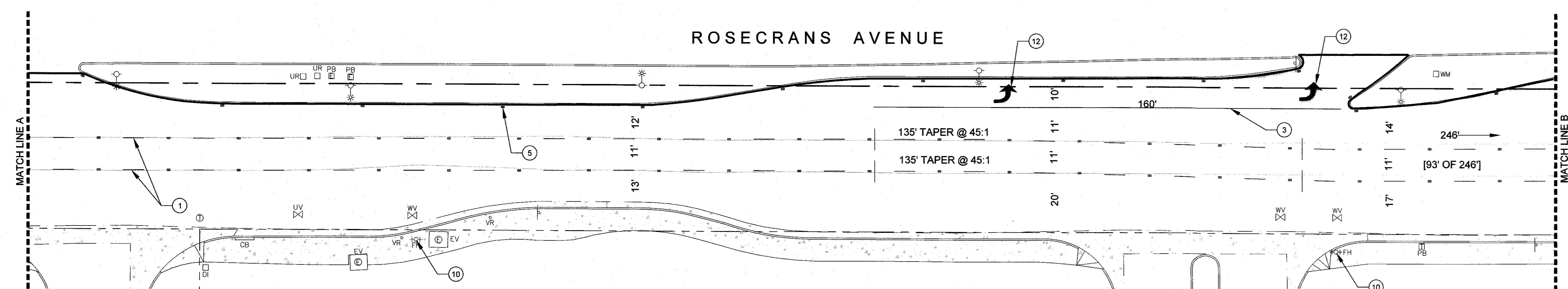
	SUPPLEMENTAL NOTES:
1. THE CONTRACTOR SHALL LOCATE, VERIFY AND PROTECT ALL EXISTING UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.	
2. DUE TO INDIVIDUAL LOT IMPROVEMENTS, THE EXISTING WATER, SEWER AND/OR GAS LATERALS MAY NOT BE AT THE LOCATIONS SHOWN OR SHOWN IN THEIR ENTIRETY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING.	
3. THE CONTRACTOR SHALL DETERMINE THE DEPTH OF THE GAS LINE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.	
NO WORK SHALL BE DONE ON THIS SITE UNTIL THE AGENCY IS NOTIFIED OF INTENTION TO GRADE OR EXCAVATE, TWO WORKING DAYS BEFORE YOU DIG.	
02-27-20 DATE SIGNED	
 REGISTERED PROFESSIONAL ENGINEER C-51975 EXPIRED 06/06/2020 CIVIL STATE OF CALIFORNIA 2020	
<b>QUANTUM QUALITY CONSULTING, INC.</b> 2720 SEPULVEDA BLVD. SUITE 100 TORRANCE, CA 90505 PHONE: (310) 891-3994 FAX: (310) 891-3995	





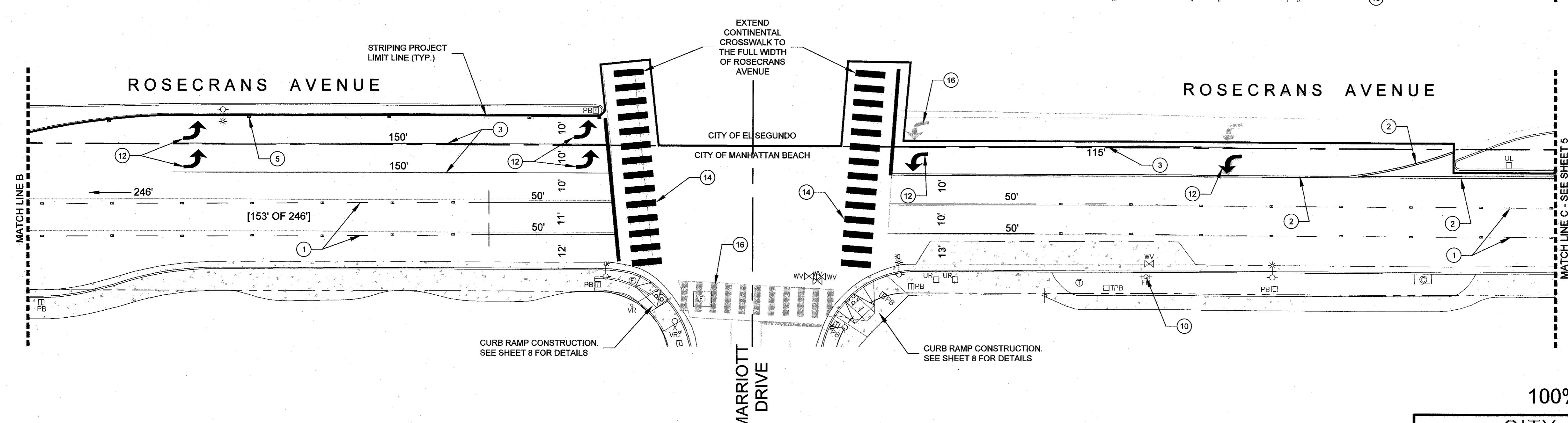
#### STRIPPING CONSTRUCTION NOTES:

1. INSTALL CA MUTCD DETAIL 9 FOR LANE STRIPING. SEE SHEET 4 FOR DETAIL.
2. INSTALL CA MUTCD DETAIL 22. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL.
3. INSTALL CALTRANS DETAIL 38. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL.
4. NOT USED
5. INSTALL CALTRANS DETAIL 26. LENGTH AS SHOWN ON PLAN. SEE SHEET 4 FOR DETAIL.
6. NOT USED
7. NOT USED
8. INSTALL 12" THICK LIMIT LINE
9. NOT USED
10. INSTALL BLUE REFLECTIVE MARKER ADJACENT TO ALL FIRE HYDRANTS PER MUTCD 3B-102(CA). SEE SHEET 4 FOR DETAIL.
11. NOT USED
12. INSTALL THERMOPLASTIC WHITE "TYPE IV" LEFT ARROW PER CALTRANS STANDARD PLAN A24A. SEE SHEET 4 FOR DETAIL.
13. INSTALL THERMOPLASTIC WHITE "TYPE IV" RIGHT ARROW PER CALTRANS STANDARD PLAN A24A. SEE SHEET 4 FOR DETAIL.
14. INSTALL THERMOPLASTIC 24-INCH WIDE CONTINENTAL ONLY CROSSWALK PER CITY STANDARD MBSI-174A-0(ST-27). SEE SHEET 4 FOR DETAIL.
15. INSTALL THERMOPLASTIC 4-INCH WIDE DOUBLE DOUBLE YELLOW MEDIAN PER CA MUTCD DETAIL 29. SEE SHEET 4 FOR DETAIL.
16. PROTECT IN PLACE OR CONTRACTOR RESPONSIBLE FOR RESTORING ALL EXISTING FEATURE DAMAGE.



#### GENERAL STRIPPING NOTES:

1. REMOVE ALL EXISTING STRIPING AND MARKERS WITHIN LIMITS OF WORK.
2. ANY EXISTING STRIPING (INCLUDING RAISED PAVEMENT MARKERS) OR PAVEMENT LEGENDS WHICH CONFLICT WITH THE APPROVED STRIPING PLAN SHALL BE REMOVED BY WET SANDBLASTING OR GRINDING. ANY GRINDING OF PAVEMENT MARKING SHALL BE DONE TO A SQUARE OR RECTANGLE BLOCK SHAPE. ANY PAVEMENT OR SURFACING, IN THE OPINION OF THE CITY, THAT HAS BEEN DAMAGED BY THE WORK, SHALL BE REPAIRED TO THE CITY'S SATISFACTION AT NO EXPENSE TO THE CITY. ANY DEBRIS SHALL BE REMOVED BEFORE END OF EACH WORK DAY. NO BLACKOUT OR STRIPPING WILL BE ALLOWED.
3. STRIPPING LAYOUT SHALL BE MARKED ON PAVEMENT AND APPROVED BY THE CITY OF MANHATTAN BEACH CITY ENGINEER PRIOR TO INSTALLATION.
4. ALL TRAFFIC LINES AND PAVEMENT MARKINGS SHOWN HEREON AS PART OF THIS PROJECT SHALL BE INSTALLED WITH THERMOPLASTIC BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
5. ALL LINES AND MARKING SHALL CONFIRM THE CA MUTCD & CALTRANS STANDARD PLANS AND SPECIFICATIONS (LATEST EDITION) AS NOTED.
6. ALL ARROW MARKINGS SHALL BE CALTRANS TYPE IV (L OR R) UNLESS OTHERWISE NOTED.
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100% FOR CONSTRUCTION

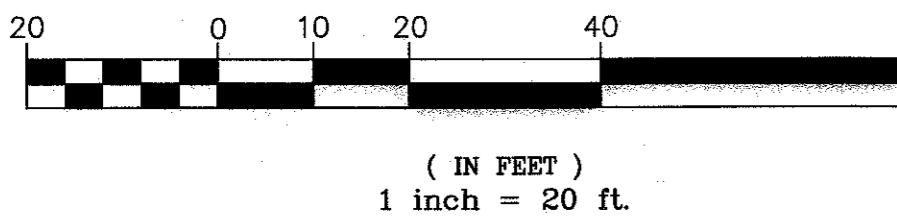
CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

REFERENCES		ROSECRANS AVE STREET RESURFACING PROJECT	
NO.	BY DATE	STRIPING PLAN: BETWEEN VILLAGE DR. AND MARRIOTT DR.	
		RECOMMENDED BY	APPROVED BY
		ADILIA MILLER PROJECT MANAGER	STEPHANIE KATSOULEAS
		REVIEWED BY	DATE
		REVISIONS	
		REVIEWED BY	DATE
		ADILIA MILLER PROJECT MANAGER	2/27/20
		DESIGNED BY	DATE
		BUJAN VAZIRI PROJECT ENGINEER	02-11-20
		SCALE	
		1"=20'	02-11-20
		DRAWING NO.	
		P-897	



GRAPHIC SCALE

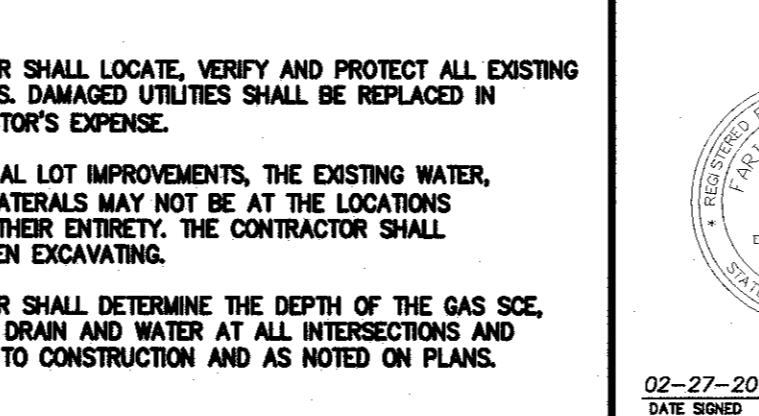


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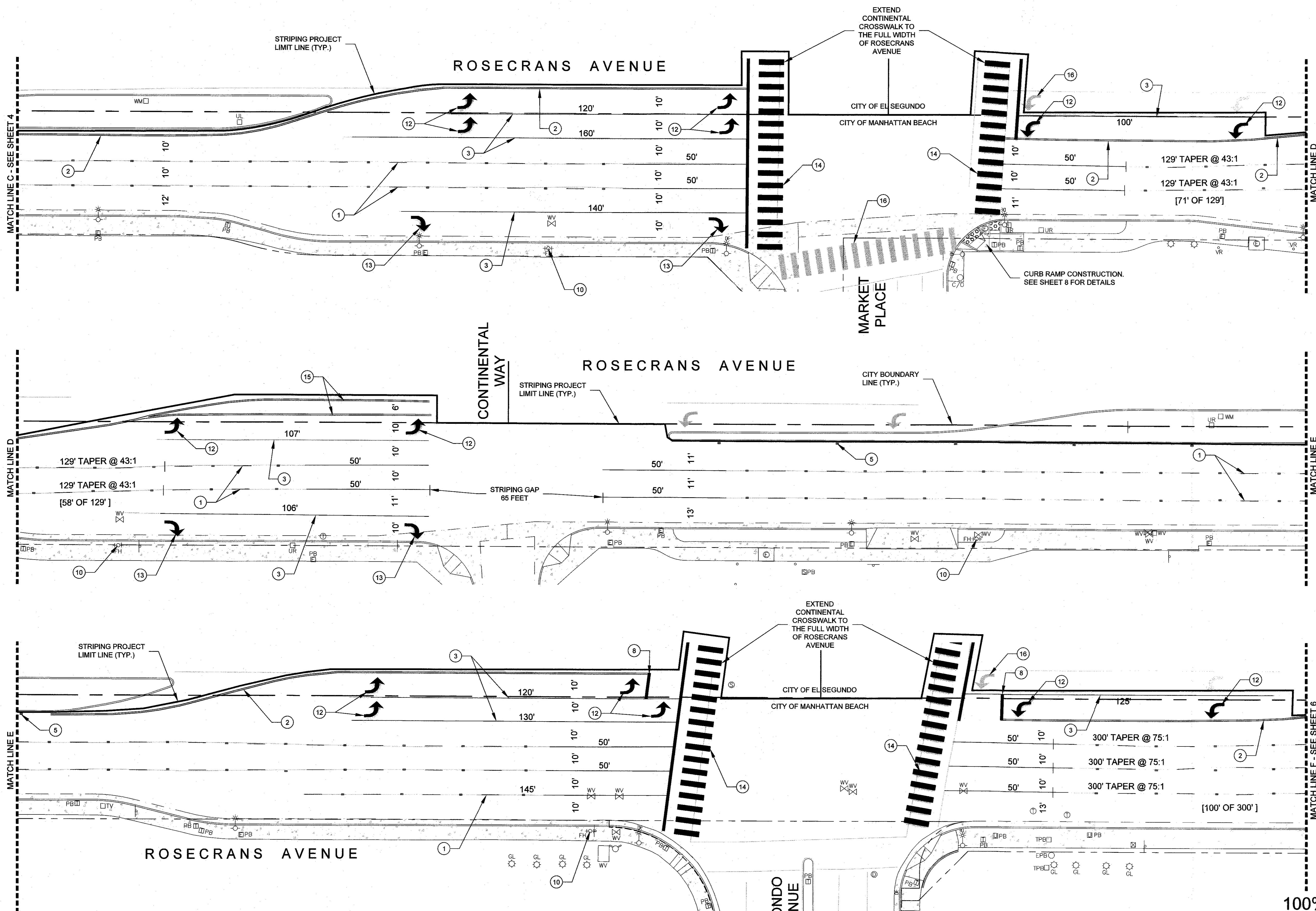
NO WORK SHALL BE DONE ON THIS SITE  
UNTIL USA AGENCY IS NOTIFIED  
OF INTENTION TO GRADE OR EXCAVATE,  
TWO WORKING DAYS BEFORE YOU DIG.

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QUANTUM QUALITY  
CONSULTING, INC.  
2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891 - 3994  
FAX: (310) 891 - 3995



## **STRIPING CONSTRUCTION NOTES:**

- 1 INSTALL CA\_MUTCD DETAIL 9 FOR LANE STRIPING. SEE SHEET 4 FOR DETAIL
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- 9 NOT USED
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## 100% FOR CONSTRUCTION

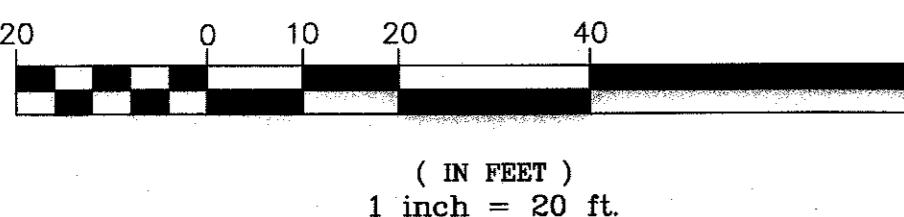
# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT      ENGINEERING DIVISION

REFERENCES			ROSECRANS AVE STREET RESURFACING PROJECT STRIPING PLAN: BETWEEN MARRIOTT DR. AND REDONDO AVE.						
NO.	BY	DATE	RECOMMENDED BY			APPROVED BY			
				PREM KUMAR	2/27/20		DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS	2/27/20	
REVISIONS			REVIEWED BY			SCALE			DRAWING NO.
			ADILIA MILLER PROJECT MANAGER			2/27/20	1"=20'	02-11-20	P-897
DESIGNED BY			BIJAN VAZIRI PROJECT ENGINEER			02-11-20	SHEET 6 OF 9		



## GRAPHIC SCALE

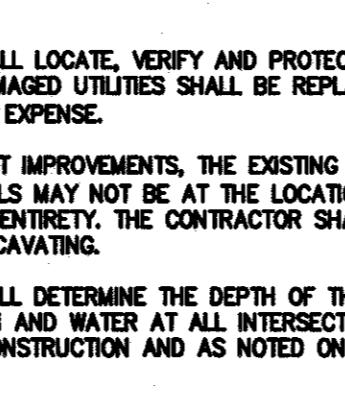


**Know what's below.  
Call before you**

NO WORK SHALL BE DONE ON THIS SITE  
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2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891 - 3994  
FAX: (310) 891 - 3995

REVIEWED BY

ROSECRANS AVE STREET RESURFACING PROJECT  
STRIPING PLAN: BETWEEN MARRIOTT DR. AND PERONDO AVE

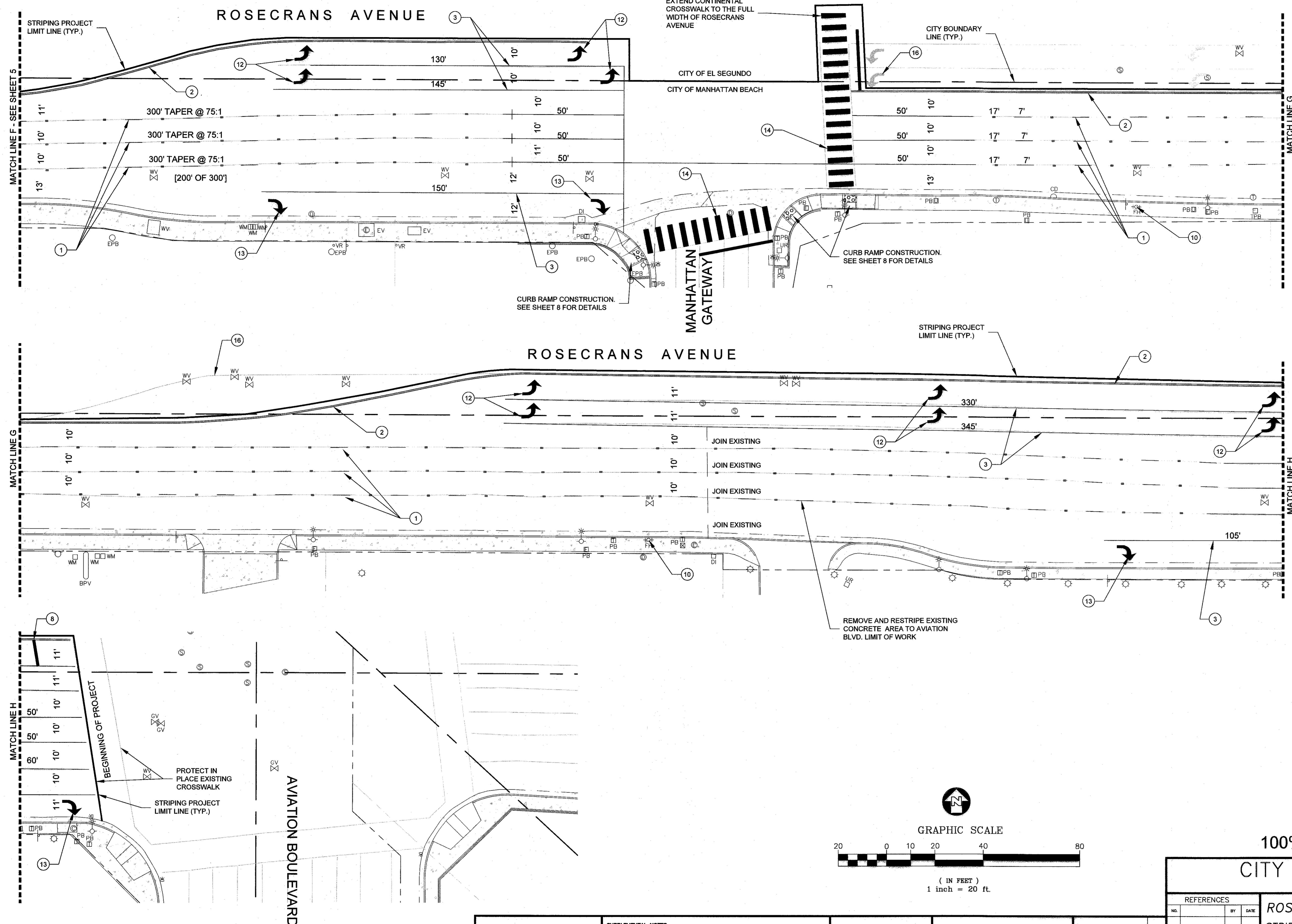
STRIPING PLAN: BETWEEN MARRIOTT DR. AND REDUNDO AVE.

APPROVED BY  2/2/20

WORKS DATE

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100% FOR CONSTRUCTION

CITY OF MANHATTAN BEACH

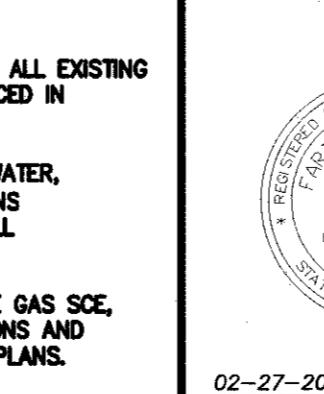
PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION

ROSECRANS AVE STREET RESURFACING PROJECT		
STRIPING PLAN: BETWEEN REDONDO AVE. AND AVIATION BLVD.		
REFERENCES	REVIEWED BY	APPROVED BY
NO. BY DATE	RECOMMENDED BY CITY ENGINEER PREM KUMAR	APPROVED BY DIRECTOR OF PUBLIC WORKS STEPHANIE KATSOULEAS
REVISIONS	REVIEWED BY ADILA MILLER PROJECT MANAGER	
REVIEWED BY BIJAN VAZIRI PROJECT ENGINEER	APPROVED BY STEPHANIE KATSOULEAS	
DATE 02-11-20	SCALE 1"=20'	DATE 02-11-20
DATE 02-11-20	DATE 02-11-20	DRAWING NO. P-897



#### SUPPLEMENTAL NOTES:

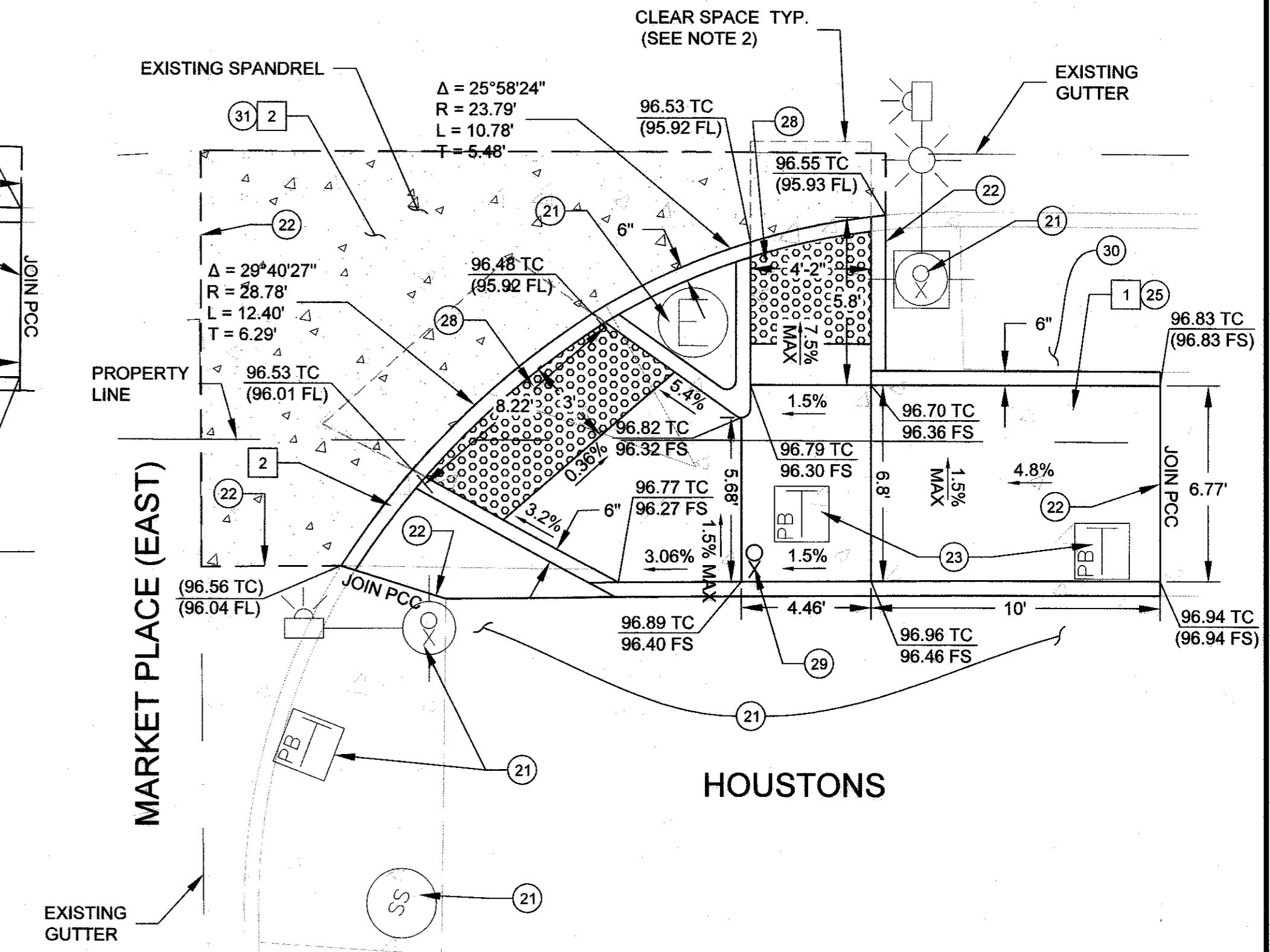
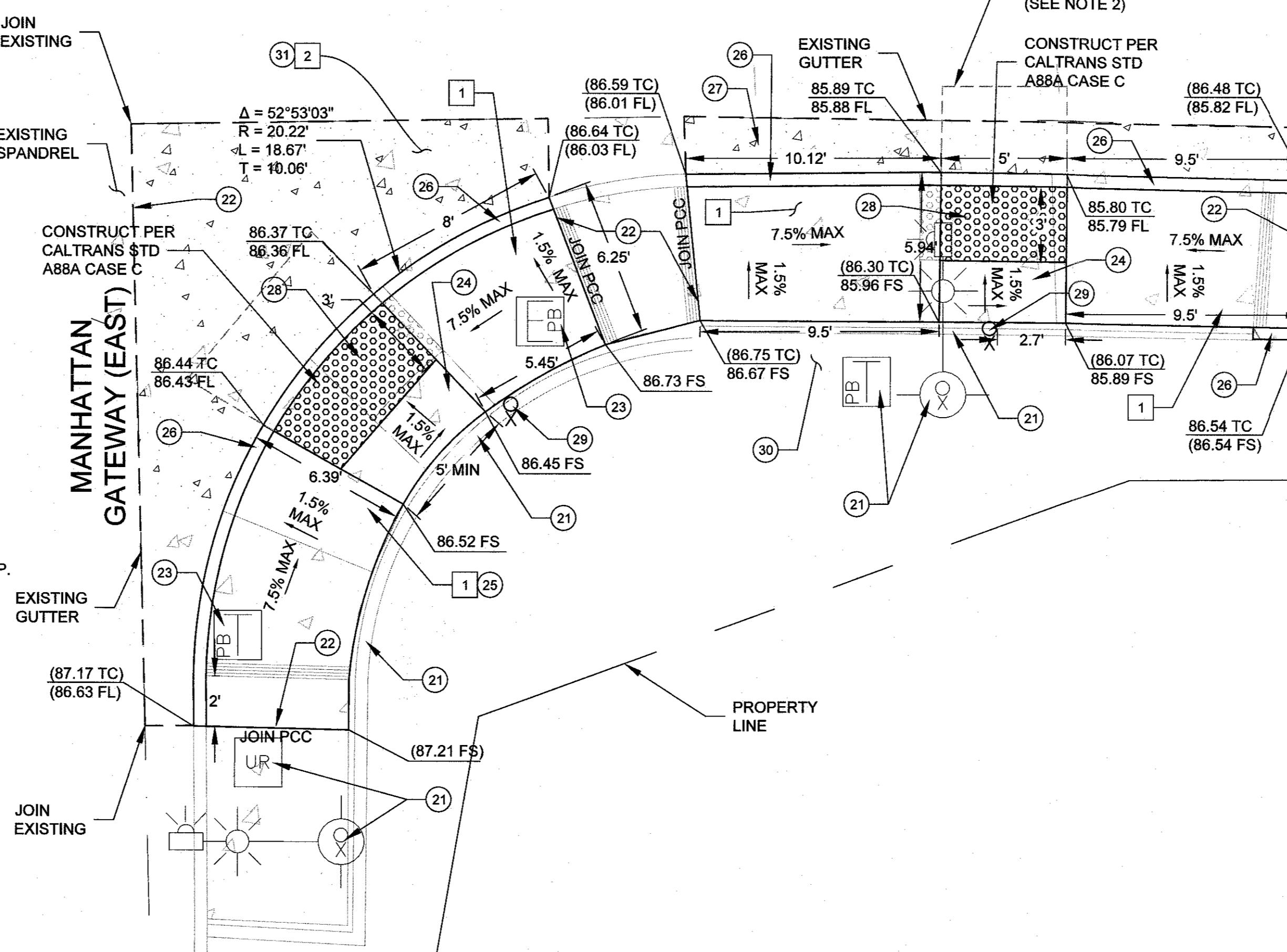
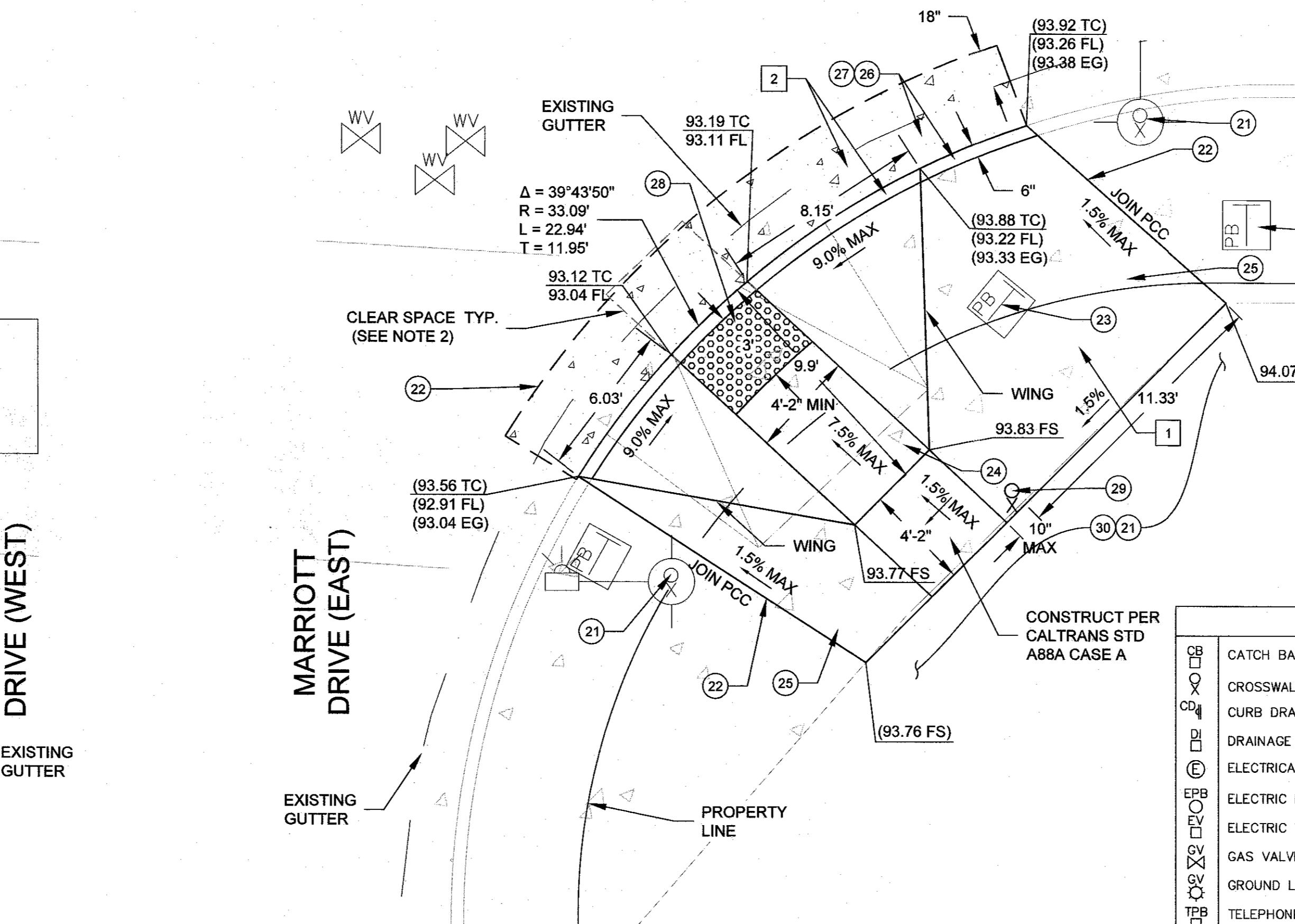
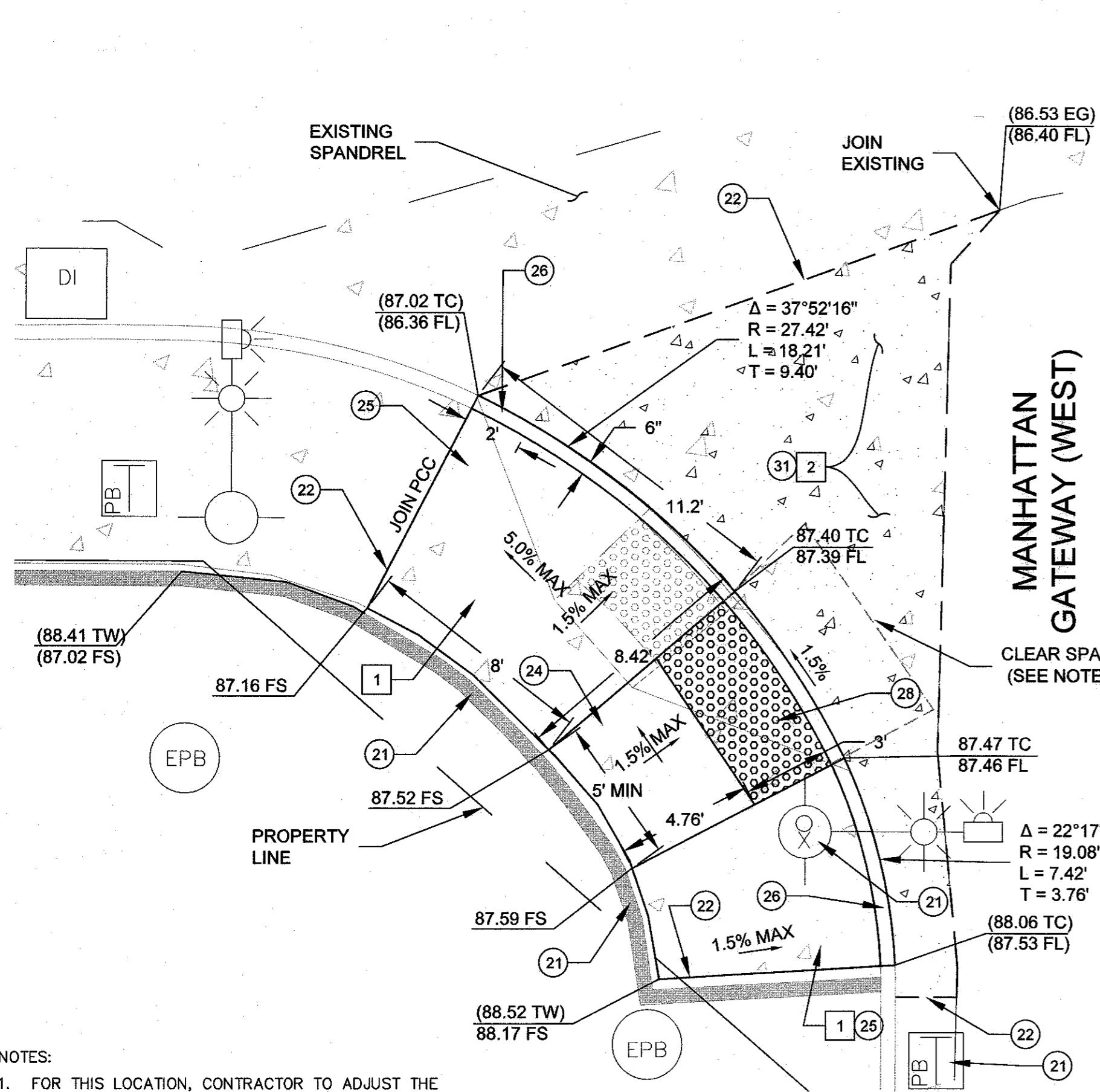
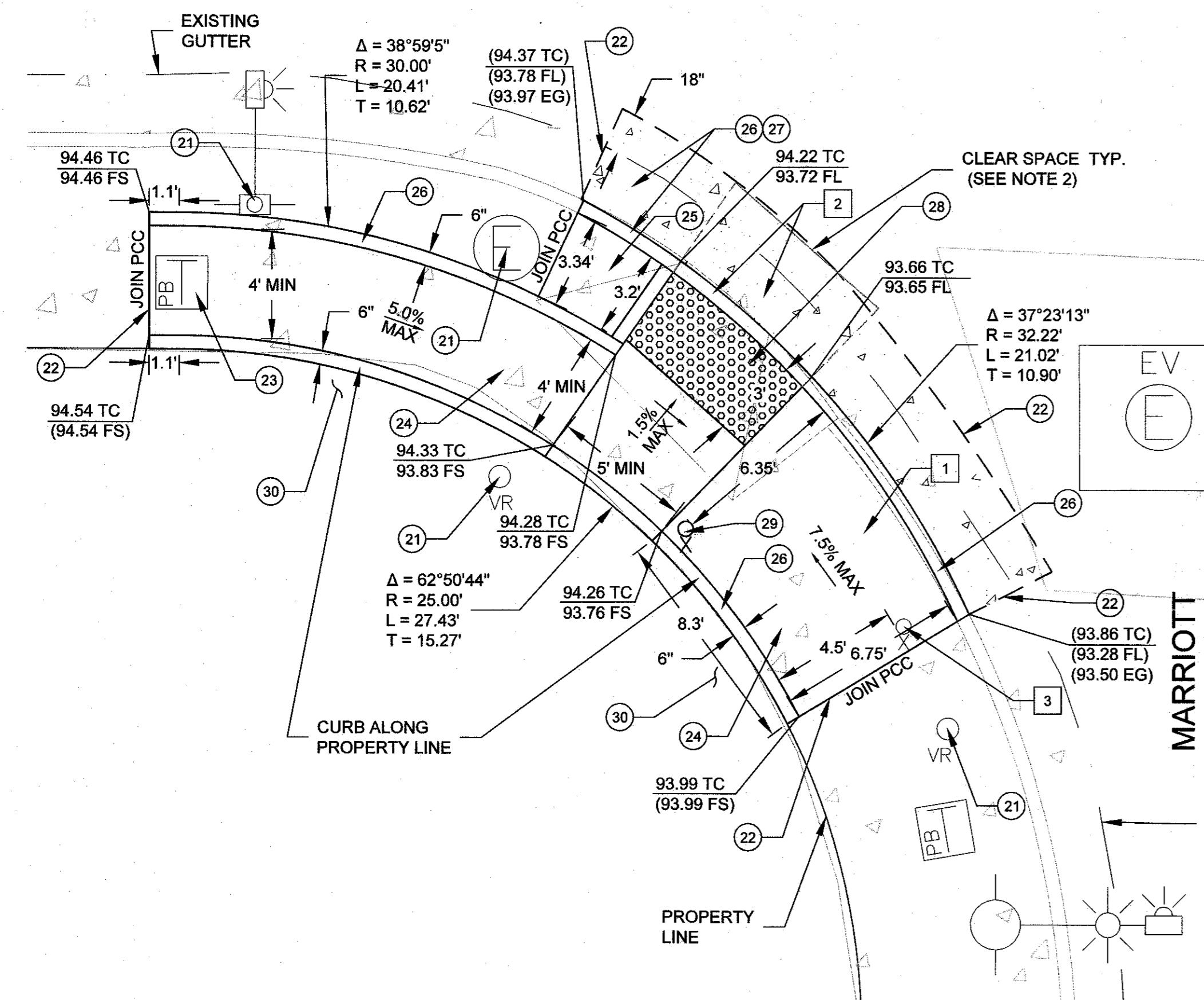
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QUANTUM QUALITY CONSULTING, INC.  
2720 SEPULVEDA BLVD.  
SUITE 100  
TORRANCE, CA 90505  
PHONE: (310) 891-3994  
FAX: (310) 891-3995

02-27-20  
DATE SIGNED

P-897



## **CONSTRUCTION NOTES:**

- 21 PROTECT IN PLACE
- 22 SAWCUT
- 23 ADJUST BOX FACE & COVER TO NEW GRADE
- 24 CONSTRUCT CURB RAMP PER CALTRANS STANDARD A88A OR A88B AS NOTED. SEE SHEET 9 FOR STANDARD PLANS
- 25 CONSTRUCT 4" CONCRETE SIDEWALK PER CITY STD MBSI-112A-0
- 26 CONSTRUCT 6" CURB PER CITY STD MBSI-120A-0 (ST-3)
- 27 CONSTRUCT 18" GUTTER. SEE DETAIL MBSI-120A-(ST-3)
- 28 INSTALL DETECTABLE WARNING SURFACE
- 29 INSTALL NEW PEDESTRIAN BUTTON TYPE B WITH POST (EXTEND CONNECTION FROM EXISTING). BUTTON TO BE 42" ABOVE FS. SEE SHEET 9 FOR STANDARD PLANS ES-5C DETAIL B AND ES-7A DETAIL B.
- 30 RESTORE LANDSCAPING AS REQUIRED
- 31 REPLACE CONCRETE SPANDREL

## **DEMOLITION NOTES:**

- 1 REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK PAVEMENT AND BASE
- 2 REMOVE AND DISPOSE EXISTING CONCRETE CURB AND GUTTER AND/OR SPANDREL
- 3 REMOVE PEDESTRIAN BUTTON AND POST

## NOTES:

1. GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.
2. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4 FT MINIMUM BY 4 FT MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND FULLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
3. PUSH BUTTONS TO BE AT LEAST 10" MAXIMUM FROM THE LANDINGS.

## 100% FOR CONSTRUCTION

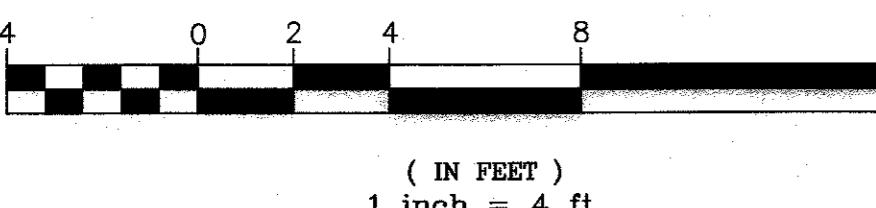
# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT — ENGINEERING DIVISION

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION



## GRAPHIC SCALE



Know what's best  
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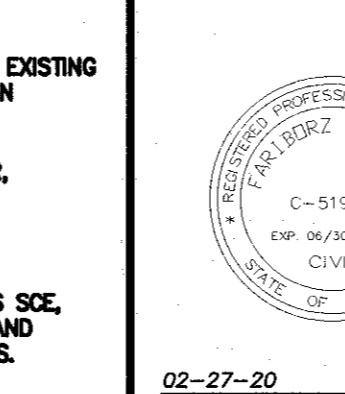
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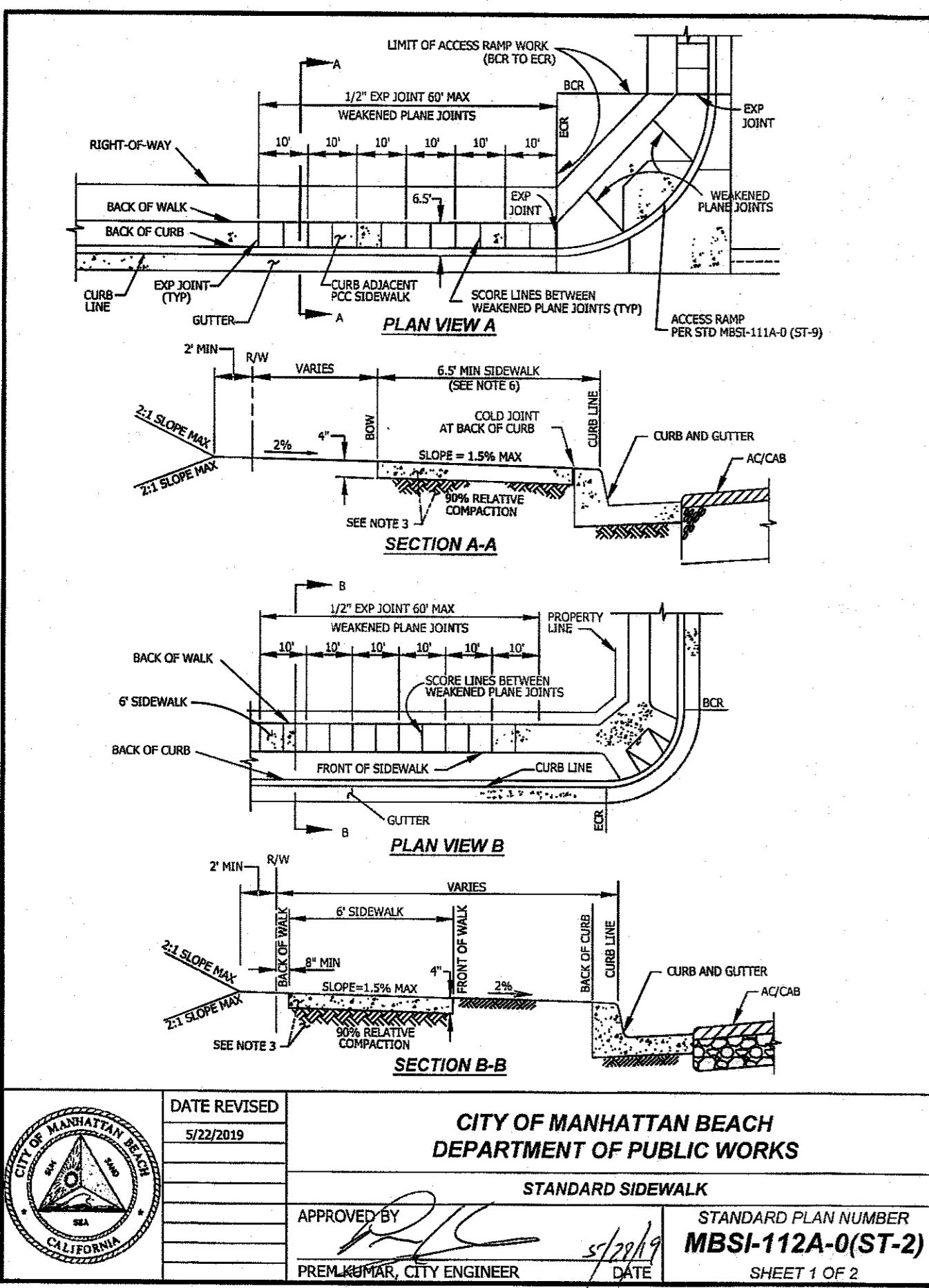


QUANTUM QUALITY CONSULTING INC.

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TORRANCE, CA 90505  
PHONE: (310) 891-3333**

**FAX: (310) 891 - 39**

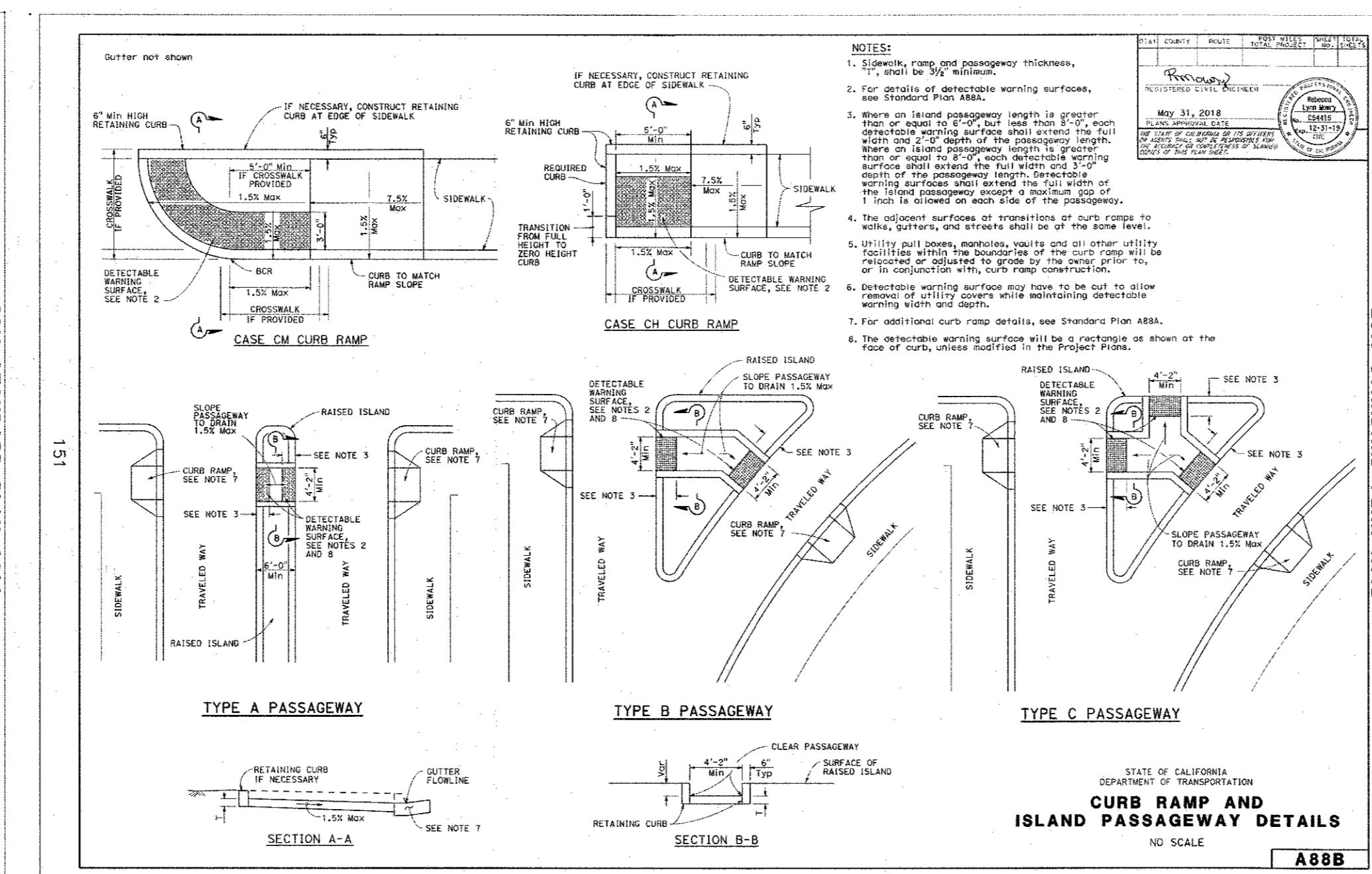
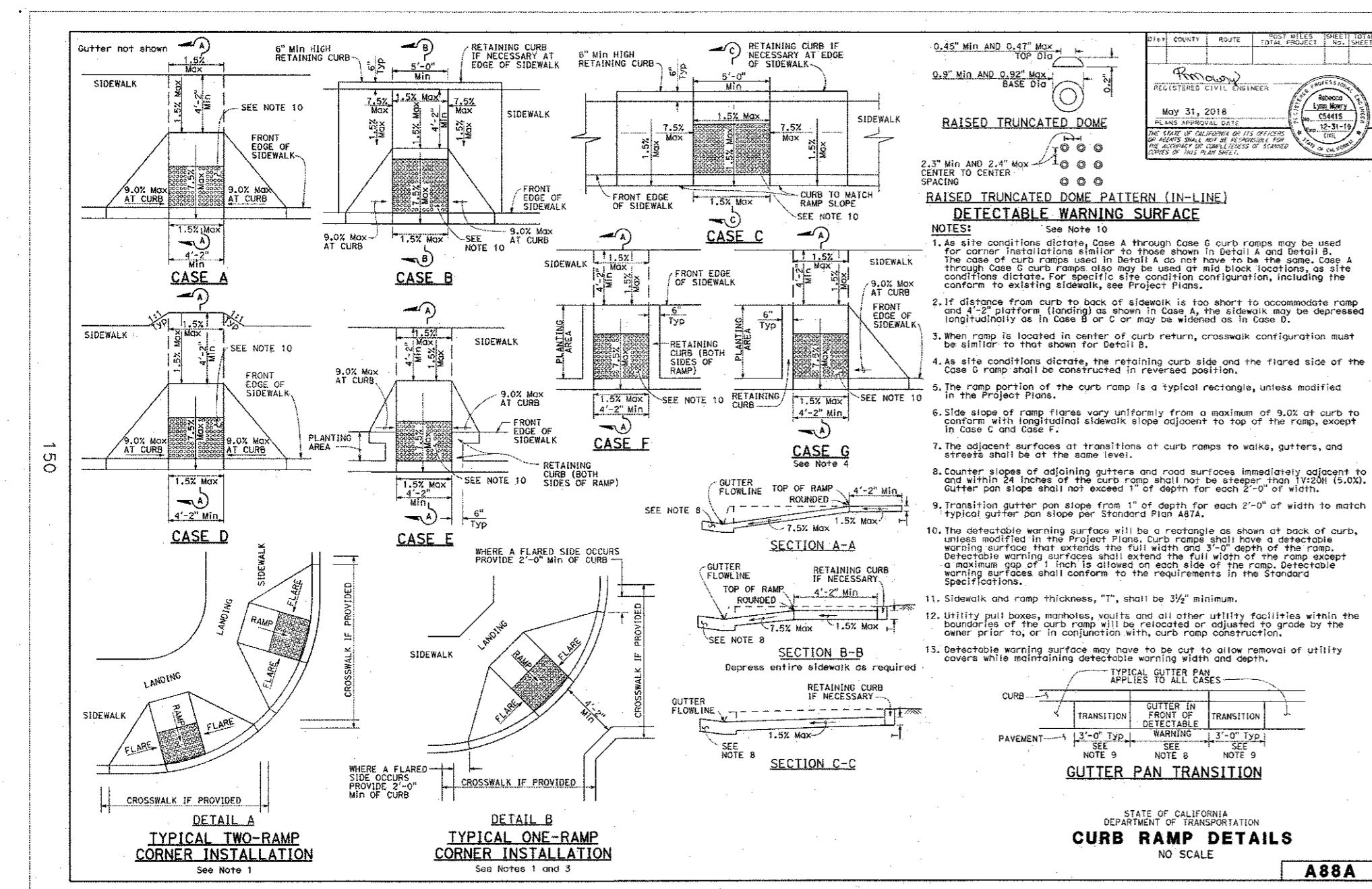
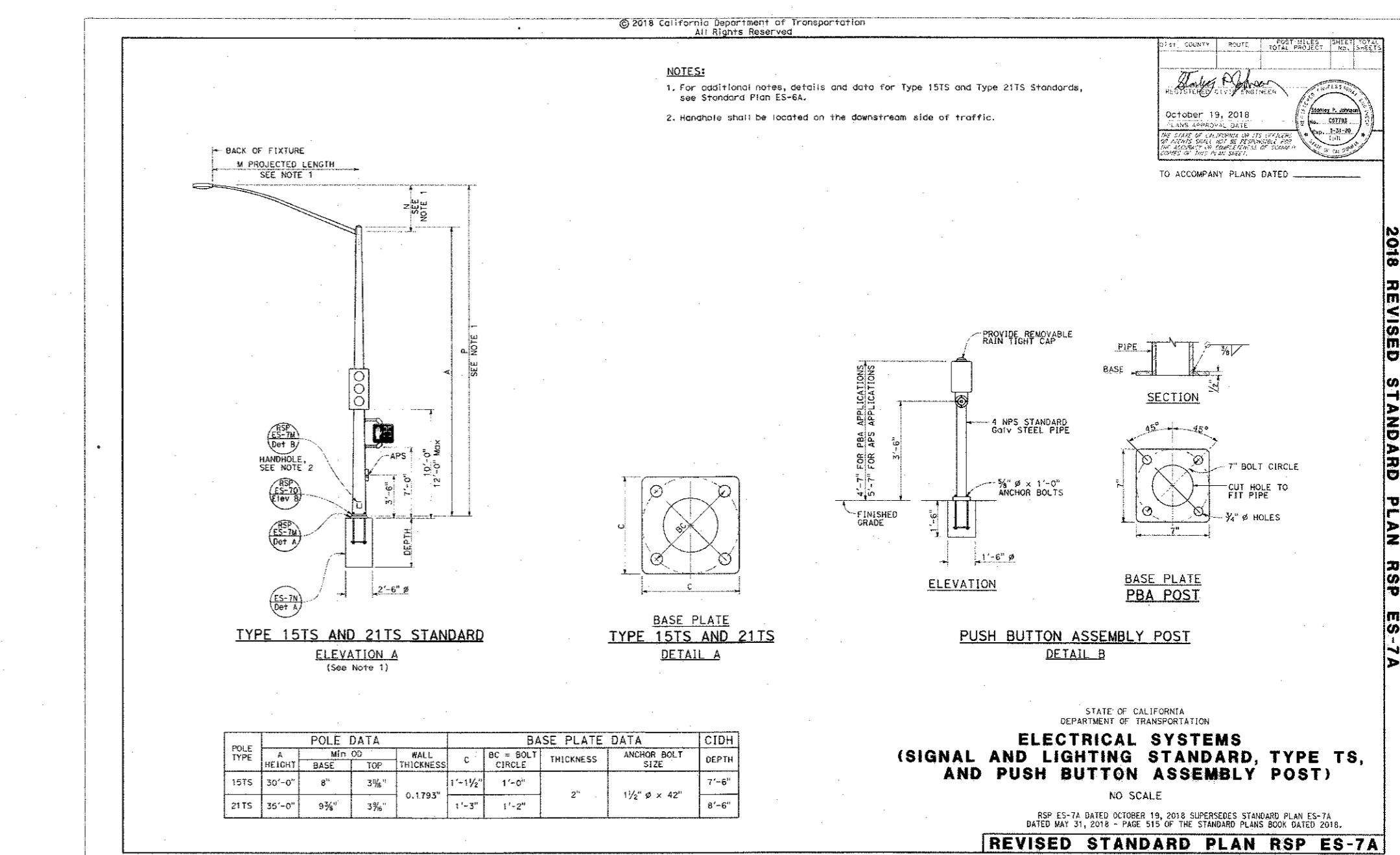
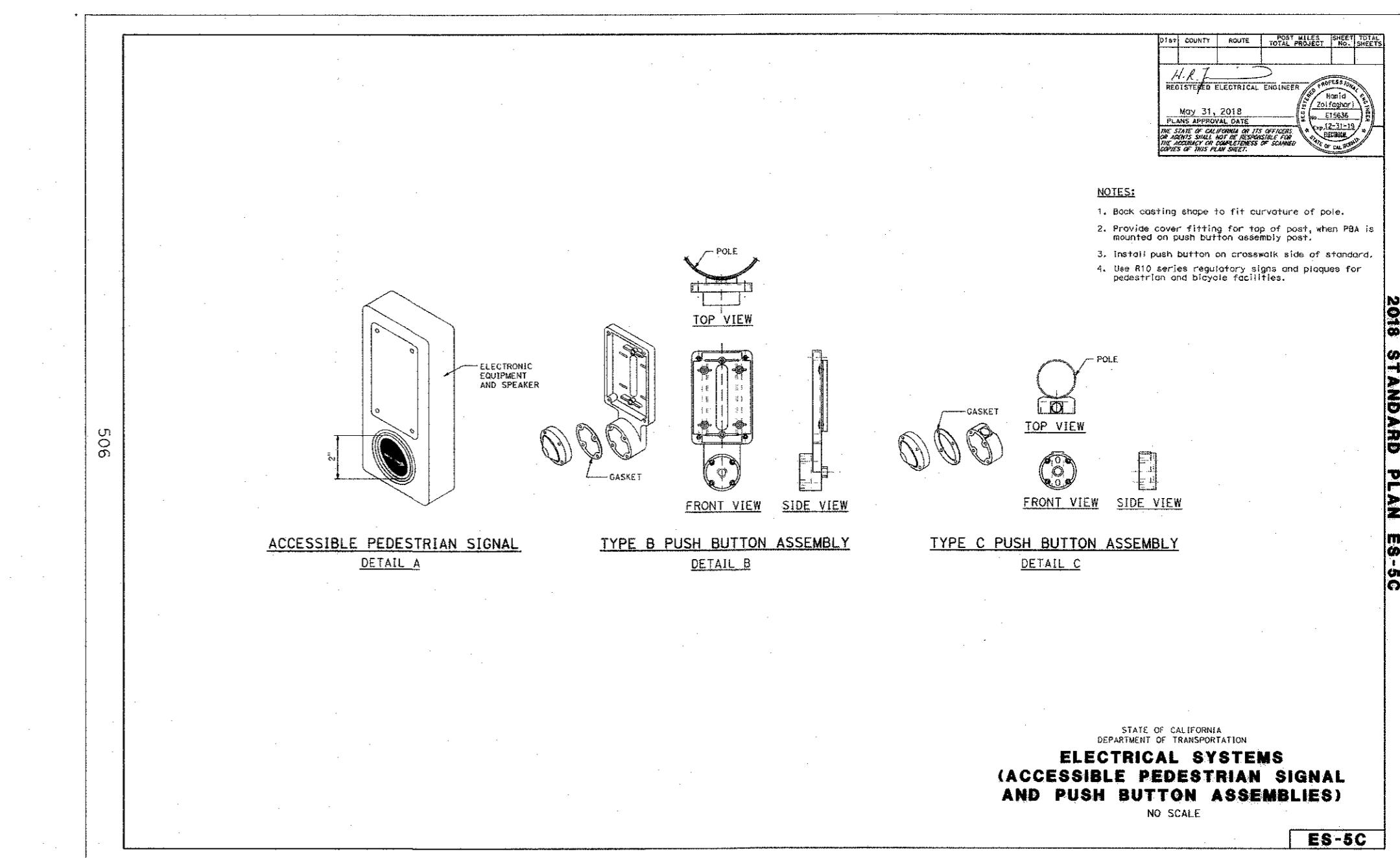
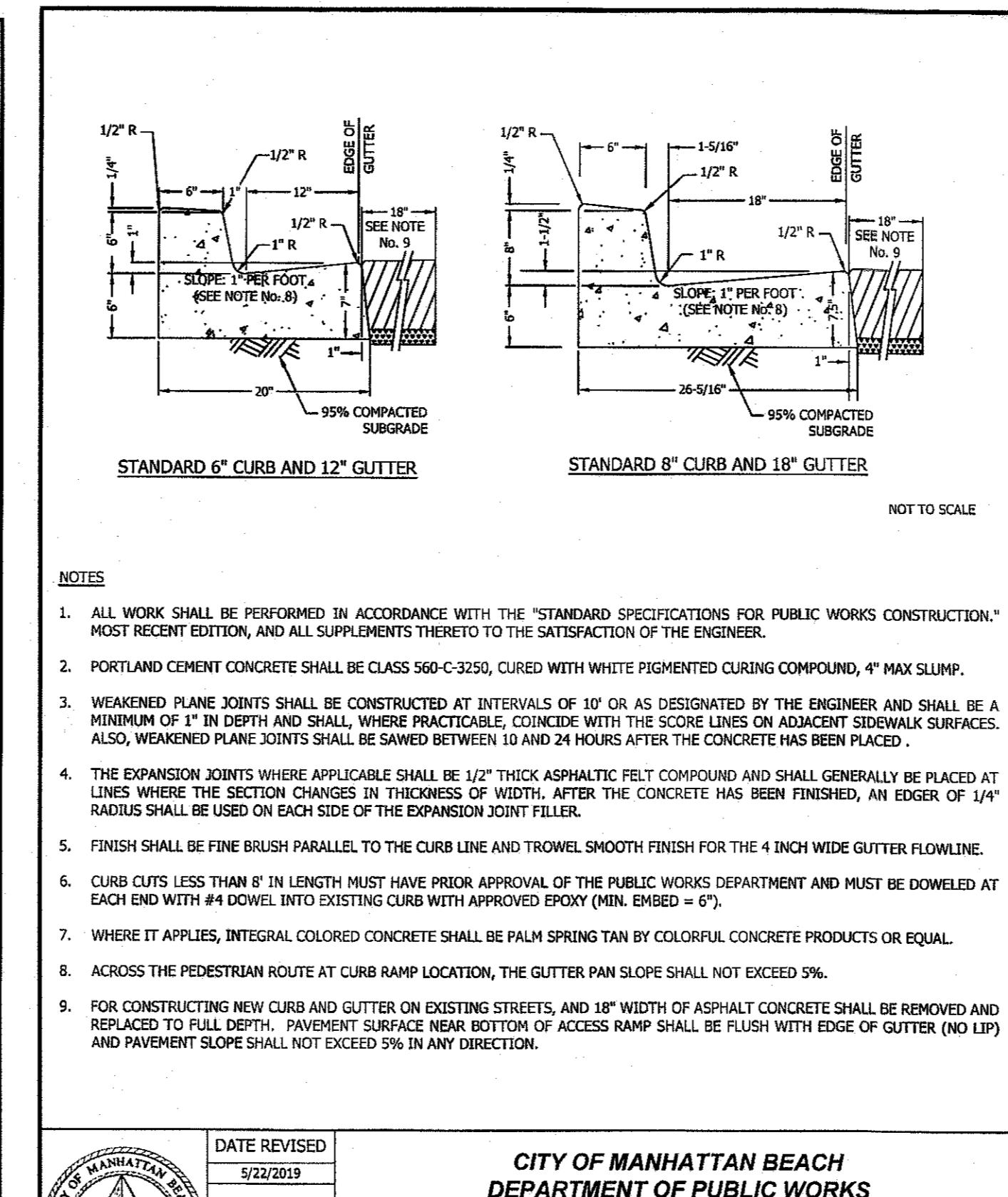
OF 9 P-917



	DATE REVISED	CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS	
	5/22/2019		
STANDARD SIDEWALK		STANDARD PLAN NUMBER	
		MBSI-112A-0(ST-2)	
APPROVED BY PREM KUMAR, CITY ENGINEER		5/29/19 DATE	SHEET 1 OF 2

	DATE REVISED	CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS	
	5/22/2019		
APPROVED BY		STANDARD SIDEWALK	
		5/28/19	STANDARD PLAN NUMBER
PREM KUMAR, CITY ENGINEER		DATE	MBSI-112A-0(ST-2)
SHEET 2 OF 2			

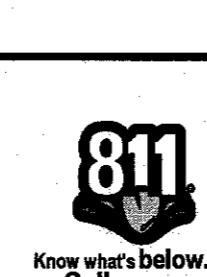
	DATE REVISED	CITY OF MANHATTAN BEACH DEPARTMENT OF PUBLIC WORKS	
	5/22/2019	STANDARD CURB AND GUTTER	
		APPROVED BY	
		PREM KUMAR, CITY ENGINEER	
		DATE	STANDARD PLAN NUMBER
	5/29/19	MBSI-120A-0(ST-3)	
		SHEET 1 OF 1	



## 100% FOR CONSTRUCTION

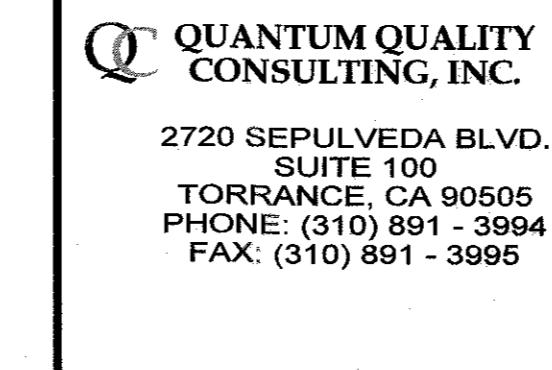
# CITY OF MANHATTAN BEACH

PUBLIC WORKS DEPARTMENT – ENGINEERING DIVISION



SUPPLEMENTAL NO

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 THE GAS SCE, CABLE, SEWER, STORM DRAIN AND WATER AT ALL INTERSECTIONS AND INTERFERENCES PRIOR TO CONSTRUCTION AND AS NOTED ON PLANS.



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1. *Leucosia* (Leucosia) *leucosia* (L.) (Fig. 1) (Pl. 1, Fig. 1) (Pl. 2, Fig. 1)