



**CITY OF CARLSBAD
CONTRACT DOCUMENTS**

FOR:

Stagecoach Community Park Community Gardens

Project No. 4611

PWS24-2413PKS

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SECTION 1

00 11 10 NOTICE INVITING BIDS

1. RECEIPT OF BIDS.

The City of Carlsbad (“Agency”) will accept Bids via electronic format via the City of Carlsbad Electronic Bidding Site up to and no later than **May 29, 2024 at 11 a.m.** through the online bidding portal ([Contracting & Purchasing | Carlsbad, CA \(carlsbadca.gov\)](https://carlsbadca.gov/contracting-purchasing)) for the construction of the Work entitled:

Stagecoach Community Park Community Gardens

PWS24-2413PKS

Project No. 4611

2. DESCRIPTION OF WORK.

The Work includes the provision of all equipment, labor, materials, tools, services, transportation, permits, utilities, and all other items necessary to complete the construction of the following, as specified and shown in the Construction Documents: The City desires to construct a new community garden at Stagecoach Community Park. This new garden will include 35 raised garden beds decorative fencing, retaining wall, paving, shade sail, picnic table, water fountain, trash/recycling receptacles, two benches, compost bins, tool storage chest, informational kiosk, two pedestrian gates, service gate and irrigation along with other site amenities as detailed in the contract documents. The Work Site is located in the City of Carlsbad, in the County of San Diego, California.

3. COMPLETION OF WORK.

The Contract Time is established as one hundred and twenty days (120) working days. The Contract Time shall begin seven (7) calendar Days from the date of receipt of the Notice to Proceed. The Engineers’ estimate for this Project is \$435,680.00

4. OPENING AND AWARD OF BIDS.

Agency shall consider awarding the Contract for the Project to the lowest, responsive, responsible Bidder as determined by the Agency from the base Bid alone. The Agency has the right to reject any or all Bids or to waive any irregularities or informalities in any Bids or in the Bidding process.

5. PERIOD FOR AWARD.

A period of ninety (90) Calendar Days from the time of Bid opening may be required to award the Contract. No Bidder may withdraw its Bid or Bid Guarantee during this period. Bidders shall assume full responsibility for their Bid Price during this period and shall make certain that such delay does not restrict the Bid Guarantee.

6. BIDDER QUALIFICATIONS.

Bidders shall be licensed Contractors pursuant to Business and Professions Code Sections 7000 *et seq.* under the classification of B: General Building Contractor or C-27 Landscaping Contractor as of the date of submittal of the Bid Documents and shall maintain such license until final acceptance of the Work. Additional qualifications are included in the Contract Documents.

7. PRE-BID CONFERENCE.

The Agency will have a mandatory Pre-Bid Conference at the project site (address listed below) **on May 7, 2024, at 10 a.m.**

Address: **3420 Camino De Los Cochese, Carlsbad, CA 92009.**

Representatives of the Agency and consulting engineers, if any, will be present. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing, and shall be sent to all Bidders present at the Pre-Bid Conference and be posted on the online bidding portal. Bids will not be accepted from any bidder who did not attend a mandatory Pre-Bid Conference.

8. OBTAINING CONTRACT DOCUMENTS.

Bidders may obtain a copy of the Contract Documents from Agency's website ([Contracting & Purchasing | Carlsbad, CA \(carlsbadca.gov\)](https://www.carlsbadca.gov/contracting-purchasing)). To the extent required by Public Contract Code Section 20103.7, upon request from a Contractor plan room service, the Agency shall provide an electronic copy of the Contract Documents at no charge to the Contractor plan room. It is the responsibility of each prospective Bidder to download and print all Bid Documents for review and to verify the completeness of Bid Documents before submitting a Bid. All Addenda will be posted on the online bidding portal. It is the responsibility of each prospective Bidder to check the online bidding portal on a daily basis through the close of the bidding period for any applicable Addenda. The Agency does not assume any liability or responsibility for any defective or incomplete copying, excerpting, scanning, faxing, downloading or printing of the Bid Documents. Information on the online bidding portal may change without notice to prospective Bidders. The Contract Documents shall supersede any information posted or transmitted by the online bidding portal. No time extensions or other consideration will be given for non-receipt or other circumstance associated with the review or acquisition of Contract Documents. Bids must be submitted on the Agency's Bid Forms in the Contract Documents.

9. BID GUARANTEE AND BONDS.

Each Bid shall be accompanied by cash, a certified or cashier's check or Bid Bond secured from a surety company satisfactory to the Agency, the amount of which shall not be less than 10% of the submitted Total Bid Price, made payable to the Agency as bid security. The bid security shall be provided as a guarantee that within 10 Working Days after the Agency provides the successful bidder the Notice of Award, the successful Bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful Bidder fails to comply within these 10 Working Days. No interest will be paid on funds deposited with the Agency.

All Bidders must upload Bidder's Bond to the online bidding portal. The original Bid Bond for the 3 apparent low Bidders must be submitted to the City within 2 Business Days of Bid opening. The successful Bidder will be required to furnish a Faithful Performance Bond and a Labor and Material Bond each in an amount equal to 100% of the Contract Price. Each bond shall be in the forms set forth in the Contract Documents, shall be secured from a surety company that meets all State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and that is a California admitted surety insurer. Pursuant to Public Contract Code Section 22300, the successful Bidder may substitute certain securities for funds withheld by Agency to ensure its performance under the Contract.

10. PREVAILING WAGE RATES AND LABOR COMPLIANCE.

This Project is subject to prevailing wages and labor compliance per the Labor Code. To this end, Bidder shall sign and submit with its Bid the California Department of Industrial Relations (DIR) Public Works Contractor Registration Certification on the form 00 45 00 provided. Failure to submit this form may render the bid non-responsive. In addition, each Bidder shall provide the registration number for each listed Subcontractor in the space provided in the Proposed SubContractors form. In bidding this Project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this Contract and applicable law in its Bid. A copy of the prevailing wage rates may be obtained via the internet at: www.dir.ca.gov/dlsr/.

11. PROJECT ADMINISTRATION/QUESTIONS.

Requests for Information (RFI) or interpretations of Bid Documents during the bid period shall be submitted via Online Q&A in the online bidding portal.

The cutoff date and time to submit questions or substitution request regarding this Project via Online Q&A in the online bidding portal is **May 13, 2024, at 5 p.m.** No questions will be entertained after that date.

The answers to questions submitted during the bidding period will be published in an addendum and provide to those bidding on the Project no later than May 21, 2024.

For further information, see the online bidding portal.

12. CALIFORNIA AIR RESOURCE BOARD.

The California Air Resources Board ("CARB") implemented amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulations ("Regulation") which are effective on January 1, 2024 and apply broadly to all self-propelled off road diesel vehicles 25 horsepower or greater and other forms of equipment used in California. A copy of the Regulation is available at:

<https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-roaddiesel/appa-1.pdf>.

Bidders are required to comply with all CARB and Regulation requirements, including, without limitation, all applicable sections of the Regulation, as codified in Title 13 of the California Code

of Regulations section 2449 *et seq.* throughout the term of the Project. **Bidders must provide, with their Bid, copies of Bidder's and all listed subContractors the most recent, valid Certificate of Reported Compliance ("CRC") issued by CARB.** Failure to provide valid CRCs as required herein may render the Bid non-responsive.

The City of Carlsbad is a Public Works Awarding Body, as defined under Title 13 California Code of Regulations section 2449(c)(46). Accordingly, Bidders must submit, with their Bids, valid Certificates of Reported Compliance ("CRC") for the Bidder's fleet, and for the fleets of any listed subContractors (including any applicable leased equipment or vehicles). Bidders must complete and submit the Fleet Compliance Certification, on the form provided. Failure to provide a CRC for the Bidder, and for all listed subContractors, or failure to complete the Fleet Compliance Certification, may render the **Bid non-responsive.**

13. COMPLIANCE WITH CALIFORNIA AIR RESOURCE BOARD REGULATIONS.

Contractor shall comply, and shall ensure all Subcontractors comply, with all applicable requirements of the most current version of the California Air Resources Board ("CARB") regulations including, without limitation, all applicable terms of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments ("Regulation").

Throughout the Project, and for three (3) years thereafter, Contractor shall make available for inspection and copying any and all documents or information associated with Contractor's and subContractors' fleet including, without limitation, Certificates of Reported Compliance ("CRC"), fuel/refueling records, maintenance records, emissions records, and any other information the Contractor is required to produce, keep or maintain pursuant to the Regulation upon two (2) calendar days' notice from the City of Carlsbad.

Contractor shall be solely liable for any and all costs associated with complying with the Regulation as well as for any and all penalties, fines, damages, or costs associated with any and all violations, or failures to comply with the Regulation. Contractor shall defend, indemnify and hold harmless the City of Carlsbad, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Regulation.

END OF SECTION

00 21 10 INSTRUCTIONS TO BIDDERS

1. SECURING CONTRACT DOCUMENTS.

Bids must be submitted to the Agency on the Bid Forms which are a part of the Contract Documents for the Project. The Contract Documents may be obtained from the Agency's online bidding portal ([Contracting & Purchasing | Carlsbad, CA \(carlsbadca.gov\)](https://carlsbadca.gov/contracting-purchasing)). Prospective bidders are encouraged to communicate with the Agency well in advance of the date and time bids are due to the Agency ("Bid Submission Deadline") to determine the availability of Contract Documents.

The Agency may also make the Contract Documents available for review at one or more plan rooms. Prospective Bidders who choose to review the Contract Documents at a plan room must contact the Agency to obtain the required Contract Documents if they decide to submit a Bid for the Project.

Addenda will be posted on the online bidding portal. Failure to acknowledge all Addenda may make a Bid nonresponsive and ineligible for award of the Contract. Bidders are advised to verify the issuance of all Addenda and receipt of them 1 Working Day prior to bidding. Failure to acknowledge all Addenda may make a Bid nonresponsive and ineligible for award of the Contract.

2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS.

At its own expense and before submitting its Bid, each Bidder shall visit the Site of the proposed Work and fully acquaint itself with the conditions relating to the construction and labor required so that the Bidder may fully understand the Work, including but not limited to, difficulties and restrictions attending the execution of the Work under the Contract. Each Bidder shall carefully examine the Drawings, and shall read the Specifications, Contract Documents, and all other referenced documents. Each Bidder shall also determine the local conditions which may in any way affect the performance of the Work, including local tax structure, Contractors' licensing requirements, availability of required insurance, the prevailing wages and other relevant cost factors. Each Bidder shall also familiarize itself with all federal, state and local laws, ordinances, rules, regulations and codes affecting the performance of the Work, including the cost of permits and licenses required for the Work, and shall make such surveys and investigations, including investigations of subsurface or latent physical conditions at the Site or where Work is to be performed as may be required. Bidders are responsible for consulting the standards referenced in the Contract. The failure or omission of any Bidder to receive or examine any contract documents, forms, instruments, addenda, or other documents, or to visit the Site and acquaint itself with conditions there existing shall in no way relieve any Bidder from any obligation with respect to its Bid or to the Contract and no relief for error or omission will be given except as required under California law. The submission of a Bid shall be taken as conclusive evidence of compliance with this Section.

3. INTERPRETATION OF DRAWINGS AND DOCUMENTS.

Prospective Bidders unclear as to the true meaning of any part of the Drawings, Specifications or other parts of the Contract Documents, or discrepancies in or omissions from the Drawings and Specifications, may promptly submit a written request for information, interpretation,

clarification, or correction (“RFI”) to the Bid Administrator, the Agencies designated representative for soliciting and conducting bids on the Agencies online e-bidding portal. (defined below). The Agency may not respond to RFIs submitted past the Q&A Submission Deadline. The Bidder submitting the RFI is responsible for prompt delivery to the Bid Administrator.

Responses to RFIs will be made only by duly issued written Addenda. The Agency shall not provide verbal responses to RFIs. Copies of written Addenda will be posted on the online bidding portal for each prospective Bidder who has downloaded a set of Contract Documents. The Agency will not be responsible for any other explanation or interpretations of the Drawings, Specifications or other parts of the Contract Documents. If any Prospective Bidder becomes aware of any errors or omissions in any part of the Contract Documents, the Prospective Bidder must promptly notify the Agency of such error or omission.

Before award of the Contract, no addition to, modification of, or interpretation of any provision in the Contract Documents will be given by any agent, employee or Contractor of the Agency except as otherwise specified in these Instructions to Bidders. No bidder may rely on verbal directions given by any agent, employee or Contractor of the Agency except as specified in these Instructions to Bidders.

4. QUESTIONS.

Questions regarding this Project must be submitted through the online e-bidding portal. Questions shall be definite and certain, and shall reference applicable drawing sheets, notes, details or specification sections. The deadline to submit questions is identified in the Notice Inviting Bids. Questions received after the deadline may not be answered. Responses to questions submitted during the bidding period will be published in an Addendum and provided to those bidding on the Project no later than the date specified in the Notice Inviting Bids.

Except for the Agency’s Bid Administrator, no other members of the Agency’s staff or Board should be contacted about this procurement during the bidding process. All inquiries and comments from Prospective Bidders regarding a proposed Bid must be communicated in writing, unless otherwise instructed by the Agency. The Agency may, in its sole discretion, disqualify any Prospective Bidder who engages in any prohibited communications.

5. PRE-BID CONFERENCE.

The Notice Inviting Bids shall state whether a Pre-Bid Conference will be held and, if so, whether attendance is mandatory. Bids will not be accepted from any bidder who did not attend a Mandatory Pre-Bid Conference. The Conference will commence at the specified start time and the Site visit will begin at the conclusion of the Conference. Prospective Bidders who arrive late and who do not sign the “Sign-In” or attendance sheet, may be disqualified from the bidding process.

Representatives of the Agency and its consultants, if any, will be present to the extent possible. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing and shall be sent to all Bidders present at the Pre-Bid Conference.

A Pre-Bid Conference may include a Project Site visit. Personal Protective Equipment (PPE) is required of all Job Walk attendees. Attendees are required to wear closed toe shoes, long pants, no sleeveless shirts, safety glasses (may be prescription with side shields if in process areas), safety vests and hard hats. Only those possessing such attire will be allowed on the Job Site. The Agency will not provide personal protective equipment to Job Walk attendees.

6. ADDENDA.

The Agency may revise the Contract Documents before the Bid Submission Deadline. Revisions, if any, shall be made by written Addenda. All Addenda will be posted on the online bidding portal. All Addenda issued by the Agency shall be acknowledged by the Bidder on the online bidding portal and made part of the Contract Documents. The Bidder shall acknowledge the Addenda before submitting its Bid. Bidders are responsible for the receipt of all Addenda. The Agency may reject a Bid if the Bidder fails to acknowledge all Addenda.

Pursuant to Public Contract Code Section 4104.5, if the Agency issues an Addendum which includes material changes to the Project less than 72 hours before the Bid Submission Deadline, the Agency will extend the Bid Submission Deadline by no less than 72 hours. The Agency may determine, in its sole discretion, whether an Addendum warrants postponement of the Bid Submission Deadline.

7. ALTERNATE BIDS.

If alternate Bid items are called for in the Notice Inviting Bids and the Contract Documents, the time required for completion of the Work for the alternate Bid items is factored into the Contract duration and no additional Contract Time will be awarded. The Agency may elect to include one or more of the alternate Bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each Bidder must ensure that each Bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the Bidder.

If the Agency utilizes alternate Bid items as described above, the Notice Inviting Bids will prescribe predetermined criteria for the Bid package selection or a selection process in which price information and Bidder identities are not revealed to the Agency before the Bid Submission Deadline.

8. COMPLETION OF BID FORMS.

Bids shall only be prepared using the Bid Forms which are included in the Contract Documents. The use of substitute Bid Forms other than legible and correct photocopies of those provided by the Agency are prohibited. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable), and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. Use of black or blue ink, indelible pencil, or a typewriter is required. Deviations from these instructions may result in the Bid being deemed non-responsive.

The following documents must be completed and properly executed including notarization, where indicated, and submitted as a part of the complete Bid Package:

1. Bid Form (00 41 00)
2. Bid Bond (00 43 10) or Bid Security (00 43 20) with check/cash
3. Proposed SubContractors Form (00 43 30)
4. Bidder Information and Experience Form (00 43 40)
5. Non-Collusion Affidavit (00 45 10)
6. Iran Contracting Act Certification (00 45 15)
7. Public Works Contractor Registration Certification (00 45 20)
8. Certificate of Insurance (00 45 25)
9. Statement Regarding Debarment (00 45 30)
10. Disclosure of Discipline Record (00 45 35)
11. Acknowledgement of ALL Addenda on the online bidding portal.
12. Optional Escrow Agreement, as applicable (00 61 30)
13. Appendix A – Fleet Compliance Certification Form

All Bids shall be computed on the basis of the given estimated quantities of work, as indicated in the Bid, multiplied by the unit price as submitted by the Bidder.

When paper copies are submitted, all prices must be written in ink or typewritten. Changes or corrections may be crossed out and typed or written in with ink and must be initialed in ink by a person authorized to sign for the Contractor.

9. GOVERNING GENERAL PROVISIONS.

The Specifications contained in the Agency Supplemental General Provisions (00 73 00) take precedence over the specification language contained in the Standard Specifications for Public Works Construction, “the Greenbook” latest edition and all errata. The Supplemental General Provisions address the unique conditions in the City of Carlsbad that are not addressed in the Greenbook. Therefore, if there is a conflict between the two, the Supplemental Provisions shall control over the Greenbook.

The Greenbook may be purchased at Bidder’s/Contractor’s local technical bookstore, online or directly from the publisher. The Supplemental Provisions are available only for download from the online bidding portal with Contract Documents. The Agency does not provide hard copies.

10. MODIFICATIONS OF BIDS.

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions, or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall not delete, modify, or supplement the printed matter on the Bid Forms, or make substitutions thereon. Oral, telephonic, and electronic modifications will not be considered.

11. BID GUARANTEE.

Each Bid shall be accompanied by: (a) a cashier’s check; or, (b) a certified check made payable to Agency; or, (c) a Bid Bond secured from a surety company satisfactory to the Board, the amount of which shall not be less than 10% of the total bid price, made payable to Agency as bid security.

Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be a California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The bid security shall be provided as a guarantee that within 10 Working Days after the Agency provides the successful Bidder the Notice of Award, the successful Bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security may be declared forfeited if the successful Bidder fails to enter into a contract and provide the necessary bonds and certificates of insurance. Any Bid received that does not comply with these Bid Guarantee instructions may be rejected as non-responsive, and Agency may enter into a contract with the next lowest, responsive, responsible Bidder, or may call for new Bids. No interest shall be paid on funds deposited with the Agency. Copies of Bid Bonds submitted to the Agency shall have the same force and effect as the original.

The Bidder's security of the second and third next lowest responsive Bidders may be withheld until the Contract has been fully executed. The security submitted by all other unsuccessful Bidders shall be returned to them, or deemed void, within 10 Working Days after the Contract is awarded

The proceeds of the Bidder's security may also become property of the Agency if the Bidder withdraws its Bid within 15 Calendar Days after the Bid opening date, unless otherwise required by law, including Public Contract Code Section 5100 *et. seq.*, and notwithstanding the award of the Contract to another Bidder.

The Bidder shall submit Bid Bond (00 43 10) or Bid Security (00 43 20) with properly certified check with the Bid Package.

12. LABOR & MATERIAL BOND AND PERFORMANCE & WARRANTY BOND REQUIREMENTS.

The successful Bidder shall furnish Agency with a Labor and Material Payment Bond and a Performance and Warranty Bond, each in an amount equal to 100% of the Contract price. Each bond shall be secured from a surety company that meets all State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120 and is admitted by the State of California, and whose assets exceed their liabilities in an amount equal to or in excess of the amount of the bond. The Agency shall not accept personal sureties and unregistered surety companies. Each bond shall be accompanied, upon the request of Agency, with all documents required by Code of Civil Procedure Section 995.660 to the extent required by law. All bonding and insurance requirements shall be completed and submitted to Agency within 10 Working Days from the date the Agency provides the successful Bidder with the Notice of Award.

These bonds shall be kept in full force and effect during the course of this Project, and shall extend in full force and effect and be retained by the Agency until they are released as stated in the Contract. The Bonds are to be accompanied by an original, or a certified copy, of the unrevoked appointment, power of attorney, by laws, or other instrument entitling or authorizing the person who executed the bond to do so.

13. SUBSTITUTION OF SECURITY.

The Contract Documents call for monthly progress payments based upon the percentage of the Work completed. The Agency will retain a percentage of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the Agency will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

14. OPTIONAL ESCROW FOR SECURITY DEPOSIT.

Pursuant to applicable provisions of law (i.e., Public Contract Code Section 10263), appropriate securities may be substituted for any obligation required by these instructions or for any monies withheld by the Agency to ensure performance under the Contract. Public Contract Code Section 10263 requires monies or securities to be deposited with the Agency or a state or federally chartered bank in California as the escrow agent. The escrow agent shall maintain insurance to cover negligent acts and omissions of the agent in connection with the handling of retentions under this section in an amount not less than \$100,000 per contract.

15. INSURANCE REQUIREMENTS.

Before commencing the Work, the successful Bidder shall purchase and maintain insurance as set forth in the Agency General Conditions. If the Bid is accepted, and if requested by the Agency, Contractor shall provide Agency or preferred vendor copies of the insurer's most recent annual statement and quarterly statement filed with the Department of Insurance pursuant to Insurance Code Section 900 *et seq.* within 10 Calendar Days of the insurer's receipt of a request to submit the statements.

In accordance with the provisions of Labor Code Section 3700, Contractor shall secure the payment of compensation to its employees. Contractor shall sign and file with the Agency the following certificate before performing the Work under the Contract:

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

The form of such, Certificate of Insurance (00 45 25), shall be submitted as a part of the Bid Package.

Insurance must be placed with insurers that:

- 1) Have a rating in the most recent Best's Key Rating Guide of at least A:-VII, or
- 2) Appear on the List of Approved Surplus Line Insurers, ("LASLI") with a Best's Key Rating Guide of at least A: X.
- 3) Are admitted to conduct the business of insurance in the State of California by the Insurance Commissioner.
- 4) Otherwise comply with all other aspects of City Council Policy No. 70.

Auto policies offered to meet the specification of this Contract must:

- 1) Meet the conditions stated above for all insurance companies.
- 2) Cover any vehicle used in the performance of the Contract, used onsite or offsite, whether owned, non-owned or hired, and whether scheduled or non-scheduled.

Workers' compensation insurance required under this Contract must be offered by a company meeting the above standards with the exception that the Best's rating condition may be waived. The Agency does accept policies issued by the State Compensation Fund meeting the requirement for workers' compensation insurance.

The Contractor shall be required to maintain insurance as specified in the Contract. Any additional cost of the insurance shall be included in the Bid price.

The award of the Contract by the Board is contingent upon the Contractor submitting the required bonds and insurance, as described in the Contract Documents, within 10 Working Days of bid opening. If the Contractor fails to comply with these requirements, the Agency may award the Contract to the second or third lowest Bidder and the bid security of the lowest Bidder may be forfeited.

16. LICENSING REQUIREMENTS.

Pursuant to Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, all Bidders must possess proper licenses for performance of the Contract. SubContractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Business and Professions Code Section 7028.5, the Agency shall consider any Bid submitted by a Contractor not currently licensed in accordance with California law and pursuant to the requirements found in the Contract Documents to be nonresponsive, and the Agency shall reject the Bid. The Agency shall have the right to request, and Bidders shall provide within 10 Calendar Days, evidence satisfactory to the Agency of all valid license(s) currently held by that Bidder and each of the Bidder's SubContractors, before awarding the Contract.

Notwithstanding anything contained in this Contract, if the Work involves federal funds, the Contractor shall be properly licensed by the time the Contract is awarded, pursuant to the provisions of Public Contract Code Section 20103.5.

17. SUBCONTRACTORS.

Bidder shall set forth the name, address of the place of business, and Contractor license number of each SubContractor who will perform work, labor, furnish materials or render services to the bidder on the Contract. This requirement includes each SubContractor licensed by the State of California who, under subcontract to Bidder, specially fabricates and installs a portion of the Work described in the Drawings and Specifications in an amount in excess of one-half of one percent (0.5%) of the total Bid price. Additionally, the Bidder shall indicate the portion of the Work to be done by each SubContractor in accordance with Public Contract Code Section 4104.

Bidder shall submit Proposed SubContractors Form (00 43 30) with the Bid Package.

This form will be used by the Agency to determine the percentage of work that the Bidder proposes to perform. Bidders are cautioned that failure to provide complete and correct information may result in rejection of the Bid as non-responsive. Any Bid that proposes performance of more than 50 percent of the Work by SubContractors or performance by forces other than the Bidder's own organization will be rejected as non-responsive. Specialty items of work that may be so designated on the Proposed SubContractors Form (00 43 30) "Contractor's Bid" will not be included in computing the percentage of work proposed to be performed by the Bidder.

Suppliers of materials from sources outside the limits of Work are not SubContractors. The value of materials and transport of materials from sources outside the limits of Work, as shown on the plans, shall be assigned to the Contractor or the SubContractor, as the case may be, that the Bidder proposes as installer of the materials. The value of material incorporated in any SubContractor-installed Bid item that is supplied by the Bidder shall be included as a part of the Work that the Bidder proposes to be performed by the SubContractor installing the item.

When the Bidder proposes to use a SubContractor to construct or install less than 100 percent of a Bid item, the Bidder shall attach an explanation sheet to the Proposed SubContractor Form (00 43 30). The explanation sheet shall clearly apprise the Agency of the specific facts that show the Bidder proposes to perform no less than fifty percent (50%) of the Work with its own forces.

Determination of the subcontract amounts for purposes of award of the Contract shall be determined by the Board in conformance with the provisions of the Contract Documents. The decision of the Board shall be final.

Contractor is prohibited from performing any Work on this Project with a SubContractor who is ineligible to perform work on a public works project pursuant to Labor Code Section 1771.1 or 1777.7.

Bidders shall make copies of the disclosure forms as may be necessary to provide the required information to SubContractors. The page number and total number of additional form pages shall be entered in the location provided on each type of form so duplicated.

18. BIDDER INFORMATION AND EXPERIENCE FORM.

Each Bidder shall complete the provided questionnaire and shall submit the questionnaire along with its Bid. Failure to provide all information requested within the questionnaire along with the Bid may cause the Bid to be rejected as non-responsive. The Agency may reject any Bid if an investigation of the information submitted does not satisfy the Agency that the Bidder is qualified to properly carry out the terms of the Contract.

The Bidder shall submit Bidder Information and Experience Form (00 43 40) with the Bid Package.

19. NON-COLLUSION AFFIDAVIT.

Bidders on all public works contracts are required to submit an affidavit of non-collusion with their Bid. This form (00 45 10 Non-Collusion Affidavit) is included with the Bid Package and must be signed and dated under penalty of perjury.

20. IRAN CONTRACTING ACT OF 2010.

In accordance with Public Contract Code Section 2200 *et seq.*, the Agency requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the Agency with respect to goods or services of \$1,000,000 or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable.

The form of such Iran Contracting Certificate is included with the Bid Package and must be signed and dated under penalty of perjury.

21. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION.

Pursuant to Labor Code Section 1773, the Agency has obtained the prevailing rate of per diem wages and the prevailing wage rate for holiday and overtime work applicable in San Diego County from the Director of the Department of Industrial Relations for each craft, classification, or type of worker needed to execute this Contract. A copy of these prevailing wage rates may be obtained via the internet at www.dir.ca.gov/dlsr/.

In addition, a copy of the prevailing rate of per diem wages is available at the Agency and shall be made available to interested parties upon request. The successful Bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the Bidder to whom the Contract is awarded, and upon any SubContractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the specified prevailing wage rates to all workers employed by them in the execution of the Contract, employment of apprentices, hours of labor and debarment of Contractors and subContractors.

Pursuant to Labor Code Sections 1725.5 and 1771.1, all Contractors and subContractors that wish to bid on, be listed in a bid, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the Contractor's and subContractors' current registration with the Department of Industrial Relations to perform public work. If awarded the Contract, the Bidder and its SubContractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this Project, it shall be the Bidder's sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under the Contract and applicable law in its Bid.

To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained in the registration certificate. Failure to submit this certificate may render the Bid non-responsive. In addition, each Bidder shall provide the registration number for each listed SubContractor in the space provided in the Proposed SubContractors Form (00 43 30).

22. PREVAILING WAGES.

Pursuant to Labor Code Sections 1720, *et. seq.* and 1770, *et. seq.*, Contractor shall pay prevailing wages for all Work performed under the Contract. The Agency has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which the Work will be performed for each craft or type of worker needed to execute the Contract. These rates are available at the Agency or may be obtained online at <http://www.dir.ca.gov>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

23. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS.

In accordance with the provisions of the Labor Code, Contractors or subContractors may not perform work on a public works project with a subContractor who is ineligible to perform work on a public project pursuant to Labor Code Section 1777.1 or 1777.7. Any contract on a public works project executed between a Contractor and a debarred subContractor is void as a matter of law. A debarred subContractor may not receive any public money for performing work as a subContractor on a public works contract. Any public money that is paid to a debarred subContractor by the Contractor for the Project shall be returned to the Agency. The Contractor shall be responsible for the payment of wages to workers of a debarred SubContractor who has been allowed to work on the Project.

The Agency may disqualify a Contractor or SubContractor from participating in bidding when a Contractor or SubContractor has been debarred by the Agency or another jurisdiction in the State of California as an irresponsible bidder.

24. SIGNING OF BIDS.

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations that the Bidder assumes under the Bid and under any Contract

arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

25. SUBMISSION OF SEALED BIDS.

Once the Bid and supporting documents have been completed and signed as set forth in these Instructions to Bidders, they shall be uploaded, along with other required materials, to the online bidding portal before the deadline for submitting bids.

At the time of Bid submission, whether in the form of a cashier's check, a properly certified check or an approved corporate surety bond payable to the Agency, Bidders must upload an electronic Portable Document Format (PDF) copy of the Bid Guarantee to the online bidding portal. The first 3 apparent low Bidders must provide the Agency with the original Bid Guarantee within 2 Business Days after the Bid opening date.

Failure to submit the electronic version of the Bid Guarantee at time of bid submission shall cause the bid to be rejected and deemed **non-responsive**. Failure to provide the original within 2 business days may deem the bidder **non-responsive**.

Original Bid Bond shall be submitted to:

Public Works Contract Administration
Attention: Janean Hawney, Contract Administrator
1635 Faraday Avenue
Carlsbad, California, 92008

No oral or telephonic Bids will be considered. Pursuant to Public Contract Code Sections 1600 and 1601, only where expressly permitted in these Instructions to Bidders and the Notice Inviting Bids may Bidders submit their Bids via electronic transmission (the online bidding portal). Bids received after the Bid Submission Deadline will not be accepted. Agency may reject any Bid not strictly complying with Agency's designated methods for delivery.

26. OPENING OF BIDS.

Bids submitted on the online bidding portal will be reviewed by the Agency. Once the Bid Submission Deadline has passed, Bidders, proposers, the general public, and Agency staff are able to immediately see the results online. Agency shall consider award of the Contract to the lowest, responsive, responsible Bidder as determined by the Agency consistent with Section 32 below. In case of a discrepancy between the line item entries submitted in the online bidding portal and the Bid Form, the online bidding portal shall prevail. In the event of any discrepancies, written numbers (e.g., fifty, hundred) will govern over numerical numbers (e.g., 50, 100) on the Bid Form.

In the event of any discrepancies, written numbers (e.g., fifty, hundred) will govern over numerical numbers (e.g., 50, 100) on the Price Proposal Form. Also, the sum of all lump sum line items will govern over the "Total Proposed Lump Sum Price" line item. The Agency may reject any or all Bids or waive any irregularities or informalities in any Bids or in the Bidding process.

The Bid and the terms of the Contract Documents constitute an irrevocable offer that shall remain valid and in full force for a period of 90 Calendar Days from the Bid Submission Deadline and such additional time as may be mutually agreed upon by the Agency and the Bidder.

27. WITHDRAWAL OF BID.

Any Bid may be withdrawn via written letter, incurring no penalty, at any time before the scheduled closing time for receipt of Bids. Requests to withdraw Bids shall be worded to not reveal the amount of the original Bid. Withdrawn Bids may be resubmitted until the Bid Submission Deadline, provided that resubmitted Bids are in conformance with these Instructions to Bidders.

Bids may be withdrawn after bid opening only by providing written notice to Agency within five (5) Working Days of the bid opening and in compliance with Public Contract Code Section 5100 *et seq.*, or as otherwise may be allowed with the consent of the Agency.

28. BIDDERS INTERESTED IN MORE THAN ONE BID.

No Bidder shall be allowed to make, file or be interested in more than 1 Bid for the same work unless alternate Bids are specifically called for. If the Notice Inviting Bids provides for alternate Bids, a person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder, is not disqualified from submitting a sub-proposal or quoting prices to other Bidders. No person, firm, corporation, or other entity may submit a sub-proposal to a Bidder, or quote prices of materials to a Bidder, when also submitting a prime Bid on the same Project.

29. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES, AND FEES.

Contractor and its SubContractors performing work under the Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the Work will be located, unless otherwise expressly provided by the Contract Documents.

30. PERMIT AND INSPECTION FEE ALLOWANCE.

Notwithstanding anything contained in these Instructions to Bidders, the Bid Form contains an allowance for the Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency. The allowance is included within the Bid Form to eliminate the need by Bidders to research or estimate the costs of traffic control permits and construction inspection fees before submitting a Bid. The allowance is specifically intended to account for the costs of traffic control permits and construction inspection fees charged by the Agency. No other costs payable by Contractor to the Agency are included within the allowance.

If such cost is not contained or specified in the Bid Form, the Contractor shall include the costs in the other Bid items on the Bid Form.

31. BASIS OF AWARD; BALANCED BID.

The Agency shall award the Contract to the lowest responsible Bidder submitting a responsive Bid. The lowest Bid will be determined on the basis of the total Bid price. In the event of any discrepancies, written numbers (e.g., fifty, hundred) will govern over numerical numbers (e.g., 50, 100) on the Price Proposal Form. Also, the sum of all lump sum line items will govern over the "Total Proposed Lump Sum Price" line item.

The Agency may reject any Bid which, in its opinion when compared to other Bids received or to the Agency's internal estimates, does not accurately reflect the cost to perform the Work. The Agency may reject as non-responsive any Bid which unevenly weights or allocates costs, including but not limited to overhead and profit to 1 or more particular Bid items or otherwise violates Public Contract Code Section 9203.

32. AWARD PROCESS.

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the Board may award the Contract. Once notified by Agency staff, the apparent successful Bidder should begin to prepare the following documents: (1) the Labor and Materials Bond; (2) the Performance and Warranty Bond; and (3) the required insurance certificates and endorsements. Once the Agency notifies the Bidder of the award, the Bidder will have 10 Working Days from the date of this notification to execute the Contract and supply the Agency with all of the required documents and certifications or the Bidder may forfeit the Bid security and the Agency may pursue award of the Contract to the next lowest, responsive, responsible Bidder. Once the Agency receives all properly drafted and executed documents and certifications from the Bidder, the Agency shall issue a Notice to Proceed to that Bidder.

33. EXECUTION OF CONTRACT.

As required in these Instructions to Bidders, the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The Agency may require appropriate evidence that the persons executing the Contract are duly empowered to do so. The Contract and bond forms to be executed by the successful Bidder are included within these Specifications and shall not be detached.

34. BUSINESS LICENSE

The prime Contractor and all SubContractors are required to have and maintain a valid City of Carlsbad Business License for the duration of the Contract.

35. PARTICIPATION OF MINORITY AND WOMEN-OWNED BUSINESSES.

The Agency encourages the participation of minority and women-owned businesses.

36. USE OF RECYCLED MATERIALS

The Agency encourages Bidders, suppliers, manufacturers, fabricators and Contractors to utilize recycled and recyclable materials when available, appropriate and approved by the Agency's Engineer.

37. STATUTORY REFERENCES

All references in these Instructions to Bidders (00 21 10) to any statute, rule or regulation are to the statute, rule or regulation as amended, modified, supplemented or replaced from time to time by the corresponding legislative or regulatory body.

END OF SECTION

00 41 00 BID FORM

NAME OF PROJECT: Stagecoach Community Park Community Gardens

CONTRACT NO.: PWS24-2413PKS

NAME OF BIDDER: _____

AGENCY: City of Carlsbad
1635 Faraday Ave
Carlsbad, CA 92008

The undersigned declares that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all Plans, Specifications, and Addenda, if any, for the above-mentioned Project. The undersigned has acknowledged receipt, understanding, and full consideration of ANY and ALL Addenda to the Contract Documents via the online bidding portal.

We propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project, as described and in strict conformity with the Drawings, and these Specifications for TOTAL BID PRICE.

- Attached is the required Bid Bond (00 43 10) or Bid Security (00 43 20) in the amount of not less than 10% of the Total Bid Price.
- Attached is the completed Proposed SubContractors form (00 43 30).
- Attached is the completed Bidder Information and Experience form (00 45 40)
- Attached is the fully executed Non-collusion Affidavit (00 45 10).
- Attached is the completed Iran Contracting Act Certification form (00 45 15).
- Attached is the completed Public Works Contractor Registration Certification form (00 45 20).
- Attached is the completed Certificate of Insurance form (00 45 25).
- Attached is the Statement of Regarding Debarment form (00 45 30)
- Attached is the Disclosure of Discipline Record (00 45 35)
- Attached is the Optional Escrow Agreement (if applicable) (00 61 30)

1. BID SCHEDULE

Schedule "A" Per General and Technical Specifications, and Plans "S" denotes specialty items for the purpose of subContractor calculations				
Item No.	Item Description	Unit of Measure	Quantity	Unit Price
A-1	Mobilization and Demobilization	LS	1	\$10,000.00
A-2	Curb Removal	LF	160	
A-3	Chain Link Fence Removal	LF	300	
A-4	Asphalt Removal	SF	4,450	
A-5	Sidewalk Removal	SF	600	
A-6	Sawcut	LF	30	
A-7	Concrete Removal	SF	90	
A-8	Sewer Cleanout	EA	1	
A-9	Clear and Grub	SF	1550	
A-10	Cap Isolation Valve	EA	1	
A-11	Hose Bib/Water Valve Removal	LS	1	
A-12	Excavate and Fill	CY	22	
A-13	Import	CY	6	
A-14	Fine Grading	SF	5,560	
A-15	Curb (Height Varies 4" Max)	LF	30	
A-16	Sidewalk	SF	570	
A-17	AC Pavement	SF	30	
A-18	Grind and Overlay	SF	60	
A-19	4" PVC Pipe	LF	30	
A-20	0" Mow Curb	LF	80	
A-21	1" PVC Pipe	LF	100	
A-22	Retaining Wall	SF	600	
A-23	Chain Link Fence (height varies)	LF	70	
A-24	5' Ht Wood Garden Fence	LF	188	
A-25	5' Ht Wood Pedestrian (2 Gates)	EA	2	

A-26	5' Ht Wood Double Vehicular Gate	EA	1	
A-27	Staining for Wood Elements	SF	5,200	
A-28	Decomposed Granite Stabilizer	SF	4,751	
A-29	Pavers	SF	460	
A-30 (S)	Shade Sail Structure (Specialty Item for SubContractor Calculation):	LS	1	\$30,000.00
A-31	Woodwork for Planter Boxes (Full)	EA	33	
A-32	Woodwork for Planter Boxes (ADA)	EA	2	
A-33	Drinking Fountain	EA	1	
A-34	Waste Containers	EA	3	
A-35	Compost Bins	EA	3	
A-36	ADA Picnic Table	EA	1	
A-37	7' Bench	EA	2	
A-38	Horizontal Storage Box	EA	1	
A-39	Information Kiosk	LS	1	
A-40	Irrigation POC	LS	1	
A-41	Irrigation System	SF	1,960	
A-42	SWPPP	LS	1	

The costs for any Work shown or required in the Contract Documents, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the Agency makes no representation that the actual quantities of Work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of Work performed based upon the Unit Price.

2. TOTAL BID PRICE

The TOTAL BID PRICE on Bid Schedule total of Unit Prices:

Total Bid Price in Numbers: _____

Total Bid Price in Written Form: _____

In case of discrepancy between the written price, the numerical price, or the price as submitted via the online bidding portal, the online bidding portal price shall prevail.

The undersigned agrees that this Bid Form constitutes a firm offer to the Agency which cannot be withdrawn for ninety (90) Calendar Days from and after the Bid opening, or until a Contract for the Work is fully executed by the Agency and the lowest responsible Bidder, whichever is later.

The Undersigned has carefully checked all the above figures and understands that the Agency will not be responsible for any error or omission on the part of the Undersigned in preparing this Bid.

3. RECITALS

The successful Bidder agrees to sign the Contract and furnish the necessary bonds and certificates of insurance within 10 Working Days after the Agency issues the Notice of Award to the successful Bidder.

The Undersigned agrees that in case of failure to execute the required Contract with necessary bonds and insurance policies within this time period, the Agency may pursue awarding the Contract to the next lowest responsible Bidder and the Bid Security of the lowest Bidder may be forfeited.

Upon receipt of the signed Contract and other required documents, the Agency will proceed to execute the Contract and issue a purchase order and the Notice to Proceed. The time of completion shall commence on the date of the Notice to Proceed, unless otherwise specified. The undersigned agrees to begin the Work within 10 Working Days of the date of the Notice to Proceed, unless otherwise specified.

The Undersigned is aware of the provisions of Labor Code Section 3700, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and agrees to comply with such provisions before commencing the performance of the Work of this Contract and continue to comply until the Contract is complete.

The Undersigned is aware of the provisions of Labor Code Section 1770 *et seq.* relative to the general prevailing rate of wages for each craft or type of worker needed to execute the Contract and agrees to comply with its provisions.

The Undersigned Bidder declares, under penalty of perjury, that the undersigned is licensed to do business or act in the capaCity of a Contractor within the State of California and that this statement is true and correct and has the legal effect of an affidavit. The following are the Bidder's applicable license number(s), with their expiration date(s) and class of license(s):

If the Bidder is a joint venture, each member of the joint venture must include the required licensing information.

A Bid submitted to the Agency by a Contractor who is not licensed as a Contractor pursuant to the Business and Professions Code shall be considered nonresponsive and shall be rejected by the Agency. In all contracts where federal funds are involved, no Bid submitted shall be invalidated by the failure of the Bidder to be licensed in accordance with California law. However, at the time the Contract is awarded, the Contractor shall be properly licensed.

The Undersigned Bidder represents as follows:

1. That no elected or appointed official, officer, agent, or employee of the Agency is personally interested, directly or indirectly, in this Contract, or the compensation to be paid under it; that no representation, oral or in writing, of the Agency, its officers, agents, or employees has induced Bidder to enter into this Contract, excepting only those contained in this form of Contract and the papers made a part of this Contract by its terms; and
2. That this Bid is made without connection with any person, firm, or corporation making a Bid for the same Work, and is in all respects fair and without collusion or fraud.

Accompanying this Bid is _____ (Cash, Certified Check, Bidder's Bond or Cashier's Check) for 10% of the amount Bid, payable to Agency as Bid Security and which is given as a guarantee that the undersigned will enter into a Contract and provide the necessary bonds and certificates of insurance if awarded the Contract.

Organized under the laws of the State of _____.

- an individual
- a partnership
- a corporation

IF A SOLE OWNER OR SOLE CONTRACTOR SIGN HERE:

I certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made in this Bid are true and correct.

1 Name under which
business is
conducted _____

2 Signature (given and
surname) of
proprietor _____

Printed/Typed Name _____

3 Place of Business
(Full Address: street,
number, City, state,
zip) _____

4 Telephone Number _____

5 Email _____

NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED

IF A PARTNERSHIP, SIGN HERE:

I certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made in this Bid are true and correct.

1 Name under which business is conducted _____

2 Signature (given and surname and role)
(Note: Signature must be made by a general partner) _____

Printed/Typed Name _____

3 Place of Business
(Full Address: street, number, City, state, zip) _____

4 Telephone Number _____

5 Email _____

NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED

IF A CORPORATION, SIGN HERE:

I certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made in this Bid are true and correct.

1 Name under which business is conducted _____

2 Signature (given and surname and Title)
(Note: Signature must be made by a someone who can bind the corporation) _____

Printed/Typed Name _____

3 Place of Business
(Full Address: street, number, City, state, zip) _____

4 Telephone Number _____

5 Email _____

NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED

List below names of president, vice president, CFO, secretary and assistant secretary, if a corporation; if a partnership, list names of all general partners, and managing partners:

END OF SECTION

00 43 10 BID BOND FORM

(Note: This form is not required when other form of Bidder’s Security, e.g. cash, certified check or cashier’s check, accompanies Bid. In that case, use form 00 43 20 Bid Security)

NAME OF PROJECT: Stagecoach Community Park Community Gardens

CONTRACT NO.: PWS24-2413PKS

NAME OF BIDDER: _____

The makers of this bond are, _____ as Principal, and _____, as Surety and are held and firmly bound unto the City of Carlsbad (“Agency”) in the penal sum of 10% OF THE TOTAL BID PRICE of the Principal submitted to the Agency for the Work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying Bid dated _____.

If the Principal does not withdraw its Bid within the time specified in the Contract Documents; and if the Principal provides all required documents to the Agency and is awarded the Contract; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall affect its obligation under this bond, and Surety waives notice of any such changes.

In the event a lawsuit is brought upon this bond by the Agency and judgment is recovered, the Surety shall pay all litigation expenses incurred by the Agency in such suit, including reasonable attorneys’ fees, court costs, expert witness fees and expenses.

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IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this _____ day of _____, 20____, the name and corporate seal of each corporation.

PRINCIPAL:

Executed by SURETY

(Name of Principal)

this _____ day of _____, 20____

By:

SURETY:

(sign here)

(name of Surety)

(Print name here)

(address of Surety)

(Title and Organization of Signatory)

(telephone number of Surety)

By:

(signature of Attorney-in-Fact)

(printed name of Attorney-in-Fact)

Required Attachments:

- Corporate resolution showing current power of attorney.
- Proper execution by PRINCIPAL.
- Proper notarial acknowledgment of execution by SURETY.
- President or vice-president and CFO, secretary or assistant secretary must sign for corporations. If only 1 officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering that officer to bind the corporation.

END OF SECTION

00 43 20 BID SECURITY

(Note: This form is required when cash, certified check or cashier's check, accompanies Bid. If Bid Bond is being provided, use form 00 43 10 Bid Bond)

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

Accompanying this proposal is a Certified / Cashier's check payable to the order of the City of Carlsbad ("Agency"), in the sum of _____ dollars (\$ _____), this amount being 10% of the total amount of the Bid. The proceeds of this check shall become the property of the Agency, provided this proposal shall be accepted by the Agency through action of its legally constituted contracting authorities and the Undersigned shall fail to execute a Contract and furnish the required Performance, Warranty and Payment Bonds and proof of insurance coverage within the stipulated time; otherwise, the check shall be returned to the Undersigned. The proceeds of this check shall also become the property of the Agency if the Undersigned shall withdraw his or her Bid within the period of 15 Calendar Days after the date set for the opening of the Bid, unless otherwise required by law, and notwithstanding the award of the Contract to another Bidder.

BIDDER

Required Attachments:

- Certified Check or Cashier's Check

END OF SECTION

00 43 30 PROPOSED SUBCONTRACTORS FORM

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

In compliance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 *et seq.*), Bidder shall set forth below: (a) the name and the location of the place of business, (b) the California Contractor license number, (c) the DIR public works Contractor registration number, and (d) the portion of the Work which will be done by each SubContractor who will perform work or labor or render service to the Bidder in or about the construction of the Work or improvement to be performed under this Contract in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price. Notwithstanding the foregoing, if the Work involves the construction of streets and highways, then the Bidder shall list each SubContractor who will perform work or labor or render service to the Bidder in or about the Work in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If a Bidder fails to specify a SubContractor or if a Contractor specifies more than one SubContractor for the same portion of Work, then the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of Work and that it shall perform that portion itself. No changes in the SubContractor's listed Work will be made without the prior approval of the Agency.

Attach additional pages as required.

(Signature of Bidder)

Name of SubContractor	Location of Business	CSLB Contractor License No. / Exp Date	DIR Registration Number / Exp. Date	Type of Work to be done by SubContractor	% of Work	Amount of Work by SubContractor in Dollars*

Pursuant to Public Contract Code Section 4104, subdivision (a)(3)(A), receipt of the information preceded by an asterisk (*) may be submitted by the Bidder up to 24 hours after the deadline for submitting bids contained in the "Notice Inviting Bids."

END OF SECTION

00 43 40 BIDDER INFORMATION AND EXPERIENCE FORM

NAME OF PROJECT: Stagecoach Community Park Community Gardens

CONTRACT NO.: PWS24-2413PKS

NAME OF BIDDER: _____

1. INFORMATION ABOUT BIDDER

(Indicate not applicable (“N/A”) where appropriate.)

NOTE: Where Bidder is a joint venture, pages shall be duplicated, and information provided for all parties to the joint venture.

1. Type, if Entity: _____

2. Bidder Address: _____

a. Facsimile Number _____

b. Telephone Number _____

c. Email Address _____

3. How many years has Bidder’s organization been in business as a Contractor? _____

4. How many years has Bidder’s organization been in business under its present name? _____

a. Under what other or former names has Bidder’s organization operated?

5. If Bidder’s organization is a corporation, answer the following:

a. Date of Incorporation:

b. State of Incorporation:

c. President’s Name:

d. Vice-President’s Name(s):

e. Secretary’s Name:

f. Treasurer’s Name:

g. CFO’s Name:

6. If an individual or a partnership, answer the following:

a. Date of Organization: _____

b. Name and address of all partners (state whether general or limited partnership):

7. If other than a corporation or partnership, describe organization and name principals:

8. List other states in which Bidder's organization is legally qualified to do business.

9. What type of work does the Bidder normally perform with its own forces?

10. Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

11. Within the last 5 years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

12. Please list 3 projects where you have been responsible for installation of shade sail systems. Please include narrative description of the scope of work and coordination with other trades such as surveying, foundations, electrical/lighting, drainage, etc." Attach a separate sheet of explanation, if needed:

13. List Trade/Client References: 3 trades (projects over \$100k) and 3 clients (projects over \$400k) attach additional sheet if needed.

	Company Name	Contact Name	Phone Number	Email Address
Trade ≥\$100k				
Trade ≥\$100k				
Trade ≥\$100k				
Client > \$400k				
Client ≥ \$400k				
Client ≥ \$400k				

14. List Bank References (Bank and Branch Address):

15. Name of Bonding Company and Name and Address of Agent:

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2. LIST OF CURRENT PROJECTS (BACKLOG)

[**Duplicate or attach additional pages if needed for listing current projects.**]

Project Name Sub or Prime?	Description of Bidder's Work	Client Name	Completion Date	Cost of Bidder's Work

LIST OF COMPLETED PROJECTS (LAST 3 YEARS)

[**Duplicate or attach additional pages if needed for listing completed projects. **]

Please include only those projects which are similar enough to demonstrate Bidder's ability to perform the required Work.

Project Name Sub or Prime?	Description of Bidder's Work	Client Name	Completion Date	Cost of Bidder's Work

EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE

Personnel:

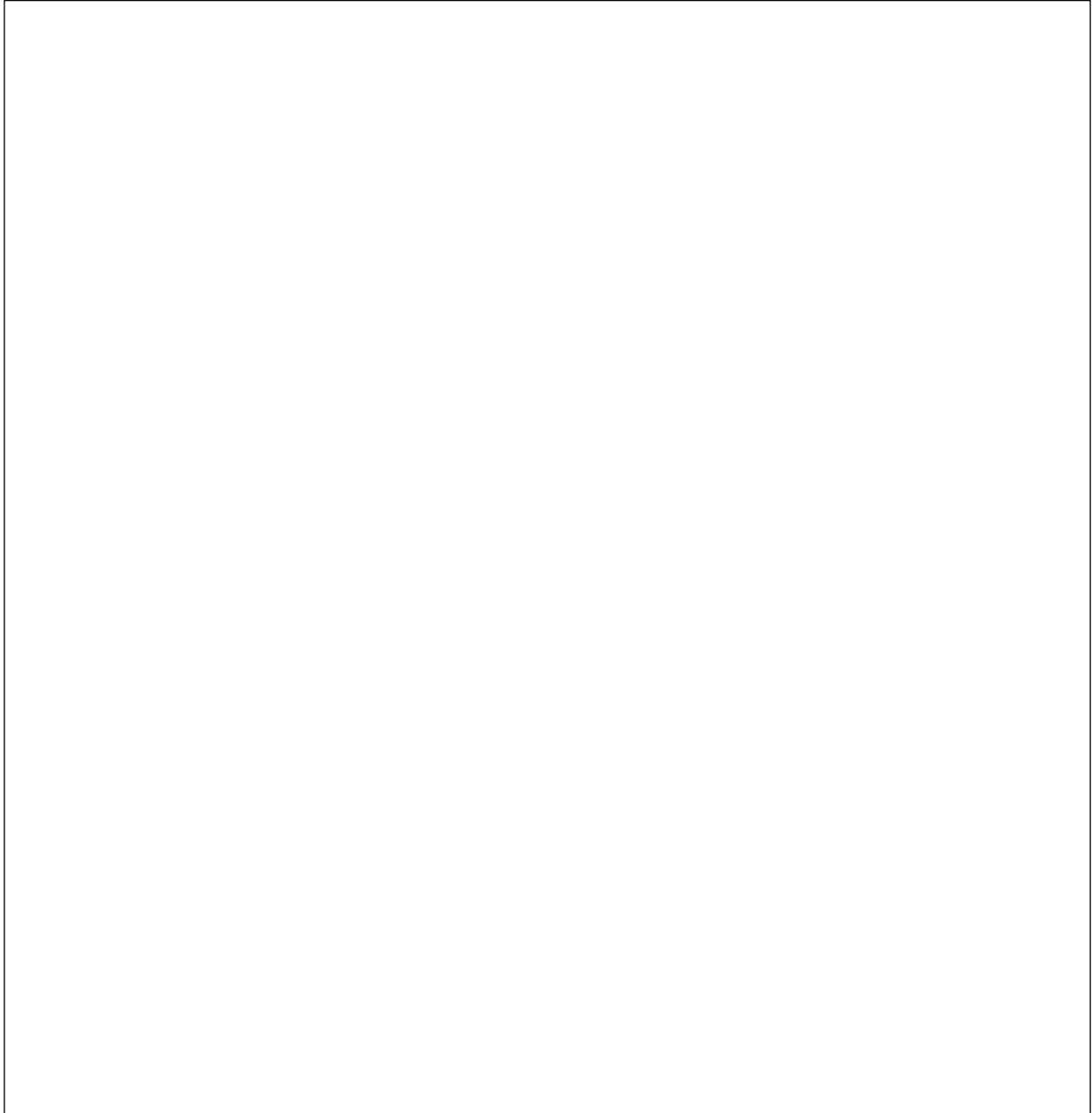
The Bidder shall identify the key personnel to be assigned to this Project in a management, construction supervision or engineering capacity. Add additional pages to identify ALL key personnel. Bidder may submit a 2-page resume of each key personnel mentioned above.

Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the Agency.

Job Title Name % time on this Project	Specialized Education	Years of construction experience relevant to the Project	Summarize the experience

Additional Bidder's Statements:

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:



3. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder: _____

Signature _____

Name _____

Title _____

Date _____

END OF SECTION

00 45 10 NON-COLLUSION AFFIDAVIT

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

Consistent with Public Contract Code Section 7106, the undersigned declares:

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

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

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

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed _____ 20 ____ at _____ [City], _____ [state].

Signature _____

Name _____

Title _____

END OF SECTION

00 45 15 IRAN CONTRACTING ACT CERTIFICATION

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

As required by Public Contract Code Section 2204, the Contractor certifies subject to penalty of perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 et seq.) is true and correct:

The Contractor is not:

- 1) identified on the current list of persons and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
- 2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

The Agency has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the Agency will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

Signature: _____ Date: _____

Name: _____ Title: _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for 3 years.

END OF SECTION

00 45 20 PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

Pursuant to Labor Code Sections 1725.5 and 1771.1, all Contractors and SubContractors that wish to Bid on, be listed in a Bid proposal, or enter into a Contract to perform public work must be registered with the Department of Industrial Relations. See [Public Works \(ca.gov\)](https://www.dir.ca.gov) for additional information.

No Bid will be accepted, nor any Contract entered into without proof of the Contractor's and SubContractors' current registration with the Department of Industrial Relations to perform public work.

Bidder certifies that it is aware of the registration requirements set forth in Labor Code Sections 1725.5 and 1771.1 and is currently registered as a Contractor with the Department of Industrial Relations.

Name of Bidder: _____

DIR Registration Number: _____

DIR Registration Expiration: _____

Bidder further certifies:

1. Bidder shall maintain a current DIR registration for the duration of the Project.
2. Bidder shall include the requirements of Labor Code Sections 1725.5 and 1771.1 in its Contract with SubContractors and ensure that all SubContractors are registered at the time of Bid opening and maintain registration status for the duration of the Project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the Bid is non-responsive.

Signature: _____

Date: _____

Name: _____

Title: _____

END OF SECTION

00 45 25 CERTIFICATE OF INSURANCE

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

Bidder must **attach either** of the following to this page.

- Certificates of insurance showing conformance with the requirements for each of:
 - a. Comprehensive General Liability
 - b. Automobile Liability
 - c. Workers Compensation
 - d. Employer's Liability

- Statement with an insurance carrier's notarized signature stating that the carrier can, and upon payment of fees and/or premiums by the Bidder, will issue to the Bidder the required policies of insurance for Comprehensive General Liability, Automobile Liability, Workers Compensation and Employer's Liability in conformance and the required Certificates of insurance to the Agency.

END OF SECTION

00 45 30 STATEMENT REGARDING DEBARMENT

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

1. Have you or any of your SubContractors ever been debarred as an irresponsible Bidder by another public agency in the State of California?

- YES
- NO

2. If yes, what was/were the name(s) of the public agency(ies) and what was/were the period(s) of debarment(s)? Attach additional copies of this page to accommodate more than 2 debarments.

_____	_____
party debarred	party debarred
_____	_____
public agency	public agency
_____	_____
period of debarment	period of debarment

BY CONTRACTOR:

By: _____
(sign here)

(print name/title)

Page _____ of _____ pages of this Statement Regarding Debarment form

END OF SECTION

00 45 35 DISCLOSURE OF DISCIPLINE RECORD

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against Contractors if a complaint regarding a latent act or omission is filed within 4 years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a Contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

1. Have you ever had your Contractor's license suspended or revoked by the California Contractors' State license Board 2 or more times within an 8-year period?
 - YES
 - NO

2. Has the suspension or revocation of your Contractor's license ever been stayed?
 - YES
 - NO
 - N/A

3. Have any SubContractors that you propose to perform any portion of the Work ever had their Contractor's license suspended or revoked by the California Contractors' State License Board 2 or more times within an 8-year period?
 - YES
 - NO

4. Has the suspension or revocation of the license of any SubContractors that you propose to perform any portion of the Work ever been stayed?
 - YES
 - NO
 - N/A

5. If the answer to either of 1 or 3 above is “yes,” fully identify, in each and every case, the party disciplined, the date of and violation that the disciplinary action pertains to, the nature of the violation and disciplinary action taken.

(If needed attach additional sheets to provide full disclosure.)

6. If the answer to either of 2 or 4 above is “yes,” fully identify, in each and every case, the party whose discipline was stayed, the date of and the violation that the disciplinary action pertains to, the nature of the violation and the condition (if any) upon which the disciplinary action was stayed.

(If needed attach additional sheets to provide full disclosure.)

BY CONTRACTOR:

By: _____
(sign here)

(print name and title)

END OF SECTION

00 52 00 CONTRACT

This Project No. 4611 ("Contract") is made and entered into this _____ day of _____, 2024, by and between the City of Carlsbad, California, a California municipal corporation ("Agency") and _____ ("Contractor"), whose principal _____ place of business is _____.

The parties agree:

1. SCOPE OF WORK.

The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all the Work required in strict compliance with the Contract Documents for the following Project:

NAME OF PROJECT: Stagecoach Community Park Community Gardens

The Contractor and its surety shall be liable to the Agency for any damages arising as a result of the Contractor's failure to comply with the obligation described in this Section 1.

2. TIME OF COMPLETION.

Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the Agency's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within one hundred twenty (120) working days from the commencement date stated in the Notice to Proceed. Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

3. CONTRACT PRICE.

The Agency shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions made in accordance with the Contract Documents, and including all applicable taxes and costs, the sum of _____ Dollars (\$ _____). Payment shall be made as set forth in the General Conditions.

The Engineer will close the estimate of work completed for progress payments on the last working day of each month. The Agency shall withhold retention as required by Public Contract Code Section 9203.

4. LIQUIDATED DAMAGES.

In accordance with Government Code Section 53069.85, it is agreed that the Contractor will pay the Agency the sum set forth in Section 00 73 00 Supplemental General Provisions for each and every Calendar Day of delay beyond the time of completion prescribed in this Contract as Liquidated Damages and not as a penalty or forfeiture. If this sum is not paid, the Contractor agrees the Agency may deduct that amount from any money due or that may become due the

Contractor under the Contract. This Section does not exclude recovery of other damages specified in the Contract Documents.

5. CONTRACT DOCUMENTS.

The “Contract Documents” include the following:

- 00 11 10 Notice Inviting Bids
- 00 21 10 Instructions to Bidders
- 00 41 00 Bid Form
- 00 42 10 Bid Bond or 00 43 20 Bid Security
- 00 43 30 Proposed SubContractors
- 00 43 40 Bidder Information and Experience
- 00 45 10 Non-Collusion Affidavit
- 00 45 15 Iran Contracting Act Certification
- 00 45 20 Public Works Contractor Registration Certification
- 00 45 30 Statement of Regarding Debarment
- 00 45 35 Disclosure of Discipline Record
- 00 52 10 Contract
- 00 61 10 Labor and Materials Bond
- 00 61 20 Faithful Performance and Warranty Bond
- 00 61 30 Optional Escrow Agreement (if applicable)
- 00 73 00 Supplemental General Provisions
- Technical Specifications for the Project
- All Addenda
- Plans and Drawings
- Permits
- 00 74 00 Supplemental Technical Provisions
- “Standard Specifications and Drawings,” as last revised
- Standard Specifications for Public Works Construction “Greenbook,” latest edition and including all errata
 - Part 1 General Provisions
 - Part 2 to Part 8 (Construction Materials, Construction Methods, Existing Improvements, Pipeline System Rehabilitation, Temporary Traffic Control, Street Lighting and Traffic Signal Systems, Landscaping and Irrigation)
- Standard Plans for Public Works Construction, latest edition and including all errata
- Applicable Local Agency Standards and Specifications, as last revised
- Approved and fully executed change orders

- Any other documents contained in or incorporated by reference into the Contract Documents

The Contractor shall complete the Work in strict accordance with the Contract Documents. The requirements of the various sections or documents comprising the Contract Documents are intended to be complementary. Work required by 1 of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

6. PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.

Every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the Labor Code and Public Contract Code which are applicable to the Work.

7. INDEMNIFICATION.

Contractor shall provide indemnification and defense as set forth in the 00 73 00 Agency Supplemental General Provisions.

8. PREVAILING WAGES.

Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates may be obtained online at <http://www.dir.ca.gov> and which must be posted at the job site.

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NOTARIAL ACKNOWLEDGMENT OF EXECUTION BY ALL SIGNATORIES MUST BE ATTACHED

(CORPORATE SEAL)
CONTRACTOR

City of Carlsbad, California, a California
municipal corporation

By:

By:

(sign here)

Keith Blackburn, Mayor

(print name/title)

ATTEST:

By:

(sign here)

for Sherry Freisinger, City Clerk

(print name/title)

If required by the Agency, proper notarial acknowledgment of execution by Contractor must be attached. If a corporation, the Contract must be signed by 1 corporate officer from each of the following 2 groups.

Group A
Chairman,
President, **or**
Vice-President

Group B
Secretary,
Assistant Secretary,
CFO **or** Assistant Treasurer

Otherwise, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering the officer(s) signing to bind the corporation.

APPROVED AS TO FORM:
CINDIE K. McMAHON, City Attorney

BY: _____
Assistant City Attorney

END OF SECTION

00 61 10 LABOR AND MATERIALS BOND

KNOW ALL PERSONS BY THESE PRESENTS THAT:

WHEREAS, the City of Carlsbad ("Agency") has awarded to _____ ("Principal,") a Contract for the Work described as follows: Contract No **PWS24-2413PKS** Project No. 4611 Name of Project: Stagecoach Community Park Community Gardens (the "Project") in strict conformity with the drawings and specifications, and other Contract Documents now on file in the Office of the City Clerk of the City of Carlsbad and all of which are incorporated by this reference; and

WHEREAS, Principal is required to furnish a bond in connection with the Contract providing that if Principal or any of its SubContractors fail to pay (1) for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the Work contracted to be done, (2) for any Work or labor of any kind performed under the Contract, (3) for amounts due under the Unemployment Insurance Code for any Work or labor of any kind performed under the Contract, or (4) for any amounts required to be deducted, withheld, and paid over to the Employment Development Department under Unemployment Insurance Code Section 13020 or to the Franchise Tax Board under Revenue and Taxation Code Section 18663 from the wages of employees of Principal and its SubContractors with respect to the Work or labor, the Surety on this bond will pay for the same to the extent set forth below.

NOW THEREFORE, we, Principal and _____, as Surety, are held and firmly bound unto the Agency in the penal sum of _____ Dollars (\$ _____), for the payment of which sum being an amount equal to 100% of the total amount payable under the terms of the Contract by the Agency, and for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors, or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Principal, or its SubContractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Civil Code Section 9100; fail to pay for any materials, provisions, provender, equipment, or other supplies, used in, upon, for or about the performance of the Work contracted to be done; fail to pay for any Work or labor of any kind performed under the Contract; fail to pay amounts due under the Unemployment Insurance Code for any Work or labor of any kind performed under the Contract; or fail to pay for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of Principal or its SubContractors pursuant to Unemployment Insurance Code Section 13020 or Revenue and Taxation Code Section 18663, with respect to the Work or labor, then the Surety will pay for the same, in an amount not exceeding the penal sum specified above, and also, in case suit is brought upon this bond, all litigation expenses incurred by the Agency in the suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses to be fixed by the court consistent with Civil Code Section 9554.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 so as to give a right of action to such persons or their assigns in any suit brought upon this bond. The Surety stipulates and agrees that this bond shall not be exonerated or released from the obligation of this bond by:

1. Any change, extension of time for performance, addition, alteration or modification in, to, or of any Contract, Plans, Specifications, or agreement pertaining or relating to any scheme or Work of improvement described above, or the furnishing of labor, materials, or equipment pertaining or relating to any scheme or Work of improvement described above.
2. Any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or Work of improvement described above.
3. Any rescission or attempted rescission or attempted rescission of the Contract, agreement or bond.
4. Any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such Contract or agreement or under the bond.
5. Any fraud practiced by any person other than the claimant seeking to recover on the bond.

The Surety also stipulates and agrees that this bond shall be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit this bond has been given by reason of any breach of contract between the Agency and Principal or on the part of any obligee named in this bond. Finally, the Surety waives notice of any such change, extension of time, addition, alteration or modification mentioned in this bond, including but not limited to the provisions of Civil Code Sections 2819 and 2845.

If Principal is an individual, it is agreed that the death of any such Principal shall not exonerate the Surety from its obligations under this bond.

This payment surety bond may be approved as to form by the Agency in counterpart, and the counterparts shall all constitute a single, original instrument.

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Executed by PRINCIPAL this _____ day of _____, 20____.

Executed by SURETY this _____ day of _____, 20____.

PRINCIPAL:

SURETY:

(name of Contractor)

(name of Surety)

By: _____
(sign here)

(address of Surety)

(print name here)

(telephone number of Surety)

(title and organization of signatory)

By: _____
(signature of Attorney-in-Fact)

(printed name of Attorney-in-Fact)
(attach corporate resolution showing current power of attorney)

(Proper notarial acknowledgment of execution by CONTRACTOR and SURETY must be attached.)

(President or vice-president and secretary or assistant secretary must sign for corporations. If only 1 officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering that officer to bind the corporation.)

APPROVED AS TO FORM:

CINDIE K. McMAHON, City Attorney

BY: _____
Assistant City Attorney

END OF SECTION

00 61 20 FAITHFUL PERFORMANCE AND WARRANTY BOND

KNOW ALL PERSONS BY THESE PRESENTS THAT:

WHEREAS, the City of Carlsbad ("Agency") has awarded to _____
("Principal,") a Contract for the Work described as follows: Contract No. **PWS24-2413PKS** Project
No. 4611 Name of Project: Stagecoach Community Park Community Gardens (the "Project") in
strict conformity with the drawings and specifications, and other Contract Documents now on
file in the Office of the City Clerk of the City of Carlsbad and all of which are incorporated by this
reference; and

WHEREAS, the Principal is required by the Contract Documents to perform the terms of them
and to furnish a bond for the faithful performance and warranty of the Contract Documents.

NOW THEREFORE, we, _____Principal, and _____
_____,as Surety, are held and firmly bound unto the
Agency in the penal sum of _____dollars (\$
_____), which is equal to 100% of the total amount of the Contract, for which amount
well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors
and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if Principal, its heirs, executors,
administrators, successors or assigns, shall in all things stand to and abide by, and well and truly
keep and perform the covenants, conditions and agreements in the Contract Documents and any
alteration of the Contract Documents made as provided in the Contract Documents, on its part,
to be kept and performed at the time and in the manner specified in the Contract Documents,
and in all respects according to their true intent and meaning; and shall indemnify and save
harmless the Agency, its Board, members of the Board, officers, directors, managers, employees,
agents, and authorized volunteers, as stipulated in the Contract Documents, then this obligation
shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured by this bond and in addition to the face amount specified in
this bond, there shall be included costs and reasonable expenses and fees, including reasonable
attorneys' fees, incurred by Agency in enforcing such obligation, all to be taxed as costs and
included in any judgment rendered.

As a condition precedent to the satisfactory completion of the Work unless otherwise provided
for in the Contract Documents, the above obligation shall hold good for a period of 1 year after
the acceptance of the Work by the Agency. During this 1-year period, if Contractor fails to make
full, complete, and satisfactory repair and replacements and totally protect the Agency from loss
or damage resulting from or caused by defective materials or faulty workmanship in connection
with Contractor's Work on the Project, the obligations of Surety under this bond shall continue
so long as any obligation of Principal remains to the Agency. Nothing in this bond shall limit the
Agency's rights or the Principal's or Surety's obligations under the Contract, law or equity,
including, but not limited to, Code of Civil Procedure Section 337.15.

Whenever Principal shall be, and is declared by the Agency to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the Agency's option:

- i. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents;
- ii. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder, the Surety and the Agency, and make available as Work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the Contract Price, including other costs and damages for which Surety may be liable. The term "balance of the Contract Price" as used in this paragraph shall mean the total amount payable to Principal by the Agency under the Contract and any modification to the Contract, less any amount previously paid by the Agency to the Principal and any other set offs pursuant to the Contract Documents.
Or
- iii. Permit the Agency to complete the Project in any manner consistent with Applicable Law and make available as Work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the Contract Price, including other costs and damages for which Surety may be liable. The term "balance of the Contract Price" as used in this paragraph shall mean the total amount payable to Principal by the Agency under the Contract and any modification to the Contract, less any amount previously paid by the Agency to the Principal and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the Agency may reject any Contractor or subContractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal.

Surety shall not utilize Principal in completing the Project, nor shall Surety accept a bid from Principal for completion of the Project, if the Agency, when declaring the Principal in default, notifies Surety of the Agency's objection to Principal's further participation in the completion of the Project.

The Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed under the Contract Documents shall in any way affect Surety's obligations on this bond, and Surety waives notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

If Principal is an individual, it is agreed that the death of any such Principal shall not exonerate the Surety from its obligations under this bond.

This faithful performance and warranty surety bond may be approved as to form by the City Attorney for the Agency in counterpart, and the counterparts shall all constitute a single, original instrument.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

Executed by PRINCIPAL this _____ day of _____, 20__.

Executed by SURETY this _____ day of _____, 20__.

PRINCIPAL:

SURETY:

(name of Contractor)

(name of Surety)

By: _____
(sign here)

(address of Surety)

(print name here)

(telephone number of Surety)

(title and organization of signatory)

By: _____
(signature of Attorney-in-Fact)

(printed name of Attorney-in-Fact)

(attach corporate resolution showing current power of attorney)

(Proper notarial acknowledgment of execution by CONTRACTOR and SURETY must be attached.)

(President or vice-president **and** secretary or assistant secretary must sign for corporations. If only 1 officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering that officer to bind the corporation.)

APPROVED AS TO FORM:

CINDIE K. McMAHON, City Attorney

BY: _____
Assistant City Attorney

END OF SECTION

00 61 30 OPTIONAL ESCROW AGREEMENT

NAME OF PROJECT: Stagecoach Community Park Community Gardens

NAME OF BIDDER: _____

This Escrow Agreement is made and entered into by and between the 1200 Carlsbad Village Drive, Carlsbad, California, 92008 ("Agency"), _____ whose address is _____ ("Contractor") and _____ whose address is _____ ("Escrow Agent").

Agency, Contractor and Escrow Agent agree as follows:

1. Pursuant Public Contract Code Section 22300, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Agency pursuant to the construction contract entered into between Agency and Contractor for Stagecoach Community Park Community Gardens in the amount of _____ dated _____ ("Contract"). Alternatively, on written request of Contractor, Agency shall make payments of the retention earnings directly to Escrow Agent. When the Contractor deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify Agency within 10 Calendar Days of the deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract. Securities shall be held in Agency's name and shall designate Contractor as the beneficial owner.
2. Agency shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that Escrow Agent holds securities in the form and amount specified above.
3. When Agency makes payment of retentions earned directly to Escrow Agent, Escrow Agent shall hold them for the benefit of Contractor until the time that the escrow created under this Escrow Agreement is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when Agency pays Escrow Agent directly.
4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of Agency. These expenses and payment terms shall be determined by Agency, Contractor, and Escrow Agent.
5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to Agency.
6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Agency to Escrow Agent that Agency consents to the withdrawal of the amount sought to be withdrawn by Contractor.

7. Agency shall have a right to draw upon the securities in the event of default by the Contractor. Upon 7 Calendar Days' written notice to Escrow Agent from Agency of a default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by Agency.
8. Upon receipt of written notification from the Agency certifying that the Work required by the Contract is final and complete and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
9. Escrow Agent shall rely on the written notifications from Agency and Contractor pursuant to Sections (5) to (8), inclusive, of this Escrow Agreement and Agency and Contractor shall hold Escrow Agent harmless from Escrow Agent's release, conversion and disbursement of the securities and interest as set forth above.
10. The names of the persons who are authorized to give written notices or to receive written notice on behalf of Agency and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

For Agency (Finance Director) Title _____

Name _____

Signature _____

Address _____

For Contractor Title _____

Name _____

Signature _____

Address

For Escrow
Agent

Title

Name

Signature

Address

At the time the Escrow Account is opened, Agency and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Escrow Agreement.

IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

For Agency

Title

Name

Signature

Address

For Contractor

Title

Name

Signature

Address

For Escrow
Agent

Title

Name

Signature

Address

APPROVED AS TO FORM:
CINDIE K. McMAHON, City Attorney

BY: _____
Assistant City Attorney

END OF SECTION

00 73 00 AGENCY SUPPLEMENTAL GENERAL PROVISIONS

INTRODUCTION

The specifications contained in this 00 73 00 Agency Supplemental General Provisions take precedence over the specification language contained in the Standard Specifications for Public Works Construction, "The Greenbook," latest edition and all errata. This specification addresses the unique conditions in Carlsbad that are not addressed in The Greenbook. Therefore, if there is a conflict, these specifications shall control.

The Greenbook may be purchased at Bidder's/Contractor's local technical bookstore or directly from the publisher. These Supplemental General Provisions are available only for download from the online bidding portal with Contract Documents. The Agency does not provide hard copies.

When used in the Contract Documents, statements, or command phrases (active voice and imperative mood) refer to and are directed at the "Bidder" or "Contractor" as applicable. The specifications are written to the "Bidder" before award and the "Contractor" after award. Before award, interpret sentences written in the imperative mood as starting with "The Bidder shall." Interpret the term "you" as "the Bidder" and interpret the term "your" as "the Bidder's." After award, interpret sentences written in the imperative mood starting with "The Contractor shall." Interpret the term "you" as "the Contractor" and interpret the term "your" as "the Contractor's."

PART 1 GENERAL PROVISIONS

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

GENERAL

ADD the following:

1. The word "provide" shall mean "furnish and install," unless otherwise stated.
2. In reference to Drawings, where words "shown," "indicated," "detailed," "noted," "scheduled," or words of similar import are used, it shall be understood that reference is made to the Plans accompanying these provisions, unless stated otherwise.
3. Where the words "equal," "approved equal," "equivalent," and words of similar import are used, it shall be understood such words are followed by the expression "in the opinion of the Engineer," unless otherwise stated.
4. The word "perform" shall be understood to mean that the Contractor, at its expense, shall "perform all operations and furnish labor, tools and equipment," and further, "furnish and install materials that are indicated, specified or required" shall be understood to mean that the Contractor, at its expense, shall "furnish and install the Work, complete in place and ready to use, including furnishing of necessary labor, materials, tools, equipment, and transportation."
5. Where words "directed," "designated," "selected," or words of similar import are used, it shall be understood that the direction, designation, or selection of the Engineer is intended, unless stated otherwise. The word "required" and words of similar import shall be understood to mean "as required to properly complete the Work as required and as approved by the Engineer," unless stated otherwise.

Where the words “approved,” “approval,” “acceptance,” or words of similar import are used, it shall be understood that the approval, acceptance, or similar import of the Engineer is intended.

TERMS AND DEFINITIONS

Where applicable ADD/REPLACE the following:

1. **Agency** - The City of Carlsbad or the Carlsbad Municipal Water District, the owner of the Project.
2. **Agency Approval** - Except where stated in this Contract to the contrary, the phrases “Agency approval,” and “Agency’s written approval” or such similar phrases shall mean approval by the City Manager for the City of Carlsbad or the Executive Manager for the Carlsbad Municipal Water District, which approval shall not be unreasonably withheld.
3. **Agency Forces** – City of Carlsbad or Carlsbad Municipal Water District employees who perform construction work.
4. **Agency Supplement** - 00 73 00 Agency Supplemental General Provisions; and 00 74 00 Agency Supplemental Technical Provisions.
5. **Allowance (AL)** - Payment under Allowance Bid items, denoted as “AL,” shall be based on the actual expenditures and for pre-authorized items of the Work in accordance with the Contract Documents. The unused portions of the Allowances shall revert to the Agency upon acceptance of the Project or Work.
6. **Apparent Low Bidder** - The Bidder whose Bid having been publicly opened, initially meets the material requirements of the Bid Documents and whose Bid price is the lowest received.
7. **Applicable Laws** - Laws, statutes, ordinances, rules, orders, and regulations of governmental authorities and courts having jurisdiction over the Project.
8. **As-Builts** - The CADD drawings prepared from the approved Red-lines for record keeping purposes.
9. **Award of Contract (Award)** - The date on which the Board or designee executes the Contract.
10. **Bid** - Any proposal submitted to the Agency in competitive bidding for the construction, alteration, repair, or improvement of any structure, building, road or other improvement of any kind.
11. **Board** – The officer or body constituting the awarding authority of the Agency, which is the City Council for the City of Carlsbad or the Board of Directors for the Carlsbad Municipal Water District.
12. **Board of Directors for the Carlsbad Municipal Water District** – The legislative body that governs the Carlsbad Municipal Water District and has the authority to pass ordinances and appropriate funds.
13. **Business Day** - See Working Day.
14. **Calendar Day** – Every day on the calendar, including weekends and holidays.
15. **City** - The term “City” or “the City” means, City of Carlsbad. See also Agency.
16. **City Council** - The legislative body that governs the City of Carlsbad and has the authority to pass ordinances and appropriate funds.

17. **City Engineer** - The term "City Engineer" is defined as the Transportation Director, or designee, and is the person authorized to perform the functions of the City Engineer as defined in Government Code Section 66416.5. The City Engineer is the City's "duly authorized officer" for the purposes of Public Contract Code Sections 4107 and 4107.5.
18. **City Manager** – The appointed official who directs the administration of the City of Carlsbad.
19. **Construction Documents** - Plans and details, including Plans showing installation of major systems, equipment, fixed furnishings and graphics, the technical specifications and all other technical drawings, schedules, diagrams and specifications, accepted Shop Drawings, Working Drawings, and submittals that are necessary to set forth in detail the requirements for the Project.
20. **Construction Manager** – The Project Inspector's immediate supervisor and the Engineer's designated representative for the first level of appeal for informal dispute resolution.
21. **Construction Work** - The portion of the Work to construct the Project as set forth in the Contract Documents in conformance with 2-1, "WORK TO BE DONE."
22. **Contract** – The written agreement between the Agency and the Contractor covering the Work.
23. **Contract Documents** - Contract Documents include the following: The signed Contract, Addenda, Notice Inviting Bids, funding agency provisions, Bid including documentation accompanying the Bid and any post-Bid documentation submitted prior to the Notice of Award when attached as an exhibit to the Contract, Bonds, Permits, CEQA documents, Standard Specifications (the "Greenbook"), Agency Supplement, Plans, Standard Plans, Construction Documents, Reference Specifications, and Change Orders. Contract Documents, when applicable, shall also include Site and Coastal development permits, NEPA documents, re-vegetation plans, biological letters or technical reports, habitat mitigation plans, storm water documents, and local, state, and federal resource agency permits.
24. **Contract Time** - The number of Working Days to complete the Work as specified in the Contract Documents.
25. **Contractor** – The individual, partnership, corporation, joint venture, or other legal entity having a Contract with the Agency to perform the Work. In the case of Work being done under permit issued by the Agency, the permittee shall be constructed to be the Contractor. The term "prime Contractor" shall mean Contractor.
26. **Critical Path** – In the Construction Schedule, the sequence of activities that represents the longest path through the Project network of activities and the shortest possible Project duration.
27. **Days** – Days shall mean consecutive calendar days unless otherwise specified in this Contract.
28. **Defective Work** - Work that does not conform to the Contract Documents.
29. **Delay Factor** - The Delay Factor may be the basis for compensation for idle equipment time on an excusable delay. The factor has been calculated to include the ownership costs without including operating costs. The Delay Factor recovers all the Contractor's non-operating costs in an 8-hour day. If payment is made for equipment on an excusable delay, it is limited to 8 hours per day or 40 hours per week maximum.

30. **Deputy City Engineer** – The Engineering Manager of the Construction Management & Inspection Division and the Construction Manager’s immediate supervisor and the Engineer’s designated representative for the second level of appeal for informal dispute resolution.
31. **Dispute Board** – Persons designated by the City Manager of the City of Carlsbad or Executive Manager of the Carlsbad Municipal Water District, to hear and advise the City Manager or Executive Manager on claims submitted by the Contractor. The City Manager for the City of Carlsbad or the Executive Manager for the Carlsbad Municipal Water District is the last appeal level for informal dispute resolution.
32. **Drawings** - See Plans.
33. **D-size Sheet** - “D” size paper for engineering design applications refers to 22” x 34” paper.
34. **Engineer** - The Deputy City Manager, Public Works of the City of Carlsbad acting either directly or through designated representatives and the third level of appeal for informal dispute resolution.
35. **Engineer of Record/Design Engineer** – A registered Professional Engineer licensed in the State of California who is qualified to act as an agent of a Project Owner or to prepare Plans for facilities to be accepted by the City of Carlsbad or the Carlsbad Municipal Water District. The term includes persons licensed in the State of California as Civil Engineers or Structural Engineers, as well as other licensed professionals like Architects and Landscape Architects.
36. **Executive Manager** – The appointed official who directs the administration of the Carlsbad Municipal Water District.
37. **Field Book** - The Agency field maps showing sewer and water facilities.
38. **Field Order** - A Field Order is a written agreement by the Engineer to compensate the Contractor for work items in accordance with 2-8, “EXTRA WORK” or 2-9, “CHANGED CONDITIONS.” A Field Order does not change the Contract Price or Contract Time or the intent of the Contract. The unused portions of the Field Orders shall revert to the Agency upon acceptance of the Work.
39. **Final Environmental Document** - The CEQA and/or NEPA document issued for the Project, such as certified environmental impact reports, mitigated negative declarations (MNDs), negative declarations, or exemptions.
40. **Final Payment** - The last payment for the Contract made to the Contractor, excluding Retention.
41. **Float** – The number of days by which an activity in the Construction Schedule may be delayed from either its earliest start date or earliest completion date without extending the Contract Time (total float). Total float belongs to the Project and to any Party to accommodate changes in the Work or to mitigate the effect of events which may delay completion.

Holiday - Holidays observed by the Agency are listed below:

Holiday	Observed On
New Year's Day	January 1
Martin Luther King Day	3 rd Monday in January
Presidents' Day	3 rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1 st Monday in September
Indigenous Peoples' Day	2 nd Monday in October
Veteran's Day	November 11
Thanksgiving Day	4 th Thursday/Friday in November
Christmas Day	December 25

If any Holiday listed falls on a Saturday, the Saturday and the preceding Friday are both legal Holidays. If the Holiday falls on a Sunday, both Sunday and the following Monday shall be legal Holidays. **Unless specified otherwise in the Contract Documents or authorized by the Engineer**, do not work on Holidays.

42. **Limited Notice to Proceed (LNTP)** - A written notice given from the Agency that authorizes the Contractor to start a limited amount of work that, as described in the notice, is not Construction Work.
43. **Minor Bid Item** – a single contract item constituting less than 10 percent (10%) of the original Contract Price bid.
44. **Night Work** - See Working Night.
45. **Normal Working Hours** - Unless specified otherwise, Normal Working Hours core periods shall be 7:00 AM to 4:00 PM, Monday through Friday, inclusive. Saturdays, Sundays, and Agency Holidays are excluded. For Traffic Control Permits, Normal Working Hours are defined as 8:30 AM to 3:30 PM, unless specified otherwise.
46. **Notice of Completion (NOC)** - A document recorded with the County of San Diego to signify that the Work has been completed and accepted by the Agency.
47. **Party or Parties** - The Agency, the Contractor, or both, their respective permitted successors or assigns, and any other future signatories to the Contract.
48. **Plans** – The drawings, profiles, cross sections, Standard Plans, working drawings, and shop drawings, or reproductions thereof, approved by the City Engineer, which show the location, character, dimensions or details of the Work.
49. **Prime Contractor** - See Contractor.

50. **Project Inspector** – the Engineer's designated representative for inspection, Contract administration and the first level for informal dispute resolution.
51. **Project Site (Site)** - Areas where the Work is performed pursuant to the Contract.
52. **Punchlist** - A list of items of Work or corrections generated after a Walk-through that is conducted when the Contractor considers that the Work and Services are complete.

53. **Quality Control Standards and Procedures** - The standards and procedures that are stated in a written manual that can be furnished to the Engineer upon request. The standards and procedures are followed by the Supplier in the production of materials supplied for the Work Site.
54. **Red-lines** - Plans with annotations of changes made during construction to reflect the actual improvements or facilities built during construction whether concealed or visible.
55. **Retention** - The amount withheld from the money due to the Contractor in accordance with 7-3.2, "PARTIAL AND FINAL PAYMENT."
56. **Samples** - Physical examples of the materials, equipment, or workmanship specified or required and which conform with the standards and specifications in the Contract Documents and by which the Work shall be evaluated.
57. **Schedule** - A Critical Path Method (CPM) schedule of construction activities and their durations to be performed during the Contract Time and prepared by the Contractor in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK," and accepted by the Engineer.
58. **Scope of Work (SOW)** - Labor, materials, equipment, facilities, and services required to be performed or provided by the Contractor to complete the entire Project or the various separately identifiable parts of the Project pursuant to the provisions of the Contract Documents.
59. **Services** - Work performed in connection with the layout, construction, testing, inspection, and commissioning of the Work or administration of the Contract and which may include professional services such as engineering, surveying, construction management and legal services that are required in accordance with the Contract Documents. Services are incidental to the Work.
60. **Separate Contractors** - Those individuals or entities that have entered into arrangements with the Agency for the provision of labor, materials, or other services in connection with the Project who are not under contract with the Contractor.
61. **Signal Pre-Check** - The procedure that the City uses to evaluate traffic signal systems prior to Signal Turn-On and generating a Punchlist.
62. **Signal Turn-On** - The day the City activates new traffic signals.
63. **Supplemental Provisions** – See Agency Supplement.
64. **Tonne** – Also referred to as "metric ton." Represents a unit of measure in the International System of Units equal to 1,000 kilograms.
65. **Walk-through** - The procedure the Agency uses to evaluate the status of the Project and to generate a Punchlist prior to acceptance of the Work.
66. **Work** – All labor, materials, equipment, tools, and services and other requirements of the Contract Documents as modified by Change Order, whether completed or partially completed, provided or to be provided by Contractor to fulfill Contractor's obligations. The Work may constitute the whole or a part of the Project.
67. **Working Day** - Any day within the period between the start of the Contract Time as defined in Section 6-1 and the date provided for completion, or upon field acceptance by the Engineer for all work provided for in the Contract, whichever occurs first, other than:
 - Saturday;
 - Sunday;

- any day designated as a holiday by the Agency;
- any other day designated as a holiday in a Master Labor Agreement entered into by the Contractor or on behalf of the Contractor as an eligible member of a Contractor association;
- any day the Contractor is prevented from working at the beginning of the workday for cause as defined in Section 6-6.1; or
- any day the Contractor is prevented from working during the first 5 hours with at least 60 percent of the normal work force for cause as defined in Section 6-6.1.

68. Working Night (Night Work) - A period of nighttime work, allowed only on Sunday through Thursday, excluding Holidays.

69. Work Site - See Project Site (Site).

ABBREVIATIONS

1-3.2 Common Usage.

ADD the following:

AML	Approved Material List
CADD	Computer Aided Design and Drafting
CA MUTCD	California Manual on Uniform Traffic Control Devices
CCT	Correlated Color Temperature
CEQA	California Environmental Quality Act.
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIPM	Cured-In-Place-Manhole
CL	Centerline
CMS	Content Management System Database
CNC	Computer Numerical Control
CRI	Color Rendering Index
CSA	Canadian Standards Association
DBE	Disadvantaged Business Enterprise
DCE	Data Computer Equipment
DG	Decomposed Granite
DVBE	Disabled Veteran Business Enterprise
DWT	Detectable Warning Tiles
EOW	Engineer of Work
ESL	Environmentally Sensitive Lands
ESO	Electrical Service Orders
FRP	Fiberglass Reinforced Plastic
GFE	Good Faith Effort
GMT	Greenwich Mean Time
GPS	Global Positioning System
IDA	International Dark Sky Association
IP	Ingress Protection

LCD	Liquid Crystal Display
LD	Laser Diode
LER	Luminaire Efficiency Rating
MBE	Minority Business Enterprise
MDFT	Minimum Dry Film Thickness
MHPA	Multiple Habitat Planning Area
MH	Manhole
MIL	Military
MJ	Mechanical Joint
M&M	Maintenance and Monitoring
MMC	Mitigation and Monitoring Coordination
MOV	Metal Oxide Varistor
NA	Numerical Aperture
NC	Not Connected, Normally Closed
NEPA	National Environmental Policy Act of 1969
NEXT	Near End Crosstalk
NCHRP	National Cooperative Highway Research Program
NOC	Notice of Completion
NPDES	National Pollutant Discharge Elimination System
NTP	Notice to Proceed
OC	On Center
ODP	Open Drip Proof
OFNR	Optical Fiber Nonconductive Riser
OTDR	Optical Time Domain Reflectometer
PB	Pull Box
PCMS	Portable Changeable Message Signs
PCU	Photoelectric Control Unit
PEP	Plant Establishment Period
PIC	Polyethylene Insulated Cable
PL	Property Line
POC	Point of Connection
RFP	Request for Proposal
RFI	Request for Information
RPMS	Rubber Polymer Modified Slurry
SIC	Standard Industry Classification
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SOW	Statement of Work, Scope of Work
SOV	Schedule of Values
SPDT	Single Pole Double Throw
SSD	Surge Suppression Devices
TDR	Time Domain Reflectometer
TEES	Transportation Electrical Equipment Specifications
TFFN	Thermoplastic Flexible Fixture Wire Nylon Jacketed

TIG	Tungsten Inert Gas
UF	Underground Feeder
UPRR	Union Pacific Railroad Company
VAC	Volts AC
VPC	Vitrified Polymer Composite
WBE	Women Business Enterprise

1-3.3 Institutions.

ADD the following:

AMTRACK	American Track National Railroad Passenger Corp.
ANSI	American National Standards Institute
AASHTO	American Association of State Highway and Transportation Officials
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
API	American Petroleum Institute
AREA	American Railway Engineering Association
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
BNSF	Burlington Northern Santa Fe Railway
DSD	Development Services Department
FHWA	Federal Highway Administration
GRI	Geosynthetic Research Institute
IPCEA	Insulated Power Cable Engineers Association
IES	Illuminating Engineering Society (Photometric Data)
ISO	International Organization for Standardization
MTS	San Diego Metropolitan Transit System
NACE	National Association of Corrosion Engineers
NAFP	National Association of Pipe Fabricators
NCTD	North County Transit District
NEMA	National Electrical Manufacturers Association
NOAA	National Oceanic and Atmospheric Administration (Dept. of Commerce)
NFPA	National Fire Protection Association
PCI	Prestressed Concrete Institute
SANDAG	San Diego Association of Governments
SD&AE	San Diego & Arizona Eastern Railroad
SDTI	San Diego Trolley, Inc.
UL	Underwriters' Laboratories Inc.
USGS	United States Geological Survey
UPRR	Union Pacific Railroad Company

1-6 BIDDING AND SUBMISSION OF THE BID

1-6.2 SubContractor Listing.

ADD the following:

Each Bidder shall comply with the Chapter of the Public Contract Code including Sections 4100 through 4113. The use of SubContractors in no way relieves the Contractor of any obligations or responsibilities under the Contract.

The following excerpts or summaries of some of the requirements of this Chapter are included below for information:

The Bidder shall set forth in the Bid, as provided in Section 4104:

“(a) The name and location of the place of business of each SubContractor who will perform Work or Labor or render service to the prime Contractor in or about the construction of the Work or improvements, or a SubContractor licensed by the State of California who, under Subcontract to the prime Contractor, specially fabricates and installs a portion of the Work or improvement according to detailed Drawings contained in the Plans and Specifications, in an amount in excess of one-half of 1 percent of the prime Contractor’s total Bid, or, in the case of Bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime Contractor’s total Bid or ten thousand dollars (\$10,000), whichever is greater.”

“(b) The portion of the Work which will be done by each such SubContractor under this act. The prime Contractor shall list only one SubContractor for each such portion as is defined by the prime Contractor in his Bid.”

If the Contractor fails to specify a SubContractor or specifies more than one SubContractor for the same portion of the Work to be performed under the Contract (in excess of one-half of 1 percent of the Contractor’s total Bid), the Contractor shall be qualified to perform that portion itself, and shall perform that portion itself, except as otherwise provided in the Code.

As provided in Section 4107, no Contractor whose Bid is accepted shall substitute any person as SubContractor in place of the SubContractor listed in the original Bid, except for causes and by procedures established in Section 4107.5. This section provides procedures to correct a clerical error in the listing of a SubContractor.

Section 4110 provides that a Contractor violating any of the provisions of the Chapter violates the Contract and the Board may exercise the option either to cancel the Contract or assess the Contractor a penalty in an amount of not more than 10 percent of the Subcontract involved, after a public hearing.

1-7 AWARD AND EXECUTION OF THE CONTRACT

1-7.1 General.

DELETE in its entirety and SUBSTITUTE with the following:

1-7.1 Standard Contract Provisions.

1-7.1.1 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, the Agency, and the Contractor's and the Agency's respective heirs, executors, administrators, successors, and assigns.

1-7.1.2 Waiver of Legal Rights.

1. The Agency's failure to insist, in any 1 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.
2. Any waiver of any breach of the Contract shall not be held to be a waiver of any other or subsequent breach.
3. Any waiver the Agency issues to any provision of the Contract shall only be effective if it is agreed upon in writing by the Agency and if it is specific to the matter concerned.

1-7.1.3 Requests for Information (RFI).

1. Inquiries from the Contractor seeking clarification of the requirements of the Contract Documents shall be submitted in writing to the Agency as a Request for Information (RFI).

1-7.1.4 Assignment to Awarding Body.

1. In accordance with subdivision (b) of Public Contract Code Section 7103.5, the Contractor and the Contractor's SubContractors shall conform to the following requirements:
 - a. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or the Contractor's SubContractor offer and agree to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Business and Professions Code Section 16700 *et seq.*) arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract.
 - b. This assignment shall be made and become effective at the time the awarding body tenders to the Contractor, without further acknowledgment by the Parties.

1-7.2 Contract Bonds.

ADD the following:

1. Before execution of the Contract, the Bidder shall file surety bonds with the Agency to be approved by the Board in the amounts and for the purposes noted below. Bonds issued by a Surety, who is authorized to issue bonds in California, and whose bonding limitation shown in the circular is enough to provide bonds in the amount required by the Contract shall be deemed approved unless specifically rejected by the Agency. Bonds from all other sureties shall be accompanied by all documents enumerated in Code of Civil Procedure Section 995.660 (a). The Bidder shall pay all bond premiums, costs, and incidentals.

2. Each bond shall incorporate, by reference, the Contract and be signed by both the Bidder and Surety and the signature of the authorized agent of the Surety shall be notarized.
3. The faithful performance/warranty bond will be reduced to 25 percent of the original amount 30 Calendar Days after recordation of the Notice of Completion and will remain in full force and effect for the 1-year warranty period and until all warranty repairs are completed to the satisfaction of the Engineer. The bond to secure payment of laborers and materials suppliers shall be released 6 months plus 30 Calendar Days after recordation of the Notice of Completion if all claims have been paid.
4. All bonds are to be placed with a Surety insurance carrier admitted and authorized to transact the business of insurance in California and whose assets exceed its liabilities in an amount equal to or in excess of the amount of the bond. The bonds are to contain the following documents:
 - a. An original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws, or other instrument entitling or authorizing the person who executed the bond to do so.
 - b. A certified copy of the certificate of authority of the insurer issued by the insurance commissioner.
5. If the Bid is accepted, the Agency may require a financial statement of the assets and liabilities of the Surety for the quarter calendar year preceding the date of the execution of the bond. The financial statement shall be made by an officer's certificate as defined in Corporations Code Section 173. In the case of a foreign Surety, the financial statement may be verified by the oath of the principal officer or manager residing within the United States.
6. If the Surety on any bond furnished by the Contractor is declared bankrupt, becomes insolvent, or its right to do business is terminated in any state where any part of the Project is located, immediately notify the Engineer; and immediately substitute another bond and Surety acceptable to the Agency.
7. The Contractor shall require the Surety to mail its standard "Bond Status" form to the Agency.

ADD the following: 1-7.2.1 Payment.

1. If enumerated in the Contract Documents, the Bid item for "Bonds (Payment and Performance)" includes full compensation for actual costs of payment and performance bonds. The Contractor may submit a request for payment of actual invoiced costs up to the Bid amount, but not to exceed 2.5% of the Contract Price, no less than 10 Working Days after the award of the Contract.
2. If enumerated in the Contract Documents, if the Bid item for "Bonds (Payment and Performance)" exceeds actual invoiced costs, any such differential amount up to the Bid amount shall be paid as a part of the Final Payment.

SECTION 2 – SCOPE OF THE WORK

2-1 WORK TO BE DONE

ADD the following:

1. Where approval or acceptance by the Agency is required, only a general approval is required. However, such approval does not relieve the Contractor from the Contractor's responsibility

for complying with all applicable laws, codes, and best industry practices. Contractor has its obligation to fulfill all conditions of the Contract.

2. In accordance with the provisions of California Law, the Contractor shall possess or require the Contractor's SubContractor(s) to possess valid appropriate license(s) for the Work being performed as conveyed in the Bidding Documents.

2-2 PERMITS

DELETE in its entirety and SUBSTITUTE with the following:

2-2 PERMITS, FEES, AND NOTICES

1. The Contractor shall obtain and pay for all business taxes, business licenses, permits, and fees required for constructing the Project and licenses and inspections necessary for the proper execution and completion of the Work, unless specified otherwise in the Contract Documents.
 - a. **Resource Agency Permits.** [insert when applicable]
 - b. To the extent that there is a change in the type or cost of any of such permits, fees, licenses, or inspection occurring after Award of Contract, there shall be an equitable adjustment in the Contract Price on account of such change under the Extra Work provisions.
 - c. The Contractor shall comply with and give notices required by applicable laws. The Contractor is not entitled to damages or additional payment for delays attributable to the acquisition of permits.
 - d. The Contractor shall pay the Agency for regulatory fees, fines, or penalties imposed on the Agency arising from the Contractor's failure to complete the Work in accordance with the Contract Documents.
2. Contractor shall not begin work until all permit's incidental to the Work are obtained. This includes, and is not limited to, encroachment, right-of-way, grading and building permits necessary to perform Work for this Contract on Agency property, streets, or other rights-of-way. Permits for night work, overload, blasting, demolition, and disposal of all materials removed from the Project are also Contractor's responsibility.
3. The Contractor shall obtain and pay for all permits for the disposal of all materials removed from the Project. The cost of the permit(s) shall be included in the price Bid for the appropriate Bid item and the Agency shall not pay additional compensation for Contractor to obtain such permits.
4. Permits shall be maintained in valid status until acceptance of the Work by the Agency.

2-2.1 Building Permits.

1. The City has obtained the required building permits. Any prior approval obtained for the Plans shall not in any way waive this requirement.
2. Request inspections in accordance with the building codes in effect on the permitted Plans and by City's Development Services Department, Building Division or Construction Management and Inspection Department. Any Work performed without the benefit of the required permit and subsequent inspection shall be removed and replaced at the discretion of the City Building Inspector at no additional cost.

2-3 RIGHT-OF-WAY

ADD the following:

2-4 COOPERATION AND COLLATERAL WORK

ADD the following:

1. The Contractor shall coordinate and cooperate with all the utility companies during the relocation or construction of their lines. The Contractor may be granted a time extension if, in the opinion of the Engineer, a delay is caused by the utility company. No additional compensation will be made to the Contractor for any such delay.
2. If work to be performed by the Agency or its separate Contractors is not shown or specified in the Contract Documents, the Engineer shall notify the Contractor in writing 10 Working Days prior to the start of such work and make available Plans or Specifications for work to be performed by others that may be pertinent to Contractor's Work. If Contractor determines that the work to be performed by the Agency or its separate Contractors may interfere with or cause damage or delays to Contractor's Work, notify the Engineer in writing within 3 Working Days of the Engineer's notice. The Contractor shall diligently pursue with the Engineer resolution of potential conflicts with the work of others.

2-5 THE CONTRACTOR'S EQUIPMENT AND FACILITIES

2-5.2 Temporary Utility Services.

ADD the following:

1. The Contractor shall furnish, install, maintain, and remove all temporary utility services, such as light, power, electrical, gas, and water, at its own expense for construction and maintenance activities until acceptance of Work. These include piping, wiring, lamps, and other equipment necessary for the Work. Contractor shall provide a written plan submittal for temporary connections and obtain written authorization prior to the commencement of Work.
2. The Contractor shall obtain a construction meter for water used for the construction, testing, disinfection and flushing of new water or sewer facilities, vegetation establishment and maintenance, site maintenance, landscaping, cleanup, and all other work requiring water. The Contractor shall contact the water agency that serves the Project Site for requirements.
3. The Contractor shall pay all costs of temporary light, power and water including hookup, service, meter, and any, and all, other charges, deposits and/or fees. The costs shall be considered incidental to the items of Work that they are associated with and no additional payment will be made for them.

2-6 CHANGES REQUESTED BY THE CONTRACTOR

ADD the following:

1. Any plan or method of work suggested to the Contractor by the Agency, but not specified or required by the Contract or Change Order, which is adopted or followed by the Contractor in whole or in part shall be done at the Contractor's sole risk and responsibility.
2. The Contract Price is not subject to adjustment for any type of tax increases after the Award.

ADD the following: 2-6.1 Cost Reduction Proposal.

1. The Contractor may submit to the Engineer 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.
2. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the Project such as service life, economy of operation, ease of maintenance, quality, desired appearance, or design and safety standards.
3. The following information must be included in the cost reduction proposal:
 - 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 Engineer shall act on the cost reduction proposal.
 - e. The Contract items of Work affected by the proposed changes, including any quantity variation attributable thereto.
4. This subsection does not require the Engineer to consider any cost reduction proposal. The Agency shall not be liable to the Contractor for not approving or acting upon any cost reduction proposal the Contractor submitted nor for any delays to the Work attributable to the cost reduction proposal.
5. If a cost reduction proposal is similar to the information included in the Contract Documents or adopted by the Agency after the advertisement and prior to Award of the Contract, the Engineer will not accept such proposal and reserves the right to make such changes without compensation to the Contractor under the provisions of this subsection.
6. The Contractor shall continue to perform the Work in accordance with the requirements of the Contract until a Change Order incorporating the cost reduction proposal has been issued.
7. The Engineer is the sole judge of the acceptability of a cost reduction proposal and the estimated net savings. In determining the estimated net savings, the Agency has the right to disregard the Contract Bid prices if, in the judgment of the Engineer, such prices do not represent a fair measure of the value of the Work to be performed or to be deleted.
8. The Agency reserves the right to require the Contractor to share in the Agency's costs of investigating the Contractor's cost reduction proposal. When this is required, the Contractor shall indicate the Contractor's acceptance in writing allowing the Agency to deduct amounts payable to the Contractor.
9. If the Engineer accepts the Contractor's cost reduction proposal in whole or in part, the Engineer shall issue a Change Order to 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. If the Engineer's approval is conditional, the Change Order shall include any conditions upon which the Engineer's approval is based.
10. The Change Order also includes the estimated net savings in the cost of performing the Work due to the accepted cost reduction proposal and provides that the Contract cost be adjusted by crediting the Agency with 50% of estimated net savings amount.

11. The Contract Time shall not be extended by the acceptance of the cost reduction proposal and the performance of the Work unless specified otherwise in the Change Order.
12. The amount specified as payable to the Contractor in the Change Order is full compensation for the cost reduction proposal and the performance of the Work.
13. The Agency expressly reserves the right to adopt a cost reduction proposal for general use on contracts administered by the Agency when it determines that the 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 shall be eligible for compensation subject to this subsection, and in that case, only for contracts awarded prior to submission of the accepted cost reduction proposal.
14. The cost reduction proposals identical or similar to previously submitted proposals shall be eligible for consideration and compensation under the provisions of this subsection if the identical or similar previously submitted proposals were not adopted for general application to other contracts administered by the Agency.
15. Subject to the provisions contained in the Contract, the Agency 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.
16. The Contractor shall bear all costs to revise bonds for the Project to include the cost reduction incentive proposal work.

2-7 CHANGES INITIATED BY THE AGENCY

2-7.1 General.

ADD the following:

1. The Agency may change the Plans, Specifications, character of the Work, or quantity of Work provided the total arithmetic dollar value of all such changes, both additive and deductive, does not exceed 25 percent of the Contract Price. Should it become necessary to exceed this limitation, the change shall be by written supplemental agreement between the Contractor and Agency, unless both parties agree to proceed with the change, by Change Order.
2. Change Orders shall be in writing and state the dollar value of the change or established method of payment, any adjustment in Contract Time of completion, and when negotiated prices are involved, and shall provide for the Contractor's signature indicating acceptance.
3. Unless expressly set forth in writing in a Change Order signed by the Agency and the Contractor, changes initiated by the Agency shall not be construed as the Agency directing the Contractor's means-and-methods in the execution of the Work.

2-7.2 Payment-Contract Unit Prices.

1. If a change is ordered in an item of work covered by a Contract Unit Price, and such change does not involve substantial change in character of the Work from that shown on the Plans or specified in the Specifications, then an adjustment in payment will be made. This adjustment will be based upon the increase or decrease in quantity and the Contract Unit Price.
2. If the actual quantity of an item of work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications varies from the Bid quantity by 50 percent or less, payment will be made at the Contract Unit Price. If the actual quantity of the item of

work varies from the Bid quantity by more than 50 percent, payment will be made per Section 2-7.3 or 2-7.4 as appropriate.

3. If a change is ordered in an item of work covered by a Contract Unit Price, and such change does involve a substantial change in the character of the Work from that shown on the Plans or specified in the Specifications, an adjustment in payment will be made per Section 2-7.6.

2-7.3 Payment – Increases of More than 50 Percent.

1. Should the actual quantity of an item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications, exceed the Bid quantity by more than 50 percent, payment for the quantity in excess of 150 percent of the Bid quantity will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 2-8. The Extra Work per Section 2-8, basis of payment, shall not include fixed costs. Fixed costs shall be deemed to have been recovered by the Contractor through payment for 150 percent of the Bid quantity at the Contract Unit Price.

2-7.4 Payment – Decreases of More than 50 Percent

Should the actual quantity of an item of Work covered by a Contract Unit Price, and constructed in conformance with the Plans and Specifications, be less than 50 percent of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, payment will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 2-8; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price nor more than would be made for 50 percent of the Bid quantity at the Contract Unit Price.

2-7.5 Stipulated Unit Prices.

Stipulated Unit Prices are unit prices established by the Agency in the Contract Documents as distinguished from Contract Unit Prices submitted by the Contractor. Stipulated Unit Prices may be used for the adjustment of Contract changes when so specified in the Supplemental General Provisions.

2-7.6 Agreed Prices.

Agreed Prices are prices for new or unforeseen Work, or adjustments in Contract Unit Prices per Section 2-7.2, established by mutual agreement between the Contractor and the Agency. If mutual agreement cannot be reached, the Engineer may direct the Contractor to proceed on the basis of Extra Work in accordance with Section 2-8, except as otherwise specified in Sections 2-7.3 and 2-7.4.

2-7.7 Schedule of Values.

Before construction, Contractor shall provide a schedule of values for all lump-sum Bid items that shall be used for the purpose of progress payments. The prices shall be valid for the purpose of Change Orders to the Project.

2-7.8 Eliminated Items.

Should any Bid item be eliminated in its entirety, payment will be made to the Contractor for its actual costs incurred in connection with the eliminated item prior to notification in writing from the Engineer so stating its elimination. If material conforming to the Plans and Specifications is ordered by the Contractor for use in the eliminated item prior to the date of notification of elimination by the Engineer, and if the order for that material cannot be canceled, payment will be made to the Contractor for the actual cost of the material. In this case, the material shall become the property of the Agency. Payment will be made to the Contractor for its actual costs for any further handling. If the material is returnable, the material shall be returned, and payment will be made to the Contractor for the actual cost of charges made by the supplier for returning the material and for handling by the Contractor. Actual costs, as used in this Agency Supplement, shall be computed on the basis of Extra Work per Section 2-8.

2-8 EXTRA WORK

ADD the following:

1. New or unforeseen Work will be classified as “Extra Work” when the Engineer determines that it is not covered by Contract Unit Prices or stipulated unit prices.
2. Any request by the Contractor for Extra Work shall be in writing to the Engineer and shall include itemized estimates and in accordance with Section 7-4. The Contractor shall fully itemize the Extra Work cost estimates such as labor and payroll costs, quantities, crew composition, production rates, material costs, SubContractor and Supplier costs, equipment costs, supplemental costs, and time impact.

2-9 CHANGED CONDITIONS

ADD the following:

The Contractor shall promptly notify the Engineer of the following Work Site conditions (“Changed Conditions”), in writing, upon their discovery and before they are disturbed:

1. Subsurface or latent physical conditions differing materially from those represented in the Contract;
2. Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character being performed; and
3. Material differing from that represented in the Contract which the Contractor believes may be hazardous waste, as defined in Health and Safety Code Section 25117, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

The Engineer will promptly investigate conditions which appear to be Changed Conditions. If the Engineer determines that conditions are Changed Conditions and they will materially affect performance time, the Contractor, upon submitting a written request, will be granted an extension of time subject to Section 6-4.2.

If the Engineer determines that the conditions do not justify an adjustment in compensation, the Contractor will be notified in writing. This notice will also advise the Contractor of its obligation to notify the Engineer in writing if the Contractor disagrees.

The Contractor's failure to give notice of Changed Conditions promptly upon their discovery and before they are disturbed shall constitute a waiver of all claims in connection with them.

1. The Contractor shall not be entitled to the payment of any additional compensation for any act, or failure to act, by the Engineer, including failure or refusal to issue a Change Order, or for the occurrence of any event or other cause, unless the Contractor shall have first given the Engineer written notice of potential claim as specified in this Section 2-9. Compliance with this section shall not be required as a prerequisite to notice provisions in Section 6-4.2(4) Extensions of Time, nor to any claim that is based on differences in measurement or errors of computation as to Contract quantities.
2. The Contractor shall provide the Agency with a written document containing a description of the particular circumstances giving rise to the potential claim, the reasons for which the Contractor believes additional compensation may be due and the nature of any and all costs involved within 20 Working Days of the date of service of the written notice of potential claim for Changed Conditions. Verbal notifications will not be accepted.
3. The potential claim shall include the following certification relative to the California False Claims Act, Government Code Sections 12650-12656.

"The undersigned certifies that the above statements are made in full awareness of the California False Claims Act, Government Code Sections 12650-12656. The undersigned further understands and agrees that this potential claim, unless resolved, must be restated as a claim in response to the Agency's proposed final estimate for it to be further considered."

By: _____ Title: _____

Date: _____

Company Name: _____

4. The Contractor's estimate of costs may be updated when actual costs are known. The Contractor shall submit proof of its actual costs to the Engineer within 20 Working Days after the affected Work is completed. Failure to do so shall be cause to deny any later-filed claim regarding a potential claim described in this Section 2-9.
5. The intent of this Section 2-9 is to have differences between the parties arising under the Contract brought to the attention of the Engineer at the earliest possible time so that such matters can be settled, if possible, or other appropriate action promptly taken.

2-10 DISPUTED WORK

ADD the following: 2-10.1 Claims.

1. A Claim is a written demand by the Contractor that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the Contract, including a breach of any Contract provision. A voucher, invoice, or other routine request for payment is not a Claim.
2. A Claim shall conform to these specifications and may be considered after the Agency has previously denied a request by the Contractor for a Change Order seeking the demanded relief.
3. The Contractor shall submit a Claim to the Engineer if a dispute occurs that arises from or relates to the Contract. The Claim shall seek all relief to which the Contractor asserts the Contractor is entitled as a result of the event(s) giving rise to the dispute. The Contractor's failure to process a Claim in accordance with these specifications shall constitute a waiver of all relief associated with the dispute. Claims are subject to 6-10, "Right to Audit."
4. The Contractor shall continue to perform the Services and Work and shall maintain the Schedule during any dispute proceedings. The Engineer will continue to make payments for undisputed Services and Work.
5. The Agency's Claims process specified in the Agency Supplement shall not relieve the Contractor of the Contractor's statutory obligations to present Claims prior to any action under the Government Code.
6. Except for those final payment items disputed in the written statement required in Section 7-3.2, all Claims of any dollar amount shall be submitted in a written statement by the Contractor no later than the date of receipt of the final payment estimate. Those final payment items disputed in the written statement required in Section 7-3.2 shall be submitted no later than 30 Calendar Days after receipt of the Final Payment estimate. No Claim will be considered that was not included in this written statement, nor will any Claim be allowed for which written notice or protest is required under any provision of this Contract, including Sections 2-9 Changed Conditions, 2-10 Disputed Work, 4-1(22) Protection, 6-4.4 Written Notice and Report, or 6-4.2(4) Extensions of Time, unless the Contractor has complied with notice or protest requirements.
7. The Engineer will consider Contractor's filed Claims, which must be detailed enough so the Engineer can determine the basis and amount of the Claims. Contractor shall provide the Engineer additional information to determine the facts or contentions involved in a Claim if requested by the Engineer. If additional information is needed, Contractor must provide Engineer with this information within a reasonable time of being asked for additional information. Failure to submit such information and details will be sufficient cause for denying the Claims.
8. Payment for Claims shall be processed by the next payment application of their resolution for those Claims approved by the Engineer. The Contractor shall proceed with informal dispute resolution under Section 2-10, Disputed Work, for those Claims remaining in dispute.

2-10.1.1 Initiation of Claim.

1. A Claim is a written demand by the Contractor that seeks an adjustment in the Contract Price, Contract Time, or other relief associated with a dispute arising under or relating to the

Contract, including a breach of any provision of the Contract. A voucher, invoice, payment application or other routine request for payment is not a Claim. A Claim shall conform to these specifications and may be considered after the City has previously denied a request from the Contractor for a Change Order seeking the demanded relief. The Contractor shall, consistent with 2-10.1.2, give the Agency written notice of Claim prior to commencing any Disputed Work. Failure to give the notice shall constitute a waiver of all Claims in connection with the Disputed Work. If the Contractor and the Agency are unable to reach agreement on Disputed Work, the Agency may direct the Contractor to proceed with the Work and such direction shall not be construed as the Agency directing the Contractor's means-and-methods in the execution of the Work. After the Agency has rejected a Change Order request and prior to proceeding with dispute resolution pursuant to the Public Contract Code, applicable provisions of which are specified below, the Contractor shall attempt to resolve all disputes informally through the following dispute resolution chain of command:

For claims with a monetary value of \$50,000 or less:

- i. Project Inspector
- ii. Construction Manager
- iii. Deputy City Engineer/Engineering Manager

For claims with a monetary value greater than \$50,000:

- iv. Project Inspector
- v. Construction Manager
- vi. Deputy City Engineer/Engineering Manager
- vii. City Engineer
- viii. City Manager or Executive Manager

2. Consistent with Section 2-10.1.2, the Contractor shall submit a complete report within 20 Working Days after completion of the Disputed Work stating its position on the Claim, the contractual basis for the Claim, along with all documentation supporting the costs, Contract Time, and all other evidentiary materials. At each level of Claim or appeal of Claim the Agency will, within 10 Working Days of receipt of the Claim or appeal of Claim, review the Contractor's report and respond with a position, request additional information or request that the Contractor meet and present its report. When additional information or a meeting is requested the Agency will provide its position within 10 Working Days of receipt of the additional information or Contractor's presentation of its report. The Contractor may appeal each level's position up to the Deputy City Engineer/Engineering Manager for claims less than \$50,000 and/or up to the City Manager for the City of Carlsbad or Executive Manager for the Carlsbad Municipal Water District for claims greater than \$50,000 after which the Contractor may proceed under the provisions of the Public Contract Code. The Agency's failure to state a position or otherwise respond to a Claim within the timeframes set forth above shall be deemed a rejection of the Claim by the Agency.
3. The authority within the dispute resolution chain of command is limited to recommending a resolution to a Claim to the City Manager for the City of Carlsbad or Executive Manager for the Carlsbad Municipal Water District. Actual approval of the Claim is subject to the Change Order provisions in the Contract.

4. Any remaining Claims not resolved by the informal dispute resolution process described above shall be resolved in accordance with Public Contract Code Section 9204, the relevant portion of which is included below:

(d)(1)(A) Upon receipt of a Claim pursuant to this section, the public entity to which the Claim applies shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide the Claimant a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, a public entity and a Contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The Claimant shall furnish reasonable documentation to support the Claim.

(C) If the public entity needs approval from its governing body to provide the Claimant a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the Claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the Claimant disputes the public entity's written response, or if the public entity fails to respond to a Claim issued pursuant to this section within the time prescribed, the Claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the public entity shall provide the Claimant a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the Claimant sharing the associated costs equally. The public entity and Claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators

shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a Claim from a Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the Claim being deemed rejected in its entirety. A Claim that is denied by reason of the public entity's failure to have responded to a Claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a SubContractor or a lower tier SubContractor lacks legal standing to assert a Claim against a public entity because privity of Contract does not exist, the Contractor may present to the public entity a Claim on behalf of a SubContractor or lower tier SubContractor. A SubContractor may request in writing, either on their own behalf or on behalf of a lower tier SubContractor, that the Contractor present a Claim for work which was performed by the SubContractor or by a lower tier SubContractor on behalf of the SubContractor. The SubContractor requesting that the Claim be presented to the public entity shall furnish reasonable documentation to support the Claim. Within 45 days of receipt of this written request, the Contractor shall notify the SubContractor in writing as to whether the Contractor presented the Claim to the public entity and, if the original Contractor did not present the Claim, provide the SubContractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the Plans or Specifications for any Public Works Project that may give rise to a Claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a Claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable Change Order, Claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute that is enacted before January 1, 2027, deletes, or extends that date.

In addition, all Claims by Contractor for \$375,000 or less shall be resolved in accordance with the procedures in the Public Contract Code Section 20104 *et seq.*, applicable provisions of which are included below:

20104.2 For any Claim subject to this article, the following requirements apply:

(a) The Claim shall be in writing and include the documents necessary to substantiate the Claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of Claims.

(b)(1) For Claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written Claim within 45 days of receipt of the Claim, or may request, in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the local agency may have against the Claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the Claimant.

(3) The local agency's written response to the Claim, as further documented, shall be submitted to the Claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the Claimant in producing the additional information, whichever is greater.

(c)(1) For Claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written Claims within 60 days of receipt of the Claim, or may request, in writing, within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to defenses to the Claim the local agency may have against the Claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the Claimant.

(3) The local agency's written response to the Claim, as further documented, shall be submitted to the Claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the Claimant in producing the additional information or requested documentation, whichever is greater.

(d) If the Claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the Claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the Claim or any portion remains in dispute, the Claimant may file a Claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a Claim must be filed shall be tolled from the time the Claimant submits his or her written Claim pursuant to subdivision (a) until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort Claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort Claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.

20104.4 The following procedures are established for all civil actions filed to resolve Claims subject to this article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b)(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act (Title 4 (commencing with Section 2016.010) of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(b) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

20104.6 Payment on undisputed portion of Claim; interest on arbitration awards or judgments:

(a) No local agency shall fail to pay money as to any portion of a Claim which is undisputed except as otherwise provided in the Contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

5. 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 2-10.

2-10.1.2 Claim Certification Submittal.

1. If the Contractor's Claim seeks an increase in the Contract Price, the Contract Time, or both, submit with the Claim an affidavit certifying the following:
 - a. The Claim is made in good faith and covers all costs and delays to which the Contractor is entitled as a result of the event(s) giving rise to the Claim.
 - b. The amount Claimed accurately reflects the adjustments in the Contract Price, the Contract Time, or both to which the Contractor believes the Contractor is entitled.
 - c. All supporting costs and pricing data are current, accurate, and complete to the best of the Contractor's knowledge. The Contractor shall supply a cost breakdown per item of Work.
 - d. The Contractor shall ensure that the affidavit is executed by an official who has the authority to legally bind the Contractor.

2-10.1.3 Agency's Final Determination.

1. If the Contractor disagrees with the City Manager or Executive Manager's final determination, as described in 2-10.1.1(1-2), Contractor must notify the Engineer in writing of the Contractor's objection within 15 Working Days after receipt of the written determination and file a "Request for Mediation" in accordance with 2-10.2, "Dispute Resolution Process."
2. Failure to give notice of objection within the 15 Working Days period shall waive the Contractor's right to pursue the Claim.

2-10.1.6 Mandatory Assistance.

1. If a third-party dispute, litigation, or both, arises out of or relates in any way to the Services provided under the Contract, upon the Agency's request, the Contractor shall assist in resolving the dispute or litigation. The Contractor's assistance includes, but is not limited to the following:
 - a. Providing requested documents in a timely manner.
 - b. Providing professional consultations.
 - c. Attending mediations, arbitrations, depositions, trials, or any event related to the dispute resolution and litigation.

2-10.1.6.1 Compensation for Mandatory Assistance.

1. The Agency will reimburse the Contractor for reasonable fees and expenses incurred by the Contractor for any required assistance rendered in accordance with 2-10.1.6, "Mandatory Assistance" as Extra Work.
2. The Engineer will determine whether these fees and expenses were necessary due to the Contractor's conduct or failure to act.

3. If the Engineer determines that the basis of the dispute or litigation in which these fees and expenses were incurred were the result of the Contractor's conduct or the Contractor's failure to act in part or in whole, the Contractor shall reimburse the Agency for any payments made for these fees and expenses.

Reimbursement may be through any legal means necessary, including the Agency's withholding of the Contractor's payment.

ADD the following: 2-10.2 Dispute Resolution Process

2-10.2.1 Mandatory Non-binding Mediation.

1. If a dispute arises out of or relates to the Contract, or the breach of it, and if the dispute cannot be settled through those procedures described in Section 2-10.1.1, the parties must attempt to settle the dispute in an amicable manner, using mandatory mediation under the Construction Industry Mediation Rules of the American Arbitration Association before having recourse in a court of law.
2. To initiate mediation, the initiating party shall serve a Request for Mediation at the American Arbitration Association (AAA).

2-10.2.2 Mandatory Mediation Costs.

1. 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.

2-10.2.3 Selection of Mediator.

1. A single mediator, knowledgeable in construction aspects and acceptable to both parties, shall be used to mediate the dispute.
2. If AAA is used, 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.
3. If AAA is selected to coordinate the mediation (Administrator), within 10 Working Days from the receipt of the initiating party's Request for Mediation, the opposing party shall file the following:
 - a. A copy of the list of the preferred mediators listed in preference order after striking any mediators to which they have any objection.
 - b. A preference for available dates.
 - c. Appropriate fees.
4. If the parties cannot agree on a mediator, then each party shall select a mediator and those mediators shall select the neutral third party to mediate the matter.

2-10.2.4 Conduct of Mediation Sessions.

1. Mediation hearings shall be conducted in an informal manner and discovery shall not be allowed.

2. Discussions, statements, or admissions shall be confidential to the proceedings and shall not be used for any other purpose regarding the party's legal position. The parties may agree to exchange any information they deem necessary.
3. Both parties shall have an authorized representative attend the mediation. Each representative shall 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 notifications of whether attorney(s) shall be present.
4. Any resulting agreements from mediation shall be documented in writing. Mediation results and documents, 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 the following: 2-10.3 Governing Law & Forum for Litigation.

1. This Contract shall be governed by and construed in accordance with the laws of the State of California. Any lawsuits, at law or in equity, between the parties arising out of this Contract shall be filed in a court of competent jurisdiction in the County of San Diego. With respect to venue, the parties agree that this Contract is made in and will be performed in the County of San Diego. The parties waive all provisions of law providing for a change of venue in these proceedings to any other county.

ADD the following: 2-10.4 Pre-judgment Interest.

1. The parties stipulate that if a judgment is entered against a party for breaching this Contract, the pre-judgment interest shall be 2% per annum.

SECTION 3 – CONTROL OF THE WORK

3-2 SELF-PERFORMANCE

ADD the following:

1. If Contractor fails to satisfy the provisions requiring the Contractor to complete Work amounting to at least 50 percent of the Contract price with its own organization unless stipulated otherwise in the Contract Documents, the Agency may at its sole discretion elect to cancel the Contract or deduct an amount equal to 10 percent of the value of the Work performed in excess of 50 percent of the Contract Price by other than the Contractor's own organization. The Board shall be the sole body for determination of a violation of these provisions. In any proceedings under this section, the Contractor, or prime Contractor, shall be entitled to a public hearing before the Board and shall be notified 10 Calendar Days in advance of the time and location of the hearing. The determination of the Board shall be final.

3-3 SUBCONTRACTORS

ADD the following:

1. The Contractor shall incorporate these Specifications in the Contractor's subcontracts for the work being performed by the Contractor's SubContractor.
2. The Contractor shall obtain or require that each SubContractor obtains insurance policies in accordance with 5-4, "INSURANCE" which shall be kept in full force and effect for the duration of the Contract and in any attached supplemental agreements.
3. In any dispute between the Contractor and the Contractor's SubContractors, the Agency shall not be made a party to any judicial or administrative proceeding to resolve the dispute.
4. The Contractor shall ensure that the Contractor's SubContractors are appropriately licensed for the duration of the work that is performed under the Subcontracts in accordance with 2-1, "WORK TO BE DONE." If a SubContractor is not properly licensed, the Contractor shall cease payment to the SubContractor for all work performed when the SubContractor was not properly licensed. The Contractor shall return to the Agency any payment the Contractor made to a SubContractor for work performed when the SubContractor was not licensed.
5. SubContractors shall be considered employees of the Contractor, and the Contractor shall be responsible for their work.
6. Where the Contract Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, ensure the SubContractor or Supplier employed for such work is approved by the manufacturer.
7. Before the work of any SubContractor is started, the Contractor shall submit to the Engineer for approval a written statement showing the Work to be subcontracted giving the name and business of each SubContractor and description and value of each portion of the Work to be so subcontracted. This submittal will confirm the SubContractor's commitments in the Bid.

3-4 AUTHORITY OF THE ENGINEER

ADD the following:

1. The Engineer shall be the single point of contact and shall be included in all communications between Contractor and any Agency representative.

3-5 INSPECTION

ADD the following:

1. Contractor shall make available to the Engineer accurate books and accounting records regarding all its activities. Contractor shall contractually require all SubContractors to this Contract to do the same. The Engineer shall have access to the Contractor's, and any SubContractors documents described in this Section 3-5(1) within San Diego County. The Engineer shall have the right to monitor, assess, and evaluate Contractor's and its SubContractor's performance pursuant to this Contract. The Engineer's monitoring, assessments, and evaluations will include, but shall not be limited to, audits, inspection of premises, reports, contracts, subcontracts and interviews of Contractor's staff and the staff of all SubContractors to this Contract. Upon reasonable advance notice, Contractor shall make available to the Engineer for examination, all of its, and all SubContractors to this Contract, records with respect to all matters covered by this Contract. Contractor shall also permit the Engineer to audit, examine, copy and make excerpts or transcripts from such data and records, and to make audits of all invoices, materials, payrolls, records of personnel, and

other data relating to all matters covered by this Contract. Any inspection described in this Section 3-5(1) shall occur as often as the Engineer deems necessary and during normal business hours. However, any such inspection shall not unreasonably interfere with Contractor's ongoing business operations. Contractor and all SubContractors to this Contract shall maintain such data and records for as long as may be required by applicable laws and regulations.

2. The Agency may utilize consultants to assist the Engineer during construction in observing the Contractor's performance. The consultant shall be the Agency's Representative on the Site assisting the Engineer and must not be confused with a building inspector with the Agency or with a Special Inspector.
3. The Agency may utilize a Special Inspector for inspection of specialty work and materials, whose costs the Agency will pay for unless the Contractor fails inspection. If inspections or tests reveal non-compliance with the requirements of the Contract Documents, the Contractor shall pay for all corrective measures deemed necessary by the Engineer and also pay the cost of the Agency's subsequent re-inspection and re-testing.
4. Inspections required by codes or ordinances are the Contractor's responsibility.
5. The Contractor's quality control testing and inspections are the Contractor's responsibility. Contractor shall coordinate and schedule all inspections and tests. The Contractor shall give the Engineer notice of tests and inspections made by others. At least 5 Working Days of notice shall be given for offsite inspections. The Contractor shall wait until the Engineer has responded and agreed to Contractor's schedule before scheduling test or inspections.
6. The Agency shall schedule any inspections and tests as the Agency deems necessary to ensure the Work is accomplished in accordance with the requirements of the Contract Documents (other than inspections for work performed in accordance with a permit). The Contractor is responsible for the inspection of all Work performed in accordance with the Contract Documents.
7. Contractor shall provide access in accordance with Cal-OSHA Standards as necessary.
8. Contractor shall remove and replace any items of Work performed without the required permit or inspection. For required subsequent inspection, the Contractor shall remove and replace Work at the discretion of Engineer at no additional cost to the Agency. Inspection of the Work does not relieve the Contractor of full compliance with the Contract Documents.
9. Contractor shall not conceal the Work prior to inspection, testing, or approval required by the Contract Documents, the Engineer's prior written request, or by other agencies. If any item of Work is done prior to obtaining the required approvals when requested by the Engineer, Contractor shall expose the Work for inspection, testing, and/or approval. Upon successful completion of the inspection, testing, or approval, the Contractor shall proceed with the Work. The Contractor shall bear all direct and indirect costs and damages of such uncovering and re-covering and shall not be entitled to an increase in the Contract Price or the Contract Time, unless the Contractor has given the Engineer and any other affected agencies written notice of the Contractor's intention to cover the Work and the Engineer has not acted in response to such notice.
10. When specified, Contractor shall make arrangements for tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Engineer, or with the

appropriate public authority. The payment for such tests, inspections, and approvals are included in the Contract Price.

11. Unless specified otherwise, the Contractor shall pay the cost of inspections and tests. If inspections or tests reveal non-compliance with the requirements of the Contract Documents, the Contractor shall bear the cost of corrective measures deemed necessary by the Engineer and the cost of the Agency's subsequent re-inspection and re-testing.
12. The Contractor shall, at no charge to the Agency, provide copies of all records in the Contractor's or SubContractor's possession pertaining to the Work that the Engineer may request.
13. Contractor agrees to maintain and/or make available, to the Engineer, within San Diego County, accurate books, and accounting records relative to all its activities and to contractually require all SubContractors to this Contract to do the same. The Engineer shall have the right to monitor, assess, and evaluate Contractor's and its SubContractors performance pursuant to this Contract, the monitoring, assessments, and evaluations to include, but not be limited to, audits, inspection of premises, reports, contracts, subcontracts and interviews of Contractor's staff and the staff of all SubContractors to this Contract. At any time during normal business hours and as often as the Engineer may deem necessary, upon reasonable advance notice, Contractor shall make available to the Engineer for examination, all of its, and all of its SubContractors' records with respect to all matters covered by this Contract and will permit the Engineer to audit, examine, copy and make excerpts or transcripts from such data and records, and to make audits of all invoices, materials, payrolls, records of personnel, and other data relating to all matters covered by this Contract. However, any such activities shall be carried out in a manner so as to not unreasonably interfere with Contractor's ongoing business operations. Contractor and all SubContractors to this Contract shall maintain such data and records for as long as may be required by applicable laws and regulations.

3-6 THE CONTRACTOR'S REPRESENTATIVE

ADD the following:

1. Both the representative and alternative representative shall be the Contractor's employees and shall not be assigned to a SubContractor unless otherwise approved by the Agency in writing.
2. The Contractor's Project team shall attend scheduled construction meetings as required by the Engineer. If any of 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 shall pay for the costs of the Agency's staff, consultants, or both that attended. The Contractor shall be charged a minimum of 2 hours of the attendee's time.
3. The payment for the Contractor's attendance at Project meetings is included in the Contract Price. The Engineer shall deduct costs assessed to the Contractor for not attending the meetings from the monthly progress payment via Change Order.

3-7 CONTRACT DOCUMENTS

3-7.1 General.

ADD the following:

1. Specifications and Plans are divided into groups by engineering discipline for the Agency's convenience. These divisions are not for the purpose of apportioning the Work or responsibility for the Work among SubContractors and Suppliers.
2. The Contractor shall supply any Work that may reasonably be inferred from the Specifications or Plans as being required to produce the intended result whether or not it is specifically called for, at no additional cost to the Agency.
3. If referenced documents have been discontinued or updated by the issuing organization, the replacement documents issued or otherwise identified by that organization shall be used or, if there are no replacement documents, the last version of the document before it was discontinued.
4. Scaled dimensions on Contract Documents are approximate. Before ordering materials or commencing the Work, the Contractor shall measure the Site for proper size and fit and verify dimensions and quantities by taking measurements in the field. The Contractor shall be responsible for their accuracy.
5. The Contractor shall verify any conditions affecting the cost of the Work through a reasonable examination of the Work Site prior to submitting the Bid.
6. Existing improvements visible at the Work Site, for which no specific disposition is made on the Plans, but which interfere with the completion of the Work, shall be removed, and disposed of by the Contractor.
7. The Plans, Specifications, and other Contract Documents shall govern the Work. The Contract Documents are intended to be complementary and cooperative. Anything specified in the Specifications and not shown on the Plans or shown on the Plans and not specified in the Specifications, shall be as though shown on or specified in both.
8. The Plans shall be supplemented by such working drawings and shop drawings as are necessary to adequately control the Work.
9. The Contractor shall ascertain the existence of any conditions affecting the cost of the Work through a reasonable examination of the Work Site prior to submitting the Bid.
10. Existing improvements visible at the Work Site, for which no specific disposition is made on the Plans, but which interfere with the completion of the Work, shall be removed, and disposed of by the Contractor.
11. The Contractor shall, upon discovering any error or omission in the Plans or Specifications, immediately call it to the attention of the Engineer.

3-7.2 Precedence of the Contract Documents.

DELETE in its entirety and REPLACE with the following:

1. If there is a conflict between any of the Contract Documents, the document highest in the order of precedence, and most recent in edition, shall control. The order of precedence, from highest to lowest, shall be as follows:

- a. Permits (issued by jurisdictional regulatory agencies including environmental documents).
 - b. Change Orders and supplemental agreements; whichever occurs last.
 - c. Contract Addenda, whichever occurs last.
 - d. The signed written Contract.
 - e. Bid/Proposal.
 - f. Project Plans.
 - g. Technical Specifications.
 - h. Standard Drawings.
 - i. Agency Supplemental General Provisions (Section 00 73 00).
 - j. Agency Supplemental Technical Provisions (Section 00 74 00).
 - k. Standard Plans
 - i. City of Carlsbad Standard Drawings.
 - ii. Carlsbad Municipal Water District Standard Drawings.
 - iii. City of Carlsbad modifications to the San Diego Area Regional Standard Drawings.
 - iv. Traffic Signal Design Guidelines and Standards.
 - v. State of California Department of Transportation Standard Plans.
 - vi. California Manual on Uniform Traffic Control Devices (CA MUTCD).
 - l. "Greenbook" (Standard Specifications for Public Works Construction).
 - m. Reference Specifications.
2. When additional small business/minority/women-owned/veteran or other special requirements by funding sources are included in the Contract Documents, the funding source's requirements shall govern.
- a. With reference to the Drawings, the order of precedence shall be as follows: Figures govern over scaled dimensions.
 - b. Detail Drawings govern over general Drawings.
 - c. Addenda and Change Order Drawings govern over Plans.
 - d. Plans govern over Standard Drawings.
3. When a conflict exists between the ADA requirements of Title 24, and the Agency Supplemental Provisions, the most restrictive requirement shall be followed.

ADD the following: 3-7.3 Red-lines and Record Documents.

3-7.3.1 General.

- 1. The Contractor shall, at no charge to the Agency, provide copies of all records in the Contractor's or SubContractor's possession pertaining to the Work that the Engineer may request.
- 2. The Contractor shall keep the Red-lines current with entries checked by the Engineer before the Work is covered. Contractor's failure to update and deliver Red-lines information monthly to the Engineer for review and approval may result in the withholding of monthly progress payments.
- 3. The Contractor shall note the source identification, such as RFI numbers and Change Order numbers, as required identifying the source of the change to the Contract Documents.

4. The Contractor shall deliver the Red-lines to the Engineer upon completion of the Construction Work.
5. The Contractor shall legibly annotate a full-size set of Plans daily, in red ink, to record additions, deletions or changes to the Work and changes in location, elevation or character of the Work not otherwise shown or noted in the Contract Documents. This “redline” set of drawings shall be kept on the Job Site, shall be used only as a record set, and shall be delivered to the Engineer within 10 Calendar Days of completion of the Work. Contractor shall immediately give written notice of any conflicts between these documents to the Engineer.
6. As-built information shall represent field measurements, approved Shop Drawings, Working Drawings, samples, product data, and other pertinent data discovered during the performance of the Work. The Contractor shall note the source of the change such as RFI or Change Order numbers, as required. The Contractor shall clearly record additions or changes in the Work and depth of underground facilities by dimensioning from 2, known, fixed points.
7. Payment for Record Drawings and Documents shall be included in the various Bid items and no additional payment will be made therefore.

3-7.3.2 Asset Specific Red-lines.

1. Irrigation System Red-lines: Red-lines shall clearly record by dimension from 2 known fixed points and by depth of underground facilities all deviations, modifications, and changes in the Work. Records, deviations, modifications, and changes on the day the Work is performed shall reflect the actual Work location and shall be marked in red at the scale of the Plan sheet on which they are recorded. Red-lines shall show any changes to the Plans for the equipment locations and associated information for the following:
 - a. Potable water mainline and size
 - b. Water Meter - Size, type of water (potable or reclaimed), and water meter address.
 - c. Backflow Device - Size, available static pressure in psi, the psi and flow in gallons per minutes for which the irrigation system is designed, and device serial number.
 - d. Master Control Valve.
 - e. Flow Sensor.
 - f. Pressure Regulator Valve.
 - g. Isolation Valves.
 - h. Remote Control Valves - Size, irrigation controller, valve station number, and flow demand in gallons per minute.
 - i. Quick Coupling Valves and Size.
 - j. Electrical Meter, including meter address.
 - k. Remote Control Valve Wiring.
 - l. Communication Cables.
 - m. Pull Boxes.
 - n. Rain Shut Off Switch.
 - o. Electrical lines from electrical meter to irrigation controller, including the power disconnect switch.

- p. Irrigation Mainline and Size.
 - q. Irrigation Lateral Line and Size.
 - r. Irrigation Sleeves and Size.
 - s. Irrigation Controller - Location, number of stations, identifying call-out.
 - t. Irrigation sprinkler heads which have been added or deleted from the approved Plans. Changes in manufacturer nozzle size shall be noted on the red-lined Drawings including operating pressure, gallons per minute, and radius of throw.
2. Re-vegetation Red-lines:
- a. Within 4 weeks of the end of the Plant Establishment Period, as determined and accepted by the Project Biologist or Landscape Architect, furnish and submit to the Engineer 1 full scale Red-lines set showing field changes to grade, erosion control, and seeding for the re-vegetated areas.
3. Utility Red-lines: Utility Red-lines shall show any changes from the Plan for the following:
- a. Horizontal and vertical bends
 - b. Changes in pipe material or pressure class
 - c. Isolation valves
 - d. Insulating joints
 - e. Blow off valves by stationing and offsets.
 - f. Air vacuum valves by stationing and offsets.
 - g. Water and recycled water meter boxes replaced.
 - h. Water sampling stations
 - i. Cathodic test stations
 - j. Locations of all sewer laterals and cleanouts.
 - k. Items abandoned in place following dewatering operation.
4. Building Red-lines: Building Red-lines shall show any changes from the Plans for the following:
- a. Location by dimension and the depth by elevation of underground lines, valves, plugged tees, and capped ends.
 - b. By dimension or scale Plans, wiring, conduits, and pull boxes as installed.
 - c. Information necessary to maintain and service concealed items of Work.
 - d. Dimensional changes to the Drawings.
 - e. Revisions to details shown on the Drawings.
 - f. Depths of foundations below the first floor.
 - g. Locations and depths of underground utilities.
 - h. Revisions to the routing of piping and conduits.
 - i. Revisions to electrical circuitry.
 - j. Actual equipment locations.
 - k. Duct size and routing.
 - l. Locations of concealed internal utilities.
 - m. Changes made by Change Orders.
 - n. Details not shown on original Plans.
5. SWPPP:

- a. Upon completion of construction, the Contractor shall submit the SWPPP and all its appendices, records, reports, maps and records of permanent BMPs to the Engineer with the Red-lines.
- 6. Slurry Seal and Asphalt Concrete Overlay:
 - a. The Contractor shall clearly record on the forms the Agency provides in MS Excel format the actual dates and quantity of each Bid item applied to each street segment and comments regarding each segment and record reasons if no work is performed.
 - b.

3-7.3.3 Payment.

- 1. The payment for Red-lines Drawings shall be included in the Contract Price.

ADD the following: 3-7.4 Measurement and Dimensions.

- 1. Scaled dimensions are approximate. Before ordering materials or commencing the Work, the Contractor shall measure the Site for proper size and fit and verify dimensions and quantities by taking measurements in the field. Contractor shall be responsible for their accuracy.

3-8 SUBMITTALS

3-8.3 Shop Drawings.

ADD the following:

- 1. Shop Drawings shall be submitted electronically to the Agency.
- 2. Additional Shop Drawings may be required by the Special Provisions.

DELETE Table 3-8.3 in its entirety and REPLACE with following:

TABLE 3-8.3			
Item	Subsection	Title	Subject
1	207-2.5	Joints	Reinforced Concrete Pipe
2	207-8.4	Joints	Vitrified Clay Pipe
3	209-2.2.2	Shop Drawings	Steel Pipe and Fittings
4	216-1	General	Precast Reinforced Concrete Box
5	218-1	General	Precast Vault
6	304-1.1.1	Shop Drawings	Structural Steel
7	304-2.1	General	Metal Hand Railings

3-8.4 Supporting Information.

ADD the following:

- 1. The Contractor shall submit samples of the materials with cut sheets of the products. The Contractor shall organize cut sheets for review and approval by the Engineer prior to use on the Project and identify deviation from any of the specified material clearly, including cut sheets and samples of both the specified material and basis for the substitution. Included should be the Agency’s Project Name, Project Number, and the Engineer’s name, Contractor Name, and Submittal Number and clearly indicate the specific product to be used.

2. When photos of material are required, they shall be clear in resolution, identify the specific item for review, and shall indicate the name of the item, source, and date taken. The material shown in the photo shall be currently available for use on the Project.
3. For landscaping and irrigation materials, the Contractor shall submit samples and test results to the Engineer within 15 Working Days of the Notice to Proceed.
4. Test sections (“Mock ups”) of materials as required in the Special Provisions shall be accepted by the Engineer before proceeding with the Work.
5. The Contractor shall provide and keep up-to-date a complete “As-Built” record set of blue-line prints, which shall be corrected in red daily and show every change from the original Drawings and Specifications and the exact “As-Built” locations, sizes and kinds of equipment, underground piping, valves, and all other Work not visible at surface grade. Prints for this purpose may be obtained from the Agency at cost. This set of Drawings shall be kept on the job and shall be used only as a Record Set and shall be delivered to the Engineer within 10 Calendar Days of completion of the Work. Payment for performing the Work required by Section 2-5.4 shall be included in the various Bid items and no additional payment will be made therefore.

3-8.6 [Manufacturer’s Operation, Maintenance, and Warranty Instructions.](#)
 To sentence (1), DELETE in its entirety and SUBSTITUTE with the following:

For each pre-manufactured product covered by a manufacturer’s warranty, Contractor shall submit 1 electronic copy and 3 bound original or legal copies prior to acceptance of the Contract.

3-9 [SUBSURFACE DATA](#)

DELETE in its entirety and SUBSTITUTE with the following:

3-9 TECHNICAL STUDIES AND SUBSURFACE DATA

1. If reports of explorations and tests of Site conditions are referenced in the Contract Documents, Contractor is encouraged to inspect the Site, acquire, and review these reports, and take other necessary steps to thoroughly familiarize oneself with the Site conditions. If a review of the documents and Site inspection indicate an obstruction or utility conflict with the proposed work, immediately notify the Engineer.
2. Subsurface data shall include geotechnical reports, groundwater elevations, soil analyses and characterization, and other information included or referenced in the Special Provisions and shall apply only at the location of the test holes and to the depths indicated.
3. Contractor is encouraged to review subsurface data, examine the Site and assess the Site conditions pertaining to the Work. If a review of the documents and Site inspection indicate an obstruction or utility conflict with the proposed work, immediately notify the Engineer.
4. Soil test reports for test holes which have been drilled are available for review at the office of the Engineer. Additional exploration may be performed at Contractor’s own expense.
5. The indicated groundwater elevation is that which existed on the date specified in the data. It shall be Contractor’s responsibility to determine and allow for the groundwater elevation on the date the Work is performed. A difference in groundwater elevation

between what is shown in soil boring logs and what is encountered during construction shall not be considered as a basis for Extra Work in accordance with 2-8, "Extra Work."

3-10 SURVEYING

3-10.1 General.

ADD the following:

1. The Engineer or Surveyor shall request a right of entry to perform survey services on sewer mains and manholes from City of Carlsbad, wastewater@carlsbadca.gov or call 442-339-2722, 7 Calendar Days prior to the start of survey services.
2. The Contractor shall hire and pay for the services of a licensed Surveyor ("Surveyor") to perform all work necessary for establishing control, construction staking, records research and all other surveying work necessary to construct the Work, provide surveying services as required in the Contract and provide surveying, drafting and other professional services required to satisfy the requirements of the Land Surveyors Act. Surveyor shall be resident on the Site during all surveying operations and shall personally supervise and certify the surveying work.
3. All surveying data submittals shall conform to the requirements of Section 3.8, "Submittals." The Contractor shall submit grade sheets to the Engineer before commencing work in the area affected by the grade sheets. The Contractor shall submit field notes for all required surveying to the Engineer within 10 Calendar Days of performing the survey. All surveying field notes, grade sheets and survey calculations shall be submitted electronically. The field notes, calculations and supporting data shall be clear and complete. Supporting data shall include all maps, affidavits, plats, field notes from earlier surveys and all other evidence used by the Surveyor to determine the location of the monuments set. The field notes and calculations will be labeled with name of the Surveyor, the party chief, the field crewmembers and the author of the field notes or calculations. They shall be annotated with the date of observation or calculation, be numbered with consecutive page numbers and shall be readable without resort to any electronic aid, computer program or documentation for any computer program. The field notes shall be prepared in conformance with the Caltrans "Surveys Manual." The Contractor shall have a Record of Survey prepared by the Surveyor and file it in conformance with Business and Professions Code Sections 8700-8805 when the Surveyor performs any surveying that such map is required under Business and Professions Code Section 8762 and whenever the Surveyor shall establish, set or construct any permanent survey monument. SDRS drawing M-10 A, B, C type monuments, bolts, spikes, leaded tacks and nails (when set in concrete), iron pipes, reinforcing steel and all monuments and marks that are at, or accessory to, property corners and street centerlines are permanent survey monuments. The Record of Survey shall show all monuments set, control monuments used, the basis of bearings and all other data needed to determine the procedure of survey and the degree of accuracy attained by the field surveying including the unadjusted ratio of closure. The unadjusted ratio of closure shall not exceed 1 part in 40,000. The Record of Survey shall show the location and justification of location of all permanent monuments set and their relation to the street right-of-way. Record(s) of Survey(s) shall be submitted for the

Engineer's review and approval before submittal to the County Surveyor and before submittal to the County Recorder.

4. Payment for Work performed to satisfy the requirements shall be included in the actual Bid items requiring the survey work and no additional payment will be made. Extension of unit prices for Extra Work shall include full compensation for attendant survey work and no additional payment will be made. Payment for the replacement of disturbed monuments and the filing of Records of Survey and/or corner records, including filing fees, shall be incidental to the Work necessitating the disturbance of the monuments and no additional payment will be made.

3-12 CONTRACT INFORMATION SIGNS

ADD the following:

Signs shall not be posted until approved by the Engineer. The Contractor shall complete and submit a Review for Sign Permit (form P-11), available at:

<https://www.carlsbadca.gov/services/depts/planning/applications.asp>

3-12 WORK SITE MAINTENANCE

3-12.1 General.

ADD the following:

1. Maintain Site improvements including any temporary facilities, equipment, or other materials. Remove graffiti encountered on the Site within 24 hours. See also SECTION 400 - PROTECTION AND RESTORATION.
2. 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. The cost of disposal is the Contractor's responsibility.
3. The Contractor shall provide and maintain enclosed toilets for the use of their employees. Toilets must be kept in a neat and sanitary condition and ensure that they comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwellings and camps. The cost of such is the Contractor's responsibility.
4. If required in the Special Provisions, the Contractor shall provide and maintain enclosed toilets for the use of the Agency's and Contractor's officers, employees, or agents. Toilets must be kept in a neat and sanitary condition and ensure that they comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwellings and camps. The cost of such is the Contractor's responsibility.
5. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of sandbags, asphaltic concrete, or other acceptable material will be permitted, when necessary, by the SWPPP and/ or BMP plan. Such dams shall be removed from the Site as soon as their use is no longer necessary.
6. Work Site maintenance shall be conducted on non-workdays when increased levels of maintenance are deemed necessary, in the opinion of the Engineer, to preserve the health safety or welfare of the public and or to comply with applicable regulations.

7. Disposal of all rubbish and surplus materials is incidental to Work Site maintenance. Disposal shall be made off the Site and shall be in accordance with:
 - a. Local codes and ordinances that govern locations and methods of disposal.
 - b. All applicable safety laws.
 - c. Requirements of Subpart H, Section 1926.252 of the OSHA Safety and Health Standards for Construction.
8. Work Site maintenance is considered incidental to the items of work that they are associated with and no additional payment will be made.
9. Cleanup and Dust Control. Throughout all phases of construction, including suspension of the Work, and until the final acceptance, the Contractor shall keep the Site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.

3-12.2 Air Pollution Control.

ADD the following:

1. Contractor shall carry out effective measures whenever and as often as necessary to prevent Contractor's 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. Contractor shall be responsible for any damage resulting from any dust originating from Contractor's operations. The dust abatement measures shall be continued until Contractor is relieved of further responsibility by the Engineer.
2. Contractor shall adhere to Air Pollution Control District County of San Diego regulations for equipment used on the Job Site.

3-12.3 Noise Control.

ADD the following:

1. All internal combustion engines used in the Work shall be equipped with mufflers in good repair and are subject to the City Noise Control Ordinance, Carlsbad Municipal Code Chapter 8.48.

3-12.4 Storage of Equipment and Materials.

3-12.4.1 General.

ADD the following:

1. Equipment and material storage shall be confined to areas approved by the Engineer. Disposal of all rubbish and surplus materials shall be at the Contractor's expense.
2. The Contractor shall order, purchase, transport, coordinate delivery, accept delivery, confirm the quantity and quality received, prepare storage area(s), store, handle, protect, move, relocate, remove and dispose excess of all materials used to accomplish the Work.
3. Materials shall be delivered to the Work Site only during Working Hours, and shall be accompanied by bills of lading that shall clearly state for each delivery: the name of the

Contractor as consignee, the Project name and number, address of delivery and name of consignor and a description of the material(s) shipped.

4. Prior to storage of any materials which have been shipped to or by the Contractor to any location within the City's boundaries the Contractor shall provide the Engineer a copy of lease agreements for each property where such materials are stored. The lease agreement shall clearly state the term of the lease, the description of materials allowed to be stored and shall provide for the removal of the materials and restoration of the storage site within the time allowed for the Work.
5. All such storage shall conform to all laws and ordinances that may pertain to the materials stored and to preparation of the storage site and the location of the site on which the materials are stored. Storage of hazardous wastes, construction equipment material, and parking and fueling of equipment shall not occur in biologically sensitive areas.
6. Loss, damage or deterioration of all stored materials and installed materials shall be the Contractor's responsibility. Conformance to the requirements of this section, both within and outside the limits of work is a part of the Work. The Engineer shall have the right to verify the suitability of materials and their proper storage at any time during the Work.
7. The Contractor shall furnish and maintain in good condition all equipment and facilities as required for the proper execution and inspection of the Work. Such equipment and facilities shall meet all requirements of applicable ordinances and laws.
8. Restore the storage area to an equal or better condition as deemed necessary by the Engineer and at no additional cost to the Agency.
10. When required by the Engineer, the Contractor shall furnish and operate a self-loading motor sweeper with spray nozzles at least once each Working Day for the purpose of keeping paved areas acceptably clean wherever construction, including restoration, is incomplete.
11. Materials and equipment shall be removed from the Site as soon as they are no longer necessary. Before the final inspection, the Site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be included in the Contractor's Bid.
12. Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately, and the area cleaned.
13. Excess excavation material from catch basins or similar structures shall be removed from the Site immediately. Sufficient material may remain for use as backfill if permitted by the Specifications. Forms and form lumber shall be removed from the Site as soon as practicable after stripping.
14. Failure of the Contractor to comply with the Engineer's cleanup orders may result in an order to suspend Work until the condition is corrected. No additional compensation will be allowed because of such suspension.
15. Cleanup and dust control required in the Contract shall also be executed on weekends and other non-Working Days when needed to preserve the health safety or welfare of the public. The Contractor shall conduct effective cleanup and dust control throughout the duration of the Contract. The Engineer may require increased levels of cleanup and dust control that, in his/her sole discretion, are necessary to preserve the health, safety and welfare of the public. Cleanup and dust control shall be considered incidental to the items of Work that they are associated with and no additional payment will be made for them.

16. Vermin Control. At the time of acceptance, structures entirely constructed under the Contract shall be free of rodents, insects, vermin, and pests. Necessary extermination work shall be arranged and paid for by the Contractor as part of the Work within the Contract Time and shall be performed by a licensed exterminator in accordance with requirements of governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.
17. Temporary Light, Power, and Water. The Contractor shall furnish, install, maintain, and remove all temporary light, power, and water at its own expense. These include piping, wiring, lamps, and other equipment necessary for the Work. The Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining permission from the water agency concerned. The Contractor shall obtain a construction meter for water used for the construction, plant establishment, maintenance, cleanup, testing and all other work requiring water related to this Contract. The Contractor shall contact the appropriate water agency for requirements. The Contractor shall pay all costs of temporary light, power and water including hookup, service, meter and any, and all, other charges, deposits and/or fees for them. These costs shall be considered incidental to the items of Work that they are associated with and no additional payment will be made for them.

3-12.4.2 [Storage in Public Streets.](#)

DELETE in its entirety and SUBSTITUTE with the following:

1. Construction materials shall not be stored in streets, roads, or highways for more than 5 Calendar Days after unloading. All materials not installed or used in construction within 5 Calendar Days after unloading shall be stored at a location approved by the Engineer.
2. Construction equipment shall not be stored at the Work Site before its actual use nor for more than 5 Calendar Days after it is no longer needed. Time necessary for repair or assembly of equipment may be authorized by the Engineer.
3. Excavated material, except that which is to be used as backfill in the adjacent trench, shall not be stored in public streets unless otherwise permitted. Immediately after placing backfill, all excess material shall be removed.
4. The Contractor shall not store equipment for traffic control in right of way.

ADD the following: [3-12.4.3 Storage and Staging Areas.](#)

1. Storage and staging areas are the Contractor's responsibility. If the Plans designate a staging location within the Project or in close proximity, the Contractor may utilize such area for their use. The storage and staging areas shall be as close as possible to the Site. Contractor is responsible for obtaining any permits, leases, or any other items necessary to obtain staging areas.
2. Storage of hazardous wastes, construction equipment material, and parking and fueling of equipment shall not be allowed in the MHPA or other biologically sensitive areas. Ensure the fueling of vehicles occurs only within designated staging areas using appropriate catch basins and devices.
3. Return the storage and staging area and the adjacent area to an equal or better condition as deemed necessary by the Engineer, at no additional cost to the Agency.

4. The Contractor shall provide the Engineer a copy of the lease agreement for any property to be used for the storage of materials or equipment prior to delivery or storage of any materials or equipment. Each lease agreement shall clearly state the term of the lease and a description of the materials or equipment allowed to be stored and shall provide for the removal of the materials or equipment and restoration of the storage site within the time allowed for the Work.
5. Construction equipment shall not be stored at the Work Site before its actual use on the Work nor for more than 5 Calendar Days after it is no longer needed. Time necessary for repair or assembly of equipment may be authorized by the Engineer.

3-12.6 Water Pollution Controls

3-12.6.2 Best Management Practices (BMPs).

ADD the following:

1. Contractor shall submit a BMP plan as a submittal to the Agency.

3-12.6.3 Storm Water Pollution Prevention Plan (SWPPP).

ADD the following:

1. The Contractor shall evaluate the requirements for the preparation of a SWPPP for Work within the City's boundary by reviewing the Determination of SWPPP Tier Level and Construction Threat Level (form E-32), which may be obtained at:

[Engineering Applications & Forms | Carlsbad, CA \(carlsbadca.gov\)](https://www.carlsbadca.gov/Engineering-Applications-&-Forms)

2. The Contractor shall review the criteria requiring the preparation of a SWPPP conforming with the State Water Resources Control Board Order No. 2022-0057-DWQ, NPDES General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities (the Construction General Permit or CGP). The CGP and other information are available at:

https://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

3. If a SWPPP has been prepared specifically for the Project and is included as a part of the Contract Documents, the Contractor shall use the SWPPP as a baseline document and shall amend the SWPPP, with the Engineer's approval, as necessary to include the Contractor's proposed Construction Schedule, construction operations, and the Site conditions encountered or created during the Work.
4. If the Agency has not prepared a SWPPP for the Project and the Project is subject to coverage under the CGP, the Contractor shall prepare and implement the SWPPP conforming with the CGP requirements.
5. The Contractor shall comply with all requirements of the approved SWPPP and the CGP including implementation during construction by a QSP, The Contractor shall provide all information necessary for the Agency to obtain coverage under the CGP during the electronic submittal of Permit Registration Documents and supporting data necessary for the filing of

the storm water Notice of Intent and Notice of Termination. The Contractor shall be responsible for conducting all monitoring and inspections and filing all reports required by and in accordance with the CGP.

3-12.6.5 Payment.

DELETE in its entirety and SUBSTITUTE with the following:

1. Unless otherwise specified, payment for water pollution control, including implementation and maintenance of BMPs, shall be considered as included in the Contract Unit Price for each item in the Bid.

Payment for dewatering shall be as specified in the Special Provisions.

ADD the following: 3-12.7 Vermin Control.

1. The Site and structures constructed under the Contract shall be kept free of rodents, insects, vermin, and pests. Necessary extermination work shall be arranged and paid for by the Contractor as part of the Work within the Contract time and shall be performed by a licensed exterminator in accordance with requirements of governing authorities. The Contractor shall be liable for injury to persons or property and responsible for the elimination of offensive odors resulting from extermination operations.

3-13 COMPLETION, ACCEPTANCE, AND WARRANTY

3-13.1 Completion.

DELETE in its entirety and SUBSTITUTE with the following:

1. The Contractor shall comply with the following prior to requesting a Pre-Final inspection of the Work and filing of a written assertion that the Work has been completed:
 - a. Provide completed and signed redline drawings and record documents including installation, maintenance and operation instructions, manuals and/or tools for installed equipment.
 - b. Provide and properly label all keys for existing facilities or new permanent work.
 - c. Provide all items specified to be supplied as extra stock and spare parts. Wrap, seal, or place in a container all items as necessary to allow for storage by the Agency for future use. Verify the specified quantities.
 - d. Provide all final Special Inspection reports and certifications required by equipment manufacturers to demonstrate compliance with applicable codes and standards.
 - e. Obtain any required certifications from the Engineer of Record for permanent BMPs.
 - f. Comply with all requirements of permits issued by jurisdictional agencies.
 - g. Remove temporary facilities from the Site.
 - h. Thoroughly clean the Site and remove all mark-outs and construction staking.
2. The Agency Inspector will schedule the Pre-Final inspection within 5 Working Days of receipt of the Contractor's request. The Inspector will generate a list of deficiencies (Punchlist) within 5 Working Days after the Pre-Final inspection.
3. The Contractor shall have 30 Working Days to correct the deficiencies and provide a written response to each Punchlist item. The Inspector will review the corrective work within 5 Working Days of receipt of the Contractor's written response to each Punchlist item. Any

outstanding deficiencies will be considered incomplete Work and the Punchlist will be returned to Contractor. Full payment will not be made for any Bid item with outstanding deficiencies and a Final Inspection will not be scheduled until all deficiencies are completed to the satisfaction of the Inspector.

4. The Contractor shall submit a request for Final Inspection which shall include a written assertion that the Work has been completed in accordance with the Contract Documents and a written response describing the corrective Work completed for all punch list items identified in the Pre-Final inspection(s). The request for Final Inspection will not be considered without the Contractor's written response to the punch list items. The Inspector will schedule the Final Inspection within 10 Working Days of receipt of the Contractor's request and invitees will include the Construction Manager, Engineer and representatives from agencies or utility companies having jurisdiction over the Work. The Contractor's attendance is mandatory.
5. If, in the Engineer's judgment, the Work has been completed in accordance with the Contract Documents, the Engineer will set forth in writing the date the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect and maintain the Work, and to which liquidated damages will be computed.

ADD the following: [3-13.1.1 Requirements Before Requesting a Walk-through.](#)

1. The following items are required prior to requesting a Walk-through:
 - a. Remove temporary facilities from the Site.
 - b. Thoroughly cleaning the Site and removing all mark outs and construction staking.
 - c. Provide completed and signed Red-lines in accordance with Contract Document requirements.
 - d. Provide all material and equipment maintenance and operation instructions and/or manuals.
 - e. Provide all tools which are a permanent part of the equipment installed in the Project.
 - f. Provide and properly identify all keys for construction and all keys for permanent work.
 - g. Provide all final Special Inspection reports required by the applicable building code.
 - h. Provide all items specified to be supplied as extra stock. Wrap, seal, or place in a container all items as necessary to allow for storage by the Agency for future use. Verify the specified quantities.
 - i. Ensure that all specified equal opportunity (if applicable) and certified wage rate documentations covering the Contract Time have been submitted.
 - j. Provide the spare parts for the proposed irrigation system as specified in the Special Provisions.
2. Contractor shall notify the Engineer to arrange a final inspection of permanent BMPs installed and shall obtain the completed, signed, and stamped DS-563 Form 30 Calendar Days prior to the issuance of the Notice of Completion.

ADD the following: [3-13.1.2 Walk-through and Punchlist Procedure.](#)

1. When Contractor considers that the Work and Services are complete, notify the Engineer in writing that the Project is complete and request that the Contractor and the Engineer perform

a Walk-through for the generation of a Punchlist. Contractor shall notify the Engineer at least 7 Working Days in advance of the Walk-through.

2. The Engineer will first determine if the Project is ready for a Walk-through by verifying whether the Contractor have completed all items as required by 3-13.1.1, "Requirements Before Requesting a Walk-through."
3. If the Work includes sewer and storm drain installations, the inspection shall include televising in accordance with the requirements in the Contract Documents.
4. The Engineer shall facilitate the Walk-through.
5. Contractor shall make Plans, specifications, and technical data, such as submittals and equipment manuals, available at the Site for the Walk-through attendees.
6. The Engineer will provide the Contractor with the Punchlist within 15 Working Days after the date of the Walk-through and submit it to the Contractor. The Agency shall not provide a preliminary Punchlist.
7. If the Engineer finds that the Project is not substantially complete as defined in the Contract, the Engineer will terminate the Walk-through and notify the Contractor in writing.
8. If, at any time during the Engineer's evaluation of the corrective Work required by the Punchlist, the Engineer discovers that additional corrective Work is required, the Engineer may include that corrective Work in the Punchlist. Contractor shall remain solely responsible for the Project Site until the Project is completely operational, all Punchlist items have been corrected, and all operation and maintenance manuals have been accepted by the Agency.
9. The Engineer shall meet with the Contractor until all Punchlist items are corrected. If Contractor takes longer than 30 Working Days to complete the corrective Work, the Project shall be subject to re-evaluation.
10. Upon acceptance of the Work, Contractor shall assemble and deliver to the Engineer all records, documents, warranties, material certifications, bonds, guarantees, maintenance and service agreements, and maintenance and operating manuals. Written warranties, except manufacturer's standard printed warranties, shall be on a letterhead addressed to the Contractor. Warranties shall be submitted in the format described in this section, modified as approved by the Agency, to suit the conditions pertaining to the warranty.

3-13.2 Acceptance

DELETE in its entirety and SUBSTITUTE with the following:

1. Acceptance of the Work will occur after all the requirements of the Contract Documents have been fulfilled. If, in the Engineer's judgment, the Contractor has fully performed the Contract, the Engineer will recommend to the City Manager for the City of Carlsbad or Executive Manager for the Carlsbad Municipal Water District that the Contractor's performance of the Contract be accepted. Upon such certification by the Engineer, the City Manager or Executive Manager may accept the Work. Upon the acceptance of the Work by the City Manager or Executive Manager, a "Notice of Completion" will be filed in the office of the San Diego County Recorder. The date of recordation shall be the date of acceptance of the Work.
2. Once the "Notice of Completion" has been recorded, the Engineer will release the retention.

3-13.3 Warranty.

DELETE in its entirety and SUBSTITUTE with the following:

1. Contractor shall warranty and repair all defective materials and workmanship for a period of 1 year. This warranty period shall start on the date the Work was recorded by the “Notice of Completion” unless the Agency has beneficial use of the Project (excluding water, sewer, and storm drain projects). In addition, Contractor shall warranty the Work against all latent and patent defects for a period of 10 years.
2. The warranty period for specific items covered under manufacturers’ or suppliers’ warranties shall commence on the date they are placed into service at the direction of or as approved by the Engineer in writing.
3. All warranties, express or implied, from SubContractors, manufacturers, or suppliers, of any tier, for the materials furnished and work performed shall be assigned, in writing, to the Agency, and shall be delivered to the Engineer prior to the acceptance of the Contractor’s performance of the Contract.
4. Replace or repair defective materials and workmanship in a manner satisfactory to the Engineer after notice to do so from the Engineer and within the time specified in the notice. If Contractor fails to make such replacements or repairs within the time specified in the notice, the Agency may perform the replacement or repairs at Contractor’s expense. If Contractor fails to reimburse the Agency for the actual costs, Contractor’s Surety shall be liable for the cost.
5. The warranty period shall be extended with respect to portions of the Work corrected under warranty. Items that shall be warrantied free from defective workmanship and materials for a period longer than 1 year are as follows:

Specified Item	Minimum Warranty Period
Detectable Warning Tile Construction	3 Years of Manufacturer’s Warranty
All Work Under SECTION 500 – PIPELINE REHABILITATION	3 Years
Fiber Optic Interconnect Cables	2 Years
Luminaires ¹	10 Years of Manufacturer’s Warranty
LED Signal Modules	3 Years of Manufacturer’s Warranty

¹ Provide documentation verifying that the induction luminaire models being offered for the Project are covered by the 10-year warranty.

6. Contractor shall provide the Agency a copy of the manufacturer’s warranty for private sewer pumps, including the alarm panel and all other accessories.
 - a. Contractor shall involve the manufacturer in the installation and startup as needed to secure any extended warranty required.

- b. This section is not intended to limit any manufacturer's warranty which provides the Agency with greater warranty rights than set forth in this section or the Contract Documents.
 - c. The warranty shall include all components. The form of the warranty shall be approved by the Engineer in accordance with 3-13.3.2, "Warranty Format Requirements."
7. If, during the warranty period, any item of the Work is found to be Defective Work, Contractor shall correct it promptly after receipt of written notice from the Agency to do so. The warranty period shall be extended with respect to portions of the Work corrected as part of the warranty requirements.

ADD the following: 3-13.3.1 Defective Work.

1. If the Engineer finds any part of the Work, to be defective or not in compliance with the Contract Documents, the Contractor shall correct the Defective Work in accordance with the Engineer's written instructions and within the specified time limits.
2. The Engineer may order Contractor to stop all or part of the Project if, upon notice, Contractor fails to immediately correct the Defective Work in conformance with the Contract Documents. The Contractor bears all direct and indirect costs and damages that result from the Agency's Stop Work notice.
3. The Engineer may determine in its sole discretion to accept Defective Work instead of having the Contractor correct the Defective Work. However, the Contractor will still be financially responsible for the Defective Work. The Engineer shall issue a deductive Change Order and will incorporate the necessary revisions in the Contract Documents for the Defective Work, the diminished value to the Project, or for the cost to repair the Defective Work.
4. If the Contractor fails to correct Defective Work within the specified time limits, the Engineer may correct the Contractor's Defective Work. The Agency has the right to correct any Defective Work without notice in the event of an emergency. Contractor shall bear all direct and indirect costs of the Defective Work that the Agency corrects.
5. When undertaking remedial action under this section, the Agency may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's Work and or services, and incorporate into the Project all materials and equipment stored at the Site or for which the Agency has paid but Contractor has stored elsewhere.
6. 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 Agency's Punchlist within 30 Working Days in accordance with 6-1.1, "Construction Schedule," the Contractor shall reimburse the Agency for all costs to provide inspection services required to monitor the Contractor's Work beyond the 30 Working Days. The Agency shall bill the Contractor for the additional inspection at the Agency's established rates.
7. If the Contractor completes the Project or portions of the Project prior to NOC, the Contractor shall preserve equipment by developing and implementing a preventive maintenance program in compliance with manufacturer's recommendations.

ADD the following: 3-13.3.2 Warranty Format Requirements.

1. Written warranties, except manufacturer's standard printed warranties, shall be on the Contractor's and Contractor's agents', material suppliers', installers', or manufacturers' own letterhead, addressed to and for the Agency's benefit. Submit warranties in the format described in this section, modified as approved by Engineer to suit the conditions pertaining to the warranty.
2. The Contractor shall obtain warranties, executed in triplicate by responsible SubContractors and Suppliers, within 10 Working Days after completion of the applicable item of Work. Except for items put into use with the Engineer's permission with date mutually agreed upon in writing, ensure that the beginning time of the warranty is the Project completion date.
3. The Contractor shall verify that the documents are in proper form, contain full information, and are notarized.
4. The Contractor shall verify that warranties are signed by both the Contractor and the appropriate party.
5. The Contractor shall provide warranties to the Engineer with a neatly typed table of contents, identifying each warranty with the number and title of the applicable specification section requiring the warranty and the name of the product or work item.
6. The Contractor shall separate each warranty with index tab sheets keyed to the table of contents listing. Provide complete information using separate typed sheets as necessary. The information shall include a list of SubContractors and Suppliers with the name, address, and telephone number of the responsible principals.

3-13.3.3 Long-Term Warranty Contract (LTWC).

1. If specified in the Special Provisions and when a LTWC is included in the Contract Documents, the Contractor shall execute and submit the supplemental agreement for the extended Project warranty (the LTWC covering the workmanship and materials).
2. The first 3 years of warranty protection after installation shall be secured by the faithful performance and payment bonds in accordance with 1-7.2, "Contract Bonds."
3. At the conclusion of the initial 3-year bonded warranty period, an "n"-year subsequent manufacturer's warranty for labor and materials shall commence and run concurrently with the LTWC, where "n" is the number of additional years beyond the initial 3 years as specified in the Special Provisions. Alternatively, and with respect to the 3-year bonded warranty, the Contractor may submit a 2-year bond followed by 1-year bond. If the alternate option is selected, the 1-year bond shall be submitted to the Agency at least 90 Calendar Days before the expiration of the original 2-year bond. Contractor shall clearly inform the Contract Specialist of the option selected. The protection provided shall not be for less than 3 + "n" years continuously.
4. The manufacturer's warranty for parts and labor shall secure performance of the LTWC by the Contractor. Additional security in the form of bonds for both the LTWC and the manufacturer's extended "n"-year warranty (in years 4 and on following Acceptance) for labor and materials may, but is not required to be, provided per the compensation provisions of the LTWC.
5. The manufacturer warranty shall extend to performance of the LTWC by the Contractor, including without limitation the performance of periodic inspections, preparation of periodic reports, and performance of repairs or replacements including parts and labor. If the

manufacturer warranty does not expressly extend to the LTWC or is qualified in any way to exclude warranty of the performance of the LTWC by the Contractor, the surety bond shall be provided for the LTWC in accordance with 1-7.2, "Contract Bonds."

6. If the Contractor is unable to obtain a bond which extends the "n"-year term of the LTWC, to obtain a manufacturer warranty or both which clearly and unambiguously extends to secure performance of the LTWC by the Contractor for the "n"- year term, the Agency shall accept either form of security provided that at least 1 of these forms is provided before award.
7. Provision of the manufacturer's warranty, bonds, or both as specified is a pre-condition to award of the Contract.
8. Refer to the LTWC for additional information. The provisions of 3-3, "SUBCONTRACTORS" shall not apply to LTWC.

ADD the following: 3-14 PARTNERING

1. Contractor may request the formation of a formal partnering relationship (Partnering) by submitting a request in writing to the Engineer after approval of the Contract. If Contractor's request for Partnering is approved by the Engineer, scheduling of a Partnering workshop, selecting the Partnering facilitator and workshop, selecting the Partnering facilitator and workshop site, and other administrative details shall be as agreed to by both Parties.
2. The establishment of a Partnering shall not change or modify the terms and conditions of the Contract and shall not relieve either party of the legal requirements of the Contract.
3. The goals of Partnering include the following:
 - a. The Engineer and Contractor's representatives, including Contractor's SubContractors, actively working together as partners.
 - b. Avoidance of destructive confrontation and litigation among the parties.
 - c. Mutual understanding on how the Work is to be conducted.
 - d. Establishment of mutual key results to facilitate Project success.
 - e. Establishment of an atmosphere of teamwork, trust, and open communication.

3-14.1 Payment.

1. The payment for providing a facilitator and a workshop site shall be borne equally by the Agency and Contractor. Contractor shall pay in advance all compensation for the costs of the facilitator and for the costs of obtaining the workshop site.
2. Unless a Bid item has been provided for "Partnering," the Agency's share of such costs shall be reimbursed to Contractor as Extra Work. Markups shall not be added. Other costs associated with the Partnering relationship shall be borne separately by the party incurring the costs.

ADD the following: 3-15 PUBLIC CONVENIENCE

1. The Contractor shall provide and maintain safe and adequate pedestrian and vehicular access to fire hydrants; hospitals; police and fire stations; commercial and industrial establishments including churches, schools and parking lots; service stations; public transportation; pedestrian crossing; motels and establishments of similar nature. Access shall be continuous and unobstructed unless otherwise approved by the Engineer.

2. The Contractor shall provide access for emergency vehicles and mail delivery and trash collection services. The trash hauling schedule can be obtained by contacting Republic Services at [Customer Support | Republic Services](#).
3. During paving operations, the Contractor shall provide paved parking within 800 feet of the affected residences or businesses unless otherwise approved by the Engineer.
4. The Contractor shall provide notification 72 hours prior to the start of construction in the public right-of-way that affects vehicular traffic, parking, or pedestrian routes. For a full street closure, all residences and/or businesses on the affected street or alley shall be notified. For partial street closures or for curb, sidewalk or driveway repairs, the residences and/or businesses directly affected by the Work shall be notified. The notice shall:
 - a. Be written and hand delivered.
 - b. State the date and time the Work will begin and its anticipated duration.
 - c. Provide a brief description of the Work and simple instructions to the home or business owner on actions to facilitate the construction.
 - d. List 2 telephone numbers to obtain additional information. One number shall be the Contractor's permanent office or field office and the other number shall be a 24-hour number answered by someone who is knowledgeable about the Project. An answering machine shall not be connected to either number.
 - e. For residences, be prepared on 65-lb. brightly colored card stock or equivalent durability with contrasting, 12-point font or larger printing; pre-cut in a manner for hanging on a doorknob; and minimum size of 3-1/2 inches wide by 8-1/2 inches long (refer to the appendices for an example).
 - f. Be approved by the Engineer prior to distribution.
5. The Contractor shall post "No Parking" signs 72 hours in advance of the Work. The signs shall state the date and time of parking restriction for a duration not to exceed the time necessary to complete the Work at that location. If the Work is delayed or rescheduled, the signs shall be removed and re-posted 72 hours in advance of the rescheduled Work.
6. Payment for public convenience shall be considered as included in the Contract Price for each item in the Bid and no additional payment will be made.

ADD the following: 3-16 SITE ACTIVITIES BY THE AGENCY OR SEPARATE CONTRACTORS

3-16.1 The Agency's Right to Award Separate Contracts.

1. The Agency reserves the right to perform work or operations outside the Scope of Work of the Contract related to the Project with Agency Forces, Separate Contractors, or both. If work to be performed by another party was not noted in the Contract, the Agency shall give written notice to Contractor 10 Working Days prior to the start of any Work. If Contractor determines that the work being performed by the Agency or others may interfere with or cause damage to Work being performed by Contractor, notify the Engineer in writing within 3 Working Days of the Engineer's notice.

3-16.2 Integration of the Work with Separate Contractors.

1. When specified in the Contract Documents, prepare a plan to integrate the work performed by Separate Contractors, Agency Forces, or both with the performance of the Work and submit the plan to the Engineer for approval. The plan shall be fair and reasonable for

Contractor and the Separate Contractors. Work with Separate Contractors to reach an agreement for the prepared plan. Arrange the performance of the work so that the Work and the work of the Separate Contractors are, to the extent applicable, properly integrated and jointed in a manner that avoids any damage to the Work or to the work of the Separate Contractors.

3-16.3 Coordination.

1. Coordinate Contractor's activities and the Schedule with the activities and schedules of the Separate Contractors and make any revisions to the Schedule deemed necessary to avoid any disruption to the Work or to the work of the Separate Contractors.

3-16.4 Use of Site.

1. Provide the Agency and the Separate Contractors reasonable opportunities for the storage of materials and equipment and performance of their work. Connect and coordinate work and operations with the work and operations of the Agency and the Separate Contractors as required by the Contract Documents.
2. Coordinate traffic control with the Separate Contractors for other projects and minimize the impact to the community. Prior to the start of construction, submit Contractor's plan for coordination.

3-16.5 Deficiency in Work of Separate Contractors.

1. If part of Contractor's Work depends on proper execution or results upon construction or operations by the Agency or a Separate Contractor, prior to proceeding with that portion of the Work, promptly report to the Separate Contractor and the Engineer any apparent discrepancies or defects in construction that would render it unsuitable for proper execution and results. Use good faith efforts to resolve any such discrepancies or defects or any related disagreements. Contractor's failure to report constitutes Contractor's acceptance of the Work of Separate Contractors as fit, proper, and coordinated with the Work.

3-16.6 Payment.

1. Payment for reporting deficiencies, coordinating, and resolving discrepancies shall be included in the Contract Price.

SECTION 4 – CONTROL OF MATERIALS

4-1 PROTECTION

ADD the following:

1. The Contractor shall repair or replace any equipment and materials in the event of vandalism, damage, or theft at no additional cost to the Agency.
2. The Contractor shall be responsible for the protection of public and private property adjacent to the Work and shall exercise due caution to avoid damage to such property.
3. All costs to the Contractor for protecting, removing, and restoring existing improvements shall be included in the Bid.

4. The Agency and affected utility companies have, by a search of known records, endeavored to locate and indicate on the Plans, all utilities which exist within the limits of the Work. However, the accuracy and/or completeness of the nature, size and/or location of utilities indicated on the Plans is not guaranteed.
5. The Contractor shall determine the location and depth of all utilities, including service connections, which have been marked by the respective owners and which may affect or be affected by its operations. 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.
6. The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the owner or order from the Agency. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.
7. Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with Section 5-1, the Contractor shall, unless otherwise provided, furnish, and place the necessary protection at its expense.
8. Upon learning of the existence and location of any utility omitted from or shown incorrectly on the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for.
9. The Contractor shall immediately notify the Engineer and the utility owner if any utility is disturbed or damaged. The Contractor shall bear the costs of repair or replacement of any utility damaged if located.
10. When placing concrete around or contiguous to any non-metallic utility installation, the Contractor shall at its expense:
 - a. Furnish and install a 2-inch cushion of expansion joint material or other similar resilient material; or
 - b. Provide a sleeve or other opening which will result in a 2-inch minimum-clear annular space between the concrete and the utility; or
 - c. Provide other acceptable means to prevent embedment in or bonding to the concrete.
11. Where concrete is used for backfill or for structures which would result in embedment, or partial embedment, of a metallic utility installation; or where the coating, bedding or other cathodic protection system is exposed or damaged by the Contractor's operations, the Contractor shall notify the Engineer and arrange to secure the advice of the affected utility owner regarding the procedures required to maintain or restore the integrity of the system.
12. Unless otherwise specified, the Contractor shall remove all interfering portions of utilities shown on the Plans or indicated in the Bid documents as "abandoned" or "to be abandoned in place." Before starting removal operations, the Contractor shall ascertain from the Agency whether the abandonment is complete, and the costs involved in the removal and disposal shall be included in the Bid for the items of Work necessitating such removals.
13. When feasible, the owner is responsible for utilities within the area affected by the Work and will complete their necessary installations, relocations, repairs, or replacements before commencement of Work by the Contractor. When the Plans or Specifications indicate that a utility installation is to be relocated, altered, or constructed by others, the Agency will conduct all negotiations with the owners and work will be done at no cost to the Contractor,

except for manhole frame and cover sets to be brought to grade as provided in the Contract Documents. Utilities which are relocated to avoid interference shall be protected in their position and the cost of such protection shall be included in the Bid for the items of Work necessitating such relocation.

14. After award of the Contract, portions of utilities which are found to interfere with the Work will be relocated, altered, or reconstructed by the owners, or the Engineer may order changes in the Work to avoid interference. Such changes will be paid.
15. When the Plans or Specifications provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such Work shall be included in the Bid for the items of Work necessitating such Work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its convenience shall be its responsibility and it shall make all arrangements and bear all costs.
16. The utility owner will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. The relocation of such service connections will be paid and will include the restoration of all existing improvements which may be affected by the relocation. The Contractor may agree with the owner of any utility to disconnect and reconnect interfering service connections. The Agency will not be involved in any such agreement.
17. Contractor shall coordinate the Work with utility agencies and companies. Prior to the installation of any and all utility structures within the limits of work by any utility agency or company, or its Contractor, the Contractor shall place all curb or curb and gutter that is a part of the Work and adjacent to the location where such utility structures are shown on the Plans and are noted as being located, relocated or are otherwise shown as installed by others. In order to minimize delays to the Contractor caused by the failure of other parties to relocate utilities that interfere with the construction, the Contractor, upon the Engineer's approval, may be permitted to temporarily omit the portion of Work affected by the utility. If such temporary omission is approved by the Engineer, the Contractor shall place survey or other physical control markers sufficient to locate the curb or curb and gutter to the satisfaction of the utility agency or company. Such temporary omission shall be for the Contractor's convenience and no additional compensation will be allowed therefore or for additional work, materials or delay associated with the temporary omission. The portion thus omitted shall be constructed by the Contractor immediately following the relocation of the utility involved unless otherwise directed by the Engineer.
18. The Contractor shall notify the Engineer of its Construction Schedule insofar as it affects the protection, removal, or relocation of utilities. The notification shall be included as a part of the Construction Schedule. The Contractor shall notify the Engineer in writing of any subsequent changes in the Construction Schedule which will affect the time available for protection, removal, or relocation of utilities.
19. The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed.

20. The Contractor may be given an extension of time for unforeseen delays attributable to unreasonably protracted interference by utilities in performing the Work correctly shown on the Plans.
21. The Agency will assume responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities within the area affected by the Work if such utilities are not identified in the Contract Documents. The Contractor will not be assessed liquidated damages for any delay caused by failure of Agency to provide for the timely removal, relocation, or protection of such existing facilities.
22. The Contractor will be compensated for damages incurred due to delays for which the Agency is responsible or for delays attributable to interferences, relocations, or alterations not covered by the Contract Documents. These damages for delay will be determined by the Engineer. The Agency shall not be liable for damages which could have been avoided by the judicious handling of forces, equipment, or plant. These avoidable damages will be determined by the Engineer. The Engineer may grant Contractor an extension of time for damages due to delay.
23. When necessary, the Contractor shall so conduct its operations as to permit access to the Work Site and provide time for utility work to be accomplished during the progress of the Work.

4-2 INSPECTION

4-2.1 General

ADD the following:

1. Unless identified prior to award of contract, all costs of inspection at the source, including salaries and mileage costs, shall be paid by the Contractor.
2. Materials typically accepted by Certificate of Compliance shall not require inspection at the source unless specified in the Contract Documents.
3. Location changes to the source of materials requiring inspection without the required 24-hour notification may result in non-compliant material subject to rejection. Contractor shall be responsible for staff charges resulting from last minute changes or cancellations once staff has been deployed. The Engineer shall issue a deductive Field Order for a minimum of 2 hours of staff time to reimburse the Agency for misdirected staff charges. The Contractor shall be notified in writing of the additional staff charges incurred.
4. Steel pipe in sizes larger than 18 inches shall require inspection at the source of production.
5. Vitrified clay and cast-iron pipe in all sizes are acceptable upon submittal of a Certificate of Compliance, subject to sampling and testing by the Agency.
6. Agency staff or a qualified inspection agency approved by the Engineer shall witness all welding, lining, coating, and testing. Contractor shall incur additional inspection costs outlined in 4-2.3, "Inspection of Items Not Locally Produced."
7. All parts of production (including but not limited to product fabrication, welding, testing, lining, and coating of straight pieces and specials) shall be performed or produced in the United States.
8. Welding and all testing shall be performed by certified welders and testing staff with credentials traceable in the United States.

9. The Contractor shall provide the Engineer free and safe access to any and all parts of Work at any time. Such free and safe access shall include means of safe access and egress, ventilation, lighting, shoring, dewatering and all elements pertaining to the safety of persons as contained in the California Code of Regulations, Title 8, Industrial Relations, Chapter 4, Division of Industrial Safety, Subchapter 4, Construction Safety Orders and such other safety regulations as may apply. Contractor shall furnish Engineer with such information as may be necessary to keep the Engineer fully informed regarding progress and manner of work and character of materials. Inspection or testing of the whole or any portion of the Work or materials incorporated in the Work shall not relieve Contractor from any obligation to fulfill this Contract.

4-2.3 Inspection of Items Not Locally Produced

ADD the following:

1. Specialty Testing of Foreign Materials.
 - a. Materials that are manufactured, produced, or fabricated outside of the United States shall be delivered to a distribution point in California, unless otherwise specified. Quality Control and related testing shall be performed to all applicable specified US standards. Manufacturer's testing and staff certification shall be traceable to a United States regulatory agency. Retain the materials for a sufficient period of time to permit inspection, sampling, and testing. The Contractor shall not be entitled to an extension of time for acts or events occurring outside of, at point of entry, or during transport to the United States, unless the extension is acceptable to the Engineer.

ADD the following: 4-2.4 Specialty Inspection Paid for by the Contractor

1. Contractor shall employ and pay for the services of a qualified inspection agency to perform specialty inspection services as required by the Contract Documents.
2. The payment for the specialty inspection service Work shall be included under the Bid item for "Specialty Inspection Paid For By the Contractor."
3. When an Allowance Bid item for "Specialty Testing Under the Direction of the Engineer" is provided, Contractor shall employ and pay for the services of a qualified third party independent laboratory to perform the required testing. Contractor shall be reimbursed for the cost of testing under this Bid item.
4. Contractor shall be reimbursed for the cost of specialty inspections when an Allowance Bid item is included in the Bid otherwise the cost is the responsibility of the Contractor if the manufacturer requires a specialty inspection service.

4-3 TESTING

ADD the following:

1. Except as specified in these Special Provisions, the Agency will bear the cost of testing of locally produced materials and/or on-site workmanship where the results of such tests meet or exceed the requirements indicated in the Standard Specifications, Technical Specification, and any Supplemental Provisions. The cost of all other tests shall be borne by the Contractor.
2. At the option of the Engineer, the source of supply of each of the materials shall be approved by the Engineer before the delivery is started. All materials proposed for use may be

inspected or tested at any time during their preparation and use. If, after incorporating such materials into the Work, it is found that sources of supply that have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. If any product proves unacceptable after improper storage, handling or for any other reason it shall be rejected, not incorporated into the Work and shall be removed from the Project Site all at the Contractor's expense.

3. Compaction tests may be made by the Engineer and all costs for tests that meet or exceed the requirements of the specifications shall be borne by the Agency. The tests may be made at any place along the Work as deemed necessary by the Engineer. The costs of any retests made necessary by noncompliance with the specifications shall be borne by the Contractor.

4-4 TRADE NAMES

ADD the following:

1. Whenever materials or equipment are indicated in the Contract Documents by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function, and quality required.
2. Unless stated otherwise, materials or equipment of other suppliers may be accepted if sufficient information is submitted to the Engineer for review to determine whether the material or equipment proposed is equivalent or equal to that named.
3. For reviews prior to Bid:
 - a. The Engineer shall respond to Contractor's substitution proposal by the last date for issuing an Addendum for the Contract. If the Engineer fails to respond to Contractor's substitution proposal before the Bid due date, the substitution proposal shall be deemed denied.
 - b. Contractor may bring forward a substitution proposal after Award that was denied based on the Engineer's failure to respond by submitting a Cost Reduction Proposal in accordance with 2-6.1, "Cost Reduction Proposal."
4. Include the following information in the request for substitution:
 - a. Whether or not acceptance of the substitute for use in the Work shall require a change in any of the Contract Documents to adopt the design to the proposed substitute.
 - b. Whether or not incorporation or use of the substitute in connection with the Work is subject to the payment of any license fee or royalty.
 - c. All variations of the proposed substitute from the items originally specified shall be identified.
 - d. Available maintenance, repair, and replacement service requirements. The manufacturer shall have a local service agency within 50 miles (80.5 km) of the Site which maintains properly trained personnel and adequate spare parts and is able to respond and complete repairs within 24 hours.
 - e. Certifications from the manufacturer or service provider that the proposed substitute shall perform the intended function adequately under the expected service conditions, achieve the results called for by the general design, and be similar and of equal substance to that indicated.

5. There is no guaranteed time frame for the Engineer's review of the substitution requests. Any lack of action on the Engineer's side within Contractor's requested time does not constitute acceptance of the substitution.
6. If, in the opinion of the Engineer, substitute items are determined to be unsatisfactory in performance, appearance, durability, compatibility with existing equipment or systems, availability of repair parts and suitability of application, the Contractor shall remove the substituted item and replace it with the originally specified item at no cost to the Agency.
7. The burden of proof as to the type, function, and quality of any such substitute product, material or equipment shall be upon Contractor. The Engineer may require at Contractor's expense additional data about the proposed substitute.
8. Acceptance by the Engineer of a substitute item does not relieve Contractor of the responsibility for full compliance with the Contract Documents. If the Engineer takes no exceptions to the proposed substitution, it shall not relieve Contractor from Contractor's responsibility to the efficiency, sufficiency, quality, and performance of the substitute material or equipment in the same manner and degree as the material and equipment specified by name.
9. The Bid submittal shall be based on the material and equipment specified by name in the Contract. If the proposal is rejected by the Engineer, Contractor shall not be entitled to either an extension in Contract Time, an increase in the Contract Price, or both.
10. As applicable, no Shop Drawing or Working Drawing submittals shall be made for a substitute item nor shall any substitute item be ordered, installed, or utilized without the Engineer's prior written approval.
11. The Contractor is responsible for the satisfactory performance of substituted items. If, in the sole opinion of the Engineer, the substitution is determined to be unsatisfactory in performance, appearance, durability, compatibility with associated items, availability of repair parts and suitability of application the Contractor shall remove the substituted item and replace it with the originally specified item at no cost to the Agency.

4-5 WEIGHING AND METERING EQUIPMENT

REPLACE the first paragraph with the following:

All scales and metering equipment used for proportioning materials shall be inspected for accuracy and certified within the past 12 months by the State of California Bureau of Weights and Measures, by the County Director or Sealer of Weights and Measures, or by a scale mechanic registered with or licensed by the County.

SECTION 5 – LEGAL RELATIONS AND RESPONSIBILITIES

5-1 LAWS AND REGULATIONS

ADD the following:

1. The Contractor shall strictly adhere to the provisions of the Labor Code regarding minimum wages; the 8-hour day and 40-hour week; overtime; Saturday, Sunday, and holiday work; and prohibitions against discrimination, harassment, and retaliation. The Contractor shall forfeit to the Agency the penalties prescribed in the Labor Code for violations.

2. Each worker shall be paid subsistence and travel as required by the collective bargaining agreement on file with the State of California Department of Industrial Relations.
3. The Contractor's attention is directed to Labor Code Section 1776 which imposes responsibility upon the Contractor for the maintenance, certification, and availability for inspection of such records for all persons employed by the Contractor or SubContractor in connection with the Project. The Contractor shall agree through the Contract to comply with this Section and the remaining provisions of the Labor Code.
4. Municipal ordinances that affect this Work include Chapter 11.06. Excavation and Grading. If this notice specifies locations or possible materials, such as borrow pits or gravel beds, for use in the proposed construction Project which would be subject to Fish and Game Code Section 1601 or 1603, the conditions established in Fish and Game Code Section 1601 *et seq.* shall become conditions of the Contract.

5-3.3 Payroll Records.

ADD the following:

1. The Contractor and its SubContractors shall maintain and furnish to the Agency, at a designated time, a certified copy of each weekly payroll reflecting the wages containing all of Contractor's and SubContractors' employees engaged in the Work and a statement of compliance signed under penalty of perjury.

5-3.4 Hours of Labor

ADD the following:

1. Unless otherwise approved in writing by the Engineer, the hours of work shall be between the hours of 7:00 AM and 4:00 PM on Mondays through Fridays, excluding Agency holidays. The Contractor shall obtain the written approval of the Engineer if the Contractor desires to work outside these hours or at any time during weekends and/or holidays. This written permission must be obtained at least 48 hours prior to such work. The Engineer may approve work outside the stated hours and/or days when, in his/her sole opinion, such work conducted by the Contractor is beneficial to the best interests of the Agency. The Contractor shall pay the inspection costs of such work.
2. The Contractor shall incorporate the dates, areas and types of work prohibited in this section in the Construction Schedule. No additional payment, adjustment of bid prices or adjustment of Contract Time of completion will be allowed as a consequence of the prohibition of work being performed within the dates, areas and/or types of work prohibited in this section.

5-4 INSURANCE

5-4.1 General.

ADD the following:

1. Contractor shall procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the Work by the Contractor, his or her agents, representatives,

employees or SubContractors. The insurance shall meet the City's policy for insurance as stated in City Council Policy No. 70.

- a. **Coverages and Limits:** Contractor shall maintain the types of coverages and minimum limits specified in these Agency Supplemental General Provisions (00 73 00):
 - i. **Commercial General Liability (CGL) Insurance:** Insurance written on an "occurrence" basis, including products-completed operations, personal & advertising injury, with limits no less than \$2,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
 - ii. **Business Automobile Liability Insurance:** \$2,000,000 combined single limit per accident for bodily injury and property damage. In addition, the auto policy must cover any vehicle used in the performance of the Contract, used onsite or offsite, whether owned, non-owned or hired, and whether scheduled or non-scheduled.
 - iii. **Workers' Compensation and Employers' Liability Insurance:** Workers' compensation limits as required by the Labor Code and Employers' Liability limits of \$1,000,000 per incident. Workers' compensation offered by the State Compensation Insurance Fund is acceptable to the City.
- b. **Additional Provisions:** Contractor shall ensure that the policies of insurance required under this Contract with the exception of Workers' Compensation and Business Automobile Liability Insurance contain, or are endorsed to contain, the following provisions.
 - i. The Agency, its officials, employees and volunteers must be covered as additional insured as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officials, employees or volunteers. All additional insured endorsements must be evidenced using separate documents attached to the certificate of insurance; 1 for each company affording general liability, and employers' liability coverage.
 - ii. The Contractor's insurance coverage shall be primary insurance as respects the Agency, its officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its officials, employees or volunteers shall be in excess of the Contractor's insurance and shall not contribute with it.
 - iii. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officials, employees or volunteers.
 - iv. Coverage shall state that the 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.
- c. **Notice of Cancellation.** Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be nonrenewed, suspended, voided,

canceled, or reduced in coverage or limits except after 10 Calendar Days' prior written notice has been sent to the Agency by certified mail, return receipt requested.

- d. **Deductibles and Self-Insured Retention (S.I.R.) Levels.** Any deductibles or self-insured retention levels must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention levels as respects the Agency, its officials and employees; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.
- e. **Waiver of Subrogation.** All policies of insurance required under this Contract shall contain a waiver of all rights of subrogation the insurer may have or may acquire against the Agency or any of its officials or employees.
- f. **SubContractors.** Contractor shall include all SubContractors as insured under its policies or shall furnish separate certificates and endorsements for each SubContractor. Coverages for SubContractors shall be subject to all of the requirements stated in these Agency Supplemental General Provisions (00 73 00).
- g. **Acceptability of Insurers.** Insurance must be placed with insurers that have a rating in Best's Key Rating Guide of at least A-VII. Insurers must also be authorized to transact the business of insurance by the State of California Insurance Commissioner as admitted carriers as evidenced by a listing in the official publication of the Department of Insurance of the State of California and/or under the standards specified by City Council Policy No. 70.
- h. **Verification of Coverage.** Contractor shall furnish the Agency with certificates of insurance and original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be in forms approved by the Agency and are to be received and approved by the Agency before the Contract is executed by the Agency.
- i. **Coverage and Limits.** Contractor will maintain the types of coverage and minimum limits indicated below unless the Risk Manager or City Manager or Executive Manager approves a lower amount. These minimum amounts of coverage will not constitute any limitations or cap on Contractor's indemnification obligations under this Contract. Agency, its officers, agents, and employees make no representation that the limits of the insurance specified to be carried by Contractor pursuant to this Contract are adequate to protect Contractor. If Contractor believes that any required insurance coverage is inadequate, Contractor will obtain such additional insurance coverage, as Contractor deems adequate, at Contractor's sole expense. The full limits available to the named insured shall also be available and applicable to the Agency as an additional insured.
- j. **Cost of Insurance.** The Cost of all insurance required under this Contract shall be included in the Contractor's Bid.

5-6 PATENTS FEES AND ROYALTIES.

DELETE in its entirety and SUBSTITUTE with the following:

1. Contractor shall pay, at no additional cost to the Agency, all applicable royalties and license fees arising from the Work. Contractor shall indemnify and defend all claims and lawsuits for infringement of patent, trademark, and copyright against the Agency and shall hold the Agency harmless from any loss.

5-7 SAFETY

5-7.1.1 General.

ADD the following:

1. When conducting grading or excavation, place Contractor's name and emergency telephone number adjacent to the Work at intervals and locations approved by the Engineer. The method of posting shall be approved by the Engineer.
2. The Contractor shall respond and initiate corrective action in accordance with OSHA and within 24 hours of the notice of the nonconforming Work that poses an imminent threat to person or property.
3. The Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for the protection of workers and public, and shall use danger signs warning against hazards created by such features of construction as protruding nails, hoists, well holes, and falling materials.

ADD the following: 5-7.1.3 Health and Safety Plan (HSP).

1. The Contractor is ultimately responsible for the health and safety of Contractor's employees. These specifications shall not be construed to limit Contractor's liability nor to assume that the Agency, its employees, or designees shall assume any of Contractor's liability associated with Site safety considerations.
2. Contractor shall have a HSP in effect at least 1 week prior to the commencement of the Work. The HSP shall comply with all OSHA and other applicable requirements.
3. The HSP shall specifically address procedures and protocols that shall be followed to monitor for or respond to the presence of hazardous atmosphere, possibility for engulfment, gasses due to organic soils or proximity to landfills, exposure to hazardous products such as may be released when grinding, cutting, or torching galvanized or painted surfaces or asbestos containing materials, contaminated soil, and groundwater. Identify response actions that shall be taken when these conditions are encountered.
4. The Agency shall not assume any role in determining the adequacy of the HSP on Contractor's behalf.

5-7.3 Use of Explosives.

ADD the following:

1. Explosives may be used only when authorized in writing by the Engineer. The Contractor shall prepare and submit an application for blasting permit to the City of Carlsbad Engineering Department and comply with the City's blasting policy.

5-7.7 Security and Protective Devices.

5-7.7.1 General.

DELETE in its entirety and SUBSTITUTE with the following:

1. Security and protective devices shall consist of fencing, railing, steel plates, or other devices for the protection of workers or the public from hazards posed by open excavations or any work in progress. Security and protective devices shall remain in place until the Work is accepted.
2. Unless otherwise specified, no separate or additional payment will be made for security and protective devices. Payment shall be included in the Contract price for the various Bid items requiring such devices.

ADD the following: 5-7.7.3 Playground Safety.

1. Provide a secured fence around the playground to prevent use or access. Do not remove the fence until the independent Playground Safety Audit has been done by the Contractor and the Engineer, the Engineer has accepted the playground design and installation, and the Punchlist items have been completed.
2. Provide certification by a NPSI Certified Playground Safety Inspector that confirms that the installed equipment is compliant with all applicable codes.
3. The payment for the fencing around the playground and the playground safety audit is included in the Contract Price.

5-7.7.2 Security Fencing

1. The payment for security fencing Work for open excavations shall be included in the Contract Price.

5-7.8 Steel Plate Covers

5-7.8.1 General.

ADD the following:

1. The Contractor shall protect transverse or longitudinal cuts, voids, trenches, holes, and excavations in the right-of-way that cannot be properly completed within 1 Working Day by adequately designed barricades and structural steel plates (plates) that shall support legal vehicle loads in such a way as to preserve unobstructed traffic flow.
2. For trench widths exceeding those in Table 5-7.8.2, a structural design shall be prepared by a California registered civil or structural engineer regularly engaged in the design of shoring systems.
3. The Contractor shall secure approval in advance from authorities concerning the use of any bridging proposed on the Work.
4. The Contractor shall shore the trench adequately to support the bridging and traffic loads.
5. The Contractor shall design plates for HS 20-44 truck loading in accordance with Caltrans Bridge Design Specifications Manual and evaluate soil conditions and ensure that the plate extends enough beyond the trench walls to support traffic loads.
6. The Contractor shall use the plates skid-resistant with a nominal COF of 0.35 as determined by California Test Method 342. If a different test method is used, the Contractor may utilize standard test plates with known coefficients of friction available from each Caltrans District Materials Engineer to correlate skid resistance results to California Test Method 342.

7. Plates shall provide complete coverage to prevent any person, bicycle, motorcycle, or motor vehicle from being endangered due to plate movement causing separations or gaps.
8. Alternative installation methods may be submitted in accordance with 3-8, "SUBMITTALS" for the Engineer's approval.
9. Contractor shall install signage and postings with a 2 inch (50.8 mm) minimum letter height indicating the steel plate cover load limit, the Company's name, and a 24-hour emergency contact phone number. See 601-1, "GENERAL."
10. Contractor is responsible for the maintenance of the plates, shoring, and asphalt concrete ramps or any other approved device used to secure the plates. Contractor shall immediately mobilize necessary personnel and equipment after being notified by the Engineer, the Agency, or a member of the public of a repair needed for such items as plate movements, noise, anchors, and asphalt ramps. Failure to respond to the emergency request within 2 hours shall be grounds for the Agency to perform necessary repairs that shall be invoiced at the actual cost including overhead or \$500 per incident, whichever is greater. Failure may also result in a "Stop Work" notice.
11. When plates are removed, Contractor shall repair any damage to the pavement with fine graded asphalt concrete mix or slurry seal satisfactory to the Engineer.
12. The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate. The cold milling shall produce a flat surface that the plate shall rest on with no horizontal or vertical movement. Horizontal gaps between the unmilled pavement and the plate shall not exceed 25 mm (1 ") and shall be filled with elastomeric sealant material which may, at the Contractor's option, be mixed with no more than 50%, by volume, of Type I aggregate conforming to the requirements of tables 203-5.2 and 203-5.3.

ADD the following: 5-8 INDEMNIFICATION AND HOLD HARMLESS AGREEMENT

1. Contractor agrees to defend, indemnify, and hold harmless Agency, its affiliated and subsidiary entities, and its elected and appointed officials, officers, directors, managers, employees and agents ("Indemnified Parties") from and against all claims asserted, liability established, or judgments for damages or injuries to any person or property, including to Contractor's officers, employees, agents, or subContractors, arising directly or indirectly out of the Work, which arise from, are connected with, or are caused or claimed to be caused by the acts or omissions of Contractor, its officers, employees, agents or subContractors. Contractor's duty to defend, indemnify, and hold harmless shall not include any claims or liabilities arising from the sole negligence or sole willful misconduct of the Indemnified Parties.

Contractor further agrees that its duty to defend includes all attorney fees and costs associated with enforcement of this indemnification provision, defense of any claims arising from this Contract, and, where a conflict of interest exists or may exist between Contractor and Agency, the reasonable value of attorney fees and costs if Agency chooses, at its own election, to conduct its own defense or participate in its own defense of any claim related to this Contract.

2. Contractor shall also defend and indemnify the Indemnified Parties against any challenges to the Award of the Contract to Contractor, and Contractor will pay all costs, including defense costs for the Agency. Defense costs include the cost of separate counsel for the Indemnified Parties, if the Indemnified Parties request separate counsel.
3. Contractor shall also defend and indemnify the Indemnified Parties against any challenges to the Award of the Contract to Contractor, arising in whole or in part from alleged inaccuracies or misrepresentation by the Contractor, whether intentional or otherwise, and Contractor will pay all costs, including defense costs for the Agency. Defense costs include the cost of separate counsel for the Indemnified Parties, if the Indemnified Parties request separate counsel.
4. Contractor shall defend, indemnify, protect and hold the Indemnified Parties harmless from and against any dispute between Contractor and Contractor's SubContractors if the Indemnified Parties are made a party to any judicial or administrative proceeding.

ADD the following: 5-9 CONFLICT OF INTEREST

1. Establish and make known to Contractor's 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 and 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.
2. Contractor is subject to all federal, state, and local conflict of interest laws, regulations, and policies applicable to public contracts and procurement practices (Government Code Sections 1090 *et. seq.* and 81000 *et. seq.*, the Agency's Ordinances, and the City of Carlsbad Municipal Code). If, in performing the Work, Contractor makes or participates in a "governmental decision" in accordance with Title 2, Section 18701, subdivision (a)(2) of the California Code of Regulations, or performs the same or substantially all the same duties for Agency that would otherwise be performed by an Agency employee holding a position specified in the Agency's conflict of interest code, Contractor shall be subject to a conflict of interest code requiring the completion of 1 or more statements of economic interests disclosing Contractor's relevant financial interests.
3. Statements of economic interests shall be made on Fair Political Practices Commission Form 700 and filed with the City of Carlsbad's City Clerk. Contractor shall file a Form 700 (Assuming Office Statement) within 30 Calendar Days of the Agency's written determination that Contractor shall be subject to a conflict of interest code and file a Form 700 (Annual Statement) on or before April 1st disclosing any financial interests held during the previous calendar year for which Contractor was subject to a conflict of interest code.
4. If the Agency requires Contractor to file a statement of economic interests as a result of the Work performed, Contractor shall be considered an "Agency Official" for conflict of interest purposes, including the prohibition against lobbying the Agency for 1 year following the expiration or termination of the Contract.
5. Contractor's personnel employed on the Project shall not accept gratuities or any other favors from any SubContractors or potential SubContractors. Contractor shall not recommend or specify any product, supplier, or other Contractor with whom Contractor has a direct or

indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

6. If Contractor violates any conflict of interest laws or any of these conflict of interest provisions, the violation shall be grounds for immediate termination of this Contract. Further, the violation subjects Contractor to liability to the Agency for all damages sustained as a result of the violation.

ADD the following: 5-10 ELECTRONIC COMMUNICATION

1. When specified in the Contract Documents, Contractor shall post all communications addressed to the Engineer concerning construction including RFIs, submittals, daily logs, and transmittals to the Project management website established for the Project. The Contractor shall maintain a list of scheduled activities including planned and actual execution dates for all major construction activities and milestones defined in the approved Schedule. The Contractor shall review and act on all communications addressed to the Contractor in the Project management website. A user's guide to the Project management system may be available on the City's website and shall be provided to Contractor at the Pre-construction Meeting.
2. The payment for electronic communications shall be included in the Contract Price.

ADD the following: 5-11 STATUTORY REFERENCES

1. All references in these Agency Supplemental General Provisions (00 73 00) to any statute, rule or regulation are to the statute, rule or regulation as amended, modified, supplemented, or replaced from time to time by the corresponding legislative or regulatory body.

SECTION 6 – PROSECUTION AND PROGRESS OF THE WORK

6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

ADD the following:

1. A Payment for the Construction Schedule shall be included in the Contract Price and no separate payment will be made, therefore.

6-2 PROSECUTION OF WORK

ADD the following:

1. As soon as possible under the provisions of the Specifications, the Contractor shall backfill all excavations and restores to usefulness all improvements existing prior to the start of the Work.
2. When a SubContractor fails to prosecute a portion of the Work in a manner satisfactory to the Agency, Contractor shall remove such SubContractor immediately upon written request of the Agency, and shall request approval of a replacement SubContractor to perform the Work in accordance with the Subletting and Subcontracting Fair Practices Act (Pub. Contract Code, § 4100 *et seq.*) at no added cost to the Agency.

ADD the following: 6-2.1 Order of Work.

1. The Contractor shall incorporate the requirements of the City, utility companies or agencies having jurisdiction over the Work in accordance with 2-4 Cooperation and Collateral Work, including any phasing requirements identified on the Plans or Special Provisions.
2. If construction and demolition operations are within an active public space, the Contractor shall submit a phasing plan to the Engineer to accommodate accessibility to the public and Agency staff. Phasing plan must be approved before Work starts. Phasing plan will be considered part of the mobilization Bid item and shall include any revisions or implementation of the Plan.

ADD the following: 6-2.2 Moratoriums.

1. When moratorium periods are specified in the Special Provisions, Contractor shall stop Work and completely demobilize all construction related activity, equipment, and materials within the stated limits prior to the beginning of the moratorium periods at no additional cost to the Agency. The Contractor shall complete any Work that has been started prior to the start of the moratorium.
2. Contractor shall restore and clean the Site prior to each moratorium. The Contractor shall not leave equipment, materials, or traffic control on the Site during the moratorium periods. Trenches shall be backfilled during moratorium periods. Temporary resurfacing or steel plate covers over trenches shall not be used.
3. The payment for complying with moratorium requirements shall be included in the Contract Bid. Contractor shall not be entitled to any additional costs for repeated mobilization and demobilization to continue the Work after the moratorium periods.

6-3 TIME OF COMPLETION

6-3.1 General.

ADD the following:

1. Unless otherwise specified in the Contract, the time of completion of the Contract shall be expressed in Working Days.
2. The number of Working Days specified for the walk-through, preparation, and the completion of Punchlist items until acceptance shall be included in the stipulated Contract Time.
3. For pipeline Projects, the following shall be included in the stipulated Contract Time:
 - a. Complete each street segment within 15 Working Days from the day the slurry seal or asphalt overlay is placed. Each completed segment shall include other incidental Work items (weed abatement, damaged asphalt pavement replacement, asphalt patching, resurfacing, striping, markings, raised pavement markers, and inlet markers).
 - b. Where shutdowns of 16-inch and larger pipes are required, there is a shutdown moratorium from May until October. The Contractor shall plan and schedule Work accordingly. No additional payment or Working Days will be granted for delays due to the moratorium.
4. When specified in the Contract Documents, the PEP is included in the stipulated Contract Time and shall begin with the acceptance of the installation of the vegetation plan in accordance with Part 8 – LANDSCAPING AND IRRIGATION.

5. The Contractor shall obtain the written approval of the Engineer to perform any Work outside of normal Work hours. This approval must be obtained at least 48 hours prior to commencement of such Work. The Contractor shall pay any additional costs for inspection or testing of such Work.
6. Work that is required by the Engineer to occur outside of normal Work hours will be identified in the Special Provisions.
7. The Contractor shall not perform Work during moratoriums per 6-2.2 or during any periods of restriction identified in agency permits or Project environmental documents and shall include all such schedule constraints in the Construction Schedule.
8. No additional payment or adjustment of Bid item prices or adjustment of Contract Time will be made for the Contractor's inability to work outside of normal Work hours if Contractor's request is denied by the Engineer or during prohibited periods.
9. Contractor's schedule shall plan for a minimum of 2 weeks after final walk-through to receive a final punch list from the Agency. Punch list items can be worked on during this 2-week period.

6-4 DELAYS AND EXTENSIONS OF TIME

6-4.1 General.

ADD the following:

1. The Agency shall only grant an extension of time if the Extra Work or unforeseen condition impacts the Project's critical path. All requests for an extension in Contract Time for any Extra Work or unforeseen event shall be demonstrated by using the CPM. No other scheduling method shall be used to calculate the Project's schedule.

6-4.2 Extensions of Time.

DELETE in its entirety and SUBSTITUTE with the following:

1. The Contract Time shall be modified only by Change Order.
2. Contractor shall immediately submit to the Agency a written request for a Change Order to modify the Contract Time, but in no event later than 1 Working Day after the occurrence and discovery of the events giving rise to the request. Contractor shall include in Contractor's request a general description of the basis for and the estimated length of any extension and submit supporting data, including a time impact analysis setting forth the claimed Critical Path impacts to the Construction Schedule consistent with Section 1.14 (Change Orders, Delays, and Extensions of Time).
3. The Engineer shall not grant an extension of Contract Time unless Contractor demonstrates, through an analysis of the critical path, the following:
 - a. The event causing the delay impacted the activities along the Project's critical path.
 - b. The increases in the time to perform all or part of the Project beyond the Contract Time arose from unforeseeable causes beyond Contractor's control and without Contractor's fault or negligence.
 - c. All Project float has been used.

4. The Engineer shall issue a weekly document that stipulates the Contract Time. If Contractor does not agree with this document, Contractor shall submit to the Engineer for review a written protest supporting Contractor's objections to the document within 15 Working Days after receipt of the weekly document. Contractor's failure to file a timely protest shall constitute Contractor's acceptance of the Engineer's weekly document.
 - a. Contractor's protest will be considered a claim for time extension and shall be subject to 2-10.1, "Claims."

6-4.4 Written Notice and Report.

DELETE in its entirety and SUBSTITUTE with the following:

1. Contractor's failure to file with the Engineer a written request and report of cause within 24 hours will be considered grounds for refusal by the Agency to consider such request.
2. The Contractor shall provide written notice to the Engineer within 2 hours after the beginning of the delay, or when the Contractor has placed any workers or equipment on standby for any reason that the Contractor has determined to be caused by the Agency or by any organization that the Agency may otherwise be obligated by. The Contractor shall provide continuing daily written notice to the Engineer, each Working Day, throughout the duration of such period of delay. The initial and continuing written notices shall include the classification of each worker and supervisor and the make and model of all equipment placed on standby, the cumulative duration of the standby, the Contractor's opinion of the cause of the delay and a cogent explanation of why the Contractor could not avoid the delay by reasonable means. Should the Contractor fail to provide the notice(s) required by this section the Contractor agrees that no delay has occurred and that it will not submit any claim(s) therefore.
3. The request for payment or extension must be made at least 15 Calendar Days prior to the specified completion date. Failure by the Contractor to provide notices and reports as specified in the Contract will be considered grounds for refusal by the Agency to consider such request.

6-6 SUSPENSION OF THE WORK

6-6.1 General.

ADD the following:

1. The Agency reserves the right to shut down any trenching operation if Contractor is not proceeding within a reasonable period of time to restore the pavement and Site cleanup. A reasonable period of time is considered to be 5 to 10 Working Days after backfilling any 1 block, approximately 600 feet, of pipeline. The Engineer shall determine the period of time allowed which shall not be subject to dispute.
2. During periods when the Work is suspended, Contractor shall be prepared for any emergency Work that shall be supervised by Contractor's representative.
3. Trenching operations are subject to suspension if the Contractor does not comply with the requirements for the maximum length of open trench specified in 306-3.5.

6-7 TERMINATION OF THE CONTRACT FOR DEFAULT

6-7.1 General.

DELETE in its entirety and SUBSTITUTE with the following:

1. Prior to the Acceptance of the Work, Contractor shall be found in default of the Contract if:
 - a. Contractor becomes insolvent, assign Contractor's assets for the benefit of Contractor's creditors, are unable to pay Contractor's debts as they become due, or are otherwise financially unable to complete the Work.
 - b. Contractor abandons the Work by failing to report to the Site and by failing to diligently execute the Work to completion.
 - c. Contractor disregards written instruction from the Engineer or materially violates provisions of the Contract Documents.
 - d. Contractor fails to execute the Work according to the Schedule approved by the Engineer.
 - e. Contractor disregards laws or regulations of any public body having jurisdiction.
 - f. Contractor commits continuous or repeated violations of regulatory or statutory safety requirements.
 - g. Contractor fails to notify the Engineer upon discovery of items of Native American, Archaeological, or Paleontological interests.
2. Notices and other written communications regarding default between the Contractor, the Agency, and the Surety shall be transmitted in accordance with 5- 2, "SPECIAL NOTICES."

6-8 TERMINATION OF THE CONTRACT FOR CONVENIENCE.

DELETE in its entirety and SUBSTITUTE with the following:

1. At any time, the Agency may at its sole discretion terminate this Contract in whole or in part. If the Agency decides to terminate this Contract for convenience, the Agency shall issue a written notice of termination for convenience in accordance with 5-2, "SPECIAL NOTICES." Upon receipt of this notice, Contractor shall immediately proceed as follows:
 - a. Stop Work immediately or in accordance with the Notice of Termination.
 - b. Notify SubContractors and Suppliers to immediately cease their Work and place no further subcontracts for materials, services, or facilities except as necessary to complete any authorized continued portion of the Contract.
 - c. Terminate all subcontracts to the extent that they relate to the Work terminated.
 - d. With approval by the Engineer, settle all outstanding obligations arising from the termination of subcontracts. This approval shall be final for the purposes of this section.
 - e. As directed by the Engineer, transfer and deliver 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 Agency.
 - f. Complete the performance of the Work not terminated.
 - g. Take all necessary steps and actions to minimize all costs to the Agency as a result of the termination.

- h. Take any action that may be necessary or that the Engineer may direct for the protection and preservation of the property related to the Contract that is in Contractor's possession and in which the Agency has or may acquire an interest.

6-8.1 Termination Cost.

1. The Agency shall determine and pay Contractor the fair and reasonable amounts for Contractor's termination cost as follows:
 - a. The Contract Price for completed services accepted by the Engineer not previously paid or adjusted for any saving of freight and other charges.
 - b. The fair and reasonable cost of settling and paying termination settlements for terminated subcontracts that are chargeable to the terminated portion of the Contract.
 - c. The Agency shall pay Contractor a prorated amount of profit for Work that Contractor performed. The Agency shall not pay for lost profit on Work that was not performed by Contractor.

6-8.2 Termination Settlement.

1. After termination, Contractor shall submit a final termination settlement proposal to the Engineer no later than 3 months from the effective date of termination, unless extended in writing by the Engineer.
2. If Contractor fails to submit the proposal within the time allowed, the Agency may determine and pay the fair and reasonable amount that may be due Contractor as a result of the termination. If Contractor does not agree that the amount determined by the Engineer is fair and reasonable, Contractor must notify the Engineer within 30 Calendar Days of receipt of payment.

6-8.3 Determination of Amount Due the Contractor.

1. In determining the amount due Contractor, the Agency shall deduct the following:
 - a. The fair value of property destroyed, lost, stolen, or damaged that has become undeliverable to the Agency.
 - b. Any claim which the Agency has against Contractor under the Contract.

6-8.4 Records and Documents Relating to Termination.

1. The Engineer will file an Agreement of Mutual Rescission of Contract with the Board. Once the Agreement is executed and a Notice of Completion is recorded, retention can be released.
2. Unless otherwise specified or required by statute, Contractor shall maintain all records and documents relating to the terminated portion of the Contract for 3 years after final settlement. This includes all books and other evidence bearing on Contractor's costs, expenses, and settlement under the Contract. Contractor shall make these records and documents available to the Agency, at Contractor's office, at all reasonable times, without any direct charge. If approved by the Engineer, Contractor may maintain photographs, microphotographs, and other authentic reproductions instead of original records and documents.

6-8.5 The Agency’s Right to Terminate or Suspend for Loss of Project Funds.

1. The Agency may terminate or suspend the Contract at its sole discretion if the State of California or its agents render the funds being used to fund this Project unavailable. If the Agency chooses to suspend the Contract, that suspension shall last until funds are identified and approved by the Board, whichever is appropriate, to be used to complete this Project. If the Agency elects under this provision to terminate the Contract, then neither Party is entitled to compensation from the other Party for any costs arising from such termination. The Agency may also elect to terminate after invoking a suspension under this provision.

6-9 LIQUIDATED DAMAGES

DELETE in its entirety and SUBSTITUTE with the following:

1. Contractor’s failure to complete the Work within the time allowed shall result in damages being sustained by the Agency. Such damages are, and shall continue to be, impracticable and extremely difficult to determine. For each consecutive Working Day in excess of the time specified for the completion of the Work, as adjusted in accordance with 6-4, “DELAYS AND EXTENSIONS OF TIME,” Contractor shall pay to the Agency, or have withheld from monies due it, the sum described in the table below, along with any other damages that may be sustained by the Agency during the Project, unless otherwise specified in the Special Provisions.
2. The execution of the Contract shall constitute agreement between Contractor and the Agency that the liquidated damage amount described in the table below is the value of the damage caused by Contractor’s failure to complete the Work within the allotted time. Such sum shall not be construed as a penalty and may be deducted from Contractor’s payments if such delay occurs.

Contract Value	Liquidated Damage Daily Amount
Less than \$100,000	\$1,000
\$100,000 and more	\$2,500

3. Any progress payments made to Contractor after the specified completion date shall not constitute a waiver of payment for damages sustained by the Agency under this section.

ADD the following: 6-10 RIGHT TO AUDIT

6-10.1 General.

1. The Agency retains the right to review, audit, reasonably access Contractor’s and all Contractor’s SubContractor’s premises to review and audit Contractor’s compliance with the provisions of the Contract. This includes the right to inspect, photocopy, and retain copies, outside of Contractor’s premises, of all records with appropriate safeguards if such retention is deemed necessary by the Agency in its sole discretion. The Agency will keep this information in strictest confidence.
2. Contractor shall include the Agency’s right to audit in its subcontracts and ensure that these specifications are binding upon all SubContractors.

6-10.2 Audit.

1. The right to audit includes the right to examine any and all books, records, documents, and any other evidence of procedures and practices that the Agency determines is necessary to discover and verify that Contractor are in compliance with all requirements under the Contract.
2. If there is a claim for additional compensation or for changes in Work, the right to audit also includes the right to verify all direct and indirect costs 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.
3. Contractor shall maintain complete and accurate records in accordance with generally accepted accounting practices in the construction industry. Contractor shall also make available to the Engineer for review and audit all Project-related accounting records and documents and any other financial data. Upon the Engineer's request, Contractor shall submit exact duplicates of originals of all requested records to the Engineer.

6-10.3 Compliance Required Before Mediation and Litigation.

1. As a condition precedent to proceeding with mandatory mediation and further litigation under 2-10.2, "Dispute Resolution Process" Contractor shall comply with the audit specifications within 60 Calendar Days of the Engineer's notice to review and audit compliance. See 5-2, "SPECIAL NOTICES."

6-10.4 Access to Records on Federally Funded Projects.

1. Contractor shall retain all records, books, papers, and documents directly pertinent to the Contract for a minimum of 5 years after the Agency makes final payments and all other pending matters are closed and shall allow access to those records to the Agency, the Federal grantor agency, the Comptroller General of the United States, or any duly authorized representatives.

SECTION 7 – MEASUREMENT AND PAYMENT

Units of Measurement. The system of measure for this contract shall be the U.S. Standard Measures.

7-2 LUMP SUM WORK

ADD the following: 7-2.1 Schedule of Values (SOV).

1. Submit a SOV for the lump sum Bid items of the Work to the Engineer for review and approval at the pre-construction meeting.
2. The SOV shall:
 - a. Subdivide the Work into its respective parts.
 - b. Include values for all items comprising the Work.
 - c. Serve as the basis for monthly progress payments.
3. The Engineer is the sole judge of acceptable numbers, details, and description of values established. If, in the opinion of the Engineer, a greater number of SOV items than proposed by Contractor is necessary, add the additional items identified by the Engineer. When requested by the Engineer, provide substantiating data in support of the SOV.

4. The Contractor shall incorporate the SOV into the cost loading function of the Schedule in accordance with 6-1, "CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK." Monthly progress payment amounts for Lump Sum items shall be determined from the monthly updates of the Schedule activities.
5. The Contractor shall develop the SOV independently but simultaneously with the development of the Schedule activities and logic. Incorporate phase funding impacts, if applicable, into the Schedule.
6. The Contractor shall break down the Work not specifically included in the Bid as necessary for establishment of cost and Schedule activity.
7. Following acceptance of the SOV, the Contractor shall incorporate the changes (if any) into the cost loading portion of the Schedule. Where coordination of the Schedule and the SOV requires changes made to 1 or both documents, the Contractor shall propose changes to the SOV and to the Schedule activities to satisfy the Schedule cost loading requirements.
8. The Contractor shall update and submit these listings in conjunction with the Schedule monthly submittals.
9. The Contractor shall incorporate issued Change Orders or Field Orders in the Schedule into the SOV as single units identified by the Change Order or Field Order number.
10. Changes to the Schedule which add activities not included in the original Schedule but included in the original Work (schedule omissions) shall have values assigned as accepted by the Engineer. Other activity values shall be reduced to provide equal value adjustment increases for added activities as accepted by the Engineer.
11. In the event that the Contractor and the Engineer agree to make adjustments to the original SOV because of inequities discovered in the original accepted SOV, increases and equal decreases to values for activities may be made.
12. The payment for the preparation of the SOV shall be included in the Contract Price.

7-3 PAYMENT

7-3.1 General.

To paragraph (8), DELETE in its entirety and SUBSTITUTE with the following:

If, within the time fixed by law, a properly executed notice to stop payment is filed with the Agency, due to the Contractor's failure to pay for labor or materials used in the Work, all money plus 25 percent due for such labor or materials will be withheld from payment in accordance with applicable laws. At the expiration of 30 Calendar Days from the date of recording the NOC, the amount deducted from the final estimate and retained by the Agency shall be paid to Contractor except such amounts as are required by law to be withheld by properly executed and filed notices to stop payment.

ADD the following:

1. Unless specified otherwise, the Contract Price includes use, consumer, and other taxes mandated by applicable legal requirements. The Contract Price is not subject to adjustment for tax increases.

2. As provided in California Public Contract Code Section 7105, if the Contract is not financed by revenue bonds, Contractor is not responsible for the cost of repairing or restoring damage to the Project when damage was proximately caused by an Act of God, in excess of 5% of the Contract Price, if the following occur:
 - a. The damaged portion of the Project was built in accordance with the Contract requirements.
 - b. There are no insurance requirements in the Contract for the damages.
3. Guarantee periods shall not be affected by any payment but shall commence on the date of recordation of the Notice of Completion.

7-3.2 Partial and Final Payment.

To paragraph (5), DELETE in its entirety and SUBSTITUTE with the following:

Pursuant to Public Contract Code Section 22300, Contractor shall have the option, at Contractor's expense, to substitute for any money withheld by the Agency, 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, Contractor shall be the beneficial owner of same and shall receive any accrued interest. Such security shall, at Contractor's request and expense, be deposited with the Agency or with a State or Federally Chartered bank as the escrow agent who shall pay such monies to Contractor upon notification by the Engineer that payment can be made. Such notification shall be given at the expiration of 30 Calendar Days from the date of NOC, or as prescribed by law, provided however, that there shall 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 the following:

1. After final inspection, the Engineer will make a Final Payment Estimate and process a corresponding payment. This estimate will be in writing and shall be for the total amount owed the Contractor as determined by the Engineer and shall be itemized by the Contract Bid item and Change Order item with quantities and payment amounts and shall show all deductions made or to be made for prior payments and amounts to be deducted under provisions of the Contract. All prior estimates and progress payments shall be subject to correction in the Final Payment Estimate.

The Contractor shall have 30 Calendar Days from receipt of the Final Payment Estimate to make a written statement disputing any Bid item or Change Order item quantity or payment amount. The Contractor shall provide all documentation at the time of submitting the statement supporting its position. Should the Contractor fail to submit the statement and supporting documentation within the time specified, the Contractor acknowledges that full and final payment has been made for all Contract Bid items and Change Order items.

If the Contractor submits a written statement with supporting documents within 30 Calendar Days from receipt of the Final Payment Estimate, the Engineer will review the disputed item within 30 Calendar Days and make any appropriate adjustments on the Final Payment. Remaining disputed quantities or amounts not approved by the Engineer will be subject to resolution as specified in Section 2-10.1.1, Initiation of Claim.

The written statement filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of the disputed items. The Engineer will consider the merits of the Contractor's claims. It will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by the Engineer to determine the facts or contentions involved in its claims. Failure to submit such information and details will be sufficient cause for denying payment for the disputed items.

2. Final Payment and release of Retention shall be paid after Contractor submits the following:
 - a. An affidavit that payrolls and bills for materials, equipment, and other indebtedness connected with the Work for which the Agency or the Agency's property might be responsible for or encumbered by. Fewer amounts withheld by the Agency shall have been paid for or otherwise satisfied.
 - b. A certificate evidencing that insurances required by the Contract Documents shall remain in force after Final Payment is currently in effect and shall not be canceled or allowed to expire until at least a 30 Calendar Days prior written notice has been given to the Engineer.
 - c. Consent of Surety to Final Payment.
 - d. If required by the Engineer, other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, claims, and security interests or encumbrances arising out of the Contract Documents. If a SubContractor refuses to furnish a release or waiver required by the Agency, Contractor may furnish a bond satisfactory to the Engineer to indemnify the Agency against such lien.
 - e. If required in the Contract Documents, the successful completion and submittal of the required reports such as construction demolition, waste recycling, and hydrostatic discharge reports.
 - f. Required documentation, record drawings, operations manuals, test reports, warranty documentation, and UL labels shall be submitted before requesting the release of retention.

ADD the following: [7-3.2.1](#) [Application for Progress Payment](#).

1. By the 5th day of each month, sign, fill out, and submit to the Engineer a partial payment estimate that identifies acceptable Work performed during the previous month, or since the last partial payment estimate was submitted. If requested by the Engineer, provide such additional data as may be required to support the payment estimate. Such data may include submission of signed field orders and satisfactory evidence of payment for equipment, materials, and labor, including payments to SubContractors and Suppliers.
2. For application for progress payments, Contractor shall use the format required by the Agency. An electronic copy of the invoice form is available from the Engineer upon request.

Progress payments shall be signed, and the date of the invoice shall be the date that the invoice is submitted.

3. The Agency shall not pay progress or partial payments until Contractor submits to the Engineer an updated Schedule. It is solely the Contractor’s responsibility to prepare and submit the Schedule updates.
4. Disputed or incorrect applications shall be returned to the Contractor within 7 Calendar Days with documentation describing the reason for the rejection of the payment request.

ADD the following: 7-3.2.2 Amount of Progress Payments.

1. If an undisputed and properly submitted application for payment is received by the Engineer, the Agency shall pay Contractor within 30 Calendar Days after the Engineer receives the application for Payment consistent with Public Contract Code Section 20104.50. The Agency shall pay Contractor for the Work performed, including the payment for offsite stored materials per section 7-3.3.1.2, through the period covered by the application for payment if the payment amount before Retention does not exceed the percentage of completion of the Work as set forth in the SOV.

ADD the following: 7-3.2.2.1 Progress Payment for Pipelines.

1. Progress payments for pipelines shall 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 Contract Unit Price for the particular main(s) or drain(s).
2. The progress payment may include payment for items in the Bid proposal, other than mains, which have been installed complete during the payment period.
3. Payment breakdown shall be as follows:

OPERATION	PERCENTAGE
WATER:	
Trench Excavation, Pipe in Place, Backfill and Cleanup.	80%
Hydrostatic and Bacterial Testing, Pavement Restoration and Final Cleanup	20%
SEWER:	
Trench Excavation, Pipe in Place, Backfill and Cleanup.	80%
Testing (Wayneball and/or Mandrel), Pavement Restoration and Final Cleanup.	20%
STORM DRAIN:	
Trench Excavation, Pipe in Place, Backfill and Cleanup.	80%
Pavement Restoration and Final Cleanup.	20%
SEWER MAIN REHABILITATION:	
Cleaning, Televising, liner installation, point repairs, and lateral reinstatements.	80%
Approval of pipeline rehabilitation verified by Final Video.	20%

4. In asphalt-surfaced streets, the Agency shall pay 15% for hydrostatic and bacterial testing, Wayne Ball and Mandrelling (where necessary), for water and sewer utility constructions respectively, and operational testing for storm drains, including the trench cap and cleanup. The Agency shall pay the remaining 5% after completing the asphalt wearing surface and final cleanup.
5. Trench excavation, pipe in place, backfill, and cleanup of construction debris are 1 operation that shall be complete before the Agency pays the first 80%.

ADD the following: 7-3.2.3 Waiver of Claims at Final Payment.

1. Contractor's acceptance of Final Payment constitutes a waiver of affirmative claims by Contractor, except those previously made in writing and identified as unsettled at the time of Final Payment, which are expressly reserved by Contractor from operation of its Release of Claims pursuant to Public Contract Code Section 7100 or other Applicable Law.

ADD the following: 7-3.2.4 Withholding of Payment and Back Charge.

1. The Engineer may withhold payment for any of the following reasons:
 - a. Defective or incomplete Work.
 - b. Stop notices, wage orders, or other withholdings required by Applicable Law.
 - c. Contractor's failure to comply with 5-3.3, "Payroll Records" and the Contractor Registration and Electronic Reporting System requirements of the Contract Documents.
 - d. Failure to submit monthly Construction Schedule updates.
2. The Engineer may back charge the Contractor for any of the following reasons:
 - a. Defective or incorrect Work not remedied.
 - b. Damage to Agency property or a third party's property that was caused by Contractor.
 - c. Liquidated Damages.
 - d. Non-attendance at meetings without prior cancellation notice.
 - e. Failed inspections or re-inspections paid by the Agency.

7-3.3 Delivered Materials

DELETE in its entirety and SUBSTITUTE with the following:

1. The cost of materials and equipment delivered but not incorporated into the Work will not be included in the progress estimate.

ADD the following: 7-3.3.1 Payment for Stored Materials on Site.

ADD the following: 7-3.3.1.1 General.

1. When authorized, Contractor may request payment for materials and equipment which has not been incorporated into the Work but will be at a later date and will be delivered and stored at the Project Site.
2. The material shall meet the Contract requirements and the material's required test results and certifications shall be filed with the Engineer.
3. Only non-perishable materials for major items of Work or Materials Subject to Price Adjustment shall be considered for payment for on-site storage. However, each individual

item has a value of more than 1% of the Contract Price and shall become a permanent part of the Work.

4. Materials cost shall be evidenced by the manufacturer's paid invoice bearing the statement that Contractor has paid all invoices in full.
5. The payments for the stored materials shall not exceed the invoice price or 60% of the Bid prices for the pay items into which the materials are to be incorporated, whichever is less, unless otherwise approved by the Engineer.
6. Apply for the payment for materials stored on a form provided by the Engineer and attach documentation to show the following:
 - a. The amount paid on the invoice (or other record of production cost) for the stored items.
 - b. The dollar amount of the material incorporated into each of the various Work items for the month.
 - c. The amount that should be retained for stored materials.
 - d. That Contractor has received the materials and equipment free and are clear of all liens, charges, secured interests, and encumbrances.
 - e. That the materials and equipment are covered by the appropriate property insurance in accordance with the insurance provisions and other arrangements that protect the Agency's interest.
7. Contractor shall provide the Engineer, upon request and prior to any partial payment, documentation which transfers full legal title to such materials to the Agency conditional only upon receipt of the Final Payment. Such transfer of title or any partial payment shall not constitute acceptance by the Agency of the materials nor shall it void the right to reject materials subsequently found to be unsatisfactory in accordance with SECTION 4 – CONTROL OF MATERIALS. This shall also not relieve Contractor of any obligation arising under the Contract Documents.
8. The payments for materials on-site are subject to retention as set forth in 7-3.2, "Partial and Final Payment."
9. Contractor shall assume all risks associated with the loss or damage to the stored products for which payment has or has not been received.
10. Equipment and materials shall be stored in accordance with manufacturer's recommendations. The stored products shall be in a form ready for installation. The Agency shall not pay for raw materials or parts and pieces of equipment.
11. Any and all surplus materials that are not incorporated in the Work shall become Contractor's property at no additional cost to the Agency.
12. Unless specifically provided in the Contract, payment for the materials on hand shall not be included when determining the percentage of Work completed.
13. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the job site in the quantities involved, plus sales tax, freight, and delivery.

The Agency reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary, for the progress of the Work. No markup shall be applied to any material provided by the Agency.

ADD the following: 7-3.3.1.2 Payment for Stored Materials Offsite.

1. The payment of materials and equipment delivered and stored offsite shall be contingent upon Contractor's compliance with the storage and protective maintenance requirements set forth in the Contract Documents and all other requirements necessary to preserve equipment warranties for the benefit of the Agency.
2. The Agency reserves the right to refuse approval for the payment of any equipment or materials suitably stored offsite in its sole discretion, regardless of whether all conditions in the Contract Documents have been met.
3. Partial payment may be made for products eligible for offsite delivery and storage only upon Contractor's presentation of a bill of sale, a paid invoice, or an affidavit certifying that the material is received by the Contractor free and clear of all liens, encumbrances, and secured interest of any kind including offsite delivery.
4. Partial payment for products delivered and stored offsite shall be contingent upon Contractor's compliance with the storage and protective maintenance requirements set forth in the Contract Documents and all other requirements necessary to preserve equipment warranties for the benefit of the Agency.
5. The cost of materials and equipment delivered but not incorporated into the Work will not be included in the progress estimate.
6. Costs associated with the delivery to and storage at an offsite facility shall be at Contractor's expense regardless of the Engineer's approval to deliver and store the materials.
7. Contractor shall provide written evidence to the Engineer of having made arrangements for unrestricted access by the Agency and the Agency's authorized representatives to the materials wherever stored, including provisions for the Agency to take control and possession of such materials at any time and without restriction. Contractor shall furnish the Engineer a permit of entry, from the owner of the property, for at least 6 months after the NOC has been filed. The permit of entry shall contain information similar to the following:

PERMIT OF ENTRY: Permission is granted to the Agency and its designated employees or agents to enter upon the property described in this permit for a period of not less than 6 months after the NOC has been filed for (**Stagecoach Community Park Community Gardens**) for the purpose of removing materials for which advance materials on hand payment has been made to (Contractor's Name). The property is owned by (Owner's Name) and is described as follows: (Address and Description of Property). (Include signature(s) and date(s) for owner and lessee or purchaser, and, if appropriate, attach a copy of a warehouse receipt or contract for storage.

8. The material shall be clearly marked and identified as being specifically fabricated, produced, and reserved for use on the Project. The Contractor shall provide payment documentation for the materials.

7-3.4 Mobilization.

ADD the following:

1. Mobilization consists of Work necessary for the movement of personnel, equipment, supplies, and incidentals to and from the Site; for establishment of all offices, buildings,

storage yards, and other facilities necessary for the Work; and for all other Work and operations which shall be performed prior to beginning the Work and after completion of the Work on the various Contract items on the Site.

2. Contractor shall properly design the Project parameters to incorporate construction mobility for moving on and off the Site in a manner that limits disturbance to the surrounding residences, businesses, and any other citizens. This includes the designated staging areas, loading areas, and assemblage areas. Contractor shall consider and address access rights of the public at all times. Prepare a mobilization plan that shall describe and govern Contractor's mobilization activities.
3. When a Bid item has been provided for "Mobilization," payment for mobilization Work shall be distributed equally over the first 2 progress payments up to the Bid amount of the "Mobilization" Bid item but shall not exceed 3% of the Contract Price. If Contractor's Bid item for "Mobilization" exceeds 3% of the Contract Price, then anything above 3% of the Contract Price shall be paid as a part of the Final Payment.
4. The complete dismantling and removal of all of Contractor's properties, temporary facilities, equipment, materials, construction wastes, and personnel at the Site referred to as demobilization is included in the payment for mobilization, unless there is a Bid item for demobilization.
5. If a separate Bid item has not been provided for mobilization, the payment for mobilization is included in the Contract Price.

7-3.5 Contract Unit Prices

7-3.5.1 General.

ADD the following:

1. Unit Bid prices shall not be subject to adjustment regardless of quantity used or if none is used for the following Bid items:
 - a. additional bedding
 - b. imported backfill
 - c. shoring
 - d. water services and connections
 - e. water pollution control items
 - f. point repairs for existing sewer mains
 - g. additional point repairs for existing sewer mains
 - h. sewer lateral connections
 - i. sewer lateral linings
 - j. traffic control
 - k. additional equipment
2. Should the actual quantity of an item of Work covered by a Contract Unit Price and constructed in conformance with the Plans and Specifications, exceed the Bid quantity by more than 50 percent, payment for the quantity in excess of 150 percent of the Bid quantity will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 2-8. The Extra Work per Section 2-8, basis of payment, shall not include fixed

costs. Fixed costs shall be deemed to have been recovered by the Contractor through payment for 150 percent of the Bid quantity at the Contract Unit Price.

3. Should the actual quantity of an item of Work covered by a Contract Unit Price, and constructed in conformance with the Plans and Specifications, be less than 50 percent of the Bid quantity, an adjustment in payment will not be made unless so requested in writing by the Contractor. If the Contractor so requests, payment will be made on the basis of an adjustment in the Contract Unit Price mutually agreed to by the Contractor and the Agency, or at the option of the Engineer, on the basis of Extra Work per Section 2-8; however, in no case will payment be less than would be made for the actual quantity at the Contract Unit Price nor more than would be made for 50 percent of the Bid quantity at the Contract Unit Price.

ADD the following: 7-3.9 Field Orders.

1. The Agency shall pay Field Order items of the Work in accordance with the limits below if the cumulative total of Field Orders does not exceed the "Field Orders" Bid Item:

Contract Price	Maximum Field Order Amount
Less than \$100,001	\$2,500
\$100,001 to \$1,000,000	\$5,000
\$1,000,001 to \$5,000,000	\$10,000
Greater than \$5,000,000	\$20,000

ADD the following: 7-3.10 Compensation Adjustments for Price Index Fluctuations.

1. Unless otherwise specified, the provisions of this section apply only to the paving asphalt used in the following:
 - a. Asphalt Concrete Pavement
 - b. Asphalt Pavement Repair
 - c. Scheduled and Unscheduled Base Repair
 - d. Slurry Seal or any other asphalt emulsion
2. The compensation for paving asphalt shall be increased or decreased for paving asphalt price fluctuations in accordance with 7-3.11 "Compensation Adjustments for Price Index Fluctuations" in the Caltrans Standard Specifications.
3. The adjustment in compensation shall also be subject to the following:
 - a. Show the provided compensation adjustments separately on payment estimates. Contractor is liable to the Agency for decreased compensation adjustments and the Engineer may deduct the amount from moneys payable or that may become payable to Contractor.
 - b. In the event of an overrun of Contract Time, adjustment in compensation for asphalt binder included in estimates during the overrun period shall be determined using the California Statewide Crude Oil Price Index in effect on the first business day of the month within the pay period in which the overrun began.
 - c. In the event that the companies discontinue posting their prices for a field, the Engineer shall determine an index from the remaining posted prices. The Agency reserves the right to include in the index determination the posted prices of additional fields.

4. Contractor may opt out of the payment adjustments for price index fluctuations when specified in the Contract Documents by submitting a letter with the Bid.

7-4 PAYMENT FOR EXTRA WORK

7-4.1 General.

ADD the following:

1. With every request for payment, Contractor shall submit to the Engineer a breakdown showing monthly and cumulative amounts of the Work performed under the Change Order by Contractor and Contractor's SubContractors. The reporting format shall be approved by the Engineer.
2. When the price for the Extra Work cannot be agreed upon, the Agency will pay for the Extra Work based on the accumulation of costs.

7-4.2 Basis for Establishing Costs.

7-4.2.1 Labor.

ADD the following:

1. The costs of labor will be the actual cost for wages of workers performing the Extra Work at the time the Extra Work is done, plus employer payments of payroll taxes, workers compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, resulting from federal, state, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements.
2. The use of a labor classification which would increase the Extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental. The labor cost for foremen shall be proportionate to all their assigned work and only that applicable to Extra Work will be paid.
3. Nondirect labor costs, including superintendence, shall be considered part of the markup of Section 7-4.2.1(1).
4. The Agency reserves the right to request the following:
 - a. Financial records of salaries for an employee.
 - b. Wage rates/Certified Payroll.
 - c. Bonuses and deductions.
5. Contractor shall list the labor rates of its personnel and SubContractors who work on the Project. The payment for payroll records is included in the Contract Price.
6. If Contractor's proposal for Extra Work is based upon services and Work to be performed outside Normal Working Hours, the labor charges associated with the Extra Work shall consist of straight time wages and burdens plus the appropriate overtime or shift premium with no additional burdens, such as fringe benefits, on the premium portion.

7-4.2.2 Tool and Equipment Rental.

DELETE in its entirety and SUBSTITUTE with the following:

1. No payment shall be made for the use of tools which have a replacement value of \$750 or less.
2. Regardless of ownership, the rates and delay factors to be used in determining equipment rental costs shall not exceed those listed in the latest edition of the Caltrans publication entitled "Labor Surcharge and Equipment Rental Rates" preceding the date the Work is accomplished. The latest edition of the Caltrans publication is available at www.dot.ca.gov. The delay factors therein shall be used as multipliers of the rental rates for determining the value of costs for delay to the Contractor and SubContractors, if any. The labor surcharge rates published therein are not a part of this Contract.
3. Contractor shall be entitled to a rental rate adjustment when Contractor can substantiate that the rental rates prevailing locally exceed the published rates by more than 15%. For equipment not listed in the Caltrans publication, rental rates shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed.
4. Whenever possible, Extra Work shall be accomplished using equipment available on Site or owned by Contractor. If a specific piece of equipment shall be rented to be used exclusively for the Extra Work, the rental rate shall be the invoiced rate. The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the Extra Work shall be included.
5. If rental equipment is not being used or used intermittently and could be returned to its rental source rather than holding it at the Work Site, the Contractor shall return the equipment at no expense to the Agency unless Contractor elects to keep it at the Work Site at Contractor's expense.
6. The reported rental time for equipment already at the Work Site shall be the duration of its use on the Extra Work. This time shall begin when equipment is first used on Extra Work, plus the time required to move it from its previous site and back or from its previous site to a closer site.
7. All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used.

7-4.2.3 Materials.

The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the job Site in the quantities involved, plus sales tax, freight, and delivery.

The Agency reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary, for the progress of the Work. No markup shall be applied to any material provided by the Agency.

7-4.2.4 Invoices.

Vendors' invoices for material, equipment rental and other expenditures shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the Agency may establish the cost of the item involved at the lowest price which was current at the time of the report.

7-4.3 Markup.

7-4.3.1 Work by the Contractor.

DELETE in its entirety and REPLACE with the following:

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

Labor	20
Materials	15
Equipment Rental	15
Other Items and Expenditures	15

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

7-4.3.2 Work by a SubContractor.

DELETE in its entirety and REPLACE with the following:

When all or any part of the Extra Work is performed by a SubContractor, the markup established in 7-4.3.1 shall be applied to the SubContractor's actual cost of such Work. A markup of 10 percent on the first \$5,000 of the subcontracted portion of the Extra Work and a markup of 5 percent on Work added in excess of \$5,000 of the subcontracted portion of the Extra Work may be added by the Contractor.

7-4.4 Daily Reports.

ADD the following:

Payment for Extra Work will not be made until such time that the Contractor submits completed daily reports and all supporting documents to the Engineer.

When the price for the Extra Work cannot be agreed upon, the Contractor shall submit a daily report to the Engineer on forms approved by the Agency. Included are applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and other services and expenditures when authorized. Payment for Extra Work will not be made until such time that the Contractor submits completed daily reports and all supporting documents to the Engineer. Failure to submit the daily report by the close of the next Working Day may waive any rights for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by the Engineer and the Contractor. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by SubContractors or others shall be submitted through the Contractor.

The report shall:

1. Show names of workers, classifications, and hours worked.
2. Describe and list quantities of materials used.

3. Show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
4. Describe other services and expenditures in such detail as the Agency may require.

END OF SECTION

00 74 00 AGENCY SUPPLEMENTAL TECHNICAL PROVISIONS

INTRODUCTION

The Specifications contained in this 00 7400 Agency Supplemental Technical Provisions take precedence over the specification language contained in the Standard Specifications for Public Works Construction, "The Greenbook" latest edition and all errata. This specification addresses the unique conditions in Carlsbad that are not addressed in The Greenbook. Therefore, if there is a conflict, these Specifications shall control.

The Greenbook may be purchased at Bidder/Contractors local technical bookstore or directly from the publisher. These Agency Supplemental General Provisions are available only for download from the online bidding portal with Contract Documents. The Agency does not provide hard copies.

When used in the Contract Documents, statements or command phrases (active voice and imperative mood) refer to and are directed at the "Bidder" or "Contractor" as applicable. The Specifications are written to the "Bidder" before award and the "Contractor" after award. Before award, interpret sentences written in the imperative mood as starting with "The Bidder shall." Interpret the term "you" as "the Bidder" and interpret the term "your" as "the Bidder's." After award, interpret sentences written in the imperative mood starting with "The Contractor shall." Interpret the term "you" as "the Contractor" and interpret the term "your" as "the Contractor's."

PART 2 CONSTRUCTION MATERIALS

SECTION 200 – ROCK MATERIALS

200-2 UNTREATED BASE MATERIALS

200-2.1 General.

ADD the following:

1. Aggregate base shall be Crushed Aggregate Base per Greenbook Section 200-2 and as specified in this section.

200-2.2 Crushed Aggregate Base.

200-2.2.1 General.

ADD the following:

Crushed Aggregate Base shall be free from organic matter and other deleterious substances, and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base.

1. The aggregate shall not be treated with lime, cement or other chemical material before tests are performed.
2. Samples for testing shall represent every 500 cubic yards or one day's production, whichever is smaller. If the results of the aggregate grading tests do not meet the requirements for Percentage Passing Sieve as specified in Table 200-2.2.2, but meet the Quality Requirements as specified in Table 200-2.2.3, placement of the aggregate base may be continued for the remainder of that day. However, another day's Work may not be started until test results indicate to the satisfaction of the Engineer that the next material to be used in the Work will comply with the requirements specified for Percentage Passing Sieve.

3. If the results of both the aggregate grading and Sand Equivalent tests do not meet the requirements of Section 200-2.2, the aggregate base which is represented by these tests shall be removed. However, if requested by the Contractor, and approved at the sole discretion of the Engineer, the aggregate base may remain in place and the Contractor shall pay to the Agency \$50 per cubic yard for such aggregate base left in place. The Agency may deduct this amount from any moneys due, or that may be come due, to the Contractor under the Contract.

SECTION 203 – BITUMINOUS MATERIALS

203-1 PAVING ASPHALT.

203-1.3 Test Reports and Certification.

DELETE in its entirety and REPLACE with the following:

1. Paving asphalt shall be supplied by Caltrans or other State Department of Transportation approved vendors unless otherwise specified in the Special Provisions. At delivery time, the supplying vendor shall deliver to the purchaser a certified copy of the test report. This report shall indicate the vendor's name, grade of paving asphalt delivered, date/ time and point of delivery, quantity delivered, ticket number, purchase order number, and results of specified tests. The certified test report and the testing required in connection with the report shall be submitted in accordance with 3-8.4.
2. Final acceptance of the material will be dependent upon the determination by the Engineer that the material involved conforms to the Specifications.

203-5 SLURRY SEAL.

203-5.2 Mix Design.

DELETE the last paragraph and REPLACE with the following:

1. When a mix design is more than 30 Calendar Days old, it shall be supplemented with a Certificate of Compliance that states the combined aggregate gradation is within ± 3 percent of the referenced mix design based on a 30-day moving average or the average of a minimum of 10 of the most current laboratory results, whichever is greater. A mix design shall be reformulated if it is more than 6 months old or whenever the combined aggregate gradation changes from that in the previously submitted mix design by ± 3 percentage points on any sieve size shown in Table 203-5.3.2. If the source of any aggregate or emulsified asphalt is changed, or the mix design or supporting laboratory reports are over 6 months old, a new mix design shall be submitted.

203-6 ASPHALT CONCRETE.

203-6.1 General.

DELETE in its entirety and REPLACE with the following:

1. Asphalt concrete shall be the product of mixing mineral aggregate and up to 20 percent RAP with asphalt binder at a central mixing plant.
2. When specified in the Special Provisions, asphalt concrete may contain greater than 20 percent RAP or be produced using a WMA technology.
3. Asphalt concrete containing any modified paving asphalt or WMA technology or WMA additive shall not include more than 15 percent RAP.

4. Unless otherwise specified in the Special Provisions or shown on the Plans, asphalt concrete mixtures shall conform to 203-6.4.

203-6.2.5.4 Testing.

DELETE the fourth sentence and REPLACE with the following:

1. When using greater than 20 percent RAP, the following additional tests shall be performed:

203-6.3 Job Mix Formula (JMF) and Mix Designs.

203-6.3.1 General.

DELETE in its entirety and REPLACE with the following:

1. The Contractor shall submit in accordance with 3-8.4 a JMF that summarizes each asphalt concrete mix design for each class and grade of asphalt concrete required to construct the Work. Supporting information for the WMA technology and/or recycling agent, if included in a mixture, shall also be submitted.
2. The JMF shall identify the source and the individual grading of each material used to produce the mix design (including the percentage and individual gradation of any manufactured or natural sands), the combined gradation, the OBC, void content, RAP percentage, RAP gradation, RAP binder content, stability value, plant identification, mix number, WMA technology, and the source and performance grade of the paving asphalt. The mix design test data represented by the JMF shall be submitted to the Engineer with the JMF.
3. When greater than 20 percent RAP is to be included in a mixture, a mix design shall be submitted. The submittal shall include supporting information showing the viscosity of the individual binders (both the virgin paving asphalt grade and that of the binder recovered from the RAP); and the amount of recycling agent, if any, and the blended final viscosity in accordance with AASHTO M323.
4. For all mixtures, the asphalt binder content shall be defined as the total bituminous material present in the mix consisting of the blend of virgin paving asphalt, residual paving asphalt from RAP, and recycling agent.
5. When a mix design is more than 30 Calendar Days old, the JMF must indicate that the combined gradation is ± 3 percent from the referenced mix design based on a 30-day moving average or a minimum of the 10 most current results. If the combined aggregate gradation is not within ± 3 percentage points of the gradation shown on the referenced mix design on any sieve, if the source of any aggregate is changed, the performance grade or source of paving asphalt is changed, the grade or source of any other component of asphalt concrete is changed, or the mix design is over 1 year old, a new mix design shall be prepared and a new JMF shall be submitted to the Engineer for approval.
6. Asphalt concrete shall be class C2-PG 64-28PM and PG 76-22PM. No more than 15% RAP shall be allowed in any AC mix.

203-6.3.2 Hveem Mix Design Method.

DELETE the fourth paragraph and REPLACE with the following:

1. Unless viscosity and blending charts developed in accordance with AASHTO M323 show otherwise, mix designs for mixtures containing more than 20 percent RAP shall drop the high temperature requirement of the virgin paving asphalt by one performance grade and drop

the low temperature requirement by a minimum of one performance grade, e.g., a specified "PG 64-10" shall become a "PG 58-22 or "PG 58-16."

203-6.4.1 Class and Grade.

DELETE letters b) and d) and REPLACE with the following:

b) "R0" if the mixture does not contain RAP, e.g., "C2-PG 64-10-R0."

d) "WMA" if the mixture uses a warm mix asphalt technology, e.g., "C2-PG 64-10-WMA"

203-6.4.4 Composition and Grading.

ADD the following:

1. Evaluation of asphalt concrete shall be determined from samples of final asphalt concrete material. In addition to evaluation of the final asphalt material, samples of aggregate, RAP, and asphalt binder will be taken for testing. In case of dispute between the Contractor and the Agency, the Engineer has the authority to request core samples for analysis from the placed asphalt concrete for any of the acceptance criteria, at the locations determined by the Engineer. All samples shall be taken in accordance with California Test 125, and the following table:

Sampling	Location
Asphalt Concrete	<ul style="list-style-type: none"> • Trucks, or • Mat behind the paver
Aggregate	<ul style="list-style-type: none"> • Cold feed belts, or • Hot bins prior to addition of asphalt binder
RAP	<ul style="list-style-type: none"> • RAP system, or • RAP feed belts
Asphalt Binder	<ul style="list-style-type: none"> • Asphalt binder supplier, or • Storage tanks at the plant during production

2. When behind the paver or core samples of asphalt concrete are to be used for evaluation, sufficient size samples shall be taken to ensure representative and adequate quantity of material for the required testing.
3. When using core samples, the samples must be properly prepared to safeguard against influx of outside contaminants and so that the cut surfaces do not influence the test results.
4. Material samples of the asphalt concrete shall be on a lot basis. A standard lot shall be equal to 1 day's production or 750 tons, whichever is smaller. The samples and testing results shall be representative of their entire sample lot.
5. Table 203-6.4.4, design criteria, shall be modified per the following table, the gradation shall stay the same:

Table 203-6.4.4 – Modified (Design Criteria)

Sieve Size	Percentage Passing Sieves							
	A	B	C1	C2	D1	D2	E	F

	Dense Coarse	Dense Medium Coarse	Coarse Medium	Dense Medium	Coarse Fine	Dense Fine	Extra Fine	Channel Liner
1-1/2" (37.5 mm)	100							
1" (25 mm)	90-100	100						
3/4" (19.0 mm)	78-90	87-100	100	100				
1/2" (12.5 mm)	64-78	70-87	90-100	95-100	100	100		
3/8" (9.5 mm)	54-68	55-76	72-88	72-88	90-100	95-100	100	100
No. 4 (4.75 mm)	34-48	35-52	40-54	46-60	40-54	58-72	65-85	95-100
No. 8 (2.36 mm)	25-35	22-40	18-34	28-42	20-32	34-48	45-65	70-84
No. 30 (600 µm)	12-22	8-24	8-20	15-27	6-18	18-32	22-38	36-50
No.50 (300 µm)	8-16	5-18	4-14	10-20	2-12	13-23	16-28	23-35
No. 200 (75 µm)	3-6	0-7	1-6	2-7	0-5	2-9	6-12	6-12
Asphalt Binder %	4.5-6.0	4.7-6.5	5.0-6.5	5.0-6.5	5.3-7.0	5.3-7.0	6.0-8.0	8.0-10.0
Hveem Stability "S Value" (min.)	37	37	35	35	32	32		
Air Voids ¹	4%	4%	4%	4%	4%	4%		

203-6.5.1 Class and Grade.

DELETE the list and REPLACE with the following:

- a) No suffix if the mixture contains RAP in an amount up to 20 percent.
- b) "R0" if the mixture does not contain RAP, e.g., "III-C2-PG 64-10-R0."
- c) "R" and the percentage of RAP if the mixture contains greater than 20 percent, e.g. "III-C2-PG 64-10-R25."
- d) "WMA" if the mixture uses a warm mix asphalt technology, e.g., "III-C2-PG 64-10-WMA."

203-6.5.4 Table.

DELETE in its entirety and REPLACE with the following:

CLASS	B2		B3	
Sieve Size	Individual Test Result	Moving Average	Individual Test Result	Moving Average
1" (25.0 mm)	100	100	100	100
3/4" (19.0 mm)	87-100	90-100	90-100	95-100
3/8" (9.5 mm)	50-80	60-75	60-84	65-80
No. 4 (4.75 mm)	30-60	40-55	40-60	45-60
No. 8 (2.36 mm)	22-44	27-40	24-50	30-45
No. 30 (600 µm)	8-26	12-22	11-29	15-25
No. 200 (75 µm)	1-8	3-6	1-9	3-7
Asphalt Binder %	4.8-6.5		4.8-6.5	
Air Voids %	4%		4%	
CLASS	C2		C3	
Sieve Size	Individual Test Result	Moving Average	Individual Test Result	Moving Average
3/4" (19.0 mm)	100	100	100	100
1/2" (12.5 mm)	89 -100	95 -100	89 -100	95 - 100
3/8" (9.5 mm)	70-94	75-90	74 -100	80-95
No. 4 (4.75 mm)	44-72	50-67	50- 78	55-72
No. 8 (2.36 mm)	30-54	35-50	32-60	38-55
No. 30 (600 µm)	10-34	15 - 30	14 - 38	18 - 33
No. 200 (75 µm)	2-10	4-7	2-10	4-8
Asphalt Binder %	5.0 - 6.8		5.0 - 7.0	
Air Voids %	4%		4%	
CLASS	D	F		
Sieve Sizes	Combined Average	Combined Average		
1/2" (12.5 mm)	100	-		
3/8" (9.5 mm)	95-100	100		
No. 4 (4.75 mm)	65-85	95-100		
No. 8 (2.36 mm)	50-70	70-80		
No. 30 (600 µm)	28-40	35-50		
No. 200 (75 µm)	5-14	7-16		
Asphalt Binder %	6.0-8.0	8.0-10.0		
Air Voids	4%			

203-6.8 Storage.

DELETE in its entirety and REPLACE with the following:

1. Storage of asphalt concrete shall not be allowed. Asphalt concrete shall be transferred from the mixer by a method that does not cause segregation.

203-6.10 Sampling.

DELETE in its entirety and REPLACE with the following:

1. Aggregate samples for batch plants shall be taken from the hot bins. Aggregate samples for dryer-drum plants shall be taken in advance of the dryer-drum using devices conforming to 203-6.7.4.2.
2. Evaluation and acceptance of asphalt concrete shall be determined from samples of final asphalt concrete material. In addition to evaluation of the final asphalt material, samples of aggregate, RAP, and asphalt binder shall be taken for testing. In case of dispute between the Contractor and the Agency, the Engineer has the authority to request core samples for analysis from the placed asphalt concrete for any of the acceptance criteria, at the locations determined by the Engineer. All samples shall be taken in accordance with California Test 125, and the following table:

TABLE 203-6.10

Sampling	Location
Asphalt Concrete	<ul style="list-style-type: none">• Trucks, or• Mat behind the paver
Aggregate	<ul style="list-style-type: none">• Cold feed belts, or• Hot bins prior to addition of asphalt binder
RAP	<ul style="list-style-type: none">• RAP system, or• RAP feed belts
Asphalt Binder	<ul style="list-style-type: none">• Asphalt binder supplier, or• Storage tanks at the plant during production

3. When behind the paver or core samples of asphalt concrete are to be used for evaluation, sufficient size samples shall be taken to ensure representative and adequate quantity of material for the required testing.
4. When using core samples, the samples must be properly prepared to safeguard against influx of outside contaminants and so that the cut surfaces do not influence the test results.
5. Material samples of the asphalt concrete shall be on a lot basis. A standard lot shall be equal to 1 day's production or 750 tons, whichever is smaller. The samples and testing results shall be representative of their entire sample lot.

203-6.11 Acceptance.

DELETE in its entirety and REPLACE with the following:

1. Acceptance of asphalt concrete mixtures will be based upon conformance to the gradation, asphalt binder content, air voids, and minimum stability values shown in Table 203-6.4.4. Air void values shall be between 2% and 6%. The asphalt binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.
2. Acceptance of Type III asphalt concrete mixtures will be based upon conformance to the gradation, asphalt binder content, air voids, and minimum stability values shown in Tables 203-6.5.4 (A) and 203-6.5.4 (B). Air void values shall be between 2% and 6%. The asphalt

binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.

3. Should plant gradation test results be unavailable and allowed by the Engineer, gradation may be determined in accordance with ASTM D2172 or by AASHTO T 308 with adherence to the aggregate correction factor therein. In the case of a continued dispute, final acceptance of plant produced mixtures may be based upon binder content, stability and air void values.
4. When dissimilar surface course mix characteristics are the result of production and delivery from multiple plants, the Engineer may require production and delivery from only 1 plant during any 1 day of production, unless approved by the Engineer.

203-11 ASPHALT RUBBER HOT MIX (ARHM).

203-11.3 Composition and Grading.

Delete row 10 of TABLE 203-11.3 and REPLACE with the following:

1. Asphalt Rubber Binder, % by Weight of Dry Aggregate¹ | 7.5-8.5 | 7.5-8.8 | 7.8-9

ADD the following: 203-11.10 Acceptance.

1. Acceptance of asphalt rubber hot mixes will be based upon conformance to the gradation, asphalt binder content, air voids, and minimum stability values shown in Table 203-11.3. Air void values shall be within +/- 2 percent of the targeted value at the optimum binder content (OBC) shown on the respective job mix formula. The asphalt binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.

203-13 CRUMB RUBER MODIFIED ASPHALT CONCRETE GAP GRADED (CRUMAC-GG).

203-13.4 Mix Designs.

Delete the last sentence and REPLACE with the following:

1. Once the total percent of paving asphalt and CRM is determined by the mix design, the production tolerance for the combined materials shall be ± 0.4 percent as determined by California Test 382.

203-14 TIRE RUBBER MODIFIED ASPHALT CONCRETE (TRMAC).

203-14.9 Acceptance.

DELETE in its entirety and REPLACE with the following:

1. Acceptance of dense-graded mixtures will be based upon conformance to the gradation, asphalt binder content, air voids, and minimum stability values shown in Table 203-6.4.4. Air void values shall be between 2% and 6%. The asphalt binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.
2. Acceptance of gap-graded mixes will be based upon conformance to the gradation, air voids, and minimum stability requirements shown in Table 203-11.3. Air void values shall be within +/- 2 percent of the targeted value at the OBC shown on the respective job mix formula. Acceptance of gap-graded mixes will also be based upon conformance to the asphalt binder content shown in Table 203-14.4.4. The asphalt binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.
3. Should plant gradation test results be unavailable and allowed by the Engineer, gradation may be determined in accordance with ASTM D2172 or by AASHTO T 308 with adherence to

the aggregate correction factor therein. In the case of a continued dispute, final acceptance of plant produced mixtures may be based upon binder content, stability, and air void values.

4. When dissimilar surface course mix characteristics are the result of production and delivery from multiple plants, the Engineer may require production and delivery from only 1 plant during any 1 day of production, unless approved by the Engineer.

203-16 Polymer Modified Asphalt Concrete (PMAC).

203-16.1 General.

DELETE in its entirety and REPLACE with the following:

1. PMAC shall be the product of mixing mineral aggregate and up to 15% RAP with polymer modified paving asphalt at a central mixing plant.

203-16.3 Job Mix Formulas and Mix Designs.

ADD the following:

1. Contractor shall submit for approval an asphalt concrete mix design per Greenbook Section 203-6.3. The asphalt concrete mix design method shall be Hveem with the optimal binder content determined by California Test 367. The mix design shall conform to Greenbook Table 203-6.4.4 for gradation, and the above MODIFIED (DESIGN CRITERIA) table.

203-16.4.3 Composition and Grading.

DELETE in its entirety and REPLACE with the following:

1. Composition and grading shall conform to 203-6.4.4.

203-16.9 Acceptance.

DELETE in its entirety and REPLACE with the following:

1. Acceptance of asphalt concrete mixtures will be based upon conformance to the gradation, asphalt binder content, air voids, and minimum stability requirements shown in Table 203-6.4.4. Air void values shall be between 2% and 6%. The asphalt binder content shall be within +/- 0.4 percent of the OBC shown on the respective job mix formula.
2. Material samples of the asphalt concrete shall be on a lot basis. A standard lot shall be equal to 1 day's production or 750 tons, whichever is smaller. The samples and testing results shall be representative of their entire sample lot.
3. Should plant gradation test results be unavailable and allowed by the Engineer, gradation may be determined in accordance with ASTM D2172 or by AASHTO T 308 with adherence to the aggregate correction factor therein. In the case of a continued dispute, final acceptance of plant produced mixtures may be based upon binder content, stability, and air void values.
4. When dissimilar surface course mix characteristics are the result of production and delivery from multiple plants, the Engineer may require production and delivery from only 1 plant during any 1 day of production, unless approved by the Engineer.

SECTION 206 – MISCELLANEOUS METAL ITEMS

ADD the following: 206-7 TRAFFIC SIGNS.

1. .

SECTION 209 – PRESSURE PIPE

209-4 PVC PRESSURE PIPE.

209-4.1 General.

ADD the following:

1. PVC pipe and fittings and installation shall conform with the City of Carlsbad Engineering Standards, Volumes 2 and 3.

209-4.2 Materials.

DELETE entirely and replace with the following:

1. Unless otherwise specified, PVC pressure pipe shall conform to the following:

TABLE 209-4.2

Item	Material	Reference Specification/Requirements		
Pipe	Manufacturing Standards	Conform to AWWA C900 for pipe 4" – 60" (100 mm – 1,500 mm).		
	Design Standards	Conform to AWWA M23 using hydraulic design basis below.		
	NSF Certification	NSF 61 certification required for potable water pipe.		
	Material	Virgin rigid poly-vinyl-chloride. Conform to ASTM D1784 Cell Class 12454B or better. Conform to NSF 13. Conform to AWWA C900 Section 4.2.		
	Markings (each pipe)	Conform to AWWA C900 Section 6.1.		
		Mark applicable AWWA standard.		
		Show nominal pipe diameter.		
		Show AWWA pressure class or DR.		
		Show NSF 61 stamp (for potable water service).		
	Size	Conform to outside diameter of ductile iron pipe unless otherwise shown.		
		As shown on the Plans.		
	Minimum Wall Thickness (Dimension Ratio)	Design Pressure and Diameter Shown on the Plans	Minimum Dimension Ratio	
		0-100 psi (.7 MPa) 4" – 16" (100 mm – 400 mm)	DR 18 (Class 235)	
		100-200 psi (1.0 MPa) 4" – 16" (100 mm – 400 mm)	DR 14 (Class 305)	
Greater than 200 psi (1.4 MPa) or greater than 16"		Use DIP or Steel Pipe		
Pipe with Grooved Couplings		Use DIP or Steel Pipe		
Lengths	Laying lengths shall be 20' with option to supply up to 15% random (minimum length 10') sections			

Item	Material	Reference Specification/Requirements
Joints	Standard Push-on Style	Conform to ASTM D3139.
Bell Joint Gaskets	Material	Elastomeric membrane per AWWA C900 Section 4.2.4 (Gaskets and Lubricants) and ASTM F477. Butadiene styrene (SBR or BR) for potable water. Ethylene propylene (EPM or EPDM) for recycled water.
	Material for Hydrocarbon Applications and Contaminated Soils	Elastomeric membrane per AWWA C900 Section 4.2.4 (Gaskets and Lubricants) and ASTM F477. NBR (Nitrile) (acrylonitrile butadiene), FLUOREL or FKM (Viton) (fluorocarbon).
	Gasket Age	< 180 Calendar Days old or < 2 years old but retested < 60 Calendar Days prior to installation
Fittings	Material	Ductile iron.
	Standards	Conform to AWWA C110/ANSI 21.10 or AWWA C153/ANSI A21.53.
	Style	Push-on (standard) or restrained joint (as shown).
	Marking	Cast letters "DI" or "DUCTILE" into fittings, unless otherwise specified.
	Exterior Coatings	1 mil (25 µm) petroleum asphaltic coating.
	Interior Linings	Cement mortar (double thickness).
	Plastic Film Wrap for Corrosion Protection	Conform to 212-12.1.1. Color per 212-12.2.

209-5 HIGH-DENSITY POLYETHYLENE (HDPE) SOLID WALL PRESSURE PIPE.

209-5.1 General.

ADD the following:

1. HDPE pipe and fittings and installation shall conform with the City of Carlsbad Engineering Standards, Volumes 2 and 3.

209-5.2 Materials.

DELETE in its entirety and replace with the following:

1. Unless otherwise specified, HDPE pressure pipe shall conform to the following.

TABLE 209-5.2

Item	Material	Reference Specification/Requirements
Pipe	Manufacturing Standards	Conform to AWWA C901 for pipe 1/2" – 3" (12.5 mm – 75 mm).

Item	Material	Reference Specification/Requirements	
	(Potable Water Pipe)	Conform to AWWA C906 for pipe 4" – 63" (100 mm – 1575 mm).	
	Manufacturing Standards (Non-Potable Water Pipe)	Conform to ASTM F714	
	Design Standards	Conform to AWWA M55.	
	NSF Certification	NSF 61 certification required for potable water pipe.	
	Material	ASTM D3350 PE 4710 Cell classification 4454 or higher. Conform to AWWA C901 Section 4.2 or AWWA C906 Section 4.2 as appropriate.	
	Markings (each pipe)	Conform to AWWA C901 or C906 Section 6.1.	
		Mark applicable AWWA standard.	
		Show nominal pipe diameter.	
		Show standard material code designation.	
		Show AWWA pressure class or DR.	
	Size	Show NSF 61 stamp (for potable water service).	
		Show manufacturer and manufacturing date code.	
	Minimum Wall Thickness (Dimension Ratio)	1-1/4" – 63" (32 mm – 1575 mm) diameter as shown on the Plans. Ductile iron pipe size (DIPS) outside diameter for pipe 4" – 48" (100 mm – 1200 mm) unless otherwise shown. Iron pipe size (IPS) outside diameter for pipe ≤ 4" (100 mm) or > 48" (1200 mm).	
		Design Pressure Shown on the Plans	Minimum Dimension Ratio
0-80 psi (0.6 MPa)		DR 21	
80-100 psi (0.7 MPa)		DR 17	
100-150 psi (1.0 MPa)		DR 11	
150-200 psi (1.4 MPa)	DR 9		
Greater than 200 psi	Use ductile iron or steel		
Joints	Style	Thermal butt fusion for joining pipe in accordance with the manufacturer's recommendations.	
		Flanged for connections to appurtenances and other pipe materials in accordance with manufacturer's recommendations.	
	Flange Back-up Ring	Provide flange back-up ring of Type 316 SS or fusion bonded epoxy coated ductile iron.	

Item	Material	Reference Specification/Requirements
	Design Pressure	Match design pressure rating of pipe shown on the Plans.
Fusion Fittings	Standards	ASTM D2683 socket-type, ASTM D3261 butt-type, or ASTM F1055 electrofusion (fittings shall be marked as complying).
	Material	HDPE conforming to pipe specifications.
	Pressure Rating	De-rated pressure of fitting shall meet or exceed design pressure rating of pipe shown on the Plans.
Adaptor Fittings (For Connections to Flanged Fittings)	Internal Stiffener Ring	Required for mechanical joint connections.
	Backup Ring	Stainless steel.
	Thrust Restraint.	HDPE in-line wall anchors and thrust blocks and per manufacturer's requirements.

209-7 PIPELINE IDENTIFICATION.

209-7.2 Requirements.

DELETE in its entirety and replace with the following:

1. Pipeline identification shall conform to the following:

TABLE 209-7.2

Function	Type	Materials/Method	
Pipe Contents Identification	Pipe Color (Plastic Pipe or Polywrap)	Blue for Potable Water. Purple for Recycled Water. Green for Sewage.	
	AND		
	Stenciling	Stenciling marked on pipe in contrasting color to background color of pipe stating: "POTABLE WATER," "CAUTION RECYCLED WATER – DO NOT DRINK" or "CAUTION SEWER" as appropriate.	
		5/8" (16 mm) high letters.	
		Repeated at 1 foot (300 mm) intervals.	
	OR		
	Identification Tape	Polyethylene tape 6" (150 mm) wide and 4 mils (100 µm) minimum thickness with 2" (50 mm) high letters stating: "POTABLE WATER," "CAUTION RECYCLED WATER – DO NOT DRINK" or "CAUTION SEWER" as appropriate. For pipe > 12" (300 mm) diameter, use 12" (300 mm) wide tape.	
Color – Blue with black or white letters for potable water, Purple with black or white letters for recycled water, Green with black or white letters for sewage.			

Function	Type	Materials/Method
		Attached to top of pipe with adhesive tape.
Pipe Warning and Locating	Warning and Locating Tape	Polyethylene tape 6" (150 mm) wide and 4 mils (100 μm) minimum thickness with 2" (50 mm) high letters stating: "CAUTION: WATERLINE BURIED BELOW," "CAUTION: RECLAIMED WATERLINE BURIED BELOW – DO NOT DRINK," or "CAUTION: SEWER BURIED BELOW" as appropriate. For pipe > 12" (300 mm) diameter, use 12" (300 mm) wide tape.
		Color – blue with black or white letters for potable water, Purple with black or white letters for recycled water, Green with black or white letters for sewage.
		Place in pipe trench 18" (450 mm) above pipe.
		Tape shall contain metallic strip that can be registered by magnetic field locating device.
	OR	
	Locating Wire	In lieu of installing metallic warning tape; non-metallic warning tape 18" (450 mm) above pipe and 10-gauge copper wire attached to top of pipe and accessibly terminated may be used.

SECTION 211 – MATERIAL TESTS

211-3 INFILTRATION CAPACITY TEST.

211-3.4 Infiltration CapaCity.

DELETE in its entirety and REPLACE with the following:

1. Infiltration CapaCity shall be calculated as follows:
 - a) The formula for U.S. Standard Measures shall be: $IC = (V)(3,326,400) / (\pi)(d_1)(d_2)(t)$ inches per hour.
 - b) The formula for SI Units shall be: $IC = (V)(14.4 \times 10^6) / (\pi)(d_1)(d_2)(t)$ cm per hour. Where:
 - IC is Infiltration CapaCity
 - V is the volume of water in gallons or liters
 - d_1 and d_2 are the dimensions that were determined in part 211-3.3
 - π is approximately 3.14159

SECTION 212 – WATER AND SEWER SYSTEM VALVES AND APPURTENANCES

212-1 GENERAL.

212-1.2 Products Conveying Potable Water

DELETE b) and REPLACE with the following:

- b) have an interior lining listed as complying with NSF 61 and certified to be holiday-free

212-2 FLANGED AND THREADED CONNECTIONS.

212-2.8.2 Insulation of Threaded Connections.

DELETE in its entirety and REPLACE with the following:

1. Threaded insulating bushings, couplings or unions shall be furnished and installed where dissimilar threaded piping materials are joined.

212-3 PIPE HANGERS AND SUPPORTS, CASINGS SPACERS, AND WALL PENETRATIONS.

212-3.4 Rubber Annular Hydrostatic Sealing Devices.

212-3.4.1 General.

DELETE the last sentence and REPLACE with the following:

1. The sealing device shall be capable of sealing a minimum hydrostatic pressure of 20 psi.

212-5 VALVES.

212-5.5.1.2 Materials.

DELETE TABLE 212-5.5.1.2 in its entirety and REPLACE with the following:

TABLE 212-5.5.1.2

Item	Option	Reference Specification/Requirements
Body and Cover	Ductile Iron or	ASTM A536 Grade 65-45-12.
Body and Cover for Pressures over 250 psi (1.7 MPa)	Ductile Iron	ASTM A536 Grade 65-45-12.
Disc and Disc Arm	Ductile Iron	ASTM A536 Grade 65-45-12.
Seat	SAE Type 316 Stainless Steel	ASTMA276.
Pivot Shaft	SAE Type 316 Stainless Steel	ASTMA276.

212-10 SERVICE LATERALS, METERS, AND METER BOXES.

212-10.3 Corporation Stops, Angle Meter Valves, Service Saddles and Other Service Materials.

DELETE the last sentence of the first paragraph and REPLACE with the following:

1. Unless otherwise shown on the Plans or specified in the Special Provisions, service saddles and corporation stop inlets shall be threaded per NPT tapered per ANSI B1.20.1.

ADD the following: 212-13 TRACER WIRE FOR NON-METALLIC PIPE.

212-13.1 General.

1. Tracer wire shall conform to the following:

- a) Conductor: Minimum 10 AWG, copper clad steel or solid copper (direct burial) or 8 AWG, copper clad steel (directional drilling), rated for 30 volts.
- b) Break load: minimum 600-lb (direct burial); 2,500-lb (directional drilling)
- c) Insulation: High Molecular Weight Polyethylene (HMWPE), minimum 30-mil (direct burial); 45-mil (directional drilling). Color per the APWA uniform color code.
- d) Splices and connectors: For direct burial only, moisture displacement and corrosion proof, direct bury splice kits, UL rated for 600 volts.

SECTION 216 – PRECAST REINFORCED CONCRETE BOX

216-4 TESTING REQUIREMENTS.

216-4.2.2 Acceptance.

DELETE the first paragraph and REPLACE with the following:

1. When the average compressive strength of all cylinders tested is equal to or greater than the specified compressive strength of the PCC, and not more than 10 percent of the cylinders tested have an average compressive strength less than 90 percent of the specified compressive strength, and no cylinder tested has a compressive strength less than 85 percent of the specified compressive strength, the lot will be accepted.

SECTION 217 – BEDDING AND BACKFILL MATERIALS

217-1 BEDDING MATERIAL.

217-1.1 General.

ADD the following:

1. Bedding for pressure pipe of any material shall conform with the City of Carlsbad Engineering Standards, Volumes 2 and 3.

217-1.2 Bedding Material for Plastic Pipe.

DELETE the second paragraph and REPLACE with the following:

1. For HDPE, PVC solid wall, and PE solid wall pipe in gravity applications, the bedding material shall be crushed rock conforming to the requirements shown in Table 217-1.2 unless otherwise specified or shown on the Plans.

217-2 TRENCH BACKFILL.

217-2.1 General.

DELETE TABLE 217-2.1 and replace with the following:

TABLE 217-2.1

Zone	Zone Limits	Maximum Rock Size (greatest dimension)	Sand Equivalent (Excluding Rock)
Backfill Zone	From subgrade to 12" (300 mm) above top of pipe or conduit	4" (150 mm)	Not less than 20 unless otherwise shown on the Plans or specified in the Special Provisions.

PART 3 CONSTRUCTION METHODS

SECTION 300 – EARTHWORK

300-1 CLEANING AND GRUBBING.

DELETE 300-1.2 Root Pruning and Tree Trimming.

300-1.3 Measurement.

DELETE in its entirety and REPLACE with the following:

1. Clearing and grubbing, if measured for payment, will be measured by the acre or lump sum.

300-1.4 Payment.

DELETE the second sentence.

PART 4 EXISTING IMPROVEMENTS

SECTION 400 – PROTECTION AND RESTORATION

400-2 PERMANENT SURVEY MARKERS.

ADD the following:

1. The Contractor shall not cover or disturb permanent survey monuments or benchmarks without the consent of the Engineer. Where the Engineer concurs, in writing, with the Contractor that protecting an existing monument in place is impractical, the Contractor shall employ a licensed land surveyor or a registered civil engineer authorized to practice land surveying within the State of California (“Surveyor”) to establish the location of the monument before it is disturbed. The Contractor shall have the monument replaced by the Surveyor no later than 30 Calendar Days after construction at the site of the replacement is completed. The Surveyor shall file corner record(s) as required by Business and Professions Code Sections 8772 and 8773 *et seq.*
2. When a change is made in the finished elevation of the pavement of any roadway in which a permanent survey monument is located, the Contractor shall adjust the monument frame and cover to the new grade within 7 Calendar Days of paving unless the Engineer shall approve otherwise. Monument frames and covers shall be protected during street sealing or painting projects or be cleaned to the satisfaction of the Engineer.

SECTION 401 – REMOVAL

401-2 ASPHALT CONCRETE PAVEMENT.

DELETE in its entirety and REPLACE with the following:

1. Asphalt concrete pavement shall be removed to clean, straight lines. Removal performed by cold milling shall conform to 404. Adjacent AC/AB sawcut and removal associated with concrete construction shall be full depth and a minimum width of 12 inches from face of concrete edge and continue along the concrete scheduled for removal. Removal and disposal of adjoining AC/AB section shall be incidental to the removal of concrete structure Bid item per this Section. Replacement of adjoining AC/AB section shall be incidental to replacement of the concrete

401-3 CONCRETE AND MASONRY IMPROVEMENTS.

401-3.2 Concrete Curb, Walk, Gutters, Cross Gutters, Curb Ramps, Driveway and Alley Intersections.

DELETE in its entirety and REPLACE with the following:

1. Concrete shall be removed to neatly sawed edges with saw cuts made through the entire thickness. Concrete sidewalk or driveway to be removed shall be neatly sawed in straight lines either parallel to the curb or at right angles to the alignment of the sidewalk. No section to be replaced shall be smaller than 30 inches (750 mm) in either length or width. All existing concrete shall be removed to the nearest joint. Concrete shall be removed to neatly sawed edges with saw cuts made to a depth deep enough to produce a clean straight break without loosening, cracking or damaging adjoining improvements. Curb and gutter shall be sawed on a neat line at right angles to the curb face. PCC and all other material unsuitable for use as fill, as determined by the Engineer, shall be removed from the right-of-way and disposed of by the Contractor at a site of his own choice and shall pay all costs incidental to the disposal.

ADD the following: [401-3.2.1 Adjacent Asphalt Concrete \(AC/AB\) Sawcut and Removal.](#)

1. Adjacent AC/AB sawcut and removal associated with concrete construction shall be full depth and a minimum width of 12 inches from face of concrete edge and continue along the concrete scheduled for removal. Removal and disposal of adjoining AC/AB section shall be incidental to the removal of concrete structure Bid item per this Section. Replacement of adjoining AC/AB section shall be incidental to replacement of the concrete as specified in Section 303-5.

SECTION 402 – UTILITIES

402-1 LOCATION.

402-1.1 General.

DELETE the first paragraph and REPLACE with the following:

1. Known utilities and their respective owners are shown on the Plans or specified in the Special Provisions and their locations are based on available records. The accuracy and/or completeness of the utilities shown on the Plans is not guaranteed and actual locations must be confirmed by potholing. Where underground utilities are shown on the Plans, the Contractor shall assume every property parcel will be served by a service connection for each type of utility.

INSERT, after the first sentence of the third paragraph, the following:

Subsurface installations shall be located at least 5 Working Days and at least 500 feet in advance of any construction heading and the results reported in written form to the Engineer.

AMEND letter d) to read as follows:

- d) horizontal location with reference to Project stationing.

402-2 PROTECTION.

DELETE the first 3 paragraphs and REPLACE with the following:

1. The Contractor shall not interrupt the service function or disturb the support of any utility without authority from the utility owner or direction from the Engineer. Valves, switches,

vaults, and meters shall be maintained readily accessible for emergency shutoff. Excavation of soils providing support to pressure pipeline thrust blocks may require isolation and de-pressurization of the pipeline prior to the installation of support devices and the Contractor shall coordinate such Work with the utility owner.

2. Where a vertical separation distance of 12 inches cannot be attained between a proposed utility and an existing utility greater than 4 inches in diameter, place a 1-inch thick neoprene or silicone pad with Shore A durometer hardness of 50 to 70 (ASTM D2240) in contact with the top of the lower utility and backfill with Portland cement concrete sand conforming to 203-1.5.5 to 3 inches above the bottom of the upper utility. The width of the pad shall be equal to the width of the trench and the length shall extend 1 foot beyond the outer limits of the existing utility.
3. Where protection is required to ensure support of utilities located as shown on the Plans or in accordance with 402-1, the Contractor shall, unless otherwise specified, furnish and place the necessary protection at its expense.
4. Upon learning of the existence and location of any utility omitted from the Plans, the Contractor shall immediately notify the Engineer in writing. When authorized by the Engineer, support or protection of the utility will be paid for as provided in 7-3 or 7-4.

402-4 RELOCATION.

DELETE paragraphs 3 and 4 and REPLACE with the following:

1. When the Plans or Special Provisions provide for the Contractor to alter, relocate, or reconstruct a utility, all costs for such Work, including temporary utility service, shall be included in the Bid for the items of Work necessitating such Work. Temporary or permanent relocation or alteration of utilities requested by the Contractor for its convenience shall be its responsibility and it shall make all arrangements and bear all costs.
2. The Contractor will relocate service connections as necessary within the limits of the Work or within temporary construction or slope easements in accordance with the procedures and upon the approval of the utility owner. When directed by the Engineer, the Contractor shall arrange for the relocation of service connections as necessary between the meter and property line, or between a meter and the limits of temporary construction or slope easements. Payment for the relocation of such service connections shall be in accordance with 7-3 unless otherwise specified in the Bid. Payment will include disconnection of existing service connections from the utility main, capping or plugging existing outlets on the utility main, abandoning the service connection, and the restoration of all existing improvements which may be affected by the service connection relocation. The Contractor may agree with the owner of any utility to disconnect and reconnect private interfering service connections. Unless otherwise specified in the Bid, disconnection and reconnection of private services will be outside of the scope of the Work and the Agency will not be involved in any such agreement.

402-5 DELAYS DUE TO UTILITY CONFLICTS.

DELETE paragraphs 1 through 4 and REPLACE with the following:

1. The Contractor shall notify the Engineer of its Construction Schedule insofar as it affects the protection, removal, or relocation of utilities. The notification shall be included as a part of

the Construction Schedule in accordance with 6-1 which shall be revised upon the completion of utility potholing and evaluation for potential utility conflicts. The Contractor shall notify the Engineer in writing of any subsequent changes in the Construction Schedule which will affect the time available for protection, removal, or relocation of utilities.

2. The Contractor will not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, noted, and completed in accordance with 402-1.
3. The Contractor may be given an extension of time for unforeseen delays attributable to unreasonably protracted interference by utilities in performing Work correctly shown on the Plans.
4. The Agency will determine the scope of Work for the removal, relocation, or protection of existing main or trunk line utility facilities within the area affected by the Work if such utilities are not identified in the Contract Documents. The Contractor will not be assessed liquidated damages for any delay caused by the removal, relocation, or protection of such existing facilities.

402-6 COOPERATION.

DELETE in its entirety and REPLACE with the following:

1. When necessary, the Contractor shall so conduct its operations as to permit access to the Work Site by the Agency or the utility owner and provide time for utility Work to be accomplished during the progress of the Work.

SECTION 403 - MANHOLE ADJUSTMENT AND RECONSTRUCTION

403-1 GENERAL.

DELETE in its entirety and REPLACE with the following:

1. Wet utility (water, recycled water, sewer and storm drain) manhole and vault frames and covers and valve box frames and covers within an area to be paved or graded shall be set to finish grade by the Contractor.
2. The Contractor shall remove all debris from the interior of manholes and vaults and shall clean all foreign material from the top of the frames and covers.

403-3 MANHOLES IN ASPHALT CONCRETE PAVEMENT.

DELETE in its entirety and REPLACE with the following:

1. Wet utility structures extending 2 inches (50 mm) or more above the new subgrade shall be lowered by the Contractor to the new subgrade before construction of the pavement section. Other structures shall be lowered by their owners unless otherwise specified or shown on the Plans. Structures projecting less than 2 inches (50 mm) above the subgrade may be surveyed and covered for construction of the pavement section and later adjusted to grade. The top of reset manholes and other structures shall conform to the smoothness requirement specified in 302-5.6.2.
2. All structures from which manhole frames and covers have been removed to facilitate pavement section construction shall be temporarily covered with a steel plate by the Contractor. When this procedure is impractical, such as for large vaults, or special structures, remodeling or reconstruction shall be completed to finish permanent surface prior to paving operations.

3. The Contractor shall notify utility owners at least 21 Calendar Days in advance of the need to commence Work required prior to paving operations and again for Work required after paving operations. If the Engineer determines the utility owner will not complete adjustment of its facilities within 10 Working Days of the completion of the surface course of pavement, the facilities will be adjusted by their owner under a separate procedure established by the Agency.
4. After the pavement has been completed, the necessary portions of the subgrade, base, and pavement shall be neatly removed, the structure built up, and the manhole or vault frame or valve box set to within 1-1/2 inches (37.5 mm) of finish pavement surface with concrete pavement conforming to 201-1 and 302-6. The Contractor shall fill the remaining 1-1/2 inches (37.5 mm) with the asphalt concrete surface course mixture. This material shall be placed and compacted to conform to the appearance, grade, density and smoothness of the surrounding pavement.

403-4 MEASUREMENT.

DELETE in its entirety and REPLACE with the following:

1. Manhole, vault or valve box adjustment and reconstruction of the type specified will be measured by each.

403-5 PAYMENT.

DELETE in its entirety and REPLACE with the following:

1. Payment for adjusting manhole or vault frames and covers to grade, where the difference between the lowest point of manhole or vault frame removal and final elevation of the top of the frame is less than 15 inches (375 mm) or where the adjustment is accomplished by adjustment rings only, will be made at the Contract Unit Price for adjusting each manhole or vault frame.
2. Payment for setting manhole or vault frames and covers to grade, where the difference between the lowest point of manhole or vault frame removal and the final elevation of the top of the frame is 15 inches (375 mm) or more, will be made at the Contract Unit Price for reconstructing each manhole.
3. Payment for adjusting valve boxes to grade will be made at the Contract Unit Price for adjusting each valve box regardless of the height of the adjustment.

SECTION 404 – COLD MILLING

404-12 PAYMENT.

ADD the following:

No extra payment will be made for milling or disposing of geotextile, geogrid, or pavement fabric.

ADD the following: 500-2.4 As-Built Records.

1. Submit 1 set of Plans annotated with the as-built information and identification of Work performed and other records acceptable to the Engineer prior to final acceptance of the Work by the Agency.
2. As-built drawings and records shall include all necessary information as outlined in the PWS or as agreed to by the Agency. Records shall include pre and post inspection video; locations

of obstructions, groundwater or other conditions encountered; locations of test coupons and service connections; liner type and thickness; and temperature and/or light train sensor data from data loggers. The records shall be updated by the Contractor as the Work progresses, shall be clearly legible and shall indicate the locations of the Work performed each day.

SECTION 2

01 11 00 SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- a. The Contractor shall perform Work and furnish materials, labor, tools, equipment or services that may be reasonably inferred as being required to produce the intended result, whether specifically called for in the Contract Documents, at no additional cost to the Agency.
- b. Visible, existing improvements for which no specific disposition is made on the Plans, but which interfere with the Work, shall be removed, and disposed of by the Contractor with the prior approval of the Engineer.
- c. The completed Work will provide the Agency with a new community garden, as more fully described in the Drawings and the technical specifications. Provide all labor, material and equipment for the following: List the main elements in the Project, e.g.
 1. demolition of existing asphalt surface, existing sidewalk adjacent to the proposed garden within work limit, existing chain-link fence, existing curb, existing outdoor shower, existing concrete adjacent to building. Please see Sheet 4 of plan set for all matters regarding demolition.
 2. removal of indicated existing asphalt paving, existing sidewalk adjacent to proposed garden within work limit, existing chain-link fence, existing curb, existing outdoor shower, hose bib/water valve, existing concrete adjacent to building, Please see Sheet 4 of plan set for all matters regarding removal. nsite work to repurpose the former park maintenance yard into a community garden. (this includes site grading, clearing and grubbing, excavation demolition, removal, storm water pollution prevention measures, site amenity installations, irrigation and plumbing.) Please see plan set.
 3. excavation and drainage. Please see Plan Set and SWPPP
 4. construction of new structures, including a shade sail, 35 raised garden beds, new wooden fence and gates with steel mesh, informational kiosk, 2 concrete benches, 3 trash/recycling receptacles, brick driveway, irrigation, back flow preventer, 1 drinking fountain. Please see plan set.
 5. new drain sump connection. Please see plan set.
 6. existing isolation valve to be protected in place. Please see Sheet 4 of plan set.
 7. existing sewer cleanout to be protected in place. Please see Sheet 4 of plan set.
 8. existing lighting to remain. Please see Sheet 4 of plan set.

11. existing building to remain. Please see Sheet 4 of plan set.
 9. replacement of sidewalk 570 square feet. Please see plan set.
 10. new 2.5' tall CMU retaining wall six hundred square feet. Please see plan set.
 11. new rolling 4" curb at service entrance. Please see plan set.
 12. new 4" PVC piping. Please see plan set.
 13. new 5' wooden garden fence. Please see plan set.
 14. new 2 5' wooden garden pedestrian gates. Please see plan set.
 15. new 1 12' wide wooden service gate. Please see plan set.
 16. new pavers four hundred and sixty square feet. Please see plan set.
 17. new 1 shade sail. Please see plan set.
 18. new 35 wooden planter boxes. Please see plan set.
 19. new 1 drinking fountain. Please see plan set.
 20. new 3 waste/recycling containers. Please see plan set.
 21. new 3 compost bins. Please see plan set.
 22. new 2 7' benches. Please see plan set.
 23. new 1 horizontal storage box. Please see plan set.
 24. new 1 informational kiosk. Please see plan set.
 25. new 1 drain sump. Please see plan set.
 26. new 1 cover for isolation valve
 27. new 1 cover for sewer cleanout
 28. install silt fencing as part of the stormwater prevention plan. Please see SWPPP plan set for instructions.
 29. install fiber roll as part of the stormwater prevention plan. Please see SWPPP plan set for instructions.
 30. remove silt fencing when complete as part of the stormwater prevention plan. Please see SWPPP plan set for instructions.
 31. remove fiber rolls when work complete as part of the stormwater prevention plan. Please see SWPPP plan set for instructions.
 32. new, piping and irrigation. Please see plan set.
 33. new decomposed granite four thousand seven hundred and fifty-one square feet. Please see plan set.
 34. other improvements as indicated. Please see plan set.
- d. Location of the Project is <3420 Camino De Los Coches, Carlsbad, CA 92009>.
- e. <Describe here all items one by one, if needed>
- f. Work also includes: - Maintaining the safety around the work site for pedestrians throughout the construction period; traffic control; and obtaining all permits needed to perform the indicated work.
- g. The Work is divided into the following schedules:
1. Schedule A
 - i. Mobilization and Demobilization
 - ii. Demolition/Site Preparation Cost

- iii. Earthwork
- iv. Site Improvements
- v. Walls and Fencing
- vi. Landscape Elements
- vii. Irrigation
- viii. Erosion Control

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

01 11 20 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- a. The Contract Price shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum Bid prices. All Work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of Contractor and all costs in connection the Work shall be included in the Bid prices.
- b. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the Bids submitted for the Work. The actual amounts of Work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for Work and materials will be the actual amount of Work done and materials furnished. Contractor agrees that it will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of Work actually performed and materials actually furnished and the estimated amounts therefor.
- c. Payment for each Bid Item shall be made in accordance with Sections 7-2 and 7-3 of the Agency Supplemental General Provisions and the Bid. All Work shown or described in the Contract Documents and necessary for the functioning of installed equipment or constructed facilities and the repair or replacement of damaged existing improvements in accordance with the Contract Documents shall be considered as included in the Bid Items.
- d. **General.** Unless otherwise specified, quantities of work shall be determined from measurements or dimensions in horizontal planes. However, linear quantities of pipe, piling, fencing and timber shall be considered as being the true length measured along longitudinal axis.

Unless otherwise provided in Specifications, volumetric quantities shall be the product of the mean area of vertical or horizontal sections and the intervening horizontal or vertical dimension. The planimeter shall be considered an instrument of precision adapted to measurement of all areas.
- e. **Methods of Measurement.** Materials and items of work which are to be paid for on basis of measurement shall be measured in accordance with methods stipulated in the particular sections involved.
- f. **Certified Weights.** When payment is to be made on the basis of weight, the weighing shall be done on certified platform scales or, when approved by the Engineer, on a completely automated weighing and recording system. The Contractor shall furnish the Engineer with duplicate licensed weighmaster's certificates showing actual net weights. The Agency will accept the certificates as evidence of weights delivered.
- g. **Units of Measurement.** The system of measure for this contract shall be the U.S. Standard Measures.

- h. **LUMP SUM WORK.** Items for which quantities are indicated “Lump Sum”, “L.S.”, or “Job”, shall be paid for at the price indicated in the Bid. Such payment shall be full compensation for the items of work and all work appurtenant thereto.

When required by the Specifications or requested by the Engineer, the Contractor shall submit to the Engineer within 15 days after award of Contract, a detailed schedule to be used only as a basis for determining progress payments on a lump sum contract or designated lump sum bid item. This schedule shall equal the lump sum bid items and shall be in such form and sufficiently detailed as to satisfy the Engineer that it correctly represents a reasonable apportionment of the lump sum.

1.02 BID ITEMS

- a. Describe in detail each Bid item and how to measure.
- a. **BID ITEMS.** Payment for each Bid Item shall be made at the quantity and type as listed in the Contractor's Proposal. All work shown or mentioned on the plans, in the Contract Documents, General Provisions, or Technical Provisions/Specifications shall be considered as included in the Bid Items. Contractor must protect existing utilities, improvements, landscaping, irrigation systems, and vegetation in place. If damaged during the work, Contractor is responsible to repair or replace any utilities, improvements, landscaping, irrigation systems, and vegetation at his expense.
- b. “S” denotes specialty items for the purpose of subContractor calculations.

Bid Item No. 1 Mobilization and Demobilization

The contract price paid for this bid item shall constitute full compensation for the costs of all pre- and post-construction preparatory work and operations which must be performed or for costs incurred prior to commencing/concluding work on the various contract items on the project site and no other compensation will be allowed, therefore. This item shall include but not be limited to the following items: mobilization/demobilization and lay-down area; obtaining and paying for all required bonds, insurance policies (including premiums and incidentals), and permits if applicable; submittal of required materials and shop drawings, baseline construction schedule(s) and 3- week look ahead schedule; construction yards, 6' high construction fencing and green screen, sanitary facilities, and any other facilities necessary for

work at all project sites; utility services for construction facilities; posting all OSHA required notices and establishment of safety programs; the movement of personnel, equipment, supplies, and incidentals to all project sites; developing and installing construction water supply; notification of residents and businesses; and all utility coordination, utility locating, potholing, and mark out; and shall include all labor, materials, tools, equipment, and incidentals in accordance with the latest regulatory requirements, the plans, and contract documents and no other compensation will be allowed therefore.

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

The deletion of work or the addition of extra work as provided for herein shall be reflected in Contract Change Orders and shall not affect the price paid for "General Conditions."

The production of asbuilt drawings will be performed as part of the Contractor's demobilization.

All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 2 Curb Removal

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated curb removal. The Contractor shall remove concrete curb, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 3 Chain Link Fence Removal

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with chain link fence removal. The Contractor shall remove the chain link fence, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the



demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 4 Asphalt Removal

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated asphalt removal. The Contractor shall remove the asphalt, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 5 Sidewalk Removal

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated sidewalk removal. The Contractor shall remove the sidewalk as called out in the plans, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 6 Sawcut

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with saw cutting, removing, and disposing of all concrete, and other materials in accordance with the plans and contract documents and no other compensation will be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Shall conform to the Standard Specifications and Supplementary General Provisions and shall consist of the protection of all items to remain, saw-cutting, and demolition and improvements as specified or shown on the Plans, removal of deleterious materials, and proper disposal from the Project site of all existing surface and subsurface materials as required to construct the improvements as shown on the Plans and as described in the Specifications. All re-moved materials not indicated for salvage, re-use or re-cycle shall become the property of the Contractor and shall be disposed of offsite at a legal site or recycling facility.

Bid Item No. 7 Concrete Removal

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with concrete removal. The Contractor shall remove the concrete as called out in the plans, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 8 Sewer Cleanout

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing sewer cleanout improvements at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 9 Clear and Grub

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with demolition, clearing and grubbing activities including, but not limited to removing and disposing of all concrete, turf, landscaping, existing improvements and other materials in accordance with the plans and contract documents and no other compensation will be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Clearing and grubbing shall conform to the Standard Specifications and Supplementary General Provisions and shall consist of the protection of all items to remain, saw-cutting, demolition and disposal of existing improvements, and improvements as specified or shown on the Plans, removal of deleterious materials, and proper disposal from the Project site of all existing surface and subsurface materials as required to construct the improvements as shown on the Plans and as described in the Specifications. All removed materials not indicated for salvage, re-use or re-cycle shall become the property of the Contractor and shall be disposed of offsite at a legal site or recycling facility.

Bid Item No. 10 Cap Isolation Valve

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with Cap Isolation Valve at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 11 Hose Bib/Water Valve Removal

The contract lump sum price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with but not limited to hose bib/water valve removal. The Contractor shall remove the hose bib/water valve as called out in the plans, and other existing features which interfere with the work. All costs of prosecuting the work as described herein shall be included in the Contractors bid. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of the demolition. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 12 Excavate and Fill

The contract cubic yardage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work associated with excavate and fill. The Contractor shall excavate to the lines and levels required and/or shown on the Drawings. The Contractor shall provide all shoring, bracing, cribbing, pumping, and planking required. The Contractor shall excavate and maintain the bottom of all trenches in a condition that is level, firm, clean and free from all debris or foreign matter. Excavations shall be kept free from water at all times. The Contractor shall remove any unsuitable material encountered below grade as directed by the Engineer. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 13 Import

The contract cubic yardage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with import. Imported Borrow Properties. The Contractor shall provide imported borrow that is clean well graded soil consisting of material conforming to all of the requirements in Table 300-5.2.1(A) and the following requirements. Rock included in the top 1 m (3') of imported borrow shall be particles of less than 75 mm (3"). Rock included below the top 1 m (3') of imported borrow shall be particles of less than 150 mm (6"). All costs of prosecuting the work as described herein shall be included in the Contractors

bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

TABLE 300-5.2.1(A) IMPORTED BORROW PROPERTIES

Tests	Test Method No.	Requirements
R-Value	Calif. 301	40 Min.
Expansion Index	UBC Standard 18-2	10 Max.
PlastiCity Index	ASTM D 424	4 Max.
Sieve Analysis	ASTM D 422	Percent Passing 75 μ (No. 200) 15 Max.

Bid Item No. 14 Fine Grading

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with fine grading, at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 15 Curb (Height Varies 4" Max)

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing all concrete improvements including, but not limited to, curbs, at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 16 Sidewalk

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing all concrete improvements including, but not limited to at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 17 AC Pavement

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing vehicular asphalt paving at the locations shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 18 Grind and Overlay

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with grind and overlay including, but not limited to sidewalks at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 19 4" PVC Pipe

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with the excavation, installation and fill for 4" PVC Pipe, at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 20 0" Mow Curb

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing all concrete improvements including, but not limited to mow curbs at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 21 1" PVC Pipe

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing all 1" PVC Pipe improvements including, but not limited

to PVC Pipe improvements at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 22 Retaining Wall

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for all concrete improvements including, but not limited to deepened footings and CMU retaining wall at the locations shown on the drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 23 Chain Link Fence (height varies)

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for all chain link fence as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 24 5' Ht Wood Garden Fence

The contract linear footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with installing all wooden and wire mesh fence and gates as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 25 5' Ht Wood Pedestrian Gate

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for wooden and wire mesh Pedestrian Gates as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors

bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 26 5' Ht Wood Double Vehicular Gate

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for wooden and wire mesh Double Vehicular Service Gate as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 27 Painting Staining of Wood Elements

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with painting and staining of wood elements including, but not limited to painting and staining of wood elements improvements at the locations shown on the Drawings and in accordance with the Contract Documents, herein and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 28 Decomposed Granite Stabilizer

The contract lump sum price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for decomposed granite as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 29 Pavers

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, installing and fill for pavers as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

(S) Bid Item No. 30 Shade Sail

The contract lump sum price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing the fabric shade sail structure at the location shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed therefor. The shade sail structure shall be manufactured by Superior Shade, LLC, or pre-approved equal and installed per the manufacturer's specifications. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 31 Woodwork for Planter Boxes (Full)

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, constructing, installing and related woodwork and fill for full sized Planter Boxes as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

1 LUMBER AND PLYWOOD

**TABLE 204-1.2(A) add
the following: TABLE
204-1.2(A)**

USES	GRADES
Headers for bituminous pavement up to 50 mm x 100 mm (2"x4")	Construction grade Redwood or preservative treated construction grade Douglas Fir
Headers for bituminous pavement larger than 50 mm x 100 mm (2"x4")	Number 1 grade Redwood, or preservative treated number 1 grade Douglas Fir

Bid Item No. 32 Woodwork for Planter Boxes (ADA)

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with excavating, constructing, installing, all related woodwork, and fill for ADA Planter Boxes as shown on the Drawings and in accordance with the Contract Documents herein, and no additional compensation shall be allowed, therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

1 LUMBER AND PLYWOOD

**TABLE 204-1.2(A) add
the following: TABLE
204-1.2(A)**

USES	GRADES
Headers for bituminous pavement up to 50 mm x 100 mm (2"x4")	Construction grade Redwood or preservative treated construction grade Douglas Fir
Headers for bituminous pavement larger than 50 mm x 100 mm (2"x4")	Number 1 grade Redwood, or preservative treated number 1 grade Douglas Fir

Bid Item No. 33 Drinking Fountain

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefore. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 34 Waste Container

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefore. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 35 Compost Bins

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefore. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 36 ADA Picnic Table

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefor. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 37 7' Bench

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefor. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 38 Horizontal Storage Box

The contract unit price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities as shown on the Drawings and in

accordance with the contract documents herein, and no additional compensation shall be allowed therefore. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 39 Information Kiosk

The contract lump sum price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with furnishing and installing all site amenities including as shown on the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefor. Site amenities shall be installed per the manufacturer's specifications unless noted otherwise. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 40 Irrigation POC

The contract lump sum price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with construction and installation of the backflow preventer and related components, as shown in the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 41 Irrigation System

The contract square footage price shall constitute full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work associated with construction and installation of the irrigation system, as shown in the Drawings and in accordance with the contract documents herein, and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

Bid Item No. 42 Storm Water Pollution Prevention Plan (SWPPP)

The contract lump sum price paid for the BMPs and Erosion Control work and shall constitute full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing the work involved in installing and maintaining any and all storm water BMPs for the duration of the project, as specified herein, and as directed by the Engineer and no additional compensation shall be allowed

therefore. This work shall include preparing, obtaining approvals, revising and amending the project SWPPP, installing, constructing, maintaining, removing and disposing of all Best Management Practices (BMPs) specified in the SWPPP and as required by applicable codes and in strict accordance with the State Water Board, maintenance of storm water and non-storm water best management practices (BMPs) throughout the duration of all Work. These requirements shall also apply to any construction laydown areas utilized for this project. The lump sum bid price shall include payment of application and annual fees required by the SDRWCB until the date of the projects' substantial completion and no additional compensation shall be allowed therefore. All costs of prosecuting the work as described herein shall be included in the Contractors bid. All work shall be done in accordance with the Plans, Specifications and Supplemental Provisions.

1.03 SUBMITTALS

- a. Informational Submittals:
 - 1. Schedule of Values: Submit on Agency's form.
 - 2. Schedule of Estimated Progress Payments:
 - i. Submit with initially acceptable Schedule of Values.
 - ii. Submit adjustments thereto with Application for Payment.
 - 3. Application for Payment.
 - 4. Final Application for Payment.

1.05 SCHEDULE OF VALUES (SOV)

- a. The Contractor shall prepare a separate SOV for each schedule of the Work under the Contract.
- b. Upon request of the Construction Manager, the Contractor shall provide documentation to support the accuracy of the SOV.
- c. The Contractor shall prepare and submit to the Engineer for review a SOV within the time specified in the Contract Documents.
- d. When requested by the Engineer, the SOV shall divide each lump sum Bid item into its respective activities as listed in the Construction Schedule, and the sum of the costs apportioned to the activities comprising the Bid item shall equal the Bid item price. The Contractor shall add additional detail to the SOV when, in the opinion of the Engineer, such detail is necessary to represent the basis for payment. The Contractor shall submit to the Engineer a corrected Schedule of Values within 10 Calendar Days of the Engineer's request.
- e. The Contractor shall make adjustments to the approved SOV to account for Change Orders or Extra Work. The SOV entries for adjustments so made shall be approved by the Engineer.
- f. The Contractor shall submit a revised SOV with each payment request.

- g. Payment for the preparation of or revisions to the SOV shall be included in the Contract Price and no additional payment will be made therefor.
- h. Unit Price Work: Must reflect unit price quantity and price breakdown from conformed Bid Form.
- i. Lump Sum Work:
 - 1. Must reflect specified cash and contingency allowances and alternates, as applicable.
 - 2. List bonds and insurance premiums, mobilization, demobilization, preliminary and detailed progress schedule preparation, equipment testing, facility startup, and Contract closeout separately.
 - i. Mobilization includes, at minimum, items identified in Section 01 50 00, Temporary Facilities and Controls.
 - ii. Include item(s) for monthly progress schedule update and maintenance of Construction Manager's trailer.
 - 3. Break down by Division 02 through 49 with appropriate subdivision of each specification for each Project facility.
- j. An unbalanced or front-end loaded schedule will not be acceptable.
- k. Summation of the complete SOV representing all the Work shall equal the Contract Price.
- l. The Contractor shall submit SOV electronically in a spreadsheet format compatible with latest version of MS Excel.

1.06 SCHEDULE OF ESTIMATED PROGRESS PAYMENTS

- a. Show estimated payment requests throughout Contract Times aggregating initial Contract Price.
- b. Base estimated progress payments on initially acceptable progress schedule. Adjust to reflect subsequent adjustments in progress schedule and Contract Price as reflected by modifications to the Contract Documents.

1.07 APPLICATION FOR PAYMENT

- a. Transmittal Summary Form: Attach 1 Summary Form with each detailed Application for Payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.
- b. Use detailed Application for Payment Form provided by Construction Manager.
- c. Provide separate form for each schedule as applicable.
- d. Include accepted Schedule of Values for each schedule or portion of lump sum Work and the unit price breakdown for the Work to be paid on a unit priced basis.
- e. Include separate line item for each Change Order and Work Change Directive executed prior to date of submission. Provide further breakdown of such as requested by Construction Manager.

- f. Preparation:
 - 1. Round values to nearest dollar.
 - 2. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form(s) for each schedule as applicable, a listing of materials on hand for each schedule as applicable, and such supporting data as may be requested by Construction Manager.

1.08 PAYMENT

- a. Transmittal Summary Form: Attach 1 Summary Form with each detailed Application for Payment for each schedule and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of Contractor.
- b. Each month, the Engineer will make an approximate measurement of the Work performed to the closure date as basis for making monthly progress payments. The estimated value will be based on Contract Unit Prices, completed Change Order Work. Progress payments shall be made no later than 30 Calendar Days after the closure date. Five Working Days following the closure date, the Engineer shall complete the detailed progress pay estimate and submit it to the Contractor for the Contractor's information. Should the Contractor assert that additional payment is due, the Contractor shall within 10 Calendar Days of receipt of the progress estimate, submit a supplemental payment request to the Engineer with adequate justification supporting the amount of supplemental payment request. Upon receipt of the supplemental payment request, the Engineer shall, as soon as practicable after receipt, determine whether the supplemental payment request is a proper payment request. If the Engineer determines that the supplemental payment request is not proper, then the request shall be returned to the Contractor as soon as practicable, but not later than 7 Calendar Days after receipt. The returned request shall be accompanied by a document setting forth in writing the reasons why the supplemental payment request was not proper. Consistent with Public Contract Code Section 20104.50, the Agency shall make payments within 30 Calendar Days after receipt of an undisputed and properly submitted supplemental payment request from the Contractor. If payment of the undisputed supplemental payment request is not made within 30 Calendar Days after receipt by the Engineer, then the Agency shall pay interest to the Contractor equivalent to the legal rate set forth in subdivision (a) of Code of Civil Procedure Code Section 685.010.
- c. After final inspection, the Engineer will make a Final Payment Estimate and process a corresponding payment. This estimate will be in writing and shall be for the total amount owed the Contractor as determined by the Engineer and shall be itemized by the Contract Bid item and Change Order item with quantities and payment amounts and shall show all deductions made or to be made for prior payments and amounts to be deducted under provisions of the Contract. All prior estimates and progress payments shall be subject to correction in the Final Payment Estimate.
- d. The Contractor shall have 30 Calendar Days from receipt of the Final Payment Estimate to make a written statement disputing any Bid item or Change Order item quantity or payment amount. The Contractor shall provide all documentation at the time of

submitting the statement supporting its position. Should the Contractor fail to submit the statement and supporting documentation within the time specified, the Contractor acknowledges that full and final payment has been made for all Contract Bid items and Change Order items.

- e. If the Contractor submits a written statement with documentation in the aforementioned time, the Engineer will review the disputed item within 30 Calendar Days and make any appropriate adjustments on the Final Payment. Remaining disputed quantities or amounts not approved by the Engineer will be subject to resolution as specified in Section 2-10, Disputed Work.
- f. The written statement filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of the disputed items. The Engineer will consider the merits of the Contractor's claims. It will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by the Engineer to determine the facts or contentions involved in its claims. Failure to submit such information and details will be sufficient cause for denying payment for the disputed items.

1.09 MOBILIZATION AND DEMOBILIZATION

- a. Payment for mobilization, preparatory, and demobilization Work will be made at the stipulated lump-sum price in the Bid Schedule and includes full compensation for furnishing all insurance, bonds, licenses, labor, materials, utilities, tools, equipment and incidentals, and for doing all the Work involved in mobilization, preparatory, and demobilization Work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidental to preparing to conduct Work onto and off of the Project Site and other offsite facilities necessary for Work on the Project and project closeout including final asbuilt record drawings; for all other facilities, sureties, Work and operations which must be performed or costs incurred prior to beginning Work on various Contract items on or off the Project Site, excepting those specifically paid for under separate sections of these Specifications. The Contractor agrees that the stipulated lump sum amount is sufficient for mobilization preparatory, and demobilization Work costs, as described in this section, and that the Contractor shall have no right to additional compensation for mobilization, preparatory, or demobilization Work..
- b. Progress payments for mobilization and preparatory Work will be made as follows: For the first progress payment (after the issuance of the Notice to Proceed), 50% of the amount Bid for mobilization and demobilization Work will be allowed. The remaining 50% will be paid on the Final Payment Application after all Work is complete and asbuilt drawings and other required closeout submittals have been provided from the Contractor. The dismantling and removal of temporary facilities, equipment, materials, construction waste and personnel shall be included in the payment for mobilization.
- c. **Removal and Disposal of Materials:** Also included in clearing and grubbing shall be removal and disposal of existing fences, asphalt concrete and aggregate base, concrete curb and gutter, concrete sidewalk, existing gate, and other existing

features which interfere with the work. Whether or not such items are shown on the plans they shall be removed as a part of clearing and grubbing. Existing underground pipes and conduits that are shown on the plans and designated to be removed shall be removed by the Contractor as a part of clearing and grubbing.

Payment. Modify as follows: Payment for clearing and grubbing shall be made at the contract lump sum price for clearing and grubbing within the project limits and at stockpile locations and no other payments will be made. Unless otherwise noted on plans, the Contractor shall remove all existing abandoned pipelines and conduits of any type, or use, and pipelines and conduits of any type, or use, that are abandoned during the course of the work and shall replace said pipelines and conduits with properly compacted soils. Payment for removal and disposal of abandoned utilities shall be included in the lump-sum bid for Clearing and Grubbing, and no additional payment will be made.

d.

1.09 EXCAVATION AND TRENCHING

a. General.

Add the following:

Unclassified excavation shall include removal and stockpile of suitable material, recompaction, mixing, grading for mitigation work, trenching and backfilling of storm drains, sewers, other utilities, disposal of unsuitable materials not included in the bid item for clearing and grubbing, all cut and fill including salvaging clean excavated material and filling areas to the required grades and cross section. Suitable excavated material may be utilized onsite to make all fills shown on the plans. Unclassified excavation shall also include scarification and moisture adjustment and compaction of the top 300 mm (1') of the subgrade in the roadway prism in cut areas to 95 percent relative compaction, and export of remaining excess material to a disposal site or spoil area acquired by the Contractor.

Unsuitable Material.

Revise this subsection to read as follows:

General. All excess material generated by the grading operations that is not suitable for backfill shall be excavated and disposed of by the Contractor at a legal disposal site. The Agency makes no claim on the suitability or moisture content of the existing materials. Any suitable local borrow materials at the site that the Contractor wishes to re-use shall be stockpiled by the Contractor. The location of stockpiles shall be approved by the Engineer prior to placement of materials, and all stockpiles shall be protected by erosion control measures.

All subgrade areas to receive fills or structures shall be inspected by the Geotechnical Engineer. All alluvial and colluvial soils, loose or poorly compacted soils, or existing dry material must be reworked before the placement of base or concrete can proceed. Areas where soils are loose or poorly compacted shall be reworked by excavating, blending and recompacting the loose soils to the specified compaction. The existing loose soils to be reworked shall be removed by the Contractor until a firm unyielding surface is exposed or to a depth determined by the Engineer. Dry materials shall be scarified, and moisture conditioned to achieve the specified compaction. With the approval of the Geotechnical Engineer, the Contractor may choose to stabilize poorly-compacted areas with geogrid at his own expense.

If the Contractor wishes to temporarily stockpile material for disposal at a later date the location of stockpiles shall be approved by the Engineer prior to placement of materials, and all stockpiles shall be protected by storm water pollution prevention and erosion control measures. The stockpiles shall be removed regularly from the Project site so as not to interfere with access to the Project.

If the excavated material is unsatisfactory as excavated for other uses in the Project, as determined by the Engineer, the Contractor shall remove and dispose of such excavated material off the site. The Contractor shall be responsible for obtaining a suitable legal disposal site for any unsuitable excavated materials in accordance with the appropriate section in the Standard Specifications.

Slopes. Add the following: The hinge points (the top and bottom) of slopes shall be located within 75 mm (0.25') of the locations shown on the plans.

Slopes. add the following: after the first sentence of the first paragraph: A slope shall be defined as any area steeper than three horizontal to one vertical.

**Surplus
Material.**

Add the
following:

The Contractor shall haul and dispose of all surplus material from the project. The Contractor shall utilize highway legal haul trucks for this export of material from the project site and to a site secured by the Contractor. No earth moving equipment or special construction equipment, as defined in section 565 of the California Vehicle Code, will be allowed for hauling material on public streets.

Selected Material.

Revise this subsection to read as follows:

300-2.7 Selected Material. Selected material encountered in excavation shall be used as directed by the Agency. Topsoil excavated within the limits of the Project may be considered as a selected material only for the purpose of backfilling areas to be planted.

Measurement.

Unclassified Excavation shall be measured based on the volume it occupies in its original position before excavating. The measurement shall be from the original ground contours after clearing and grubbing and the bottom of areas of excavation to the design elevations shown on the plans or actual ground contours existing in borrow sites after excavation, whichever is lower in elevation. No excavated material which is re-excavated will be measured for payment. No allowance for shrinkage or swell will be considered. Materials excavated or otherwise removed as all or part of any other bid item shall not be measured as Unclassified Excavation.

Payment.

Payment for all unclassified excavation will be made at the Contract Lump Sum price bid for Grading and shall include compensation for excavation, sloping, rounding tops and ends of excavation, matching existing graded slopes, loading, exporting and disposing of surplus material and unsuitable material shown on the plans or specified herein to be removed, stockpiling, hauling to designated sites, placing and compacting, mixing, grading of mitigation site, salvaging clean and suitable material and filling areas to the required grades and cross sections. Unclassified fill, slope rounding, all work incidental to Section 300-4.8 and construction of transitions will be paid for as a part of Grading, and no additional payment will be made therefore.

When required by the plans or specifications or where directed by the Engineer, the excavation and stockpiling of selected material will be paid for at the Contract Lump Sum price for unclassified excavation. Removing such selected material from the stockpile and placing it in its final position will also be paid for at the Contract Lump Sum Price for unclassified excavation and no additional compensation will be allowed therefore.

Grading Tolerance. The Contractor shall finish excavated areas other than slopes and subgrade below structures, within the roadway and sidewalk areas within 30 mm (0.1') of the grades shown on the plans. Subgrade tolerances shall conform to the requirements of section 301-1.4 SSPWC.



STRUCTURE EXCAVATION AND BACKFILL

1 General.

Add the following:

The Contractor shall excavate to the lines and levels required and/or shown on the Drawings. The Contractor shall provide all shoring, bracing, cribbing, pumping, and planking required. The Contractor shall excavate and maintain the bottom of all trenches in a condition that is level, firm, clean and free from all debris or foreign matter. Excavations shall be kept free from water at all times. The Contractor shall remove any unsuitable material encountered below grade as directed by the Engineer.

Add the following:

No change will be made in the amount to be paid for supporting the excavation for structures as a result of required revisions in the excavation support details due to a type of soil encountered which requires a method of trench support different from that approved.

UNCLASSIFIED FILL

Preparation of Fill Areas. Add the following: Except as provided in section 300-4.7, "Compaction", areas proposed for improvements all fill (including backfill and scarified ground surfaces) shall be compacted by the Contractor to no less than 90 percent of maximum dry density as determined in accordance with ASTM Test Procedure D1557-91.

Placing Materials for Fills.

Add the following:

The Contractor shall perform grading such that the upper 900 mm (3') of fill placed in the roadway pavement area is composed of properly compacted low expansive soils. The more highly expansive soils shall be placed in the deeper fill areas and properly compacted or exported from the site. Low expansive soils are defined as those soils that have an Expansion Index of 50 or less when tested in accordance with 1994 UBC Standard 18-2 as published by the International Conference of Building Officials. Should insufficient soils meeting the requirement of an expansion index of 50 or less be present within the limits of work, soils of the least expansion index that are available within the limits of work shall be incorporated in the upper 900 mm (3') of fill placed in the roadway.



The Contractor shall break rock encountered in the excavation into particles of less than 75 mm (3"). Particles with dimensions greater than 75 mm (3") shall be uniformly distributed over the area to be filled so that construction equipment can be operated in such a manner that the larger pieces will be broken into smaller particles and become incorporated with the other materials in the layer. This requirement for particle size reduction does not apply to cobbles, small boulders, and small hard rocks found within the surface soils and formational materials. Rocks having any dimension greater than 460mm (18") shall not be incorporated into the fill. Rock exceeding 150 mm (6") in diameter shall not be placed in the upper 900 mm (3') of any fill. When there are large quantities of rock to be placed in the fill, rocks shall not be nested, but shall be spread with sufficient room between them so that intervening voids can be adequately filled with fine material to form a dense, compact mass. Oversize material which cannot be utilized for erosion mitigation or landscaping onsite shall be broken to acceptable sizes or removed from the site by the Contractor. If disposed of within the City of Carlsbad, a separate grading permit will be required for disposal of rock.

- a. Structure Excavation. All excavation Work required for structures, not otherwise paid for as trenching, shall be considered to be a subsidiary obligation of Contractor and the cost of such excavation shall be included in the prices Bid for the structures.

Resodding. No separate payment shall be made in connection with resodding as specified or required. All costs in connection with resodding shall be included in the cost of trenching.

- a. (Optional Paragraph) Pavement Removal and Replacement. Pavement removal and replacement shall be measured for payment horizontally along the center line of the pipe, through manholes, and to the edge of the existing pavement; or, where the edge of the existing pavement is not clearly defined, to the edge of the pavement replacement. The width of pavement replacement will not be measured or taken into account in payment.
 - 1. The unit prices Bid for pavement removal and replacement shall include all costs in connection with the removal and replacement, including cutting, removal, and disposal of old pavement; construction of new pavement; and all extra compaction effort required for backfill beneath pavement.
- b. (Optional Paragraph) Sidewalk Removal and Replacement. The unit prices per square yard [square meter] Bid for sidewalk removal and replacement shall include all costs involved in cutting and removing sidewalks, and all labor and materials required to replace the sidewalks.
 - 1. Measurement for payment for sidewalk removal and replacement shall be on a square yard [square meter] basis and shall include only the area actually removed and replaced, between joints, over the pipeline trench.
 - 2. All costs involved in repairing or removal and replacement of existing sidewalks outside the specified pay limits, where damaged during the construction operations, shall be considered a subsidiary obligation of Contractor and shall be borne by Contractor.

<Add more as necessary>

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

PROJECT MANAGEMENT AND COORDINATION

PART 1 CONSTRUCTION MANAGEMENT SOFTWARE

1.01 PROCORE PROJECT MANAGEMENT AND COLLABORATION SYSTEM

- a. This project may utilize the Owner's Procore (www.procore.com) online project management and document control platform at the direction of the Engineer. The intent of utilizing Procore is to reduce cost and schedule risk, improve quality and safety, and maintain a healthy team dynamic by improving information flow, reducing non-productive activities, reducing rework and decreasing turnaround times. The Contractor is required to create a free web-based Procore user account(s) and utilize web-based training / tutorials (as needed) to become familiar with the system. Unless the Engineer approves otherwise, the Contractor shall process all project documents through Procore because this platform will be used to submit, track, distribute and collaborate on project. If unfamiliar or not otherwise trained with Procore, Contractor and applicable team members shall complete a free training certification course located at <http://learn.procore.com/procore-certification-subContractor>. The Contractor is responsible for attaining their own Procore support, as needed, either through the online training or reaching out to the Procore support team. It will be the responsibility of the Contractor to regularly check Procore and review updated documents as they are added. There will be no cost to the Contractor for use of Procore.

It is recommended that the Contractor provide mobile access for Windows, iOS located at <https://apps.apple.com/us/app/procore-construction-management/id374930542> or Android devices located at <https://play.google.com/store/apps/details?id=com.procore.activities> with the Procore App installed to at least one on-site individual to provide real-time access to current posted drawings, specifications, RFIs, submittals, schedules, change orders, project documents, as well as any deficient observations or punch list items. Providing mobile access will improve communication, efficiency, and productivity for all parties. The use of Procore for project management does not relieve the Contractor of any other requirements as may be specified in the contract documents.

END OF SECTION

01 32 00 SUBMITTALS

PART 1 GENERAL

1.01 GENERAL

- a. Each submittal shall be consecutively numbered. Resubmittals shall be labeled with the original submittal number followed by an ascending alphabetical designation (e.g., '4-A' would indicate the first resubmittal of the fourth submittal). Each submittal shall be accompanied by a letter of transmittal on the Contractor's letterhead which shall contain the following:
 1. Agency Project title and Contract number.
 2. Specification section number(s) pertaining to material submitted for review.
 3. Submittal number.
 4. Description of the contents of the submittal.
 5. Identification of any deviation from the Contract Documents on the transmittal and by redline on the shop or working Drawings.
 6. Contractor's certification statement.
 7. Printed name and signature of submitter, title and date.
- b. The Contractor shall place the following certification statements on all submittals and shall subscribe to one of the following:

"I certify that the materials, equipment or construction procedure(s) contained in this submittal meet all requirements shown or specified in the Contract Documents with no exceptions."

Or

"I certify that the materials, equipment or construction procedure(s) contained in this submittal meet all requirements shown or specified in the Contract Documents, except for the following deviation(s):"
- c. Shop Drawings and engineering data (submittals) covering all equipment and all fabricated components and building materials which will become a permanent part of the Goods and Special Services under this Contract shall be submitted to Engineer for review, as required. Submittals shall verify compliance with the Contract Documents, and shall include Drawings and descriptive information in sufficient detail to show the kind, size, arrangement, and the operation of component materials and devices; the external connections, anchorages, and supports required; the performance characteristics; and dimensions needed for installation and correlation with other materials and equipment.
- d. Each submittal shall cover items from only one section of the specification unless the item consists of components from several sources. Contractor shall submit a complete initial submittal including all components. When an item consists of components from several sources, Contractor's initial submittal shall be complete including all components.
- e. All submittals, regardless of origin, shall be approved by Contractor and clearly identified with the name and number of this Contract, Contractor's name, and references to

applicable specification paragraphs and Contract Drawings. Each copy of all submittals, regardless of origin, shall be stamped or affixed with an approval statement of Contractor. Each submittal shall indicate the intended use of the item in the Goods and Special Services. When catalog pages are submitted, applicable items shall be clearly identified and inapplicable data crossed out. The current revision, issue number, and date shall be indicated on all Drawings and other descriptive data.

- f. Contractor shall be solely responsible for the completeness of each submittal. Contractor's stamp or affixed approval statement of a submittal, is a representation to Engineer that Contractor accepts sole responsibility for determining and verifying all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, and that Contractor has reviewed and coordinated each submittal with the requirements of the Goods and Special Services and the Contract Documents.
- g. All deviations from the Contract Documents shall be identified as deviations on each submittal and shall be tabulated in Contractor's letter of transmittal using Figure P-01300-2. Such submittals shall, as pertinent to the deviation, indicate essential details of all changes proposed by Contractor (including modifications to other facilities that may be a result of the deviation) and all required piping and wiring diagrams.
- h. The Contractor shall submit shop Drawings in either hard copy or electronically. All submittals shall be made with the selected method, and the Contractor shall inform the Engineer by letter 1 week after award of the Contract, which method has been selected. Submittals made by any method other than that selected by the Contractor, will be returned without review.
- i. Electronic submittal file sizes shall be limited to 10 MB. When multiple files are required for a submittal the least number of files possible shall be created.
- j. The Contractor shall post submittals and retrieve the Engineer's submittal review comments through the Engineer's (Consulting Engineer's) Project website accessible through the Internet. Instruction on procedures for posting and retrieving submittals will be provided after award of the Contract.
- k. Facsimiles (fax) will not be acceptable. Engineer will not accept submittals from anyone but Contractor. Submittals shall be consecutively numbered starting with the number one (1.) and continue in direct sequence of submittal and without division by subcontracts or trades.

1.02 ENGINEER'S REVIEW OF SUBMITTALS

- a. Engineer's review of submittals covers only general conformity to the Drawings and Specifications, external connections, and dimensions that affect the layout; it does not indicate thorough review of all dimensions, quantities, and details of the material, equipment, device, or item covered. Engineer's review shall not relieve Contractor of sole responsibility for errors, omissions, or deviations in the Drawings and data, nor of Contractor's sole responsibility for compliance with the Contract Documents.

- b. Engineer's submittal review period shall be 21 consecutive Calendar Days and shall commence on the first Calendar Day following receipt of the submittal or resubmittal in Engineer's office. The time required to mail the submittal or resubmittal back to Contractor shall not be considered a part of the submittal review period.
- c. When the Drawings and data are returned with review status "REJECTED" or "REVISE AND RESUBMIT," the corrections shall be made as instructed by Engineer. If submittals are made in hard copy, 5 corrected copies shall be resubmitted. If submittals are made electronically, the corrected Drawings and data shall be resubmitted through the Project website. Resubmittals by facsimile or e-mail will not be accepted. When the Drawings and data are returned with review status "EXCEPTIONS NOTED," "NO EXCEPTIONS NOTED," or "RECORD COPY," no additional copies need be furnished unless specifically requested by Engineer.

1.03 RESUBMITTAL OF DRAWINGS AND DATA

- a. Contractor shall accept full responsibility for the completeness of each resubmittal. Contractor shall verify that all corrected data and additional information previously requested by Engineer are provided on the resubmittal.
- b. When corrected copies are resubmitted, Contractor shall direct specific attention to all revisions in writing and shall list separately any revisions made other than those called for by Engineer on previous submittals. Requirements specified for initial submittals shall also apply to resubmittals. Resubmittals shall be submitted in Procore from the original submittal and follow the Procore number sequencing for resubmittals to bear the number of the original submittal followed by the Procore generated unique sequencing for all resubmittals (1.0, 1.1, 1.2 1.3...etc.) .
- c. If more than 1 resubmittal is required because of failure of Contractor to provide all previously requested corrected data or additional information, Contractor shall reimburse Agency for the charges of Engineer for review of the additional resubmittals. This does not include initial submittal data such as shop tests and field tests that are submitted after initial submittal.
- d. The need for more than 1 resubmittal, or any other delay in obtaining Engineer's review of submittals, will not entitle Contractor to extension of the Contract Times unless delay of the Work is the direct result of a change in the Work authorized by a Change Order or failure of Engineer to review and return any submittal to Contractor within the specified review period.
- e. XX

1.04 COLOR SELECTION

- a. Contractor shall submit samples of colors and finishes for all accepted products before Engineer will coordinate the selection of colors and finishes with Agency. Engineer will prepare a schedule of finishes that include the colors and finishes selected for both manufactured products and for surfaces to be field painted or finished and will furnish this schedule to Contractor within 21 Calendar Days after the date of acceptance of the last color or finish sample.

1.05 OPERATION AND MAINTENANCE DATA AND MANUALS

- a. Adequate operation and maintenance information shall be supplied for all equipment requiring maintenance or other attention. The Contractor shall provide the original manufacturer's installation instructions and operation and maintenance manual for each type of equipment indicated in the individual equipment sections or the equipment schedule. All documentation shall be provided in hard copy and electronically.
- b. Parts lists and operating and maintenance instructions shall be furnished for other equipment not listed in the individual equipment sections or the equipment schedule at the direction of the Engineer
- c. Shipment of equipment will not be considered complete until all required manuals and data have been received.

END OF SECTION

01 33 00 CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 PROGRESS SCHEDULE

- a. A Progress Schedule shall be used to control the Work and to provide a definitive basis for determining Project progress. The Progress Schedule shall be prepared, maintained and updated by the Contractor and historical dates agreed monthly with the Engineer. The Contractor shall submit a preliminary Progress Schedule and a Progress Schedule for acceptance by the Engineer. These schedules shall be the Contractor's working schedules and shall be used to plan, organize and execute the Work, record and report actual performance and progress, and show how the Contractor plans to complete all remaining Work as of the end of each progress report period.
- b. The Progress Schedule shall comprise all the detailed construction-related activities using the CPM. The Progress Schedule shall provide sufficient detail and clarity to reflect the intricacies and interdependencies of activities so the Contractor can plan, schedule, monitor, control and report on the progress of its work. In addition, it shall provide the Engineer and Agency a tool to monitor and follow the progress for all phases of the Work.
- c. The Contractor shall perform Work and furnish materials, labor, tools, equipment or services that may be reasonably inferred as being required to produce the intended result, whether specifically called for in the Contract Documents, at no additional cost to the Agency.
- d. Visible, existing improvements for which no specific disposition is made on the Plans, but which interfere with the Work, shall be removed and disposed of by the Contractor with the prior approval of the Engineer.
- e. Scheduling software shall be Primavera Project Manager (P6), or equivalent approved by the Construction Manager, without exception.

1.03 PRELIMINARY PROGRESS SCHEDULE

- a. The Contractor shall submit a preliminary Progress Schedule for review by the Engineer at the preconstruction meeting. The preliminary Progress Schedule shall show detailed construction-related activities for the first 60 Calendar Days of Work after issuance of the Notice to Proceed. The remainder of the Contract activities shall be shown as summary bars within the milestones of the Work. If the Engineer has comments on the preliminary Progress Schedule, Contractor shall make the necessary changes and resubmit it within 10 Calendar Days. No progress payments will be made during the period specified above for the preliminary Progress Schedule.
- b. The preliminary Progress Schedule shall:
 1. Illustrate a feasible schedule for completion of the Work within the time and milestones specified.
 2. Provide an elementary example of the schedule in the format to be used for the Progress Schedule.

3. Include the activity code structure as described in paragraph 1.18 ACTIVITY CODES.
- c. Preliminary Progress Schedule Submittal Format: Contractor shall submit the preliminary Progress Schedule in hard copy and .PDF file format for review. A brief narrative shall accompany the submittal, describing Contractor's scheduling approach to the Project. The narrative shall include a description of the Contract milestones, approach for construction activities during the period of the preliminary Progress Schedule, description of the general approach of the activities for the Work beyond the preliminary Progress Schedule period, a description of the Project's Critical Path, identification of critical long-lead submittals, and planned outages. The narrative shall also incorporate activity codes, calendars, weather days, milestone constraints, and work breakdown structure in accordance with the requirements specified in this part.

1.04 PROGRESS SCHEDULE

- a. The Progress Schedule comprises all the construction-related activities for the Work and shall show the order in which the Contractor proposes to carry out the Work. Contractor shall include milestones, coordination necessitated by limited access and available work areas, and the availability and use of the labor force, material and equipment. Contractor shall use the Progress Schedule to plan, schedule and coordinate the Work including activities of SubContractors, equipment vendors, and suppliers.
- b. The Progress Schedule shall be to the level of detail acceptable to the Engineer, and shall include the following:
 1. Organization and structural breakdown of the Project;
 2. Milestones and completion dates;
 3. Type of Work to be performed and the labor trades involved;
 4. Purchase, manufacture and delivery activities for major materials and equipment;
 5. Preparation, submittal, and acceptance of shop drawings and material samples;
 6. Deliveries of Agency-furnished equipment and/or materials;
 7. Acceptances required by regulatory agencies and/or other third parties;
 8. Assignment of responsibility for each activity;
 9. Access requirements to Work areas;
 10. Identification of interfaces and dependencies with preceding, concurrent and follow on Contractors;
 11. Tests, submittal of test reports and acceptance of test results;
 12. Planning for phased or total acceptance by Agency; including start up and commissioning;
 13. Identification of any labor force, material and equipment restrictions.
 14. Sequence of construction to maintain plant operations;
 15. Planned outages.
- c. The activities included in the Progress Schedule shall be defined in Working Days. Durations shall be based on the labor (crafts), equipment, and materials required to perform each activity on a normal workday basis. Activity durations shall be 20 Working Days or less except in the case of non-construction activities such as procurement of

materials, delivery of equipment, and concrete curing. All durations shall be the result of definitive labor force and resource planning by Contractor to perform the Work, in consideration of contractually defined on Site Work conditions and Contractor's planned means and methods.

- d. When the Progress Schedule is accepted by the Engineer, the Engineer will save a copy of the Progress Schedule as the baseline schedule, and will use it for analysis of Contractor's progress.
- e. The Contractor shall update the Progress Schedule monthly.

1.05 ELECTRONIC PROGRESS SCHEDULE FORMAT AND REPORTING

- a. The Progress Schedule shall be created using Primavera P6 scheduling software or equivalent approved by the Engineer. Contractor shall use Engineer's file-naming format throughout the Project.
 - 1. Electronic schedule files shall be saved with .XML or .XER file extensions and be provided to the City in native file format and .PDF format for all monthly updates.
 - 2. Primavera Project Manager settings for "Baseline Type" shall be used in the following manner:
 - i. Select <None> as the baseline type for the Preliminary Schedule Submittal.
 - ii. Once the Preliminary and Project Schedule are accepted, the baseline type shall be named <Initial Plan>.
 - iii. Each subsequent Project Schedule update shall set the baseline type to <Last Performance Update>.
 - 3. The data date for schedule calculation in the preliminary Progress Schedule shall be set at the anticipated date of the Notice to Proceed, as approval of the project schedule is required prior to issuance of the Notice to proceed. The approved Progress Schedule shall be updated to reflect the actual date of the Notice to Proceed unless otherwise specified by the Engineer.
- a.

1.08 COORDINATING PROGRESS SCHEDULE WITH OTHER CONTRACT SCHEDULES

- a. Where Work is to be performed under this Contract concurrently with or contingent upon work performed on the same facilities or area under other contracts, the Progress Schedule shall be coordinated with the schedules of the other contracts. Agency will provide the schedules of other contracts for preparation and updating of the Progress Schedule. Contractor shall revise the Progress Schedule as required by changes in schedules of other contracts.
- b. In case of interference between the operations of different Contractors, the Agency will determine the work priority of each Contractor and the sequence of work necessary to expedite the completion of the entire Project. In all such cases, the decision of Agency shall be accepted as final.

1.09 SUBMITTALS

- a. The Progress Schedule and associated reports shall be submitted to the Engineer for acceptance within the period of the preliminary Progress Schedule specified in 1.05(3). If the Progress Schedule or monthly update is not submitted, no progress payments will be made after the due date until the Progress Schedule has been submitted.
- b. Printouts and electronic layouts required as part of the Progress Schedule submittal and monthly updates are as follows:
 1. Summary Schedule: 1-page milestone and summary schedule, sorted by total float, early-start, early-finish;
 2. Detailed Project Schedule: organized by WBS or area of Work; sorted by total float, early-start, early-finish;
 3. Critical Path Schedule: sorted based on the total float, early-start, early-finish;
 4. 60-Calendar-Day Look Ahead Schedule: sorted by total float, early-start, early-finish;
 5. Activities in Progress: organized by WBS or area of Work; sorted by total float, early-start, early-finish;
 6. Out-of-sequence Report: tabular report showing Work performed out-of-sequence.
- c. Contractor shall submit additional layouts if directed by Engineer.
- d. The submittal shall include the following:
 1. Narrative report summarizing the Contract milestones, Critical Path, Project approach including phasing or use of crews, significant submittal and fabrication items, coordination or interface requirements, Agency-provided items, and list of SubContractors and vendors.
- e. Graphic reports including Critical Path report (longest path), summary schedule report, total float report by early-start early-finish, look-ahead report grouped by work breakdown structure or Project phasing. The schedule, Critical Path, and look-ahead schedules shall be submitted on E (34"x44") size paper or 36" wide plots;
- f. The Progress Schedule file shall be submitted in an executable format, using Primavera Project Manager format and uploaded to Procore in native file format at .PDF format.
- g. The narrative and graphic reports shall be provided on 8"x11" paper and E-size plots respectively.

1.10 MONTHLY SCHEDULE UPDATES

- a. Monthly Progress Schedule updates shall be submitted for the duration of the Contract by the 5th day of each month. If monthly Progress Schedule updates are not submitted by the due date, progress payments will be withheld until the required information is submitted.
- b. The updated schedule shall be reviewed each month in a meeting with Engineer to verify:

1. Actual start dates,
 2. Actual completion dates,
 3. Activity percent completion,
 4. Revised logic (as-built and projected) and changes in activity durations, cost assigned,
 5. Cost influence of Change Orders, if any,
 6. Revisions due to extension of time.
- c. Prior to each meeting, Contractor shall prepare a complete and accurate report of current procurement and construction progress through the end of the update period, and a depiction of how Contractor plans to continue the Work to meet all Contract completion dates. All network changes and status data agreed to during each update meeting shall be considered as accepted by both parties unless written notice of any exceptions is given within 5 Calendar Days after the meeting.
- d. For major network changes that cannot be agreed to during an updating meeting, Contractor shall submit the proposed changes for Engineer's acceptance prior to inserting such changes into the network. Submittals may be in the form of marked up networks, fragnets, or schedule abstracts, provided they are submitted with a letter of transmittal. A fragnet is defined as a sequence of new activities and/or activity revisions that are proposed to be added to the existing schedule to demonstrate how Project events have an impact on the schedule.

1.11 DATA DATE

- a. The data date is the re-settable date in P6 that serves as the end of a reporting period. The reporting period will be recorded on a monthly basis, e.g., January 1st through January 31st with the 31st as the data date. If required for coordination purposes by the Agency, the Engineer will provide specific data dates to be used by the Contractor.

1.12 REVIEW PROCESS

- a. Engineer will review Contractor's preliminary Progress Schedule and full Progress Schedule submittals within 15 Calendar Days after receipt of all required information.
- b. At the request of Agency or Engineer, Contractor shall participate in any meetings necessary to reach a mutual agreement and acceptance of the preliminary Progress Schedule, Progress Schedules.
- c. If any of the required submittals are returned to Contractor for corrections or revisions, they shall be resubmitted within 10 Calendar Days after the return date. Resubmittals shall include all information and media included in the first submittal. Review and response by Engineer will be given within 10 Calendar Days after receipt of each resubmittal.
- d. Schedules shall show Contract completion of the Work on the Contract completion date and with zero or positive total float even if the Contractor plans to finish early. In no event shall acceptance of the schedule be a basis for a claim for delay against Agency by Contractor for an early finish. A Progress Schedule containing activities with negative float or that extend beyond the Contract completion date will not be accepted.

- e. Acceptance of the Progress Schedule by Engineer does not relieve Contractor of responsibility for accomplishing the Work by the Contract completion date. Omissions and errors in the accepted Progress Schedule shall not relieve the Contractor of obligations under the Contract. Acceptance by Engineer in no way makes Engineer or Agency an insurer of the Schedule's success or liable for time or cost overruns. Engineer and Agency disclaim any obligation or liability by reason of acceptance of the Progress Schedule by the Engineer.

1.13 RESPONSIBILITY OF SCHEDULE COMPLIANCE

- a. Whenever it becomes apparent from the current Progress Schedule that the Critical Path is delayed and the Contract completion date will not be met, Contractor shall mitigate the delay by taking some or all of the following actions at no additional cost to Agency.
 - 1. Increase construction labor force in such quantities and crafts as will bring the Project back on schedule within the completion dates and milestones.
 - 2. Increase the number of Working Hours per shift, shifts per day, Working Days per week, and the amount of construction equipment, or any combination of the foregoing, to substantially eliminate the backlog of Work, with approval of the Engineer.
 - 3. Re-schedule activities to achieve maximum practical concurrence of activities and to comply with the schedule date(s).
- b. Within 10 Calendar Days of the Engineer's request, Contractor shall submit a recovery schedule and written statement of the steps intended to remove or arrest the delay to the Critical Path in the schedule. If the Contractor fails to submit the required information or should fail to take measures acceptable to the Engineer, the Engineer with Agency concurrence may direct Contractor to increase labor force, equipment and scheduled Work hours to remove or arrest the delay to the Critical Path and the Contractor shall promptly provide such level of effort at no additional cost to Agency.
- c. In the event Contractor fails to follow the updated or revised recovery schedule, Agency may elect to withhold progress payments until Contractor complies with the revised schedule.
- d. Should Contractor's efforts not remove or arrest the delay to the Critical Path of the accepted schedule, then Agency shall be entitled to supplement Contractor's workforce and equipment to remove and arrest any delay, and shall be entitled to deduct all costs and expenses associated with the supplemental workforce and equipment from payments due to the Contractor. If insufficient Contract funds remain, Agency may recover such funds from Contractor and its Surety.

1.14 CHANGE ORDERS, DELAYS, AND EXTENSIONS OF TIME

- a. When Change Orders or delays are experienced by Contractor and Contractor requests an extension of time, Contractor shall submit a written time impact analysis to the Engineer illustrating the influence of each change or delay to the current Contract Schedule completion date. Each time impact analysis shall include a fragment incorporating the Change Order or delay into the Progress Schedule to demonstrate how Contractor was delayed.

- b. Each time impact analysis shall demonstrate the estimated time impact based on the events of the change or the delay; the date the change was given to Contractor or the delay incurred, the status of construction at that point in time, and the event time computation of all activities affected by the change or delay. The event times used in the analysis shall be those included in the latest update of the Progress Schedule or as adjusted for the events of delay.
- c. The time impact analysis shall be submitted within 7 Calendar Days of delay occurrence or direction to proceed with a change is given to Contractor. No time extensions will be considered if the time impact analysis is not submitted within the specified time.
- d. The Engineer will review Contractor's time impact analysis. Contractor shall furnish such justification and supporting evidence as the Engineer deems necessary to determine whether Contractor is entitled to an extension of time. Engineer's review of each time impact analysis will be made within 5 Working Days of receipt of the time impact analysis and additional information as required by the Engineer, unless subsequent meetings and negotiations are necessary.
- e. The Contract completion time will be adjusted only for causes specified in paragraph 1.15. Time extensions will be granted only to the extent that equitable time adjustments for the activity or activities affected exceed the total or remaining float along the Critical Path at the time of actual delay. Delays in activities which are not on the Critical Path and do not affect Contract completion dates, will not be considered for an extension of time.

1.15 CAUSES FOR EXTENSIONS OF TIME

- a. Additional positive total float in the Progress Schedule generated by efficiencies of Agency or Contractor is a shared commodity to be reasonably used by either party, and belongs exclusively to the Project. The Contractor is not entitled to any additional compensation for completion of the Project prior to expiration of the Contract Times.
- b. Agency-Initiated Changes. Agency initiated changes to the Contract Work that absorb float time will not be considered for an extension of time. Agency-initiated changes that affect the Critical Path of the Progress Schedule shall be grounds for extending or shortening completion dates. Use of float time for Contractor initiated changes will require Agency's concurrence. Contractor's changes, however, shall give way to Agency-initiated changes competing for the same float time.
- c. Outside Contractor's Control. Events outside of the Contractor's control that affect the Critical Path of the Progress Schedule will be considered for an extension or reduction of the Contract Times.
- d. Weather Delays. Engineer will obtain weather data during construction from a reputable source, and will maintain weather records.
 - 1. Engineer will determine Contractor's entitlement to an extension of the Contract Time as a result of weather delays. Extensions of time will be granted at the discretion of the Engineer for circumstances not covered by the flow chart.
 - 2. Any weather-related extension of Contract Time shall be non-compensable. Efficiencies gained as a result of favorable weather within a calendar month, where the number of days of normally anticipated weather days is less than

expected, shall contribute to the Project float and shall not affect the Contract Times.

3. Application for a weather-related extension of time shall be submitted to the Engineer, and shall state the extension requested and be supported by the relevant weather data.

1.16 AS-BUILT SCHEDULE

- a. As a condition precedent to release of final payment, the last update to the Progress Schedule submitted shall be identified by the Contractor as the "As-Built Schedule." The "As-Built Schedule" shall reflect the exact manner in which the Project was actually constructed (including actual start and completion dates, activities, sequences, and logic) and shall be signed and certified by the Contractor's Project manager.

1.17 SCHEDULE SOFTWARE SETTINGS AND RESTRICTIONS

- a. Contractor shall consult with Engineer for acceptable Primavera Project Manager software settings and restrictions. The following shall apply unless otherwise directed by the Engineer.
 1. Schedule Options:
 - i. Shall be defined only to "Use expected finish dates";
 - ii. Scheduling progressed activities to be set to "Use only retained logic," not progress override option;
 - iii. Critical Path activities defined as Total Float less than or equal to zero;
 - iv. Calculating start-to-start lag from "early start" dates; and computing total float as "finish float = late finish – early finish";
 - v. Calendar to be set for scheduling relationship lag as "Predecessor Activity Calendar."
 2. Activity progress shall be shown using Remaining Duration. Date format shall be DDMMYY.
 3. Default activity type shall be set to "Independent Task."
 4. Date/time activity constraint(s), other than those required by the Contract, will not be allowed unless accepted by Engineer. Contractor shall identify proposed constraints and explain the constraint purpose in the Narrative Report.
 5. Lags shall not be used in the creation of an activity that will perform the same function, e.g., concrete cure time. Lag durations contained in the Project Schedule shall not have a negative value. Contractor shall identify any lag proposed and explain the purpose of the lag in the Narrative Report.
 6. Actual Start and Finish dates shall not be automatically updated by default mechanism that may be included in the CPM scheduling software system. Actual Start and Actual Finish dates on the CPM schedule shall be updated by actual Work progression.

1.18 ACTIVITY CODES

- a. The Primavera (P6) activity codes and WBS to be confirmed or revised by the Engineer are listed below. Confirmation or revision of the activity codes and WBS will be provided to

the Contractor within 3 Working Days of the Effective Date of the Contract. Use of the Engineer prescribed activity codes and WBS is mandatory.

- b. "Project Codes" as defined by Primavera P6 is reserved for the Agency. Only "Activity Codes" at Project Level will be permitted for Contractor use.

<u>Activity Code</u>	<u>Code Value</u>	<u>Description</u>
Phase	0005	Construction Phase
Construction Phase	A	Milestones
	BC	Administrative
	D	Submittals
	E	Construction Activities
		Closeout Phase
Submittals	SUB	Submittals
	R&A	Review & Approve
	F&D	Fabricate & Deliver

Other Codes to be prescribed by Engineer or requested by Contractor for Project specific criteria.

1.19 ACTIVITY RELATIONSHIPS

- a. Relationships between activities shall be identified with the following information:
 1. Predecessor and successor activity ID.
 2. Relationship types:
 - i. FS Finish to start
 - ii. SS Start to start
 - iii. FF Finish to finish
 - iv. SF Start to finish – This relationship is not allowed, unless authorized by Engineer.

1.20 PROJECT CALENDARS

- a. Project Calendars shall use Working Days and Calendar Days as the planning unit for the schedule. Use of Global Calendars is reserved for Agency. Each calendar shall be set to start on Mondays with holidays in accordance with Agency policy. The following calendars shall be used for each activity except as otherwise accepted by Engineer:
 1. 5-Day x 8 Hour Workweek (with holidays) shall be used for 5-day 40-hour workweek activities: Monday through Friday. All holidays and non-work days shall be assigned to this calendar. This calendar shall be used for all normal work activities, submittals, and fabricate and delivery activities. This calendar shall be the default calendar for the Project unless otherwise specified.
 2. 5-Day x 10-Hour Workweek (with holidays) shall be used for 5-day 50-hour workweek activities: Monday through Friday. All holidays and non-work days shall be assigned to this calendar.
 3. 6-Day x 10-Hour Workweek (with holidays) shall be used for 6-day 60-hour workweek activities. Monday through Saturday. All holiday and non-work days shall be assigned to this calendar.
 4. 7-Day Calendar (no holidays) shall be used for 7-day workweek activities. No non-work days shall be entered into this calendar.
 5. Additional Calendars may be assigned depending on need. However, Contractor shall consult with the Engineer before other calendars are entered and/or used in the Project schedule.
- b. The workday to calendar day correlation shall be based on a single shift and 5-day work week with adequate allowance for holidays, adverse weather, and all other special requirements of the Work. Contractor may, at his option, propose alternate baseline calendars to allow a second shift and/or a single shift on Saturdays subject to the concurrence and acceptance of Agency. Under no circumstances will a schedule be accepted which allows regularly scheduled Work on Sundays.

1.21 FLOAT

- a. Contractor shall not use float suppression techniques, including preferential sequencing (arranging Critical Path through activities more susceptible to Agency caused delay); lag logic restraints; zero total or free float constraints; extended activity times; or imposing constraint dates other than as required by the Contract. Float suppression will be cause

for rejection of the preliminary Progress Schedule or full Progress Schedule and its updates.

1.22 MANDATORY MILESTONES

- a. The Contract duration shall be equal to the time period between the Notice to Proceed and the completion milestone. The following milestones are mandatory.
 1. Project Award Milestone
 2. Notice to Proceed Milestone
 3. Substantial Completion is [Insert number and type (i.e., Working or Calendar)] days from Notice to Proceed
 4. Completion is [Insert number and type i.e., Working or Calendar] days from Notice to Proceed
- b. The following additional milestones are to be considered and incorporated into the Progress Schedule in accordance with the Contract terms, if applicable.
 1. Permit constraints
 2. Facility shut down or outage milestone requirements
 3. Applicable phasing milestones
 4. Other milestones deemed appropriate by the Engineer.

PART 2 EXECUTION

2-1.1 Preconstruction Meeting

After, or upon, notification of Contract award, the Engineer will set the time and location for the Preconstruction Meeting. Attendance of the Contractor's management personnel responsible for the management, administration, and execution of the Project is mandatory for the meeting to be convened. Failure of the Contractor to have the Contractor's responsible Project personnel attend the Preconstruction Meeting will be grounds for default by Contractor per Supplemental General Provisions Section 6-7. No separate payment will be made for the Contractor's attendance at the meeting. The Notice to Proceed will only be issued on or after the completion of the Preconstruction Meeting.p2-1.2 Preparation and Review of the Baseline Construction Schedule

The Contractor shall prepare the Baseline Construction Schedule as a CPM Schedule in the precedence diagram method (activity-on-node) format. The Baseline Construction Schedule shall depict a workable plan showing the sequence, duration, and interdependence of all activities required to represent the complete performance of all Project Work as well as periods where Work is precluded. The Baseline Construction Schedule shall begin with the projected date of issuance of the Notice to Proceed and conclude with the date of final completion per the Contract duration. The Baseline Construction Schedule shall include detail of all Project phasing, staging, and sequencing, including all milestones necessary to define beginning and ending of each phase or stage.h2-1.2.1 Time-Scaled Network Diagram

As a part of the Baseline Construction Schedule the Contractor shall prepare and submit to the Engineer a complete time-scaled network diagram showing all of the activities, logic relationships, and milestones comprising the schedule.

2-1.2.2 Tabular Listing

As a part of the Baseline Construction Schedule the Contractor shall prepare and submit to the Engineer a tabular listing of all of the activities, showing for each activity the identification number, the description, the duration, the early start, the early finish, the late start, the late finish, the total float, and all predecessor and successor activities for the activity described.

2-1.2.3 Bar Chart

As a part of the Baseline Construction Schedule the Contractor shall prepare and submit to the Engineer a chart showing individual tasks and their durations arranged with the tasks on the vertical axis and duration on the horizontal axis. The bar chart shall use differing texture patterns or distinctive line types to show the Critical Path.

2-1.2.4 Schedule Activities

Except for submittal activities, activity durations shall not be shorter than 1 Working Day nor longer than 15 Working Days, unless specifically and individually allowed by the Engineer. The Baseline Construction Schedule shall include between 100 and 500 activities, including submittals, interfaces between utility companies and other agencies, Project milestones and equipment and material deliveries. The number of activities will be sufficient, in the judgment of the Engineer, to communicate the Contractor's plan for Project execution, to accurately describe the Project Work, and to allow monitoring and evaluation of progress and of time impacts. Each activity's description shall accurately define the work planned for the activity and each activity shall have recognizable beginning and end points. Float or slack time within the schedule is available without charge or compensation to whatever party or contingency first exhausts it.

2-1.2.6 Restraints to Activities

Any submittals, utility interfaces, or any furnishing of Agency supplied materials, equipment, or services, which may impact any activity's construction shall be shown as a restraint to those activities. Time periods to accommodate the review and correction of submittals shall be included in the schedule.

2-1.2.7 Late Completion

A Baseline Construction Schedule showing a Project duration longer than the specified Contract duration will not be acceptable and will be grounds for determination of default by Contractor, per Agency Supplemental General Provisions Section 6-4.

2-1.2.8 Early Completion

The Baseline Construction Schedule will show the Contractor's plan to support and maintain the Project for the entire contractual time span of the Project. Should the Contractor propose a Project duration shorter than Contract duration, a complete Baseline Construction Schedule must be submitted, reflecting the shorter duration, in complete accordance with all schedule requirements of Agency Supplemental General Provisions Section 6-1. The Engineer may choose to accept the Contractor's proposal of a Project duration shorter than the duration specified; provided the Agency is satisfied the shortened Baseline Construction Schedule is reasonable and the Agency and all other entities, public and private, which interface with the Project are able to support the provisions of the shortened Baseline Construction Schedule. The Agency's

acceptance of a shortened duration Project will be confirmed through the execution of a Contract Change Order revising the Project duration and implementing all contractual requirements including liquidated damages in accordance with the revised duration.t2-1.2.9 Engineer’s Review

The Construction Schedule is subject to the review of the Engineer. The Engineer’s determination that the Baseline Construction Schedule proposed by the Contractor complies with the requirements of these supplemental provisions shall be a condition precedent to issuance of the Notice to Proceed by the Engineer. If the Engineer determines that the Construction Schedule does not meet the requirements of these specifications the Contractor shall correct the Construction Schedule to meet these specifications and resubmit it to the Engineer. Failure of the Contractor to obtain the Engineer’s determination that the initial Construction Schedule proposed by the Contractor complies with the requirements of these supplemental provisions within 30 Working Days after the date of the Preconstruction Meeting shall be grounds for termination of the Contract per Agency Supplemental General Provisions Section 6-4. Days used by the Engineer to review the initial Construction Schedule will not be included in the 30 Working Days.

The Engineer will review and return to the Contractor, with any comments, the Baseline Construction Schedule within 15 Working Days of submittal. The Baseline Construction Schedule will be returned marked as per Sections 2-1.2.10.1 through 2-1.2.10.3.y2-1.2.9.1 “Accepted”

The Contractor may proceed with the Project Work upon issuance of the Notice to Proceed, and will receive payment for the schedule in accordance with Section 2-1.8.1.

2-1.2.9.2 “Accepted with Comments”

The Contractor may proceed with the Project Work upon issuance of the Notice to Proceed. The Contractor must resubmit the schedule incorporating the comments prior to receipt of payment per Section 2-1.8.1.

2-1.2.9.3 “Not Accepted”

The Contractor must resubmit the schedule incorporating the corrections and changes of the comments prior to receipt of payment per Section 2-1.8.1. The Notice to Proceed will not be issued by the Engineer if the changes of the comments are not submitted as required and marked “Accepted” or “Accepted with Comments” by the Engineer. The Contractor, at the sole option of the Engineer, may be considered as having defaulted the Contract under the provisions of Supplemental General Provisions Section 2-7 TERMINATION OF THE CONTRACT FOR DEFAULT if the changes of the comments are not submitted as required and marked “Accepted” by the Engineer.A2-1.3 Preparation of Schedule Updates and Revisions

The Contractor shall meet with the Engineer during the last week of each month to agree upon each activity’s schedule status and shall submit monthly updates of the Baseline Construction Schedule confirming the agreements no later than the fifth Working Day of the following month. The monthly update will be submitted on hard (paper) copy and electronic media conforming to Section 6-1.3.3 Electronic Media per the submittal requirements of Section 1.05 (Electronic Progress Schedule Format and Reporting) and will include each item and element of Sections 2-1.2 through 2-1.2.9 and 2-1.3.1 through 2-1.3.7.w2-1.3.1 Actual Activity Dates

The actual dates each activity was started and/or completed during the month. After first reporting an actual date, the Contractor shall not change that actual date in later updates without specific notification to the Engineer with the update.

2-1.3.2 Activity Percent Complete

For each activity underway at the end of the month, the Contractor shall report the percentage determined by the Engineer as complete for the activity.

2-1.3.3 Electronic Media

The schedule data disk shall be a digital file, labeled with the Project name and number, the Contractor's name and the date of preparation of the schedule data disk. The schedule data disk shall be readable by the software specified in Section 6-1.2.4 "Schedule Software" and shall be free of file locking, encryption or any other protocol that would impede full access of all data stored on it.

2-1.3.4 List of Changes

A list of all changes made to the activities or to the interconnecting logic, with an explanation for each change.

2-1.3.5 Change Orders

Each monthly update will include the addition of the network revisions reflecting the Change Orders approved in the previous month. The network revisions will be as agreed upon during the review and acceptance of the Contractor's Change Orders.

2-1.3.6 Bar Chart

Each monthly update will include a chart showing individual tasks and their durations arranged with the tasks on the vertical axis and duration on the horizontal axis. The bar chart shall use differing texture patterns or distinctive line types to show the Critical Path.

2-1.4 Engineer's Review of Updated Construction Schedule

The Engineer will review and return the Updated Construction Schedule to the Contractor, with any comments, within 5 Working Days of submittal. The Updated Construction Schedule will be returned marked as per Sections 6-1.4.1 through 6-1.4.3. Any Updated Construction Schedule marked "Accepted with Comments" or "Not Accepted" by the Engineer will be returned to the Contractor for correction. Upon resubmittal the Engineer will review and return the resubmitted Updated Construction Schedule to the Contractor, with any comments, within 5 Working Days. Failure of the Contractor to submit a monthly Updated Construction Schedule will invoke the same consequences as the Engineer returning a monthly Updated Construction Schedule marked "Not Accepted." 2-1.4.1 "Accepted"

The Contractor may proceed with the Project Work upon issuance of the Notice to Proceed, and will receive payment for the schedule in accordance with Section 2-1.8.1.

2-1.4.2 "Accepted with Comments"

The Contractor may proceed with the Project Work upon issuance of the Notice to Proceed. The Contractor must resubmit the schedule incorporating the comments prior to receipt of payment per Section 2-1.8.1.

2-1.4.3 “Not Accepted”

The Contractor must resubmit the Updated Construction Schedule to the Engineer incorporating the corrections and changes noted in the Engineer’s comments prior to receipt of payment per Section 6-1.8.2. The Contractor, at the sole option of the Engineer, may be considered as having defaulted the Contract under the provisions of Agency Supplemental General Provisions Section 6-7 TERMINATION OF THE CONTRACT FOR DEFAULT if the changes of the comments are not submitted and marked “Accepted” by the Engineer before the last day of the month in which the Updated Construction Schedule is due. If the Contractor fails to submit the corrected Updated Construction Schedule as required the Contractor may elect to proceed with the Project at its own risk. Should the Contractor elect not to proceed with the Project, any resulting delay, impact, or disruption to the Project will be the Contractor’s responsibility.

Should the Schedule Update indicate a completion or contractually required milestone date later than the properly adjusted Contract or milestone duration, the Agency may withhold liquidated damages for the number of Calendar Days late. Should a subsequent “Accepted” Schedule Update remove all or a portion of the delay, all or the allocated portion of the previously held liquidated damages shall be released in the monthly payment to the Contractor immediately following the “Accepted” schedule.

Should the actual or projected progress of the Work become substantially different from that depicted in the Project Schedule, independently of and prior to the next monthly update, the Contractor will submit a revised Baseline Construction Schedule, with a list and explanation of each change made to the schedule. The Revised Construction Schedule will be submitted per the submittal requirements of Section 1.05 (Electronic Progress Schedule Format and Reporting) and per the schedule review and acceptance requirements of Agency Supplemental General Provisions Section 6-1, including but not limited to the acceptance and payment provisions. As used in this section “substantially different” means a time variance greater than 5 percent of the number of Calendar Days of duration for the Project.

The Contractor shall prepare and submit a Final Schedule Update when 100% of the Construction Work is completed. The Contractor’s Final Schedule Update must accurately represent the actual dates for all activities. The Final Schedule Update shall be prepared and reviewed per Sections 6-1.3. Preparation of Schedule Updates and Revisions and 6-1.4 Engineer’s Review of Updated Construction Schedule. Acceptance of the Final Schedule Update is required for completion of the Project and release of any and all funds retained per Section 9-3.2.

2-1.8 Measurement and Payment of Construction Schedule

The Contractor’s preparation, revision and maintenance of the Construction Schedule are incidental to the Work and no separate payment will be made for them.

END OF SECTION

01 41 26 PERMIT REQUIREMENTS

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

- a. The Contractor is responsible to obtain all local, state and federal permits and licenses required to perform the Work. Payment for obtaining and complying with permits and licenses including, but not limited to, general construction permits, building permits, grading permits, encroachment permits, haul route permits, excavation permits, drilling permits, water discharge permits, temporary easements, licenses, inspection fees, and Federal, State and local taxes shall be borne by the Contractor and shall be included in prices Bid for Work for which such costs are appurtenant.
- b. For permits not already obtained by City, the Contractor shall obtain and pay for all costs incurred for permits necessitated by its operations such as, but not limited to, permits required for sewage bypass pumping or discharge; Night Work; overload; blasting or demolition or for any permit related to the operation of equipment used in such Work.
- c. The Contractor shall obtain and pay for all permits for the disposal of all waste or surplus materials removed from the Project. The cost of the permit(s) shall be included in the price for the Bid items requiring the permits and no additional compensation will be allowed for them.
- d. For permits that City has not previously secured, the Contractor shall provide a copy of the permit or license to the Agency prior to performing the Work requiring the permit or license.
- e. Contractor shall pay for all fees applicable to Contractor's operations.
- f. Contractor shall not begin Work until all permits applicable to the Work are obtained. Permits shall be maintained in valid status until acceptance of the Work by the Agency.
- g. The Contractor shall pay all business taxes or license fees that are required for the Work.
 1. To the extent that there is a change in the type or cost of any permits, fees, licenses, or inspections after Contract award, there shall be an equitable adjustment in the Contract Price on account of such change under the Extra Work provisions.
 2. The Contractor shall comply with and give notices required by Applicable Laws. The Contractor is not entitled to damages or additional payment for delays attributable to the acquisition of permits.
 3. The Contractor shall pay the Agency for regulatory fees, fines, or penalties imposed on the Agency arising from the Contractor's failure to complete the Work in accordance with the Contract Documents.
- h. The Contractor shall obtain, pay for, and comply with required permits, licenses, work permits, and authorizations from appropriate agencies, including the following:
 1. Licenses

- i. Before submitting Bids, Contractors shall be licensed in accordance with provisions of Chapter 9, Division 3, of the Business and Professions Code.
 - ii. City of Carlsbad Business License.
 - 2. Other permits
 - i. City Haul Route Permit
 - ii. Traffic Control Plan Permit
 - iii. Grading Permit
 - iv. Right of Way Permit
- i. The Agency will obtain for the Contractor, the following:
 - 1. CEQA Notice of Exemption

1.02 HAUL ROUTE PERMIT

- a. The Contractor shall prepare a Project specific haul route plan detailing the streets intended for use in delivery of materials and import and export of soil. Contractor will be limited to the routes approved by the City of Carlsbad according to the approved haul route plan contained in the permit.

1.03 TRAFFIC CONTROL PLANS

- a. The Contractor shall prepare Project specific traffic control plans, and haul route plan and use such plans to obtain a traffic control permit from the City of Carlsbad Development Services Department.

1.05 STORMWATER POLLUTION PREVENTION PLAN (SWPPP)/ GENERAL PERMIT

- A. I Water Pollution Prevention. The Contractor shall plan for and implement temporary construction BMPs to mitigate the water quality impacts of land disturbance and non-storm water discharges related to construction activities in accordance the Agency's current Municipal Stormwater Permit and Carlsbad Municipal Code Chapter 15.12. BMPs are the schedules of activities, prohibitions of practices, maintenance procedures and other management practices employed during construction activities to prevent or reduce pollution of bodies of water protected by the federal Clean Water Act (33 U.S.C. § 1251 *et seq.*) and the state Porter-Cologne Water Quality Control Act (Water Code, § 13000 *et seq.*), which include oceans, lagoons, lakes, streams and other sensitive water bodies and water courses. Construction BMPs also include physical devices and structural construction control measures designed to prevent soil erosion from occurring on the Work Site, or that are designed to prevent sediment from leaving the Work Site, both of which are referred to hereafter as "Water Pollution." BMPs are also intended to protect the health, safety and welfare of the public and to prevent damage to adjoining public and private property resulting from construction activities.
- B. Pollution prevention practices and the minimum BMPs are required during all 12 months of the year. BMPs and other erosion control practices must be implemented as the most important "first line of defense." The Agency has adopted the CASQA 'Stormwater Best Management Practices Handbook: Construction,' latest edition, as its preferred source for adopting construction BMPs. All BMPs must correspond to the BMP Fact Sheets included in the CASQA Construction Handbook. With the approval of the Engineer, or designee, the Agency may accept comparable BMPs from reputable alternative sources.

As used in this section, “Engineer” shall have the same meaning as “Construction Manager.”

- C. The Contractor shall utilize the Agency’s Tier 1 or Tier 2 SWPPP templates and include all applicable elements provided in the template. The SWPPP templates are available on the Agency’s website at [PROJECT ENGINEER insert website address here]. Tier 1 and Tier 2 SWPPP templates include standard storm water prevention construction notes, a Project information block, a Storm Water Compliance Statement, Agency approval block and a BMP Checklist Table. The BMP Checklist Table is intended to help the Contractor select appropriate BMPs best suited to the Project and the Work. Additionally, the SWPPP shall include a Site plan showing the proposed Project Site and depicting the areas of proposed construction and proposed locations of construction BMPs. The Tier 1 and Tier 2 SWPPP plans shall be submitted as additional sheets to the construction plan set.
- D. The Engineer may require Contractor to adopt additional BMPs if the Engineer determines the selected BMP(s) are ineffective or incapable of preventing Water Pollution from escaping the Work site. Tier 1 and Tier 2 SWPPPs must be combined with proper and timely installation of the BMPs, thorough and frequent inspections, maintenance, and documentation. The Contractor shall ensure that the selected BMPs are appropriately incorporated into the Site design and, if required by the Engineer, must employ a qualified professional to ensure proper installation and maintenance of the BMPs.
- E. The Engineer may suspend the Work, consistent with Supplemental General Provisions Section 6-6, at the Contractor’s cost, that create Water Pollution or otherwise violate water quality standards required by the federal Clean Water Act (33 U.S.C. § 1251 *et seq.*) and the state Porter-Cologne Water Quality Control Act (Water Code, § 13000 *et seq.*) if the Engineer determines that the Contractor has failed to satisfy all requirements of this section. If the Contractor violates any provisions of this subsection, or if Water Pollution occurs in the Work Site for any reason, the Contractor shall immediately notify the Engineer.
- F. The Contractor shall immediately notify the Agency if there is a non-stormwater discharge to the storm drain conveyance system resulting from the Work or Project-related activities. In addition, the Contractor shall, within 24 hours, submit a written report to the Engineer describing the incident and corrective actions taken. If for any reason the Engineer detects Water Pollution, before notification by the Contractor, this written report shall also include an explanation of why the Contractor had not timely notified the Engineer.
- G. Implementation Costs. Preparation, implementation and management of Water Pollution prevention activities are incidental to the items of Work and Agency shall not make additional payment to Contractor for these costs.

Annual Report Certification	Agency	Project Engineer/MPM. No later than September 1st
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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

01 50 00 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.03 WATER

- a. All water required for and in connection with the Work to be performed shall be provided by and at the expense of Contractor. No separate payment for water used or required will be made and all costs in connection with the water shall be included in the Bid.
- b. All water required for and in connection with the Work to be performed shall be furnished by and at the expense of Contractor through meters installed on hydrants. Contractor shall supply all necessary tools, hose, and pipe, or otherwise transport the water to the point of use, and shall make its own arrangements with the appropriate water department as to the amount of water required and the time when the water will be needed. Indiscriminate use of water so furnished will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants. In no case shall pipe wrenches be used for this purpose.
- c.
- d.

1.04 POWER

- a. Contractor shall provide all power for heating, lighting, operation of Contractor's plant or equipment, or for any other use by Contractor. Temporary heat and lighting shall be maintained until the Work is accepted.
- b. Construction Operations. Each Contractor shall provide all power for operation of its plant and equipment, or for any other use, except building heating and lighting. All building heating and lighting shall be provided under Contract.
- c. These provisions shall not be construed as a guarantee by Agency of the uninterrupted continuation of power, and interruptions beyond the control of Agency shall not be reason for claims for additional costs nor for extensions of time. Contractor shall provide, at no additional cost to Agency, any necessary power required for prosecution of the Work during such interruptions.
- d. XX

1.05 SANITARY FACILITIES

- a. Contractor shall furnish temporary sanitary facilities at the Site, as provided in the Contract, for the needs of all construction workers and others performing Work or furnishing services on the Project.
- b. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least 1 toilet will be furnished for each 20 persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the Site.

1.07 CONSTRUCTION AIDS

- a. Contractor shall furnish, install, maintain, and operate all construction aids required by it and its SubContractors in the performance of the Work, except as otherwise provided in the Contract.
- b. Contractor under Contract shall provide construction aids necessary for the performance of Work by other Contractors on the Project. Such construction aids shall be suitable for conditions encountered and shall include:
 1. Elevators and hoists
 2. Cranes
 3. Temporary enclosures
 4. Swing staging
 5. Scaffolding
 6. Temporary stairs
- c. Construction aids shall be furnished without charge to the other Contractors, and all necessary erection, maintenance, and operating personnel shall be included. In the event of conflict, the Contractor furnishing the equipment shall determine priorities in the best interest of the Project.

1.08 MAINTENANCE OF TRAFFIC

- a. Contractor shall conduct its Work to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways, and walks, whether public or private, Contractor shall provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Such maintenance of traffic will not be required when Contractor has obtained permission from the Agency and tenant of private property, or from the authority having jurisdiction over public property involved, to obstruct traffic at the designated point.
- b. Detours. Where required by the authority having jurisdiction thereover that traffic be maintained over any Construction Work in a public street, road, or highway, and the traffic cannot be maintained on the alignment of the original roadbed or pavement, Contractor shall, at its own expense, construct and maintain a detour around the Construction Work. Each detour shall include a bridge across the pipe trench and all necessary barricades, guardrails, approaches, lights, signals, signs, and other devices and precautions necessary for protection of the Work and safety of the public.

1.09 BARRICADES AND LIGHTS

- a. All streets, roads, highways, and other public thoroughfares which are closed to traffic shall be protected by effective barricades on which shall be placed acceptable warning signs. Barricades shall be located at the nearest intersecting public highway or street on each side of the blocked section.

- b. All open trenches and other excavations shall have suitable barricades, signs, and lights to provide adequate protection to the public. Obstructions, such as material piles and equipment, shall be provided with similar warning signs and lights. All barricades and obstructions shall be illuminated with warning lights from sunset to sunrise. Material storage and conduct of the Work on or alongside public streets and highways shall cause the minimum obstruction and inconvenience to the traveling public.
- c. All barricades, signs, lights, and other protective devices shall be installed and maintained in conformity with applicable statutory requirements and, where within railroad and highway rights-of-way, as required by the authority having jurisdiction thereover. XX

1.10 FENCES

- a. All existing fences affected by the Work shall be maintained by Contractor until completion of the Work. Fences which interfere with construction operations shall not be relocated or dismantled until written permission is obtained from the owner of the fence, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use. On completion of the Work across any tract of land, Contractor shall restore all fences to their original or to a better condition and to their original locations.
- b. XX

1.11 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

- a. Contractor shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by its construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards, parkways, and medians, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.
- b. No trees shall be removed outside the permanent easement, except where authorized by the Engineer or Consulting Engineer. Whenever practicable, Contractor shall tunnel beneath trees in yards and parking lots when on or near the line of trench. Hand excavation shall be employed as necessary to prevent injury to trees. Trees left standing shall be adequately protected against damage from construction operations. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work Site or any part of it, whether by Contractor or its SubContractors. Contractor shall make satisfactory and acceptable arrangements with the owner of, or the agency or authority having jurisdiction over, the damaged property concerning its repair or replacement or payment of costs incurred in connection with the damage.

- c. All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.

1.12 DAMAGE TO EXISTING PROPERTY

- a. Contractor will be held responsible for any damage to existing structures, Work, materials, or equipment because of its operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, Agency.
- b. Contractor shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
- c. Contractor shall be responsible for all damage to streets, roads, parking lots, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work Site. Contractor shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.

1.13 TREE AND PLANT PROTECTION

- a. All trees and other vegetation which must be removed to perform the Work shall be removed and disposed of by Contractor; however, no trees or cultured plants shall be unnecessarily removed unless their removal is indicated on the Drawings. All trees and plants not removed shall be protected against injury from construction operations.
- b. Trees considered by Engineer to have any significant effect on construction operations are indicated on the Drawings and those which are to be preserved are so indicated.
- c. Contractor shall take extra measures to protect trees designated to be preserved, such as erecting barricades, trimming to prevent damage from construction equipment, and installing pipe and other Work by means of hand excavation or tunneling methods. Such trees shall not be endangered by stockpiling excavated material or storing equipment against their trunks. When injuring or removal of trees designated to be preserved cannot be avoided, or when removal and replacement is indicated on the Drawings, each tree injured beyond repair or removed shall be replaced with a similar tree of the nearest size possible.
- d. All trimming, repair, and replacement of trees and plants shall be performed by qualified nursery workers or horticulturists. Prior written workplan will be provided to Engineer for approval prior to the commencement of any of the aforementioned work.

1.14 SECURITY

- a. Contractor shall be responsible for protection of the Site, and all Work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.

- b. No claim shall be made against Agency by reason of any act of an employee or trespasser, and Contractor shall make good all damage to Agency's property resulting from Contractor's failure to provide security measures as specified.
- c. Security measures shall be at least equal to those usually provided by Agency's to protect Agency's existing facilities during normal operation, but shall also include such additional security fencing, barricades, lighting, watchman services, and other measures as required to protect the Site. t

1.15 ACCESS ROADS

- a. Contractor shall establish and maintain temporary access roads to various parts of the Site as required to complete the Project. Such roads shall be available for the use of all others performing work or furnishing services in connection with the Project.
- b. XX

1.16 PARKING

- a. Contractor shall provide and maintain suitable parking areas for the use of all workers and others performing Work or furnishing services in connection with the Project, as required to avoid any need for parking personal vehicles where they may interfere with public traffic, Agency's operations, or construction activities.

1.17 NOISE CONTROL

- a. Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during Working Hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.
- b. During construction activities on or adjacent to occupied buildings, and when appropriate, Contractor shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.

1.18 DUST CONTROL

- a. Contractor shall take reasonable measures to prevent unnecessary dust. Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant. When practicable, dusty materials in piles or in transit shall be covered to prevent blowing dust.
- b. Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust. Existing or new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens. Proper ventilation shall be included with dust screens.s

1.19 TEMPORARY DRAINAGE PROVISIONS

- a. Contractor shall provide for the drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Site, and adjacent property.
- b. Existing drainage channels and conduits shall be cleaned, enlarged, or supplemented as necessary to carry all increased runoff attributable to Contractor's operations. Dikes shall be constructed as necessary to divert increased runoff from entering adjacent property (except in natural channels), to protect Agency's facilities and the Work, and to direct water to drainage channels or conduits. Ponding shall be provided as necessary to prevent downstream flooding.

1.20 EROSION CONTROL

- a. Contractor shall prevent erosion of soil on the Site and adjacent property resulting from its construction activities. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection.
- b. Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

1.21 POLLUTION CONTROL

- a. Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance shall be permitted to enter sanitary sewers, and reasonable measures shall be taken to prevent such materials from entering any drain or watercourse.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

STAGECOACH COMMUNITY GARDEN

**TECHNICAL SPECIFICATIONS
100% CONSTRUCTION DOCUMENTS SUBMITTAL**

CITY OF CARLSBAD

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April 16, 2024

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SECTION 01 55 00

MOBILIZATION & DEMOBILIZATION

PART 1 – GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Mobilization and Demobilization.
 - 2. Site Security and Access.
 - 3. Contractor Staging and Parking.

1.2 REFERENCE STANDARDS

- A. All references made within these technical provisions to the various standards, requirements and elements shown in Section 1.1.A shall be limited to construction materials, methods, and all work incidental to the item of work only.

1.3 SUBMITTALS

- A. Prior to the start of construction, the Contractor shall videotape/photo log the conditions of the parking lot and project area to be used for hauling demolition materials and delivery of the materials. The videotape/ log shall be prepared by the Contractor and submitted to the City.
- B. Catalog Cuts: Submit for each pre-manufactured item.
- C. Shop Drawings: Submit shop drawings when required on the plans.

1.4 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Materials and equipment shall be delivered and unloaded at the job site in such a manner that no damage occurs to the product during hauling, handling, or unloading, storage and installation.

PART 2 – PRODUCTS

- 2.1 No products.

PART 3 – EXECUTION

3.1 MOBILIZATION

- A. This item shall consist of payment for mobilization, demobilization, preparatory work, and staging area development and is intended to compensate the Contractor for operations

required to start up and close down the project, including but not limited to:

1. Provide the required submittals after received Notice of Award
 2. Obtain any required permits
 3. Provide a temporary construction fence
 4. Establishment of Contractor Yard or Staging Area
 5. Movement of equipment
 6. Movement of personnel
 7. Supplies
 8. Supplies and incidentals for the project site
 9. Payment of Bonds and Insurance for the project
 10. Utilities required for the Site
 11. All other work required to be performed prior to the start of operations and construction.
 12. Securing of the Contractor Yard or Staging Area.
 13. All temporary chain-link fencing and gate(s) as required on this Project for the safety of the public, security of the staging area and Contractor Office.
 14. Demobilization
 15. Coordination with Others
 16. Shared haul routes
 17. Clean up
 18. Project close out
- B. All facilities, plants and equipment which are established at or brought to the work site by the Contractor shall conform to the provisions of this Section unless the Representative specifically directs otherwise in writing. The Contractor shall be solely responsible for the adequacy of all plants, facilities, and equipment.

3.2 SITE SECURITY AND ACCESS

- A. Access to the Site
1. The Contractor's access to the site shall be as shown on the Drawings. The Contractor

shall maintain traffic control to and from the project area. The Contractor shall immediately clean any debris deposited along any route used as a result of its construction traffic.

3.3 CONTRACTOR HAUL ROUTES, STAGING AND PARKING

- A. On-Site staging and parking shall be located by the Contractor at the Contractor's expense to accommodate project construction phasing, as necessary. Initial setup and maintenance of the Contractor staging and parking area shall be included in Mobilization.
- B. Any damage along haul routes, and within staging and parking areas shall be repaired (to the condition prior to the Contractor's use) by the Contractor prior to the completion of the project for which the route and area is used.

END OF SECTION 01 55 00

SECTION 02 41 19

SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. The Work of this Section Includes:
 - 1. Demolition and removal of selected portions of exterior site elements.
 - 2. Removal of existing items.
- B. Related Requirements:

Greenbook Standard Specifications, 2021 Edition.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and deliver to the Owner as indicated.
- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage; prepare for reuse; and reinstall where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes the property of the Contractor.

1.4 COORDINATION

- A. Arrange a selective demolition schedule so as not to interfere with the Owner's operations.

1.5 PREINSTALLATION MEETINGS

- A. Pre-demolition Conference: Conduct conference at the project site, 3420 Camino de los Coches, Carlsbad, CA.
 - 1. Inspect and discuss the condition of construction to be selectively demolished.
 - 2. Review areas where existing construction is to remain and require protection.

3. Review and finalize protection requirements.
4. Review storage, protection, and accounting for items to be removed and protected in place.

1.6 FIELD CONDITIONS

- A. The owner will not occupy portions of the building immediately adjacent to the selective demolition area.
- B. Conditions existing at the time of inspection for bidding purposes will be maintained by the Owner as far as practical.
- C. Notify the Landscape Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials:
 1. It is not expected that hazardous materials will be encountered in the Work.
 - a. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify the Landscape Architect and Owner. Hazardous materials will be removed by the Owner under a separate contract.
- E. On-site sale of removed items or materials is not permitted.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with Greenbook Standard Specifications, 2021 Edition.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing conditions. Owner does not guarantee that existing conditions are the same as those indicated in Project Record Documents.
- C. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs

or video.

1. Inventory and record the condition of items to be removed. Photograph or video conditions that might be misconstrued as damage caused by removal.
2. Photograph or video existing conditions of adjoining construction including finish surfaces, that might be misconstrued as damage caused by selective demolition operations or removal of items for salvage or reinstallation.

3.2 PREPARATION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- B. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition.

3.3 UTILITY SERVICES AND BUILDING SYSTEMS

- A. Existing Services/Systems to Remain: Maintain utilities and building systems and equipment to remain and protect against damage during selective demolition operations.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utilities and building systems serving areas to be selectively demolished.
 1. Owner will arrange to shut off indicated utilities when requested by the Contractor.
 2. Arrange to shut off utilities with utility companies.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within the limitations of governing regulations and as follows:
- B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete:
 1. Demolish in small sections. Using a power-driven saw, cut concrete to a depth of at least 3/4 inch at junctures with construction to remain. Dislodge concrete from reinforcement at the perimeter of areas being demolished, cut reinforcement, and then remove the remainder of the concrete. Neatly trim openings to the dimensions indicated.
 2. Demolish in sections. Cut concrete full depth at junctures with construction to remain and

at regular intervals using a power-driven saw, and then remove concrete between saw cuts.

- B. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using a power-driven saw, and then remove masonry between saw cuts.
- C. Concrete Slabs-on-Grade: Saw-cut perimeter of the area to be demolished, and then broken up and removed.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from the Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 19

SECTION 04 22 00
CONCRETE MASONRY UNIT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

Concrete Masonry Units

B. Related Requirements:

Greenbook Standard Specifications, 2021 Edition.

1.2 DEFINITIONS

A. CMU(s): Concrete masonry unit(s).

B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

C. Exposed: Weather-exposed side of a constructed wall.

1.3 SUBMITTALS

A. Product Data:

1. For CMU product.

B. Samples for Initial Selection:

1. Split face CMU, color per plans.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: Qualified in accordance with ASTM C1093 for testing indicated.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.

- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained, and contamination avoided.
- D. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

PART 2 - PRODUCTS

2.1 CONCRETE UNIT MASONRY, GENERAL

- A. Masonry Standards: Comply with Greenbook Standard Specifications, 2021 Edition.
- B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work.

2.2 MORTAR AND GROUT MATERIALS

- A. Standards: Comply with Greenbook Standard Specifications, 2021 Edition.

2.3 REINFORCEMENT

- A. Uncoated-Steel Reinforcing Bars: ASTM A615/A615M or ASTM A996/A996M.
- B. Standards: Comply with Greenbook Standard Specifications, 2021 Edition.

2.4 MORTAR AND GROUT MIXES

- A. Standards: Comply with Greenbook Standard Specifications, 2021 Edition.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Standards: Comply with Greenbook Standard Specifications, 2021 Edition.
- B. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.
- C. Exposed Masonry: Mix units to produce uniform blend of colors and textures.
- D. Where existing masonry occurs, match coursing, bonding, color, and texture of existing masonry.
- E. Masonry Protection: Protect completed masonry and masonry not being worked on in the following manner.
 - 1. 40 to 32 Deg F (4 to 0 Deg C): Protect masonry from rain for at least 24 hours by covering it with weather-resistive membrane.

3.3 CONTROL JOINTS

- A. General: Install control joint materials in CMUs as masonry progresses. Do not allow materials to span control joints without provision to allow for in-plane wall or partition movement.
- B. Locate control joints per Greenbook Standard Specifications, 2021 Edition.

3.4 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage special inspectors to perform tests and inspections and prepare reports. Allow inspectors access to work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements is done at the Contractor's expense.

3.5 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as Work progresses by dry brushing to remove mortar fins and smears before tooling joints.
- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:

1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
2. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.

3.6 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.

END OF SECTION 04 22 00

SECTION 06 44 00

WOOD FOR PLANTER BOXES, GARDEN FENCE AND GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Redwood – Clear all Heart

1.2 REFERENCE STANDARDS

Redwood Garden Grade Merchantable Heart

1.3 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog data for specified products demonstrating compliance with referenced standards.
- B. Shop Drawings: Submit Shop Drawings for fabrication and installation.

PART 2- PRODUCTS

2.1 PRESSURE-TREATED WOOD

- A. Kiln-dry material after treatment to a maximum moisture content of 19 percent.
- B. Mark each treated item with treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
- C. All treated wood shown on the drawings shall be Redwood Garden Grade Merchantable Heart.

PART 3- EXECUTION

3.1 INSTALLATION

- A. Set lumber to required levels and lines, with members plumb, true to line, cut, and fitted. Fit lumber to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Securely attach lumber to the substrate by anchoring and fastening as indicated on the plans.
- C. Fastening Methods: Use fasteners of appropriate type and length per plan and detail. Pre-drill members when necessary to avoid splitting wood.

END OF SECTION 06 44 00

SECTION 09 93 00

STAINING AND TRANSPARENT FINISHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Primers
2. Wood Stains

B. Related Requirements:

1. Comply with Greenbook Standard Specifications, 2021 Edition.

1.2 ACTION SUBMITTALS

A. Product Data:

1. For each type of product.
2. Include preparation requirements and application instructions.

B. Samples for Initial Selection: Manufacturer's standard color sheets, showing full range of available colors for each type of exposed finish.

C. Samples for Verification: Sample for each type of finish system and in each color and gloss of finish required on representative samples of actual wood substrates.

1. Size: 8 inches square
2. Apply coats on Samples in steps to show each coat required for system.
3. Label each coat of each Sample.
4. Label each Sample for location and application area.

D. Product List: Cross-reference to finish system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.3 MAINTENANCE MATERIAL SUBMITTALS

A. Extra Stock Material: Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Stains and Transparent Finishes: 1 gallon of each material and color applied.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 degrees F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.5 FIELD CONDITIONS

- A. Apply finishes only when temperature of surfaces to be finished and ambient air temperatures are between 50- and 95-degrees F.
- B. Do not apply finishes when relative humidity exceeds 85 percent, at temperatures of less than 5 degrees F above the dew point, or to damp or wet surfaces.
- C. Do not apply exterior finishes in snow, rain, fog, or mist.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Source: Obtain each coating product (including penetrative sealer) from a single source from a single manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Exterior Wood Substrates: 15 percent, when measured with an electronic moisture meter.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with finish application only after unsatisfactory conditions have been corrected.
 - 1. Beginning finish application constitutes Contractor's acceptance of substrates and conditions.

3.2 PREPARATION

- A. Exterior Wood Substrates:

1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
2. Prime edges, ends, faces, undersides, and backsides of wood.
 - a. For solid hide stained wood, stain edges and ends after priming.
 - b. For varnish-coated stained wood, stain edges and ends and prime with varnish. Prime undersides and backsides with varnish.
3. Countersink steel nails, if used, and fill with putty or plastic wood filler tinted to final color. Sand smooth when dried.

3.3 APPLICATION

- A. Apply finishes according to the manufacturer's written instructions.
 1. Use applicators and techniques suited for finish and substrate indicated.
 2. Finish surfaces behind movable equipment and furniture same as similar exposed surfaces.
 3. Do not apply finishes over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- B. Apply finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

3.4 CLEANING AND PROTECTION

- A. At the end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing finish application, clean spattered surfaces. Remove spattered materials by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from finish application. Correct damage by cleaning, repairing, replacing, and refinishing, as approved by Landscape Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced finished wood surfaces.

3.5 EXTERIOR WOOD-FINISH-SYSTEM SCHEDULE

- A. Wood Substrates, Wood Trim, Wood Gates, Wood Board Siding and Wood Fences:
 1. Solid-Color, Water-Based Stain System
 - a. Prime Coat: Primer, alkyd for exterior wood.
 - b. Intermediate Coat: Stain, exterior, water based, solid hide, matching topcoat.
 - c. Topcoat: Stain, exterior, and water based.
 - d. Sealer

END OF SECTION 09 93 00

SECTION 13 31 23

TENSIONED FABRIC STRUCTURES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections apply to this section.

1.2 SUMMARY

The shade structure contractor shall be responsible for the design, engineering, fabrication, supply, and installation of the work specified herein. The intent of this specification is to have one single contractor to be responsible for the above functions.

1.3 REFERENCES

- A. The Shade Structures must comply with the latest revision of the applicable codes and regulations including the International Building Code (IBC) 2012.
- B. American Society of Testing Materials (ASTM).
- C. American Welding Society: Structural Welding Code AWS D1.1-AWS Structural Welding Code-Steel.

1.4 SUBMITTALS

- A. Provide proof of five (5) installed reference sites with structures of similar scope of project and installation that are engineered to IBC specifications. Include in the reference list the structure dimensions with the installation date and project location.
- B. Provide a minimum of 5 fabric samples to demonstrate fabric color range and 5 powder-coated paint color chip selections.

1.5 QUALITY ASSURANCE

- A. A single shade structure contractor shall design, engineer, and manufacture the shade structure(s).
- B. All bidders shall have at least 15 years of experience in the design, engineering, manufacturing, and installation of shade structures.
- C. All bidders shall engineer to IBC 2012 requirements with a similar scope.
- D. The shade structure contractor shall have a Corporate Quality Control program and manual describing their complete quality assurance program.

1.6 PROJECT CONDITIONS

Field Measurements: Verify layout information for the shade structure(s) shown on the project drawings in relation to the property survey and existing structures and verify locations by field measurements prior to construction for the shade structures.

1.7 WARRANTY

- A. The successful bidder shall provide a 12-month warranty on all labor and materials.
- B. A supplemental limited warranty from the manufacturer shall be provided for 20 years Non-Prorated against the Structural Integrity of the steel components and 10 years Prorated on the fabric canopy(s).

PART 2 – PRODUCTS

2.1 GENERAL

A. Scope

- 1. Quantity to be two (2) triangular shade sails, overall dimensions of shade sails are 22' x 13' x 25'-7".
- 2. Column height to be 8' to 10'. See plans for clarification.

B. Manufacturer

The proposed shade structure(s) to be manufactured by Superior Recreational Products Shade Division, also recognized as (SRP Shade or Superior Shade) or approved equal, and shall be modular and prefabricated, and include the structural steel frame, fabric roof, steel cables, and all fasteners.

1. SRP Shade

1050 Columbia Dr.

Carrollton, GA 30117

(866) 959-8004 or Kevin Diner CPSI (Zoom Recreation) (619) 363-1756

www.SRPShade.com

- 2. Or Equal: Standard for approved equal. Ten (10) days prior, approval is required for the substitution of product design, materials, and features specified above. Submittals must include plans, drawings, cut sheets, material data sheets, testing results, and samples. Bids failing to meet this requirement will be deemed non-responsive.

1. Fabric Specifications Manufactured as ALNET Extra Block

- A. The fabric knit is to be made using Monofilament and tape HDPE yarns.
- B. UV shade fabric is made of UV-stabilized materials.
- C. The high-density polyethylene material shall be manufactured with tensioned fabric structures in mind.
- D. Shade fabric has a weight average of 9.6 oz. per sq.yd.

- E. Material to be Rachel-knitted to ensure the material will not unravel if cut.
 - F. Burst Strength of 363 lb. (ASTM 3786)
 - G. Cloth meets fire resistance tests as follows:
 - 1. Alnet Extra Block: California State Fire Marshall Reg. #F-93501
 - 2. Others: NFPA 701-99 (Test Method 2). ASTM E-84
 - H. Fabric Properties:
 - 1. Tear Tests (lbs./ft): WARP 33 and WEFT 36 (ASTM D2261)
 - 2. Burst Test (lbs./ ft): 363 lbs. (ASTM D3787)
 - 3. Fabric Weight (oz/sq. ft.) Average: 1.02 to 1.07
 - 4. Roll Length 150'
 - 5. Roll Size: 63" x 16.5"
 - 6. Weight: 120 lbs.
 - 7. Life Expectancy: 10 Years
 - 8. Fading: Minimum fading after 6 years (Note: 3 years for Red and Yellow)
 - 9. Minimum Temperature: -77 degrees F
 - 10. Maximum Temperature: 167 degrees F
2. Thread
- A. Shall be 100% expanded PTFE fiber which carries a 10-year warranty that is high strength and low shrinkage.
 - B. Shall have a wide temperature and humidity range.
 - C. Abrasion resistant and UV radiation immunity.
 - D. Shall be unaffected by non-hydrocarbon-based cleaning agents, acid rain, mildew, rot, chlorine, saltwater, and pollution.
 - E. Lockstitch thread – 1200 Denier or equal.
 - F. Chain stitch thread – 2400 denier or equal.
3. Steel Tubing
- A. All fabricated steel must be in accordance with approved shop drawings and calculations.
 - B. All steel is cleaned, degreased, or etched to ensure proper adhesion of powder-coat in accordance with manufacturer specifications.
 - C. All Steel used on this project needs to be new and accompanied by mill certificates if requested. Structural steel tubing up to 5"-7 gauge shall be galvanized per Allied Steel FLO-COAT specifications. Schedule 40 black pipe fabrications shall be sandblasted and primed as described below.
 - D. All non-hollow structural shapes comply with ASTM A-36 unless otherwise noted.
 - E. All hollow structural steel shapes shall be cold-formed HSS ASTM A-53, grade C unless otherwise noted.
 - F. Plate products shall comply with ASTM A-36.
4. Powder Coating and Priming
- A. All steel (galvanized) must be coated with rust-inhibiting primer prior to applying the powder coat. Primer shall be Marine Grade Cardinal Industrial Finishes Corp. E396 – GR1372 epoxy powder coating semi-gloss smooth zinc rich primer.
 - B. All steel parts shall be coated for rust protection and finished with a minimum of 3.5 mil thick UV-inhibited weather-resistant powder coating.

- C. Powder used in the powder-coat process shall have the following characteristics:
 - 1. N.3.1 | Specific Gravity | 1.68+/-0.05
 - 2. N.3.2 | Theoretical Coverage | 114+/-4 ft. 2/lb./mil
 - 3. N.3.3 | Mass Loss During Cure | <1%
 - 4. N.3.4 | Maximum Storage Temperature | 75 degrees F

- D. Powder-coating shall meet the following tests:
 - 1. ASTM | Gloss at 60 | 85 to 95
 - 2. HOI TM 10.219 | PCI Powder Smoothness | 7
 - 3. ASTM D2454-91 | Over-Bake Resistance Time | 200%
 - 4. ASTM D3363-92A | Pencil Hardness | H-2H
 - 5. ASTM D2794-93 | Dir/Rev Impact, Gardner | 140/140 in./lbs.
 - 6. ASTM D3359-95B | Adhesion, Cross Hatch | 5B PASS
 - 7. ASTM D522-93A | Flexibility Mandrel | ¼" Diameter, No Fracture
 - 8. ASTM B117-95 | Salt Spray | 1000 Hours
 - 9. UL Dtov2 | Organic Coating Steel Enclosures, Elect Eq. | Recognized.

- E. Application Criteria:
 - 1. N.5.1 | Electrostatic Spray Cold | Substrate: 0.032 in. CRS
 - 2. N.5.2 | Cure Schedule | 10 Minutes at 400 degrees F
 - 3. N.5.3 | Pretreatment | Bonderite 1000
 - 4. N.5.4 | Film Thickness | 3.5 Mils

- 5. Welding
 - A. All shop welds shall be executed in accordance with the latest edition of the American Welding Society Specifications.
 - B. Welding procedures shall comply in accordance with the AWS D1.1-AWS Structural Welding Code-Steel.
 - C. All welding is performed by a certified welder. All welds shall be continuous where length is not given unless otherwise shown or noted on drawings.
 - D. All welds shall develop the full strength of the weaker member. All welds shall be made using E70xx.035 wire.
 - E. Shop connections shall be welded unless noted otherwise. Field connections shall be indicated on the drawings. Field-welded connections are not acceptable.
 - F. All fillet welds shall be a minimum of ¼" unless otherwise noted.
 - G. All steel shall be welded shut at terminations to prevent internal leakage.
 - H. Internal weld sleeving is not acceptable.
 - I. On-site welding is not acceptable.

- 6. Sewing
 - A. On-site sewing of a fabric will not be accepted.
 - B. All corners shall be reinforced with Kevlar® extra non-tear cloth and strap to distribute the load.
 - C. The perimeters that contain the cables shall be double-lock stitched.

7. Installation Hardware
 - A. Bolt and fastening hardware shall be determined based on calculated engineering loads.
 - B. All bolts shall comply with SAE-J429(Grade 8) or ASTM A325 (Grade BD). All nuts shall comply with the ASTM F-594, alloy group 1 or 2.
 - C. Stainless Steel hardware shall comply with ASTM A-304.
 - D. ¼” galvanized wire rope shall be 7x19 strand with a breaking strength of 7,000 lbs. for shades generally under 575 sq. ft. unless requested larger by the customer. For shades over 575 sq. ft., cable shall be 5/16” with a breaking strength of 9,800 lbs. ¼” Stainless Steel wire rope shall be 7x19 strand with a breaking strength of 6,400 lbs. 5/16” Stainless steel wire rope shall be 7/19 strand with a breaking strength of 9,000 lbs.
 - E. All fittings required for proper securing of the cable are hot-dipped galvanized.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Installations of shade structure(s) shall be performed by an installer who shall follow the manufacturer’s plans, specifications and instructions for assembly, installation, and erection, per approved drawings.
- B. Concrete
 1. Concrete work shall be executed in accordance with the latest edition of American Concrete Building Code ACI 318 unless specified by the governing municipality.
 2. Concrete specifications shall comply in accordance with, and detailed as per plans and as follows:
 - A. 28 days Strength F’c = 2500 psi
 - B. Aggregate: HR
 - C. Slump: 3-5
 - D. Portland Cement shall conform to C-150
 - E. Aggregate shall conform to ASTM C-33
 3. All reinforcement shall conform to ASTM A-615 grade 60.
 4. Reinforcing steel shall be detailed, fabricated, and placed in accordance with the latest ACI Detailing Manual and Manual of Standard Practice.
 5. Whenever daily ambient temperatures are below 80 degrees Fahrenheit, the contractor may have mixed accelerators and hot water added at the batch plant. (See Table 1.)

6. TABLE 1

Temperature Range	% Accelerator	Accelerator Type
75-80 degrees	1%	High Early (non-calcium)
70-75 degrees	2%	High Early (non-calcium)
Below 70 degrees	3%	High Early (non-calcium)

C. Footings

1. All anchor bolts set in new concrete shall be ASTM A-307, or ASTM F-1554 if specified by engineer.
2. All anchor bolts shall be zinc plated unless specified otherwise.
3. Footing shall be placed in accordance with and conform to engineered specifications and drawings.

END OF SECTION 13 31 23

SECTION 31 20 00

EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Preparing subgrades for walks and pavements.
 - 2. Subbase course for concrete walks, pavers, and DG pavement.
- B. Related Requirements: Comply with Greenbook Standard Specifications, 2021 Edition.

1.2 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Fill Soil materials used to raise existing grades.
- F. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- G. Utilities: On-site underground pipes, conduits, ducts, and cables.

1.3 SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
 - 1. Geotextiles.
 - 2. Warning tapes.
- B. Samples for Verification: For the following products, in sizes indicated below:
 - 1. Geotextile: 12 by 12 inches.
 - 2. Warning Tape: 12 inches long; of each color.
 - 3. INFORMATIONAL SUBMITTALS

- C. Comply with Greenbook Standard Specifications, 2021 Edition.

1.4 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by the Owner or authorities having jurisdiction.
 - 3. Do not proceed with work on adjoining property until directed by the Architect.
- B. Utility Locator Service: Notify Dig Alert per plans for the area where the Project is located before beginning earth-moving operations.
- C. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures are in place.
- D. Do not direct vehicle or equipment exhaust toward protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Comply with Greenbook Standard Specifications, 2021 Edition.

2.2 GEOTEXTILES

- A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288.
- B. Satisfactory Geotextiles: Comply with Greenbook Standard Specifications, 2021 Edition.

2.3 ACCESSORIES

- A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, continuously inscribed with a description of the utility; colored as follows:
 - 1. Red: Electric.
 - 2. Yellow: Gas, oil, steam, and dangerous materials.

3. Orange: Telephone and other communications.
4. Blue: Water systems.
5. Green: Sewer systems.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.

3.2 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions.
 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.3 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.4 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 1. Stockpile soil materials away from grading operations. Do not store within the drip line of the remaining trees.

3.5 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to the specified dry unit weight.

3.6 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Comply with Greenbook Standard Specifications, 2021 Edition.

3.7 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
- B. Comply with Greenbook Standard Specifications, 2021 Edition.
- C. Provide a smooth transition between adjacent existing grades and new grades.
- D. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

3.8 FIELD QUALITY CONTROL

- A. Comply with Greenbook Standard Specifications, 2021 Edition.

3.9 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 1. Scarify or remove and replace soil material to depth as directed by Landscape Architect; reshape and recompact.
- C. Where settling occurs before the Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 1. Restore the appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.10 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off the Owner's property.

END OF SECTION 31 20 00

SECTION 32 12 16

GRIND OVERLAY, SLURRY SEAL & PVC PIPE

PART 1 – GENERAL

1.1 SUMMARY

- A. This applies to:
 - 1. Grind Overlay
 - 2. Tack Coat
 - 3. Slurry seal coatings
 - 4. PVC Pipe

1.2 REFERENCE STANDARDS

- A. Comply with Greenbook Standard Specifications, 2021 Edition

1.3 SUBMITTALS

- A. Slurry Seal: Contractor shall submit a job mix design for Slurry Seal required for the project.

1.4 QUALITY CONTROL

- A. Standard: Provide materials and construction methods complying with Greenbook Standard Specifications, 2021 Edition
- B. Manufacturer Qualifications: A firm experienced in manufacturing emulsified asphalt and slurry seal products.

PART 2 – PRODUCTS

2.1 SLURRY SEAL

- A. Material for slurry seal shall conform to the requirements in the Greenbook Standard Specifications, 2021 Edition.
- B. Aggregate grading shall be in accordance with Greenbook Standard Specifications, 2021 Edition

2.2 TACK COAT

- A. Tack coat shall be an asphaltic emulsion per Greenbook Standard Specifications, 2021 Edition

2.3 POLYVINYL CHLORIDE PIPE

- A. All plastic piping and sleeving shall be integral white color, Type 1, Grade 1 (impact modified) designated as Polyvinyl Chloride (PVC), conforming to ASTM D1785 and ASTM D2441.
- B. PVC Plastic Pressure Lines: Drinking fountain piping shall be Schedule 80 PVC.
- C. Plastic Sleeves: Where required, sleeves shall be PVC SCH 80, sized at twice the diameter of the pipe to be sleeved, with a 2" minimum size.
- D. Identification: Furnish plastic pipe continuously and permanently marked with the following information: Manufacturer's name or trademark, size, schedule or class and type of pipe, working pressure rating at 73.4 degrees F., National Sanitation Foundation (NSF) rating, and date of extrusion.

PART 3 – EXECUTION

3.1 PREPARATION - CLEANING OF EXISTING SURFACES

- A. Where new asphaltic concrete is to be placed upon existing pavement or where it overlaps existing pavement, the surface to be paved shall be cleaned of all dust, loose material, and vegetation by sweeping with power brooms, or other approved method. The Contractor shall remove scrap and dispose of all dirt and loose material collected during the surface cleaning operations at his own expense. If deemed necessary by the Engineer, excessively dusty or dirty walks shall be washed down by the Contractor with water trucks or fire hoses from adjacent hydrants. After washing, all standing water shall be removed, and the walks shall be dry before applying the tack coat.

3.2 GRINDING OVERLAY

Per Greenbook standard Specifications, 2021 Edition

3.3 PREPARATION-TACK COAT

- A. A tack coat shall be applied to existing paved surfaces where new slurry seal is to be placed upon existing pavement, or where it overlaps existing pavement.
- B. After the surface has been thoroughly cleaned and dried, a thin asphaltic emulsion tack coat shall be uniformly applied to the surface at a rate of not to exceed 0.10 gallons per square yard.
- C. Coat surfaces of manholes and storm drainage structure with oil to prevent bond with asphaltic pavement. Do not tack coat these surfaces.

3.4 SLURRY SEAL

- A. General. Except as modified herein, paving materials and construction methods for slurry seal shall be in accordance with Section 37-2 of the State Standard Specifications.

- B. Cleaning Of Existing Surfaces. Immediately prior to placing the slurry seal, the surface to be sealed shall be cleaned of all dust, loose material, vegetation and any other objectionable material in accordance with paragraph 3.1 of this Section.
- C. Preparation - Application of Paint Binder. Before placing the slurry seal, the existing surface shall be covered with a paint binder. The paint binder shall be an asphaltic emulsion of the same type and grade specified for the slurry seal. The ratio of asphaltic emulsion to water shall be 1:3. The paint binder shall be applied at the rate not to exceed 0.10 gallons per square yard. Full compensation for applying paint binder shall be considered as included in the price for slurry seal and no additional compensation will be allowed.
- D. Application of Slurry Seal. Slurry seal shall be spread on the existing pavement at a rate of 10 to 15 pounds of dry aggregate per square yard depending on existing surface conditions as determined by the Engineer.

3.5 POLYVINYL CHLORIDE PIPE

- A. Install per plans.

END OF SECTION 32 12 16

SECTION 32 13 13
CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes concrete paving, including the following:

1. Driveways.
2. Parking lots.
3. Curbs and gutters.
4. Walks.

B. Related Requirements:

Comply with Greenbook Standard Specifications, 2021 Edition.

1.2 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.

B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.3 INFORMATIONAL SUBMITTALS

A. Material Certificates: For the following, from the manufacturer:

1. Cementitious materials.
2. Steel reinforcement and reinforcement accessories.

1.4 QUALITY ASSURANCE

A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products that complies with ASTM C94/C94M requirements for production facilities and equipment.

B. Testing Agency Qualifications: Qualified according to ASTM C1077 and ASTM E329 for testing indicated.

1.5 FIELD CONDITIONS

A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other

construction activities.

- B. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain the concrete temperature below 90 deg F at the time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided the water equivalent of ice is calculated in the total amount of mixing water. Using liquid nitrogen to cool concrete is the Contractor's option.
 - 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. Comply with Greenbook Standard Specifications, 2021 Edition.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 STEEL REINFORCEMENT

- A. Comply with Greenbook Standard Specifications, 2021 Edition.

2.4 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project.

2.5 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete.
- B. Comply with Greenbook Standard Specifications, 2021 Edition.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Comply with Greenbook Standard Specifications, 2021 Edition.
- B. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- C. Proof-roll prepared sub-base surface below concrete paving to identify soft pockets.
 - 1. Completely proof-roll subbase in one direction and repeat in a perpendicular direction.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove loose material from the compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place for at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 INSTALLATION OF STEEL REINFORCEMENT

- A. General: Comply with Greenbook Standard Specifications, 2021 Edition.
- B. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- C. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- D. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- E. Install welded-wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to the line, with

faces perpendicular to the surface plane of concrete.

1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
- C. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, and to match jointing of existing adjacent concrete paving.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, and steel reinforcement installation.
- B. Moisten subbase to provide a uniform dampened condition at the time concrete is placed. Do not place concrete around manholes or other structures until they are at the required finish elevation and alignment.
- C. Comply with **ACI 301** requirements for measuring, mixing, transporting, and placing concrete.
- D. Do not add water to concrete during delivery or at the Project site. Do not add water to fresh concrete after testing.
- E. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- F. Screed paving surface with a straightedge and strike off.
- G. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross-sections, lines, grades, finish, and jointing.

3.7 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Begin curing after finishing the concrete but not before free water has disappeared from the concrete surface.
- D. Curing Methods: Cure concrete by moisture curing as follows:
 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

- a. Water.
- b. Continuous water-fog spray.
- c. Absorptive cover, water-saturated and kept continuously wet. Cover concrete surfaces and edges with a 12-inch lap over adjacent absorptive covers.

3.8 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with the requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by the Landscape Architect.
- B. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- C. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before the date scheduled for Substantial Completion inspections.

END OF SECTION 32 13 13

SECTION 32 14 00

UNIT PAVING

PART 1 - GENERAL

1.01 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. This Section includes the following:
 - 1. Concrete pavers set in aggregate setting beds.

1.03 SUBMITTALS

- A. Product Data: For materials other than water and aggregates.
- B. Product Data: For the following:
 - 1. Pavers.
- C. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136.
- D. Samples for Initial Selection: For the following:
 - 1. The unit paver indicated.
 - 2. Sand Joint materials for color selection.
- E. Samples for Verification:
 - 1. Full-size units of each type of unit paver indicated.

1.04 QUALITY ASSURANCE

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from one source with resources to provide materials and products of consistent quality in appearance and physical properties.
- B. Construction Meeting: Conduct a meeting at the Project site.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If pavers are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store cementitious materials on elevated platforms, undercover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained, and contamination avoided.
- D. Store liquids in tightly closed containers protected from freezing.
- E. Store asphalt cement and other bituminous materials in tightly closed containers.

1.06 PROJECT CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed with or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

PART 2 - PRODUCTS

2.01 CONCRETE PAVERS

- A. Concrete Pavers: Solid interlocking paving units complying with ASTM C 936, made from normal-weight aggregates.
 - 1. Basis-of-Design Product: The design for concrete pavers is based on Belgard, Cambridge products. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
 - a. Belgard, Cambridge Cobble Paver
 - 2. Thickness: 3-1/8 inches (80 mm)
 - 3. Face Size and Shape: 6 inches square.
 - 4. Face Size and Shape: 6 inches by 9 inches rectangle.
 - 5. Color: Victorian
 - 6. Pattern: K Pattern
 - 7. Paver PSI: 8000

2.02 AGGREGATE SETTING-BED MATERIALS

- A. Graded Aggregate for Subbase: Sound, crushed stone or gravel complying with ASTM D 448 for Size No. 57

- B. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 144 for fine aggregate.
- C. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 sieve and no more than 10 percent passing No. 200 sieve.
- D. Separation Geotextile: Woven geotextile fabric, manufactured for separate applications; made from polyolefins or polyesters, with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
 - 3. Permittivity: 0.02 per second, minimum; ASTM D 4491.
 - 4. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.
- E. Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2; AASHTO M 288.
 - 2. Apparent Opening Size: No. 40 sieve, maximum; ASTM D 4751.
 - 3. Permittivity: 0.5 per second, minimum; ASTM D 4491.
 - 4. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.
- F. Herbicide: Commercial chemical for weed control, registered with the EPA. Provide in granular, liquid, or wettable powder form.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine areas indicated to receive paving, with the Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.
 - 2. Where pavers are to be installed over waterproofing, examine waterproofing installation, with waterproofing installer present, for protection from paving operations. Examine areas where the waterproofing system is turned up or flashed against vertical surfaces and horizontal waterproofing. Proceed with installation only after protection is in place.

3.02 PREPARATION

- A. Remove substances from concrete substrates that could impair mortar bonds, including curing and sealing compounds, form oil, and laitance.

- B. Clean concrete substrates to remove dirt, dust, debris, and loose particles.
- C. Proof-roll prepared subgrade to identify soft pockets and areas of excess yielding. Proceed with unit paver installation only after deficient subgrades have been corrected and are ready to receive the subbase and base course for unit pavers.

3.03 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, and other defects that might be visible in the finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide the pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
 - 1. For concrete pavers, a block splitter may be used.
- D. Exercise care in handling coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. Remove coating from bonding surfaces before setting paver.
- E. Joint Pattern: As shown in drawings.
- F. Pavers over Waterproofing: Exercise care in placing pavers and setting materials over waterproofing so protection materials are not displaced, and waterproofing is not punctured or otherwise damaged. Carefully replace protection materials that become displaced and arrange for repair of damaged waterproofing before covering with paving.
- G. Tolerances: Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 10 feet from level, or indicated slope, for finished surface of paving.
- H. Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.
- I. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.
 - 1. Install edge restraints to comply with the manufacturer's written instructions. Install stakes at intervals required to hold edge restraints in place during and after unit paver installation.
 - 2. Install job-built concrete edge restraints to comply with requirements.

3.04 AGGREGATE SETTING-BED APPLICATIONS

- A. Compact soil subgrade uniformly to 95 percent of ASTM D 69 laboratory density.

- B. Proof-roll prepared subgrade to identify soft pockets and areas of excess yielding. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Architect, and replace them with compacted backfill or fill as directed.
- C. Place separation geotextile over prepared subgrade, overlapping ends and edges at least 12 inches.
- D. Place aggregate subbase and base, compact by tamping with plate vibrator, and screed to depth indicated.
- E. Place leveling course and screed to a thickness of 1 to 1 1/2 inches, taking care that moisture content remains constant, and density is loose and constant until pavers are set and compacted.
- F. Treat the leveling course with herbicide to inhibit the growth of grass and weeds.
- G. Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch, being careful not to disturb the leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.
 - 1. When the installation is performed with mechanical equipment, use only unit pavers with spacer bars on the sides of each unit.
- H. Spread dry sand and fill joints immediately after installing pavers into the leveling course. Add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.
- I. Do not allow traffic on installed pavers until the sand has been vibrated into joints.
- J. Repeat the joint-filling process 30 days later.

3.05 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install them in the same manner as the original units, with the same joint treatment and with no evidence of replacement.
- B. Cleaning: Remove excess sand from exposed paver surfaces; wash and scrub clean.

END OF SECTION 32 14 00

SECTION 32 15 40

DECOMPOSED GRANITE

PART 1 – GENERAL

1.1 SCOPE

- A. Section Includes: Stabilized decomposed granite (DG) surfacing. Furnish all materials as shown on the drawings and as specified herein.

1.2 SUBMITTALS

- A. Submit the following:
 - 1. Manufacturer's product data sheet and installation instructions indicating that the product complies with specifications.
 - 2. Submit a quart sample of decomposed granite material in color specified in the Construction Legend for selection.

1.3 MOCK-UP

- A. Install a 5-square-foot area with stabilized decomposed granite surfacing, including compacted subgrade and concrete edging, at a location approved by the Owner.
- B. The owner viewed and approved the mock-up before proceeding with the installation of the stabilized decomposed granite surfacing.
- C. Approved mock-up may remain as part of the completed Work.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect stabilized decomposed granite from contamination. Store under cover.

1.5 FIELD CONDITIONS

- A. Do not install stabilized decomposed granite surfacing when the subbase is wet and/or saturated.

PART 2 – PRODUCTS

2.1 STABILIZED DECOMPOSED GRANITE MATERIALS

- A. Acceptable Manufacturer:
 - 1. Specification is based on products by Southwest Boulder and Stone, CA: phone 760-466-3277; California Gold Decomposed Granite or approved equal.
 - 2. Substitutions: Products by other manufacturers that comply with specifications will be reviewed prior to approval.
- B. Decomposed Granite:
 - 1. Produced from naturally friable granite. Blends of coarse sand and rock dust are not acceptable.
 - 2. Graduation, in accordance with ASTM C136:

Sieve Size	Percent Passing
½ “	100
3/8”	90-100
No. 4	50-100
No. 300	25-55
No. 100	10-20
No. 200	5-18

3. Sand Equivalent: 30 minimum in accordance with ASTM D2419.
4. Color: California Gold or approved equal
5. Supplier: Southwest Boulder and Stone. Phone:760-466-3277, website: www.southwestboulder.com, or approved equal.
6. Binder: Provide Organic Lock binder, provided by Envirobond Products Corporation. Phone:866-636-8476, website: www.organic-lock.com, or approved equal.

C. Factory Blending:

1. Blend DG and binder per the binder manufacturer’s recommendation.

2.2 ACCESSORIES

- A. Water: Free from contaminants that would discolor or be deleterious to stabilized decomposed granite surfacing.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Examine grading and subsoil conditions. Do not proceed until conditions are acceptable.

3.2 PREPARATION

- A. Excavation: Excavate to the depth required so edges of stabilized decomposed granite surfacing will match adjacent grades and have a maximum cross slope of 1 percent. Remove excavated soil from the site.
- B. Use a blade compactor to achieve 90% compaction.

3.3 STABILIZED DECOMPOSED GRANITE INSTALLATION

- A. Prior to installation, thoroughly presoak the surface on which stabilized decomposed granite surfacing is to be placed.
- B. Install blended binder per manufacturer recommendations.
- C. Compact: After +/- 4 hours, make 4-6 passes using a 1-ton double or single static drum roller, or equivalent.
- D. Minimum Compacted Thickness: Install to the depth shown on Drawings.
- E. Surface shall follow the overall contours of the landscape. Flat areas shall be crowned for drainage.
- F. Installed surface shall be of consistent quality and free of deleterious materials such as organic materials, nails, stones, and loose material. Surface shall not have depressions or humps greater than 1/4 inch in ten feet.

3.4 FIELD QUALITY CONTROL

- A. Material shall comply with manufacturer specifications.

3.5 PROTECTION

- A. Do not allow traffic on stabilized decomposed granite surfacing for four days after placement or until compacted stabilized decomposed granite has fully cured.
- B. Protect stabilized decomposed granite surfacing from damage until Project completion. Repair damaged areas to match specified requirements.

3.6 MAINTENANCE & REPAIRS OF STABILIZED DECOMPOSED GRANITE

- A. Loose aggregate will appear on the surface over time which is a natural occurrence. If excessive aggregate over ¼ inch occurs, redistribute the stabilized decomposed granite over the entire surface, water thoroughly, and re-compact with a minimum one-ton drum roller. This process can be repeated as needed.
- B. To repair and excavate damaged areas leaving a minimum one-inch depth of existing stabilized decomposed granite, water, and scarify. Scarifying existing stabilized decomposed granite will prevent a cold joint layer between the existing stabilized decomposed granite and the newly imported pre-blended stabilized decomposed granite to the excavated area at or above the finished grade.
- C. Add water to the pre-blended stabilized decomposed granite to activate. Apply moistened pre-blended stabilized decomposed granite to the excavated area at or above the finished grade.
- D. Compact with a walk-behind drum roller. Do not allow traffic on stabilized decomposed granite surfacing for two days after placement or until compacted stabilized decomposed granite has fully cured.

END OF SECTION 32 15 40

SECTION 32 19 00
SITE FURNISHINGS

PART 1 – GENERAL

1.1 SCOPE

- A. Work Included: Provide all material, labor, equipment, and services necessary for the furnishing and installation of all site furniture and site equipment items, as shown on the drawings and as specified below. The work includes, but is not limited to:

1. ADA Picnic Table
2. Bench
3. Waste Containers
4. Compost Bin
5. Horizontal Storage Box
6. Drinking Fountain
7. Information Kiosk

1.2 RELATED SECTIONS

- A. Related sections include the following:

- 32 15 40 Decomposed Granite
- 32 13 13 Concrete Paving

1.3 ACCEPTANCE

- A. Prior to the purchase of the items, the Contractor shall supply the Landscape Architect with vendor information, photos, and samples of the finishes for approval. No materials for this section shall be purchased until such approval is granted in writing.

1.4 CERTIFICATION

- A. Delivery schedules shall be verified and certified in writing by the Construction Manager within 10 days after the project commences.

1.5 QUALITY ASSURANCE

- A. Workmanship and Materials: All workmanship and materials within this Section shall conform strictly to the manufacturer's specifications, installation instructions, and guarantees.

1.6 SUBMITTALS

- A. General: Submittals to be in accordance with the requirements of the Standard Specifications. Review or acceptance, as specified, by the Landscape Architect is required prior to commencement of work.
- B. Catalog Cuts: Submit for each pre-manufactured item.
- C. Shop Drawings: Submit shop drawings when required in the list of items below.

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Site furnishings and equipment shall be delivered and unloaded at the job site in such a manner that no damage occurs to the product during hauling, handling, or unloading, storage, and installation.

1.8 SUBSTITUTIONS, ADDITIONS, AND DELETIONS

- A. Submit proposals for substitutions in writing to the Construction Manager. Acceptance by the Landscape Architect is required prior to proceeding with the work under this Section.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Site furnishing items shall be as indicated on the drawings or approved equal.
- B. Shade Structures shall be as indicated on the drawings or approved equal and per Section 13 31 23.

2.2 MANUFACTURERS

- A. See the drawings for manufacturers of site furnishings and shade structures or approved equal.
- B. ADA Picnic Table: The precast concrete ADA picnic table shall be QCP (866-703-3434) model QLBT102PTADA, color and finish per drawings, or approved equal.
- B. Bench: The precast concrete bench shall be QCP (866-703-3434) model Q1-PAS-84 B, color and finish per drawings, or approved equal.
- C. Waste containers: The precast concrete waste containers shall be QCP (866-703-3434) model QR-CAL2832W-H28 with fiberglass bubble top lid, and plastic liner, or approved equal. Contractor to coordinate with the manufacturer to identification inset images and colors for separated waste containers.
- D. Compost Bin: The compost bin shall be Busch Systems, model Soilsaver 12 cubic feet, or approved equal.
- G. Horizontal Storage Box: The prefabricated Storage Box shall be an Electric life, model 70" outdoor woodshed with galvanized sheet roof, or approved equal.

- H. Sail Shade Structure: The Sail Shade Structure shall be Zoom Recreation, a multi-sail 22' x 13' custom-made structure. The sail shade fabric shall pass the NFPA 701 or ASTM E84 tests for fire retardation.
- I. Drinking Fountain: The drinking fountain shall be Haws model 3216 ADA vandal resistant with bottle filler, color gray, or approved equal.
- J. Information Kiosk: The information kiosk shall be as shown on the drawings or approved equal.

PART 3 – CONSTRUCTION

3.1 LAYOUT OF SITE FURNISHINGS / EQUIPMENT

- A. Layout site furniture according to the locations shown on the drawings, and as required by the Landscape Architect.
- B. Set site furnishings level and true to line, in correct relationship to adjacent materials and structures.
- C. Secure site furnishings permanently in place to prevent removal or tampering.
- D. Adjustments: The Landscape Architect reserves the right to adjust in the locations of the site furniture without additional cost to the Contractor.
- E. Install per manufacturer's specifications.
- F. Quantity of furnishings shall be as specified on plans.

3.2 INSTALLATION

- A. Installation of site furnishings and shade structures to be per manufacturer's recommendations and approved shop drawings.

3.3 PROTECTION

- A. Protect installed site furniture, if required, during the construction period to prevent damage and wear.

3.4 REPLACEMENT

- A. Replace all defective or damaged site furniture prior to Final Acceptance.

END OF SECTION 32 19 00

SECTION 32 31 13

GALVANIZED CHAIN LINK FENCE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, quality, product and performance requirements, and general and supplemental conditions apply as applicable to the project and project documents.

1.2 SUMMARY

- A. This Section includes chain link fence and gates specifications:

- 1. Galvanized steel chain link fabric
- 2. Galvanized steel framework and fittings
- 3. Installation

- B. Related Sections:

- 1. 32 13 13 - Concrete Paving

1.3 REFERENCES

- A. ASTM A392 Specification for Zinc-Coated Steel Chain-Link Fence Fabric
- B. ASTM A780 Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
- C. ASTM F552 Standard Terminology Relating to Chain Link Fencing
- D. ASTM F567 Standard Practice for Installation of Chain Link Fence
- E. ASTM F626 Specification for Fence Fittings
- F. ASTM F900 Specification for Industrial and Commercial Swing Gates
- G. ASTM F1043 Specification for Strength and Protective Coatings of Steel Industrial Chain Link Fence Framework
- H. ASTM F1083 Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structure

1.4 SUBMITTALS

- A. Shop drawings: Site plan showing layout of fence location with dimensions, location of gates and opening size, cleared area, elevation of fence, gates, footings, and details of attachments.
- B. Material samples: Provide a representative sample of chain link fabric, framework, and fittings.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Framework, posts, rails, fabric, and fittings for chain link fence system.

2.2 CHAIN LINK FABRIC

- A. Steel Chain Link Fabric: Height indicated on drawings.
 - 1. Zinc-Coated Steel Fabric: ASTM A392 hot dipped galvanized before weaving (GBW) or after weaving (GAW).
 - a. Class 1 - 1.2 oz/ft² (366 g/m²)
 - b. Class 2 - 2.0 oz/ft² (610 g/m²)
 - 2. Fabric Selection: Steel chain link mesh 2” in size (see below) and gauges produced in one-piece widths 3 feet (910 mm) to 12 feet (3660 mm)

Mesh Size	6 Gauge Core	9 Gauge Core	11 Gauge Core	11 Gauge Core ^{1/2}	12 Gauge Core	Notes
In. (mm)	0.192 in.	0.148 in.	0.120 in.	0.113 in.	0.105 in.	
	4.88 mm	3.76 mm	3.05 mm	2.87 mm	2.67 mm	N/A = Not applicable for
2 (50)	YES	YES	YES	N/A	N/A	Industrial/Commercial
1 3/4 (44)	YES	YES	YES	N/A	N/A	Applications
1 (25)	N/M	YES	YES	N/A	N/A	N/M = Not manufactured
5/8 (16)	N/M	YES	YES	YES	YES*	*12 ga. Only per F668
1/2 (13)	N/M	YES	YES	YES	YES*	
3/8 (10)	N/M	N/M	YES	YES	YES*	
	2170 lbf	1290 lbf	850 lbf	750 lbf	650 lbf	Wire Break Strength

	(9650 N)	(5740 N)	(3780 N)	(3340 N)	(2895 N)	
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3. Fabric selvage:
 - a. Standard fabric selvage for 2 in (50 mm) mesh 72 in. (1.8 m) high and higher is knuckle finish at one end, twist at the other.
 - b. Fabric less than 72 in (1.8 m), knuckle finish top and bottom, K&K.

2.3 ROUND STEEL PIPE FENCE FRAMEWORK

- A. Round steel pipe and rail: Schedule 40 standard weight pipe, in accordance with ASTM F1083, 1.8 oz/ ft² (550 g/m²) hot dip galvanized zinc exterior and 1.8 oz/ft² (550 g/m²) hot dip galvanized zinc interior coating.
 1. Regular Grade: Minimum steel yield strength 30,000 psi (205 MPa)
 2. High Strength Grade: Minimum yield strength 50,000 psi (344 MPa)
 - a. Line post 1-7/8” outside diameter
 - b. End, Corner, Pull post 2-7/8” outside diameter
 - c. Top, brace, bottom, and intermediate rails (at skatepark fencing only)
1.660 in. (42.2 mm)
OD: 1-1/4” outside diameter
- B. Typical post and rail size for normal Commercial / Industrial applications

Item	Fence Height	Outside Diameter Inches (mm)	*F1083 Schedule 40 Weight lb/ft (kg/m)	F1043-ic (LG-40) Weight lb/ft (kg/m)
Line post	Up to 6 ft. (1.8m)	1.900 (48.3)	2.72 (4.0)	2.28 (3.39)
	Over 6 to 8 ft. (1.8 to 2.4m)	2.375 (60.3)	3.65 (5.4)	3.12 (4.64)
	Over 8 to 12 ft. (2.4 to 3.7m)	2.875 (73.0)	5.79 (8.6)	4.64 (6.91)
	Over 12 to 16 ft. (3.7 to 4.9m)	4.000 (101.6)	9.11 (13.6)	6.56 (9.78)
Terminal Post	Up to 6 ft. (1.8m)	2.375 (60.3)	3.65 (5.4)	3.12 (4.64)
	Over 6 to 8 ft. (1.8 to 2.4m)	2.875 (73.0)	5.79 (8.6)	4.64 (6.91)
	Over 8 to 12 ft. (2.4 to 3.7m)	4.000 (101.6)	9.11 (13.6)	6.56 (9.78)
	Over 12 to 16 ft. (3.7 to 4.9m)	6.625 (168.3)	18.97 (28.2)	Not Available

		8.625 (219.1)	28.58 (42.5)	Not Available
Rails		1.660 (42.2)	2.27 (3.4)	1.84 (2.74)

*Regular Grade F1083 Schedule 40

2.4 TENSION WIRE

A. Metallic Coated Steel Marcellled Tension Wire: 7-gauge core (0.177 in.) (4.50 mm) marcellled wire complying with ASTM A824. Match the coating type to that of the chain link fabric.

1. Type II Zinc-Coated, ASTM A817 Class 4 - 1.2 oz/ft² (366 g/m²)
2. Type II Zinc-Coated, ASTM A817 Class 5 - 2.0 oz/ft² (610 g/m²)

2.6 FITTINGS

A. Tension and Brace Bands: Galvanized pressed steel complying with ASTM F626, minimum steel thickness of 12 gauge (0.105 in.) (2.67 mm), minimum width of 3/4 in. (19 mm) and minimum zinc coating of 1.20 oz/ft² (366 g/m²). Secure bands with 5/16 in. (7.94 mm) galvanized steel carriage bolts.

B. Terminal Post Caps, Line Post Loop Tops, Rail and Brace Ends, Boulevard Clamps, Rail Sleeves: In compliance to ASTM F626, pressed steel galvanized after fabrication having a minimum zinc coating of 1.20 oz/ft² (366 g/m²).

C. Truss Rod Assembly: In compliance with ASTM F626, 3/8 in. (9.53 mm) or 5/16" (7.94 mm) diameter steel truss rod with a pressed steel tightener, minimum zinc coating of 1.2 oz/ft² (366 g/m²), assembly capable of withstanding a tension of 2,000 lbs. (970 kg).

D. Tension Bars: In compliance with ASTM F626. Galvanized steel one-piece length 2 in. (50 mm) less than the fabric height. Minimum zinc coating 1.2 oz. /ft² (366 g/m²). Bars for 2 in. (50 mm) and 1 3/4 in. (44 mm) mesh shall have a minimum cross-section of 3/16 in. (4.8 mm) by 3/4 in. (19 mm).

2.9 SWING GATES

A. Swing Gates: Galvanized steel pipe welded fabrication in compliance with ASTM F900. Gate frame members 1.900 in. OD (48.3 mm). ASTM F 1083 schedule 40 galvanized steel pipes. Frame members spaced no greater than 8 ft. (2440 mm) apart vertically and horizontally. Welded joints are protected by applying zinc-rich paint in accordance with ASTM Practice A780. Positive locking gate latch, pressed steel galvanized after fabrication. Galvanized malleable iron or heavy gauge pressed steel post and frame hinges. Provide lockable drop bar and gate holdbacks with double gates. Match gate fabric to that of the fence system. Gateposts per ASTM F1083 schedule 40 galvanized steel pipes.

B. Gateposts: Regular Grade ASTM F1083 Schedule 40 pipe

Gate fabric height up to and including 6ft. (1.2m)

Gate leaf width	Post Outside Diameter	Weight
Up to 4 ft. (1.2m)	2.375 in. (60.3 mm)	3.65 lb/ft (5.4 kg/m)
Over 4 ft to 10ft. (1.2 to 3.05m)	2.875 in. (73.0 mm)	5.79 lb/ft (8.6 kg/m)
Over 10 ft to 18 ft. (3.05 to 5.5m)	4.000 in. (101.6 mm)	9.11 lb/ft (13.6 kg/m)
Gate fabric height over 6 ft. to 12 ft. (1.2 to 2.4m)		
Gate leaf width	Post Outside Diameter	Weight
Up to 6 ft. (1.8m)	2.875 in. (73.0 mm)	5.79 lb/ft (8.6 kg/m)
Over 6 ft. to 12 ft. (1.8 to 3.7m)	4.000 in. (101.6 mm)	9.11 lb/ft (13.6 kg/m)
Over 12 ft. to 18 ft. (3.7 to 5.5m)	6.625 in. (168.3 mm)	18.97 lb/ft (28.2 kg/m)
Over 18ft to 24 ft. (5.5 to 7.3m)	8.625 in. (219.1 mm)	28.58 lb/ft (42.5 kg/m)

2.11 CONCRETE

Concrete for post footings shall have a 28-day compressive strength of 2,500 psi. (17.2 MPa).

PART 3 – EXECUTION

3.1 CLEARING FENCE LINE

- A. Clearing: Surveying, clearing, grubbing, grading, and removal of debris for the fence line or any required clear areas adjacent to the fence is included in the general contractor's contract. The contract drawings indicate the extent of the area to be cleared and grubbed.

3.2 FRAMEWORK INSTALLATION

- A. Posts: Posts shall be set plumb in concrete footings in accordance with ASTM F567. Minimum footing depth, 24 in. (609.6 mm) plus an additional 3 in. (76.2 mm) depth for each 1 ft. (305 mm) increase in the fence height over 4 ft. (1220 mm). The minimum footing diameter will be four times the largest cross-section of the post up to a 4.00" (101.6 mm) dimension and three times the largest cross-section of the post greater than a 4.00" (101.6 mm) dimension. Local codes, site soil conditions, fence height, and wind load may require larger diameter or deeper footings - See Chain Link Manufactures Institute – Product Guide and Wind Load Guide CLFMI: WLG 2445. Top of the concrete footing to be at grade and crowned to shed water away from the post. Line posts were installed at intervals not exceeding 10 ft. (3.05 m) in the center.
- B. Top rail: When specified, install 21 ft. (6.4 m) lengths of rail continuously through the line post top. Splice rail using top rail sleeves minimum 6 in. (152 mm) long. Rail shall be secured to the terminal post by a brace band and rail end. Bottom rail or intermediate rail shall be field cut and secured to the line posts using boulevard clamps or brace bands with rail ends.

- C. Terminal posts: End, corner, pull, and gate posts shall be braced and trussed for fences 6 ft. (1.8 m) and higher and for fences 5 ft. (1.5 m) in height not having a top rail. The horizontal brace rail and diagonal truss rod shall be installed in accordance with ASTM F567.
- D. Tension wire: Shall be installed 4 in. (101.6 mm) up from the bottom of the fabric. Fences without top rail shall have a tension wire installed 4 in. (101.6 mm) down from the top of the fabric. Tension wire to be stretched taut, independently and prior to the fabric, between the terminal posts and secured to the terminal post using a brace band. Secure the tension wire to each line post with a tie wire.

3.3 CHAIN LINK FABRIC INSTALLATION

- A. Install fabric to the inside of the framework maintaining a ground clearance of no more than 2 inches (50 mm). Attach the fabric to the terminal post by threading the tension bar through the fabric; secure the tension bar to the terminal post with tension bands and 5/16 in. (7.94 mm) carriage bolts spaced no greater than 12 inches (304.8mm) on center. Small mesh fabric less than 1 in. (25 mm), attach to terminal post by sandwiching the mesh between the post and a vertical 2 in. wide (50mm) by 3/16 in. (4.76 mm) galvanized steel strap using carriage bolts, bolted thru the bar, mesh and post spaced 15 in. (381 mm) on center. The chain link fabric shall be stretched taut with no sagging. Fabric to be secured to the line post with tie wires spaced no greater than 12 inches (304.8 mm) on center and to horizontal rail spaced no greater than 18 inches (457.2 mm) on center. Aluminum alloy tie wire shall be installed following ASTM F567: Wrap the tie around the post or rail and attached to a fabric wire picket on each side of the post or rail by twisting the tie wire around the fabric wire picket two full turns, cut off excess wire and bend over to prevent injury. Secure the fabric to the tension wire by crimping hogs rings around a fabric wire picket and tension wire.

3.4 GATE INSTALLATION

- A. Swing Gates: Installation of swing gates and gateposts in compliance with ASTM F 567. Direction of swing shall be inward. Gates shall be plumb in the closed position having a bottom clearance of 3 in. (76 mm), grade permitting. Hinge and latch offset opening space shall be no greater than 3 in. (76 mm) in the closed position. Double gate drop bar receivers shall be set in a concrete footing minimum 6 in. (152 mm) diameter 24 in. (609.6 mm) deep. Gate leaf holdbacks shall be installed for all double gates.

3.5 NUTS AND BOLTS

- A. Bolts: Carriage bolts used for fittings shall be installed with the head on the secure side of the fence. All bolts shall be peened over to prevent removal of the nut.

3.6 CLEAN UP

- A. Clean Up: The area of the fence line shall be left neat and free of any debris caused by the installation of the fence.

END OF SECTION 32 31 13

SECTION 32 84 00

IRRIGATION SYSTEM

PART 1 – GENERAL

1.1 GENERAL CONDITIONS

The General Conditions and Special Conditions are a part of this section and the Contract for this work and apply to this section as fully as if repeated herein.

1.2 SCOPE OF WORK

- A. The scope of work includes the construction of an irrigation system for raised garden planters. The extent of the irrigation system is shown on the drawings. The work includes all services, labor, materials, transportation, and equipment necessary to perform the work as shown and/or noted on the drawings and/or as specified. The irrigation system shall be fully functional with all capabilities met.
- B. Landscape Contractor is responsible for close coordination with other contractors involved with grading, drainage, utilities, and construction of site elements. It is the responsibility of the Landscape Contractor to coordinate his work with other trades throughout the construction period, to avoid conflicts which may interrupt other trades' work progress.

1.3 RELATED SECTIONS

- A. No related sections

1.4 REFERENCES

The latest editions of standards and specifications published by the following organizations, and referenced herein, apply to the work only to the extent specified by the reference.

- A. American National Standards Institute (ANSI)
- B. American Society for Testing and Materials (ASTM)

1.5 SUBMITTALS

- A. Submit a list of irrigation system components and equipment to be used, manufacturer's brochures, maintenance manuals, warranties, and operating instructions, within three (3) weeks of notice to proceed. Provide an index sheet clearly identifying the product name, manufacturer/model number, any options, and the sheet number where the product cut sheet is located in the submittal package.
- B. Substitution of irrigation equipment from that specified on plans if proposed, shall provide in writing the proposed substitution for approval, prior to any installation.

1.6 GUARANTEE

At the conclusion of the Maintenance Period, the Landscape Contractor shall provide an irrigation system guarantee in accordance with the General Conditions, for a period of one (1) year from the date of final acceptance. The guarantee shall include non-settling of the backfill in trenches and excavations, which if occurs, shall be corrected, including repairs and/or replacement of any material damaged thereby or therefrom.

1.7 SITE OBSERVATION VISITS BY THE LANDSCAPE ARCHITECT

- A. In all cases where site observation visits of the irrigation system work are required and/or where portions of the work are specified to be performed under the direction and/or site observation of the Landscape Architect of Record, the Landscape Sub-Contractor shall notify the Landscape Architect of Record at least three (3) working days in advance of the time such site observations and/or directions are required.
- B. In all cases where site observation visits of the irrigation system work are required and/or where portions of the work are specified to be performed under the direction and/or site observation of the Landscape Architect of Record, the Landscape Subcontractor shall notify the Olivenhain Municipal Water District's Backflow and Cross Connection Coordinator at least three (3) working days in advance of the time such site observations and/or direction are required.
- C. Site observation will be required for the following work:
 - 1. Upon connecting to any existing mainline.
 - 2. Upon installation and testing of mainlines, when pipes are laid and are to be submitted to pressure tests. Lines shall not be covered until they have been checked and approved.
 - 3. Upon installation and testing of service and control systems, including any valves, backflow prevention devices, and control valves and wires.
 - 4. When the irrigation system is completed, the Landscape Contractor in the presence of the Landscape Architect of Record, shall perform a coverage test to determine if the coverage of water afforded planting areas is complete and adequate. The Landscape Contractor shall promptly furnish all materials and perform all work required to correct any inadequacies, without extra cost.
 - 5. A final site observation visit by Olivenhain Municipal Water District's Backflow and Cross Connection Coordinator to observe a performance test which shall be at the same time as the final site observation of the specified landscape maintenance period work.

1.8 TESTING

- A. P.V.C. mains shall be subjected to a pressure test of existing line pressure for a period of four (4) hours and shall be watertight. All shut-off valves to isolate the section of mainline to be tested shall be fully closed prior to testing. Testing will be done in sections as required per construction schedule.
- B. Water mains shall be tested as follows: (1) add water slowly to pipe to avoid water hammer damage, (2) bleed system at pressure gauge location to ensure all air is out of pipes, (3) pressurize system to line pressure for duration specified. Visually inspect for leaks while the system is under constant pressure.
- C. Authorization to proceed with installation shall be received prior to backfilling any trench. Do not cover any lines, sleeves, conduits, conductors, or fittings until they have been reviewed, and

authorization to proceed is given by the Landscape Architect of Record.

- D. Backflow prevention assembly shall be tested by a certified backflow preventer tester and tested until it passes. Provide certification to Owner, and a copy to Landscape Architect of Record.

1.9 RECORD DOCUMENTS

- A. Prior to final acceptance of work, the Landscape Contractor shall provide an electronic record set of drawings showing the irrigation system work. Utilize one complete set of irrigation drawings used for installing system, for indicating installed equipment. Make daily annotations thereon as project progresses, prior to burial of irrigation facilities. All items changed/relocated from original drawings shall be so indicated with the same symbol in the new location, the original symbol erased. All notes/callouts pertaining to the item shall be directed to the new location. All work shall be prepared in the same electronic format and version as the construction drawings and subject to the satisfaction of the County Project Manager.
- B. Immediately upon the installation of any pipe or equipment, the Landscape Contractor shall indicate on the drawings the locations of said pipe or equipment if changes have been made. All changes in direction of the mainline, all conduits and sleeves shall be noted on plans with size and depth.
- C. All, stub-outs, points of connection to water mains, sleeves, shall be located by measured dimensions, to the nearest one-half foot. Dimensions from two (2) different reference points minimum shall be given from permanent objects such as face of curbs, drain inlets, sidewalks, walls, structures, and driveways.
- D. Record drawings shall be signed and dated in black ink by the Landscape Contractor attesting to and certifying the accuracy of the record drawings. Landscape Contractor shall also include company name, supervisor's name, and company address and phone number on record drawings.

1.10 OPERATION AND MAINTENANCE MANUALS

- A. Prepare and deliver to the Program/Project Manager within ten calendar days prior to completion of construction, two (2) 3-ring hard cover binders containing the following information:
 - 1. Index sheet stating Landscape Contractor's address and telephone number, list of equipment with name and addresses of local manufacturers' representatives.
 - 2. Catalog and parts sheets on all material and equipment.
 - 3. Equipment warranties and certificates.
 - 4. Guarantee statement.
 - 5. Complete operating and maintenance instructions for all major equipment.
- B. In addition to the above-mentioned maintenance manuals, provide the County's maintenance personnel with instructions for maintaining major equipment and show evidence in writing to the Landscape Architect of Record at the conclusion of the project that this has been rendered.

1.11 GENERAL REQUIREMENTS

- A. Code requirements shall be those of State and Municipal Codes and Regulations locally governing this work, providing that any requirements of the Drawings and Specifications, not conflicting therewith, but exceeding the Code Requirements, shall govern unless written permission to the contrary is granted by the County.
- B. Extreme care shall be exercised at all times by the Landscape Contractor in excavating and working in the project area due to existing utilities and/or existing irrigation systems. Landscape Contractor shall be fully responsible for expenses incurred in the repair of damages caused by his operation.
- C. For the purpose of clarity, plan locations of hose bibs, splice boxes, existing facilities, backflow preventers, pressure regulators, and pipelines are diagrammatic and indicate the relative locations of all installations. Location and identification of existing irrigation facilities shall be field verified with the Landscape Architect of Record. Final locations of installations shall be determined by final site conditions and plantings prior to their installation with the Landscape Architect of Record present.
- D. All lines shall have a minimum horizontal and vertical clearance of 6" from each other and 6" from lines of other trades. Parallel lines shall not be installed directly over one another.
- E. Prior to starting any work, Landscape Contractor shall obtain a reading of existing available water pressure (no flow condition) at the designated point of connection and immediately submit written verification of pressure with date and time of recording to the Landscape Architect of Record. Any differences to stated pressure on plans and readings may cause changes directed by the Landscape Architect of Record. Failure of Contractor to provide stated information in the manner above will cause the Contractor to bear full responsibility in cost, installation and equipment changes or additions for any changes necessary for a fully functional irrigation system.
- F. Point of connection shall be approximately as shown on drawings. Connect new underground piping and valves and provide all flanges, adapters, or other necessary fittings for connection.
- G. Permission to shut off any existing in-use water line must be obtained 48 hours in advance, in writing from the Project Manager. The Landscape Contractor shall receive instructions from the Project Manager as to the exact length of time of each shut-off.
- H. Landscape Contractor shall acquaint himself with all site conditions and proposed site conditions as indicated on the plans and specifications, prior to any installation. Measure site planter areas and dimensions and compare them to drawing area dimensions. Do not proceed with installation in any area until conflicts between these measurements have been brought to the immediate attention of Landscape Architect of Record and resolved by and with the Landscape Architect of Record. Do not willfully install the irrigation system as shown on the drawings when it is obvious in the field that unknown obstructions, grade differences or grade discrepancies in area dimensions exist that might not have been considered during design. Such differences shall be brought to the immediate attention of the Landscape Architect of Record. In the event this notification is not performed, the Contractor shall assume full responsibility and costs involved for any revisions necessary.

1.12 QUALITY ASSURANCE

- A. Refer to Section 1.07 Site Observation Visits, for irrigation installation milestones and quality control measures.

B. Refer to Section 1.08 Testing, for testing and review of installed equipment.

PART 2 – PRODUCTS

2.1 POLYVINYL CHLORIDE PIPE

- A. All plastic piping and sleeving shall be integral white color, Type 1, Grade 1 (impact modified) designated as Polyvinyl Chloride (PVC), conforming to ASTM D1785 and ASTM D2441.
- B. PVC Plastic Pressure Lines: For piping upstream, shut-off valves, and quick coupling valves. All piping 2" and larger shall be Class 315 PVC 1120 (SDR 13.5). All piping 1-1/2" and smaller shall be Schedule 40 PVC.
- C. Plastic Non-Pressure Lines: For piping downstream of remote-control valves. All pipes shall be PVC SCH 40.
- D. Plastic Sleeves: Where required, sleeves shall be PVC SCH 80, sized at twice the diameter of the pipe to be sleeved, with a 2" minimum size.
- E. Identification: Furnish plastic pipe continuously and permanently marked with the following information: Manufacturer's name or trademark, size, schedule or class and type of pipe, working pressure rating at 73.4 degrees F., National Sanitation Foundation (NSF) rating, and date of extrusion.
- F. All plastic pipes shall conform to ASTM D2441.

2.2 COPPER PIPE

Copper pipe shall be Type K hard copper.

2.3 BRASS PIPE

Brass pipe shall be IPS Standard weight 125 pounds, 85% red brass.

2.4 FITTINGS AND CONNECTIONS

- A. Polyvinyl Chloride Pipe Fittings and Connections: Type I, Cell C1. 12454B, Schedule 40, high impact molded fittings, manufactured from virgin compounds as specified for piping tapered socket or molded thread type, suitable for either solvent weld or screwed connections. Machine-threaded fittings and plastic saddle and flange fittings are not acceptable. Furnish fittings permanently marked with the following information: Nominal pipe size, type, and schedule of material, and National Sanitation Foundation (NSF) seal of approval. PVC fitting shall conform to ASTM D2464 and D2466.
- B. Copper pipe fittings and connections: Type K hard copper.
- C. Brass Pipe Fittings and Connections: Standard 125-pound class 85% red brass fittings and connections, IPS threaded.
- D. Flexible risers shall be of line size IPS, PVC plastic threaded adaptors securely held to approximately 4.6" long synthetic rubber or flex-vinyl hose shanks, 85-pound minimum.

- E. Polyvinyl Chloride Schedule 80 Risers and Nipples: Type 1, Grade 1, Schedule 80, high impact molded, manufactured from virgin compounds as specified for piping and conforming to ASTM D-2464. Threaded ends shall be molded threads only. Machined threads are not acceptable.
- F. Swing joint assemblies for sprinklers shall be as indicated on the details or approved equal.
- G. PVC unions at valve assemblies shall be PVC SCH 80, molded and threaded inlet, and outlet.

2.5 SOLVENT CEMENTS AND THREAD LUBRICANT

- A. Solvent cement shall comply with ASTM D2564. Socket joints shall be made per recommended procedures for joining PVC plastic pipe and fittings with PVC solvent cement by the pipe and fitting manufacturer and procedures outlined in the Appendix of ASTM D2564.
- B. Thread lubricant shall be Teflon ribbon-type, suitable for threaded installations as per the manufacturer's recommendations.

2.6 BALL AND GATE VALVES

- A. Ball valves and gate valves shall be as specified in the irrigation legend or approved equal.

2.7 BACKFLOW PREVENTER ASSEMBLY

- A. The backflow preventer shall be an integral part of an assembly including two ball valves. Backflow preventers shall be brass, bronze, or epoxy-coated cast iron bodies with all bronze or stainless-steel trim and all moving parts of non-corrosive materials and shall completely and positively prevent back-siphoning of water. The backflow preventer assembly shall include inlet and discharge shutoff ball valves with all risers, connectors, and appurtenances of Class 1 red brass pipe, conforming to WW-P-351, and red brass fittings with pressure rating 1 conforming to WW-P-460. Backflow preventers shall be of the type and size designated in the irrigation legend.

2.8 Y-STRAINER

- A. The Y-strainer shall be cast of high tensile bronze, conforming with ASTM B-62, rated at 300 P.S.I. The internal screen shall be cylindrical, 20 mesh, constructed of stainless steel with tapered self-aligning seats. The Y-strainer shall be the type specified in the irrigation legend as part of the backflow preventer assembly.

2.9 PRESSURE REGULATOR

- A. Adjustable pressure regulator shall be as specified in the irrigation legend.

2.10 TRENCH MARKER TAPE

Water warning marker tape for pressure irrigation lines shall be "Alarm tape" manufactured by Christy, Paul Potter Warning Tape Inc., or approved equal.

2.11 EXTRA EQUIPMENT

- A. Landscape Subcontractor shall provide to the County:

1. Two (2) quick coupler keys with swivel hose ells of the type installed.
2. One hundred feet (100') of dripline of the type specified on this project.
3. Two (2) hand ratchet wrenches with sockets to match the size of locking bolts installed on valve boxes.

PART 3 – EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Locations on drawings are diagrammatic and approximate only and shall be changed and adjusted as necessary and as directed to meet existing conditions and obtain complete water access.
- B. Install and extend the system as shown on the drawings, and as necessary to carry out the intent of the Drawings and Specifications.
- C. Locate existing potable water lines and other underground utilities prior to digging irrigation trenches.
- D. All piping, whether existing installation or new, shall be kept free from dirt and debris that may potentially enter piping during construction and following construction. Should the Landscape Contractor's work cause contamination in the irrigation water and exhibit itself during construction and/or the maintenance period, the Landscape Contractor shall be responsible for decontaminating the entire irrigation system's components affected by contamination by flushing the debris out until water appears clear at the satisfaction of the Project Manager, at Landscape Contractor's expense. Components include, but are not limited to the following: mainlines, valves, sprinkler swing joints, sprinklers, and nozzles. The Landscape Contractor shall replace components where attempts at cleaning them prove unsuccessful. All work to decontaminate the system and put it back into satisfactory working order shall be completed within 48 hours of the time the condition is found and/or at the time of notification by the County.
- E. Landscape Contractor shall employ whatever means necessary to protect, lateral lines and mainlines installed, especially when working with other trades. Stake-out facilities; use flat, sturdy material to cover shallow buried piping as required throughout the construction period to minimize damage to the installation and to help prevent bodily injury. Employ removable barriers as required to keep public activity outside of construction areas.

3.2 INSTALLATION OF IRRIGATION SYSTEM

Excavation and backfilling of Trenches

- A. Excavate trenches, prepare subgrade, and backfill to line and grade with sufficient room for pipe fittings, testing, and inspecting operations. Do not backfill until the pipe system has been subjected to a hydrostatic test as specified. Do not cover any installed control wiring until it has been visually observed by the Landscape Architect of Record.
- B. Depth of Trench
 1. In Landscape: (from Soil Finish Grade to Top of Pipe or Tubing)

PVC Pressure Line (2-1/2" & smaller)	18" min.
PVC Pressure Line (3" & larger)	24" min.
PVC Non-Pressure Line with 4" to 6" Pop-Ups or Bubblers	12" min.
PVC Non-Pressure Line with 12" Pop-Ups	18" min.
Subterranean Dripline Tubing	4" min.

2. Under Pavement: (from Base Material to Top of Pipe)

PVC Pressure Line (2-1/2" & smaller)	24" min.
PVC Pressure Line (3" & larger)	36" min.
PVC Non-Pressure Line	18" min.

- C. Native soil backfill within 3" of piping shall be free of all rocks over 1" diameter, debris, and litter prior to use as backfill.
- D. Deposit soil on one side of the trench and on the opposite side, then install irrigation lines and test each section.
- E. Repair any leaks and replace all defective pipes or fittings until lines meet test requirements. Do not cover any lines until they have been checked and approved for tightness, quality of workmanship, and materials.
- F. Backfill trenches, after approval of piping, with suitable native soil, tamping soil around the pipe and thoroughly compacting all trench fills until 90% relative compaction has been achieved.
- G. Backfill material shall be approved soil, free from rocks and clods, trash, and other debris.

3.3 INSTALLATION OF POLYVINYL CHLORIDE PIPE

- A. Because of the nature of plastic pipe and fittings, exercise caution in handling, loading, and storing, to avoid damage.
- B. The pipe and fittings shall be stored under cover until using and shall be transported in a vehicle with a bed long enough to allow the length of the pipe to lay flat so as not to be subjected to undue bending or concentrated external load at any point.
- C. All pipe that has been dented or damaged shall be discarded unless such dent or damaged section is cut out and the pipe rejoined with a coupling.
- D. Trench depth shall be as specified above from the finish grade to the top of the pipe. The bottom of the trench shall be free of rocks, clods, and other sharp-edged objects.
- E. Pipe ends and fittings shall be wiped with "MEK" primer, or approved equal, prior to applying welding solvent. Welded joints shall be given a minimum of 15 minutes to set prior to moving or handling. All field cuts shall be beveled to remove burrs and excess material prior to fitting and gluing together.
- F. Pipe shall be snaked from side-to-side of trench bottom to allow forexpansion and contraction.
- G. Center load pipe at 10' intervals with small amount of backfill to prevent arching and slipping under pressure. Leave joints exposed for site observation during testing.
- H. No water shall be permitted in the pipe until a period of at least 24 hours has elapsed for solvent

weld setting and curing per manufacturer's recommendations.

- I. Plastic to metal joints shall be made with metal threaded couplings with PVC SCH 80 male adapters hand tightened, plus one turn with a strap wrench.
- J. Plastic to plastic joints shall be solvent-weld, assembled per pipe manufacturer's specifications and using solvent recommended by pipe manufacturer only.
- K. All pressure pipe shall have a continuous blue-colored metallic three (3) inch wide marker tape placed nine (9) inches below the finished grade directly above the buried pipe, or as detailed on the drawings.

3.4 INSTALLATION OF COPPER PIPE

- A. Cut copper piping by power hacksaw, circular cutting machine using an abrasive wheel, or hand hacksaw. No piping shall be cut with a metallic wheel cutter of any description. Ream and remove rough edges of burrs so smooth and unobstructed flow is obtained.
- B. Carefully and smoothly place thread lubricant on a male thread only. Tighten screwed joints with tongs or wrenches.
- C. Solder piping connections per pipe manufacturer's recommendations, using silver solder and flux.

3.5 INSTALLATION OF BRASS PIPE

- A. Cut brass piping by a power hacksaw, circular cutting machine using an abrasive wheel, or hand hacksaw. No piping shall be cut with a metallic wheel cutter of any description. Ream and remove rough edges of burrs so smooth and unobstructed flow is obtained.
- B. Carefully and smoothly place thread lubricant on a male thread only. Tighten screwed joints with tongs or wrenches. Caulking is not permitted.

3.6 INSTALLATION OF SLEEVING AND CONDUIT

- A. Sleeving and conduit shall extend twelve inches (12") beyond the farthest edge of pavement, wall, or structure on each end of the sleeve.
- B. Provide removable non-decaying plugs at ends of conduits to prevent entrance of earth. No cloth or cloth Duct tape. Dry-fitted PVC cap is advised.
- C. Refer to specific plan notes and details for installation. Exercise extreme caution when working near drainage system lines, structures, and walls. Ensure these facilities have been staked out prior to any installation.

3.7 BALL AND GATE VALVE INSTALLATION

Install all ball valves and gate valves where shown on drawings and as shown on the detail drawings. Install one valve per box. Do not locate in paving.

3.8 PRESSURE REGULATOR INSTALLATION

Install adjustable pressure regulator where shown on drawings and per manufacturer's instructions. Set pressure to the minimum pressure setting for equipment controlled on the system, at the worst-case scenario.

3.9 Y-STRAINER INSTALLATION

The Y-strainer shall be installed as an integral part of the backflow preventer assembly as shown in the irrigation details.

3.10 FLUSHING OF SYSTEMS

After piping and risers are in place, prior to hose bib installation, a full head of water shall be used to flush out the system. After the system is thoroughly flushed, cap all risers.

3.11 CLEAN-UP

As the project progresses, the Landscape Contractor shall maintain all areas in a neat manner and remove unsightly debris, as necessary. After completion of the project, the Landscape Contractor shall remove all debris and containers used in accomplishing work. He shall sweep and clean all sidewalks, asphalt, and concrete areas, and clean all vertical surfaces affected by his work, to the satisfaction of the Project Manager.

END OF SECTION 32 84 00

Appendix A

FLEET COMPLIANCE CERTIFICATION

Bidder hereby acknowledges that they have reviewed the California Air Resources Board's policies, rules and regulations and are familiar with the requirements of Title 13, California Code of Regulations, Division 3, Chapter 9, effective on January 1, 2024 (the "Regulation"). Bidder hereby certifies, subject to penalty for perjury, that the option checked below relating to the Bidder's fleet, and/or that of their subcontractor(s) ("Fleet") is true and correct:

- The Fleet is subject to the requirements of the Regulation, and the appropriate Certificate(s) of Reported Compliance have been attached hereto.
- The Fleet is exempt from the Regulation under section 2449.1(f)(2), and a signed description of the subject vehicles, and reasoning for exemption has been attached hereto.
- Bidder and/or their subcontractor is unable to procure R99 or R100 renewable diesel fuel as defined in the Regulation pursuant to section 2449.1(f)(3). Bidder shall keep detailed records describing the normal refueling methods, their attempts to procure renewable diesel fuel and proof that shows they were not able to procure renewable diesel (i.e. third party correspondence or vendor bids).
- The Fleet is exempt from the requirements of the Regulation pursuant to section 2449(i)(4) because this Project has been deemed an Emergency, as defined under section 2449(c)(18). Bidder shall only operate the exempted vehicles in the emergency situation and records of the exempted vehicles must be maintained, pursuant to section 2449(i)(4).
- The Fleet does not fall under the Regulation or is otherwise exempted, and a detailed reasoning is attached hereto.

Name of Bidder: _____

Signature: _____

Name: _____

Title: _____

Date: _____

CONSTRUCTION DOCUMENTS FOR: STAGECOACH COMMUNITY PARK - COMMUNITY GARDEN

3420 CAMINO DE LOS COCHES, CARLSBAD, CA 92009

FINAL SUBMITTAL

"DECLARATION OF RESPONSIBLE CHARGE"
I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.
I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CARLSBAD DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.
FIRM: RICK ENGINEERING
ADDRESS: 5620 FRIARS ROAD,
CITY, ST.: SAN DIEGO, CA 92110
TELEPHONE: (619) 291-0707

PE NO.: 56891
REGISTRATION EXPIRATION DATE: 06/30/2025
SIGNATURE: *Karen Van Ert*
DATE: 03-07-2024
PE NO.: 3247
REGISTRATION EXPIRATION DATE: 11/30/2025
SIGNATURE: *Patricia Trauth*
DATE: 03-07-2024

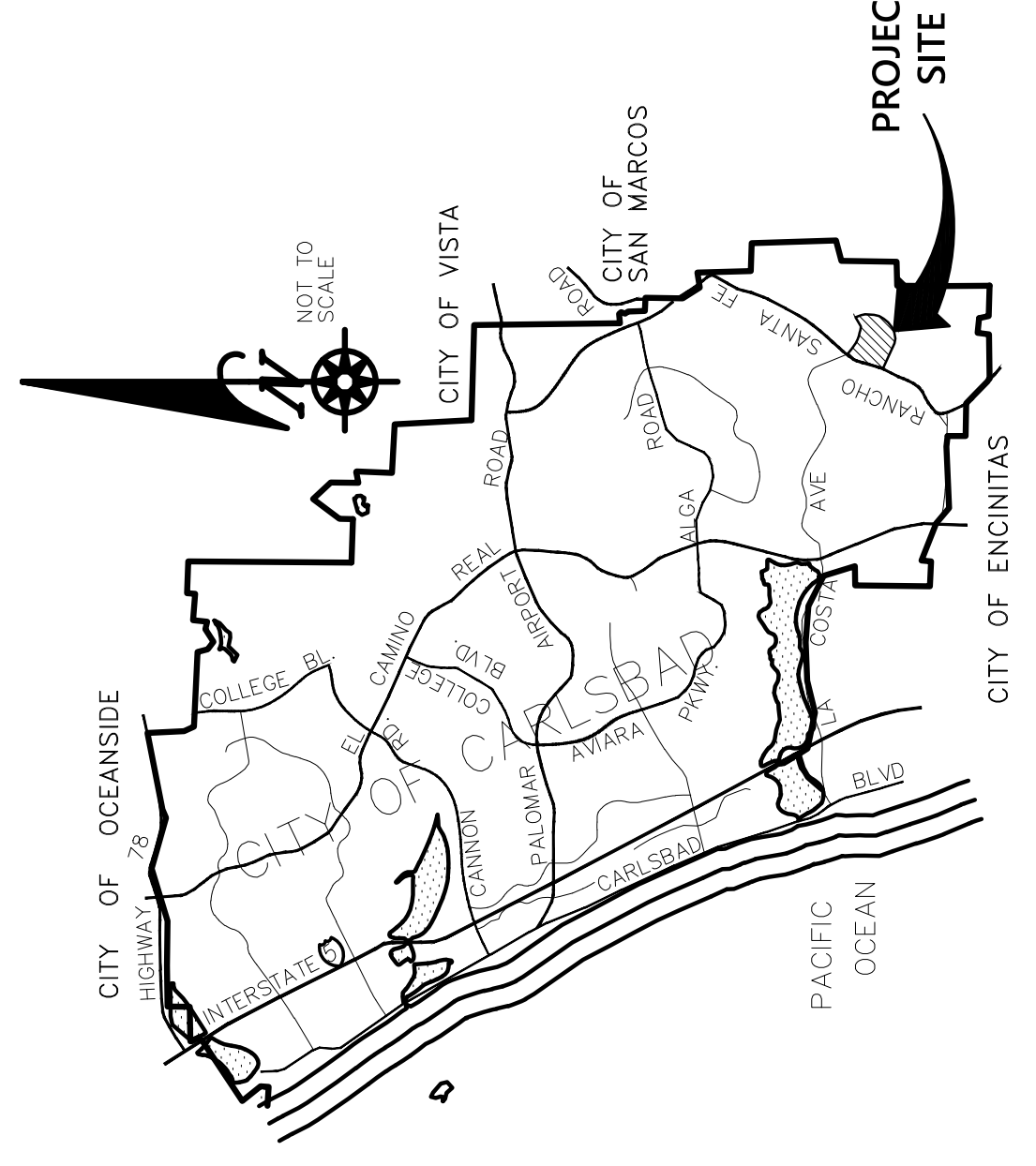
SS.a - For Concrete compressive strength more than 2500 PSI, CBC 1705.3
In accordance with Chapter 17 of the California Building Code the following must be completed when work being performed requires special inspection, structural observation, and construction material testing.

Project Permit: _____
Project Address: _____
A. THIS SECTION MUST BE COMPLETED BY THE PROPERTY OWNER/AUTHORIZED AGENT. Please check if you are Owner-Builder
 (If you checked as owner-builder you must also complete Section B of this agreement.)
Name: (Please print) _____ (Last) _____ (First) _____ (Middle)
Mailing Address: _____ Phone: _____
Email: _____
I am: Property Owner Property Owner's Agent of Record
 Architect of Record Engineer of Record

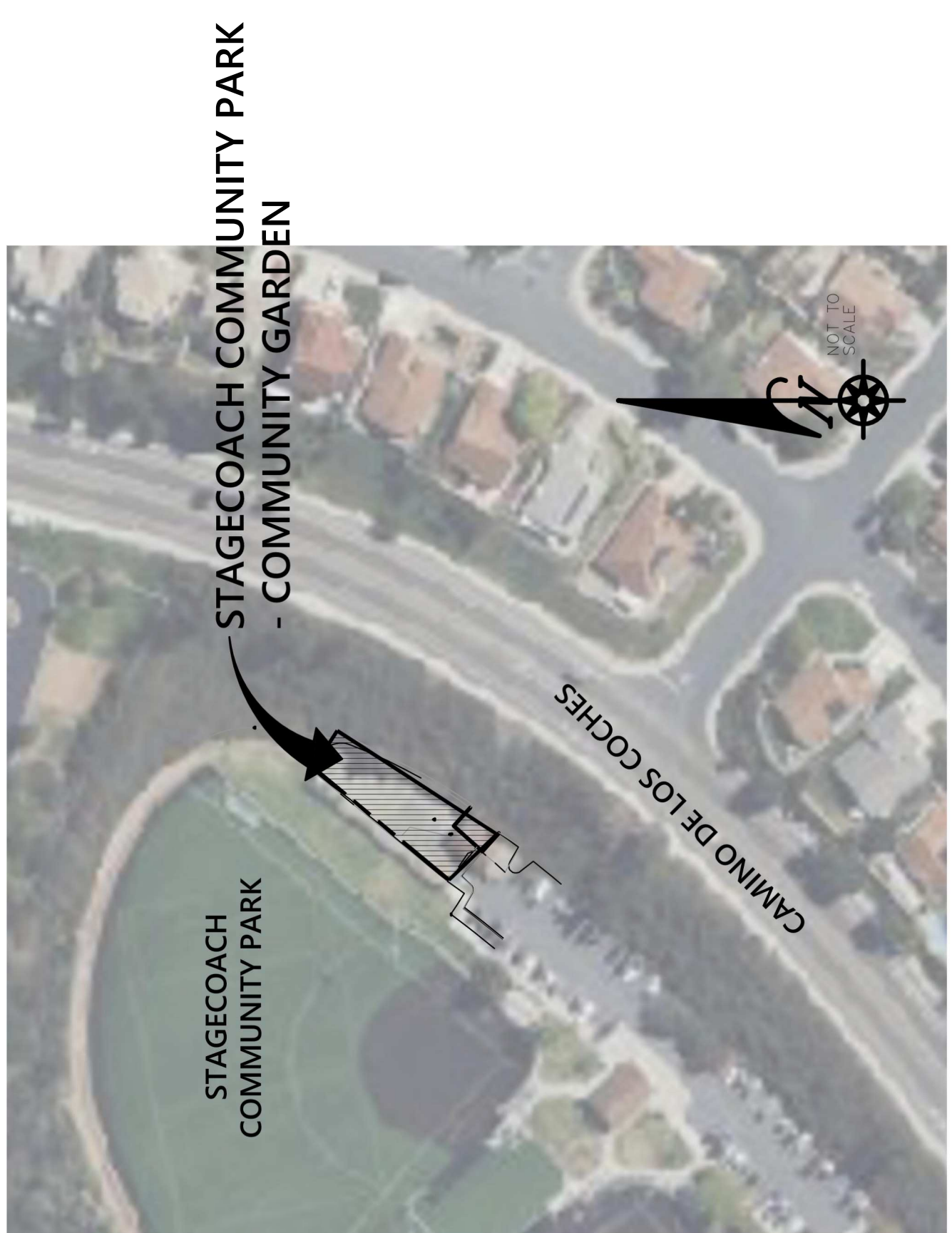
Slate of California Registration Number: _____
Expiration Date: _____
AGREEMENT: I, the undersigned, declare under penalty of perjury under the laws of the State of California, that I have read, understand, acknowledge and promise to comply with the City of Carlsbad requirements for special inspections, structural observations, construction materials testing and off-site fabrication of building components, as prescribed in the statement of special inspections noted on the approved plans and, as required by the California Building Code.
Signature: _____ Date: _____
B. CONTRACTOR'S STATEMENT OF RESPONSIBILITY (07 CBC, Ch 17, Section 1706). This section must be completed by the contractor/builder/owner-builder.
Contractor's Company Name: _____
Please check if you are Owner-Builder
Name: (Please print) _____ (Last) _____ (First) _____ (Middle)
Mailing Address: _____ Phone: _____
Email: _____
Slate of California Contractor's License Number: _____
Expiration Date: _____
 I acknowledge and am aware, of special requirements contained in the statement of special inspections noted on the approved plans;
 I acknowledge that control will be exercised to obtain conformance with the construction documents approved by the building official;
 I will have in-place procedures for exercising control within our (the contractor's) organization, for the method and frequency of reporting and the distribution of the reports; and
 I certify that I will have a qualified person within our (the contractor's) organization to exercise such control.
 I will provide a final report / letter in compliance with CBC Section 1704.1.2 prior to requesting final inspection.
Signature: _____ Date: _____

SS.B - FIELD WELDING CBC 1705.2.5
WELDING SHALL BE DONE BY A CERTIFIED WELDER USING THE SHIELDED ARC PROCESS AND E80 SERIES ELECTRODES. WELDS SHALL BE FULL SECTION, FULL PENETRATION AND SHALL DEVELOP THE FULL STRENGTH OF THE SMALLER OF THE PARTS JOINED UNLESS THE PLANS SHOW OTHERWISE. ALL SHOP WELDING SHALL BE DONE USING THE SHIELDED ARC PROCESS BY CERTIFIED WELDERS USING APPROVED ELECTRODES. NO FIELD WELDING WITHOUT SPECIAL INSPECTION. ALL WELDING PER AWS D1.1. USE E8010 ELECTRODES. NO FIELD WELDING IS EXPECTED TO BE A PART OF THIS PROJECT.

VICINITY MAP



LOCATION MAP



PROJECT DIRECTORY

OWNER:
CITY OF CARLSBAD
PARKS AND RECREATION DEPARTMENT
3906 HARDING ST.
CARLSBAD, CA 92008
PHONE: (442) 338-5724
CONTACT: MICHAEL TULLY

LANDSCAPE ARCHITECT:
RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
PHONE: (619) 291-0707
CONTACT: PATRICIA TRAUTH

SURVEYOR:
RICK ENGINEERING COMPANY
5620 FRIARS ROAD,
SAN DIEGO, CA 92110
PHONE: (619) 278-6613
CONTACT: BRIAN JAQUES

SOURCE OF TOPOGRAPHY

TOPOGRAPHY SHOWN ON THESE PLANS WAS GENERATED BY GPS METHODS FROM INFORMATION GATHERED ON 11/11/2022 BY RICK ENGINEERING. TOPOGRAPHY SHOWN HEREON CONFORMS TO NATIONAL MAP ACCURACY STANDARDS.

PROJECT LOCATION

THIS PROJECT IS LOCATED WITHIN ASSESSORS PARCEL NUMBER(S) 223-066-6-1
THE CALIFORNIA COORDINATE INDEX OF THIS PROJECT IS N 1970 E 6255.
APN10: 2230606100, APN10: 2230606000, APN10: 2230605100

BENCHMARK

DESCRIPTION: WELL MONUMENT IN THE CENTER OF THE SOUTHEAST END OF BULB CUL-DE-SAC OF SITO BORDER
LOCATION: 0.1 MI. SOUTHEASTERLY OF AVENIDA DIESTRO AND 47.5 FT. NORTHWESTERLY OF STREET LIGHT
RECORDED: ROS 11721
ELEVATION: 369.53
DATUM: NGVD 88
ZONING: P-C PLANNED COMMUNITY ZONE
GENERAL PLAN LAND USE: OS
TOTAL AREA OF WORK: 6,700 SF

LEGAL DESCRIPTION

PORTIONS OF LOT 9 AND LOT 5 OF LA COSTA, IN THE CITY OF CARLSBAD COUNTY OF SAN DIEGO, ACCORDING TO MAP NO. 13524 FILED IN OFFICE OF THE COUNTY RECORDER.

WORK TO BE DONE:

THE IMPROVEMENT WORK SHALL BE PERFORMED IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE FOLLOWING DOCUMENTS, CURRENT AT THE TIME OF CONSTRUCTION PLEASE SEE CONTRACT FOR PRECEDENT OF ALL DOCUMENTS THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

- CARLSBAD MUNICIPAL CODE
- CITY OF CARLSBAD ENGINEERING STANDARDS
- THIS SET OF PLANS
- RESOLUTION NO. N/A DATED N/A
- THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK).
- SOILS REPORT AND RECOMMENDATIONS BY N/A
- THE SAN DIEGO REGIONAL STANDARD DRAWINGS AND AS MAY BE MODIFIED BY THE CITY OF CARLSBAD STANDARDS.
- CALIFORNIA COASTAL COMMISSION DEVELOPMENT PERMIT CONDITIONS
- ENVIRONMENTAL APPROVAL DOCUMENTS DATED N/A
- TIER 2 STORM WATER POLLUTION PREVENTION PLAN PREPARED BY RICK ENGINEERING COMPANY, DATED 2024
- CALIFORNIA STORM WATER QUALITY ASSOCIATION BMP CONSTRUCTION HANDBOOK AND CALTRANS CONSTRUCTION SITE BMP MANUAL.

SHEET INDEX

NO	TITLE SHEET	SHEET NUMBER
1	TITLE SHEET	T.01
2	NOTES AND DETAILS	C.01
3	SURVEY PLAN	C.02
4	DEMOLITION PLAN	C.03
5	PRECISE GRADING PLAN	C.04
6	PRECISE GRADING PLAN	C.05
7	WALL PROFILE	C.06
8	EROSION CONTROL PLAN	C.07
9	CONSTRUCTION LEGEND AND NOTES	L.01
10	CONSTRUCTION PLAN 1	L.02
11	CONSTRUCTION PLAN 2	L.03
12	CONSTRUCTION DETAILS 1	L.04
13	CONSTRUCTION DETAILS 2	L.05
14	CONSTRUCTION DETAILS 3	L.06
15	CONSTRUCTION DETAILS 4	L.07
16	CONSTRUCTION DETAILS 5	L.08
17	CONSTRUCTION DETAILS 6	L.09
18	IRRIGATION LEGEND AND NOTES	L.01
19	IRRIGATION PLAN	L.02
20	IRRIGATION DETAILS	L.03
21	SHADE SAIL DETAILS	L-10
22	WUNDER - COVER DETAILS	C.08

SCOPE OF WORK

STAGECOACH PARK COMMUNITY GARDEN INCLUDES THE FOLLOWING IMPROVEMENTS: GRADING, GARDEN BEDS, SHADE STRUCTURE, FENCING, RETAINING WALL, AND IRRIGATION

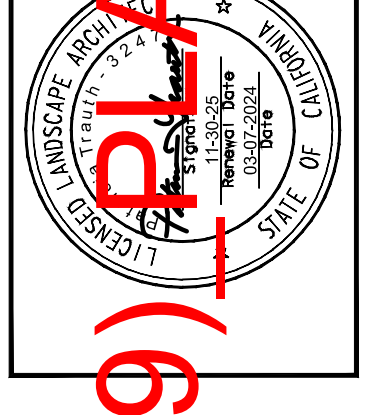
GOVERNING AGENCIES AND UTILITY CONTACTS

- UNDERGROUND SERVICE ALERT (800)227-4260
- BUILDING CITY OF CARLSBAD CARLSBAD, CA 92008 (760) 902-2700
- GAS AND ELECTRICITY SAN DIEGO
- GAS & ELECTRIC CITY OF CARLSBAD 2560 ORION WAY OCEANSIDE, CA 92054 (760) 931-2141
- SEWER CITY OF CARLSBAD 5620 FRIARS ROAD CARLSBAD, CA 92008
- POLICE CITY OF CARLSBAD 2560 ORION WAY CARLSBAD, CA 92008 (760) 931-2131
- STORMWATER CITY OF CARLSBAD 1635 FARADAY AVENUE CARLSBAD, CA 92008
- WATER DISTRICT OLIVENHAIN MUNICIPAL WATER DISTRICT 6221 EL MONTE BLVD. ENIGNITY, CA 92024 (760) 753-6466

"AS BUILT"

RCE _____ EXP _____ DATE _____
REVIEWED BY: _____
INSPECTOR _____ DATE _____

SHEET 1
CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN
T.01 TITLE SHEET
ACCEPTED BY: _____ DATE: 4/16/2024
DWN BY: EM PROJECT NO. 4611 DRAWING NO. 547-4
CHKD BY: JY
R/WVD BY: JL



DIGITAL PLAN V1 4/12/24
PREV 2024-0059 (CBR 2024-0039)
Carlsbad Parks & Recreation
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
AT LEAST TWO DAYS BEFORE YOU DIG

GRADING NOTES

(IN ADDITION TO THE REQUIREMENTS OF CHAPTER 15.16 OF THE CARLSBAD MUNICIPAL CODE.)

- APPROVAL OF THIS PLAN DOES NOT LESSEN OR WAIVE ANY PORTION OF THE CARLSBAD MUNICIPAL CODE, RESOLUTION OF CONDITIONAL APPROVAL, CITY STANDARDS OR OTHER PROTECTION DOCUMENTS LISTED HEREON AS THEY MAY REMAIN IN EFFECT. THIS PROJECT ENGINEER IS RESPONSIBLE TO CHARGE SHEET WITH THESE PLANS WHEN DOES NOT REFLECT THE DESIGNER'S INTENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OF ERRORS AND OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR APPROVAL.
- NO WORK SHALL BE COMMENCED UNTIL ALL PERMITS HAVE BEEN OBTAINED FROM THE CITY AND OTHER APPROPRIATE AGENCIES.
- NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE CITY ENGINEER. NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND THE TITLE SHEET.
- ORIGINAL DRAWINGS SHALL BECOME THE PROPERTY OF THE CITY UPON BEING SIGNED BY THE CITY ENGINEER.
- THE ORIGINAL DRAWING SHALL BE REVISED TO REFLECT AS-BUILT CONDITIONS BY THE ENGINEER-OF-WORK PRIOR TO FINAL ACCEPTANCE OF THE WORK BY THE CITY.
- ACCESS FOR FIRE AND OTHER EMERGENCY VEHICLES SHALL BE MAINTAINED TO THE PROJECT SITE AT ALL TIMES DURING CONSTRUCTION.
- A PRECONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE BEGINNING OF WORK AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR THE PROJECT. THE CONTRACTOR WILL BE CONTACTED BY THE PROJECT INSPECTOR TO COORDINATE A DATE AND TIME FOR THE PRECONSTRUCTION MEETING. APPROVED DRAWINGS MUST BE AVAILABLE PRIOR TO SCHEDULING. THE GRADING PERMIT WILL BE PROVIDED BY THE PROJECT INSPECTOR AT THE MEETING.
- ALL INSPECTION REQUESTS OTHER THAN FOR PRECONSTRUCTION MEETING WILL BE MADE BY CALLING THE ENGINEERING 24-HOUR INSPECTION REQUEST LINE AT (760) 438-3891. INSPECTION REQUEST MUST BE RECEIVED PRIOR TO 2:00 P.M. THE WORKING DAY BEFORE THE INSPECTION IS NEEDED. REQUESTS MADE AFTER 2:00 P.M. WILL BE SCHEDULED FOR TWO FULL WORK DAYS LATER.
- THE OWNER AND/OR APPLICANT THROUGH THE DEVELOPER AND/OR CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
- THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE CITY ENGINEER AND/OR CONCERNED AGENCY SHOWING THE DESIGN OF SHORING, BRACING SLOPING OR OTHER PROVISIONS TO BE MADE TO PROTECT FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE (5) FEET OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY. ESTABLISHMENT OF THE CONSTRUCTION SAFETY PROGRAM SYSTEM STANDARDS (ESTABLISHMENT OF THE CONSTRUCTION SAFETY PROGRAM) BY A REGISTERED ENGINEER AT THE CONTRACTORS' EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
- ALL OPERATIONS CONDUCTED ON THE SITE OR ADJACENT THERETO, INCLUDING WASHING, GRADING, PAVING, CONSTRUCTION EQUIPMENT AND ANY OTHER ASSOCIATED GRADING EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 6:00 P.M. EACH DAY, MONDAY THRU FRIDAY AND NO EARTHMOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON WEEKENDS OR HOLIDAYS. (A LIST OF CITY HOLIDAYS IS AVAILABLE AT THE ENGINEERING DEPARTMENT COUNTER.)
- ALL OFF-SITE HAUL ROUTES SHALL BE SUBMITTED BY THE CONTRACTOR TO THE CITY INSPECTOR FOR APPROVAL TWO FULL WORKING DAYS PRIOR TO BEGINNING OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEBRIS OR DAMAGE TO THE HAUL ROUTE OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
- IMPORT MATERIAL SHALL BE OBTAINED FROM, AND WASTE MATERIAL SHALL BE REMOVED FROM, THE PROJECT SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEBRIS OR DAMAGE OCCURRING ALONG THE HAUL ROUTES OR ADJACENT STREETS AS A RESULT OF THE GRADING OPERATION.
- BRUSH SHALL BE REMOVED ONLY WITHIN THE AREA TO BE GRADED. NO TREES ARE TO BE REMOVED UNLESS SPECIFICALLY NOTED ON THE PLAN.
- ALL AREAS SHALL BE GRADED TO DRAIN, GRADING RESULTING IN THE PONDING OF WATER IS NOT PERMITTED. ALL EARTHEN SWALES AND DITCHES SHALL HAVE A MINIMUM ONE PERCENT SLOPE.
- THESE PLANS ARE SUBJECT TO A SIGNED AND APPROVED SWPPP AND/OR SET OF EROSION CONTROL PLANS. EROSION CONTROL SHALL BE AS SHOWN AND AS APPROVED BY THE CITY ENGINEER OR AS DIRECTED BY THE PROJECT INSPECTOR.
- ALL SLOPES SHALL BE TRIMMED TO A FINISH GRADE TO PRODUCE A UNIFORM SURFACE AND CROSS SECTIONS. THE SITE SHALL BE LEFT IN A NEAT AND ORDERLY MANNER. ALL EXCESS MATERIAL SHALL BE REMOVED AND DISPOSED AT A SITE APPROVED BY THE CITY ENGINEER.
- ALL SLOPES SHALL BE BROADCAST, STABILIZED, PLANTED AND/OR HYDROSEEDED WITHIN TEN (10) DAYS OF THE TIME EACH SLOPE IS BROUGHT TO GRADE AS SHOWN ON THE APPROVED GRADING PLANS.
- LANDSCAPING SHALL BE ACCOMPLISHED ON ALL SLOPES AND PADS AS REQUIRED BY THE CITY OF CARLSBAD LANDSCAPE MANUAL. THE LANDSCAPING PLANS FOR THIS PROJECT, DRAWING NO. _____ AND/OR AS DIRECTED BY THE CITY ENGINEER OR PLANNING DIRECTOR.
- THE OWNER/APPLICANT SHALL INSURE THAT ALL CONTRACTORS SHALL COORDINATE THE WORK OF THESE GRADING PLANS WITH THAT SHOWN ON BOTH THE LANDSCAPE AND IRRIGATION PLANS AND THE IMPROVEMENT PLANS AS REQUIRED FOR THIS WORK IN ACCORDANCE WITH THE LANDSCAPE MANUAL. TIME REQUIREMENTS.
- WHERE AN EXISTING PIPE LINE IS TO BE ABANDONED AS A RESULT OF THE GRADING OPERATION, IT SHALL BE REMOVED WITHIN TWENTY FEET OF BUILDING OR STREET AREAS AND REPLACED WITH PROPERLY COMPACTED SOILS. IN OTHER AREAS, IT SHALL BE PLOUGED WITH CONCRETE OR REMOVED AS APPROVED BY THE CITY ENGINEER.
- THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF UTILITY FACILITIES OR STRUCTURES NOT SHOWN ON A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.

- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVE GROUND AND UNDER GROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF GRADING TO PERMIT THE REVISION OF THE GRADING PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
- THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST 2 FULL WORKING DAYS PRIOR TO STARTING GRADING NEAR THEIR FACILITIES AND SHALL COORDINATE THE WORK WITH A COMPANY REPRESENTATIVE. UNDERGROUND SERVICE ALERT (800)422-4133 (800)411-7343 (800)892-0123 SOG&E (760)438-1741 AT&T (760)434-2880 CITY OF CARLSBAD (STREETS & STORM DRAIN) (760)434-2880 CITY OF CARLSBAD (SEWER WATER & RECLAIMED WATER) (760)438-2722 SAN DIEGO WATER DISTRICT (760)633-2650 LEUCADIA WASTEWATER DISTRICT (760)753-0155 VALLECITOS WATER DISTRICT (760)744-0460 OLIVENHAIN WATER DISTRICT (760)753-6466 BUENA SANITATION DISAS APPROPRIATE (760)726-1540 #1530
- GRADING SHALL BE DONE WITHIN A TOLERANCE OF 0.1' +/- OF THE GRADES AND ELEVATIONS SHOWN ON THE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN 0.5' +/- OF THE LOCATION SHOWN ON THE PLANS. IN NO WAY DO THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH SURFACE THAT WILL NOT POND.

WORK TO BE DONE

THE GRADING WORK SHALL CONSIST OF THE CONSTRUCTION OF ALL CUTS AND FILLS, REMEDIAL GRADING, DRAINAGE FACILITIES, EROSION CONTROL FACILITIES, AND PLANTING OF PERMANENT LANDSCAPING AND PREPARATION OF AS-BUILT GRADING PLANS, AS-BUILT GEOLOGIC MAPS AND REPORTS, ALL AS SHOWN OR REQUIRED ON THIS SET OF PLANS AND THE CITY STANDARDS, SPECIFICATIONS, REQUIREMENTS, RESOLUTIONS AND ORDINANCES CITED ON THESE PLANS. THE GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS CURRENT AT THE TIME OF CONSTRUCTION, AS DIRECTED BY THE CITY ENGINEER.

- CARLSBAD MUNICIPAL CODE
- CITY OF CARLSBAD ENGINEERING STANDARDS
- THIS SET OF PLANS
- THE STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION (GREEN BOOK)
- THE SAN DIEGO REGIONAL STANDARD DRAWINGS AND AS MAY BE MODIFIED BY THE CITY OF CARLSBAD STANDARDS.
- CALIFORNIA STORM WATER QUALITY ASSOCIATION BMP CONSTRUCTION HANDBOOK AND CALTRANS CONSTRUCTION BMP MANUAL.

LEGEND

PROPOSED

IMPROVEMENT	STANDARD DMGS.	SYMBOL
3 1/4" x 5" AC PAVEMENT PER SCHEDULE J	C-07	
PAVERS	PER LANDSCAPE DETAIL	
GRIND AND OVERLAY	DETAIL THIS SHEET	
GRADE BREAK		
ADA PATH		
DECOMPOSED GRANITE	PER LANDSCAPE DETAIL	
RETAINING WALL	C-02, C-08, C-09	

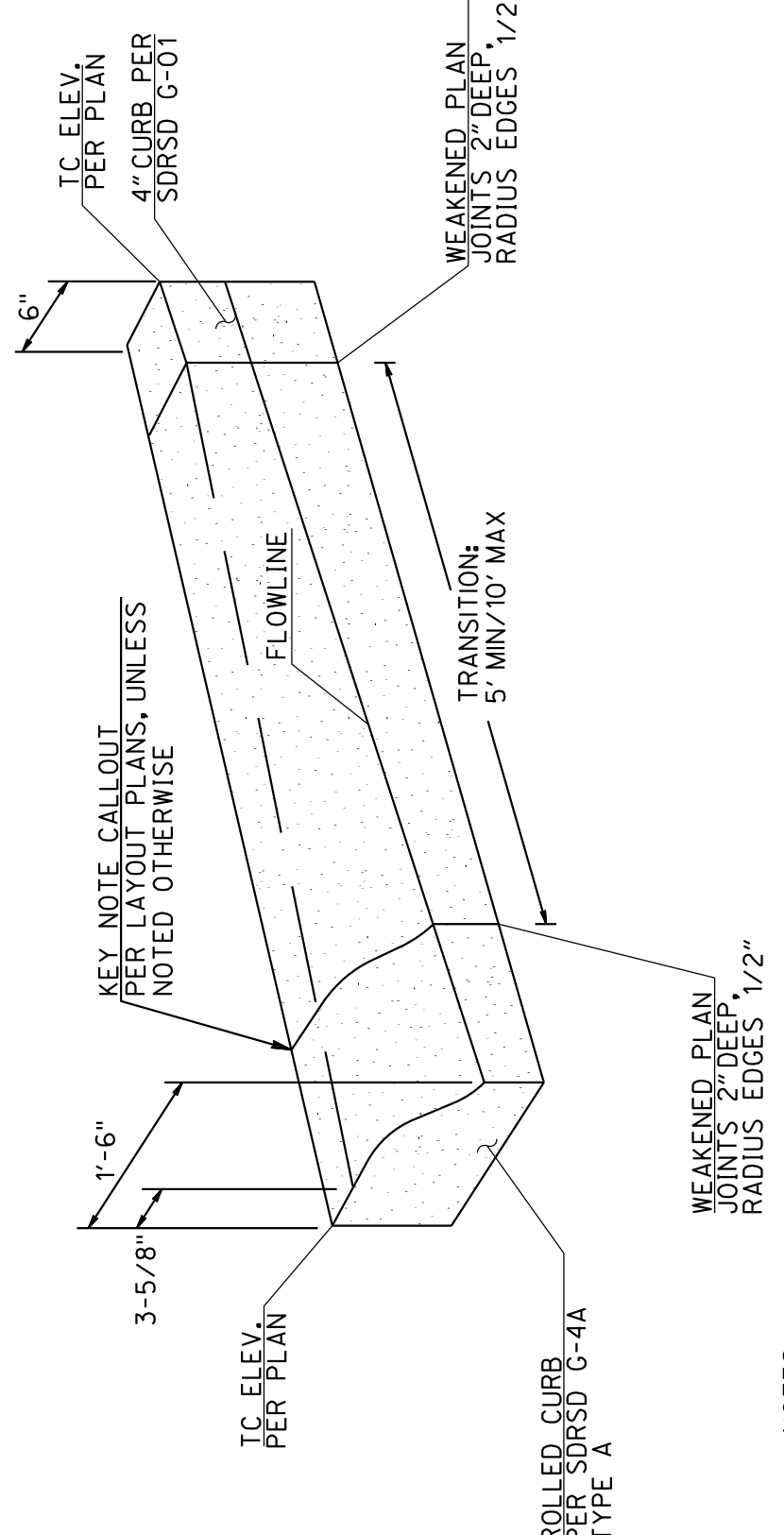
POST-CONSTRUCTION BMP TABLE

STORMWATER REQUIREMENTS THAT APPLY:	EXEMPT FROM TRASH CAPTURE?	EXEMPT FROM HYDROMODIFICATION?			
<input checked="" type="checkbox"/> STANDARD STORMWATER REQUIREMENTS	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> YES			
<input type="checkbox"/> PRIORITY PROJECT REQUIREMENTS	<input type="checkbox"/> NO	<input type="checkbox"/> NO			
TYPE	DESCRIPTION	OWNERSHIP	MAINTENANCE AGREEMENT	SHEET NO.	MAINTENANCE FREQUENCY

GRADING QUANTITIES

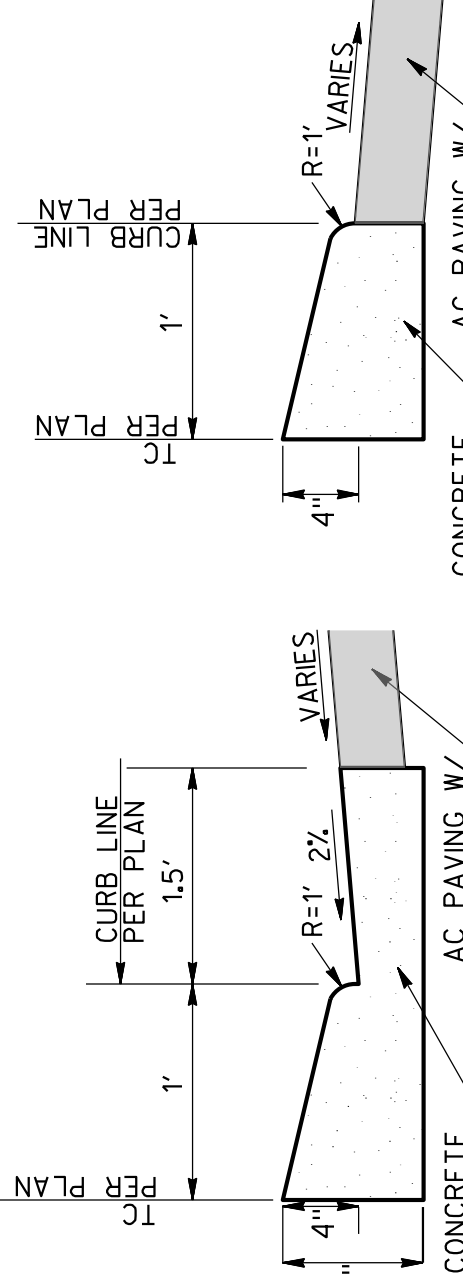
GRADED AREA = 0.2 ACYD
EXCAVATE AND FILL 22 CYD
IMPORT 6 CYD

THIS PROJECT PROPOSES TO IMPORT 6 CUBIC YARDS OF MATERIAL TO THIS SITE.



4" CURB TO ROLLED CURB TRANSITION PER SDRSD G-04B

- NOT TO SCALE
- NOTES:
1. REFER TO RSD, G-1 AND G-4A FOR SPECIFIC DIMENSIONS RELATED TO EACH TYPE OF CURB.
2. TRANSITIONS SHOULD OCCUR ALONG THE BACK OF CURB, HOLDING EDGE OF PAVEMENT PARALLEL AND CONCENTRIC WITH STREET CENTERLINE.



4" ROLLED CURB DETAIL (PVT)

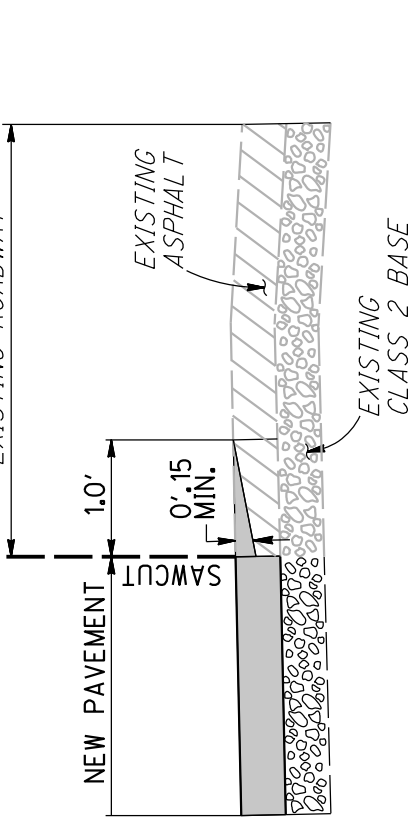
NOT TO SCALE

TOTAL LOT AREA = 5,750 SF
TOTAL DISTURBED AREA = 6,700 SF

(THIS AREA INCLUDES BUT IS NOT LIMITED TO OFF-SITE WORK INCLUDING PUBLIC IMPROVEMENTS AND TEMPORARY DISTURBANCE SUCH AS VEHICLE AND EQUIPMENT STAGING AREAS, CONSTRUCTION WORKER COLLECTOR TRAFFIC, SOIL/ROCK PILES, UTILITY TRENCH BACKFILL, AND SLOPE STABILIZATION.)
TOTAL REPLACED IMPERVIOUS AREA = 1,050 SF

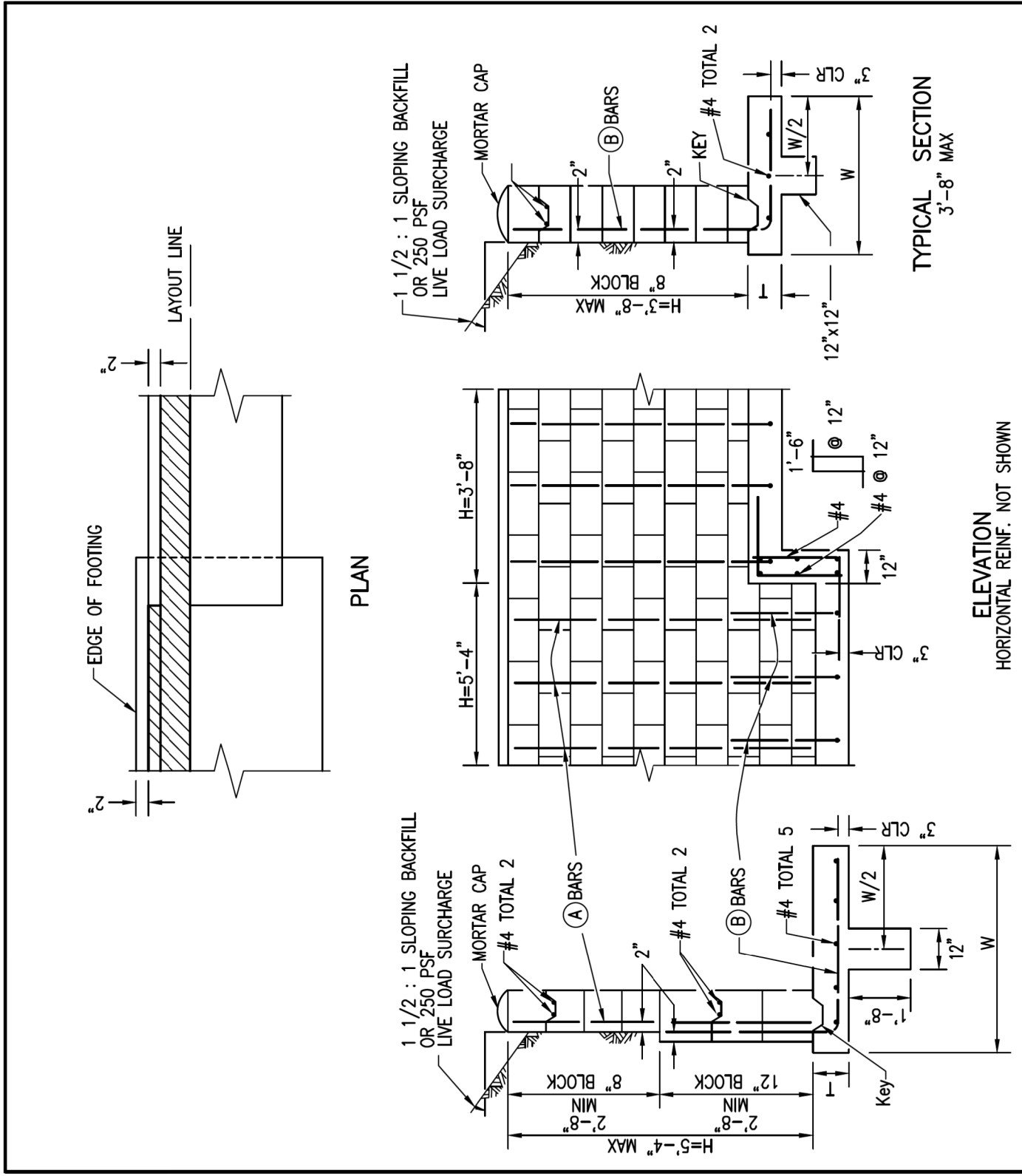
LEGAL DESCRIPTION

PORTIONS OF LOT 9 AND LOT 5 OF LA COSTA IN THE CITY OF CARLSBAD, COUNTY OF SAN DIEGO, ACCORDING TO MAP NO. 052747, AS SHOWN IN THE OFFICE OF THE COUNTY RECORDER.



PAVEMENT CONFORMANCE DETAIL

NOT TO SCALE



DIMENSIONS AND REINFORCING STEEL

H (MAX)	5'-4"	3'-8"
T (MIN)	1'-1"	0'-10"
W (MIN)	5'-0"	3'-5"
Ø BARS	#4@16"	#4@16"
Ø BARS	#4@16"	#4@16"
MAX SOIL PRESSURE	1000 PSF	800 PSF

- NOTES:
1. SEE C-7 AND C-8 FOR ADDITIONAL NOTES AND DETAILS.
2. FILL ALL BLOCK CELLS WITH GROUT.

Revision	By	Approved	Date
ORIGINAL	TS	TS	12/7/15
Revised	TS	TS	11/15
Updated	DM	TS	08/17
Revised	RF	S. Englin	03/22

SAN DIEGO REGIONAL STANDARD DRAWING
MASONRY RETAINING WALL TYPE 2
(LIVE LOAD SURCHARGE OR SLOPING BACKFILL)

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Checked: R.C.E. 5/24/2022 Date: _____
Drawing Number: **C-02**

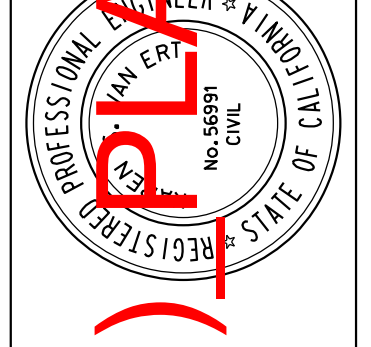
"AS BUILT"

RCE _____ EXP. _____ DATE _____
REVIEWED BY: _____
INSPECTOR _____ DATE _____

SHEET 2
CITY OF CARLSBAD
PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR:
**STAGECOACH COMMUNITY PARK
COMMUNITY GARDEN**
C-01 - NOTES & DETAILS
ACCEPTED BY: *Carly Bergman*
4/16/2024

DWN BY: _____ DATE _____
CHKD BY: _____
R/VD BY: _____

PROJECT NO. **4611**
DRAWING NO. **547-4**



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

Karen S. Van Ert
R.C.E. No. 56991
EXP. DATE: 6-30-2025

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
AT LEAST TWO DAYS BEFORE YOU DIG

City of Carlsbad
Parks & Recreation

CONSTRUCTION NOTES

- 1 REMOVE EXISTING CONCRETE
- 2 REMOVE EXISTING CURB
- 3 REMOVE EXISTING CHAINLINK FENCE
- 4 EXISTING ISOLATION VALVE TO BE PROTECTED IN PLACE. PROVIDE UNDERCOVER OR APPROVED EQUIVALENT. SEE DETAILS, SHT 22
- 5 EXISTING SEWER CLEANOUT TO BE PROTECTED IN PLACE. PROVIDE UNDERCOVER OR APPROVED EQUIVALENT. SEE DETAILS, SHT 22
- 6 REMOVE EXISTING SHOWER
- 7 EXISTING LIGHT TO REMAIN
- 8 EXISTING 1-1/2" ISOLATION VALVE-FIELD VERIFICATION FOR ROUTING. REMOVE IF NOT NEEDED
- 9 EXISTING UNDERGROUND UTILITY TO REMAIN
- 10 EXISTING BUILDING TO REMAIN
- 11 EXISTING BOLLARDS TO REMAIN
- 12 EXISTING BOLLARDS TO REMAIN
- 13 REMOVE EXISTING ASPHALT
- 14 EXISTING FENCE TO REMAIN
- 15 EXISTING POTABLE WATER LINE. CONTRACTOR IS RESPONSIBLE TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING WATER LINE PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY CITY ENGINEER PRIOR TO START OF CONSTRUCTION TO CHECK FOR CONFLICTS.

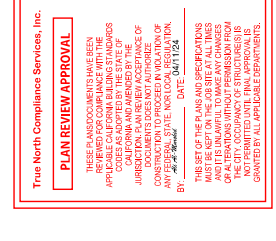
LEGEND

- REMOVE EXISTING ASPHALT
- CLEAR AND GRUB
- REMOVE EXISTING SIDEWALK



!CAUTION!!
 1 PLEASE REMOVE WITH EXTRA CAUTION AND NOTIFY CONSTRUCTION MANAGER OF ANY REMOVAL OF CONCRETE, REBAR, OR RADIATION AND VERIFY WITH SAID MANAGER. THE PROPER FLUSH WITH SAW CUT LOCATION PARALLEL WITH THE BUILDING BEFORE BEGINNING WORK.

CONTRACTOR TO ADJUST EXISTING IRRIGATION SYSTEM AS NEEDED.



"AS BUILT"

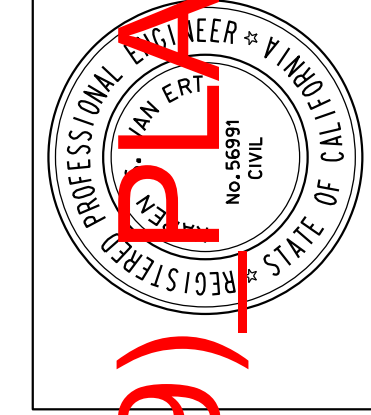
RCE _____ EXP. _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____

SHEET	CITY OF CARLSBAD
4	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR:	
STAGECOACH COMMUNITY PARK	
COMMUNITY GARDEN	
C-03 - DEMOLITION PLAN	
ACCEPTED BY:	4/16/2024
<i>Karen S. Van Ert</i>	
DWN BY:	PROJECT NO.
CHKD BY:	4611
REV'D BY:	DRAWING NO.
	547-4

DATE	INITIAL	DATE	INITIAL	DATE	INITIAL



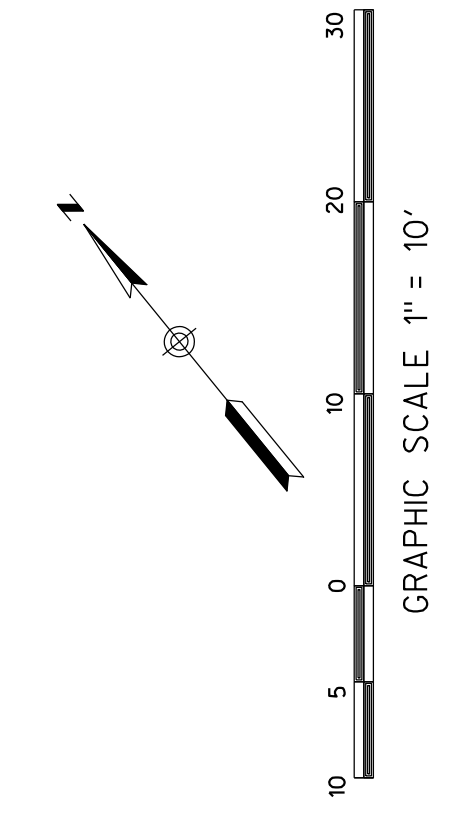
PREV2024-0059 (CBR2024-0039) PLANS_V1 4/12/24

DIGALERT
 City of Carlsbad
 Parks & Recreation

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

AT LEAST TWO DAYS BEFORE YOU DIG

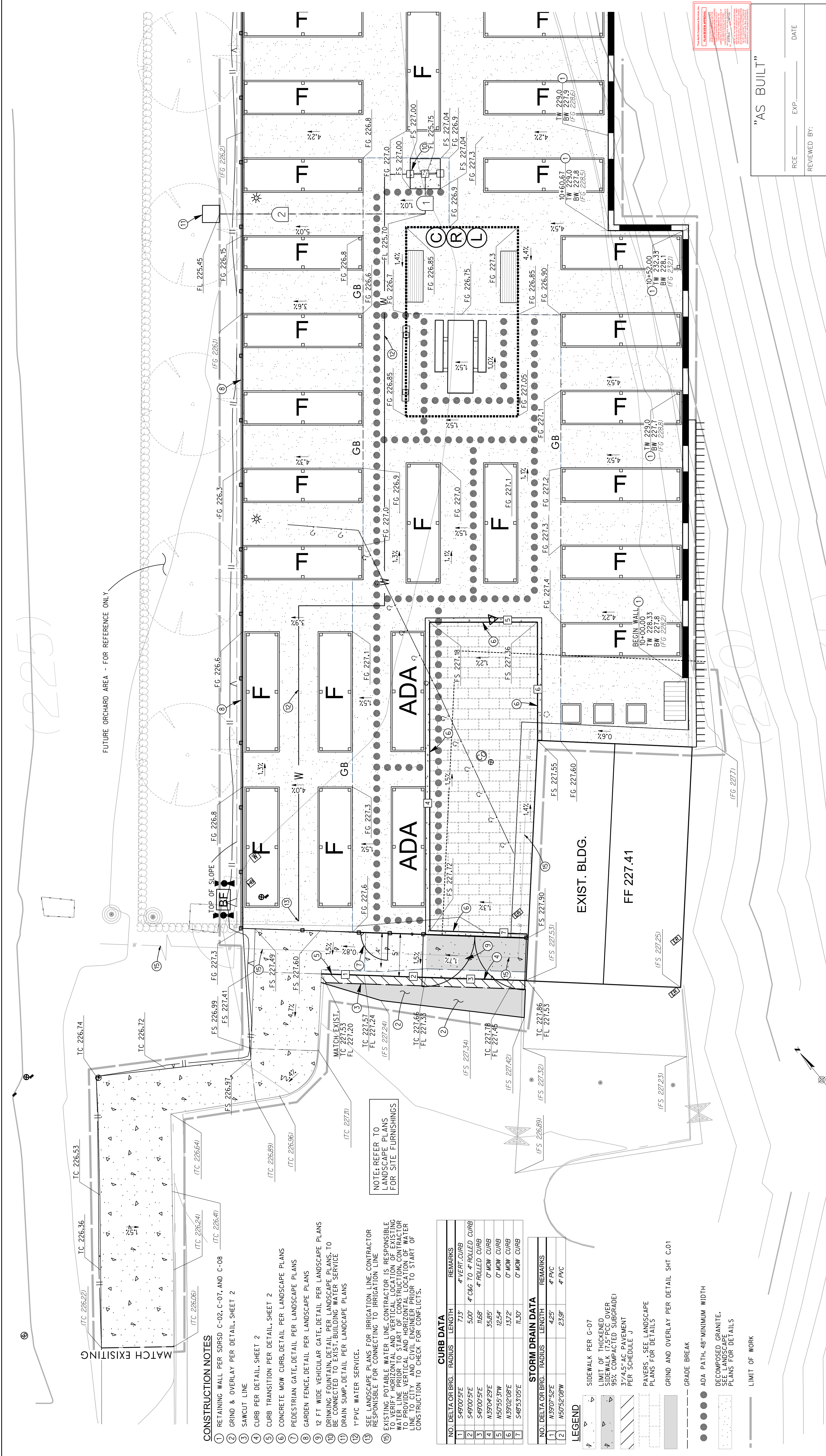
1-800-4-A-DAWG



Karen S. Van Ert
 KAREN S. VAN ERT

R.C.E. No. 56991 EXP. DATE: 6-30-2025

3/7/2024 DATE



FUTURE ORCHARD AREA - FOR REFERENCE ONLY

MATCH EXISTING

CONSTRUCTION NOTES

- 1 RETAINING WALL PER SDRSD C-02, C-07, AND C-08
- 2 GRIND & OVERLAY PER DETAIL, SHEET 2
- 3 SAWCUT LINE
- 4 CURB PER DETAIL, SHEET 2
- 5 CURB TRANSITION PER DETAIL, SHEET 2
- 6 CONCRETE MOW CURB, DETAIL PER LANDSCAPE PLANS
- 7 PEDESTRIAN GATE, DETAIL PER LANDSCAPE PLANS
- 8 GARDEN FENCE, DETAIL PER LANDSCAPE PLANS
- 9 12 FT WIDE VEHICULAR GATE, DETAIL PER LANDSCAPE PLANS
- 10 DRINKING FOUNTAIN, DETAIL PER LANDSCAPE PLANS. TO BE CONNECTED TO EXIST. BUILDING WATER SERVICE
- 11 DRAIN SUMP, DETAIL PER LANDSCAPE PLANS
- 12 1" PVC WATER SERVICE.
- 13 SEE LANDSCAPE PLANS FOR IRRIGATION LINE. CONTRACTOR RESPONSIBLE FOR CONNECTING TO IRRIGATION LINE
- 14 EXISTING POTABLE WATER LINE. CONTRACTOR IS RESPONSIBLE TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING WATER LINE PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO CITY AND CIVIL ENGINEER PRIOR TO START OF CONSTRUCTION TO CHECK FOR CONFLICTS.

NOTE: REFER TO LANDSCAPE PLANS FOR SITE FURNISHINGS

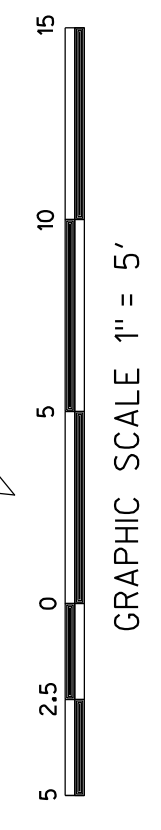
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S490057E	713'		4" VERT. CURB
2	S490057E	500'		4" C&G TO 4" ROLLED CURB
3	S490057E	1168'		4" ROLLED CURB
4	N390429E	35.85'		0" MOW CURB
5	N505537W	12.54'		0" MOW CURB
6	N390208E	13.72'		0" MOW CURB
7	S465305E	71.50'		0" MOW CURB

STORM DRAIN DATA

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N390752E		425'	4" PVC
2	N505208W		23.9'	4" PVC

LEGEND

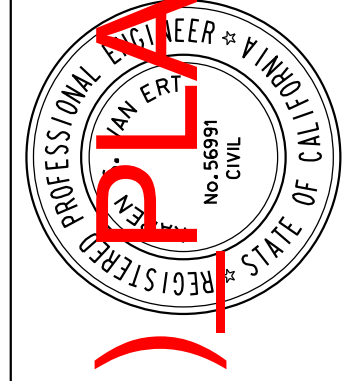
- ▲ SIDEWALK PER G-07
- ▲ LIMIT OF THICKENED SUBGRADE (SEE SCHEDULE J)
- ▲ 3% COMPACTED SUBGRADE
- ▲ 7.5" 4" 15" ASPHALT PAVEMENT PER SCHEDULE J
- ▲ PAVERS - SEE LANDSCAPE PLANS FOR DETAILS
- ▲ GRIND AND OVERLAY PER DETAIL SHT C.01
- GRADE BREAK
- ADA PATH, 48" MINIMUM WIDTH
- DECOMPOSED GRANITE. SEE LANDSCAPE PLANS FOR DETAILS
- LIMIT OF WORK



PREV2024-0059 (CBR2024-0039) PLANS_V1 4/12/24



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800-488-4888
www.usa.com



Karen Van Ert

R.C.E. No. 56991 EXP. DATE: 6-30-2025

3/7/2024 DATE

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

SHEET	5	CITY OF CARLSBAD	PLANNING DIVISION	PROJECT NO.	4611
LANDSCAPE IMPROVEMENT PLANS FOR:			STAGECOACH COMMUNITY PARK		
C-04 - PRECISE GRADING PLAN			ACCEPTED BY:		
			4/16/2024		
DWN BY: EH			PROJECT NO. 4611		
CHKD BY: MW			DRAWING NO. 547-4		
RWD BY: KVE					

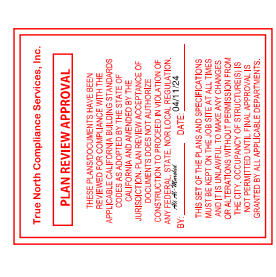
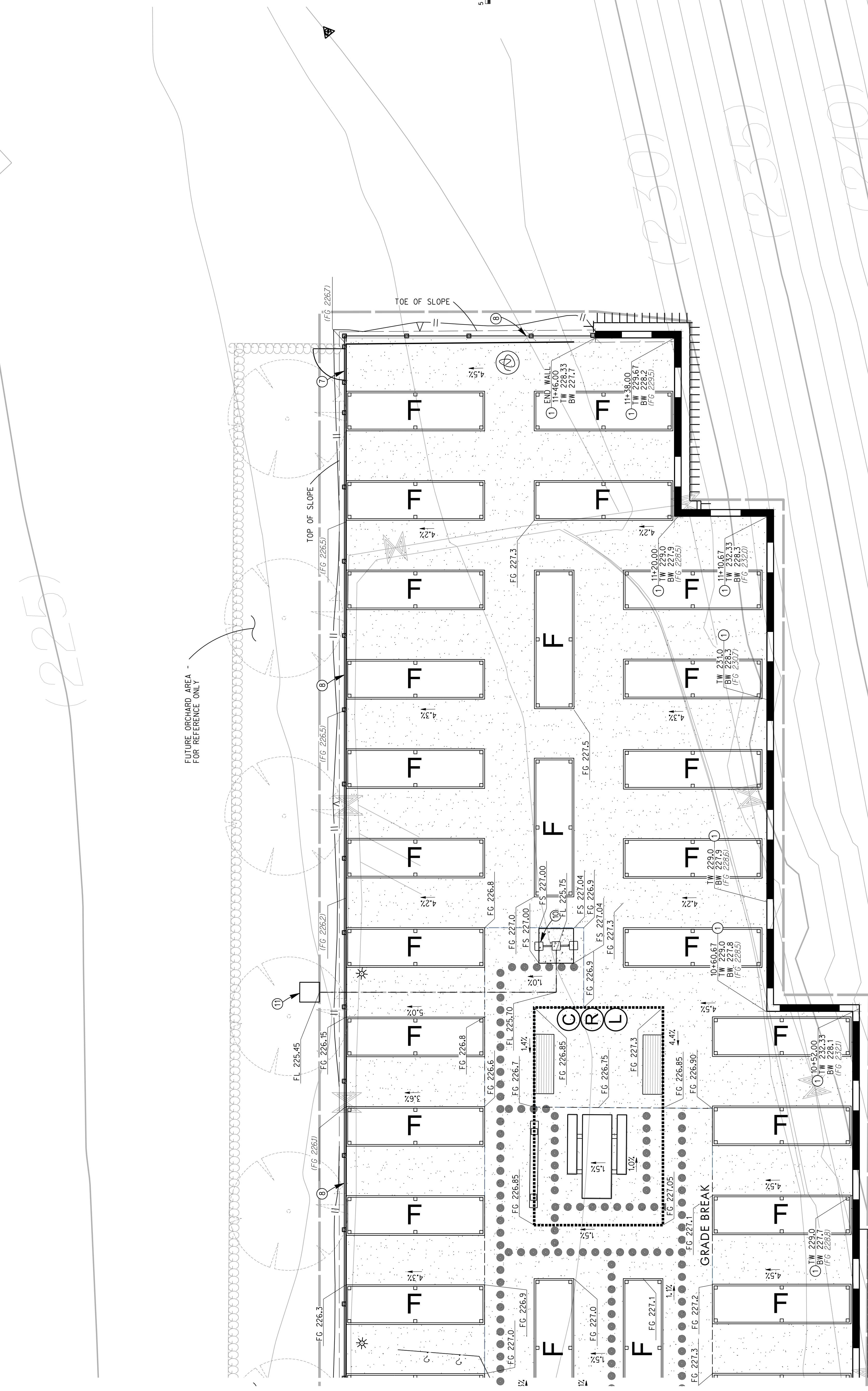
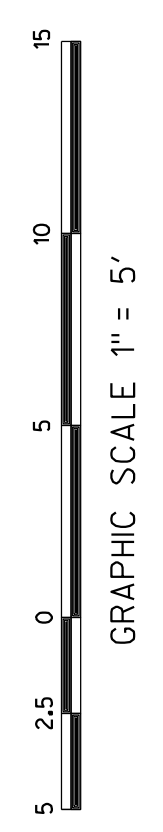
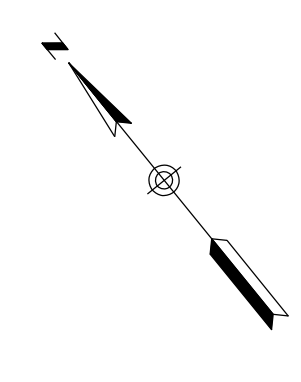
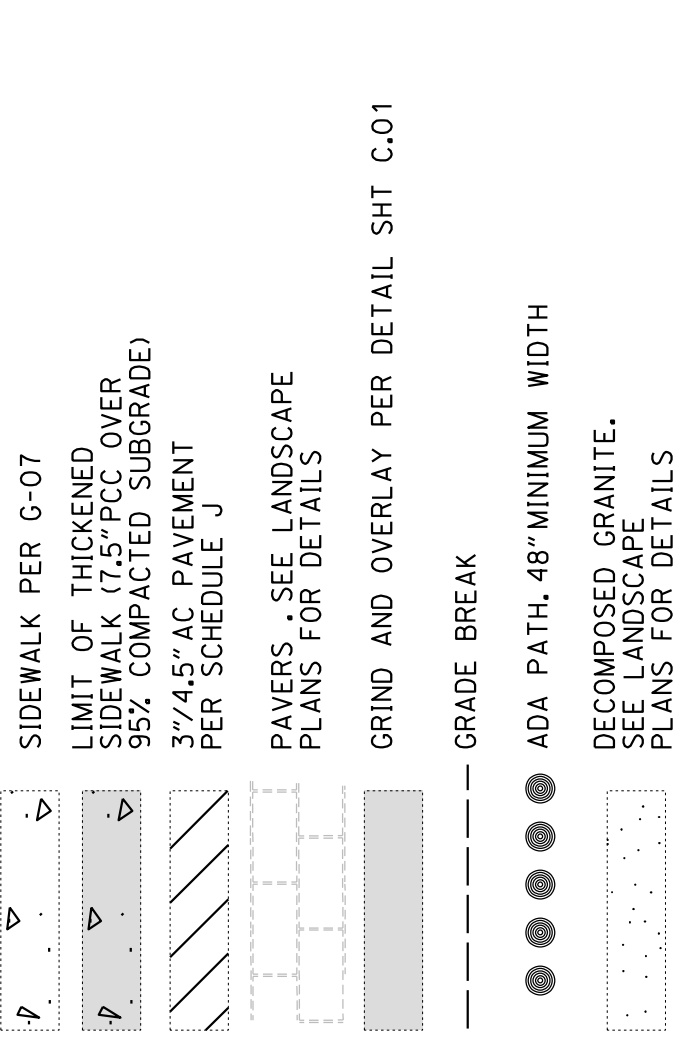
"AS BUILT"

RCE _____ EXP. _____ DATE _____
 REVIEWED BY: _____
 INSPECTOR _____ DATE _____

CONSTRUCTION NOTES

- 1 RETAINING WALL PER SDRSD C-02, C-07, AND C-08
- 2 GRIND & OVERLAY PER DETAIL, SHEET 2
- 3 SAWCUT LINE
- 4 CURB PER DETAIL, SHEET 2
- 5 CURB TRANSITION PER DETAIL, SHEET 2
- 6 CONCRETE MOW CURB, DETAIL PER LANDSCAPE PLANS
- 7 PEDESTRIAN GATE, DETAIL PER LANDSCAPE PLANS
- 8 GARDEN FENCE, DETAIL PER LANDSCAPE PLANS
- 9 12 FT WIDE VEHICULAR GATE, DETAIL PER LANDSCAPE PLANS
- 10 DRINKING FOUNTAIN, DETAIL PER LANDSCAPE PLANS. TO BE CONNECTED TO EXIST. BUILDING WATER SERVICE
- 11 DRAIN SUMP, DETAIL PER LANDSCAPE PLANS

LEGEND



"AS BUILT"

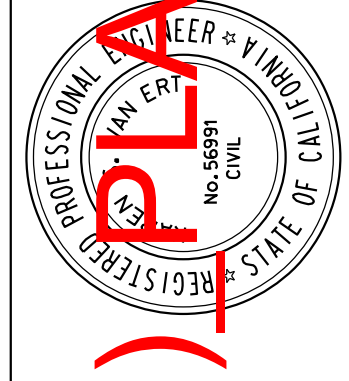
RCE _____ EXP. _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____

SHEET 6	CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR: STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
C-05 - PRECISE GRADING PLAN	
ACCEPTED BY: <i>Emily Hargrove</i>	4/16/2024
DWN BY: EH	PROJECT NO. 4611
CHKD BY: MW	DRAWING NO. 547-4
RWD BY: XVE	

DATE	INITIAL	DATE	INITIAL	REVISION DESCRIPTION

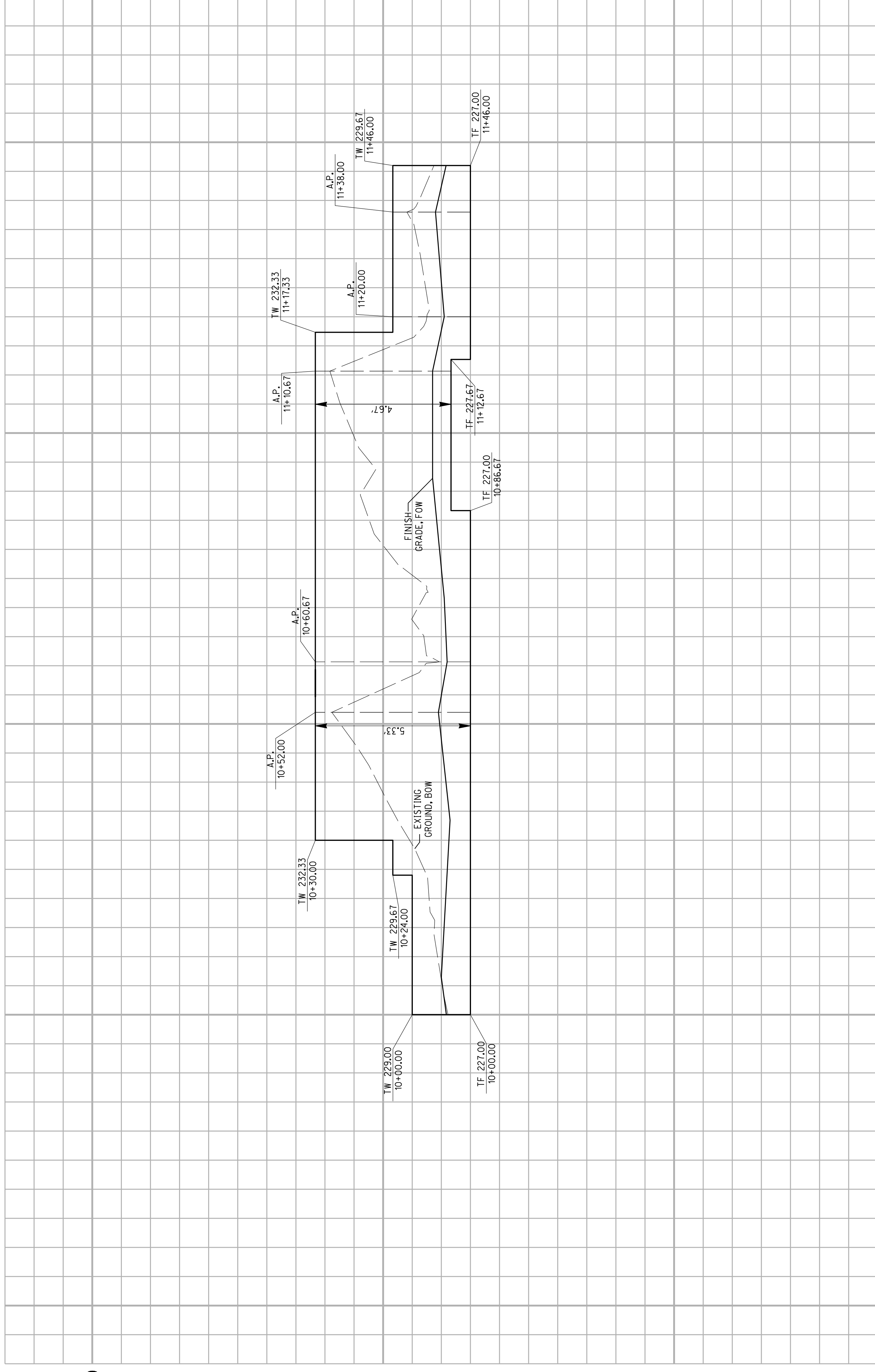


PREV2024-0059 (CBR2024-0039) PLANS_V1 4/12/24

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
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1-800-4-A-DIG

KAREN S. VAN ERT
R.C.E. No. 56991
EXP. DATE: 6-30-2025
3/7/2024
DATE

Karen Van Ert



11+00

10+00

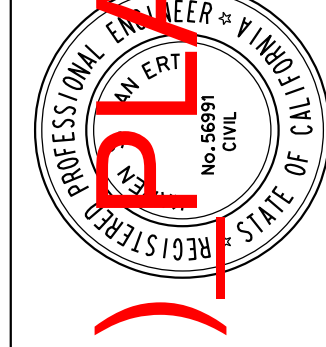
PROFILE: WALL #1

SCALE: HORIZ. 1"=10', VERT. 1"=2'



"AS BUILT"
 RCE _____ EXP. _____ DATE _____
 REVIEWED BY: _____
 INSPECTOR _____ DATE _____

SHEET	CITY OF CARLSBAD
7	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR:	
STAGECOACH COMMUNITY PARK	
COMMUNITY GARDEN	
C.06 - WALL PROFILE	
ACCEPTED BY:	4/16/2024
DWN BY: EH	PROJECT NO. 4611
CHKD BY: JWP	DRAWING NO. 547-4
RWD BY: KYE	



PREV2024-0059 (CBR2024-0039)
PLANS_V1 4/12/24

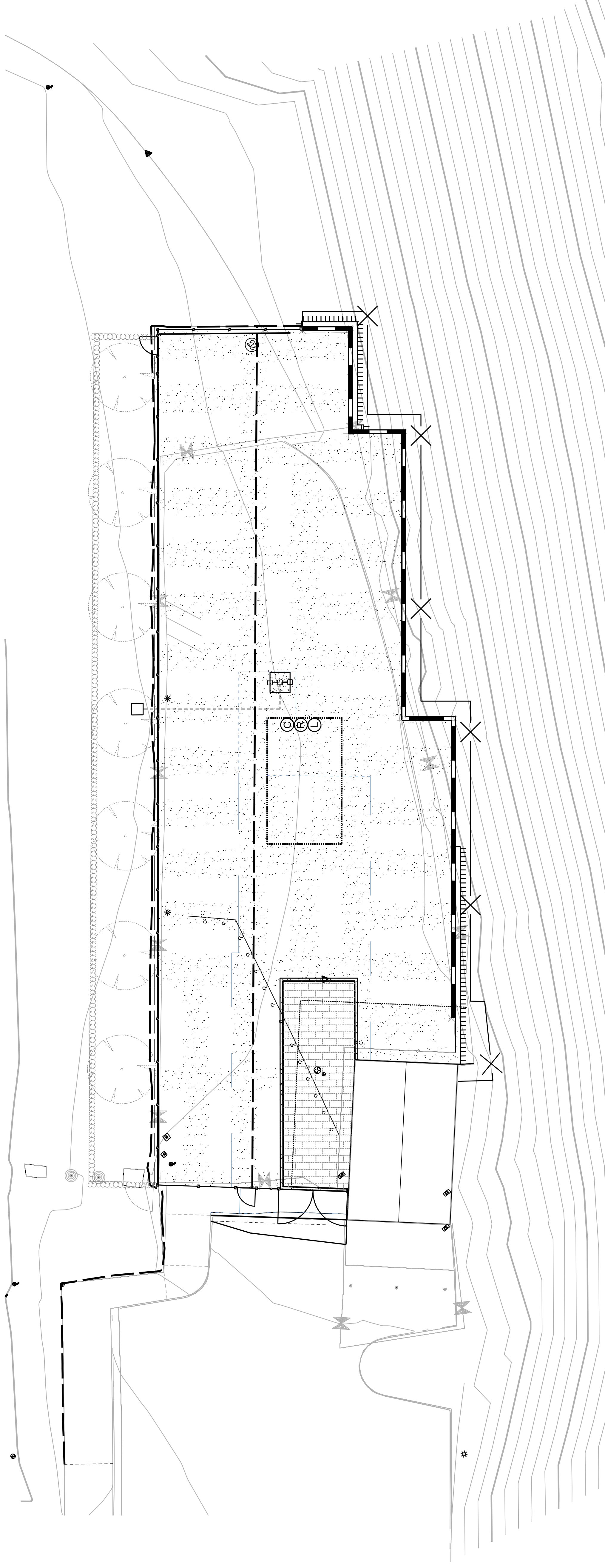


3/7/2024
 DATE

R.C.E. No. 56991
 EXP. DATE: 6-30-2025

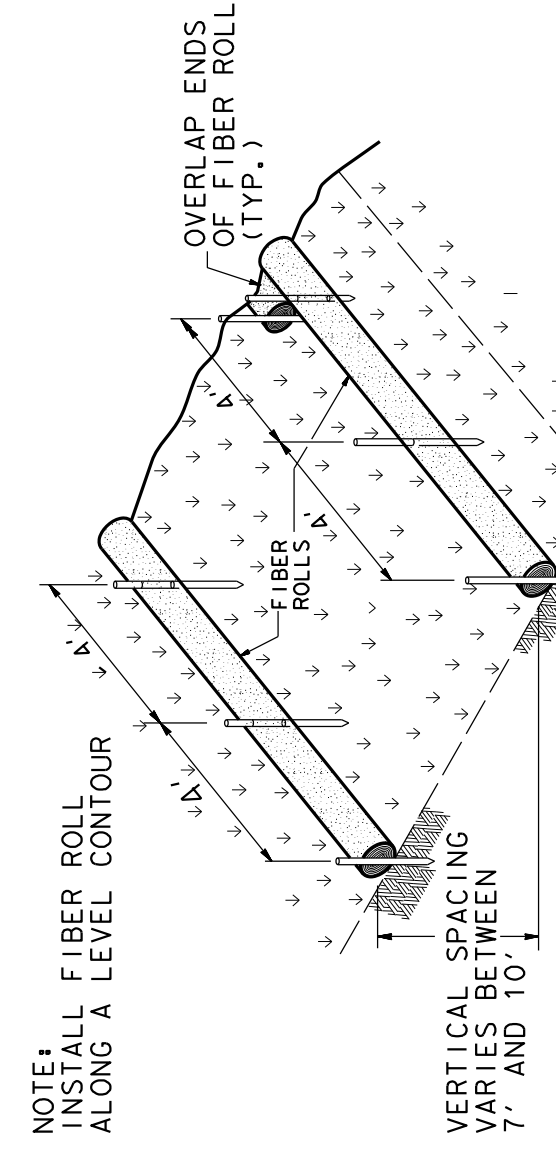
Karen S. Van Ert
 KAREN S. VAN ERT

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
 AT LEAST TWO DAYS BEFORE YOU DIG
 1-800-4-A-DIG

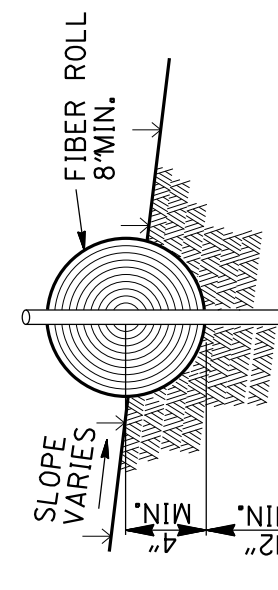


LEGEND

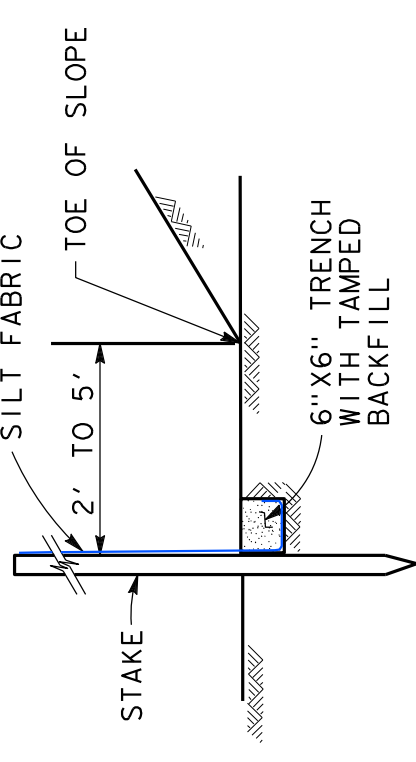
- FIBER ROLL (SE-5)
- SILT FENCE (SE-1)



TYPICAL FIBER ROLL INSTALLATION
NO SCALE



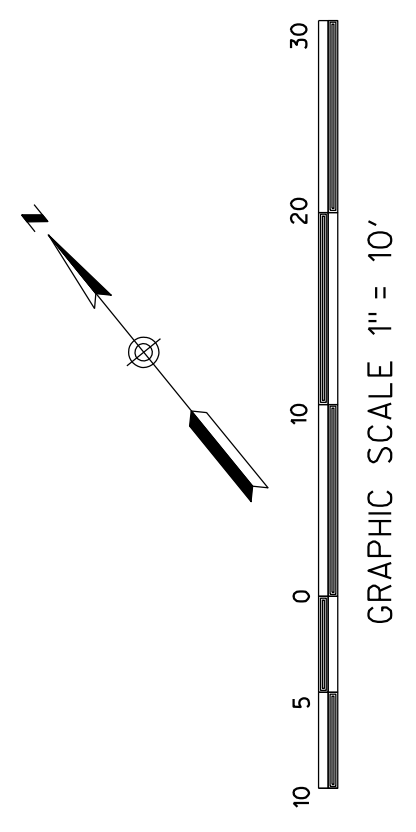
TYPICAL SECTION FOR FIBER ROLL
NO SCALE



TYPICAL SECTION FOR SILT FENCE
NO SCALE

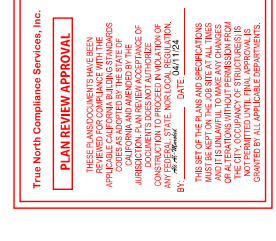
TABLE A

GRAVEL BAG ROW SPACING	TABLE STREET GRADE	INTERVAL
LESS THAN 2%	200'	75'
2% TO 4%	75'	40'
4% TO 6%	40'	25'
6% TO 8%	25'	25'
8% TO 10%	25'	25'



EROSION CONTROL NOTES

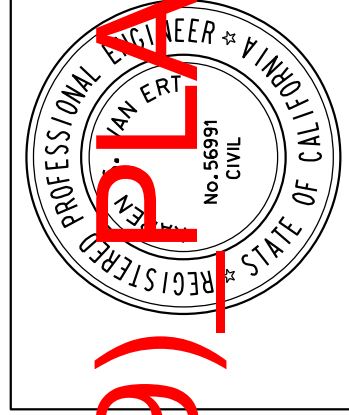
1. IN CASE EMERGENCY WORK IS REQUIRED, CONTACT CITY OF CARLSBAD AT (760) 502-4220.
2. ALL EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS EMINENT.
3. FOR PROJECTS COVERED BY STATE SWPPP/NOID, IN ACCORDANCE WITH THE CONSTRUCTION ORDER ISSUED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, THE CONTRACTOR'S QUALIFIED SWPPP PRACTITIONER (QSP) SHALL UPDATE AND MAINTAIN THE WATER POLLUTION CONTROL (WPC) PLAN TO ADDRESS UPDATED SITE CONDITIONS OF THE PROJECT. THE UPDATED WPC PLAN AND UPDATED SWPPP SHALL BE KEPT AT THE PROJECT SITE AND MADE AVAILABLE TO THE CITY INSPECTOR. ADDITIONAL CONSTRUCTION BMP'S BEYOND THE ORIGINAL APPROVED SWPPP SHALL BE PROVIDED TO ADDRESS SITE CONDITIONS NOT ANTICIPATED. THE QSP SHALL REPORT BMP DEFICIENCIES TO THE CITY INSPECTOR AND THE CITY INSPECTOR SHALL OBTAIN APPROVAL FROM THE CONTRACTOR'S SWPPP DEVELOPER AND THE CITY INSPECTOR REGARDING ANY SIGNIFICANT CHANGES TO BMP DEPLOYMENT.
4. THE CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.
5. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE CITY ENGINEER AND/OR CITY INSPECTOR DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES WHICH MAY ARISE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO MAINTAIN SAFE PASSAGE ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
7. ALL EROSION CONTROL MEASURES PROVIDED PER THE APPROVED SWPPP AND/OR EROSION CONTROL PLAN SHALL BE INCORPORATED HEREON.
8. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPE AT THE CONCLUSION OF EACH WORKING DAY.
9. ALL REMOVABLE PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FIVE (5) DAY RAIN PROBABILITY FORECAST EXCEEDS FORTY PERCENT (40%) SILT AND OTHER DEBRIS SHALL BE REMOVED AFTER EACH RAINFALL.
10. ALL GRAVEL BAGS SHALL BE BURLAP TYPE WITH 3/4 INCH MINIMUM AGGREGATE.
11. SHOULD GERMINATION OF HYDROSEEDED SLOPES FAIL TO PROVIDE EFFECTIVE COVERAGE OF GRADED SLOPES (90% COVERAGE) PRIOR TO NOVEMBER 15, THE SLOPES SHALL BE STABILIZED BY PUNCH STRAW INSTALLED IN ACCORDANCE WITH SECTION 35.023 OF THE EROSION AND SEDIMENT CONTROL HANDBOOK OF THE DEPARTMENT OF CONSERVATION, STATE OF CALIFORNIA.



"AS BUILT"

RCE _____ EXP. _____ DATE _____
 REVIEWED BY: _____
 INSPECTOR _____ DATE _____

SHEET	CITY OF CARLSBAD
8	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR:	
STAGECOACH COMMUNITY PARK	
COMMUNITY GARDEN	
C-07 - EROSION CONTROL PLAN	
ACCEPTED BY:	4/16/2024
PROJECT NO. 4611	
DWN BY: EH	DRAWING NO. 547-4
CHKD BY: MWP	
R/WD BY: KVE	



PREV2024-0059 (CBR2024-0039) PLANS_V1 4/12/24

DIGALERT
 City of Carlsbad
 Parks & Recreation
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
 AT LEAST TWO DAYS BEFORE YOU DIG
 1-800-4-A-DIG

Karen Van Ert
 KAREN S. VAN ERT
 R.C.E. NO. 56991 EXP. DATE: 6-30-2025

3/7/2024
 DATE

EXP. DATE: 6-30-2025

R.C.E. NO. 56991

EXP. DATE: 6-30-2025

DATE

HARDSCAPE PLAN NOTES

- 1. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. ALL PROPERTY, EASEMENT AND LIMIT LINES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
3. WRITTEN SPECIFICATIONS ARE PART OF THE CONSTRUCTION DOCUMENTATION PACKAGE. CONTRACTOR IS TO BE FAMILIAR WITH WRITTEN SPECIFICATIONS AND DRAINING PACKAGE.
4. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS, AREA DISCREPANCIES AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY COSTS, CONSTRUCTION DELAYS, OR REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
5. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND ORDINANCES. ALL WORK SHALL BE IN CONFORMANCE WITH LOCAL ADMINISTRATIVE CODE, TITLE 24, AND AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.
6. CONTRACTOR TO NOTIFY THE OWNER OF ANY VIOLATION OF LOCAL, STATE AND FEDERAL CODES AND ORDINANCES.
7. CONTRACTOR SHALL PERFORM ALL PROTECTION, DEMOLITION, REMOVAL AND SITE PREPARATION NECESSARY FOR THE PROPER EXECUTION OF ALL WORK SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
8. CONTRACTOR SHALL REMOVE FROM THE SITE ALL DEBRIS AND UNSUITABLE MATERIAL GENERATED BY THE CONTRACTOR'S OPERATIONS. CONSTRUCTION SITE SHALL BE MAINTAINED AT ALL TIMES SO THAT NO OBSTRUCTION, CONSTRUCTION EQUIPMENT OR CONSTRUCTION PROCESS CAUSES POTENTIAL HARM OR DANGERS TO PUBLIC OR CONSTRUCTION SITE.
9. CONTRACTOR SHALL BE RESPONSIBLE TO CONSULT WITH LANDSCAPE ARCHITECT, APPROPRIATE AGENCIES AND CONSTRUCTION DOCUMENTATION FOR THE LOCATIONS OF ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF UTILITIES.
10. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING MATERIALS TO REMAIN THAT ARE DAMAGED DURING CONSTRUCTION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION, REPAIR, AND REPLACEMENT IN KIND OF EXISTING WATERPROOFING SYSTEMS AND/OR STRUCTURES DAMAGED DURING CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL DRAIN LINES, IRRIGATION SUPPLY LINES, CONDUIT, SLEEVES, AND POWER AND WATER SERVICE POINTS SHALL BE IN PLACE PRIOR TO INSTALLATION OF SITE LANDSCAPE CONSTRUCTION.
13. ALL TESTING ASSOCIATED WITH INSTALLATION OF SITE IMPROVEMENTS ARE INCLUDED IN THE CONTRACTOR'S SCOPE OF WORK. SUCH TESTING INCLUDES, BUT IS NOT LIMITED TO, SOIL TESTING FOR HORTICULTURAL SUITABILITY AND CONCRETE TESTING OF WALLS, SURFACES, AND STAIRS. ALL COSTS ASSOCIATED WITH SUCH TESTS SHALL BE COVERED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
14. FOR ALL ROADWAYS, CURBS, GUTTERS, ROADWAY DRAINAGE, VEHICULAR PAVEMENT, STREET LIGHTING, UTILITIES, AND SIDEWALK GRADING, REFER TO CIVIL DRAWINGS.
15. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, GRADES AND CONDITIONS PRIOR TO COMMENCING WORK AND SHALL NOTIFY LANDSCAPE ARCHITECT AND OWNER OF ANY DISCREPANCIES.
16. WHERE 'VERIFY' OR 'FIELD VERIFY' IS USED IN CONJUNCTION WITH A DIMENSION, THE CONTRACTOR SHALL VERIFY THE MEASUREMENT PRIOR TO BEGINNING THE WORK. IMMEDIATELY BRING DISCREPANCIES TO THE ATTENTION OF THE LANDSCAPE ARCHITECT AND OWNER.
17. DIMENSIONS ARE TAKEN FROM FACE OF BUILDING, BACK FACE OF CURB OR WALL, OR PROPERTY LINE UNLESS OTHERWISE NOTED.
18. COORDINATE LOCATIONS DEPICTED ON PLANS WITH SURVEY INFORMATION PROVIDED BY CIVIL ENGINEER.
19. ALL ABOVE AND BELOW GRADE UTILITIES SHALL BE LOCATED BEFORE START OF WORK. FOR UTILITY LOCATIONS, SEE UTILITY PLANS.
20. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF COORDINATES DEPICTED ON DRAWINGS TO SURVEY CONTROL PROVIDED BY SURVEYOR. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
21. ALL SUBGRADES UNDER PAVEMENTS & LANDSCAPE FOUNDATIONS SHALL BE COMPACTED IN ACCORDANCE TO RELATIVE COMPACTION AND DEPTHS SPECIFIED IN GEOTECHNICAL REPORT, UNLESS OTHERWISE NOTED.
22. COORDINATE CONSTRUCTION WORK WITH OTHER CONTRACTORS, I.E. WATERPROOF, ELECTRICAL, MECHANICAL AND IRRIGATION FOR INSTALLATION OF WATERPROOFING, SLEEVES, CONDUIT, ANCHOR BOLTS, ETC.
23. ALL STRUCTURAL REINFORCING, CONNECTIONS AND FOUNDATIONS FOR LANDSCAPE IMPROVEMENTS SHALL BE REVIEWED AND APPROVED BY STRUCTURAL ENGINEER.
24. PROVIDE EXPANSION JOINT WITH SEALANT WHERE PAVING ABUTS CURBING, BUILDINGS, COLUMNS AND OTHER STRUCTURES.
25. REFER TO CIVIL GRADING PLANS WHERE INDICATED ON PLANS.
26. ALL SHOP DRAWINGS REQUIRED AS PART OF LANDSCAPE IMPROVEMENTS SHALL BE COORDINATED WITH ALL ASSOCIATED DISCIPLINES, SITE AND ARCHITECTURAL CONDITIONS. DRAWINGS SHALL SHOW ADJACENT INFORMATION THAT WILL GIVE CLEAR INDICATION OF THE INTERFACE TO STRUCTURES, FOUNDATIONS, UTILITIES, PROPERTY LINES AND EASEMENTS, AND ANY OTHER NECESSARY INFORMATION.

SITE ELEMENTS LEGEND

Table with 10 columns: SYMBOL, KEY, DESCRIPTION, COLOR, SIZE, QUANTITY, MANUFACTURER/MODEL, DETAIL, REMARKS. Includes items like Full Garden Bed, ADA Full Garden Bed, Sail Shade, Chain Link Fence, Garden Fence, Concrete Mow Curb, Pedestrian Gate, Vehicular Double Gate, and Shade Sail Post Typ.

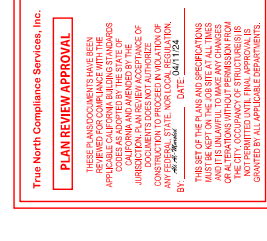
SITE PAVING LEGEND

Table with 4 columns: SYMBOL, KEY, DESCRIPTION, REMARKS. Includes items like Stabilized Decomposed Granite, Concrete Paving, and Pavers.

SITE FURNISHING LEGEND

Table with 6 columns: SYMBOL, KEY, DESCRIPTION, COLOR/ FINISH, SIZE, QUANTITY, MANUFACTURER/ MODEL, DETAIL, REMARKS. Includes items like Waste Container, Bench, Compost Bin, Drinking Fountain, Storage Box, ADA Picnic Table, and Information Kiosk.

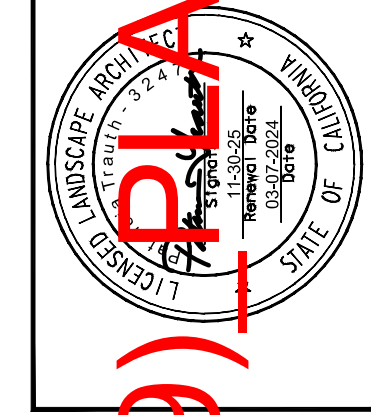
NOTE: ALL WOOD TO BE PRESSURE TREATED



"AS BUILT"

RCE EXP DATE
REVIEWED BY:
INSPECTOR DATE

Approval table with columns for DATE, INITIAL, DESIGNER OF WORK, REVISION DESCRIPTION, DATE, INITIAL, CITY APPROVAL, DATE, INITIAL, CITY APPROVAL. Includes City of Carlsbad Planning Division stamp.



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24
DIGITAL
Carlsbad Parks & Recreation

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

SHEET 9
CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN
L.01 - CONSTRUCTION LEGEND AND NOTES
ACCEPTED BY: Eric J. Thompson 4/16/2024
DWN BY: EM
CHKD BY: JAV
RWD BY: JF
PROJECT NO. 4611
DRAWING NO. 547-4

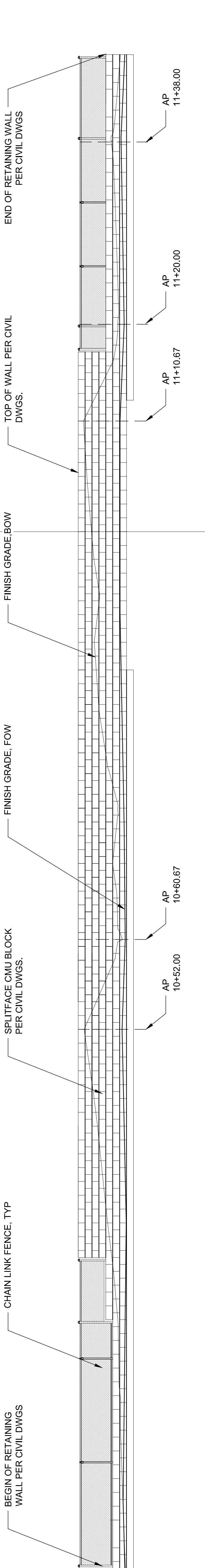
240

220

200

10+00

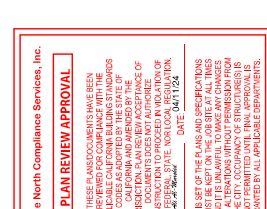
11+00



NOTES:

- 1. SEE CIVIL DWGS. FOR TW AND BW INFORMATION.

WALL ELEVATION

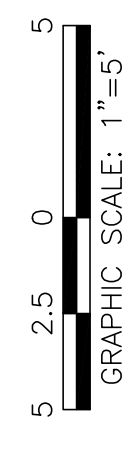


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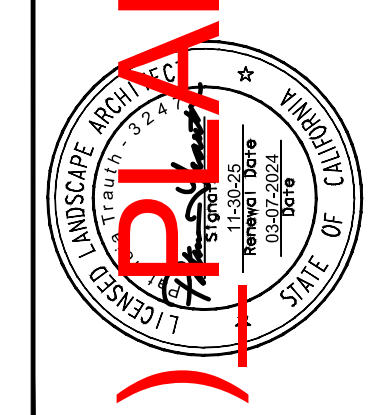
RCE _____ EXP. _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____



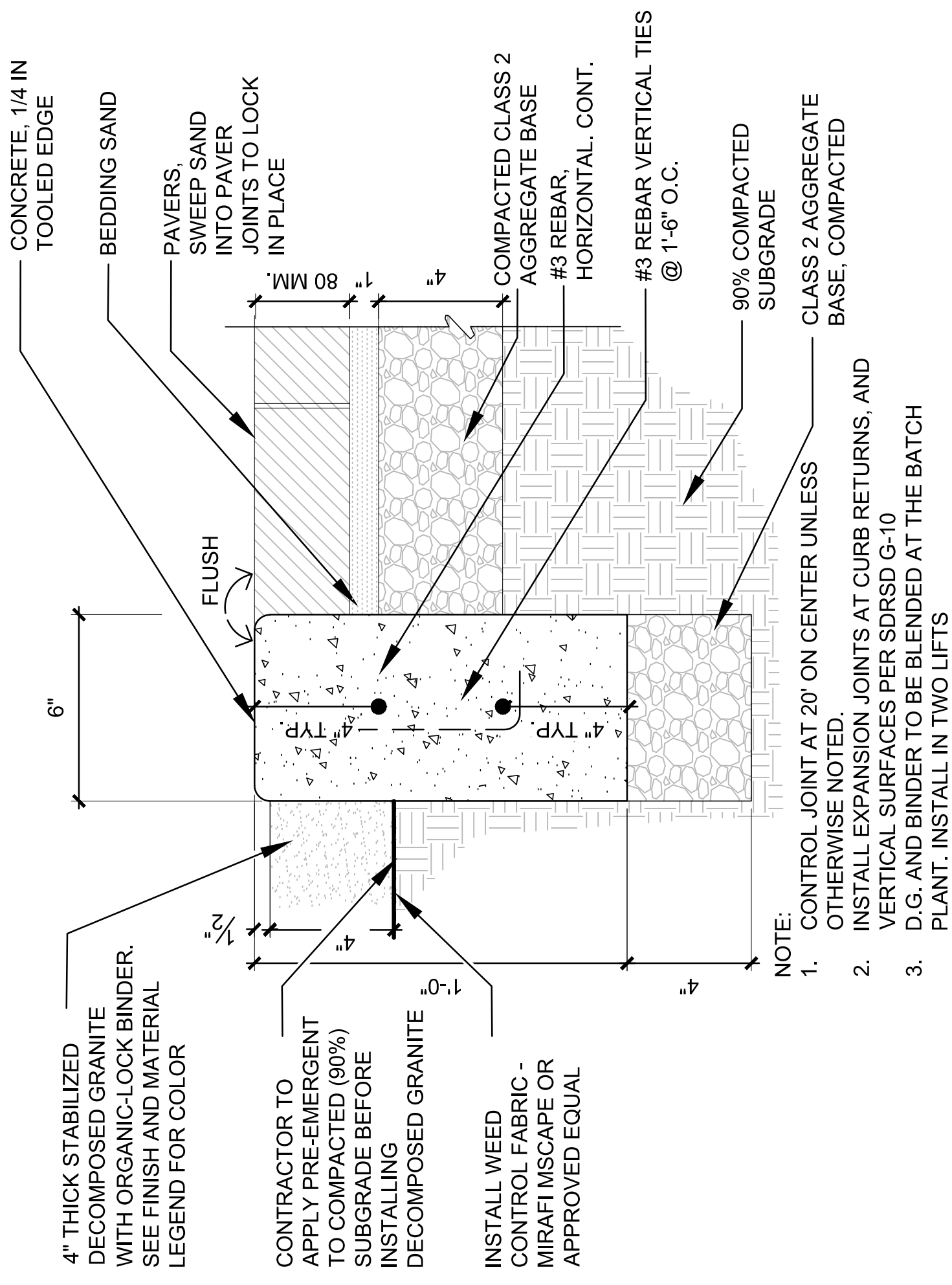
SHEET 11	CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
L.03 - CONSTRUCTION PLAN 2	
ACCEPTED BY: <i>Christy Thompson</i>	4/16/2024
DWN BY: <i>EM</i>	PROJECT NO. 4611
CHKD BY: <i>AV</i>	DRAWING NO. 547-4
REV'D BY: <i>FL</i>	



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

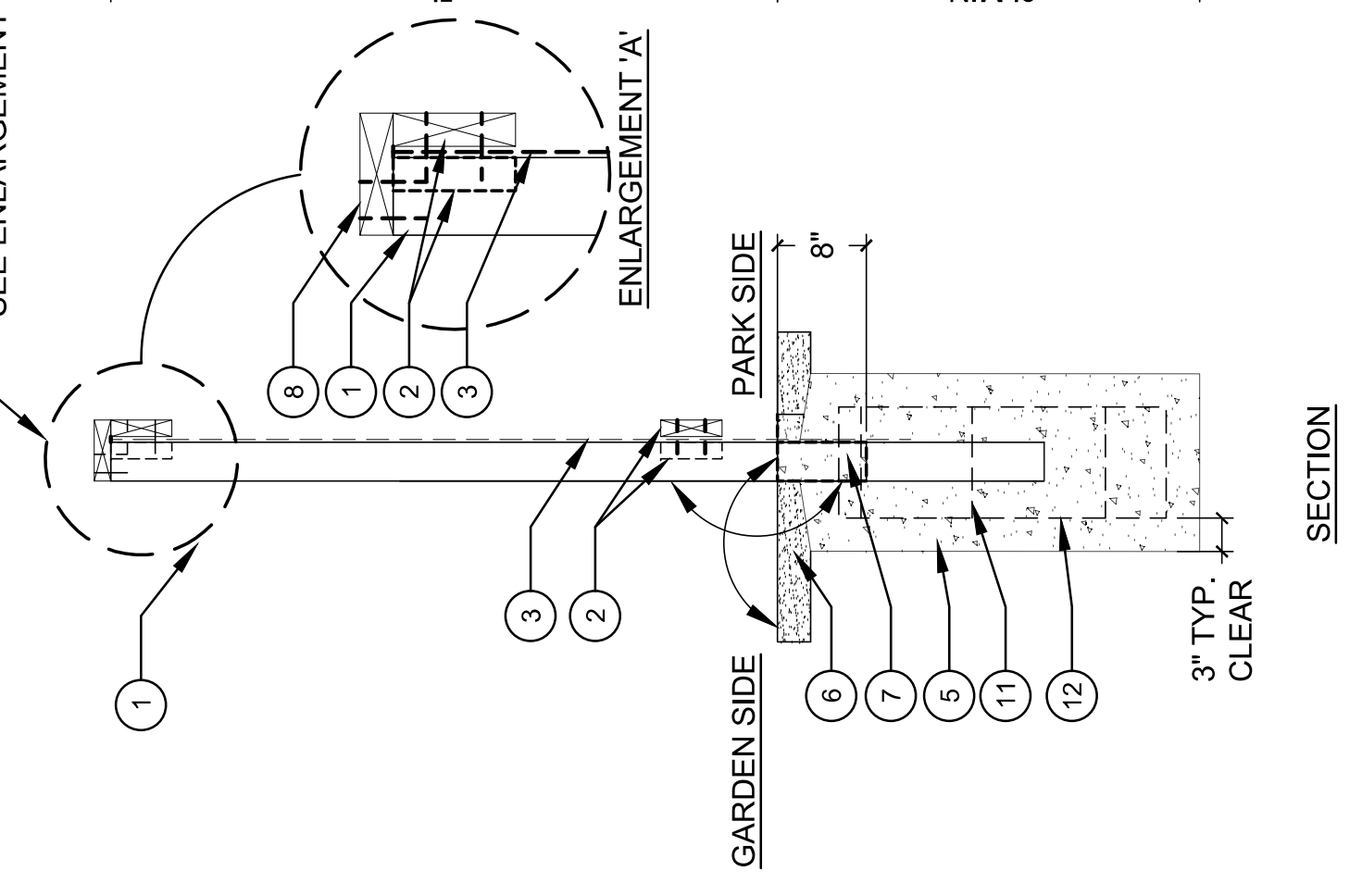


UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



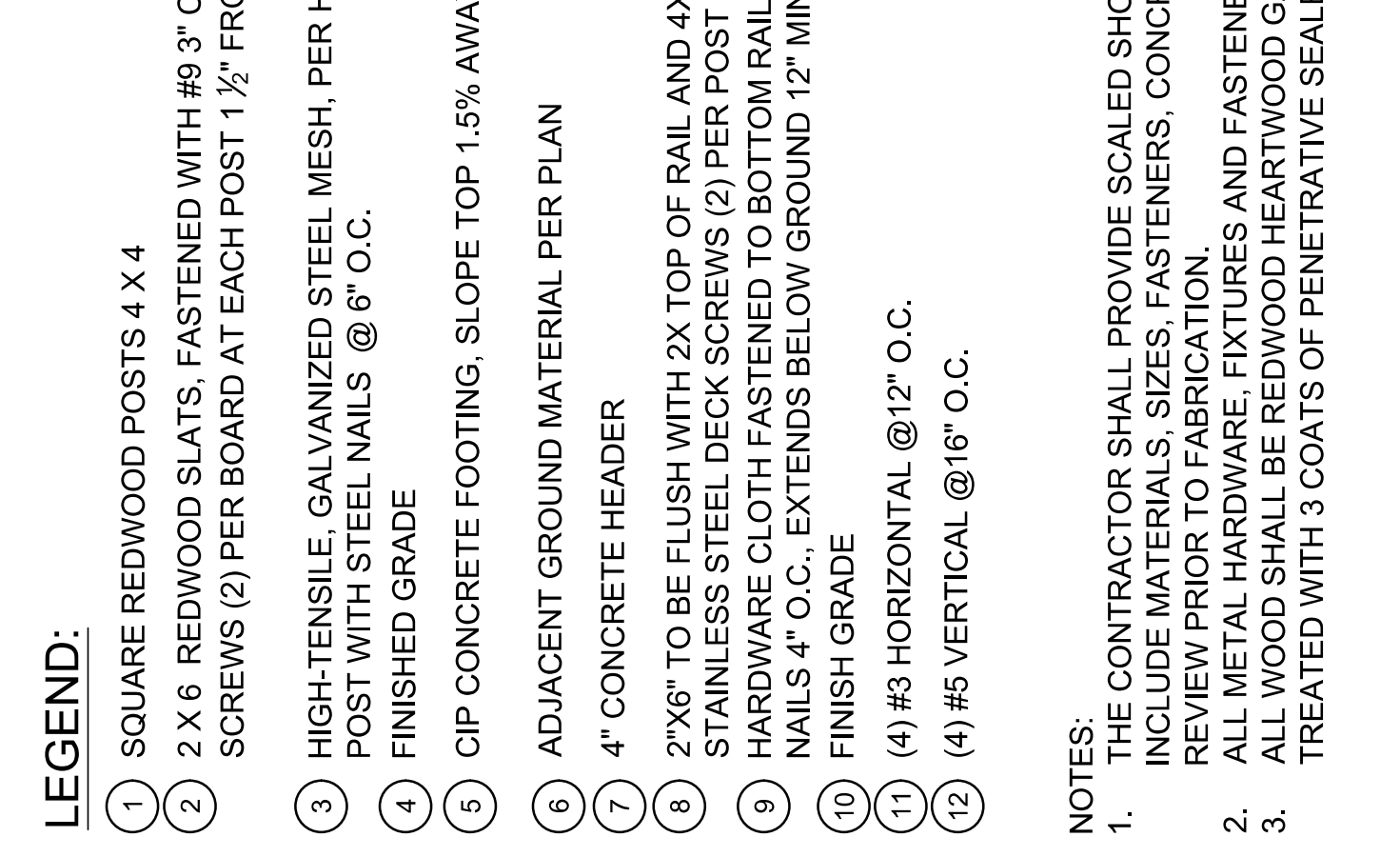
(A) CONCRETE CURB - PAVERS-STABILIZED DG
SCALE: NTS

- NOTE:
- CONTRACTOR TO APPLY PRE-EMERGENT TO COMPACTED (90%) SUBGRADE BEFORE INSTALLING DECOMPOSED GRANITE
 - INSTALL WEED CONTROL FABRIC- MIRAFI MISCAPE OR APPROVED EQUAL
 - CONTROL JOINT AT 20' ON CENTER UNLESS OTHERWISE NOTED.
 - INSTALL EXPANSION JOINTS AT CURB RETURNS, AND VERTICAL SURFACES PER SDRSD G-10
 - D.G. AND BINDER TO BE BLEND AT THE BATCH PLANT. INSTALL IN TWO LIFTS



(B) 5' HIGH GARDEN FENCE
SCALE: NTS

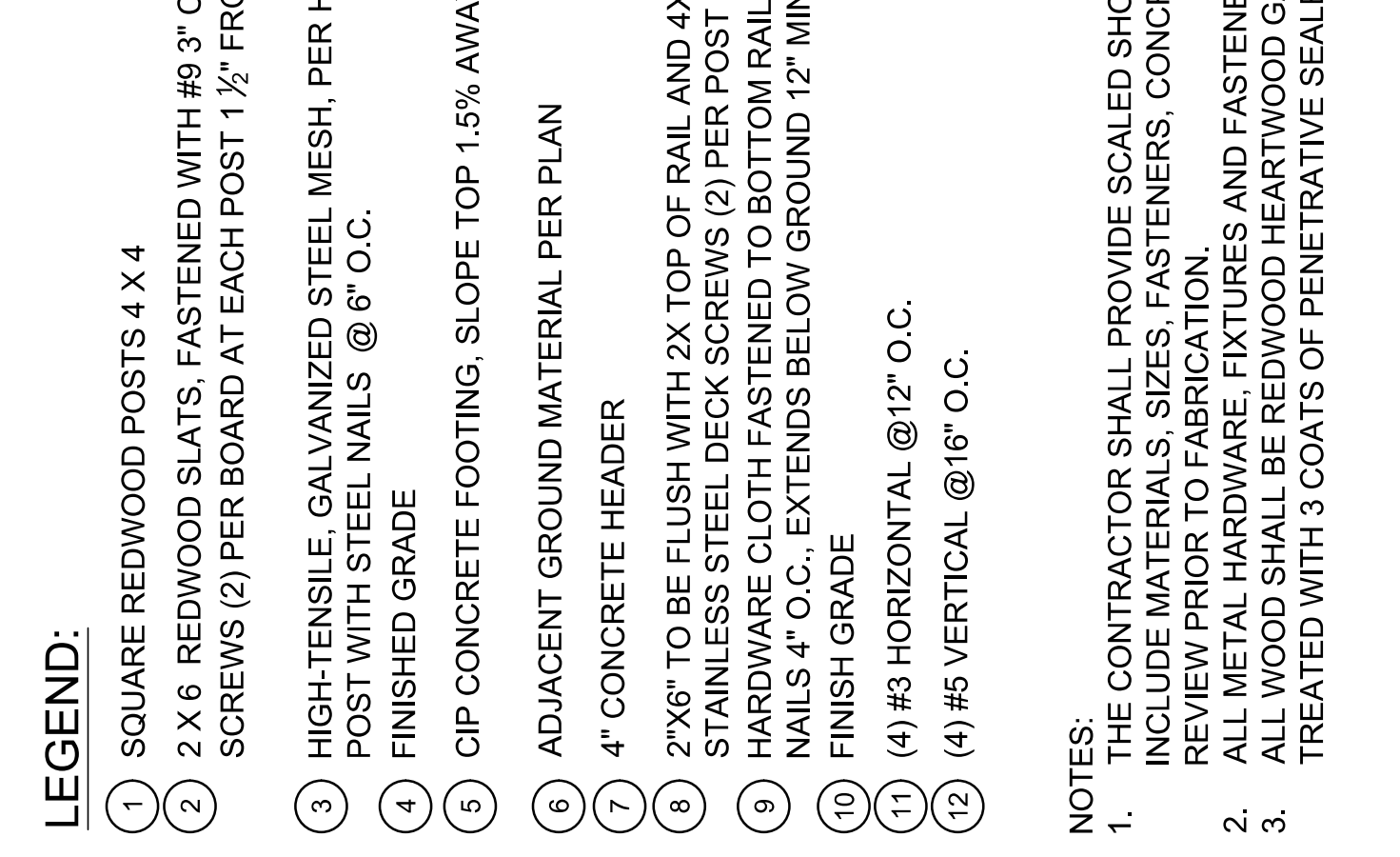
- LEGEND:**
- SQUARE REDWOOD POSTS 4 X 4
 - 2 X 6 REDWOOD SLATS, FASTENED WITH #9 3" COUNTERSUNK STAINLESS STEEL SCREWS (2) PER BOARD AT EACH POST 1 1/2" FROM BOARD EDGE, SPACED EQUALLY
 - HIGH-TENSILE GALVANIZED STEEL MESH, PER HARDSCAPE LEGEND FASTENED TO POST WITH STEEL NAILS @ 6" O.C.
 - FINISHED GRADE
 - CIP CONCRETE FOOTING, SLOPE TOP 1.5% AWAY FROM POST
 - ADJACENT GROUND MATERIAL PER PLAN
 - 4" CONCRETE HEADER
 - 2"X6" TO BE FLUSH WITH 2X TOP OF RAIL AND 4X POST FASTENED WITH #9 3" STAINLESS STEEL DECK SCREWS (2) PER POST
 - HARDWARE CLOTH FASTENED TO BOTTOM RAIL WITH STAINLESS STEEL FENCING NAILS 4" O.C., EXTENDS BELOW GROUND 12" MIN. ON EXTERIOR SIDE OF FENCE.
 - FINISH GRADE
 - #3 HORIZONTAL @12" O.C.
 - #5 VERTICAL @16" O.C.
- NOTES:**
- THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS: SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCING, DETAILS, ETC. FOR REVIEW PRIOR TO FABRICATION.
 - ALL METAL HARDWARE, FIXTURES AND FASTENERS SHALL BE 316 STAINLESS STEEL.
 - ALL WOOD SHALL BE REDWOOD HEARTWOOD GARDEN GRADE-MERCHANTABLE HEART, TREATED WITH 3 COATS OF PENETRATIVE SEALER PER SPECIFICATIONS



SECTION / ELEVATION
PARK SIDE / COMMUNITY GARDEN SIDE

(C) 5' HIGH GARDEN GATE
SCALE: NTS

- LEGEND:**
- SQUARE REDWOOD POST, 4 X 4
 - 2 X 6 REDWOOD GATE WING, TO MATCH FENCE
 - 5" X 5" STAINLESS STEEL BUTT HINGE ATTACHED WITH STAINLESS STEEL SCREWS (TYP)
 - STAINLESS STEEL COUNTERSUNK BOLT M12 X (1.5MM) X 65MM
 - #9 2 1/2" STAINLESS STEEL DECK SCREWS
 - LOCKEY USA, MODEL #3835 MECHANICAL KEYLESS LEVER LOCK, REFER TO DETAIL C1, SHEET 13, FOR INSTALLATION
 - FINISH GRADE
 - ADJACENT PERIMETER FENCE
 - CIP CONCRETE FOOTING, SLOPE TOP 1.5% AWAY FROM POST
 - HIGH-TENSILE GALVANIZED STEEL MESH FASTENED TO POST WITH STEEL FENCING NAILS AT 6" O.C.
 - 2 X 8 CONTINUOUS REDWOOD TOP RAIL.
 - HARDWARE CLOTH FASTENED TO BOTTOM RAIL EXTENDS VERTICALLY 12" BELOW GRADE
 - 4" CONCRETE HEADER PER FENCE DETAIL, PER DETAIL B
 - 3/8" Ø STAINLESS STEEL DIAGONAL STEEL BRACING ROD ASSEMBLY
 - 3" X 1/2" STAINLESS STEEL EYE STRAP
 - 2 X 8 REDWOOD GATE WING
 - STAINLESS STEEL GUARD 3"X3", DRILL HOLES @ 12" O.C. AND SCREW INTO WOOD FRAME W/ SS SCREWS. INSTALL ON THE INTERIOR SIDE OF GATE.
- NOTES:**
- THE CONTRACTOR SHALL FABRICATE A TOTAL FENCING SYSTEM INCLUDING MESH PANELS, POSTS, AND HARDWARE (BOLTS, HINGES, PLATES, HANDLES, ETC.)
 - CUT ENDS SHOULD BE DEBURRED, COLD-GALVANIZED AND PAINTED
 - THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS, SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCEMENT, DETAILS, ETC FOR REVIEW PRIOR TO FABRICATION.
 - ALL METAL FASTENERS AND FIXTURES SHALL BE 316 STAINLESS STEEL.
 - ALL WOOD SHALL BE REDWOOD HEARTWOOD GARDEN GRADE-MERCHANTABLE HEART, TREATED WITH 3 COATS OF PENETRATIVE SEALER PER SPECIFICATIONS.



DOUBLE VEHICULAR GATE
ELEVATION PARK SIDE
CANE BOLT WITH CONCRETE FOOTING.

(C) 5' HIGH GARDEN GATE
SCALE: NTS

PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

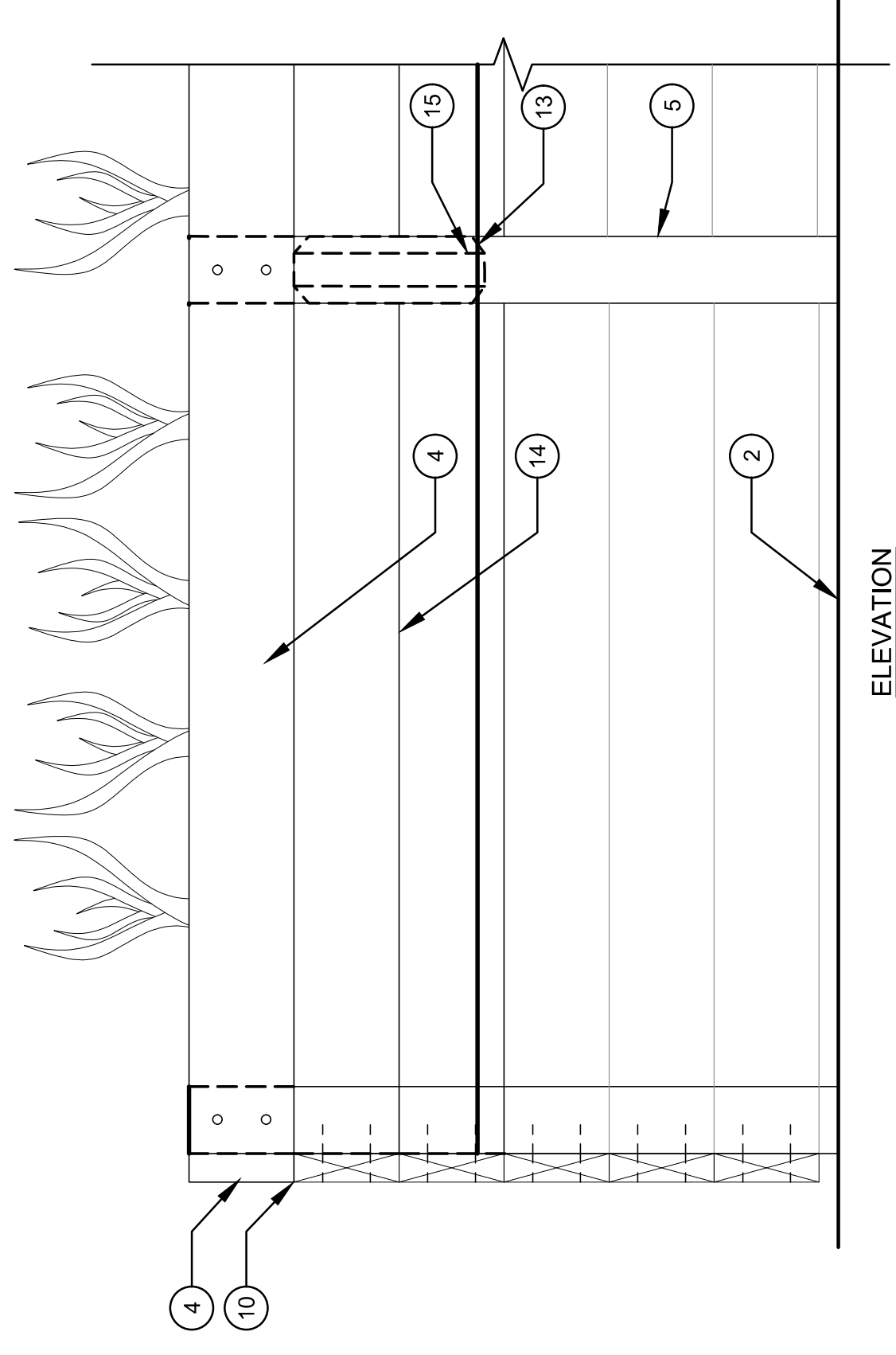
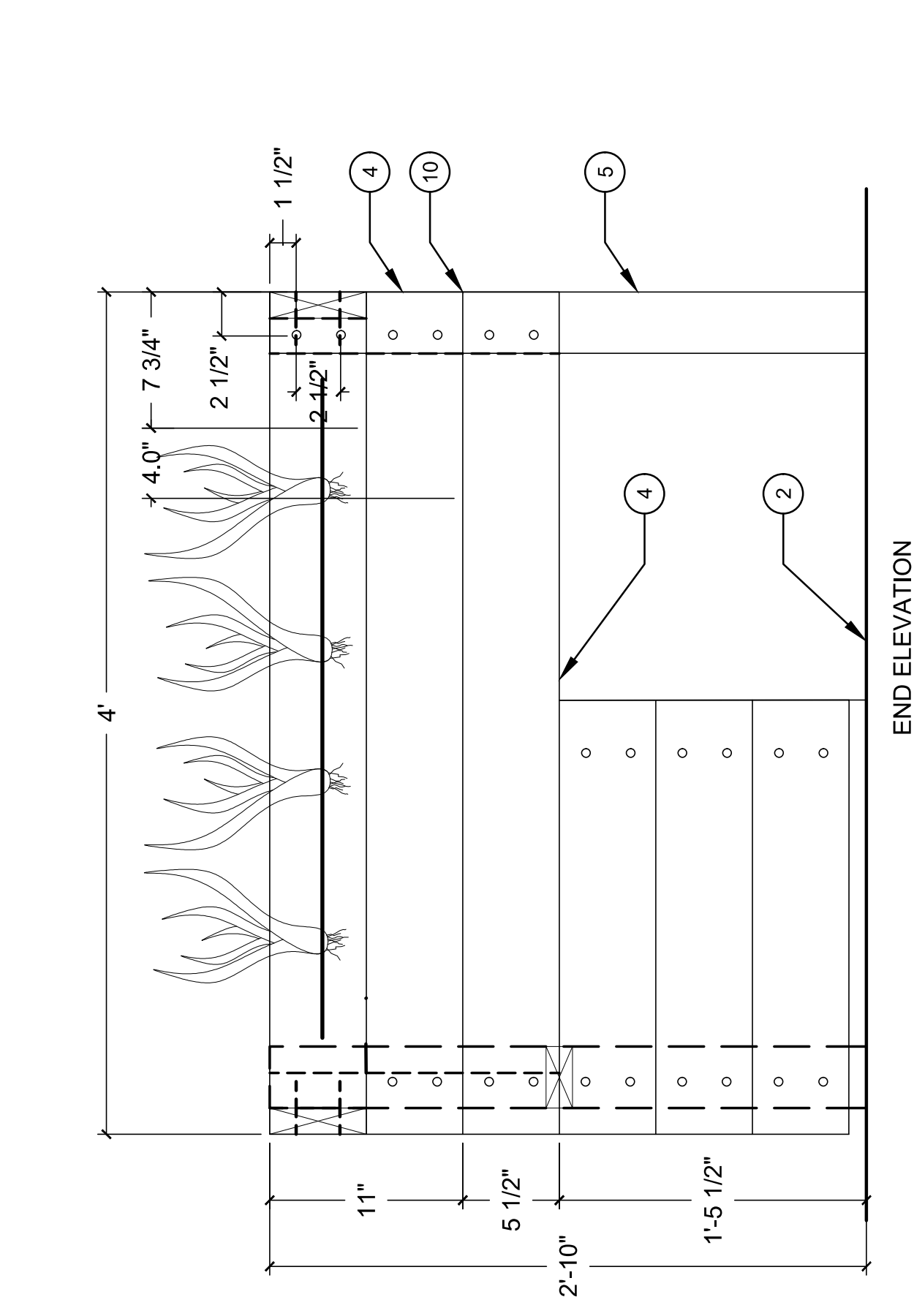
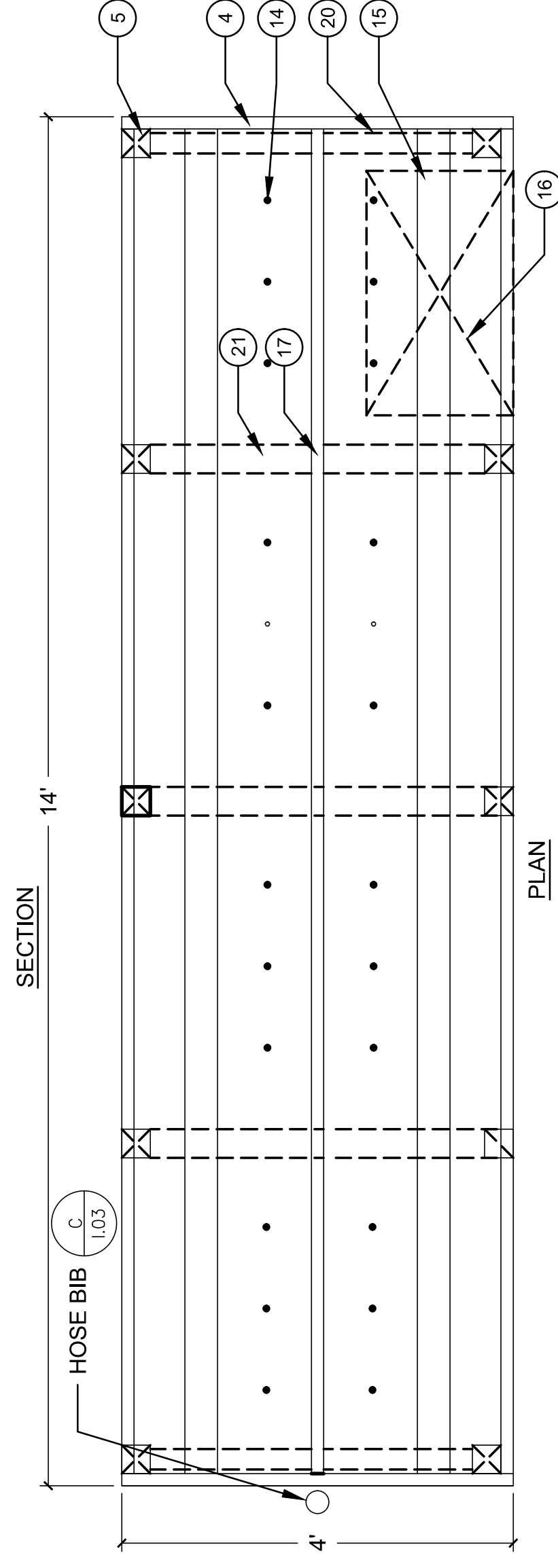
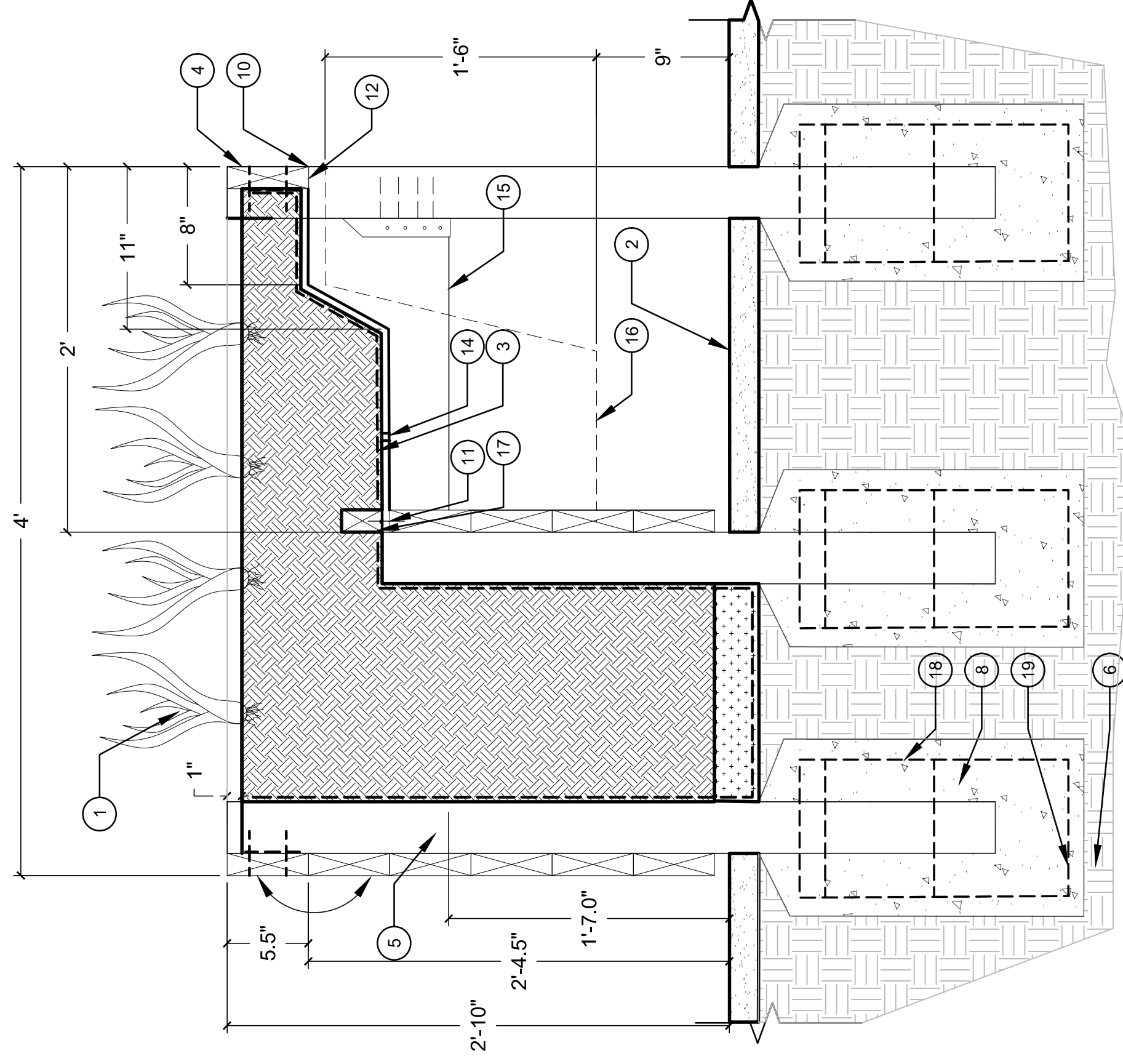
PLANS V1 4/12/24

"AS BUILT"

RCE	EXP	DATE	REVIEWED BY:	INSPECTOR	DATE	
			SHEET 12			CITY OF CARLSBAD
			LANDSCAPE IMPROVEMENT PLANS FOR			PLANNING DIVISION
			STAGECOACH COMMUNITY PARK			COMMUNITY GARDEN
			L.04 - CONSTRUCTION DETAILS 1			4/16/2024
			ACCEPTED BY: <i>Gandy Heungne</i>			
			DRAWN BY: <i>EM</i>			PROJECT NO. 4611
			CHECKED BY: <i>BY</i>			DRAWING NO. 547-4
			REVISED BY: <i>HL</i>			

REVISION DESCRIPTION	DATE	INITIAL	DATE	INITIAL	DATE	INITIAL
DESIGNER OF WORK			OTHER APPROVAL			CITY APPROVAL

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

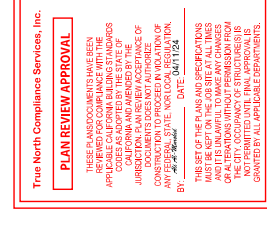


LEGEND:

- 1 PLANTING FOR REFERENCE ONLY, NOT INCLUDED IN PROJECT
- 2 FINISH GRADE
- 3 HARDWARE CLOTH TURN UP 6" ON ALL SIDES AND SECURE TO THE PLANTER WITH H.D. STAINLESS STEEL FENCE STAPLES @ 4" O.C.
- 4 2 X 6 REDWOOD SLATS, FASTENED WITH #9 3" COUNTERSUNK STAINLESS STEEL SCREWS (2) PER BOARD AT EACH POST 1-1/2" FROM BOARD EDGE, SPACED EQUALLY
- 5 4 X 4 TREATED REDWOOD POSTS, SEE PLAN FOR LOCATION
- 6 COMPACTED SUBGRADE TO 90%
- 7 NOT USED
- 8 CONCRETE FOOTING, SLOPE TOP 1.5% AWAY FROM POST
- 9 NOT USED
- 10 HAND TIGHT JOINTS, NO GAPS
- 11 COUNTERSUNK STAINLESS STEEL SCREWS
- 12 NOTCH POST TO ACCEPT SLATS
- 13 18 GA. STAINLESS STEEL JOIST HANGER FASTENED BY STAINLESS STEEL SCREWS
- 14 1-1/2" MARINE GRADE PLYWOOD W/1/2" DRAIN HOLES 18" OC. MAX. BOTH WAYS
- 15 REDWOOD BEAM CUSTOM CUT TO PLANTER PROFILE
- 16 CLEAR KNEE SPACE
- 17) 2 X4 REDWOOD BLOCKING
- 18) (4) #5 VERTICAL @16" O.C.
- 19) (4) #3 HORIZONTAL @12" O.C.
- 20) 3 X9 BEAM, SHAPED
- 21) 4 X9 BEAM, SHAPED

NOTES:

1. THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS: SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCING, DETAILS, ETC. FOR REVIEW PRIOR TO FABRICATION.
2. ALL METAL HARDWARE, FIXTURES AND FASTENERS SHALL BE 316 STAINLESS STEEL.
3. ALL WOOD SHALL BE REDWOOD HEARTWOOD GARDEN GRADE-MERCHANTABLE HEART, TREATED WITH 3 COATS OF PENETRATIVE SEALER PER SPECIFICATIONS.



"AS BUILT"

RCE _____ EXP _____ DATE _____
 REVIEWED BY: _____
 INSPECTOR _____ DATE _____

SHEET 14	CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
L.06 - CONSTRUCTION DETAILS 3	
ACCEPTED BY: <i>Emily Hargrave</i>	4/16/2024
DWN BY: EM	PROJECT NO. 4611
CHKD BY: SY	DRAWING NO. 547-4
REV'D BY: FL	

DESIGNER OF WORK	DATE	INITIAL	REVISION DESCRIPTION	OTHER APPROVAL	DATE	INITIAL	CITY APPROVAL



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

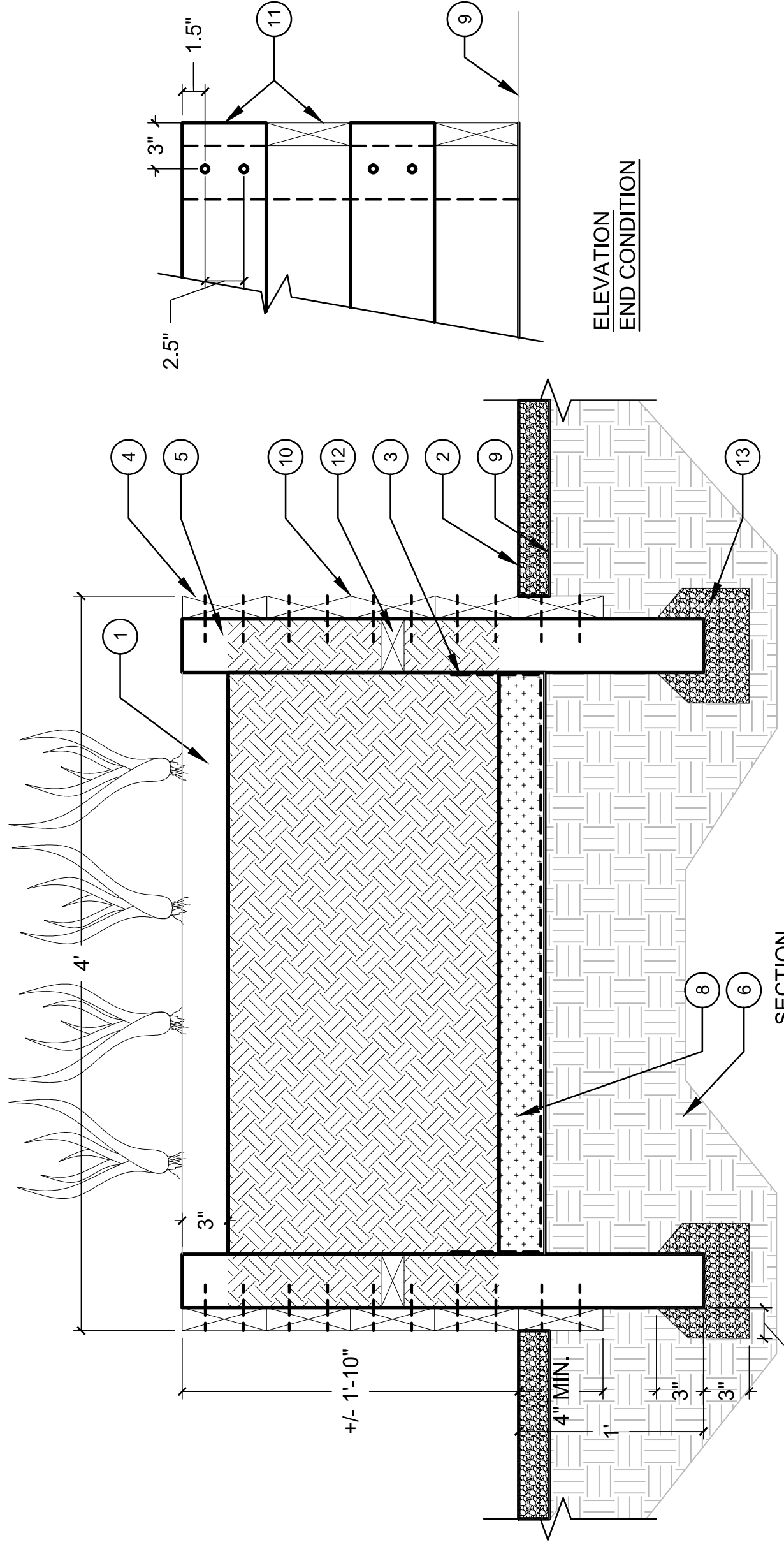


F 34" RAISED ADA PLANTER
SCALE: NTS

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
 AT LEAST TWO DAYS BEFORE YOU DIG
 800-444-4343

LEGEND:

- 1 PLANTING FOR REFERENCE ONLY, NOT INCLUDED IN PROJECT
- 2 ADJACENT PAVING MATERIAL VARIES SEE PLANS
- 3 HARDWARE CLOTH TURN UP 6" ON ALL SIDES AND SECURE TO THE PLANTER WITH H.D. STAINLESS STEEL FENCE STAPLES @ 4" O.C.
- 4 2" X 6" REDWOOD SLATS, FASTENED WITH #9 3" COUNTERSUNK STAINLESS STEEL SCREWS (2) PER BOARD AT EACH POST 1 1/2" FROM BOARD EDGE, SPACED EQUALLY
- 5 (6) 4" X 4" TREATED REDWOOD POSTS, SEE PLAN FOR LOCATION
- 6 COMPACTED SUBGRADE TO 90%
- 7 NOT USED
- 8 3" STRAW LAYER
- 9 FINISH GRADE
- 10 HAND TIGHT JOINTS, NO GAPS
- 11 ALTERNATE BOARD JOINTS AT PLANTER CORNERS
- 12 2" X 4" BLOCKING ATTACHED TO POST WITH STAINLESS STEEL SCREWS
- 13 3/4" GRAVEL



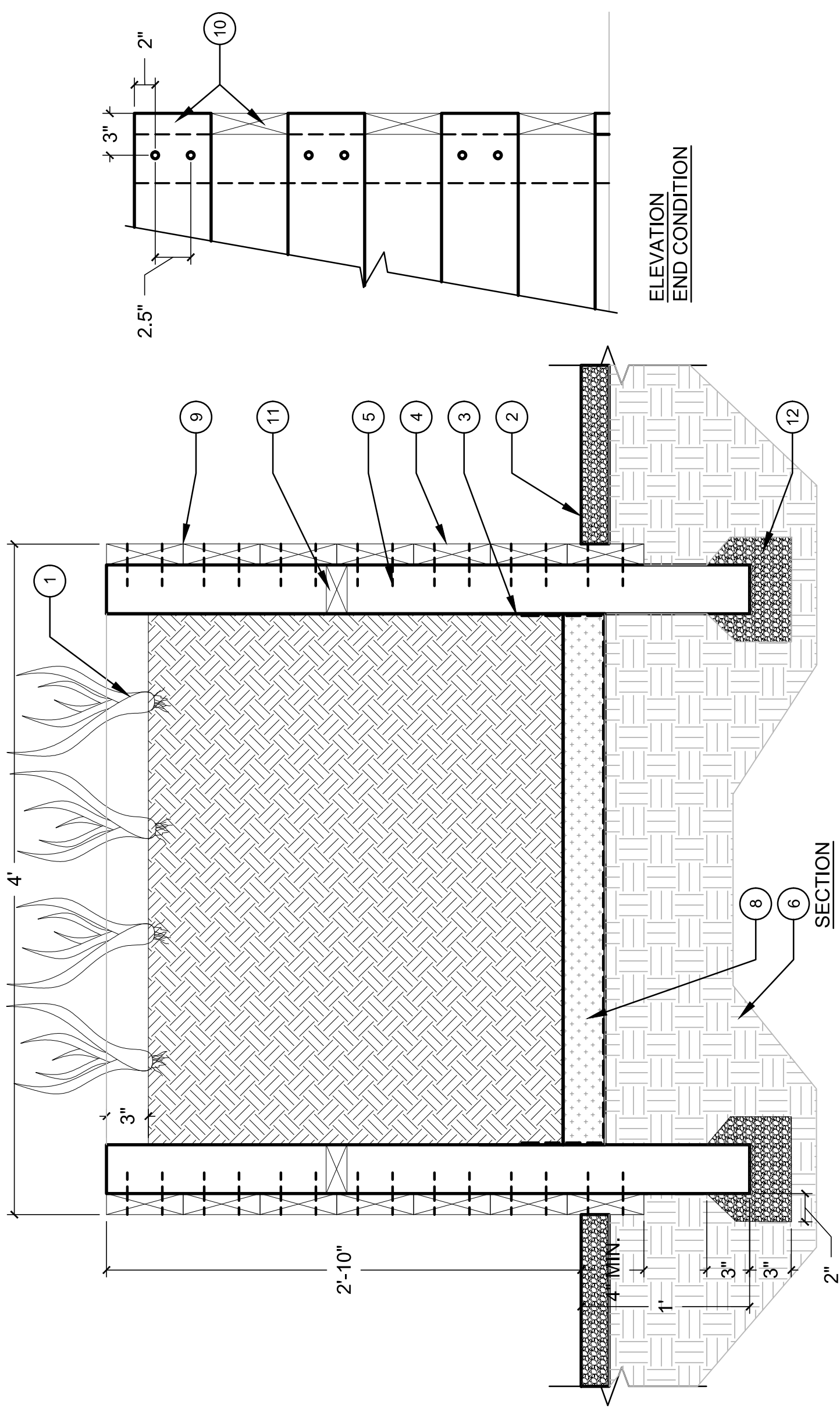
22" RAISED PLANTER - NOT USED

SCALE: 1/12" = 1'-0"



LEGEND:

- 1 PLANTING FOR REFERENCE ONLY, NOT INCLUDED IN PROJECT
- 2 FINISH GRADE
- 3 HARDWARE CLOTH TURN UP 6" ON ALL SIDES AND SECURE TO THE PLANTER WITH H.D. STAINLESS STEEL FENCE STAPLES @ 4" O.C.
- 4 2" X 6" REDWOOD SLATS, FASTENED WITH #9 3" COUNTERSUNK STAINLESS STEEL SCREWS (2) PER BOARD AT EACH POST 1 1/2" FROM BOARD EDGE, SPACED EQUALLY
- 5 (6) 4" X 4" TREATED REDWOOD POSTS, SEE PLAN FOR LOCATION
- 6 COMPACTED SUBGRADE TO 90%
- 7 NOT USED
- 8 3" STRAW LAYER
- 9 HAND TIGHT JOINTS, NO GAPS
- 10 ALTERNATE BOARD JOINTS AT PLANTER CORNERS
- 11 2" X 4" BLOCKING ATTACHED TO POST WITH STAINLESS STEEL SCREWS
- 12 3/4" GRAVEL

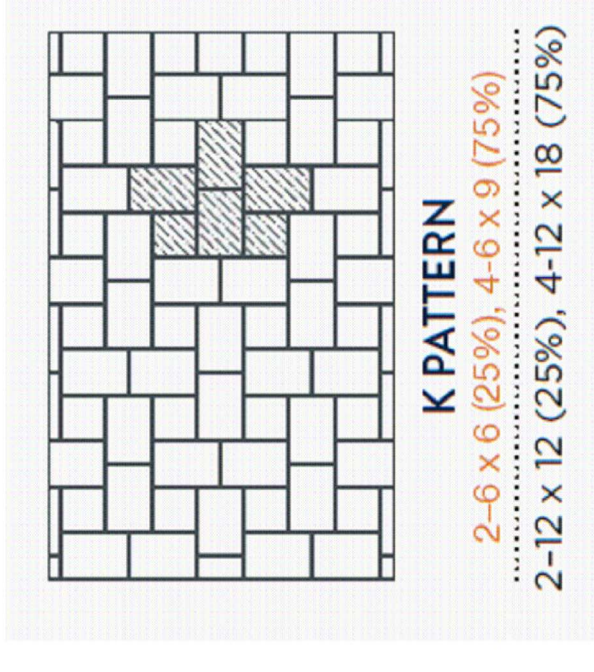


34" RAISED PLANTER

SCALE: 1/12" = 1'-0"

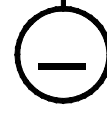


MANUFACTURER: BELGRADE
 PAVER TYPE: CAMBRIDGE
 PAVER COLOR: VICTORIAN
 PATTERN TYPE: K PATTERN
 PAVER SIZE: 6X6 AND 6X9
 80 MM

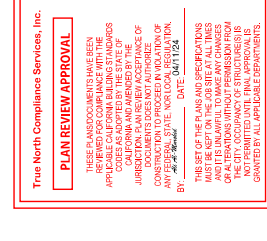


VEHICULAR PAVERS PATTERN

SCALE: NTS



- NOTES:**
- 1. THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS; SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCING, DETAILS, ETC. FOR REVIEW PRIOR TO FABRICATION.
 - 2. ALL METAL HARDWARE, FIXTURES AND FASTENERS SHALL BE 316 STAINLESS STEEL.
 - 3. ALL WOOD SHALL BE REDWOOD HEARTWOOD GARDEN GRADE-MERCHANTABLE HEART, TREATED WITH 3 COATS OF PENETRATIVE SEALER PER SPECIFICATIONS.



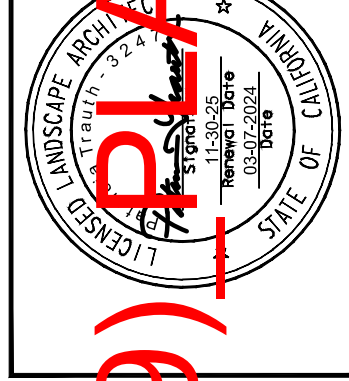
"AS BUILT"

RCE _____ EXP _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____

SHEET	15
CITY OF CARLSBAD	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
L.07 - CONSTRUCTION DETAILS 4	
ACCEPTED BY:	4/16/2024
DWN BY: EM	PROJECT NO. 4611
CHKD BY: JBY	DRAWING NO. 547-4
REV'D BY: JFL	



PREV2024-0059 of Carlsbad Parks & Recreation

DIGITAL FRT

CBR2024-0039

PLANS V1 4/12/24

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

PRODUCT: Q1-EM84B

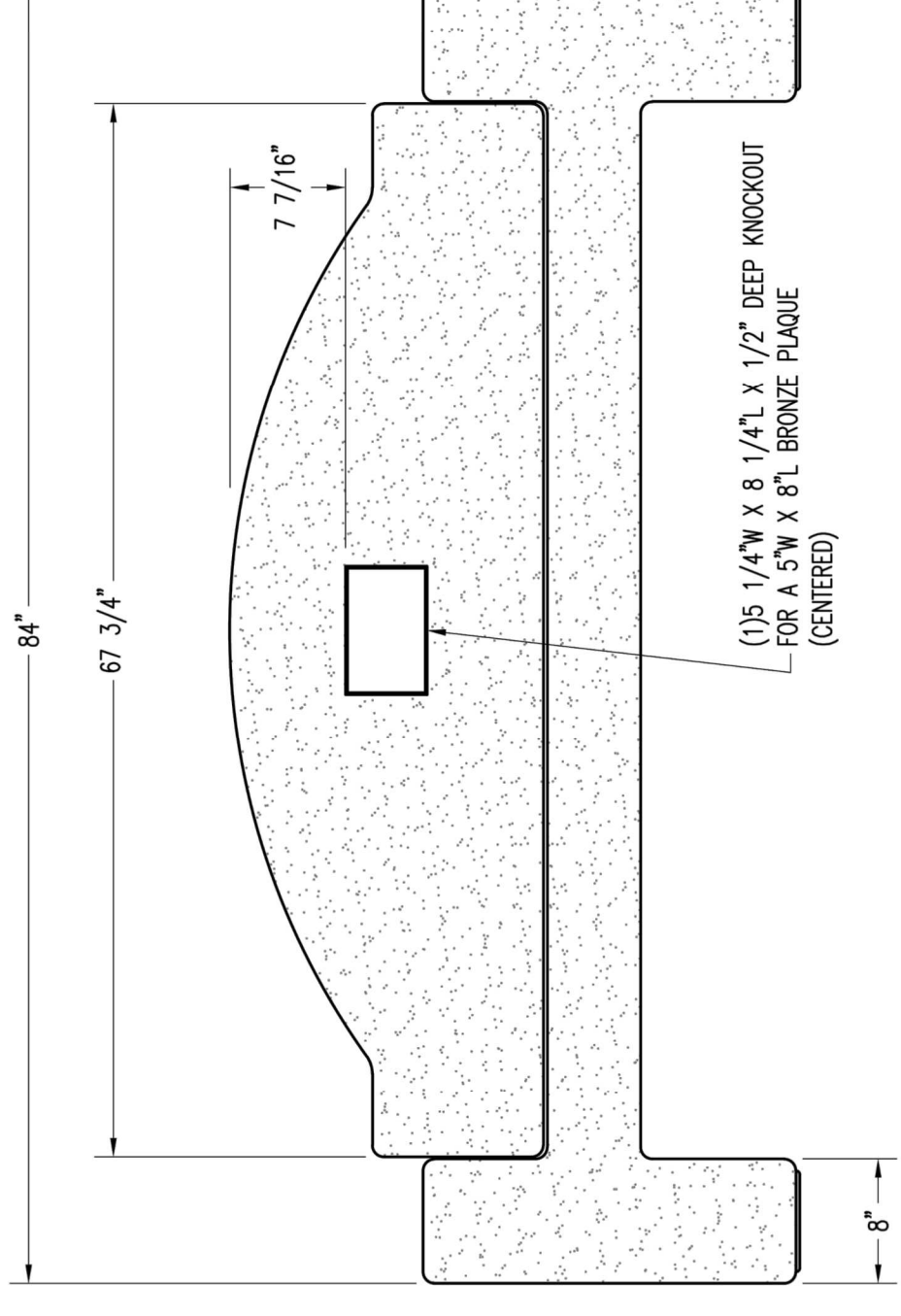
WEIGHT: 1,918 lbs.
(CUSTOMER TO OFFLOAD PAVEMENT POWER 6000 lbs.)

- CONCRETE COLOR:
- QUAL HILL RED
 - FRENCH GREY
 - NATURAL
 - BANGALOW
 - MISSION WHITE
 - ADORNE TAUPÉ
 - LAITE
 - CUSTOM COLOR
 - HARVEST
- CONCRETE TEXTURE:
- CRAFTSMANS ETCH
 - STRATA

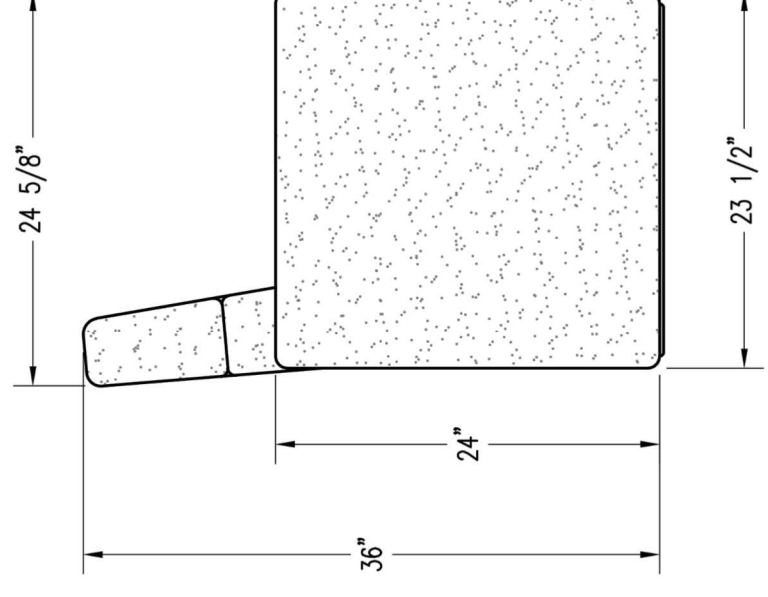
QUANTITY: 1

SEALER: STANDARD GLOSS SEALER

GENERAL PRODUCT NOTES:
E = EXPOSED FINISHED SURFACE
INSTALLATION IS REQUIRED BY OTHERS.
ALL EDGES TO BE EASED.
MANUFACTURING TOLERANCE ±1/8".
ANCHORING METHOD BY OTHERS
QCP RECOMMENDS ANCHORING WITH ADHESIVE
INCLUDES ADHESIVE
BRONZE PLAQUE SUPPLIED
AND INSTALLED BY OTHERS



ELEVATION VIEW

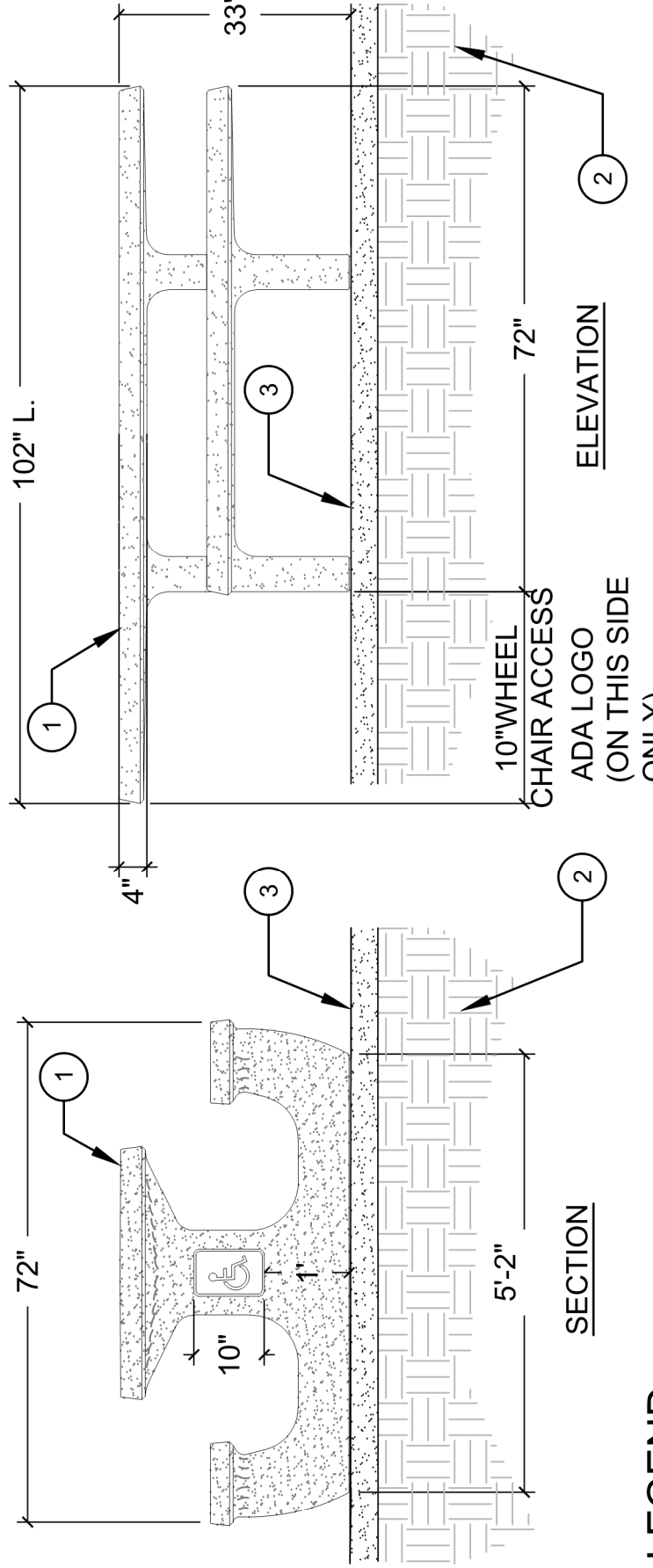


SECTION VIEW

HARDWARE LIST		DATE	FILE NO.	SHEET
QTY	TYPE	10/09/19	144825-1	1
1	SMILEX		DRAWN BY:	
		SCALE	C.P.	OF
		5/8" = 1'		1
		PC NO.	QCP ITEM NO.	
		CC1	1	

PLANT TYPE	CONSTRUCTION PLAN
	Q1-EM84B BENCH EL MONTE
PRODUCT	CITY OF CARLSBAD
PROJECT NAME	

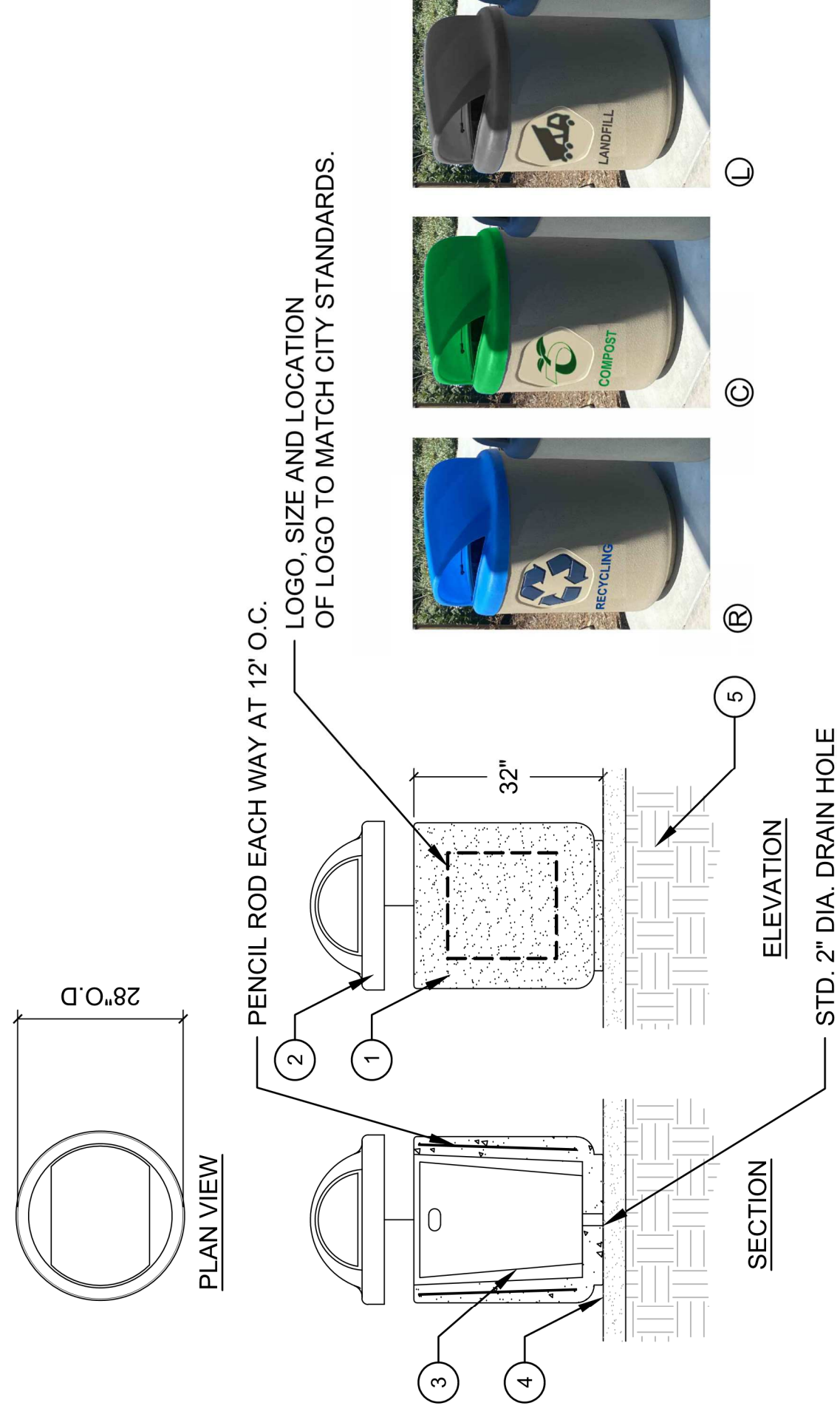
(K) 7' BENCH
SCALE: NTS



LEGEND:

- (1)** PRECAST CONCRETE PICNIC TABLE, SEE LEGEND FOR MODEL, COLOR AND FINISH
- (2)** 90% COMPACTED SUBGRADE
- (3)** FINISH GRADE

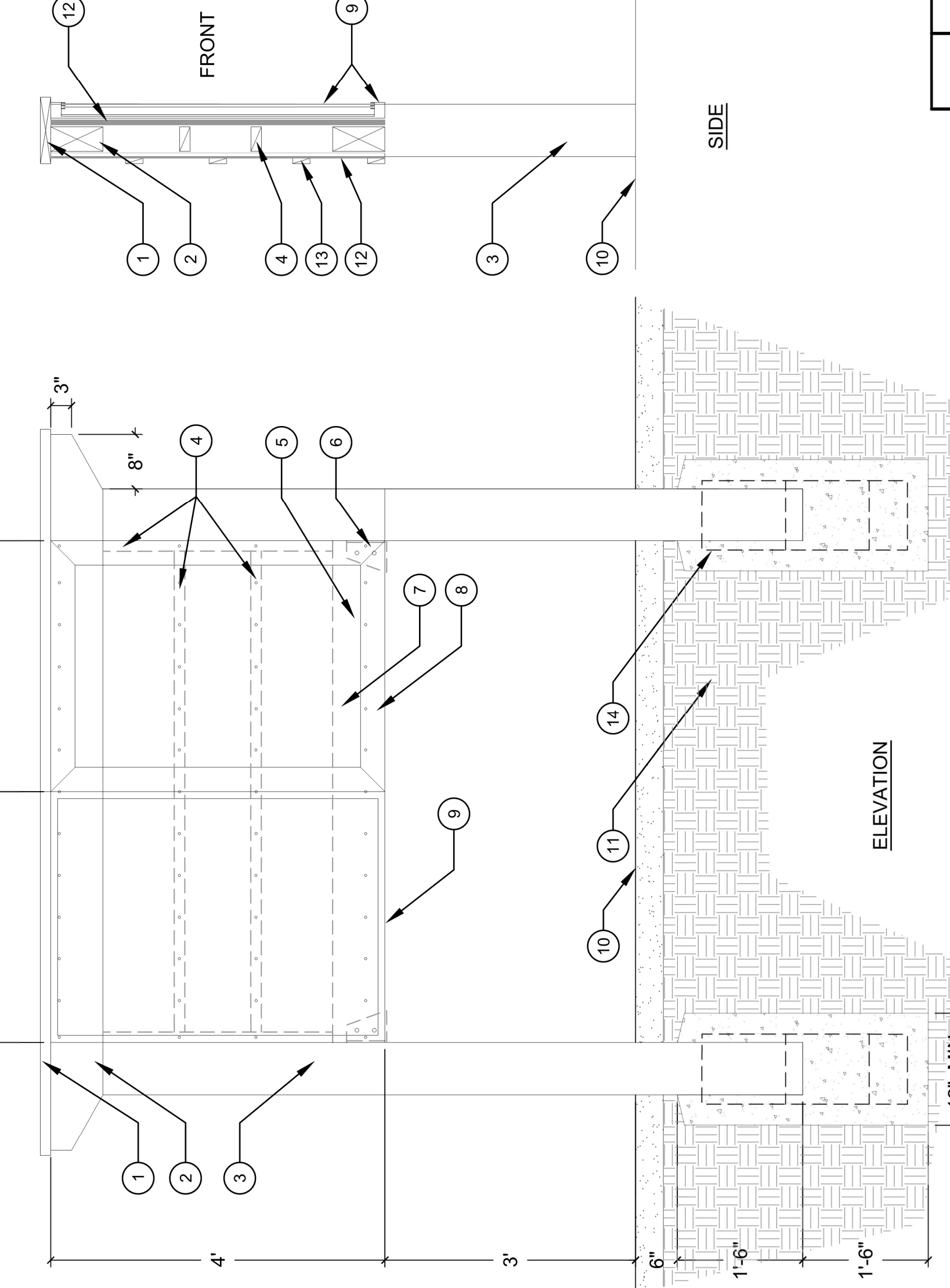
(J) ADA PICNIC TABLE
SCALE: NTS



LEGEND:

- (1)** PRECAST WASTE CONTAINER, SEE LEGEND FOR MODEL AND COLOR
- (2)** LID - H28 W/SECURITY CABLE & BOLT, COLOR GRAY
- (3)** PLASTIC LINER -(QRPL27B) 26 GAL.
- (4)** FINISH GRADE
- (5)** 90% COMPACTED SUBGRADE

(L) WASTE RECEPTACLE
SCALE: NTS



LEGEND:

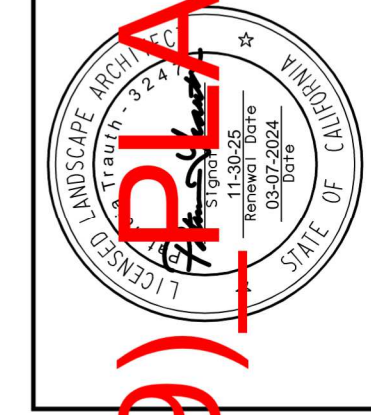
- (1)** 2 X 10 REDWOOD CAP BOARD
- (2)** 4 X 8 REDWOOD BEAM, CHAMFER EDGES PER DETAIL
- (3)** 8 X 8 REDWOOD POST
- (4)** 2 X 4 REDWOOD BLOCKING, FASTENED WITH #9 2 1/2" STEEL SCREWS
- (5)** 4 X 8 REDWOOD BEAM
- (6)** 6 X 6 X 5 / 16 X 4 CONCEALED STAINLESS STEEL PLATE W/BEARING SEAT
- (7)** 3/8" W X 48" H AREA PRIMED FOR AND PAINTED W/EXTERIOR RUSTOLEIUM BLACK CHALKBOARD PAINT OR APPROVED EQUAL
- (8)** 1 X 4 REDWOOD TRIM, ATTACH WITH TRIM STAINLESS STEEL NAILS 6" OC
- (9)** BALT WEATHER SENTINEL OUTDOOR ENCLOSED CABINET, 1 SIDE HINGED DOOR, 36" W X 48" H, TAN RUBBER TACK BACK PANEL, FROM GLOBAL INDUSTRIAL, 888-978-7759, ATTACH PER MANUFACTURER'S RECOMMENDATION.
- (10)** FINISH GRADE
- (11)** SUBGRADE COMPACTED TO 90%
- (12)** 3/4" B-C EXTERIOR GRADE PLYWOOD FASTENED WITH #9 1-1/2" STAINLESS STEEL COUNTERSUNK SCREWS 6" OC.
- (13)** REDWOOD BATTEN BOARD AT 12" OC, ATTACH WITH TRIM NAILS 6" OC
- (14)** CIP CONCRETE FOOTING, SLOPE 1.5% AWAY FROM POST

- NOTES:
- THE CONTRACTOR SHALL PROVIDE SCALE SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCING, DETAILS, ETC. FOR REVIEW PRIOR TO FABRICATION. ALL METAL FASTENERS AND FIXTURES SHALL BE 316.
 - STAINLESS STEEL SHALL BE REDWOOD HEARTWOOD GARDEN GRADE-MERCHANTABLE HEART, TREATED WITH 3 COATS OF PENETRATIVE SEALER PER SPECIFICATIONS.

"AS BUILT"

RCE	EXP	DATE
REVIEWED BY:		
INSPECTOR		DATE

SHEET	CITY OF CARLSBAD
16	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR:	
STAGECOACH COMMUNITY PARK	
COMMUNITY GARDEN	
L.08 - CONSTRUCTION DETAILS 5	
ACCEPTED BY:	4/16/2024
DIV BY: EM	PROJECT NO. 4611
CHKD BY: AS	DRAWING NO. 547-4
REV'D BY: JL	



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

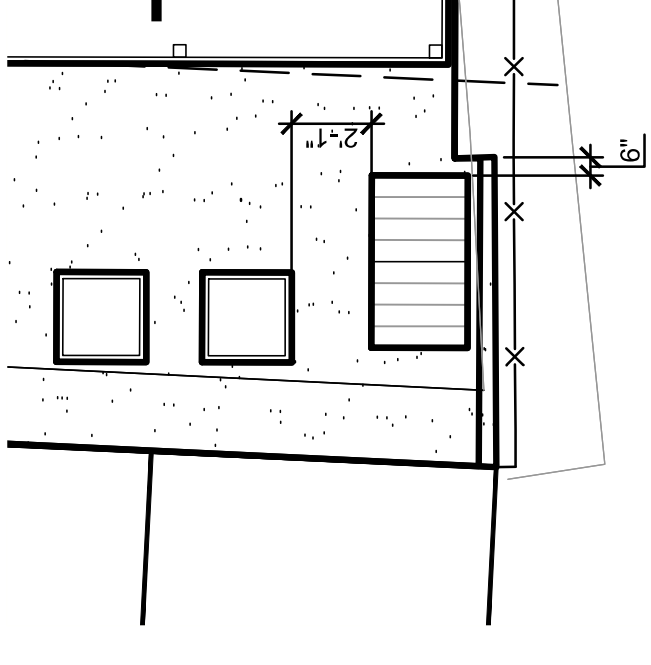
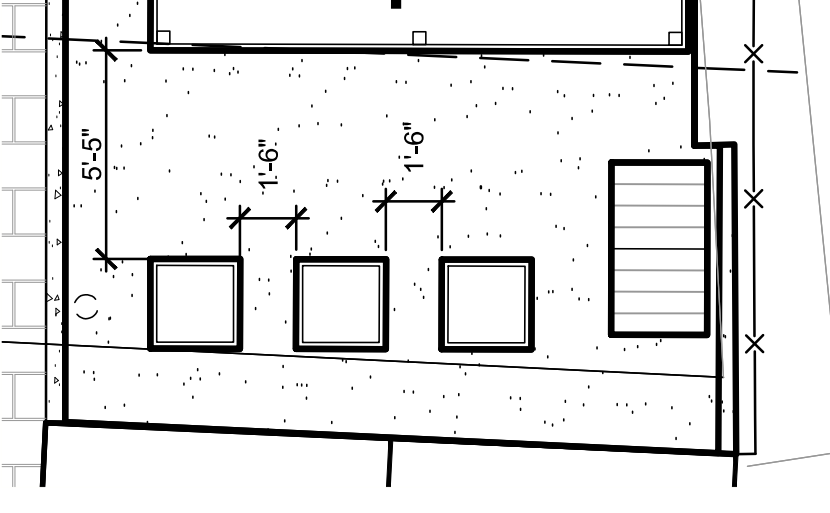
DIGITAL
Carlsbad
Parks & Recreation

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
AT LEAST TWO DAYS BEFORE YOU DIG
800-4-A-SHALERT



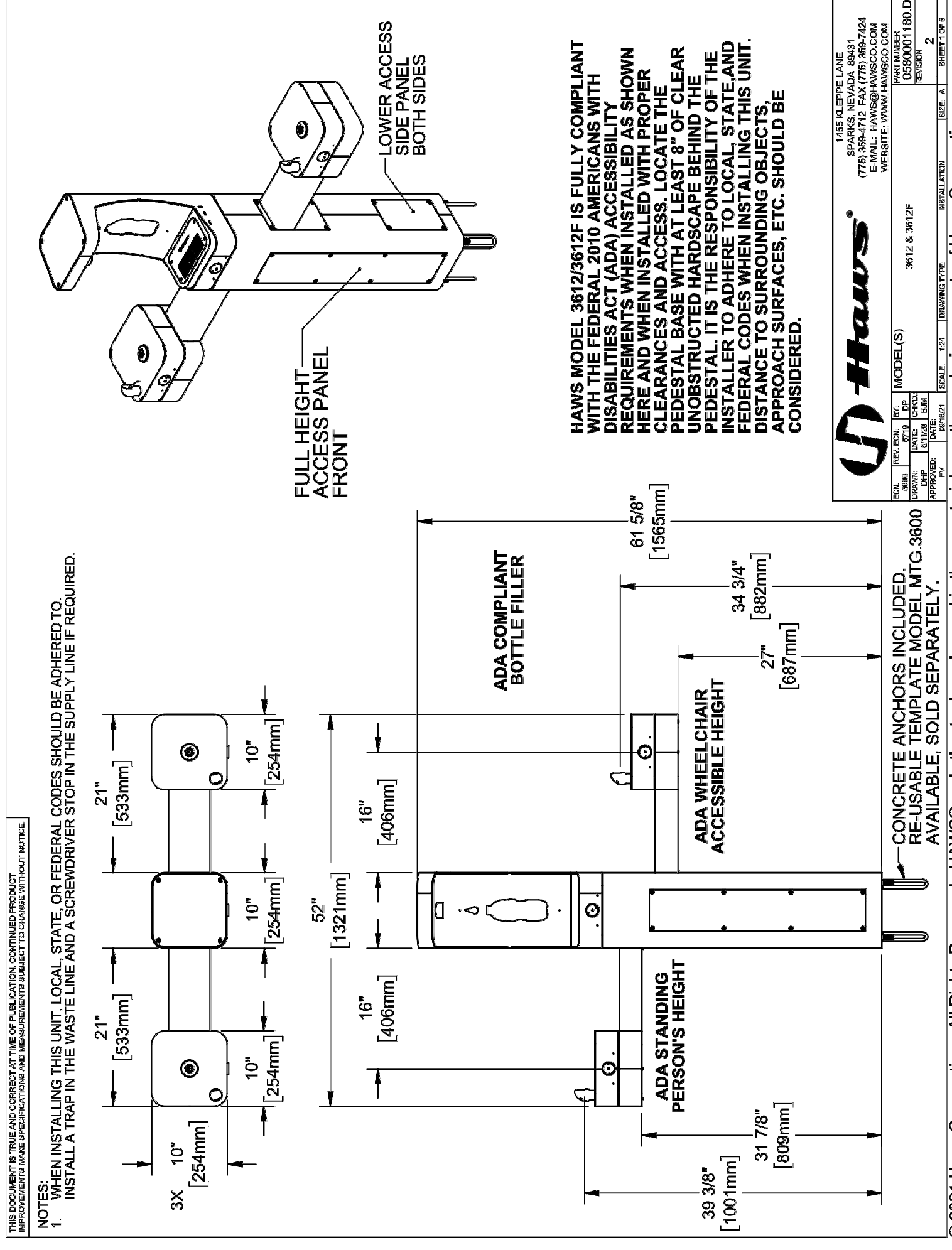
MANUFACTURER: BUSCH SYSTEMS
SEE LEGEND FOR MODEL INFORMATION

(N) NOT USED
SCALE: NTS



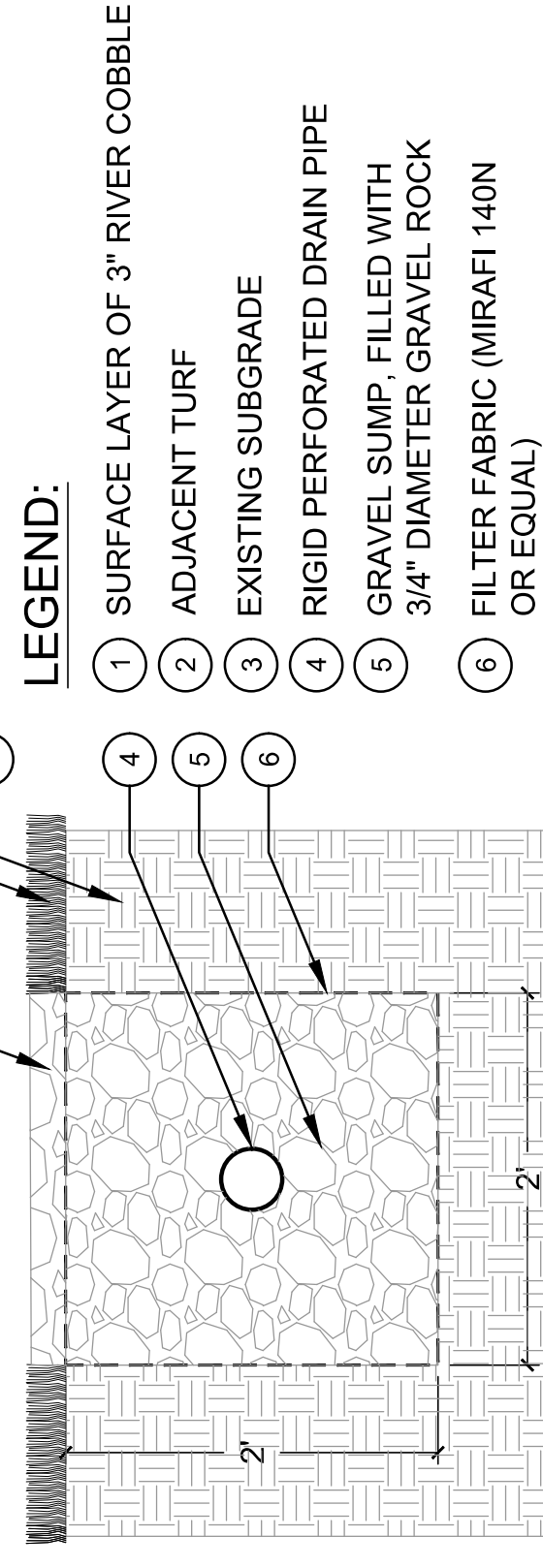
MANUFACTURER: WEST ELM
SEE LEGEND FOR MODEL INFORMATION

(P) HORIZONTAL STORAGE BOX
SCALE: NTS



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(Q) DRINKING FOUNTAIN
NTS

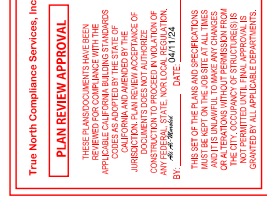


DRINKING FOUNTAIN DRAIN SUMP

NOTE:
1. INSTALL PEA GRAVEL AROUND RIGID PERFORATED DRAIN PIPE.

LEGEND:

- 1 SURFACE LAYER OF 3" RIVER COBBLE
- 2 ADJACENT TURF
- 3 EXISTING SUBGRADE
- 4 RIGID PERFORATED DRAIN PIPE
- 5 GRAVEL SUMP, FILLED WITH 3/4" DIAMETER GRAVEL ROCK
- 6 FILTER FABRIC (MIRAFI 140N OR EQUAL)



"AS BUILT"

RCE _____ EXP _____ DATE _____

REVIEWED BY:

INSPECTOR _____ DATE _____

SHEET	17	CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR	STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
ACCREDITED BY:	L.09 - CONSTRUCTION DETAILS 6	4/16/2024
DWN BY:	JM	PROJECT NO. 4611
CHKD BY:	AV	DRAWING NO. 547-4
REV'D BY:	JL	

DATE	INITIAL	DESIGNER OF WORK	REVISION DESCRIPTION	DATE	INITIAL	OTHER APPROVAL	DATE	INITIAL	CITY APPROVAL



PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

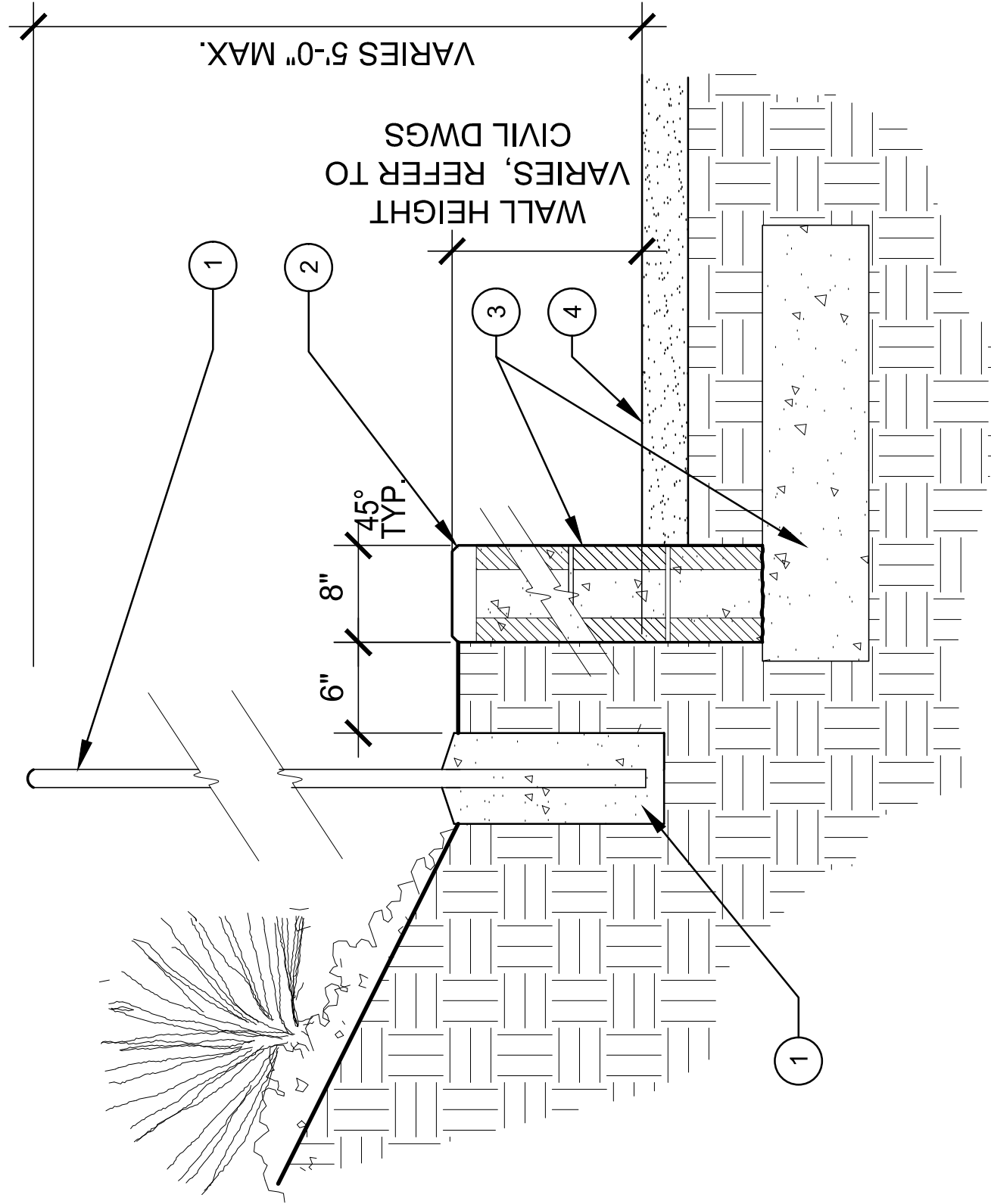
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
AT LEAST TWO DAYS BEFORE YOU DIG
800-487-4874

LOCKEY USA 3830/3835 Installation Instructions **3830 Knob** **3835 Lever**

Part #	Part Name	# Included	DC Lock Included
1	Outside Body	1	1
2	Inside Body	1	1
3	Lever/Knob	2/2	2/2
4	Rubber Trim Plate	2	2
5	Strike Plate	1	1
6	Modified Striker	1	1
7	Spindle	1	1
8	Allen Wrench	1	1
9	Machine Screw M4 x 30mm	2	2
10	Machine Screw M4 x 40mm	2	2
11	Machine Screw M4 x 50mm	2	2
12	Wood Screw M4 x 18mm	4	4
13	Wood Screw M4 x 18mm	4	4
14	Extra Non-Code Tumblers (Red)	1	2
15	Adjustable Latch (2 3/8" - 2 3/4")	1	1
16	Support Pin	1	1
17	Twonops	1	1
18	Hex Bolts	2	2

(C.1) MECHANICAL LEVER LOCK INSTALLATION

SCALE: NTS



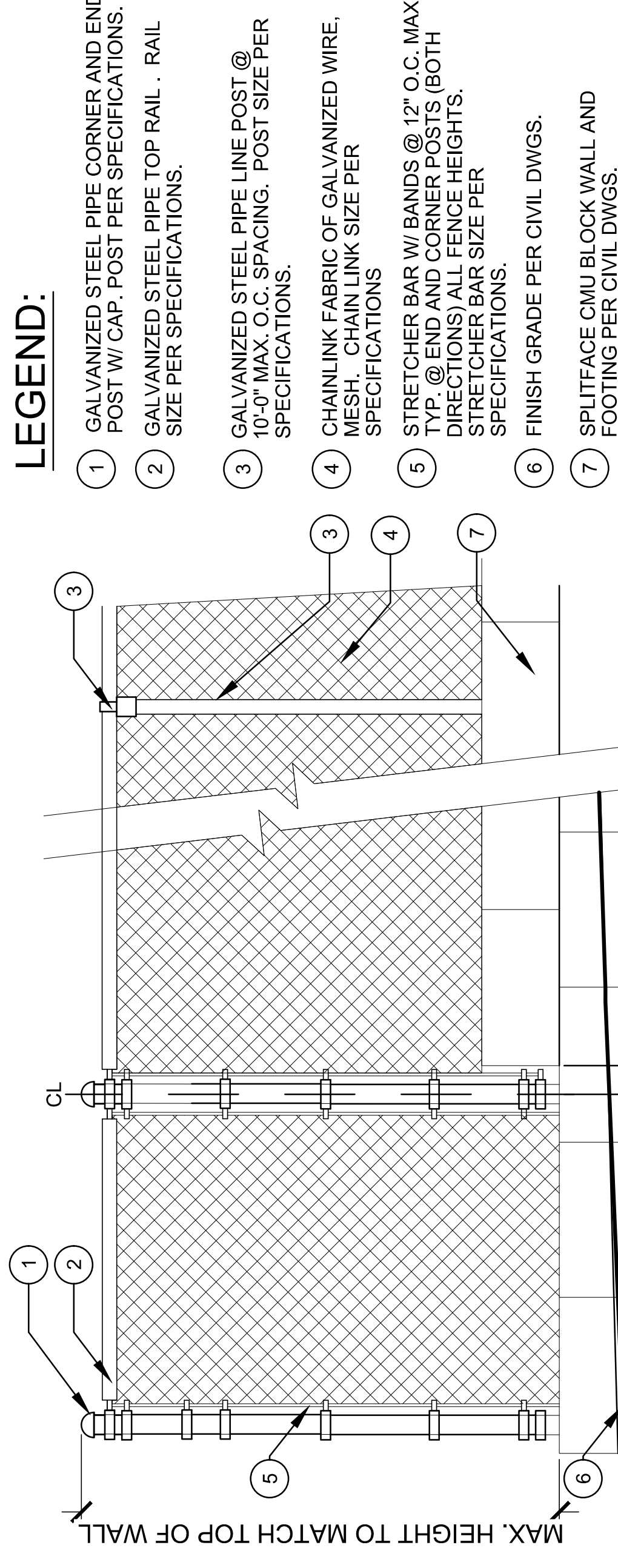
LEGEND:

- 1 CHAIN LINK FENCE - SEE FENCE DETAIL, AND CHAIN LINK FOOTING PER SDRSD M-06
- 2 MORTAR WALL CAP WITH 45° CHAMFER EDGE - COLOR TO MATCH BLOCK
- 3 WALL, FOOTING AND DRAINAGE PER SDRSD C-02, SEE CIVIL DWGS, SHEET 2 FOR DETAIL
- 4 FINISH GRADE

NOTES:
1. SPLITFACE CMU COLOR TO BE WHEAT MW BY ORCO BLOCK OR APPROVED EQUAL. CONTRACTOR TO SUBMIT SAMPLES FOR REVIEW AND APPROVAL.

(D) CMU RETAINING WALL AND FENCE

NTS



LEGEND:

- 1 GALVANIZED STEEL PIPE CORNER AND END POST W/ CAP. POST PER SPECIFICATIONS.
- 2 GALVANIZED STEEL PIPE TOP RAIL. RAIL SIZE PER SPECIFICATIONS.
- 3 GALVANIZED STEEL PIPE LINE POST @ 10'-0" MAX. O.C. SPACING. POST SIZE PER SPECIFICATIONS.
- 4 CHAIN LINK FABRIC OF GALVANIZED WIRE, MESH, CHAIN LINK SIZE PER SPECIFICATIONS
- 5 STRETCHER BAR W/ BANDS @ 12" O.C. MAX. TYP. @ END AND CORNER POSTS (BOTH DIRECTIONS) ALL FENCE HEIGHTS. STRETCHER BAR SIZE PER SPECIFICATIONS.
- 6 FINISH GRADE PER CIVIL DWGS.
- 7 SPLITFACE CMU BLOCK WALL AND FOOTING PER CIVIL DWGS.

NOTES:
1. THE CONTRACTOR SHALL PROVIDE SCALED SHOP DRAWINGS, SHOP DRAWINGS SHALL INCLUDE MATERIALS, SIZES, FASTENERS, CONCRETE REINFORCEMENT, DETAILS, ETC FOR REVIEW PRIOR TO FABRICATION.
2. PROVIDE REINFORCING TENSION WIRE TO BOTTOM OF FENCE

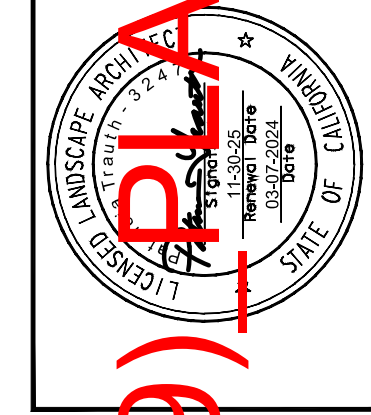
(E) CMU RETAINING WALL AND CHAIN LINK FENCE

NTS

"AS BUILT"

RCE _____ EXP. _____ DATE _____
REVIEWED BY: _____
INSPECTOR _____ DATE _____

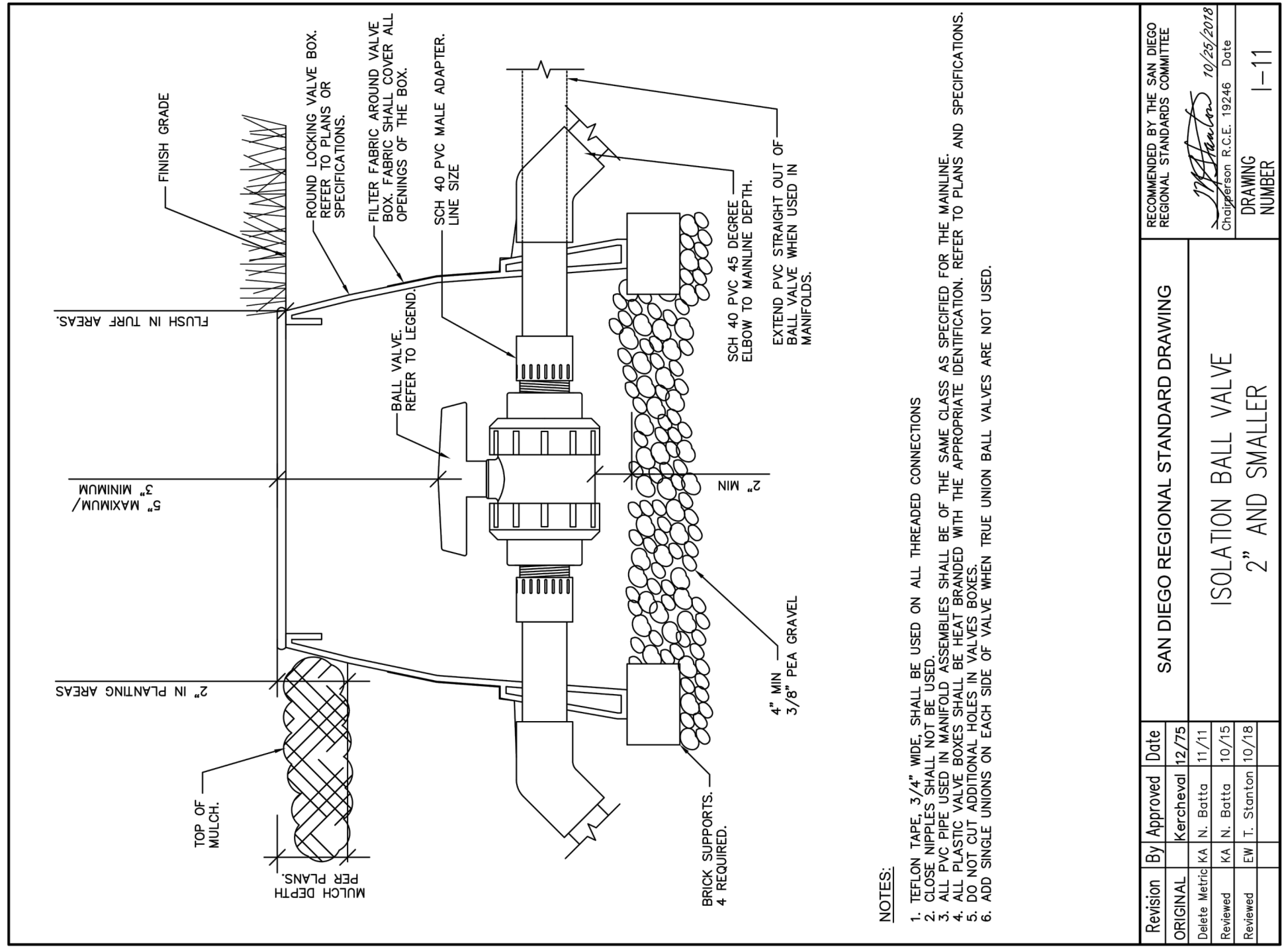
SHEET 13	CITY OF CARLSBAD PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR STAGECOACH COMMUNITY PARK COMMUNITY GARDEN	
L.05 - CONSTRUCTION DETAILS 2	
AUGUST 14, 2024	4/16/2024
DWN BY: EM	PROJECT NO. 4611
CHKD BY: JAV	DRAWING NO. 547-4
REV'D BY: JF	



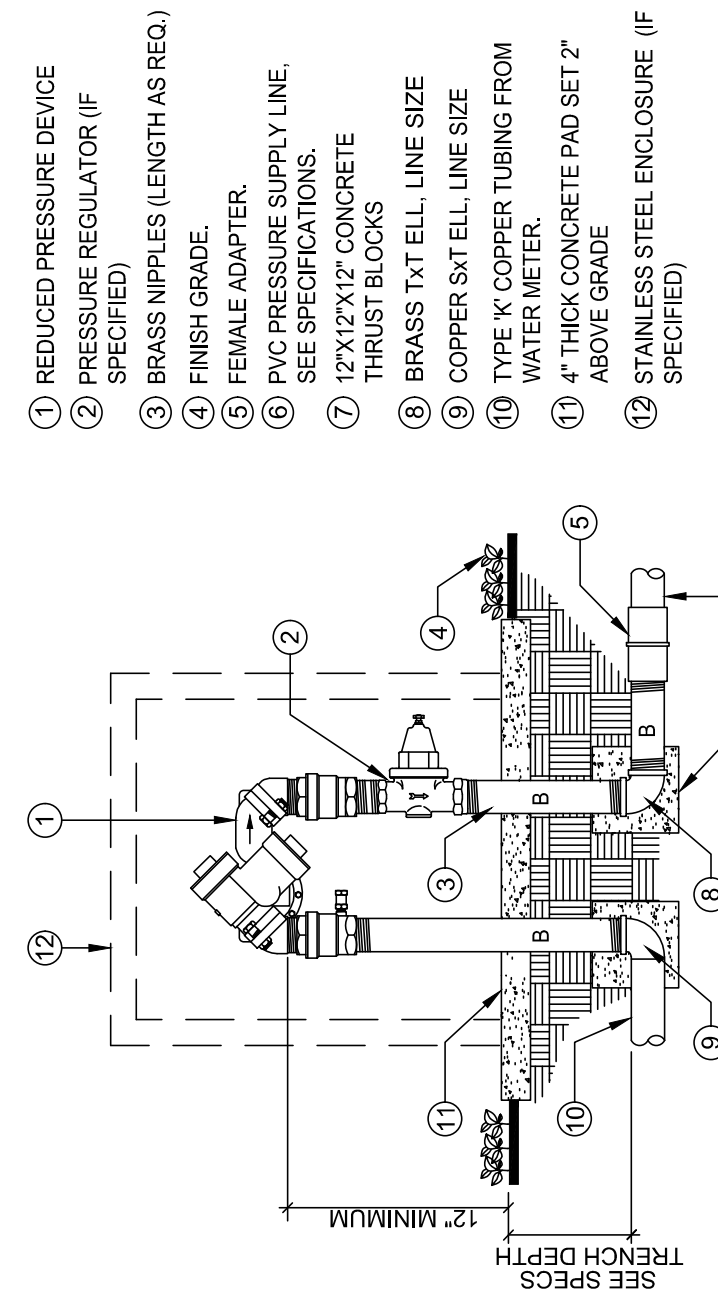
PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

DIGITAL
Carlsbad
Parks & Recreation

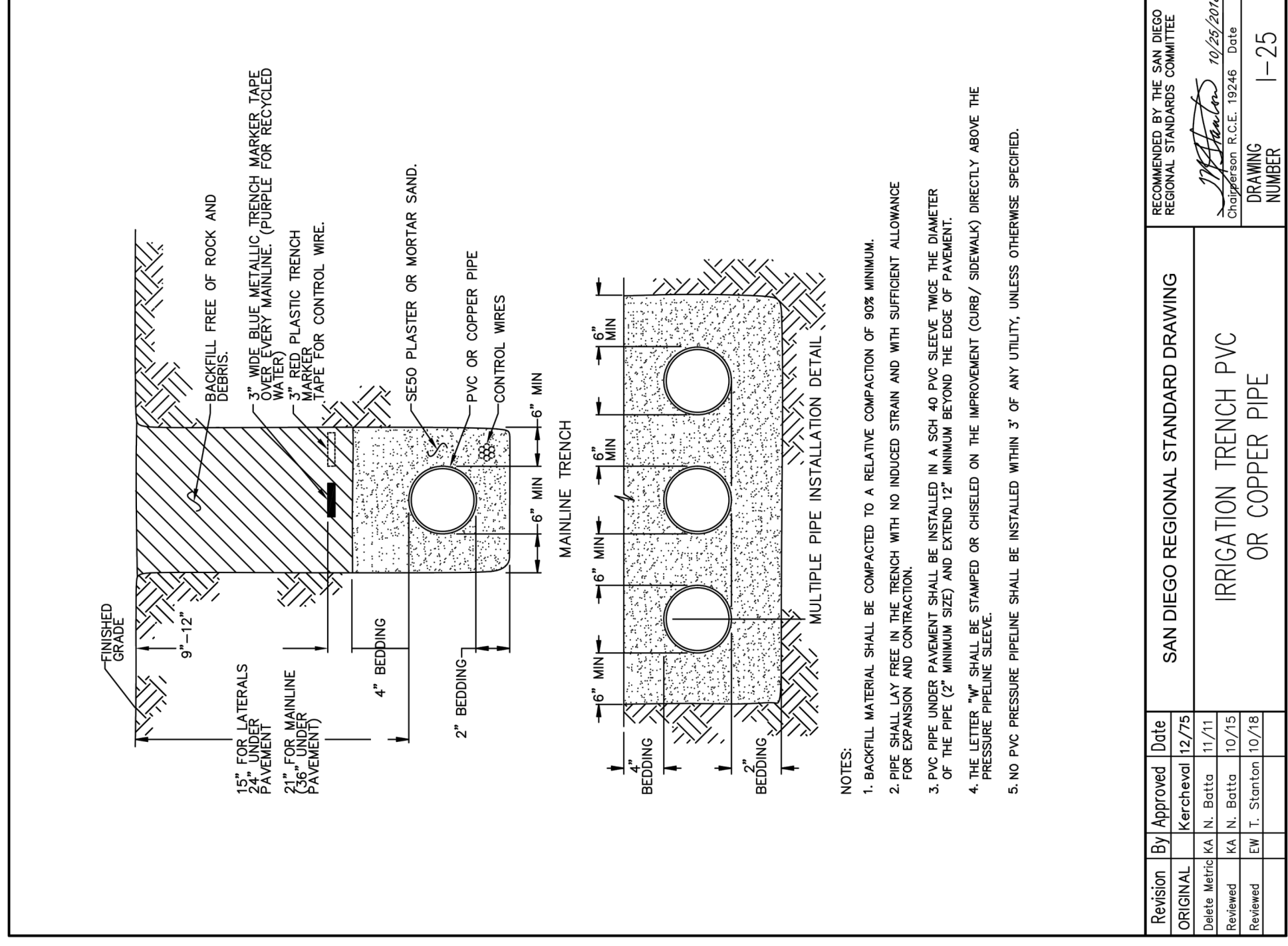
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA



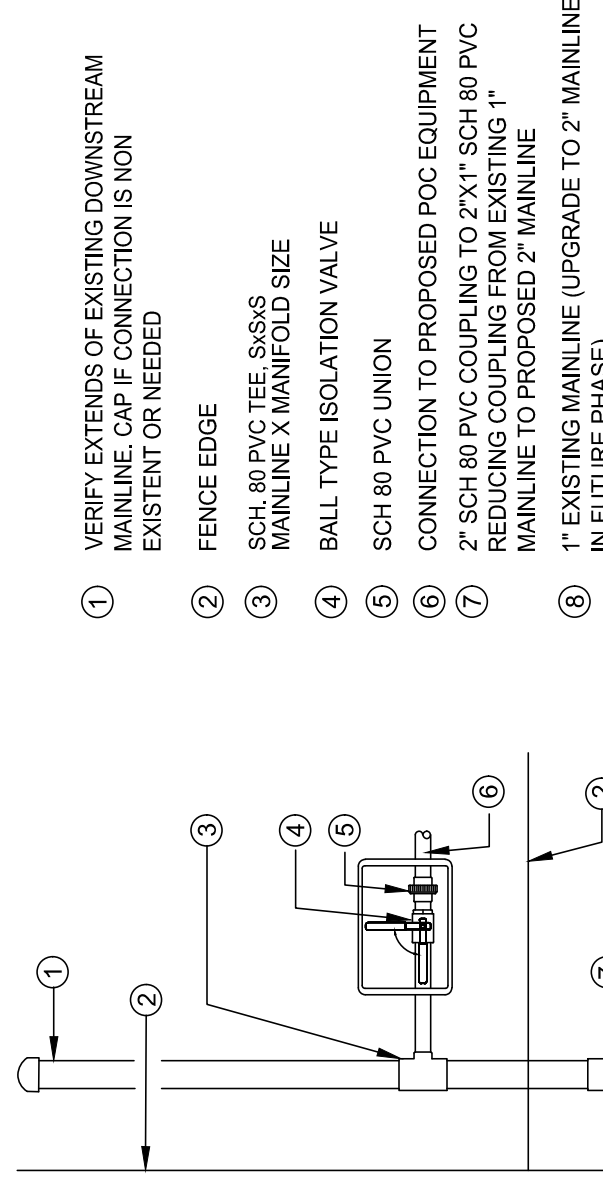
(A) ISOLATION BALL VALVE - 2" AND SMALLER
SCALE: NTS



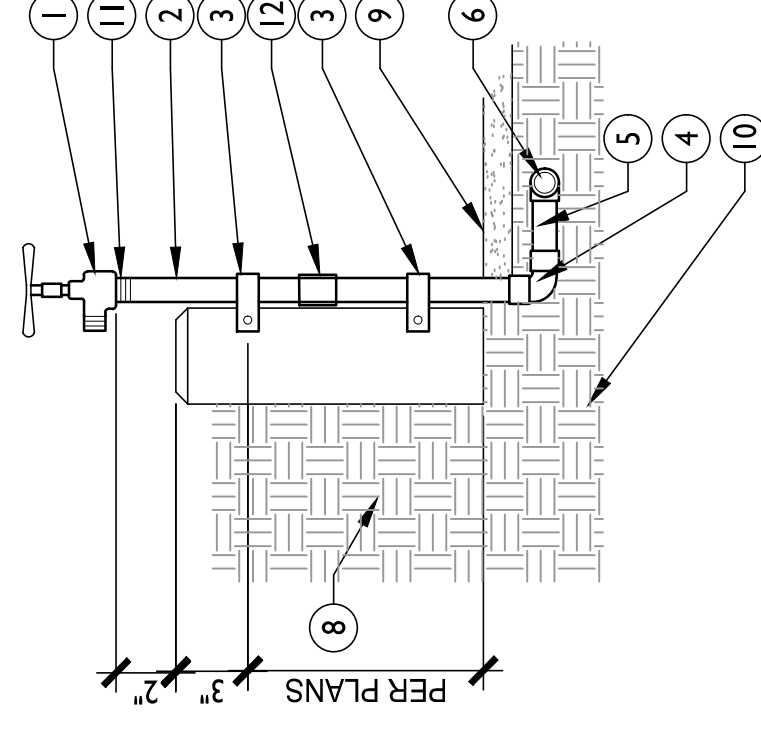
(D) BACKFLOW PREVENTER
SCALE: NTS



(B) IRRIGATION TRENCH PVC OR COPPER PIPE
SCALE: NTS



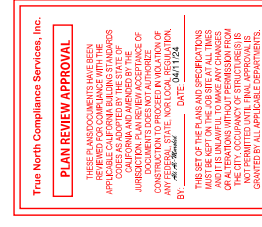
(E) POC MANIFOLD TO MAINLINE CONNECTION
SCALE: NTS



(C) HOSE BIB FOR PLANTERS
SCALE: NTS

- LEGEND:**
- BRASS 3/4" HOSE BIB
 - 3/4" RED BRASS RISER (LENGTH PER PLANS)
 - MINERALI SS CABLE & CONDUIT HANGER PART #1-SB WITH SS BOLTS & NUTS - 1/4" X 2". SECURE HANGER TO PLANTER WALL WITH 1/4" X 2" SS WOOD SCREW
 - 3/4" BRASS BASE ELBOW
 - 3/4" PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
 - PVC SCH 40 TEE (SST) OR ELL (ST) ON POTABLE WATER PRESSURE LINE
 - WOOD PLANTER WALL
 - SOIL PER DWGS.
 - FINISH GRADE
 - COMPACTED SUBGRADE TO 90%
 - 3/4" FEMALE X 3/4" FEMALE THREADED NIPPLE
 - 3/4" BRASS IN-LINE CHECK VALVE

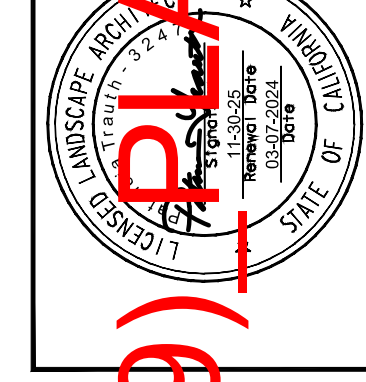
NOTE:
 1. REFERRED CONNECTIONS TO HAVE TEFELON TAPE OR PASTE.



"AS BUILT"

RCE _____ EXP. _____ DATE _____
 REVIEWED BY: _____
 INSPECTOR _____ DATE _____

SHEET	CITY OF CARLSBAD
20	PLANNING DIVISION
LANDSCAPE IMPROVEMENT PLANS FOR	
STAGECOACH COMMUNITY PARK	
COMMUNITY GARDEN	
I.03 - IRRIGATION DETAILS	
ACCEPTED BY:	4/16/2024
City of Carlsbad	
DWN BY:	EM
CHKD BY:	EM
REV'D BY:	EM
PROJECT NO.	4611
DRAWING NO.	547-4



DIGIFERT
 PREVIOUS (CBR 2024-0039) PLANS V1 4/12/24
 Carlsbad
 Parks & Recreation
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

FLAME RETARDANT
Fabric Registration
LICENSE NUMBER: F-094501
EXTRA BLOCK SHADECLOTH

Product Marketed by:
ALNET PTY (LTD)
 MOORSOM AVENUE, EPPING, INDUSTRY II
 CAPE TOWN, S. AFRICA

Issue Date: 03/06/2023
 Expiration Date: 06/30/2024

This product meets the minimum requirements of flame resistance established by the California State Fire Marshal. The scope of the approved use of this product is provided in the current edition of the CALIFORNIA APPROVED LIST OF FLAME RETARDANT CHEMICALS AND FABRICS, GENERAL AND SPECIAL CONCERNS published by the California State Fire Marshal.

Issued By: Corinna Walker
 Fire Engineering License Manager
 Fire Engineering & Investigations Division

Reviewed and Approved By: Patricia Shter
 Deputy State Fire Marshal
 Fire Engineering & Investigations Division

OFFICE OF THE STATE FIRE MARSHAL
 Please visit calfire.ca.gov for more information on Licensing and Permitting with CAL FIRE

2022 CALIFORNIA BUILDING CODE
 DEAD LOAD: 0.5 PSF
 SNOW LOAD: 0.5 PSF
 GROUND SNOW LOAD: 5 PSF
 ROOF SNOW LOAD: 5 PSF
 SNOW EXPOSURE FACTOR: 1.0
 SNOW LOAD IMPORTANCE FACTOR: 1.0
 SNOW LOAD FACTOR: 1.2
 LIVE LOAD:
 ROOF: LIVE LOAD: 5 PSF
 WIND LOAD:
 BASIC DESIGN WIND SPEED: 96 MPH
 BASIC WIND EXPOSURE CATEGORY: B
 WIND IMPORTANCE FACTOR: 1.0
 WIND SPEED EFFECT FACTOR: 0.89
 WIND ENCLASURE TYPE: OPEN
 GUST EFFECT FACTOR: 0.89
 DESIGN CATEGORY: III
 SEISMIC IMPORTANCE FACTOR: 1.0
 SEISMIC SITE CLASS: D
 SEISMIC DESIGN CATEGORY: D
 BASIC SEISMIC FORCE RESISTING SYSTEM: CANTILEVERED COLUMNS DETAILED TO ORDINARY MOMENT FRAMES

OWNER NOTES
 1. MEMBRANES MUST BE REMOVED IF LIVE LOAD/ROOF SNOW LOAD IS EXPECTED TO EXCEED 5 PSF AND/OR THE BASIC WIND SPEED IS EXPECTED TO EXCEED 115 MPH OR A NOMINAL DESIGN WIND SPEED OF 84 MPH OR 76 MPH SUSTAINED WIND LOAD TO PREVENT DAMAGE.
 2. THE OWNER ACCEPTS FULL RESPONSIBILITY OF REMOVING THE FABRIC FROM THE STEEL FRAME WHEN THE FABRIC IS DAMAGED OR WEAR IS OBSERVED.
 3. THE STEEL STRUCTURE WITH THE FABRIC REMOVED, WAS DESIGNED TO WITHSTAND DEAD LOADS, ROOF LIVE LOADS, SNOW LOADS AND WIND SPEEDS AS SPECIFIED ABOVE PER THE LOCAL CODE REQUIREMENTS. IF THE ABOVE LOADS ARE EXCEEDED OR ADDITIONAL LOADS ARE INDUCED STRUCTURAL FAILURE MAY OCCUR. THE OWNER IS RESPONSIBLE FOR AND ACCEPTS FULL LIABILITY FOR ANY ISSUES CAUSED BY EXCEEDING THE DESIGN CRITERIA LOADS.

GENERAL NOTES
 1. FABRIC MEETS NFPA 701-H.
 2. ALL EXPOSED STEEL TO BE POWDER COATED.
FOUNDATION DESIGN
 MINIMUM CONCRETE COMPRESSIVE STRENGTH AFTER 28 DAYS: 3,000 PSI
 STEEL REINFORCEMENT: ASTM-A615, GRADE 60
 ASSUMED VERTICAL FOUNDATION PRESSURE: 1,500 PSF
 ASSUMED LATERAL BEARING PRESSURE: 100 PSF/FT
 ALL FOUNDATION BEARING PRESSURE VALUES WERE CONSIDERED PER CONDITIONS OF CURRENT BUILDING CODE.

FOUNDATION NOTES:
 1. THE FOUNDATION DESIGN IS BASED ON TABLE 1806.2 OF THE INTERNATIONAL BUILDING CODE (IBC). THE FOUNDATION DESIGN IS BASED ON THE ASSUMPTION THAT IT IS TO DETERMINE THE LOAD BEARING VALUES OF THE SOIL. OWNER / CONTRACTOR ASSUME FULL LIABILITY IF NO GEOTECHNICAL INVESTIGATIONS ARE CONDUCTED.
 2. IF THE FOOTING DEPTH DOES NOT MEET LOCAL PROST REQUIREMENTS, FOOTINGS SHALL BE REDESIGNED UNDER THE DIRECTION OF AN ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCAL PROST DEPTH.

INSPECTION NOTES:
 1. IT IS THE CUSTOMER/CONTRACTOR'S RESPONSIBILITY TO VERIFY AND COORDINATE ANY AND ALL INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT.

MATERIALS
 ALL MATERIALS LISTED BELOW MAY NOT BE SPECIFIC TO THIS PROJECT.

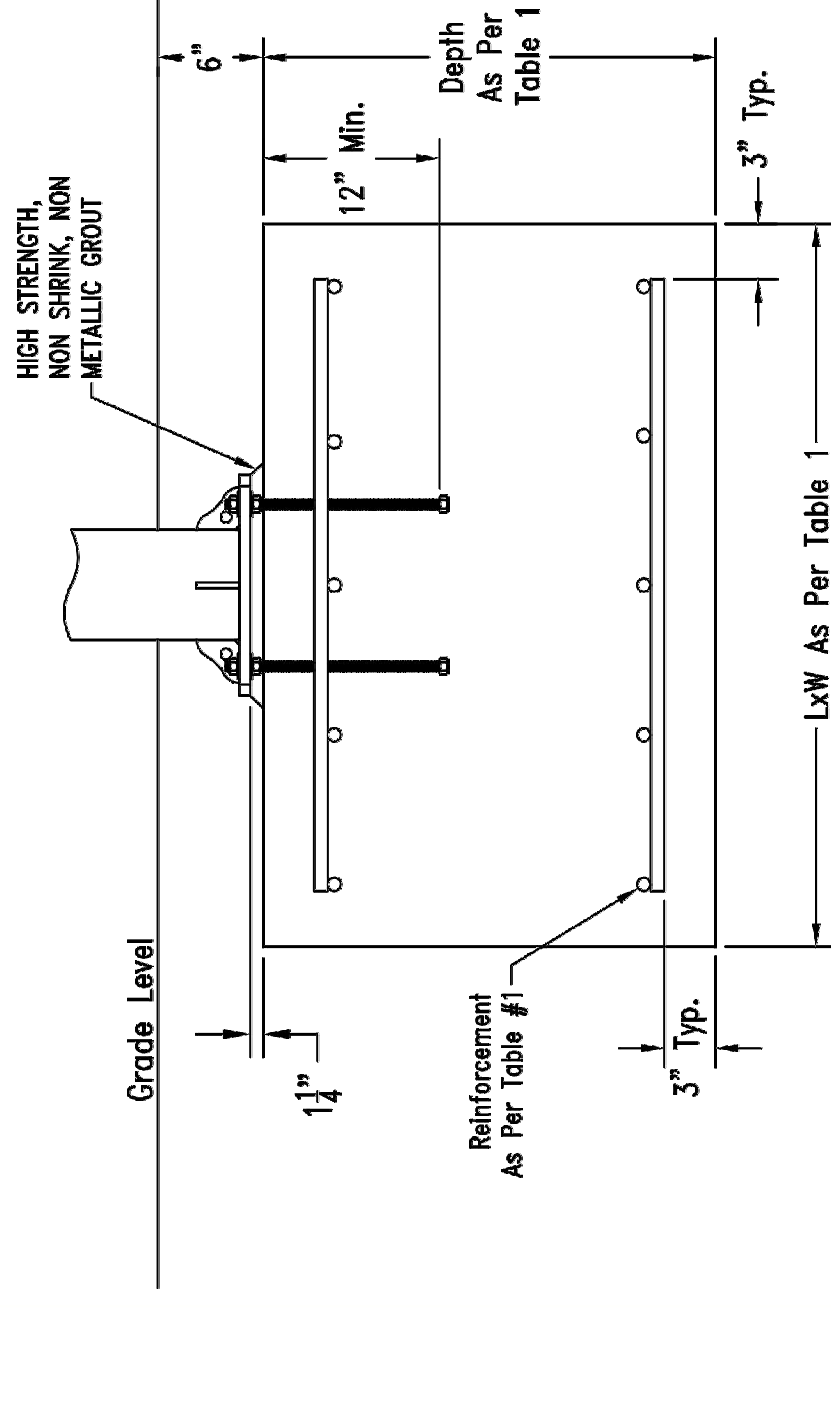
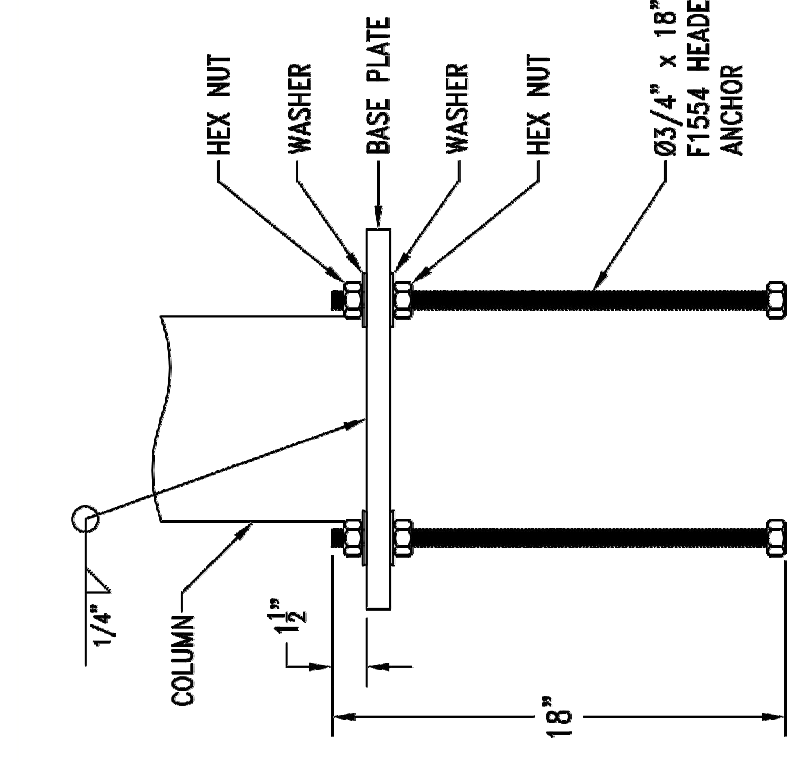
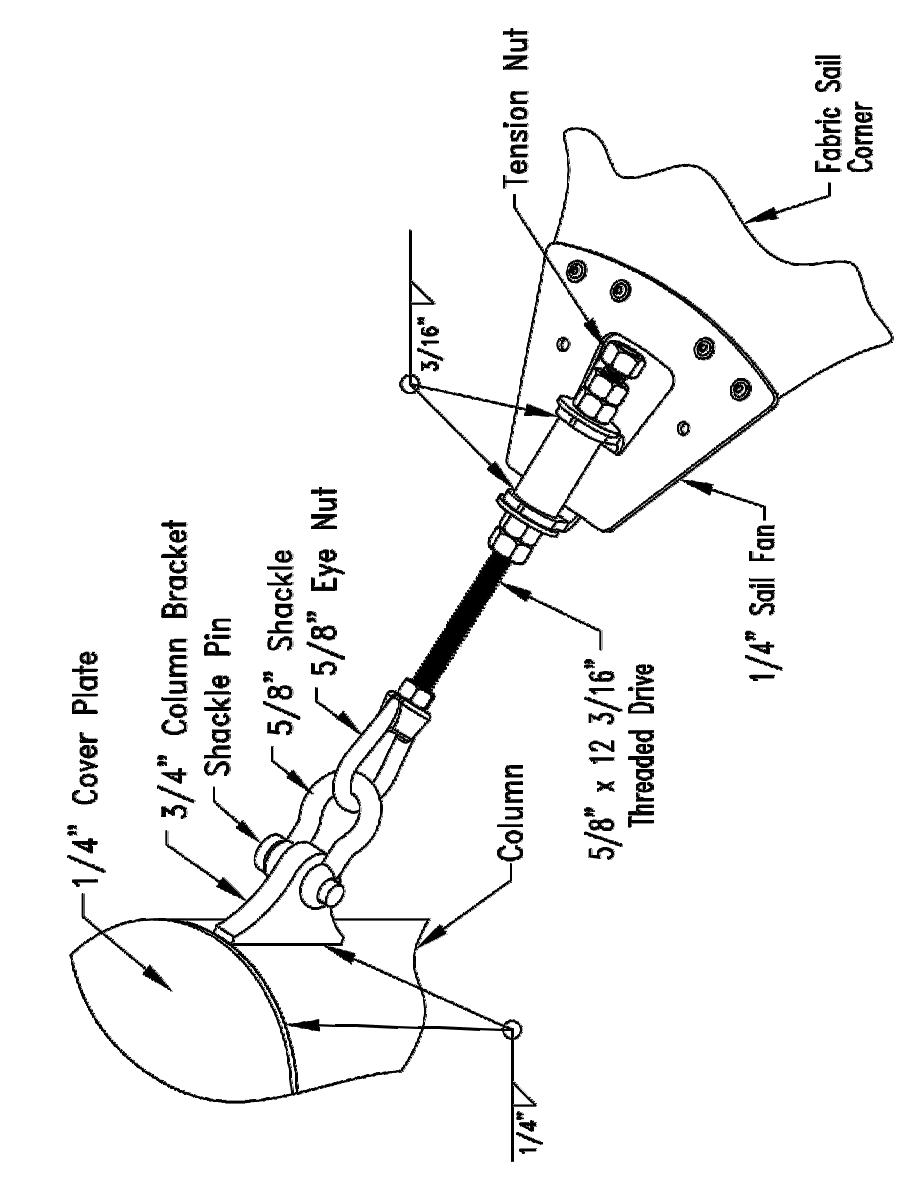
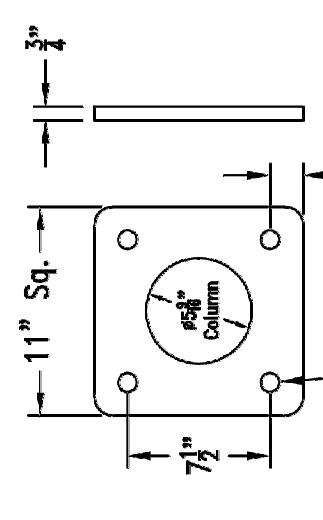
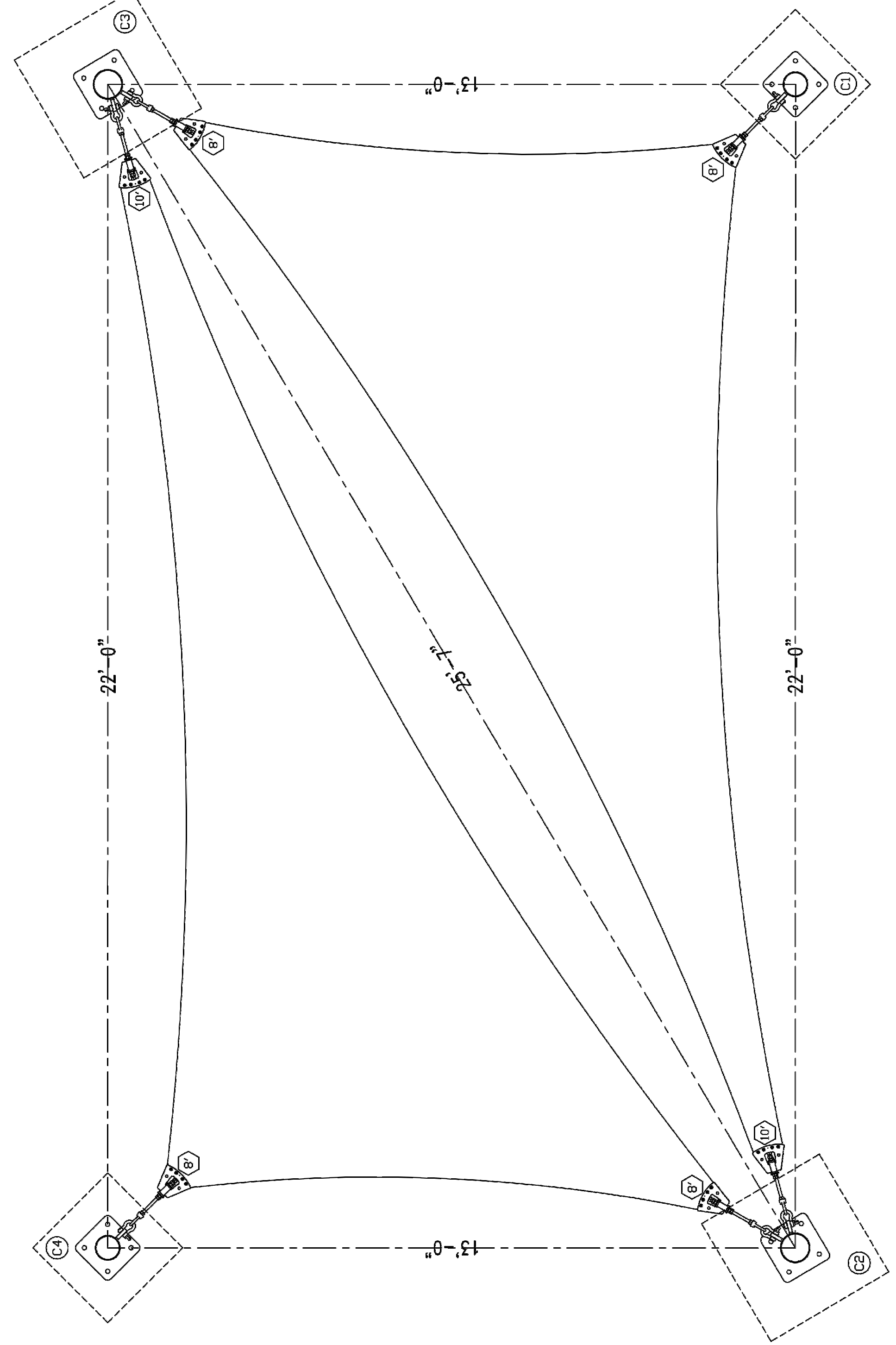
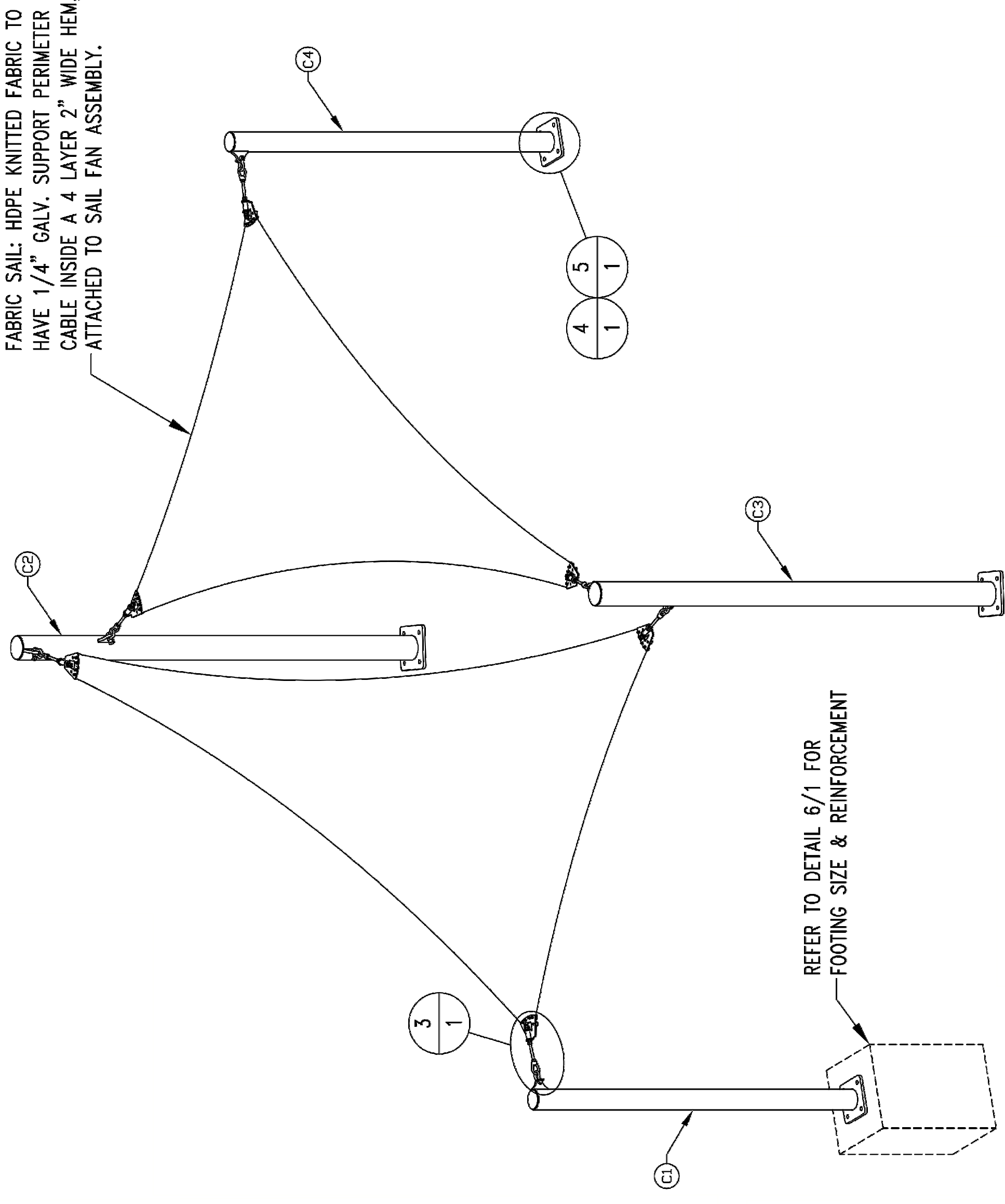
MEMBER TYPE	ASTM	MIN. YIELD STRENGTH
RECTANGULAR TUBES	A500 (GRADE B)	46 KSI
SQUARE HSS TUBES	A500 (GRADE B)	46 KSI
ROUND HSS TUBES	A500 (GRADE B)	42 KSI
SCHEDULE PIPE	A500 (GRADE B&C)	50 KSI
ROUND MECHANICAL TUBING	A519	45 KSI
MECHANICAL TUBING	A519	92 KSI
CONNECTION BOLTS	S&E A492 (GRADE 5)	36 KSI
HOOKED ANCHOR BOLTS	F1554	36 KSI
ANCHOR BOLTS	A307	36 KSI

5/16" GALVANIZED AIRCRAFT CABLE SHALL HAVE A NOMINAL STRENGTH OF 4,200 LBS.
 5/16" GALVANIZED AIRCRAFT CABLE SHALL HAVE A NOMINAL STRENGTH OF 9,800 LBS.

TABLE 1

STRUCTURE STYLE	COLUMN HEIGHT ABOVE GRADE	COLUMN SIZE	FOOTING SIZE	FOOTING REINFORCEMENT
TRIANGULAR SAIL	C1/C4 = 8' 5.0" ID Sch-40	5.0" ID Sch-40	3.0'x3.0'x3.0'	(3)#6 EW, TOP & BOT.
	C2/C3 = 10' 6.0" ID Sch-40	6.0" ID Sch-40	4.0'x4.0'x3.0'	(4)#6 EW, TOP & BOT.

FABRIC SAIL: HDPE KNITTED FABRIC TO HAVE 1/4" GALV. SUPPORT PERIMETER CABLE INSIDE A 4 LAYER 2" WIDE HEM, ATTACHED TO SAIL FAN ASSEMBLY.



SEAL:

DATE: 4/21/2024
 Exp. 9/30/2025

"AS BUILT"

RCE: _____ EXP: _____ DATE: _____
 REVIEWED BY: _____
 INSPECTOR: _____ DATE: _____

SHEET 21
 CITY OF CARLSBAD
 PLANNING DIVISION
 LANDSCAPE IMPROVEMENT PLANS FOR
 STAGECOACH COMMUNITY PARK
 COMMUNITY GARDEN
 L10 - CONSTRUCTION DETAILS 7

ACCEPTED BY: _____ DATE: 4/16/2024
 City of Carlsbad

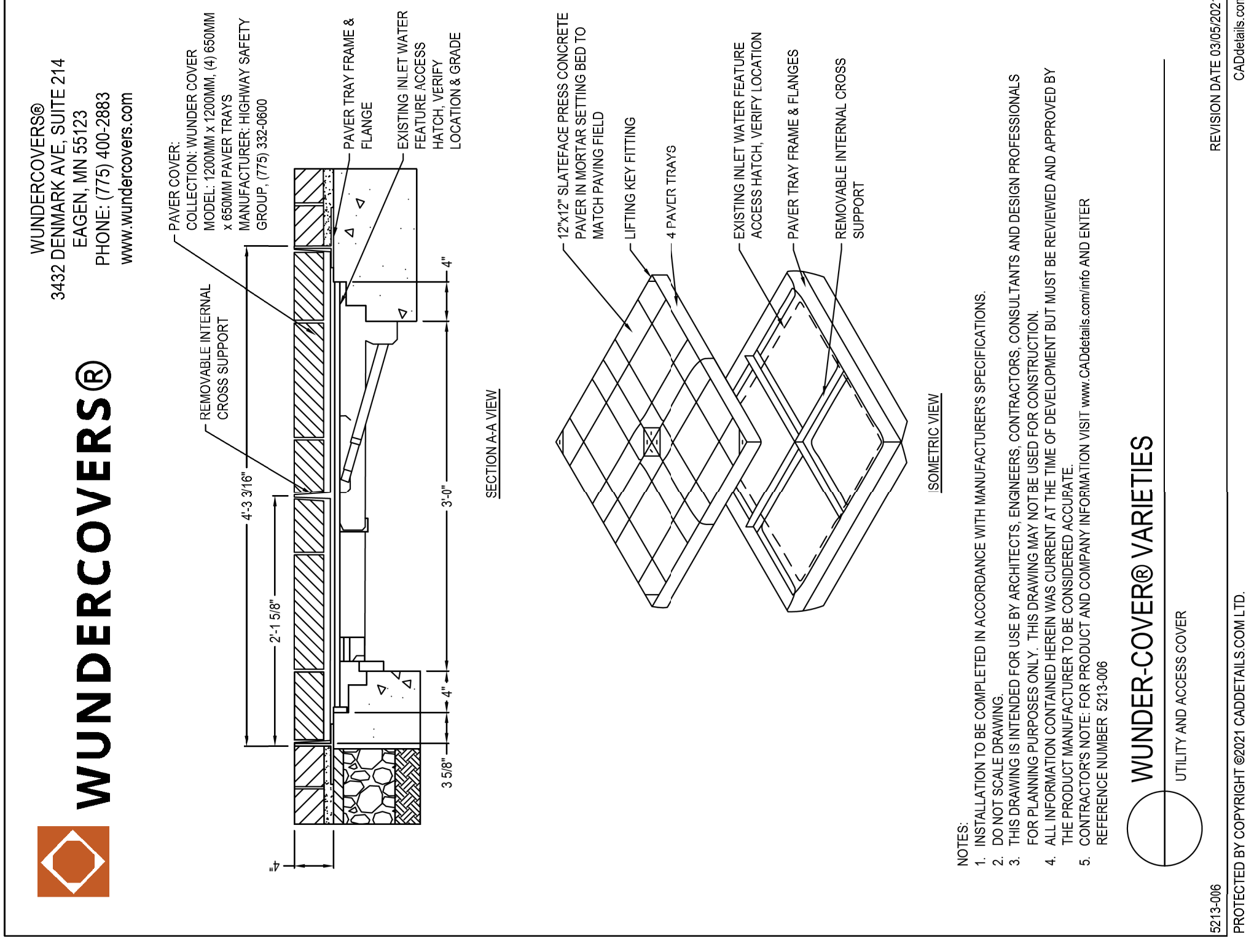
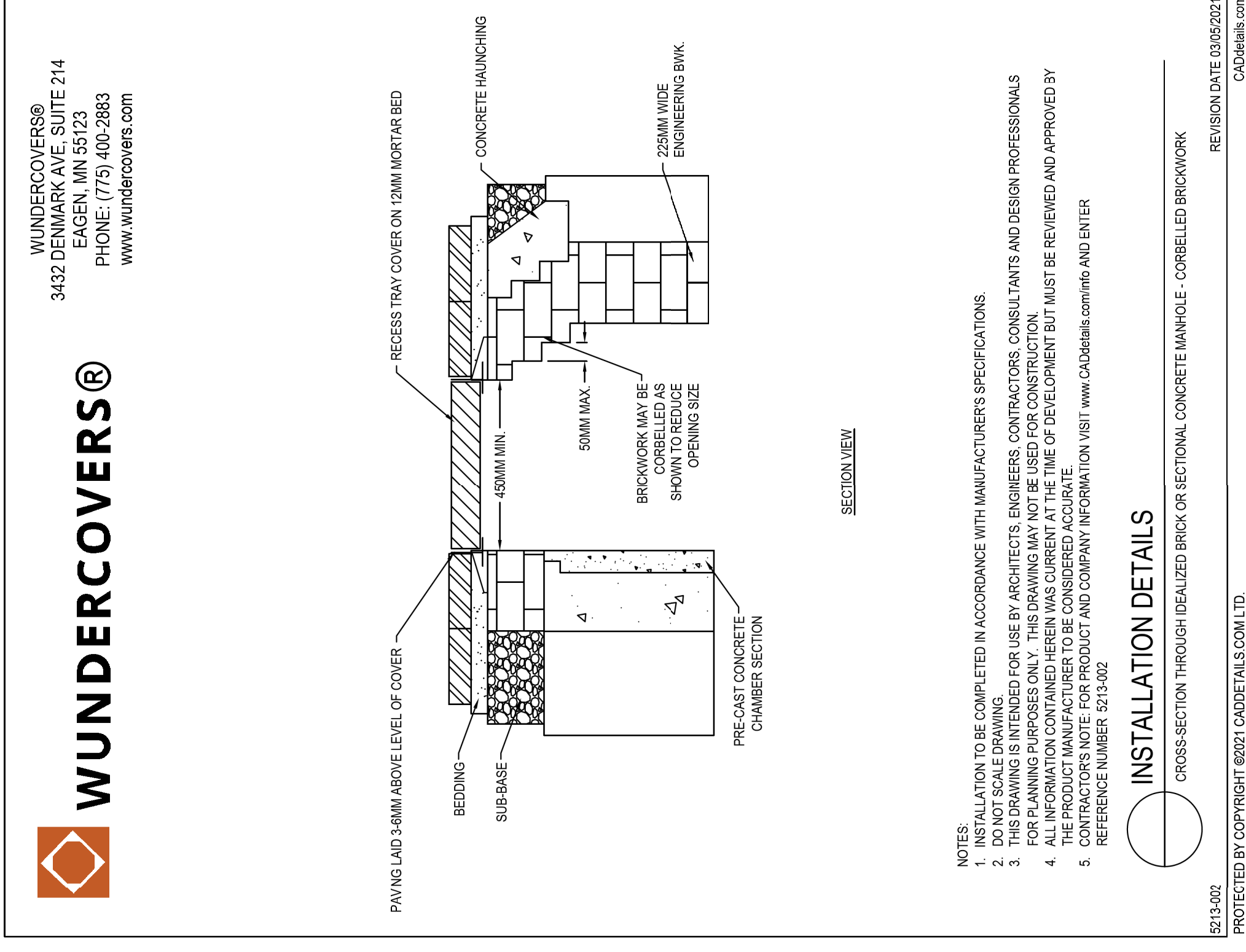
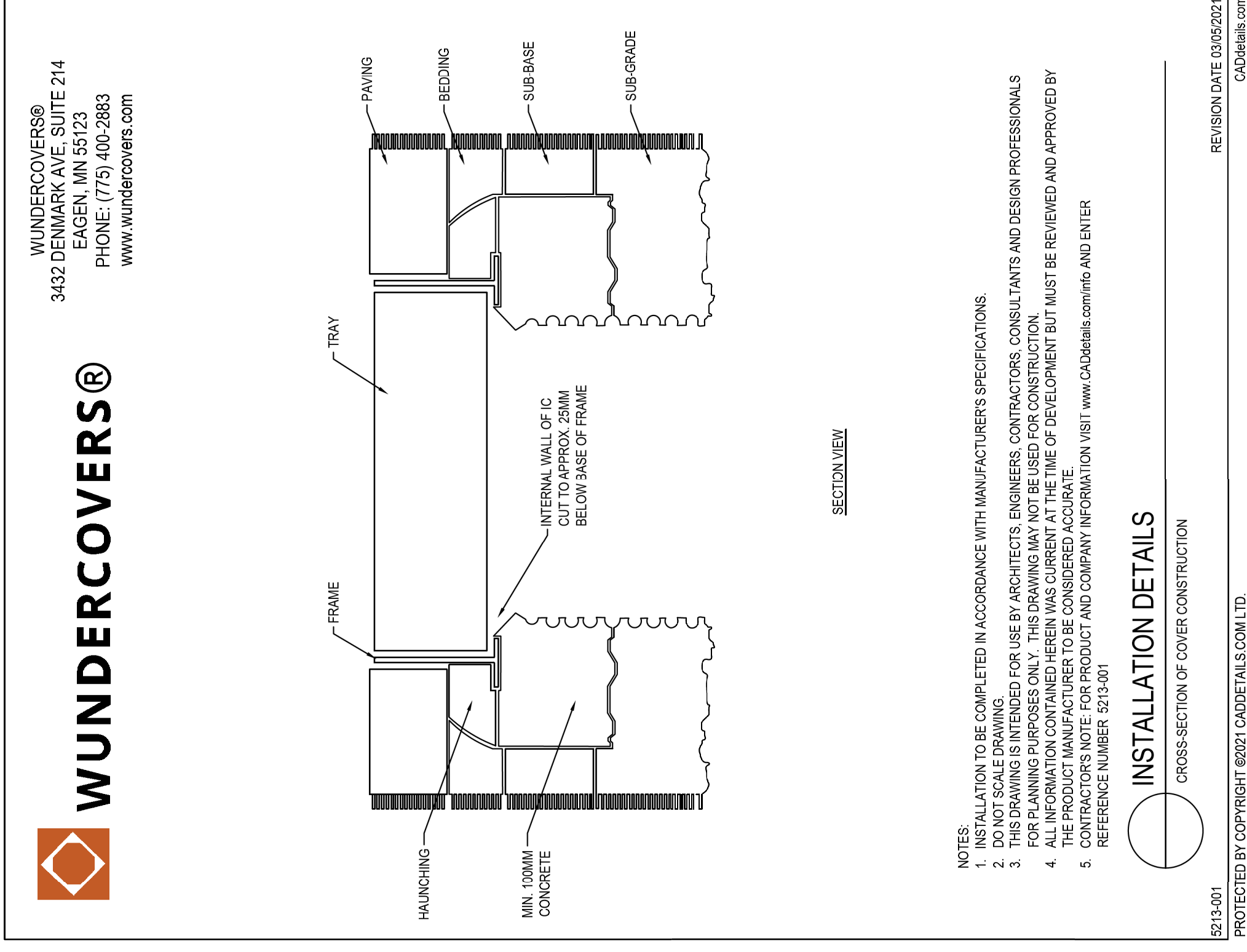
DWN BY: EM
 CHKD BY: JG
 RWD BY: JF

PROJECT NO. 4611
 DRAWING NO. 547-4

DIGALERT
 PREV2024-0059 (CBR2024-0039) PLANS V1 4/12/24

CITY OF CARLSBAD
 Parks & Recreation

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
 AT LEAST TWO DAYS BEFORE YOU DIG



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"AS BUILT"

RCE _____ EXP. _____ DATE _____

REVIEWED BY: _____

INSPECTOR _____ DATE _____

SHEET 22

CITY OF CARLSBAD
PLANNING DIVISION

LANDSCAPE IMPROVEMENT PLANS FOR:
STAGECOACH COMMUNITY PARK
COMMUNITY GARDEN
C.08 - WUNDER-COVER DETAILS

ACCEPTED BY:
Emily Hargrove
4/16/2024

DWN BY: _____
CHKD BY: _____
RWD BY: _____

PROJECT NO. 4611

DRAWING NO. 547-4

PLANS_V1 4/12/24

PREV2024-0059 (CBR2024-0039)

City of Carlsbad
Parks & Recreation

DIGALERT

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

AT LEAST TWO DAYS BEFORE YOU DIG

1-800-4-A-DIG

PROFESSIONAL SEAL

EMILY HARGROVE
REGISTERED PROFESSIONAL ENGINEER - CIVIL
No. 00591
STATE OF CALIFORNIA

Karen S. Van Ert

KAREN S. VAN ERT R.C.E. No. 56991 EXP. DATE: 6-30-2025

3/7/2024 DATE