

CITY OF SAN DIEGO



SUPPLEMENT

TO BE USED IN CONJUNCTION WITH THE
STANDARD SPECIFICATIONS
FOR
PUBLIC WORKS CONSTRUCTION (GREENBOOK) 2006 EDITION
(REGIONAL SUPPLEMENT ATTACHED)

INTRODUCTION

The 2006 City of San Diego Supplement also commonly known as “City Supplement” has been prepared to be used in conjunction with the Standard Specifications for Public Works Construction, 2006 Edition (GREENBOOK). The 2006 Regional Supplement has also attached here for the convenience of staff and bidders.

The specifications contained in City Supplement take precedence over the specification language contained in GREENBOOK, 2006 Edition, including its San Diego Regional Supplement as follows:

1. City of San Diego Supplement (highest)
2. San Diego Regional Supplement as published by the San Diego Regional Standards Committee
3. GREENBOOK 2006

This order of precedence is to be used in all applicable cases unless modified by a higher precedence document.

COMMENTS

The City of San Diego is committed to the quality of this publication and desires to correct any errors, omissions or ambiguity. If you have any suggestions and comments i.e., corrections or additions you would like to submit for consideration to be included in the next publication, you are encouraged to submit them to:

Standards & Specifications Engineer
Engineering and Capital Projects Department
1010 2nd Avenue, Suite 500, M.S. 651
San Diego, CA 92101
or
mmaali@sandiego.gov

2006 CITY SUPPLEMENT

TO

"GREENBOOK"

**STANDARD SPECIFICATIONS
FOR
PUBLIC WORKS CONSTRUCTION**

2006 Edition

December 2006

TABLE OF CONTENTS

PART 1

GENERAL PROVISIONS 1

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

1-1 TERMS 1

1-2 DEFINITIONS 1

SECTION 2 – SCOPE AND CONTROL OF WORK

2-3.1 General 3

2-3.2 Additional Responsibility 3

2-3.3 Status of Subcontractors 4

2-4 CONTRACT BONDS 4

2-5.1 General 6

2-5.1.2 Re-Use of Documents 6

2-5.3 Submittals 6

2-5.4 As-Built Drawings 7

2-7.1 Examination of Subsurface Conditions 7

2-9.2 Survey Service 8

2-11 INSPECTION 8

2-12 ENGERGY POLICY AND CONSERVATION ACT 8

2-13 JOINT VENTURE CONTRACTOR 8

2-14 REQUESTS FOR CLARIFICATION 9

2-15 ERRORS AND OMISSIONS 9

2-16 SUCCESSOR’S OBLIGATIONS 9

2-17 SERVICE OF NOTICE 9

2-18 SUGGESTIONS TO CONTRACTOR 9

2-19 WAIVER OF LEGAL RIGHTS 10

SECTION 3 – CHANGES IN WORK

3-1.3 Cost Reduction Incentive 10

3-2.2.1 Contract Unit Prices 12

3-2.4 Agreed Pricing 12

3-2.6 Request for Proposal 12

3-2.7 Requirement to Proceed With Work 12

2006 CITY OF SAN DIEGO SUPPLEMENT

3-3.1 General..... 13

3-3.1.1 Work Not in Contract..... 13

3-3.2.2 Basis for Establishing Costs..... 13

3-3.2.3 Markup..... 13

3-3.2.4 Subcontractor Mark Up..... 14

3-4 CHANGED CONDITIONS..... 14

3-5 DISPUTED WORK..... 15

3-6 DISPUTE RESOLUTION PROCESS..... 15

3-6.1.1 Mandatory Mediation Costs..... 15

3-6.1.2 Selection of Mediator..... 15

3-6.1.3 Conduct of Mediation Sessions..... 16

3-6.2 Dispute Resolution Board..... 16

3-6.2.1 Dispute Resolution Board Costs..... 16

3-6.2.2 Conduct of Dispute Resolution Board Hearings..... 17

SECTION 5 – UTILITIES

5-1 LOCATION..... 17

SECTION 6 – PROSECUTION, PROGRESS, AND ACCEPTANCE OF WORK

6-4 DEFAULT BY CONTRACTOR..... 18

6-5 TERMINATION OF CONTRACT..... 20

6-5.1.1 Termination of Contractor’s Performance of Work..... 20

6-5.1.2 Notice of Termination..... 20

6-5.1.3 Removal of City Property..... 21

6-5.1.4 Termination Settlement..... 21

6-5.1.5 Payment to Contractor Due to Termination..... 21

6-5.1.6 Failure to Agree on Payment..... 21

6-5.1.7 Arbitration of Payment..... 22

6-5.1.8 Payment for Property Destroyed, Lost, Stolen, or Damaged..... 22

6-5.1.9 Determination of Amount Due Contractor..... 22

6-5.1.10 Partial Termination..... 23

6-5.1.11 Partial Termination Payments..... 23

6-5.1.12 Records and Documents Relating to Termination..... 23

6-6 DELAYS AND EXTENSIONS OF TIME..... 23

6-6.1 General..... 24

6-6.5 Contractor Required Analysis..... 24

6-6.6 City’s Right to Grant Extension..... 24

6-6.7 Time Only Entitlement..... 24

6-6.8 City Not Liable 24

6-7.2 Working Day 24

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY 26

6-11 RIGHT TO AUDIT 25

6-11.1 City’s Right..... 26

6-11.2 Audit 26

6-11.2.1 Cost Audit..... 26

6-11.2.1.1 Accounting Records 26

6-11.3 City’s Right –Binding on Subcontractors..... 26

6-11.4 Compliance Required Before Mediation and Litigation 26

SECTION 7 – RESPONSIBILITIES OF THE CONTRACTOR

7-2.2 Laws..... 27

7-2.2.1 Access to Records on Federally Funded Projects..... 27

7-2.3 Approval Required to Work Outside Normal Hours..... 27

7-3 LIABILITY INSURANCE..... 27

7-3.1 Policies and Procedures 27

7-3.2 Types of Insurance..... 28

7-3.2.1 Commercial General Liability Insurance 28

7-3.2.2 Commercial Automobile Liability Insurance 28

7-3.2.3 Commercial Pollution Liability Insurance 28

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance 29

7-3.2.5 Contractors Builders Risk Property Insurance 29

7-3.2.6 Railroad Protective Liability Insurance 30

7-3.3 Rating Requirements 30

7-3.3.1 Non-Admitted Carriers 30

7-3.4 Evidence of Insurance 30

7-3.5 Policy Endorsements 31

7-3.5.1 Commercial General Liability Insurance 31

7-3.5.1.1 Additional Insured 31

7-3.5.1.2 Primary and Non-Contributory Coverage 31

7-3.5.1.3 Project General Aggregate Limit..... 31

7-3.5.2 Commercial Automobile Liability Insurance 31

7-3.5.2.1 Additional Insured 31

7-3.5.3 Contractors Pollution Liability Insurance Endorsements..... 32

7-3.5.3.1 Additional Insured 32

7-3.5.3.2 Primary and Non-Contributory Coverage 32

7-3.5.3.3 Severability of Interest..... 32

2006 CITY OF SAN DIEGO SUPPLEMENT

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements... 33

7-3.5.4.1 Additional Interest..... 33

7-3.5.4.2 Primary and Non-Contributory Coverage..... 33

7-3.5.4.3 Severability of Interest..... 33

7-3.5.5 Builders Risk Endorsements..... 33

7-3.5.5.1 Waiver of Subrogation..... 33

7-3.5.5.2 Builders Risk – Partial Utilization..... 33

7-3.6 Deductibles/Self-Insured Retentions..... 34

7-3.7 Reservation of Rights..... 34

7-3.8 Notice of Changes to Insurance..... 34

7-3.9 Excess Insurance..... 34

7-4 WORKERS’ COMPENSATION INSURANCE..... 34

7-4.1 Workers’ Compensation Insurance and Employers Liability Insurance..... 34

7-4.1.1 Workers’ Compensation Insurance for Work In, Over, or Alongside Navigable
Waters..... 35

7-4.2 Workers’ Compensation and Employers Liability Insurance Endorsements..... 35

7-4.2.1 Waiver of Subrogation..... 35

7-6 THE CONTRACTOR’S REPRESENTATIVE..... 35

7-6.1 Project Meetings..... 35

7-8.1 Cleanup and Dust Control..... 35

7-8.1.1 Affidavit of Legal Disposal..... 35

7-8.1.2 Dust Abatement..... 36

7-8.1.3 Rubbish Control..... 36

7-8.2 Air Pollution Control..... 36

7-8.6 Water Pollution Control..... 36

7-8.6.1 Water Pollution Control Site Management..... 37

7-8.6.2 Performance Standards..... 39

7-8.6.2.1 Dry Season Requirements (May 1 through September 30)..... 40

7-8.6.2.2 Rainy Season Requirements (October 1 through April 300)..... 40

7-8.6.2.3 Construction BMPs..... 41

7-8.6.2.4 Storm Drain Inlet Protection..... 41

7-8.6.2.5 Pollution Control Measures For Equipment Maintenance Fueling, Cleaning and
Storage..... 42

7-8.6.2.6 Street Sweeping..... 43

7-8.6.2.7 Storage/Staging Areas Protection..... 43

7-8.6.2.8 Temporary Silt Fence..... 43

7-8.6.2.9 Temporary Concrete Washout..... 44

7-8.6.2.10 Temporary Gravel Bags..... 44

2006 CITY OF SAN DIEGO SUPPLEMENT

7-8.6.2.11 Stock Pile Protection 44

7-8.8 Sewage Spill Prevention and Response Plan..... 45

7-8.8.1 Flow Diversion Plan 47

7-8.9 Environmental Protection 48

7-8.10 Flood Disaster Protection of 1973 48

7-8.11 Illness and Injury Prevention Program 49

7-8.12 Graffiti Control 49

7-8.13 Hydrostatic Discharge Requirement..... 49

7-8.14 Noise Abatement 49

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS..... 50

7-9.1 Placements and Removal of Markouts 50

7-10.1 Traffic and Access 50

7-10.1.1 Traffic Control by Working drawings 50

7-10.1.2 Traffic Control by Appointment..... 53

7-10.1.3 Traffic Control – Part of Plans 53

7-10.1.4 Traffic Control for Resurfacing and/or Slurry Seal..... 54

7-10.1.4.1 “No Parking –Tow-Away Zone” Signs and Notices for Slurry Seal 55

7-10.1.4.2 “No Parking – Tow-Away Zone” Signs and Notices for Resurfacing..... 55

7-10.3.1 Portable Changeable Message Signs 55

7-10.4.1 Safety Orders 56

7-10.4.5 Emergency Markout 57

7-10.4.6 Health and Safety Plan 57

7-10.4.7 Friable Asbestos Materials 57

7-10.4.7.1 Handling and Disposal of Asbestos Cement Pipe 57

7-10.5 Temporary Street Name Signs..... 57

7-10.6 Encountering or Releasing Hazardous Substances..... 58

7-10.7 Encountering Contaminated Soil..... 58

7-10.7.1 Monitoring of Potentially Contaminated Soil 58

7-10.7.2 Stockpiling Contaminated Soil and/or Hazardous Waste..... 58

7-10.7.3 Disposal of Contaminated Soil 59

7-12 ADVERTISING 60

7-12.1 Product Endorsement..... 60

7-13 LAWS TO BE OBSERVED 60

7-15 WATER FOR CONSTRUCTION PURPOSES 60

7-16 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT 61

7-17 CONFLICT OF INTEREST..... 61

7-18 PROJECT IDENTIFICATION 61

7-19 Community Liaison 62

7-20 Video Taping of Pre-Existing Conditions 62

SECTION 9 – MEASUREMENT AND PAYMENT

9-3.1 General..... 63

9-3.2 Partial and Final Payment..... 64

9-3.2.1 Application for Progress Payment..... 64

9-3.2.3 Progress Payments..... 65

9-3.4 Mobilization..... 65

9-3.4.1 Description..... 66

9-3.4.2 Payment 66

9-3.5 Bond Payment..... 67

9-3.6 Field Orders 67

9-4 WAIVER OF CLAIMS 68

PART 2

CONSTRUCTION OF MATERIALS..... 69

SECTION 200 – ROCK MATERIALS

200-2.4.3 Quality Requirements 69

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS

201-1.1.4 Concrete Specified by Competitive Strength 69

SECTION 203 – BITUMINOUS MATERIALS

203-5.4 Mix Design 69

SECTION 206 – MISCELLANEOUS METAL ITEMS

206-3 GRAY IRON CASTING..... 69

SECTION 207 – PIPE

207-4.2 Design, Manufacture and Tests 70

207-4.4 Corrosivity Test..... 70

207-9.2.3 Fittings..... 70

207-9.2.4 Lining and Coating..... 70

207-9.2.6 Polyethylene Encasement for External Protection 70

207-9.4 Corrosivity Test..... 70

207-10.1 General..... 71

207-10.4.7 Corrosivity Test..... 71

207-10.5.3 Corrosivity Test..... 71

2006 CITY OF SAN DIEGO SUPPLEMENT

207-11.2.2 Coupling Bands 71
207-11.3.3 Fabrication by Continuous Helical Seam 72
207-11.4 Repair of Damaged Galvanizing or Aluminizing 72
207-11.7 Slotted Pipe 72
207-17.1 General 72
207-20.2 Materials 72
207-20.7 Pipe Acceptance or Rejection 72
207-20.8 Installation and Field Inspection 72
207-26.2 Fire Hydrants (2006 Regional Supplement) 73
207-27 APPROVED MATERIALS LIST 73

SECTION 208 – PIPE JOINT TYPES AND MATERIALS

208-2.1 General 73

SECTION 210 – PAINT AND PROTECTIVE COATINGS

210-1.6.1 General 73
210-2.3.5 Shop-Welded Joints 73

SECTION 211 – SOILS AND AGGREGATE TESTS

211-1.2 Field Density 73

SECTION 212 – LANDSCAPE AND IRRIGATION MATERIALS

212-1.1.2 Class “A” Topsoil 74

SECTION 216 – DETECTABLE/TACTILE WARNING TILES

216-1 DETECTABLE/TACTILE WARNING TILES 74
216-1.1 General 74
216-1.2 Submittals 74
216-1.2.1 Material Test Reports 74
216-1.3 Quality Control 75
216-1.3.1 Delivery, Storage and Handling 75
216-1.4 Materials 75
216-1.5 Manufacturers 75

PART 3

CONSTRUCTION METHODS 76

SECTION 301 – TREATED SOIL, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS

301-1.2 Preparation of Subgrade 76
301-1.7 Payment 76
301-3.1.5 Cement Application, Mixing and Spreading 76
301-3.1.8 Placing, Compacting, and Finishing 76

SECTION 302 – ROADWAY SURFACING

302-5.10 Seal Coat (2006 Regional Supplement) 77

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION	
303-5.1.1 General.....	77
303-5.1.4.3 Protection and Preservation of Improvements.....	77
303-5.5.3 Walk.....	78
303-5.10.1.2 Installation.....	78
303-5.10.1.3 Cleaning and Protecting.....	78
303-5.10.2 Preparation.....	78
303-5.10.3 Payment.....	78
303-5.11 Curb Ramp Installation.....	78
303-5.11.1 General.....	78
303-5.11.2 Site Visit.....	79
303-5.11.3 Payment.....	79
303-6.1 General.....	79
 SECTION 304 – METAL FABRICATION AND CONSTRUCTION	
304-5 STREET NAME SIGN	80
304-5.1 General.....	80
304-5.2 Installation.....	80
304-5.3 Measurement and Payment.....	80
 SECTION 306 – UNDERGROUND CONDUIT CONSTRUCTION	
306-1.1.2 Maximum Length of Open Trench.....	80
306-1.2.1 Bedding.....	81
306-1.2.2 Pipe Laying.....	81
306-1.2.12 Field Inspection for Plastic Pipe and Fittings.....	81
306-1.3.3 Jetted Backfill.....	81
306-1.3.4 Backfilling Narrow Trenches	82
306-1.4.5 Water Pressure Test.....	83
306-1.4.8.1 General Requirements (2006 Regional Supplement)	83
306-1.4.9 Balling Sewers.....	83
306-1.5.2 Permanent Resurfacing.....	84
306-4.1 General.....	84
306-4.1.1 Inspection.....	84
306-4.4.7 Curing.....	84
306-4.4.8 Repairing	84
306-4.4.9 Rejection.....	84
306-4.5 Backfill	85
 SECTION 307 – STREET LIGHTING AND TRAFFIC SIGNALS	
307-2.7 Bonding and Grounding	85
 SECTION 308 – LANDSCAPE AND IRRIGATION INSTALLATION	
308-6 MAINTENANCE AND PLANT ESTABLISHMENT	85
 SECTION 310 – PAINTING	
310-5.6.1 General.....	85

**PART 1
GENERAL PROVISIONS**

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

1-1 TERMS.

DELETE the entire paragraph and REPLACE with the following:

Whenever the terms "directed," "required," "permitted," "ordered," "designated," "prescribed," or terms of like import are used, it shall be understood that the direction, requirements, permission, order, designation, or prescription of the Engineer is intended. Similarly, the terms "approved," "acceptable," "satisfactory," "or equal," or terms of like import shall mean approved or acceptable to or satisfactory to the Engineer, unless otherwise expressly stated. The word "provide" shall be understood to mean furnish and install. Where used in the Contract Documents, statement or command type phrases refer to and are directed to the Contractor.

1-2 DEFINITIONS.

ADD the following definitions:

Acceptance - Formal action of the City in determining that the Contractor's Work has been completed in accordance with the Contract, filing a Notice of Completion with the County Recorder, which stipulates the date that the Work was completed, and notifying the Contractor in writing of the acceptability of the Work.

Agency - DELETE the definition in its entirety and REPLACE with the following:
The City of San Diego.

Agent - Any individual, firm, association, partnership, corporation, trust, joint venture or other legal entity, including but not limited to the Project Manager and Consultants, employed by the City for services on this project.

Allowance - Payment under "AL" Allowance items unit will be based on actual expenditures in accordance with Contract Documents. Work under Allowance items shall be authorized by the City in advance.

Award of Contract - Date of - Date on which the Mayor or designee executes the contract documents and all conditions precedent to award have been satisfied.

Apparent Low Bidder - The Bidder whose Bid, having been publicly opened and read aloud, meets all the material requirements of the Bid Documents, the Director, Purchasing & Contracting Department deems responsible in accordance with the City's Municipal Code, and whose bid price is the lowest received.

City - The City of San Diego.

Consultants - are Architects and Engineers employed by the City for project design or other specialized services and who function under the direction of the Project Manager.

Contract Time - The number of successive days stated in the Contract Documents for the completion of the Work.

Construction Manager - The person designated, in writing, by the City to act as its representative at the construction site and to perform construction inspection services and administrative functions relating to this Contract. Initial contact by the Contractor with the City shall be through the Construction Manager. The Construction Manager may be an employee of the City or an independent Consultant contracted to represent the City. Same as Engineer, Resident Engineer, Field Engineer, and Inspector.

Design Consultant - The individual, partnership, corporation, joint-venture or other legal entity named as such in the Contract Documents or succeeding entity.

Drawings – Same as Plans.

Execution of Contract - date of - Date on which the Mayor or designee representative signs the construction Contract.

Engineer - DELETE in its entirety and ADD the following:

Engineer - The City Engineer or other representative of the Mayor designated to administer the work for the City and who may be represented on the work by the following personnel within the scope of the particular duties entrusted to them:

Inspector - also referred to as Resident Engineer, Supervising District Engineer, or Deputy Director, who are charged with handling detailed administration and inspection of the Contract.

Project Manager - is the representative charged with overall responsibility for the project.

House Connection Sewer - ADD the following:

Such a connecting sewer is commonly known as a Sewer Lateral or Sewer Service Lateral and may be so identified.

Interface Milestone - Date on which connecting or abutting Work is to be completed by others and available in order for the Contractor to begin Work under this contract.

Interfacing Work - Work which connects to, abuts, or meets with work of another contractor.

Interim Contract Milestone - A principal event specified in the Contract Documents relating to an intermediate completion date of a portion of the work, or a period of time within which the portion of the work should be performed prior to Substantial Completion of all the Work. Liquidated damages are frequently associated with these milestones.

Milestone - See Interim Contract Milestone.

Owner - City of San Diego when designated as Owner.

Project Manager - is the representative charged with overall responsibility for the project.

Punchlist - List of incomplete items of Work and of items of Work which are not in conformance with the Contract.

Shop Drawings - Drawings submitted by the Contractor showing details of manufactured or assembled products proposed to be incorporated into Work.

Specifications - That part of the Contract Documents consisting of written descriptions of the technical features of materials, equipment, construction systems, standards, workmanship, design, and configuration.

Substantial Completion - Date of written notice to the Contractor that the Project is Substantially Complete and is ready for final inspection and development of the final punchlist. Substantial Completion does not mean completion in accordance with the Contract, nor shall Substantial Completion of all or any part of the Project entitle the Contractor to Acceptance under the Contract.

Technical Specifications - A Special Provisions section, typically written in the format of the Construction Specifications Institute (CSI), which applies to all or portions of the Project as defined in the Contract Documents. The Technical Specifications takes precedence over Special Provisions, Parts 2 and higher, except where reference is specifically called out in the Technical Specifications.

Working Drawings – Drawings submitted by the Contractor showing details of work not shown on the Plans.

SECTION 2 – SCOPE AND CONTROL OF WORK

2-3.1 General. ADD the following:

The requirement that the Contractor perform, with its own organization, Contract work amount to at least fifty percent (50%) of the Contract price applies only to the base Contract amount, and shall not apply to Additive or Deductive Alternate work.

2-3.2 Additional Responsibility. Second paragraph, DELETE second sentence and SUBSTITUTE the following:

Unless “Specialty Items’ are designated by the Engineer in the Bid Proposal, the following items of work will qualify as “Specialty Items” if they are identified by the bidder in the Bid Proposal and their total cost does not exceed twenty-five percent (25%) of the Bid:

“Street lights, traffic signal, landscaping, irrigation, sewer, water, tile, precast paving units, Stamped concrete, masonry, iron or steel, pavement markings and striping.”

2-3.3 Status of Subcontractors. ADD the following:

Provisions of "Subletting and Subcontracting Fair Practices Act," (Public Contract Code 4100-4113, inclusive) will apply to all of the work to be performed under this contract.

The prime Contractor shall include in his list of Subcontractors shown on Pages B-5(1) of these special provisions, the following:

Any Subcontractor performing contract work which is in excess of one-half of one percent (0.5%) of the prime Contractor's total base bid shall be listed identifying dollar amount of contract to be performed by Subcontractor.

2-4 CONTRACT BONDS.

First paragraph, DELETE second and third sentences and SUBSTITUTE the following:

Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California. Bonds shall be either:

1. Surety rated, Class A, by A.M. Best, Key Rating Guide to an amount not to exceed ten percent (10%) of its capital and surplus, or
2. Listed in Federal Register Circular 570 in conformance with the Underwriting Limitation.
3. Where a company is not included in either No. 1 or No. 2 above, it shall conform with the State of California Insurance Code and shall show by convincing evidence that its financial responsibility is equal or better than the rating set forth in No. 1 or No. 2 above.

DELETE the third and fourth paragraphs and SUBSTITUTE the following:

The Contractor shall provide the following bonds:

- A. Contracts less than \$10,000:
 1. A "Payment Bond" (Materials and Labor Bond) is optional. If no bond is submitted, no payment will be made until thirty-five (35) days after Notice of Completion has been recorded and any lien requirements have been fulfilled. If a bond is submitted, progress payments will be made in accordance with these Specifications.
 2. A "Faithful Performance Bond" is not required.
- B. Contracts over \$10,000 and less than \$25,000:
 1. A "Payment Bond" (Materials and Labor Bond) is optional. If no bond is submitted, progress payments may be made with a minimum of twenty percent

2006 CITY OF SAN DIEGO SUPPLEMENT

(20%) retention. If a bond is submitted, progress payments will be made in accordance with these Specifications.

2. A "Faithful Performance Bond" is not required.
- C. Contracts over \$25,000 and less than \$100,000:
1. A "Payment Bond" (Materials and Labor Bond) for not less than one hundred percent (100%) of the contract price, to satisfy claims of material suppliers and of mechanics and laborers employed on the work. The bond shall be maintained by the Contractor in full force and effect until the work is accepted by the City and until all claims for materials and labor are paid, and shall otherwise comply with the Government Code.
 2. A "Faithful Performance Bond" is not required.
- D. Contracts over \$100,000 or where submitted on optional basis:
1. A "Payment Bond" (Materials and Labor Bond) for one hundred percent (100%) of the contract price, to satisfy claims of material suppliers and of mechanics and laborers employed on the work. The bond shall be maintained by the Contractor in full force and effect until the work is accepted by the City and until all claims for materials and labor are paid, and shall otherwise comply with the Government Code.
 2. A "Faithful Performance Bond" for one hundred percent (100%) of the contract price to guarantee faithful performance of all work, within the time prescribed, in a manner satisfactory to the City, and that all materials and workmanship will be free from original or developed defects.
- E. Contracts over \$100,000 which include CDBG - HUD Program Funds:
1. A "Payment Bond" (Material and Labor Bond) for one hundred percent (100%) of the contract price, to satisfy claims of material suppliers and of mechanics and laborers employed on the work. The bond shall be maintained by the Contractor in full force and effect until the work is accepted by the City and until all claims for materials and labor are paid, and shall otherwise comply with the Government Code and Public Contract Code.
 2. A "Faithful Performance Bond" for one hundred percent (100%) of the contract price to guarantee faithful performance of all work, within the time prescribed, in a manner satisfactory to the City, and that all materials and workmanship will be free from original or developed defects.

The bond shall remain in effect until the end of all warranty periods set forth in the Contract.

2-5.1 General. DELETE the second and fifth paragraphs in their entirety and SUBSTITUTE the following paragraphs:

The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If, during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, he shall report it to the Engineer in writing at once and before proceeding with the Work affected thereby.

It is the intent of the Specifications and Plans to describe a complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the Specifications or Plans as being required to produce the intended result shall be supplied whether or not it is specifically called for, at no additional cost to City.

The Specifications may describe or the Plans may show the general arrangement of an item or material or equipment when the actual details of said arrangement will vary depending on the source of the material or equipment. In such cases, Contractor shall bear all direct and indirect costs to accommodate the material or equipment furnished, whether the material or equipment is furnished by a manufacturer named in the Specifications or is furnished as an approved substitute or “or equal” item of material or equipment.

When words in the Specifications or on the Plans, which have a well-known technical or trade meaning, are used to describe Work, material or equipment such words shall be interpreted in accordance with such meaning. Reference to Standard Specifications, manuals or codes of any technical society, organization or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest Standard Specifications, manual or code in effect at the time of opening of Bids (or, on the effective date of the Contract if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced Standard Specifications, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of City, Contractor or Engineer, or any of their agents or employees from those set forth in the Contract Documents. Clarifications and interpretations of the Contract Documents will be issued by the Engineer per Subsection 2-14.

ADD:

2-5.1.2 Re-use of Documents. Neither Contractor nor any Subcontractor, manufacturer, fabricator, supplier or distributor shall have or acquire any title to or ownership rights in any of the Plans, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer; and they shall not re-use any of them on extensions of the Project or any other Project without written consent of City and specific written verification or adaptation by Engineer.

2-5.3 Submittals. ADD the following:

Submittals are required for sewage spill response plan, spill containment/cleanup plan, staging area, flow diversion plan, traffic control permit and working drawings, shop drawings, crack, sealant, and may be required for any product, manufactured item, or system.

However, materials such as concrete, asphalt concrete, slurry, backfill and bedding, gravel, crushed rock, and other materials that are not produced or delivered until the day they are used do not require a submittal if they are found to be standard materials of the current Greenbook edition. In lieu of the submittal, the Contractor is required to certify in writing, that all equipment and material incorporated in the work to be done comply with the Contract Documents. Any substitutions requested by the Contractor will require a formal submittal review process as discussed previously in this section.

ADD:

2-5.4 As-Built Drawings. Accurate and legible records shall be kept on a set of project blue line prints i.e, plans of all changes of work which occur during project construction. The Contractor shall record the location, by stationing to nearest foot, and the depth, by elevation to the nearest tenth of a foot ($\pm 0.1'$), of all City utility underground lines, including valves, plugged tees, capped ends, etc. The Contractor shall record, by dimension and/or scale drawings, all wiring, conduits and pull boxes as actually installed. All information necessary to maintain and/or service any concealed work shall be noted on the record drawings, The locations by station of sewer laterals and water services that are not perpendicular to the main shall be noted on the record drawings. Records shall be kept up to date with all entries checked by the Engineer before the work is buried or covered up. Prior to field acceptance, the Contractor shall deliver this "As-Built" information to the Engineer. Contractor's failure to update and deliver "As-Built" information monthly to the Engineer will result in withholding of monthly progress payments.

ADD:

2-7.1 Examination of Subsurface Conditions. Unless shown on the Plans or referenced in the Contract Document the City has made no investigation of subsurface conditions in areas where work is to be performed. The Contractor may do his own exploration as to subsurface or latent physical conditions at the site of the Work.

Any soils investigations referenced have been made for design purposes only, and are not a part of the Contract Documents. If investigations were performed, reports are available for bidders' information at the City.

Contractor shall examine carefully the site of the proposed Work, the bid proposal, Plans, Specifications, and Contract forms. Contractor shall satisfy himself/herself as to the character, quality, and quantities of the Work to be performed, materials to be furnished, and as to the requirements of the Specifications and the Contract. The Plans for the Work will show conditions as are believed by the Engineer to exist, but it is not to be inferred that all of the conditions as shown thereon actually exist, nor shall the City or any of its officers be liable for any loss sustained by the Contractor as a result of any variance between conditions as shown on the Plans and the actual conditions revealed during the progress of the Work or otherwise.

Should anything be omitted from the Plans or Specifications which is necessary to a clear understanding of the Work, or should any errors appear in either the various instruments or in the Work done by other Contractors affecting the Work included in the Specifications, it shall be the duty of the Contractor to notify the Engineer. In the event of Contractor's failure to give such notice, Contractor shall make good any damage or defect in the Work caused thereby. The

execution of Work specially detailed or explained, without a previous written claim for an extra Work charge, shall constitute an acceptance by the Contractor.

2-9.2 Survey Service. ADD the following:

The property and/or right-of-way line shall be located and marked with flags spaced one hundred (100) feet apart or as necessary to clearly mark the line before grading starts whenever the work to be done is within fifty (50) feet of the line or when specified on the plans.

2-11 INSPECTION.

ADD the following:

If parts of the Work are covered prior to inspection and approval, the cost of exposing the Work for inspection and closing shall be borne by the Contractor at no additional cost to the City even if the Work is found to be in compliance with the Contract.

The Engineer shall have access to the Work, the site of the Work, the place where Work is being prepared, or where materials, equipment, and machinery are being obtained for the Work. If required by the Engineer, the Contractor shall provide the assistance necessary for obtaining such access, and shall provide information related to the inspection of the Work. The Contractor shall provide access in accordance with Cal-OSHA Standards where necessary.

ADD:

2-12 ENERGY POLICY AND CONSERVATION ACT.

This contract recognizes the mandatory standards and policies relating to energy efficiency which are contained in the State Energy Conservation Plan issued in compliance with the Energy Policy and Conservation Act (P.L. 94-163) as set forth in Division 15 of the Public Resources Code of the State of California.

ADD:

2-13 JOINT VENTURE CONTRACTOR.

If the Contractor is a joint venture, all grants, covenants, provisions and claims, rights, powers, privileges and liabilities of the Contract shall be construed and held to be several as well as joint. Any notice, order, direct request or any communication required to be or that may be given by the City to the Contractor, shall be well and sufficiently given to all entities being the Contractor if given to any one or more of such entities. Any notice, request or other communication given by any one of such entities to the City under this contract shall be deemed to have been given by and shall bind all entities being the Contractor. The Joint Venture shall designate an on-site representative and an alternate in writing. The on-site representative and the alternate shall have the full authority to bind all Joint Venture partners. The Joint Venture shall provide a copy of the Joint Venture agreement and the Joint Venture license to the City at the time of Contract award.

ADD:

2-14 REQUESTS FOR CLARIFICATION.

In the event the work to be done, or matters relative thereto, are not sufficiently detailed or explained in the Contract Documents, the Contractor shall apply to the Engineer for further explanations as may be necessary and shall conform thereto so far as may be consistent with the terms of the contract. In the event of doubt or question arising respecting the true meaning of the Specifications or Plans, reference shall be made to the Engineer for his decision pursuant to Subsection 2-10.

ADD:

2-15 ERRORS AND OMISSIONS.

If the Contractor, in the course of the work, becomes aware of any claimed errors or omissions in the Contract Documents or in the City's field work, he/she shall immediately inform the Engineer, in writing. The Engineer will promptly review the matter, and if he finds an error or omission has been made, he/she will determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the contract, the City will issue an appropriate Change Order or Field Order (as applicable). After discovery of a claimed error or omission by the Contractor, related work performed by the Contractor shall be done at his risk unless authorized by the Engineer pursuant to Subsection 2-10.

ADD:

2-16 SUCCESSOR'S OBLIGATIONS.

All grants, covenants, provisions and claims, rights, powers, privileges and abilities contained in the Contract Documents shall be read and held as made by and with, and granted to and imposed upon, the Contractor and the City and their respective heirs, executors, administrators, successors and assigns.

ADD:

2-17 SERVICE OF NOTICE.

Any notice, order, direction, request or other communication given by the Engineer shall be deemed to be well and sufficiently given to the Contractor if left at any office used by the Contractor or delivered to any of his officers, clerks or servants or posted at the jobsite or mailed to the Contractor at the address given by the Contract Documents or at the Contractor's last known place of business. If mailed by first-class mail, any form of communication shall be deemed to have been given to and received by the Contractor five (5) days after the day of mailing.

ADD:

2-18 SUGGESTIONS TO CONTRACTOR.

Any plan or method of work suggested by the City to the Contractor but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be pursued at the risk

and responsibility of the Contractor. The City assumes no responsibility thereof and in no way will be held liable for any defects in the work which may result from or be caused by use of such plan or method of work.

ADD:

2-19 WAIVER OF LEGAL RIGHTS.

The failure of the City to insist, in any one or more instances, upon the performance of any provision of the Contract, or to exercise any right therein, shall not be construed as a waiver or relinquishment of such provisions or rights. Any waiver of any breach of this Contract shall not be held to be a waiver of any other or subsequent breach.

Any waiver issued by the City of any provision of the Contract shall only be effective if issued in writing by the City and shall be specific, shall apply only to the particular matter concerned and not to other similar or dissimilar matters.

SECTION 3 – CHANGES IN WORK

ADD:

3-1.3 Cost Reduction Incentive. The Contractor may submit to the Mayor or designee in writing, proposals for modifying the Plans, Specifications or other requirements of the Contract for the sole purpose of reducing the total cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance or design and safety standards.

Cost reduction proposals shall contain the following information:

- A. A description of both the existing contract requirements for performing the work and the proposed changes.
- B. An itemization of the contract requirements that shall be changed if the proposal is adopted.
- C. A detailed estimate of the cost of performing the work under the existing contract and under the proposed change.
- D. A statement of the time within which the Mayor or designee must make a decision thereon.
- E. The contract items of work affected by the proposed changes, including any quantity variation attributable thereto.

The provisions of this section shall not be construed to require the Mayor or designee to consider any cost reduction proposal which may be submitted hereunder; nor will the City be liable to the Contractor for failure to accept or act upon any cost reduction proposal submitted pursuant to

this section, nor for any delays to the work attributable to any such proposal. If a cost reduction proposal is similar to Standard Specifications, these Supplement amendments or Standard Drawings adopted by the City after the advertisement for the contract, the City will not accept such proposal and the City reserves the right to make such changes without compensation to the Contractor under the provisions of this section.

The Contractor shall continue to perform the work in accordance with the requirements of the Contract until an executed Change Order, incorporating the cost reduction proposal has been issued. If an executed Change Order has not been issued by the date upon which the Contractor's cost reduction proposal specified that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, such cost reduction proposal shall be deemed rejected.

The Mayor or designee shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in construction costs from the adoption of all or any part of such proposal. In determining the estimated net savings, the right is reserved to disregard the contract bid prices if, in the judgment of the Mayor or designee, such prices do not represent a fair measure of the value of the work to be performed or to be deleted.

The City reserves the right, where it deems such action appropriate, to require the Contractor to share in the City's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall indicate his acceptance thereof in writing, and such acceptance shall constitute full authority for the City to deduct amounts payable to the Contractor from any monies due or that may become due to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a Change Order, which shall specifically state that it is executed pursuant to this section. Such Change Order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal, or such part of it as has been accepted to be put into effect, and shall include any conditions upon which the City's approval thereof is based if the approval of the City is conditional.

The Change Order shall also set forth the estimated net savings in the cost of performing the work attributable to the cost reduction proposal effectuated by the Change Order, and shall further provide that the contract cost be adjusted by crediting the City with fifty percent (50%) of said estimated net savings amount.

Acceptance of the cost reduction proposal and performance of the work thereunder shall not extend the time of completion of the Contract, unless specifically provided for in the Change Order authorizing the use of the cost reduction proposal.

The amount specified to accrue to the Contractor in the Change Order which effectuates a cost reduction proposal shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work thereof pursuant to the said Change Order.

The City expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the City when it determines that said proposal is suitable for application to other contracts. When an accepted cost reduction proposal is adopted for general use, only the Contractor who first submitted such proposal will be eligible for compensation pursuant to this section, and in that case, only as to those contracts awarded to him prior to submission of the accepted cost reduction proposal. Cost reduction proposals identical or similar to previously submitted proposals will be eligible for consideration and compensation under the provisions of this section, if the identical or similar, previously submitted proposals were not adopted for general application to other contracts administered by the City. Subject to the provisions contained herein, the City or any other public agency shall have the right to use all or any part of any submitted cost reduction proposal without obligation or compensation of any kind to the Contractor.

The Contractor shall bear all costs to revise all bonds for the project to include the cost reduction incentive proposal work. Additional bonding may be required.

3-2.2.1 Contract Unit Prices. ADD the following:

Soil conditions, number of water service conflicts, and number of lateral replacements are unknown. Unit bid prices for Additional Bedding, Imported Backfill, Shoring, Water Services, Abandoned Water Service (stiff) and House Connection Sewer (laterals) shall not be subject to adjustment regardless of quantity used or if none is used.

Unit bid prices for Water Pollution Control items as specified under 7-8.6 shall not be subject to adjustment regardless of quantity used or if none is used.

3-2.4 Agreed Pricing. To the end of the first sentence, ADD the following:

“and in accordance with the Contractor's overhead and profit limitations addressed in 3-3.2.3.”

ADD:

3-2.6 Request for Proposal. When the City desires a change in the Work, the Engineer will issue a Request for Proposal to the Contractor. The Contractor will be required to respond within fourteen (14) days unless more time is authorized by the Engineer. If the Contractor fails to submit the requested proposal within the time specified above, the Contractor will be solely liable for any delays or impacts caused by the late submittals.

ADD:

3-2.7 Requirement to Proceed With Work. If the City and Contractor agree on the value of any work, and the amount of Contract Time that should be allowed as a result of the Contractor’s response to a Request for Proposal, the Contractor shall proceed as directed by the City so as to minimize the impact on and delays to the Work pending the issuance of a Change Order. If however, the City and the Contractor are unable to agree as to the extent, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of the Contractor’s response to a Request for Proposal, the City can direct the Contractor to proceed on the basis of a price for the Work as estimated by the Engineer or Time

and Materials (T&M) so as to minimize the impact on and delays to the Work, in accordance with this section.

3-3.1 General. ADD the following:

The City reserves the right to direct the Contractor to solicit competitive bids for additional work. If required by City, the Contractor shall obtain competitive bids from Subcontractors acceptable to Contractor and shall deliver such bids to City who will then determine, with the advice of the Project Manager, which bids will be accepted.

ADD:

3-3.1.1 Work Not in Contract. The Contractor shall not be entitled to an increase in the Contract Price nor an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified, supplemented by Change Order, except in the case of an emergency.

3-3.2.2 Basis for Establishing Costs:

(a) Labor: ADD the following:

The Engineer reserves the right to request certified payrolls to substantiate the actual cost of labor. The bid item for Certified Payroll shall include all costs associated with producing payroll certified by a California licensed Certified Public Accountant and shall be paid for on a per each basis. The certified payroll shall list the labor rates of all Contractor personnel, consultants and subcontractors that are working on or are associated with this project and shall be provided at the request of the City's Engineer.

In no case shall the Contractor be required to pay more than state and/or federal wage rates, whichever governs the project, for work being performed. The Engineer may waive this requirement when appropriate.

(c) Tool and Equipment Rental: DELETE second paragraph in its entirety, and SUBSTITUTE the following:

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed those listed in the latest edition of the State Department of Transportation publication entitled "Labor Surcharge and Equipment Rental Rates" preceding the date the work is accomplished. Where the Contractor can substantiate that the rental rates prevailing locally exceed the published rates by more than 15%, the Contractor will be entitled to a rental rate adjustment. For equipment not listed in said publication, rental rates shall not exceed listed rates prevailing locally at equipment rental agencies or distributors, at the time the work is performed.

Equipment Required Specifically for the Additional Work - Whenever possible, changed work will be accomplished using equipment available on-site or owned by the Contractor. If no on-site equipment can be used, and a specific piece of equipment shall be rented to be used exclusively for the changed work, the rental rate will be the invoiced rate.

3-3.2.3 Markup. DELETE in its entirety and SUBSTITUTE the following:

For all change orders, whether additive or deductive, the allowance for overhead and profit shall include full compensation for superintendence, insurance premiums, taxes, field office expense, extended overhead, home office overhead, and all other items of expense or cost not included in the cost of labor, materials, or equipment provided for in this subsection included but not limited to change order estimating and preparation cost, claims preparation cost, schedule analysis, project management, and field engineering.

This provision is intended to provide for stipulated markup for all overhead costs including extended field and home office overhead and profit. It provides liquidated damage stipulations regarding extended overhead and profit on changes, and is not intended as a penalty. The City recognizes that changes in the Work will result in extended overhead and otherwise reduced profit, but these damages are and will continue to be impractical and very difficult to determine. Accordingly, this section liquidates the damages arising from changes to a percentage of direct cost of the changes. By signing the contract, the Contractor expressly agrees that these liquidated damage provisions for overhead and profit on changes are reasonable and binding on both parties.

The allowance for overhead and profit will not exceed the following schedule and will apply to change orders which increase or decrease (credit) the contract price:

	Overhead	Profit (May be reduced by other provisions)
Labor =	10 percent	10 percent
Materials =	10 percent	5 percent
Equipment =	10 percent	5 percent

To the sum of the costs and markups provided for in this subsection, 1 percent shall be added as compensation for bonding.

For Change Orders that extend Contract Time as a result of City caused delay without direct cost to apply the stipulated mark up, the Contractors allowance for Overhead and Profit may be liquidated. If the allowance is liquidated, the amount will be stated in the Section 6-9.1 representing full compensation to the Contractor for City caused delay. If it is not liquidated, the Contractors allowance will not be stated in Section 6-9.1 and the Contractor's allowance will be determined by its actual costs incurred due to the City caused delay, subject to review and verification by the City.

ADD:

3-3.2.4 Subcontractor Markup. It is understood that labor, materials, and equipment may be furnished by the Contractor or by the subcontractor on behalf of the Contractor. When all or any part of the extra work is performed by a subcontractor, the allowance specified herein shall be applied to the labor, materials, and equipment costs of the subcontractor, to which the Contractor may add 5 percent of the subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of subcontractors, the five percent (5%) which is the Contractor's allowance for overhead (3.5%) and profit (1.5%) may be applied one time only to the performing subcontractor's total cost.

3-4 CHANGED CONDITIONS.

To second paragraph, second sentence, MODIFY to read as follows:

If the Engineer determines that the conditions are changed conditions and will materially affect the costs, a Change Order or Field Order will be issued adjusting the compensation for such portion of the Work in accordance with Subsection 3-2. Work agreed to and paid for by Field Order will not require the issuance of any other supplemental agreement.

3-5 DISPUTED WORK.

DELETE in its entirety and SUBSTITUTE the following:

Disputed work shall be considered work in which the City and the Contractor are in disagreement. If the Contractor and the City are unable to reach agreement on disputed work, the Agency may direct the Contractor to proceed with the disputed work. Payment shall be as later determined by 3-2, 3-3, mediation or arbitration, if the City and Contractor agree thereto, or as fixed in a court of law.

Although not to be construed as proceeding under extra work provisions, the Contractor shall keep and furnish records of disputed work in accordance with Section 3-3.

ADD:

3-6 DISPUTE RESOLUTION PROCESS.

3-6.1 Mandatory Non-Binding Mediation. If a dispute arises out of, or relates to this contract, or the breach thereof, and if said dispute cannot be settled through normal contract negotiations, the parties agree to first endeavor to settle the dispute in an amicable manner, using mandatory mediation under the Construction Industry Mediation Rules of the American Arbitration Association /or any other neutral organization agreed upon before having recourse in a court of law.

3-6.1.1 Mandatory Mediation Costs. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.

3-6.1.2 Selection of Mediator. A single mediator that is acceptable to both parties shall be used to mediate the dispute. The mediator will be knowledgeable in construction aspects and may be selected from lists furnished by the American Arbitration Association (AAA) or any other agreed upon mediator. To initiate mediation, the initiating party shall serve a Request for Mediation on the opposing party. If the mediator is selected from a list provided by AAA, the initiating party shall concurrently file with AAA a "Request for Mediation" along with the appropriate fees; a copy of requested mediators marked in preference order, and, a preference for available dates.

If AAA is selected to coordinate the mediation (Administrator), within ten (10) working days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following: a copy of the list of the preferred Mediators listed in preference order, after striking any Mediators to which they have any factual objection, and, a preference for available dates. If

the parties agree not to use AAA, then a mutually agreed upon mediator, date and place for the mediation shall be agreed upon.

The Administrator will appoint or the parties shall agree upon the highest, mutually preferred, Mediator from the individual parties' lists who is available to serve within the designated time frames.

3-6.1.3 Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed.

All discussions, statements, or admissions will be confidential to the proceedings and will not be used for any other purpose as it relates to the party's legal position. The parties may agree to exchange any information they deem necessary.

Both parties must have an authorized representative attend the mediation. Each representative must have the authority to recommend entering into a settlement. Either party may have attorney(s), witnesses or expert(s) present. Either party may request a list of witnesses and notification whether attorney(s) will be present.

Any resultant agreements from mediation shall be documented in writing. All mediation results and documentation, by themselves, shall be "non-binding" and inadmissible for any purpose in any legal proceeding, unless such admission is otherwise agreed upon, in writing, by both parties. Mediators shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

ADD:

3-6.2 Dispute Resolution Board. If mediation is unsuccessful in settling the dispute and if both parties agree, a non-mandatory dispute resolution board process may be used. The parties may impanel a Dispute Resolution Board (DRB) and the DRB process shall be conducted in accordance with the City's Alternative Dispute Resolution Process, utilizing board members who are individuals who have expertise in construction. The selection process shall be administered by the American Arbitration Association, or any other such neutral organization selected by the City, hereinafter called the "Administrator". Claims made for \$60,000 or less shall be heard by one (1) DRB member and claims for more than \$60,000 shall be heard by three (3) DRB members.

To initiate the DRB procedures, the parties shall jointly execute and file a "Submission to Dispute Resolution Board Procedures" request with the Administrator. Upon receipt by the Administrator of the submission form, the Administrator shall furnish to the parties a list of individuals skilled in dispute resolution and having expertise in construction from which to select the Dispute Resolution Board. Within ten (10) working days from the date the list is sent to the parties, the parties shall return the list to the Administrator, striking any individuals to which the parties have any factual objections and numbering the remaining in preference order. The Administrator shall appoint the highest mutually preferred individuals to the DRB that are available to serve in the time frame designated above.

3-6.2.1 Dispute Resolution Board Costs. The costs for all DRB hearings and proceedings, which includes those of either the one (1) person or three (3) person boards hearing the dispute,

will be shared equally by both parties. Fees shall be jointly negotiated by both parties directly with the DRB Administrator.

3-6.2.2 Conduct of Dispute Resolution Board Hearings. DRB hearings shall be informal and discovery shall not be permitted. The parties may agree to exchange any information they deem necessary. Each party shall have a maximum of two (2) hours for presentation, unless otherwise agreed upon. Outside experts, including attorneys, may address their specialty if the opposing party is notified in advance. Each party will be given full opportunity to present its views and supporting information, including documents, drawings, or other pertinent material. All such evidence and displays shall be considered confidential and shall be retained by the presenting party. Discussions or admissions during DRB discussions shall be considered as part of privileged settlement discussions, without prejudice to any party's legal position.

Any resultant agreements from a DRB Hearing shall be documented, in writing, by both parties. All DRB results and documentation, by themselves, shall be non-binding and inadmissible for any purpose in any legal proceeding, unless such admission is otherwise agreed upon, in writing, by both parties. DRB members shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

Within ten (10) working days after the hearing, the DRB will make its recommendation, in writing, for resolution of the dispute to all parties. The DRB will strive for consensus and unanimity in its decision making. If such is unattainable, however, separate written recommendations may be made as majority or minority reports.

SECTION 5 - UTILITIES

5-1 LOCATION.

Fifth paragraph, DELETE the first sentence and SUBSTITUTE the following:

The Contractor shall determine by pothole the location and depth of all utilities, including service connections, which have been marked by the respective owners or shown on the Plans and which may affect or be affected by its operation. The Contractor shall remove all evidence of mark-outs upon completion of construction.

ADD the following:

The City does not warrant the accuracy or completeness of the location and type of existing utilities and substructures shown on the Plans.

The Contractor is responsible to accurately locate, by potholing or other suitable methods, all existing utilities and substructures as shown on the Plans and marked out by Underground Service Alert (USA), to prevent damage to such facilities and to identify any conflicts with the proposed work. The cost of utility location shall be included in the price per linear foot for pipelines, and no additional compensation will be made by the City. Potholing for existing utilities not shown on the Plans, but marked out by USA shall be as directed by the Engineer and paid for according to Section 3-3, "Extra Work". The Contractor shall fill all potholes on the

same day of excavation, and fully restore all potholes (and any damaged surrounding areas) to their original condition, if no trenching is performed within ten (10) working days.

There will be no other compensation for potholing at any specific location required by the Plans. Neither will showing some specific locations on the Plans relieve the Contractor of the responsibility to pothole as previously mentioned in this Subsection.

The Contractor shall notify the Engineer, in writing, of any conflicts between existing utilities and the proposed work a minimum of five (5) working days, and three hundred feet (300') in advance of the work to provide adequate time, and space for any changes to the work needed to avoid unforeseen conflicts. The Contractor shall perform utility location far enough in advance of the work to provide the written notification specified in this section.

The written notification shall include; date of utility location, method of utility location, type, size, and material of utility, horizontal location (to the nearest Station), depth for existing pavement or ground surface to top and bottom of utility, suspected ownership of utility, and the date on which any conflict with the utility will impact the Critical Path.

For existing utilities shown on the Plans or marked out by USA, the Contractor shall not be entitled to an extension of Contract Time or compensation for delay if direction is provided by the Engineer within five (5) working days from receipt of the Contractor's written notification of the utility conflict. If the Engineer does not provide direction to the Contractor within the five (5) working days, an extension of Contract Time may be granted in accordance with Section 6-6.2, beginning on the sixth (6th) working day after receipt of the Contractor's written notification.

SECTION 6 – PROSECUTION, PROGRESS, AND ACCEPTANCE OF WORK

6-4 DEFAULT BY CONTRACTOR.

DELETE this section in its entirety and SUBSTITUTE the following:

If one or more of the following events occur during the Contract time, the Contractor shall be considered in default of the Contract:

1. declares or files for bankruptcy, becomes insolvent, assigns its assets for the benefit of its creditors, is unable to pay debts as they become due, or is otherwise financially unable to complete the Contract work;
2. abandons the Project by failing to report to the Project Site and diligently prosecute the Contract the work;
3. fails to provide materials or workmanship meeting the requirements of the Contract Documents, and fails to correct the defective work as required by Section 6-8;

4. disregards or violates provisions of the Contract Documents or City's Representative's instructions;
5. fails to prosecute the Work according to the approved progress schedule;
6. fails to provide a qualified superintendent, competent workmen, or materials or equipment meeting the requirements of the Contract Documents;
7. fails to meet contract milestones;
8. disregards Laws or Regulations of any public body having jurisdiction; or
9. commits continuous or repeated serious violations of approved or legislated safety plan requirements.

In the event of default by the Contractor for the reasons stated above, the City shall give five (5) days written notice by in compliance with Notices requirements in this subsection, at the Contractor's last known place of business, of the City's intent to exercise the default right under this section if the Contactor does not remedy the conditions constituting the default.

If the Contractor fails to remedy the conditions constituting default within the five (5) days time period prescribed in this section, the Mayor or his or her legally designated official, officers, or employees may declare the Contractor to be in default by issuing a Notice of Default to the Contractor and its Surety by in compliance with Notices requirements in this subsection. Upon receipt of the Notice of Default, the Surety shall immediately takeover and assume the control and perform the Work as the successor to the Contractor. The Surety shall assume all rights, obligations, and liabilities, including liquidated damages that may have accrued under the Contract. In the event of default, the Contractor will be paid the actual amount due based on Contract Unit Prices or lump sum bid and the quantity of the Work completed at the time of default, less damages caused by the City by the acts of the Contractor. The Contractor agrees to release the City from all obligations and waives all claims under the Contract in the event of its default.

When the Surety assumes any part of the Work, it shall take the Contractor's place in all respects for that part, and shall be paid by the City for all work performed by it in accordance with the Contract. When the Surety assumes the entire Contract, all money due the Contractor at the time of its default shall be payable to the Surety as the Work progress, subject to the terms of the Contract.

If the Surety does not assume control and perform the Work within five (5) days after receiving Notice of Default, or fails to continue to comply, the City may exclude the Surety from the premises. The City may then take possession of all material and equipment and complete the Work by City Forces, by letting the unfinished Work to another Contractor, or by a combination of such methods. In any event, the cost of completing the Work shall be charged against the Contractor and its Surety and may be deducted from any money due or becoming due from the City. If the sums due under the Contract are insufficient for completion, the Contractor or Surety shall pay to the City within five (5) days after the completion, all costs in excess of the sums due.

The provisions of this subsection shall be in addition to all other rights and remedies available to the City under law.

Notices - Whenever a notice is required to be delivered under this provision, unless otherwise expressly provided for in this Contract, it shall be in writing and the notice shall be delivered by any of the following methods:

1. Personal delivery, service shall be deemed effective on the date of delivery; or,
2. Certified mail, postage prepaid; return receipt requested. Simultaneously, the same notice may be sent by regular mail. If a notice that is sent by certified mail is returned unsigned, then delivery shall be deemed effective pursuant to regular mail, provided the notice that was sent by regular mail is not returned. Service shall be deemed effective on the date of mailing;

Proof of delivery of notice may be made by the certificate of any officer or employee of the city or by declaration under penalty of perjury of any person over the age of eighteen years. The proof of delivery shall show that delivery was done in conformity with this Provision or other provisions of law applicable to the subject matter concerned.

6-5 TERMINATION OF CONTRACT.

DELETE in its entirety and SUBSTITUTE the following:

The City may terminate the contract at its own discretion or when conditions encountered during the Work make it impossible or impracticable to proceed, or when the City is prevented from proceeding with the Contract by act of God, by law, or by official action of a public authority.

6-5.1.1 Termination of Contractor's Performance of Work. The City may terminate, subject to the express terms and conditions set forth below, the Contractor's performance of work under this contract, in whole or, from time to time, in part, if the City Council does not appropriate sufficient monies to fund the contract. The Mayor or designee shall terminate, on behalf of the City, by delivering to the Contractor a Notice of Termination, in writing, specifying the extent of termination and the effective date.

6-5.1.2 Notice of Termination. After receipt of the Notice of Termination, and except as otherwise directed by the Mayor or designee, the Contractor shall immediately proceed as follows:

- A. Stop work immediately or as specified in the Notice;
- B. Immediately place no further subcontracts for materials, services, or facilities, except as necessary to complete any authorized continued portion of the contract;
- C. Immediately terminate all subcontracts to the extent that they relate to the work terminated;

- D. With approval by the Mayor or designee, settle all outstanding obligations arising from the termination of subcontracts; the approval of which will be final for purposes of this clause;
- E. As directed by the Mayor or designee, transfer the title and deliver to the City, completed or partially completed drawings, plans, calculations, specifications and any other documents and records that, if the contract had been completed, would be required to be furnished to the City;
- F. Complete performance of the work not terminated;
- G. Take any action that may be necessary, or that the Mayor or designee may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the City has or may acquire an interest.

6-5.1.3 Removal of City Property. The Contractor may request the City to remove the City's property or enter into an agreement for its storage. Within sixty (60) days, the City will accept title of property and remove it or enter into a storage agreement.

6-5.1.4 Termination Settlement. After termination, the Contractor shall submit a final termination settlement proposal to the Mayor or designee in the form and with the certification prescribed by the Mayor or designee. The Contractor shall submit the proposal promptly, but no later than six (6) months from the effective date of termination, unless extended, in writing, by the Mayor or designee upon written request of the Contractor within this six (6) month period. However, if the Mayor or designee determines that the facts justify it, a termination settlement proposal may be received and acted on after six (6) months or any extension. If the Contractor fails to submit the proposal within the time allowed, the City may, in good faith, determine, on the basis of information available, the fair and reasonable amount, if any, due the Contractor as a result of the termination and pay the amount determined. If the Contractor does not agree that the amount determined by the Mayor or designee is fair and reasonable, and if the Contractor gives notice of such disagreement to the City in accordance with Section 6-5.1.4 of the Contract, within thirty (30) days of receipt of payment, then the amount due shall be as later determined by arbitration, if the City and the Contractor agree thereto, or as fixed in a court of law.

6-5.1.5 Payment to Contractor Due to Termination. Subject to Section 6-5.1.4, above, the Contractor and the Mayor or designee may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this Section 6-5.1.5 or Section 6-5.1.6, below, exclusive of costs shown in Section 6-5.1.6, subparagraph C, below, may not exceed the total dollar amount authorized by the City as reduced by (1) the amount of payments previously made; and (2) the contract price of work not terminated. The contract shall be amended, and the Contractor paid the agreed amount. Section 6-5.1.6, below, shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

6-5.1.6 Failure to Agree on Payment. If the Contractor and City fail to agree on the whole amount to be paid because of the termination of work, the City shall pay the Contractor the fair

and reasonable amounts determined in good faith by the City as follows, but without duplication of any amounts agreed on under Section 6-5.1.5, above:

- A. The contract price for completed services accepted by the City not previously paid for, adjusted for any saving of freight and other charges.

- B. The total of:
 - 1. The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to services paid or to be paid under Section 6-5.1.6, subparagraph A, above;
 - 2. The fair and reasonable cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in Subdivision 1, above;
 - 3. A sum, as provided on Subdivision 1, above, determined by the Mayor or designee to be fair and reasonable under the circumstances; however, if it appears that the Contractor would have sustained a loss on the entire contract, had it been completed, the City shall allow no profit under this Subdivision 3 and shall reduce the settlement to reflect the indicated rate of loss.

- C. The reasonable costs of settlement of the work terminated, including:
 - 1. Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination of settlement proposals and supporting data;
 - 2. The termination and settlement of subcontracts (excluding the amounts of such settlements); and
 - 3. Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of property in which the City has or may acquire an interest.

6-5.1.7 Arbitration of Payment. If the Contractor does not agree that the amount determined by the Mayor or designee under Section 6-5.1.6, above, is fair and reasonable, and if the Contractor gives notice of such disagreement to the City in accordance with Section 6-5.1.4 of this contract within thirty (30) days of receipt of payment, then the amount due shall be as later determined by arbitration, if the City and Contractor specifically agree thereto, or as determined in a court of law.

6-5.1.8 Payment for Property Destroyed, Lost, Stolen, or Damaged. Except to the extent that the City expressly assumed the risk of loss, the Mayor or designee shall exclude from the amounts payable to the Contractor under Section 6-5.1.6, above, the fair value, as determined by the Mayor or designee, or property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the City.

6-5.1.9 Determination of Amount Due Contractor. In arriving at the amount due the Contractor under this clause, there shall be deducted:

- A. All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;
- B. Any claim which the City has against the Contractor under this contract; and
- C. The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the City.

6-5.1.10 Partial Termination. If the termination is partial, the Contractor may file a proposal with the Mayor or designee for an equitable adjustment of the price(s) of the continued portion of the contract. The City shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within ninety (90) days from the effective date of termination, unless extended, in writing, by the Mayor or designee.

6-5.1.11 Partial Termination Payments. The City may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract if the Mayor or designee believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

If the total payments exceed amounts finally determined to be due, the Contractor shall repay the excess to the City upon demand, together with interest. Interest shall be at a rate of six percent (6%) per annum compounded daily and shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or disposition, or a later date determined by the Mayor or designee because of the circumstances.

6-5.1.12 Records and Documents Relating to Termination. Unless otherwise provided in the contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for three (3) years after final settlement. This includes all books and other evidence bearing on the Contractor's costs, expenses, and settlement under this contract. The Contractor shall make these records and documents available to the City, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Mayor or designee, photographs, microphotographs, and other authentic reproductions may be maintained instead of original records and documents.

6-6 DELAYS AND EXTENSIONS OF TIME.

ADD the following:

Whenever the Contractor foresees any delay in the prosecution of the work, and in any event immediately upon the occurrence of any delay which the Contractor regards as unavoidable, he

shall notify the Engineer, in writing, of the probability of the occurrence of such delay and its cause.

It will be assumed that any and all delays which have occurred in the prosecution and completion of the work have been avoidable delays, except such delays as shall have been called to the attention of the Engineer at the time of their occurrence and found by him to have been unavoidable.

The Contractor shall make no claims that any delay not called to the attention of the Engineer at the time of its occurrence has been an unavoidable delay.

6-6.1 General. First paragraph, second sentence, DELETE the following:

“..., adverse weather or elements necessitating cessation of work,...”

ADD:

6-6.5 Contractor Required Analysis. An extension in Contract Time will not be granted unless the Contractor can demonstrate through a Critical Path Method (CPM) analysis of the progress schedule i.e., critical path that the increases in the time to perform or complete the Work, or specified part of the Work, beyond the corresponding Contract Time(s) arise from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and his subcontractors, suppliers or other persons or organizations, and that such causes in fact lead to performance or completion of the Work, or specified part in question, beyond the corresponding Contract Time, despite the Contractor's reasonable and diligent actions to guard against those effects.

6-6.6 City's Right to Grant Extension. The City may elect, at its sole discretion, to grant an extension in Contract Time, without the Contractor 's request, because of delays or other factors.

6-6.7 Time Only Entitlement. Where Contractor is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay to a "critical path" activity beyond the control of both City and Contractor, an extension of the Contract Times (or Milestones) in an amount equal to the time lost on the critical path of the project due to such delay shall be Contractor 's sole and exclusive remedy for such delay.

6-6.8 City Not Liable. In no event shall City be liable to Contractor, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from (i) delays caused by or within the control of Contractor, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God, war, or terrorist attack, closure of City facilities mandated by State or Federal agencies, or acts or neglect by utility owners or other contractors performing other work as contemplated by Section 7 - Responsibilities of the Contractor. Contractor shall provide the Project Manager written notice of the potential delay within 24 hours of the occurrence.

6-7.2 Working Day. ADD the following:

If the Contractor desires an extension of time for a delay as specified in Section 6-6.1, the Contractor, during that day, shall request a conference between the Engineer and the Contractor. The Engineer will determine if the time extension will be granted. Upon approval, the Engineer will extend the date of completion accordingly. The Contractor shall not be entitled to damages or additional payment due to such delay.

6-8 COMPLETION, ACCEPTANCE, AND WARRANTY. DELETE first two paragraphs in their entirety and SUBSTITUTE the following:

The Work will be inspected by the Engineer for acceptance upon receipt of the Contractor's assertion that the Work has been completed. For underground sewer conduit installations, the inspection will also include televising (Section 306-1.4.8).

The Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress payment or the issuance of a Notice of Completion, nor any payment by the City to the Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by the City, nor any act of acceptance by the City, nor any failure to do so, nor any review of a Shop Drawing or sample submittal, will constitute an acceptance of Work not in accordance with the Contract Documents.

All Work, material, or equipment that is unsatisfactory, faulty, incomplete, or does not conform to the Contract Documents is defective. If the Work, or any part thereof, is found to be defective, whether or not manufactured, fabricated, installed, completed or overlooked and accepted by the City, the Contractor shall, promptly and in accordance with the written instructions of the City including but not limited to a "punch-list" and within the reasonable time limits stated therein, either correct such defective work, or, if it has been rejected by the City, remove it from the site and replace it with non-defective and conforming work.

For Building Projects which require a Certificate of Occupancy, not including Sewer and Water Facilities, if the Contractor fails to correct the defective work listed on the City's "punch-list" within 45 days after the Contract duration, the Contractor shall be responsible for reimbursing the City for all costs to provide inspection services required to monitor Work beyond the 45 days. The Contractor shall be billed for this at the Contract Liquidated Damages rate.

If, in the Engineer's judgment, the Work has been completed, the Engineer will file a Notice of Completion with the County Recorder.

REVISE first two paragraphs to read:

The Work will be inspected by the Engineer for acceptance upon receipt of the Contractor's assertion that the Work has been completed. For underground sewer conduit installations, the inspection will also include televising (Section 306-1.4.8).

If, in the Engineer's judgment, the Work has been completed, the Engineer will file a Notice of Completion with the County Recorder.

The Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress payment or the issuance of a Notice of Completion, nor any payment by the City to the Contractor under the Contract Documents, nor any use or occupancy of the Work or any part thereof by the City, nor any act of acceptance by the City, nor any failure to do so, nor any review of a Shop Drawing or sample submittal, will constitute an acceptance of Work not in accordance with the Contract Documents.

All Work, material, or equipment that is unsatisfactory, faulty, incomplete, or does not conform to the Contract Documents is defective. If the Work, or any part thereof, is found to be defective, whether or not manufactured, fabricated, installed, completed or overlooked and accepted by the City, the Contractor shall, promptly and in accordance with the written instructions of the City and within the reasonable time limits stated therein, either correct such defective work, or, if it has been rejected by the City, remove it from the site and replace it with non-defective and conforming work.

ADD:

6-11 RIGHT TO AUDIT.

6-11.1 City's Right. The City retains the right to review and audit, and the reasonable right of access to Contractor's and all Subcontractor's premises to review and audit Contractor's compliance with the provisions of this Contract [City's Right]. The City's Right includes the right to inspect and photocopy same, and to retain copies, outside of Contractor's premises, of any and all records with appropriate safeguards, if such retention is deemed necessary by City in its sole discretion. This information shall be kept by the City in strictest confidence.

6-11.2 Audit. The City's Right includes the right to examine any and all books, records, documents and any other evidence of procedures and practices that the City determines is necessary to discover and verify that Contractor is in compliance with all requirements under this Contract.

6-11.2.1 Cost Audit. If there is a claim for additional compensation or for changes in Work, the City's Right to Audit includes the right to examine books, records, documents, and any and all other evidence and accounting procedures and practices that the City determines is necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, anticipated to be incurred, or for which a claim for additional compensation or for changes in the Work have been submitted.

6-11.2.1.1 Accounting Records. Contractor shall maintain complete and accurate records in accordance with generally accepted accounting practices in the construction industry. The Contractor shall make available to the City for review and audit, all project related accounting records and documents, and any other financial data. Upon City's request, the Contractor shall submit exact duplicates of originals of all requested records to the City.

6-11.3 City's Right -Binding on Subcontractors. The Contractor shall include City's Right as described in this Section 6-11, in any and all of their subcontracts, and shall ensure that this Section 6-11 is binding upon all Subcontractors.

6-11.4 Compliance Required Before Mediation and Litigation. A condition precedent to proceeding with mandatory mediation and further litigation provided for in Section 3-6 is the

Contractor's full compliance with the provisions of this Section 6-11 within sixty days of the date on which City mails a written request to review and audit compliance.

SECTION 7 – RESPONSIBILITIES OF THE CONTRACTOR

7-2.2 Laws. ADD the following sentence to the last paragraph:

For contracts subject to payment of prevailing wages, the Contractor shall submit certified payrolls weekly to the City reflecting the wages of all prime and subcontractor employees engaged in the contract work.

ADD:

7-2.2.1 Access to Records on Federally Funded Projects. The Contractor shall retain all records, books, papers, and documents directly pertinent to the specific contract for a period of not less than three (3) years after grantees or subgrantees make final payments and all other pending matters are closed; and allow access to said records by the grantee, subgrantee, the Federal Grantor Agency, the Comptroller General of the United States, or any duly authorized representatives.

ADD:

7-2.3 Approval Required to Work Outside Normal Hours. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all work at the site shall be performed during normal working hours. Normal working hours refers to the working hours identified in the Contract Documents. The Contractor shall not work during non normal working hours or on Saturday, Sunday, or any City of San Diego observed holiday without the Resident Engineer's written consent. The Resident Engineer will coordinate inspection staff, to the extent possible, to accommodate project inspection requirements. If the Contractor's request is approved, the Contractor will be responsible for reimbursing the City for all costs to provide inspection services required to monitor the Work outside of normal working hours. The Contractor shall be billed at the stipulated hourly rate to cover the City's expenses for the inspection services and a deductive change order will be issued.

7-3 LIABILITY INSURANCE.

DELETE in its entirety and SUBSTITUTE the following:

7-3.1 Policies and Procedures. Contractor shall, at its sole cost and expense, procure insurance against claims for loss including injuries to persons or damage to property, which may arise out of or in connection, with the performance of the Work hereunder by the Contractor, Contractor's agents, representatives, officers, employees or subcontractors. Contractor shall maintain this insurance for the duration of this Contract and at all times thereafter when the Contractor is correcting, removing, or replacing Work in accordance with this Contract. Contractor's liabilities, including but not limited to Contractor's indemnity obligations, under this Contract shall not be deemed limited in any way to the insurance coverage required herein. Payment for insurance shall be included in the various items of Work as bid, and except as specifically agreed

to by the City in writing, Contractor shall not be entitled to any additional payment. Contractor shall not begin any work under this Contract until it has provided and the City has approved all required insurance. Except as provided for under California law, all policies of insurance required hereunder shall provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies. Maintenance of specified insurance coverage is a material element of this Contract and Contractor’s failure to maintain or renew coverage or to provide evidence of renewal during the term of this Contract may be treated as a material breach of contract by City.

7-3.2 Types of Insurance.

7-3.2.1 Commercial General Liability Insurance. Contractor shall provide at its expense a policy or policies of Commercial General Liability (CGL) Insurance written on an ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad and which shall cover liability arising from premises and operations, XCU (explosions, underground, and collapse) independent contractors, products/completed operations, personal injury and advertising injury, property damage, and liability assumed under an insured’s contract (including the tort liability of another assumed in a business contract). There shall be no endorsement or modification of the CGL Insurance limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. Contractor shall maintain the same or equivalent CGL Insurance as described herein for at least ten (10) years following substantial completion of the work. All costs of defense shall be outside the policy limits. Policy coverage shall in liability limits of not less than the following:

Limits of Liability

General Annual Aggregate Limit (Other than Products/Completed Operations)	\$2,000,000
Products/Completed Operations Aggregate Limit	\$2,000,000
Personal Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000

7-3.2.2 Commercial Automobile Liability Insurance. Contractor shall provide at its expense a policy or policies of Commercial Automobile Liability Insurance written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad in the amount of \$1,000,000 combined single limit per accident, covering bodily injury and property damage for owned, non-owned and hired automobiles (“Any Auto”). All costs of defense shall be outside the limits of the policy.

7-3.2.3 Commercial Pollution Liability Insurance. Contractor shall procure and maintain at its expense or cause its subcontractor to procure and maintain, Contractors Pollution Liability Insurance including contractual liability coverage to cover liability arising out of cleanup, removal, storage, or handling of hazardous or toxic chemicals, materials, substances, or any other pollutants by the Contractor or any subcontractor in an amount not less than \$2,000,000 limit for bodily injury and property damage. All costs of defense shall be outside the limits of the policy. Any such insurance provided by a subcontractor must be approved separately in writing by the City. Approval of a substitution of a subcontractor’s insurance shall require a certification by the

Contractor that all activities for which Contractors Pollution Liability Insurance will provide coverage will be performed exclusively by the subcontractor providing the insurance. The deductible shall not exceed \$25,000 per claim. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this Contract, and shall include a 12 month extended Claims Discovery Period applicable to this Contract or the existing policy or policies must continue to be maintained for 12 months after the completion of the Work under the Contract without advancing the retroactive date. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.4 Contractors Hazardous Transporters Pollution Liability Insurance. Contractor shall provide at its expense or cause its subcontractor to provide Contractors Hazardous Transporters Pollution Liability Insurance including contractual liability coverage to cover liability arising out of transportation of hazardous or toxic, materials, substances, or any other pollutants by the Contractor or any subcontractor in an amount not less than \$2,000,000 limit per occurrence/aggregate for bodily injury and property damage. All costs of defense shall be outside the limits of the policy. The deductible shall not exceed \$25,000 per claim. Any such insurance provided by a subcontractor must be approved separately in writing by the City. Approval of the substitution of a subcontractor’s insurance shall require a certification by the Contractor that all activities for which Contractors Hazardous Transporters Pollution Liability Insurance will provide coverage will be performed exclusively by the subcontractor providing the insurance. Contractual liability shall include coverage of tort liability of another party to pay for bodily injury or property damage to a third person or organization. There shall be no endorsement or modification of the coverage limiting the scope of coverage for either “insured vs. insured” claims or contractual liability. Occurrence based policies shall be procured before the Work commences and shall be maintained for the duration of this Contract. Claims Made policies shall be procured before the Work commences, shall be maintained for the duration of this Contract, and shall include a twelve (12) month extended Claims Discovery Period applicable to this Contract or the existing policy or policies must continue to be maintained for twelve (12) months after the completion of the Work under this Contract without advancing the retroactive date. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.5 Contractors Builders Risk Property Insurance. Contractor shall provide at its expense, and maintain until Final Completion and Acceptance of the Work, a Special Form Builders Risk Policy or Policies. This insurance shall be in an amount equal to the replacement cost of the completed Work (without deduction for depreciation) including the cost of excavations, grading, and filling. The policy or policies limits shall be one hundred percent (100%) of this Contract value of the Work plus fifteen percent (15%) to cover administrative costs, design costs, and the costs of inspections and construction management.

Insured property shall include material or portions of the Work located away from the project site but intended for use at the project site, and shall also cover material or portions of the Work in transit. The policy or policies shall include as insured property scaffolding, falsework, and temporary buildings located at the project site. The policy or policies shall cover the cost of removing debris, including demolition.

The policy or policies shall provide that all proceeds thereunder shall be payable to the City as Trustee for the insureds, and shall name City, Contractor, subcontractors, and suppliers of all tiers as named insureds. City as Trustee shall collect, adjust, and receive all monies which may become due and payable under the policy or policies, may compromise any and all claims thereunder, and shall apply the proceeds of such insurance to the repair, reconstruction, or replacement of the Work.

Any deductible applicable to the insurance shall be identified in the policy or policies documents and responsibility for paying the part of any loss not covered because of the application of such deductibles shall be apportioned among the parties except for the City as follows: if there is more than one claimant for a single occurrence, then each claimant shall pay a pro-rata share of the per occurrence deductible based upon the percentage of their paid claim to the total paid for all insureds. The City shall be entitled to one hundred percent (100 percent) of its loss. Any portion of that loss not covered because of a deductible shall be paid to the City by the Contractor at the same time the proceeds of the insurance are paid to the City as trustee.

Any insured, other than City, making claim to which a deductible applies shall be responsible for 100 percent of the loss not insured because of the deductible. Except as provided for under California law, the policy or policies must provide that the City is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies.

7-3.2.6 Railroad Protective Liability Insurance. All exclusions relating to performance of operations within the vicinity of any railroad, bridge, trestle, roadbed, tunnel, underpass, or cross must be deleted from all policies to which they may apply. Alternatively, the Contractor may provide separate Railroad Protective Liability insurance providing coverage, including endorsements, equivalent to that required for the CGL described herein.

7-3.3 Rating Requirements. Except for the State Compensation Insurance Fund, all insurance required by this Contract as described herein shall be carried only by responsible insurance companies with a rating of, or equivalent to, at least “A-, VI” by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State of California, and that have been approved by the City.

7-3.3.1 Non-Admitted Carriers. The City will accept insurance provided by non-admitted, “surplus lines” carriers only if the carrier is authorized to do business in the State of California and is included on the List of Eligible Surplus Lines Insurers (LESLI list).

All policies of insurance carried by non-admitted carriers shall be subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

7-3.4 Evidence of Insurance. The Contractor shall furnish to the City documents including but not limited to certificates of insurance and endorsements evidencing the insurance required herein, and shall furnish renewal documentation prior to expiration of this insurance. Each required document shall be signed by the insurer or a person authorized by the insurer to bind coverage on its behalf. The City reserves the right to require complete, certified copies of all insurance policies required herein.

7-3.5 Policy Endorsements.

7-3.5.1 Commercial General Liability Insurance

7-3.5.1.1 Additional Insured. The policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives. The coverage for Projects for which the Engineer's Estimate is \$1,000,000 or more shall include liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, (c) Your work, including but not limited to your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled, or used by you; the coverage for Projects for which the Engineer's Estimate is less than \$1,000,000 shall include liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, or (c) premises owned, leased, controlled, or used by you; *Except* that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of Section 2782 of the California Civil Code apply, these endorsements shall not provide any duty of indemnity coverage for the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City of San Diego and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of Section 2782 of the California Civil Code. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code Section 11580.04, the insurer's obligation to the City of San Diego and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code Section 11580.04.

7-3.5.1.2 Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the CGL policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives with respect to operations, including the completed operations if appropriate, of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Contractor's insurance and shall not contribute to it.

7-3.5.1.3 Project General Aggregate Limit. The policy or policies must be endorsed to provide a Designated Construction Project General Aggregate Limit that will apply only to the Work performed under this Contract. Claims payments not arising from the Work shall not reduce the Designated Construction Project General Aggregate Limit. The Designated Construction Project General Aggregate Limit shall be in addition to the aggregate limit provided for the products-completed operations hazard.

7-3.5.2 Commercial Automobile Liability Insurance.

7-3.5.2.1 Additional Insured. Unless the policy or policies of Commercial Auto Liability Insurance are written on an ISO form CA 00 01 12 90 or a later version of this form or equivalent form providing coverage at least as broad, the policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Contractor; *Except* that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of Section 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City of San Diego and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of Section 2782 of the California Civil Code. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code Section 11580.04, the insurer's obligation to the City of San Diego and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code Section 11580.04.

7-3.5.3 Contractors Pollution Liability Insurance Endorsements.

7-3.5.3.1 Additional Insured. The policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, (c) Your work, including but not limited to your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled, or used by you; *Except* that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of Section 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City of San Diego and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of Section 2782 of the California Civil Code. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code Section 11580.04, the insurer's obligation to the City of San Diego and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code Section 11580.04.

7-3.5.3.2 Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Contractor's insurance and shall not contribute to it.

7-3.5.3.3 Severability of Interest. For Contractors Pollution Liability Insurance, the policy or policies must provide that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage

7-3.5.4 Contractors Hazardous Transporters Pollution Liability Insurance Endorsements.

7-3.5.4.1 Additional Insured. The policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents, and representatives, with respect to liability arising out of: (a) Ongoing operations performed by you or on your behalf, (b) Your products, (c) Your work, including but not limited to your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled, or used by you; *Except* that in connection with, collateral to, or affecting any construction contract to which the provisions of subdivision (b) of Section 2782 of the California Civil Code apply, this endorsement shall not provide any duty of indemnity coverage for the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives in any case where an agreement to indemnify the City of San Diego and its respective elected officials, officers, employees, agents, and representatives would be invalid under subdivision (b) of Section 2782 of the California Civil Code. In any case where a claim or loss encompasses the negligence of the Insured and the active negligence of the City of San Diego and its respective elected officials, officers, employees, agents, and representatives that is not covered because of California Insurance Code Section 11580.04, the insurer's obligation to the City of San Diego and its respective elected officials, officers, employees, agents, and representatives shall be limited to obligations permitted by California Insurance Code Section 11580.04.

7-3.5.4.2 Primary and Non-Contributory Coverage. The policy or policies must be endorsed to provide that the insurance afforded by the Contractors Pollution Liability Insurance policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives with respect to operations including the completed operations of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Contractor's insurance and shall not contribute to it.

7-3.5.4.3 Severability of Interest. For Contractors Hazardous Transporters Pollution Liability Insurance, the policy or policies must provide that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

7-3.5.5 Builders Risk Endorsements.

7-3.5.5.1 Waiver of Subrogation. The policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the Named Insured for the City.

7-3.5.5.2 Builders Risk – Partial Utilization. If the City desires to occupy or use a portion or portions of the Work prior to Substantial Completion in accordance with this Contract, City shall

notify Contractor and Contractor shall immediately notify its Builder's Risk insurer and obtain an endorsement that the policy or policies shall not be cancelled or lapse on account of any such partial use or occupancy. Contractor shall obtain the endorsement prior to City's occupation and use.

7-3.6 Deductibles/Self-Insured Retentions. Contractor shall be responsible for the payment of all deductibles and self-insured retentions which must be disclosed to the City at the time the evidence of insurance is provided.

7-3.7 Reservation of Rights. The City reserves the right, from time to time, to review the Contractor's insurance coverage, limits, deductible and self-insured retentions to determine if they are acceptable to the City. The City will reimburse the Contractor for the cost of the additional premium for any coverage requested by the City in excess of that required by this Contract without overhead, profit, or any other markup.

7-3.8 Notice of Changes to Insurance. Contractor shall notify the City 30 days prior to any material change to the policies of insurance provided under this Contract.

7-3.9 Excess Insurance. All policies providing excess coverage shall follow the form of the primary policy or policies including but not limited to all endorsements.

7-4 WORKERS' COMPENSATION INSURANCE.

DELETE in its entirety and SUBSTITUTE the following:

7-4.1 Workers' Compensation Insurance and Employers Liability Insurance. In accordance with the provisions of Section 3700 of the California Labor Code, Contractor shall provide at its expense Workers' Compensation Insurance and Employers Liability Insurance to protect the Contractor against all claims under applicable state workers compensation laws. The City, its elected officials, and employees will not be responsible for any claims in law or equity occasioned by the failure of the Contractor to comply with the requirements of this section. Limits for this insurance shall be not less than the following:

Workers' Compensation	Statutory
Employers Liability	
Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

Before execution of the Contract by the City, the Contractor shall file with the City the following certification:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's 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. Signature and return of this Contract as provided on page B-1 shall

constitute signing and filing of the certificate as required by Section 1861 of the California Labor Code.”

7-4.1.1 Workers’ Compensation Insurance for Work In, Over, or Alongside Navigable Waters. In addition to the Workers’ Compensation Insurance required under the General Conditions of this Contract, Contractor shall provide additional insurance coverage for claims brought under the Longshore and Harbor Workers’ Compensation Act, the Jones Act, general maritime law, and any other federal or state laws, resulting from Contractor’s work in, over, or alongside navigable waters.

7-4.2 Workers’ Compensation and Employers Liability Insurance Endorsements.

7-4.2.1 Waiver of Subrogation. The policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City, and its respective elected officials, officers, employees, agents, and representatives for losses paid under the terms of the policy or policies and which arise from work performed by the Named Insured for the City.

7-6 THE CONTRACTOR'S REPRESENTATIVE.

ADD the following:

The designated Contractor's representative shall not be replaced without written notice to the City. During periods when the work is suspended, the Contractor shall make appropriate arrangements for any emergency work which may be required.

ADD:

7-6.1 Project Meetings. The Contractor’s job-site Foreman, Superintendent, and Project Engineer/Manager, shall attend all scheduled construction progress meetings and other project meetings as required by the Engineer. The City’s Project Manager and/or Project Engineer will attend project meetings on an as-needed basis to address design issues. Construction progress meetings may be weekly, bi-weekly, or monthly as required by the Engineer. Other project meetings shall be scheduled at the sole discretion of the Engineer. The Engineer shall determine the date(s), time(s), and location(s) for all meetings. The Engineer will be responsible for the meeting agendas and meeting minutes. If any of the Contractor’s staff cannot attend, the Contractor shall notify the Engineer a minimum of 24 hours in advance, prior to the start of the scheduled meeting. If the Contractor does not provide the required notification the Contractor will be financially responsible for the costs of City Staff and/or consultants that attend. The Contractor will be charged a minimum of two hours of the Engineer’s time plus the time of other City employees or representatives that attend the meeting. Lack of participation from the Contractor will be documented and reported in the Contractor’s performance evaluation.

All costs associated with the Contractor’s attendance of project meetings shall be included in the prices bid for the various items of work and no additional compensation will be paid. All costs assessed to the Contractor for not attending the meetings will be deducted from the monthly invoice.

7-8.1 Cleanup and Dust Control. First paragraph, ADD the following:

The Contractor shall keep the streets in and adjacent to the construction area clean at all times. Streets must be swept before washing.

ADD:

7-8.1.1 Affidavit of Legal Disposal. As a condition of final payment, the Contractor shall submit a signed and notarized affidavit stating that all brush, trash, debris, and surplus materials resulting from this project have been disposed of in a legal manner. (See Affidavit of Disposal, in the Contract Documents). Disposal of refuse generated as a result of this contract at City landfills is subject to a fee. The cost of disposing of this refuse should be included in your bid. Contact the Refuse Disposal Division at (858) 573-1418 for fee information.

ADD:

7-8.1.2 Dust Abatement. The Contractor shall carry out effective measures whenever and as often as necessary to prevent its operation from producing dust in amounts damaging to property, cultivated vegetation, domestic animals, or causing a nuisance to persons living or occupying buildings in the vicinity. The Contractor shall be responsible for any damage resulting from any dust originating from its operations. The dust abatement measures shall be continued until the Contractor is relieved of further responsibility by the Engineer. No separate payment will be allowed for dust abatement measures and all costs therefore shall be included in the Contractor's bid price.

ADD:

7-8.1.3 Rubbish Control. During the progress of the work, the Contractor shall keep the site of the work and other areas used by it in a neat and clean condition; free from any accumulation of rubbish. The Contractor shall dispose of all rubbish and waste materials of any nature occurring at the work site, and shall establish regular intervals of collection and disposal of such materials and waste. The Contractor shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Equipment and material storage shall be confined to areas approved by the Engineer. Disposal of all rubbish and surplus materials shall be off the site of construction, at the Contractor's expense, and in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and the particular requirements of Subpart H, Section 1926.252 of the OSHA Safety and Health Standards for Construction.

7-8.2 Air Pollution Control. ADD the following:

The Contractor shall comply with all applicable standards, orders or requirements of the Clean Air Act of 1970, including but not limited to Section 306 (42 U.S.C. 7606), Executive Order 11738, prohibiting contracting with Clean Air Act violators; and Sections 608 and 609 (42 U.S.C. 7671g, 7671h) as amended November 15, 1990, prohibiting the intentional release of chlorofluorocarbons into the environment when performing work specified by the contract.

7-8.6 Water Pollution Control. Add the following:

The Contractor shall comply with all applicable standards, orders, or requirements issued under Section 508 of the Clean Water Act (33 U.S.C. 1368) Executive Order 11738.

The Contractor shall exercise extreme care when excavating adjacent to existing sewer systems. The Contractor shall include in his bid all labor and materials necessary to protect existing sewer facilities. If no pay item is provided in the contract for this work, full compensation for such work shall be considered as included in the prices bid for other items of work. The Contractor will be liable for all damages and fines associated with sewage spills caused by improper support or damage to the existing sewer facilities.

ADD:

7-8.6.1 Water Pollution Control Site Management. The Contractor shall comply with all federal, state and City standards, orders and requirements. The following is definition to terms used in this section:

Best Management Practice (BMP): (1) A measure that is implemented to protect water quality and reduce the potential for pollution associated with storm water runoff. (2) Any program, technology, process, site criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

Clean Water Act (CWA): The Federal Water Pollution Control Act entered in 1972 by Public Law 92-500 and amended by the Water Quality Act of 1987. The Clean Water Act prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit. The 1987 amendments include guidelines for regulating municipal, industrial, and construction storm water discharges under the NPDES program.

Maximum Extend Practicable (MEP): Means the technology-based standard established by Congress in the Clean Water Act 402(p) (3) (B) (iii) that municipal discharges of urban runoff discharges must meet. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional lines of defense).

National Pollutant Discharge Elimination System (NPDES): EPA's program to control the discharge of pollutants to waters of the United States. NPDES is a part of the federal CWA, which requires point and non-point source discharges to obtain permits. These permits are referred to as NPDES permits.

Storm Water Management (SWM): The recognition of adverse drainage resulting from altered runoff and the solutions resulting to mitigate, abate, or reverse those adverse results.

Storm Water Pollution Prevention Plan (SWPPP): A plan required by storm water regulations or permits that includes site map(s), an identification of construction/Contractor activities that could cause pollutants in the storm water, and a description of measures or practices to control these pollutants.

Water Pollution Control Plan (WPCP): This plan is to show BMPs placed to the MEP for a site where project area is less than 1 acre and SWPPPs are not required.”

Water Pollution Control Site Management Plan (WPCSM): A combination of a WPCP and site management that together effectively controls pollution leaving a construction site to the MEP.

The Contractor's Water Pollution Control Site Management plan shall be submitted at the preconstruction meeting, and Resident Engineer approval is required prior to start on any construction activities.

At a minimum, the Contractor shall be required to do the following:

1. The Contractor shall designate a qualified person who is trained and competent in the use of BMPs and shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention.

This person shall implement the conditions of the WPCP, contract documents and local ordinances with respect erosion and sediment control and other waste management regulations.

This person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored (use National Weather Forecast <http://www.wrh.noaa.gov/sandiego/index.shtml>) on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

This person is responsible for overseeing any site grading, operations, and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other designated site management staff is responsible to check the BMPs routinely for maintenance.

2. Educate all subcontractors and employees about storm water pollution and mitigation measures needed during various construction activities to prevent the impact of construction discharges. Education requirements shall be in accordance with Section F.2.J of the San Diego Regional Water Quality Control Board (SDRWQCB) Order No. 2001-1, dated February 21, 2001. The Contractor shall insure that all personal are trained in basic urban runoff management. A log of the attendees and the educational materials shall be available upon request of the Resident Engineer.
3. Protect all new and existing storm water conveyance system structures from sedimentation and concrete rinse, or other construction related debris and discharges with gravel bags and filter fabric or by any other equal product that is approved by the Resident Engineer.
4. Within your WPCP show where concrete wash out, vehicle maintenance, staging, and storage areas will be located. Also, show pollutant control measures to be utilized to keep construction waste in these designated areas, including measures to reduce the tracking of sediment onto public and private roads.
5. Inspect monthly all pollutant control measures installed to mitigate construction activities during the dry season (May 1 through September 30). The Contractor shall include in his/her Water Pollution Control Site Management documentation that these pollutant control measures were inspected for the duration of the project with each progress payment submitted to the Resident Engineer.

6. Maintain all pollutant control measures installed to mitigate construction activities daily or as requested by the Resident Engineer.
7. All pollutant control measures shall be inspected weekly, before and after every rain event, and every 24 hours during any prolonged rain event. The Contractor shall include in his/her Water Pollution Control Site Management documentation that these pollutant control measures were inspected for the duration of the project with each progress payment submitted to the Resident Engineer.
8. All pollutant control measures shall be maintained daily, before and after every rain event and every 24 hours during any prolonged rain event. The Contractor shall maintain and repair all pollutant control measures as soon as possible after the conclusion of each rain event as worker safety allows.
9. Every storm drain inlet within the project's boundaries shall be stenciled or have a concrete stamp stating "NO DUMPING - I LIVE DOWN STREAM". The contractor shall use stencil stamp on existing inlets and concrete stamps shall be used on new inlets. The concrete stamp is available from the Resident Engineer, with five days advance notice. On curb inlets the concrete stamp shall be placed on the inlet roof or in the sidewalk behind the inlet. On catch basins, the Concrete stamp shall be imprinted next to the inlet grate. Extra concrete may be required next to the grate to cover the 31" by 8.5" concrete stamp dimensions. Any cost associated with this work shall be included in the inlet protection bid item.
10. If an unmitigated non storm drain water discharge leaves the project site, the Contractor shall immediately stop the activity causing the discharge and mitigate the discharge. The Contractor shall also immediately notify the Resident Engineer of the discharge. As soon as practical, any and all waste material, sediment and debris from each unattended discharge shall be removed from the drainage system by the contractor.

All work associated with the above mentioned requirements as described under this Section 7-8.6.1 shall be included in the various bid items if no specific bid item is provided in the bid schedule.

ADD:

7-8.6.2 Performance Standards. The City will evaluate the adequacy of the Contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water. Performance standards shall include:

- A. No observable discharge of sediment or other pollutions in runoff from the site.
- B. Slope erosion shall be managed and contained utilizing approved BMP's; if rills and gullies become evident they must be repaired immediately and additional BMPs added to correct the source.
- C. Water velocity moving offsite must be manageable in order not to create flooding or other impacts downstream.

At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. A site will be considered inactive if construction activities have ceased for a period of Seven (7) or more consecutive calendar days.

It is also the Contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges. The City of San Diego has adopted BMPs (City of Los Angeles and CalTrans Standard BMPs) that can be used for wet and dry seasons.

7-8.6.2.1 Dry Season Requirements (May 1 through September 30).

- A. Perimeter protection BMPs shall be installed and maintained to comply with the performance standards listed in section 7-8.6.2.
- B. Sediment control BMPs shall be installed and maintained to comply with the performance standards listed in section 7-8.6.2.
- C. BMPs to control sediment tracking shall be installed and maintained at on and off site entrances/exits to comply with the performance standards listed in section 7-8.6.2.
- D. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, shall be stored on site.
- E. The Contractor shall have an approved weather triggered action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% or greater chance of rain). On request, the Contractor shall provide proof of this capability that is acceptable to the City.
- F. The area that can be trenched, cleared or graded and left exposed at one time is limited to the amount of acreage that the Contractor can adequately protect prior to a predicted storm event.

7-8.6.2.2 Rainy Season Requirements (October 1 through April 30).

In addition to the requirements listed under the Dry Season Requirements, the following shall be required during the rainy season:

- A. Erosion control BMPs shall be upgraded as necessary to provide sufficient protection for the 2-year storm event, most likely to occur, during the rainy season.
- B. Perimeter protection and sediment control BMPs shall be upgraded as necessary to provide sufficient protection for storms likely to occur during the rainy season.
- C. Physical or vegetation erosion control BMPs shall be installed and established for all completed construction facilities prior to the start of the rainy season, to comply with the performance standards listed in section 7-8.6.2. These BMPs shall be maintained throughout the rainy season. If a selected BMP fails, it shall be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP shall indicate that the BMP, as installed, was not adequate for the circumstances in which it

was used and the BMP shall be corrected or modified as necessary. Repairs or replacements must therefore put a more effective BMP in place.

- D. The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected by deploying standby erosion control and sediment control BMPs prior to a predicted storm event.
- E. A disturbed area that is not completed but that is not being actively graded or excavated must be fully protected from erosion if left for 7 or more calendar days. The ability to deploy standby BMP materials shall not be considered sufficient protection for these areas. BMPs must actually be deployed.

7-8.6.2.3 Construction BMPs. Unless specifically noted otherwise, it is the responsibility of the Contractor to select, install and maintain appropriate BMPs in accordance with these specifications. It is the contractor's responsibility to insure that the BMPs are operational and working properly. Furthermore, the Contractor shall be held responsible for any citation and/or fine due discharges or malfunctioning of the BMPs. BMPs shall be installed in accordance with an industry recommended standard (for example: City of Los Angeles, CalTrans or California Storm water BMP handbooks) or in accordance with the California General Permit for Construction Activities. The web site address for CalTrans and City of Los Angeles are as follows:

CalTrans - WWW.DOT.CA.GOV/HQ/CONSTRUC/STORMWATER.HTML

City of Los Angeles - WWW.CITYOFLA.ORG/SAN/WPD/INDEX.HTM

Depending on project scope and potential associated discharges, additional BMPs may be needed. If the Contractor proposes to use a BMP not listed in the bid items, approval from the City is required prior to installation.

If particular minimum BMPs are infeasible at any specific site, the City will require the implementation of other equivalent BMPs. Site specific BMPs shall be required as necessary to comply with Order No. 2001-01 (copy available in the City's Storm Water Pollution Prevention Division), including BMPs which are more stringent than those required under the statewide General Construction Permit.

7-8.6.2.4 Storm Drain Inlet Protection. Storm drain inlet protection shall be installed and maintained through construction, and later removed. Only storm drain inlet protection methods specified in these specifications and plans may be used. All on-site storm drain inlets shall be protected. Off-site storm drain inlets shall be protected in areas where construction activity tracks sediment onto paved areas or where inlets receive runoff from disturbed areas.

Storm drain inlet sediment control measures shall be of sufficient capacity and dimensions so as to handle received flows and debris without blocking or diverting flows from the inlets. Area around the inlet shall be provided for water to pond without flooding structures and property.

The storm drain inlet sediment control measures shall not impede the safe flow of traffic. The storm drain inlet sediment control measures shall be of sufficient weight so as not to shift out of place, or shall be secured in place against movement.

Inlet sediment control measures shall be maintained daily or more often if needed. Maintaining inlet sediment control measures shall include removing and disposing of accumulated trash & debris when depth exceeds one third the height of filter/trap. Waste materials shall be removed and disposed in accordance with 7-8.1. Maintaining inlet sediment control protection shall also include daily checks for excessive debris and for damaged inlet sediment control measures. Damaged inlet sediment control measures shall be repaired or replaced immediately.

When storm drain inlet protection is no longer required for the work, as approved by the Resident Engineer, the inlet sediment control measures shall be completely removed. Storm drain inlet protection shall not be removed until upstream soils are stabilized and streets are cleaned. Materials for inlet sediment control shall become the property of the contractor and shall be removed from the site of the work and disposed off-site as specified in the contract.

Storm drain inlet sediment control will be measured and paid for per number of facilities installed as listed in the unit bid price. The contract unit price paid for storm drain inlet sediment control shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, maintaining, removing and disposing of waste and inlet sediment control facilities, as specified in the specs and as directed by the Resident Engineer. Failure of the storm drain inlet sediment control due to inadequate device or maintenance may result in reduced payment to the Contractor.

7-8.6.2.5 Pollution Control Measures For Equipment Maintenance Fueling, Cleaning and Storage. The WPCP shall include where and how pollution control measures for equipment maintenance, fueling, cleaning and storage will take place. This WCPC shall include drawings with descriptions showing pollution control measures to be utilized to keep any resulting waste in these designated areas and measures to dispose of this waste and prevent tracking onto public and private roads. If during construction operations, pollution control measures for equipment maintenance, fueling, cleaning and storage in the public or private right of way is unavoidable, measures similar to those used on off site locations are to be followed. If any discharge leaves the control site, the Contractor shall immediately stop the activity, mitigate the discharge, and notify the Resident Engineer.

The Resident Engineer may allow the contractor to fuel construction equipments outside of the designated areas, provided that the contractor takes all necessary precaution measures to prevent any potential fuel spillage, and to prevent fuel contact with the street surfaces.

Locations of these activities are to be restored to their prior condition as soon as possible and no later than at construction completion.

Pollution control measures for equipment maintenance, fueling, cleaning and storage will be paid for by the lump sum bid price. The contract lump sum bid price shall include full compensation all labor, materials, tools, equipment, and incidentals to perform this work unless otherwise approved for changed conditions per Section 3-2. The lump sum price shall cover all pollution control measures for equipment maintenance, fueling, cleaning and storage regardless of the number of locations.

7-8.6.2.6 Street Sweeping. The Contractor shall sweep the streets construction active area daily, and as often as needed, with a motor sweeper in accordance with section 7-8.1 of the

specifications. Failure of the contractor to comply with this to the satisfaction of the Resident Engineer will result in reduced payment for the contractor. The contract lump sum price for street sweeping shall include all labor, materials, tools, equipment, and incidentals to perform this work as specified. The lump sum price shall cover all street sweeping regardless of the number of locations.

7-8.6.2.7 Storage/ Staging Areas Protection. Storage / Staging areas shall be the responsibility of the Contractor. The staging/storage area shall be as close as possible to the project site. The Contractor is responsible for obtaining any permits, leases, or any other items necessary to obtain staging areas. The contract lump sum price bid for storage/staging area and protection shall include full compensation for all costs associated with locating the site, securing necessary permits, complying with all local regulations. The cost of storage/staging areas shall be included in the various bid items if no specific bid item is provided in the bid schedule.

The Contractor shall be responsible for ensuring that all waste and debris generated during the period of construction is contained within the storage/staging area. No dust, oil, or contaminated run-off shall be allowed out of the staging/storage area. Perimeter and run-off control measures shall be installed around the staging/storage area. The entrance to the construction staging/storage area shall have stabilized gravel entrances/roadways, metal pans to loosen dirt from tires, or the like, to reduce tracking and create a sediment barrier between the storage/staging area and the roadway. The cost for storm water protection and control of storage/staging areas including the perimeter control, tracking, etc., as noted above shall be included in the lump sum bid item. The lump sum price shall cover all storage / staging area regardless of the number of locations.

7-8.6.2.8 Temporary Silt Fence. As part of the WPCP, the Contractor shall show where and how temporary silt fencing will be utilized to stop sediment movement. The silt fence shall be installed in accordance with CalTrans detail for silt fences, if specific detail is not provided in the contract.

The silt fence shall be constructed only along a level contour. Enough room shall be allowed below the silt fence to allow sediment removal equipment to operate. Silt fences shall be used below the toe of exposed and erodible slopes, down slope of exposed soil area, around temporary stockpiles, and along streams and channels. Silt fence shall not be used in streams, channels, or anywhere flow is concentrated. In addition, silt fences shall not be used below slopes subject to creep, slumping or landslide. Silt fences shall not be used to divert flow. The silt fence fabric shall be woven polypropylene with a minimum width of 36 inches and a minimum tensile strength of 100 pound-force, conforming to the requirements of ASTM Designation D 4632, and shall have an integral reinforcement layer. The permittivity of the fabric shall be between 0.1 - 0.15 sec⁻¹.

The silt fence shall be inspected at least once per month in the dry season and weekly in the wet season, and immediately after each rainfall. Sediment shall be removed if and when it reaches one third the height of the fence. Silt fences that are damaged and become unsuitable for the intended purpose, as determined by the Resident Engineer, shall be removed and replaced with new silt fence. Silt fence shall be removed when no longer needed or as required by the Resident Engineer. Contractor shall fill and compact post holes and anchorage trench, remove sediment accumulation, and grade fence alignment to blend with adjacent ground.

Gravel bags used in combination with the silt fence shall be paid as a separate bid item and in accordance with the bid price for gravel bags.

Temporary silt fence will be paid for by the bid unit price. The contract unit price shall include all labor, materials, tools, equipment, and incidentals to perform this work as specified in these specifications.

7-8.6.2.9 Temporary Concrete Washout. Whenever required, temporary concrete washouts shall be constructed prior to any placement of concrete; maintained and later removed. Location of the temporary concrete washouts shall be shown on the WPCP. The facility shall be located away from construction traffic or access areas to prevent disturbance and tracking. Temporary washout shall be located a minimum of 50 feet from downstream storm drain inlets, open drainage facilities, and any water course. The perimeter of the concrete washout shall be delineated by lath and flagging to prevent accidental access. Temporary concrete washout facilities shall be maintained daily or more often as needed. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete. Concrete waste materials shall be removed and disposed in accordance with 7-8.1.

When temporary concrete washout is no longer required for the work, the remaining concrete waste shall be removed and disposed of. Materials for temporary concrete washout shall become the property of the Contractor and shall be removed from the site of the work and disposed of outside the project area in accordance with 7-8.1.

Trenches, depressions and pits caused by the removal of temporary concrete washout shall be backfilled in kind.

The Resident Engineer may allow the Contractor to use the 55 gallons commercially available drums to disposed concrete washout, provided that all necessary protection measures are in place to prevent any spillage.

Temporary concrete washout will be measured and paid for by the lump sum bid price. The contract lump sum price paid for temporary concrete washout shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, maintaining, removing and disposing of concrete waste and temporary concrete washout, as specified in the specs under "Temporary Concrete Washouts." The lump sum price shall cover all temporary concrete washouts regardless of the number of locations.

7-8.6.2.10 Temporary Gravel Bags. Temporary gravel bags shall be installed, maintained, and later removed as approved by the Resident Engineer. The Contractor will not be paid any additional money for the maintenance, removal and replacement of gravel bag at the same location.

Gravel bags fill material shall be one-half to one-inch Class 2 aggregate base, clean and free from clay and deleterious material. Gravel bag fabric shall be woven high density polyethylene fabric with a minimum unit weight of 5 oz. /square yard. The fabric shall have Mullen burst strength of at least 350 psi, conforming to the requirements of ASTM Designation D 3786, and an ultraviolet (UV) stability exceeding 70 percent. Gravel bags, when filled, shall have nominal dimensions (length x width x height) of 16 in. x 12 in. x 6 in., and a fill mass of 35 to 60 pounds.

The Contractor shall use other methods if ponding will encroach in to the traffic or onto erodible surfaces and slopes. Flow from a severe storm shall not overtop the curb. Temporary gravel bags shall be maintained to provide for adequate sediment holding capacity. The Contractor shall remove the sediment behind the barrier when it reaches one-third the height of the barrier and immediately before and after each storm event. When no longer required for the intended purpose, temporary gravel bag barriers shall be removed from the site of work.

Temporary gravel bags will be measured and paid for by the bid item unit price per bag. The contract bid price paid for temporary gravel bags shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, maintaining, removing and disposing of temporary gravel bags, as specified in the specs. The cost associated with gravel bags for inlet protection details and the like shall be included in those items of work noted, not this item. This bid item is for miscellaneous applications, not covered in other drawing details.

7-8.6.2.11 Stock Pile Protection. The Contractor shall avoid placing stock piles in any drainage path. The Resident Engineer may approve temporary stockpiling in a drainage path provided that measures are taken to allow unimpaired drainage and sediment transport is prevented. Regardless of the location of stockpiled materials, containment measures are to be employed to control dust and sediment movement arising from wind, rain, and/or runoff. Controlling measures includes but are not limited to covering the stockpiled material and the installation of protection around the perimeter of the stockpiled material during rain events and winds.

Stock pile protection will be paid for by the lump sum price. The contract lump sum price shall include all labor, materials, tools, equipment, and incidentals to perform this work as specified in these specifications. The lump sum price shall cover all stock pile protection regardless of the number of locations.

ADD:

7-8.8 Sewage Spill Prevention and Response Plan. Prior to the start of construction, the Contractor shall develop and submit to Engineer, for review and approval, a written Sewage Spill Response Plan. The Contractor shall observe and comply with the City's policy of zero spills. The Sewage Spill Response Plan shall be developed to respond to any construction related sewage spill(s). This plan shall include but not limited to:

1. Identifying all nearby environmentally-sensitive areas such as waterways, channels, catch basins and entrances to existing underground storm drains.
2. Making arrangements for an emergency response unit, stationed at or near the job site, comprised of emergency response equipment and trained personnel to be immediately dispatched in the event of a sewage spill(s). This could also include field biologists and/or archaeologists if in an environmentally-sensitive area such as a canyon.
3. Developing an emergency notification procedure, which includes an emergency response team with telephone numbers and arrangements for backup personnel and equipment. The emergency response unit shall be able to dispatch to the site 24 hours a day 7 days a week including weekends and holidays. The Contractor shall designate primary and secondary representatives, their respective phone numbers,

pager numbers, and mobile phone numbers. These Contractor's representatives shall be accessible and available at all times to respond immediately to any sewer spill event.

4. Identifying any property owners who may be affected including but not limited to City Park and Recreation Department.

At the preconstruction meeting the Contractor will be provided with a list of city representatives to contact in case of sewage spill(s). In case of a sewage spill(s), the Contractor shall immediately call the Sewage Spill Hotline number at **(619) 527-5481** and shall act immediately **without instructions** from the City, to control the spill and take all appropriate steps to contain it in accordance with the Sewage Spill Prevention and Response Plan and Section 7-8.8.1, Flow Diversion Plan. The Contractor shall immediately notify the City representatives of the spill and shall report project name, location, Contractor name, Project Engineer and Engineer names. The Contractor shall, within three working days from the occurrence of the spill, submit to the Engineer a written report describing the following information related to the spill: the location; the nature and estimated volume; the date and time; the duration; the cause; the type of remedial and/or clean up measures taken (including erosion control measures) and the date and time of implementation; the corrective and/or preventive actions taken to avoid further spills; equipment used in spill response; and the environmentally-sensitive habitat such as a water body, if any, impacted and results of any necessary monitoring. The Contractor shall also provide a list of who from the City was notified, date and time of notification, date and time Contractor was notified of the spill, date and time Contractor arrived on site.

The Engineer may institute further corrective actions, as deemed necessary, to fully comply with existing laws, ordinances, codes, order or other pertinent regulations. In addition to any penalties provided by federal, state, and local laws, the Contractor shall be responsible for all costs incurred for the corrective actions including mitigation measures (habitat restoration, etc.) and obtaining after-the-fact permits if necessary, in environmentally sensitive areas. These permits include but are not limited to those from the City Planning Department Development Services, California Coastal Commission, U. S. Army Corps of Engineers and the California Department of Fish and Game.

It shall be the Contractor's responsibility to assure that all field forces, including subcontractors, know and obey all safety and emergency procedures, including the Spill Response Plan applicable to the work, to be maintained and followed at the job site. If in an environmentally sensitive area, such as canyon, stream, or lagoon, impacts shall be minimized. Crews shall be aware at the start of the job of any sensitive environmental habitats, breeding season restrictions, etc.

The Contractor shall take extreme care to prevent spills when working on sewer lines such as when making temporary connection and when connecting new lines into the sewer system. The Contractor shall not trap debris and discharge rock or debris downstream. Avoidance of streams is paramount unless authorized via permits.

The Contractor shall defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees, from and against all claims asserted, or liability established for damages or injuries to any person or property resulting from any sewage spill caused or claimed to be caused

by the Contractor's action or failure to take measures to prevent a spill. The Contractor shall also be responsible for payment of any fines assessed against the City for such sewage spills. The Contractor's duty to indemnify and hold harmless shall not include any claims or liability arising from the established active or sole negligence or willful misconduct of the City, its agents, officers or employees.

The Contractor shall obtain and maintain an additional insurance coverage for Pollution Liability with its limits and requirements as set forth in Section 7-3.5.8 Contractors Pollution Liability. The limits and requirements for Pollution Liability shall be in an amount sufficient to cover potential losses from sudden and accidental pollution. Unless otherwise provided for in the Bid Proposal, all costs associated with the requirements for "Sewage Spill Response Plan," including additional insurance, shall be included in the prices for other related bid items.

7-8.8.1 Flow Diversion Plan. The Contractor shall submit to the Engineer for approval, a wastewater flow diversion plan at least fifteen (15) working days prior to implementation of flow diversion in compliance with the City's policy of "ZERO SPILLS." The diversion plan shall indicate the sequence of diversion operations, and all other operations the Contractor will establish to maintain wastewater service during the construction period. The diversion plan shall include an emergency response plan indicating the procedures, equipment, and activities that will be implemented in the event of an emergency shutdown or failure of the flow diversion equipment used for construction. The Contractor shall be responsible for implementation of the emergency plan in accordance with Section 7-8.8 "Sewage Spill Prevention and Response Plan".

The Contractor's Wastewater Flow Diversion Plan shall be reviewed and approved by the Wastewater Collection Division of the City before flow can be diverted. No deviation from the approved Wastewater Flow Diversion Plan will be allowed without prior approval from the Engineer.

The Contractor shall observe and comply with all Federal, State, and local laws, ordinances, codes, orders, and regulations which in any manner affect the conduct of the work, specifically as it relates to sewage spills. The Contractor shall be fully responsible for preventing sewage spill(s), containing any sewage spill(s), recovery and legal disposal of any spilled sewage, any fines, penalties, claims and liability arising from negligently causing a sewage spill(s), and any violation of any law, ordinance, code, order, or regulation as a result of the spill(s).

The Contractor shall exercise care not to damage existing public and private improvements, interrupt existing services and/or facility operations which may cause a sewage spill(s). Any reasonably anticipated utility and/or improvement which are damaged by the Contractor shall be immediately repaired at the expense of the Contractor. In the event that the Contractor damages an existing utility or interrupts an existing service, which causes a sewage spill(s), the Contractor shall immediately call the emergency number at (619) 515-3525.

The Contractor shall exercise care not to damage any sensitive habitats or historic resources unless authorized via the discretionary permit and Mitigation, Monitoring and Reporting Program approved by the City of San Diego.

The Contractor shall provide all facilities, labor, power, and appurtenances necessary to divert wastewater flows as necessary to allow proper installation of the pipeline and/or manhole linings.

The Contractor shall submit as part of their Flow Diversion Plan their monitoring procedure and frequency and shall continuously monitor the flow levels downstream and upstream of the flow diversion to detect any possible failure that may cause a sewage backup and spill(s). The Contractor shall maintain a log of the monitoring and provide daily copies to the Engineer in a manner acceptable to the Engineer.

The Contractor shall inspect and maintain the diversion system daily, including the back-up system. The Contractor shall submit with their bypass plan their maintenance procedures and frequency. The Contractor shall maintain a log of all inspection, maintenance and repair records, and provide copies to the Engineer upon request in a manner acceptable to the Engineer.

The Contractor shall size the flow diversion system to handle the peak flow and shall include a 100% backup in the flow diversion system. The Contractor shall provide temporary means to maintain and handle the sewage flow in the existing system as required to complete the necessary construction. The Contractor shall utilize the flow diversion system to mitigate any additional wet weather flows, perform the necessary maintenance and repairs on the flow diversion system, and exercise and ensure the operation of the backup system. Each pump, including the backup pumps, shall be a complete unit with its own suction and discharge piping. The Contractor shall operate the backup flow diversion system for a minimum of 25% of the total diversion time on a weekly basis. The backup flow diversion system shall be fully installed, operational, and ready for immediate use. The diversion system shall be hydraulically tested with clean water prior to wastewater flow diversion. The Contractor shall demonstrate to the satisfaction of the Engineer that both the primary and backup flow diversion systems are fully functional and adequate, and shall certify the same, in writing, to the Engineer in a manner acceptable to the Engineer.

The Contractor shall provide one dedicated fuel tank for every single pump/generator, if fuel/generator driven pumps are used. The Contractor shall provide an emergency standby power generator, if electric power driven pumps are used. The Contractor shall provide a fuel level indicator outside each fuel tank. The Contractor shall continuously (while in use) monitor the fuel level in the tanks and ensure that the fuel level does not drop below a level equivalent of two hours of continuous flow diversion system operation. The Contractor shall take the necessary measures to ensure the fuel supply is protected against contamination. This includes but is not limited to fuel line water traps, fuel line filters, and protecting fuel stores from precipitation. The Contractor shall also monitor all hoses and repair leaks immediately.

Unless otherwise provided for in the Bid Proposal, full compensation for the Wastewater Flow Diversion Plan, its implementation including but not limited to labor, facilities, equipments, power, appurtenances and incidental, shall be included in the price bid per lineal foot of sewer main and no additional compensation shall be made.

ADD:

7-8.9 Environmental Protection. The Contractor shall comply with all applicable standards, orders, or requirements of the Environmental Protection Agency regulations (40 CFR, Part 15).

ADD:

7-8.10 Flood Disaster Protection of 1973. The Contractor shall comply with all applicable standards, orders, or requirements of the Flood Disaster Protection Act of 1973 (42 USC 4001 et seq, as amended).

ADD:

7-8.11 Illness and Injury Prevention Program. The Contractor shall comply with all the mandates of Senate Bill 198 and specifically shall have a written Injury Prevention Program on file with the City in accordance with all applicable standards, orders, or requirements of California Labor Code, Section 6401.7. **This Program shall be on file at time of Award of Contract.**

ADD:

7-8.12 Graffiti Control. The Contractor shall maintain all site improvements, including any temporary facilities, equipment or other materials in a graffiti free condition throughout the construction period, until acceptance of the project by the City. Graffiti encountered on the job site shall be removed by the Contractor within twenty-four (24) hours. Costs for removal shall be included in other items of work.

ADD:

7-8.13 Hydrostatic Discharge Requirements. The Contractor shall comply with Regional Water Quality Control Board (RWQCB) Order No. 2002-0020, General Permit for Discharges of Hydrostatic Test Water and Potable Water to Surface Water and Storm Drains as follows:

- A. The discharged water shall be dechlorinated to a non-detectable or 0.1 mg/l level; Effluent shall be maintained between 6 and 9 PH;
- B. The release of discharged water shall not cause downstream erosion or a violation of a water quality standard in the RWQCB's Basin Plan;
- C. A flow limit shall be devised to protect the Beneficial Uses in the areas affected by the discharge;
- D. Total dissolved solids (TDS) and boron, sodium, sulfate and fluoride concentrations of discharged water shall be determined and fall within the individual hydrologic unit limits set in Attachment E of the Order found at:

http://www.waterboards.ca.gov/rwqcb9/orders/order_files/2002%20order%20files/R9-2002-0020/Attachments.pdf

- E. Quarterly reports as required by the Order shall be submitted to the RWQCB and to the City. Reporting requirements and schedule are outlined in the Order.

Payment for work under Section 7-8.13 shall be included in the price per linear foot bid for new water main and no separate payment will be allowed thereafter.

ADD:

7-8.14 Noise Abatement. ADD the following:

No work that is considered to be disturbing, excessive or offensive shall be done Monday through Saturday prior to 7:00 a.m. or after 7:00 p.m. or on Sunday and holidays without a noise abatement variance. No work shall be done on Saturday, Sunday and holidays without authorization by the Engineer twenty –four (24) hours in advance of work.

7-9 PROTECTION AND RESTORATION OF EXISTING IMPROVEMENTS.

ADD the following:

In the event that any Contractor Date Stamp/Impressions are located on existing sidewalk, curb ramps, or curbs, which are scheduled to be removed, the disposition of those stamps/impressions shall be determined by the City prior to Notice to Proceed and shall be in accordance with Subsection 303-5.1.4.3 of the City of San Diego Supplement Amendments. In the event that the Contractor encounters any stamps/impressions not previously identified by the City, Contractor shall notify the Engineer prior to removal.

ADD:

7-9.1 Placements and Removal of Markouts. Markouts shall not be placed in the public right-of-way more than thirty (30) days prior to the commencement of excavation work perform in connection with an installation. If the excavation work is not commenced within thirty days of the placement of the markout, the markout shall be immediately removed.

Markouts shall be removed from all surfaces in the public right-of-way, including decorative surfaces, within thirty (30) days of the completion of the excavation work, if the work is completed, but in any event no later than sixty (60) days from the date the markout is placed in the public right-of-way.

7-10.1 Traffic and Access. ADD the following:

The requirements for providing and approving traffic control varies according to the type of work being performed and at least one of the following sections shall apply to the work, or portions thereof, as described in each section.

ADD:

7-10.1.1 Traffic Control by Working Drawings. For those portions of the work where traffic control drawings are not a part of the Plans and the Plans indicate that traffic control working drawings are required, then the requirements described in this section shall apply.

The Contractor shall, in accordance with Subsection 2-5.3, prepare traffic control working drawings and submit them to the Engineer. The working drawings shall be prepared in accordance with current modern engineering practice and shall be of a size and scale to clearly show all necessary details. Each shop drawing shall be a good quality print. Typical plans and sections will not be accepted. The traffic control shop drawing shall be site-specific. The Contractor shall allow a minimum of twenty (20) working days for review of the working drawings. If extensive additions or corrections are required, the Engineering Traffic Control Section will return the marked-up print for corrections and re-submission. If no change or

correction is required, the original working drawings will be retained by the Engineering Traffic Control Section and one copy, with the Traffic Control Plan (TCP) Permit attached, will be returned to the Contractor. Work shall not begin in the public roadway without the approved TCP Permit. No extension of time will be allowed as a result of the Contractor's failure to properly produce traffic control working drawings and to schedule the work.

The Contractor shall furnish, install, and maintain the traffic control devices as shown on the TCP Permit, and additional traffic control devices as may be required to ensure the safe movement of vehicles and pedestrians, and to provide for the safety of construction workers. The Contractor shall maintain existing traffic control signs and traffic signals in their proper location on temporary mounting supports until permanent signs or signals are restored. The Contractor shall use signs, delineators, barricades, etc., as per the latest California MUTCD. The name of the Contractor or vendor who owns the traffic control devices shall be clearly noted on each device.

Barricades used at night shall be equipped with flashing lights. Signs used at night shall be reflectorized with a material that has a smooth, sealed outer surface, or illuminated to show approximately the same shape and color day and night. Internally or externally illuminated signs shall be used where there is significant interference from extraneous light sources and reflectorized signs will not be effective. External light sources shall be properly shielded to protect drivers from glare. Street lighting is not adequate for sign illumination.

Traffic controls shall be in accordance with Traffic Control Plans of the San Diego Regional Standard Drawings, and current CalTrans Standard Specification, Section 12, and California MUTCD and shall conform to the following unless otherwise shown on the TCP Permit:

- 1) The working hours shall be between 8:30 A.M. and 3:30 P.M. if construction is to be performed in phases; all work shall be completed in each phase prior to beginning work on the next phase. Approval of a traffic plan for hours outside of these does not constitute a guarantee that inspection will be available (see Section 2-11).
- 2) Equipment, material, or debris shall not be stored or remain in the public right-of-way without prior approval by the Engineer.
- 3) Travel lanes shall be 12 feet wide, minimum. For lane closures on roadways with bike lanes, the rightmost travel lane shall be 14 feet wide, minimum.
- 4) Flashing arrow boards shall be used when the posted speed is 40 mph or more, or when curvature of the roadway limits visibility.
- 5) The Contractor shall maintain cross traffic and turning moves at the intersections.
- 6) Trenches shall be backfilled or trench-plated at the end of each work day. An asphalt ramp shall be placed around each trench plate to prevent the plate from being dislodged. Upon completion of excavation backfill, the Contractor shall provide a satisfactory surface for traffic. Portable concrete barrier (K-rail), additional noticing, and other items may be required when trenching cannot be secured overnight by backfilling or trench-plating.

- 7) The Contractor shall repair or replace traffic control devices (including traffic signs, striping, pavement markers, pavement markings, legends, curb markings, loop detectors, traffic signal equipment, etc.) damaged or removed as a result of operations and not designated for removal. Repairs and replacements shall be equal to existing improvements. Loop detectors shall be replaced within 3 working days of completion of underground work.
- 8) The Contractor may use the parking lane while working next to the curb. The Contractor shall post “TOW-AWAY/NO PARKING” signs 24 hours in advance for temporary parking removal. Signs shall indicate specific days, dates, and times of restrictions.
- 9) The Contractor shall provide for a safe 4-foot wide pedestrian walkway along entire length of construction area.
- 10) Access to private property shall be maintained to the greatest extent practicable. The Contractor shall minimize the time periods that driveways will be closed, and shall minimize inconvenience to the driveway users. When a driveway or pedestrian access is to be closed, the Contractor shall notify the property owner and tenants a minimum of five (5) working days prior to closure, and shall explain to the owner/occupant when the closure is to start and how long the work will take. The Engineer shall approve the format of the notice prior to its being issued.
- 11) The Contractor shall post signs notifying the public a minimum of five (5) working days prior to closure, or detour, of streets.
- 12) The Contractor shall maintain full width of all traffic lanes of the existing roadway during non-working hours and on Saturday, Sunday, designated holidays, and when construction operations are not actively in progress on working days. The Contractor shall keep the streets in and adjacent to the construction area clean. Streets shall be swept before washing.
- 13) When constructing a new roadway, the Contractor is to install and maintain Type III barricades with flashing yellow lights and “Road Closed” signs and/or chain link fences until the new roadway is accepted by the Engineer.

The Contractor shall notify San Diego Transit at (619) 238-0100, Ext. 424, a minimum of five (5) working days prior to excavation, construction, or traffic control affecting bus stops. The Contractor shall notify the following agencies a minimum of two (2) working days prior to excavation, construction, or traffic control affecting the agencies:

A.	Fire Department Dispatch	(Street or alley closure)	(858) 573-1300
B.	Police Department Traffic	(Street or alley closure)	(858) 495-7800
C.	Environmental Services Dept.	(Refuse collection)	(858) 694-7000
D.	Street Division/Electrical	(Traffic signals)	(619) 527-7500
E.	U.S. Navy	(32 nd Street Naval Station)	(619) 556-1319
F.	Underground Service Alert	(Any excavation)	(800) 422-4133
G.	MTDB	(Street Closure)	(619) 557-4549

The Contractor shall submit proposed changes to and deviations from the TCP Permit to the Engineer for approval. Prior to implementation, the Engineer will observe all traffic control plans in operation and reserves the right to require the Contractor to make changes as field conditions warrant. The Engineer may approve the changes to the TCP Permit, or, if directed in writing by the Engineer, the Contractor shall call the Engineering Traffic Control Section at (858) 495-4741, for an appointment, to request a revision to the TCP Permit. Such changes shall supersede the original TCP Permit.

All costs for traffic requirements shall be included in the lump sum price for the traffic control system required to do the work when provided in the bid proposal. The lump sum price bid shall include full compensation for furnishing all labor, materials, tools and equipment doing all work required for traffic control. These costs include all costs for traffic control plans, signs, barricades, lights, and any other traffic control devices which may be required by the City. If no bid item is provided, all costs for traffic requirements shall be considered as part of the various items of work of this contract and no additional payments will be made therefore.

ADD:

7-10.1.2 Traffic Control by Appointment. For those portions of the work where traffic control drawings are not a part of the Plans and either the Plans indicate that the TCP permit is to be issued by appointment or the plans do not indicate a procedure, then the requirements of Section 7-10.1.1 shall apply and as noted below, except that traffic control working drawings are not required.

The Contractor shall prepare traffic control plans and shall call the Engineering Traffic Control Section, at (858) 495-4741, for an appointment to apply for a TCP Permit. The Contractor shall allow a minimum of two (2) working days prior to starting work (five (5) working days when the work will affect a traffic signal). Upon approval of the TCP, the Engineering Traffic Control Section will issue the TCP Permit. Work shall not begin in the public roadway without the approved TCP Permit.

ADD:

7-10.1.3 Traffic Control - Part of Plans. For those portions of the work where traffic control drawings are included in the Plans, the requirements of Section 7-10.1.1 shall apply, except as stated below.

The Traffic Control Plan (TCP) is not valid until work dates are approved and a TCP Permit is issued. To obtain a TCP Permit, the Contractor shall call the Engineering Traffic Control Section, (858) 495-4741 for an appointment a minimum of two (2) working days prior to starting work (five (5) working days when the work will affect a traffic signal). The Contractor shall provide two (2) copies of the traffic control drawings in the plans at the time of the appointment. The Contractor shall prepare traffic control working drawings for work not included in the traffic control drawings in the plans.

When included in the bid, the following traffic control bid items will be paid separately for those portions shown in the Plans:

1. K-rail will be measured and paid for per linear foot along the top of the rail per location. The contract unit price paid for K-rail shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the

work involved in furnishing, placing, maintaining, repairing, replacing, and removing the K-rail, including, but not limited to, excavation and backfill, drilling holes and grouting threaded rods or dowels when required, removing threaded rods or dowels and filling drilled holes with mortar, and moving and replacing removable panels as required, complete in place, as shown on the Plans, as specified in these Specifications and the Special Provisions, and as directed by the Engineer.

2. Crash cushion modules shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing, placing, maintaining, repairing, replacing, and removing the modules, complete in place, as shown on the Plans, as specified in these Specifications and the Special Provisions, and as directed by the Engineer. Crash cushion modules shall be measured per each individual module (barrel), on a one-time basis, for each location shown on the Plans.
3. The lump sum bid for flashing arrow boards and electronic message signs shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing, placing, maintaining, repairing, replacing, and removing the flashing arrow boards and electronic message signs, complete in place, as shown on the Plans, as specified in these Specifications and the Special Provisions, and as directed by the Engineer. Flashing arrow boards and electronic message signs shall be available for use twenty-four (24) hours per day as required, without any additional payment for time or number of locations unless otherwise required for changed conditions.

No additional compensation will be allowed for removal and replacement of K-Rail, crash cushion modules, or flashing arrow boards and electronic message signs at the same location. Those portions of these items not covered by the Plans shall not be paid separately.

ADD:

7-10.1.4 Traffic Control for Resurfacing and/or Slurry Seal. The Contractor shall submit a separate TCP for resurfacing and/or slurry seal work. The TCP shall be submitted in accordance with subsection 7-10.1.1, except as noted below. The Contractor shall coordinate the traffic control shop drawings submittal with the work so that no work will be delayed.

The City will provide to the Contractor, at the Pre-Construction Meeting, the standard format for “NO PARKING - TOW-AWAY ZONE” signs for the resurfacing and/or slurry seal portion of the work. The Contractor shall furnish the “NO PARKING - TOW-AWAY ZONE” signs and pedestals for posting on sidewalks and streets. The “NO PARKING - TOW-AWAY ZONE” signs shall be mounted on suitable pedestals, such as tripods, barricades, etc. Signs shall be posted every 50 feet on both sides of the block affected by the proposed resurfacing and/or slurry sealing.

The Contractor shall affix to each “NO PARKING - TOW-AWAY ZONE” sign cards with 2-inch high letters stating the day(s) of the week parking is prohibited, as well as the Contractor’s company name and telephone number. The “NO PARKING - TOW-AWAY ZONE” signs shall be removed immediately following the completion of the resurfacing and/or slurry sealing.

The Contractor shall furnish and distribute the doorknob hanger notices in sufficient quantities to advise the general public of the scheduled parking prohibitions. The Contractor shall include the company name and telephone number on each doorknob hanger notice. The Engineer shall approve the format of the doorknob hanger notice prior to its distribution. The doorknob hanger notices shall be left on or at the front door of each dwelling and apartment unit and at each tenant of commercial buildings abutting each of the street block segments to be slurry sealed or resurfaced. Where the front doors of apartment units are inaccessible, doorknob hanger notices shall be distributed to the apartment manager or security officer. The Contractor shall deliver copies of the doorknob hanger notice to a responsible party of commercial buildings, schools, hospitals, churches, and other public buildings.

If provided in the bid, all costs for traffic control, including “NO PARKING - TOW-AWAY ZONE” signs and notices, shall be included in the Contract lump sum bid items for Traffic Control for Resurfacing and/or Slurry Sealing. If no bid item is provided, all costs for traffic requirements shall be considered as part of the various items of work of this Contract and no additional payments will be made therefor.

ADD:

7-10.1.4.1 “No Parking – Tow-Away Zone” Signs and Notices for Slurry Sealing. For each street block segment scheduled for slurry sealing, the posted parking prohibition shall be for two (2) consecutive working days. The Contractor shall schedule the slurry sealing on the first posted working day. The second posted working day shall be reserved for emergency work, and may be used only with the approval of the Engineer. Street block segments which are not completed by the second posted working day shall be rescheduled. “NO PARKING - TOW-AWAY ZONE” signs shall be placed no less than forty-eighty (48) hours in advance and no more than seventy-two (72) hours in advance of the scheduled slurry sealing.

Doorknob hanger notices shall be distributed no less than ninety-six (96) hours in advance and no more than one hundred twenty (120) hours in advance of the scheduled slurry sealing.

ADD:

7-10.1.4.2 “No Parking – Tow-Away Zone” Signs and Notices for Resurfacing. For each street block segment scheduled for resurfacing, the posted parking prohibition shall be for 2 consecutive working days, unless approved by the Engineer. “NO PARKING - TOW-AWAY ZONE” signs shall be placed no less than 48 hours in advance, and no more than 72 hours in advance. Street block segments which are not completed by the last posted working day shall be rescheduled.

If a work delay of 48 hours or more occurs from the originally scheduled work date, the “NO PARKING - TOW-AWAY ZONE” signs shall be removed for a minimum of 24 hours, then reset and re-posted for the appropriate work date.

Doorknob hanger notices shall be distributed no less than 48 hours in advance and no more than 72 hours in advance of the scheduled resurfacing.

7-10.3.1 Portable Changeable Message Signs.

- a. Each portable changeable message sign unit shall consist of a controller unit, a power supply and a structural support system, all mounted on a trailer. The unit shall be assembled to form a complete self-contained portable changeable message sign which can be delivered to the site of the work and placed in immediate operation. The complete message sign unit shall be capable of operating in an ambient air temperature range of -4° F to 158° F and shall not be affected by unauthorized mobile radio transmissions. The trailer shall be equipped so that it can be leveled and plumbed.
- b. The message displayed on the sign shall be visible from a distance of 1,500 feet and shall be legible from a distance of 750 feet, at noon on a cloudless day, by persons with vision of or corrected to 20/20. The sign panel shall be 3-line matrix and shall display not less than 7 characters per line. Sign messages to be displayed shall be as approved by the Engineer.
- c. The sign face shall be flat black and shall be protected from glare of the sun by a method which does not interfere with the clarity of the sign message. The sign shall be raised and lowered by means of a power driven lifting mechanism.
- d. The matrix sign shall be capable of complete alphanumeric selection.
- e. Lamp matrix type signs shall be equipped with an automatic dimming operational mode that automatically compensates for the influence of a temporary light source or other abnormal lighting conditions. The sign shall have manual dimming operation modes of 3 or more different lamp intensities.
- f. Matrix signs not utilizing lamps shall be either internally or externally illuminated at night.
- g. The controller shall be an all solid-state unit containing all the necessary circuitry for the storage of at least 5 preprogrammed messages. The controller shall be installed in a location allowing the operator to perform all functions from one position. A keyboard entry system shall be provided to allow an operator to generate an infinite number of additional messages over the preprogrammed stored messages. The keyboard shall be equipped with a security lockout feature to prevent unauthorized use of the controller.
- h. The controller shall contain a nonvolatile memory to hold the keyboard created messages in memory during periods when the power is not activated. The controller shall provide for a variable message display rate which allows the operator to match the information display to the speed of the approaching traffic. The flashing off time shall be operator adjustable within the control cabinet.
- i. Full operation height shall be with the bottom of the sign at least 7 feet above the ground and the top no more than 14.5 feet above the ground.
- j. After initial placement, portable changeable message signs shall be moved from location to location as directed by the Engineer.
- k. Portable changeable message signs shall be furnished, placed, operated, and maintained at locations shown on the plans, specified in the special provisions, or designated by the Engineer.

Portable changeable message signs will be measured by the unit from actual count. The contract unit price paid for portable changeable message sign shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, operating, maintaining, repairing, replacing, transporting from location to location and removing the portable changeable message signs,

as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

7-10.4.1 Safety Orders. ADD the following:

In non – emergency situations, the Contractor shall back fill trenches and restore roadway for safe night-time traffic usage. No open trenches shall be allowed overnight or during non-working hours unless prior written approval is received from the Engineer.

ADD:

7-10.4.5 Emergency Markout. The Contractor shall place, by spray paint or other method approved by the Engineer, their name and emergency phone number on the trench saw cut for the following day. All costs shall be included in the price bid for new mains and no additional payment will be made.

ADD:

7-10.4.6 Health and Safety Plan. The Contractor bears the ultimate responsibility for the health and safety of its employees. These specifications shall not be construed to limit the Contractor's liability nor to assume that the City, its employees or designate, will assume any of the Contractor's liability associated with site safety considerations. The Contractor shall have a health and safety plan in effect prior to commencement of work. The plan shall meet all OSHA and other applicable requirements. The plan shall also specifically address procedures and protocols that will be followed to monitor for the presence of hazardous atmosphere, contaminated soil, or groundwater, and identify response actions that will be taken when these conditions are encountered. This plan shall be provided to the Engineer at least one week before any construction activities begin. The City will not assume any role in determining the adequacy of the plan on behalf of the Contractor.

ADD:

7-10.4.7 Friable Asbestos Materials. All friable asbestos-containing materials (material that can be crumbled, pulverized, or reduced to powder in hand) are regulated as a hazardous waste and must be transported by a licensed hazardous waste hauler and disposed of in an appropriate landfill. If Contractor identifies friable asbestos containing materials at the work site, Contractor shall immediately stop work in the affected area and notify the Engineer.

ADD:

7-10.4.7.1 Handling and Disposal of Asbestos Cement Pipe. If asbestos cement pipe (ACP) is identified that has not been included in the Work, the Contractor shall take adequate care to maintain the ACP in a non-friable condition and notify the Engineer immediately.

Any authorized extra work to remove the ACP shall be in compliance with City standard specifications and with all applicable state and federal regulations. Prior to Contractors performing work on ACP, the Contractor shall submit its work plan for the City's Asbestos and Lead Management Program review and approval per Section 2-5.3. The City reserves the right to select another qualified Contractor to perform the asbestos related work.

Payment for the handling and disposal of ACP shall be in accordance with Subsection 3.2.4 if a pay item for it has not been established in the bid schedule.

ADD:

7-10.5 Temporary Street Name Signs. Upon completion of rough grading and prior to underground construction, temporary street name signs shall be provided and maintained at each intersection until the permanent street name signs have been placed.

Temporary street name signs shall be constructed and placed to the following minimum requirements:

- 1) Five-inch (5") high black lettering on eight-inch by thirty-two inch (8" x 32") white blades.
- 2) The bottom of the blades shall be a minimum of seven feet (7') above ground line, mounted on white 4 x 4 posts.
- 3) Posts are to be placed radial to mid-point of curb returns, fifteen feet (15') in from the future face of curb.

ADD:

7-10.6 Encountering or Releasing Hazardous Substances. If the Contractor encounters, causes the release of, or has knowledge of a release or an imminent release of hazardous substances, work in the area must immediately cease. Any substance which is toxic, corrosive, an irritant, a strong sensitizer, flammable, combustible, or radioactive or may cause substantial personal injury or substantial illness as a proximate result of any customary or reasonable foreseeable handling or use is considered a hazardous substance. Contractor shall immediately notify Project Manager, County of San Diego, Department of Environmental Health (DEH), at Telephone No. (619) 338-2222 (during normal work hours) or Telephone No. 911 (outside normal work hours). If there is an immediate fire, explosion, health or safety threat, the Contractor shall notify the Fire Department via 911. If there is a health and safety plan for this specific site or project, it must be followed precisely. Contractor shall follow and comply with all applicable Federal, State, and local laws and regulations including but not limited to notification requirements.

ADD:

7-10.7 Encountering Contaminated Soil. Contaminated soils are soil contaminants as defined in Chapter 18, Division 4.5, Title 22 of the California Code Regulations.

When encountering petroleum contaminated soil, abandoned underground storage tanks, petroleum transmission pipelines, or unidentified contamination, the Contractor shall follow the guidelines of the current edition of the County of San Diego, Department of Environmental Health (DEH) Site Assessment and Mitigation Manual (SAM Manual), which is available by contacting the DEH at (619) 338-2222. Contractor shall follow and comply with all applicable laws and regulations.

The Contractor shall immediately notify the Engineer when apparent contaminated soils are encountered. Following notice by the Contractor, the Engineer shall contact the City's Environmental Services Department, Office of Environmental Protection and Sustainability, Tank Engineering and Environmental Management (TEEM) Program at (858) 627-3311.

ADD:

7-10.7.1 Monitoring of Potentially Contaminated Soil.

Monitoring for the presence of petroleum contaminated shall be the Contractor's responsibility and shall be performed in areas of known or suspected contamination during construction activities. Any contaminated soil encountered shall be tested by the City at no cost to the Contractor. Contaminated soil testing shall be performed by the city's Environmental Services Department Refuse Disposal Division, Underground Storage Tank Program (USTP). Contractor shall notify the Engineer five (5) days prior to excavation in areas of known contaminated, and immediately if suspected or unforeseen contaminated is encountered.

An operational explosimeter (Combustible Gas Indicator - CGI), calibrated for and capable of automatically detecting explosive gases at twenty percent (20%) of the Lower Explosive Limit (LEL) shall be used by the Contractor. The functional requirements of the CGI shall comply with the Site Assessment and Mitigation (SAM) Manual. If twenty percent (20%) is greater of the Lower Explosive Limit (LEL) is detected in an excavation, surface area or confined space, the Fire Department and the DEH shall be notified immediately.

All cost for the monitoring of potentially contaminated soils in accordance with these specifications shall be included in the lump sum bid item titled Monitoring of Potentially Contaminated Soils and no additional payment will be made.

ADD:

7-10.7.2 Stockpiling Contaminated Soil and/or Hazardous Waste. Unless directed otherwise by the Engineer, the Contractor shall stockpile all visually inspected soil, which is believed to be contaminated soil and/or hazardous waste, at a location approved by the Engineer and the TEEM Program and in accordance to the following procedure. Stockpiled contaminated soil and/or hazardous waste shall be:

- A. Placed on a relatively impervious surface such as asphalt, concrete or on a minimum 8-mil thick polyethylene sheeting.
- B. Moistened to minimize dust emissions during stockpiling. however, no run-off shall be permitted at any time.
- C. Securely covered by 8-mil polyethylene sheeting to minimize vapor emissions and prevent run-off from rain (sheeting shall be maintained and remain in satisfactory condition),
- D. Configured in such a manner that surface water run-off from the stockpile does not carry soil and/or leachate beyond the stockpile perimeter berm,
- E. Separated from uncontaminated soil.

The Contractor will be responsible for loading stockpiled soil for transport and disposal following characterization of the soil by the City's TEEM Program. It is the Contractor's responsibility to manage the contaminated soil properly. The City shall not be liable for contaminated soil improperly handled or disposed by the Contractor. Payment will be on a per cubic yard basis for excavation, stockpiling, and loading contaminated soil.

ADD:

7-10.7.3 Disposal of Contaminated Soil. If the bid form does not include a line item for transport and disposal of contaminated soil, arrangements for disposal will be made by the City's TEEM Program. In this instance, the Contractor may be directed by the City to pay for the costs of transport and disposal, in which case the City will reimburse the Contractor on a cost plus markup basis under a Field or Change Order.

If the bid form does include a line item for transport and disposal of contaminated soil, then the following shall apply. Contaminated, non-hazardous soils shall be transported to a licensed treatment facility within the State of California or, in the event that a treatment facility will not accept the soil, to a State of California licensed Class III landfill. The Contractor shall pre-approve their proposed treatment or disposal facility with the City's TEEM Program. Following approval from the City's TEEM Program, the Contractor shall obtain all necessary approvals and authorizations from the treatment or disposal facility and shall provide the City's TEEM Program with copies of all approvals and authorizations prior to scheduling transport. The Contractor shall use a Regulated Waste or Non-Hazardous Waste Data form to document the disposal of the contaminated soil from the site. The Contractor shall provide the City's TEEM Program with manifests for each load at least 48-hours prior to the scheduled pickup date. The City's TEEM Program will review the manifests for accuracy. All manifests shall be signed off by the TEEM Program on the date of loading and transport. Copies of executed manifests and treatment or disposal certificates shall be provided to the City's TEEM Program. It is the Contractor's responsibility to manage the contaminated soil properly. The City shall not be liable for contaminated soil improperly handled or disposed by the Contractor. Payment will be on a per ton basis for transport and disposal of contaminated soil.

7-12 ADVERTISING.

ADD the following:

Any advertisement referring to the City of San Diego as a user of a product, material or service by the Contractor or any Subcontractor, material supplier, vendor or manufacturer is expressly prohibited without prior written approval of the City of the City of San Diego.

ADD:

7-12.1 Product Endorsement. Any advertisement referring to the City of San Diego as a user of a product, material or service by the Contractor or any Subcontractor, material supplier, vendor or manufacturer is expressly prohibited without prior written approval of the Mayor of the City of San Diego.

7-13 LAWS TO BE OBSERVED.

ADD the following:

The Contractor shall give the notices required by law and comply with all laws, ordinances, rules and regulations pertaining to the conduct of the Work. The Contractor shall be liable for violations of the law in connection with Work provided by the Contractor. If the Contractor observes that the Plans, Specifications or other portions of the Contract Documents are at variance with any laws, ordinances, rules or regulations, he shall promptly notify the Engineer in

writing of such variance. The City shall promptly review the matter and, if necessary, shall issue a Change Order or take any other action necessary to bring about compliance with the law, ordinance, rule or regulation in questions. Contractor agrees not to perform work known to be contrary to any laws, ordinances, rules or regulations.

ADD:

7-15 WATER FOR CONSTRUCTION PURPOSES.

The Contractor shall purchase all water for construction including water used for initial filling and final flushing of new pipeline.

Only the two and one-half inch (2 1/2) fire hydrant port may be used. The four-inch (4") port shall be free for use in the event of a fire.

It shall be the Contractor's responsibility to obtain a meter and comply with the Fire Hydrant Meter Policy, Water Department Instruction, DI #55.27, dated April 21, 2000, and attached in Appendix B. Violation of the requirements as set forth in the DI above is subject to fines or penalties pursuant to the Municipal Code, Section 67.15 and Section 67.37.

ADD:

7-16 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT.

Contractor agrees to defend, indemnify, protect and hold City, its agents, officers and employees, harmless from and against all claims asserted, or liability established for damages or injuries to any person or property including to Contractor's employees, agents or officers, or judgments arising directly or indirectly out of obligations, work or services herein undertaken, which arise from, are connected with, are caused or claimed to be caused by the acts or omissions of the Contractor, its agents, officers and employees. The obligation to indemnify shall be effective even if the City, its agents, officers or employees established passive negligence contributes to the loss or claim. Contractor further agrees that the duty to defend includes attorneys fees and all costs associated with enforcement of this indemnification provision, defense of any claims arising from this Project; and, where a conflict of interest exists, or may exist between Contractor and the City, the reasonable value of attorneys fees and all costs if the city chooses, at its own election, to conduct its own defense or participate in its own defense of any claim related to this Project. The Contractor's duty to indemnify and hold harmless shall not include any claims or liability arising from the established active or sole negligence, or sole willful misconduct of the City, its agents, officers or employees.

ADD:

7-17 CONFLICT OF INTEREST.

Contractor shall establish and make known to its employees appropriate safeguards to prohibit employees from using their positions for a purpose that is, or gives the appearance of being, motivated by desire for private gain for themselves or others, particularly those with whom they have family, business, or other relationships. Project personnel shall not accept gratuities or any other favors from Subcontractors or potential Subcontractors.

ADD:

7-18 PROJECT IDENTIFICATION SIGN.

All Capital Improvement Projects shall have a set of signs (a Project Identification Sign and a Project Location Sign) displayed at the beginning and ending of the street where construction is actively occurring. If additional signs are provided, the Contractor shall display them at the beginning and end of the project limits. The Project Signs will be displayed everyday during working hours, then removed and stored during non-working hours. For all projects involving Contracts in excess of \$250,000 and limited to a confined site, signs shall be permanently mounted at the project site for the duration of the Contract in-lieu of daily removal.

All Project Signs are to be provided to the Contractor by the City. The Contractor shall contact the Engineer to pick up the Project Signs. The Contractor shall mount the sign on a standard barricade in a manner and location approved by the Engineer, and return the sign to the Sign Shop upon acceptance of the project by the City. All costs necessary for the transportation, installation, maintenance, and removal of project signs shall be considered included in the Lump Sum price bid for Traffic Control, and no additional payment will be made. If no traffic control bid item exists, then all costs shall be included in other items of work.

ADD:

7-19 COMMUNITY LIAISON

The Contractor shall retain a community liaison representative throughout the Contract period. The representative shall closely coordinate all work with the businesses, institutions and residents impacted by the project. Duties shall include, but not be limited to, notification to the businesses, institutions and residents of the commencement of construction activities as soon in advance as possible and not less than five (5) working days, coordination of access for vehicular and pedestrian traffic to businesses, institutions and residences impacted by the project, response to community questions/complaints related to the Contractor's activities, reporting of liaison activities at all project progress meetings scheduled by the Resident Engineer, attendance to the project pre-construction meeting, and attendance at two (2) community meetings. The Contractor shall present their community liaison representative to the City, in writing, within fifteen (15) calendar of the award of the Contract. All costs for the community liaison shall be included in the price bid for various items of work.

ADD:

7-20 VIDEO TAPING OF PRE-EXISTING CONDITIONS

The Contractor shall make his own arrangements for video taping all pre-existing conditions of the project site prior to any construction.

Video taping of important aspects of a construction project site shall include, but is not limited to the following:

- A. Property lines.
- B. Right-of-way and easement conditions.
- C. Utility markings.
- D. Survey conditions.
- E. Pavement conditions.
- F. Adjacent property conditions.
- G. Sidewalk, median, curb, and gutter conditions.
- H. Safety conditions.
- I. Unusual conditions or equipment.
- J. Existing canyon conditions (including vegetation) along the pipe corridor;
- K. Striping

The Contractor shall have the following video criteria and capabilities:

- A. High resolution and clarity provided by a process such as utilizing three-quarter-inch (3/4") tape recording equipment and converting to VHS format (color type).
- B. Tape shall be automatically dated and timed;
- C. Camera with zoom lens capability;
- D. Cataloging and storage capability;
- E. On and off-road mobility;
- F. Video operator must have at least one (1) year of experience in televising.

The Contractor shall turn over original VHS video tape to the City immediately after taping and complete televising must be done in the presence of the Resident Engineer. Tape(s) should be submitted NO LATER than thirty (30) days from Notice to Proceed. All materials, equipment and labor to perform the televising shall be performed at no cost to the City. The Contractor shall not be entitled to any additional working days due to delay securing videotaping services. Payment for video taping services is included under "Videotaping of Pre-Existing Conditions" bid item, and no separate payment will be made therefore.

Unless proven otherwise via the pre-existing video, the Contractor shall be responsible for the repair of any damage for which a claim has been submitted.

SECTION 9 – MEASUREMENT AND PAYMENT

9-3.1 General. DELETE the tenth paragraph in its entirety and SUBSTITUTE the following:

At the expiration of thirty-five (35) days from the date of filing Notice of Completion (NOC) with the County Recorder and upon receipt by the City Auditor of a fully executed Release of Claims, the amount deducted from the final estimate, and retained by the Agency, 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.

Acceptance by the Contractor of final payments shall be and shall operate as a release to the City of all claims in stated amounts that may be specifically excepted by the Contractor for things done or furnished in connection with this Work and for every act and neglect of the City and others related to or arising out of this Work. Payment by the City shall not release the Contractor or his surety from any obligation under Contract or under the performance bond and payment bonds.

9-3.2 Partial and Final Payment. DELETE the third paragraph in its entirety and SUBSTITUTE with the following:

From each progress estimate, five percent (5%) will be withheld and retained by the City until the final completion and acceptance of the project.

ADD the following:

Partial payments made after the contract completion date will reflect the amount withheld for liquidated damages as required by Paragraph 6-9. Any such partial payments made to the Contractor, or its Sureties, will not constitute a waiver of the Agency's liquidated damages.

Pursuant to California Public Contract Code Section 22300, the Contractor has the option, at its expense, to substitute for any money withheld by the City, securities equivalent to the amount being withheld. Securities eligible for such substitution are bank or savings and loans certificates of deposit or such securities which are eligible for investment pursuant to Government Code Section 16430. As to any such security or securities so substituted for monies withheld, the Contractor shall be the beneficial owner of same and shall receive any interest thereon.

Such security shall, at the request and expense of the Contractor, be deposited with the City or with a State or Federally Chartered bank as the escrow agent who shall pay such monies to the Contractor upon notification by the City that payment can be made. Such notification will be given at the expiration of thirty-five (35) days from the date of acceptance of the work, or as prescribed by law, provided however, that there will be a continued retention of the necessary securities to cover 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.

ADD:

9-3.2.1 Application for Progress Payment. Thirty (30) days after presentation of undisputed and properly submitted Application for Payment, the amount will become due and when due will be paid by the City to the Contractor.

Any payment request that is disputed or determined to be improper shall be returned to the Contractor not later than seven (7) days after receipt accompanied by documentation describing the reason(s) why the payment request is not proper.

Any progress payment not made within thirty (30) days of an undisputed and properly submitted payment request will require the City to pay interest as provided by Public Contract Code, Section 20104.50.

9-3.2.3 Progress Payments. ADD the following:

The lump sum price for construction BMP's shall cover all the work involved in furnishing, placing, maintaining, removing and disposing of waste and related to water pollution measures as specified and as directed by the Engineer per Section 2-6. Payments for lump sum construction BMP's shall be made on a monthly basis and based on the progress and evaluation of the work at the Engineer's discretion.

Progress payments will be determined by multiplying the total number of linear feet of each of the following operations completed during the payment period, by the corresponding percentage given below, and the unit price bid for the particular main(s) or drain(s). The progress payment may also include payment for items in the bid proposal, other than mains, which have been installed complete during the payment period.

<u>OPERATION</u>	<u>PERCENTAGE</u>
<u>WATER:</u>	
Trench Excavation, Pipe in Place, Backfill and Cleanup.	80%
Hydrostatic Testing, Bac-t Testing. *Pavement Restoration and Final Cleanup	20%
<u>SEWER:</u>	
Trench Excavation, Pipe in Place, Backfill and Cleanup.	80%
Testing (Wayneball and/or Mandrel). *Pavement Restoration and Final Cleanup.	20%

*In asphalt-surfaced streets, fifteen percent (15%) payment will be made for Hydro static testing and Bac-t Testing, Wayneball and Mandrelling (where necessary), for water and sewer respectively, and operational testing for stormdrains, including the concrete trench cap (per SDG-107) and cleanup. Remaining five percent (5%) payment shall be made after completing the asphalt wearing surface and final cleanup.

Trench excavation, pipe in place, backfill, and cleanup of construction debris are to be treated as one operation and must be complete before the first eighty percent (80%) payment will be made.

9-3.4 Mobilization: DELETE in its entirety and SUBSTITUTE the following:

When a bid item is included in the Proposal form for mobilization and subject to the conditions and limitations in the Specifications, the costs of work in advance of, and at the completion of, construction operations and not directly attributable to any specific bid item will be included in the progress estimate. When no such bid item is provided, payment for such costs will be considered in the progress estimate.

9-3.4.1 Description. Mobilization shall consist of labor and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to and from the project site; for establishment of all offices, buildings, storage yards, and other facilities necessary for work on the project, and for all other work and operations which shall be performed prior to beginning work and after completion of work on the various Contract items on the project site.

9-3.4.2 Payment. Payment for mobilization will be made as follows:

- A. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is five percent (5%) or more of the original Contract amount, twenty percent (20%) of the price bid for mobilization or two percent (2%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- B. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is ten percent (10%) or more of the original Contract amount, forty percent (40%) of the price bid for mobilization or four percent (4%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- C. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is twenty percent (20%) or more of the original Contract amount, fifty percent (50%) of the price bid for mobilization or five percent (5%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- D. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is fifty percent (50%) or more of the original Contract amount, seventy percent (70%) of the price bid for mobilization or seven percent (7%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- E. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is seventy percent (70%) or more of the original Contract amount, eighty percent (80%) of the price bid for mobilization or eight percent (8%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.

- F. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is ninety percent (90%) or more of the original Contract amount, ninety percent (90%) of the price bid for mobilization or nine percent (9%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- G. When the monthly partial payment estimate of the amount earned, not including the amount earned for mobilization, bonds, and permits, is one-hundred percent (100%) or more of the original Contract amount, and final cleanup operations have been satisfactorily completed, one-hundred percent (100%) of the price bid for mobilization or ten percent (10%) of the original Contract amount, whichever is the lesser, will be included in said estimate for payment.
- H. The amount, if any, of the price bid for mobilization in excess of ten percent (10%) of the original Contract amount may be included for payment in any partial payment estimate after filing of the Notice of Completion pursuant to Section 6-8.

The adjustment provisions of the Contract pursuant to Section 3-2.2.1, Contract Unit Prices shall not apply to the Contract lump sum item for mobilization. When other Contract items are adjusted as provided in said Section 3-2.2.1, if the costs applicable to such item of work include mobilization costs, such costs will be deemed to have been recovered by the Contractor by payments made for mobilization, and will be excluded for consideration in determining compensation under said Section 3-2.2.1.

ADD:

9-3.5 Bond Payments. The lump sum bid item for bonds shall include full compensation for actual costs of payment and performance bonds. Contractor may submit a request for payment of actual invoiced costs up to the bid amount, but not to exceed two and one-half percent (2-1/2%) of the Contract amount, not less than ten (10) working days after Award of the Contract by the City.

If lump sum bid item for bonds exceeds actual invoiced costs, any such differential amount up to the lump sum bid amount, shall be paid as a part of the final contract payment.

ADD:

9-3.6 Field Orders. A Field Order is a written order by the Engineer to compensate the Contractor for items of work in accordance with Subsection 3-3 "Extra Work," or Subsection 3-4 "Changed Conditions." Field Order items of work may be paid for under this section provided that the accumulative total of Field Orders does not exceed the Field Order Bid Item.

Construction Contract Amount	Max. Amount for Each Field Order
Less than \$100,000	\$2,500
\$100,000 to \$1 million	\$5,000
Over \$1 million to \$5 million	\$10,000
Greater than \$5 million	\$20,000

Payment to the Contractor for Field Order items shall provide full compensation for all equipment, materials, labor, field and home office overhead, mark-ups and profit necessary to complete the work. By executing the Field Order, Contractor agrees that no additional compensation or claims for items of work listed in the Field Order will be allowed.

ADD:

9-4 WAIVER OF CLAIMS.

The acceptance by the Contractor of the final payment of undisputed contract amounts shall release the City, the Engineer, and the Design Consultant, as agent of the City, from all claims and all liability to the Contractor for all things done or furnished in connection with the work, and every act of the City and others relating to or arising out of the work and related to those undisputed amounts. No payment, however, final or otherwise, shall operate to release the Contractor and his sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds and warranties as herein provided.

*** END OF PART 1 ***

**PART 2
CONSTRUCTION OF MATERIALS**

SECTION 200 – ROCK MATERIALS

200-2.4.3 Quality Requirements. REVISE Table 200-2.4.3 (A) for R-value to read “80 Minimum.”

SECTION 201 – CONCRETE, MORTAR, AND RELATED MATERIALS

201-1.1.4 Concrete Specified by Compressive Strength. DELETE last sentence of the first paragraph and SUBSTITUTE the following:

The concrete shall contain not less than 520 pounds of cement per cubic yard for concrete strengths of less than 3250 psi.

SECTION 203 – BITUMINOUS MATERIALS

203-5.4 Mix Design. Second Paragraph, second Sentence, DELETE “2 days” and SUBSTITUTE “4 Working Days.”

SECTION 206 – MISCELLANEOUS METAL ITEMS

ADD:

206-3 GRAY IRON CASTING:

DELETE last and SUBSTITUTE the following:

All ductile and gray iron fittings, valves, and appurtenances directly buried in ground shall be coated per 207.9.2.4.

SECTION 207 – PIPE

207-4.2 Design, Manufacture and Tests. ADD the following:

For pipe size sixteen inches (16”) and larger, minimum cement mortar lining thickness shall be three-quarters of an inch (3/4”) and cement mortar coating thickness shall be one and one-quarter inches (1-1/4”) over reinforcing rod.

Electrical continuity shall be maintained by welding or providing jumper straps all along pipe, fittings and valves per SDW-116.

Minimum radius of any fabricated bend or fitting shall be two and one-half (2-½) times pipe diameter.

ADD:

207-4.4 Corrosivity Test. Refer to section 207.9.4

207-9.2.3 Fittings. ADD the following:

Threaded Flange Ductile-Iron Extension Spools for Above Ground and Vault Installations - The pipe shall be Class 53 minimum and cut to allow for ½ – inch additional length for Flange x Flange and ¼ -inch additional length for Flange x Pipe End.

Machine tapered pipe thread (NPT) shall comply with ANSI B1.20.1 adapted to ductile-iron pipe outside diameters.

The threaded flange shall be dimensioned in accordance with USA Standard Taper Pipe and shall be attached to the machined pipe threads. The threaded flange shall be removed from the pipe and two-part epoxy thread sealant shall be applied to the pipe threads and the flange threads. Coal tar coating shall comply with AWWA C203 and epoxy coating shall comply with AWWA C213. The threaded flange shall be re-attached to the pipe threads and shall be machine tightened. Facing and flange alignment for the threaded joints shall comply with AWWA C115.

The threaded joint and spool assembly shall be hydrostatically tested 300 psi, stamped with the manufacturer's mark indicating length, weight, and customer, and stenciled with "Tested at 300 PSI".

Certification of Compliance with all specifications shall be furnished.

207.9.2.4 Lining and Coating. REVISE last sentence to read:

The outside surfaces of ductile iron pipe and fittings, including valves and appurtenances for buried service shall be coated with one of the following:

- 24 mils minimum dry film thickness (MDFT)) liquid epoxy coating (except Coal Tar) per AWWA C-210.
- 20 mils MDFT Fusion Bonded Epoxy coating per AWWA C-213 and AWWA C-116.
- A cold applied three-part system, 80 mils petroleum Wax Tape coating per AWWA C-217
- 24 mils MDFT 100% solids Polyurethane coating per AWWA C-222.

Prior to coating, the iron surfaces shall be blast cleaned in accordance with the applicable National Association of Pipe Fabricators (NAPF) standard 500-03, "surface preparation standard for ductile iron pipe and fittings receiving special external coatings and/or special internal linings." The entire coated surface shall be inspected with a holiday detector in accordance with National Association of Corrosion Engineers (NACE International) standard RP0188-99, "Discontinuity (Holiday) testing of new protective coatings on conductive substrates."

207-9.2.6 Polyethylene Encasement for External Protection. DELETE its entirety.

ADD:

207-9.4 Corrosivity Test. At the option of City, soil samples shall be collected at spring line of the proposed alignment, and chemically analyzed by qualified laboratory for pH, soluble chlorides and sulfate ions, resistivity, and oxidation-reduction potential based on the test methods:

- pH - ASTM G51
- Soluble Sulfate Ion - ASTM D 516-90
- Soluble Chloride Ion - ASTM D 512-89
- Resistivity - ASTM G57 (dry and wet)
- Oxidation-reduction Potential - ASTM D1498-93

207-10.1 General. ADD the following:

Design and installation of fabricated steel pipe shall conform to AWWA M-11, “Manual of Steel Pipe Design and Installation”, (latest Edition at time of bid), with the following exceptions,

- 1) Steel plates used in the manufacture shall have minimum yield point strength of 33,000 psi and the design stress shall not exceed 16,500 psi.
- 2) For pipe size sixteen inches (16”) and larger, minimum cement mortar lining thickness shall be three-quarters of an inch (3/4”) and cement mortar coating thickness shall be one and one-quarter inches (1-1/4”).
- 3) Electrical continuity shall be maintained by welding or providing jumper straps all along pipe, fittings and valves per SDW -116.
- 4) Minimum radius of any fabricated bend or fitting shall be two and one-half (2-½) times pipe diameter.

ADD:

207-10.4.7 Corrosivity Test - Refer to section 207.9.4

ADD:

207-10.5.3 Corrosivity Test. Refer to section 207.9.4

207-11.2.2 Coupling Bands. Make the following modifications:

- a) First paragraph, third sentence, CHANGE, “... three standard culvert sheet...” TO “one standard culvert sheet...”.
- b) First paragraph, end of fourth sentence, CHANGE, “100mm... (4inches), “ TO “...(8 inches) 200mm.”
- c) First paragraph, end of fifth sentence, DELETE, “ ...without prior written approval of the Engineer.”
- d) Second paragraph, DELETE in its entirety and SUBSTITUTE the following:

Water-tight joints shall be provided by use of approved sealant or gasket materials for all slope drains at grades of twenty percent (20%) or greater. Test for water-tight joints shall conform to the requirements of Subsection 306-1.4.6

207-11.3.3 Fabrication by Continuous Helical Seam. Subparagraph b) Continuous Lock Seam Pipe, Item 3), end of first sentence, ADD the following:

“or protective coating”

207-11.4 Repair of Damaged Galvanizing or Aluminizing. First sentence after word, “flux” ADD a comma and the word “oxidation,”.

207-11.7 Slotted Pipe. Fifth paragraph last sentence, DELETE the words: “64mm (2 ½ inches) or”

207-17.1 General. DELETE in its entirety and SUBSTITUTE the following:

This subsection applies to the requirement for unplasticized polyvinyl chloride (PVC) plastic pipe for gravity flow sewers and house connection sewers. Pipe, fittings, couplings and joints shall be in conformance with the requirements of ASTM D-3033, D-3034 or F-679, except as modified herein. The ASTM Designation, SDR, pipe stiffness and type of joint shall be specified on the plans and/or specifications. When PVC sewer pipe is specified without further qualifications the pipe shall conform to the following requirements:

- 1) Four-inch (4”) thru fifteen-inch (15”) size pipe ASTM D-3034, SDR 35
- 2) Eighteen-inch (18”) thru twenty-seven inch (27”) size pipe ASTM F-679
- 3) Shall conform to SDS-101 and,
- 4) Shall have gasketed joints.

207-20.2 Materials. ADD the following:

CCFRPM pipe shall conform to the minimum pipe stiffness requirements contained in 207-20.5 which is the minimum pipe stiffness value at the end of service life of 50 years, (60 years for Storm Drains).

207-20.7 Pipe Acceptance or Rejection. ADD the following:

For the purpose of these specifications, a lot is defined as 400 feet but no more than 50 sections of pipe, or fraction thereof, of one size and class manufactured on consecutive working days. If the 400 feet, but no more than 50 sections of pipe are not made on consecutive working days, then only those made on consecutive working days shall be considered a lot. If an interruption in manufacturing occurs, the Engineer may permit the pipe made after the interruption to be included in the lot, provided that the interruption lasts less than 7 days and no other pipe is manufactured on that machine in the interim period. A new lot number will be assigned if any change occurs in size or spacing of reinforcing materials, in the mix, or in the curing method.

207-20.8 Installation and Field Inspection. ADD before first paragraph:

Each section of pipe shall be moved or installed using approved non-metallic slings. The slings shall support each pipe section at a minimum of two (2) locations in such a way that the pipe is not damaged by flexure or abrasion. The Contractor shall submit detailed drawings of slings proposed for the handling of the pipe during production, loading, unloading, and installation.

ADD the following at end of Section:

The installation depth of CCFRPM pipe shall be limited to a minimum cover of 5 feet to a maximum of 15 feet including cover, unless a special design is approved by the Engineer.

207-26.2 Fire Hydrants (2006 Regional Supplement). To the third paragraph, DELETE in its entirety and SUBSTITUTE the following:

“Unless otherwise specified, fire hydrants for residential areas shall have one 4 –inch port and one 2 -½ inch port and fire hydrants for commercial and industrial areas shall have two 4-inch ports and one 2-½ inch port.”

ADD:

207-27 APPROVED MATERIALS LIST.

All the material, including pipe, fittings, valves and appurtenances, shall be in accordance with materials listed in the current City of San Diego, Water and Sewer, Approved Materials List. The approved Materials List is available at the Engineering and Capital Projects Department, Water and Sewer Design Division.

Materials not on the list shall be submitted to the Engineer for approval prior to delivery to project site. The decision of the City as to acceptability of any substitute material shall be final.

SECTION 208 – PIPE JOINT TYPES AND MATERIALS

208-2.1 General. DELETE in its entirety and SUBSTITUTE the following:

Joints approved for Vitrified Clay pipe are Type “G” joints for socket and spigot pipe, and Type “D” joints for plain end pipe. The circular sleeve of the Type “D” joint shall be polyurethane or a synthetic rubber with equal or greater resistance to solvency, chemical or biological attack.

SECTION 210 – PAINT AND PROTECTIVE COATINGS

210-1.6.1 General: ADD the following:

All crosswalk lines, limit lines, and pavement legends (except within a bike lane) shall be thermoplastic per section 210-1.6.2, Thermoplastic Paint, State Specifications.

210-2.3.5 Shop-Welded Joints. ADD the following:

Liner for pipes 15-inches or larger in diameter shall be shop-welded by lapping a minimum of ½ inch and fusing the sheets together by high frequency dielectric fusion, or other electric fusion process as approved by the Engineer.

SECTION 211 – SOILS AND AGGREGATE TESTS

211-1.2 Field Density. DELETE in its entirety and SUBSTITUTE the following:

Field density of soil shall be by ASTM Methods D 1556 (Sand Cone), D 2922 (Nuclear Gauge), or California Test Methods 216 (Sand Cone) or 231 (Nuclear Gauge).

The minimum test whole volume shall be 0.10 cubic foot. A test hole six and one-half inches (6-½”) wide (per Figure 1, ASTM D 1557) by five inches (5”) deep equals 0.096 cubic foot. If the layer of soil is less than five inches (5”) deep, then the full depth of the layer shall be tested.

SECTION 212 – LANDSCAPE AND IRRIGATION MATERIALS

212-1.1.2 Class “A” Topsoil. ADD the following:

Any amendments which shall be added to the topsoil to meet the requirements of class “A” as specified in this section shall be uniformly blended through a mixer (pug mill) prior to delivery to the job site.

ADD:

SECTION 216 – DETECTABLE/TACTILE WARNING TILES

216-1 DETECTABLE/TACTILE WARNING TILES.

216-1.1 General. This section includes specification for Stainless Steel Cast In Place Detectable/Tactile Warning Tiles, embedded in an inline dome pattern, on all curb ramps and walking surfaces at the locations and to the dimension shown on the Plans, in accordance with these Special Provisions and the following references:

- 1) Americans with Disabilities Act (Title III Regulations, 28 CFR Part 36 ADA STANDARDS FOR ACCESSIBLE DESIGN, Appendix A, Section 4.29.2 DETECTABLE WARNINGS ON WALKING SURFACES).
- 2) California Code of Regulations (CCR) Title 24, Part 2, Section 205 definition of “Detectable Warning,” Section 1117A.4 and 1127B.5 for “Curb Ramps” and Section 1133B.8.5 for “Detectable Warnings at Hazardous Vehicular Areas.”

216-1.2 Submittals. Submittals shall be per 2-5.3 and also contain manufacturer’s product data for each specified product, including:

- 1) Installer’s Certification
- 2) Installation Instructions
- 3) Cleaning and Protection Specification
- 4) Maintenance Recommendations
- 5) Two (2) tile samples, 18” x 18” minimum size of the kind proposed for use

The name and contact information of the manufacturer of the Cast In Place Detectable/Tactile Warning Surface Tiles used shall be included on the Contract As-Built Drawings.

216-1.2.1 Material Test Reports. Contractor shall submit complete test reports from qualified independent testing laboratories to certify that materials proposed for use are in compliance with requirements of and meet or exceed the properties indicated in Section 216. All test reports shall be current within a 24-month period.

216-1.3 Quality Control. Contractor shall provide Cast In Place Detectable/Tactile Warning Tiles and accessories with a minimum of five (5) years manufacturer's warranty that is transferable to the City from the date of final completion against breakage, fading, chipping, peeling, cracking, deformation, and loosening of tiles. Contractor shall engage an experienced installer certified in writing by tile manufacturer, who has successfully completed tile installations similar in material, design, and extent to that indicated for Project.

216-1.3.1 Delivery, Storage and Handling. Tiles shall be suitably packaged or crated to prevent damage in shipment or handling. Finished surfaces shall be protected by sturdy wrappings to protect tile from concrete residue during installation.

216-1.4 Materials. The color shall be yellow conforming to Federal Standard 595B Table IV, Color No. 33538. Color shall be homogeneous throughout the tile.

- 1) The Cast In Place Detectable/Tactile Warning Surface Tiles shall be stainless steel (16 gauge Type 304L) with an integral micro-texture non-slip surface stamped into the stainless steel plate on the top of the domes and in the field surface between the domes. It shall have an ultra violet stabilized coating. The tile shall incorporate an in-line pattern of truncated domes measuring nominal 0.2" height, 0.9" to 1.4" base diameter, and 0.45" top diameter (or 50% minimum up to 65% maximum of base diameter), spaced center-to-center at 2.35" as measured on a diagonal and 1.6" to 2.4" as measured side by side. For wheelchair and high heel shoe safety, the field area shall consist of an integral non-slip surface (within the stainless steel plate) that measure 0.03 above the adjacent surface.

216-1.5 Manufacturers.

- 1) The City's Approved Material List;
- 2) Advantage Tactile Systems as manufactured by Advantage Tactile Systems, Inc.;
- 3) City approved equal.

*** END OF PART 2 ***

**PART 3
CONSTRUCTION METHODS**

SECTION 301 – TREATED SOIL, SUBGRADE PREPARATION AND PLACEMENT OF BASE MATERIALS

301-1.2 Preparation of Subgrade. After first paragraph, ADD the following:

Subgrade soil shall be tested for expansive potential per ASTM Test Method D4829. If expansive soil is encountered within the roadway improvements and extending beyond the limit of paved sidewalks, curb and gutter or edge of pavement, then one of the following methods shall be used to mitigate the expansive soil:

1. Expansive soil subgrade shall be removed, and replaced with a non-expansive material having an expansion index of less than 20 (ASTM D 4829). The depth of excavation will be based on the Expansive Index of the native soil in accordance with the following table:

Expansive index of native subgrade soil*	Minimum depth of expansive materials to be removed and replaced (in inches) **
0-50	None
51-90	18
91-130	24
Above 130	36

* Based on expansion index test. UBC Table 29-C 1988 edition.

** Removal shall extend beyond edge of sidewalk a horizontal distance equivalent to the minimum depth of removal.

2. “R” value shall be determined on the original soil for pavement design.
3. The project Geotechnical Consultant may submit an optional plan for soil treatment to the Engineer for review and approval.

301-1.7 Payment. Last paragraph, REVISE to read:

If no provision for manhole adjustment or reconstruction is made, payment for such work will be deemed to be included in the other items of work and no additional payment will be made therefore.

301-3.1.5 Cement Application, Mixing and Spreading. DELETE first sentence in its entirety and SUBSTITUTE the following:

Mixing of the soil, cement and water shall be accomplished by the central plant-mixed method only.

301-3.1.8 Placing, Compacting, and Finishing. ADD the following:

Vibratory rollers shall not be used for finish rolling of cement treated base.

SECTION 302 – ROADWAY SURFACING

302-5.10 Seal Coat (2006 Regional Supplement). ADD the following paragraph:

For trench restoration work in accordance with City Standard Drawings SDG-107, the asphalt concrete mixture shall be Class “F” and no seal coat or sand shall be applied.

SECTION 303 – CONCRETE AND MASONRY CONSTRUCTION

303-1.3 Forms. Eleventh paragraph, DELETE in its entirety and SUBSTITUTE the following:

Exterior forms are required for all structures unless otherwise specified on the Plans or in the specifications.

303-2.4 Tests. After the sixth paragraph; ADD the following:

For brow and/or terrace ditches only, the minimum strength of test specimens shall be:

7 day (cylinders)	1500 psi
14 day (cores)	1750 psi
28 day	2500 psi

303-5.1.1 General.

After the first paragraph, ADD the following:

Monolithic curb, gutter and sidewalk shall not be allowed.

ADD:

303-5.1.4.3 Protection and Preservation of Improvements. Existing improvements, adjacent property, utility and other facilities, and trees and plants that are not to be removed shall be protected from injury or damage in accordance with Section 7-9.

In the event that any Contractor Date Stamps/Impressions are located on existing sidewalks, pedestrian ramps or curbs which are scheduled to be removed, the disposition and placement of those stamps/impressions shall be per SDG-115. For those stamps/impressions to be relocated, the Contractor shall carefully remove and relocate the existing contractor date stamp/impression, and street name stamps outside the pedestrian travel way to the parkway area/face of sidewalk, as shown on standard drawing SDG-115. The stamp’s position shall be such that it can be read from the street and as close as practical to the stamp’s original location. If it is determined that the stamp/impression can not be relocated and the Plans designate the stamp/impression to be removed, the contractor shall saw cut full depth at a minimum distance of two (2) inches from the edge of the stamp, carefully remove, bag, label, and set it aside on site in a location designated by the Engineer for pickup by others. Additionally, the Contractor shall stamp, in concrete, the current contractor’s name and date. The Contractor is to follow the same procedure if, during construction operations, and contractor date stamp as designated on the Plans for relocation is broken or is in a condition such that it can not be relocated as determined by the Engineer.

If any existing curb and/or gutter or sidewalk are replaced, the Contractor shall duplicate the surrounding score pattern and color as shown on the Plans. The score pattern and color shall be approved in advance by the Engineer.

303-5.5.3 Walk. ADD the following:

If the continuous sidewalk length equals a block or more, the name of the contractor, together with the year in which the improvements is constructed, shall be stamped therein to a depth of 6mm (1/4 inch) in letters not less than 19mm (3/4 inch) high, at a location determined by the Engineer.

303-5.10.1.2 Installation. Tile shall be installed per manufacturer's specifications. Tile shall be oriented such that the rows of detectable surface domes are parallel with the direction of the ramp. When multiple tiles regardless of size are used, the domes shall be aligned between the tiles and throughout the entire detectable surface installation. The edge of the tile(s) nearest the street shall be between 6" and 8" from the gutter flowline. Trimming of tiles may be required to achieve required distance. Contractor shall trim and refinish edges of trimmed tiles per manufacturer's recommendations.

303-5.10.1.3 Cleaning and Protecting. Contractor shall clean and protect tiles against damage during construction period to comply with Cast In Place Detectable/Tactile Warning Surface Tiles manufacturer's specification.

After the installation of the Cast In Place Detectable/Tactile Warning Surface Tiles, the surface of the tiles shall be kept free of any debris, concrete, and sealant and shall be cleaned according to the manufacturer's recommendation.

303-5.10.2 Preparation. Environmental Conditions and Protection: Maintain minimum temperature of 40°F in spaces to receive Cast In Place Detectable/Tactile Warning Surface Tiles for at least 24 hours prior to installation, during installation, and for not less than 24 hours after installation.

- 1) The use of water for work, cleaning or dust control, etc. shall be contained and controlled and shall not be allowed to come into contact with the general public. Provide barricades or screens to protect the general public. Provide City approved temporary curb ramps appropriately located for pedestrian flow and safety and proper street drainage.

303-5.10.3 Payment. Payment for Cast In Place Detectable/Tactile Warning Surface Tiles, as specified in Sections 216 and 303, shall be included in the price bid for Curb Ramp(s).

303-5.11 Curb Ramp Installation.

303-5.11.1 General.

- 1) To allow for proper drainage, the slope of the landing to the street shall not be less than 1.0%.

- 2) The slope of the ramp shall not exceed 1 unit vertical to 12 units horizontal or 8.33%.
- 3) The slope of the sides/flares shall not exceed 1 unit vertical to 10 units horizontal or 10.0%.

303-5.11.2 Site Visit. Prior to Bid, the Contractor shall evaluate the project site to determine existing conditions and actual limits of work to assure the installation of compliant curb ramp(s). If the condition of the street and sidewalk is such that the existing slopes do not allow the installation of the required curb ramp and side/flare slopes then the Contractor may extend the construction of the slope up to a maximum length of 15'-0" (linear feet) to catch the required slope even if the required slope is not achieved. Close coordination with the designated Engineer is required at these conditions prior to any demolition of the street and sidewalk and prior to the installation of the curb ramp.

303-5.11.3 Payment. All cost shall be included in the price bid for the Curb Ramp(s).

303-6.1 General. DELETE in its entirety and SUBSTITUTE with the following:

Stamped concrete pavement shall be constructed in accordance with the following conditions:

- 1) Prior to construction, a test section at least five feet by five feet (5' x 5') shall be approved of the test section, it will be designated as the standard for that particular pattern on the subject project. Approval shall be by inspection as determined by the City's Materials Testing Laboratory. In case of dispute, testing may be required by either ANSI/ASTM E-274 or California Test Method No. 342, with a minimum acceptance value of 0.35 for both tests.
- 2) Visual inspection of all work shall be performed to determine that surface texture is as rough as the approved test section and the surface flatness is as flat as the approved test section.
- 3) In the event of rejection of a completed pavement area, the Contractor shall have the opportunity to rework the rejected area to meet requirements.
- 4) Concrete color shall have prior approval by Engineer.
- 5) Color shall be integrated throughout the entire monolithic pavement section.
- 6) All coloring and curing compounds used in the work shall be from the same manufacturer and batch lot.
- 7) Color Conditioned Admixture or Pure Mineral Spirits shall be added to the concrete in accordance with approved manufacturers printed instructions. No calcium chloride or other admixtures shall be added to the concrete.

- 8) The thickness of the concrete paving shall be increased by one-half inch (1/2") over that which is required for Schedule "J" paving (SDG-113).
- 9) The pavement section shall be Portland cement concrete, Class 560-C-3250, placed in conformance with Subsection 302-6.
- 10) A full structural Portland cement concrete pavement section shall be provided below the stamped concrete for the support of the stamped concrete (the PCC shall be a monolithic pour of the base and surface – no cold joint permitted).
- 11) The final finishing for textured, stamped or colored concrete paving shall be in accordance with Section 302-6.4.4, subject to the following conditions:
 - a) Stamping will be performed before the initial set of the concrete. No water
 - b) A flat surface shall be maintained (no rounding).
 - c) Limited to a running bond pattern.
 - d) One quarter inch (1/4") wide maximum groove – one quarter inch (1/4") deep maximum imprint.
 - e) Portland cement concrete shall no be poured in air temperature exceeding eighty-five degrees Fahrenheit (85° F.).
 - f) A very heavy broom finish, perpendicular to the traveled way, shall be used.
 - g) No wax curing or wax sealing is permitted.

SECTION 304 – METAL FABRICATION AND CONSTRUCTION

ADD:

304-5 STREET NAME SIGN.

304-5.1 General. Materials for street name signs shall conform to the requirements of Subsection 206-7.

304-5.2 Installation. Street name signs shall be installed at the locations shown on the Plans. Installation of the street name signs shall be in conformance with Standard Drawing SDM-102.

304-5.3 Measurement and Payment. Street name signs will be paid for at the contract price, complete, including footing, post, sign and all required hardware.

SECTION 306 – UNDERGROUND CONDUIT CONSTRUCTION

306-1.1.2 Maximum Length of Open Trench. Third paragraph, ADD the following:

If compliance is not achieved promptly, the Engineer may order City Forces to restore non-complying portions of the trench after written notice to the Contractor. If City Forces are used, the cost, at premium overtime rates with overhead charges applied to labor, equipment, and material costs, shall be paid to the City upon demand or shall be withheld from any monies due the Contractor.

306-1.2.1 Bedding. DELETE the seventh paragraph in its entirety and SUBSTITUTE the following:

All sanitary sewer pipes shall be bedded in three-eighths inch (3/8") crushed rock (ref. 200-1.2) and in conformance with Standard Drawings SDS-110, Type "C" and SDS-100.

All water pipes, including steel, shall be bedded in accordance with Standard Drawings WP-02 and SDW-100. The bedding material shall either be sand, crushed aggregate or native free-draining granular material. One hundred percent (100%) of the bedding material shall pass the no. 4 sieve, shall have a sand equivalent of not less than fifty (50) and an expansion when saturated with water of not more than 0.5 of one percent.

All sanitary sewer and water pipe bedding shall have a pH with the range of 6.0 or greater, a resistivity of 2,000 ohm-cm. or greater, a soluble sulfate content of 500 ppm or less, and a soluble chloride content of 200 ppm or less. The analytical methods described in California Test 417 and 422 shall be used to measure soluble sulfates and soluble chlorides, respectively.

306-1.2.2 Pipe Laying. ADD the following:

Where applicable, in domestic water projects, all valves shall be flanged to crosses and tees.

306-1.2.12 Field Inspection for Plastic Pipe and Fittings. to the Third Paragraph, DELETE the first sentence and SUBSTITUTE the following:

Deflection tests shall be performed not sooner than 30 days after completion of placement and densification of backfill and prior to the placing of permanent pavement.

306-1.3.3 Jetted Backfill. DELETE subsection in its entirety and SUBSTITUTE the following:

All backfill material to be densified by water shall be jetted and shall have a minimum sand equivalent of thirty (30). Jetting shall be accomplished by the use of a jet pipe to which a hose is attached, carrying a continuous supply of water under pressure. The backfill shall be jetted in accordance with the following requirements:

- 1) The jet pipe shall consist of a minimum one and one-half inch (1-1/2") diameter pipe to which a minimum two-inch (2") diameter hose is attached at the upper end. The jet shall be of sufficient length to project to within two feet (2') of the bottom of the lift being densified.
- 2) The Contractor shall jet to within two feet (2') of the bottom of the lift and apply water in a manner, quantity and at a rate sufficient to thoroughly saturate the thickness of the lift being densified. The jet pipe shall not be moved until the backfill has collapsed and the water has been forced to the surface.
- 3) Backfill material shall be placed and consolidated in layers not exceeding six feet (6') in thickness.

- 4) The jetting shall be performed without softening the embankment and in a manner that excess water will not be impounded.
- 5) The jetting methods shall be supplemented by the use of vibratory or other consolidation equipment as necessary to obtain the minimum specified relative compaction.
- 6) The upper three feet (3') below finished subgrade shall be mechanically compacted in street areas.
- 7) The Contractor shall make its own determination that jetting will not result in damage and any resulting damage shall be repaired at the Contractor's expense.

306-1.3.4 Backfilling Narrow Trenches. ADD the following:

Trench backfill shall be densified to a minimum ninety percent (90%) relative compaction. The final foot shall be densified to a minimum 95% relative compaction except in unimproved areas.

306-1.4.5 Water Pressure Test. ADD the following:

Testing of the completed pipeline shall be performed in sections between test bulkheads after all anchors and appurtenances have been installed, and backfilling completed. The Contractor shall install the test bulkheads at locations approved by the Engineer.

Test pressure at the lowest elevation shall be one hundred and fifty percent (150%) of pipe pressure classification and no less than one hundred percent (100%) of pipe pressure classification at the highest elevation.

Side outlets valves to be furnished with blind flanges shall be tested uncovered to allow visual inspection for valve leakage during the required field hydrostatic test.

An Optional Field Hydrostatic Test may be permitted by the Engineer. The duration of the test and the maximum leakage permitted shall be as stated below:

Duration: Pumping Discontinued 1 hours

Leakage: The Contractor shall provide accurate means for measuring the quantity of water lost. To be acceptable, the rate of loss of water shall not exceed fifteen gallons per inch diameter, per mile of pipeline, per 24- hours.

In the event that the rate of loss of water during either test method exceeds the acceptable rate, the Contractor shall locate the leaks and perform the required repairs. Regardless of the outcome of the test, all detectable leaks shall be repaired by the Contractor at his own expense. Additional test shall be performed until a satisfactory test has been completed. The connections to existing pipelines shall be tested at line pressure after refilling the existing pipelines. The Contractor shall repair all leaks in the connections which occur as a result of these operations.

No leakage is allowed for steel (flanged or welded) and ductile iron (flanged) pipe.

306-1.4.8.1 General Requirements (2006 Regional Supplement). to Subparagraph 2), 3), and 6), REVISE to read:

- 2) Videotapes shall be high quality COLOR in VHS format and recorded in either SP or LP modes. Recordings made in SLP or EP modes are not acceptable. Any out-of-focus video recording or portions thereof, shall be cause for rejection of the video recording and will necessitate re-televising.
- 3) Engineer shall be notified a minimum of two (2) working days in advance of televising. The entire televised inspection process shall be done in the presence of the Engineer.
- 6) For underground sewer or storm drain conduit installations, the maximum operational tolerance for sag shall be one-half inch (1/2"). When televised inspection is used to check for sag, a calibrated one-quarter (1/4") diameter steel bar, mounted in front of the camera, shall be used to measure the depth of a sag.

At the end of subsection, ADD the following:

Work shall be covered per 306-1.4.8.5.

ADD:

306-1.4.9 Balling Sewers. Prior to acceptance by Engineer, the Contractor shall prove all new sewer mains are clear of obstructions. The Engineer shall require the Contractor to Wayne ball the sewer main in their presence.

306-1.5.1 Temporary Resurfacing: ADD the following:

Temporary trench resurfacing and subgrade shall be compacted with one and half (1 1/2) ton roller. Trench plating shall not be allowed for more than 24 hours at any location.

All costs for Temporary Resurfacing shall be included in the unit price bid for Temporary Resurfacing and no additional payment shall be made.

306-1.5.2 Permanent Resurfacing. DELETE in its entirety and SUBSTITUTE the following:

All surface improvements damaged, displaced or removed as a result of the Contractor's operation shall be reconstructed by the Contractor according to City of San Diego Standard Drawings SDG-107 and SDG-108.

Subgrade for trench resurfacing shall conform to Section 301-1 and the pavement reconstruction shall comply with the applicable provisions of Section 302.

A paving machine or spreader box shall be used to place the Class "F" asphalt concrete wearing surface, followed immediately by a roller. Resurfacing shall be completed within a maximum of thirty (30) days after traffic is restored.

306-4.1 General. REVISE Item two (2) to read:

- 2) Where soils encountered are not capable of standing unsupported from the bottom of trench to the top of the trench, or three feet (3') above the top of pipe, whichever is greater, without any sloughing, and where soils are saturated or contain water quantities or other conditions harmful to the concrete, the Contractor shall install an alternate pipe as directed by the Engineer. The substitution of alternate pipe shall be at no additional expense to the Agency.

ADD:

306-4.1.1 Inspection. On all private contract work the Contractor shall not construct CIPCP without the presence of a City provided Registered Civil Engineer special inspector of case-in-place concrete pipe experienced in the manufacture and placement of CIPCP, for continuous inspection of the construction of the pipe. The inspection shall be certified in writing and signed by the Registered Civil Engineer. The certification is to be done on a daily basis of operation and shall include, as a minimum, the following:

- 1) Confirm that a California Registered Civil Engineer who qualifies as a Soils Engineer or Geotechnical Engineer has determined and verified, in writing, the following:
 - a) A minimum of ninety percent (90%) relative compaction exists in the pipe support area of the trench.
 - b) Integrity of the trench bottom and sides is sufficient to provide necessary support to the CIPCP, as required by Section 306-4.1.
- 2) Report on concrete mix design used, method of placing transit mix concrete, including drum revolution counts, time from mix to placement and slump as placed.
- 3) Report on visual appearance of the pipe as poured for smoothness, rock pockets, if any alignment and grade.
- 4) Report on curing method.
- 5) Report on method and timing of backfill.
- 6) Review of concrete test results and adequacy of the finished product.

306-4.4.7 Curing. ADD the following:

At no time will drainage be allowed within the pipe during the curing period.

306-4.4.8 Repairing. At the beginning of the section, ADD the following:

The Engineer shall be the sole judge as to the reparability of deficiencies.

306-4.4.9 Rejection. At the beginning of the section, ADD the following:

The Engineer shall be the sole judge as to whether or not the pipe shall be rejected.

306-4.5 Backfill. ADD the following:

Maximum height of cover over top of pipe shall not exceed fifteen feet (15’).

SECTION 307 – STREET LIGHTING AND TRAFFIC SIGNALS

307-2.7 Bonding and Grounding. ADD the following:

On fiberglass or wood poles, all metallic equipment mounted less than eight feet (8’) above ground surface shall be grounded. For bonding purposes of this metallic equipment, a No. 8 bare copper wire, or colored copper wire coded to Code requirements, shall be run continuously to the service point ground rod, or a ground rod at the base of the fiberglass or wood pole.

SECTION 308 – LANDSCAPE AND IRRIGATION INSTALLATION

308-6 MAINTENANCE AND PLANT ESTABLISHMENT.

To the fifth paragraph, CHANGE “30 calendar days” to read “90 calendar days”.

SECTION 310 - PAINTING

310-5.6.1 General. Last paragraph, REVISE as follows:

DELETE second sentence.

At the end of paragraph, ADD the following:

The Contractor shall within one (1) working day or as directed by the Engineer, remove by wet sandblasting all existing or temporary traffic markings that may confuse the public and afterwards seal and sand the abraded area. Additionally, all construction related markouts, including utility markouts, shall be removed upon completion of the job. Unless otherwise specified, payment for sandblasting, sand and seal shall be included in other items of work and no additional payment will be made therefor.

***** END OF City Supplement *****