AGREEMENT

(Design-Build)

REALIZE FLOOD PARK PHASE 2 - PLAYGROUND REPLACEMENT PROJECT

THIS AGREEMENT, dated this 20th day of May, 2025, by and between Jensen Landscape Contractor, LLC, whose place of business is located: 1250 Ames Avenue, Milpitas, CA 95035 ("Design-Build Entity" or "DBE"), and the County of San Mateo ("Owner"), acting under and by virtue of the authority vested in Owner by the laws of the State of California for preconstruction and construction services ("Work") for the Flood Park Phase 2 – Playground Replacement Project ("Project") in accordance with the Contract Documents. By executing this Agreement, each of the Signatories represents that they have the authority to bind the Party on whose behalf the execution is made.

Owner:
County of San Mateo
455 County Center, 4th Floor
Redwood City, CA 94063

By: _____
(Signature)

Name: David J. Canepa

Telephone No.: 650-363-4572

Facsimile No.:

Email: dcanepa@smcgov.org

Design-Build Entity:
Jensen Landscape Contractor, LLC
250 Ames Avenue
Milpitas, CA 95035

By: _____
(Signature)

Name: Jeffrey Colton, President

Telephone No.: (408) 446-1118

Facsimile No.: (408) 446-4881

Email: Jcolton@Jensencorp.com

CA License No.: 259540

DIR Registration No.: 1000038694

THE PARTIES AGREE TO THE FOLLOWING TERMS AND CONDITIONS

TABLE OF EXHIBITS

All Exhibits set forth below are incorporated into the Agreement.

Exhibit 1	Supplemental Conditions
Exhibit 2	Bridging Contract Documents
Exhibit 2A	Realize Flood Park Phase 2 – Conceptual Plan
Exhibit 2B	Criteria Document
Exhibit 2C	Site Survey with underground utilities
Exhibit 2D.1	Geotechnical Report
Exhibit 2D.2	Supplemental Geotechnical Report
Exhibit 3	Scope of Work
Exhibit 4	Price Proposal
Exhibit 4A	Price Proposal
Exhibit 4B	Schedule of Values
Exhibit 5	Personnel & Equipment
Exhibit 5A	Staffing Plan
Exhibit 5B	Key Personnel
Exhibit 6	Schedule and Site Logistics Plan
Exhibit 6A	Project Baseline Schedule
Exhibit 6B	Site Logistics Plan
Exhibit 7	Schematic Design Documents
Exhibit 8	Design-Builder’s Proposal

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DESIGN-BUILD AGREEMENT

This Design-Build Agreement (**"Agreement")** is executed as of May 20, 2025 (**"Effective Date"**) by and between the **"Owner"** and **"Design-Builder"** for completion of the **"Project**." The Owner and Design-Builder may collectively be referred to as **"the Parties**."

Owner:
County of San Mateo
455 County Center, 4th Floor
Redwood City, CA 94063

Design-Builder:
Jensen Landscape Contractor, LLC
1250 Ames Avenue
Milpitas, CA 95035

Project:
Realize Flood Park Phase 2 – Playground Replacement and Improvement of Surrounding Areas

The Owner and Design-Builder agree as set forth below:

1. GENERAL

1.1 Definitions. All defined terms will be capitalized throughout the Agreement. The definitions for this Agreement appear in alphabetical order in Section 1 of the "**Supplemental Conditions**" to the Agreement and may also be set forth herein for convenience as defined terms the first time the term is used.

1.2 Project Description. The Project involves **Preconstruction Stage Services and Construction Stage Services** to design and construct a replacement playground structure and improvement of surrounding areas at Flood County Park, located at 215 Bay Road, Menlo Park, CA 94025 ("Project") according to the Conceptual Plan and Project Criteria Documents attached hereto as Exhibits 2A and 2B respectively.

1.3 Project Delivery. The Project will be delivered using a design-build delivery method pursuant to Sections 22160, et seq., of the California Public Contract Code.

2. THE DESIGN-BUILD TEAM AND RELATIONSHIP OF THE PARTIES

2.1 Design-Build Team. The Design-Builder is responsible to the Owner for completion of the Project. The Design-Build Team includes all team members providing services for or on behalf of the Design-Builder, and is comprised of, at a minimum, the **"General Contractor,"** the **"Design Professionals"** and "**Design-Build Subcontractors,**". All **"Design Services"** will be performed by the Architect of Record and/or other design consultants (collectively, **"Design Professionals"**). The Design-Builder shall name the Owner as a third-party beneficiary to all design service agreements and/or design-build subcontracts and the parties agree that the Owner is an intended third-party beneficiary of such contracts. The Design-Build Team is currently comprised of the entities identified in **Exhibit 5B Key Personnel**.

2.2 **Licensing.** Design-Builder must possess a valid California state class “A” or “B” General Contractor license during the entire term of this Agreement. All members of the Design-Build Team must possess the appropriate California state design licenses for their particular discipline. Subcontractors must all possess the appropriate California state specialty license for their particular trade. Nothing in this Agreement will require a Design-Build Team member, or any of their respective Consultants or Subcontractors, to perform any portion of the Work outside of their respective licenses or contrary to Applicable Law.

2.3 **Good Faith.** The Design-Builder will perform all Work under this Agreement in compliance with each of the following requirements: (i) use its best skill and judgment in pursuit of the Project; (ii) furnish effective and efficient design, construction administration and supervision; (iii) furnish at all times an adequate supply of **“Skilled Labor”** and materials; and (iv) perform the Work in the most expeditious and economical manner consistent with the Bridging Contract Documents **in Exhibit 2**, and good engineering practices.

2.4 **Standard of Care.** The Design-Builder warrants that it possesses the design and construction licenses and expertise required for this Project under Section 2.2 and will use the same degree of care and skill customarily used by California state licensed professionals performing similar services for residential construction projects in the state of California.

2.5 **Collaboration.** Owner and Design-Builder commit at all times to cooperate fully with each other and proceed on the basis of trust and good faith to permit each party to realize the benefits afforded under this Agreement. Design-Builder and its Design Professionals, Subcontractors, suppliers, and equipment vendors will perform their respective portions of the Work using collaborative tools and methods. The Design-Build Team will actively participate and collaborate with Owner to achieve best value, optimal design, increased labor efficiency, and elimination of waste and re-work. The Design-Builder will collaborate with Owner to develop the design within the Contract Price, and to ensure that the design satisfies the Bridging Contract Documents.

2.6 **Communications.** All communications from the Design-Builder shall be directed to Owner via the Owner’s Project Manager, Mike Wassermann, and others as designated and directed by the Owner’s Project Manager.

2.7 **Relationship of the Parties.** The Design-Builder’s relationship with the Owner is that of an independent contractor whose involvement in the Project is to act solely in the capacity of a California licensed design professional and general contractor and not as an agent, fiduciary, partner, member of, subsidiary of, or otherwise affiliated with the Owner.

2.8 **Responsibility.** Design-Builder acknowledges and agrees that it is solely responsible to Owner for the sufficiency, quality, adequacy and completeness of the Work, and that Design-Builder is responsible for any acts, errors, or omissions of the Design-Builder’s principals, employees, agents, and/or any other parties either directly or indirectly in privity of contract with Design-Builder including, but not limited to, the Architect of Record and other Design Professionals, Subcontractors, suppliers, equipment

vendors, and their agents and employees, and other persons performing any portion of the Work on behalf of Design-Builder.

2.9 Conflicts of Interest. Design-Builder warrants that it is not aware of any existing conflicts of interest under Applicable Law that would prevent any member of the Design-Build Team from participating in the Project. Design-Builder has an ongoing obligation to monitor and disclose conflicts or potential conflicts of interest. If an organizational conflict of interest is discovered, the Design-Builder must make an immediate and full written disclosure to the Owner that includes a description of the action that the Design-Builder has taken or proposes to take to avoid or mitigate the conflict. If the contract is terminated due to a conflict of interest that existed at the time of the award, the Owner has no obligation, responsibility or liability to reimburse all or part of the costs incurred or alleged to have been incurred by the Design-Builder.

3. CONTRACT DOCUMENTS

3.1 Contract Documents. The **"Contract Documents"** consist of this Agreement, the Supplemental Conditions, and all other Exhibits attached to this Agreement, all subsequent modifications through amendments and change orders executed by Owner and Design-Builder, and the Construction Documents to be developed by the Design-Builder.

3.2 Interpretation and Intent. The intent of the Contract Documents is to include all items necessary for proper completion of all Work within the **"Contract Time"** and within the **"Contract Price**." The Contract Documents are intended to be complementary and what is required by any one of them is as binding as if called for by all of them.

3.3 Sufficiency of Contract Documents. The Design-Builder acknowledges that all documents and materials submitted by the Owner to the Design-Builder in connection with the process culminating in the execution of this Design-Build Agreement, are complete and sufficient to have enabled the Design-Builder to determine the cost of the Work in order to enter into this Agreement. The Design- Builder confirms that it has examined the site and all physical, legal and other conditions affecting the Work and is fully familiar with the site and with such conditions. The Design-Builder specifically represents to the Owner that it has examined (a) the nature, location, and character of the Project and the site, including, without limitation, the surface conditions of the site and subsurface conditions of the site to the extent that such conditions affect the design and constructability of the Project, and all structures and obstructions on the site and thereunder, both natural and man-made, and all surface and subsurface water conditions of the site and the surrounding area; (b) the nature, location, and character of the general area in which the Project is located, including without limitation, its climatic conditions, available labor supply and labor costs, and available equipment supply and equipment costs; and (c) the quality and quantity of all materials, supplies, tools, equipment, labor, and professional services necessary to complete the Work in the manner and within the cost and time required by the Contract Documents. In connection with the foregoing, and having carefully examined all Contract Documents, and having examined the site, the Design-Builder acknowledges and declares that it has no knowledge of any discrepancies, omissions, ambiguities or conflicts in the Contracts Documents and agrees that if it becomes

aware of any such discrepancies, omissions, ambiguities or conflicts, it shall promptly notify the Owner thereof.

3.4 **Order of Precedence.** In the event of inconsistencies between requirements contained in different components of the Contract Documents, the content of each document listed below prevails over any inconsistent content in any document listed below it:

3.4.1 Amendments of the Design-Build Agreement;

3.4.2 Change Orders approved by Owner;

3.4.3 The Design-Build Agreement executed between Owner and Design- Builder not including Exhibits;

3.4.4 Project Baseline Schedule, as approved by Owner and updated pursuant to Section 8.2 of this Agreement;

3.4.5 The Scope of Work set forth in **Exhibit 3** to the Agreement;

3.4.6 The Supplemental Conditions included in **Exhibit 1** to the Agreement**;**

3.4.7 The Bridging Contract Documents included as **Exhibit 2**;

3.4.8 100% Construction Documents developed by Design-Builder;

3.4.9 All other Exhibits to the Design-Build Agreement and all other Contract Documents not listed above;

3.4.10 Proposal submitted by Design-Builder.

4. OWNER'S OBLIGATIONS

4.1 **Information and Documents.** The Owner may make various Background Documents related to the Project available to the Design-Builder, including but not limited to any surveys and other information that describe the Project Site as well as schedule requirements, budget constraints and other criteria, and procurement schedules. Any Background Documents provided are for information only and will not be included as part of the Contract Documents.

4.2 **Bridging Contract Documents.** The "Bridging Contract Documents," consisting of the Design Criteria, both included in **Exhibit 2** to this Agreement, were developed by the Owner to provide an understanding of the baseline design requirements for the Project. The Bridging Contract Documents, along with other information provided during the RFP and proposal process, provides a basis for the Contract Price, initial Project Baseline Schedule, and initial design work. The Design-Builder must conduct all Work in accordance with the Bridging Contract Documents.

4.3 **Ownership of Facilities.** The Owner will own the Facilities, and control easements on which certain Facilities are to be built. Owner will provide Design-Builder with access

to the Work site and easements for the purpose of fulfilling its obligations under this Agreement.

4.4 Governmental Approvals. The Design Builder will be responsible for obtaining the permits and approvals for the Project facilities. Owner shall reimburse the Design Builder without mark-up for all permits and fees associated with this work. Design-Builder's responsibility for permits, licenses, and approvals is set forth in Section 5.5.

4.5 Owner's Project Manager. Owner's interests on the Project will be represented by the Owner's Project Manager, Mike Wassermann, as well as any other individuals identified from time to time by the Owner. The Project Manager is authorized to act on the Owner's behalf with respect to the daily operations of the Project, including, without limitation, review of Work, invoices, claims, change orders, and submittals, or may delegate authority to another representative. For simplicity, where this Agreement refers to the Owner, Design- Builder may assume that the Project Manager is the appropriate point of contact. Where necessary, the Project Manager will elevate issues to the County Board of Supervisors or to appropriate executives.

4.6 Stop Payment Notice. The Owner will comply with all stop payment notices submitted in compliance with applicable laws by withholding appropriate amounts from payments otherwise due to Design-Builder or otherwise responding consistent with legal requirements.

4.7 Separate Contracts. The Owner reserves the right to perform construction, maintenance, and operations related to the Project with the Owner's own forces, and to award contracts for work that lies outside of the Design-Builder's Project Scope of Work. The Design- Builder and Owner will coordinate to allow for any other separate contracts to be performed, and to minimize interference with the Work and the work that the Owner is having performed through separate contract or contracts. Design-Builder shall perform all Work in such a manner as to avoid any material interruption of Owner's existing operations, including, without limitation, use of the athletic fields. When performing construction, maintenance, or operations related to the Project, the Owner agrees that its separate contractors will be subject to the same obligations as the Design- Builder with respect to insurance, indemnification, safety, protection, inspections and non-conforming work. The Owner will remain responsible to the Design- Builder for any delays to the Contract Time or cost impacts resulting from work performed by its separate contractors. Any cost and/or time impacts will be addressed through the Change Order process set forth in Section 9.

4.8 Timeliness. In order to avoid any impacts to the Contract Time, information or services under the Owner's control, including reviews and approvals, will be furnished within the timeframes set forth in the Contract Documents.

4.9 Owner Direct Payments. In case of a material breach by the Design-Builder, the Owner hereby retains the right to make direct payment to Subcontractors and Design Professionals, less retention, and to deduct the amounts from future payment requests from Design-Builder. Owner shall give Design-Builder notice and a reasonable opportunity to cure the material breach before exercising any rights described in this Section 4.9.

5. DESIGN-BUILDER'S OBLIGATIONS

5.1 Design-Build Services. Design-Builder will provide all labor, materials and equipment necessary to complete the Work in compliance with the Contract Documents as described in further detail in the Scope of Work included in **Exhibit 3**. Unless otherwise provided in the Contract Documents, the Design- Builder shall provide or cause to be provided, and shall pay for services, labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

5.2 Preconstruction Stage Services – Preparation of Design and Construction Documents. Design-Builder will work collaboratively with Owner to validate Schematic Design **(Exhibit 7),** propose alternatives where such alternatives create value to the Owner, evaluate design and construction phasing alternatives, and potential early work packages. Design Builder to produce Schematic, Design Development, and Construction Documents for the Project in accordance with: Criteria Documents (**Exhibit 2**), its attachments, and supporting documents: Site Survey, Geotechnical Report, Logistic Plan; and Scope of Work **(Exhibit 3).** Also, complete design per meetings with the County for input, conformance with Criteria Documents, and approval at each design phase for the schematic design, design development, construction phase documents.

5.2.1 Conduct of Design Services. Design-Builder must perform all design-services, including architectural, engineering and other design professional services, consistent with applicable state licensing laws, and through qualified, licensed design professionals employed by Design-Builder, or procured from qualified, independent licensed Design Professionals, and in accordance with the standard of care described in Section 2.4. The Design-Builder's Architect shall be the Architect-of-Record.

5.2.2 Schematic Design. Prior to starting design, DBE is to conduct site investigations and familiarize themselves with the existing conditions and supporting documents provided by the County. Prepare Schematic Design Documents based on the Conceptual Drawings, site observations, Criteria Document and supporting documents. Include site layout drawings for approval by the County. Attend review meetings with the County and incorporate conformance review comments.

5.2.3 Design Development. Upon the County's written acceptance of the Schematic Design Documents, prepare Design Development Documents for approval by the County from the Criteria Documents, including related architectural, structural, mechanical, electrical, plumbing, and civil plans. Attend review meetings with the County and incorporate conformance review comments.

5.2.4 **Construction Documents**. Upon the County's written acceptance of Design Development Documents, prepare 100% complete construction documents for review and written approval by the County prior to submitting for permitting. Perform quality assurance/quality control and constructability reviews of the documents prior to submitting to the County. The County will perform its own constructability and conformance reviews. The 100% Construction Documents shall consist of complete detailed working drawings and Specifications addressing required materials, products, equipment, their installation and operation, quality assurances, reference standards, product data, warranty data, etc. These 100% Construction Documents shall contain all required drawings and Specifications completed in detail sufficient to construct the Project, confirm conformance with Bridging Contract Documents, and obtain agency approvals. The 100% Construction Documents shall be consistent with approved interim design submissions, as such submissions may have been modified in a design review meeting and recorded in the meetings minutes. Design-Builder shall remain responsible for correcting any deviation from the Bridging Contract Documents, whether discovered prior to or during construction work. Attend meetings with the County and incorporate review comments prior to submitting for permitting purposes.

5.2.5 **Permitting**. Not applicable.

5.2.6 Any other services that are reasonable and necessary for design and permitting of the Project, including close-out with local jurisdictional agencies.

5.3 **Construction Stage Notice to Proceed.** Prior to commencing any work on the Construction Stage of the Project, the Design-Builder will submit a Final Design Package to Owner that Design-Builder proposes would govern the Construction Stage work. The Final Design Package shall be comprised of the following documents: 1) the 100% Construction Documents; 2) a Construction Stage project schedule; 3) all documents required as part of the Project Manual for Construction Stage Work, including a number of forms and plans (Safety Plan, Traffic Control Plan, Quality Control Plan, various mitigation plans) to be identified by Owner and developed by Design- Builder during the course of the Preconstruction Stage; and 5) any other documents or materials reasonably required by Owner. Design-Builder must submit one (1) electronic set and (5) sets of prints. Owner shall review the Final Design Package in order to determine whether this Design-Build Agreement provides Owner with the best value for completing the Construction Stage of the Project. Owner reserves the right to take any of the following actions in response to the proposed Final Design Package submitted by Design-Builder.

5.3.1 Owner may elect to proceed with the Construction Stage of this Agreement by delivering to the Design-Builder a written Notice to Proceed with Construction (the "NTP "), Builder elect to proceed with the Construction (in reasonably acceptable form), Building Permit and Clearance of Bird Nesting. Design-Builder will coordinate in good faith and in a commercially reasonable manner with respect to securing the Building Permit and the Clearance of Bird Nesting.

5.3.2 The Owner may notify the Design-Builder of any objections to the Final Design Package within fourteen (14) calendar days after their submittal. In the event that the Owner makes objections to the 100% Construction Documents, the Design-Builder may complete, correct and/or modify the 100% Construction Documents in question and resubmit the Final Design Package to the Owner. If the need for re-submittal of the Final Design Package (or any part of it) shall not be due to a change requested by the Owner in the Final Design Package, then the Design- Builder shall have ten (10) calendar days within which to correct, complete and re-submit the Final Design Package, but there shall be no extension of the dates in the Project Baseline Schedule. In the event the Owner shall request any change in the Final Design Package that represents a change in the Scope of Work, such request may require an adjustment of time and compensation pursuant to a Change Order.

5.3.3 The Owner may elect not to proceed with the Construction Stage of this Agreement in its sole discretion, and may take such action without cause and for its own convenience whether or not the Owner elects to have the project constructed, terminate the Agreement with Design- Builder for convenience in accordance with Article 16.3, and take possession of the 100% Construction Documents and all other design documents and related work product developed by Design-Builder for potential award to a separate contractor.

5.4 Construction Stage Services. Design-Builder shall proceed to execute and complete the Construction Stage services only upon issuance by the Owner to the Design-Builder of a NTP and other Documents set for the in Section 5.3.1 of this Agreement with the construction phase of the Work. Design-Builder will provide all Construction Stage Services required for the Project. Design-Builder's construction stage services will also include each of the responsibilities summarized below.

5.4.1 Unless otherwise provided in the Contract Documents to be the responsibility of Owner or a separate contractor, Design-Builder shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Design- Builder to complete the Construction Stage Services consistent with the Contract Documents.

5.4.2 Design-Builder is responsible for demolition and removal of all existing improvements necessary for construction of the Project.

5.4.3 Design-Builder shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. Design-Builder shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

5.4.4 Design-Builder shall coordinate the activities of all Subcontractors. If Owner performs other work at the Site with separate contractors under Owner’s control, Design- Builder agrees to reasonably cooperate and coordinate its

activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption to the Work or the work that the Owner is having performed by separate contractors.

5.4.5 Design-Builder shall fully comply with all environmental and permit mitigation requirements set forth in these Contract Documents, including, without limitation, remediation of all hazardous materials, including preexisting hazardous materials, at the Project Site.

5.4.6 Design-Builder must promptly remove from the Project Site, or from property adjacent to the site of the Work, all unused and rejected materials, surplus earth, concrete, plaster, and construction waste, including waste from demolition of existing structures and improvements, to permit Design-Builder to perform its Construction Stage Services efficiently, safely and without interfering with the use of adjacent property. In particular, the Design-Builder shall keep the Project Site clean to maintain safe access and to avoid fire hazard. Upon Substantial Completion of the Work, or a portion of the Work, Design-Builder shall remove all debris, trash, construction waste, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit Owner to occupy the Project for its intended use. Upon Substantial Completion of the Work, Design-Builder shall return the premises to its pre-existing condition or better, based on a preconstruction survey to be performed by Design-Builder.

5.5 Governmental Approval Services. Design- Builder is responsible for obtaining all permits, licenses, and approvals necessary for the completion of the Work.

5.5.1 Review of Approvals. Owner reserves the right to review any submittals and final terms and conditions of permits, licenses, and approvals obtained pursuant to this Section 5.5, and to deal directly with any agencies responsible for the approvals. Design- Builder will be entitled to an extension of time to the extent that a delay is caused by Owner's unreasonable delay in reviewing and/or approving such approvals.

5.5.2 Permit Documents. Only documents prepared for or by Design- Builder for this project may be used for obtaining building permits for construction. No drawings or specifications prepared by the Owner or by the Project Manager or by their representatives shall be used for permits or construction without the Owner’s and the Project Manager’s prior written permission in each instance.

5.6 Project Support Services. Owner may require Design-Builder to provide other incidental services relating to the Project, including, without limitation, public outreach, and presentations at Board of Supervisor meetings. The parties acknowledge and agree that, to the extent that the services described in this Section 5.6 are, in fact, incidental, the Design-Builder shall perform them without additional compensation. In the event that the Owner requests services pursuant to this Section 5.6 and the Design- Builder asserts that such services are not incidental, the Design-Builder shall promptly, and before performing any such work, notify the Owner of its contention and

shall provide any supporting documentation. Owner shall promptly respond to any such notice from the Design-Builder and the parties shall meet and confer in good faith regarding any disagreements with respect to services under this Section 5.6.

5.7 Site Investigations. By executing this Agreement, the Design-Builder represents that it has visited the Project premises, and is familiar with the local conditions under which the Work is to be performed.

5.8 Test and Inspections. The Design-Builder shall be responsible for and coordinate any and all inspections required by any governmental body that has jurisdiction over the Project. Failure to obtain any permits, licenses, or other approvals because of the failure of the Design-Builder to conform to this paragraph will not extend the Contract Time and the contractor shall not be entitled to an increase in the Contract Price therefore. Further, the Design- Builder shall be liable to the Owner for any financial damage such failure may cause the Owner. The Owner will pay for all testing and inspection including the special inspections, structural, mechanical, chemical, air and water pollution tests, tests for hazardous materials, and other laboratory and environmental tests, inspections and reports required by law or the Contract Documents, however, the Design-Builder shall be responsible for costs related to any tests required for corrective work.

5.9 Coordination with Owner and Owner's Separate Contractors. The Design-Builder will coordinate its Work with any of Owner's employees or contractors performing work in the vicinity of the Project Site.

5.10 Sole Responsibility. The Design-Builder acknowledges and agrees that it is solely responsible to the Owner for the sufficiency, quality, adequacy and completeness of all services performed by the Design-Builder, including, without limitation, design work (whether during the Preconstruction Stage or Construction Stage), and construction services. Design- Builder is responsible for any acts, errors, or omissions of the Design-Builder, its Design Professionals, its Subcontractors, employees, agents, and/or any other parties either directly or indirectly in privity of contract with Design-Builder including, but not limited to, the “Design-Build Team” identified in Section 2.1, second tier-subcontractors, and vendors who are performing any portion of the Work. The Design-Builder’s design must meet the minimum design requirements as defined by the Bridging Contract Documents, and all other design requirements included in the agreement. The Owner may review (at its sole discretion) and as it may deem necessary or desirable, the design at specific design development milestones for consistency and compliance with such design requirements. If the Owner shall elect to review any such documents, it shall be entitled (but not obligated) to limit its review to a cursory review or to such review as may be required to enable the Owner to determine rate of progress. Owner's review and/or approval submittals, including, without limitation, interim and final design submittals, does not reduce Design-Builder's obligations under this section.

5.10.1 Nothing in this Agreement shall relieve the Design-Builder of its obligations to complete the Project in full accordance with all applicable laws and regulations and suitable for the Owner's intended purposes.

5.10.2 The Design-Builder, on behalf of itself and its design Team, specifically acknowledges and agrees that the Owner shall have the discretion to determine whether the 100% Construction Documents comply with the requirements of the Contract Documents.

5.11 Applicable Laws.

5.11.1 Statutory Authority. The Owner is awarding this Project pursuant to the design-build authority provided under Sections 22160, et seq., of the California Public Contract Code. The Design-Builder and the Owner acknowledge that they have reviewed this statutory authority, are familiar with all requirements, and will comply with applicable requirements and duties.

5.11.2 Compliance with All Applicable Laws. The Design-Builder and the Owner agree to comply with all Federal, State, Municipal and local laws, ordinances, rules, regulations, building codes and standards, orders, notices and requirements applicable to proper design and construction of this Project.

5.12 Staffing Plan and Key Personnel. The Design-Builder agrees that it will staff this Project in accordance with the staffing plan included in **Exhibit 5A**. The Staffing Plan will include a staff-level organizational chart indicating hierarchy and reporting responsibilities, as well as all Key Personnel.

5.12.1 Key Personnel. The Design-Builder will identify all **"Key Personnel"** in **Exhibit 5B** and will not remove any of its Key Personnel from this Project without the express written consent of the Owner, except for death, disability or departure of person from employment. The Owner's Project Manager will be able to request the removal of any person employed by the Design-Builder whom it believes is incompetent, improper or a hindrance to the design-build process. If any Design- Builder personnel become unavailable to work on the Project, or if the Owner requests that an employee be removed, the Design-Builder will propose a replacement person within 10 business days for approval by the Owner. The recommended replacement person will have similar or better qualifications and experience, and must be approved in writing by the Owner. Additional Staffing and Key Personnel requirements are set forth in the Scope of Work in **Exhibit 3**.

5.13 Safety. The Design-Builder is the "Controlling Employer" as defined by Cal/OSHA and will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work and in accordance with the Design- Builder's Health and Safety Program. The Design-Builder shall comply with all statutory safety requirements.

5.14 Project Baseline Schedule. The initial Project Baseline Schedule, is attached as **Exhibit 6A**. This initial Project Baseline Schedule will be regularly updated in conjunction with Section 8.2 of this Agreement (at least monthly) and refined as project development and design proceeds. The updates to the initial Project Baseline Schedule will coordinate and integrate the progress of Design Services with milestone dates for design development and Construction Documents, procurement of long lead

items and Subcontracts, and construction of major components of the Project. The initial Project Baseline Schedule, and all subsequent versions, shall include all major components of the Work and the Owner's occupancy requirements projecting milestones for each of the following:

- Completion of Schematic Design
- Completion of 100% Construction Documents
- Submission of Final Design Package
- Issuance of Construction Stage Notice to Proceed
- "Substantial Completion" of the Project including Issuance of Final Certificate of Occupancy for the Project
- "Final Completion" of the Project

The Project Baseline Schedule must be prepared utilizing CPM scheduling software. The schedule must be broken down by activity and duration highlighting the critical path.

The schedule submitted by the Design-Builder and agreed to by the Owner shall be referred to as the Project Baseline Schedule, and shall not be adjusted except through Change Order under Section 9 for permitted delays as defined in Section 8. The Project owns all float in the Project Baseline Schedule and monthly updates. Therefore, there will not be any adjustments to the Contract Time until all Project float is exhausted and the critical path is impacted.

5.15 Taxes and Fees. The Design-Builder will pay all sales, consumer, use, gross receipts, and other similar taxes legally related to the work enacted at the time of Contract Award.

5.16 Consultants and Laboratories. The Design-Builder will make recommendations to the Owner regarding selecting, retaining and coordinating any additional professional services, special consultants and testing laboratories required for the Project.

5.17 Construction Administration.

5.17.1 Preliminary Notices. Within 5 business day's receipt, Design-Builder will forward to the Owner all Preliminary Notices (Civil Code sections 9300, 9500 and 9560) served on it by any person or entity entitled to assert a payment bond or stop payment notice claim. Design-Builder will maintain a written record of all Preliminary Notices received by it including the manner of receipt, date of receipt, and name and address of person or entity serving the Preliminary Notice. This written record will be turned over to the Owner at Project Close-out.

5.17.2 Supervision. The Design-Builder will manage, supervise and direct the Work using its best skill and judgment. The Design-Builder shall identify the ("Design- Builder's Manager") who will represent the Design-Builder with respect to the daily operations of the Project, or may delegate authority to another representative. For simplicity, where this Agreement refers to the Design-Builder, Owner may assume that the Design-Builder's Manager is the

appropriate point of contact. The Design-Builder's Manager may not be changed without Owner's written consent. The Design-Builder will also provide a qualified superintendent and assistant superintendent at the Project Site to properly supervise all of Design-Builder's employees, Subcontractors and their agents and employees, and other persons performing construction work and to ensure that the construction work is carried out in strict accordance with the Contract Documents. Both the superintendent and assistant superintendent shall be approved by Owner in its sole discretion.

Neither the superintendent nor the assistant superintendent may have other project or business responsibilities or calls on his or her time other than this Project.

5.17.3 **Discipline.** The Design-Builder will enforce strict discipline and good order at all times among Design-Builder's employees, Design Professionals and Subcontractors and will not employ or contract with any unfit or unskilled person(s) or entities on this Project. The Design- Builder and its Design-Professionals and Subcontractors will comply with all Owner policies, standards, and procedures throughout the duration of this Project.

5.17.4 **Construction Coordination.** Before starting each portion of the construction work, the Design-Builder will: (i) coordinate with Owner's Project Manager, or his designee, to coordinate any necessary shut- down of equipment, and related operations issues; (ii) review and compare the various Contract Documents relative to that portion of the construction work, as well as the information furnished by the Owner, Design Professionals and Subcontractors that may affect proper installation of the work; (iii) field measure existing conditions related to that portion of the work; and (iv) observe any conditions at the site directly affecting that portion of the work.

5.17.5 **Field Measurements**. The Design-Builder will take field measurements to ensure proper matching and fitting of new construction with existing conditions at the Project Site.

5.17.6 **Submittals**. The Design-Builder and its Subcontractors shall provide timely submittal of all "Shop Drawings," "Product Data," "Samples" and similar submittals (collectively referred to as "Submittals") required by the Contract Documents, to the Architect of Record for review and approval. After approval by the Architect of Record, all Submittals will also be provided to the Owner for Owner's information. All Submittals will be submitted in a sequence that avoids delays in the Project Schedule. Design-Builder will not submit any Submittal that is merely a tracing or copy of any of the Construction Documents. Each Submittal will be prepared by the Design-Builder and/or its Subcontractors or suppliers and will be submitted according to the Project specifications. No construction work will be performed without approval by the Design- Builder, as required. Regardless of the Submittal process, the Design- Builder remains responsible to the Owner for proper design and construction in compliance with all requirements set forth in this Agreement. Refer to OMR for additional provisions on Submittals.

5.17.6.1 Response Times to Design-Builder Submittals. Unless otherwise provided in the Contract Documents, Owner shall respond to reviews, approvals, and data needs to Design-Builder within 14 calendar days, provided that the Design-Builder shall, at Owner's request, act reasonably in allowing Owner an extension of time to respond to review, approvals, and data based on a high volume of submittals or complexity of submittals under review at a given time.

5.17.6.2 Design-Build Subcontractors. All Submittals prepared by Design-Builder and its Subcontractors shall be reviewed and approved by the Design- Builder's Architect of Record who will remain responsible to the Design-Builder and Owner for the design.

5.17.7 Coordination of Subcontractors. Subcontractor work will be coordinated, as appropriate, to avoid obstructions, conflicts, keep openings and other passageways clear, overcome interference with work, and coordinate with all trades.

5.17.8 Layout and Protection. The Design-Builder is responsible for all layouts and will preserve and protect all line and grade benchmarks. Any additional surveying or layout caused as a result of Design-Builder or any of its Subcontractor's failure to take the necessary precautions to protect the data will be performed at Design-Builder's own cost and expense.

5.17.9 Materials and Equipment. All materials and equipment required under the Contract Documents will be new and of good quality. Once the Construction Documents are complete, no substitutions will be accepted on this Project unless: (i) the specified materials or equipment have been discontinued; or (ii) the Owner has approved the substitution through written Change Order. Materials and equipment will be furnished in ample quantities and procured in time to ensure uninterrupted progress of construction. All materials and equipment will be properly stored and protected as required by the Contract Documents and any loss or damage due to improper storage or protection will be borne by the Design- Builder.

5.17.9.1 Long Lead Items. The Design-Builder will collaborate with Owner to establish a program to expedite ordering and delivery of materials and equipment requiring long lead time.

5.17.9.2 Shipment and Deliveries. Prior to shipment, delivery and installation of materials and equipment, the Design-Builder will verify the stage of completion of the Project with Owner to determine the availability of facilities for access, delivery, transportation and storage, and to correlate these observations with the requirements of the Contract Documents. All shipments and deliveries will be scheduled and coordinated in accordance with the most current approved site logistics plan and the most current approved Project Schedule.

5.17.9.3 Storage of Materials and Equipment. Storage of equipment and materials will be coordinated through the Design-Builder and the Owner. Design-Builder will maintain, or cause its Subcontractor's to maintain, all storage areas and will keep storage areas clean, safe, and secure. Storage areas shall also provide for proper protection of all stored materials and equipment from all forms of corrosion. Design-Builder must request and receive Owner's approval, granted at Owner's sole discretion, for offsite storage. Any materials or equipment stored offsite will be insured or stored in a bonded warehouse. The risk of loss will remain on the Design-Builder for all materials and equipment stored off-site.

5.17.9.4 Risk of Loss. All construction work stored at the Project Site, or work related to the preparation or delivery of materials or equipment to the Project Site, will remain at the risk of the Design-Builder or appropriate insurance carrier until Final Completion of the Project.

5.17.9.5 Maintenance. The Design-Builder will provide all maintenance for systems and equipment at its own costs and expense until Substantial Completion.

5.17.10 Correction of Work. At any time prior to Final Completion, Owner may require Design-Builder to correct work that does not comply with the Contract Documents. Design-Builder must correct such defective work immediately (unless otherwise approved by Owner), at its sole cost and expense, and in a manner that does not delay the completion of the Project.

5.17.11 Covering and Uncovering Work. Design-Builder must provide notice to Owner as to the schedule for covering Work so that the Owner has adequate time to observe Work to be covered. Owner may require any Work to be uncovered, whether or not prior information was provided as to the schedule for covering. Should Work so uncovered prove to be in non-compliance with the Contract Documents, the cost of uncovering, correction of the Work and re-covering shall be borne by the Design- Builder and the Owner is not be liable for any schedule recovery costs Design-Builder may incur. If Design-Builder provided adequate notice of covering and the work is compliant with the Contract Documents, Design-Builder is entitled to a change order for any extra cost caused Design-Builder, including any cost of schedule recovery. Design-Builder may comply with the notice requirements of this section as part of the project schedules described in Section 8.2 of the Design-Build Agreement.

6. SUBCONTRACTORS

6.1 Procurement. Those portions of the Work that the Design-Builder will not self-perform, or that will not be performed by Design Professionals or Subcontractors named in Design-Builder's proposal, will be performed by Subcontractors added during the course of the Work in accordance with the bidding process in Public Contract Code Sections 4100, et seq. All subcontracted work shall be performed

under written subcontracts or purchase orders. The Design-Builder must furnish to the Owner in writing the names of the persons or entities the Design-Builder proposes to engage as subcontractors at least ten (10) days before said entity shall start any Work as a subcontractor. The Design- Builder may not contract with any subcontractor to whom the Owner has made reasonable and timely objection.

6.2 **Written Agreements**. All subcontracts will be in writing and will bind the Subcontractor to the Design-Builder by the terms of the Contract Documents, and Subcontractor will assume toward the Design-Builder all the obligations and responsibilities that the Design- Builder assumes toward the Owner. Each subcontract agreement will preserve and protect the rights of the Owner and Design-Builder under the Contract Documents with respect to the portion of the Work to be performed by the Subcontractor so that subcontracting the Work does not prejudice the Owner's rights. Where appropriate, the Design-Builder will require Subcontractors to enter into similar agreements with its tier- subcontractors. The Supplemental Conditions to this Agreement and all necessary Exhibits to this Agreement will be a part of each Subcontract Agreement.

6.3 **Licensing Requirements.** All Subcontractors will be properly licensed for their respective portion of the Work.

6.4 **Standard of Care.** All Subcontractors will warrant that they possess the design and/or construction licenses and expertise required for this Project and will use the same degree of care and skill customarily used by California state licensed professionals and contractors performing similar services for residential facilities construction in the state of California during the same time frame.

6.5 **Responsibility.** Design-Builder assumes responsibility to Owner for the proper performance of the Work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights. Design-Builder shall coordinate the activities of all Subcontractors.

6.6 **Conflicting Terms.** All conflicts arising out of any subcontract agreement will be resolved in accordance with the order of precedence set forth in Section 3.4, and this Agreement will take precedence over any terms and provisions in a subcontract.

6.7 **Assignment.** Each subcontract agreement will include an assignment provision. The assignment provision will allow for assignment of subcontracts to the Owner upon termination of the Design-Builder for cause or convenience provided: (i) Owner accepts assignment by written notification to the Subcontractor and Design-Builder; and (ii) assignment is subject to the rights of the surety, if any, obligated under a bond or bonds relating to this Agreement. The Design-Builder will not be responsible for acts and omissions of the Subcontractors that occur after the effective date of assignment.

6.8 **Claims and Dispute Resolution.** The Subcontractor will be bound to the same claims and dispute resolution procedures as set forth in Section 14.12 of the Supplemental Conditions.

6.9 **Insurance.** The Design-Builder may, at its discretion, require its Subcontractors, through written subcontract, to carry appropriate insurance and bonding. Design-Builder's insurance must satisfy all requirements set forth in **Section 12** regardless of any subcontractor coverage.

6.10 **Indemnity.** The Design-Builder will cause its Subcontractors, through written subcontract, to include the indemnification provisions set forth in Section 11 and to indemnify and defend the Owner and its board of trustees, the Owner, and Design-Builder from all claims, damages and liability pursuant to the provisions in Section 11, except to the extent that such subcontractors cannot legally be required to indemnify (e.g., with respect to design-related claims) .

6.10.1 **Third Party Beneficiary.** The Owner will be an express third-party beneficiary to all design-build subcontracts.

6.10.2 **Subcontracts.** Subcontracts may be awarded on a lump sum or best value basis.

6.10.3 **Contract Time.** Subcontractors will be tied to similar provisions governing Contract Time under Section 8.

7. COMPENSATION

7.1 **Preconstruction Stage Compensation**. During the Preconstruction Stage of the Project, the Design-Builder will complete all Preconstruction Stage Services summarized in Section 5.2 of this Agreement and elaborated in more detail in the Scope of Work in **Exhibit 3.** Compensation for all Preconstruction Stage Services, including labor, materials, overhead, and profit of Design-Builder and all of its Design Professionals, and design-assist Subcontractors, will be on the basis of a lump-sum amount of Two-Hundred Fifty-five Thousand ($255,000). full compensation to the Design- Builder for the Work called for in Step One ("Preconstruction Stage Price"). Payments will be made based on monthly invoices, with monthly invoices/payments based on the percentage complete of the scope of work for the Preconstruction Stage services.

7.2 **Construction Stage Compensation**. During the Construction Stage of the Project, the Design-Builder will perform all Construction Stage Services, as summarized in Section 5.4 of this Agreement. Compensation for the Construction Stage Services will be on the basis of a lump sum of Three-Million Six-Hundred Forty-five Thousand ($3,645,000) which will cover all labor, equipment, materials, profit, overhead, taxes and other expenses to be incurred by the Design- Builder ("Construction Stage Price"). Design-Builder will be paid pursuant to monthly invoices based on a Schedule of Values and percentage of completion of the Work. The Preconstruction Stage Compensation and the Construction Stage Compensation shall, in the aggregate, constitute the Contract Price.

7.3 Construction Contingency. The Contract Price includes a Construction Contingency in the amount of Two-Hundred Thousand ($200,000). Construction Contingency is Owner controlled. Use of the Construction Contingency requires

Owner's prior approval. All unspent funds in the Contingency at Final Completion shall accrue to Owner. The Construction Contingency is available for Design-Builder to cover cost of the Work unanticipated by Design-Builder on the effective date of the Design-Build Agreement, such as unanticipated field conditions or differing site condition, re- sequencing the Work for the good of the Project, acceleration in the Schedule for improvement in the overall Contract Time, and Owner requested changes.

7.4 Contract Price. The Contract Price is the sum of the Preconstruction Stage Price, Construction Stage Price, and Constriction Contingency, and shall represent the sum total of all compensation due to the Design-Builder for all design and construction services under the Agreement. The Contract Price for this Agreement is the lump sum of Four-Million One-Hundred Thousand ($4,100,000).

7.5 **Design-Builder's Fee.** The Design-Builder's Fee is included in the Contract Price. However, the Design-Builder's Fee of 15% can be applied to the direct cost of the construction in the event of contingency work and approved change orders. Design-Builder will not be entitled to Design-Builder's Fee for work necessitated by its own substandard workmanship, errors or omissions.

8. CONTRACT TIME

8.1 **Contract Time.** The Design-Builder must achieve Final Completion of the Work using best practical safe speed to achieve Final Completion as soon as reasonably possible. The Contract Time is the time allotted for the Design- Builder to achieve Substantial Completion and Final Completion of the Work. Completion of the Preconstruction Stage must be achieved by July, 21, 2025 based on the issuance of the Notice to Proceed for the Preconstruction Services on May 26, 2025. Substantial Completion must be achieved by February 6, 2026 based on issuance of the Notice to Proceed for the Construction Stage Services on July 21, 2025. Final Completion must be achieved by March 9, 2026. The Design-Builder must also achieve all specific milestone completion dates as set forth in the Project Baseline Schedule in Exhibit 6A.

8.2 **Monthly Project Schedules**. The Design-Builder will create monthly updates of the initial Project Baseline Schedule, referred to as "Monthly Project Schedules," incorporating activities and schedule updates of the Design Professionals and Subcontractors on the Project as necessary to reflect the status of design and construction and projected milestone dates for Substantial Completion and Final Completion. The Design-Builder will provide for Owner's approval information in an agreed upon format, and as requested by the Owner, for the scheduling of times and sequences of operations required for its Work in coordination with the work of Owner's employees and separate contractors, if any.

8.2.1 **3 Week Look-Ahead Schedules.** The Owner will require the Design-Builder, with the assistance of its Design Professionals and Subcontractors, to create 3 Week Look-Ahead Schedules for the performance of upcoming Work and document all Work performed during the prior 3-week period. The Design-Builder will require its Subcontractors and Design Professionals to continuously monitor the Monthly Project Schedule and 3 Week Look- Ahead

schedules to understand the timing, phasing and sequencing of operations of their respective work with other Work being performed at the Project. The 3 Week Look-Ahead Schedules are to be used as a working tool to evaluate any schedule slippages and collaborate on methods for labor efficiency. Work flow will be scheduled based on providing information, material and resources as required by the user of the information, material or resources, optimizing the flow of Work and reducing bottlenecks and activity that will not advance the Project Schedule. The Design-Builder will provide Owner with copies of the 3 Week Look- Ahead Schedules and will meet with Owner to review and coordinate with any work being performed by Owner's separate contractors. Design-Builder shall request input from Owner on 3 Week Look-Ahead Schedules, as necessary, no less than one week before the 3 Week Look-Ahead Schedule submission date.

8.3 Prosecution of the Work. The Design-Builder will commence the Work within 10 days of receipt of a Notice to Proceed by the Owner and will diligently prosecute and complete its Work pursuant to the most approved current Monthly Project Schedule.

8.3.1 Schedule Slippage. The Design-Builder will notify Owner and the Owner within 72 hours of any slippage in the Monthly Project Schedule as a result of its Work and must submit a detailed recovery plan for evaluation and approval by Owner. All costs associated with the recovery, which shall provide for completion of the Project within the Contract Time, will be the responsibility of the Design-Builder unless the Design-Builder is entitled to an extension of time under Section 8.4

8.3.2 Acceleration. The Owner may direct the Design-Builder and its Subcontractors and Design Professionals to work overtime in order to accelerate the Project schedule. If the Design-Builder and its Subcontractors and Design Professionals are not in default under any of the terms or provisions of this Agreement, their respective subcontracts and/or agreements, or any of the other Contract Documents, the Owner will pay the Design- Builder, its Subcontractors and Design Professionals for actual additional wages and/or billable rates paid, if any. All additional wages and billable rates paid will be subject to audit.

8.4 Permitted Delays. If the Design-Builder is delayed, obstructed, hindered or interfered with in the commencement, prosecution or completion of the Work by: (i) any negligent act or omission of the Owner, or Owner's separate contractors; (ii) **"Owner Elected Changes;"** (iii) delay caused by a **"Force Majeure Event;"** (iv) **"Unforeseen and Differing Site Conditions;"** and/or (v) "**Owner's Suspension of the Work,"** such that the critical path of the most current, approved Project Baseline Schedule is impacted extending the Final Completion Date, the Substantial Completion Date, or any specific milestone completion dates, then the Design-Builder will be entitled to an extension for the same period of time that the Design-Builder was delayed provided that the delay, obstruction, interference or hindrance was not caused, in whole or in part by any fault, neglect, act or omission of the Design-Builder, its employees, Design Professionals, Subcontractors or suppliers.

Notwithstanding the above, the Design-Builder will not be entitled to an extension of time unless the Design-Builder provides the Owner with notice in writing of potential delay, obstruction, hindrance or interference within 72 hours of the discovery of the potential delay. Design-Builder shall follow up with all practical speed, but not later than 7 days after the initial notice, to summarize the cause or causes of the delay, and demonstrates that it could not have anticipated or avoided the delay, obstruction, hindrance or interference and has used all available means to minimize the consequences of the delay. The Design-Builder may also be entitled to an adjustment in the Contract Price based on demonstration that the delay and resulting adverse material effect in the cost of completing the Work, after implementation of all reasonable mitigation, materially adversely affected Design-Builder's cost of completing the Work.

8.5 Liquidated Damages. The Owner and Design-Builder acknowledge and agree that if Design-Builder fails to complete Work within the time set forth in section 8.1, the Owner will suffer damages that are both extremely difficult and impracticable to ascertain. Therefore, Owner and Design-Builder agree that, liquidated damages shall be enforced on failure to achieve Substantial Completion in the amount of $3,000 per day, and failure to achieve Final Completion in the amount of $1,000 per day.

Payment of liquidated damages represents a reasonable estimate of fair compensation for the losses that reasonably may be anticipated as a result of Design-Builder's delays in completing the Work. Owner and Design- Builder acknowledge and agree that these liquidated damages provision will be Owner's sole remedy for delay damages caused by Design- Builder's failure to achieve Substantial Completion or Final Completion, within the time set forth in Section 8.1, and/or any of the specific milestone completion dates. Nothing contained in this Section 8.5 shall preclude Owner from recovery for actual damages unrelated to Design-Builder's delays, including, but not limited to, claims for actual losses incurred due to breach of contract, negligence, defective work, injury to persons or property or third-party claims.

9. CHANGES

9.1 Change Orders. A Change Order is a mutually agreed upon written order adjusting the Design-Builder's Scope of Work, Contract Price, Contract Time or any combination. A Change Order may come through an Owner Elected Change, or Design- Builder's request. All changes in the Work will only be authorized by an Owner Elected Change, or Owner executed Change Order and performed under the applicable conditions of the Contract Documents. A Change Order signed by the Design-Builder and Owner indicates an agreement to any adjustment in the Contract Time, and/or Contract Price, which includes all Costs of Work plus Fee, and that the adjustments in the Change Order fully and completely resolves any claim by Design-Builder for additional compensation or time arising from or related to the subject of the Change Order. Change Orders for additional Work that was not considered as part of the Contract Price are limited to the following circumstances and, therefore may impact the Contract Price, and may or may not impact Contract Time:

9.1.1 Owner Elected Changes

9.1.2 Force Majeure Events

9.1.3 Unforeseen and Differing Site Conditions

9.1.4 Owner's Suspension of the Work as defined in Section 16.2

9.1.5 Changes in applicable law

9.2 **Owner Elected Change.** The Owner will initiate a Change Order by providing the Design-Builder with a written summary of the Owner Elected Change. Within 10 business days of receipt of an Owner Elected Change, or such other mutually-agreed upon period for more complex or extensive Owner Elected Changes, the Design-Builder must submit a complete cost proposal for the revised scope to the Owner, as well as any proposed change in Contract Time under Section 8. The Owner will review and evaluate the Design-Builder's cost proposal and any proposed change in Contract Time, before presenting the Design-Builder with a proposed Change Order at either its regular weekly meeting or a special meeting.

9.3 **Design-Builder Initiated Changes.** The Design-Builder must provide the Owner written notice of a proposed change within 5 business days of discovery of the facts or circumstances giving rise to the proposed change order. The Owner will meet and discuss the proposed change either at its regular weekly meeting or at a special meeting.

9.4 **Submission.** All claims for additional compensation or extensions in Contract Time will be presented in writing to the Owner for review. The Owner will either discuss the proposed change at its regular weekly meeting or will call a special meeting to meet and review the proposed change. At the conclusion of the meeting an Owner Elected Change may be issued. Consistent with Owner's internal procedures, a change order request may require approval from Owner's Board of Trustees. All Change Orders must be approved by the Owner before the expense is incurred. Additive Change Orders will affect Contract Price and may affect Contract Time, subject to Section 8. Deductive Change Orders will affect Contract Price and may affect Contract Time.

9.5 **Continued Performance.** No Work will be allowed to lag pending the adjustment through Change Order, but will be promptly executed as directed through Owner Elected Change, even if a dispute arises. Disputes will be resolved in accordance with Section 14.12. Failure of the Design-Builder to provide the Owner with notice of its disputed claim and to submit the written claim within 10 business days of completion of the Work in dispute constitutes an agreement on the part of the Design-Builder that it will not be paid for its Work. No claim will be considered after the Work in question has been performed unless a written Change Order has been executed or timely written notice of claim has been made by the Design-Builder. The Design-Builder will not be entitled to claim or to bring suit for damages, whether for loss of profits or otherwise, on account of an omission of any item or portion of Work covered by the executed Change Order.

9.6 **Omitted Work.** If the Design-Builder omits any portion of the Work that is included in the Contract Documents, the Owner will have the right to withhold from payments due or to become due to the Design-Builder in an amount which, in the Owner's opinion, is equal to the value of portion of the Work that was omitted until the omitted Work is performed.

9.7 Contract Price Reduction. The Owner may also reduce the Contract Price to reflect back-charges or payments withheld pursuant to the Contract Documents upon written notice, and 48 hours opportunity to cure.

9.8 Contract Time Impacts and Extended Costs. The Design-Builder will not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is allowable under Section 8 and claimed in a proposed change order under Section 9.3. No claims will be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. Nothing contained in this Section will be construed as restricting the rights and remedies of Design-Builder in violation of Civil Code section 2782 or Public Contract Code section 7102. If this provision is determined to conflict with Public Contract Code section 7102 or Civil Code section 2782, this provision will be reformed to provide the greatest protection to the Owner under the law.

9.9 Surety. All changes, additions or omissions in the Work ordered through an Owner Elected Change, or Change Order are part of the Work and will be performed and furnished in strict accordance with all of the terms and provisions of the executed Change Order and the other Contract Documents. The Design- Builder will keep its surety informed of all modifications to this Agreement. The obligations of Design-Builder's surety are not to be reduced, waived or adversely affected by the issuance of Change Orders even if the Design- Builder fails to inform the surety of the Change Order(s) and the Owner will not be required to obtain consent of the surety to the Design-Builder or any of its Subcontractors.

10. PAYMENT

10.1 Progress Payments. In accordance with Public Contract Code section 20104.50, the Owner will make monthly progress payments on all undisputed Work performed within 30 calendar days of receipt of a monthly invoice and a monthly progress report that were properly submitted pursuant to the procedures set forth in this Section and as further established by the Owner. Each invoice will be submitted on the forms provided by the Owner, will include an itemized list of the work performed, be based on the percentage of the Work completed, and provide a level of detail to allow Owner to make a fair and reasonable estimate of the value of Work completed. The invoice must be certified by the Design-Builder and made out to the Owner. Before making payment, the Owner will review the invoice for accuracy of the Work completed to date. No such payment shall be required to be made when, in the judgment of the Owner, the request for payment is in excess of the percentage of Work completed. Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation into the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment stored off of the site at a location agreed upon in writing, provided that such off-site location shall be a bonded warehouse or secured by other means acceptable to the Owner.

10.1.1 Schedule of Values. Design-Builder must submit a draft schedule of values to Owner for approval prior to the first payment and within ten days after

Notice to Proceed. As approved by Owner, the schedule of values shall be used for preparing future estimates for partial payments to the Design-Builder, and shall list the major items of Work, including materials and services, with a cost fairly apportioned to each item so that the total of the prices for all items equal the lump sum price. The schedule of values shall be by area, structure, or other logical division of work. The insurance, bond, Elevator, Car Lift, Doors & Frames, Finish Hardware, Cabinets, Appliances, Windows, Scaffolding and overhead costs will be carried on separate line items and the Design- Builder shall be entitled to bill for reimbursement for costs related to Elevators and Car Lifts as such costs are incurred, subject to documentation of such costs, prior to the Elevators and Car Lifts being installed in the premises. The schedule of values shall not be considered in determining payment or credit for additional or deleted work. The final Schedule of Values will be added to the Design-Build Agreement as Exhibit 4B.

10.1.2 Monthly Progress Reports. Each monthly invoice must include a report providing an overall status of the Project's progress, and any concerns or impacts.

10.1.3 Evaluation of Invoice. The Owner will review the invoice based on the approved schedule of values, monthly progress report, on-site observations and evaluation of the Work, and on the data and documentation substantiating the invoice. Upon request, Design-Builder must substantiate the cost for any or all items and provide additional level of detail, including quantities of work. Based on that review, Owner will pay all undisputed items. An approval of an invoice is subject to results of subsequent tests and inspections, to correction of minor deviations from the Contract Documents prior to completion of the Work and to specific qualifications expressed by the Owner. Owner is entitled to rely on the accuracy and completeness of the information furnished by the Design-Builder and approval will not be deemed to represent that a detailed examination, audit, or arithmetic verification of the documentation submitted with the Design-Builder's invoice has been made or that exhaustive or continuous on-site inspections have been made to verify that the Work is in accordance with the Contract Documents. A payment by Owner does not represent that Owner has ascertained how or for what purpose the Design-Builder has used money previously paid.

10.1.4 Retention. The Owner will withhold 5% of each progress payment during the Project. Retention will be withheld until the Project achieves Final Completion unless the Owner, in its sole discretion, agrees to release the Design-Builder's retention earlier and provided that the Work has been accepted by the Owner and other necessary agencies with jurisdiction over the Project.

10.1.4.1 Substitution of Securities. To the extent required by law, Owner will consider and approve reasonable and appropriate requests under Public Contract Code section 22300 for substitution of securities or establishment of an escrow account for retention. Nothing contained in this Section will prevent Owner from

withholding payment when grounds exist for doing so under the Contract Documents.

10.1.5 Change Orders. Applications for payment may include requests for payment on account of changes in the Work that have been properly authorized.

10.1.6 Stored Materials and Equipment. Stored materials and equipment may be included in the invoice provided the materials and equipment are properly stored in accordance with Section 5.17.9.3 and a complete invoice accompanies the invoice. Owner will not pay for materials or equipment storage.

10.1.7 Stop Payment Notices and Claims. Upon submission of an invoice, the Design-Builder warrants that all Work included in the invoice has been performed in accordance with the Contract Documents and to the best of the Design-Builder's knowledge, information and belief, title to all Work covered by the invoice will pass to the Owner free and clear of all stop payment notices, claims, security interests or encumbrances. Design-Builder will provide executed conditional waivers and release of claims for all amounts included in the invoice. Waivers must comply with the requirements of California Civil Code section 8132.

10.1.8 Owner Payment to Design Professionals, Subcontractors and Suppliers. The Owner will not have an obligation to pay a Design Professional or Subcontractor for work performed unless required by law. However, if the Owner is not in default of payment provisions and receives a stop payment notice or has reason to believe that the Design-Builder is not paying its Design Professionals or Subcontractors and suppliers, the Owner may make payment of sums due to Design- Builder through joint check or pay Design Professionals and Subcontractors and suppliers directly and withhold those payments from Design-Builder. The Owner shall not exercise any rights granted under this Section prior to issuing a notice to the Design-Builder and granting the Design-Builder a reasonable opportunity to cure.

10.2 Final Payment. Upon Final Completion of the Work, the Design-Builder will submit a final payment application. All prior progress estimates will be subject to correction in the final invoice. If items remain to be completed at that time, then the Design-Builder in conjunction with Owner will revise the Final Punch List and will include 150% of the estimated cost to complete each remaining item. The Owner may withhold from the final payment 150% of the estimated cost to complete the Work. The amount retained by the Owner for Final Punch List items will be released to the Design-Builder as each item is completed. Upon Final Completion of the Project, and submission of Owner's Release of Claims form, by Design- Builder, final payment of all remaining retention, if unencumbered, will be paid on all undisputed amounts no later than 30 calendar days after either Final Completion of the entire Project or recordation of a Notice of Completion (whichever is later), and in no event later than the time prescribed under Section 7107 of the Public Contract Code.

10.2.1 Contract Price Reduction. Upon Final Completion of the Project, the Owner after written notice to Design-Builder may reduce the Contract Price to reflect

costs charged to the Design-Builder, back-charges or payments withheld pursuant to the Contract Documents.

10.2.2 **Evidence.** Before issuance of final payment, Owner may request satisfactory evidence that: (i) all payrolls, materials bills and other indebtedness connected with the Work have been paid or otherwise satisfied; (ii) insurance required by the Contract Documents will remain in force after final payment and will not be canceled or allowed to expire until at least 30 calendar days prior written notice has been given to the Owner; (iii) the Design- Builder knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (iv) surety, if any, has consented to final payment, (v) Owner has received all close-out documents required by the Contract Documents; and (vi), other data establishing payment or satisfaction of obligations, such as releases and waivers of stop payment notices, claims, security interests or encumbrances arising out of this Agreement have been received.

10.2.3 **Payment Not Acceptance of Work.** Approval of an invoice (final or otherwise) or partial or entire use or occupancy of the Project by the Owner will not be used as conclusive evidence that the Work was properly performed or constitute acceptance of Work that is not in accordance with the Contract Documents.

10.3 **Payments Withheld.** In addition to the 5% retention, the Owner may withhold payments due to the Design-Builder that may be necessary to cover: (i) stop payment notice claims; (ii) defective Work not remedied; (iii) failure of Design- Builder to make proper payments to its Design Professionals, Subcontractors or suppliers; (iv) damage to Design Professionals, Subcontractors or third party caused by Design-Builder; (v) amounts due to the Owner for claims against Design-Builder; (vi) failure to provide Owner with timely schedule updates under Section 8.2; (vii) disputed amounts in the invoice; and (viii) legally permitted penalties.

10.4 **Waiver of Claims.** Acceptance of final payment by the Design-Builder constitutes a waiver of claims by Design-Builder and its Design Professionals, Subcontractors and suppliers except for those previously made in writing and identified by the Design-Builder as unsettled at the time of final invoice. The Design-Builder must acknowledge this waiver on a form provided by the Owner prior to Design-Builder's receipt of the final payment.

11. INDEMNIFICATION

11.1 **Indemnification**. Design-Builder shall defend, indemnify, and hold harmless San Mateo County, and its trustees, officers, employees and agents, and their successors and assigns (collectively referred to as “Indemnitees”) from and against all third party claims, demands, liability, suits, actions, costs or expenses (including reasonable attorneys’ fees) for any and all loss or damage, including, but not limited to, personal injury or property damage, arising out of or resulting from allegations of:

a. The failure or alleged failure by any Design-Build Team member to comply with any applicable law, order, citation, rule, regulation, standard, ordinance or statute,

including rules and regulations imposed by Cal-OSHA and caused by the act or omission of the Design-Builder;

b. The negligent act, omission, misconduct, or fault, or the alleged negligent act, omission, misconduct or fault of any Design-Build Team member;

c. Any and all claims by any governmental or taxing authority claiming unpaid taxes based on gross receipts, purchases or sales, the use of any property or income of any Design-Build Team member with respect to any payment for the Work made to or earned by the Design-Build Team member under the Contract Documents;

d. Any and all stop payment notices and/or liens filed in connection with the Work, including all expenses and attorneys' fees incurred by the Owner in discharging any stop payment notice or lien, provided that the Owner is not in default on payments owing to the Design-Builder with respect to such Work;

e. Failure of the Design-Builder to comply with the Insurance provisions set forth in Section 12**;**

f Any release of hazardous materials brought onto the Site by any Design-Build Team member; or where the removal or handling involved negligence, willful misconduct, or breach of Contract by any Design-Build Team member;

Nothing in this section shall require the Design-Builder to defend, indemnify or hold harmless the Indemnitees for the Indemnitees' sole negligence, willful misconduct, or active negligence.

11.2 Indemnification for Infringement of Intellectual Property Rights.

The Design-Builder agrees to fully defend, indemnify, and hold harmless the Indemnitees against any demand, claim, cause of action, suit, proceeding, or judgment that design, service, method, or product called for and provided by the Design-Builder or any Design-Build Team member (herein called "deliverables") that infringes or allegedly infringes any patent, copyright, trademark, service mark, trade dress, utility model, industrial design, mask work, trade secret, or other proprietary right of a third party (collectively "Intellectual Property Right").

The Design-Builder shall pay any and all costs of such defense and settlement (including interest, fines, penalties, costs of investigation, costs of appeals, and attorney 's fees), and will pay any and all costs and damages finally awarded against any of the Indemnitees. The Design- Builder shall have the exclusive right to conduct its legal defense.

In the event that any deliverable furnished hereunder, or called for in any design or services provided under this Agreement, is in any suit, proceeding, or judgment held to constitute an infringement on any third party's Intellectual Property Right, and its use is enjoined, the Design- Builder shall, at its own expense accomplish the following:

a. Procure the fully paid-up, irrevocable, and perpetual right for the Owner to continue using the deliverable;

b. Modify the deliverable; or

c. Provide for the replacement of the deliverable with an alternative product that is functionally equivalent to the deliverable.

If the Design-Builder is unable to provide the Owner with one of the forms of relief described above, the Design-Builder shall also reimburse to the Owner the total paid by the Owner for the deliverable that is held to constitute an infringement.

11.3 Indemnification for Design Defects. To the fullest extent permitted by law, the Design-Builder shall fully defend (with counsel acceptable to the Owner), indemnify, and hold harmless Indemnitees from any and all claims, demands, causes of action, damages, costs, expenses (including legal, expert witness, and consulting fees and costs), losses, or liabilities of whatsoever nature that arise out of, pertain to, or relate to the negligence, recklessness or willful misconduct of the Design-Builder, its employees, any of the Design-Builder's Design Professionals or Subcontractors of any tier, or anyone for whom Design-Builder or any of its Design Professionals or Subcontracts may be liable, in relation to any of their design services, including but not limited to errors, omissions, inconsistencies, inaccuracies, deficiencies, or other defects whether or not contained in the Construction Documents furnished by the Design- Builder, and whether or not such errors, omissions, inconsistencies, inaccuracies, deficiencies, or other defects were also included in the Contract Documents provided by the Owner. The Design-Builder agrees that, because the Bridging Contract Documents are preliminary and conceptual in nature and are subject to review and modification by the Design-Builder, such documents shall not be deemed a "design furnished" by the Owner or any of the other Indemnitees, as the term "design furnished" is used in Civil Code Section 2782, and that this clause is governed by Civil Code Section 2782.8. In addition, Design-Builder shall defend the Owner, or pay for the costs of such defense, to the extent of Design-Builder's proportionate percentage of fault for the underlying claim. In addition, Design-Builder shall defend the Owner, or pay for the costs of such defense, to the extent of Design-Builder's proportionate percentage of fault for the underlying claim.

11.4 Exception. The indemnification provisions in this Section 11 will extend to claims occurring after this Agreement is terminated as well as while it is in force. However, Design- Builder will not be obligated to indemnify or provide a defense to the Indemnitees from claims arising from the active negligence or willful misconduct of Indemnitees. If any of the Indemnitees are actively negligent, the Design-Builder will continue to indemnify and provide a defense to Indemnitees but only to the extent and in proportion to the degree that the Indemnitees were not actively negligent. Nothing contained in Section 11 will be construed to impose any obligation in conflict with the provisions of Civil Code section 2782 and/or Insurance Code section 11580.04. In the event of a conflict, the provision conflicting with Civil Code section 2782 and/or Insurance Code section 11580.04 will be modified to limit Design-Builder's obligations to the greatest extent permitted by law. The section does not apply to the duty to defend claims arising from design defects, which obligation is addressed separately in Section 11.3. The section does not apply to the duty to defend claims arising from design defects, which obligation is addressed separately in Section 11.3.

11.5 Duty to Defend. Except as otherwise provided herein, the Design-Builder will defend all claims defined in Section 11.1 at its own cost, expense and risk and pay and satisfy any judgment or decree that may be rendered against any Indemnitee arising

out of a claim, or reimburse Indemnitee(s) for any and all legal expenses incurred by any of them in connection with the claim or in enforcing the indemnity granted in this section. The duty to defend will apply, and Design-Builder will be required to furnish a defense, regardless of whether the matter has been adjudicated. The Owner shall have the right to approve counsel defending it, which approval will not be unreasonably withheld. Following the resolution of any such dispute, the Owner shall reimburse Design-Builder for the costs incurred by Design-Builder for any Indemnitees' defense, to the extent of the Owner's proportionate responsibility or fault, as determined by court or arbitrator or as agreed by settlement orotherwise.

12. INSURANCE AND BONDS

12.1 Design-Builder's Insurance Requirements. The Owner and its trustees, officers, employees, agents, and volunteers will be a named additional insured under all of Design- Builder's insurance policies except errors and omissions policies and workers' compensation policies. Likewise, the Design-Builder will require all Subcontractors to name the Owner, and its trustees, officers, employees, agents, and volunteers as additional insured on all Subcontractor policies except errors and omissions policies and workers' compensation policies. Before commencement of the Work, the Design-Builder will provide certificates of insurance and endorsements per the following as evidence of insurance and Owner's, and Owner's additional insured status under those policies.

12.2 DBE Provided Insurance

12.2.1 General: DBE shall procure and maintain for the duration of this Contract at its sole cost and expense, insurance against claims which may arise from, or in connection with, the performance of the Work by, or on behalf of (whether directly or indirectly), the DBE.

Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be suspended, voided, canceled, or reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the Owner, except that ten (10) days' prior written notice shall apply in the event that cancellation for non- payment of premium.

12.2.2 Commercial General Liability: $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.

12.2.3 Workers' Compensation and Employers' Liability: Workers' Compensation limits as required by the California Labor Code and Employers Liability limits of $1,000,000 per accident.

12.2.4 Automobile Liability: $1,000,000 combined single limit per accident for bodily injury and property damage.

12.2.5 **Builder's Risk/Course of Construction:** DBE shall procure and maintain in effect a Builders' Risk (course of construction) insurance for completed value of the Work. No deductible shall exceed $100,000, per occurrence except for earthquakes, earth movement or flood. Builder's Risk Policies shall contain the following provisions:

12.2.5.1 Owner and Subcontractors of every tier shall be named as an additional insured loss payee; and

12.2.5.2 Coverage shall contain a mutual waiver of subrogation in favor of the Design Build Entity, Subcontractors at every tier, and the Owner, its officials, employees, agents, and only to the extent of onsite activity, design or engineering professionals.

12.2.5.3 Owner and Design Build Entity will share equally in payment of all deductibles from a covered event due to act of God events including earthquake, earth movement, and flood.

12.2.6 **Contractor's Pollution Liability Insurance** on an occurrence basis, with limits of at least $2,000,000 per occurrence and $2,000,000 policy term aggregate for bodily injury, property damage, cleanup costs and claim expenses, arising at or emanating from the Project Site arising from all operations performed on behalf of the Design Build Entity. Subcontractors will provide Pollution Liability coverage as required by their specific Subcontract.

Such insurance shall provide liability coverage for both sudden and gradual releases arising from the Work. CPL policy shall name Owner, Design-Build Entity and all Subcontractors of all tiers as insureds.

Contractor shall be responsible at its own expense for an obligation for each loss payable under this insurance that is attributable to the Design-Build Entity's acts, errors, or omissions, or the acts, errors, or omissions of any of its Subcontractors, or any other entity or person for whom Design-Build Entity may be responsible. The amount of the obligation shall be based on the amount of the initial Contract Price, as follows:

12.2.6.1 The portion of the obligation applying to the Design-Build Entity or Subcontractor shall be the responsibility of the Design Build Entity and shall remain uninsured. Design Build Entity shall promptly pay its charge pertaining to any loss. The Owner, in addition to its other remedies, may back charge Design-Build Entity for the obligation and deduct the back-charged amount from Design-Build Entity's next progress payment or final payment.

12.2.7 **Professional Liability Errors and Omissions Insurance**: $1,000,000 per claim/$2,000,000 aggregate limit.

12.2.8 **Waivers**

12.2.8.1 Owner and Design-Build Entity waive all rights against each other and any of their consultants, including Construction Manager, Bridging Architect and their consultants to the extent of their onsite exposure, separate contractors, if any, Subcontractors, Designers, agents and employees, each of the other, and any of their contractors, subcontractors, agents and employees, for damages caused by fire or other causes of loss to the extent covered by Builder's Risk insurance obtained pursuant to paragraph 1.2 above, or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the Owner in good faith. Owner or Design-Build Entity, as appropriate, shall require of the separate contractors, if any, and the Subcontractors, Designers, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to any individual or entity even if such individual or entity (a) would otherwise have a duty of indemnification, contractual or otherwise, (b) did not pay the insurance premium directly or indirectly, and (c) whether or not such individual or entity had an insurable interest in the property damaged. The only exceptions to this waiver of subrogation are for claims that may be covered by any Professional Liability insurance to the extent that insurance responds to any loss.

12.2.8.2 Owner waives subrogation rights under the Contractor's Pollution Liability Policy, to the greatest extent permitted by law, against all other project participants, including Design- Build Entity and Subcontractors of any tier.

12.3 Performance and Payment Bonds. Prior to commencement of the Construction Stage, the Design-Builder will furnish a payment bond and a performance bond to the Owner, each in the amount equal to 100% of the amount of the Construction Stage Price, covering all construction work and warranties, on the forms acceptable to the Owner. The payment and performance bonds will be provided prior to commencement of Work. The surety supplying the bonds must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as a surety in the State of California and satisfactory to the Owner. Failure to furnish the required payment and performance bonds to the Owner constitutes a default under this Agreement and the Owner will have all of the rights and remedies provided under the Contract Documents and afforded by law including, but not limited to, forfeiture of the bidder's bid deposit or bond to the Owner and the Owner may award this contract to another responsive and responsible bidder, or may call for new bids. Full compensation for furnishing the payment and performance bonds are included in the Contract Price.

12.4 Payment of Subcontractors. Without limiting the responsibilities of Design- Builder and its surety under the terms of this Agreement, the Design-Builder and its surety agree to promptly pay all lawful claims of Subcontractors, materialmen, laborers, persons, firms or corporations for labor or services performed or materials, supplies, machinery equipment, rentals, fuels, oils, tools, appliances, insurance and other items

furnished, used, or consumed in connection with the prosecution of the construction work including Change Orders, and will indemnify and save harmless the Owner, and Owner from and against all liability loss, damage and expense, including interest, costs and attorneys' fees, which the Owner, and Owner and/or its surety may sustain by reason of Design-Builder's or its surety's failure to do so.

13. WARRANTY OF THE WORK

13.1 Design-Builder Warranty. The Design-Builder shall provide a two-year warranty on all furnished labor and materials, commencing on the date of Final Completion of all Work under the Agreement. Design-Builder shall perform all required corrective work, and shall be responsible for the cost of all labor, materials, equipment, transport, installation and re-testing required for the corrective work. Moreover, in the event that corrective work is required under the Design-Builder Warranty, a one-year warranty shall apply to the corrected work covering any discrepancies and defects in the corrected work that are discovered after the corrected work is accepted.

The Design-Builder Warranty shall warrant that:

a. The Work conforms to the requirements of the Contract Documents;

b. All Design Services furnished under the Agreement conforms to all professional engineering principles generally accepted as standards of the industry in the State of California and complies with the standard of care of a reasonable professional that is performing the same or similar work, at the same time and locality and under the same or similar conditions;

The construction Work furnished under the Agreement is free from defects in workmanship, and was performed in a workmanlike manner and conforms to the standards of care and diligence normally practiced by recognized construction firms performing construction of a similar nature in the State of California, and conforms to the requirements of the Bridging Contract Documents and the100% Construction Documents, as these documents may have amended during the course of Work under the Agreement;

c. Materials and equipment furnished under the Contract Documents are of good quality and new;

d. The Facilities are fit for the purposes intended in the Contract Documents;

e. The Facilities shall be free of defects in design, material, and workmanship; and

f. The Facilities shall function up to the standards set forth in the Bridging Contract Documents and all other reliability standards established in the Contract Documents.

13.2 **Subcontractor Warranties.** The Design-Builder shall obtain one year warranties commencing on the date of Final Completion of all Work under the Agreement from all Subcontractors and Design-Build Team members providing design services, labor, equipment, materials, supplies and maintenance equipment; require all such warranties to be executed in writing for the benefit of the Owner and enforce all warranties for the benefit of the Owner, if so directed by the Owner. Warranties by subcontractors are in addition to, and do not replace or reduce, any other warranty

obligations stated in the Contract Documents, including but not limited to the Design-Builder Warranty. All such Subcontractor warranties from Design-Build Team members shall run directly to and be enforceable by the Design-Builder and the Owner, and their respective successors and assigns.

The Design-Builder hereby assigns to the Owner all of the Design-Builder's rights and interest in all warranties that are received by the Design-Builder from any Subcontractor or Design-Build Team members unless necessary for enforcement. All such warranties shall survive Final Completion, acceptance, final payment, and termination of the Agreement if the stated warranty period extends beyond the Final Completion, acceptance, final payment, and termination of the Agreement.

13.3 Manufacturers' Warranties. The Design-Builder shall obtain manufacturers' warranties for all equipment procured and installed on the Project and shall assign all such warranties to the Owner prior to Final Completion. Owner and Design-Builder shall agree upon acceptable warranty periods for each item of equipment prior to the procurement of the equipment of not less than one year from Final Completion. Manufacturers' warranties shall all commence on Final Completion.

13.4 Remedy. The Design-Builder shall remedy, at its own expense, any failure to conform to the warranty requirements set forth in this Section 13 Warranty of the Work. If the Design-Builder fails to remedy any such failure within a reasonable time after receipt of notice (or immediately in the case of an emergency), the Owner shall have the right in its sole discretion to replace, remove, or otherwise remedy the failure at the Design-Builder's expense.

13.4.1 Notification to Design-Builder. The Owner shall notify the Design- Builder, in writing, within a reasonable time after the discovery of any failure to conform to the warranty requirements set forth in this Section 13, Warranty of the Work.

13.4.2 Warranties Do Not Limit the Design-Builder's Liability. The foregoing warranties are in addition to all rights and remedies available under the Agreement or applicable law, and shall not limit the Design- Builder's liability or responsibility imposed by the Agreement or applicable law with respect to the Work, including:

a. Liability for design defects;

b. Latent construction defects;

c. Strict liability;

d. Negligence; and

e. Fraud.

13.5 Assignment of Warranty. Upon providing written notice to the Design-Builder, the Design-Builder's warranties, including all warranties from Subcontractors and Design-Build Team members that have been assigned to the Design-Builder, shall be immediately assignable by the Owner to any entity, in the Owner's sole discretion.

14. OWNERSHIP AND USE OF DOCUMENTS

14.1 Ownership of Construction Documents. The drawings, specifications and other documents prepared by or on behalf of the Design-Builder pursuant to this Agreement (including, without limitation, the Construction Documents), including all drafts, and the copyright thereto, shall at all times be and remain the property of the Owner, whether or not the Project for which they are made is commenced, so long as the Owner shall not be in default of its obligations under this Design- Build Agreement. Neither the Design-Builder nor any subcontractor or material or equipment supplier shall own or claim a copyright in such drawings, specifications and other similar or related documents, and Owner shall retain all common law, statutory, and other reserved rights with respect thereto. All copies of such documents shall be delivered by the Design-Builder to the Owner upon completion of the Work or upon the prior termination of this Agreement. Such drawings, specifications and other documents shall be used by the Design- Builder solely with respect to this Project and shall not be used by the Design- Builder or any subcontractor or material or equipment supplier on other projects or for additions to this Project outside the scope of the Work without the specific written consent of the Owner in each instance.

14.2 Ownership under Termination. Should the Owner elect to terminate this agreement, the Design-Builder agrees that (1) for itself and its Architect, that the Owner will be the sole and absolute owner of the 100% Construction Documents, and shall have the right to use or to modify the 100% Construction Documents in any manner it wishes, including, without limitation, using the 100% Construction Documents in construction contracts with third parties; and (2) there shall be no limitation on the Owner by the Design-Builder should the Owner subsequently engage the Design-Builder's Architect of Record for services on this project or for other services.

14.3 Confidentiality. The documents, materials and information prepared by or on behalf of, or furnished to the Design-Builder in connection with the Work, including, without limitation, the RFP, the Contract Documents, the 100% Construction Documents and any other plans, specifications, drawings, shop drawings or details relating to the Project and the terms and provisions of this Agreement, shall be kept strictly confidential by the Design-Builder. The Design-Builder shall not disclose, furnish or make known or accessible to or use for the benefit of anyone, any such documents, materials or information or make available any reports, recommendations and/or conclusions which the Design- Builder may make for the Owner to any person, firm or corporation or use such documents or information in any manner whatsoever without obtaining the Owner's prior written approval in each instance unless such disclosure is required by law. The Design-Builder acknowledges that the Owner will incur significant damages in the event of a breach by the Design-Builder of its obligations under this Section 14.3. The provisions of Article 14 shall survive the expiration or prior termination of this Agreement.

14.4 Licensing. The Design-Builder, its Design Professionals and Design-Build Subcontractors are granted a limited, non-exclusive, license to use and reproduce applicable portions of the Design and Construction Documents and other documents prepared by the Design-Builder for use in the performance of the Design-Builder’s Work under this Agreement. Additionally, the Owner grants the Design-Build Team members a non-exclusive, perpetual license for use, or display of the Project information solely for either educational or promotional purposes.

14.5 **Exception.** Nothing contained in Section 14.1 will be construed to limit the Design-Builder, its Design Professionals and Design-Build Subcontractors rights, title and interest to continue to use their respective general design details that each of them uses or has used on multiple projects, or new standard design details that were developed during design of this facility.

14.6 **Copies**. All copies made under this license will bear the statutory copyright notice, if any, shown on the Design and Construction Documents and any other documents prepared by the Design-Builder, its Design Professionals and Design-Build Subcontractors. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project will not be construed as publication in derogation of the Owner's copyright or other reserved rights and interests.

15. ACCOUNTING RECORDS

15.1 Audit. In accordance with Government Code Section 8546.7, records of both the Owner and the Design-Builder will be subject to examination and audit by the State Auditor General for a period of 10 years after final payment. Design-Builder will make available to the Owner any of the Design-Builder's other documents related to the Work immediately upon request of the Owner as set forth in Section 15.2.

15.2 Records. The Design-Builder will keep full and detailed accounts and exercise controls as may be necessary for proper financial management under this Agreement. In addition to the State Auditor rights above, the Owner will have the right during normal business hours to audit and copy the Design-Builder's documents related to this Project including, but not limited to, records, books, estimates, correspondence, instructions, drawings, receipts and invoices for materials, supplies and equipment, temporary facilities, etc., contracts, purchase orders, vouchers, memorandums, Change Orders and all substantiating documentation, certified payroll, and other data relating to the Cost of Work, the Contract Price in order to evaluate accuracy and completeness of Design- Builder's billing. The Design-Builder will preserve all Project records for a period of at least 3 years after final payment, or for such longer period as may be required by law. The Design-Builder will incorporate Section 15 accounting and auditing provisions into all Design Professional agreements and Subcontracts and require Design Professionals and Subcontractors to keep detailed and accurate accounting records for their portion of the Work for a period of at least 3 years.

16. TERMINATION, SUSPENSION AND ABANDONMENT

16.1 **Termination for Fault.** The Owner may terminate this Agreement upon not less than 7 calendar days' written notice and an additional 7 calendar days to commence curing upon the Design-Builder's failure to perform any material obligation under the Agreement. The Design-Builder will have 7 days after receiving reasonably detailed written notice thereof from the Owner, provided that, if the nature of the breach is such that it will reasonably require more than 7 days to commence curing, the Owner may not terminate so long as Design- Builder (1) promptly, upon receipt of notice to cure, submits a plan to initiate all actions reasonably necessary to correct the default and prevent its reoccurrence, and (2) Owner accepts Design- Builder's plan, and (3) Design-Builder commences and continuously implements the plan to Owner's

satisfaction. The Owner may also terminate this Agreement without notice or opportunity to cure upon the occurrence of the following Design-Builder events of default: 1) the failure to obtain and maintain any contract security instrument, 2) the failure to achieve acceptance of the Facilities through the acceptance process, and 3) the insolvency or bankruptcy of the Design- Builder. The notice will set forth the reason for termination and the effective date of termination. If the Owner terminates this Agreement for cause, the Design-Builder will not be entitled to any further payments except for work already completed. Unless otherwise limited herein, nothing stated in this paragraph will prevent the Owner from pursuing and recovering any damages allowed by law from Design-Builder arising out of a breach of this Agreement. If a court of competent jurisdiction deems that termination of the Design-Builder was wrongful or otherwise improper, the termination will be deemed a termination for convenience under Section 16.3.

16.2 Suspension By Owner. If the Project is suspended by the Owner and not due to any fault of the Design-Builder or any of its Design Professionals or Subcontractors, the Design- Builder will be entitled to receive payment for all Work performed as of the effective date of the suspension, plus any documented reasonable direct costs incurred by Design-Builder to implement the suspension. The written notice of suspension will set forth the reason for suspension and the effective date of suspension. If the Project is resumed, and provided that the suspension was not caused or due to any fault or neglect of the Design-Builder or any of its Design Professionals or Subcontractors, then the Design-Builder's compensation will be equitably adjusted through Change Order under Section 9.1.4 and the Contract Time will be equitably adjusted for the additional time required to achieve Final Completion.

16.3 Termination For Convenience. The Owner may terminate this Agreement, in whole or in part, for convenience upon 30 calendar days' written notice at any time. The notice will state the extent of the termination and effective date of termination. For convenience termination during the Preconstruction Stage and through the issuance of a Notice to Proceed for Construction Stage, the Design-Builder will be entitled to receive payment for the percentage of Preconstruction Stage work completed, not to exceed the Preconstruction Stage lump sum amount. For convenience termination following the issuance of a Notice to Proceed for Construction Stage Services, the Design-Builder will be entitled to payment for all Work performed as of the effective date of termination based on the compensation provisions set forth in Section 7 of this Agreement, as well as reasonable demobilization costs and unmitigable costs incurred by termination. In the event that the Owner terminates the Design-Build Agreement for convenience, Design-Builder must assign all subcontracts executed pursuant to the performance of the Design-Build Agreement to Owner promptly upon request. Design-Builder is entitled to compensation for all authorized payments made to any subcontractor prior to termination, which payments will be credited to Owner under the respective subcontracts, plus Design-Builder's approved costs that are incurred prior to any termination. In addition, in the event Owner terminates the Design- Build Agreement for convenience, Design-Builder must execute any documents establishing Owner's ownership of completed Work upon request. Any dispute over the amount to be paid upon termination will be resolved in accordance with the claims procedures set forth in Section 14.12 of the Supplemental Conditions.

17. MISCELLANEOUS PROVISIONS

17.1 **Governing Law**. This Agreement will be governed and construed in accordance with the laws of the State of California without regard to the principles of the conflict of laws. The Parties agree that any claim or enforcement of a judgment or alternative dispute award will be filed with the appropriate court of law in San Mateo County.

17.2 **No Solicitation of Employees**. Owner will not solicit or employ any of Design-Builder's Project personnel for the duration of the Project.

17.3 **Assignment.** The Owner and Design-Builder, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of the other party with respect to all covenants of this Agreement. Neither Owner nor Design-Builder will assign this Agreement without the written consent of the other, and such consent will not be unreasonably withheld or delayed.

17.4 **Severability**. The terms and conditions of this Agreement will be interpreted in accordance with their plain meaning, and not strictly for or against either party. Any rule of construction or interpretation to the contrary will be of no force or effect with respect to this Agreement. If a court of competent jurisdiction finds any term or provision of this Agreement to be void or unenforceable for any reason that term or provision will be deemed severed, and the remainder of the Agreement will remain in full force and effect according to its terms and provisions, to the maximum extent permitted by law.

17.5 **No Third-Party Beneficiaries**. Nothing contained in this Agreement creates a contractual relationship with, or a cause of action in favor of any third party against, either the Owner or Design-Builder. Owner and Design-Builder acknowledge and agree that the obligations of the Design-Builder are solely for the benefit of the Owner and are not intended in any respect to benefit any other third parties.

17.6 **Waiver**. No action or failure to act by the Owner or Design-Builder will constitute a waiver of a right or duty afforded them under this Agreement, nor will such action or failure to act constitute approval of or acquiescence in a breach of this Agreement, unless specifically agreed to in writing.

17.7 **Time is of the Essence.** Time is of the essence with respect to each and every provision of the Agreement and any subsequent Change Orders.

17.8 **Notice.** Any notice required to be given by this Agreement will be in writing and deemed effective upon personal delivery, or 1 business day after being sent via registered or certified mail return receipt requested or by overnight commercial courier providing next business day delivery and addressed to the following respective parties:

To Owner: County of San Mateo Parks
Attention: Nicholas Caldron

455 County Center, 4th Floor
Redwood City, CA 94063

Copy to: Mike Wassermann
Project Manager
Capital Program Management, Inc.
495 Seaport Court, Suite 103
Redwood City, 94063

17.9 Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, and all of which when taken together will constitute one instrument. The counterparts of this Agreement, and all amendments, must be manually executed, but the exchange of copies of this Agreement and of manually executed signature pages by facsimile or by electronic mail as an attachment in portable document format (.pdf) to the addresses provided in this Agreement shall constitute effective delivery of this Agreement as to the Parties and may be used as a fully binding original in lieu of the original Agreement for all purposes.

17.10 Modifications. All modifications to the terms and conditions set forth in this Agreement must be in writing and signed by an authorized representative of both parties.

17.11 Section Headings. The Section headings contained in this Agreement are for reference purposes only and will not in any way affect the meaning or interpretation of this Agreement.

17.12 Legal Citations. Legal citations to statutory requirements are included in the Agreement for convenience and an omission of any statutory requirement will not relieve the Design-Builder or its Design Professionals and Subcontractors from compliance with the law.

17.13 Exhibits. The Supplemental Conditions and following Exhibits are incorporated by reference into the Agreement as though set forth in full.

17.14 Entire Agreement. This Agreement represents the entire integrated agreement between the Owner and Design-Builder and supersedes all prior oral and written negotiations, representations or agreements by the parties with respect to this subject matter. This Agreement is entered into as of the Effective Date first written above.

COUNTY OF SAN MATEO	DESIGN-BUILDER
_____	_____
Signature	Signature
_____	_____
Printed Name	Printed Name

Exhibit 1
SUPPLEMENTAL CONDITIONS

DESIGN-BUILD AGREEMENT

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SUPPLEMENTAL CONDITIONS TO
DESIGN-BUILD AGREEMENT

1. DEFINITIONS

1.1 "**Agreement**" means the Design-Build Agreement between County of San Mateo and Design-Builder, dated May 20, 2025, including the Supplemental Conditions to the Agreement and all Exhibits.

1.2 "**Allowance**" is a non-binding, good faith, estimate of all Cost of Work attributable to the Allowance item carried in the Contract Price. An Allowance is necessary in certain circumstances because the item, components and/or systems are anticipated but undefined at the time that the Contract Price is set, and may require further development by the Architect of Record, Owner, or other Design Professionals.

1.3 "**Landscape Architect of Record**" is the entity retained by the Design-Builder as the lead Design Professional that is responsible for the design of the Project. The Landscape Architect of Record for his Project is Studio 2nd Street.

1.4 "**Background Documents**" means any existing drawings Owner provides to Design-Builder for reference. Background Documents are not part of the Contract Documents.

1.5 **"Bridging Contract Documents"** is defined in Section 4.2

1.6 "**Change Order**" is defined in Section 9.1.

1.7 "**Construction Documents**" means the documents developed by Design-Builder that establish all requirements for work during the Construction Stage of the Project. The Construction Documents will be informed by, and be consistent with the Bridging Contract Documents.

1.8 "**Construction Stage Services**" means all labor, materials, equipment and appurtenances provided by the Design-Builder and its Subcontractors to complete construction of the Project in strict accordance with the 100% Construction Documents and other components of the Contract Documents, ensure that all mechanical and support systems, as applicable, are properly and fully operational, and obtain all required certificates, approvals, and temporary or permanent permits for occupancy, use and completion of the Project have been issued by appropriate governmental authorities.

1.9 "**Contract Documents**" are set forth in Section 3.1 of the Agreement and include the Agreement inclusive of Exhibits, the Supplemental Conditions to the Agreement, and the Construction Documents, to be developed by the Design-Builder, and all subsequent contract modifications issued after execution of the Agreement, such as Change Orders.

1.10 "**Contract Price**" is set forth in Section 7 of the Agreement and reflects the sum total of all compensation due to the Design-Builder for all design and construction services under the Agreement. The Contract Price is the sum of the Preconstruction Price and the Construction Price.

1.11 "**Contract Time**" is the time within which the Design-Builder must achieve Final Completion of all Work on the Project. The Contract Time is set forth in Section 8.1."**Daily**

Construction Reports" means the daily log kept by the Design-Builder that describes the weather, each Subcontractor's work on the site, the number of workers per trade, identification of equipment, construction work accomplished, problems encountered, and other similar relevant data such as accidents, service connections or disconnections, construction work stoppage, delays, material and labor shortages, and any applicable orders or requests from governing authorities.

1.12 "**Design-Builder, Design-Build Entity**" the entity that will enter into the Agreement with Owner and that will be the single point of accountability to Owner for delivering the services and the Project.

1.13 "**Design-Build Subcontractors**" means all Subcontractors that contract directly with the Design-Builder to perform design and construction services related to a specific trade or discipline.

1.14 "**Design-Build Team**" includes the General Contractor, Design Professionals and Design-Build Subcontractors members of the Design-Builder performing Preconstruction Stage Services and Construction Stage Services for the Project.

1.15 **"Design Guide Illustrations"** mean the drawings prepared by Owner and made a part of the Bridging Contract Documents.

1.16 "**Design Professionals**" means the Architect of Record, the structural engineer, and any other design consultants who are performing design services for the Project on behalf of Design-Builder but do not perform any Construction Stage Services.

1.17 "**Design Services**" includes all required design work required to complete the Project, consistent with the Bridging Contract Documents.

1.18 "**Effective Date**" means the date that the Design-Builder and Owner entered into the Agreement, which is set forth on page 1 of the Agreement.

1.19 "**Facilities**" means all equipment, products, materials, controls, software, both individually and collectively as a completed system.

1.20 "**Final Completion**" occurs on the date when Design-Builder has achieved Substantial Completion; all Final Punch List items have been completed and accepted by the Owner; all close-out documentation required under the Project specifications has been transmitted to the Owner's Project Manager.

1.21 "**Final Completion Date**" is set forth in Section 8.1 of the Agreement.

1.22 **"Final Design Package"** is defined in Section 5.3 of the Design-Build Agreement.

1.23 **"Final Punch List"** is the punch list prepared by the Design-Builder in conjunction with the Owner after completing a Project walk-through upon Substantial Completion.

1.24 "**Force Majeure Event**" means an Act of God as defined under Public Contract Code section 7105, civil disobedience, an act of terror, or unavoidable casualties beyond the

Design-Builder's control, and not due to any act or omission of the Design-Builder or its Design Professionals and/or Subcontractors, that necessarily extends the Final Completion Date.

1.25 "**Hazardous Materials and Substances**" means any substance, product, waste, or other material of any nature that is or becomes listed, regulated or addressed under one or more of the following Environmental Laws: (1) CERCLA, (2) Hazardous Materials Transportation Act, (3) RCRA, (4) the Clean Water Act, (5) the Toxic Substance Control Act, (6) HSAA, (7) the California Porter-Cologne Water Quality Control Act, (8) the California Hazardous Waste Management Act, (9) the California Safe Drinking Water Act, (10) the California Waste Management Act, and (11) any other Federal or State law or local ordinance concerning hazardous, toxic or dangerous substances, wastes, or materials.

1.26 "**Key Personnel**" means the Design-Builder's personnel identified as key to the overall success of the Project, and, at a minimum, including those positions defined as Key Personnel in the RFQ and RFP. The Design-Builder's Key Personnel are specifically identified in **Exhibit 5B**.

1.27 "**Owner**" means San Mateo County - Parks.

1.28 "**Owner-Elected Changes**" are changes in the Work directed by the Owner that may impact the Contract Price, and Final Completion Date and are not: (i) reasonably inferable from the Bridging Contract Documents or Contract Documents; or (ii) required as a result of design errors and omissions.

1.29 **"Owner's Minimum Requirements"** mean the performance specifications and prescriptive specifications prepared by Owner and made a part of the Bridging Contract Documents.

1.30 "**Owner's Suspension of Work**" is when the Owner elects to suspend progress of Work on the Project under Section 16.2 of the Agreement.

1.31 "**Party**" or "**Parties**" means the Design-Builder or the Owner in the singular or the Design-Builder and Owner collectively who have executed the Agreement.

1.32 **"Preconstruction Stage Services"** means all services, labor, materials, equipment and appurtenances provided by the Design-Builder and its Subcontractors to prepare a Preliminary Design for the Project, as further defined in **Exhibit 3**.

1.33 "**Preconstruction Survey**" Design-Builder's deliverable comprised of a comprehensive preconstruction survey of the Work site as described in more detail in the Scope of Work.

1.34 "**Product Data**" includes illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Design-Builder's Subcontractors illustrating materials or equipment for some portion of the construction work.

1.35 "**Project**" means the completion of the Preconstruction Stage Services and Construction Stage Services.

1.36 **"Project Site"** means that certain real property located at 215 Bay Road, Melon Park, CA 94025 commonly known as Flood Park.

1.37 "**Project Baseline Schedule**" means the approved critical path schedule prepared by the Design-Builder for performance of all Work within the Contract Time, as approved by the Owner.

1.38 "**Punch List**" is a list prepared by the Owner's Project Manager, when Design-Builder considers a portion of the construction work substantially complete, that includes all items that are incomplete or unsatisfactorily finished and a schedule for their completion.

1.39 "**Request for Information**" ("RFI") means written requests prepared by the Design-Builder and/or its Subcontractors requesting clarification about design or raising coordination issues that impact design, cost or schedule. RFIs will be handled internally by the Design-Builder, with copies to the Owner.

1.40 "**Samples**" means physical examples of materials, equipment or workmanship required by the Construction Documents that are used to establish standards by which the construction work will be judged.

1.41 "**Shop Drawings**" means drawings, diagrams, and other data specially prepared by the Design-Builder and/or its Subcontractors, manufacturers, suppliers or distributors to demonstrate the way in which materials and equipment will perform in accordance with the design illustrated in the Construction Documents. Shop Drawings will be approved by Design-Builder, but Owner will also review.

1.42 "**Site Logistics Plan**" will provide phasing, establish the areas of the site that will be used for trailers, deliveries, staging, ingress and egress, location of major pieces of equipment, storage containers, stockpiles of materials, clearways used for emergency access, environmental controls, trailers for Design-Builder and Owner, parting facilities for Design-Builders, employees, and Owner, access road, fence line, etc.

1.43 **"Specifications"** means the component of the Construction Documents separate from the drawings, addressing all required materials, products and equipment, their installation and operation, quality assurances, reference standards, submittal requirements etc., not already addressed in the OMRs. The Specifications shall be developed in conjunction with the Construction Specifications Institute ("CSI") 16 Division/Three Part Format, as established in the CSI Manual of Practice.

1.44 "**Staffing Plan**" means the plan submitted by the Design-Builder with its proposal.

1.45 "**Subcontractor**" means all contractors under direct contract with Design-Builder for performance of a portion of the construction work as well as any lower tier-subcontractors. The term subcontractor includes Design-Build Subcontractors.

1.46 "**Submittals**" includes Shop Drawings, Product Data, Samples and similar documentation required by the Project specifications or other Construction Documents.

1.47 "**Substantial Completion**" means completion of all Preconstruction Stage Services and Construction Stage Services in accordance with the Contract Documents, and sufficient for the Owner to occupy and use the Facilities for their intended purpose; notwithstanding the foregoing, incomplete minor Punch List work that does not affect Owner's

ability to occupy and use the Facilities for their intended purpose shall not prevent achievement of Substantial Completion.

1.48 "**Substantial Completion Date**" The Substantial Completion Date is set forth in Section 8.1 of the Agreement.

1.49 "**Supplemental Conditions**" means the Supplemental Conditions to the Agreement.

1.50 "**Unforeseen Site Conditions**" or "**Differing Site Conditions**" means discovery of unknown, unforeseen or differing site conditions, as defined in Public Contract Code section 7104, any unknown existing conditions in concealed spaces of the renovated portions of the Project.

1.51 "**Work**" means all work, including all services, labor, materials, equipment, tools, and appurtenances, necessary to complete the Preconstruction Stage Services and Construction Stage Services, as described in, or reasonably inferable from, the Contract Documents.

2. WORK RESTRICTIONS

2.1 Work Hours. All construction work will be performed between 8:00 a.m. and 5:00 p.m. Design-Builder will provide Owner with written notice for any construction work that will need to be performed after hours. All after hour construction work requires Owner's written approval prior to commencement.

2.2 Signs. Design-Builder shall not erect any sign on the Project Site without the prior written consent of the Owner, which shall be at the sole discretion of the Owner.

2.3 Parking. Design-Builder works parking must be in Owner approved area.

2.4 Staging and Storage. Material will be stored only in the areas indicated on the Site Logistics Plan. Limited short-term staging areas will be designated in the Site Logistics Plan.

3. SOILS INVESTIGATIONS AND HAZARDOUS MATERIALS

3.1 Site Inspection. The Design-Builder is required to examine the Project Site before submitting its proposal. Design-Builder may not rely exclusively on Background Documents to determine the status of soil conditions, except for issues involving Unforeseen and Differing Site Conditions.

3.2 Hazardous Materials and Substances. The Design-Builder is responsible for the proper handling, removal and disposal of the "**Hazardous Materials or Substances**" that were pre-existing at the Project Site before commencement of construction and are part of the Work. The Design-Builder will not be considered the generator of any pre-existing hazardous materials on the Project Site. The Design-Builder is also responsible for all Hazardous Materials and Substances that it either requires through the Project design specifications or that are brought onto the Project Site by its employees and/or Subcontractors.

3.2.1 Unsafe or Hazardous Conditions. If reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from any Hazardous Materials or Substances encountered at the Project Site, the Design-Builder will stop any part of the Work that it deems unsafe until corrective measures have been taken. If the Design-Builder fails to take corrective measures, the Owner may do so. Failure on the part of the Owner to stop unsafe practices, or the Owner's efforts to take corrective measures after the Design-Builder fails to do so, does not relieve or diminish the Design-Builder's safety responsibilities.

3.2.2 Verification. Upon discovery of any Hazardous Material or Substance that has not previously been identified in the Design-Builder's Hazardous Material Survey, the Design-Builder will immediately notify the Owner's Project Manager and stop all construction work in the area if necessary. The Design-Builder will retain the services of a licensed laboratory to verify the presence or absence of the preexisting Hazardous Material or Substance. If preexisting Hazardous Material or Substance is discovered, the Design-Builder will contact its licensed laboratory to verify that the condition has been rendered harmless before construction work recommences in the affected area. The Design-Builder may be entitled to an adjustment in the Contract Time if the Hazardous Material or Substance is deemed an Unforeseen or Differing Site Condition and impacts the Final Completion Date of the Project. If the Hazardous Material or Substance was pre-existing the Owner will pay for the services of the licensed laboratory. The Design-Builder will reimburse the Owner for the services of the licensed laboratory if the Hazardous Material or Substance was brought on-site by the Design-Builder or any of its Subcontractors or vendors.

4. SAFETY

4.1 Signs. The Design-Builder will erect and maintain, as required by existing conditions and performance of the construction work, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

4.2 Weekly Safety Meetings. The Design-Builder will hold weekly meetings with its Subcontractors to review Subcontractor compliance with the Design-Builder's Health and Safety Program.

4.3 Daily Jobsite Walks. The Design-Builder will also conduct daily jobsite inspections to verify that the construction work is being performed in a safe and workmanlike manner and in accordance with the Design-Builder's Health and Safety Program. The Design-Builder will provide written notice to its Subcontractors demanding immediate correction of any known safety violation.

5. QUALITY ASSURANCE AND QUALITY CONTROL

5.1 Quality Control Plan. The Design-Builder will prepare and submit to the Owner's Project Manager for approval a plan that describes the procedures and methods the Design-Builder will utilize to control the quality of the construction work. The Quality Control Plan must be approved before the start of construction. The Owner reserves the right to require revisions of the Quality Control Plan that are necessary to ensure the specified quality of the construction work. The Design-Builder will assign appropriate site personnel to oversee quality control. No change in the Quality Control Plan will be implemented without prior Owner

approval. At a minimum the Quality Control Plan will provide information regarding the following:

5.1.1 Quality control supervision and document control.

5.1.2 Identification of personnel for required training and qualification activities.

5.1.3 Procedures for testing and inspections that identify individual inspection or testing points and acceptance criteria, and include provisions for recording results and the responsible inspection/test personnel.

5.1.4 Procedures for identifying what applicable technical and quality requirements will be required of vendors supplying materials, parts and services to ensure compliance with the Contract Documents.

5.1.5 Procedures for receiving, inspecting and accepting materials and equipment. The procedures will include, at a minimum, examination of the physical condition for compliance with the Contract Documents, purchase order and/or subcontract agreement, and identifying and processing any non-conforming goods.

5.1.6 Provisions for identifying and timely remedying non-conforming or defective construction work.

5.1.7 Documentation control to maintain records of the activities included in the Quality Control Plan. All documentation will be submitted to the Owner as part of the close-out documentation for this Project and therefore must be logically organized and indexed for reference.

5.2 Design Quality Control Plan. The Design-Builder will prepare and submit to the Owner for approval a Design-Quality Control Plan that describes the procedures and methods the Design-Builder will utilize to control the quality of the construction work. The Design Quality Control Plan must be approved before the start of construction. The Owner reserves the right to require revisions of the Design Quality Control Plan that are necessary to ensure the specified quality of the construction work. The Design-Builder will assign appropriate site personnel to oversee quality control. No change in the Design Quality Control Plan will be implemented without prior Owner approval.

5.3 Manufacturer's Field Services. To the extent required, the Design-Builder will engage in a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. All manufacturers' field service reports must be in writing and included as part of the records turned over to Owner during close-out.

5.3.1 Quality Control Reports. The Design-Builder will keep daily Quality Control Reports throughout the duration of the construction process certifying that the relevant area of the construction work has been inspected. The Quality Control Reports will be prepared, signed and dated by the personnel identified as the supervisor in the Quality Control Plan and will include, at a minimum, the following information: Identification of the material, equipment or component that was inspected and indicate, if applicable, if the Submittals have been reviewed and approved by the Design- Builder.

5.3.2 Indicate that materials and/or equipment comply with the requirements of Section 5.19.9 of the Agreement and are properly stored, if not yet installed.

5.3.3 Indicate that the construction work has been coordinated under Sections 5.19.4 and 5.19.5 of the Agreement, that all required preliminary work has been inspected by Quality Control personnel, was properly performed, and that the area is ready to receive subsequent construction work. If the construction work is not acceptable, provide a written description of any rework required in the area inspected with an explanation of the cause of the re-rework (including which Subcontractors are involved), any cost involved in the required re-work, and the expected completion date of the required re-work.

5.4.4 Results of any off-site testing or quality control work and any required further actions.

5.4.5 Other necessary information including, directions received, quality control problem areas, deviations from the Quality Control Plan, construction deficiencies encountered, Quality Control meetings held, acknowledgement that as-built drawings have been updated (if applicable), corrective direction given by Quality Control personnel, and corrective action taken by the Design-Builder.

5.5 **Quality Control Design Reports**. The Design-Builder will keep daily Quality Control Design Reports throughout the duration of the construction process certifying that the relevant area of the construction work has been inspected. The Quality Control Design Reports will be prepared, signed and dated by the personnel identified as the supervisor in the Design Quality Control Plan. Quality Control Design Reports should be submitted as part of each design submittal.

5.6 **Test and Inspection Logs**. The Design-Builder will maintain an on-site inspection log that is accessible by the Owner. The log will document all tests and inspections performed at the Project during construction. In addition, the Design-Builder will prepare a sequentially numbered record of tests and inspections. The record of tests will include the following information:

5.6.1 Request for Inspection.

5.6.2 Date test or inspection was conducted.

5.6.3 Identity of testing agency or special inspector.

5.6.4 Description of the construction work tested or inspected.

5.6.5 Identification of any drawings or applicable details on the Construction Documents or Submittals that were used during testing and inspection.

5.6.6 Date that the test or inspection was concluded and the date that the results were transmitted to Owner.

6. TEMPORARY FACILITIES

6.1 Temporary Electricity. Design-Builder will provide, maintain, and pay for temporary electrical power at the Project Site for construction purposes and trailers.

6.2 Temporary Communications. The Design-Builder will provide, maintain, and pay for all applicable communications and data service connections for field offices pursuant to **Exhibit 6B** of the Agreement, including all installation and connection charges.

6.3 Temporary Water. The Design-Builder will provide, maintain, and pay for all required potable water required for construction field personnel as well as water required for and in connection with the construction operations such as dust control. Unnecessary waste of water will not be permitted. The Design-Builder must use special hydrant wrenches for opening and closing fire hydrants in lieu of pipe wrenches.

6.4 Temporary Fences. The Design-Builder will provide all necessary temporary fencing and gates required for the Project Site. Temporary fencing will be subject to restrictions in the use permit. The Design-Builder will maintain all fences through Final Completion of the Project. Gates are to remain closed and locked during off-hours.

6.5 Temporary Sanitary Facilities. Provide and maintain all required temporary toilets for use of all design and construction personnel and field labor at the Project Site through Final Completion of the Project. Location of temporary sanitary facilities will be approved by Owner's Project Manager prior to delivery. The Design-builder will provide at least 1 temporary toilet facility for every 20 persons. The Design-Builder will cause all design and construction personnel (including field labor) to use temporary sanitary facilities rather than Owner's facilities. All temporary sanitary facilities will comply with the Department of Health standards.

6.6 Temporary Barriers and Enclosures. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's safe use of the Project premise, and to protect existing facilities and adjacent properties from damage from construction operations per Section 8.

6.7 Water Control. Design-Builder will grade the Project Site as required by the civil design included in the Construction Document. During construction, the Design-Builder will maintain all trenches and excavated areas free from water accumulation and will provide the necessary barriers to protect the Project Site from ponding, running water and soil erosion. The Design-Builder will provide for increased drainage of storm water and any water that may be applied or discharged on the Project Site during performance of the construction work. All drainage facilities will be adequate to prevent damage to the construction work, Project Site, and adjacent property. Design-Builder will construct dikes, if necessary, to divert any increased runoff from entering adjacent property (except in natural channels), to protect Owner's facilities and the construction work, and to direct water to drainage channels or conduits. Design-Builder will provide ponding as necessary to prevent downstream flooding. Design-Builder shall be solely liable for any loss or damages resulting from Design-Builder's failure to comply with the provisions of the Dept. of Water Resources Best Management Practices and County requirements.

6.8 Pollution Control. The Design-Builder will provide a plan that meets the requirements of California Storm Best Management Practices (Stormwater Quality Task Force, 1993) to prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances and/or soil erosion during construction operations:

6.8.1 No sanitary wastes will be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance will be permitted to enter

sanitary sewers without authorization of the receiving sanitary sewer service, and all possible best management practices will be taken to prevent materials from entering into any drain to watercourse.

6.8.2 In the event that dewatering of excavations is required, Design-Builder will obtain the necessary permits from local governmental authorities for discharge of the dewatering effluent. The Design-Builder will be responsible for assuring that water quality of the discharge meets the appropriate permit requirements prior to anydischarge.

6.8.3 Erosion and sedimentation control practices will include installation of silt fences, straw wattle, soil stabilization, re-vegetation, and runoff control to limit increases in sediment in storm water runoff, including but not limited to, detention basins, straw bales, silt fences, check-dams, geo-fabrics, drainage swales, and sand bagdikes.

6.8.4 The construction work will be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation will be preserved to the greatest extent practicable. Temporary storage and construction buildings will be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover will be provided as necessary to controlrunoff.

6.9 Construction Equipment and Aids. Design-Builder will furnish, install, maintain, and operate all construction equipment required by the performance of the construction work. Construction aids include elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding and temporary stairs. When sandblasting, spray painting, spraying of insulation, or other activities inconveniencing or dangerous to property or the health of design or construction personnel, Owner's staff, or the public are in progress, Design-Builder will enclose the area of activity to contain the dust, over-spray, or otherhazard.

6.10 Traffic Control. The Design-Builder will provide a traffic control plan in accordance with the California Department of Transportation Traffic Manual as part of its Site Logistics set forth in **Exhibit 6B**. The Design-Builder will submit its traffic control plan to the appropriate agency for approval, as necessary, before commencement of the construction work:

6.11 Removal of Temporary Facilities and Equipment. The Design-Builder will remove all temporary utilities, equipment, facilities, and materials before final inspection ofthe Project and clean and repair any damage caused by installation or use of temporary work restoring existing facilities to their originalconditions.

7. SURVEYING

7.1 Field Engineering. The Design-Builder will employ a California State licensed civil engineer or land surveyor to provide field engineering services to establish benchmarks and line and grade for horizontal and verticalcontrol.

8. DEMOLITION

8.1 Demolition Plan. Prior to commencing any required demolition work, the Design-Builder will submit a plan to the Owner's Project Manager for review and approval. Under no circumstances, can demolition interrupt the Owner's operations. The Design-Builder's plan, at a minimum, will address the following:

8.1.1 Identify areas that will require demolition and provide a schedule for those demolition activities that is coordinated with the Owner's operations and the approved Project Baseline Schedule.

8.1.2 Inventory materials and equipment that will be salvaged during demolition and whether the salvaged materials and equipment will be reused, returned to the Owner, or sold at fair market value on behalf of the Owner.

8.1.3 Document procedures for protecting the existing structure and/or building materials, equipment and components that are remaining, as well as protection plans for adjacent property and persons.

8.1.4 Document procedures for proper ventilation, noise, and dust control during demolition operations and clean-up after demolition is completed.

8.1.5 Document procedures for required disruption of any utility service as a result of demolition activities and a record of any utilities that are capped during the process. Any required shut-off or interruption of service must be approved in writing by the Owner 14 business days in advance, and all necessary water, emergency power, etc., must be in place prior to shut-off or disruption.

8.1.6 Provide for all required temporary sheeting, shoring, bracing or other structural support necessary to ensure stability of the existing structure or adjacent properties and prevent movement, settlement or collapse during demolition operations. All required temporary structural support will be designed by a California licensed structural or civil engineer.

8.1.7 Document procedures to deal with encountering Hazardous Materials or Substances that comply with the requirements of Supplemental Conditions Section 3 and procedures regarding Unforeseen or Differing Site Conditions that comply with Supplemental Conditions Section 14.14.

8.1.8 Document procedures for hauling away and disposal of any demolished materials and equipment. The procedures should include, among other things, requirements for refrigerant recovery under Environmental Protection Agency, a list of all required hauling permits, requirements for hauling and disposing of Hazardous Waste, volatile organic compounds or any other substance that is regulated by Health and Safety Code, the Bay Area Air Quality Management Owner "BAAQMD" or any other governmental agency that regulates the proper hauling and disposal of certain materials and substances.

8.1.9 Document procedures to ensure that removal and replacement of equipment will not void any existing warranties.

8.1.10 Require a survey of existing conditions and video or photographic documentation before commencement of the demolition activity to demonstrate existing conditions of adjacent areas or property.

8.2 Permits and Fees. The Design-Builder will secure all required hauling permits. The Owner will reimburse the Design-Builder at cost, for all permits and dumping fees as part of the Cost of Work.

9. PROTECTION OF WORK AND PROPERTY

9.1 Design-Builder will be responsible for providing a safe place for the performance of the construction work and for the physical conditions and safety of areas affected by the construction work. Design-Builder will take all necessary precautions to provide for the safety and protection of all persons who may come in contact with the construction work and for all property and equipment within or adjacent to the Project Site including adequate precautions to protect existing trees, equipment, materials, utilities, and other adjoining property and structures. Design-Builder will repair any damage caused by its operations at its own expense and will provide protection to prevent damage, injury or loss to:

9.1.1 Owner's employees and other persons at the Project Site.

9.1.2 Equipment, materials, and vehicles stored at the site or off-site if under the care, custody, or control of the Design-Builder or its Design Professionals or Subcontractors.

9.1.3 Existing trees, structures, roads, equipment, property and the work of others when carrying out Design-Builder's Work. Refer to Tree Protection specifications as included as part of the Criteria Document includes as **Exhibit 2B**.

9.2 These precautionary measures will apply continuously and not be limited to normal working hours.

9.3 If damage to persons or property occur as a result of the construction work, Design-Builder will be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The Owner will be entitled to inspect and copy any documentation, video, or photographs.

10. WORKERS AND WORKERS' COMPENSATION

10.1 Design-Builder will at all times enforce strict discipline and good order among its employees. Design-Builder will not employ on the Project any unfit person or unskilled labor.

10.2 Design-Builder and its Subcontractors are required to secure the payment of compensation of its employees in accordance with Labor Code section 3700. Before commencing the Work, the Design-Builder, its Design-Build Team members, and its Subcontractors will sign and file a certification with the Owner under Labor Code section 1861 stating the following:

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

before commencing the performance of the any work or services under the Design-Build Agreement or any subcontract or design service agreements.

11. CHANGE IN NAME OR LEGAL ENTITY

11.1 If a change in name or nature of the Design-Builder's legal entity is anticipated, the Design-Builder will notify the Owner to ensure that the change will be properly reflected on the Agreement.

12. PROHIBITED INTERESTS

12.1 No public official or representative of the Owner who is authorized in such capacity and on behalf of the Owner to negotiate, supervise, make, accept, approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with design and construction of the Project, will be or become directly or indirectly interested financially in this Agreement.

13. LAWS AND REGULATIONS

13.1 Design-Builder will give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of Work. If Design-Builder observes that the Contract Documents are at variance with any laws, ordinances, etc., Design-Builder will promptly notify the Owner's Project Manager, in writing, and any necessary changes will be adjusted. If Design-Builder performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without notice to the Owner's Project Manager, it will bear all costs associated with any required corrections or repairs.

14. STATUTORY PUBLIC WORKS CONTRACT REQUIREMENTS

The following requirements apply to all public works construction work performed under this Agreement.

14.1 Public Works Registration. Design-Builder or its contractor, and all subcontractors, must be registered with the California Department of Industrial Relations pursuant to Labor Code Section 1725.5. This Agreement is subject to monitoring and enforcement by the DIR pursuant to Labor Code Section 1771.4. Design-Builder shall furnish the records specified in Labor Code Section 1776 directly to the Labor Commissioner on a monthly basis, and in a format prescribed by the Labor Commissioner. Design-Builder must also post notices at the work site pursuant to Title 8 California Code of Regulations Section 16451.

14.2 Use of Subcontractors. Design-Builder shall not subcontract any work to be performed by it under this Agreement without the prior written approval of Owner, which approval will not be unreasonably withheld. Design-Builder shall be solely responsible for reimbursing any subcontractors and Owner shall have no obligation to them. Attention is directed to the requirements of Section 4100 to 4113, inclusive of the California Public Contract Code which are applicable to the work covered by this Agreement.

14.3 Prohibition Against Contracting with Debarred Subcontractors. Design-Builder is prohibited from performing work on a public works project with a subcontractor who is

ineligible to perform work on the public works project pursuant to Section 1777.1 or 1777.7 of the Labor Code.

14.4 Prompt Payment to Subcontractors. Design-Builder shall pay any subcontractors approved by Owner for work that has been satisfactorily performed no later than seven (7) days from the date of Design-Builder's receipt of progress payments by Owner. Within thirty (30) days of receipt of retention by Design-Builder and satisfactory completion of all work required of the subcontractor, Design-Builder shall release any retention payments withheld to the subcontractor. In the event Design-Builder does not make progress payments or release retention to the subcontractors in accordance with the time periods in this section, Design-Builder will be subject to a charge of two percent (2%) per month on the untimely or improperly withheld payment. Owner may require Design-Builder to provide documentation satisfactory to Owner of Design-Builder's compliance with this requirement as a condition of final payment and release of contract retentions, if any.

14.5 Payment Bond for Construction Work. Pursuant to Civil Code Section 9550, Design-Builder shall furnish to Owner a Payment Bond in the amount of all equipment and construction costs, to provide Owner with security for Design-Builder's full payment to workers and subcontractors for costs of materials, equipment, supplies, and labor furnished in the course of the performance of the work applicable to this section.

14.6 Labor Code Provisions. In the performance of this Contract, Design-Builder's attention is directed to the following requirements of the Labor Code:

Hours of Labor. Eight hours labor constitutes a legal day's work. Design-Builder shall forfeit, as penalty to Owner, $25 for each worker employed in the performance of the Agreement by Design-Builder or by any subcontractor under it for each calendar day during which such worker is required or permitted to work more than eight hours in any one day and 40 hours in any one calendar week in violation of the provisions of the California Labor Code and in particular, Sections 1810 to 1815, inclusive. Work performed by employees of the Design-Builder in excess of eight hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of eight hours per day at not less than one-and-one-half times the basic rate of pay, as provided in Section 1815.

Prevailing Wages. Design-Builder shall comply with California Labor Code Sections 1770 to 1780, inclusive. In accordance with Section 1775, the Design-Builder shall forfeit as a penalty to Owner an amount as determined by the Labor Commissioner not to exceed $200 for each calendar day or portion thereof for each worker paid less than stipulated prevailing wage rates for such work or craft in which such worker is employed for any work done under the Agreement by him or by any subcontractor under it in violation of the revisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by Design-Builder. Pursuant to the provisions of Section 1773 of the Labor Code, Owner has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work applicable to the work to be done from the Director of the Department of Industrial Relations. Copies of the prevailing wage rates are on file at Owner and are available for review upon request.

Payroll Records. The Design-Builder's attention is directed to the following provisions of Labor Code Section 1776. The Design-Builder shall be responsible for the compliance with these provisions by his subcontractors.

a. Each contractor and subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work.

b. The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the Design-Builder on the following basis:

    1. A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.

    2. A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to Owner, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.

    3. A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Design-Builder, subcontractor and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Design-Builder.

c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division.

d. The Design-Builder shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested such records within ten (10) days after receipt of a written request.

e. Any copy of records made available for inspection as copies and furnished upon request to the public or Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Design-Builder shall not be marked or obliterated.

f. The Design-Builder shall inform Owner of the location of records enumerated under subdivision (a), including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

g. In the event of noncompliance with the requirements of this Section, the Design-Builder shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects such contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, the Design-Builder shall, as a penalty the State or Owner, forfeit Twenty-five Dollars ($25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The penalties specified in subdivision (g) of Labor Code Section 1776 for noncompliance with the provisions of said Section 1776 may be deducted from any monies due or which may become due to the Design-Builder.

h. The Design-Builder and each subcontractor shall preserve their payroll records for a period of three (3) years from the date of completion of the Contract.

Labor Non-discrimination. Attention is directed to Section 1735 of the Labor Code which provides that Design-Builder shall not discriminate against any employee or applicant for employment because of race or color, religion, physical or mental disability, national origin or ancestry, medical condition, marital status or sex of such persons, except as provided in Section 12940 of the Government Code. Design-Builder further agrees to include a similar provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials.

Apprentices. The Design-Builder and all subcontractors shall comply with the requirements of California Labor Code sections 1777.5, 1777.6 and 1777.7 regarding the employment and of apprentices.

14.7 Skilled and Trained Labor Force Requirements. Design-Builder agrees to comply with all requirements related to providing a skilled and trained workforce, pursuant to Public Contract Code section 22164(c), and Public Contract Code sections 2600-2603, including but not limited to the requirement to submit monthly reports to the Owner.

14.8 Retention on Progress Payments. Owner will deduct and hold in retention five percent (5%) from each progress payment to Design-Builder for construction work, or portion thereof. The remainder, less any other deductions taken in accordance with the Agreement, will be paid to Design-Builder as progress payments.

14.9 Securities in Lieu of Retention. Pursuant to Public Contract Code Section 22300, Design-Builder may elect, in lieu of having progress payments retained by Owner, to deposit in escrow with Owner, or with a bank acceptable to Owner, securities eligible for investment under Government Code Section 16430, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Design-Builder and Owner. If Design-Builder elects to submit securities in lieu of having progress payments retained by Owner, Design-Builder shall, at the request of any subcontractor performing more than 5% of Design-Builder's total bid, make the same option available to the subcontractor.

14.10 Assignment of Claims. In entering into a public works contract or a subcontract to supply goods, services, or materials, Design-Builder or subcontractor offers and agrees to assign to Owner 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 (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time Owner tenders final payment to Design-Builder, without further acknowledgement by the parties.

14.11 Third-Party Claims. Pursuant to Public Contracts Code Section 9201, Owner shall have full authority to compromise or otherwise settle any claim relating to the Agreement at any time. Owner shall provide for timely notification to Design-Builder of the receipt of any third-party claim, relating to the contract. Notice shall be in writing and will be provided within thirty (30) days.

14.12 Public Contract Code Claims Procedures

14.12.1 Mandatory Prerequisites to Filing a Construction Claim. Prior to filing a construction claim pursuant to Public Contract Code Sections 9203 and 20104-20104.6 and this section, Design-Builder must first complete all Change Order procedures in Section 9 of the Design-Build Agreement. Any claim submitted prior to satisfaction of the Change Order procedures will be rejected as premature and untimely. A construction claim must be submitted no later than (a) 30 days after the completion of all Dispute Resolution Board procedures are completed, or (b) 30 days after the occurrence of the event giving rise to the claim.

14.12.2 Claims Procedures. In accordance with the procedures set forth in Public Contract Code sections 9204 and 20104-20104.6, Design-Builder may submit a claim by registered or certified mail with return receipt requested, for one or more of the following: (a) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the Owner; (b) payment by the Owner of money or damages arising from work done by, or on behalf of, the Design-Builder pursuant to this contract and payment for which is not otherwise expressly provided or to which the Design-Builder is not otherwise entitled; or (c) payment of an amount that is disputed by the Owner.

14.12.3 Support for Claim. The Design-Builder shall furnish reasonable documentation to support the claim, including but not limited to: 1) a clear, concise recital of the basis upon which the claim is asserted, including a designation of the provisions of the Contract Documents upon which the claim is based, 2) a statement as to the amount of time and/or compensation sought pursuant to the claim; 3) whether the Design-Builder's claim arises from an ongoing occurrence, and if so a description of the specific Work activities affected by the claim, 4) a time impact analysis in the event that Design-Builder requests a time extension, 5) full and complete cost records supporting the amount of any claim for additional compensation, and 6) a notarized certification by the Design-Builder as follows: "Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et seq., the undersigned hereby certifies that the information contained herein is a true, accurate and complete statement of all features relating to the claim asserted." Failure by the Design-Builder to provide sufficient documentation will result in denial of the claim. The Owner reserves the right to request additional documentation, or clarification of the documentation provided.

14.12.4 Response to Claim. Upon receipt of a claim, the Owner will conduct a reasonable review and provide a written statement to the Design-Builder identifying what portion of the claim is disputed and what portion is undisputed within 45 days of receipt of the claim. The Owner and Design-Builder may, by mutual agreement, extend the 45-day time period. For any undisputed portion of a claim, the Owner must make payment within 60 days of its issuance of the written statement.

If the Design-Builder disputes the Owner's written statement, or if the Owner fails to respond, the Design-Builder may demand an informal conference to meet and confer for settlement of the issues in dispute. The Owner will then schedule the meet and confer conference within 30 days of the demand. Within 10 business days following the meet and confer conference, the Owner will provide a written statement identifying the portion of the claim that remain in dispute. Any payment due on an undisputed portion of the claim will be made within 60 days of the meet and confer conference.

After the meet and confer conference, any disputed portion of the claim shall be submitted to non-binding mediation. Alternatively, 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. If mediation is unsuccessful, the parts of the claim that remain in dispute shall be subject to applicable procedures set forth below.

Failure of Owner to respond to a claim within the time periods described above shall result in the claim being deemed rejected in its entirety. Additionally, amounts not paid in a timely manner shall bear interest at 7 percent per year.

In the event that the mediation is unsuccessful, Design-Builder must file a government claim pursuant to Government Code section 910 et seq. in order to initiate a civil action.

14.13 Utility Relocation. Pursuant to California Government Code Section 4215, if during the course of the work Design-Builder encounters utility installations which are not shown or indicated in the contract plans or in the specifications or which are found in a location substantially different from that shown, and such utilities are not reasonably apparent from visual examination of the work site, then it shall promptly notify Owner in writing. Where necessary for the work of the Contract, Owner will amend the Agreement to adjust the scope of work to allow Design-Builder to make such adjustment, rearrangement, repair, removal, alteration, or special handling of such utility, including repair of the damaged utility. If Design-Builder fails to give the notice specified above and thereafter acts without instructions from Owner, then it shall be liable for any or all damage to such utilities or other work of the Agreement which arises from its operations subsequent to the discovery, and it shall repair and make good such damage at its own cost.

14.14 Trenching, Shoring, and Differing Site Conditions.

14.14.1 Compliance. Design-Builder will comply with Labor Code sections 6500, 6705, and 6707, and Public Contract Code section 7104 regarding trenching and shoring.

14.14.2 Permit Requirements for Trenches 5'-0" or More in Depth. Design-Builder agrees to comply in full with Section 6500 of the Labor Code and to provide the required permits prior to the initiation of any work, method, operation or process that involves: (i) construction of trenches or excavations that are 5'-0" or deeper and into which a person is required to descend; (ii) the construction of any building, structure, falsework, or scaffolding

more than 3 stories high or the equivalent height; (iii) the demolition of any building, structure, falsework, or scaffold more than 3 stories high or the equivalent height; or (iv) the underground use of diesel engines in work in mines and tunnels.

14.14.2.1 Detailed Plans for Trenches 5'-0" or More in Depth. In compliance with Labor Code section 6705, the Design-Builder will submit to the Owner's Project Manager, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches 5'-0" or more in depth. If the plan varies from shoring system standards, the plan will be prepared by a registered civil or structural engineer. The plan will not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.

14.14.2.2 Separate Bid Items for Sheeting, Shoring, etc. To the extent that Design-Builder's Work involves construction of a pipeline, sewer, sewage disposal system, boring and jacking pits, or similar trenches or open excavations, which are 5'-0" or deeper, Design-Builder will comply with all applicable laws, regulations, and codes and its bid and the Contract Price will contain, as a line item, adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life or limb pursuant to Labor Code section 6707, which will conform to applicable safety orders. Nothing in this section will be construed to impose tort liability on the Owner or any of its employees.

14.14.2 Excavations Deeper than 4'-0". If Work under this Agreement involves digging trenches or other excavation that extends deeper than 4'-0" below the surface, Design-Builder will promptly, and before the following conditions are disturbed, notify Owner's Project Manager, in writing, in accordance with Public Contract Code section 7104, of any:

14.14.2.1 Material that the Design-Builder believes may be hazardous waste, as defined in Section 25117 of the Health and Safety Code, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

14.14.2.2 Subsurface or latent physical conditions at the site differing from those indicated.

14.14.2.3 Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the construction work of the character provided for in the Bid Documents and under this Agreement.

14.14.3 Differing Site Conditions. Design-Builder's notice to Owner shall be issued by telephone or in person and followed within 24 hours thereafter by written notice, providing a brief description of why the condition encountered is considered a Differing Site Condition. Promptly upon receipt of Design-Builder's notice, Owner will investigate the site conditions. If, during construction, the Design-Builder encounters an alleged Differing Site Condition, the Design-Builder shall immediately give written notice and may continue work; provided however that the following documents and information shall be submitted on a daily basis:

1. Digital photographs (paper and electronic copy) that detail the Differing Site Conditions;

2. An electronic copy of the pertinent data (e.g. settlement monitoring data, boring logs, dewatering production rates, etc.) for the previous 24 hours;

3. As applicable, sample of soil and groundwater in the alleged Differing Site Condition area.

4. Design-Builder's applicable daily reports for each day that the alleged Differing Site Condition exists; and

5. Detailed daily records (which shall include, but not be limited to, labor and equipment), describing the alleged Differing Site Conditions and the impact the Differing Site Conditions are having on the progress of the construction.

Immediate written notice shall describe the specific ground conditions encountered and the measures taken to deal with the ground conditions. The Design-Builder will provide the OR with written notice within 5 business days discovery of an Unforeseen and Differing Site Condition. The OR, in conjunction with the Owner and IOR, will promptly investigate the conditions, and if they find that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Design-Builder's Contract Price or Contract Time for any part of the Work, the OR will recommend that the Owner issue a Change Order under Section 9 of the Agreement. If it is determined that physical conditions at the site are not materially different from those indicated in Bid Documents or that no change in terms of the Contract Documents is justified, the OR will notify Design-Builder in writing, stating reasons the Design-Builder will not be entitled to an adjustment in the Contract Price or Contract Time. Such reasons may include any of the following:

14.14.4.2 Design-Builder knew of the existence of the conditions at the time Design-Builder submitted its proposal; or

14.14.4.3 Design-Builder should have known of the existence of the conditions as a result of having complied with the requirements of Contract Documents; or

14.14.4.4 The information or conditions claimed by Design-Builder to be latent or materially different consist of information, conclusions, opinions or deductions of the kind that precludes reliance upon; or

14.14.4.5 Design-Builder was required to give written notice of differing site conditions under the Contract Documents and failed to do so within the time required.

The Design-Builder will not be excused from the Contract Time to complete its Work and will proceed with all Work to be performed under the Agreement unless or until it is determined that Design-Builder is entitled to an adjustment under Section 9 of the Agreement. If the Design-Builder disagrees with the decision regarding an alleged Differing Site Condition, Design-Builder may pursue a claim under Section 14.12 of these Supplemental Conditions.

14.15 Design-Builder's License Requirements. Design-Builder and any approved subconsultants (for design, engineering, construction project management services) or subcontractors shall hold such current and valid licenses as required by California Law, including the Department of Industrial Relations (DIR) contractor and subcontractor registration requirements articulated in part by Cal. Labor Code section 1725.5.

14.16 Examination and Audit of Records. Pursuant to Government Code Section 8546.7, Design-Builder shall retain all project-related records for a period of 3 years after final payment on this DBO Contract, which shall be subject to audit or inspection by the Owner or the State Auditor during this period.

14.17 Safety Requirements. The Design-Builder shall promptly and fully comply with and carry out, and shall without separate charge therefore to the Owner, enforce compliance with the safety and first aid requirements prescribed by applicable State and Federal laws and regulations, rules and orders and as may be necessary to ensure that all Construction Work shall be done in a safe manner and that the safety and health of the employees, agents and the people of local communities is safeguarded. Compliance with the provisions of this Section by subcontractors shall be the responsibility of the Design-Builder. All installed, dismantled, and removed material, equipment and facilities, without separate charge therefore to Owner, shall fully conform with all applicable State and Federal safety laws, rules, regulations and orders and it shall be the Design-Builder's responsibility to furnish only such material, equipment and facilities.

14.18 Notice of Third-Party Claims. Pursuant to Public Contract Code section 9201, the Owner will provide Design-Builder with timely notification of the receipt of any third-party claim relating to the Agreement.

14.19 Assignment of Anti-Trust Actions. Pursuant to Public Contract Code section 7103.5 and Government Code sections 4554 and 4553, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Design-Builder, its Design Professionals and Subcontractors offer and agree to assign to the Owner 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. section 15) or under the Cartwright Act (chapter 2 (commencing with section 16700) of part 2 of division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this Agreement or any Subcontract. This assignment will be made and become effective at the time the Owner makes final payment to the Design-Builder, without further acknowledgment by the parties.

14.20 Compliance with All Applicable Laws. Design-Builder shall comply with all the applicable requirements of federal, state and local laws, statutes and ordinances relative to the execution of the Work. In the event Design-Builder fails to comply with these requirements, Owner may stop any Work until such noncompliance is remedied. No part of the time lost due to any such cessation of the Work shall be made the subject of a claim for an extension of time or increase in the compensation.

Exhibit 2

BRIDGING DOCUMENTS

Exhibit 2A – Conceptual Design

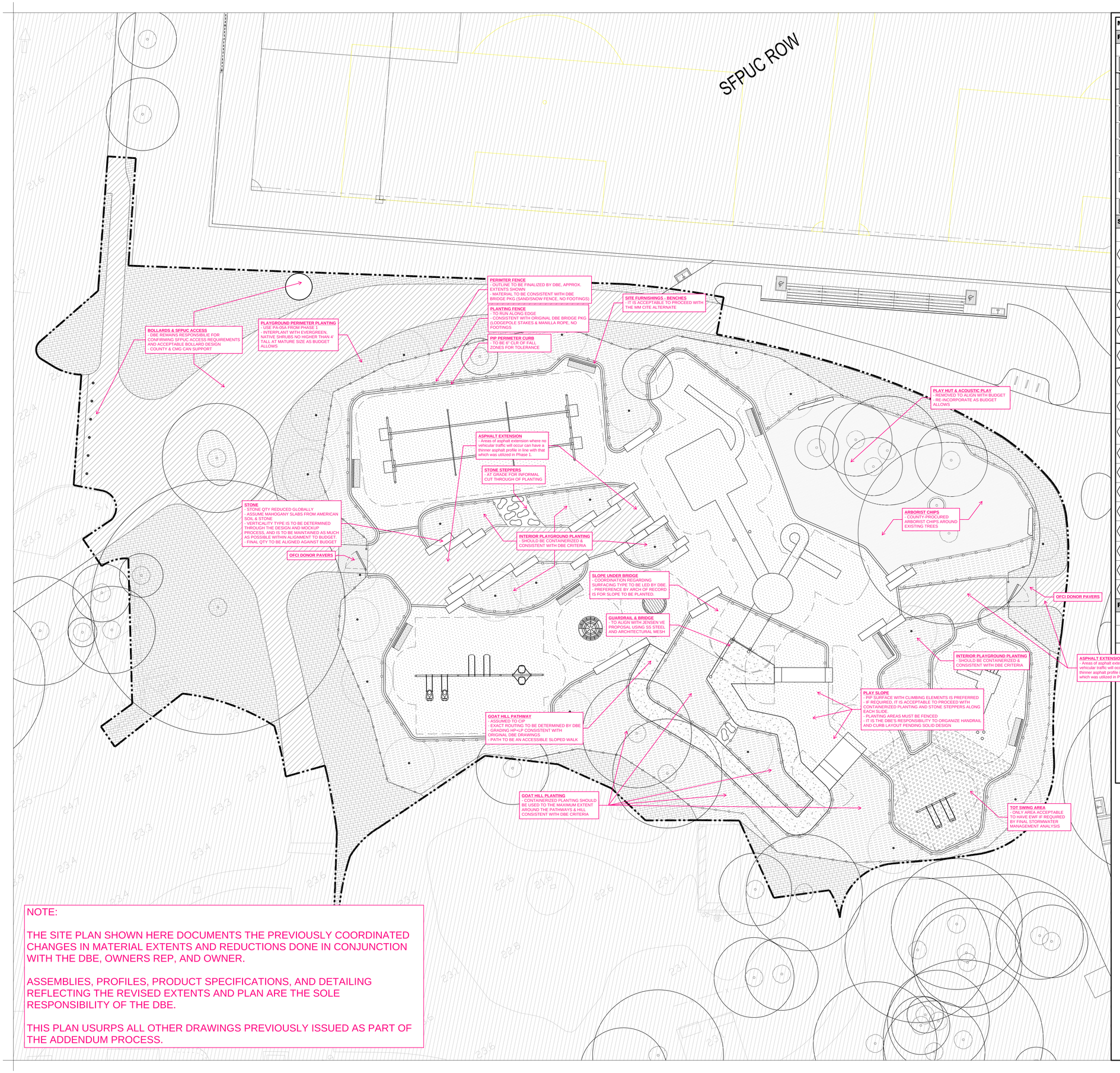
Exhibit 2B –Design Criteria

Exhibit 2C – Site Survey

Exhibit 2D.1 –Geotechnical Report

Exhibit 2D.2 – Supplemental Geotechnical Report

Please refer to the attached documents.



NOTE:

THE SITE PLAN SHOWN HERE DOCUMENTS THE PREVIOUSLY COORDINATED CHANGES IN MATERIAL EXTENTS AND REDUCTIONS DONE IN CONJUNCTION WITH THE DBE, OWNERS REP, AND OWNER.

ASSEMBLIES, PROFILES, PRODUCT SPECIFICATIONS, AND DETAILING REFLECTING THE REVISED EXTENTS AND PLAN ARE THE SOLE RESPONSIBILITY OF THE DBE.

THIS PLAN USURPS ALL OTHER DRAWINGS PREVIOUSLY ISSUED AS PART OF THE ADDENDUM PROCESS.

MATERIALS SCHEDULE

PAVING

TAG	SYMBOL	TYPE	DETAIL
P1		AC PAVING	3/L6-101
P2		~~ASF~~ ~~VE~~ NOT USED	3/L6-101
P3A		DONOR RECOGNITION PAVERS	--
P3B		CIP CONCRETE PAVING	4/L6-101
P4		CONCRETE CURB	--
P5		PLAYSURFACING - TYPE 1	1/L6-102
P6		PLAYSURFACING - TYPE 2	6/L6-102
P7		FLAGSTONE PAVING	1/L6-103
P8		WOOD CHIP MULCH	--

SITE ELEMENTS

TAG	SYMBOL	TYPE	DETAIL
S1		CANYON THRESHOLD	L6-201
S2		CANYON STONE	L6-203
S3		~~CAN~~ ~~RE~~ NOT USED	
S4		STONE LANDSCAPE ELEMENTS	L6-204 AND DETAIL 6/L6-208
S5		~~TAC~~ NOT USED	
S6		STONE SEATING	
S7		RETAINING WALL AT TOWER BRIDGE LANDING	L6-211
S8		WOOD DECK & STAGE	L6-221
S9A		PLAYGROUND FENCE	--
S9B		PLANTING FENCE	--
S10		PLAYGROUND GATE	--
S11		WOOD LANDSCAPE ELEMENTS	--
S12		WASTE RECEPTACLES	2/L6-241
S13		BENCH	1/L6-241
S14		REMOVABLE BOLLARDS	4/L6-251
S14		DRINKING FOUNTAIN	3/L6-251

PLAY EQUIPMENT

TAG	SYMBOL	TYPE	DETAIL
SEE PLAY EQUIPMENT SHEET L1-101 FOR REFERENCE			

cmg
Landscape Architecture
444 Bryant St
San Francisco, CA 94107
415.495.3070
www.cmgsite.com

OWNER/CLIENT

COUNTY OF SAN MATEO PARKS
400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND

215 Bay Road
Menlo Park, CA 94025

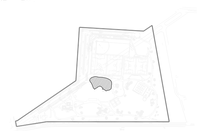
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25
02	BRIDGE DRAWINGS AMENDMENT	03.27.25
03	BRIDGE DRAWINGS VE-4 DIAGRAM	05.02.25

KEY PLAN



SHEET TITLE

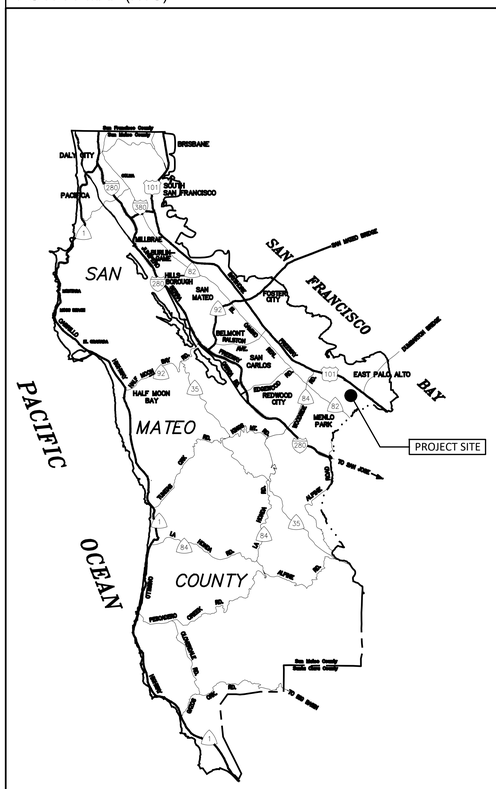
MATERIALS
OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

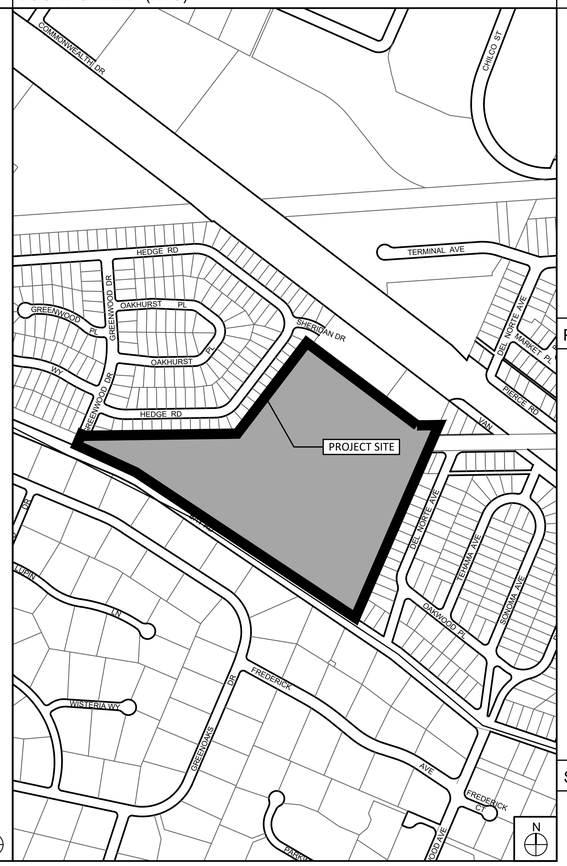
SHEET NUMBER

L1-110

VICINITY MAP (NTS)



LOCATION MAP (NTS)



ILLUSTRATIVE PLAN (NTS, FOR REFERENCE ONLY)



PROJECT

COUNTY OF SAN MATEO

CALIFORNIA

REALIZE FLOOD PARK PROJECT – PLAYGROUND

215 BAY ROAD

MENLO PARK, CA 94025

PROJECT TEAM

LANDSCAPE ARCHITECTURE
CMG Landscape Architecture
444 Bryant Street
San Francisco, CA 94107
415-495-3070
cmgsite.com

ARCHITECTURE
Page + Turnbull
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San Francisco, CA 94108
415-362-5154
page-turnbull.com

MEP
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90 New Montgomery St., Ste 1420
San Francisco, CA 94105
415-486-3100
esdglobal.com

OPERATIONS AND MAINTENANCE
Pros Consulting
35 Whittington Drive, Suite 300
Brownsburg, IN 46112
877-242-7760
prosconsulting.com

CIVIL ENGINEERING
BKF
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
650-482-6300
bkf.com

STRUCTURAL ENGINEERING
Krakower & Associates
160 White Oak Drive
Arcadia, CA 91006
626-355-6088

IRRIGATION
Russell D. Mitchell Associates, Inc.
2760 Camino Diablo
Walnut Creek, CA 94597
925-939-3985
rmairrigation.com

COST ESTIMATING
M Lee Corporation
601 Montgomery Street, Suite 2040
San Francisco, CA 94111
415-693-0236
mleecorp.com

GEOTECHNICAL AND SOILS ASSESSMENT
Cornerstone
1259 Oakmead Parkway
Sunnyvale, CA 94085
408-245-4600
cornerstoneearth.com

ECOLOGICAL CONSULTANTS
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983 University Ave, Building D
Los Gatos, CA 95032
408.458.3200
harveyecology.com

SOILS AND WATER TESTING
Wallace Labratories
365 Coral Circle
El Suguno, CA 90245
310-615-0116
wlabs.com

CATHODIC PROTECTION
JDH CORROSION CONSULTANTS, INC.
1100 WILLOW PASS COURT
CONCORD, CA 94520
925-927-6630
jdhcorrosion.com

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NOTE:

ALL DRAWINGS CONTAINED HEREIN ARE ARE INCLUDED FOR RECORD ONLY AND DO NOT REFLECT THE CHANGES IN MATERIAL EXTENTS AND REDUCTIONS THAT WERE DONE IN CONJUNCTION WITH THE DBE, OWNERS REP, AND OWNER.

FOR LATEST PLAN REFLECTING VE CHANGES, SEE "250508-CSM2401-L-SITE PLAN-FINAL VE" DOCUMENT.

ASSEMBLIES, PROFILES, PRODUCT SPECIFICATIONS, AND DETAILING REFLECTING THE REVISED EXTENTS AND PLAN ARE THE SOLE RESPONSIBILITY OF THE DBE.

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OWNER/CLIENT

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400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

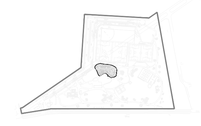
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25

KEY PLAN



SHEET TITLE

GENERAL INFORMATION
COVER SHEET

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
NTS	AMP

SHEET NUMBER

G0-100

GENERAL NOTES

1. ALL PROPERTY, EASEMENT AND LIMIT LINES SHALL BE VERIFIED PRIOR TO COMMENCING WORK.
2. CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES WITHIN THE PROJECT LIMITS, CONSISTING OF ROAD RIGHT-OF-WAY, RIGHTS OF ENTRY AND/OR PROJECT CONFORMS, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
3. EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH. NEITHER THE UTILITY OWNER NOR THE ENGINEER OR LANDSCAPE ARCHITECT ASSUMES RESPONSIBILITY THAT THE UNDERGROUND UTILITIES INDICATED ARE COMPLETE AND ACCURATE.
4. EXISTING UTILITY INFORMATION IS BASED ON SITE SURVEY AND LIMITED RECORD DRAWINGS AND IS NOT A COMPLETE INVENTORY OF EXISTING UTILITIES ON SITE. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING THEIR OWN REVIEW AND VERIFYING EXISTING UTILITY CONDITIONS PRIOR TO EXCAVATION AND DEMOLITION. CONTRACTOR TO PROVIDE UNDERGROUND LOCATING SERVICE TO HAVE THE LOCATION OF EXISTING UNDERGROUND UTILITIES MARKED. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AMPLE COVER FOR THE PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION.
5. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY OWNERS 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO THE UTILITY.
6. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY COST INCURRED DUE TO DAMAGE OF UTILITIES. ALL UTILITIES ARE ASSUMED TO BE PROTECTED IN PLACE, UNLESS OTHERWISE STATED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ANY EXISTING SURVEY MONUMENTS, AND ANY MONUMENTS OBLITERATED OR DAMAGED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL AREAS DISRUPTED BY DEMOLITION OR CONSTRUCTION WORK.
9. 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 ENGINEER. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY COSTS, CONSTRUCTION DELAYS, OR REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.
10. ALL CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN SUCH A MANNER AS TO COMPLY WITH THE STANDARDS ESTABLISHED BY THE AIR QUALITY MANAGEMENT DISTRICT FOR AIRBORNE PARTICULATE (DUST).
11. THE CONTRACTOR SHALL SCHEDULE THE OWNER'S ARBORIST TO BE ON-SITE DURING EXCAVATION NEAR TREE DRIP-LINES. REFER TO TREE PROTECTION PLANS AND SPECIFICATIONS.
12. NO TREES, VEGETATION OR IMPROVEMENTS (INCLUDING FENCES) SHALL BE REMOVED WITHOUT THE PRIOR WRITTEN CONSENT AND APPROVAL OF THE ENGINEER. VEGETATION AND IMPROVEMENTS WHICH ARE DESIGNATED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REFER TO PROJECT SPECIAL PROVISIONS SECTION 16 REGARDING REQUIREMENTS FOR ADVANCE NOTIFICATION OF PROPERTY OWNERS.
13. CONTRACTOR SHALL REMOVE FROM THE SITE ALL DEBRIS AND UNSUITABLE MATERIAL GENERATED BY THE CONTRACTOR'S OPERATIONS AND DISPOSE OF ALL MATERIAL IN COMPLIANCE WITH APPLICABLE CODES AND REGULATIONS. CONSTRUCTION SITE SHALL BE MAINTAINED AT ALL TIMES SO THAT NO OBSTRUCTION, CONSTRUCTION EQUIPMENT OR CONSTRUCTION PROCESS CAUSES POTENTIAL HARM OR DANGER TO THE PUBLIC OR THE CONSTRUCTION SITE.
14. CONTRACTOR IS RESPONSIBLE FOR REPLACEMENT OR REPAIR TO ANY EXISTING STRUCTURES, SITE FEATURES OR MATERIALS INDICATED TO REMAIN.
15. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES IN THE CONSTRUCTION DRAWINGS OR SPECIFICATIONS OR WHERE ANY CONFLICTS OCCUR BETWEEN THE DOCUMENTS AND EXISTING CONDITIONS.
16. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEATHED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEATHING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL COMPLETE NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR TRENCHING AND/OR STRUCTURE IS FIVE (5) FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL PROVIDE SHEATHING, SHORING AND BRACING IN CONFORMANCE WITH THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL COMPLY WITH OSHA REQUIREMENTS AT ALL TIMES.
17. TESTING ASSOCIATED WITH LANDSCAPE CONSTRUCTION AS NOTED IN SPECIFICATIONS ARE INCLUDED IN SCOPE OF WORK. COSTS ASSOCIATED WITH TESTING SHALL BE COVERED BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
18. 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 ENGINEER.
19. REFER TO CIVIL DRAWINGS FOR ALL NOTES AND INFORMATION RELATED TO EXISTING AND PROPOSED UTILITIES INCLUDING LOCATION OF EXISTING UTILITIES PRIOR TO ANY SITE DEMOLITION OR CLEARING OR ASSOCIATED WITH ANY SITE GRADING OR TRENCHING OPERATIONS.
20. CONTRACTOR IS TO SUBMIT A SUMMARY OF ALL SUBMITTALS NECESSARY FOR WORK AND ASSOCIATED SCOPE ITEMS FOR APPROVAL. BASED ON THE APPROVED LISTING OF PROJECT SUBMITTALS CONTRACTOR IS TO SUBMIT ALL NECESSARY DOCUMENTATION IN ACCORDANCE WITH CONTRACT DOCUMENTS.
21. ALL SHOP DRAWINGS REQUIRED AS PART OF THE 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.
22. ALL WORK SHALL COMPLY WITH THE SFPUC INTERIM ROW POLICY, INTEGRATED VEGETATION MANAGEMENT POLICY AND EQUIPMENT VEHICLE LOAD RESTRICTIONS AND THE FORTHCOMING LAND USE AGREEMENT BETWEEN THE SFPUC AND COUNTY OF SAN MATEO.
23. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SUBGRADE PREPARATION AND COMPACTION REQUIREMENTS, AGGREGATE BASE COMPACTION REQUIREMENTS, AND AC COMPACTION REQUIREMENTS.

CODES AND REGULATIONS

CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO:

- CALIFORNIA BUILDING CODE (CBC) 2022
- COUNTY OF SAN MATEO BUILDING DEPARTMENT REQUIREMENTS
- BAY AREA AIR QUALITY MANAGEMENT DISTRICT - CURRENT RULES, REGULATIONS, AND AIR QUALITY GUIDELINES
- CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS & SPECIFICATIONS 2018

ALL SITE WORK SHALL BE IN CONFORMANCE WITH LOCAL ADMINISTRATIVE CODE AND AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

SFPUC REQUIREMENTS

1. THE CITY AND COUNTY OF SAN FRANCISCO ACTING BY AND THROUGH ITS PUBLIC UTILITIES COMMISSION, WATER SUPPLY, AND TREATMENT DIVISION ("SFPUC") OWNS AND OPERATES THREE WATER AQUEDUCTS THAT CROSS THE PROJECT ALIGNMENT. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICES ALERT (USA) 48 HRS BEFORE ANY CONSTRUCTION IN THE VICINITY OF THE SFPUC AQUEDUCTS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE SFPUC CONSTRUCTION INSPECTOR, MR. ALBERT HAO, AT (650) 871-3015, AT LEAST TEN (10) CALENDAR DAYS PRIOR TO THE START OF ON-SITE CONSTRUCTION IN THE VICINITY OF THE SFPUC ROW. IN THE EVENT OF AN EMERGENCY INVOLVING SFPUC FACILITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY SFPUC BY CALLING SFPUC MILLBRAE DISPATCH AT (650) 872-5900.
2. NO MECHANICAL EXCAVATION IS ALLOWED WITHIN 24 INCHES OF SFPUC PIPELINES. DIGGING WITHIN 24 INCHES OF PIPELINE MUST BE DONE WITH HAND TOOLS. NO VIBRATORY COMPACTION EQUIPMENT SHALL BE USED WITHOUT PRIOR WRITTEN APPROVAL OF THE SFPUC.
3. CONTRACTOR SHALL OBTAIN CONSENT FROM THE SFPUC TO POTHOLE SFPUC PIPELINE TO DETERMINE THE PIPE DEPTH PRIOR TO ANY EXCAVATION. THE POTHOLING SHALL BE CARRIED OUT BY SOIL VACUUM EXTRACTION METHOD.
4. MAXIMUM EXTERNAL LOADING OVER SFPUC PIPELINE IS AASHTO H-10 LOADING WITH A MINIMUM OF 3 FT. SOIL COVER (OR H-20 LOADING WITH A MINIMUM OF 4 FT. SOIL COVER). IF LOADING CONDITION EXCEEDS ABOVE, ENGINEERING CALCULATIONS SHOWN IN AWWA, M9 MUST BE SUBMITTED TO THE SFPUC TO SHOW THAT PROPOSED CONDITION WOULD IMPOSE A LOAD OF LESS THAN 500 PSF ONTO THE PIPELINE.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH SFPUC. CONTRACTOR IS TO REVIEW AND ABIDE BY ALL SUPPORTING DOCUMENTATION AND GUIDELINES PROVIDED BY SFPUC AND COUNTY OF SAN MATEO OUTLINING WORK, ADDITIONAL WORK REQUIREMENTS, OPERATIONAL CONSTRAINTS, LOADING LIMITATIONS, AND POTHOLING REQUIREMENTS.
6. REFER TO DETAILED REQUIREMENTS IN SUPPLEMENTARY DOCUMENTS WITHIN PROJECT SPECIFICATIONS.

ADA NOTES

1. ALL SITE WORK SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE AND WITH THE AMERICANS WITH DISABILITIES ACT.
2. ALL PAVING AREAS SHALL BE ACCESSIBLE PER TITLE 24. ACCESSIBLE PATHS OF TRAVEL ARE A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX, AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP RESISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ALL ACCESSIBLE PATHS OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM, AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". THERE SHALL BE NO NO BARRIERS IN THE PATH OF TRAVEL.
3. RAMPS ARE DEFINED AS ANY WALKWAY BETWEEN SLOPES OF 1:20 (5%) AND 1:12 (8.33%). RAMPS SHALL NOT EXCEED 1:12 (8.33%). ALL RAMPS SHALL HAVE A RAILING AND CURB PER PLANS AND DETAILS. RAMPS EXCEEDING 2'-6" VERTICAL SHALL HAVE INTERMEDIATE (1.5% MAXIMUM SLOPE) LANDINGS HAVING A MINIMUM LENGTH IN THE DIRECTION OF TRAVEL OF 60". LANDINGS AT CHANGES IN RAMP DIRECTION SHALL HAVE A MINIMUM LENGTH OF 72". LANDINGS AT BOTTOMS OF RAMPS SHALL EXTEND 72" IN DIRECTION OF TRAVEL.
4. A 1.5% MAXIMUM IN ALL DIRECTIONS SLOPE SHALL BE PROVIDED AT PRIMARY ENTRANCES TO BUILDINGS, THE LANDINGS SHALL HAVE A MINIMUM DEPTH OF 60" WHEN THE DOOR OPENS INTO THE BUILDING, AND 42" PLUS THE WIDTH OF THE DOOR WHEN THE DOOR OPENS ONTO ENTRY AREA.
5. A 1.5% MAXIMUM IN ALL DIRECTIONS SLOPE SHALL BE PROVIDED AT TOP/BOTTOM OF ALL STAIRS, RAMPS AND INTERSECTIONS OF ALL PATHWAYS.

GENERAL ABBREVIATIONS

AB	AGGREGATE BASE	G	GAS	SCD	SEE CIVIL DRAWINGS
AC	ASPHALT CONCRETE	GAL	GALLON	SCH	SCHEDULE
AD	AREA DRAIN	GALV	GALVANIZED	SD	STORM DRAIN
ADA	AMERICANS WITH DISABILITIES ACT	GB	GRADE BREAK	SED	SEE ELECTRICAL DRAWINGS
APPROX	APPROXIMATE	GM	GAS METER	SHT.	SHEET
BC	BEGIN CURVE/ BOTTOM OF CURB	GND	GROUND	SID	SEE IRRIGATION DRAWINGS
BNDY	BOUNDARY	HB	HOSE BIB	SIM	SIMILAR
BEG	BEGIN	HORIZ	HORIZONTAL	SQ	SQUARE
BF	BOTTOM FACE	IE	INVERT	SS	SANITARY SEWER OR STAINLESS STEEL
BLDG	BUILDING	JT	JOINT	SSMH	SANITARY SEWER MANHOLE
BM	BENCH MARK	LF	LIGHTWEIGHT FILL	STA	STATION POINT
BOW	BACK OF WALK	LOL	LAYOUT LINE	STD	STANDARD
BTA	BIORETENTION TREATMENT AREA	LOW	LIMIT OF WORK	STL	STEEL
BVC	BEGIN VERTICAL CURVE	ME	MATCH EXISTING	S/W	SIDEWALK
BW	BOTTOM OF WALL	MH	MANHOLE	SSCO	SANITARY SEWER CLEANOUT
CL	CENTER LINE	MAINT	MAINTENANCE	TB	TOP OF BENCH
CB	CATCH BASIN	MAX	MAXIMUM	TBD	TO BE DETERMINED
CIP	CAST IN PLACE	MIN	MINIMUM	TC	TOP OF CURB
CJ	CONTROL JOINT	MISC	MISCELLANEOUS	TF	TOP FOOTING
CLR	CLEAR	MON	MONUMENT	TEMP	TEMPORARY
CO	CLEANOUT	(N)	NEW	TOF	TOP OF FOOTING
CONC	CONCRETE	N	NORTH	TOR	TOP OF RAMP
CONT	CONTINUOUS	NOS	NUMBERS	TOS	TOP OF SLAB
CMU	CONCRETE MASONRY UNIT	NTS	NOT TO SCALE	TTL	TOTAL
CU FT	CUBIC FEET	OC	ON CENTER	TOW/TW	TOP OF WALL
DB	DRAIN BASIN	OH	OVERHEAD	TYP	TYPICAL
DBH	DIAMETER AT BREAST HEIGHT	PA	PLANTING AREA	TP	TELEPHONE POLE
DI	DRAINAGE INLET	PI	POINT OF INTERSECTION	UNO	UNLESS NOTED OTHERWISE
DIA	DIAMETER	POC	POINT OF CONNECTION	V/VERT	VERTICAL
DIM	DIMENSION	POT	POINT ON TANGENT	VB	VALVE BOX
DWG	DRAWING	PP	POWER POLE	VC	VERTICAL CURVE
(E)/EX	EXISTING	PSI	POUNDS PER SQUARE INCH	VIF	VERIFY IN FIELD
EA	EACH	PT	POINT	W/	WITH
EC	END OF CURVE	PTDF	PRESSURE-TREATED DOUGLAS FIR	W/O	WITHOUT
EF	EACH FACE	PERM	PERMANENT	WC	WHEELCHAIR ACCESSIBLE
ELEV/EL	ELEVATION	PERF	PERFORATED	WM	WATER METER
ELECT	ELECTRICAL	PVC	POLYVINYL CHLORIDE PIPE	WMH	WATER MANHOLE
EQ	EQUAL	QC	QUICK COUPLER	WP	WORK POINT
EVC	END OF VERTICAL CURVE	RAD/R	RADIUS	WPJ	WEAKENED PLANE JOINT
EW	EACH WAY	RCB	REINFORCED CONCRETE BOX		
EXP/EJ	EXPANSION JOINT	RCP	REINFORCED CONCRETE PIPE		
FFE	FINISHED FLOOR	RIM	RIM ELEVATION/TOP OF GRATE		
FG	FINISH GRADE (LANDSCAPE)	RE/INF	REINFORCING		
FH	FIRE HYDRANT	R.R.	RAILROAD		
FL	FLOW LINE	RT	RIGHT		
FS	FINISH SURFACE	ROW	RIGHT-OF-WAY		

LINETYPES LEGEND

- PROPERTY LINE
- SFPUC RIGHT OF WAY
- 100' SETBACK
- LIMIT OF WORK (LOW)
  NOTE: LIMIT OF WORK FOR ALL WORK WITH EXCEPTION OF TRANSPLANTING AND PLANTING OF NEW TREES

NOTE:

REFER TO "250508-CSM2401-L-SITE PLAN-FINAL VE" DOCUMENT FOR ALL DESIGN AND PLAN BASED RELATIONSHIPS AS THE BASIS OF DESIGN. PARAMETERS SHOWN ON THIS SHEET INDICATE GENERAL REQUIREMENTS AND EXPECTATIONS FOR DESIGN AND PRODUCT SELECTION, HOWEVER THE DBE IS SOLELY RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF THE FOLLOWING, INCLUDING BUT NOT LIMITED TO, PATH OF TRAVEL, ACCESSIBILITY, PERFORMANCE, CODE COMPLIANCE, AHJ APPROVALS, DRAINAGE, STORMWATER, IMPACT ATTENUATION, USER SAFETY, AND FALL RISK SUCH THAT THE FINAL DESIGN IS APPROVED BY THE OWNER AND MEETS ANY AND ALL REQUIREMENTS FOR CONSTRUCTION AND END USERS.

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OWNER/CLIENT

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400 COUNTY CENTER
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CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND

215 Bay Road
Menlo Park, CA 94025

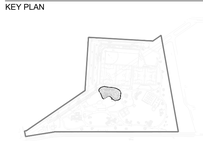
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25

KEY PLAN



SHEET TITLE

GENERAL INFORMATION
GENERAL LANDSCAPE SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
--	AMP

SHEET NUMBER

G0-101

TREE REMOVAL AND PROTECTION LEGEND

SYMBOL	TYPE
	Existing Tree to be Removed
NOT USED	Existing Tree to be T- 'anted -See L1-610 f- ant Locations NOT USED
TRUNK CANOPY	Existing Tree to Remain and be Protected
	Heritage Tree to Remain - NOTE: Protection requirements' extents are equal to 1" DBH = 1'-6" diameter of protection
	Significant Tree To Remain
	Other Tree To Remain
	Tree Protection Zone
	Heritage Tree Protection Zone + Fence
	Tree Protection Fencing
	Tree Protection Fencing Access Point

UTILITY COLOR CHART

SERVICE	COLOR
Irrigation	Blue
Water	Pink
Sewer	Green
Electrical	Orange
Telecom	Red

TREE PROTECTION NOTES

General

1. All existing trees are identified with numbers that correspond to the Arborist's Report included as part of the contract documents. Contractor shall notify Owner's appointed Construction Manager of any discrepancies between tree tag numbers in the field and those designated on plans.
2. Complete a pre-construction tree protection site walk with the Parks Department Arborist, Resident Engineer, and Landscape Architect in advance of preparing the construction sequencing and tree protection plans as defined in the Specifications.
3. Provide Tree Protection Plan indicating fencing locations based on construction sequencing plan for review and approval.
   a. Provide updates to the plan as needed for construction sequencing and operations.
   b. Updates to the protection plan and measures shall be approved by the Supervising Arborist and reviewed by the Resident Engineer to confirm compliance.
4. Key tree protection definitions and requirements are outlined below. Refer to the "Tree Removal and Protection" Specifications for all requirements.

Tree Protection Zone (TPZ)

1. Tree Protection Zones (TPZ designates an area surrounding a tree or grouping of trees that is to be fenced for protection. All construction activity (grading, filling, excavation, trenching, paving, landscaping) within the (TPZ) shall be completed according to the specifications. The TPZ for each tree is identified in the drawings as follows:
   a. Heritage Trees: 1'-6" protection for every 1-inch of diameter at breast height, e.g. 48 inch DBH = 72 foot diameter around tree.
   b. Significant Trees: TPZ = 1-foot protection for every 1 inch DBH, e.g. 24 inch DBH = 24 foot diameter around tree, or the tree dripline, whichever is greater.
   c. All Other Trees: 1-foot protection for every 1-inch DBH, e.g. 24 inch DBH = 24 foot diameter around tree, or the tree dripline, whichever is greater.
   d. Exceptions to this standard may occur depending upon the age, condition, and species tolerance of individual trees as determined by the Supervising Arborist.
2. Critical Root Zone: The critical root zone is the radial area around the trunk where all root impacts shall be avoided or mitigated with specialized procedures. The critical root zone will be a radial distance equal to three times the trunk diameter, or 8 feet minimum.
3. Protection: Provide all barricades including tree protection fencing as required to prevent all damage to existing trees and landscape areas to remain, including but not limited to protection from mechanical damage, soil compaction, pollution from all sources, and disruption of environmental support which would result in damage of said trees and plants.
   a. Primary Protection: 6' tall temporary chain link fencing defining the perimeter of the Tree Protection Zones as directed and approved by Supervising Arborist.
   b. Secondary Protection: 4' tall bright orange safety fencing, with metal channel posts installed at the Drip Line of all trees within the designated TPZ where work is to be completed. The secondary protection will define the maximum extent of work within the TPZ.
   c. Trunk Protection: Protection of trunks as required by the specifications.
   d. Root Zone Protection: Protection of root zone soil from compaction as required by the specifications.

TREE REMOVAL & PROTECTION SUMMARY - PLAY. PHASE

TYPE	QUANTITY
TOTAL EXISTING TREES	
Total (E) Trees	733
Total (E) Trees to Remain	721
Total (E) Trees to be Removed in Previous Phase	--
Total (E) Trees to be Transplanted	--
EXISTING TREES WITHIN LIMIT OF WORK	
Total (E) Trees	26
Total (E) Trees to Remain	14
Total (E) Trees to be Removed	12
Total (E) Trees to be Transplanted	0
TOTAL TREES REMOVED FOR SITE IMPROVEMENTS	
Total (E) Heritage Trees	0
Total (E) Significant Oak Trees	0
Total (E) Significant Native Trees (Non-Oak)	0
Total (E) Significant Non-Native Trees	1
Total (E) Oak Trees (less than 12")	0
Total (E) Native Trees (Non-Oak, less than 12")	2
Total (E) Non-Native Trees (less than 12")	9
TOTAL	12
TOTAL TREES REMOVED DUE TO HEALTH	
Total (E) Heritage Trees	0
Total (E) Significant Trees	0
Total (E) Non-Significant Trees	0
TOTAL	0

01

NOTE: TREE TOTALS REFLECT COORDINATION TO DATE AND ARE SUBJECT TO CHANGE BASED ON ONGOING PARK MAINTENANCE AND ASSESSMENT BY QUALIFIED ARBORISTS.

NOTE:

PARAMETERS SHOWN ON THIS SHEET INDICATE GENERAL REQUIREMENTS AND EXPECTATIONS FOR DESIGN AND PRODUCT SELECTION FOR REFERENCE ONLY. REFER TO "250508-CSM2401-L-SITE PLAN-FINAL VE" DOCUMENT FOR ALL DESIGN AND PLAN BASED RELATIONSHIPS AS THE BASIS OF DESIGN.

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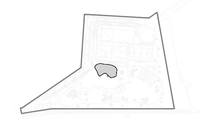
DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN



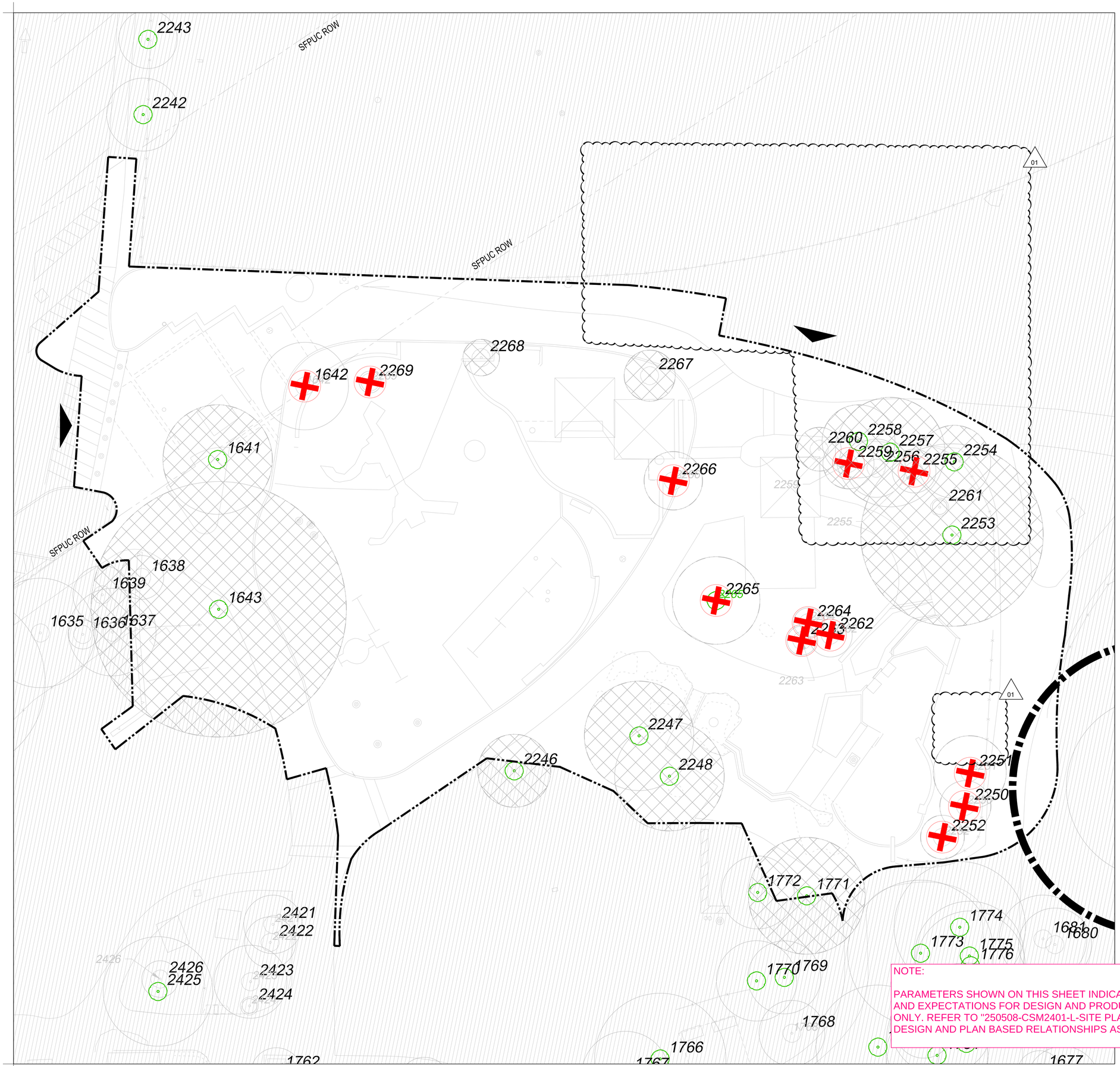
SHEET TITLE

TREE REMOVAL + PROTECTION SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
NTS	DG

SHEET NUMBER

G0-200



NOTE:

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TREE REMOVAL AND PROTECTION LEGEND

SYMBOL	TYPE
	Existing Tree to be Removed
NOT USED	Existing Tree to be T[illegible]lanted -See L1-610 [illegible]plant Locations NOT USED
	Existing Tree to Remain and be Protected
	Heritage Tree to Remain - NOTE: Protection requirements' extents are equal to 1" DBH = 1'-6" diameter of protection
	Significant Tree To Remain
	Other Tree To Remain
	Tree Protection Zone
	Heritage Tree Protection Zone
	Tree Protection Fencing
	Tree Protection Fencing Access Point

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OWNER/CLIENT

COUNTY OF SAN MATEO PARKS
400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

STAMP

PHASE

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KEY PLAN



SHEET TITLE

TREE REMOVAL + PROTECTION
OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

G0-210

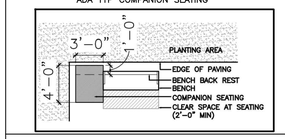
ACCESSIBILITY SCHEDULE

TAG	DESCRIPTION	DETAIL	QUANTITY	NOTES
1	BENCH COMPANION SEATING	–	PLAY AREA: 6	PROVIDE A 2'–6" X 4'–0" CLEAR SPACE ADJACENT TO BENCH

ACCESSIBILE ROUTES

SYMBOL	DESCRIPTION	NOTES
→	ACCESSIBLE ROUTE	48" WIDTH MIN. ACCESSIBLE PAVING SURFACE. SLOPES NO GREATER THAN 2% IN ANY DIRECTION
→	EXISTING PATHWAY	EXISTING PATHWAYS ARE NOT IN THE SCOPE AND ASSUMED TO CONFORM TO ACCESSIBILITY REQUIREMENTS WHERE APPLICABLE
→	ACCESSIBLE PLAY ROUTE	60" WIDE MIN ACCESSIBLE ROUTE TO PLAY AREAS & TOWER. 1:16 MAX SLOPES
✳	CONNECTION TO EXISTING CIRCULATION	PATH TRANSITIONS FROM AN ACCESSIBLE ROUTE TO EXISTING CIRCULATION
⊗	ACCESSIBLE ENTRY	ACCESSIBLE ENTRY POINT TO A POINT OF INTEREST

ADA TYP COMPANION SEATING



GENERAL NOTES

ACCESSIBLE PATH OF TRAVEL	48" WIDTH MINIMUM ACCESSIBLE PAVING SURFACE, SLOPES SHALL BE 1.5% IN THE DIRECTION OF POSITIVE DRAINAGE. CROSS SLOPES SHALL NOT EXCEED 1.5%. PHASE 1 PATH WIDTHS ARE 8'–0" WIDE, MIN., TYP.
COMPANION SEATING	WHEELCHAIR USER AREA WHERE INDICATED ON PLAN. MIN 30" WIDE. 12" CLEAR ALIGNED WITH BACK OF BENCH FOR SHOULDER TO SHOULDER SEATING. PROVIDE 24" CLEAR IN FRONT OF ALL BENCHES.

1 ALL SITE WORK SHALL BE CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE, (1029 CALIFORNIA BUILDING CODE). THE AMERICANS WITH DISABILITIES ACT (ADA). THE 2010 ADA ACCESSIBILITY STANDARDS FOR ACCESSIBLE DESIGN AND APPLICABLE COUNTY OF SAN MATEO CODES & REQUIREMENTS.

2. THE SITE IS RELATIVELY FLAT. WHERE THERE ARE NO RAMPS, HANDRAILS, OR STAIRS, ALL PAVED AREAS SHALL BE ACCESSIBLE IN ACCORDANCE WITH ITEM 1 AND ALL APPLICABLE DPW ORDERS. ACCESSIBLE PATHS OF TRAVEL ARE A BARRIER–FREEWALKING SURFACES SHALL BE STABLE, FIRM AND SLIP–RESISTANT. CROSS SLOPES DOES NOT EXCEED 1.5%.

3. DESIGN ALLOWS FOR NORMAL CONSTRUCTION TOLERANCES IN THE DESIGN WHERE POSSIBLE. FOR EXAMPLE, AT SURFACES THAT ARE NOT TO EXCEED 2% SLOPE, THE MAXIMUM DESIGN SLOPE SHOULD NOT EXCEED 1.45%.

4. PROPOSED PATHS OF TRAVEL WILL CONNECT TO EXISTING SITE PATHWAYS. CONNECTIONS WILL CONFORM TO EXISTING GRADES AND MEET PERTINENT REQUIREMENTS.

ADDITIONAL NOTES

1. SEE G0–310 FOR FURTHER ACCESSIBILITY INFORMATION
2. SEE L1–300 FOR DETAILED GRADING
3. SEE L1–100 FOR SITE FURNITURE MANUFACTURERS AND LAYOUT
4. SEE L1–101 FOR PLAY EQUIPMENT INFORMATION
5. MINIMUM 5% OF SEATING TO BE ACCESSIBLE

NOTE:

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CONSULTANTS

PROJECT NAME

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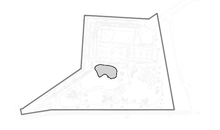


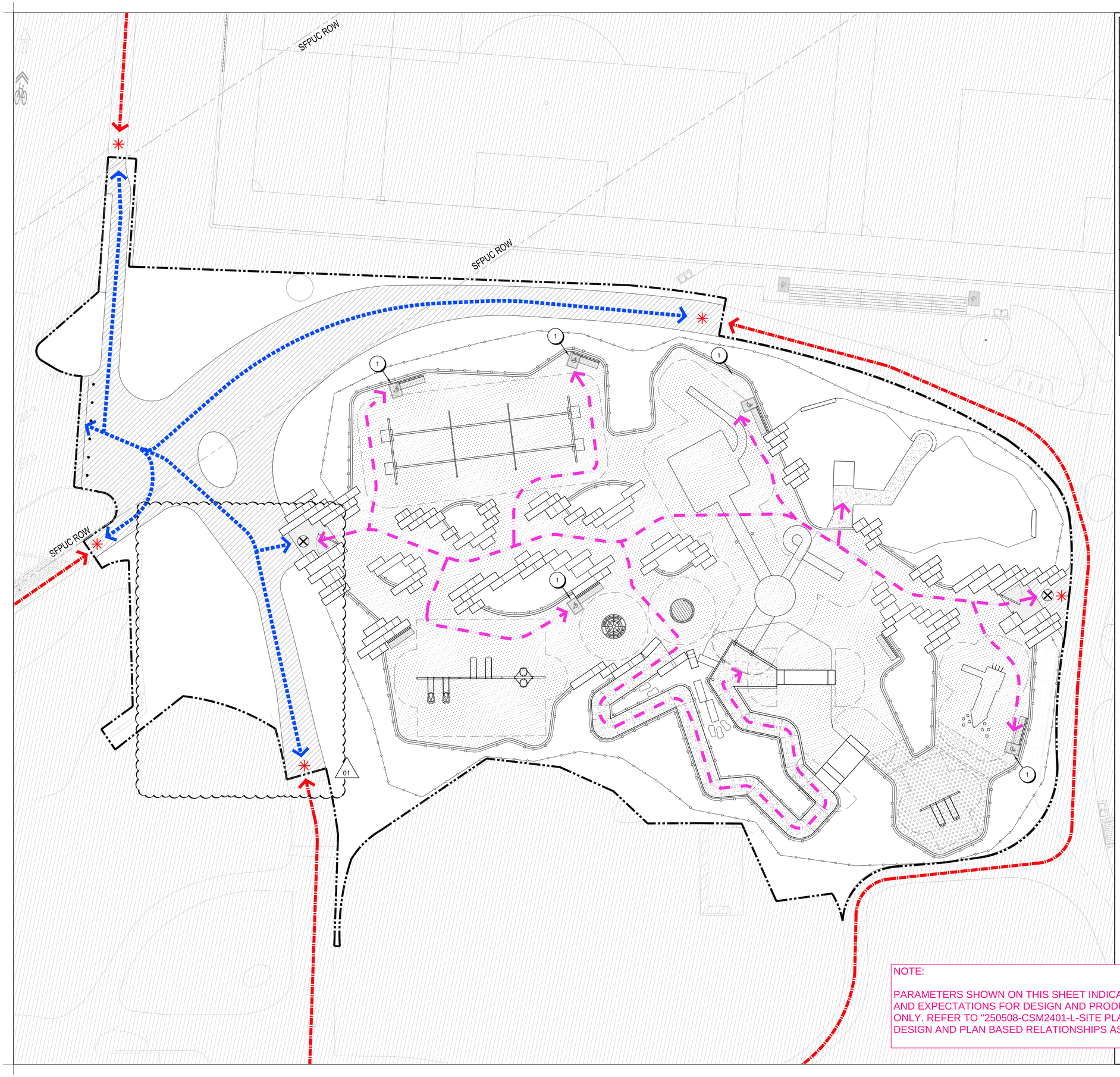
SHEET TITLE

ADA ACCESSIBILITY SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

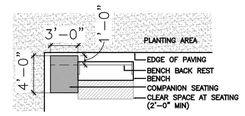
G0-300



ACCESSIBILITY SCHEDULE	
TAG	DESCRIPTION
1	BENCH COMPANION SEATING

ACCESSIBILE ROUTES	
SYMBOL	DESCRIPTION
	ACCESSIBLE ROUTE
	EXISTING PATHWAY
	ACCESSIBLE PLAY ROUTE
	CONNECTION TO EXISTING CIRCULATION
	ACCESSIBLE ENTRY

ADA TYP COMPANION SEATING



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1"=10'
0 2.5 5 10 20

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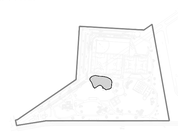

SHEET TITLE

ADA ACCESSIBILITY
OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

G0-310

MATERIALS SCHEDULE

PAVING

TAG	SYMBOL	TYPE	DETAIL	SPEC	MANUFACTURER	PRODUCT	NOTES/DESCRIPTION
P1		AC PAVING	3/L6–101	311216	EDGE RESTRAINT: PERMALOC	ASPHALTEDGE ALUMINUM ASPHALT RESTRAINT	ASPHALTEDGE DEPTH: 3", COLOR: BLACK DURAFLEX
P2		~~ASP –VE~~ NOT USED	3/L6–101	311216	EDGE RESTRAINT: PERMALOC	ASPHALTEDGE ALUMINUM ASPHALT RESTRAINT	NOT USED ~~OR: BLACK DURAFLEX~~
P3A		DONOR RECOGNITION PAVERS	––	––	POLAR ENGRAVING & TRICIRCLE PAVERS	12"X12" ENGRAVED PAVER	COLOR: TBD OWNER FURNISHED & CONTRACTOR INSTALLED, INSTALLATION TO BE PERMEABLE FOR STORMWATER
P3B		CIP CONCRETE PAVING	4/L6–101	321313	––	CIP CONCRETE	COLOR: NATURAL GRAY FINISH: MEDIUM BROOM
P4		CONCRETE CURB	––	––	––	CIP CONCRETE	COLOR: NATURAL GRAY; FINISH: MEDIUM BROOM; JOINTS: EJ'S TO BE 1/4" THICK EVERY ~20' O.C. AND ALIGNED WITH GRADE BREAKS, USE #4 X 12" SLIP DOWELS, EJ MATERIAL, BOND BREAKER, JOINT SEALE SANDED EJS; CONTROL JOINTS NOT NEEDED
P5		PLAYSURFACING – TYPE 1	1/L6–102	321316.13	TOT TURF	TPV	POURED–IN–PLACE RUBBER SURFACING: INSTALL PER MANUFACTURER'S RECOMMENDATIONS; ASSUME MIN (3) COLOR FIELDS COMPOSED OF BLENDS CONSISTING OF 3 COLORS, THE EXTENT OF COLOR FIELDS AND BLEND PERCENTAGES ARE TO BE PER DESIGN CRITERIA AND REVIEWED WITH DESIGN ARCH.
P6		PLAYSURFACING – TYPE 2	6/L6–102	321816.13	FIBAR	FIBAR SYSTEM 112	FIBAR EWF W/ FIBAR FELT; PROFILE: 12" FIBAR OVER FIBAR FELT
P7		FLAGSTONE PAVING	1/L6–103	321441	LYNGSO	SILVER QUARTZITE FLAGS	ADD/ALT: PROVIDE SAMPLES FOR REVIEW AND APPROVAL ACCORDING TO SPECIFICATIONS SIZES: PER DETAILS SETTING BED: PER DETAILS AND SPECIFICATIONS, JOINT SAND PER SPECIFICATIONS. MORTAR SETTING AT PLANTING: PER DETAILS AND SPECIFICATIONS.
P8		WOOD CHIP MULCH	––	329400	––		3" DEEP, WOOD CHIPS TO BE PROVIDED BY OWNER VIA FREE ARBOR–CHIP–DROP. CONTRACTOR TO COORDINATE WITH NATALIE KRUG, COUNTY ARBORIST. CONTRACTOR TO INSTALL WOOD CHIPS.

SITE ELEMENTS

TAG	SYMBOL	TYPE	DETAIL	SPEC	MANUFACTURER	PRODUCT	NOTES/DESCRIPTION
S1		CANYON THRESHOLD	L6–201	323900			SEE SCHEDULE STONE ON SHEET L6–200 FOR MORE INFORMATION
S2		CANYON STONE	L6–203	323900			SEE SCHEDULE STONE ON SHEET L6–200 FOR MORE INFORMATION
S3		~~CAN RE~~ NOT USED		323900			NOT USED
S4		STONE LANDSCAPE ELEMENTS	L6–204 AND DETAIL 6/L6–208	323900			SEE SCHEDULE STONE ON SHEET L6–200 FOR MORE INFORMATION
S5		~~TAC~~ NOT USED		323900			~~S~~ NOT USED ~~FET~~ L6–200 FOR MORE INFORMATION
S6		STONE SEATING		323900			SEE SCHEDULE STONE ON SHEET L6–200 FOR MORE INFORMATION, BID ADD–ALT
S7		RETAINING WALL AT TOWER BRIDGE LANDING	L6–211	033300	––	CIP CONCRETE	COLOR: NATURAL GRAY FINISH: BOARD FORM, NO VISIBLE FORM TIE LOCATIONS
S8		WOOD DECK & STAGE	L6–221	061533	––	2X6 REDWOOD DECK 4X6 WOOD CURB AT EDGES	ADD/ALT. COUNTER–SUNK, SS HARDWARE; CLEAR–COAT, NON–TOXIC, SLIP–RESISTANT FINISH ASSUME: (16) 18" WIDE X 3' DEEP CONC. PIERS W/ #4 REBAR @ 6" OC VERT. & 12" OC HORIZ., W/ SIMPSON GALV. PIER ATTACHMENTS
S9A		PLAYGROUND FENCE	––	061063	FLW INTERNATIONAL	SAND & SNOW FENCE	3' TALL, CEDAR, NATURAL FINISH, 13–GAUGE GALVANIZED STEEL WIRE MOUNTED TO 3"–DIAM. POINTED PINE LODGE POLES DIRECT BURIED INTO GROUND @ 5'–0" O.C. CONT.; LAYOUT OF FENCE TO BE REVIEWED BY DESIGN ARCH PRIOR TO AND DURING CONSTRUCTION
S9B		PLANTING FENCE	––		––	––	3" DIAM. PINE POSTS 4' TALL W/ 24" ABOVE FG. FLAT TOPS W/ EASED EDGES @ 3–5' OC CONT. DRILL 3/4" HOLE 3" BELOW TOP OF POST. STRETCH 1/2" MANILLA ROPE BETWEEN POSTS & BALL KNOT @ END, LAYOUT OF FENCE TO BE REVIEWED BY DESIGN ARCH PRIOR TO AND DURING CONSTRUCTION
S10		PLAYGROUND GATE	––	061063	––	––	SINGLE SWING, GALVANIZED METAL POSTS & GRATE FRAME WITH WOOD CLADDING AND HEAVY DUTY SS HINGES. SS GATE HANDLE HARDWARE TO BE ACCESSIBLE–COMPLIANT.
S11		WOOD LANDSCAPE ELEMENTS	––	329450	––	SALVAGE LOGS	SIZES VARY; TO BE EMBEDDED IN GROUND, PROVIDED BY OWNER (CONTACT ROGELIO CASTANDA) AND BE OF SOUND QUALITY WITH NO ROT OR INCIPIENT ROT & INSTALLED BY CONTRACTOR.
S12		WASTE RECEPTACLES	2/L6–241	323300	BEAR SAVER	HA2–PX	DOUBLE TRASH/RECYCLING LABELS, COLOR: FIR GREEN, S.S. PADLOCK HASP. CONTRACTOR TO LOCATE WITHIN PLAYGROUND OUTSIDE OF FALL ZONES.
S13		BENCH	1/L6–241	323300	STREETLIFE	ROUGH & READY L6 BENCHES	LINKED LENGTHS PER PLAN, HIGH BACKREST, GALV. STEEL BASE, ACCOYA WOOD, CENTRAL SS ARM RESTS ONLY.
S14		REMOVABLE BOLLARDS	4/L6–251	––	STREETLIFE	ROUGH & READY BOLLARD 30" TALL BOLR (REMOVABLE)	ACCOYA WOOD WITH GALVANIZED STEEL; PRODUCT AND FOOTING DESIGN TO BE REVIEWED AND APPROVED BY SFPUC
S14		DRINKING FOUNTAIN	3/L6–251	––	MOST DEPENDABLE FOUNTAINS (MDF)	MODEL 10145SMSS	COLOR: GREEN, FOUNTAIN TO INCLUDE DOMESTIC WATER & DRYWELL CONNECTION. CONTRACTOR TO LOCATE WITHIN PLAYGROUND OUTSIDE OF FALL ZONES ALONG PERIMTER OF PLAYGROUND

PLAY EQUIPMENT

TAG	SYMBOL	TYPE	DETAIL	SPEC	MANUFACTURER	PRODUCT	NOTES/DESCRIPTION
SEE PLAY EQUIPMENT SHEET L1–101 FOR REFERENCE							

GENERAL NOTES

1. EXISTING PAVING/STRUCTURES NOT NOTED FOR DEMOLITION TO REMAIN PROTECTED DURING CONSTRUCTION
2. ALL PRODUCTS SPECIFIED BY SPECIFIC PRODUCT OR MANUFACTURER MAY BE SUBSTITUTED FOR APPROVED EQUAL, PENDING CONFORMANCE TO SPECIFICATIONS AND LANDSCAPE ARCHITECT REVIEW AND APPROVAL.
3. REFER TO L1–600 SERIES UNDERSTORY PLANTING PLANS FOR CLEARING AND GRUBBING REQUIRED FOR LANDSCAPE IMPROVEMENTS.

REUSE OF EXISTING AGGREGATE BASE MATERIAL

1. EXISTING AGGREGATE BASE ROCK& SITE SPOILS MAY BE STOCKPILED AND REUSED PENDING FIELD REVIEW AND TESTING AS DIRECTED BY THE GEOTECHNICAL ENGINEER; SEE SUPPLEMENTAL GEOTECHNICAL LETTER. REUSE OF SPOILS FOR GRADING OR HILL FEATURE MUST ACCOUNT FOR MIN 18" OF PLANTING SOIL.
2. EXISTING BASE MATERIAL IS NOT SUITABLE FOR REUSE BENEATH SITE PAVING. ALL EXISTING BASE MATERIAL BELOW EXISTING PAVING IS TO BE REMOVED AND DISPOSED OF. SEE SUPPLEMENTAL REPORT BY CORNERSTONE EARTH GROUP.

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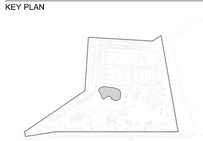

SHEET TITLE

MATERIALS SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-100

PLAY EQUIPMENT SCHEDULE

PLAY EQUIPMENT

TAG	DESCRIPTION	MANUFACTURER	QUANTITY / MODEL	FALL HEIGHT	INSTALLATION NOTES	IMAGE
PL1A PL1C	TOWER STRUCTURE	BERLINER CONTACT SPEC PLAY	USP.09047–4 CONTACT SPEC PLAY	VARIES	PLAY FEATURE CUSTOM FABRICATED BY BERLINER PLAY EQUIPMENT. THE CUSTOM PLAYGROUND ELEMENT IS TO BE SOLE–SOURCED & INSTALLED BY SPEC (SPECIFIED PLAY EQUIPMENT CO.) INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED CONTACT DAVID YOSSO, 800.475.1071; INFO@SPECPLAY.COM NO KNOWN EQUAL.	
PL1B	TOWER BRIDGE, W/ METAL TRANSITION PLATE CONTRACTOR TO PROVIDE ACCESSIBLE METAL TRANSITION PLATE BETWEEN CIP PATHWAY & TOWER BRIDGE.	BERLINER CONTACT SPEC PLAY	USP.09047–4 CONTACT SPEC PLAY	VARIES	PLAY FEATURE CUSTOM FABRICATED BY BERLINER PLAY EQUIPMENT. THE CUSTOM PLAYGROUND ELEMENT IS TO BE SOLE–SOURCED & INSTALLED BY SPEC (SPECIFIED PLAY EQUIPMENT CO.) INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED CONTACT DAVID YOSSO, 800.475.1071; INFO@SPECPLAY.COM NO KNOWN EQUAL.	
PL2	ZIPLINE	LANDSCAPE STRUCTURES	ZIPKROOZ (2) BAY, 50' ZIPLINE, 195507 (1) STANDARD ZIPLINE (1) MOLDED BUCKET ZIPLINE SEAT	VARIES	INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED	
PL3A	SWING BANK	LANDSCAPE STRUCTURES	3–BAY, 4 SWING FEATURE: (1) FRIENDSHIP SWING: 237296 / 237297 (1) ACCESSIBLE SWING: 177351 MOLDED BUCKET SEAT W/ HARNESS (2) STD. SWINGS: 174018 BELT SEAT	VARIES	INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED	
PL3B	SWING BANK – TOTS	LANDSCAPE STRUCTURES	1–BAY, 2 SWING FEATURE: (1) 177332 SINGLE POST SWING (2) HALF NUCKET SEATS FOR TOTS, 177349	VARIES	INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED	
PL4	LOGS FOR TOTS	DUNCAN AND GROVE CONTACT SPEC PLAY	RUSTIC CLIMBING FRAME NO.3 CF.RU.03.2 W/ TRANSFER HANDLE BAR PER MANUF.	VARIES	INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED	
PL5A	SPINNER – ACCESSIBLE CAROUSEL	DUNCAN & GROVE CONTACT SPEC PLAY	(1) RA.1.02	VARIES	INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED INSTALLATION TO INCLUDE SPEED GOVERNORS AS REQUIRED TO CONFORM WITH FALL ZONE REQUIREMENTS	
PL5B	SPINNER	BERLINER CONTACT SPEC PLAY	(1) HODGEPODGE O'TANNEBAUM 3.1 90.340.097			
PL6	NET PLAY FEATURES (BELOW BRIDGE, PL1B)	BERLINER CONTACT SPEC PLAY	USP.09047–4 CONTACT SPEC PLAY	VARIES	PLAY FEATURE CUSTOM FABRICATED BY BERLINER PLAY EQUIPMENT. THE CUSTOM PLAYGROUND ELEMENT IS TO BE SOLE–SOURCED & INSTALLED BY SPEC (SPECIFIED PLAY EQUIPMENT CO.) INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED CONTACT DAVID YOSSO, 800.475.1071; INFO@SPECPLAY.COM NO KNOWN EQUAL.	
PL7	QUIET HUT	EARTHSCAPE	ALPINE PLAY HUT (ASTM F1487)	VARIES		
PL8A PL8B	METAL SLIDES	BERLINER CONTACT SPEC PLAY	EMBANKMENT SLIDES: (1) STD METAL EMBANKMENT SLIDE (1) USP09168 CUSTOM SLIDE W/ DIGNITY LANDING	VARIES	PLAY FEATURE CUSTOM FABRICATED BY BERLINER PLAY EQUIPMENT. THE CUSTOM PLAYGROUND ELEMENT IS TO BE SOLE–SOURCED & INSTALLED BY SPEC (SPECIFIED PLAY EQUIPMENT CO.) INSTALLER MUST SPECIALIZE IN PERFORMING WORK WITH >3 YEARS DOCUMENTED EXPERIENCE ALL CREW LEADERS SHALL BE CPSI CERTIFIED CONTACT DAVID YOSSO, 800.475.1071; INFO@SPECPLAY.COM NO KNOWN EQUAL.	
PL9	AUDITORY PLAY EQUIPMENT	PERCUSSION PLAY	EMPEROR CHIMES	VARIES	LOCATION SHOWN ON PLANS IS FOR REFERENCE ONLY. ARCHITECT OF RECORD TO DEVELOP LOCATION AND LAYOUT FOR CHIMES INTEGRATED INTO SITE PLAN. DESIGN ARCHITECT TO REVIEW.	

01

GENERAL NOTES:

1. PLAY AREAS AND EQUIPMENT IS TO BE INSPECTED BY A CERTIFIED PLAY AREA INSPECTOR (CPSI) AND THAT A COMPLIANCE REPORT BE PROVIDED TO OWNER, CONTACT NICHOLAS CALDERON & LISA DI LORENZO @ SAN MATEO COUNTY PARKS.
   1.1. CONTACT: CHRIS TAIT, BSAFEINSPECTION, ADMIN@BSAFEINSPECTION.COM, 916.850.5071; OR APPROVED EQUAL.
2. ALL FOOTINGS REQUIRE STRUCTURAL ENGINEERING, TO BE PROVIDED BY CONTRACTOR AND COORDINATED WITH EQUIPMENT MANUFACTURER.
3. ARCHITECT OF RECORD IS TO CONFIRM FALL ZONES IN RELATION TO SITE PLAN AND PAVING PROFILES IN RELATION TO FALL HEIGHT

01

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OWNER/CLIENT

COUNTY OF SAN MATEO PARKS
400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

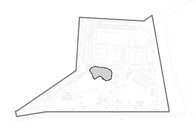
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN



SHEET TITLE

MATERIALS SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-101



NOTE:

PARAMETERS SHOWN ON THIS SHEET INDICATE GENERAL REQUIREMENTS AND EXPECTATIONS FOR DESIGN AND PRODUCT SELECTION FOR REFERENCE ONLY. REFER TO "250508-CSM2401-L-SITE PLAN-FINAL VE" DOCUMENT FOR ALL DESIGN AND PLAN BASED RELATIONSHIPS AS THE BASIS OF DESIGN.

1"=10'
0 5 10 20

MATERIALS SCHEDULE

01

PAVING

TAG	SYMBOL	TYPE	DETAIL
P1		AC PAVING	3/L6–101
P2		~~ASF –VE~~ NOT USED	3/L6–101
P3A		DONOR RECOGNITION PAVERS	––
P3B		CIP CONCRETE PAVING	4/L6–101
P4		CONCRETE CURB	––
P5		PLAYSURFACING – TYPE 1	1/L6–102
P6		PLAYSURFACING – TYPE 2	6/L6–102
P7		FLAGSTONE PAVING	1/L6–103
P8		WOOD CHIP MULCH	––

SITE ELEMENTS

TAG	SYMBOL	TYPE	DETAIL
S1		CANYON THRESHOLD	L6–201
S2		CANYON STONE	L6–203
S3		~~CAN RET~~ NOT USED	
S4		STONE LANDSCAPE ELEMENTS	L6–204 AND DETAIL 6/L6–208
S5		~~TAC~~ NOT USED	
S6		STONE SEATING	
S7		~~RET~~ NOT USED	ALL
S8		WOOD DECK & STAGE	L6–221
S9A		PLAYGROUND FENCE	––
S9B		PLANTING FENCE	––
S10		PLAYGROUND GATE	––
S11		WOOD LANDSCAPE ELEMENTS	––
S12		WASTE RECEPTACLES	2/L6–241
S13		BENCH	1/L6–241
S14		REMOVABLE BOLLARDS	4/L6–251
S14		DRINKING FOUNTAIN	3/L6–251

PLAY EQUIPMENT

TAG	SYMBOL	TYPE	DETAIL
SEE PLAY EQUIPMENT SHEET L1–101 FOR REFERENCE			

02

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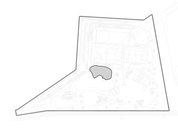


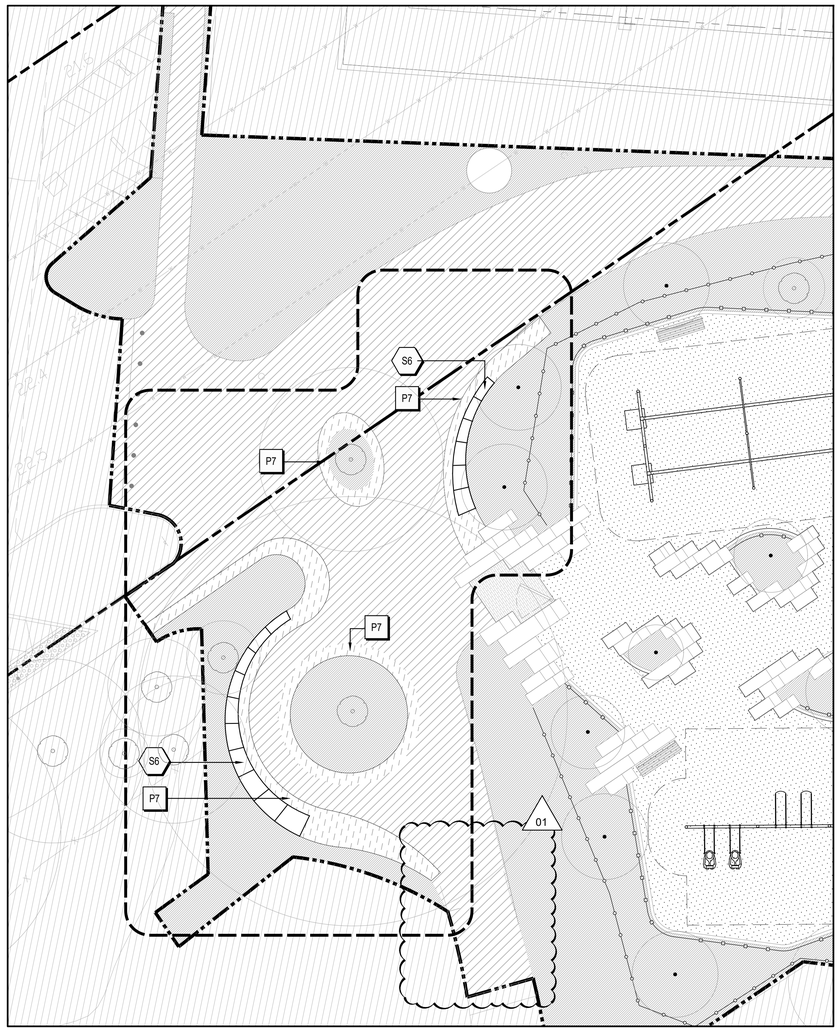
SHEET TITLE

MATERIALS
OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-110



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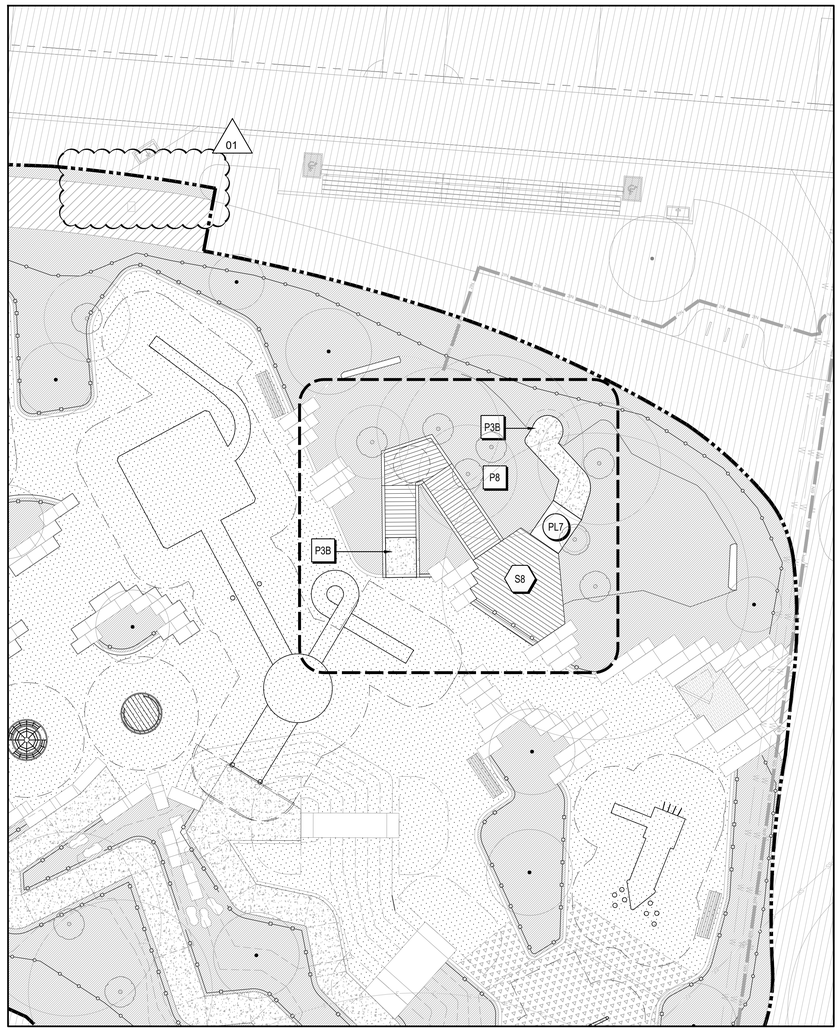

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MATERIALS SCHEDULE

PAVING

TAG	SYMBOL	TYPE	DETAIL
P1		AC PAVING	3/L6–101
P2		ASF –VE NOT USED	3/L6–101
P3A		DONOR RECOGNITION PAVERS	––
P3B		CIP CONCRETE PAVING	4/L6–101
P4		CONCRETE CURB	––
P5		PLAYSURFACING – TYPE 1	1/L6–102
P6		PLAYSURFACING – TYPE 2	6/L6–102
P7		FLAGSTONE PAVING	1/L6–103
P8		WOOD CHIP MULCH	––

SITE ELEMENTS

TAG	SYMBOL	TYPE	DETAIL
S1		CANYON THRESHOLD	L6–201
S2		CANYON STONE	L6–203
S3		CA RE NOT USED	
S4		STONE LANDSCAPE ELEMENTS	L6–204 AND DETAIL 6/L6–208
S5		AC NOT USED	
S6		STONE SEATING	
S7		RE NOT USED	ALL
S8		WOOD DECK & STAGE	L6–221
S9A		PLAYGROUND FENCE	––
S9B		PLANTING FENCE	––
S10		PLAYGROUND GATE	––
S11		WOOD LANDSCAPE ELEMENTS	––
S12		WASTE RECEPTACLES	2/L6–241
S13		BENCH	1/L6–241
S14		REMOVABLE BOLLARDS	4/L6–251
S14		DRINKING FOUNTAIN	3/L6–251

PLAY EQUIPMENT

TAG	SYMBOL	TYPE	DETAIL
SEE PLAY EQUIPMENT SHEET L1–101 FOR REFERENCE			

NOTE:

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1"=10'
0 2.5 5 10 20

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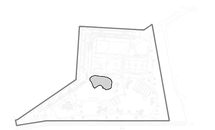

SHEET TITLE

MATERIALS
OVERALL PLAN - BID ADD ALT

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-110B

STONE + BOULDERS

TAG	SYMBOL	DESCRIPTION	MANUFACTURER	PRODUCT	DETAIL	SIZE	INSTALLATION NOTES
S1		CANYON THRESHOLD	AMERICAN SOIL AND STONE HTTPS://WWW.AMERICANSOIL.COM JIM SPAHR / 415-990-2629 JIM@AMERICANSOIL.COM	SLAB PERMA STONE PERCENTAGE OF BLOCK AND BEAM TO BE DETERMINED BY THE DBE BASED ON HEIGHTS FROM FG AND EMBED DEPTHS OF EACH STONE TYPOLOGY	L6-201	SIZE VARIES; SIZES SHOWN IN PLANS ARE	SET PERPENDICULAR TO FINISHED SURFACE OF PAVING; ANGLE OF STONE LONGITUDINALLY VARIES, SEE DETAILS; HEIGHT VARIES, 3'-6' ABOVE FINISHED GRADE; EMBED 1/3 STONE MIN INTO COMPACTED BASE BELOW
S2		CANYON STONE			L6-203		SET PERPENDICULAR TO FINISHED SURFACE OF PAVING; ANGLE OF STONE LONGITUDINALLY IS APPX 30 DEGREES; HEIGHT VARIES, 3'-4' ABOVE FINISHED GRADE; EMBED 1/3 STONE MIN INTO COMPACTED BASE BELOW
S3		C NOT USED			--		
S4		STONE LANDSCAPE ELEMENTS			L6-204 AND DETAIL 6/L6-208		SET FLAT, EMBED 1/3 STONE MIN INTO COMPACTED BASE, HEIGHT VARIES, 14"-18" ABOVE FS, BUTT JOINTS BETWEEN STONE LANDSCAPE ELEMENTS, EASE EDGES WHERE NECESSARY
S5		T/ NOT USED			--		
S6		STONE SEATING			--	PER PLAN & DETAILS	ADD ALT; SET FLAT INTO COMPACTED BASE; CUSTOM CUT PER ADD/ALT PLAN, EASED EDGES

GENERAL NOTES

1. STONE SELECTION TO BE REVIEWED BY DESIGN LANDSCAPE ARCHITECT PRIOR TO ARRIVING ON SITE
2. ALL EDGES TO BE EASED AND FREE OF SHARP POINTS; 1/8" RAD. MIN
3. CONTRACTOR TO PROVIDE MINIMUM (1) MOCKUP OF EACH STONE TYPOLOGY FOR REVIEW AND APPROVAL BY DESIGN LANDSCAPE ARCHITECT PRIOR TO PROCEEDING WITH INSTALLATION.
5. APPROXIMATE LAYOUT SHOWN IN DRAWINGS IS FOR DESIGN INTENT ONLY. FINAL LAYOUT TO BE REVIEWED AND APPROVED BY DESIGN LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR MUST SUBMIT PROPOSED STONE LAYOUT AS A SHOP DRAWING BASED ON PROCURED STONE VOLUME AND DIMENSIONS, PRIOR TO FIELD REVIEW OF LAYOUT.
6. ALL STONE IS TO BE MINIMUM 6" OUTSIDE OF PLAY EQUIPMENT FALL ZONES.

NOTE:

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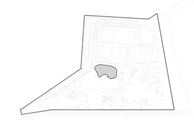

SHEET TITLE

STONE ELEMENTS
SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
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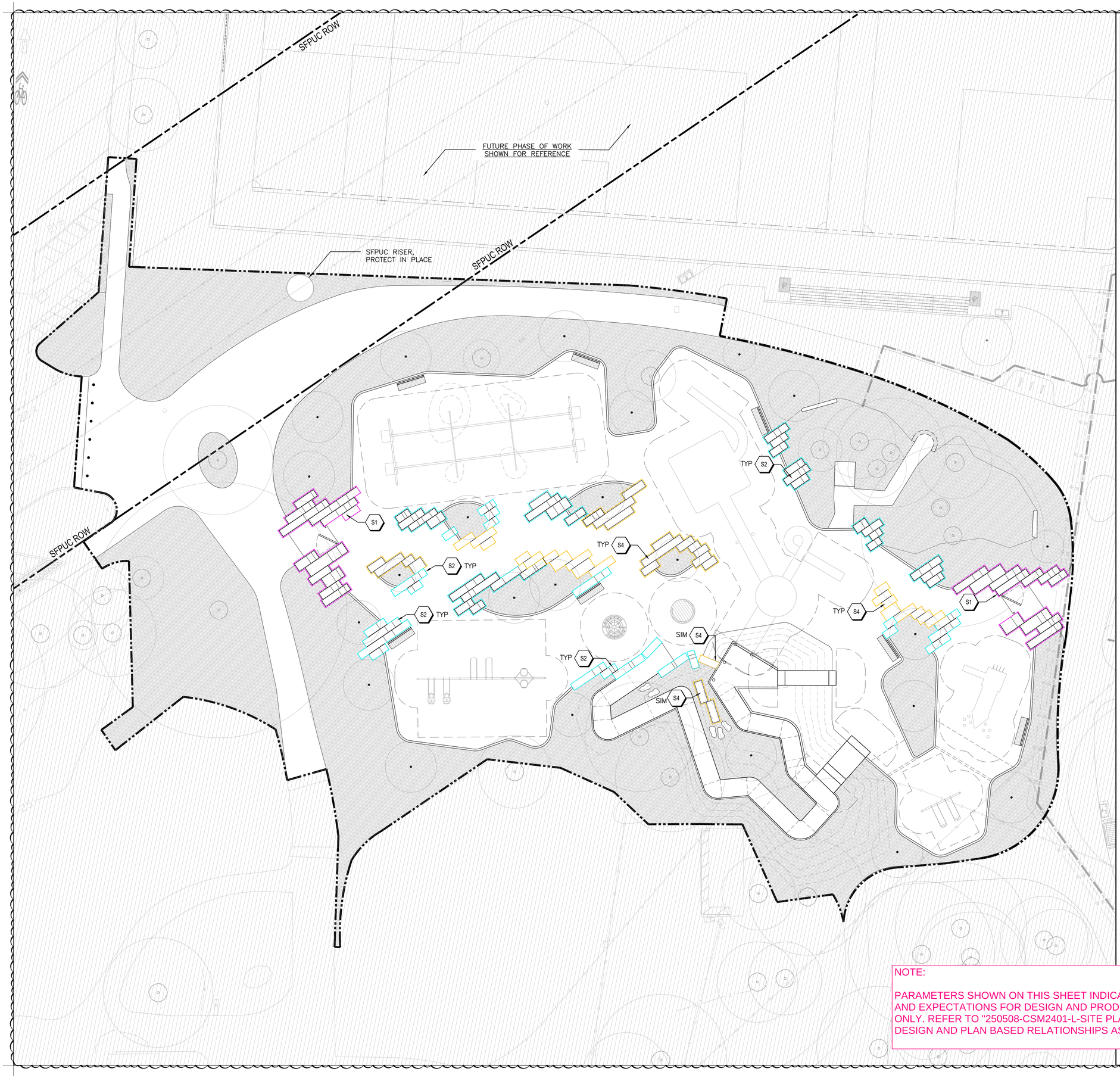
1"= 10'-0"	DG

SHEET NUMBER

L1-130



STONE + BOULDERS 01

TAG	SYMBOL	DESCRIPTION
S1		CANYON THRESHOLD
S2		CANYON STONE
S3		NOT USED
S4		STONE LANDSCAPE ELEMENTS
S5		NOT USED
S6		STONE SEATING

NOTE:

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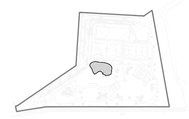

SHEET TITLE

STONE ELEMENTS OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-140

LAYOUT LEGEND



DIMENSION



ANGLE



ARC LENGTH



RADIUS



ALIGN

STAKING – CONTROL POINT

LINE OF ALIGNMENT

LAYOUT NOTES:

1. LAYOUT DRAWINGS PROVIDE GENERAL CLEAR AREA REQUIREMENTS. CONTRACTOR IS REQUIRED TO UPDATE PER FINALIZED DESIGN – INCLUDING SFPUC ACCESS REQUIREMENTS FROM REMOVABLE BOLLARDS TO SFPUC RISER FOR BOTH LAYOUT AND LOADING. 01
2. EXTENT OF PAVING AND CURBS ARE TO BE VERIFIED BY ARCHITECT OF RECORD AND CONTRACTOR IN RELATION TO EXISTING TREES AND REQUIRED OFFSETS PER COUNTY ARBORIST.
3. SEE CIVIL DRAWINGS FOR PARKING LOT IMPROVEMENTS, CURB AND GUTTER LAYOUT, AND, CURB RAMP LAYOUT. CONFIRM LOCATION OF CURB RAMP OPENINGS PRIOR TO PLACING PATHS.
4. LANDSCAPE ARCHITECT TO PROVIDE CAD FILE FOR STAKING OF HORIZONTAL AND GRADING CONTROL POINTS ACCORDING TO PLANS.
5. CONTRACTOR SHOULD ASSUME THAT ALL TANGENT POINTS ALONG EDGES OF PAVING AND INTERMEDIATE POINTS BETWEEN TANGENT POINTS AT SPACING NO GREATER THAN 10' ARE TO BE SURVEYED AND STAKED FOR REVIEW AND APPROVAL BY BOTH THE DESIGN LANDSCAPE AND LANDSCAPE ARCHITECT OF RECORD PRIOR TO EXCAVATION FOR IMPROVEMENTS. 01
6. FOLLOWING PRELIMINARY REVIEW AND APPROVAL OF SITE LAYOUT, STAKE THE FINAL LAYOUT OF PAVING AND SPRAY MARK TRANSITIONS BETWEEN CONTROL POINTS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PAVING EDGING OR FORM WORK.
7. ALL TRANSITIONS BETWEEN CONTROL POINTS SHALL BE SMOOTH AND CONTINUOUS AS INDICATED IN PLANS.
8. REFER TO GRADING AND DRAINAGE NOTES FOR ADDITIONAL STAKING REQUIREMENTS.
9. NOTE KEY ALIGNMENTS BETWEEN EXISTING CONDITIONS AND PROPOSED IMPROVEMENTS. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.

NOTE:

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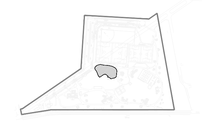


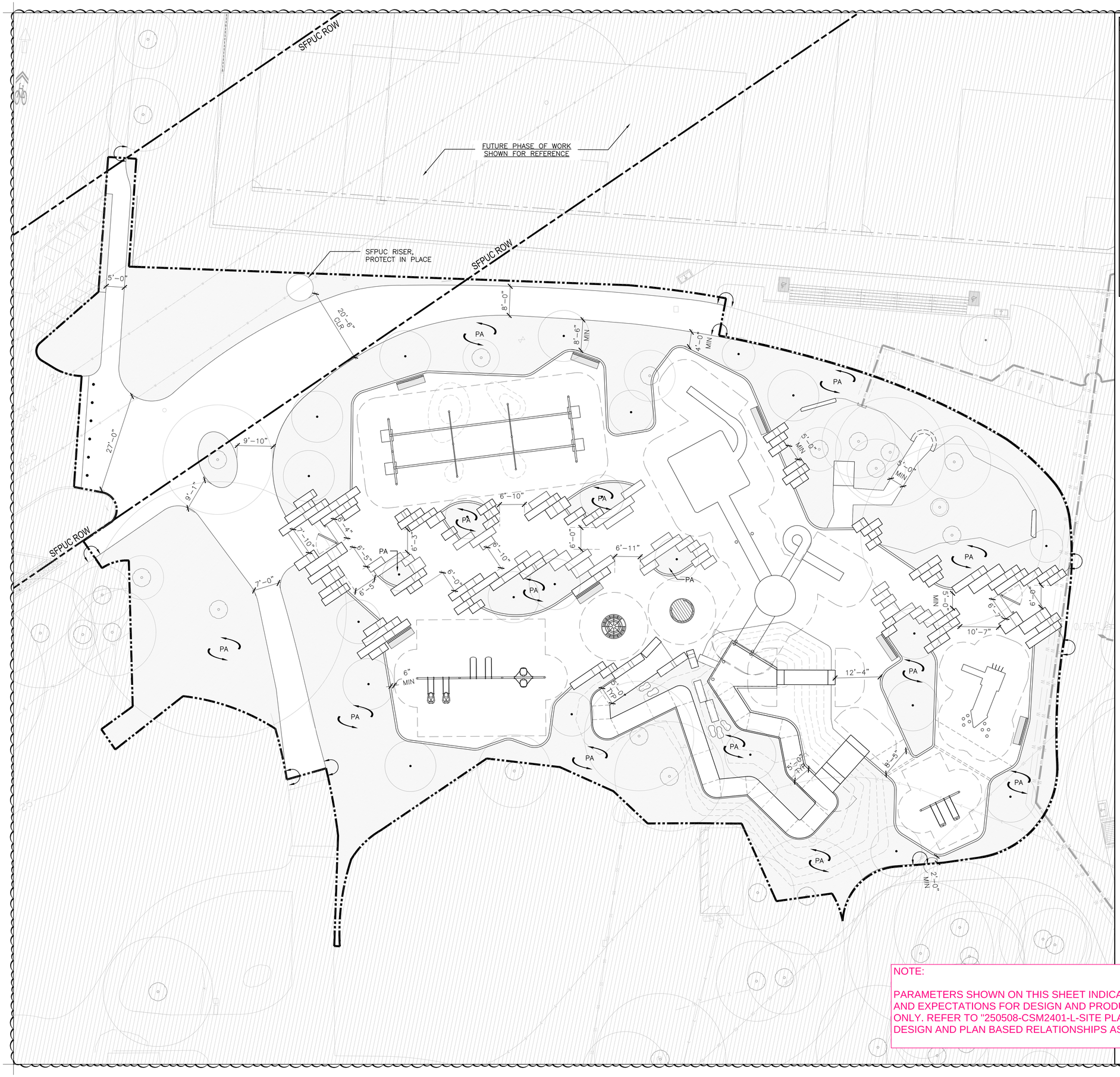
SHEET TITLE

HORIZONTAL CONTROL + LAYOUT
SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-200



LAYOUT LEGEND 01

- 1'-0" — DIMENSION
- 50° — ANGLE
- 1'-1¼" — ARC LENGTH
- R6" — RADIUS
- ALIGN
- STAKING – CONTROL POINT
- LINE OF ALIGNMENT

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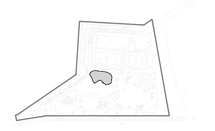

SHEET TITLE

HORIZONTAL CONTROL + LAYOUT

OVERALL PLAN

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1"= 10'-0"	AMP

SHEET NUMBER

L1-210

GRADING & DRAINAGE SCHEDULE

TAG	SYMBOL	TYPE	NOTES/DESCRIPTION
	4.8%	SLOPE	
	(FS XX.XX)	SPOT ELEVATION	
		GRADE BREAK	ALL GRADE BREAKS SHOWN IN PAVING AREAS ARE INTENDED TO SHOW HIGH AND LOW POINTS. TRANSITIONS SHALL BE SMOOTH AND CONTINUOUS.
	XX.X	1'–0" CONTOUR	
		EXTENT OF TRANSITION GRADING	MARKS THE APPROXIMATE EDGE OF CONFORM GRADING FROM PAVING TO (E) GRADE TYPICAL

GRADING AND DRAINAGE NOTES

1. GRADING DESIGN IS SHOWN FOR REFERENCE ONLY AND OUTLINES GENERAL STRATEGY FOR HANDLING DRAINAGE AND ACCESSIBLE ACCESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FINALIZE GRADING RELATIVE TO CONFORMS, ACCESSIBILITY, AND STORMWATER AND/OR C3 REQUIREMENTS.
2. ALL SITE WORK SHALL BE IN CONFORMANCE WITH TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE (2016 CALIFORNIA BUILDING CODE), THE AMERICANS WITH DISABILITIES ACT (ADA), THE 2010 ADA ACCESSIBILITY STANDARDS FOR ACCESSIBLE DESIGN, THE COUNTY OF SAN MATEO PUBLIC WORKS CODE AND THE SAN MATEO PUBLIC WORKS CURB RAMP STANDARDS, DPW ORDERS (TO BE PROVIDED).
3. REFER TO FLOOD PARK PHASE 1 CIVIL DRAWINGS FOR ALL ROADWAY AND PARKING IMPROVEMENT GRADING INCLUDING ALL CURBS AND CURB RAMPS. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN LANDSCAPE GRADES AND CIVIL GRADES.
4. EARTHWORK: CUT AND FILL INCLUDING ALL TRENCHING SPOILS SHALL BE BALANCED ON SITE. THE CONTRACTOR SHALL REVIEW THE PLANS AND MAKE AN ASSESSMENT OF THE EARTHWORK BALANCE. CONTRACTOR SHALL PREPARE BIDS SO AS TO INCLUDE ANY IMPORT TOPSOIL REQUIRED TO PROVIDE TRANSITIONS BETWEEN PROPOSED IMPROVEMENTS AND EXISTING GRADES AT A SLOPE OF 10:1 OR GREATER. IF CUT EXCEEDS FILL REQUIREMENTS, THE CONTRACTOR SHALL IDENTIFY THE QUANTITY OF EXCESS AND THE LANDSCAPE ARCHITECT SHALL PROVIDE A DESIGN FOR SMALL MOUNDS LOCATED THROUGHOUT THE PARK FOR PLACEMENT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO PROJECT EARTHWORK EXCESS OR SHORTAGE.
5. EXISTING TOPSOIL AND SUBSOILS EXCAVATED FOR SITE IMPROVEMENTS AND UTILITY TRENCHES SHALL BE STOCKPILED ON–SITE FOR REUSE.
6. IF IMPORT MATERIAL IS REQUIRED FOR NON–EXPANSIVE FILL IT SHALL MEET THE REQUIREMENTS OF THE EARTHWORK SPECIFICATIONS AND GEOTECHNICAL REPORT. IF IMPORT TOPSOIL IS REQUIRED TO MEET PROPOSED FINISH GRADES IT SHALL MEET THE REQUIREMENTS OF THE SOIL PREPARATION SPECIFICATION.
7. REFER TO THE L1–600 UNDERSTORY PLANTING SERIES FOR CLEARING AND GRUBBING AND PLANTING SOIL REQUIREMENTS.
8. ALL CONTROL POINTS IDENTIFIED IN THE PLANS SHALL BE SURVEYED AND STAKED FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION FOR IMPROVEMENTS.
9. FOLLOWING PRELIMINARY REVIEW AND APPROVAL, STAKE THE FINAL LAYOUT OF PAVING/IMROVEMENTS AND SPRAY MARK TRANSITIONS BETWEEN CONTROL POINTS FOR REVIEW BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PAVING EDGING OR FORM WORK.
10. TRANSITIONS BETWEEN GRADES SHOWN IN PLANS SHALL BE SMOOTH AND CONTINUOUS.
11. ALL GRADES REFER TO FINISH PAVING GRADES UNLESS OTHERWISE NOTED.
12. LANDSCAPE ARCHITECT TO REVIEW AND APPROVE FINISH GRADING OF ALL PLANTING AREAS PRIOR TO INSTALLATION OF IRRIGATION AND PLANTING.
13. THE CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPE AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, LANDSCAPE, GRADING, ETC., AND TO AVOID ANY ABRUPT OR APPARENT CHANGE IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS. PROVIDE A SMOOTH TRANSITION FROM LANDSCAPE AREAS TO NEW HARDSCAPE.
14. ALL CONFORMING GRADING AREAS TO BE CONFIRMED BY CONTRACTOR AND ANY DISCREPANCIES SHALL BE REVIEWED BY LANDSCAPE ARCHITECT TO ENSURE CODE COMPLIANCE.
15. UTILITY BOXES AND VAULT ELEVATIONS SHALL BE SET BASED ON ADJACENT GRADES. ADJACENT GRADES SHALL NOT BE WARPED TO CONFORM TO FIXTURES. LIDS OF ALL BOXES AND VAULTS ARE TO BE FLUSH WITH PAVING FS OR TOP OF MULCH. 01
16. PERCOLATION TESTS ARE TO BE CONDUCTED IN AREAS WHERE PERCOLATION AND WATER STORAGE ARE REQUIRED TO MEET SWPPP REQUIREMENTS. CONDUCT (3) ADDITIONAL PERCOLATION TESTS IN LOCATIONS SPREAD ACROSS SITE WHERE PLANTING AND TREES ARE TO BE PLANTED. SHOULD PERCOLATION TESTS INDICATE RATES THAT ARE INSUFFICIENT, DRY WELLS MAY BE REQUIRED. 02
17. CURBS ON ELEVATED PORTION OF THE SITE WERE PROVIDED FOR CODE COMPLIANCE ONLY AND CAN BE ELIMINATED SHOULD GRADING BE ADJUSTED TO MAKE THEM UNNECESSARY.
18. PLANTED SLOPES ARE NOT TO EXCEED 3:1. ADJUSTMENTS TO THE DESIGN WHERE FEASIBLE TO ACHIEVE THIS ARE TO BE REVIEWED WITH DESIGN ARCHITECT.

NOTE:

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OWNER/CLIENT

COUNTY OF SAN MATEO PARKS
400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

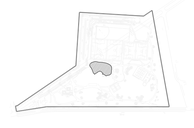
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25
02	BRIDGE DRAWINGS AMENDMENT	03.27.25

KEY PLAN



SHEET TITLE

GRADING + DRAINAGE SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-300

GRADING & DRAINAGE SCHEDULE		
TAG	SYMBOL	TYPE
	4.8%	SLOPE
	(FS XX.XX)	SPOT ELEVATION
		GRADE BREAK
	XX.X	1'-0" CONTOUR
		EXTENT OF TRANSITION GRADING

01

SFPUC ROW

SFPUC RISER, PROTECT IN PLACE

(FS 20.97) CONFORM

(FS 21.00) CONFORM

(FS 21.20) CONFORM

(FS 22.36) CONFORM

(FS 22.40) CONFORM

(FS 21.75)

(FS 22.10) CONFORM

(FS 22.50) CONFORM

(FS 22.40) CONFORM

(FS 22.63) EX TREE – REMOVED

(FS 22.40) EX TREE

(FS 21.86) CONFORM

(FS 24.19) EX TREE

(FS 24.83) EX TREE

(FS 25.49) EX TREE

(FS 25.42) EX TREE

(FS 22.99) EX TREE

(FS 23.26) EX TREE

(FS 22.94) EX TREE

(FS 22.71) EX TREE

(FS 22.97) EX TREE

(FS 22.70) EX TREE

(FS 24.25) EX TREE

(FS 24.35) EX TREE

(FS 23.49) EX TREE

(FS 23.50) MATCH

(FS 24.00) MATCH

(FS 23.00) MATCH

(FS 23.97) EX TREE

(FS 22.44) EX TREE

(FS 22.62) EX TREE

(FS 22.48) EX TREE

(FS 22.91) EX TREE

(FS 22.74) EX TREE

SWALE 22.70

SWALE 22.0

SWALE 21.50

NOTE:

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1"=10'
0 5 10 20

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

GRADING + DRAINAGE OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-310

SOILS SCHEDULE

GENERAL LANDSCAPE

TAG	SYM	SOIL TYPE	SOIL DEPTH	DETAIL	NOTES
S-1		AMENDED EXISTING TOPSOIL	12" AMENDED	--	EXISTING SOILS ARE EXPECTED TO BE AMENDED WITH GYPSUM ONLY BASED ON PRIOR SITE TESTING OUTSIDE THIS LOW. CONTRACTOR REMAINS RESPONSIBLE FOR PROCEEDING WITH TESTING REQUIREMENTS AS OUTLINED IN SPECIFICATION SECTION 329113. TESTS AND PROCEDURES OUTLINED WITHIN THAT SECTION WILL GOVERN SOIL AMENDMENT PROCEDURES AND PROTOCOLS AS CONFIRMED BY THE LANDSCAPE ARCHITECT.

TREE PLANTING

TAG	SYM	SOIL TYPE	SOIL DEPTH	DETAIL	NOTES
S-2		AMENDED EXISTING TOPSOIL	DEPTH OF TREE BOX / 36" MIN TOPSOIL	--	EXISTING SOILS ARE EXPECTED TO BE AMENDED WITH GYPSUM ONLY BASED ON PRIOR SITE TESTING OUTSIDE THIS LOW. CONTRACTOR REMAINS RESPONSIBLE FOR PROCEEDING WITH TESTING REQUIREMENTS AS OUTLINED IN SPECIFICATION SECTION 329113. TESTS AND PROCEDURES OUTLINED WITHIN THAT SECTION WILL GOVERN SOIL AMENDMENT PROCEDURES AND PROTOCOLS AS CONFIRMED BY THE LANDSCAPE ARCHITECT.

TREE PLANTING AT PAVING

TAG	SYM	SOIL TYPE	SOIL DEPTH	DETAIL	NOTES
S-3		STRUCTURAL SOIL MIX	48" APPROVED STRUCTURAL SOIL	--	

EXISTING SOIL

	SYM	SOIL TYPE		DETAIL	NOTES
S-E		EXISTING SOIL		--	CLEAR AND GRUB VEGETATION. DE-COMPACT SOILS WHERE UNDERSTORY SHRUB PLANTING IS OCCURRING. DE-COMPACTION OF SUBGRADE IS TO ABIDE BY ALL TPZ REQUIREMENTS AND/OR ADDITIONAL FIELD DIRECTION BY COUNTY ARBORIST. CONTRACTOR TO ASSUME DE-COMPACTION OF SUBGRADE WITHIN PLANTING AREAS IS TO OCCUR BY 6" DEEP RIP WITH TINES SPACED NO MORE THAN 12" OC APART. CROSS-RIP PERPENDICULAR TO INITIAL PASS. PLANTING SOIL IS TO BE SCARIFIED INTO EXISTING SUBGRADE THROUGH RIP & CROSS-RIP PROCESS OUTLINED ABOVE. PLACE SOIL IN LIFTS NOT EXCEEDING 6" TO BRING UP TO FG. 02

SUB SOIL PREPARATION NOTES

1. SOIL TESTING FOR HORTICULTURAL PURPOSES SHALL BE COMPLETED TO TEST BOTH SUB-GRADE AND TOPSOIL CONDITIONS FOR HORTICULTURAL SUITABILITY AND DEVELOPMENT OF THE SITE SOILS PLAN. THE SITE SOILS PLAN WILL INCLUDE A SOIL QUALITY CONTROL PROGRAM FOR TESTING AND VERIFICATION OF AMENDED AND IMPORT SOILS. PLANTING SOIL MIX SPECIFICATIONS SHALL BE MET BY AMENDMENT, CONDITIONING, IMPORTATION OF TOPSOIL OR A COMBINATION OF THESE.
2. PREPARE AND AMEND SUB-GRADE SOILS AS SPECIFIED.
3. REFER TO CIVIL SURVEY AND DEMO PLAN SHEETS FOR ALL EXISTING SITE FEATURES TO BE REMOVED

SOIL PREPARATION NOTES

1. PROJECT LANDSCAPE ARCHITECT TO PROVIDE CAD FILE FOR STAKING OF TREE PITS/CONTINUOUS TRENCHES.
2. REFER TO LANDSCAPE SOILS SPECIFICATIONS FOR TESTING AND QUALITY CONTROL REQUIREMENTS.
3. PRIMARY - ALL PLANTING SOILS TO BE HARVESTED FROM EXISTING PLANTING AREAS, STOCKPILED, AND AMENDED. SEE BELOW FOR PROCESS:

   A. HARVEST
   - SITE SOILS ARE HIGHLY UNEVEN AND SOILS SELECTED FOR STOCKPILE MUST MEET ALL REQUIREMENTS SET BY LANDSCAPE ARCHITECT AND SOIL SCIENTIST.
   - GRID OUT SITE INTO AREAS, APPROXIMATELY 400-500 SF EACH. SELECT BEST LOOKING SOILS WITHIN EACH GRID ZONE. SAMPLE AND TEST SELECTED SOILS PER TESTING RECOMMENDATIONS SET BY SOIL SCIENTIST.
   - AFTER TESTING TO CONFIRM SUITABILITY, HARVEST THE BEST SOILS.
   - STOCKPILE SELECTED SOILS. STOCKPILE CANNOT EXCEED 5-6' HIGH, AND MUST BE KEPT DRY.

   B. AMEND (ONCE READY FOR INSTALL)
   - SAMPLE AND TEST STOCKPILE PER RECOMMENDATIONS SET BY SOIL SCIENTIST.
   - AMEND PER RECOMMENDATIONS.
   - SAMPLE AND TEST UNTIL APPROVED BY LANDSCAPE ARCHITECT. THIS MAY REQUIRE MULTIPLE ROUNDS OF TESTING PRIOR TO APPROVAL.

   C. INSTALL
   - INSTALL AMENDED SOIL IN LANDSCAPE AREAS PER DETAILS.

4. ALTERNATE - IMPORT SOILS IN COMPLIANCE WITH PERFORMANCE REQUIREMENTS IN SPECIFICATIONS TO BE SOURCED AND APPROVED BY LANDSCAPE ARCHITECT.

NOTE:

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PHASE

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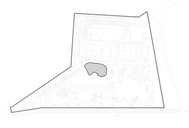
KEY PLAN



SHEET TITLE

SOILS
SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-400

SFPUC ROW

SFPUC RISER,
PROTECT IN PLACE

SFPUC ROW

SFPUC ROW

S-E

S-1

S-2

S-3

SOILS SCHEDULE

01

GENERAL LANDSCAPE

TAG	SYM	SOIL TYPE
S-1		AMENDED EXISTING TOPSOIL

TREE PLANTING

TAG	SYM	SOIL TYPE
S-2		AMENDED EXISTING TOPSOIL

TREE PLANTING AT PAVING

TAG	SYM	SOIL TYPE
S-3		STRUCTURAL SOIL MIX

EXISTING SOIL

	SYM	SOIL TYPE
S-E		EXISTING SOIL

NOTE:

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1"=10'
0 2.5 5 10 20

N

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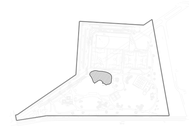


SHEET TITLE

SOILS OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

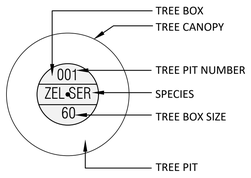
SHEET NUMBER

L1-410

TREE PLANTING SCHEDULE

SYMBOL	TAG	BOTANICAL NAME	COMMON NAME	Size	Spacing	WUCOLS	Form
	TREE SCHEDULE					**MED**	
01 XX XXX 60	QUE RUG	*Quercus rugosa*	*Netleaf Oak*	TBD	PER PLAN	Low	Standard
	QUE TOM	*Quercus tomentella*	*Channel Island Oak*	TBD	PER PLAN	Low	Standard
	NYS SYL	*Nyssa sylvatica*	*Black Tupelo*	TBD	PER PLAN	Med	Standard
	PIN CAN	*Pinus canariensis*	*Canary Island Pine*	TBD	PER PLAN	Low	Standard
	CED DEO	*Cedrus deodora*	*Deodar Cedar*	TBD	PER PLAN	Low	Standard
	ULM DRA	*Ulmus parvifolia 'Drake'*	*Drake Elm*	TBD	PER PLAN	Low	Standard
	CAR CAR	*Carpinus caroliniana*	*American Hornbeam*	TBD	PER PLAN	Med	Standard
	EUC SPA	*Eucalyptis spathulata*	*Swamp Mallet*	TBD	PER PLAN	Low	Standard
SYMBOL	**TAG**	**BOTANICAL NAME**	**COMMON NAME**	**Size**	**Spacing**	**WUCOLS**	**Form**
	EXISTING TREE SCHEDULE					**VARIES**	
*		*PER TREE SURVEY*	*PER TREE SURVEY*	*PER TREE SURVEY*	PER PLAN	VARIES	PER TREE SURVEY

TREE LEGEND - NEW



01

LANDSCAPE SOIL NOTES

1. SOIL TESTING IS REQUIRED OF BOTH SUB-GRADE AND TOPSOIL CONDITIONS FOR HORTICULTURAL SUITABILITY AND DEVELOPMENT OF THE SITE SOILS PLAN.

PLANTING NOTES

1. LANDSCAPE AREAS INCLUDE TREE MULCH RINGS FOR NEW TREES. PROVIDE MULCH RINGS AT ALL NEW AND EXISTING TREES PER DETAILS.
2. PROVIDE AN ALLOWANCE FOR ADDITIONAL PLANT MATERIAL TO ADDRESS FIELD ADJUSTMENTS DURING CONSTRUCTION AND REPLACEMENT DURING THE WARRANTY PERIOD. REFER TO SPECIFICATIONS FOR ALLOWANCE.
3. ARCHITECT OF RECORD TO CONFIRM NECESSARY CLEAR BRANCHING HEIGHT FOR TREES ADJACENT TO PLAY EQUIPMENT.
4. TREE STAKING TYPES ARE TO BE DETERMINED AFTER PROCUREMENT OF TREES.

01

WELO NOTES

1. REFER TO IRRIGATION DRAWINGS FOR MWELO COMPLIANCE.

NOTE:

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STAMP

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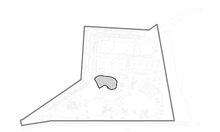
KEY PLAN



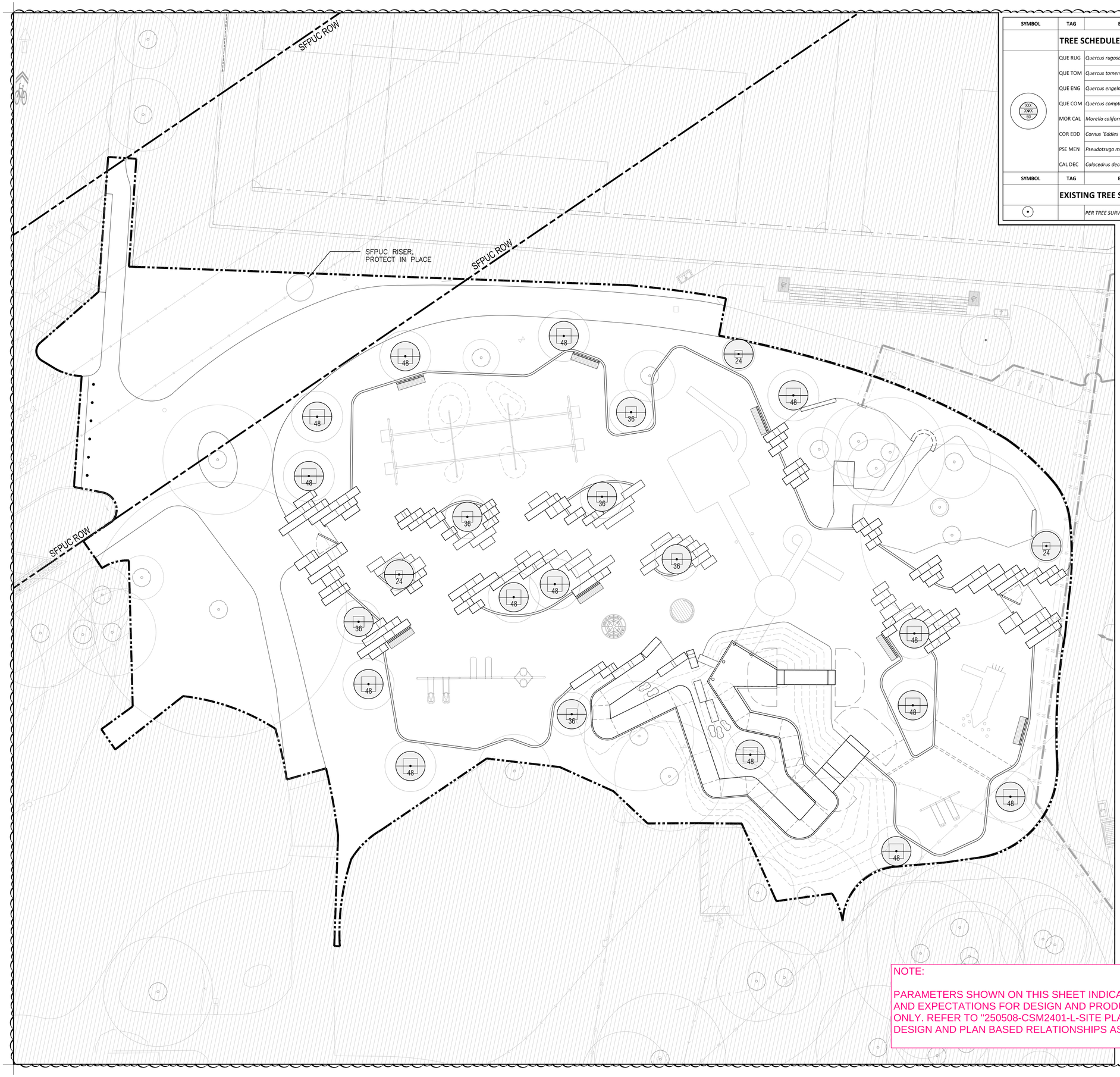
SHEET TITLE

TREE PLANTING
SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-500



SYMBOL	TAG	BOTANICAL NAME	COMMON NAME
	TREE SCHEDULE		
XXX XXX 60	QUE RUG	*Quercus rugosa*	*Netleaf Oak*
	QUE TOM	*Quercus tomentella*	*Channel Island Oak*
	QUE ENG	*Quercus engelmannii*	*Engelmann Oak*
	QUE COM	*Quercus comptoniae*	*Compton Oak*
	MOR CAL	*Morella californica*	*California Wax Myrtle*
	COR EDD	*Cornus 'Eddies White Wonder'*	*Eddies White Wonder Dogwood*
	PSE MEN	*Pseudotsuga menziesii*	*Douglas Fir*
	CAL DEC	*Calocedrus decurrens*	*Incense Cedar*
SYMBOL	**TAG**	**BOTANICAL NAME**	**COMMON NAME**
	EXISTING TREE SCHEDULE		
•		*PER TREE SURVEY*	*PER TREE SURVEY*

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1"=10'
0 2.5 5 10 20

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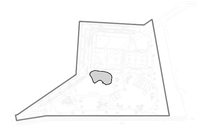

SHEET TITLE

TREE PLANTING OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-510

UNDERSTORY PLANTING SCHEDULE

SYMBOL	TAG	BOTANICAL NAME	COMMON NAME	Size	Total Area/Pecentage	Spacing	WUCOLS	NOTES
P1	**ENTRY GRASSLAND**				**3,862 SF** 01 03		**LOW**	
		Bromus carinatus	*California Brome Grass*	1 GAL	25%	12" O.C.	Low	Grass/Ground cover
		Stipa pulchrea	*Purple Needle Grass*	1 GAL	35%	24" O.C.	Low	Grass/Ground cover
		Ceanothus 'Celestial Blue'	*Celestial Blue Ceanothus*	15 GAL	15%	60" O.C.	Low	Shrub
		Mondarda villosa	*Coyote Mint*	10 GAL	5%	18" O.C.	Low	Multistem Shrub
		Salvia clevelandii	*Blue Sage*	10 GAL	10%	42" O.C.	Low	Multistem Shrub
		Salvia mellifera	*Black Sage*	10 GAL	10%	36" O.C.	Low	Multistem Shrub
SYMBOL	**TAG**	**BOTANICAL NAME**	**COMMON NAME**	**Size**	**Total Area/Pecentage**	**Spacing**	**WUCOLS**	**Role**
P2	**PERIMETER BUFFER PLANTING**				**6,428 SF** 01 03		**MED**	
		Iris douglasiana	*Douglas Iris*	5 GAL	20%	24" O.C.	Low	Large Perennial
		Heteronomeles arbutifolia	*Toyon*	15 GAL	10%	10'-0" O.C.	Low	Multistem Shrub
		Ceanothus 'Celestial Blue'	*Celestial Blue Ceanothus*	15 GAL	10%	48" O.C.	Low	Multistem Shrub
		Muhlenbergia rigens	*Deargrass*	5 GAL	40%	24" O.C.	Low	Grass / Ground Cover
		Festuca californica	*California Fescue*	1 GAL	20%	18" O.C.	Low	Grass / Ground Cover
SYMBOL	**TAG**	**BOTANICAL NAME**	**COMMON NAME**	**Size**	**Total Area/Pecentage**	**Spacing**	**WUCOLS**	**Type**
P3	**CONIFER PLANTING AREA**				**1,293 SF** 01 03		**LOW**	
		Frangula californica 'Mound San Bruno'	*Dwarf Coffeeberry*	15 GAL	20%	60" O.C.	Very Low	Dwarf Shrub
		Arctostaphylos uva-ursi 'Point Reyes'	*Point Reyes Bearberry*	1 GAL	20%	24" O.C.	Low	Grass/Ground cover
		Polystichum munitum	*Western Sword Fern*	10 GAL	30%	24" O.C.	Low	Large Fern
		Woodwardia frimbata	*Giant Chain Fern*	10 GAL	20%	42" O.C.	Very Low	Large Fern
		Arctostaphylos densifolia 'Howard McMinn'	*Howard McMinn Manzanita*	15 GAL	10%	60" O.C.	Low	Multistem Shrub
SYMBOL	**TAG**	**BOTANICAL NAME**	**COMMON NAME**	**Size**	**Total Area/Pecentage**	**Spacing**	**WUCOLS**	**Type**
P4	**OAK PLANTING AREA**				**1,467 SF** 01 03		**LOW**	
		Festuca californica	*California Fescue*	1 GAL	30%	24" O.C.	Very Low	Grass/Ground cover
		Ribes viburnifolia	*Nodding Needle Grass*	1 GAL	30%	48" O.C.	Low	Grass/Ground cover
		Monardella villosa 'Russian River'	*Russian River Coyote Mint*	15 GAL	10%	36" O.C.	Low	Shrub
		Salvia spathacea	*Hummingbird Sage*	15 GAL	10%	48" O.C.	Very Low	Shrub
		Bouteloua gracilis 'Blonde Ambition'	*Blonde Ambition Blue Grama Grass*	15 GAL	20%	24" O.C.	Low	Grass/Ground cover

LANDSCAPE SOIL NOTES

1. SOIL TESTING IS REQUIRED OF BOTH SUB–GRADE AND TOPSOIL CONDITIONS FOR HORTICULTURE SUITABILITY AND DEVELOPMENT OF THE SITE SOILS PLAN.

PLANTING NOTES

1. LANDSCAPE AREAS INCLUDE TREE MULCH RINGS FOR NEW TREES. PROVIDE MULCH RINGS AT ALL NEW AND EXISTING TREES PER DETAILS.
2. PROVIDE AN ALLOWANCE FOR ADDITIONAL PLANT MATERIAL TO ADDRESS FIELD ADJUSTMENTS DURING CONSTRUCTION AND REPLACEMENT DURING THE WARRANTY PERIOD. REFER TO SPECIFICATIONS FOR ALLOWANCE.
3. ALL PLANTING IS TO BE FIELD REVIEWED AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
4. SQUARE FOOTAGES PROVIDED ARE ESTIMATES. CONTRACTOR AND ARCHITECT OF RECORD TO CONFIRM AGAINST FINAL PLAN. 01

IRRIGATION & MWELO NOTES

1. REFER TO IRRIGATION DRAWINGS FOR MWELO COMPLIANCE.
2. ASSUMING DRIP IRRIGATION AT 12" OC, TYP. FOR THE PURPOSES OF COST ESTIMATION DURING THE DOCUMENTATION PHASE.

NOTE:

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OWNER/CLIENT

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400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

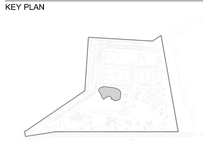
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25
03	BRIDGE DRAWINGS AMENDMENT	04.01.25

KEY PLAN



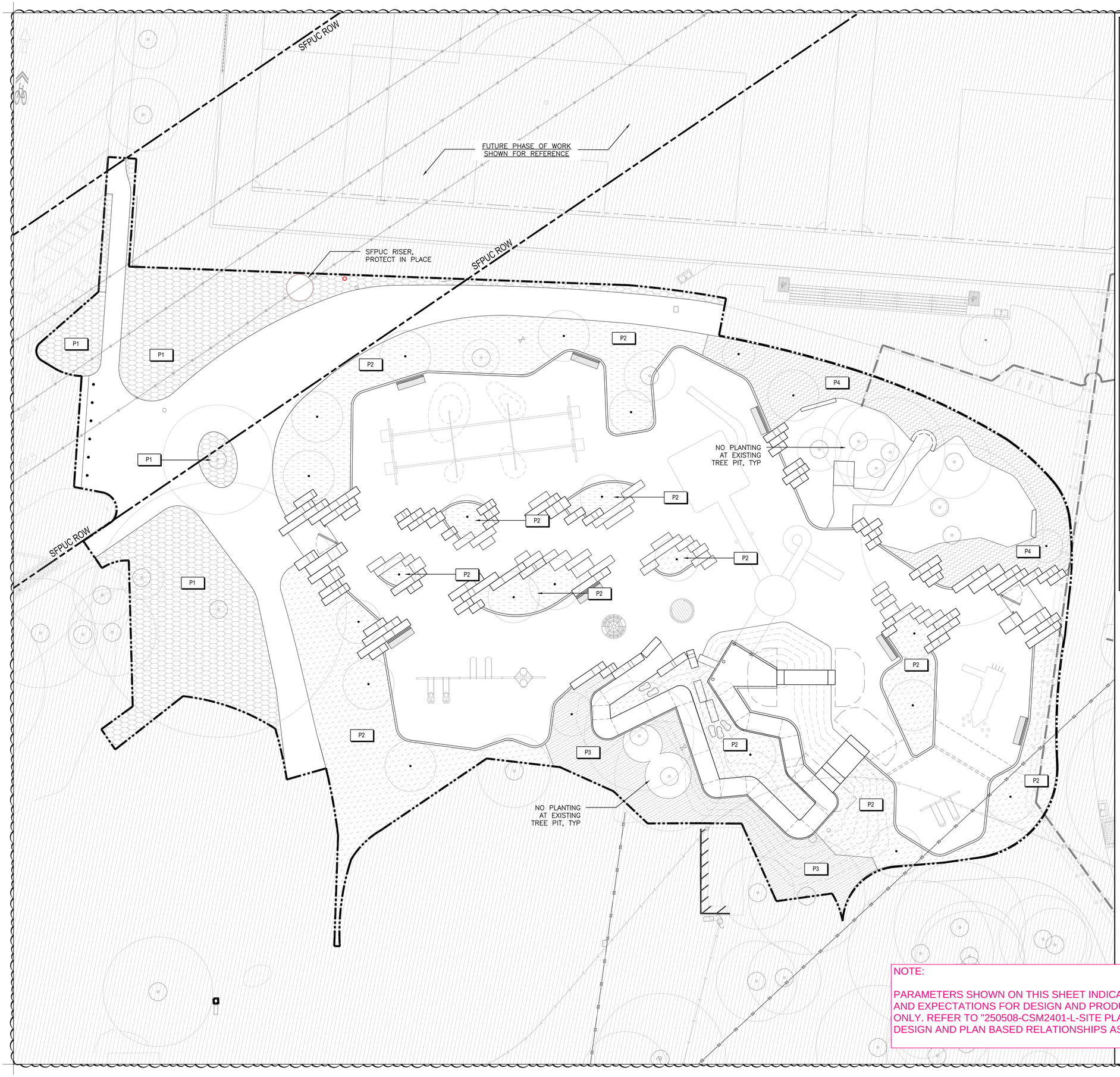
SHEET TITLE

UNDERSTORY PLANTING SCHEDULE + NOTES

PROJECT	DRAWN BY
CSM 2401	RS
SCALE	CHECKED BY
1"= 10'-0"	DG

SHEET NUMBER

L1-600



01

UNDERSTORY PLANTING SCHEDULE

SYMBOL	
P1	ENTRY GRASSLAND
P2	PERIMETER BUFFER PLANTING
P3	CONIFER PLANTING AREA
P4	OAK PLANTING AREA

NOTE:

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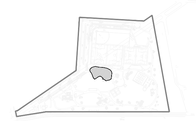
KEY PLAN



SHEET TITLE

UNDERSTORY PLANTING OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-610

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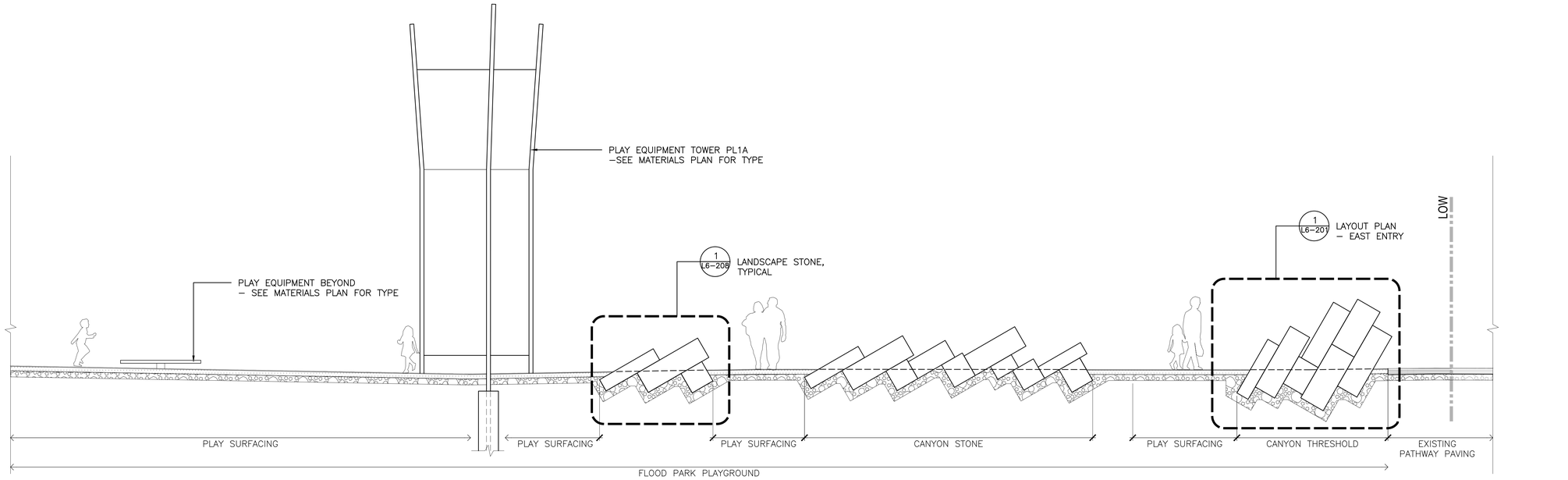
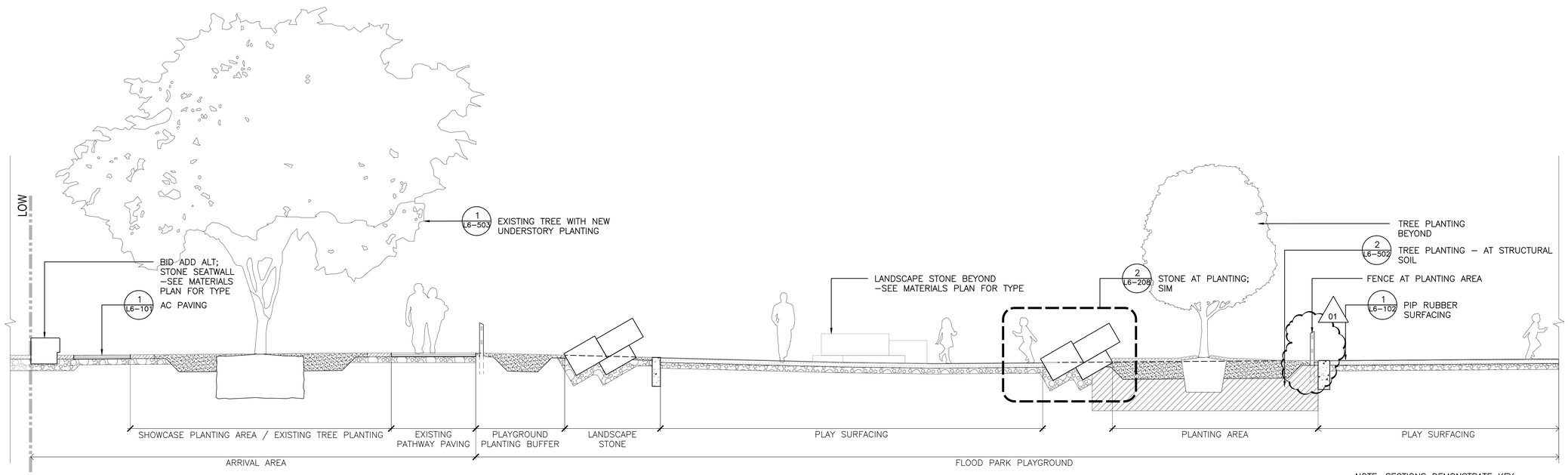


NOTE: SECTIONS DEMONSTRATE KEY RELATIONSHIPS AND MUST BE REVIEWED AGAINST PLANS BY THE DESIGN BUILD ENTITY

2 SITE SECTION A-A — SCALE: 1/4"=1'-0"



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1 SITE SECTION A-A — SCALE: 1/4"=1'-0"

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KEY PLAN

SHEET TITLE

SECTIONS
SITE + CONTEXT

PROJECT	DRAWN BY
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1"= 10'-0"	AMP

SHEET NUMBER

L2-101

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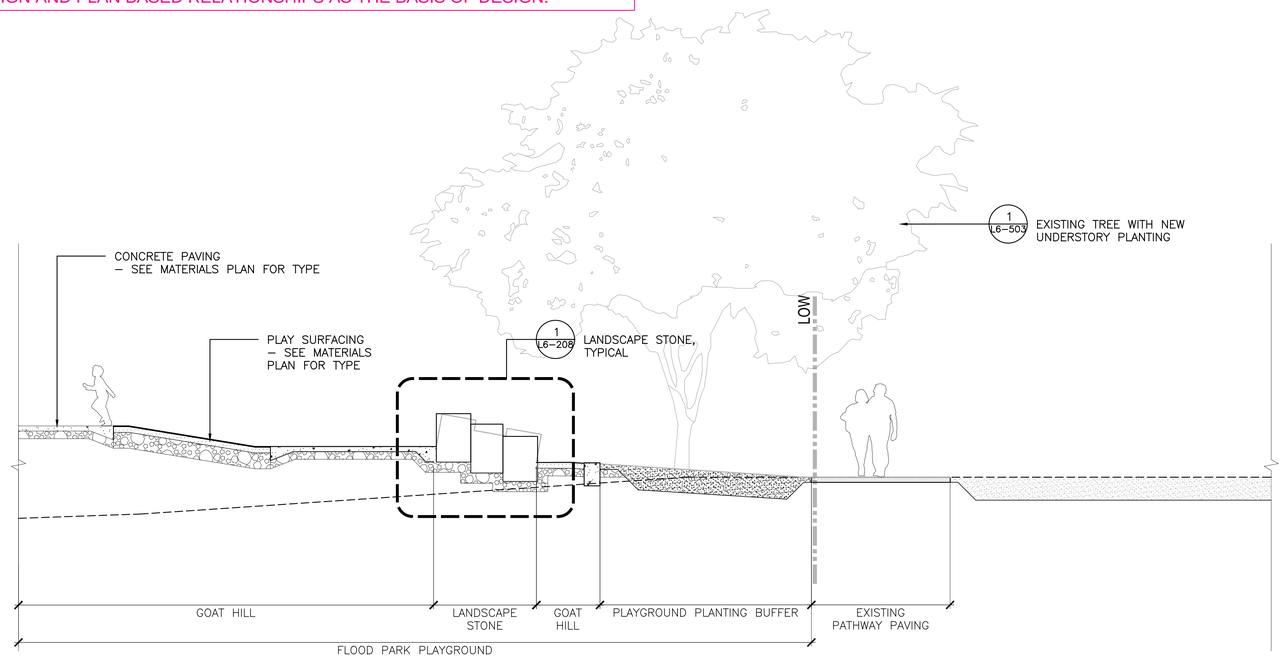
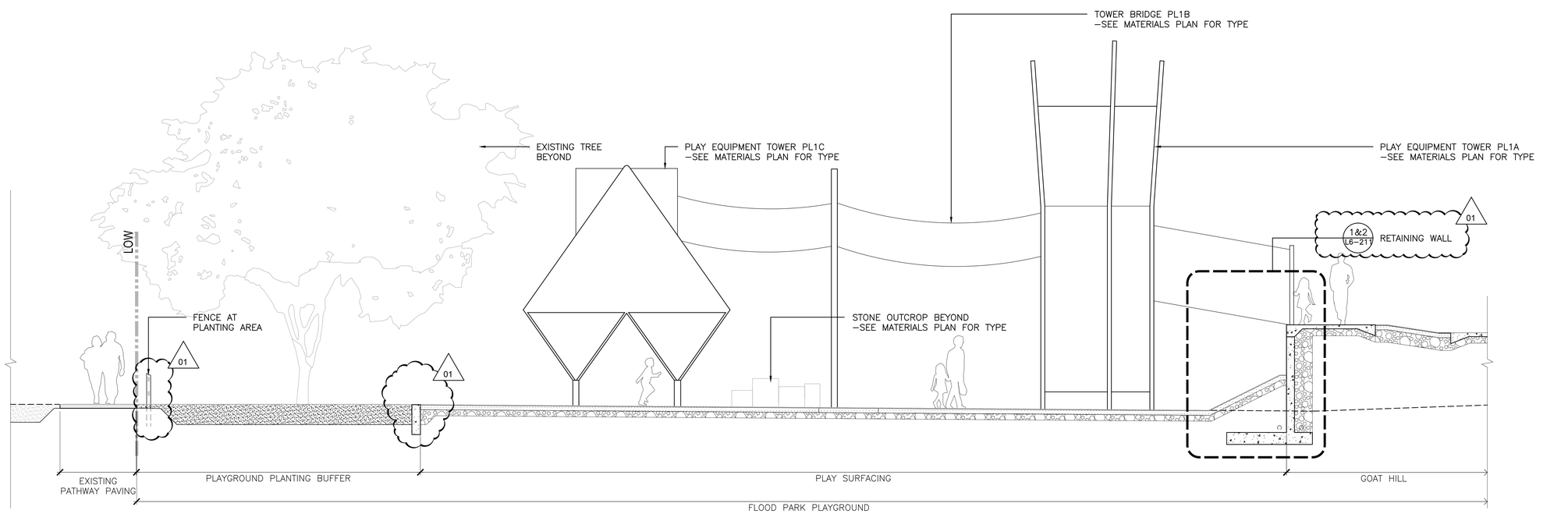


NOTE: SECTIONS DEMONSTRATE KEY RELATIONSHIPS AND MUST BE REVIEWED AGAINST PLANS BY THE DESIGN BUILD ENTITY

2 | SITE SECTION B-B | SCALE: 1/4"=1'-0"



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1 | SITE SECTION B-B | SCALE: 1/4"=1'-0"

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SITE + CONTEXT

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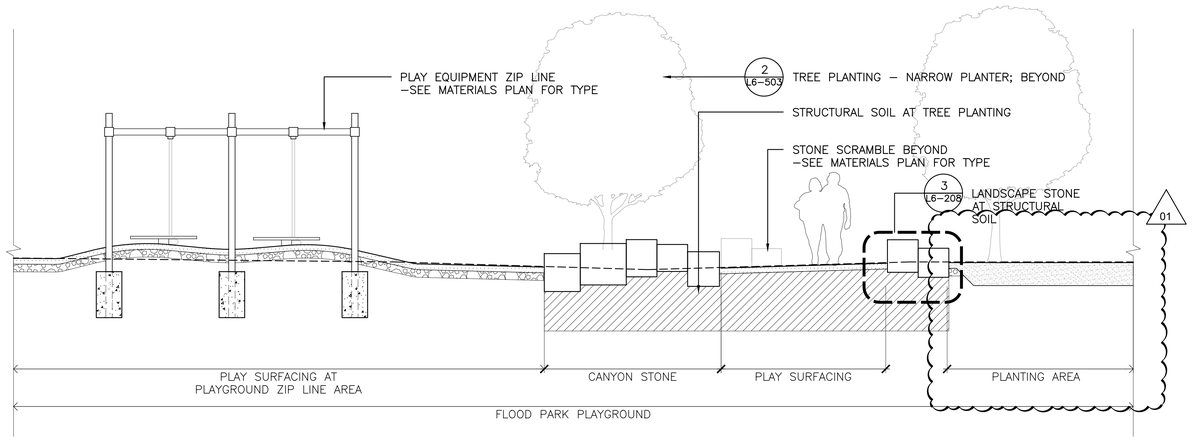
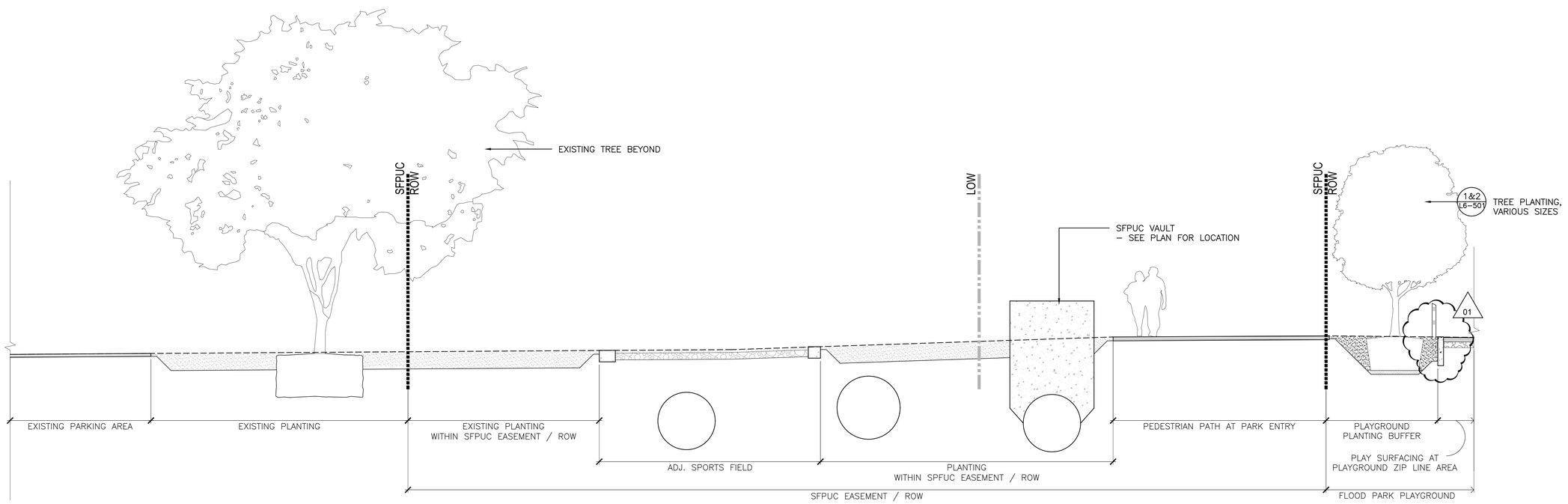


NOTE: SECTIONS DEMONSTRATE KEY RELATIONSHIPS AND MUST BE REVIEWED AGAINST PLANS BY THE DESIGN BUILD ENTITY

2 | SITE SECTION C-C | SCALE: 1/4"=1'-0"



NOTE: SECTIONS DEMONSTRATE KEY RELATIONSHIPS AND MUST BE REVIEWED AGAINST PLANS BY THE DESIGN BUILD ENTITY

1 | SITE SECTION C-C | SCALE: 1/4"=1'-0"

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SHEET TITLE

SECTIONS
SITE + CONTEXT

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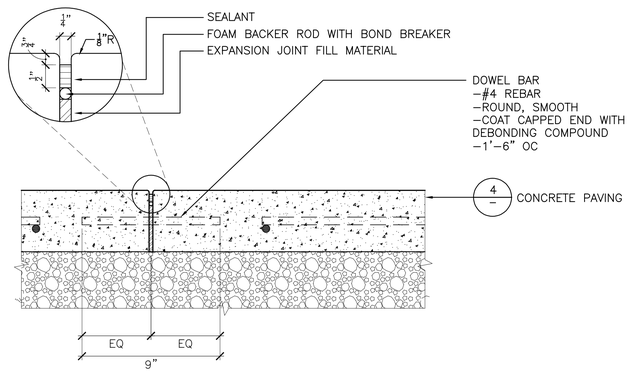
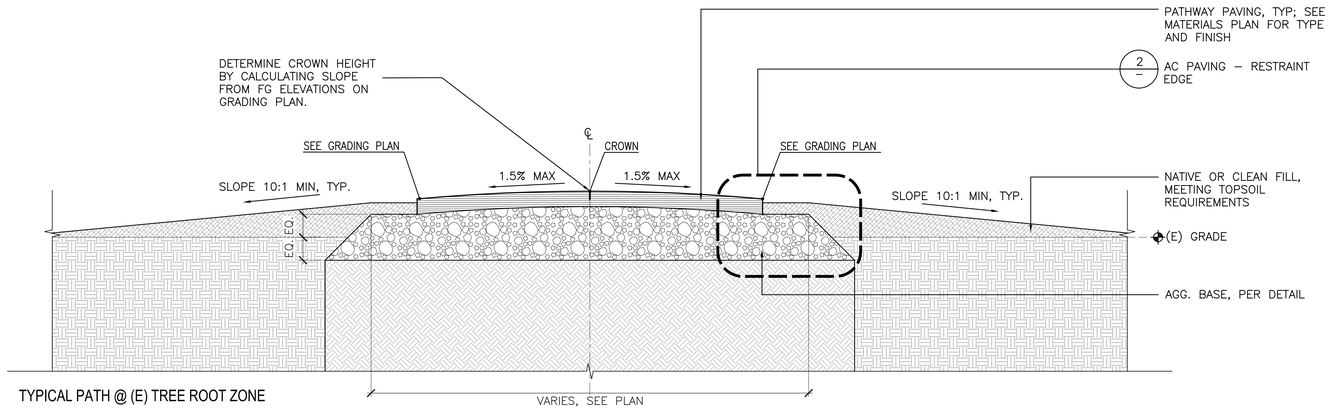
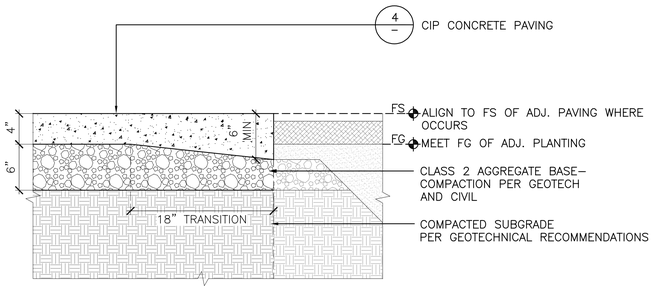


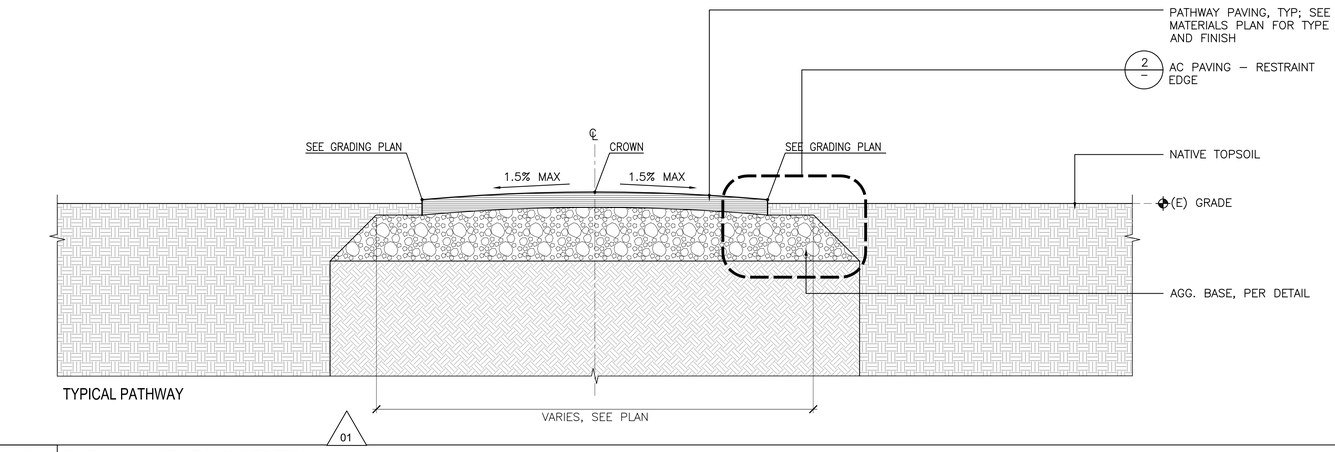
6 EXPANSION JOINT — SCALE: 3"=1'-0"



TYPICAL PATH @ (E) TREE ROOT ZONE

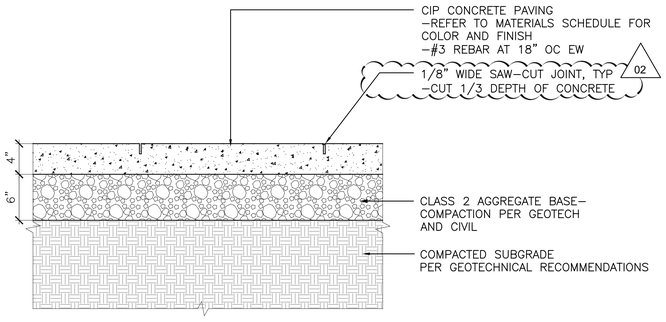


5 CIP CONCRETE PAVING - AT PLANTING — SCALE: 1 1/2"=1'-0"

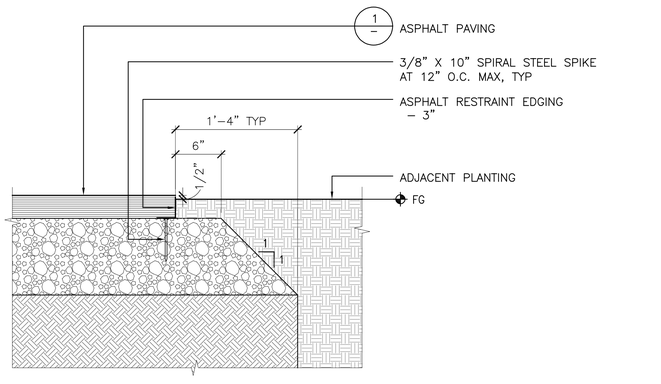


TYPICAL PATHWAY

3 PATHWAY GRADING SECTION — SCALE: 1 1/2"=1'-0"

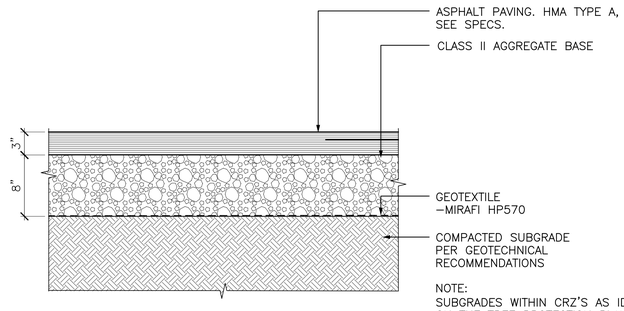


4 CIP CONCRETE PAVING TYPICAL — SCALE: 1 1/2"=1'-0"



NOTE:
LANDSCAPE ARCHITECT TO REVIEW EDGING LAYOUT PRIOR TO INSTALLATION AND AFTER INSTALLATION BEFORE ASPHALT PLACEMENT

2 AC PAVING - RESTRAINT EDGE — SCALE: 1 1/2"=1'-0"



NOTE:
SUBGRADES WITHIN CRZ'S AS IDENTIFIED ON THE TREE PROTECTION PLANS SHALL BE SCARIFIED A MAXIMUM OF 2–3 INCHES.

1 AC PAVING — SCALE: 1 1/2"=1'-0"

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CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND

215 Bay Road
Menlo Park, CA 94025

STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

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KEY PLAN

SHEET TITLE

PAVING DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
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1"= 10'-0"	AMP

SHEET NUMBER

L6-101

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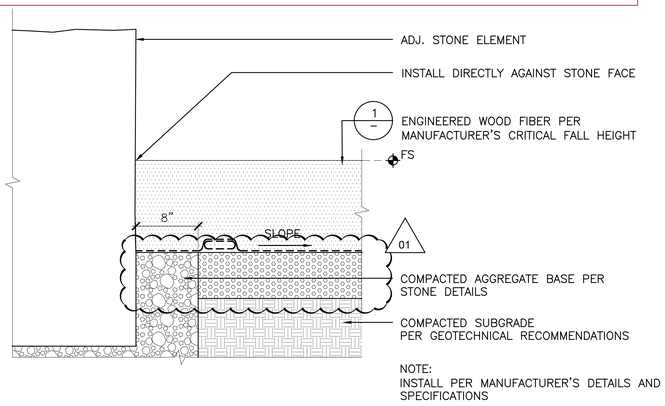
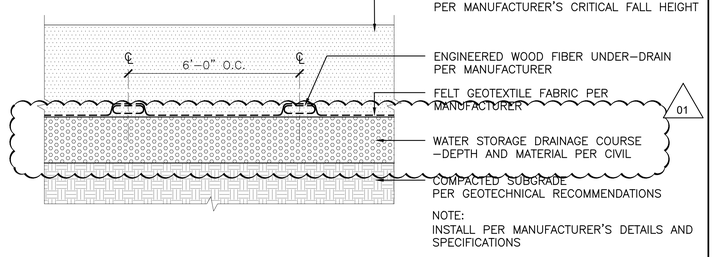
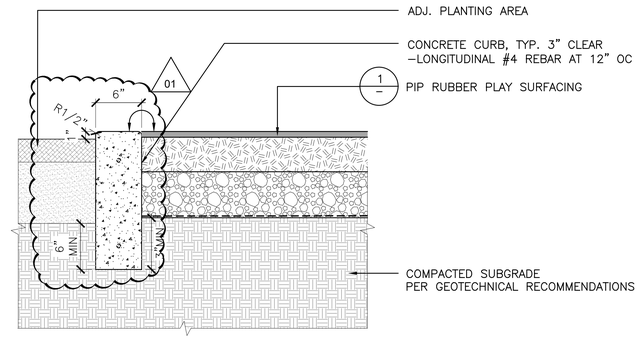


9 | FIBAR - AT VERTICAL SURFACES | SCALE: 1 1/2"=1'-0"



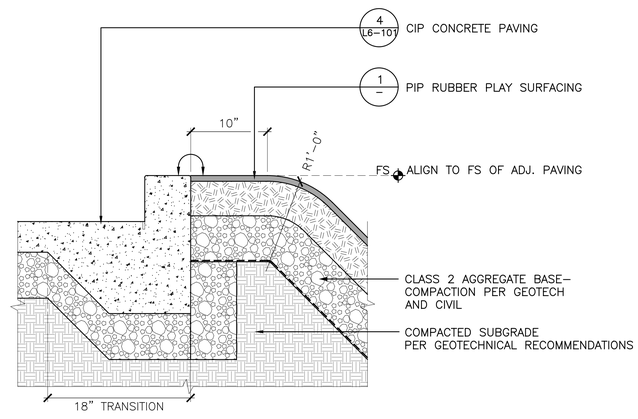
6 | ENGINEERED WOOD FIBER - TYPICAL | SCALE: 1 1/2"=1'-0"



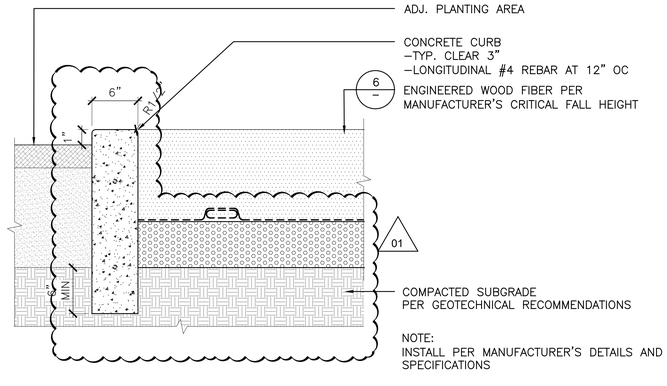
3 | POURED IN PLACE RUBBER - AT PLANTING | SCALE: 1 1/2"=1'-0"

8 | FIBAR - AT VERTICAL SURFACES | SCALE: 1 1/2"=1'-0"

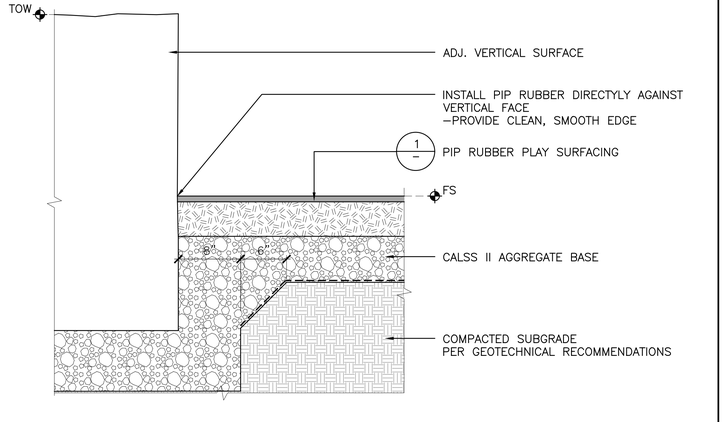
5 | POURED IN PLACE RUBBER - AT ENGINEERED WOOD FIBER | SCALE: 1 1/2"=1'-0"



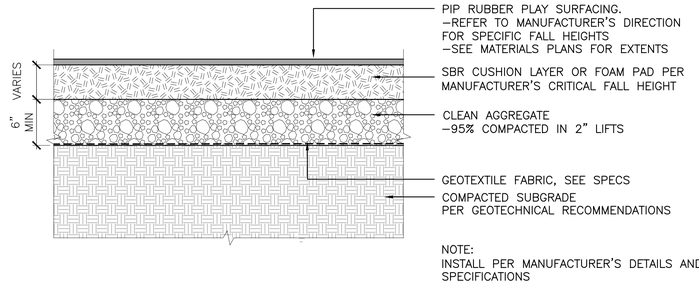
2 | GOAT HILL CIP CONCRETE PATH & CURB AT PIP | SCALE: 1 1/2"=1'-0"



7 | ENGINEERED WOOD FIBER AT PLANTING | SCALE: 1 1/2"=1'-0"



4 | POURED IN PLACE RUBBER - AT VERTICAL SURFACE | SCALE: 1 1/2"=1'-0"



1 | POURED IN PLACE RUBBER - TYPICAL | SCALE: 1 1/2"=1'-0"

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PAVING DETAILS

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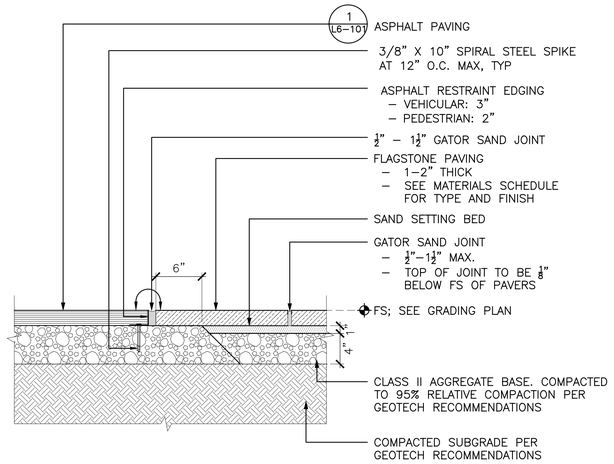
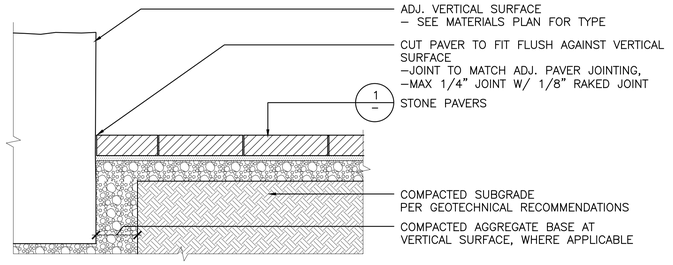
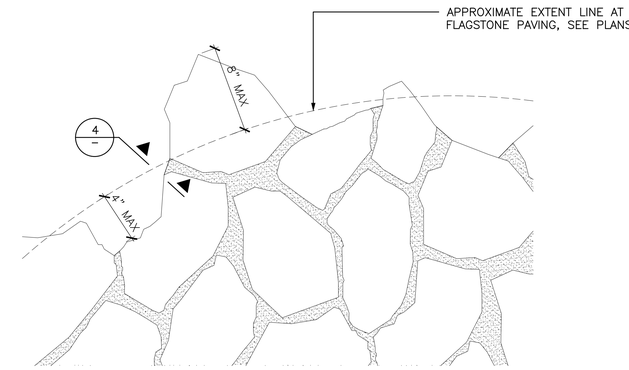


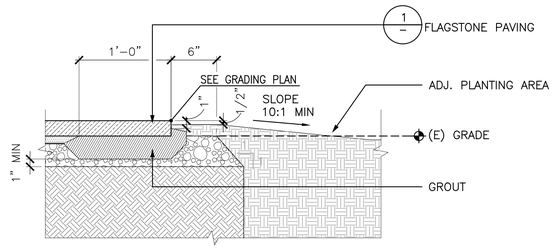
3 FLAGSTONE PAVING AT AC PAVING — SCALE: 1 1/2"=1'-0"



5 FLAGSTONE PAVING - AT VERTICAL SURFACE — SCALE: 1"=1'-0"

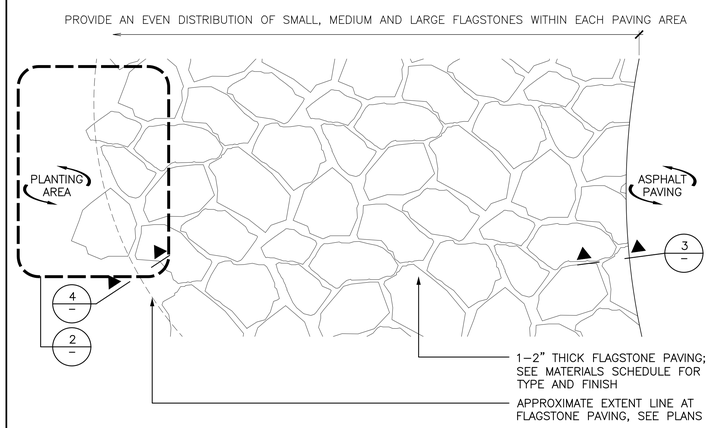


2 FLAGSTONE PAVING LAYOUT - TYP — SCALE: 1 1/2"=1'-0"



4 FLAGSTONE PAVING AT PLANTING — SCALE: 1 1/2"=1'-0"

FLAGSTONE SIZES:
SMALL: MIN. 12"X 18" (+/– 25% OF AREA)
MEDIUM: MIN. 18" X 24" (+/– 50% OF AREA)
LARGE: MIN. 24" X 36" (+/– 25% OF AREA)



1 FLAGSTONE PAVING LAYOUT AT PLANTING EDGE — SCALE: 1 1/2"=1'-0"

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PAVING
DETAILS - BID ADD ALT.

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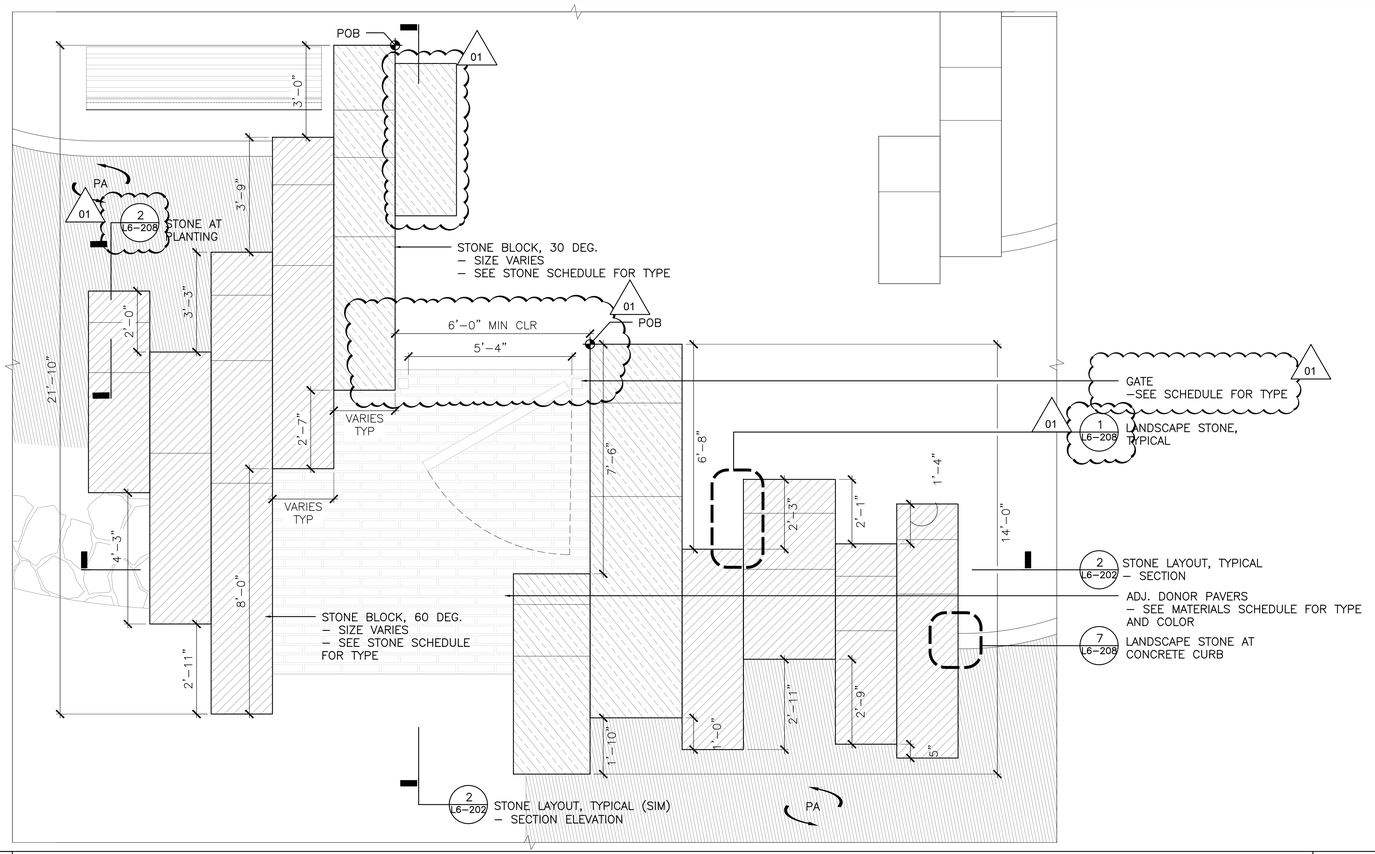
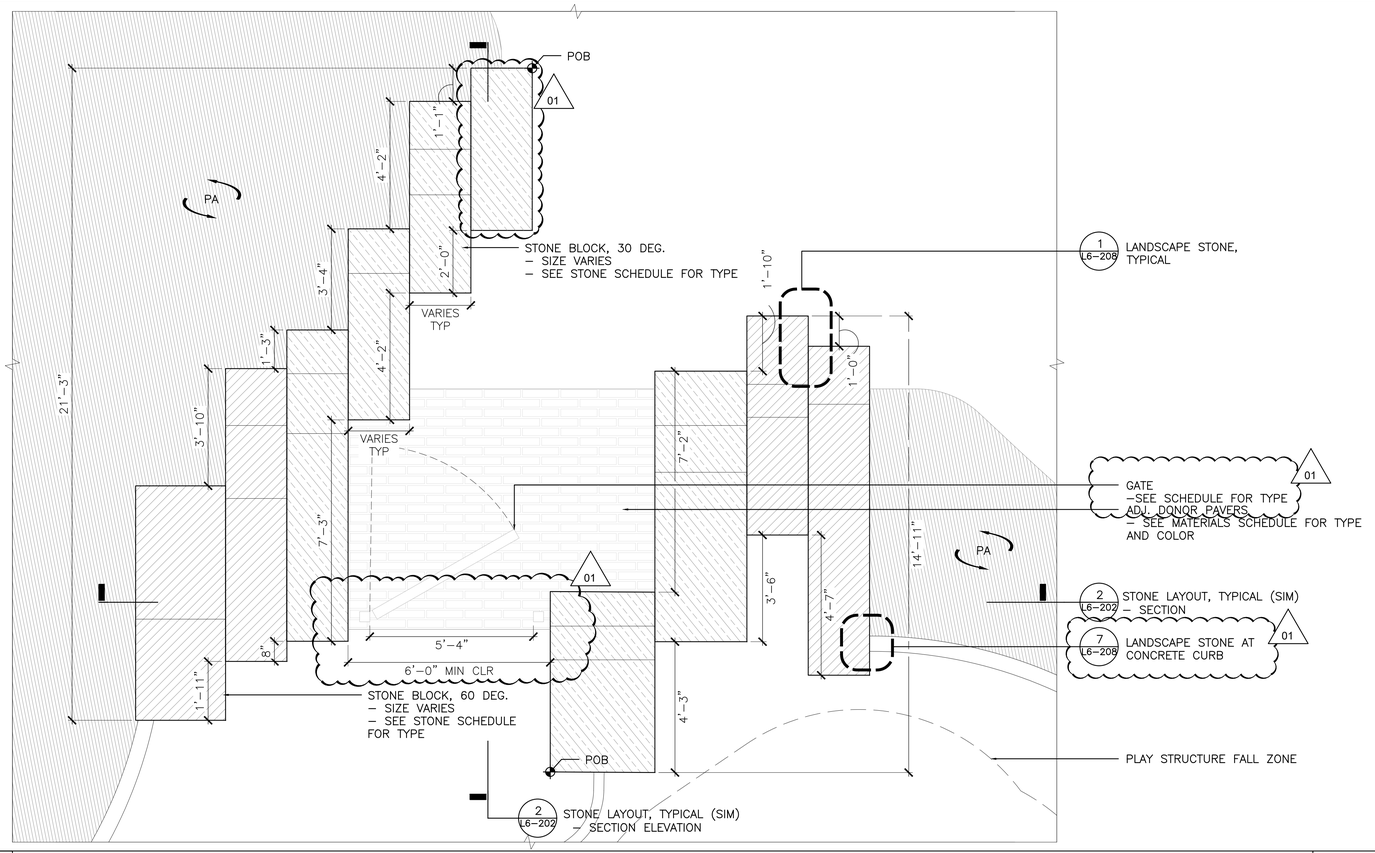


2 LAYOUT PLAN - WEST ENTRY — SCALE: 1/2"=1'-0"



1 LAYOUT PLAN - EAST ENTRY — SCALE: 1/2"=1'-0"

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400 COUNTY CENTER
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CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

STONE DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-201

NOTE:

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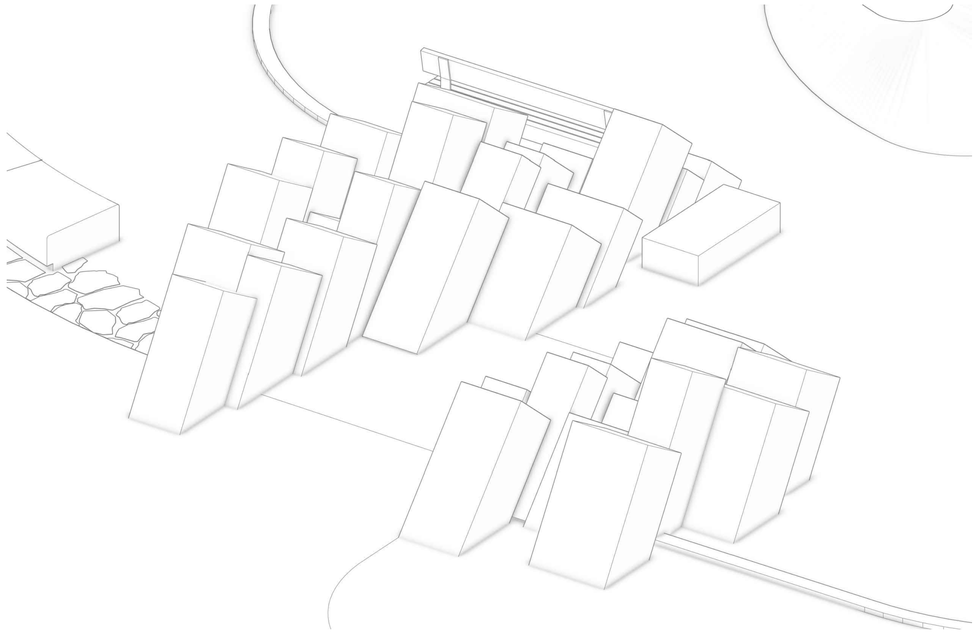
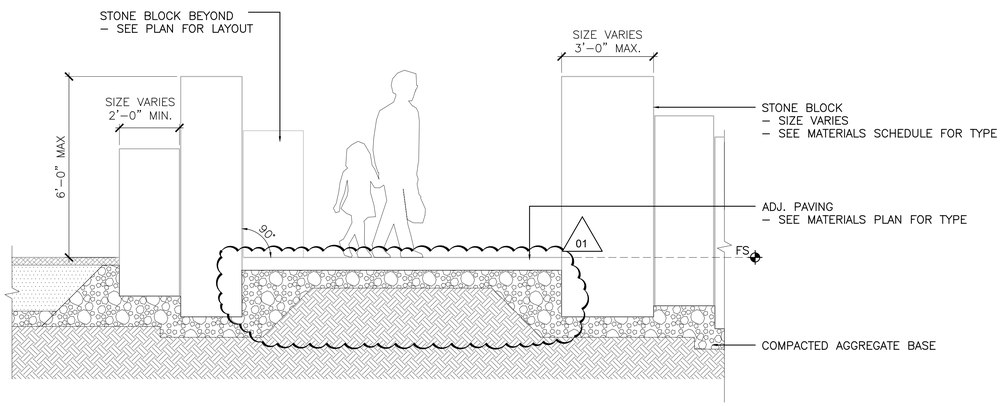
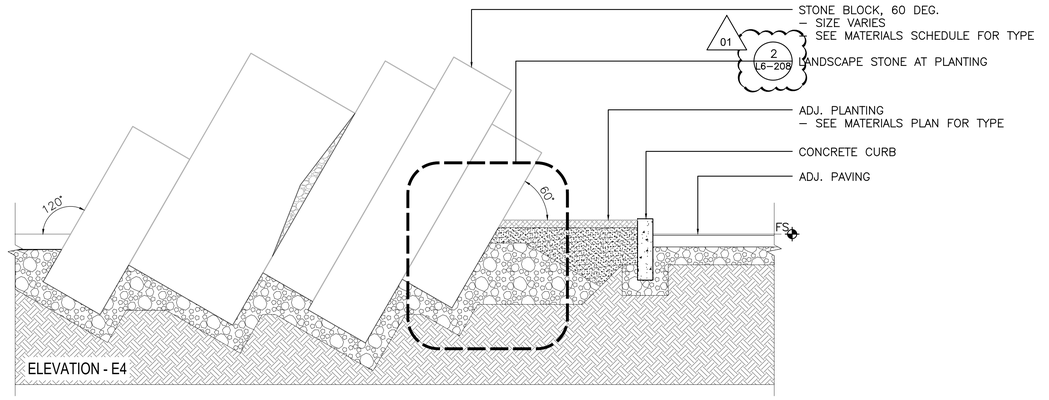


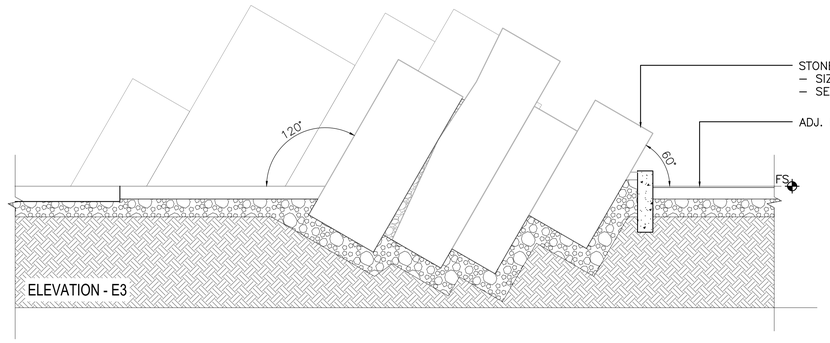
3 | MODEL SHOT - WEST ENTRY | SCALE: 1/2"=1'-0"



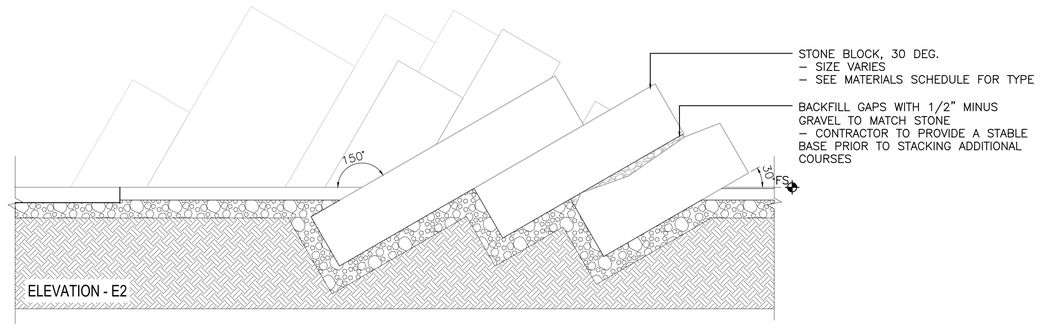
2 | DETAIL SECTION - CANYON THRESHOLD | SCALE: 1/2"=1'-0"



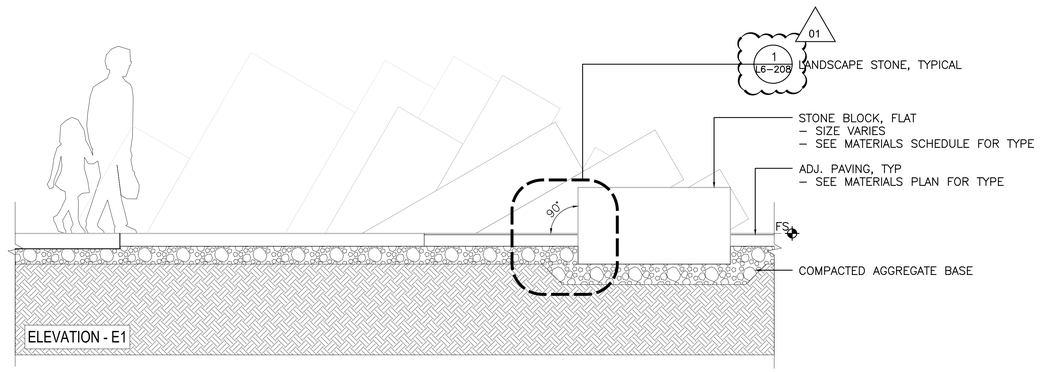
ELEVATION - E4



ELEVATION - E3



ELEVATION - E2



ELEVATION - E1

1 | ELEVATION TYPICAL - CANYON THRESHOLD | SCALE: 1/2"=1'-0"

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

STONE DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-202

NOTE:

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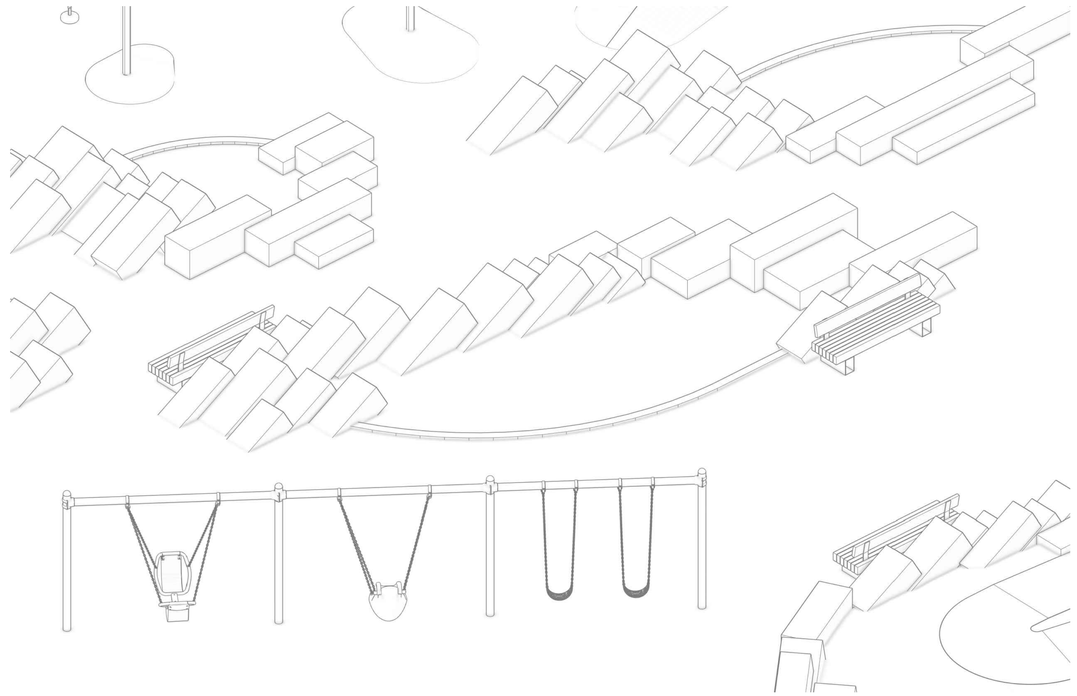
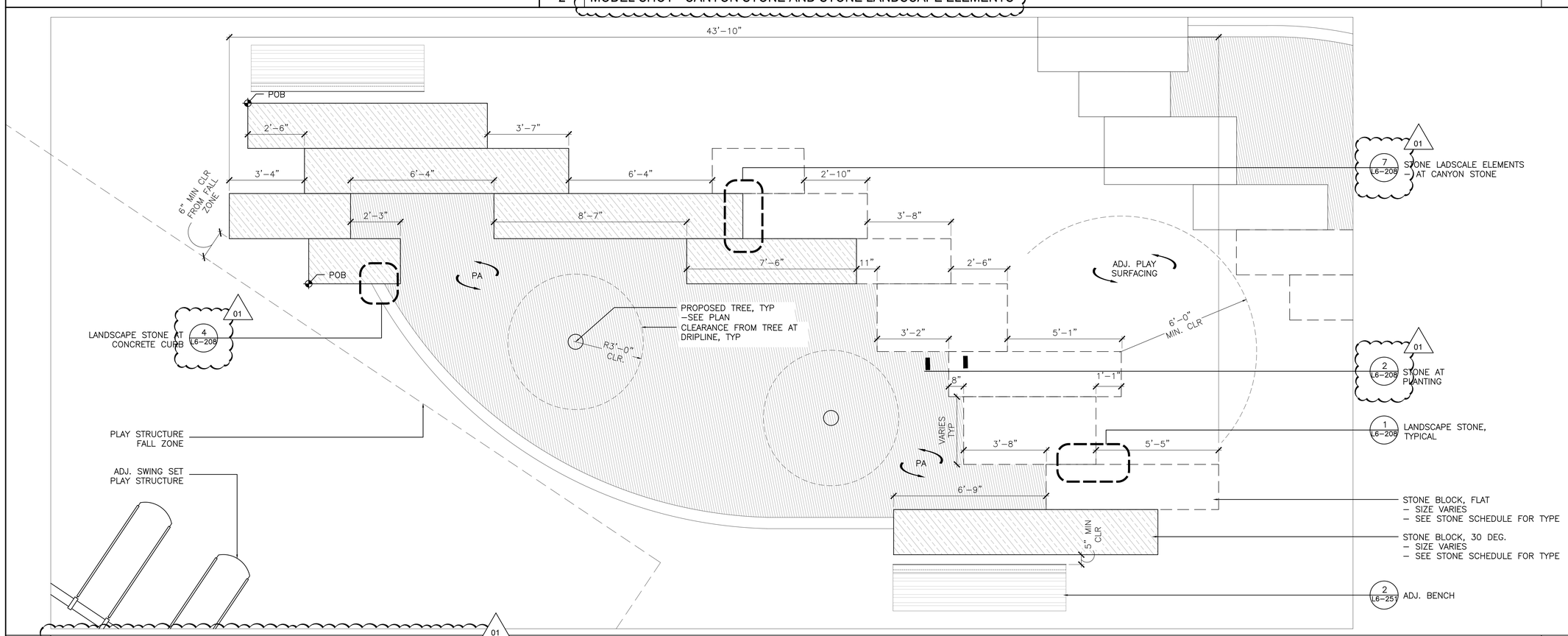


2 MODEL SHOT - CANYON STONE AND STONE LANDSCAPE ELEMENTS 01

SCALE: 1/2"=1'-0"



1 LAYOUT PLAN - CANYON STONE AND STONE LANDSCAPE ELEMENTS 01

SCALE: 1/2"=1'-0"

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

STONE DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-203

NOTE:

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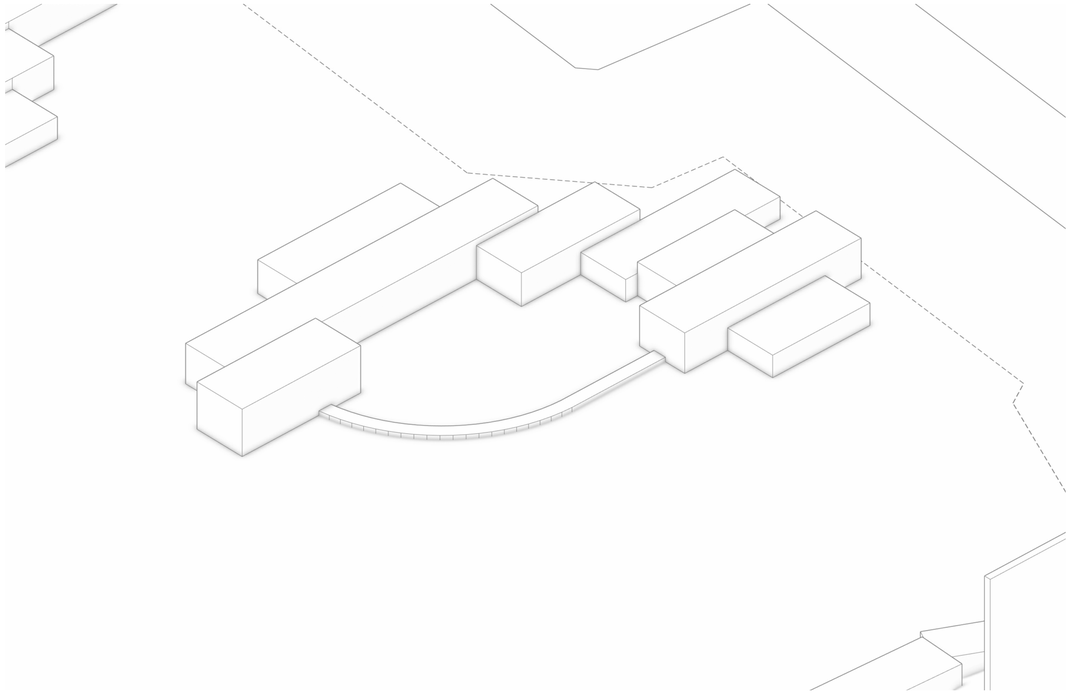
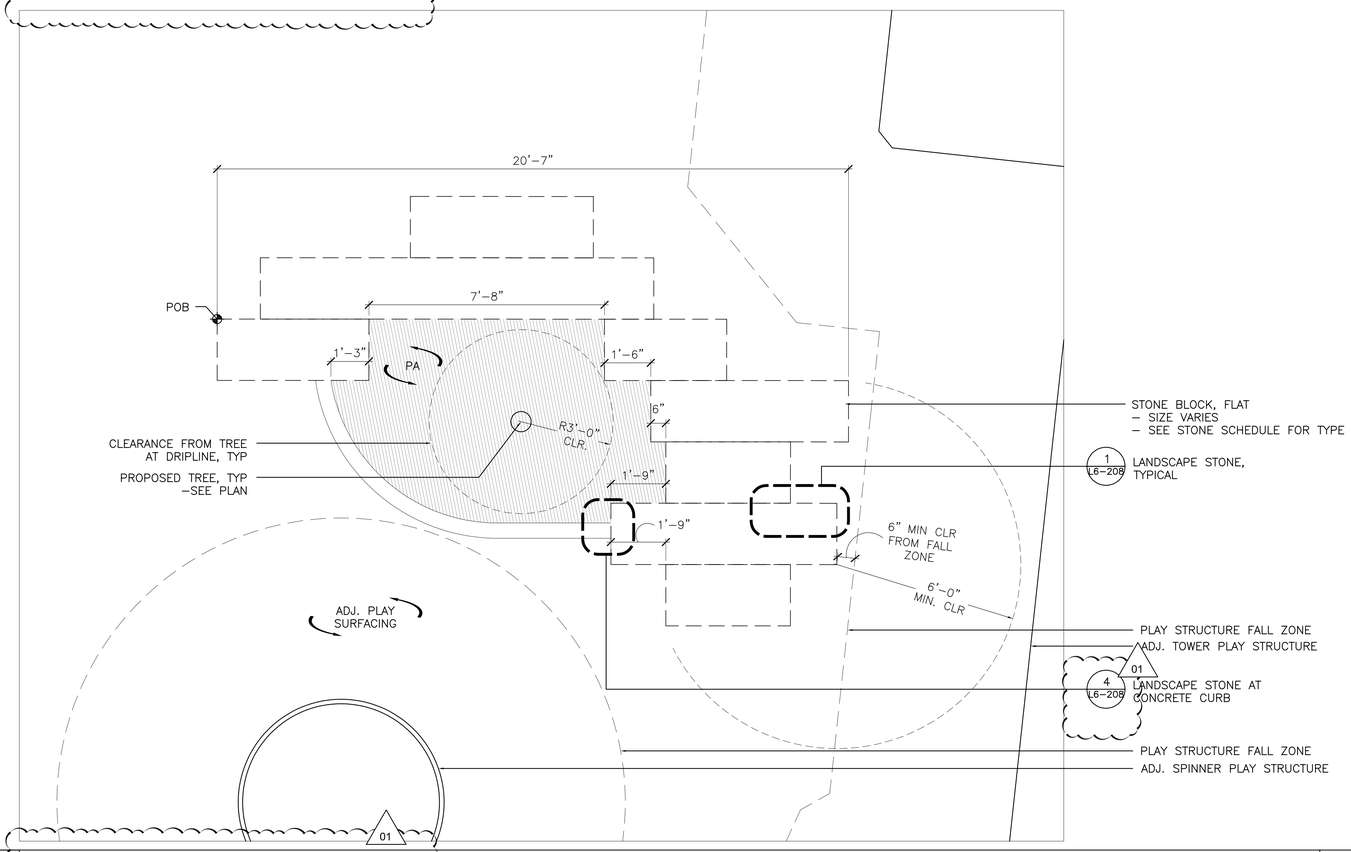


2 MODEL SHOT - STONE LANDSCAPE ELEMENTS — SCALE: 1/2"=1'-0"



1 LAYOUT PLAN - STONE LANDSCAPE ELEMENTS — SCALE: 1/2"=1'-0"

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	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

STONE DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-204

NOTE:

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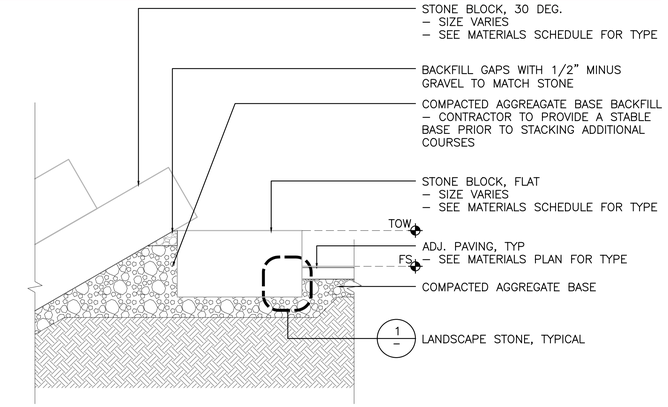
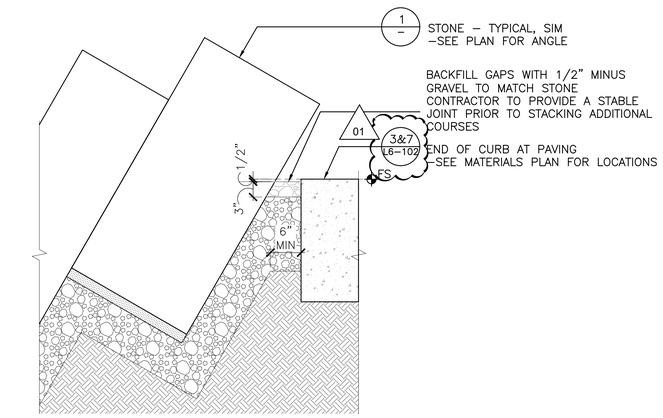


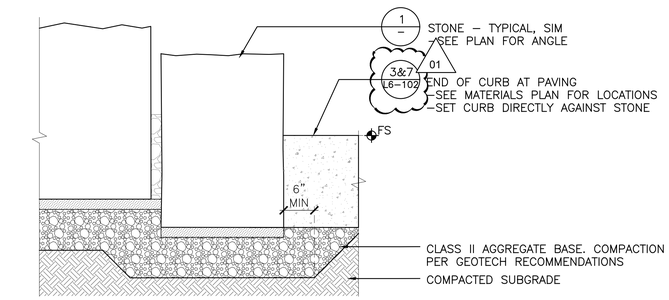
7 | STONE LANDSCAPE ELEMENTS - AT CANYON STONE | SCALE: 1/2"=1'-0"

6 | DETAIL SECTION - STONE LANDSCAPE ELEMENTS | SCALE: 1/2"=1'-0"

5 | STONE - AT WOOD DECK - BID ADD ALT. | SCALE: 1"=1'-0"

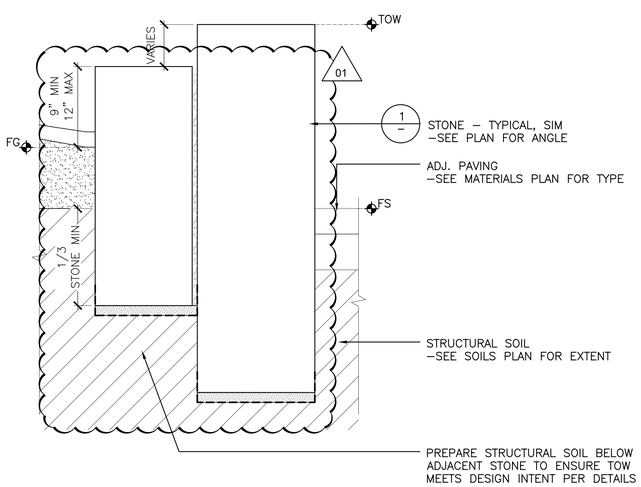


CURB AT STONE ANGLE

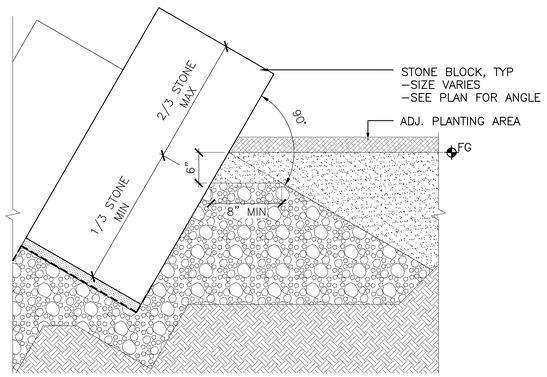


CURB AT PERPENDICULAR STONE

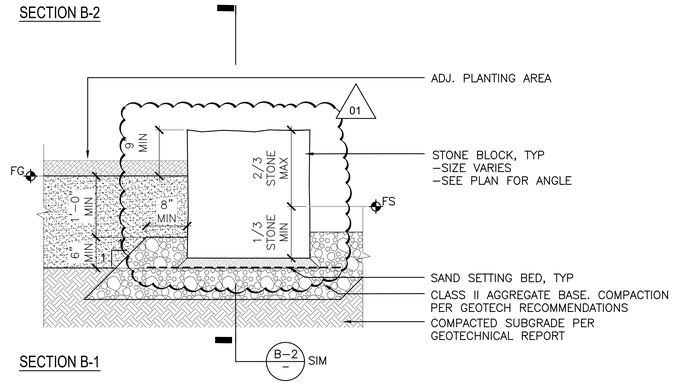
4 | STONE - AT CONCRETE CURB | SCALE: 1"=1'-0"



3 | STONE - AT STRUCTURAL SOIL | SCALE: 1"=1'-0"

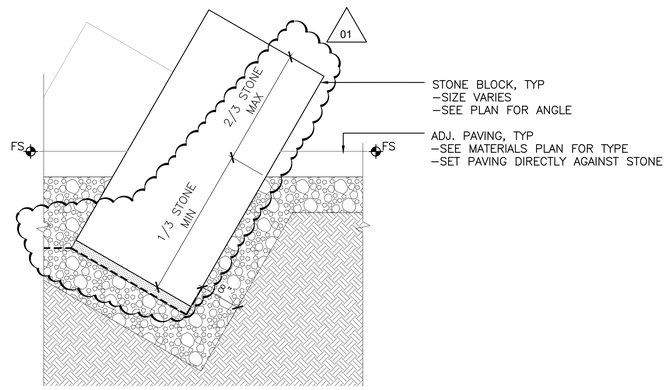


SECTION B-2



SECTION B-1

2 | STONE - AT PLANTING | SCALE: 1"=1'-0"



SECTION A-2

SECTION A-1

1 | STONE - TYPICAL | SCALE: 1"=1'-0"

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CONSULTANTS

PROJECT NAME

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215 Bay Road
Menlo Park, CA 94025

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PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

STONE DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-208

NOTE:

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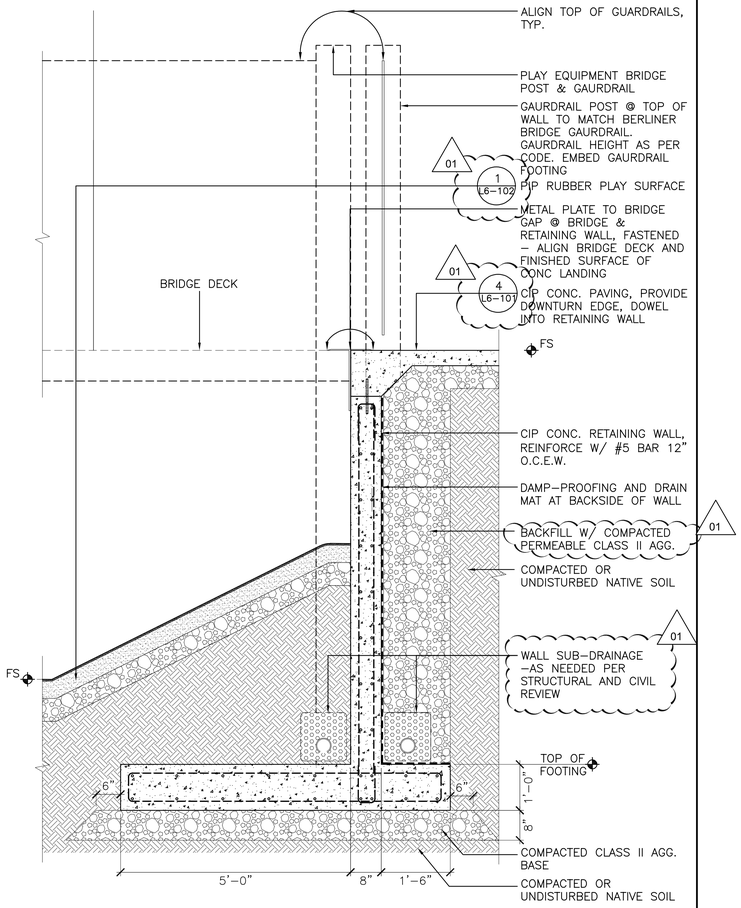
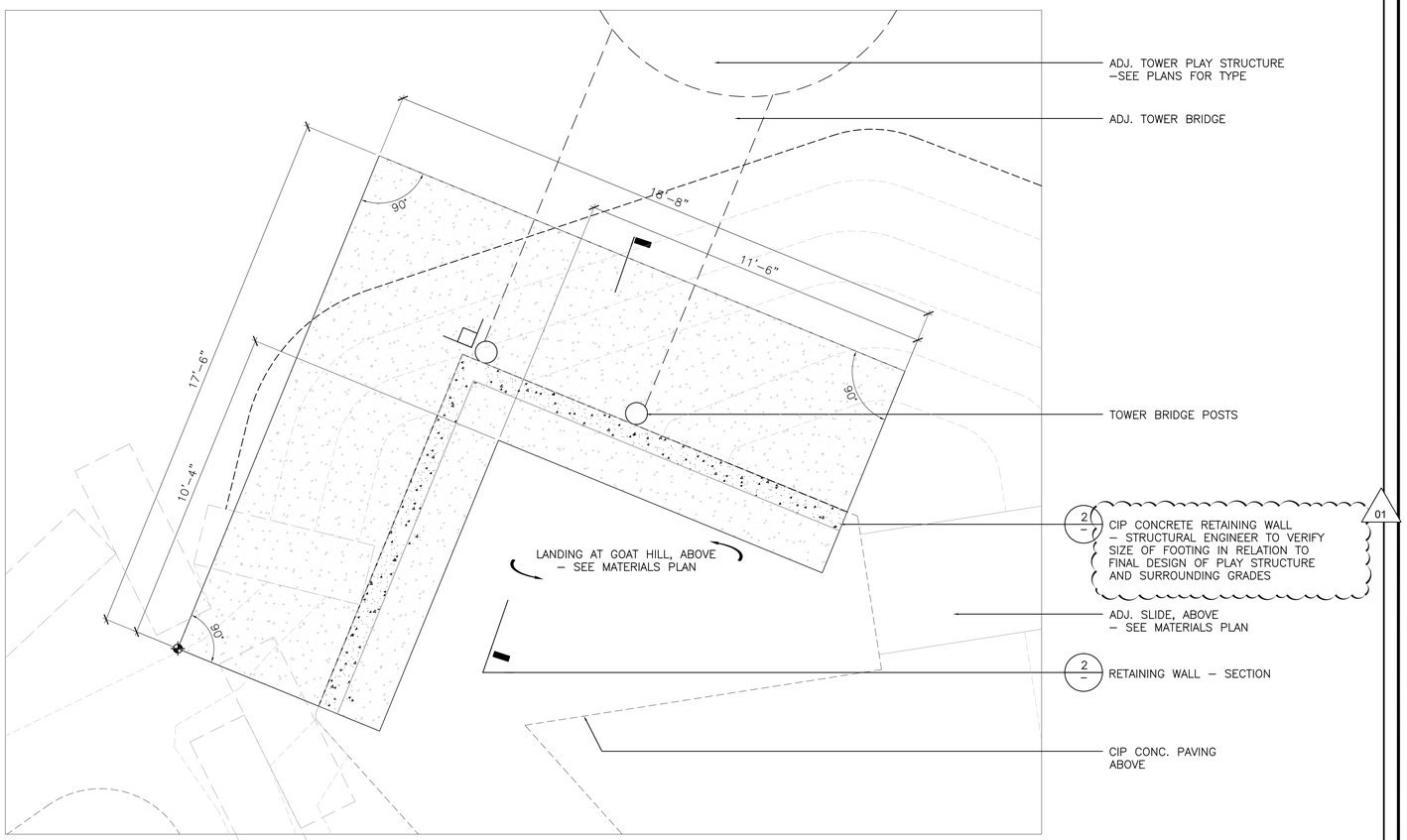


NOTES: COORDINATE WALL DESIGN AND REBAR WITH FINAL PLAY EQUIPMENT LOCATIONS AND CONNECTIONS

2 DETAIL SECTION - RETAINING WALL — SCALE: 3/4"=1'-0"



1 RETAINING WALL FOOTING LAYOUT — SCALE: 1/2"=1'-0"

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PHASE

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

WALLS
DETAILS

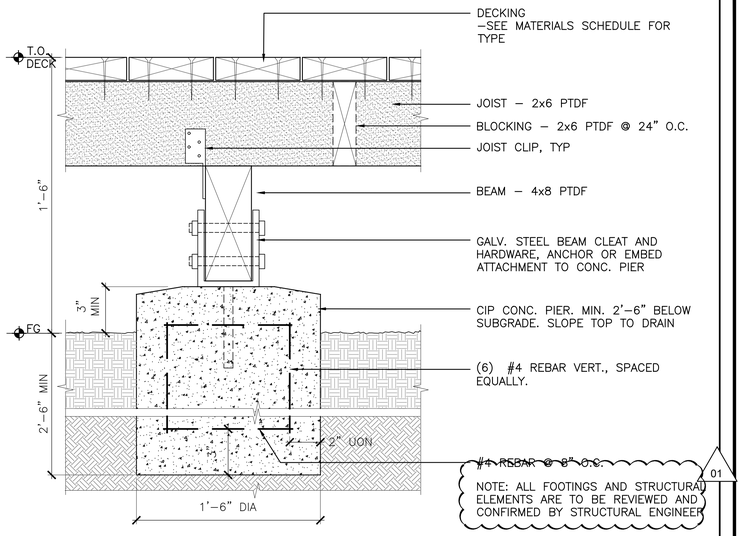
PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

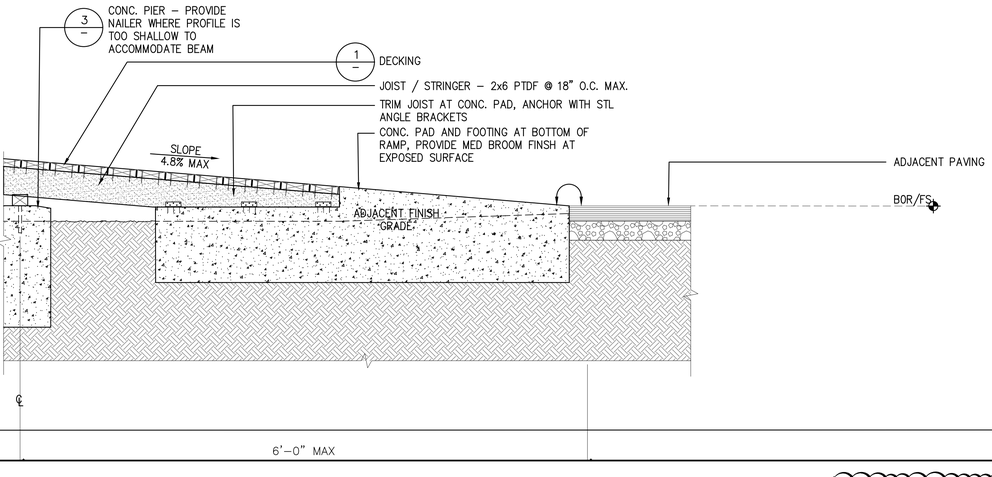
L6-211

NOTE:

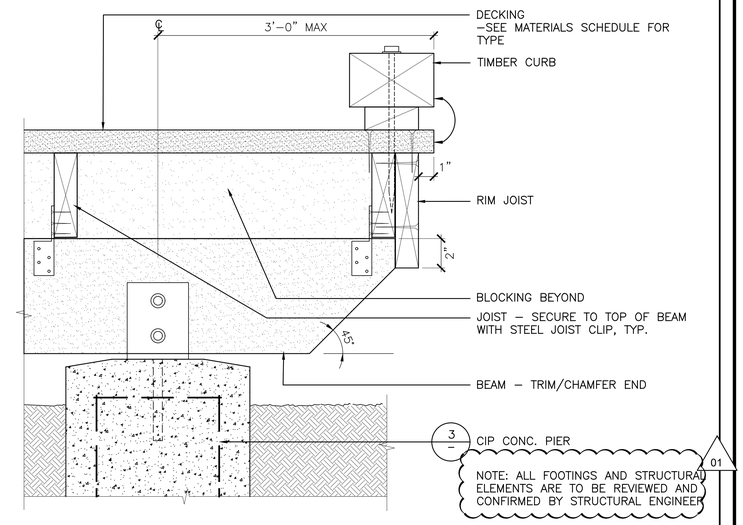
PARAMETERS SHOWN ON THIS SHEET INDICATE GENERAL REQUIREMENTS AND EXPECTATIONS FOR DESIGN AND PRODUCT SELECTION FOR REFERENCE ONLY. REFER TO "250508-CSM2401-L-SITE PLAN-FINAL VE" DOCUMENT FOR ALL DESIGN AND PLAN BASED RELATIONSHIPS AS THE BASIS OF DESIGN.



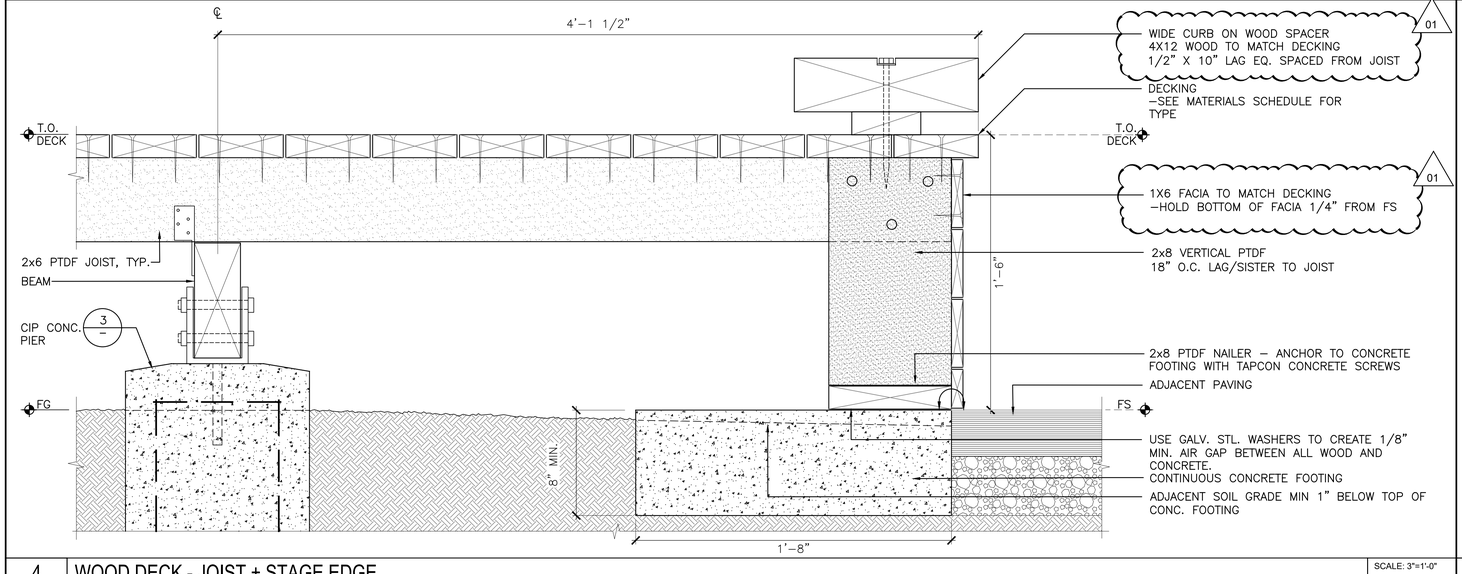
4 CONCRETE PEIR FOOTING, TYP. SCALE: 3"=1'-0"



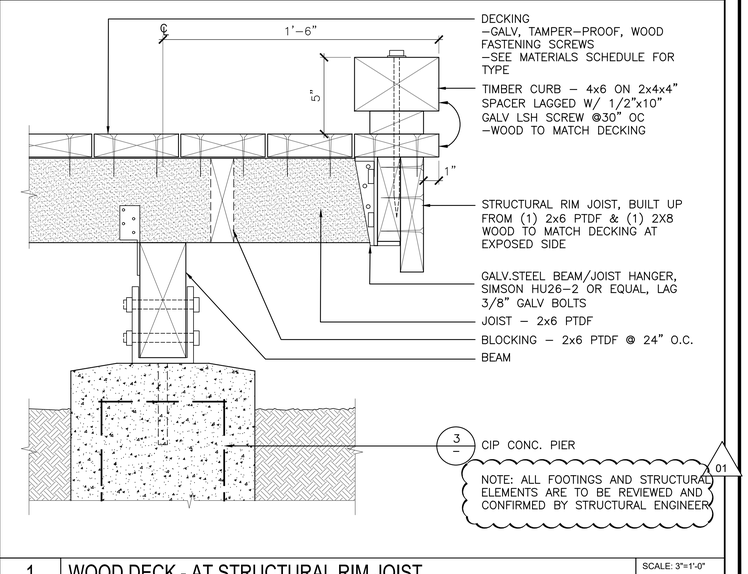
5 DECK RAMP LANDING SCALE: 1"=1'-0"



2 WOOD DECK - AT RIM JOIST SCALE: 3"=1'-0"



4 WOOD DECK - JOIST + STAGE EDGE SCALE: 3"=1'-0"



1 WOOD DECK - AT STRUCTURAL RIM JOIST SCALE: 3"=1'-0"

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CONSULTANTS

PROJECT NAME

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

WOOD DECK
DETAILS - BID ADD ALT.

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-221

NOTE:

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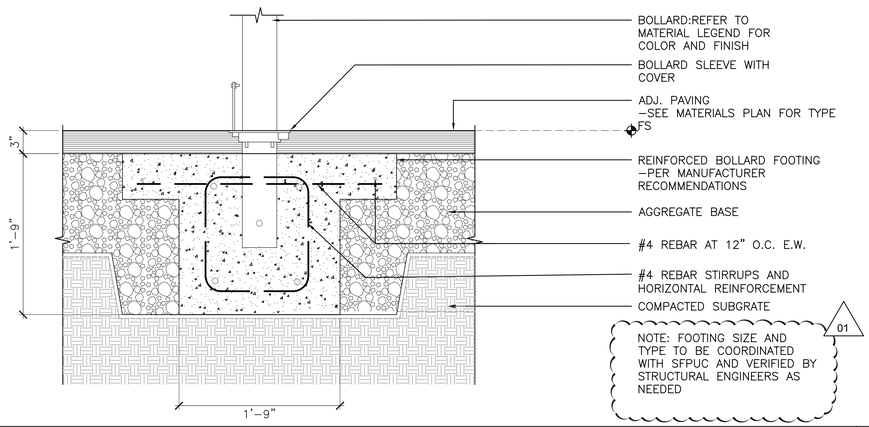
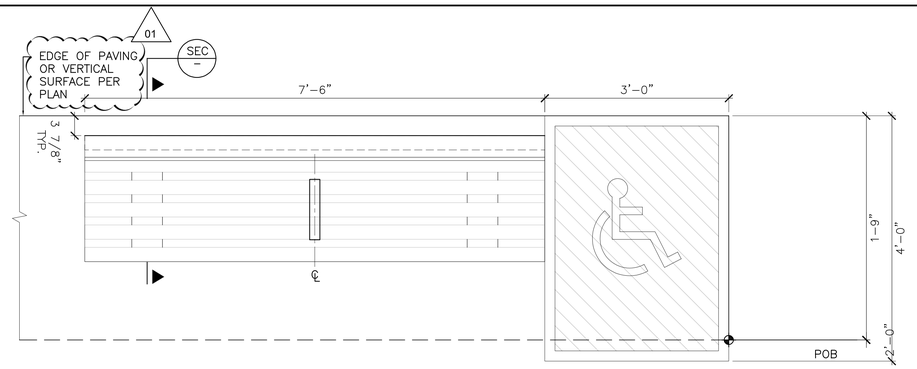
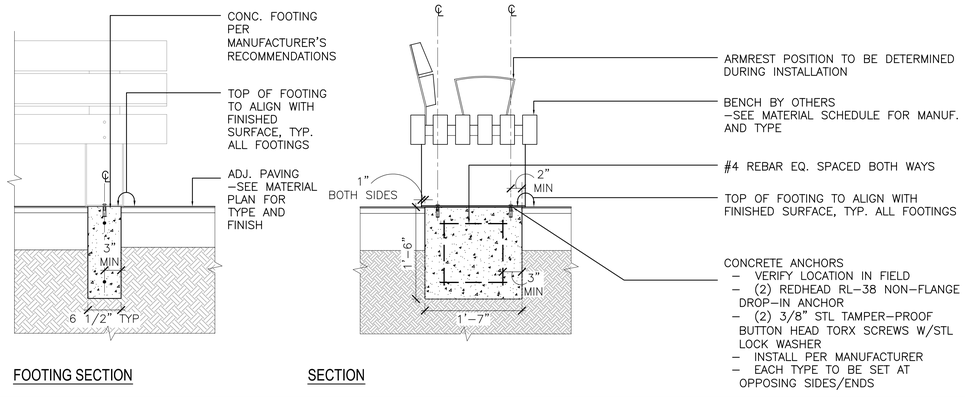


4 REMOVABLE BOLLARD — SCALE: 1 1/2"=1'-0"



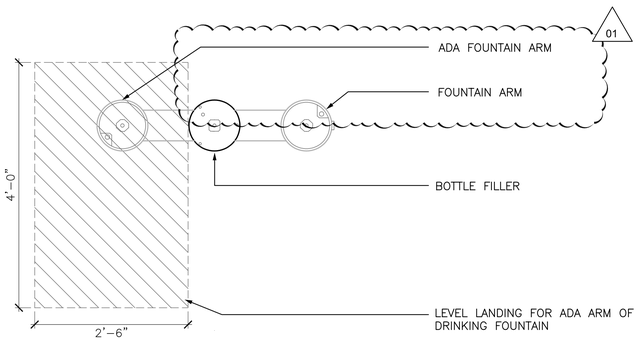
PLAN



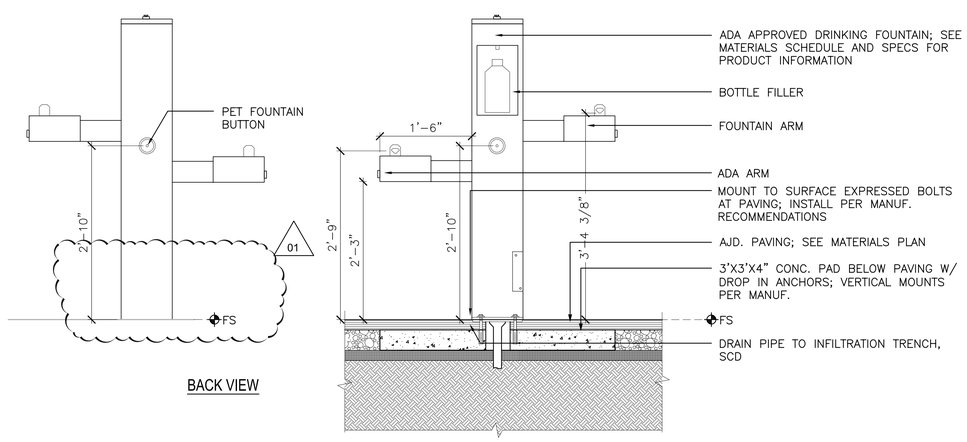
FOOTING SECTION SECTION

2 BENCH - TYPICAL — SCALE: 1"=1'-0"

NOTE:
1. MODEL MEETS ALL CURRENT FEDERAL REGULATIONS FOR THE DISABLED INCLUDING THOSE IN THE AMERICANS WITH DISABILITIES ACT
2. ALL FOOTING DIMENSIONS AND REINFORCEMENT TO BE CONFIRMED WITH STRUCTURAL ENGINEER.
3. INSTALL PER MANUF, CONTRACTOR TO VERIFY INSTALLATION IS COMPLIANT WITH ADA REQUIREMENTS

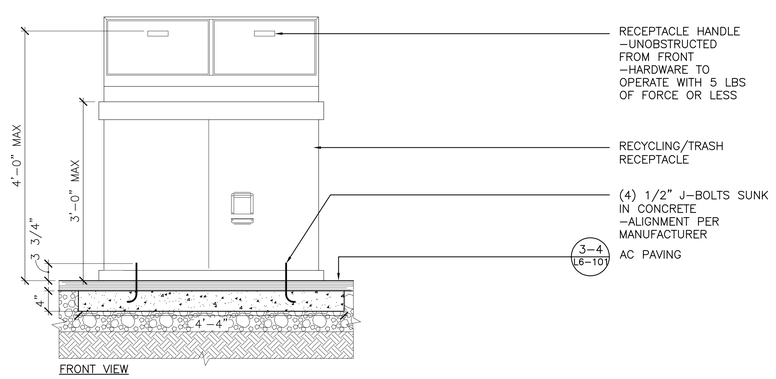


TOP VIEW



FRONT VIEW

3 DRINKING FOUNTAIN — SCALE: 1"=1'-0"



FRONT VIEW

1 RECYCLING/TRASH RECEPTACLE — SCALE: 1"=1'-0"

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DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

SITE FURNISHING DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-251

NOTE:

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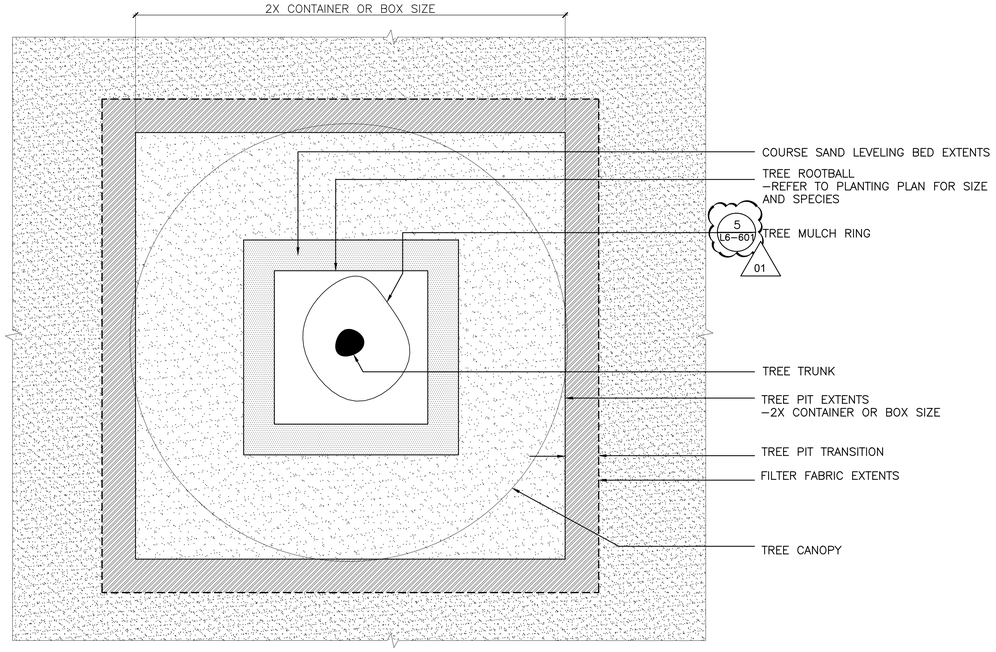
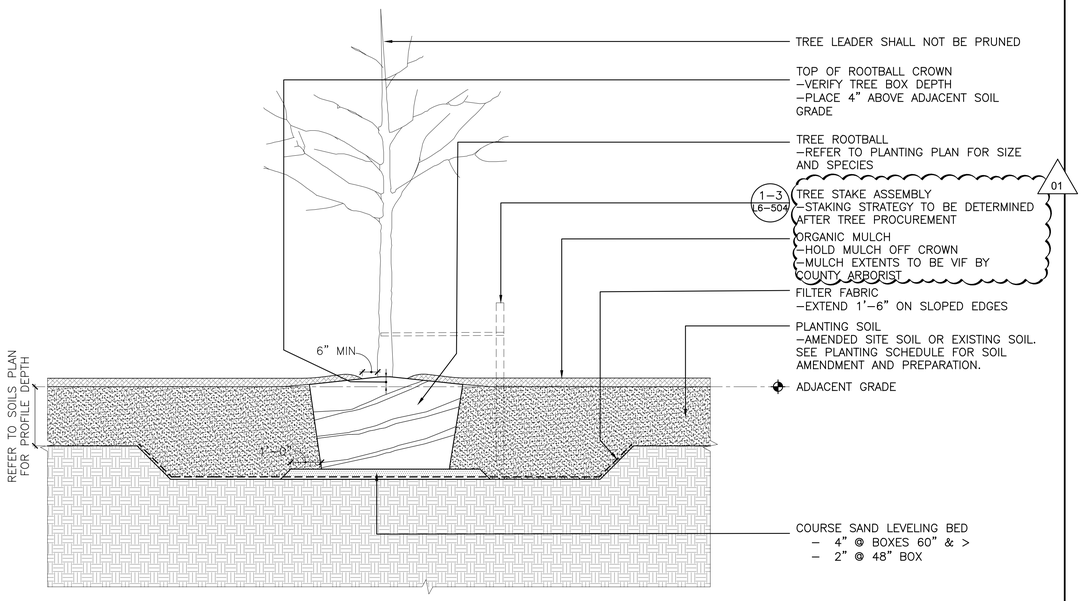
NOTE: LANDSCAPE ARCHITECT SHALL REVIEW TREE PIT PREPARATION AND LOCATION OF TREES PRIOR TO PLANTING. TREE LEADER TO BE SET PLUMB.



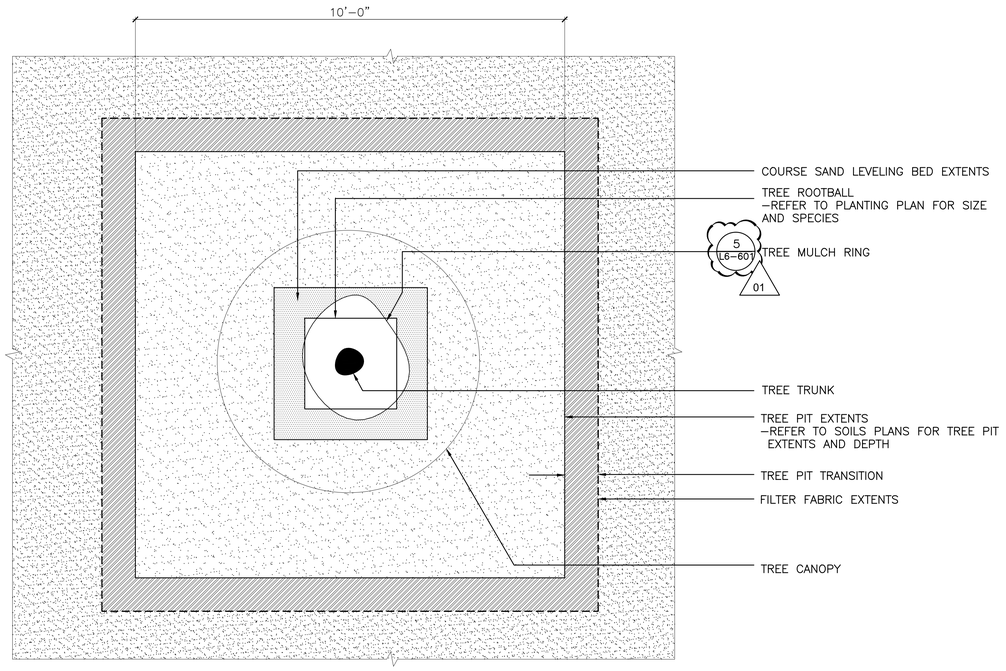
PLAN VIEW



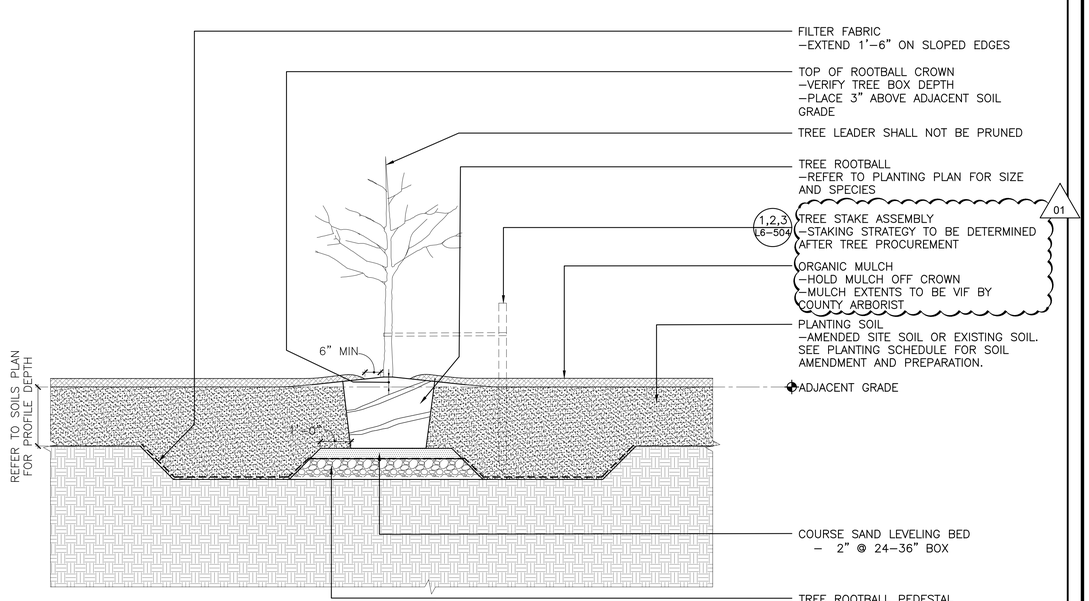
SECTION VIEW

2 | TREE PLANTING - SIZE 48" BOX TO 72" BOX | SCALE: 1/2"=1'-0"

NOTE: LANDSCAPE ARCHITECT SHALL REVIEW TREE PIT PREPARATION AND LOCATION OF TREES PRIOR TO PLANTING. TREE LEADER TO BE SET PLUMB.



PLAN VIEW



SECTION VIEW

2 | TREE PLANTING - SIZE 24" BOX TO 36" BOX | SCALE: 1/2"=1'-0"

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REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

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PHASE

DESIGN BUILD BRIDGE DRAWINGS

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KEY PLAN

SHEET TITLE

TREE PLANTING DETAILS

PROJECT	DRAWN BY
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SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-501

NOTE:

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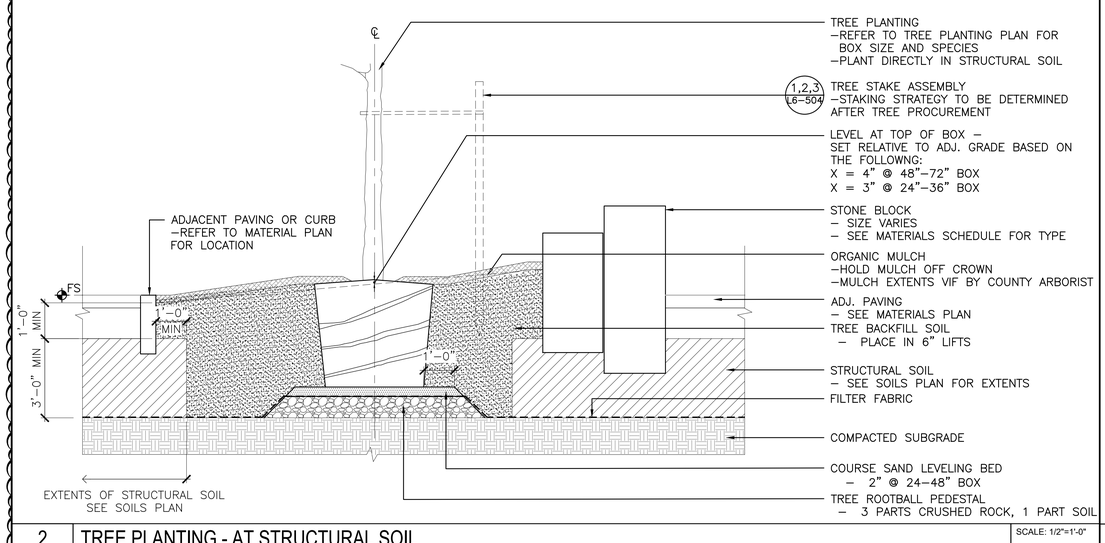
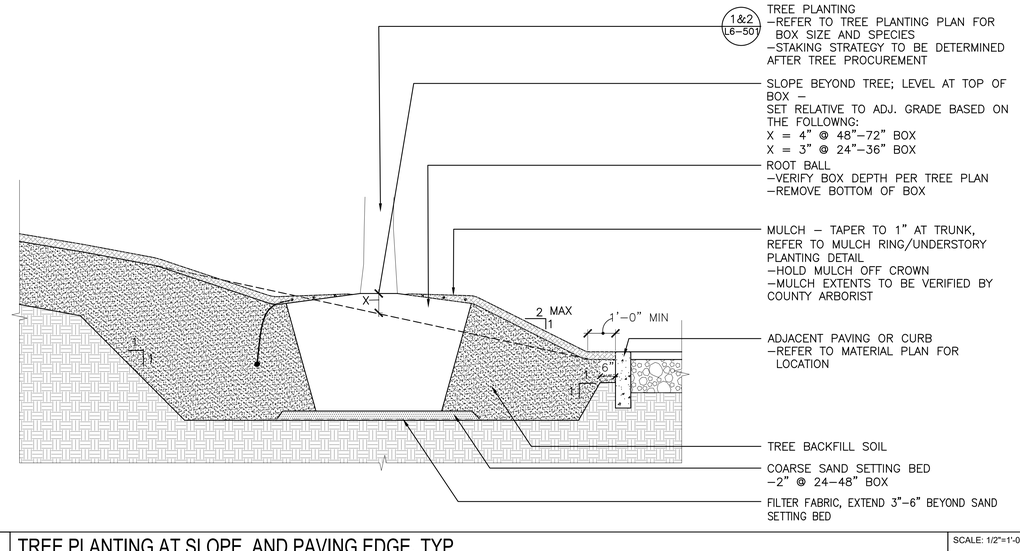


2 TREE PLANTING - AT STRUCTURAL SOIL — SCALE: 1/2"=1'-0"



1 TREE PLANTING AT SLOPE AND PAVING EDGE, TYP. — SCALE: 1/2"=1'-0"

01

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

TREE PLANTING DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-502

NOTE:

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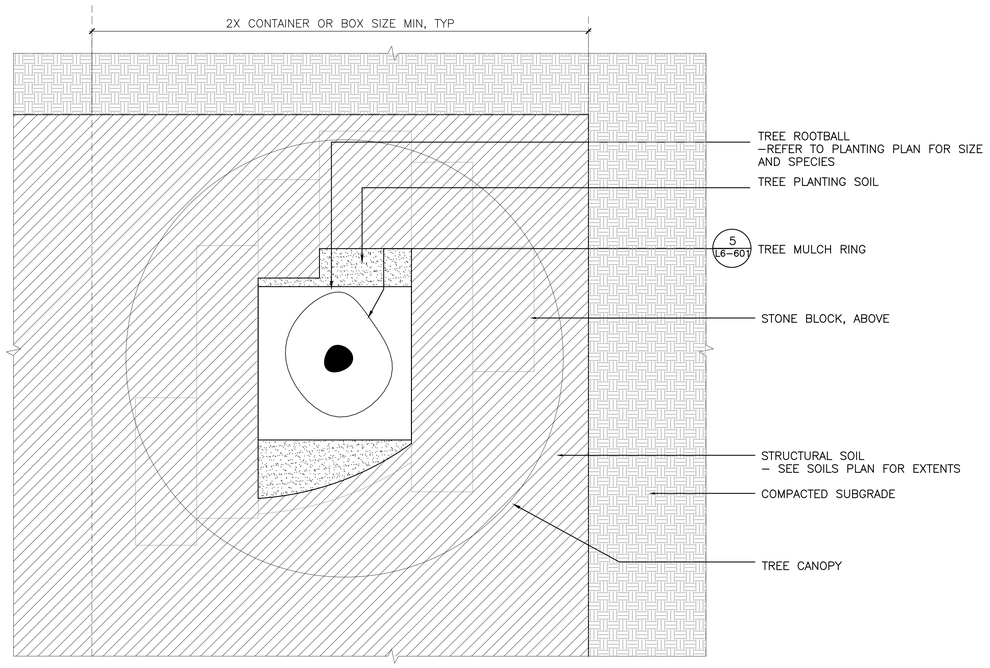
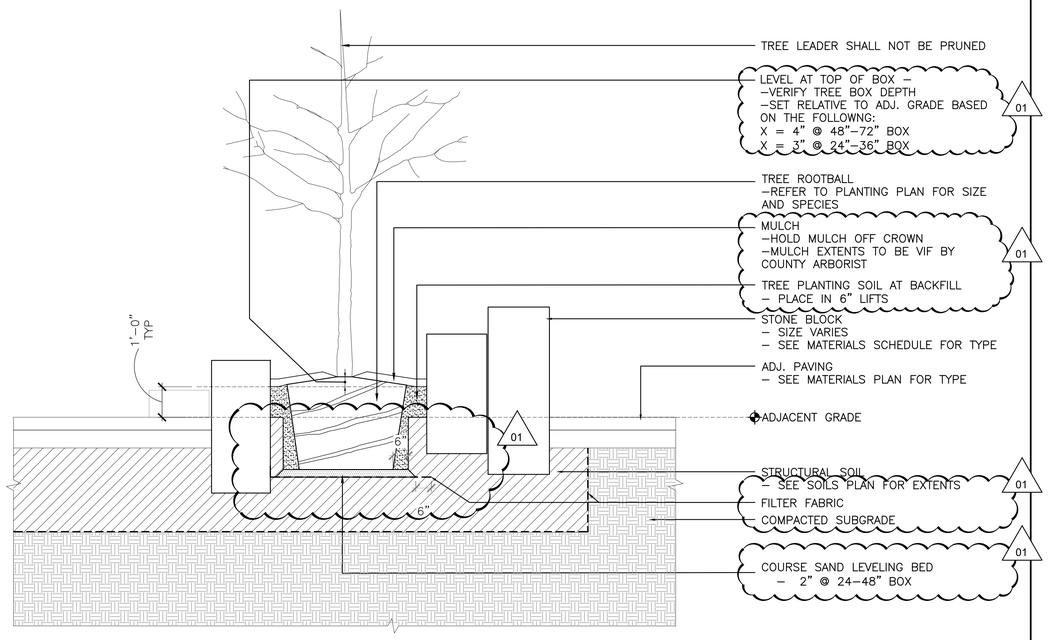


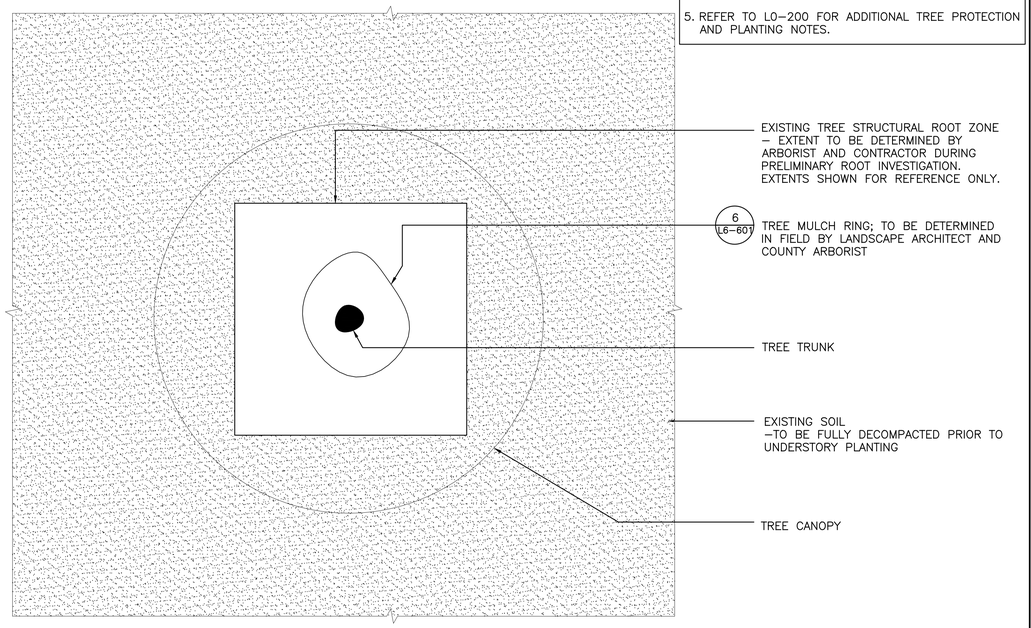
PLAN VIEW



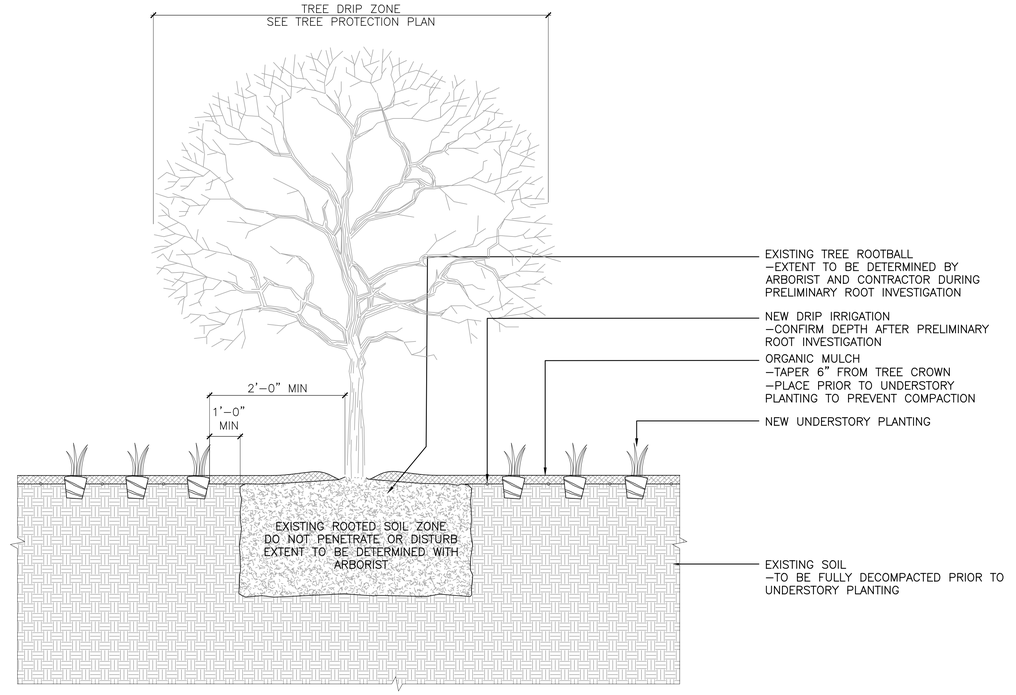
SECTION VIEW

2 | TREE PLANTING - NARROW PLANTER | SCALE: 1/2"=1'-0"

NOTES:
1. ARBORIST AND CONTRACTOR TO CONDUCT PRELIMINARY ROOT INVESTIGATION TO DETERMINE ROOT DEPTH AND SIZE UNDER EXISTING TREES. IF EXISTING ROOTS ARE DEEMED AT AN APPROPRIATE DEPTH, NEW UNDERSTORY PLANTS ARE TO BE PLANTED OUTSIDE OF PRIMARY ROOT PLATE EQUAL TO 3X DBH. IF EXISTING ROOTS ARE DEEMED NOT AT AN APPROPRIATE DEPTH, NEW UNDERSTORY PLANTING IS TO REMAIN OUTSIDE THE LIMITS OF THE TREE PROTECTION ZONE.
2. ALL WORK WITHIN CANOPY DRIPLINE SHALL BE HAND LABOR.
3. REFER TO LANDSCAPE DEMO PLANS FOR TREE PROTECTION ZONES.
4. AVOID UNNECESSARY ROOT DISTURBANCE, COMPACTION OF SOILS WITHIN DRIP LINE, OR LIMB BREAKAGE. PLACE MULCH PRIOR TO UNDERSTORY PLANTING TO PREVENT COMPACTION. DO NOT STORE MATERIAL OR DISPOSE OF ANY MATERIAL WITHIN DRIPLINE.
5. REFER TO L0–200 FOR ADDITIONAL TREE PROTECTION AND PLANTING NOTES.



PLAN VIEW



SECTION VIEW

1 | EXISTING TREE WITH NEW UNDERSTORY PLANTING | SCALE: 1/2"=1'-0"

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PROJECT NAME

FLOOD PARK PLAYGROUND
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PHASE

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01	BRIDGE DRAWINGS AMENDMENT	03.20.25

KEY PLAN

SHEET TITLE

TREE PLANTING DETAILS

PROJECT	DRAWN BY
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SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-503

NOTE:

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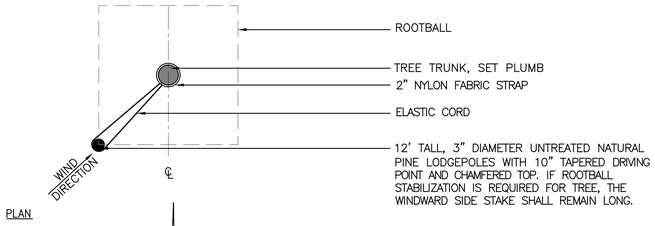
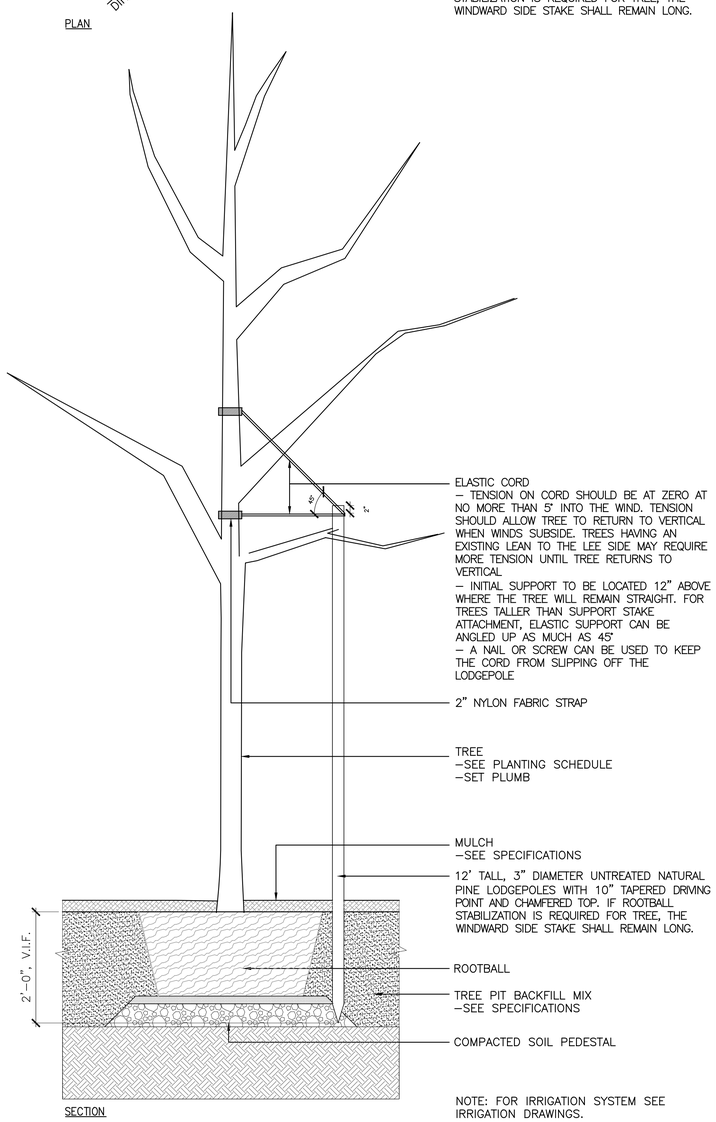


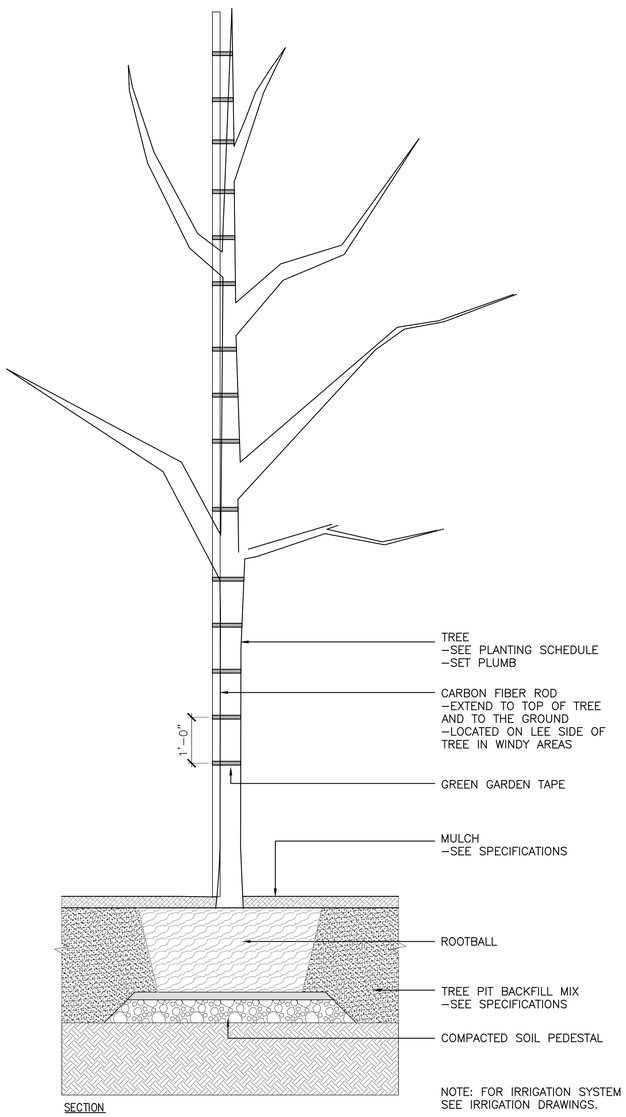
PLAN



SECTION

NOTE: FOR IRRIGATION SYSTEM SEE IRRIGATION DRAWINGS.

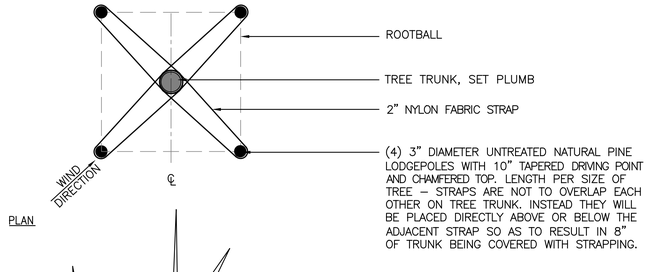
1 BUNGEE STAKING — SCALE: 3/4"=1'-0"



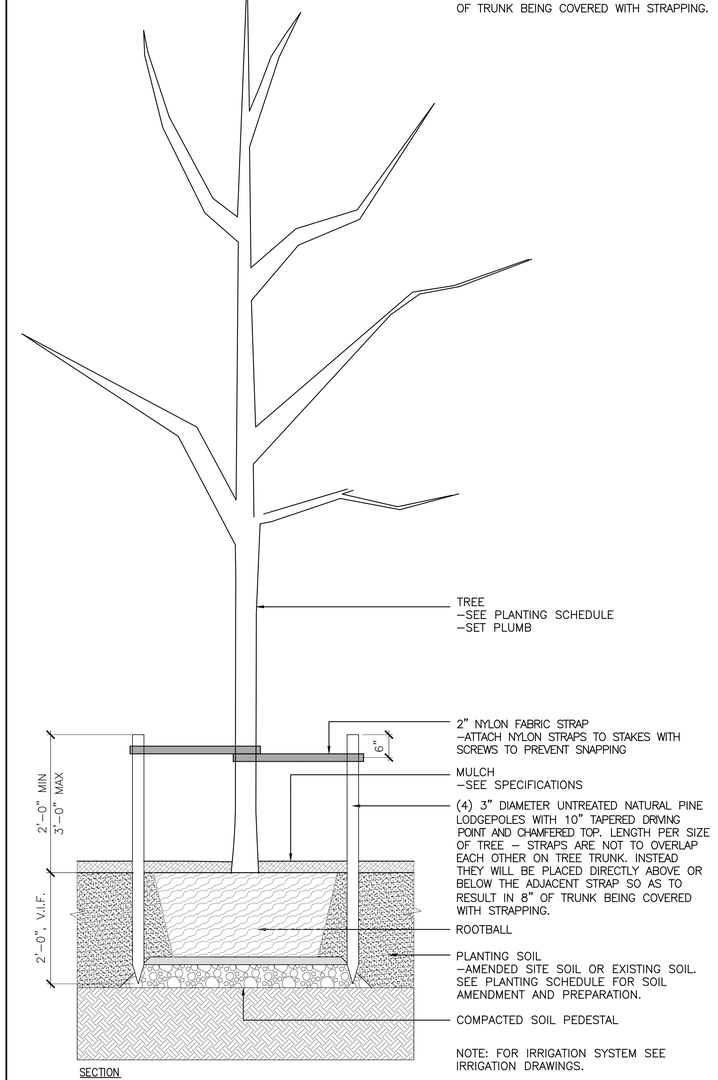
SECTION

NOTE: FOR IRRIGATION SYSTEM SEE IRRIGATION DRAWINGS.

2 TREE ROD STAKING — SCALE: 3/4"=1'-0"



PLAN



SECTION

NOTE: FOR IRRIGATION SYSTEM SEE IRRIGATION DRAWINGS.

1 TREE ROOTBALL STAKING — SCALE: 3/4"=1'-0"

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PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
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PHASE

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KEY PLAN

SHEET TITLE

TREE PLANTING DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L6-504

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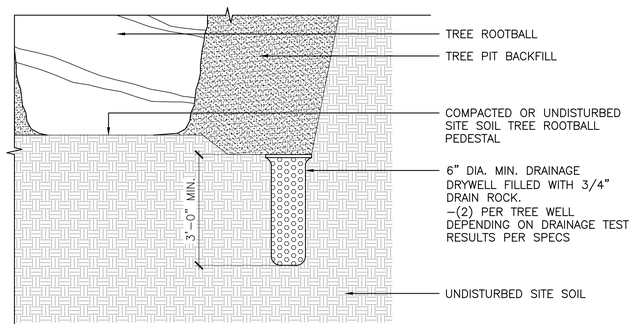
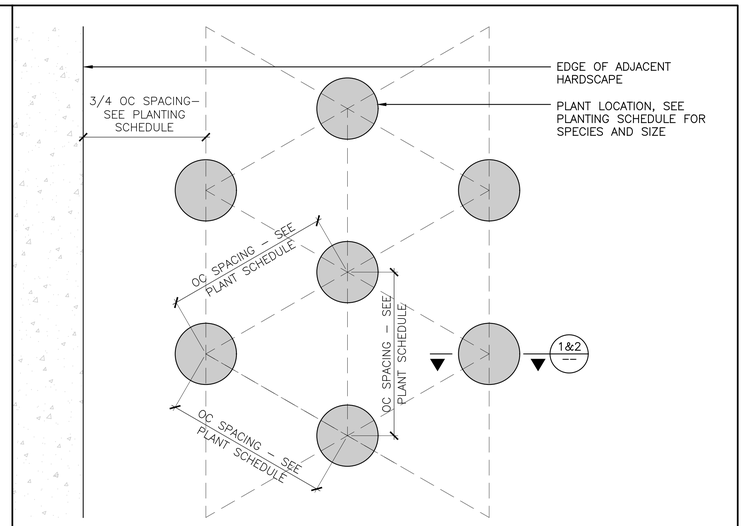
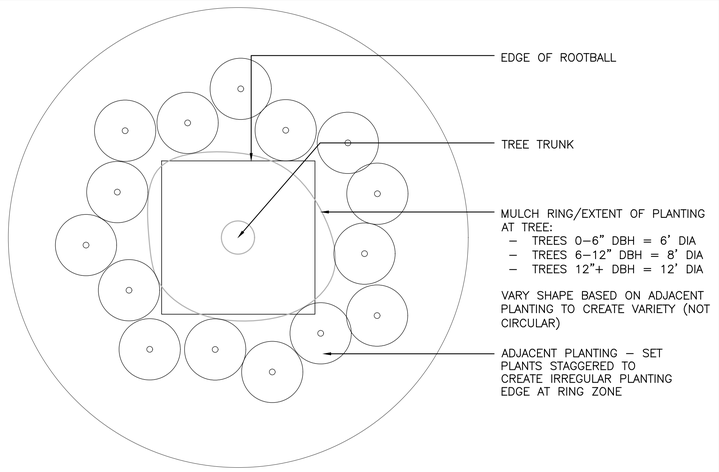


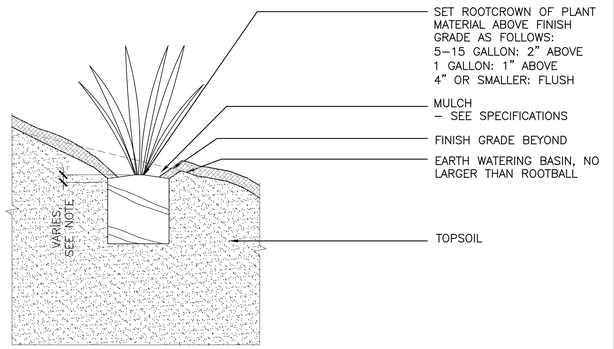
6 TREE PIT DRAINAGE DRYWELL — SCALE: 1 1/2"=1'-0"



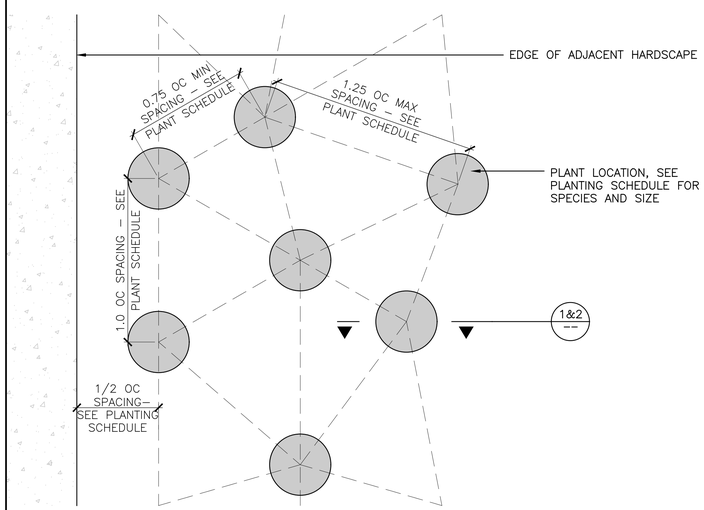
3 TRIANGULATED TYPICAL SPACING — SCALE: 1"=1'-0"



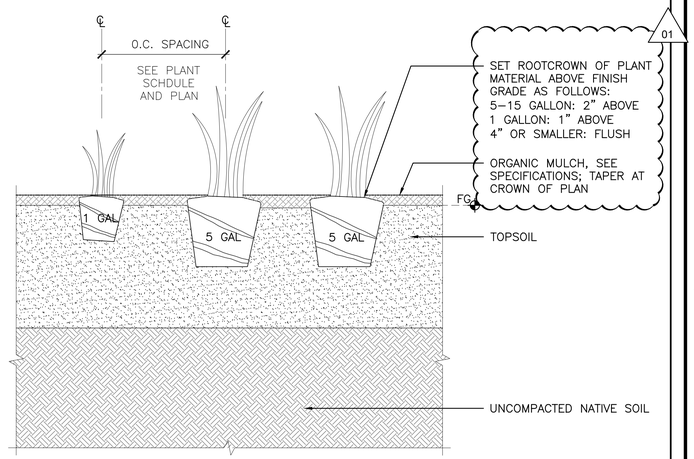
5 TREE MULCH RING — SCALE: 1/4"=1'-0"



2 SHRUB PLANTING ON SLOPE — SCALE: 1"=1'-0"



4 IRREGULAR SPACING - HABITAT PLANTING — SCALE: 1"=1'-0"



1 SHRUB PLANTING — SCALE: 1"=1'-0"

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CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

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KEY PLAN

SHEET TITLE

UNDERSTORY PLANTING DETAILS

PROJECT	DRAWN BY
CSM 2401	RS/DG
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1"= 10'-0"	AMP

SHEET NUMBER

L6-601

Flood Park Playground

Design Criteria Narrative

PART 1 - DESIGN NARRATIVE

- Value Engineering Summary
    - General: In the course of review of the DBE's proposal and costing, numerous ideas were removed, reduced, and or material extents were modified to align the Bridge Document Design while maximizing retention of the original Bridge Documents issued in early March of 2025. All play equipment specified in the original Bridge Documents remain unchanged and unmodified. The below summarizes key changes. Where required, additional information is included in the appropriate subsections in Part 2 – Design Criteria:
        - Planting – extents of hydroseed around the perimeter of the playground, planting within the playground, and the shrub (or any containerized) planting across the project area.
        - Asphalt – extents of asphalt extending into the playground. Removal of Permaloc Asphalt Edge where required. The asphalt extensions within the playground are expected to be pedestrian loaded only, and are thus expected to utilize a slimmer profile and subgrade design. All asphalt paving should utilize Mirafi 140N or equivalent geotextile given issues discovered with ground squirrels during Phase 1.
        - Stone – significant reduction in stone and the expected revision to flat laid stones only.
        - Trash Receptacles – reduction in quantity to one receptacle, consistent with Phase 1 products and installation. Final location is to be determined by the DBE.
        - PIP Extents – have been modified to reduce overall square footage while remaining compliant with fall zone requirements. A 6" buffer for tolerance remains required at all fall zones to meet playground safety requirements. Key areas of PIP revisions are as follows:
            - Area Between Goat Hill Slides – is included.
            - Area Beneath the Bridge to Berliner Structure from Goat Hill – is included.
    - As design and anticipated costing is developed during the DBE's documentation period, the following items should be prioritized for inclusion in the design as budget allows:
        - Quiet Hut – per the revised plan, the quiet hut is removed. If viable, the same or comparable product, should be included.

- Percussion Play – per the revised plan, the percussion equipment is removed. If viable, the same or comparable product, should be included.

- CIP Pathway – per the revised plan, the CIP pathway is removed. If viable, the path and/or accessible conc pads should be included to provide accessible access to a Quiet Hut and/or Percussion Play element.

- Stone – per the revised plan, stone quantities and design have been significantly reduced and modified. If viable, the addition of stone should be included with a focus on integrating some verticality which can be achieved by: A) stacking flat stone at key areas, B) reintegrating angled stone stacks. It is the responsibility of the DBE to coordinate with American Soil & Stone and/or quarry supplier to validate strategies and timing of this effort. It is acceptable to introduce alternative stone types or designs. However, such proposals are required to be reviewed by both County Parks and the Bridging Landscape Architect. It is preferred to retain the Mahogany slabs for additional stone, as procured from American Soil & Stone. Flat laid stone is preferred in all contexts to be at a height commensurate with standard seating parameters.

- Logs – given changes to the arborist chip area, County procured logs should be laid flat and installed such that rolling of logs is not viable by future users. Logs should be of sound quality, free of rot, pests, and pathogens or fungi which would present risks to occupants or vegetation within the park. It is the DBE's responsibility to review this application with the County of San Mateo Parks Department.

- Berliner Bridge – it is understood that the bridge to the Berliner towner from Goat Hill is included. It is the DBE's responsibility to resolve all coordination for Bridge installation, including the cost-benefit analysis of independently fabricated bridge.

The Flood Park Playground's design is based on substantial community engagement and preference selection for materiality, experience, and play typologies. In conjunction with County Parks and the Community, the Boulder Canyon Concept was selected. The Concept was selected based on the following design principles: emphasis on natural materials, use of stone, natural color palette with highlights of bright colors, and a destination double-tower feature with bridge elements. The playground is intended to be an interactive and engaging experience for users of all ages, provides ample opportunities for the differently abled, and provide caregivers with abundant seating opportunities that are shaded and have support. See below for design narratives to specific elements:

- Planting – shall be comprised of primarily native and naturalized species. Plant lists are provided within the Bridge Documents outlining suggested plant palettes. Final plant selection should focus on the following factors: low water use, ease of maintenance, and beauty. The SFPUC ROW has vegetation requirements within and adjacent to their right of way, see attachments. The planting should feel naturalistic with arrangements of plants consistent with what is found in natural and natural-esque planting designs located in the Bay Area. Planting plan is to be progressed to a point where individual plants are laid out for review by Bridging Landscape Architect prior to procurement.

    - Understory Planting – shall provide a buffer between adjacent spaces and pathways to create a sense of enclosure within the playground through varying plant heights and have

a mix of textures, bloom times, and be of high density. Planting design will utilize a hydroseed application matching the means and methods of Phase 1 construction, and use the PA-05A Forbs Meadow Mix. No tackifier is to be used. Shrubs shall be interplanted amongst the hydroseeded perimeter and entry areas as the shrub allowance allows. Shrubs and containerized planting in all areas around the perimeter should have a higher density along the edges of PIP, Goat Hill, and planting islands within the playground. The hydroseeded forb mix shall have a stronger presence along the perimeter walkways connecting to or adjacent to Phase 1, or the parks main entry adjacent to the parking lot.

- Tree Planting – a number of suggested species are included in the Bridge Drawings. Final tree selection will need to be reviewed with Natalie Krug, County Arborist, the suggested species are based on initial coordination with Natalie Krug. Tree size must be maximized and can exceed the box sizes suggested in the Bridge Drawings. Fast growth and canopy expansion is a critical factor as the area is exposed to the hot summers in Menlo Park. Shade structures are not included and thus the project relies on trees to provide shade. The inclusion of additional trees beyond what is outlined in the Bridge Drawings is acceptable as budget allows, but sufficient rootable soil volume must be met in all applications. Tree selection shall also include based on minimal root disturbance to paving and other features. Trees will require head height clearances within the use zone of play equipment. Required pruning of such trees shall be minimized as a function of the procurement and tree selection process and not include "lollipop" canopies, or heavy pruned canopy sides adjacent to fall/use zones.

- Stone – stone is integral to the 'Canyon' experience and provides scrambling, tactile experience, and seating opportunities. Stone shall be maximized according to project budget constraints, with additional verticality achieved through either angled stacks of stone consistent with the original Bridge Drawings, or stacked flat pieces of stone. Any stone selection shall have minimal to no spalling characteristics and eased edges, free of sharps; comfortable to engage with for seating or for tactile uses by children.

- Groundplane – the groundplane design of the poured in place rubberized safety surface shall provide (1) color field which stretches between the asphalt paving extents, through the major stone features along the central circulation path of the playground. Additional colors fields shall be utilized in pattern that is to be reviewed and approved by the Bridging Landscape Architect. The intersections of the surfacing shall be cotangent to adjacent site features. All surfaces must comply with fall zone requirements of adjacent play equipment and accessible structures and attenuation per CPSI standards. Assume that each color field will be standard colors mixed with 50% black. Inclusion of stone stepping paths through planting areas is acceptable, shall include planting fencing alongside, and provide a safe, durable, and clear path of travel for users.

- Goat Hill – the destination tower feature is connected to a sloped walk which provides accessible access to a sloped hill with embankment slides, and connects users of all abilities to the towers. Path slopes requiring railings or limiting accessibility are not acceptable. Stones in this application will be utilized for stepping moments for users to skip the pathway and should be bounded by fencing to protect adjacent planting. Stones should have dense arrangement, butt-jointed together to reduce open areas subject to erosion and compaction. Between the embankment slides, features such as ropes and or climbing holds shall be affixed to the PIP slope. It is not acceptable to use Columbia Cascade slides on Goat Hill, and Berliner slides are preferred as originally specified. Any alternate proposal must be reviewed and approved by County Parks and the Bridging Landscape Architect.

Review of Work for Approval

Bridging Landscape Architect shall review the following at the project site during construction for approval on behalf of the owner. Bridging Landscape Architect is only reviewing for consistency with design intent, and will not review for ADA or other code compliance.

- Curb and Paving Layout – once area is staked and conforms have been resolved.
- Concrete Finishes – both mockup and installed conditions. Mockups are to be coordinated with County Parks and the Owner's Representative relative to budget. Disposal of mockups and/or removal and disposal of unapproved first in place installations are the sole financial and logistical responsibility of the DBE. Disposal must meet criteria for any mockup materials consistent with attending law and pertinent requirements (including but not limited to Air Quality and construction waste disposal for any AHJ), waste disposal requirements, and transportation/trucking needs
- Stone Procurement and Installation – both mockup and installed conditions. It is acceptable to do first in place mockups.
- Metal Fabrication – shop drawings (reviewed for consistency with Bridge Documents, CMG will supply no further approvals), samples, and installed conditions. Mockups are to be coordinated with County Parks and the Owner's Representative relative to budget.
- Plant Quality – through photo-based submittals and onsite for delivered material for consistency.
- Plant Layout – once all plant materials are procured and laid out.

The following are scope areas which the Design Build Team is expected to account for:

1. Civil Engineering – for stormwater, subdrainage as required, utilities, and a demolition plan if not carried by the Landscape Architect. Records of the existing conditions are extremely poor that fully show previous site activities and work, and there is presently not sufficient information to determine the quantity or type of existing utilities not discovered during the survey effort.
2. Cathodic Protection – the site has known corrosive soils. Cathodic protection must operate in conjunction with the existing systems and be tested prior to completion of work. Should utilities design not require metal fittings or similar which require cathodic protection this scope can be removed. It is the sole responsibility of the DBE to verify this to County Parks.
3. Irrigation – must be compatible with Phase 1 improvements and not provide duplicate equipment or infrastructure. Irrigation design must comply with MWELO and supply water use calculations. It is assumed that all planting areas will be irrigated, the means and methods of said irrigation is to be determined by the DBE relative to pertinent requirements for irrigation within Menlo Park and the Bay Area, and provide sufficient water such that the establishment and success of all planted material is reasonably guaranteed for the region's climate and selected vegetation's needs.

4. Geotechnical – geotechnical reports have been provided as attachments, geotechnical testing and review of subgrades and utility backfills is required. The use permeable rock requires gradation inspections at the quarry prior to import, compaction tests, and in-situ permeability test(s). The Contractor must coordinate the infiltration requirements for items such, but not limited to: drywells, subgrade infiltration trenches, and tree pits.

5. Structural Engineering – for all walls, footings, and other required elements.

PART 2 - DESIGN CRITERIA

2.1 Tree Removal and Protection

A. Summary

1. Procedures for removal of existing trees scheduled for demolition. Protection during construction operations of existing trees to remain.

2. Refer to section 015639 “Tree Removal and Landscape Protection” for procedures and requirements.

2.2 Site Clearing and Demo

A. Summary

1. Procedures for clearing site, detection and protection of existing infrastructure, stripping and preservation of top soil. Scope and cost for demolition must reflect the previously executed removal of play equipment by County Parks.

B. Quality Control

1. Contractor to create comprehensive list of all existing equipment, site elements and furnishings. Review extent of demo and removal vs salvage with LA and client prior to proceeding.

2. Do not commence site clearing operations until temporary erosion- and sedimentation-control and tree and landscape protection measures are in place.

3. Tree- and Plant-Protection Zones: Protect according to requirements described above.

4. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises where indicated.

5. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

6. Open all covers and drain grates, dip all manholes, confirm active vs inactive lines, confirm connection points and flow directions for all active lines, confirm materiality of lines to be

demolished. (transite has been located on site elsewhere and was able to be abandoned and remain in place if it was not disturbed)

7. Existing SFPUC access structure and hatch are to remain as is and protected from construction impacts at all times.

8. Historic adobe structures are to remain in place and protected from construction impacts at all times.

9. All demo occurring over SFPUC is to be coordinated with SFPUC and be compliant with their operations, restrictions, and requirements.

10. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

C. Products

1. NA

D. Execution

1. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.

2. Areas within the limits of work, as shown on the Plans, or as directed by the County appointed Construction Manager, shall be cleared as necessary for the construction of improvements and related work. The areas to be cleared and grubbed will not necessarily extend to all limit of work lines. The exact limits for clearing and grubbing shall be approved by the County appointed Construction Manager in advance of commencing any work.

3. Construction easements, as shown on the Plans, shall be cleared only as necessary for the construction of improvements and related work, or as directed by the County appointed Construction Manager.

4. All existing vegetation, fencing, driveways, and walks outside the areas to be cleared and grubbed, shall be protected from injury and damage resulting from the Contractor's operations.

5. The Contractor shall take care not to damage existing facilities that are to remain. Any damage to such facilities caused by the Contractor's operations during clearing and grubbing operations, as determined by the County appointed Construction Manager, shall be repaired to the satisfaction of the County appointed Construction Manager, all at the Contractor's expense.

6. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

7. Topsoil Stripping:

    a. Remove sod and grass and vegetation before stripping topsoil.

    b. Strip topsoil to depth indicated in Soil Preparation Section in a manner to prevent intermingling with underlying subsoil or other waste materials.

    c. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

    d. Confirm location of stockpile with Owner's appointed Construction Manager.

    e. Limit height of topsoil stockpiles to ~~48~~ 60 inches.

    f. Do not stockpile topsoil within tree protection zones.

8. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

9. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

2.3 Utilities

A. Summary

1. Installation and coordination of wet and dry utilities.

B. Quality Control

1. Utility trench layout is to avoid tree canopies as much as possible and be combined where possible.
2. Trenching is to comply with tree protection specification
3. Geotechnical inspections
    a. Water Line Backfill
    b. Irrigation Sleeve Backfill
4. Evaluate as-builts from Phase 1 to determine appropriate water connection point for drinking fountain. Consider and plan for discovery, capping or abandonment of existing utilities that may be in conflict with this proposed new water line route.
5. Cathodic Protection is necessary for all underground utilities due to existing expansive soils across the site.
6. Inspection of cathodic protection after installation is necessary

7. Provide drawings and specifications for record documents

C. Products

1. NA

D. Execution

1. NA

2.4 Cast -in-Place Architectural Concrete (walls, seats, other vertical CIP concrete elements)

A. Summary

1. Cast-in-Place (CIP) Architectural Concrete work for all vertical, above-grade concrete site elements, including formwork, reinforcement and finishing affecting the finished appearance of the Work.
    a. Concrete Retaining walls

B. Quality Control

1. Do not proceed with the construction of the cast-in-place architectural concrete in the project, including fabrication of the formwork, until all samples, product data, mockup and shop drawings have been approved by the DBE Landscape Architect.
2. Submit product Data: For each type of product indicated, including but not limited to form facing material, form release agent, form ties, reinforcing bar supports, waterproofing admixtures, curing compound, joint fillers and sealants, and cleaning solutions.
3. Submit statement of Mix Design: Submit (1) copy of Statement of Mix Design prepared by batch plant servicing Project for each load delivered to Project. Structural review and stamp for all footings and walls is required. It is the DBE's responsibility to review engineering and mix designs and approve appropriate systems and materials for any application.
4. Footings shall not be visible at the surface wherever possible.
5. Any surface expression of structural concrete or walls is to be board formed finish or finished in accordance with a review of project constraints with the Bridging Landscape Architect. Surface expression of architectural concrete shall be consistent with structural concrete.
6. Mock Up
    a. Coordinate construction of mock-up with other site work as required. Mockups shall be 10'x10' squares for flatwork, 10' LF for linear elements, or comprise a first-in-place mockup whose extents allows for comprehensive review and does not rely on interpreting intent for the final install. As noted above, extents of mockups are subject to review and approval with Owners Rep and County Parks relative to budget. Installations not utilizing mockups or first in place installations for prior approvals and attending basis of design reviews does not relieve the DBE from

defective, unsafe, unsound, deleterious performance, or otherwise unsatisfactory performance.

1) Mock-up shall consist of the following:
    a) Use approved form face material, reinforcement and accessories and assemble formwork as intended for the building construction.
    b) Mock-up shall demonstrate all conditions including corners, top, sides, form seam lines, joints and reveals.
2) If Mock-up is not approved by the Bridging Landscape Architect, remove and replace with new Mock-ups at no additional cost to the Owner.
3) Final approved mock-up will serve as the standard for quality, finish and design for all future related architectural site concrete work and shall not be removed until all work in place has been completed and approved.
4) Design formwork to limit deflection of form-facing material to limit deflection of form-facing material, studs, and walers.

7. Performance Criteria: All cast-in-place architectural concrete formwork shall be performed so that no evidence of the following will be evident when the concrete is subject to imposed loads, temperature and weather conditions:
    a. Damage of any kind.
    b. Formwork fastening penetrations or formwork anchoring devices or projections other than approved form ties and specified embedded items.
    c. Cracking, other than at control joints, due to improper forming and placing.
    d. Out of alignment or incorrect profiles.
    e. Voids, sand pockets or discoloration due to fluid loss through the formwork.
    f. Rock pockets and honeycombs that are not consistent with the approved mockup.
    g. Discoloration caused from formboard staining and from improper placing of the concrete.
8. Provide standard warranty with a duration of one (1) year in accordance with General Conditions. Warranty shall be in writing and shall warrant work under this Section to be free from defects for the period stipulated.

C. Products

1. As-Cast Surface Form-Facing Material:
    a. Provide continuous, true, and smooth concrete surfaces.
    b. Furnish in largest practicable sizes to minimize number of joints.
    c. Acceptable Materials: As required to comply with Surface Finish designations.
2. Form Ties: Form ties that will not be visible in final wall condition.
3. Concrete Materials: Cement, washed sand, cementitious materials, aggregates shall be per industry standards and as required to achieve the structural and aesthetic properties of specified design.
4. Color and Finish: as indicated in the Drawings Materials Schedule

D. Execution

1. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 (ACI 117M) and to comply with the Surface Finish designations in the drawings.
2. Forms shall be fabricated so the concrete can be adequately placed, vibrated and finished to achieve the specified finishes.
3. Reinforcement: Comply with CRSI's "Manual of Standard Practice" for placing and supporting reinforcement.
4. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
5. Finishes for formed placements:
    a. All exposed work shall be finished with the approved finishes determined from sample tests on the mock-up. Finishes shall be as specified in the drawings.
    b. Minor protruding defects such as fins may require removal. No filling of bug holes. Patching or other filling and surface repairs shall be avoided.
    c. Tie Hole Treatment: No Tie Holes in Formwork
6. Concrete surface repairs:
    a. Prior to repairing or patching any surface defects in the concrete, review areas and repair process and materials with DBE Landscape Architect or Owner's Representative in the field.
    b. Provide a repair mock-up using the process and materials approved by DBE Landscape Architect or Owner's Representative for review and approval prior to initiating site-wide repair work.
7. Defective Concrete:
    a. Repair and patch defective areas when approved by Architect.
    b. Remove and replace concrete that cannot be repaired and patched to Architect's approval

2.5 Asphalt Paving

A. Summary

1. Pedestrian and Vehicular hot-mix asphalt paving. Natural (bevel), steel or concrete curb edging per The Drawings.

B. Quality Control

1. Geotechnical inspections

    a. Paving Subgrade
    b. Paving Agg Base

2. Submit Certificates for:

    a. Aggregates
    b. Asphalt binder
    c. Tack coat

C. Products

1. Provide Asphalt binder, Asphalt Cement, Tack Coat as required to achieve design.

2. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes designed in accordance with procedures in AI MS-2, "Asphalt Mix Design Methods".

D. Execution

1. Surface preparation:

a. Ensure that prepared subgrade is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.

b. Tack Coat: Apply uniformly to surfaces of existing pavement. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.

2. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

3. Joints: Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course. Seams of separate installations should be minimized to the maximum extent possible.

4. Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

5. Edge Shaping: where asphalt is not bordered by steel or concrete edging, while surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly. It is acceptable to not utilize Permaloc Asphalt Edge restraints as seen in Phase 1 work.

6. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

2.6 Cement Concrete Paving and Curbs

A. Summary:

1. Pedestrian CIP concrete walks, site paving, stairs & curbs. Formed and sawcut joints.

B. Quality Control

1. Geotechnical inspections

a. Paving Subgrade
b. Paving Agg Base

2. Submit Product Data - Manufacturers' current printed specifications and catalogue cuts of the following:

   a. Expansion joint filler, backer rod and bond breaker and/or zip strip.
   b. Integral color Admixture
   c. Surface Retarder/Etch
   d. Joint Sealant
   e. Sand to cover Joint Sealant

3. Mix Standards: Conform to the ACI Manual and the Portland Cement Association's "Design and Control of Concrete Mixes".

4. Slip Resistance: All paving surfaces shall be slip resistant consistent with CBC Title 24 requirements.

5. Mock up: Provide (1) 6-foot x 6-foot sample of each paving type.

   a. Each mock-up is to contain all joint types specified on project, including construction, contraction, and expansion and finishes as indicated.
   b. Coordinate location of mock-ups with Owners Representative.
   c. Approved mock-ups will not remain as part of completed work.
   d. Mockup is to be reviewed and approved by Bridging Landscape Architect.
   e. As noted above, extents of mockups are subject to review and approval with Owners Rep and County Parks relative to budget. Installations not utilizing mockups or first in place installations for prior approvals and attending basis of design reviews does not relieve the DBE from defective, unsafe, unsound, deleterious performance, or otherwise unsatisfactory performance.

6. Coordinate all items of other trades to be furnished and set in place. Coordinate proper installation of all accessories embedded in the concrete and for the provision of holes, and openings necessary to the execution of the work of the trades

C. Products

1. Provide forms, steel reinforcement, concrete materials and admixtures per industry standards and as required to achieve the structural and aesthetic properties of specified design.

2. Color and Finish: as indicated in the Drawings Materials Schedule

3. Expansion Joint Materials:

   a. Pre-molded Joint Filler: non-extruding and bituminous type resilient filler, compatible with sealant and backer rod. Expansion joints shall conform to the requirements of ASTM D 1751.

4. Joint Sealer

a. Type: Multi-component polyurethane sealant

b. Color: Submit Samples

5. Bond Breaker: Polyethene tape as recommended by joint sealant manufacturer where bond to joint filler must be avoided for proper performance of joint sealer.

6. Sand: Sand to be surface seeded into Joint Sealer, color to match that of adjacent concrete

B. Execution

1. Verify that subgrade has been rough graded for concrete paving and accepted under another Section prior to commencement of work.

2. Surface Drainage: no "birdbaths" or other surface irregularities will be permitted. Properly correct irregularities.

3. Layout and Forming: Construct forms accurately to dimensions, plumb and true to line and grade. Use forms that are substantial, mortar tight and braced as to maintain position and shape during placing of reinforcing and concrete. Concrete work showing wavy slab surfaces will be rejected.

4. Edging: Tool edges of pavement, curbs, and joints in concrete after initial floating with an edging tool to a 1/4-inch (6-mm) radius. Eliminate tool marks on concrete surfaces and finishes. All exposed edges must be eased, including corners.

5. Construct control, expansion, and construction joints properly aligned with face perpendicular to concrete surface.

6. Locate expansion joints as indicated. When not indicated, provide joints at maximum 20'-0" on center for curbs and walks, equally spaced. Align expansion joints in abutting curbs and walks and with grade breaks. Control joint spacing is to be per plans.

7. Sealing: After the curing period, carefully clean expansion joints and fill with joint compound to 1/4 in. below adjacent paved surface. Do not permit spillage on paved surfaces or overflow from joint. Sand EJ's for final condition.

8. Slip Resistance Requirements: All exposed exterior paving finishes shall meet the requirements of California Building Code (2018) Section 1133B.7.1.

9. Finish Schedule as shown in the Drawings.

10. Comply with tolerances of ACI 117 and as follows:

a. Elevation: 1/4 inch.
b. Thickness: Plus 3/8 inch, minus 1/4 inch.
c. Surface: Gap below 10-foot- long, unleveled straightedge not to exceed 1/4 inch.

2.7 Precast Concrete Unit Paving (Owner furnished Donor paving)

C. Summary:

1. The Donor Pavers shall be furnished by the Owner and installed by the Contractor.

2. Sand-set precast concrete or Brick Unit Pavers, custom engraving for donor recognition. Edging for pavers shall be coordinated with the Bridging Landscape Architect. Stormwater storage layer beneath paving profile is to be added should it be deemed necessary by Civil and DBE. Should a stormwater storage layer be deemed necessary, jointing, compaction, paving profile, inspection requirements etc. shall be updated as necessary.

D. Quality Control

1. Contractor to coordinate with SMCP and Parks Foundation on procurement and installation of donor pavers. Sequence of the work shall accommodate the delivery of the product by the owner.

2. Geotechnical inspections

   a. Paving Subgrade
   b. Paving Agg Base
   c. Gradation inspection of permeable rock at quarry
   d. Permeable rock compaction
   e. Permeable rock in-situ permeability test

3. Submit Product Data for setting material, mortar, grout, and edge restraints.

4. Mock-ups: Build mock-up to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

E. Products

1. Precast concrete or Brick Unit Paver: as selected by Owner.

2. Edge restraints: To be coordinated with Bridging Landscape Architect

3. Polymeric Jointing Sand (unless pavers need to be permeable, in which case joint material is to be updated)

4. Aggregate setting bed materials

5. Filter Fabric (As Needed)

6. Drainage Rock Stormwater Storage Layer (As needed)

F. Execution

1. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.

2. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.

3. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.

4. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.

5. Joint Pattern: Standard running bond utilizing paver size indicated in materials legend.

6. 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.

7. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.

8. Compact soil subgrade uniformly to at least 95 percent of laboratory density or per project Geotechnical Report, whichever is greater.

9. Place aggregate subbase and base, compact by tamping with plate vibrator, and screed to depth indicated.

10. Place drainage geotextile over compacted base course, overlapping ends and edges at least 12 inches.

11. 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 uniform until pavers are set and compacted.

12. Set pavers with butt jointed or gapped per manufacturer's requirements. Use string lines to keep straight lines.

13. Vibrate pavers into leveling course with a low-amplitude plate vibrator.

14. Fill joints with necessary jointing material as directed by manufacturer.

1.2 Playground Safety Surfacing

A. Summary:

1. Poured in Place Playground Surfacing

2. Loose-set "Fibar" Playground Surfacing

    a. Stormwater storage layer beneath paving profile is to be added should it be deemed necessary by Civil and DBE. Should a stormwater storage layer be deemed necessary, compaction, paving profile, inspection requirements etc. shall be updated as necessary.

B. Quality Control

1. Geotechnical inspections

    a. Paving Subgrade
    b. Paving Agg Base
    c. Gradation inspection of permeable rock at quarry
    d. Permeable rock compaction
    e. Permeable rock in-situ permeability test

2. Performance requirements: provide surfacing conforming to code requirements for impact attenuation.

    a. Poured in place surfacing within the playground equipment use zones shall meet or exceed the performance requirements of the CPSC, ADA and Fall Height Test ASTM F 1292-09. The surface must yield both a peak deceleration of no more than 200 G-max and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on Drawings

3. Surfacing shall conform to ADA accessibility standards.

4. Submit product data for each type of surfacing and attenuation system

5. Submit sample for each type and color of surfacing.

    a. Include 6-inch square minimum samples of playground surface system in for each color.
    b. Colors are to be coordinated with and reviewed and approved by Bridging Landscape Architect.
    c. Should adjustments to color need to be made upon review of the physical sample, additional samples will be made and submitted at no cost to the client until samples are reviewed and approved.

6. Provide a signed statement by an authorized official certifying that the surfacing system meets the requirements of ASTM-F1292-09 for a head-first fall from the highest accessible portion of the specified playground equipment.

7. Provide a signed statement from the manufacturer of the poured in place surfacing attesting that all materials under this section shall be installed only by the Manufacturer's Trained Installers.

8. Coordinate installation of playground surface systems with installation of playground equipment specified in landscape drawings.

9. Poured in place surfacing shall be installed after all playground equipment, signs and any other items within the surfacing area. Surface installation shall be coordinated by a manufacturer-approved representative.

10. Warranty: verify with Owner's counsel that special warranties are not less than remedies available to Owner under prevailing local laws.

    a. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of playground surface system that fail in materials or workmanship within specified warranty period.
        1) Failures include, but are not limited to, the following:
            a) Reduction in impact attenuation.
            b) Deterioration of surface and other materials beyond normal weathering.

    b. Verify available warranties for units and components and insert number in subparagraph below.

    c. Warranty Period: Seven years from date of Notice of Completion.

C. Products

1. Product and Manufacturer as specified in drawings.

D. Execution

1. Prepare substrates to receive surfacing products according to playground surface system manufacturer's written instructions. Verify that substrates are sound and without high spots, ridges, holes, and depressions.

2. Finished Grade: Verify that finished elevations of adjacent areas are as indicated on the drawings, that the appropriate sub-grade elevation has been established for the particular safety surface to be installed, and that the subsurface has been installed in a true, even plane, and sloped to drain as indicated in drawings.

3. Subbase: Tolerance of concrete or shotcrete subbase shall be within 1/8 inch (3.0 mm) in 10 feet (3050 mm). Tolerance of aggregate sub base shall be within 3/8 inch (10mm) in 10 ft (3050 mm). Verify that aggregate subbase has been fully compacted in 2” watered lifts to 95 percent or greater.

4. Drainage: Verify that sub-surfacing drainage, if required, has been installed to provide positive drainage

5. Place surfacing components in conformance with manufacturer’s requirements, applicable codes and standards.

6. Field Quality Control

    a. Manufacturer’s Services: a manufacturer’s representative who is experienced in the installation of playground safety surfacing shall be provided. The representative shall supervise the installation to ensure that the system meets the impact attenuation requirements as specified herein.

b. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

c. Thickness of PIP safety surface and of attenuation materials shall be determined by contractor.

2.8 Landscape Stone

A. Summary

1. Procurement and fabrication of Landscape stone boulder with natural, split, sawcut, hammered or otherwise finished per the drawings.

B. Quality Control

1. Bridging Architect to conduct quarry visit with representatives from Contractor and DBE to confirm design intent and stone selection. Quarry visit is contingent on stone procurement and sourcing based on the DBE's plans, material selections, and details. It is the sole responsibility of the DBE to coordinate with American Soil & Stone and appropriate quarry representatives on procurement and lead times such that the project schedule is not endangered or that the removal or further reduction in stone is required as a function of schedule constraints from any party.

2. Submit Product photos: Submit (3) different photos of each stone type as indicated in the schedule in the Drawings. Indicate name of source and source location on images.

3. Submit samples: 6" x 6" minimum size to indicate color and finish selections. Provide the number and size necessary to show full range of color, texture, finish, and kind and distribution of characteristic markings.

   a. Minimum submission:
      1) Three stone samples for each stone type
      2) Each set shall show extremes and middle of the range of appearance variations of stone proposed for the project.

4. Layout and Grading: After staking out the work, and before beginning final construction, obtain the Bridge Landscape Architect's approval for layout and grades. Review will be for design intent only.

   a. The Contractor shall stake out the horizontal and vertical layout in sufficient detail for evaluation by the DBE and Bridging Landscape Architect.
   b. The DBE and Bridging Landscape Architect shall be permitted to make reasonable adjustments to layout and grading without further compensation to the Contractor.

5. Mock up: for each type of stone installation construct mock-ups or first install per the direction of DBE Landscape Architect

C. Products

1. Stone shall be sound stock of reasonably-uniform texture; free from defects that impair strength or durability or appearance. It shall have required mechanical and physical properties. Appearance shall be within the range illustrated by each set of accepted samples.
2. Each type of stone shall be from a single quarry.
3. Stone types: as indicated on The Drawings Mahogany slabs, instead of Perma, is acceptable. Other stone applications are subject to budgetary review with Owner, Owner's Rep, and Bridge Landscape Architect. The reduced quantity of stone is expected to require generally consistent sizing, and not reflect the diversity of stone sizes contained in the original Bridge Drawings.
4. Landscape stone shall be regular in form and dimension, have minimal spalling, and free or sharp edges and angles.

D. Execution

1. Before installation, boulders shall be reviewed for damage caused by transportation, handling, or delivery. Damaged boulders will be rejected. Replace rejected boulders at no additional cost to the Owner.
2. Procurement: Contractor shall be responsible for sourcing and procuring boulders from quarry/stone supplier and transporting them to a qualified stone fabrication facility.
3. Inventory List and Inspection: Each stone shall be numbered on an inventory list to correspond with the stone schedule and include measurements and photos of stone. Physical numbering of stone shall be done such that marks, tags, numbering, or lettering is not permanent and can be removed without damage or discoloration to stone or adjacent materials. The Contractor shall submit this inventory list to the DBE Landscape Architect. The DBE Landscape Architect shall use the stone schedule to determine which stones shall be used for the final Work. The Contractor shall revise the stone schedule to indicate which stones have been selected for use.
4. Prepare subgrades and setting bed as indicated in drawings.
5. Setting: Setting shall be done by competent stone setters, in accordance with the Drawings.
6. Layout and Pattern: The approved stonework mock ups shall establish the general character, layout, jointing and pattern that are expected in the final work. The layout and patterning of the final constructed stonework shall be periodically reviewed by the Contractor and Bridging and DBE Landscape Architects for conformance to the approved mock-up.
7. Adjust stone placement and setting as directed by the Bridging and DBE Landscape Architects in a manner that results in stone assemblies matching approved samples and mockups

2.9 Fencing and Gates

A. Summary

1. Playground fence and gates.

B. Quality Control

1. Submit Product Data and material descriptions, hardware, construction details, dimensions of individual components and profiles, and finishes for all fencing and gate types.

2. Submit shop drawings indicating layout with dimensions, details, and finishes of all fence components, accessories, hardware, and post foundations.

3. Submit samples of each fence component and material, including Manufacturer's color charts.

4. Perform Work in accordance with State and local Standards and Specifications.

5. Field Measurements: Verify layout information for fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

C. Products

1. Fence Height: As indicated on The Drawings.

2. Line Post Spacing: as indicated on the Drawings, unless otherwise recommended by manufacturer.

3. Fencing system: products, hardware, color, finishes - as indicated on drawings.

4. The gate shall utilize a metal frame in combination with stiffening elements and or adjustable tension rods with wood fascia to reduce or eliminate racking which may occur over time, accessible hardware, and generally use heavy-duty SS hardware. Hinges and/or attenuation hardware shall be utilized to minimize noise when opening and closing the gate.

D. Execution

1. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance.

2. Verify areas to receive fencing are completed to final grades and elevations.

3. Stake locations of fence lines, gates, line posts and terminal posts. Layout to be reviewed and approved by Bridging Landscape Architect.

4. Set posts plumb, in concrete footings unless otherwise indicated in the Drawings. Slope top of concrete for water runoff.

5. Install fence in accordance with manufacturer’s instructions.

6. Space posts uniformly at spacing as indicated on the Drawings, unless otherwise indicated per fence manufacturer’s requirements.

7. Demonstrate that all gates swing smoothly and freely without binding or dragging, that all gates are lockable, and that all gate hardware operates properly.

8. Footing design by Contractor in consultation with Structural Engineer.

2.10 Site Furnishings

A. Summary

1. Procurement and installation of site furnishings including:

    a. Waste Receptacles
    b. Benches
    c. Removable Bollards
    d. Water Fountain

B. Quality Control

1. Product Data: Provide one of each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, field-assembly requirements, and installation details.

2. Product Samples: Provide samples of factory-applied finishes.

3. Provide shop drawings for all custom elements prior to constructing. Drawings must indicate all materials, welds and mechanical connections, hardware, and dimensions

C. Products

1. As indicated on The Drawings. It is acceptable to utilize alternative site benches, such as the previously coordinate MM Cite Product. Final selection of benches must include backs and handrests, and be reviewed and approved by the Owner.

D. Execution

1. Verify that all site furnishings can be installed at locations as shown on Drawings.

2. Conditions: Examine areas and conditions for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting installation.

3. Comply with manufacturer's written installation instructions, unless more stringent requirements are indicated. Complete field assembly of site furnishings, where required.

4. Paint all anchor bolts and tie downs to match furniture.

5. Footing design by Contractor in consultation with Structural Engineer.

2.11 Signage

A. Summary

1. Procurement and installation of playground signage.

B. Quality Control

1. Provide product data of each type of sign indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, field-assembly requirements, and installation details.

2. Product Samples: Provide samples of factory-applied finishes.

C. Products

1. All signage must conform with CPSI and ADA codes, including the designation of use areas by age group. Signage must also be provided which outlines the Owner's Rules & Regulations. Contractor is to consult with the Owner regarding signage design.

2. Contractor is to coordinate with the Owner to determine if signage can be Owner-furnished.

D. Execution

1. Verify that all signage can be installed at locations as shown on Drawings, or at locations required by CPSI, ADA, or Owner.

2. Conditions: Examine areas and conditions for compliance with requirements for correct and level finished grade, mounting surfaces, installation tolerances, and other conditions affecting installation.

3. Install all post-mounted signs plumb and level. Install wall or fence-mounted signs in locations and at heights indicated on The Drawings, per Owner direction, and per applicable codes. Eliminate or minimize the surface expression of footings.

2.12 Play Equipment

A. Summary

1. Procurement and installation of playground equipment. See attached cutsheet of Berliner double tower feature w/ Bridges. There is no known equal for this product. Pricing changes for this project by September 2025. Playground equipment has significant lead times, consequently procurement of this equipment shall be prioritized and appropriately worked into the project schedule such that the schedule is not delayed.

2. Color selection of playground equipment shall be consistent, and represent a cohesive color selection strategy across elements, regardless of manufacturer. Color selection shall be reviewed and approved by Bridging Landscape Architect. Natural materials shall be left unstained unless recommended by the manufacturer.

B. Quality Control

1. Submit Manufacturer's literature, specifications, installation, materials certificates, footing instructions and warranties for all playground equipment and accessories.

2. Submit Paint samples: Eight-inch square, or linear (where applicable) samples of each specified color, including powder coated metal colors.

3. Provide Shop Drawings including horizontal and vertical layout of play equipment; plan and section drawings to scale.

4. Installer qualifications: engage experienced subcontractors, with minimum 5 years of experience for play equipment installation. Approved subcontractors must have a proven record of installing play equipment similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.

5. Play equipment shall be delivered in good condition in original unopened packages with labels intact and unloaded at job site in such a manner that no damage occurs to the product during hauling, handling or unloading at the job site.

6. Any substitutions must meet all performance and code requirements of the original specified equipment.

7. Provide 10% of total paint supply to match final color as unopened cans for Owner to use for future touch-up and repair of play equipment. Clearly label cans with all batch mixture numbers required to duplicate finishes.

8. Warranty: All materials and workmanship of all materials are subject to warranty requirements. Warranty shall apply for a minimum period of two years from the date of Notice of Completion. Warranty work to be performed to the complete satisfaction of the City. During and at the end of this period, all required repairs and adjustments, including replacement of defective material, shall be made including all repairs to other work made necessary thereby, without additional expense to the City.

C. Products

1. The equipment layout and design as shown on the Drawings is based on products currently available from the specified manufacturer. Products of other manufacturers will be considered, if equal, provided that the Contractor shall be responsible for extra costs or delays associated with making necessary changes in design or layout to accommodate the proposed substitutions

2. Provide playground equipment as indicated in the Drawings.

D. Execution

1. Layout play equipment according to the locations shown on the drawings and per manufacturer’s requirements.

2. Adjustments: The Owner reserves the right to make minor adjustments in the locations of play equipment without additional cost.

3. Final Layout: Final layout shall meet contract drawings and manufacturer’s requirements in regards to fall zones and safety requirements

4. Protect play equipment during the construction period to prevent damage and wear.

5. Installation procedures shall be according to manufacturer's directions.

6. All components of the equipment shall be installed accurately to produce true plumb and level installation.

7. All play equipment shall be inspected by Lisa Di Lorenzo, CPSI, County of San Mateo Parks Department, or approved equal Safety Inspector with a valid certification from the National Playground Safety Institute (NPSI) for compliance in accordance with ASTM F 1487-98 and the USCPSC Handbook for Public Playground Safety. Contractor to provide the signed documentation of compliance certification at no cost to the Owner.

2.13 Soil Preparation

A. Summary

1. Provide all soil and soil amendment products, topsoil, manufactured soil mixes and amendments. Execute all labor to achieve soil production, delivery, and placement.

2. Site soils shall be maximally retained to reduce import for horticultural or site grading purposes. As noted in Materials Plan, the reuse of existing Class II may not be reused as part of AC paving profiles, but may be used in other areas pending review of Geotechnical Engineer and DBE Landscape Architect. Import shall be reduced to the maximum extent feasible.

3. Structural Soil is to be utilized wherever feasible to maximize rootable soil volume at industry recommended levels underneath paving adjacent to tree planting areas to support the pavement without compression of the voids thus protecting roots growing into the voids and allowing for more rooting space. Structural soil shall be a uniformly blended mixture of gravel/rock and PAM-treated soils. Structural soil must be designed and installed such that long-term performance of trees is ensured and that poured-in-place rubber and any other adjacent features do not settle, fail to drain, or otherwise present maintenance issues. The design and installation of structural soil shall not incur defects to the design, performance of installed elements and systems, or disrupt the accessibility of all features over the lifespan of the project. Structural soil may be eliminated provided that rootable soil volume meets industry recommend levels and the performance of installed trees is reasonably assured to the Owner.

B. Quality Control

1. Soils testing has been conducted at other locations around the park as part of Phase 1. These soil test results and Bridging Landscape Architect recommendations will be provided for reference. Phase 1 undertook soil testing and found the soils to be in good condition with only agricultural gypsum surface applied to finish graded areas prior to hydroseed. Site history and testing have not identified contamination within the site soils. Soils shall generally be minimally amended and kept conducive to California natives.

2. Due to extensive construction history on this portion of the site, 2 soil tests will be necessary to confirm and/or update the previous soil amendment direction from Phase 1.

   a. Assume 2 composite soil tests (each consisting of soil from multiple locations within the same soil strata for comprehensive result)

1) 1 soil test from subsoil after removal of surface paving

2) 1 soil test from topsoil in areas where there is existing planting

3. Testing is to be in alignment with best practices provided by Wallace Labs. Tests are to include:
   a. Agricultural suitability
   b. Organic Matter percentage
   c. Soil texture
   d. Real (not estimated) Percolation rates
   e. Sand and Gravel Sieve Analysis
4. Test results are to be reviewed by DBE and Bridging Landscape Architect. Bridging Landscape Architect will provide recommendations only.
5. Depending on soil test results, soil stockpiling and recycling methodology is to be developed to maximize the re-use of soils on site and minimize both offhaul and import
6. Should soil stockpiling be necessary, assume that this stockpiling can occur on the existing baseball field. Stockpiling is to conform with Wallace Labs best practice recommendations
7. Percolation Testing
   a. In areas that are indicated as being utilized for water treatment and storage, (1) percolation test is to be completed per area
   b. Percolation testing in addition to areas used for water treatment and storage is to be 1 test for every 5 tree pits evenly spaced throughout the site at a minimum.
   c. DBE is responsible for additional testing as needed to ensure appropriate site drainage in all areas.
   d. If percolation test in tree pit is less than 3" per hour, DBE contractor to assume that dry wells need to be installed in planting areas around site.
8. Structural Soil
   a. Samples of both rock and soil components are to be tested to confirm they are suitable for use.
   b. Test results are to be reviewed by DBE and Bridging Landscape Architect. Bridging Landscape Architect will provide recommendations only.
   c. Should amendments to the soil be necessary to make it suitable for planting, amendments shall be added to soil component and retested to ensure suitability and compliance with standards included here-in.
   d. Ratio of rock to soil shall be determined by adjusting the ratio between gravel/rock and soil such that volume percent of soils in mix is not less than 20% nor more than 50% of voids in gravel. Final ratio must meet criteria for sub-base of poured-in-place (PIP) rubber. If it cannot meet those criteria, then structural soil will extend beneath the PIP profile.
   e. Mixing of structural soils shall be performed at supplier's yard using appropriate soil measuring, mixing, and shredding equipment of sufficient capacity and capability to assure proper quality control.

C. Products

1. It is not acceptable to use pesticides or herbicides at Flood Park.

2. Planting Soil shall be friable and have sufficient structure in order to give good tilth and aeration to the soil. When amended, fertilized, and conditioned, the soil must be friable, be well drained and supportive of vigorous plant growth and contain low concentrations of inhibitory constituents. The soil must have sufficient moisture retention and nutrient retention to avoid excessive frequency of irrigation and frequency of fertilizer application.

3. Import Top Soil shall be a homogeneous mineral soil classified as sandy loam.

4. Bioretention soil (if needed) shall be sufficiently permeable to infiltrate runoff at a minimum rate of 5" per hour during the life of the facility. The soil shall have sufficient moisture retention to support healthy vegetation, and conform to the BSM specification "Specification of Soils for Biotreatment or Bioretention Facilities" included in BASMAA Handbook., Appendix C.

5. Sand: Medium sized, number 16 sand

6. Compost/Humus: Free of stones and debris. Types of acceptable products are composts, manures, mushroom composts, straw, alfalfa, peat mosses etc. low in salts, low in heavy metals, free from weed seeds, free of pathogens and other deleterious materials.

    a. Composted wood products are conditionally acceptable, stable humus must be present. Wood based products are not acceptable which are based on red wood or cedar.

    b. Sludge-based materials are not acceptable

7. Potential Chemical Amendments Required by Accepted Amendment Program and Backfill Mix.

8. Structural Soil

    a. Rock: narrowly graded triangular rock without limestone or sandstone that passes through a 3" screen but is retained on a 2" screen

    b. Soils:

        1) "Clay loam" or "clay" based on USDA classification system, free of stones greater than ½", lumps, or other debris, with no toxic substances harmful to plant growth, with 3-7% organic matter, nutrients and pH suitable for plant growth, Soluble salts less than 3.0 mmho/cm, SAR less than 4, and Boron less than 1 ppm in a saturated extract.

        2) previously conditioned with PAM according to testing laboratory recommendations

    c. Polyacrylamide (PAM): linear, water-soluble, propenoate-propenamide copolymer soil drain

    d. Geotextiles: nonwoven geotextile meeting ASTM D4759

    e. Gypsum (as needed): agricultural containing minimum of 92% calcium sulfate dihydrate

D. Execution

1. Verify that the subgrade is at the correct elevation and slope.

2. Verify that the locations of utilities, structures and other underground items have been clearly marked.
3. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.
4. Use every possible precaution to prevent damage to existing conditions to remain such as structures, utilities, lighting, irrigation systems, and drainage systems.
5. Use every possible precaution to prevent excessive compaction of planting area soil within or adjacent to the areas of Work.
6. Provide barricades, fences or other barriers to protect existing conditions to remain from damage, contamination and excessive compaction during construction.
7. Excavation and Stockpiling of Topsoil for reuse on site.
    a. Soils up to 12-inches in depth shall be excavated and stockpiled for reuse at on-site location(s) coordinated with the Resident Engineer.
    b. Stockpile management shall comply with Erosions Control requirements in the Plans and Specifications.
    c. Stockpiles shall not exceed 5-feet in height.
    d. Stockpile intended for topsoil is to be kept separate from all other materials. Barrier is to be placed below the stockpile to minimize weed seed transfer from existing conditions to stockpile
8. In planting areas, material shall be placed in 6-inch maximum layers, and shaped as shown on the plans and as directed.
9. Compact all planting areas to eighty five percent (85%) relative compaction prior to planting.
10. Existing Topsoil to Remain: In those planting areas where native topsoil is to be left in place, cross rip to a depth of ten inches. Then incorporate the amendments to a homogeneously blended soil depth of six inches. Final cross rip depths are to be confirmed by County Arborist and comply with Tree Protection Requirements.
11. Do not rip or till within root protection zone of existing trees to remain.
12. Mechanically loosen excessively compacted topsoil that exceed bulk density requirements to its full depth via a method acceptable to the DBE Landscape Architect and re-grade surface smooth.
13. Contractor shall finish grade all planting areas unless otherwise noted, and shall remove all rocks and clods over one cubic inch to a depth of 2 inches below finish grade. All areas shall be smooth and uniformly graded. All erosion damage during the construction period shall be repaired by the Contractor.
14. Keep topsoil from being excessively compacted until date of Final Completion.
15. Structural Soil
    a. Ensure subgrade is at correct elevation, compacted to necessary rates, and clear of all construction debris, trash, or other foreign materials.
    b. Install structural soil in 12” lifts and compact each lift

c. Compact materials to not less than 95% of peak dry density from a standard compaction curve.

d. Adjust structural soils to finished grades as indicated on drawings.

e. Protect structural soils from materials that would contaminate installation.

f. Repair and reestablish grades as necessary where completed or partially completed work becomes eroded, rutted, settled, or where compaction is lost due to subsequent construction activities or weather conditions.

2.14 Landscape Grading

A. Summary

1. Execute finish grades of landscape areas.

B. Quality Control

1. Provide up to date grading survey for impacted area. Confirm:
   a. Conform point elevations
   b. Contours and grade changes as they impact cut/fill calculations. Desire is for a balanced cut/fill site.
2. Complete all finish grading prior to installation of irrigation systems in each area graded.
3. Bridging Landscape Architect to review and approve grades in field.
4. Re-grade as required to finish grades established by Bridging and DBE Landscape Architect once the irrigation system is installed.

C. Products

1. Not used

D. Execution

1. Verification of Conditions: Verify that the following items have been completed prior to commencement of finish grading:
   a. Rough Grading.
   b. Installation of stockpiled and import topsoil as required and soil preparation including debris removal.
   c. Incorporation of soil amendments.
   d. Installation of drainage and subsurface drainage.
   e. Placement and setting of all electrical, water, sanitary, and irrigation boxes and equipment.
2. Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
3. Provide a smooth transition between adjacent existing grades and new grades.

4. Grade with constant slope between points where elevations are given.

5. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

6. Slope grades to direct water away from buildings to drains or subdrains and to prevent ponding.

7. Comply with tolerances for lawn, grass and planting areas as follows:

    a. Elevation: 1 inch.
    b. Surface smoothness: Gap below 10-foot long straightedge not to exceed 1 inch in any direction.
    c. Slope: unless otherwise noted on the Drawings not less than 1 percent fall.

8. Adjust existing utility surface features to suit finish grade. Extend or reduce risers, boxes, chambers, basins and rings and reset castings, frames, grout beds, access doors, lids, covers and similar appurtenances.

9. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

10. DBE and Bridging Landscape architects shall review and approve grading.

2.15 Planting and Trees

A. Summary

1. Procurement and installation of plants and trees and landscape mulch.

B. Quality Control

1. General Coordination: Coordinate with work of other disciplines to insure the following sequence of events:

    a. Irrigation system to be installed and operable prior to installation of plant materials. Schedule hand watering of all plant materials installed prior to sprinkler irrigation system.
    b. Trees in Paving: As necessary, install prior to installation of paving under another Section.
    c. Coordinate tree delivery and installation with the DBE Landscape Architect and Project Arborist.

2. Submit product/supplier data, quantities and photos of all plant and tree material for review.

3. Submit product data and sample of all mulches.

4. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements.

5. Trees shall be reviewed by the DBE Landscape Architect and Consulting Arborist and tagged at the nursery as part of the procurement process. The Landscape Contractor shall review trees at Nurseries at their discretion and as required to warrant the material as specified.
6. Trees selected at the nursery shall be reviewed by Bridging Landscape Architect by photo for review and approval.

7. All trees shall be healthy and vigorous, have a form typical of the species or cultivars, be well-rooted and properly trained.

    a. As typical for the species/cultivar, trees shall be healthy and vigorous, as indicated by an inspection of the following:
        1) Density of crown foliage
        2) Length of shoot growth (throughout crown)
        3) Size, color, and appearance of leaves
        4) Uniform distribution of roots (bare-root or in the container media)
        5) Appearance of roots
        6) Absence of twig and/or branch dieback
        7) No visible trunk or branch damage, breakage, scarring, etc.
        8) Relative freedom from insects and disease
        9) The height, crown spread, diameter, and root size of all trees shall be appropriate for the type of stock and in proportion to one another.
    b. Roots
        1) Rootball is to be moist throughout, and crown shall show no signs of moisture stress as indicated by wilted, shriveled, dead leaves or branch dieback
        2) Roots shall show no signs of being subjected to excess soil moisture conditions as indicated by root discoloration, death, or foul odor
        3) Trunk, root collar, and large roots shall be free of circling and/or kinked roots
        4) Roots shall be visible at edges of container, and trunk and root system shall move as one when trunk is carefully lifted.
        5) Root crown shall not be more than 1” above or below the container soil surface
        6) Rootball periphery shall be free of large circling and bottom-matted roots. If matted roots exist, trim 1” of outside of rootball of and spray with sugar water solution to encourage growth immediately before planting.

8. All trees shall be reviewed upon delivery to the site and approved prior to installation by the County Arborist.

9. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.

    a. Failures include, but are not limited to, the following:
        1) Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
        2) Structural failures including plantings falling or blowing over.
        3) Faulty performance of irrigation operations.
    b. Warranty Periods: From date of Final Acceptance
        1) Trees: 12 months.

2) Shrubs, and Vines 6 months.
3) Ground Covers, Biennials, Perennials, and Other Plants: 6 months.
4) Annuals: 6 months.

c. Include the following remedial actions as a minimum:
1) Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
2) Replace plants that are more than 25 percent dead or in an unhealthy condition at end of warranty period.
3) A limit of one replacement of each plant is required except for losses or replacements due to failure to comply with requirements.
4) Provide extended warranty for period equal to original warranty period, for replaced plant material.

d. Incorrect Materials:
1) During Warranty Period, replace at no cost to Owner plants revealed as being untrue to name and species.
2) Provide replacements of a size and quality to match the planted materials at the time the mistake is discovered.

C. Products

1. Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant List, Plant Schedule, or Plant Legend indicated on Drawings and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement. Shrubs may be horizontally spreading, but shall not typically exceed approximately 4’-0” in height at maturity such that Parks Staff and the Owner have clear lines of sight into the playground from exterior perimeter pathways.

2. Tree Root System: Samples must prove to be completely free of circling, kinked or girdling trunk surface and center roots and show no evidence of a pot-bound condition.

3. Label at least one plant of each variety, size, and caliper with a securely attached, waterproof tag bearing legible designation of common name and full scientific name, including genus and species. Include nomenclature for hybrid, variety, or cultivar, if applicable for the plant.

4. Fertilizer Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.

a. Size: 21-gram tablets.
b. Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.
c. Use of fertilizer is dependent on soil sampling results and is to be determined by Bridging Landscape Architect.

5. Granular Slow-release Fertilizer: submit product data and application rates for review prior to implementation. Use of fertilizer is dependent on soil sampling results and is to be determined by Bridging Landscape Architect.

6. Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of one of the following:

    a. Type: Arbormulch as provided by the County Parks Department. Sourcing of organic mulch is to be coordinated with the County Arborist, Natalie Krug.

7. Tree stakes, ties, and guys as indicated in The Drawings

D. Execution

1. Examine areas to receive plants with Bridging Landscape Architect and with Installer present, for compliance with requirements and conditions affecting installation and performance of the Work.

    a. Finish Grades: Finish grades for planting areas shall have been established, inspected and approved. Verify that all grades are within 1 in. plus or minus of required finish grade prior to installation of any plant material.
    b. Landscape Soils: Do not commence planting work prior to completion and acceptance of soil preparation.
    c. Irrigation: Verify that irrigation system has been installed and accepted.
    d. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
    e. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
    f. Uniformly moisten excessively dry soil that is not workable or which is dusty.

2. Stake the location of each tree, verify horizontal and vertical location specific to plan dimension or alignment. Bridging Landscape Architect to review and approve horizontal and vertical tree locations.

3. Outline understory planting zones with lime or non-toxic marking paint.as indicated in the drawings. Schedule planting area layout review prior to placement in installation of plants.

4. Dig tree pits in sizes as indicated in the Drawings. Do not use an auger or tree spade. Excavate planting holes per Drawing details to dimensions dictated by the rootball dimensions. Ensure that plant root ball will sit on undisturbed base soil to prevent settling. Scarify sides of tree pits smeared or smoothed during excavation.
    a. If tree pits are over excavated than depth of root ball, construct a planting pedestal by mixing 3 parts angular drainrock (3/4” to 1.5”) with 1-part native soil. Compact the mix of rock and soil in 6-inch lifts until proper pit depth is achieved and as needed to prevent settlement of finish grade of the rootball.

5. Backfill Soil: provide backfill as indicated in the Drawings Soil Schedule and per requirements of “Soil Preparation ".
6. Tree Pit Drainage Testing: perform the following drainage testing where evidence of poor drainage of tree is found
    a. In designated areas perform the following test: Minimum number to be tested shall be one (1) pit per every five (5) pits.

b. Auger a 12” diameter x 10” deep hole in the bottom of a sample tree pit. Fill with 10 inches of water [1]. Allow to drain.
c. Fill test drain hole with 10 inches of water again [2]. Document percolation every hour
d. Legibly calibrate a stake at 1 in. intervals and drive it firmly into the undisturbed soil at the bottom of the hole
e. Fill the 10-inch hole with water to the top. Immediately record water level on the stake.
f. Document water level every hour for 20 hours
g. Document amount of standing water at end of 20 hours.
h. Do not perform test on a rainy day. Repeat all tests interrupted by rain or cold.

7. Drainage Correction: Where tree pits fail drainage test, improve drainage before installation of trees by constructing tree pit dry well, adding subdrainage piping, or other measure as approved by DBE Landscape Architect.

8. All plants and trees shall be kept with soil at field-capacity moisture levels. No plant or tree shall be installed with dry or desiccated root balls.

    a. Plants that have dried out shall be fully moistened prior to removal from container by fully immersing the plant in its container into a bucket or large container of water for a minimum of 5 minutes or until the root ball has become fully saturated.

9. Boxed Trees: Lift from bottom with forklift or from sides with 2 in. x 4 in. rails nailed to each side of box. Do not remove box prior to settling tree in plant pit. Remove sides of box after acceptance by DBE Landscape Architect and prior to backfilling. Bottom of box is to be removed on trees 36” and smaller. Trees 48” and larger are to have select slats removed from bottom of box to reduce risk of rot and water entrapment at rootball.

    a. After removing tree from box, scarify the sides of the rootball to a depth of 2 in. in vertical cuts, at least two per side. Remove up to 3” of matted roots from bottom of root ball. Cut and remove circling roots over 3/8 in. diameter
    b. Backfilling: Use specified planting soil backfill mix to backfill pits as shown on Drawings. Backfill pit in 12” maximum lifts. After each lift, water backfilled soil thoroughly and saturate the rootball, eliminating all air pockets before installing next lift. Repeat procedure as required to bring backfill to proper level.
    c. As needed, place planting tablets equally distributed around planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips.

10. Container grown plants in plastic containers up to 15 gallons: Tip container to horizontal orientation and shake carefully to remove shrub. Support rootball during installation to prevent cracking or shedding of soil. See details for crown height in relation to finished grade.

    a. Rootball Scarification: 1-gallon containers: After removing from container loosen any matted roots from side and bottom of root ball. Use sharp hand pruners to remove any loose roots. For 5 gallon and 15-gallon containers, scarify the sides of the rootball to a depth of 1 in. at four to six equally-spaced locations around the perimeter of the ball. Remove up to 2” of matted roots from bottom of root ball.

b. Backfilling: backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed
c. As Needed, Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
d. As Needed, Place granular slow release fertilizer granules, where indicated, as specified and approved.
e. Continue backfilling process. Water again after placing and tamping final layer of soil.

11. Watering Basin at Trees: Form saucer with soil berm centered around plant material and as noted in the drawings.

12. Thoroughly water-in all plants after backfill so that soil flows and fills all air gaps. Water all plants again after completion of planting operations. Apply water to the top of the rootball being careful not to damage stem or excessively erode the soil. For hand watering, use a water wand to break the water force. Do not permit use of “jet” type watering equipment. Do not permit root crown to become exposed to air through dislodging of soil and mulch.

13. Fertilization (as needed):

a. Slow-release Fertilizer Tablets: Place evenly distributed in plant pits, directly around the rootball sides, when backfilled 2/3 according to the following schedule or per Manufacturer’s latest specifications.

1 gallon = 2 tablets
5 gallon = 4 tablets
15 gallon = 6 tablets
24" box = 8 tablets

b. Granular Slow-release Fertilizer: Evenly distributed granules in plant pits, directly around the rootball sides, when the plant pit has been backfilled 1/3 of the plant pit depth, and when the plant pit has been backfilled 2/3 of the plant pit depth. Apply quantities as described below. Quantities are total quantities per tree:

36"-48" box = 4 lbs.
60" box = 9 lbs.
72"-84" = 17 lbs.

14. Stake trees according the tree planting schedules and as directed by the DBE and Bridging Landscape Architect based on tree procurement. For bidding purposes provide unit costs for staking types and sizes according to the tree schedule and to allow for cost adjustment based on tree procurement.

15. Mulch all planting areas, including backfilled surfaces, with a 3-inch average thickness of approved organic mulch. Hold mulch off crown of all plants. Confirm extent of mulch at trees with County Arborist.

16. Plant Maintenance and Establishment: refer to attached section "Operation and Maintenance of Planting".

17. Warranty: refer to attached section "Operation and Maintenance of Planting".

2.16 Landscape Drainage

A. Summary

1. Provide landscape drainage as shown and as specified.

2. DBE is responsible for reviewing site drainage and ensuring that final design strategies and elements are compliant with stormwater codes and do not create maintenance issues for the Owner.

B. Quality Control

1. Submit Manufacturers' Current Product Data for each type of product indicated.

2. Provide temporary support and protection of underground and surface utility structures, drains, services and other improvements to remain.

3. Where grade or alignment of pipe is obstructed by existing utility structures such as conduits, ducts or pipes, permanently support, relocate, remove or reconstruct the obstruction.

4. Restore all damaged improvements to original condition at no additional cost to Owner.

5. Concealed Work: Verify locations of existing stubouts to receive landscape area drains. Verify and locate existing pipes and structures to be coordinated with landscape drainage work. Review all available records and make all necessary explorations and excavations.

6. Lines and Levels: Establish for each drainage system and coordinate with other systems to prevent conflicts and maintain proper clearances.

7. Notification: Submit written notification of all discrepancies in the Drawings or existing conditions, which preclude successful installation of landscape drainage work as specified.

C. Products

1. As indicated in The Drawings.

D. Execution

1. Verify exact locations and quantity of all drains relative to planting areas and adjacent to paving, prior to beginning of work. Identify required lines, levels, contours, and datum.

Immediately report to DBE Landscape Architect all discrepancies found prior to installation of drains.

2. Install area drains to locations and rim elevations as shown and detailed on the Drawings. Connect to pipe stubouts in strict accordance with the manufacturer's current printed specifications.

3. Install Subsurface Drainage System:

   a. Preparation of Trench: Accurately excavate trench as shown on the Drawings.
   b. Filter Fabric: Place fabric in bottom of trench and extend up sides and beyond trench. Overlap 12 in. at ends of roll.
   c. Drain Rock and Pipe: Install bedding portion of drain rock and bed pipe in place. Do not damage or displace filter fabric.
   d. Review: Prior to installing remaining drain rock backfill, request review by DBE Landscape Architect for progress of the work.
   e. Closing: Upon acceptance, add remaining drain rock and lap over the ends of the filter fabric as shown on the Drawings.
   f. Soil Backfill: Backfill with permeable planting soil mix to a minimum depth of 6 in. above filter fabric as shown on Drawings.

2.17 Planting Irrigation

A. Summary

1. Prepare construction/permit drawings as required for construction of irrigation system.

2. Provide all labor, materials, supplies, tools, and transportation and perform all operations in connection with and reasonably incidental to complete the installation of the automatic sprinkler irrigation systems per approved and permitted construction drawings and specifications.

B. Quality Control

1. Irrigation is to be compatible with existing infrastructure and adjacent system installed in Phase 1.

2. Preserve and re-use existing irrigation infrastructure, including backflow devices, master valves, etc. to the extent practical.

3. Product Data: Submit manufacturer catalog information on all material to be used on the project as specified on the legend, notes, details and plans. Redline or highlight exact items on page to be submitted. Complete material list shall be submitted prior to performing any work.

4. Provide one laminated controller chart showing the area covered by controller for each automatic controller supplied at the maximum size controller door will allow. Chart shall be a reduced drawing of the actual "as-built" system.

5. Contractor shall prepare an Operation and Maintenance Manual, organized in a 3-ring binder.

6. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis: The landscape irrigation audit shall be conducted by a local agency landscape irrigation auditor or a third-party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who design the landscape or installed landscape.

7. The irrigation system shall be installed to meet or exceed the requirements set forth in the California Department of Water Resources Model Water Efficient Landscape Ordinance and Comply with all applicable codes and standards.

8. All materials supplied for this Project shall be new and free from any defects. All defective materials shall be replaced immediately at no additional cost to Owner.

9. The Contractor shall secure the required licenses and permits including payments of charges and fees, give required notices to public authorities, verify permits secured or arrangements made by others affecting the Work of this section.

10. This Contract requires that the existing irrigation system be kept intact on all areas of the park not yet worked on to permit normal watering during construction.

C. Products

1. As indicated in construction/permit documents and approved by governing agencies.

D. Execution

1. Schedule and coordinate placement of materials and equipment in a manner to affect the earliest completion of work in conformance with construction and progress schedule.

2. Lay out work as accurately as possible in accordance with diagrammatic drawings.

3. Where site conditions do not permit location of piping, valves and heads where shown, notify Project Representative immediately and determine relocation in joint conference.

4. Prior to installation, the Contractor shall stake out the routing of all pressurized main lines and sprinkler heads for approval by Project Representative.

5. Run pipelines and automatic control wiring in common trenches wherever practical.

6. Trenches shall be excavated to such depths as will permit the pipe to be laid at the elevations, slopes, or depths of cover indicated on the drawings and in conformance with local codes.

7. Install remote control valves where shown on drawings and group together where practical. Limit one remote control valve per box.

8. Locate valve boxes ~~12”~~ 18” from and perpendicular to walk edges, buildings and walls. Provide 12” minimum between valve boxes where valves are grouped together.

9. Provide and install automatic irrigation controller in approximate locations shown on drawings. The exact location will be determined on the site by the Project Representative. Provide conduit and wire and connect to 120 volt switch accessible to controller for ease of maintenance.

10. Locate quick coupling valves as shown in the drawings and details.

11. After sprinkler or drip system is completed perform coverage tests in the presence of Project Representative, Test system to assure that all areas are irrigated completely and uniformly.

12. Final Inspection: Thoroughly clean, adjust and balance all systems. Demonstrate the entire system to the Irrigation Consultant and/or, if required, authorized agent and other governing agencies providing that all remote-control valves are properly balanced, that all heads are properly adjusted for radius and arc of coverage, and that the installed system is workable, clean and sufficient.

13. Guarantee: The Contractor shall guarantee all materials, equipment and workmanship furnished by him to be free of all defects of workmanship and materials, and shall agree to replace at his expense, at any time within **one year** after installation is accepted, any and all defective parts that may be found.

14. Maintenance: Continuously maintain irrigation system in areas indicated in the Contract during the progress of work and for a period of **90 days** after Notice of Completion.

SEE SHEET C3.1 FOR CONTINUATION

SEE SHEET C3.3 FOR CONTINUATION

SEE SHEET C3.5 FOR CONTINUATION

GRAPHIC SCALE
20 0 20 40

APPROX LIMIT OF WORK

EX SSMH
RIM 21.26±
10" VCP IN, INV 13.11± (E)
10" VCP IN, INV 12.90± (S)
10" VCP OUT, INV 12.90± (N)

EX PEDESTRIAN GATE

EX SPEED BUMP

EX 6" CURB

EX ADA STALL

EX CAUTION WATER PIPELINE MARKER

EG 20.98±
TOP OF 60" BDPL #1 7.28±

EX ANODE

EX SFPUC RISER

EX WALL

EG 21.28±
TOP OF 66" BDPL #2 18.48±

EG 21.39±
TOP OF 60" BDPL #5 16.39±

EX BFP

EX EB

EX BIKE RACK

EX CURB

EX WALLS, TOWER, AND MONUMENT SIGN

EX UTILITY STRUCTURE

EX WV

EX WATER STRUCTURE

EX WV

END DEMO 6" VC

EX BOLLARD, TYP

EX SIGN

EX 6" VC

EX 10" VCP SS, ±0.3% (WEST BAY)

EX PLAYGROUND

BEGIN DEMO 6" VC (86 LF)

EX FENCE

EX 6" CURB

EX WMH

EX WV

EX 60"BDPL #4

50' SFPUC ROW

EX 66" BDPL #2

EX 60" BDPL #5

EX ADA STALL

EX 6" VCP SS

EXISTING SFPUC SERVICE PROTECT IN PLACE, SEE NOTE 15

EX VAN ADA STALL

EX 2' DIA X 2' TALL CONC BOLLARD (32) TOTAL

EX SIGN

EX BOLLARD, TYP

EX ELECTRICAL BUILDING

EX WATER STRUCTURE

EX WV

EX ADOBE STORAGE BUILDING

EX SIGN

EX 4" SS

EX RESTROOM

EX SSMH
RIM 23.59±
4" IN, INV 18.89± (SE)
4" OUT, INV 18.74± (W)

EX SSMH
RIM 23.52±
INV 18.92± 6" VCP THRU (E–W)

EX ADOBE ADMIN BLDG

BEAR SAFE TRASH RECEPTACLE

EX SIGN

EX VOLLEYBALL COURT

CONNECT TO EX SSMH
RIM 23.48±
4" IN, INV 19.78± 4" (S)
INV 16.98± CAPPED (E)
INV 16.98± CAPPED (W)
6" IN, INV 14.23± (W)
8" IN, INV 15.83 (S)
10" IN, INV 13.68± (SW)
10" OUT, INV 13.63± (NE)

EX 6" VCP SS

EX TABLES SEE NOTE 15

EX PICNIC SHADE STRUCTURE

EX DUMPSTER ENCLOSURE

EX IRR WV

EX SDDI
TG 23.28±

EX SINK

REFER TO LANDSCAPE MATERIALS PLAN

EX TABLES SEE NOTE 15

EX 10" VCP SS (WEST BAY)

DEMO FLUSH CURB 380 LF

EX WATER STRUCTURE

EX OH LINE
SEP FOR LIMIT OF DEMOLITION

EX ELEC SUPPLY

EX PICNIC TABLES & GRILL

EX SDDI
TG 24.01 ±

EX HB

EX WV

EX OAK PICNIC AREA

EX SINK

EX GRILLS & CONCRETE COUNTERS

EX ELEC SUPPLY

EX PLANTER

EX WV

VOLLEYBALL POSTS

EX VOLLEYBALL COURT

EX GAS

EX FLAGPOLE

EX COMM BOX

EX WATER STRUCTURE

EX WV

EX SDDI
TG 24.69±

EX ADOBE WALL

EX ADOBE WALL

EX ADOBE WALL

EX FENCE

DRAWING NAME: \\BKF-SFS\Vol4\2021\210178_Reimagine_Flood_Park_Design\ENG\CD\SHEETS\C3.0 DEMO.dwg
PLOT DATE: 12-20-23 PLOTTED BY: emyj

NOTES:

1. REFER TO C1.0 FOR BASIS OF BEARINGS AND BENCHMARK.
2. EXISTING BOUNDARY AND EASEMENT INFORMATION IS BASED ON A REVIEW OF AVAILABLE RECORD MAPS AND TITLE REPORTS FOR THE PROJECT AREA.
3. EXISTING UTILITIES AND TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED ON A SITE FIELD SURVEY BY BKF ENGINEERS IN MAY 2022. SHOULD FIELD CONDITIONS DIFFER FROM WHAT IS SHOWN ON THESE PLANS, CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION AND CLARIFICATION PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES.
4. PLANTING REMOVAL SHOWN HEREON FOR REFERENCE. REFER TO LANDSCAPE PLANS FOR DISPOSITION OF EXISTING LANDSCAPING.
5. SEE SEPARATE LANDSCAPE PLAN FOR TREE REMOVAL AND PROTECTION LOCATIONS.
6. WORK IN CANOPY AND STRUCTURAL ROOT ZONES WILL REQUIRE HAND WORK AND/OR AIR SPADING. REFER TO LANDSCAPE PLANS FOR MORE DETAILS AND INFORMATION.
7. HISTORIC ADOBE WALL IS TO BE PROTECTED IN PLACE AND UNDISTURBED. WORK AROUND HISTORIC ADOBE WALL WILL REQUIRE HAND WORK. NOTIFY CIVIL ENGINEER AND/OR LANDSCAPE ARCHITECT AS REQUIRED.
8. DEMOLITION OF EXISTING STRUCTURE INCLUDING THE FOUNDATION WILL REQUIRE A PRE-DEMOLITION LEAD/ASBESTOS SAMPLING REPORT PRIOR TO DEMOLITION. IF LEAD/ASBESTOS TRACES ARE FOUND, DEMOLITION WILL BE HANDLED AS HAZARDOUS MATERIAL REMOVAL.
9. SAWCUT SHALL BE FULL DEPTH FOR PAVEMENT UNRAVELING.
10. CONTRACTOR TO COORDINATE WITH UTILITY OWNER FOR DEMOLITION OF EXISTING PRIVATE AND PUBLIC ELECTRICAL, CABLE, FIBER OPTIC, AND COMMUNICATION STRUCTURES. CONTRACTOR TO COORDINATE WITH COUNTY PARKS STAFF FOR PHASED DISCONNECT OF EXISTING UTILITIES TO MAINTAIN SERVICE TO SPECIFIC AREAS AS REQUIRED DURING CONSTRUCTION.
11. CONSTRUCTION WITHIN THE TREE PROTECTION FENCES AROUND EXISTING TREES TO REMAIN SHOULD BE REVIEWED AND INSPECTED BY THE PROJECT ARBORIST AND CONFORM TO THE RECOMMENDATIONS CONTAINED IN THE PROJECT ARBORIST REPORT AND TREE PROTECTION NOTES HELD BY THE LANDSCAPE ARCHITECT.
12. EXERCISE CAUTION WHEN REMOVING STORM DRAIN, SANITARY SEWER, AND WATER PIPES DUE TO THE POTENTIAL FOR THE PRESENCE OF ASBESTOS CEMENT PIPE (ACP) AT THE PROJECT SITE. HANDLE AND DISPOSE ASBESTOS PRODUCTS PER APPLICABLE HEALTH CODE REQUIREMENTS.
13. REFER TO G-200 SERIES FOR ALL TREE REMOVAL AND PROTECTION REQUIREMENTS, INCLUDING REQUIREMENTS FOR DEMOLITION OPERATIONS WITHIN TREE DRIP ZONES.
14. CONTRACTOR TO REMOVE ALL EXISTING CONCRETE AND STEEL PICNIC TABLES. ALL COUNTERS, GRILLS AND OTHER APPURTENANCES INCLUDING THOSE NOT SHOWN ON THE PLANS SHALL BE REMOVED AND DISPOSED OF.
15. CONTRACTOR TO REMOVE OAK PICNIC AREA METAL PICNIC TABLE FRAMES, WOOD TOPS AND BENCHES, AND COORDINATE WITH CSM PARKS STAFF TO REVIEW SALVAGE OF WOOD AND METAL FRAMES.
16. SFPUC ABOVE GROUND APPURTENANCES TO BE PROTECTED IN PLACE. CONTRACTOR TO PROVIDE WOOD STAKES AND SNOW FENCING AROUND ALL APPURTENANCES PER SFPUC STANDARDS.
17. CONTRACTOR TO REPLACE IN KIND AREAS WHERE TRENCHING ACTIVITIES WILL OCCUR.
18. HISTORIC STONE BBQ KITCHENS ARE TO BE RETAINED IN-SITU. ALL OTHERS SHALL BE REMOVED AND SALVAGED STONE SHALL BE DELIVERED TO CSM PARKS. CONTRACTOR TO FIELD COORDINATE WITH LANDSCAPE ARCHITECT PRIOR TO DEMOLITION.
19. CSM PARKS STAFF WILL REMOVE AND SALVAGE SPLIT RAIL FENCING PRIOR TO CONSTRUCTION. CONTRACTOR IS NOT RESPONSIBLE FOR REMOVAL AND SALVAGE.
20. CONTRACTOR TO COORDINATE WITH CSM PARKS STAFF REGARDING STORAGE OF ALL ITEMS TO BE SALVAGED OR PRESERVED.
21. CONTRACTOR TO COORDINATE WITH MENLO PARK ARBORIST AND DPW FOR PROPOSED IMPROVEMENTS ON BAY ROAD) AND SUBMIT REQUIRED ENCROACHMENT PERMITS, TREE PROTECTION PLANS, AND OTHER AS REQUIRED. WORK WITHIN MENLO PARK ROW TO CONFORM TO MENLO PARK DPW & ARBORIST STANDARDS. ALL ON-SITE WORK IS TO BE COORDINATED WITH PROJECT ARBORIST AND LANDSCAPE ARCHITECT. (R1)
22. ALL EXISTING SITE SIGNAGE, DRINKING FOUNTAINS AND BEAR SAVER TRACH/RECYCLING RECEPTACLES SHALL BE SALVAGED AND DELIVERED TO CSM.
23. EXISTING AGGREGATE BASE MATERIAL SHALL BE SALVAGED AND STOCKPILED FOR REUSE PENDING TESTING, REVIEW, AND APPROVAL BY THE GEOTECHNICAL ENGINEER.
24. REFER TO THE LANDSCAPE UNDERSTORY PLANTING DRAWINGS FOR CLEARING AND GRUBBING REQUIRED FOR SITE IMPROVEMENTS AND UNDERSTORY PLANTING.
25. FOR ITEMS THAT WILL BE SALVAGED OR PRESERVED, PARKS WILL NEED TO CONFIRM WHERE THE ITEMS WILL BE STORED BEFORE THEY BECOME REUSED.
26. CONTRACTOR TO CONFIRM EXISTENCE IN FIELD AND COORDINATE WITH COUNTY PARKS STAFF FOR REMOVAL IF ACTIVE. WHERE NOTED ON THE PLANS TO BE ABANDONED IN PLACE, CONTRACTOR TO PROVIDE COUNTY PARKS A FIELD REVIEWED MAP OF ALL ABANDONED EXISTING UTILITIES.
27. CONTRACTOR TO SAMPLE DEPTHS OF EXISTING MATERIAL AND REMOVE TO DEPTH ALLOWABLE BY SFPUC REQUIREMENTS. CONTRACTOR TO COORDINATE WITH SFPUC FOR APPROVED METHODS OF REMOVAL. SEE LANDSCAPE UNDERSTORY PLANTING SCHEDULE FOR TOPSOIL REQUIREMENTS.
28. CONTRACTOR TO OBTAIN REQUIRED PERMITS FOR HAUL ROUTES PRIOR TO DEMOLITION AND CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE BAAQMD AIR QUALITY PERMIT.
29. CONTRACTOR TO COORDINATE WITH MENLO PARK MUNICIPAL WATER (MPMW) FOR WATER METER REMOVAL. CONTRACTOR TO REMOVE EXISTING VAULT ONCE MPMW HAS REMOVED THE WATER METER.
30. CONTRACTOR TO THOROUGHLY INVESTIGATE AND FIELD VERIFY EXISTING WATER SYSTEM FEED FROM IRIS LANE PRIOR TO DEMOLITION, AND COORDINATE WITH COUNTY PARKS STAFF FOR PHASED DISCONNECT TO MAINTAIN SERVICE TO SPECIFIC AREAS WITHIN THE PARK AS REQUIRED DURING CONSTRUCTION.

LEGEND:

- 1 TO REMAIN/PROTECT IN PLACE
- 2 TO BE DEMOLISHED AND REMOVED
- 3 TO BE ABANDONED
- 4 EXISTING PICNIC TABLES (SEE NOTES 14 & 15)
- 5 TO BE REINSTALLED IN PLACE
- 6 TO BE SALVAGED AND DELIVERED TO COUNTY PARKS
- FUTURE IMPROVEMENTS OUTSIDE OF PHASE 1 SHOWN HEREON FOR REFERENCE ONLY
- HARDSCAPE TO BE DEMOLISHED & REMOVED
- AB TO BE DEMOLISHED AND REMOVED
- AC GRIND AND OVERLAY
- CLEAR AND GRUB EXISTING LANDSCAPE, SLP PER NOTE 24
- CLEARING UNDER PROPOSED PAVING AND MULTI-USE FIELD. REMOVE AND DISPOSE OF 3-4 INCHES OF EXISTING VEGETATION, ORGANIC MATERIAL AND DEBRIS.
- LIMIT OF WORK
- SAWCUT LINE
- LIMIT OF GRIND & OVERLAY
- FENCE TO BE REMOVED
- FENCE TO BE DISASSEMBLED AND STOCKPILED AT MAINTENANCE YARD
- UTILITY TO BE ABANDONED
- UTILITY TO BE REMOVED
- CONCRETE CURB TO BE REMOVED
- EXISTING TREE, SLP FOR TREE DISPOSITION

FLOOD PARK PLAYGROUND

EXISTING CONDITIONS MARKUP

NOTE: EXCLUDES PHASE 1 IMPROVEMENTS, SEE SUBSEQUENT PAGE

SEE SHEET C6.1 FOR CONTINUATION

SEE SHEET C6.3 FOR CONTINUATION

SEE SHEET C6.5 FOR CONTINUATION

EX SSMH
RIM 21.26±
10" VCP IN, INV 13.11± (E)
10" VCP IN, INV 12.90± (S)
10" VCP OUT, INV 12.90± (N)

EX BDPL #1

EX BDPL #2

EX 60" BDPL #5

SFPUC ROW
80.0'

APPROX LIMIT OF WORK

EX 10" VCP SS, S=0.3% (WEST BAY)

PR WV 6

TEE & CAP FOR FUTURE CONNECTION

EX STORAGE BUILDING

R2

5 PR FIRE HYDRANT

12 PR FDC

11 WATER TRENCH, 26 LF
8" FW
8" FW (FDC LINE)

6 PR WV

PR 2" PW 137 LF

11 WATER TRENCH 55 LF
4" PW
8" FW
8" FW (FDC)

CONNECT TO EX 6" SS
INV THRU 19.88± (W-E)

PR WATER FOUNTAIN

PR 6" SS 38 LF, S=2.0%

PR 2" PW

PR 4" PVC PW 113 LF

EX 6" VCP SS

PR SINK

PR SSCO
RIM 23.90
6" OUT, INV 20.65 (E)
PR 6" SS 18 LF, S=2.0%
SEE NOTE 8
PR 4" PVC 23 LF
SEE NOTE 8
PICNIC APPURTENANCES, SAP

EX 10" VCP SS, S=0.2% (WEST BAY)

EX STRUCTURE TO REMAIN, CONTRACTOR TO DETERMINE EXISTING SERVICE AND RECONNECT TO PROPOSED WATER SERVICE

EX SSMH
RIM 23.39±
4" IN, INV 18.89± (SE)
4" OUT, INV 18.74± (W)

EX 4" SS

CAP FOR FUTURE FDC CONNECTION

11 WATER TRENCH 129 LF
4" PW
8" FW
8" FW (FDC)

PR 8" PVC C900 DR 18 SS
5 LF, S=0.5%

PR SSCO (2)
RIM 23.48, SEE NOTE 9
8" THRU, INV 15.86 (S-N)

2

UTIL CROSSING
SEE NOTE 7

PR 8" PVC (DR 35) SS
46 LF, S=0.5%

PR SSMH (3)
RIM 24.00, SEE NOTE 9
8" THRU, INV 16.06 (SE-N)

1

11 WATER TRENCH 39 LF
4" PW
8" FW

6 PR WV

CONNECT TO EX SSMH (1)
RIM 23.48±, SEE NOTE 9
4" IN, INV 19.78± 4" (E)
INV 16.98± CAPPED (E)
INV 16.98± CAPPED (W)
6" IN, INV 14.23± (W)
8" IN, INV 15.83 (S)
10" IN, INV 13.68± (SW)
10" OUT, INV 13.63± (NE)

10.0' MIN CLEARANCE

BIORETENTION PLANTER

EX 8"/4" SAS

EX 10" VCP SS, S=0.2% (WEST BAY)

EX SSMH
RIM 23.52±
6" THRU, INV 18.92± (E-NW)
UNK IN, INV UNK (NE)

CAP FOR FUTURE CONNECTION

EX 6" VCP SS

EX ADOBE ADMINISTRATION BUILDING TO REMAIN. CONTRACTOR TO DETERMINE EXISTING SERVICE AND RECONNECT TO PROPOSED WATER AND SEWER SERVICE UTILITY CONNECTIONS
1 TOILET
1 SINK

PR 1-1/2" PW

PR WV 6

PR 2" PW
32 LF

PR WV 6

UTIL CROSSING
SEE NOTE 7

PR 8" PVC (DR 35) SS
186 LF, S=0.5%

WATER TRENCH, 66 LF 11
4" PW
6" IRR

PR 8" PVC (DR 35) SS
17 LF, S=0.5%

PR SSMH (4)
RIM 23.10, SEE NOTE 9
8" IN, INV 18.14 (SW)
8" IN, INV 17.08 (SE)
8" OUT, INV 17.08 (N)

1

PR SSCO
RIM 23.00
8" OUT, INV 17.00 (NW)

2

6 PR WV

PR 6" SS 60 LF, S=0.5%

PR 2" PW 121 LF

6 PR WV

PR 1-1/2" PW

PR SINK

2 PR SSCO (10)
RIM 23.00, SEE NOTE 9
8" OUT, INV 19.33 (NE)

WATER TRENCH, 144 LF 11
4" PW
6" IRR
8" FW

WATER TRENCH, 22 LF 11
4" PW
6" IRR
8" FW

11 WATER TRENCH, 44 LF
4" PW
6" IRR
8" FW

EX HISTORIC ADOBE WALLS
PROTECT AND SHORE WALLS IN PLACE AS REQUIRED BY COUNTY APPOINTED CONSTRUCTION MANAGER. TO BE COORDINATED WITH GEOTECHNICAL ENGINEER.

10 8" FW BFP

4" PW BFP 9

4" IRR BFP 8

(2) 3" WM 7

8" FW
4" PW
4" IRR

PR WV 6

EX 8" ACP PW

CONNECT TO EX 8" ACP PW MAIN
COORDINATE WITH CALWATER FOR CONNECTION

WATER TRENCH, 73 LF 11
4" PW
6" IRR

WATER TRENCH, 147 LF 11
4" PW
6" IRR

EX 6" VCP SS

WATER TRENCH, 102 LF 11
4" PW
6" IRR

6 PR WV

PR 2" PW
82 LF

11 WATER TRENCH, 22 LF
4" PW
6" IRR

11 WATER TRENCH, 77 LF
4" PW
6" IRR

WATER TRENCH, 108 LF 11
4" PW
6" IRR

11 WATER TRENCH, 30 LF
4" PW
6" IRR

6 PR WV

PR 4" PW WV

PR 8" PVC (DR 35) SS 127 LF, S=0.5%

1 PR SSMH (5)
RIM 23.00, SEE NOTE 9
8" THRU, INV 17.71 (SE-NW)

PR 4" PVC PW 131 LF

PR 8" PVC (DR 35) SS 130 LF, S=0.5%

PR 2" PW 25 LF

PR WATER FOUNTAIN

GRAPHIC SCALE
20 0 20 40

NOTES:

1. REFER TO C1.0 FOR BASIS OF BEARINGS AND BENCHMARK.
2. EXISTING BOUNDARY AND EASEMENT INFORMATION IS BASED ON A REVIEW OF AVAILABLE RECORD MAPS AND TITLE REPORTS FOR THE PROJECT AREA.
3. EXISTING UTILITIES AND TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED ON A SITE FIELD SURVEY BY BKF ENGINEERS IN MAY 2022. SHOULD FIELD CONDITIONS DIFFER FROM WHAT IS SHOWN ON THESE PLANS, CONTACT THE OWNER'S REPRESENTATIVE FOR DIRECTION AND CLARIFICATION PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES.
4. REFER TO GENERAL LEGEND ON C1.0 FOR UTILITY LINES.
5. 4" OR SMALLER PVC POTABLE WATER LINES WILL BE C900 SOLVENT WELD IN CONFORMANCE TO COUNTY SPECIFICATIONS. 6" OR LARGER PVC LINES WILL BE C900 BELL AND SPIGOT WITH MEGALUGS.
6. CONTRACTOR TO INSTALL TRAFFIC RATED LIDS FOR UTILITY STRUCTURES WITHIN VEHICULAR AREAS AND FIRE TRUCK ACCESS AREAS WITHIN THE PARK.
7. CONTRACTOR TO POTHOLE AND VERIFY EXISTING UTILITY LOCATION AT PROPOSED CROSSINGS.
8. CONTRACTOR TO CONFIRM LOCATIONS OF EXISTING PICNIC TABLE FOUNDATIONS PRIOR TO UTILITY LINE INSTALLATION.
9. REFER TO UTILITY PROFILES ON SHEETS C7.0–C7.2.

WEST BAY SANITARY DISTRICT NOTES:

1. THE DEVELOPMENT MUST COMPLY WITH ALL CURRENT DISTRICT REGULATIONS AND STANDARDS (WWW.WESTBAYSANITARY.ORG).
2. PRIOR TO THE DEMOLITION OF THE EXISTING SITE, EXISTING LATERALS MUST BE TEMPORARILY OR PERMANENTLY DISCONNECTED.
3. NO POOL DRAINS, ROOF GUTTERS, SURFACE DRAINAGE, OR GROUNDWATER SUMP PUMPS ARE ALLOWED TO CONNECT TO THE SANITARY SEWER.
4. THE CONTRACTOR SHALL ENSURE ALL STORM DRAIN RUNOFF IS DIRECTED AWAY FROM SANITARY SEWER CLEANOUTS AND MANHOLES.

LEGEND:

- LIMIT OF WORK
- BIORETENTION PLANTER PER DETAIL 6 ON SHEET C10.2
- FUTURE IMPROVEMENTS OUTSIDE OF PHASE 1 SHOWN HEREON FOR REFERENCE ONLY

KEYNOTE	STRUCTURE	STRUCTURE TYPE
1	◉	SANITARY SEWER MANHOLE PER DETAIL 4 ON SHEET C10.2
2	●cco	SANITARY SEWER CLEANOUT PER DETAIL 3 ON SHEET C10.2
3	▣	STORM DRAIN DROP INLET PER DETAIL 2 ON SHEET C10.2
4	●cco	STORM DRAIN CLEANOUT PER DETAIL 5 ON SHEET C10.2
5	+●+	FIRE HYDRANT PER DETAIL 3 ON SHEET C10.3
6	⋈	WATER VALVE W/ CORP STOP PER DETAIL 2 & 4 ON SHEET C10.4 (R2)
7	▭	WATER METER PER DETAIL 2 ON SHEET C10.4
8	▭	4" IRR BFP PER DETAIL 5 ON SHEET C10.4 (R2)
9	▭	4" PW BFP PER DETAIL 5 ON SHEET C10.4
10	▭	8" FW BFP PER DETAIL 7 ON SHEET C10.3
11	═ W ═	WATER TRENCH PER DETAILS 1, 6 ON SHEET C10.3
12	○	FDC PER DETAIL 5 ON SHEET C10.3
13	═══	INFILTRATION TRENCH, SLP

FLOOD PARK PLAYGROUND

EXISTING CONDITIONS MARKUP

NOTE: INCLUDES PHASE 1 IMPROVEMENTS, SEE PRIOR PAGE

DRAWING NAME: \\bkf-fc\vol4\2021\210178_Reimagine_Flood_Park_Design\ENG\CD\SHEETS\C6.0 PRUTIL.dwg
PLOT DATE: 01-19-24
PLOTTED BY: meyj

CORNERSTONE EARTH GROUP

Type of Services	**Geotechnical Investigation**
Project Name	**Reimagine Flood Park**
Location	**215 Bay Road** **Menlo Park, California**
Client	**CMG Landscape Architecture**
Client Address	**444 Bryant Street** **San Francisco, California**
Project Number	**1326-1-1**
Date	**June 27, 2022**

Prepared by **Jennifer L. Campbell, P.E.**
Project Engineer

REGISTERED PROFESSIONAL ENGINEER
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No. 2910
6/30/2024
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CORNERSTONE EARTH GROUP

Type of Services	**Geotechnical Investigation**
Project Name	**Reimagine Flood Park**
Location	**215 Bay Road** **Menlo Park, California**

SECTION 1: INTRODUCTION

This geotechnical report was prepared for the sole use of CMG Landscape Architecture for the Reimagine Flood Park project in Menlo Park, California. The location of the site is shown on the Vicinity Map, Figure 1. For our use, we were provided with the following documents:

- A landscape plan titled, "Reimagine Flood Park, County of San Mateo," prepared by Gates and Associates, dated 2020.
- A utility plan titled, "Potential IWFS Test Well Locations," author unknown, dated October 28, 2021.

1.1 PROJECT DESCRIPTION

The project will include renovating and modernizing the existing Flood Park. Site work will include restoration of the existing adobe structures, addition of several restroom facilities, and construction of additional recreational facilities including new athletic fields, tennis and volleyball courts, fitness areas, playgrounds, picnic areas with shade structures, a pump track, and walking paths. Appurtenant parking, utilities and irrigation facilities are also planned.

Loading information for the structures are not known at this time, however, we assume structural loads will be typical for small structures and canopies. We anticipate cuts and fills on the order of less than 1 to 3 feet will be required for site grading.

1.2 SCOPE OF SERVICES

Our scope of services was presented in our proposal dated May 10, 2021 and consisted of field and laboratory programs to evaluate physical and engineering properties of the subsurface soils, engineering analysis to prepare recommendations for site work and grading, building foundations, drilled piers, flatwork, and pavements, and preparation of this report. Brief descriptions of our exploration and laboratory programs are presented below.

1.3 EXPLORATION PROGRAM

Field exploration consisted of 7 borings drilled on November 23 and 24, 2021 with track-mounted, hollow-stem auger drilling equipment. The borings were drilled to depths ranging from about 10 to 30 feet. The borings were backfilled with cement grout in accordance with local requirements; exploration permits were obtained as required by local jurisdictions.

The approximate locations of our exploratory borings are shown on the Site Plan, Figure 2. Details regarding our field program are included in Appendix A.

1.4 LABORATORY TESTING PROGRAM

In addition to visual classification of samples, the laboratory program focused on obtaining data for foundation design and seismic ground deformation estimates. Testing included moisture contents, dry densities, washed sieve analyses, Plasticity Index tests, and a Modified Proctor compaction test. Details regarding our laboratory program are included in Appendix B.

1.5 CORROSION EVALUATION

Four samples from our borings from depths from about 1½ to 5½ feet were tested for saturated resistivity, pH, and soluble sulfates and chlorides. JDH Corrosion Consultants prepared a brief corrosion evaluation based on the laboratory data, which is attached to this report in Appendix C. In general, the on-site soils can be characterized as moderately to very severely corrosive to buried metal, and non-corrosive to buried concrete.

1.6 ENVIRONMENTAL SERVICES

Cornerstone Earth Group also provided environmental services for this project, including a Phase 1 site assessment and preliminary soil testing for off haul evaluation. Environmental findings and conclusions are provided under separate covers.

SECTION 2: REGIONAL SETTING

2.1 GEOLOGICAL SETTING

The site is located within the San Francisco Peninsula, which is a narrow band of rock at the north end of the Santa Cruz Mountains separating the Pacific Ocean from San Francisco Bay. This represents one mountain range in a series of northwesterly–aligned mountains forming the Coast Ranges geomorphic province of California that stretches from the Oregon border to nearly Point Conception. In the San Francisco Bay area, most of the Coast Ranges have developed on a basement of tectonically mixed Cretaceous- and Jurassic-age (70- to 200-million years old) rocks of the Franciscan Complex. Locally, these basement rocks are capped by younger sedimentary and volcanic rocks.

The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range across San Francisco Bay to the east.

2.2 REGIONAL SEISMICITY

While seismologists cannot predict earthquake events, geologists from the U.S. Geological Survey have recently updated (in 2015) earlier estimates from their 2014 Uniform California Earthquake Rupture Forecast (Version 3; UCERF3) publication. The estimated probability of one or more magnitude 6.7 earthquakes (the size of the destructive 1994 Northridge earthquake) expected to occur somewhere in the San Francisco Bay Area has been revised (increased) to 72 percent for the period 2014 to 2043 (Aagaard et al., 2016). The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward Fault.

The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. Table 1 below presents the State-considered active faults within 25 kilometers of the site.

Table 1: Approximate Fault Distances

Fault Name	Distance	
	(miles)	(kilometers)
Monte Vista-Shannon	4.8	7.8
San Andreas (1906)	6.3	10.2
Hayward (Total Length)	12.6	20.2
Hayward (Southeast Extension)	14.9	24.0
San Gregorio	15.8	25.5

A regional fault map is presented as Figure 3, illustrating the relative distances of the site to significant fault zones.

SECTION 3: SITE CONDITIONS

3.1 SITE BACKGROUND AND SURFACE DESCRIPTION

The site is currently occupied by Flood County Park, a 21-acre park containing several adobe structures, athletic facilities, playgrounds, picnic areas, and open lawn areas. The site is bounded by commercial development and Highway 101 to the north/northeast and residential development to the east, south, and west.

We reviewed historic aerial photographs dating back to 1948 provided on www.historicaerials.com. We also reviewed the project Request for Proposal and the provided "Potential IWFS Test Well Locations" plan. We understand Flood County Park opened in the early 1930s. The development included construction of several adobe structures and recreational facilities including a swimming pool. The swimming pool was removed in the 1970's. We understand improvements were implemented in the 1980's to improve accessibility for people with disabilities. Several utilities are currently present within the site including a San Francisco Public Utilities Commission (SFPUC) Hetch Hetchy Aqueduct water line running east-west through the site.

Boring EB-1 was performed in the pavement adjacent to the existing baseball field and stadium seating. Surface pavements at EB-1 generally consisted of about 4 inches of asphalt concrete over subgrade. Based on visual observations, the existing pavements within the parking lot are in poor shape with significant alligator and block cracking. Existing flatwork within the park pathways were observed to be in fair shape.

3.2 SUBSURFACE CONDITIONS

Northern Borings

Borings EB-1 and EB-2, located within the northern portion of the site, generally encountered undocumented fills to depths of about 6 and 2½ feet, respectively. The undocumented fills consisted of very stiff to hard sandy lean clay and medium dense silty sand. Beneath the fills, the Borings generally encountered very stiff to hard lean clay with variable amounts of sand to a depths of about 10 and 20 feet, the terminal depths of Borings EB-1 and EB-2 respectively.

Southern and Central Borings

Fill was encountered within the central and southern portions of the site at Borings EB-3 and EB-5 to depths of about 3 and 1½ feet respectively. The undocumented fills consisted of very stiff to hard lean clay with variable amounts of sand and gravel and loose silty sand. Beneath the undocumented fills at Borings EB-3 and EB-5 and beneath the surface at Borings EB-4, EB-6, and EB-7, our southern and central explorations encountered very stiff to hard lean clay with variable amounts of sand to depths ranging from about 4 to 5½ feet below current site grades underlain by loose to medium dense clayey sand to depths ranging from about 5¼ to 8½ feet below grade. The clayey sand was underlain by very stiff to hard lean clay with variable amounts of sand and gravel to a depth of about 30 feet, the maximum depth explored.

3.2.1 Plasticity/Expansion Potential

We performed two Plasticity Index (PI) tests on representative samples of the near surface soils collected at depths of about 2 to 4 feet below current site grades. Test results were used to evaluate expansion potential of surficial soils. The results of the surficial PI tests indicated PIs ranging from 25 to 29, indicating moderate to high expansion potential to wetting and drying cycles.

3.2.2 In-Situ Moisture Contents

Laboratory testing indicated that the in-situ moisture contents within the upper 10 feet range from about 4 percent below to 10 percent above the estimated laboratory optimum moisture.

3.3 GROUNDWATER

Groundwater was encountered in Borings EB-2, EB-3, and EB-4 at depths ranging from 18 to 23½ feet below current grades. All measurements were taken at the time of drilling and may not represent the stabilized levels that can be higher than the initial levels encountered. Historic high groundwater is mapped by the California Geologic Survey at a depth of about 10 to 12 feet below the ground surface (CGS, Palo Alto 7.5-Minute Quadrangle).

We also reviewed groundwater data available online from the website GeoTracker, https://geotracker.waterboards.ca.gov/. Nearby monitoring well data at 4040 Campbell Avenue (approximately 0.6 miles northwest of the site) indicates that groundwater has been measured at depths of approximately 5½ to 7½ feet below grade between September 2005 and August 2012. Additionally, nearby monitoring well data at 795 Willow Road (approximately 0.9 miles southeast of the stie) indicates groundwater has been measured at depths of approximately 17½ to 20½ feet below grade between January 2002 and December 2003.

Based on the above, we recommend a design groundwater depth of 10 feet below the ground surface. Fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors.

3.4 IN-SITU WATER INFILTRATION

To estimate the infiltration rate of the soils at locations and depths provided by the Civil Engineer for the project, we performed two in-situ field infiltration tests using a Guelph permeameter by SoilMoisture Equipment Corp., Model #2800, in general accordance with ASTM D5126. Generally, the Guelph permeameter is a constant head device which uses two water-filled chambers to measure infiltration rate in a shallow borehole. A constant head level is established in the borehole and the rate of water outflow into the surrounding soil is noted. The rate of flow when it reaches a steady state, or constant rate, is used to determine an approximate infiltration rate for that location and depth.

The approximate location of the field infiltration tests (I-1 and I-2) are shown on the Site Plan, Figure 2. The infiltration tests were performed at approximate depths of about 3½ and 4½ feet below existing site grades. The test results are summarized in Table 2.

Table 2: In-Situ Field Guelph Permeameter Test Results

Location	Depth Below Existing Grade (ft)	Infiltration Rate (in/hr)
P-1	3.5	2.2
P-2	4.5	1.8

3.4.1 Reliability of Field Test Data

Test results may not be truly indicative of the long-term, in-situ infiltration. Other factors including stratifications, heterogeneous deposits, overburden stress, disturbance, organic content, depth to groundwater, and other factors can influence test results. In addition, for stratified soils such as those encountered at the site, the average horizontal infiltration is typically greater than the average vertical infiltration.

3.4.2 Findings and Recommendations

Based on our findings, the soil at the locations tested and at depths of about 3½ and 4½ feet below existing grade have infiltration rates ranging from about 1.8 to 2.2 inches per hour. Based on our test results, the in-situ field tests indicated generally a low infiltration rate at the depths and locations tested.

We recommend the above estimate be confirmed in the field at the time of construction, as required. In addition, the project civil engineer should review the above information and provide additional recommendations as deemed necessary.

3.4.3 General Comments and Design Considerations

As discussed, the tests were performed at discrete locations and depths. In addition, some disturbance in preparing the test also can occur. Therefore, the above results can vary significantly and may not be representative over the entire site. Our hand auger explorations at the locations tested generally encountered lean clay to depths of about 3 to 4 feet underlain by clayey sand with gravel. Localized areas/depths with higher or lower permeable materials can increase or decrease the actual infiltration rates. Therefore, we recommend the potential for variations be considered when evaluating the soil infiltration capacity or performance.

SECTION 4: GEOLOGIC HAZARDS

4.1 FAULT SURFACE RUPTURE

As discussed above several significant faults are located within 25 kilometers of the site. The site is not located within a State-designated Alquist Priolo Earthquake Fault Zone. As shown in Figure 3, no known surface expression of fault traces is thought to cross the site; therefore, fault surface rupture hazard is not a significant geologic hazard at the site.

4.2 ESTIMATED GROUND SHAKING

Moderate to severe (design-level) earthquakes can cause strong ground shaking, which is the case for most sites within the Bay Area. A peak ground acceleration (PGA) was estimated for analysis using a value equal to F_{PGA}*PGA, as allowed in the 2019 edition of the California Building Code when an exception has been taken per ASCE 7-16, Section 11.4.8. For our liquefaction analysis we used a PGA_M of 0.698g.

4.3 LIQUEFACTION POTENTIAL

The site is not located within a State-designated Liquefaction Hazard Zone (CGS, Palo Alto Quadrangle, 2006). However, we screened the site for liquefaction during our site exploration by retrieving samples from the site, performing visual classification on sampled materials, and performing various tests to further classify the soil properties.

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering, soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (lateral spreading) (NCEER 1998). Limited field and laboratory data is available regarding ground deformation due to settlement; however, in clean sand layers settlement on the order of 2 to 3 percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap.

As discussed in the "Subsurface" section above, we primarily encountered very stiff cohesive soils beneath the design groundwater depth of 10 feet. Based on the above, our screening of the site for liquefaction indicates a low potential for liquefaction.

4.4 LATERAL SPREADING

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

As discussed, we primarily encountered very stiff cohesive soils beneath the design groundwater depth of 10 feet. We reviewed the historical ground failure map presented in the Seismic Hazard Zone Report for the vicinity (CGS, Palo Alto 7.5-Minute Quadrangle) which indicated two occurrences of lateral spread approximately 2½ to 3 miles south of the site. However, there are no open faces within a distance considered susceptible to lateral spreading. Therefore, in our opinion, the potential for lateral spreading to affect the site is low.

4.5 SEISMIC SETTLEMENT/UNSATURATED SAND SHAKING

Loose to medium dense unsaturated sandy soils can settle during strong seismic shaking. The soils encountered at the site above the design groundwater depth of 10 feet were predominantly very stiff to hard clays and medium dense to dense clayey and silty sands with 35 to 39 percent passing the Number 200 sieve. Therefore, in our opinion, the potential for significant differential seismic settlement affecting the proposed improvements is low.

4.6 TSUNAMI/SEICHE

The terms tsunami or seiche are described as ocean waves or similar waves usually created by undersea fault movement or by a coastal or submerged landslide. Tsunamis may be generated at great distance from shore (far field events) or nearby (near field events). Waves are formed, as the displaced water moves to regain equilibrium, and radiates across the open water, similar to ripples from a rock being thrown into a pond. When the waveform reaches the coastline, it quickly raises the water level, with water velocities as high as 15 to 20 knots. The water mass, as well as vessels, vehicles, or other objects in its path create tremendous forces as they impact coastal structures.

Tsunamis have affected the coastline along the Pacific Northwest during historic times. The Fort Point tide gauge in San Francisco recorded approximately 21 tsunamis between 1854 and 1964. The 1964 Alaska earthquake generated a recorded wave height of 7.4 feet and drowned eleven people in Crescent City, California. For the case of a far-field event, the Bay area would have hours of warning; for a near field event, there may be only a few minutes of warning, if any.

A tsunami or seiche originating in the Pacific Ocean would lose much of its energy passing through San Francisco Bay. Based on the mapping of tsunami inundation potential for the San Francisco Bay Area by CGS (conservation.ca.gov/cgs/tsunami/maps), areas most likely to be inundated are marshlands, tidal flats, and former bay margin lands that are now artificially filled, but are still at or below sea level, and are generally within 1½ miles of the shoreline. The site is approximately 2 miles inland from the San Francisco Bay shoreline and is approximately 19 to 25 feet above mean sea level (Google Earth, 2021). Therefore, the potential for inundation due to tsunami or seiche is considered low.

4.7 FLOODING

Based on our internet search of the Federal Emergency Management Agency (FEMA) flood map public database, the site is located within Zone X, described as an area of minimal flood hazard. We recommend the project civil engineer be retained to confirm this information and verify the base flood elevation, if appropriate.

The Department of Water Resources (DWR), Division of Safety of Dams (DSOD) compiled a database of Dam Failure Inundation Hazard Maps (DSOD, 2015). The generalized hazard maps were prepared by dam owners as required by the State Office of Emergency Services; they are intended for planning purposes only. Based on our review of these maps, the site is not located within a dam failure inundation area.

SECTION 5: CONCLUSIONS

5.1 SUMMARY

From a geotechnical viewpoint, the project is feasible provided the concerns listed below are addressed in the project design. Descriptions of each concern with brief outlines of our recommendations follow the listed concerns.

- Redevelopment considerations
- Shallow groundwater
- Presence of moderately to highly expansive soils
- Undocumented fill
- Soil Corrosion Potential

5.1.1 Redevelopment Considerations

As discussed, the site is currently occupied by several structures, site fixtures, and landscaping. We understand that some of the existing improvements will be demolished for the construction of the building additions. Potential issues that are often associated with redeveloping sites include demolition of existing improvements, abandonment of existing utilities, and undocumented fills. Please refer to the "Earthwork" section below for further recommendations.

5.1.2 Shallow Groundwater

Shallow groundwater was measured at depths ranging from approximately 17½ to 27 feet below the existing ground surface. However, based on our review of CGS maps and nearby well data we recommend a design groundwater depth of 10 feet. Our experience with similar sites in the vicinity indicates that shallow groundwater could significantly impact grading and underground construction. These impacts typically consist of potentially wet and unstable pavement subgrade, difficulty achieving compaction, and difficult underground utility installation. Dewatering and shoring of utility trenches may be required in some isolated areas of the site. Detailed recommendations addressing this concern are presented in the "Earthwork" section of this report.

5.1.3 Expansive Soils

Moderately to highly expansive surficial soils generally blanket the site. Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wetted. To reduce the potential for damage to the planned structures, slabs-on-grade should have sufficient reinforcement and be supported on a layer of non-expansive fill; footings should extend below the zone of seasonal moisture fluctuation. In addition, it is important to limit moisture changes in the surficial soils by using positive drainage away from buildings as well as limiting landscaping watering. We recommend that a plug of low-permeability clay soil, sand-cement slurry, or lean concrete be placed within trenches just outside where the trenches pass into building and pavement areas. Detailed

grading and foundation recommendations addressing this concern are presented in the following sections.

5.1.4 Undocumented Fill

Fills were encountered to a depth of up to about 6 feet in our explorations. Additionally, we understand a swimming pool located south of the existing baseball field was previously demolished. Undocumented fill may be present as a result of prior development grading and demolition backfill; any fills encountered during site grading should be completely removed from within building areas and to a lateral distance of at least 5 feet beyond the building footprints or to a lateral distance equal to fill depth below the perimeter footing, whichever is greater. Provided the fills meet the "Material for Fill" requirements below, the fills may be reused when backfilling the excavations. Based on review of the samples collected from our borings, it appears that the fill may be reused. If materials are encountered that do not meet the requirements, such as debris, wood, trash, those materials should be screened out of the remaining material and be removed from the site. Backfill of excavations should be placed in lifts and compacted in accordance with the "Compaction" section below.

Provided undocumented fills are mitigated by removal and replacement as engineered fill, the potential impact due to undocumented fill should be low.

5.1.5 Soil Corrosion Potential

A preliminary soil corrosion screening was performed by JDH Corrosion Consultants based on the results of analytical tests on samples of the near-surface soil. In general, the JDH report concludes that the corrosion potential for buried concrete does not warrant the use of sulfate resistant concrete. In addition, the corrosion potential for buried metallic structures, such as metal pipes, is considered corrosive. JDH recommends that special requirements for corrosion control be made to protect metal pipes. A more detailed discussion of the site corrosion evaluation is presented in Appendix C. As the preliminary soil corrosion screening was based on the results of limited sampling, consideration may be given to collecting and testing additional samples from the upper 5 feet for sulfates and pH to confirm the classification of corrosive to mortar coated steel and concrete.

5.2 PLANS AND SPECIFICATIONS REVIEW

We recommend that we be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing the plans for construction.

5.3 CONSTRUCTION OBSERVATION AND TESTING

As site conditions may vary significantly between the small-diameter borings performed during this investigation, we also recommend that a Cornerstone representative be present to provide geotechnical observation and testing during earthwork and foundation construction. This will allow us to form an opinion and prepare a letter at the end of construction regarding contractor

compliance with project plans and specifications, and with the recommendations in our report. We will also be allowed to evaluate any conditions differing from those encountered during our investigation and provide supplemental recommendations as necessary. For these reasons, the recommendations in this report are contingent of Cornerstone providing observation and testing during construction. Contractors should provide at least a 48-hour notice when scheduling our field personnel.

SECTION 6: EARTHWORK

6.1 SITE DEMOLITION

All existing improvements not to be reused for the current development, including all foundations, flatwork, pavements, utilities, and other improvements should be demolished and removed from the site. Recommendations in this section apply to the removal of these improvements, which are currently present on the site, prior to the start of mass grading or the construction of new improvements for the project.

Cornerstone should be notified prior to the start of demolition and should be present on at least a part-time basis during all backfill and mass grading as a result of demolition. Occasionally, other types of buried structures (wells, cisterns, debris pits, etc.) can be found on sites with prior development. If encountered, Cornerstone should be contacted to address these types of structures on a case-by-case basis.

6.1.1 Demolition of Existing Slabs, Foundations and Pavements

All slabs, foundations, and pavements should be completely removed from within planned building areas.

Special care should be taken during the demolition and removal of existing floor slabs, foundations, utilities and pavements to minimize disturbance of the subgrade. Excessive disturbance of the subgrade, which includes either native or previously placed engineered fill, resulting from demolition activities can have serious detrimental effects on planned foundation and paving elements.

Existing foundations are typically mat-slabs, shallow footings, or piers/piles. If slab or shallow footings are encountered, they should be completely removed. If drilled piers are encountered, they should be cut off at an elevation at least 60-inches below proposed footings or the final subgrade elevation, whichever is deeper. The remainder of the drilled pier could remain in place. Foundation elements to remain in place should be surveyed and superimposed on the proposed development plans to determine the potential for conflicts or detrimental impacts to the planned construction. Following review, additional mitigation or planned foundation elements may need to be modified.

6.1.2 Abandonment of Existing Utilities

All utilities should be completely removed from within planned building areas. For any utility line to be considered acceptable to remain within building areas, the utility line must be completely backfilled with grout or sand-cement slurry (sand slurry is not acceptable), the ends outside the building area capped with concrete, and the trench fills either removed and replaced as engineered fill with the trench side slopes flattened to at least 1:1, or the trench fills are determined not to be a risk to the structure. The assessment of the level of risk posed by the particular utility line will determine whether the utility may be abandoned in place or needs to be completely removed. The contractor should assume that all utilities will be removed from within building areas unless provided written confirmation from both the owner and the geotechnical engineer.

Utilities extending beyond the building area may be abandoned in place provided the ends are plugged with concrete, they do not conflict with planned improvements, and that the trench fills do not pose significant risk to the planned surface improvements.

The risk for owners associated with abandoning utilities in place include the potential for future differential settlement of existing trench fills, and/or partial collapse and potential ground loss into utility lines that are not completely filled with grout.

6.2 SITE CLEARING AND PREPARATION

6.2.1 Site Stripping

The site should be stripped of all surface vegetation, and surface and subsurface improvements (if present) within the proposed development area. Demolition of existing improvements is discussed in the prior paragraphs. A detailed discussion of removal of existing fills is provided later in this report. Surface vegetation and topsoil should be stripped to a sufficient depth to remove all material greater than 3 percent organic content by weight. Based on our site observations, surficial stripping should extend about 4 to 6 inches below existing grade in vegetated areas.

6.2.2 Tree and Shrub Removal

Trees and shrubs designated for removal should have the root balls and any roots greater than ½-inch diameter removed completely. Mature trees are estimated to have root balls extending to depths of 2 to 4 feet, depending on the tree size. Significant root zones are anticipated to extend to the diameter of the tree canopy. Grade depressions resulting from root ball removal should be cleaned of loose material and backfilled in accordance with the recommendations in the "Compaction" section of this report.

6.3 MITIGATION OF UNDOCUMENTED FILLS

As discussed, up to 6 feet of undocumented fill was encountered in our borings. Additionally, undocumented fill from previous swimming pool demolition may exist on the west-central portion

of the site and may be present beneath the proposed electrical building. The approximate limits of the former swimming pool are shown on the Site Plan, Figure 2. All undocumented fills should be completely removed from within building areas and to a lateral distance of at least 5 feet beyond the building footprint or to a lateral distance equal to fill depth below the perimeter footing, whichever is greater. Prior to construction, potholes should be performed at the proposed electrical building so that the stability of the undocumented fill can be evaluated by a Cornerstone representative. As a value-engineering decision, if the deep fills are left in place, some long-term compression is possible. If fills are not removed and replaced as engineered fill, at a minimum, we recommend, based on boring densities and blow counts, that at least the upper one to two feet be replaced as engineered fill.

Fills extending into planned pavement and flatwork areas may be left in place provided they are determined to be a low risk for future differential settlement and that the upper 12 to 18 inches of fill below pavement subgrade is re-worked and compacted as discussed in the "Compaction" section below. In our opinion, the fills encountered at this site are acceptable be left in place.

Provided the fills meet the "Material for Fill" requirements below, the fills may be reused when backfilling the excavations. Based on review of the samples collected from our borings, it appears that the fill may be reused. If materials are encountered that do not meet the requirements, such as debris, wood, trash, those materials should screen out of the remaining material and be removed from the site. Backfill of excavations should be placed in lifts and compacted in accordance with the "Compaction" section below.

6.4 TEMPORARY CUT AND FILL SLOPES

The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards. On a preliminary basis, the upper 10 feet at the site may be classified as OSHA Site C materials.

Excavations performed during site demolition and fill removal should be sloped at 3:1 (horizontal:vertical) within the upper 5 feet below building subgrade. Actual excavation inclinations should be reviewed in the field during construction, as needed. Excavations below building subgrade and excavations in pavement and flatwork areas should be sloped in accordance with OSHA soil classification requirements.

6.5 SUBGRADE PREPARATION

6.5.1 General Subgrade Preparation

After site clearing and demolition is complete, and prior to backfilling any excavations resulting from fill removal or demolition, the excavation subgrade and subgrade within areas to receive additional site fills, slabs-on-grade and/or pavements should be scarified to a depth of 12 inches, moisture conditioned, and compacted in accordance with the "Compaction" section below.

6.5.2 Synthetic Turf Field Subgrade Preparation

We understand that synthetic turf is being considered for the proposed fields. If chosen, the future turf system will likely consist of a synthetic turf with drainage composite surface overlying drainage layer overlying prepared subgrade. The guide specification should be followed for the drainage system that is chosen for this project. The geotechnical aspects of the project design details and specifications should be reviewed by our firm prior to project bidding and construction.
Once a synthetic turf system is chosen for the project, we should be consulted -to provide additional recommendations.

6.6 WET SOIL STABILIZATION GUIDELINES

Native soil and fill materials, especially soils with high fines contents such as clays and silty soils, can become unstable due to high moisture content, whether from high in-situ moisture contents or from winter rains. As the moisture content increases over the laboratory optimum, it becomes more likely the materials will be subject to softening and yielding (pumping) from construction loading or become unworkable during placement and compaction.

As discussed in the "Subsurface" section in this report, the in-situ moisture contents are up to 10 percent over the estimated laboratory optimum in the upper 10 feet of the soil profile. The contractor should anticipate drying the soils prior to reusing them as fill. In addition, repetitive rubber-tire loading will likely de-stabilize the soils.

There are several methods to address potential unstable soil conditions and facilitate fill placement and trench backfill. Some of the methods are briefly discussed below. Implementation of the appropriate stabilization measures should be evaluated on a case-by-case basis according to the project construction goals and the site conditions.

6.6.1 Scarification and Drying

The subgrade may be scarified to a depth of 8 to 12 inches and allowed to dry to near optimum conditions if sufficient dry weather is anticipated to allow sufficient drying. More than one round of scarification may be needed to break up the soil clods.

6.6.2 Removal and Replacement

As an alternative to scarification, the contractor may choose to over-excavate the unstable soils and replace them with dry on-site or import materials. A Cornerstone representative should be present to provide recommendations regarding the appropriate depth of over-excavation, whether a geosynthetic (stabilization fabric or geogrid) is recommended, and what materials are recommended for backfill.

6.7 MATERIAL FOR FILL

6.7.1 Re-Use of On-site Soils

On-site soils with an organic content less than 3 percent by weight may be reused as general fill. General fill should not have lumps, clods or cobble pieces larger than 6 inches in diameter; 85 percent of the fill should be smaller than 2½ inches in diameter. Minor amounts of oversize material (smaller than 12 inches in diameter) may be allowed provided the oversized pieces are not allowed to nest together and the compaction method will allow for loosely placed lifts not exceeding 12 inches.

6.7.2 Potential Import Sources

Non-expansive material should be inorganic with a Plasticity Index (PI) of 15 or less, and not contain recycled asphalt concrete where it will be used within the habitable building areas. Imported soil for use as general fill material should be inorganic with a Plasticity Index (PI) of 20 or less, and not contain recycled asphalt concrete where it will be used within the habitable building areas. To prevent significant caving during trenching or foundation construction, imported material should have sufficient fines. Samples of potential import sources should be delivered to our office at least 10 days prior to the desired import start date. Information regarding the import source should be provided, such as any site geotechnical reports. If the material will be derived from an excavation rather than a stockpile, potholes will likely be required to collect samples from throughout the depth of the planned cut that will be imported. At a minimum, laboratory testing will include PI tests. Material data sheets for select fill materials (Class 2 aggregate base, ¾-inch crushed rock, quarry fines, etc.) listing current laboratory testing data (not older than 6 months from the import date) may be provided for our review without providing a sample. If current data is not available, specification testing will need to be completed prior to approval.

Environmental and soil corrosion characterization should also be considered by the project team prior to acceptance. Suitable environmental laboratory data to the planned import quantity should be provided to the project environmental consultant; additional laboratory testing may be required based on the project environmental consultant's review. The potential import source should also not be more corrosive than the on-site soils, based on pH, saturated resistivity, and soluble sulfate and chloride testing.

6.8 COMPACTION REQUIREMENTS

All fills, and subgrade areas where fill, slabs-on-grade, and pavements are planned, should be placed in loose lifts 8 inches thick or less and compacted in accordance with ASTM D1557 (latest version) requirements as shown in the table below. In general, clayey soils should be compacted with sheepsfoot equipment and sandy/gravelly soils with vibratory equipment; open-graded materials such as crushed rock should be placed in lifts no thicker than 18 inches and consolidated in place with vibratory equipment. Each lift of fill and all subgrade should be firm and unyielding under construction equipment loading in addition to meeting the compaction requirements to be approved. The contractor (with input from a Cornerstone representative)

should evaluate the in-situ moisture conditions, as the use of vibratory equipment on soils with high moistures can cause unstable conditions. General recommendations for soil stabilization are provided in the "Wet Soil Stabilization Guidelines" section of this report. Where the soil's PI is 20 or greater, the expansive soil criteria should be used.

Table 3: Compaction Requirements

Description	Material Description	Minimum Relative[1] Compaction (percent)	Moisture[2] Content (percent)
General Fill (within upper 5 feet)	On-Site Expansive Soils	87 – 92	>3
	Low Expansion Soils	90	>1
General Fill (below a depth of 5 feet)	On-Site Expansive Soils	95	>3
	Low Expansion Soils	95	>1
Trench Backfill	On-Site Expansive Soils	87 – 92	>3
	Low Expansion Soils	90	>1
Trench Backfill (upper 6 inches of pavement subgrade)	On-Site Low Expansion Soils	95	>1
Crushed Rock Fill	¾-inch Clean Crushed Rock	Consolidate In-Place	NA
Non-Expansive Fill	Imported Non-Expansive Fill	90	Optimum
Flatwork Subgrade	On-Site Expansive Soils	87 - 92	>3
	Low Expansion Soils	90	>1
Flatwork Aggregate Base	Class 2 Aggregate Base[3]	90	Optimum
Pavement Subgrade	On-Site Expansive Soils	87 - 92	>3
	Low Expansion Soils	95	>1
Pavement Aggregate Base	Class 2 Aggregate Base[3]	95	Optimum
Field Permeable Base	Class II Permeable[4]	92[4]	>1
Asphalt Concrete	Asphalt Concrete	95 (Marshall)	NA

(1) Relative compaction based on maximum density determined by ASTM D1557 (latest version)
(2) Moisture content based on optimum moisture content determined by ASTM D1557 (latest version)
(3) Class 2 aggregate base shall conform to Caltrans Standard Specifications, latest edition, except that the relative compaction should be determined by ASTM D1557 (latest version)
(4) For Class II Permeable Base shall conform Caltrans Standard Specifications, latest edition, compact to 92 percent (do not over compact).

6.8.1 Construction Moisture Conditioning

Expansive soils can undergo significant volume change when dried then wetted. The contractor should keep all exposed expansive soil subgrade (and also trench excavation side walls) moist until protected by overlying improvements (or trenches are backfilled). If expansive soils are allowed to dry out significantly, re-moisture conditioning may require several days of re-wetting (flooding is not recommended), or deep scarification, moisture conditioning, and re-compaction.

6.9 TRENCH BACKFILL

Utility lines constructed within public right-of-way should be trenched, bedded and shaded, and backfilled in accordance with the local or governing jurisdictional requirements. Utility lines in private improvement areas should be constructed in accordance with the following requirements unless superseded by other governing requirements.

All utility lines should be bedded and shaded to at least 6 inches over the top of the lines with crushed rock (⅜-inch-diameter or greater) or well-graded sand and gravel materials conforming to the pipe manufacturer's requirements. Open-graded shading materials should be consolidated in place with vibratory equipment and well-graded materials should be compacted to at least 90 percent relative compaction with vibratory equipment prior to placing subsequent backfill materials.

General backfill over shading materials may consist of on-site native materials provided they meet the requirements in the "Material for Fill" section, and are moisture conditioned and compacted in accordance with the requirements in the "Compaction" section.

Where utility lines will cross perpendicular to strip footings, the footing should be deepened to encase the utility line, providing sleeves or flexible cushions to protect the pipes from anticipated foundation settlement, or the utility lines should be backfilled to the bottom of footing with sand-cement slurry or lean concrete. Where utility lines will parallel footings and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the footing, either the footing will need to be deepened so that the pipe is above the foundation plane of influence, or the utility trench will need to be backfilled with sand-cement slurry or lean concrete within the influence zone. Sand-cement slurry used within foundation influence zones should have a minimum compressive strength of 75 psi.

On expansive soils sites it is desirable to reduce the potential for water migration into building and pavement areas through the granular shading materials. We recommend that a plug of low-permeability clay soil, sand-cement slurry, or lean concrete be placed within trenches just outside where the trenches pass into building and pavement areas.

6.10 SITE DRAINAGE

6.10.1 Site Surface Drainage

Ponding should not be allowed adjacent to building foundations, slabs-on-grade, pavements, hardscape areas, or field improvements. Hardscape surfaces should slope at least 2 percent towards suitable discharge facilities; landscape areas should slope at least 3 percent towards suitable discharge facilities. Roof runoff should be directed away from building areas in closed conduits, to approved infiltration facilities, or on to hardscaped surfaces that drain to suitable facilities. Retention, detention or infiltration facilities should be spaced at least 10 feet from buildings, and preferably at least 5 feet from slabs-on-grade or pavements. However, if retention, detention or infiltration facilities are located within these zones, we recommend that

these treatment facilities meet the requirements in the Storm Water Treatment Design Considerations section of this report.

6.11 LOW-IMPACT DEVELOPMENT (LID) IMPROVEMENTS

The Municipal Regional Permit (MRP) requires regulated projects to treat 100 percent of the amount of runoff identified in Provision C.3.d from a regulated project's drainage area with low impact development (LID) treatment measures onsite or at a joint stormwater treatment facility. LID treatment measures are defined as rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment. A biotreatment system may only be used if it is infeasible to implement harvesting and use, infiltration, or evapotranspiration at a project site.

Technical infeasibility of infiltration may result from site conditions that restrict the operability of infiltration measures and devices. Various factors affecting the feasibility of infiltration treatment may create an environmental risk, structural stability risk, or physically restrict infiltration. The presence of any of these limiting factors may render infiltration technically infeasible for a proposed project. To aid in determining if infiltration may be feasible at the site, we provide the following site information regarding factors that may aid in determining the feasibility of infiltration facilities at the site.

- The near-surface soils at the site are clayey and categorized as Hydrologic Soil Group C and is expected to have infiltration rates of between about 0.06 to 0.57 inches per hour. In our opinion, these clayey soils will significantly limit the infiltration of stormwater.

- Locally, seasonal high groundwater is mapped at a depth of 10 to 12 feet, and therefore is expected to be within 10 feet of the base of the infiltration measure.

- In our opinion, infiltration locations within 10 feet of the buildings would create a geotechnical hazard.

6.11.1 Storm Water Treatment Design Considerations

If storm water treatment improvements, such as shallow bio-retention swales, basins or pervious pavements, are required as part of the site improvements to satisfy Storm Water Quality (C.3) requirements, we recommend the following items be considered for design and construction.

6.11.1.1 General Bioswale Design Guidelines

- If possible, avoid placing bioswales or basins within 10 feet of the building perimeter or within 5 feet of exterior flatwork or pavements. If bioswales must be constructed within these setbacks, the side(s) and bottom of the trench excavation should be lined with 10-mil visqueen to reduce water infiltration into the surrounding expansive clay.

- Bioswales constructed within 3 feet of proposed buildings may be within the foundation zone of influence for perimeter wall loads. Therefore, where bioswales will parallel

foundations and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the foundation, the foundation will need to be deepened so that the bottom edge of the bioswale filter material is above the foundation plane of influence.

- The bottom of bioswale or detention areas should include a perforated drain placed at a low point, such as a shallow trench or sloped bottom, to reduce water infiltration into the surrounding soils near structural improvements, and to address the low infiltration capacity of the on-site clay soils.

6.11.1.2 Bioswale Infiltration Material

- Gradation specifications for bioswale filter material, if required, should be specified on the grading and improvement plans.

- Compaction requirements for bioswale filter material in non-landscaped areas or in pervious pavement areas, if any, should be indicated on the plans and specifications to satisfy the anticipated use of the infiltration area.

- If bioswales are to be vegetated, the landscape architect should select planting materials that do not reduce or inhibit the water infiltration rate, such as covering the bioswale with grass sod containing a clayey soil base.

- Due to the relatively loose consistency and/or high organic content of many bioswale filter materials, long-term settlement of the bioswale medium should be anticipated. To reduce initial volume loss, bioswale filter material should be wetted in 12-inch lifts during placement to pre-consolidate the material. Mechanical compaction should not be allowed, unless specified on the grading and improvement plans, since this could significantly decrease the infiltration rate of the bioswale materials.

- It should be noted that the volume of bioswale filter material may decrease over time depending on the organic content of the material. Additional filter material may need to be added to bioswales after the initial exposure to winter rains and periodically over the life of the bioswale areas, as needed.

6.11.1.3 Bioswale Construction Adjacent to Pavements

If bio-infiltration swales or basins are considered adjacent to proposed parking lots or exterior flatwork, we recommend that mitigative measures be considered in the design and construction of these facilities to reduce potential impacts to flatwork or pavements. Exterior flatwork, concrete curbs, and pavements located directly adjacent to bio-swales may be susceptible to settlement or lateral movement, depending on the configuration of the bioswale and the setback between the improvements and edge of the swale. To reduce the potential for distress to these improvements due to vertical or lateral movement, the following options should be considered by the project civil engineer:

- Improvements should be setback from the vertical edge of a bioswale such that there is at least 1 foot of horizontal distance between the edge of improvements and the top edge of the bioswale excavation for every 1 foot of vertical bioswale depth, or

- Concrete curbs for pavements, or lateral restraint for exterior flatwork, located directly adjacent to a vertical bioswale cut should be designed to resist lateral earth pressures in accordance with the recommendations in the "Retaining Walls" section of this report, or concrete curbs or edge restraint should be adequately keyed into the native soil or engineered to reduce the potential for rotation or lateral movement of the curbs.

6.12 LANDSCAPE CONSIDERATIONS

Since the near-surface soils are moderately to highly expansive, we recommend greatly reducing the amount of surface water infiltrating these soils near foundations and exterior slabs-on-grade. This can typically be achieved by:

- Using drip irrigation

- Avoiding open planting within 3 feet of the building perimeter or near the top of existing slopes

- Regulating the amount of water distributed to lawns or planter areas by using irrigation timers

- Selecting landscaping that requires little or no watering, especially near foundations.

We recommend that the landscape architect consider these items when developing landscaping plans.

SECTION 7: 2019 CBC SEISMIC DESIGN CRITERIA

7.1 SEISMIC DESIGN CRITERIA

We understand that the project structural design will be based on the 2019 California Building Code (CBC), which provides criteria for the seismic design of buildings in Chapter 16. The "Seismic Coefficients" used to design buildings are established based on a series of tables and figures addressing different site factors, including the soil profile in the upper 100 feet below grade and mapped spectral acceleration parameters based on distance to the controlling seismic source/fault system.

Our explorations generally encountered very dense to hard clay and loose to medium dense sand deposits to a depth of 30 feet, the maximum depth explored. Based on our borings and review of local geology, the site is underlain by deep alluvial soils with typical SPT "N" values between 15 and 50 blows per foot. Therefore, we have classified the site as Soil Classification D. Because we used site specific data from our explorations and laboratory testing, the site class should be considered as "determined" for the purposes of estimating the seismic design

parameters from the code outlined below. The mapped spectral acceleration parameters S_s and S_1 were calculated using the web-based program ATC Hazards by Locations, located at hazards.atcouncil.org, based on the site coordinates presented below and the site classification. **Recommended values in the table below may only be used for design if in the judgement of the project structural engineer an exception can be taken per ASCE 7-16 Section 11.4.8.** The table below lists the various factors used to determine the seismic coefficients and other parameters.

Table 4: CBC Site Categorization and Site Coefficients

Classification/Coefficient	Design Value
Site Class	D
Site Latitude	37.475132°
Site Longitude	- 122.172310°
0.2-second Period Mapped Spectral Acceleration[1], S_S	1.5g
1-second Period Mapped Spectral Acceleration[1], S_1	0.6g
Short-Period Site Coefficient – Fa	1
Long-Period Site Coefficient – Fv	1.7[2]
0.2-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects - S_{MS}	1.5g
1-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – S_{M1}	1.02g[2]
0.2-second Period, Design Earthquake Spectral Response Acceleration – S_{DS}	1g
1-second Period, Design Earthquake Spectral Response Acceleration – S_{D1}	0.68g[2]

(1) For Site Class B, 5 percent damped.
(2) These values may be used for design only if an exception has been taken per Section 11.4.8 of ASCE 7-16.

SECTION 8: FOUNDATIONS

8.1 SUMMARY OF RECOMMENDATIONS

We understand the project will include restoration of existing adobe structures and construction of a new electrical building and restrooms. In our opinion, the proposed structures for new construction or renovation may be supported on shallow foundations provided the recommendations in the "Earthwork" section and the sections below are followed. Optional foundation recommendations for drilled cast-in-place piers are also provided for other onsite improvements.

8.2 SHALLOW FOUNDATIONS

8.2.1 Conventional Shallow Footings

Conventional shallow footings should bear on natural, undisturbed soil or engineered fill, be at least 12 inches wide, and extend at least 18 inches below the lowest adjacent grade. Lowest adjacent grade is defined as the deeper of the following: 1) bottom of the adjacent interior slab-on-grade, or 2) finished exterior grade, excluding landscaping topsoil. The deeper footing embedment is due to the presence of moderately to highly expansive soils and is intended to embed the footing below the zone of significant seasonal moisture fluctuation, reducing the potential for differential movement.

Footings constructed to the above dimensions and in accordance with the "Earthwork" recommendations of this report are capable of supporting maximum allowable bearing pressures of 2,000 psf for dead loads, 3,000 psf for combined dead plus live loads, and 4,000 psf for all loads including wind and seismic. These pressures are based on factors of safety of 3.0, 2.0, and 1.5 applied to the ultimate bearing pressure for dead, dead plus live, and all loads, respectively. These pressures are net values; the weight of the footing may be neglected for the portion of the footing extending below grade (typically, the full footing depth). Top and bottom mats of reinforcing steel should be included in continuous footings to help span irregularities and differential settlement.

8.2.2 Footing Settlement

Structural loads were not provided to us at the time this report was prepared; therefore, we assumed the typical loading in the following table.

Table 5: Assumed Structural Loading

Foundation Area	Range of Assumed Loads
Interior Isolated Column Footing	20 to 50 kips
Exterior Isolated Column Footing	20 to 50 kips
Perimeter Strip Footing	1 to 3 kips per lineal foot

Based on the above loading and the allowable bearing pressures presented above, we estimate that the total static footing settlement will be on the order of ½ inch, with less than ¼ inch of post-construction differential settlement between adjacent foundation elements. As our footing loads were assumed, we recommend we be retained to review the final footing layout and loading and verify the settlement estimates above.

8.2.3 Lateral Loading

Lateral loads may be resisted by friction between the bottom of footing and the supporting subgrade, and also by passive pressures generated against footing sidewalls. An ultimate frictional resistance of 0.45 applied to the footing dead load, and an ultimate passive pressure

based on an equivalent fluid pressure of 450 pcf may be used in design. The structural engineer should apply an appropriate factor of safety (such as 1.5) to the ultimate values above. Where footings are adjacent to landscape areas without hardscape, the upper 12 inches of soil should be neglected when determining passive pressure capacity.

8.2.4 Conventional Shallow Footing Construction Considerations

Where utility lines will cross perpendicular to strip footings, the footing should be deepened to encase the utility line, providing sleeves or flexible cushions to protect the pipes from anticipated foundation settlement, or the utility lines should be backfilled to the bottom of footing with sand-cement slurry or lean concrete. Where utility lines will parallel footings and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the footing, either the footing will need to be deepened so that the pipe is above the foundation plane of influence, or the utility trench will need to be backfilled with sand-cement slurry or lean concrete within the influence zone. Sand-cement slurry used within foundation influence zones should have a minimum compressive strength of 75 psi.

Footing excavations should be filled as soon as possible or be kept moist until concrete placement by regular sprinkling to prevent desiccation. A Cornerstone representative should observe all footing excavations prior to placing reinforcing steel and concrete. If there is a significant schedule delay between our initial observation and concrete placement, we may need to re-observe the excavations.

Due to the presence of clean sand and gravel, footing excavation walls will likely not stand vertical and will need to be sloped to a minimum 1:1 inclination or Stay-Form or similar may need to be placed within the footing excavations as they are excavated during construction of the foundation elements. Granular material encountered in the footing bottoms will likely be disturbed to a depth of 6 to 8 inches following excavation and will need to be compacted to 90 percent relative compaction prior to steel placement. Care should be taken to not disturb the compacted granular material during steel placement. We should re-observe the footing excavations in granular materials after reinforcing steel has been placed and just prior to concrete placement. Footing excavations should also be kept moist by regular sprinkling with water to prevent desiccation and potential raveling of the granular materials. As an alternative, a rat slab can be placed over the granular material after we have observed the footing excavation to protect the granular material prior to steel placement.

8.3 DEEP FOUNDATIONS

8.3.1 Drilled Piers

Shade structures may be supported on drilled, cast-in-place, straight-shaft friction piers. The piers should have a minimum diameter of 12 inches and extend to a depth of at least 4 feet below the bottom of the grade beams. Adjacent piers centers should be spaced at least three diameters apart, otherwise, a reduction for group effects may be required. Grade beams should span between piers and/or pier caps in accordance with structural requirements. Conventional

slabs-on-grade may be used provided the subgrade soils are prepared in accordance with the "Earthwork" section.

8.3.1.1 Vertical Capacity

The vertical capacity of the piers may be designed based on an allowable skin friction of 500 psf for combined dead plus live loads based on a factor of safety of 2.0; dead loads should not exceed two-thirds of the allowable capacities. The allowable skin friction may be increased by one-third for wind and seismic loads. Frictional resistance to uplift loads may be developed along the pier shafts based on an ultimate frictional resistance of 80 percent of the downward capacity; the structural engineer should apply an appropriate factor of safety (such as 1.5) to the ultimate uplift capacity.

8.3.1.2 Lateral Capacity

Lateral loads exerted on the pier-supported structure may be resisted by a passive resistance based on an allowable equivalent fluid pressure of 300 pcf acting against twice the projected area of piers below the pier cap and over two pier diameters for single piers, up to a maximum allowable uniform pressure of 2,500 psf based on a factor of safety of 2.0. The upper 1 foot of soil or depth of landscaping, whichever is greater, should be neglected when determining lateral capacity.

8.3.1.3 Drilled Pier Construction Considerations

The excavation of all drilled shafts should be observed by a Cornerstone representative to confirm the soil profile, verify that the piers extend the minimum depth into suitable materials, and that the piers are constructed in accordance with our recommendations and project requirements. The drilled shafts should be straight, dry, and relatively free of loose material before reinforcing steel is installed and concrete is placed. If groundwater cannot be removed from the excavations prior to concrete placement, drilling slurry or casing may be required to stabilize the shaft and the concrete should be placed using a tremie pipe, keeping the tremie pipe below the surface of the concrete to avoid entrapment of water or drilling slurry in the concrete.

SECTION 9: CONCRETE SLABS AND PEDESTRIAN PAVEMENTS

9.1 INTERIOR SLABS-ON-GRADE

Due to the moderate to high expansion potential of the surficial soils, the proposed slabs-on-grade should be supported on at least 12 inches of non-expansive fill (NEF) to reduce the potential for slab damage due to soil heave. The NEF layer should be constructed over subgrade prepared in accordance with the recommendations in the "Earthwork" section of this report. If moisture-sensitive floor coverings are planned, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. If significant time elapses between initial subgrade preparation and NEF construction, the subgrade should be proof-rolled to confirm subgrade stability, and if the soil

has been allowed to dry out, the subgrade should be re-moisture conditioned to at least 3 percent over the optimum moisture content.

The structural engineer should determine the appropriate slab reinforcement for the loading requirements and considering the expansion potential of the underlying soils. For unreinforced concrete slabs, ACI 302.1R recommends limiting control joint spacing to 24 to 36 times the slab thickness in each direction, or a maximum of 18 feet.

9.2 INTERIOR SLABS MOISTURE PROTECTION CONSIDERATIONS

The following general guidelines for concrete slab-on-grade construction where floor coverings are planned are presented for the consideration by the developer, design team, and contractor. These guidelines are based on information obtained from a variety of sources, including the American Concrete Institute (ACI) and are intended to reduce the potential for moisture-related problems causing floor covering failures, and may be supplemented as necessary based on project-specific requirements. The application of these guidelines or not will not affect the geotechnical aspects of the slab-on-grade performance.

- Place a minimum 15-mil vapor retarder conforming to ASTM E 1745, Class C requirements or better directly below the concrete slab; the vapor retarder should extend to the slab edges and be sealed at all seams and penetrations in accordance with manufacturer's recommendations and ASTM E 1643 requirements. A 4-inch-thick capillary break, consisting of crushed rock should be placed below the vapor retarder and consolidated in place with vibratory equipment. The mineral aggregate shall be of such size that the percentage composition by dry weight as determined by laboratory sieves will conform to the following gradation:

Sieve Size	Percentage Passing Sieve
1"	100
¾"	90 – 100
No. 4	0 – 10
No. 200	0 – 5

  The capillary break rock may be considered as the upper 4 inches of the non-expansive fill previously recommended.

- The concrete water:cement ratio should be 0.45 or less. Mid-range plasticizers may be used to increase concrete workability and facilitate pumping and placement.

- Water should not be added after initial batching unless the slump is less than specified and/or the resulting water:cement ratio will not exceed 0.45.

- Polishing the concrete surface with metal trowels is not recommended.

- Where floor coverings are planned, all concrete surfaces should be properly cured.

- Water vapor emission levels and concrete pH should be determined in accordance with ASTM F1869-98 and F710-98 requirements and evaluated against the floor covering manufacturer's requirements prior to installation.

9.3 EXTERIOR FLATWORK

9.3.1 Pedestrian Concrete Flatwork

Exterior flatwork, such as pedestrian walkways, patios, driveways, hardscaped areas, sports facilities such as tennis courts, and sidewalks, may experience seasonal movement due to the native expansive soils; therefore, some cracking or vertical movement of conventional slabs should be anticipated where imported fill is not planned in flatwork areas. There are several alternatives for mitigating the impacts of expansive soils beneath concrete flatwork. We are providing recommendations to reduce distress to concrete flatwork that includes moisture conditioning the subgrade soils, using non-expansive fill, and providing adequate construction and control joints to control cracks that do occur. It should be noted that minor slab movement or localized cracking and/or distress could still occur.

- The minimum recommendation for concrete flatwork constructed on moderately to highly expansive soils is to properly prepare the clayey soils prior to placing concrete. This is typically achieved by scarifying, moisture conditioning, and re-compacting the subgrade soil. Subgrade soil should be moisture conditioned to at least 3 percent over the laboratory optimum and compacted using moderate compaction effort to a relative compaction of 87 to 92 percent (ASTM Test Method D1557). Since the near surface soils may have been previously compacted and tested, the subgrade soils could possibly be moisture conditioned by gradually wetting the soil, depending on the time of year slab construction occurs. This should not include flooding or excessively watering the soil, which would likely result in a soft, unstable subgrade condition, and possible delays in the construction while waiting for the soil to dry out. In general, the subgrade should be relatively firm and non-yielding prior to construction.

- Concrete flatwork, excluding pavements that would be subject to wheel loads, should be at least 4 inches thick and underlain by at least 6 inches of non-expansive fill. Non-expansive fill may include aggregate base, crushed rock, or imported soil with a PI of 15 or less. Non-expansive fill should be compacted to at least 90 percent relative compaction. Flatwork that will be subject to heavier or frequent vehicular loading should be designed in accordance with the recommendations in the "Vehicular Pavements" section below.

- We recommend a maximum control joint spacing of about 2 feet in each direction for each inch of concrete thickness and a construction joint spacing of 10 to 12 feet. Construction joints that abut the foundations or garage slabs should include a felt strip, or approved equivalent, that extends the full depth of the exterior slab. This will help to reduce the potential for permanent vertical offset between the slabs due to friction between the concrete edges. We recommend that exterior slabs be isolated from adjacent foundations.

At the owner's option, if desired to reduce the potential for vertical offset or widening of concrete cracks, consideration should be given to using reinforcing steel, such as No. 3 rebar spaced at 18 inches on center each direction.

9.3.2 Pedestrian Pavers

Concrete unit pavers subject to pedestrian and/or occasional light pick up loading should be at least 60 mm thick and supported on at least 6 inches of Class 2 aggregate base overlying subgrade prepared in accordance with the "Earthwork" recommendations of this report. Pavers that will be subject to vehicular loading should be designed in accordance with the recommendations in the "Vehicular Pavements" section below.

9.3.3 Pedestrian Pervious Pavers

We understand pedestrian pervious interlocking concrete pavers (PICP) may be used at the site.

The pervious interlocking concrete paver recommendations presented in this section are based on standard concrete interlocking paver design methods and guidelines presented by the Interlocking Concrete Pavement Institute (www.icpi.org). The PICP section should consist of three drainage layers: an upper bedding layer, a middle base layer, and a lower sub-base layer. Due to the low infiltration rate of the native clay subgrade soils, pervious paver systems should be designed for partial exfiltration, which assumes only a portion of the collected storm water will infiltrate into underlying subgrade soils while the remainder is drained by perforated subdrains.

The pedestrian PICP drainage layers should consist of the materials presented in the following table.

Table 6: Pervious Interlocking Concrete Paver Materials

Section Layer	Minimum Layer Thickness (inches)	Material Type
Bedding	2	ASTM No. 8
Base	6	ASTM No. 57

(1) Base should be underlain by woven geotextile stabilization fabric, such as Mirafi HP270 or approved equivalent

9.3.3.1 Design Assumptions

1. All granular paver materials to consist of crushed aggregate. Rounded or sub-rounded gravel is not acceptable.
2. All granular paver materials should have less than 2 percent passing the No. 200 sieve.

3. Joint filler for pervious bricks with narrow joints between blocks should confirm to manufacturer requirements. Joint filler for impervious bricks with wide joints should consist of ⅛ to ¼ inch angular, crushed aggregate conforming to ASTM No. 9 or No. 89 material. It should be noted that the maximum size of the joint filler sand should be less than the annular space between pavers to allow filler material to flow freely into the joints without clogging at the surface.
4. The exposed subgrade soils in PICP areas should be proof-rolled with a static smooth-drummed roller and be found to be stable prior to placement of geotextile fabric. Pumping or deflecting subgrade may require additional drying or over-excavation and replacement.
5. The base material should be placed over a layer of woven geotextile stabilization fabric, consisting of Mirafi HP270 or approved equivalent placed over exposed subgrade soils and at least 12 inches up the sides of the excavation area. Geotextile fabric should be placed in accordance with manufacturer's requirements and observed by a Cornerstone representative during construction prior to placing the sub-base layer.
6. Due to the low infiltration rate of the native clay subgrade soil, a subdrain should be placed within the subbase layer that consists of a minimum 4-inch diameter PVC SDR35 pipe with perforations placed down. If possible, the bottom of the subdrain should be placed no more than 6 inches above the lowest subgrade elevation and be bedded and shaded with No. 57 drain rock that extends at least 2 to 3 inches below the bottom and 3 to 4 inches above the top of the subdrain pipe. The subdrain should be sloped at least 0.5 percent and discharge to a free draining outlet, such as a nearby storm drain.
7. Once the geotextile fabric and subdrain system has been constructed, each layer of granular base material should be densified with vibratory, smooth-drummed compaction equipment prior to placing subsequent lifts. A minimum of 2 vibratory and 2 static passes should be made on maximum 6-inch lifts, depending on the type of equipment used.
8. The actual drain rock thickness should be determined by the project civil engineer based on anticipated storm water flow.
9. Upon completion of paver and joint sand installation, the paver surface should be compacted with a minimum of three passes with smooth drum vibratory compaction equipment.
10. Design and construction of pervious concrete unit pavers, including placement and consolidation of drain rock materials and joint sand placement, should be performed by qualified pervious concrete paver suppliers and contractors in accordance with Interlocking Concrete Pavement Institute guidelines and the project specifications.

9.3.4 Pedestrian Trails

Standard sections from local public agencies are typically used for pedestrian trails (used for walking, biking, etc.) and frequently consist of 2 inches of asphalt concrete over 4 to 6 inches of aggregate base and are typically 8 to 12 feet wide, with 2-foot aggregate shoulders. However, pedestrian trails can be severely distressed due to expansive soils and poor construction techniques during construction on expansive soils. For this reason, if it is desired to mitigate for expansive soils to reduce the amount of distress to trails due to seasonal expansion/contraction

and differential movement, we recommend a layer of non-expansive fill and the compaction of expansive subgrade soils in accordance with the Earthwork recommendations of this report.

At a minimum, pedestrian trails should have asphalt and aggregate base sections consistent with the existing trail sections. In addition, if the new trail areas are to be designed to reduce the potential for distress due to expansive soils as discussed above, at least 2 inches of non-expansive fill should underly any planned asphalt concrete and baserock assuming a minimum 4 inches of baserock, and extend to the edge of the shoulders, or at least 12 inches beyond the trail edge, whichever is greater. Alternately, chemical treatment of the soil to stabilize subgrade could be performed in-place to mitigate for expansive soils. If the trail is to be used by vehicular traffic, we should be consulted to provide further pavement recommendations based on the anticipated loading.

SECTION 10: VEHICULAR PAVEMENTS

10.1 ASPHALT CONCRETE

The following asphalt concrete pavement recommendations tabulated below are based on the Procedure 608 of the Caltrans Highway Design Manual, estimated traffic indices for various pavement-loading conditions, and on a design R-value of 5. The design R-value was chosen based on engineering judgement considering the variable and expansive soil conditions.

Table 7: Asphalt Concrete Pavement Recommendations

Design Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base* (inches)	Total Pavement Section Thickness (inches)
4.0	2.5	7.5	10.0
4.5	2.5	9.5	12.0
5.0	3.0	10.0	13.0
5.5	3.0	12.0	15.0
6.0	3.5	13.0	16.5
6.5	4.0	13.5	17.5

(1) Caltrans Class 2 aggregate base; minimum R-value of 78; subgrade R-value of 5

10.2 PORTLAND CEMENT CONCRETE

The Portland Cement Concrete (PCC) pavement recommendations outlined below are based on methods presented in American Concrete Pavement Association (ACPA, 2006). We have provided a few pavement alternatives as an anticipated Average Daily Truck Traffic (ADTT) was not provided. The following table presents minimum PCC pavements thicknesses for various traffic loading categories and the anticipated maximum Average Daily Truck Traffic (ADTT).

Table 8: PCC Pavement Recommendations

Allowable ADTT	Minimum PCC Thickness[1] (inches)
3	5.0
20 to 50	6.0

(1) Subgrade design R-Value = 5

The PCC thicknesses above are based on a concrete compressive strength of at least 3,500 psi, supporting the PCC on at least 6 inches of Class 2 aggregate base compacted as recommended in the "Earthwork" section, and laterally restraining the PCC with curbs or concrete shoulders. Adequate expansion and control joints should be included. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness. Due to the expansive surficial soils present, we recommend that the construction and expansion joints be dowelled.

10.3 VEHICULAR PERVIOUS PAVERS

The plans indicate pervious interlocking concrete pavers (PICP) are being used to address storm water quality design requirements for the project. Pervious pavers will be used in parking stall areas only.

The pervious interlocking concrete paver recommendations presented in this section are based on standard concrete interlocking paver design methods and guidelines presented by the Interlocking Concrete Pavement Institute (www.icpi.org). The PICP section should consist of three drainage layers: an upper bedding layer, a middle base layer, and a lower sub-base layer. Due to the low infiltration rate of the native clay subgrade soils, pervious paver systems should be designed for partial exfiltration, which assumes only a portion of the collected storm water will infiltrate into underlying subgrade soils while the remainder is drained by perforated subdrains.

Where vehicular pervious concrete unit pavers are desired in vehicle parking bays, we recommend that the pavers be underlain by granular base material (not including the bedding layer) as summarized in the following table. The minimum paver section thicknesses for these areas are based on a revised Traffic Index of 5.0 for parking bays. The PICP drainage layers should consist of the materials presented in the following table.

Table 9: Pervious Interlocking Concrete Paver Materials

Section Layer	Minimum Layer Thickness (inches)	Material Type
Bedding	2	ASTM No. 8
Base	4	ASTM No. 57
Sub-Base(1)	8	ASTM No. 2

(1) Subbase should be underlain by woven geotextile stabilization fabric, such as Mirafi HP270 or approved equivalent

10.3.1 Design Assumptions

1. All granular paver materials to consist of crushed aggregate. Rounded or sub-rounded gravel is not acceptable.
2. All granular paver materials should have less than 2 percent passing the No. 200 sieve.
3. Joint filler for pervious bricks with narrow joints between blocks should confirm to manufacturer requirements. Joint filler for impervious bricks with wide joints should consist of ⅛ to ¼ inch angular, crushed aggregate conforming to ASTM No. 9 or No. 89 material. It should be noted that the maximum size of the joint filler sand should be less than the annular space between pavers to allow filler material to flow freely into the joints without clogging at the surface.
4. The exposed subgrade soils in PICP areas should be proof-rolled with a static smooth-drummed roller and be found to be stable prior to placement of geotextile fabric. Pumping or deflecting subgrade may require additional drying or over-excavation and replacement.
5. The granular base material should be placed over a layer of woven geotextile stabilization fabric, consisting of Mirafi HP270 or approved equivalent placed over exposed subgrade soils and at least 12 inches up the sides of the excavation area. Geotextile fabric should be placed in accordance with manufacturer's requirements and observed by a Cornerstone representative during construction prior to placing the sub-base layer.
6. Due to the low infiltration rate of the native clay subgrade soil, a subdrain should be placed within the subbase layer that consists of a minimum 4-inch diameter PVC SDR35 pipe with perforations placed down. If possible, the bottom of the subdrain should be placed no more than 6 inches above the lowest subgrade elevation and be bedded and shaded with No. 57 drain rock that extends at least 2 to 3 inches below the bottom and 3 to 4 inches above the top of the subdrain pipe. The subdrain should be sloped at least 0.5 percent and discharge to a free draining outlet, such as a nearby storm drain.
7. Once the geotextile fabric and subdrain system has been constructed, each layer of granular base material should be densified with vibratory, smooth-drummed compaction

equipment prior to placing subsequent lifts. A minimum of 2 vibratory and 2 static passes should be made on maximum 6-inch lifts, depending on the type of equipment used.

8. The actual drain rock thickness should be determined by the project civil engineer based on anticipated storm water flow.
9. A subgrade R-value of 5 was used for paver design.
10. Pervious interlocking concrete pavers should be laterally restrained by Portland Cement Concrete curbs that extend at least 4 inches below adjacent subgrade soils.
11. Upon completion of paver and joint sand installation, the paver surface should be compacted with a minimum of three passes with smooth drum vibratory compaction equipment.
12. Design and construction of pervious concrete unit pavers, including placement and consolidation of drain rock materials and joint sand placement, should be performed by qualified pervious concrete paver suppliers and contractors in accordance with Interlocking Concrete Pavement Institute guidelines and the project specifications.

10.4 PAVEMENT CUTOFF

Surface water penetration into the pavement section can significantly reduce the pavement life, due to the native expansive clays. While quantifying the life reduction is difficult, a normal 20-year pavement design could be reduced to less than 10 years; therefore, increased long-term maintenance may be required.

It would be beneficial to include a pavement cut-off, such as deepened curbs, redwood-headers, or "Deep-Root Moisture Barriers" that are keyed at least 4 inches into the pavement subgrade. This will help limit the additional long-term maintenance.

SECTION 11: RETAINING WALLS

11.1 STATIC LATERAL EARTH PRESSURES

The structural design of any site retaining wall should include resistance to lateral earth pressures that develop from the soil behind the wall, any undrained water pressure, and surcharge loads acting behind the wall. Provided a drainage system is constructed behind the wall to prevent the build-up of hydrostatic pressures as discussed in the section below, we recommend that the walls with level backfill be designed for the following pressures:

Table 10: Recommended Lateral Earth Pressures

Wall Condition	Lateral Earth Pressure[1]	Additional Surcharge Loads
Unrestrained – Cantilever Wall	45 pcf	⅓ of vertical loads at top of wall
Restrained – Braced Wall	45 pcf + $8H^2$ psf	½ of vertical loads at top of wall

(1) Lateral earth pressures are based on an equivalent fluid pressure for level backfill conditions
(2) H is the distance in feet between the bottom of footing and top of retained soil

11.2 SEISMIC LATERAL EARTH PRESSURES

The 2019 CBC states that lateral pressures from earthquakes should be considered in the design of basements and retaining walls. At this time, we are not aware of any retaining walls for the project. However, minor landscaping walls (i.e. walls 6 feet or less in height) may be proposed. In our opinion, design of these walls for seismic lateral earth pressures in addition to static earth pressures is not warranted.

11.3 WALL DRAINAGE

Adequate drainage should be provided to at-grade site walls by a subdrain system behind all walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 12 inches out from the wall and to within 2 feet of outside finished grade. Alternatively, ½-inch to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as Mirafi 140N or approved equivalent. The upper 2 feet of wall backfill should consist of compacted on-site soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or equivalent drainage matting can be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. Horizontal strip drains connecting to the vertical drainage matting may be used in lieu of the perforated pipe and crushed rock section. The vertical drainage panel should be connected to the perforated pipe or horizontal drainage strip at the base of the wall, or to some other closed or through-wall system such as the TotalDrain system from AmerDrain. Sections of horizontal drainage strips should be connected with either the manufacturer's connector pieces or by pulling back the filter fabric, overlapping the panel dimples, and replacing the filter fabric over the connection. At corners, a corner guard, corner connection insert, or a section of crushed rock covered with filter fabric must be used to maintain the drainage path.

Drainage panels should terminate 18 to 24 inches from final exterior grade. The Miradrain panel filter fabric should be extended over the top of and behind the panel to protect it from intrusion of the adjacent soil.

11.4 BACKFILL

Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls should be compacted to at least 95 percent relative compaction using light compaction equipment. Where no surface improvements are planned, backfill should be compacted to at least 90 percent. If heavy compaction equipment is used, the walls should be temporarily braced.

11.5 FOUNDATIONS

Retaining walls may be supported on a continuous and or spread footing designed in accordance with the recommendations presented in the "Foundations" section of this report.

SECTION 12: LIMITATIONS

This report, an instrument of professional service, has been prepared for the sole use of CMG Landscape Architecture specifically to support the design of the Reimagine Flood Park project in Menlo Park, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in Northern California at the time this report was prepared. No warranty, expressed or implied, is made or should be inferred.

Recommendations in this report are based upon the soil and groundwater conditions encountered during our subsurface exploration. If variations or unsuitable conditions are encountered during construction, Cornerstone must be contacted to provide supplemental recommendations, as needed.

CMG Landscape Architecture may have provided Cornerstone with plans, reports and other documents prepared by others. CMG Landscape Architecture understands that Cornerstone reviewed and relied on the information presented in these documents and cannot be responsible for their accuracy.

Cornerstone prepared this report with the understanding that it is the responsibility of the owner or his representatives to see that the recommendations contained in this report are presented to other members of the design team and incorporated into the project plans and specifications, and that appropriate actions are taken to implement the geotechnical recommendations during construction.

Conclusions and recommendations presented in this report are valid as of the present time for the development as currently planned. Changes in the condition of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Therefore, the conclusions and recommendations presented in this report may be invalidated, wholly or in part, by changes beyond Cornerstone's control. This report should be reviewed by Cornerstone after a period of three (3) years has elapsed from the date of this report. In addition, if the current project design is changed, then Cornerstone must review the proposed changes and provide supplemental recommendations, as needed.

An electronic transmission of this report may also have been issued. While Cornerstone has taken precautions to produce a complete and secure electronic transmission, please check the electronic transmission against the hard copy version for conformity.

Recommendations provided in this report are based on the assumption that Cornerstone will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design, and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, Cornerstone cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Cornerstone's report by others. Furthermore, Cornerstone will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services.

SECTION 13: REFERENCES

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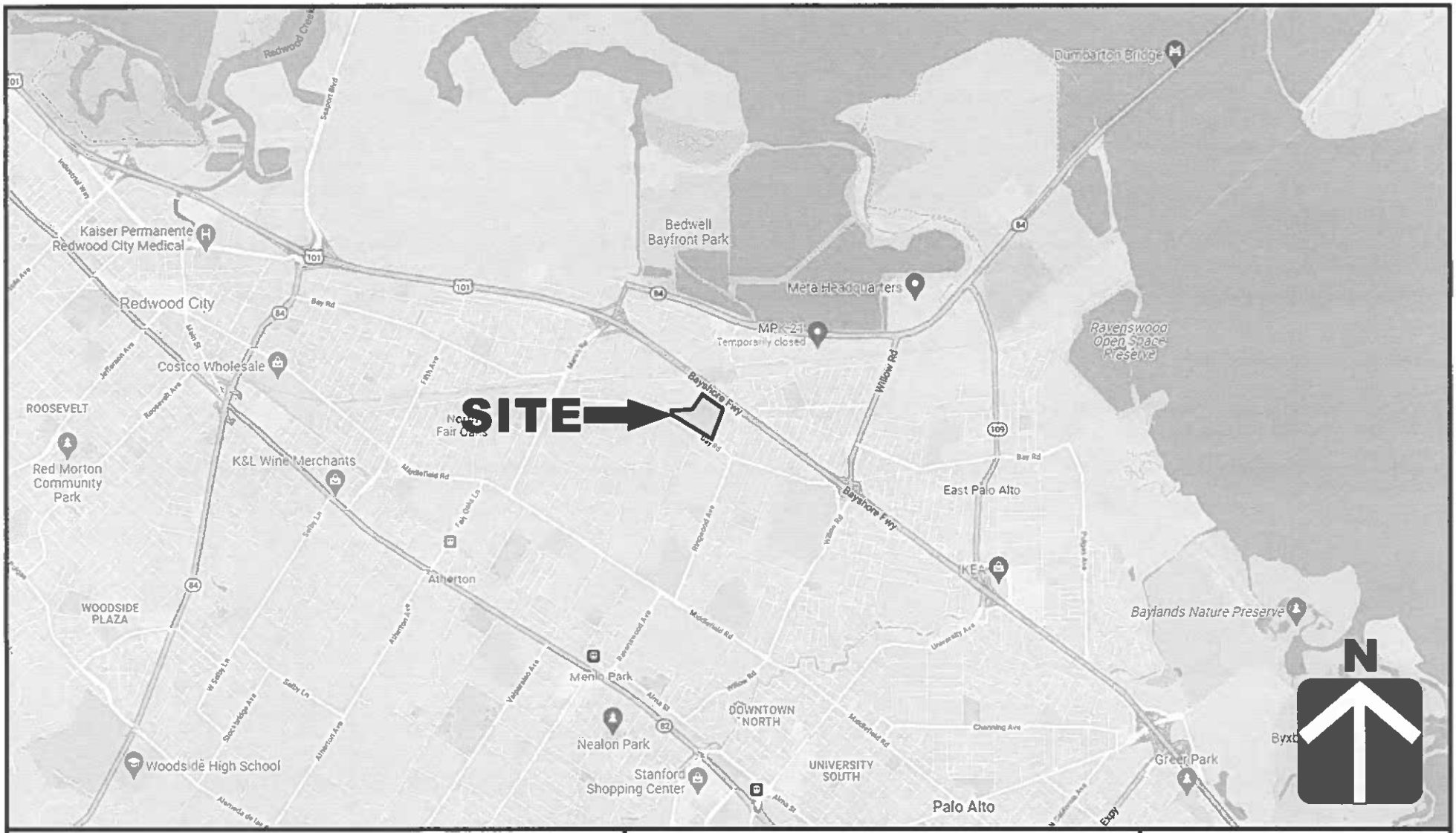
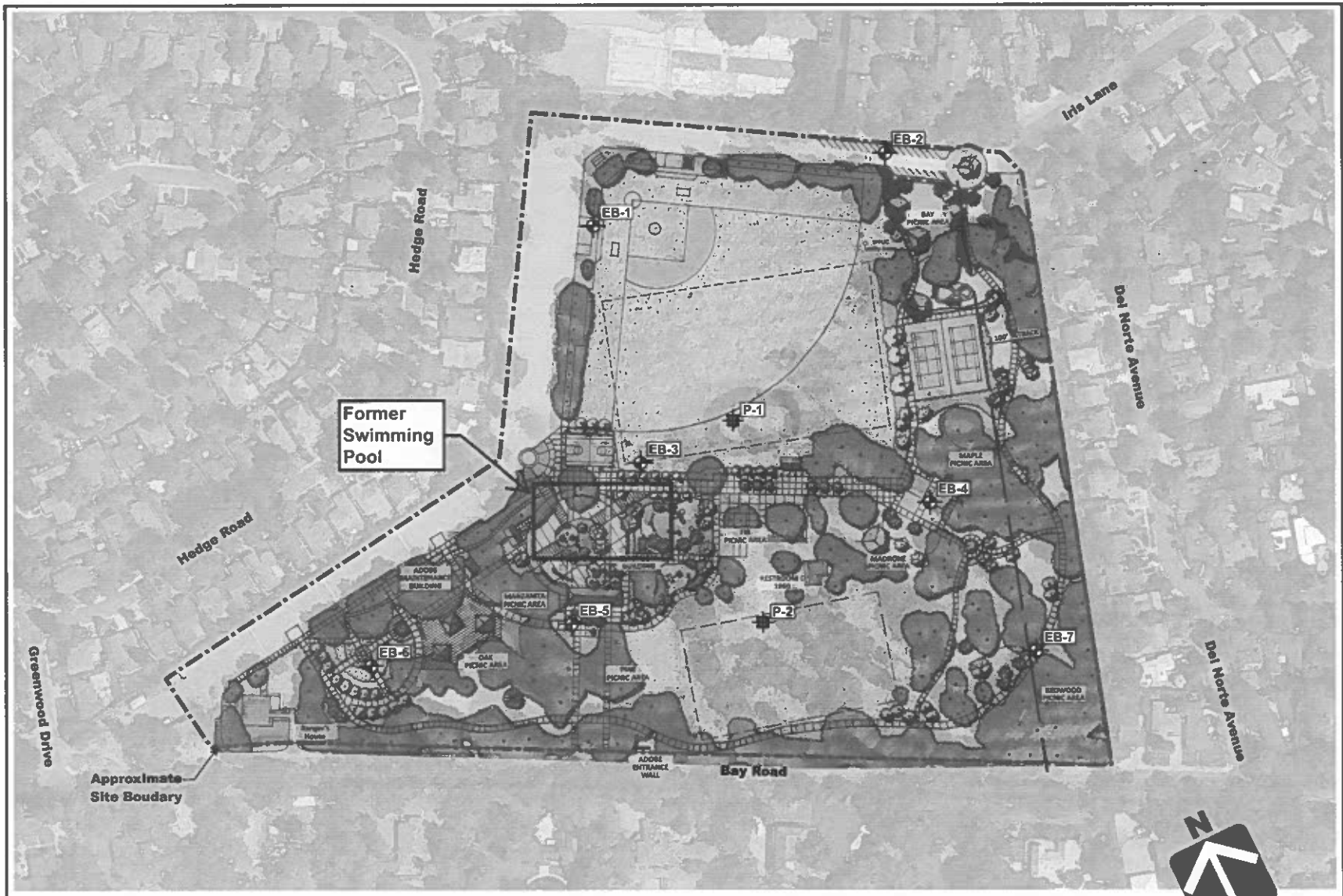


CORNERSTONE EARTH GROUP

Vicinity Map

Flood Park Improvements
215 Bay Road
Menlo Park, CA

Project Number	1326-1-1
Figure Number	Figure 1
Date	December 2021
Drawn By	RRN


Iris Lane
Hedge Road
Del Norte Avenue
EB-2
EB-1
P-1
Former Swimming Pool
EB-3
EB-4
Hedge Road
EB-5
P-2
EB-7
EB-6
Greenwood Drive
Del Norte Avenue
Approximate Site Boudary
Bay Road
N
Legend
Approximate location of exploratory boring (EB)
Approximate location of percolation test (P)
0
150
300
APPROXIMATE SCALE (FEET)
Base by Google Earth, dated 09/26/2020
Overlay by Gates + Associates, Landscape Plan, dated 2020
Site Plan
Flood Park Improvements
215 Bay Road
Menlo Park, CA
Project Number
1326-1-1
Figure Number
Figure 2
Date
December 2021
Drawn By
RRN
CORNERSTONE EARTH GROUP

CORNERSTONE EARTH GROUP

Regional Fault Map

Flood Park Improvements
215 Bay Road
Menlo Park, CA

Project Number: 1326-1-1

Figure Number: Figure 3

Date: December 2021

Drawn By: RRN

Base by California Geological Survey - 2010 Fault Activity Map of California (Jennings and Bryant, 2010)

APPENDIX A: FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using track-mounted, hollow-stem auger drilling equipment. Seven 6½-inch-diameter exploratory borings were drilled on November 23 and 24, 2021 to depths of about 10 to 30 feet. The approximate locations of exploratory borings are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). Boring logs, as well as a key to the classification of the soil and bedrock, are included as part of this appendix.

Boring locations were approximated using existing site boundaries and other site features as references. Boring elevations were not determined. The locations of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs.

Field tests included an evaluation of the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

Attached boring logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-10)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

OTHER MATERIAL SYMBOLS

- Poorly-Graded Sand with Clay
- Clayey Sand
- Sandy Silt
- Artificial/Undocumented Fill
- Poorly-Graded Gravelly Sand
- Topsoil
- Well-Graded Gravel with Clay
- Well-Graded Gravel with Silt
- Sand
- Silt
- Well Graded Gravelly Sand
- Gravelly Silt
- Asphalt
- Boulders and Cobble

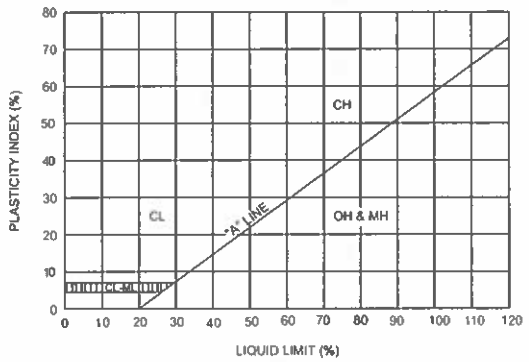
SAMPLER TYPES

- SPT
- Modified California (2.5" I.D.)
- Rock Core
- Shelby Tube
- No Recovery
- Grab Sample

ADDITIONAL TESTS

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	PI	-	PLASTICITY INDEX
CD	-	CONSOLIDATED DRAINED TRIAXIAL	SW		SWELL TEST
CN	-	CONSOLIDATION	TC	-	CYCLIC TRIAXIAL
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TV	-	TORVANE SHEAR
DS	-	DIRECT SHEAR	UC	-	UNCONFINED COMPRESSION
PP	-	POCKET PENETROMETER (TSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)			
RV	-	R-VALUE	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE			
▼	-	WATER LEVEL			

PLASTICITY CHART



PENETRATION RESISTANCE (RECORDED AS BLOWS / FOOT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	STRENGTH** (KSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 2	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 4	0.25 - 0.5
MEDIUM DENSE	10 - 30	MEDIUM STIFF	4 - 8	0.5-1.0
DENSE	30 - 50	STIFF	8 - 15	1.0 - 2.0
VERY DENSE	OVER 50	VERY STIFF	15 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

** UNDRAINED SHEAR STRENGTH IN KIPS/SQ. FT. AS DETERMINED BY LABORATORY TESTING OR APPROXIMATED BY THE STANDARD PENETRATION TEST, POCKET PENETROMETER, TORVANE, OR VISUAL OBSERVATION.

CORNERSTONE EARTH GROUP

LEGEND TO SOIL DESCRIPTIONS

Figure Number A-1

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/23/21 DATE COMPLETED 11/23/21
GROUND ELEVATION _____ BORING DEPTH 10 ft
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.476376° LONGITUDE -122.171188°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
AT TIME OF DRILLING Not Encountered
NOTES
AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH ksf
	0		4 inches asphalt concrete							HAND PENETROMETER ○ TORVANE △ UNCONFINED COMPRESSION ● UNCONSOLIDATED-UNDRAINED TRIAXIAL ▲ 1.0 2.0 3.0 4.0
			Sandy Lean Clay (CL) [Fill] very stiff, moist, dark brown with brown and gray mottles, fine sand, some fine subrounded to subangular gravel, low to moderate plasticity	5	MC-1B	90	19			
				11	MC-2B	112	16			
	5		**Lean Clay (CL)** very stiff, moist, gray with brown mottles, fine sand, moderate plasticity	7	MC-3B	104	11			
				18	MC-4B	105	19			
	10		Bottom of Boring at 10.0 feet.							
	15									
	20									
	25									

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/23/21 DATE COMPLETED 11/23/21
GROUND ELEVATION _____ BORING DEPTH 20 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.475986° LONGITUDE -122.169603°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
▽ AT TIME OF DRILLING Not Encountered
NOTES
▼ AT END OF DRILLING 18 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL)
	0	6 inches sand over filter fabric							
		Sandy Lean Clay (CL) [Fill] hard, moist, dark brown, fine to coarse sand, some fine gravel, moderate plasticity	26	MC-1B	109	19			>4.5
		Silty Sand (SM) [Fill] medium dense, moist, brown, fine sand	20	MC-2B	98	21	29		>4.5
	5	**Lean Clay (CL)** hard, moist, dark brown, moderate plasticity Liquid Limit = 48, Plastic Limit = 19	14	MC-3B	86	13			>4.5
		Sandy Lean Clay (CL) hard, moist, brown, fine sand, low plasticity							
		Lean Clay with Sand (CL) very stiff, moist, light gray with brown mottles, fine sand, moderate plasticity	14	MC-4B	98	21			
	10								
			17	MC-5B	105	21			
	15								
		becomes stiff	9	MC-6B	102	23			
	20	Bottom of Boring at 20.0 feet.							
	25								

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/23/21 DATE COMPLETED 11/23/21
GROUND ELEVATION _____ BORING DEPTH 30 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.475381° LONGITUDE -122.171635°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
AT TIME OF DRILLING Not Encountered
NOTES _____
AT END OF DRILLING 27 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
	0	3 inches topsoil							
		Sandy Lean Clay (CL) [Fill] very stiff, moist, dark brown, fine to medium sand, moderate plasticity	6	MC-1B	98	17			
		Silty Sand (SM) [Fill] loose, moist, brown, fine sand	10	MC-2B	92	13			
	5	**Lean Clay (CL)** very stiff, moist, dark brown, some fine sand, moderate plasticity							
		Clayey Sand (SC) medium dense, moist, brown, fine sand	20	MC-3B	98	8			
			11	MC-4B	84	12			
		Lean Clay with Sand (CL) hard, moist, brown and gray mottled, fine sand, moderate plasticity	16	MC-5B	99	19			>4.5
	10								
	15		25	MC-6B	109	18			>4.5
	20	becomes very stiff	14	MC-7B	104	21			
		Lean Clay (CL) stiff, moist, brown with gray mottles, fine sand, moderate plasticity	13	MC-8B	101	22			
	25								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

Continued Next Page

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park

PROJECT NUMBER 1326-1-1

PROJECT LOCATION 215 Bay Road, Menlo Park, CA

ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
			Lean Clay (CL) stiff, moist, brown with gray mottles, fine sand, moderate plasticity	10	MC-9B	101	22			
	30		Bottom of Boring at 30.0 feet.							
	35									
	40									
	45									
	50									
	55									

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UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-4

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/24/21 DATE COMPLETED 11/24/21
GROUND ELEVATION _____ BORING DEPTH 20 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.474583° LONGITUDE -122.170385°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
▽ AT TIME OF DRILLING Not Encountered
NOTES _____
▼ AT END OF DRILLING 20 ft.

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL)
	0		**Lean Clay with Sand (CL)** hard, moist, dark brown, fine sand, moderate plasticity	17	MC-1B	101	14			○
				17	MC-2B	95	11			>4.5 ○
	5		**Sandy Lean Clay (CL)** hard, moist, brown, fine sand, low plasticity							
			Clayey Sand (SC) loose to medium dense, moist, brown, fine sand	15	MC-3B	96	8			
			Sandy Lean Clay (CL) hard, moist, brown and gray mottled, fine sand, low to moderate plasticity	17	MC-4B	104	17			>4.5 ○
	10									
			Lean Clay with Sand (CL) very stiff, moist, brown and gray mottled, fine sand, moderate plasticity	25	MC-5B	107	21			○
	15									
			becomes stiff	13	MC-6		30			○
	20		Bottom of Boring at 20.0 feet.							
	25									

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 RE MAGINED FLOOD PARK.GPJ

BORING NUMBER EB-5

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/24/21 DATE COMPLETED 11/24/21
GROUND ELEVATION _____ BORING DEPTH 20 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.474938° LONGITUDE -122.172423°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
AT TIME OF DRILLING Not Encountered
NOTES _____
AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
	0	**Lean Clay with Sand (CL) [Fill]** hard, moist, brown, fine sand, trace fine subangular gravel, moderate plasticity	10	MC-1B	99	15			>4.5
		Lean Clay with Sand (CL) hard, moist, dark brown, fine sand, moderate plasticity	16	MC-2B	97	10			>4.5
	5	**Sandy Lean Clay (CL)** hard, moist, brown, fine sand, low plasticity	21	MC-3B	99	6			
		Clayey Sand (SC) medium dense, moist, brown, fine sand, some fine subangular to subrounded gravel	19	SPT-4		6		39	
		Lean Clay with Sand (CL) hard, moist, brown with gray mottleds, fine sand, moderate plasticity	18	MC-5B	92	21			>4.5
	10								
		color changes to gray with light gray mottles	20	MC-6B	104	19			>4.5
	15	**Sandy Lean Clay (CL)** very stiff, moist, gray with brown mottles, fine to medium sand, some fine subrounded gravel, low plasticity	18	MC-7B	116	16			
	20	Bottom of Boring at 20.0 feet.							
	25								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-6

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA
DATE STARTED 11/23/21 DATE COMPLETED 11/23/21
GROUND ELEVATION _____ BORING DEPTH 10 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.475236° LONGITUDE -122.173480°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
▽ AT TIME OF DRILLING Not Encountered
NOTES
▼ AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL; 1.0 2.0 3.0 4.0)
	0		**Lean Clay with Sand (CL)** hard, moist, dark brown to brown, fine sand, moderate plasticity Liquid Limit = 42, Plastic Limit = 17	25	MC-1B	103	14	25		>4.5 ○
				18	MC-2B	92	13			○
	5		**Clayey Sand (SC)** medium dense to loose, moist, light brown, fine sand	21	MC-3B	103	6		35	
				11	MC-4B	92	10			
			Lean Clay with Sand (CL) hard, moist, gray with brown mottles, fine sand, moderate plasticity	20	MC-5B	91	22			>4.5 ○
	10		Bottom of Boring at 10.0 feet.							
	15									
	20									
	25									

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

BORING NUMBER EB-7

CORNERSTONE EARTH GROUP

PROJECT NAME Reimagine Flood Park
PROJECT NUMBER 1326-1-1
PROJECT LOCATION 215 Bay Road, Menlo Park, CA

DATE STARTED 11/24/21 DATE COMPLETED 11/24/21
GROUND ELEVATION _____ BORING DEPTH 10 ft.
DRILLING CONTRACTOR Cuesta Geoservices Inc.
LATITUDE 37.473791° LONGITUDE -122.170307°
DRILLING METHOD MPP LAD Track Rig, 6½ inch Hollow-Stem Auger
GROUND WATER LEVELS:
LOGGED BY JLC
AT TIME OF DRILLING Not Encountered
NOTES _____
AT END OF DRILLING Not Encountered

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ELEVATION (ft)	DEPTH (ft)	SYMBOL	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf (○ HAND PENETROMETER, △ TORVANE, ● UNCONFINED COMPRESSION, ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL) 1.0 2.0 3.0 4.0
	0		6 inches concrete rubble							
			Lean Clay with Sand (CL) hard, moist, dark brown to brown, fine sand, moderate plasticity	15	MC-1B	91	14			>4.5 ○
				23	MC-2B	97	15			
	5		**Clayey Sand (SC)** medium dense, moist, light brown, fine sand, trace organics	20	MC-3B	96	10			>4.5 ○
			Sandy Lean Clay (CL) hard, moist, brown and gray mottled, fine to medium sand, low plasticity	19	MC-4B	102	13			>4.5 ○
	10		Bottom of Boring at 10.0 feet.							
	15									
	20									
	25									

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 12/7/21 09:54 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

APPENDIX B: LABORATORY TEST PROGRAM

The laboratory testing program was performed to evaluate the physical and mechanical properties of the soils retrieved from the site to aid in verifying soil classification.

Moisture Content: The natural water content was determined (ASTM D2216) on 41 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

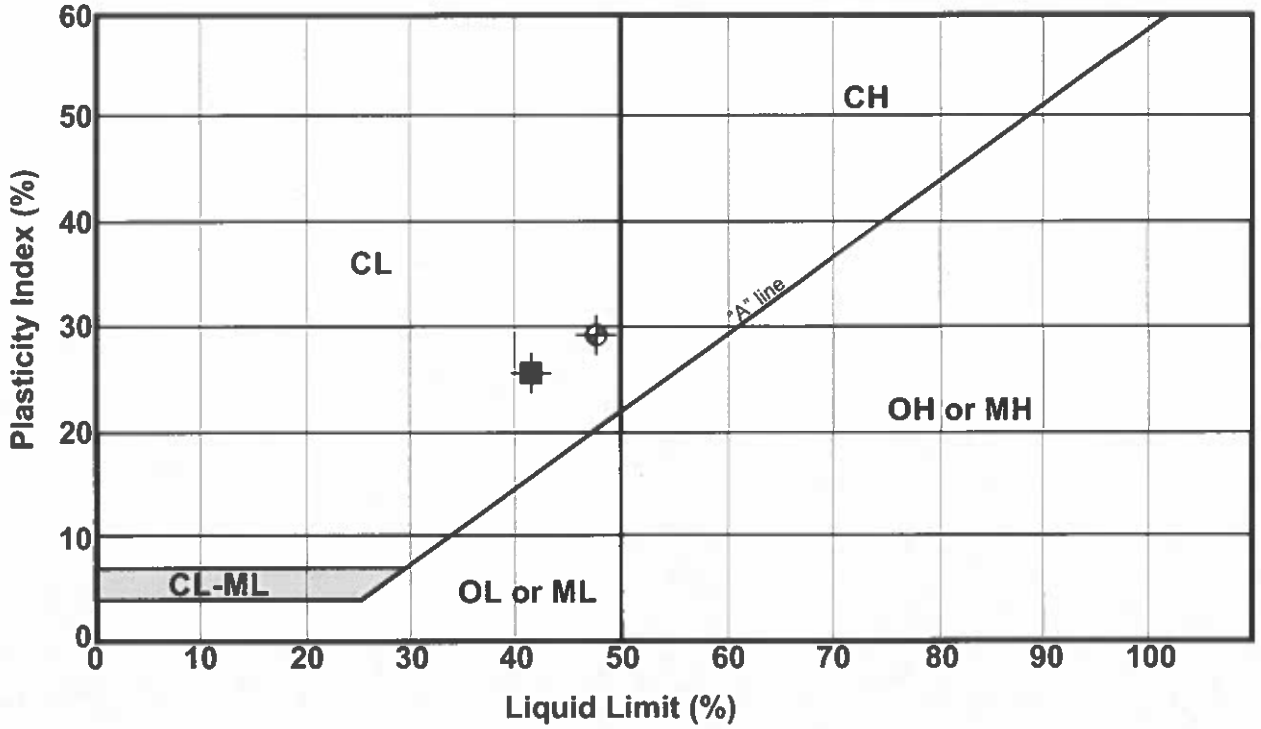
Dry Densities: In place dry density determinations (ASTM D2937) were performed on 40 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Washed Sieve Analyses: The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on two samples of the subsurface soils to aid in the classification of these soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Plasticity Index: Two Plasticity Index determinations (ASTM D4318) were performed on samples of the subsurface soils to measure the range of water contents over which this material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are shown on the boring logs at the appropriate sample depths.

Corrosion: Soluble sulfate determinations (ASTM D4327), resistivity tests (ASTM G57), chloride determinations (ASTM D4327), and pH determinations (ASTM G51) were performed on three representative samples of the subsurface soils. Results of these tests are attached to this appendix.

Plasticity Index (ASTM D4318) Testing Summary



Symbol	Boring No.	Depth (ft)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Passing No. 200 (%)	Group Name (USCS - ASTM D2487)
⊕	EB-2	4.0	21	48	19	29	—	Lean Clay (CL)
■	EB-6	2.0	14	42	17	25	—	Lean Clay with Sand (CL)

Samples prepared in accordance with ASTM D421

CORNERSTONE EARTH GROUP

Plasticity Index Testing Summary

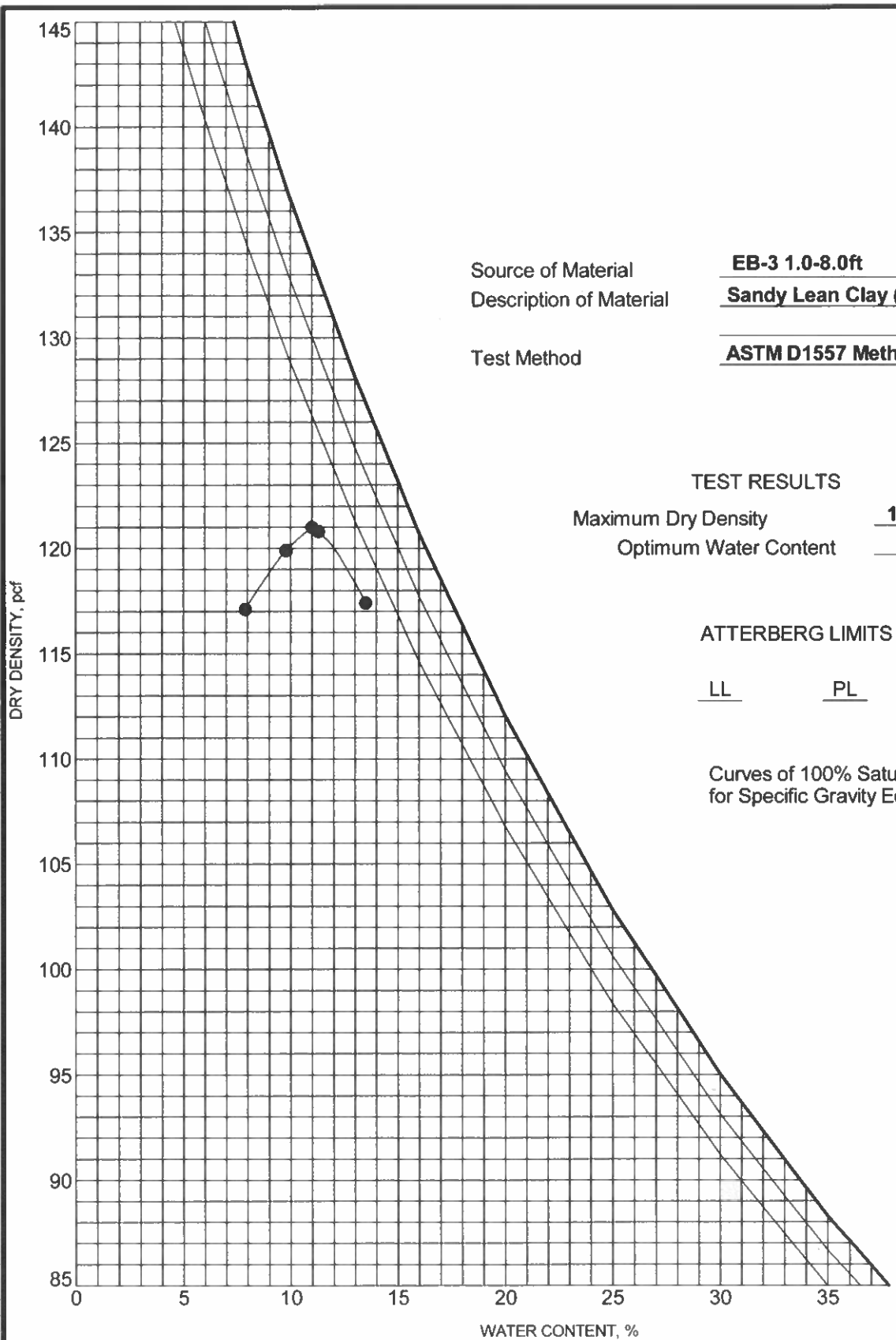
Flood Park Improvements
215 Bay Road
Menlo Park, CA

Project Number: 1326-1-1

Figure Number: Figure B1

Date: December 2021

Drawn By: ELL



Source of Material: **EB-3 1.0-8.0ft**

Description of Material: **Sandy Lean Clay (CL)**

Test Method: **ASTM D1557 Method C**

TEST RESULTS

Maximum Dry Density: **121.0 PCF**

Optimum Water Content: **11.0 %**

ATTERBERG LIMITS

LL	PL	PI

Curves of 100% Saturation for Specific Gravity Equal to:

2.80

2.70

2.60

MOISTURE-DENSITY RELATIONSHIP

CORNERSTONE EARTH GROUP

Project: Reimagine Flood Park

Location: 215 Bay Road, Menlo Park, CA

Number: 1326-1-1

US COMPACTION - CORNERSTONE 0812.GDT - 12/6/21 07:38 - P:\DRAFTING\GINT FILES\1326-1-1 REIMAGINED FLOOD PARK.GPJ

Corrosivity Tests Summary

CORNERSTONE EARTH GROUP

Job Number	1326-1-1	Date Tested	12/8/2021
Job Name	Flood Park Improvements	Tested By	BBA, FL
Location	215 Bay Road, Menlo Park, CA		

Sample I.D.			Soil Visual Description	Moisture Content %	pH	Temp. at Testing C°	Resistivity (Ohm-cm) Corrected to 15.5 C°		Chloride Dry Wt.	Sulfate Dry Wt.
Boring	Sample No.	Depth, ft.					As Received	Saturated	mg/kg	mg/kg
				ASTM D2216	ASTM G51		G57	ASTM G57	ASTM D4327	ASTM D4327
EB-1	3A	5.5	Brown Sandy Lean Clay (CL) [Fill]	10.5	7.1	22.1	-	2,773	3	17
EB-2	2A	3.5	Dark Brown Lean Clay (CL)	21.1	6.4	23.9	-	893	15	343
EB-4	1A	1.5	Dark Brown Lean Clay with Sand (CL)	14.2	6.4	23.9	-	1,163	4	15
RB-7	2A	3.5	Brown Lean Clay with Sand (CL)	14.9	6.3	24.1	-	1,397	3	42

CORNERSTONE
EARTH GROUP

APPENDIX C: SITE CORROSIVITY EVALUATION

JDH CORROSION CONSULTANTS REPORT DATED DECEMBER 9, 2021

December 9, 2021

Cornerstone Earth Group, Inc.
1259 Oakmead Parkway
Sunnyvale, CA 94085

Attention: **Jennifer Campbell, P.E.**
Senior Staff Engineer

Subject: **Site Corrosivity Evaluation**
Flood Park
Menlo Park, CA
Project: 1326-1-1

Dear Jennifer,

In accordance with your request, we have reviewed the laboratory soils data for the above referenced project site. Our evaluation of these results and our corresponding recommendations for corrosion control for the above referenced project foundations and buried site utilities are presented herein for your consideration.

Soil Testing & Analysis

Soil Chemical Analysis

Four (4) soil samples from the project site were chemically analyzed for corrosivity by **Cornerstone Earth Group**. Each sample was analyzed for chloride and sulfate concentration, pH, resistivity at 100% saturation and moisture percentage. The test results are presented in Cornerstone Earth Group Corrosivity Test Summary dated 12/8/2021. The results of the chemical analysis were as follows:

Soil Laboratory Analysis

Chemical Analysis	Range of Results	Corrosion Classification*
Chlorides	3 – 15 mg/kg	Non-corrosive*
Sulfates	15 – 343 mg/kg	Non-corrosive to Mildly Corrosive**
pH	6.3 – 7.1	Mildly Corrosive to Non-corrosive*
Moisture (%)	10.5 – 21.1 %	Not-applicable
Resistivity at 100% Saturation	893 – 2,773 ohm-cm	Corrosive to Moderately Corrosive*

* With respect to bare steel or ductile iron.
** With respect to mortar coated steel

Discussion

Reinforced Concrete Foundations

Due to the low levels of water-soluble sulfates found in these soils, there is no special requirement for sulfate resistant concrete to be used at this site. The type of cement used should be in accordance with California Building Code (CBC) for soils which have less than 0.10 percent by weight of water soluble sulfate (SO_4) in soil and the minimum depth of cover for the reinforcing steel should be as specified in CBC as well.

Underground Metallic Pipelines

The soils at the project site are generally considered to be "corrosive" to ductile/cast iron, steel and dielectric coated steel based on the saturated resistivity measurements. Therefore, special requirements for corrosion control are required for buried metallic utilities at this site depending upon the critical nature of the piping. Pressure piping systems such as domestic and fire water should be provided with appropriate coating systems and cathodic protection, where warranted. In addition, all underground pipelines should be electrically isolated from above grade structures, reinforced concrete structures and copper lines in order to avoid potential galvanic corrosion problems.

LIMITATIONS

The conclusions and recommendations contained in this report are based on the information and assumptions referenced herein. All services provided herein were performed by persons who are experienced and skilled in providing these types of services and in accordance with the standards of workmanship in this profession. No other warrantees or guarantees, expressed or implied, is provided.

We thank you for the opportunity to be of service to **Cornerstone Earth Group** on this project and trust that you find the enclosed information satisfactory. If you have any questions, or if we can be of any additional assistance, please feel free to contact us at (925) 927-6630.

Respectfully submitted,



Brendon Hurley
JDH CORROSION CONSULTANTS, INC.
Field Technician

Mohammed Ali

REGISTERED PROFESSIONAL ENGINEER
MOHAMMED ALI
No. CR 1035
Exp. June 30, 2023
CORROSION
STATE OF CALIFORNIA

Mohammed Ali., P.E.
JDH Corrosion Consultants, Inc.
Senior Corrosion Engineer

CC: File2021422

CORNERSTONE EARTH GROUP

Date:	January 16, 2024
Project No.:	255-2-1
Prepared For:	Mr. Mike Wassermann **CAPITAL PROGRAM MANAGEMENT, INC.** 495 Seaport Court, Suite 103 Redwood City, California 94063
Re:	Geotechnical Results Flood Park Pavement Evaluation 215 Bay Road Menlo Park, California

Dear Mr. Wassermann:

As requested, this letter presents the results of our findings and laboratory results for the above-referenced project. Our services were performed in accordance with our agreement dated December 19, 2023. As you know, we have previously performed a geotechnical investigation for the site and presented the findings and recommendations in our report titled "Geotechnical Investigation: Reimagine Flood Park" dated June 27, 2022.

Project Background

The project includes the modernization of Flood Park which is located at 215 Bay Road, Menlo Park, California. The modernization includes new asphalt paving and information on the existing aggregate base (AB) is needed for the bidding process. This letter discusses the thickness and quality of the existing AB and provides recommendations for reuse in future improvements. A map of the locations of our explorations is attached to this letter.

Site Observations

Exploration Plan

Field exploration consisted of nine pavement cores and hand augers performed on January 4, 2024, with wet-diamond coring equipment and hand auger drilling equipment. The hand augers were advanced to the bottom of the bottom of the existing pavements. In addition to the cores, we also collected a composite bulk sample of the existing AB from the nine core locations and a bulk of the existing AB found adjacent to core location C-9. The pavement cores were patched with quick-setting concrete. The approximate locations of our core and hand auger locations are attached at the end of the letter.

Pavement Core and Section

The existing pavement section was measured at each core location. The asphalt concrete (AC) section thickness was variable between 2 to 4½ inches and the AB thickness varied from 1½ to 5½ inches. The AB encountered in the core locations C-1 to C-9 was mainly a brown AB with

course subangular material. In C-9, the AB encountered appeared to be a mixture of the previously encountered brown AB and a black AB. The black AB material was also found adjacent to core C-9 in the exposed end of the pavement trail. The structural section at each location is summarized below in Table 1.

Table 1: Summary of Slab Cores and Sampling

Location #	AC Thickness (inches)	AB Thickness (inches)
C-1	2	5
C-2	2	3
C-3	2½	5½
C-4	3	4
C-5	3½	2½
C-6	3	1½
C-7	4½	4½
C-8	2½	5
C-9	2½	4½

Laboratory Testing Results and Recommendations

The laboratory program included two Caltrans Class II Aggregate Base Specification Tests on the existing aggregate base bulk samples collected from the composite of cores and from the bulk adjacent to C-9. The test results are included in this letter. Based on the test results, it appears the composite bulk AB sample from cores C-1 to C-9 and bulk sample collected adjacent to core C-9 do not meet Caltrans Class II specifications for reuse as Class II AB.

The AB material can be used as engineered fill at the site but should not be reused as Class II AB in new pavement structural sections.

Closure

We hope this provides the information you need at this time. Recommendations presented in this letter have been prepared for the sole use of Capital Program Management, Inc. specifically for the property at 215 Bay Road in Menlo Park, California. Our professional services were performed and our findings were prepared in accordance with generally accepted geotechnical engineering principles and practices at this time and location. No warranties are either expressed or implied.

If you have any questions or need any additional information from us, please call and we will be glad to discuss them with you.

Sincerely,

Cornerstone Earth Group, Inc.



Diana Lin, P.E.
Project Engineer

Erin L. Steiner, P.E., G.E.
Seinor Principal Engineer

DL:ELS

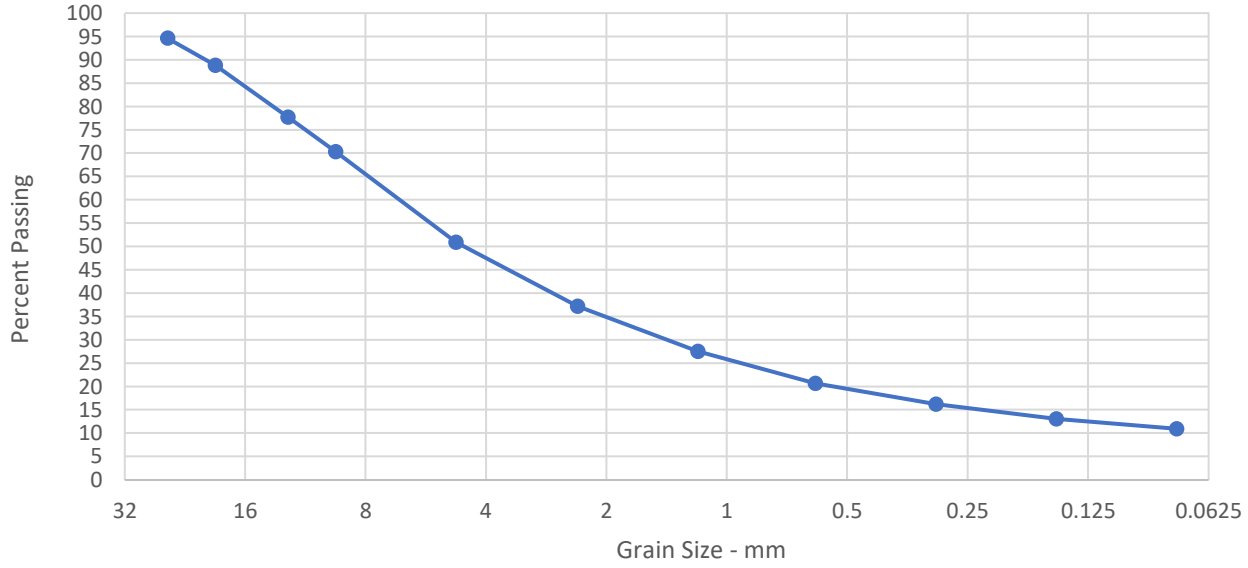
Copies: Addressee (1 by email)
Attachments: Field Exploration Map
Caltrans Class II Specification Test Results


Flood Park Site Map
215 Bay road, Menlo Park
Legend
Core Locations (9 total)
C-1
C-2
C-3
C-4
C-5
C-6
C-7
C-8
C-9
215 Bay Rd
Bayshore Fwy
Hedge Rd
Oakhurst Pl
Greenwood Dr
Bay Rd
Greenoaks Dr
Iris Ln
Del Norte Ave
Google Earth
800 ft
N

Caltrans Class II Aggregate Base Test Report

CT 202, CT 217, CT 229, CT 301

Project Name:	Flood Park Pavement Eval. (1462-1-2)	Sample Date:	1/4/2024
Project Number:	24-1688	Test Date:	1/11/2024
Sample Location:	Composite of C-1 to C-9	Report Date:	1/12/2024
Client Project :	--	Sampled By:	CEG
Project Location :	--	Lab Number:	M-2249
Material:	Native AB Material		



Sieve Size (in.)	Opening (mm)	% Passing	Caltrans Spec.	Pass/ Fail
1	25	95	100	**Fail**
3/4	19	89	87 - 100	**Pass**
1/2	12.5	78	--	**--**
3/8	9.5	70	--	**--**
#4	4.75	51	30 - 65	**Pass**
#8	2.36	37	--	**--**
#16	1.18	27	--	**--**
#30	0.6	21	5 - 35	**Pass**
#50	0.3	16	--	**--**
#100	0.15	13	--	**--**
#200	0.075	11	0 - 12	**Pass**

***Material tested meets the minimum requirements of Class II Aggregate Base per 2018 Caltrans Standard Specifications, Section 26-1.02B.**

Sand Equivalent	Caltrans Spec.	Pass/Fail
21	22 min.	**FAIL**

Durability Index	Caltrans Spec.	Pass/Fail
20	35 min.	**FAIL**

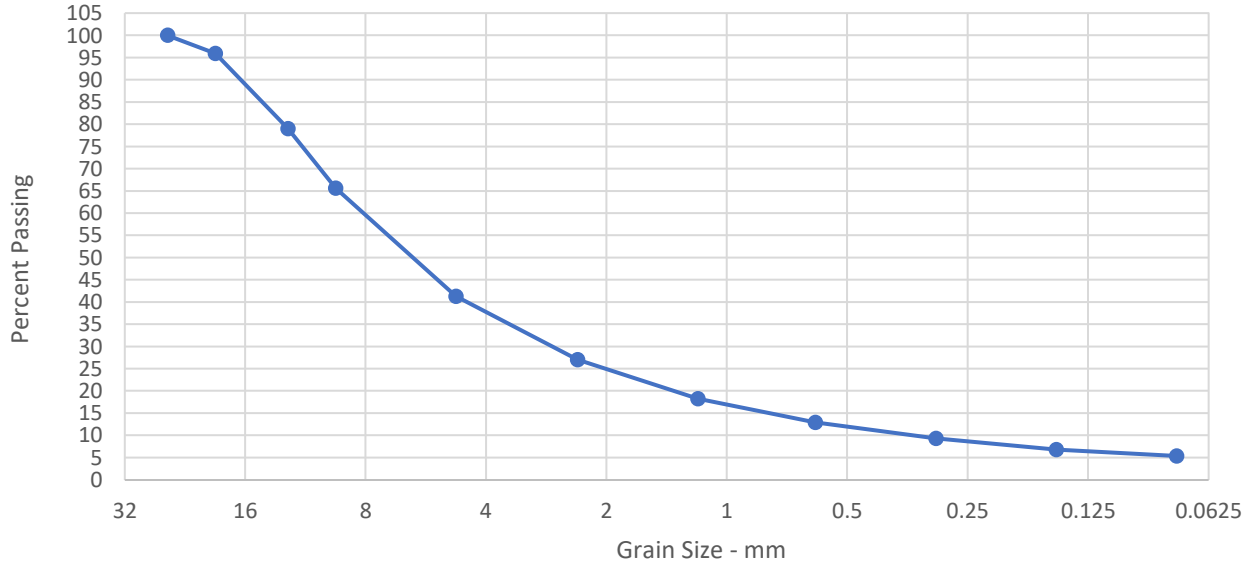
R-Value	Caltrans Spec.	Pass/Fail
33	78	**FAIL**

Suzanne Morgan
Laboratory Manager

Caltrans Class II Aggregate Base Test Report

CT 202, CT 217, CT 229, CT 301

Project Name:	Flood Park Pavement Eval. (1462-1-2)	Sample Date:	1/4/2024
Project Number:	24-1688	Test Date:	1/11/2024
Sample Location:	End of sidewalk of C-9 and also found under C-9	Report Date:	1/12/2024
Client Project :	--	Sampled By:	CEG
Project Location :	--	Lab Number:	M-2250
Material:	Recycled AB Material		



Sieve Size (in.)	Opening (mm)	% Passing	Caltrans Spec.	Pass/ Fail
1	25	100	100	**Pass**
3/4	19	96	87 - 100	**Pass**
1/2	12.5	79	--	**--**
3/8	9.5	66	--	**--**
#4	4.75	41	30 - 65	**Pass**
#8	2.36	27	--	**--**
#16	1.18	18	--	**--**
#30	0.6	13	5 - 35	**Pass**
#50	0.3	9	--	**--**
#100	0.15	7	--	**--**
#200	0.075	5	0 - 12	**Pass**

***Material tested meets the minimum requirements of Class II Aggregate Base per 2018 Caltrans Standard Specifications, Section 26-1.02B.**

Sand Equivalent	Caltrans Spec.	Pass/Fail
49	22 min.	**PASS**

Durability Index	Caltrans Spec.	Pass/Fail
35	35 min.	**PASS**

R-Value	Caltrans Spec.	Pass/Fail
72	78	**FAIL**

Suzanne Morgan
Laboratory Manager

Exhibit 3

SCOPE OF WORK

Please refer to the attached document.

SCOPE OF WORK

PROJECT UNDERSTANDING

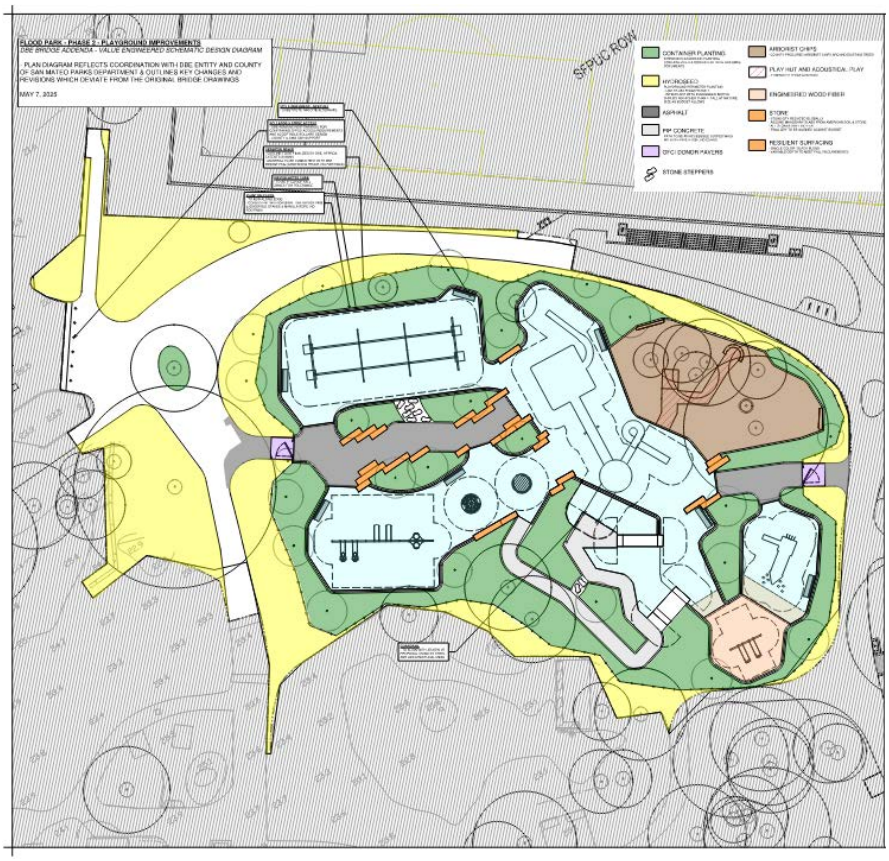
The County of San Mateo (Owner) seeks a prequalified Design-Build Entity (DBE) to design and construct a replacement playground structure and improvement of surrounding areas at Flood County Park, located at 215 Bay Road, Menlo Park, CA 94025 (Project).

Jensen Landscape, LLC (Contractor) and Studio 2nd Street, Inc. (Landscape Architect), operating as a Design-Build Entity (DBE) will provide Landscape Architectural Design and Construction services to the County for the Design-Build Delivery of the Realize Flood Park Phase 2 - Playground Replacement Project. The DBE has based this proposal on our email correspondence, conversations, site review meeting on March 12, 2025 and the County of San Mateo RFQ, RFP and related documents including the Design Criteria and Conceptual Design bridging documents prepared by CMG.

This revised proposal reflects our conversations with County of San Mateo, CMG and Jensen Landscape regarding the need for cost and schedule value engineering to meet the available budget and timeframe. The phases originally dictated in the RFP are streamlined/reduced and the scope of the civil engineer reduced based on the Client direction that permits will not be required.

I. SCOPE OF WORK

The scope of our work will include Realize Flood Park Phase 2 - Playground Replacement Project as indicated in the RFP, discussed at the Site review meeting with the County of San Mateo and as indicated below:



DESIGN SCOPE OF SERVICES

In general, the Design Scope of Services will include the completion of the design for the project based on the RFP Criteria Documents (Appendix A and B) and supporting documents: Site Survey and Existing Utilities (Appendix C), Geotechnical Report (Appendix D). The scope of services will include meetings with the County for input and approval throughout the design phase culminating in Construction Documents for implementation by the Client. The following specific tasks will be completed within the scope of services:

LANDSCAPE ARCHITECTURE SCOPE OF SERVICES

TASK 1: 40% CONSTRUCTION DOCUMENTATION

As a part of 40% Construction Documents, the Consultant, in collaboration with Jensen Landscape, will conduct site investigations and become familiar with the existing conditions and supporting documents provided by the County. The Consultant will prepare Design Documents based on site observations, Owner provided criteria documents, and supporting documents (bridging documents). The 40% Construction Documents shall include specific studies of demolition requirements, grading and drainage, utility requirements, hardscape feature layout and materials integrated with the advancement of the planting design. Design documents will be prepared in collaboration with the Client for review and approval of the Owner. Consultant will attend coordination and review meetings with the Client and Owner during the design phase.

Key Tasks:

1. Site Investigation/Data Review – In collaboration with the Client, the Consultant will review the site conditions, available reports, plans and other data as a basis for the Schematic Design. The consultant will coordinate with the Client the collection of addition information required of the design including but not limited to utility potholing, horticultural soils testing and detailed digital survey of the existing conditions locating existing features including structures, paving, curbs, and trees and accurate grade information. Cost for additional reporting and surveying will be the responsibility of the Client and is not a part of this proposal.
2. 100% Demolition and Salvage Plan – Based on the digital survey and investigation above, the Consultant will prepare a demolition and salvage plan in coordination with and for the approval of the Client and Owner. The Demolition and Salvage Plan will be completed during the 40% Construction Documents phase to facilitate an expedited start to the construction.
3. Grading Study – The Consultant will prepare a site grading and drainage study based on the bridging documents and the site investigation information above. This study will be used to quantify earthwork quantities and grading compliance with known utilities and easement restrictions.
4. Utility Coordination Study – In coordination with the project Civil Engineer, the Consultant will prepare a schematic utility coordination plan indicating the location and routing of proposed utility points of connection and routing for potable water, sewer, storm drain, gas and electric required of the site improvements.
5. 100% Tree Removal and Landscape Protection Plan – The consultant will prepare a tree removal and protection plan to identify removals, and areas of landscape protection. The Tree Removal and Landscape Protection Plan will be completed during the 40% Construction Documents phase to facilitate an expedited start to the construction.
6. Hardscape Layout Plan – The Consultant will prepare a hardscape and materials layout plan based on the bridging documents, the site investigation information above and the value engineering direction from the Client and Owner to meet the Design Build Budget. This plan will refine the layout and materials of the project hardscape elements in conformance with the site conditions, access and safety zone requirements.
7. Landscape Plan – The Consultant will prepare a landscape layout plan based on the bridging documents, indicating location and species and installation sizes of all proposed trees and the location of and character of the proposed ground plane planting.
8. Landscape Plant Palette – Consultant will prepare a palette of landscape species with related imagery to set the planting design direction and for the Client to confirm the suitability and availability of the plant material.
9. Cost Model Support – The Consultant will coordinate and collaborate with the Client to provide clarifications to the

design intent and materials in support of the client's project cost modeling utilized to confirm the project scope and budget.

10. Preconstruction Support – The Consultant will provide preconstruction support to the Client, providing input on schedule, stone materials, furnishings, play equipment, soils and plant materials including quantities, sizes, specifications and strategies to facilitate early procurement, critical path scheduling and resource conservation.
11. Client Submittal – The consultant will submit the design deliverables to the client and owner for review and comment. The consultant will incorporate any revisions into the next phase drawings.

Deliverables:

The Landscape Architect will provide the following design deliverables:

1. 100% Demolition and Salvage Plan
2. Grading Study
3. Utility Coordination Study
4. 100% Tree Removal and Landscape Protection Plan
5. Hardscape Layout Plan
6. Landscape Layout Plan
7. Landscape Plant Palette
8. Cost Model Support
9. Preconstruction Support
10. Client Submittal

TASK 2: 90% CONSTRUCTION DOCUMENTATION

While the Client and Owner are reviewing the 40% Construction Document Design, the Consultant will prepare 90% Construction Documents, incorporating any design or budget direction from the Client and Owner in coordination with the Structural Engineer and Civil Engineer. The Consultant will refine the materials, details, horizontal and vertical layout of the design and further develop the irrigation and planting design. The Consultant will continue to coordinate the landscape design with the requirements of the municipality and the directives of the Client and Owner.

Key Tasks:

1. 90% Hardscape Layout and Materials Plans – The Consultant will prepare layout and materials plan that indicates layout, materials, and finishes of the built elements of the landscape, including walls, fences, gates, paving materials, play structures, stone elements and site furnishings.
2. 90% Precise Grading and Drainage Plans – In coordination with the Civil Engineer's Stormwater Control Plan the Consultant will prepare a landscape precise grading and drainage plan.
3. 90% Construction Details – The Consultant will prepare construction details for all hardscape/landscape construction elements including sections and elevations of critical material relationships of the design.
4. Structural Engineering Coordination – The consultant will coordinate the structural design of the landscape construction details.
5. 90% Irrigation Plans – The Consultant will prepare an irrigation plans indicating point of connections (POC) / tap locations, mainline routing, sleeving, landscape zones, and control locations, sleeving and distribution system. Water use calculations will be provided to confirm requirements and compliance with water efficiency ordinances.
6. 90% Irrigation Details and Notes – The Consultant will prepare landscape irrigation typical installation details and related notes/specifications, legends and calculations for proposed improvements.
7. 90% Planting Plans – The consultant will prepare planting plans that indicate plant species, sizes, quantities and locations.
8. 90% Planting Details and Notes – The Consultant will prepare typical planting installation details and related notes.
9. Pre Construction Support – The Consultant will provide preconstruction support to the Client, providing input on schedule, stone materials, furnishings, play equipment, soils and plant materials including quantities, sizes, specifications and strategies to facilitate early procurement, critical path scheduling and resource conservation.

Deliverables:

The Landscape Architect will provide the following design deliverables:

1. 90% Hardscape Layout and Materials Plans
2. 90% Precise Grading and Drainage Plans
3. 90% Construction Details
4. Structural Engineering Coordination
5. 90% Irrigation Plans
6. 90% Irrigation Details and Notes
7. 90% Planting Plans
8. 90% Planting Details and Notes (All notes and specifications will be a part of the plans, not CSI format book specifications.)
9. Pre Construction Support

TASK 3: 100% CONSTRUCTION DOCUMENTATION

While the Client and Owner are reviewing the 90% Construction Document Design, the Consultant will prepare 100% Construction Documents for construction issue, incorporating any design or budget direction from the Client and Owner in coordination with the Structural Engineer and Civil Engineer.

1. 100% Hardscape Layout and Materials Plans – The Consultant will finalize for construction issue the layout and materials plan that indicates layout, materials, and finishes of the built elements of the landscape, including walls, fences, gates, paving materials, play structures, stone elements and site furnishings.
2. 100% Precise Grading and Drainage Plans – In coordination with the Civil Engineer's Stormwater Control Plan the Consultant will finalize for construction issue the landscape precise grading and drainage plan.
3. 100% Construction Details – The Consultant will finalize for construction issue the construction details for all hardscape/ landscape construction elements including sections and elevations of critical material relationships of the design.
4. 100% Irrigation Plans – The Consultant will finalize for construction issue the irrigation plans indicating point of connections (POC) / tap locations, mainline routing, sleeving, landscape zones, and control locations, sleeving and distribution system. Water use calculations will be provided to confirm requirements and compliance with water efficiency ordinances.
5. 100% Irrigation Details and Notes – The Consultant will finalize for construction issue the landscape irrigation typical installation details and related notes/specifications, legends and calculations for proposed improvements.
6. 100% Planting Plans – The Consultant will finalize for construction issue the planting plans that indicate plant species, sizes, quantities and locations.
7. 100% Planting Details and Notes – The Consultant will finalize for construction issue the typical planting installation details and related notes.
8. Pre Construction Support – The Consultant will provide preconstruction support to the Client, providing input on schedule, stone materials, furnishings, play equipment, soils and plant materials including quantities, sizes, specifications and strategies to facilitate early procurement, critical path scheduling and resource conservation.

Deliverables:

The Landscape Architect will provide the following design deliverables:

1. 100% Hardscape Layout and Materials Plans
2. 100% Precise Grading and Drainage Plans
3. 100% Construction Details
4. 100% Irrigation Plans
5. 100% Irrigation Details and Notes
6. 100% Planting Plans
7. 100% Planting Details and Notes (All notes and specifications will be a part of the plans, not CSI format book specifications.)
8. Pre Construction Support

TASK 4: CONSTRUCTION ADMINISTRATION

The Landscape Architect will provide administration services to support the Owner and Contractor's understanding of the landscape design intent during the project's implementation.

Key Tasks:

These services will include the following key tasks:

1. Submittal and Shop Drawing Review – The Landscape Architect shall review shop drawings and submittals relative to the design intent to help to support Contractor/Contractor's project understanding (PDF Format).
2. Support Services – The Landscape Architect will prepare responses to RFI's as requested by the Contractor / Contractor during the landscape construction phases. The Landscape Architect will review testing and inspection agency reports pertaining to the landscape scope of work (PDF Format).
3. Construction Meetings and Field Observation Visits – The Landscape Architect will attend project meetings and field observation visits to support the Owner and Contractor during the project's implementation. Landscape Architect will provide periodic site visits to observe completed work quality and general compliance with the design intent and requirements.
4. Substantial Conformance – Landscape Architect will prepare agency required substantial conformance reports upon acceptable completion of the project construction.

Deliverables:

1. Field Reports or Punch Lists – prepare typed Field Reports or "Punch Lists" that comments on the status of construction for each site visit.
2. Submittal, shop drawing, testing review responses.
3. Design Clarifications (LSK) submittals.
4. Responses to RFI's in written response and/or graphic format.

TASK 5: MEETING ATTENDANCE

The following meetings are anticipated for the duration of the project design. All meetings are billed on an hourly rate basis and against the established meeting allowance. The Landscape Architect anticipates the following meetings:

1. Weekly DBE Coordination Meetings - 10 Anticipated
2. Owner Milestone/Coordination Meetings – 4 Anticipated

CIVIL ENGINEERING BASE SCOPE OF SERVICES

BKF Engineers will perform the following Civil Engineering tasks:

TASK 1: 90% CONSTRUCTION DOCUMENTS PHASE

1. **Coordination:** BKF will prepare documents for construction based on the Concept Design and Criteria Document provided by STUDIO 2nd Street and will coordinate utility systems, hardscape, landscape and site grading with the team.

2. **Drawings:** BKF will prepare the following drawings:

- Notes, Legend & Abbreviations
- Utility Plan
- Stormwater Control Plan
- Construction Details
- Sedimentation and Erosion Control Plan

3. **Calculations:** BKF will perform preliminary water quality C.3 calculations (i.e., impervious areas, tributary drainage areas, storm outfall flows, BMP sizing, etc.) necessary to confirm the concept design proposed.

4. **NPDES C.3 Compliance:** BKF will develop methods to meet the NPDES requirements for post- construction storm water discharge. BKF will work with the landscape architect to implement the site water quality features. BKF will prepare a preliminary C.3 and C.6 Development Review Checklist. This Checklist will show calculations as well as site design features that will serve to treat the site stormwater.

TASK 2: MEETINGS

1. **Meetings:** BKF has budgeted for up to eight (8) hours of combined staff time to attend meetings and participate in conference calls during this phase.

TASK 3: CONSTRUCTION SUPPORT

1. **Construction Support Services:** BKF has allocated up to a maximum of $5,000 of combined staff time to support the contractor and design team during the construction phase of the project. Anticipated services include written response to requests for information (RFI's), submittal reviews, substitution requests, informational bulletins, addendums, attending pre-construction meetings, site visits to provide clarification of the consultant's design intent for the contractor, Architect or owner, and stormwater facility construction observations.

TASK 4: STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AMENDMENT NO.2

1. **SWPPP:** BKF will assist with preparing a SWPPP Amendment No.2 incorporating the Playground Design into the Flood Park SWPPP and adjusting the end of construction date, as the Qualified (design) SWPPP Developer (QSD).

2. **Owner's/Contractor's Responsibility:** It is the owner's responsibility to provide Qualified SWPPP Practitioner (QSP) and QSD (construction/field inspection) services, either directly or through the selected General Contractor.

STRUCTURAL ENGINEERING BASE SCOPE OF SERVICES

Gouvis Engineering will perform the following Structural Engineering tasks:

- Review and coordinate the architectural Design Packages with the engineering designs.
- Prepare complete construction documents consisting of drawings, related general notes, and calculations setting forth in detail the requirements for the construction of the project.
- Prepare a design for gravity and lateral resisting systems.
- Prepare electronically generated analytical calculations to back up member sizes and lateral resisting elements.
- Prepare construction documents for the project which will include: calculations, drawings, details, and related general notes.
- Produce drawings in AutoCAD (versions 2016 or later) based on Architectural backgrounds.
- Provide the Architect with digital files of the Construction Documents suitable for reproduction.
- Provide reasonable revisions to the Construction Documents as needed and in accordance with the Architect's and/or other consultant's work as a result of the Building Department's Plan Check corrections.
- Provide written response to all Plan Check comments.
- Provide the Architect with as many stamped and signed Building Department Plan Check re-submittal packages as required by the local jurisdiction.

Note: Excludes structural engineering for playground equipment footings.

PRECONSTRUCTION SCOPE OF SERVICES

1. DBE is to have site meetings with County representatives, as needed to review the current site conditions.
2. Detailed Project Critical Path Method (CPM) Schedule: Produce detailed design phase and construction phase CPM schedules to be incorporated into the Project Agreement including identification of the Project critical path at each phase including long lead procurement items. DBE to provide updated schedules on monthly basis.
3. Construction Planning and Site Logistics Plan: Please refer to Appendix E for location of staging area, temporary fencing, SFPUC Right-of-Way and limitations on crossing and use in the Right-Of-Way. DBE will be required to provide all temporary facilities, access/winterization, etc., as required. Note that the DBE can use the existing Admin building for contractor's field office.
4. Any other services that are reasonable and necessary to comply with County's requirements and project schedule.

CONSTRUCTION SCOPE OF SERVICES

1. Administer and coordinate on a daily basis the work of all Trade Partners, and subcontractors the DBE hires to work on the Project.
2. Enforce strict performance, scheduling, and notice requirements.
3. Document the progress and costs of the Project on a monthly basis.
4. Update the Construction CPM Project Schedule on a monthly basis, including but not limited to the following – Establish end of month data date, actual start and actual finish dates, remaining duration calculations for all activities, and updating/ calculating the critical path necessary to keep the project on schedule.
5. Report proactively on potential schedule impacts and recommend potential solutions to schedule problems.
6. Provide staff training and maintenance personnel on-boarding for all specified equipment and systems.
7. Coordination and documentation of as-builts, record drawings, RFI's and specification changes.
8. Compilation and turnover of operations and maintenance manuals, warranties/guarantees, certificates, tools, and any other closeout requirements.
9. Other responsibilities as necessary for the completion of the Project.

To:	County of San Mateo (30801)	**Contact:**	
Address:	555 County Center	**Phone:**	
	Redwood City, CA 94063	**Fax:**	
Project Name:	Flood Park Phase II DB 25.03.14	**Bid Number:**	BA25015
Project Location:	215 Bay RD, Menlo Park, CA	**Bid Date:**	5/8/2024

Item Description **Estimated Quantity** **Unit**

00 General Conditions

Mock-ups
- First in place mock-up included as specified for concrete and stone. If additional mock-ups are needed these will be done with the execution of a change order basis.

Temporary Facilities and Project Start-up

Dust Control General After Grading Paving Operations as Needed

Protection of Surfaces

SFPUC Cover

Tree Protection

Utility locating

00 General Conditions Bond

Performance and Payment Bond

00 General Conditions Design Consultants

Design Consultants

00 General Conditions Project Supervision

Project Preparation & Supervision

01 Survey

Initial Site Survey for Design
- Prior to project start have survey identify existing trees, grades, demo, existing monuments

Civil and Playground Survey
- grading and playground

Self Preform Survey
- landscape, stone work, pavers, concrete, ac

02 Erosion Control

SWPPP Monitoring and Compliance

Silt Fence and Straw Wattles at Perimeter

Remove Erosion Control

Stand by materials

03 Demolition

Demolition

Tree removal - 12 Trees

Safe off Electrical to Existing Fountain

04 Earthwork and Base Rock

Grading - rough and finish

- See unit price alternate for off-haul of spoils

Handle Spoils / Misc Grading

Base Rock

- All base rock has been included as 100% recycled.

05 Drainage

Area Drainage - Allowance

06 Domestic Water

Tap Into Existing Waterline - allowance

Potable POC Standard

1.5" Domestic sch 80 water line for drinking fountain

- Drinking fountain line not shown, includes 50 LF allowance assumes sch 80 pvc piping. Excludes cathodic protection.

07 Asphalt Paving

Asphalt Paving

- Permaloc Edging Eliminated in VE exercise 4

08 Concrete

Concrete

- No wall finishes shown, Jensen has included board form finish at retaining wall
- Concrete path to quiet hut and seatwall eliminated in VE 4 - EXCLUDED

09 Fencing

Tubular Steel Barrier Rail In Place of Guardrail to Match Berliner

[S9A] & [S10 Gate] - Playground Fencing and Gate

- For S9A Playground Fence Material Schedule and RFI Response are unclear. Jensen has assumed posts are to be direct buried per Material Schedule (Footings excluded). RFI response is assumed to show general aesthetic only and not include footing requirement. Posts are assumed to be Cedar. Material schedule lists both Cedar and Pine, but it assumed that Cedar is desired. Assumes fencing is 3" cedar (circular) lodge poles per material schedule. Horizontal top rail assumed to be included per RFI response, not stated in Material Schedule.

Planting Fence S9B

10 Pavers

Donor Pavers

- Assumes 100% owner provided pavers

Item Description	Estimated Quantity	Unit

11 Playground Equipment

Playground Equipment - Landscape Structures and Earthscape
- 50% Deposit due at time of order - applies to all play equipment
- Lead times are 24 Weeks
- Earthscape Play Hut eliminated in VE exercise 4 - EXCLUDED

Playground Equipment - Spec Play
- 50% Deposit due at time of order
- Lead times are 20 Weeks
- Percussion Play eliminated in VE 4 - EXCLUDED

Playground Installation - for all play elements

Engineering for Play Element Footings

Safety Audit

Equipment Rental for Playground

12 Play Surfacing

[P5] Resilient Surfacing
- Assumes 50% black and 50% standard colors from Spec Play in lieu of specified Tot Turf

[P6] - Playsurfacing Type 2 - Fibar (1/L6-102)
- Assumes (2) Fibar mats (1) per swing seat

13 Stone Work

Unload Stones and Layout

Excavation for stones

[S4] - Stones Various Lengths and Widths (L6-201) Set Flat
- Mahogany stone substituted in VE 4

Stone Infill at Stone Gaps - EXCLUDED
- Eliminated in VE exercise 4

Stone equipment

Salvaged Boulders
- Assumes onsite boulders used as step pads

14 Irrigation

Irrigation
- Assumes utilizing existing controller

15 Landscape

48" Box Tree
- Attachment C states that tree sizing may exceed box sizes shown on plans, this shall be considered a change in scope and be subject to additional costs.

36" Box Tree

24" Box Tree

Percolation Testing
- 3 Initial tests
- 1 test for every 5 trees per Attachment C

Tree Pit Gravel - 2 per tree

Shrubs - 15 Gal - 1 Gal

Shrub allowance per note 2 L1-600
- Quantities unclear including: (25) 1 gallon, (15) 5 gallon, (5) 10 gal, (5) 15 gallon
- To be used in hydroseed areas

[P8] - Owner Supplied Wood Chip Mulch @ 3" depth

Hydroseed
- Assumes single application of PA05A Native Grass and Wildflower Mix
- Added in VE exercise 4

Landscape Fine Grading Post Planting and Irrigation Installation

16 Soils

[S-1] & [S-2] - Amended Existing Topsoil @ 12" depth
- Additional depth at trees included in tree backfill

[S-3] - Structural Soil Mix @ 48" depth - EXCLUDED
- Eliminated in VE exercise 4

[S-E] - Existing Soil
- 6" Deep rip

Soils Testing

17 Site Furnishings

[S11] - Wood Landscape Elements - salvaged logs

[S12] Trash Receptacle - Bear Saver - New - Assumed

[S13] - 7'6"L Bench (2/L6-251) MmCite Blocq Bench
- Alternate MmCite bench accepted over specified Streetlife bench

[S14] - Removable Bollards

[S14] Drinking fountain w/ sump and pit - assumed

18 Maintenance

Maintenance - 90 Calendar Days
- Per same time frame as phase 1

19 General Conditions Contingency

DBE Controlled Contingency

Exhibit 4

PRICE PROPOSAL

Exhibit 4A – Price Proposal

Exhibit 4B –Schedule of Values

Please refer to the attached documents.

To:	County of San Mateo (30801)	**Contact:**	
Address:	555 County Center	**Phone:**	
	Redwood City, CA 94063	**Fax:**	
Project Name:	Flood Park Phase II DB 25.03.14	**Bid Number:**	BA25015
Project Location:	215 Bay RD, Menlo Park, CA	**Bid Date:**	5/8/2024

Item Description	Estimated Quantity	Unit

00 General Conditions

Mock-ups · First in place mock-up included as specified for concrete and stone. If additional mock-ups are needed these will be done with the execution of a change order basis.	1.00	LS
Temporary Facilities and Project Start-up	1.00	LS
Dust Control General After Grading Paving Operations as Needed	1.00	EACH
Protection of Surfaces	1.00	EACH
SFPUC Cover	1.00	LS
Tree Protection	1.00	LS
Utility locating	1.00	LS
Total Price for above 00 General Conditions Items:		**$150,000.00**

00 General Conditions Bond

Performance and Payment Bond	1.00	LS
Total Price for above 00 General Conditions Bond Items:		**$41,000.00**

00 General Conditions Design Consultants

Design Consultants	1.00	LS
Total Price for above 00 General Conditions Design Consultants Items:		**$255,000.00**

00 General Conditions Project Supervision

Project Preparation & Supervision	1.00	LS
Total Price for above 00 General Conditions Project Supervision Items:		**$277,000.00**

01 Survey

Initial Site Survey for Design · Prior to project start have survey identify existing trees, grades, demo, existing monuments	1.00	LS
Civil and Playground Survey · grading and playground	1.00	LS
Self Preform Survey · landscape, stone work, pavers, concrete, ac	1.00	LS
Total Price for above 01 Survey Items:		**$45,000.00**

02 Erosion Control

SWPPP Monitoring and Compliance	1.00	LS
Silt Fence and Straw Wattles at Perimeter	1.00	LS
Remove Erosion Control	1.00	LS
Stand by materials	1.00	LS

Total Price for above 02 Erosion Control Items:		**$25,000.00**

03 Demolition

Demolition	1.00	LS
Tree removal - 12 Trees	1.00	LS
Safe off Electrical to Existing Fountain	1.00	LS
Total Price for above 03 Demolition Items:		**$85,000.00**

04 Earthwork and Base Rock

Grading - rough and finish	1.00	LS
· See unit price alternate for off-haul of spoils		
Handle Spoils / Misc Grading	205.00	CY
Base Rock	1.00	LS
· All base rock has been included as 100% recycled.		
Total Price for above 04 Earthwork and Base Rock Items:		**$240,000.00**

05 Drainage

Area Drainage - Allowance	1.00	LS
Total Price for above 05 Drainage Items:		**$27,500.00**

06 Domestic Water

Tap Into Existing Waterline - allowance	1.00	LS
Potable POC Standard	1.00	EACH
1.5" Domestic sch 80 water line for drinking fountain	50.00	LF
· Drinking fountain line not shown, includes 50 LF allowance assumes sch 80 pvc piping. Excludes cathodic protection.		
Total Price for above 06 Domestic Water Items:		**$10,000.00**

07 Asphalt Paving

Asphalt Paving	1.00	LS
· Permaloc Edging Eliminated in VE exercise 4		
Total Price for above 07 Asphalt Paving Items:		**$62,000.00**

08 Concrete

Concrete	1.00	LS
· No wall finishes shown, Jensen has included board form finish at retaining wall		
· Concrete path to quiet hut and seatwall eliminated in VE 4 - EXCLUDED		
Total Price for above 08 Concrete Items:		**$317,000.00**

09 Fencing

Tubular Steel Barrier Rail In Place of Guardrail to Match Berliner	20.00	LF
[S9A] & [S10 Gate] - Playground Fencing and Gate	1.00	LS
· For S9A Playground Fence Material Schedule and RFI Response are unclear. Jensen has assumed posts are to be direct buried per Material Schedule (Footings excluded). RFI response is assumed to show general aesthetic only and not include footing requirement. Posts are assumed to be Cedar. Material schedule lists both Cedar and Pine, but it assumed that Cedar is desired. Assumes fencing is 3" cedar (circular) lodge poles per material schedule. Horizontal top rail assumed to be included per RFI response, not stated in Material Schedule.		
Planting Fence S9B	1,150.00	LF
Total Price for above 09 Fencing Items:		**$95,000.00**

10 Pavers

Donor Pavers	1.00	LS
· Assumes 100% owner provided pavers		
Total Price for above 10 Pavers Items:		**$12,000.00**

Item Description	Estimated Quantity	Unit
11 Playground Equipment		
Playground Equipment - Landscape Structures and Earthscape · 50% Deposit due at time of order - applies to all play equipment · Lead times are 24 Weeks · Earthscape Play Hut eliminated in VE exercise 4 - EXCLUDED	1.00	LS
Playground Equipment - Spec Play · 50% Deposit due at time of order · Lead times are 20 Weeks · Percussion Play eliminated in VE 4 - EXCLUDED	1.00	LS
Playground Installation - for all play elements	1.00	LS
Engineering for Play Element Footings	1.00	LS
Safety Audit	1.00	LS
Equipment Rental for Playground	1.00	LS
Total Price for above 11 Playground Equipment Items:		**$1,580,000.00**
12 Play Surfacing		
[P5] Resilient Surfacing · Assumes 50% black and 50% standard colors from Spec Play in lieu of specified Tot Turf	9,680.00	SF
[P6] - Playsurfacing Type 2 - Fibar (1/L6-102) · Assumes (2) Fibar mats (1) per swing seat	762.00	SF
Total Price for above 12 Play Surfacing Items:		**$280,000.00**
13 Stone Work		
Unload Stones and Layout	1.00	LS
Excavation for stones	400.00	SF
[S4] - Stones Various Lengths and Widths (L6-201) Set Flat · Mahogany stone substituted in VE 4	27.00	EACH
Stone Infill at Stone Gaps - EXCLUDED · Eliminated in VE exercise 4	0.00	LS
Stone equipment	1.00	LS
Salvaged Boulders · Assumes onsite boulders used as step pads	9.00	EACH
Total Price for above 13 Stone Work Items:		**$100,000.00**
14 Irrigation		
Irrigation · Assumes utilizing existing controller	14,550.00	SF
Total Price for above 14 Irrigation Items:		**$65,000.00**
15 Landscape		
48" Box Tree · Attachment C states that tree sizing may exceed box sizes shown on plans, this shall be considered a change in scope and be subject to additional costs.	14.00	EACH
36" Box Tree	6.00	EACH
24" Box Tree	3.00	EACH
Percolation Testing · 3 Initial tests · 1 test for every 5 trees per Attachment C	8.00	EACH
Tree Pit Gravel - 2 per tree	23.00	EACH
Shrubs - 15 Gal - 1 Gal	1,516.00	EACH
Shrub allowance per note 2 L1-600 · Quantities unclear including: (25) 1 gallon, (15) 5 gallon, (5) 10 gal, (5) 15 gallon · To be used in hydroseed areas	50.00	EACH
[P8] - Owner Supplied Wood Chip Mulch @ 3" depth	9,028.00	SF
Hydroseed · Assumes single application of PA05A Native Grass and Wildflower Mix · Added in VE exercise 4	7,850.00	SF
Landscape Fine Grading Post Planting and Irrigation Installation	14,845.00	SF

Total Price for above 15 Landscape Items:		**$140,000.00**

16 Soils

[S-1] & [S-2] - Amended Existing Topsoil @ 12" depth · Additional depth at trees included in tree backfill	7,029.00	SF
[S-3] - Structural Soil Mix @ 48" depth - EXCLUDED · Eliminated in VE exercise 4	0.00	SF
[S-E] - Existing Soil · 6" Deep rip	8,066.00	SF
Soils Testing	6.00	EACH
Total Price for above 16 Soils Items:		**$5,5000.00**

17 Site Furnishings

[S11] - Wood Landscape Elements - salvaged logs	2.00	EACH
[S12] Trash Receptacle - Bear Saver - New - Assumed	1.00	EACH
[S13] - 7'6"L Bench (2/L6-251) MmCite Blocq Bench · Alternate MmCite bench accepted over specified Streetlife bench	7.00	EACH
[S14] - Removable Bollards	6.00	EACH
[S14] Drinking fountain w/ sump and pit - assumed	1.00	EACH
Total Price for above 17 Site Furnishings Items:		**$79,000.00**

18 Maintenance

Maintenance - 90 Calendar Days · Per same time frame as phase 1	3.00	MO
Total Price for above 18 Maintenance Items:		**$9,000.00**

19 General Conditions Contingency

Owner Controlled Contingency	1.00	EACH
Total Price for above 19 General Conditions Contingency Items:		**$200,000.00**

Total Bid Price: **$4,100,000.00**

Offhaul Spoils

Alternate Offhaul Spoils

Alternate - Off-Haul Spoils - Unit Price per Ton · Assumes clean uncontaminated soil	1.00	TON
Total Price for above Alternate Offhaul Spoils Items:		**$45.00**

CONTINUATION SHEET		AIA DOCUMENT G703		(Instructions on reverse side)			Page of Pages	
AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT,					Application No.:			1
containing Contractor's Signed Certification, is attached.					Application Date:			
In tabulations below, amounts are stated to the nearest dollar.					Period To:			
Use Column I on Contracts where variable retainage for line items may apply.					Architect's Project No.:			
	Job Name							

A	B	C	D	E	F	G		H	I
			Work Completed		Materials	Total			
					Presently	Completed		Balance	Retainage
Item		Scheduled	From Previous		Stored	And Stored	%	To	(If Variable
No.	Description Of Work	Value	Application	This Period	(Not in	To Date	(G/C)	Finish	Rate)
			(D+E)		D Or E)	(D+E+F)		(C-G)	(G*0.1)
	Preconstruction								
	Design Consultants	$ 255,000.00							
	Project Bond	$ 41,000.00							
	Project Contingency	$ 200,000.00							
	Construction								
	General Conditions/Temp Facilities	$ 150,000.00							
	Project Supervision	$ 277,000.00							
	Survey & Layout	$ 45,000.00							
	Erosion Control	$ 25,000.00							
	Demolition	$ 85,000.00							
	Earthwork and Baserock	$ 240,000.00							
	Drainage	$ 27,500.00							
	Domestic Water	$ 10,000.00							
	Aphalt Paving	$ 62,000.00							
	Concrete	$ 305,500.00							
	Fencing	$ 95,000.00							
	Pavers	$ 12,000.00							
	Playground Equipment	$ 1,600,000.00							
	Play Surfacing	$ 280,000.00							
	Stone Work	$ 100,000.00							
	Irrigation	$ 61,500.00							
	Landscape	$ 135,000.00							
	Soils	$ 5,500.00							
	Site Furnishings	$ 79,000.00							
	Maintenance	$ 9,000.00							
		4,100,000.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00%**	**0.00**	**0.00**

Exhibit 5

PERSONNEL AND EQUIPMENT

Exhibit 5A – Staffing Plan

Exhibit 5B – Key Personnel

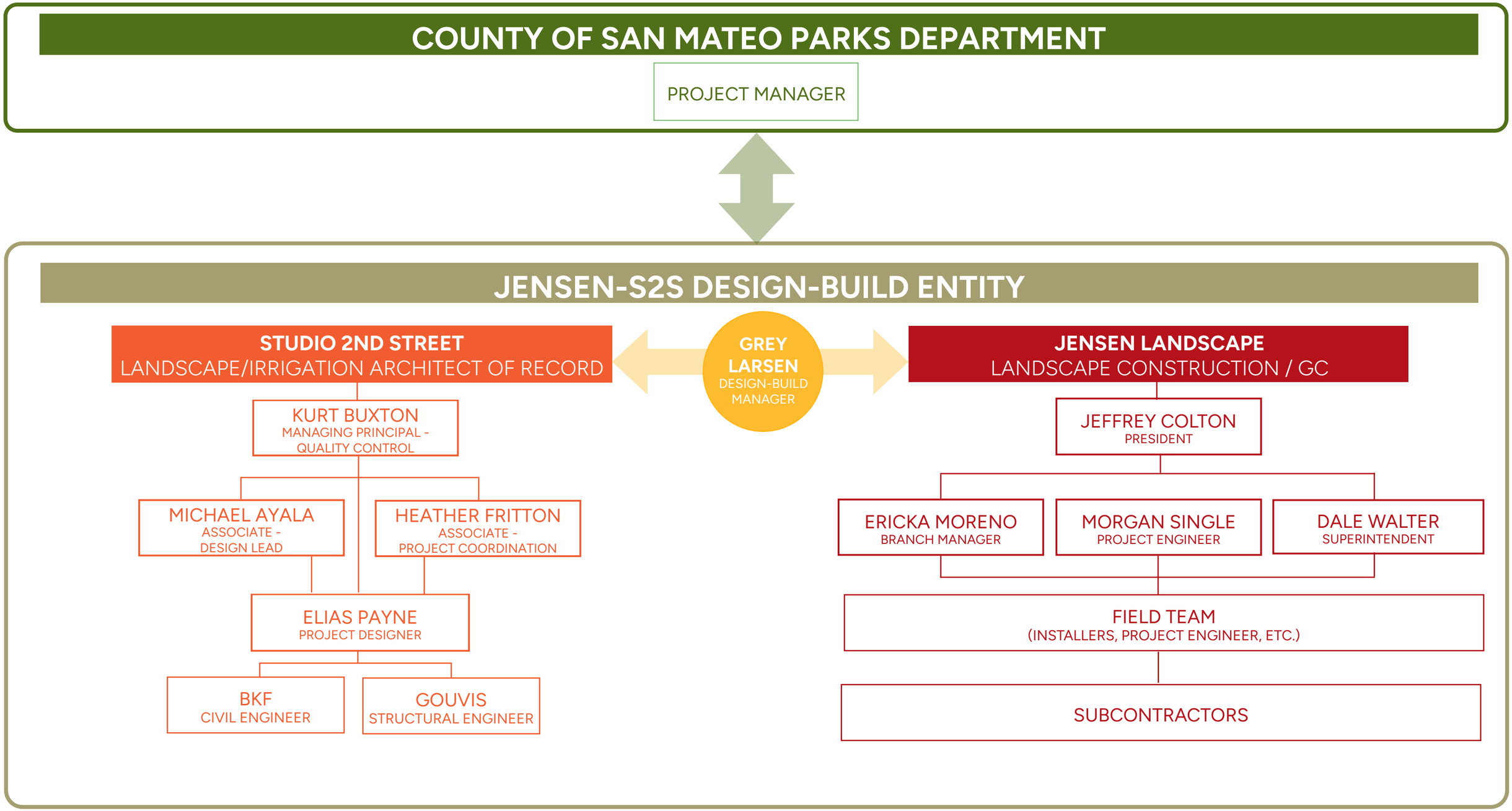
Please refer to the attached documents.

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

A. ORGANIZATIONAL CHART

The following organizational chart identifies the key individuals and their responsibilities for the Design and Construction phases of the project, and demonstrates clear lines of authority among key personnel. Jensen Landscape will be the prime contractor and Studio 2nd Street will be the Landscape Architect of Record and Irrigation Designer, and will be a subconsultant to Jensen. The Civil Engineer (BKF) and Structural Engineer (Gouvis) will be subconsultants to Studio 2nd Street. All Construction/ Installation contractors will be subconsultants to Jensen Landscape. Firm descriptions and team member resumes are provided in the pages below the organizational chart.



II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

B. PROJECT TEAM DESCRIPTION AND RESUMES

The members of the Jensen Landscape and Studio 2nd Street team share experience dating back 30 years, operating on a collaborative workflow to provide responsive, creative, cost compliant design and implementation of projects utilizing true Design Build Delivery. Our highly qualified teams understand the advantages of leveraging bridging documents in the design build process where design refinement and documentation occurs in tandem with cost modeling, material sourcing, pull planning and constructability analysis. Each progression of the project is a complete iteration, providing Ownership and the Design Build team visibility into all aspects of critical decision making in real time. With a history of enduring client relationships, the Jensen Landscape/Studio 2nd Street DBE is committing its over 50 years of combined experience in the design and implementation of recreational amenities to the actualization of the Realize Flood Park Phase 2 Playground Replacement project as a basis for a continuing partnership with the County of San Mateo Parks Department.

JENSEN LANDSCAPE

ROLE: LANDSCAPE CONSTRUCTION GENERAL CONTRACTOR

Jensen Landscape has more than 50 years of landscape installation experience, helping to create a seamless transition from bare ground to lush green environments for architects, owners, general contractors, public agencies, and developers. We can handle complicated, difficult projects, meet bid requirements, and provide customized quality solutions. Servicing both public and private entities, our team of top landscape professionals approaches every project with unmatched speed and efficiency to ensure that you meet your deadlines. Our proactive communication procedures help our customers stay informed and you can depend on our teams to deliver on your scope of work. We have the capability, resources, and experience to install landscapes of any size and complexity for a variety of entities.

Experience has taught us that no two properties are alike, nor are all clients' needs the same. Jensen believes in partnering with clients to understand their business or personal needs, which in turn allows us to understand their landscapes. We partner with architects and property owners in the design, construction, and maintenance of their sites. Through our continuous communication and by leveraging the resource of talent in our company, Jensen proactively develops landscape solutions that help reduce cost and provide the best outcome for our clients. Our mission and core values drive our business practices to give the best quality and customer care.

STUDIO 2nd Street

ROLE: LANDSCAPE ARCHITECT OF RECORD AND IRRIGATION DESIGN

Studio 2nd Street is a small, nimble Landscape Architecture practice focused on the utilization of advanced technology to create curated design solutions. Our designs, as well as the method & approach toward creating and communicating design ideas, are unique to each project. Leveraging over 60 combined years of industry experience, Studio 2nd Street creates great design by discovering new processes to craft it. We understand the importance of innovation and we're devoted to the pursuit of efficient and informative software and workflows. The S2S team strives to provide our clients with state-of the art, streamlined workflows, allowing tech to support and enhance the design process. Our services include Landscape Architecture & Design, Irrigation Design, Virtual Design & Construction, Building Information Modeling (BIM), Revit Modeling/Coordination, Predevelopment Services, Design Build Delivery, Environmental Design, Nature Play and LEED and SITES Support.

BKF ENGINEERS

ROLE: CIVIL ENGINEER

Since 1915, BKF Engineers earned a reputation for its ability to successfully plan, design, survey, and implement complex projects. We draw upon and utilize our experience diligently guiding projects from the initial due diligence and feasibility stages, progressing project designs and permitting approvals, and concluding with construction and implementation. This proven approach recognizes that developing dynamic projects is informed by focused team collaboration, mitigating physical constraints and potential risks, and balancing designs goals with value engineering solutions. BKF's decades of engineering, surveying, and planning experience is evident in our legacy projects throughout the west coast. By leveraging our diverse project portfolio in combination with innovative design solutions, BKF's team of more than 450 experienced staff is dedicated to successfully delivering sustainable and dynamic projects for our communities and partners.

GOUVISengineering consulting group, inc.

ROLE: STRUCTURAL ENGINEER

Gouvis Engineering Consulting Group delivers first class engineering services for many of the largest builders and architects throughout the country. With a tenured staff of over 100 employees company wide, we have the resources and workforce to meet any schedule requirement. Gouvis Engineering is uniquely structured into product specific teams, ensuring your project is designed and coordinated with the highest level of knowledge and experience. The Gouvis team of SMEP experts understands that efficient system operation is vital to project success. Our comprehensive audits, evaluations, inspections, code calculations and recommendations are aimed at one goal: to achieve optimal life cycle costing.

TEAM MEMBER RESUMES

JEFFREY COLTON

PRESIDENT OF CONSTRUCTION

JENSEN LANDSCAPE



After 32 years at ValleyCrest Landscape Companies Jeff is very happy to be part of Monarch Landscape / Jensen Landscape as the President of Construction. He enjoys leading teams to build beautiful projects throughout the Northwest, Northern California and all the other locations as Jensen continues to grow.

KEY PROJECTS

Yerba Buena Island Hilltop Park | San Francisco, CA
Treasure Island Development Group

+ $12M Construction Budget
+ Features the unique conversion of an existing 2-million gallon water tank into an overlook with views of downtown San Francisco, Golden Gate Bridge, Bay Bridge, Alcatraz and the surrounding Bay Area.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.
+ Featured in The New York Times, The Economist, and San Francisco Chronicle.

Yerba Buena Island Dog Park | San Francisco, CA
Treasure Island Development Group

+ $1.1M Construction Budget
+ New dog park featuring salvaged boulders embedded into slopes, gravel area, custom fencing, drinking fountain, landscaping irrigation, drainage, site concrete and lighting.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.

Facebook Campus | Menlo Park, CA
Facebook

+ $75M Construction Budget
+ 10+ Years of being primary landscape contractor on new campus.

Japantown Heilinville Park | San Jose, CA
Shay Builders

+ $4.9M Construction Budget
+ Community Urban Park, architectural concrete, pavers, trellises, picnic areas, playground, play surfacing, picnic area, planting areas, architectural/decorative fencing, site furnishings.

EDUCATION

+ Bachelor of Arts, Broadcast Journalism - Cal State Northridge

LICENSURE / REGISTRATIONS

+ CA License A, B and C-27

SPEAKING ENGAGEMENTS

+ Guest Lecturer - Cal State East Bay - "Construction Lean Principles"

ERICKA MORENO

BRANCH MANAGER

JENSEN LANDSCAPE



Ericka is a construction professional with 20+ years of experience in the industry. She has sold and managed multiple projects, valued at $500K to over $15M. Ericka demonstrates leadership, communication, and management skills in Sales, Operations, Finance and Purchasing. She is skilled at working with multiple stakeholders in collaborative design and construction processes, and leads teams of various sizes in Operations, Sales/Business Development and Project Management.

KEY PROJECTS

Mission Rock Horizontal, Parcel A, Parcel B, Parcel G & China Basin Park, | San Francisco, CA
Tishman Speyer/ Webcor Builders/Swinerton Builders/Hathaway-Dinwiddie

+ $11.5 M Construction Budget
+ Neighborhood Park, Streetscape, Site furnishings, Commercial Office/Residential Building Landscape, Roof/Patio Gardens

UCB Helen Diller House | Berkeley, CA
UC Berkeley/ Build Group

+ $1.8M Construction Budget
+ Student Housing Residence Hall, Streetscapes, Site Furnishings, Roof Garden, On Structure podiums Patios/ landscape, Synthetic Turf

Google Java Site & Parking | Sunnyvale, CA
Google / XL Construction

+ $5.4M Construction Budget
+ Commercial Office Park Campus, Bioretention area, Exterior Green wall, Campus Landscape, Site Furnishings, Basketball Court, synthetic Turf

Menlo Community Center | Menlo Park, CA
City of Menlo Park/Facebook, Inc.

- $1M Construction Budget
- Community Center, landscape, irrigation, playground, play surfacing, bio retention, site furnishings.

1629 Market Street | San Francisco, CA
Market Street 1629 Ventures

- $2M Construction Budget
- Residential Building, Community/City park, roof/desk patios/ gardens, decking, site furnishing, landscape, irrigation, playground, play surfacing, boulders, pavers.

EDUCATION

+ Master of Science, Civil Engineering, emphasis on Construction Management - University of California Berkeley
+ Bachelor of Science, Civil Engineering, Minor, Urban Studies and Planning - Massachusetts Institute of Technology

SKILLS

+ Fluent in Spanish, both written and verbal communication
+ Microsoft Office Suite
+ Procore
+ Salesforce

GREY LARSEN

PROJECT MANAGER

JENSEN LANDSCAPE

Grey is an experienced Project Manager with 14 years experience in the Construction Industry. As a GC, he managed and led the construction of $15+ million park projects on Yerba Buena Island, as well as managing over 15 subcontractors, an internal project office, and field teams. Grey conducts weekly OAC meetings with owner,s project designers, engineers, and City representatives. He has the ability to overcome project challenges when the arise whether due to design, site conditions, access, schedule and limited budget.

KEY PROJECTS

Yerba Buena Island Hilltop Park | San Francisco, CA
Treasure Island Development Group

+ $12M Construction Budget
+ Features the unique conversion of an existing 2-million gallon water tank into an overlook with views of downtown San Francisco, Golden Gate Bridge, Bay Bridge, Alcatraz and the surrounding Bay Area.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.
+ Featured in The New York Times, The Economist, and San Francisco Chronicle.

Yerba Buena Island Dog Park | San Francisco, CA
Treasure Island Development Group

+ $1.1M Construction Budget
+ New dog park featuring salvaged boulders embedded into slopes, gravel area, custom fencing, drinking fountain, landscaping irrigation, drainage, site concrete and lighting.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.

Flood Park Phase 1 | Menlo Park, CA
County of San Mateo

+ $8M Construction Budget
+ 22-Acre park renovation featuring new landscaping, pathways, underground utilities, picnic areas with custom bbq islands, site furnishings, soccer field, tennis and pickleball courts, basketball court, and parking improvements.



EDUCATION

+ Bachelor of Science, Civil & Environmental Engineering - University of Massachusetts Amherst
+ *Honors: Commonwealth Honors College, Cum Laude*

SKILLS & CERTIFICATIONS

+ Construction Management: Procore, PlanGrid, Microsoft Project (Scheduling)
+ Estimating / Takeoff: Bluebeam, On-Screen Takeoff, Microsoft Excel
+ Certifications: E.I.T. – Massachusetts, Apr. 2012, Excavation Competent Person, 40 Hour HAZWOPER

DALE WALTER

SUPERINTENDENT

JENSEN LANDSCAPE

Dale Walter is a construction professional with over 30 years of experience in building and operations. Organized, collaborative, motivated, and optimistic, Dale is a team player adept at reading building plans and enforcing industry safety and standard regulations. He is detail-oriented and strategic with a priority on clear client communication. Dale is skilled in inclusive, effective leadership and creative problem-solving.



KEY PROJECTS

Flood Park Phase 1 | Menlo Park, CA
County of San Mateo

+ $8M Construction Budget
+ 22-Acre park renovation featuring new landscaping, pathways, underground utilities, picnic areas with custom bbq islands, site furnishings, soccer field, tennis and pickleball courts, basketball court, and parking improvements.

Japantown Heilinville Park | San Jose, CA
Shay Builders

+ $4.9M Construction Budget
+ Community Urban Park, architectural concrete, pavers, trellises, picnic areas, playground, play surfacing, picnic area, planting areas, architectural/decorative fencing, site furnishings.

LICENSES, CERTIFICATION, EDUCATION

+ General Engineering A License
+ CA C27 Landscape License
+ Class A Commercial CA Driver's License (+ trailer endorsement)
+ Polyethylene Fusion Certification
+ Sequoia Automotive Institute
+ Forklift Certification

AWARDS AND HONORS

+ Best of Houzz Service Award 2018, 2017, 2016 and 2015
+ California Contractor's Landscape Association (CLCA) Bay Area Chapter Awards:
  - 2018 Sweepstakes Award
  - 2018 First Place Sm Residential Renovation
  - 2018 First Place Sm Residential Installation
  - 2015 First Place Lg Residential Installation
  - 2009 First Place Design/Build Landscape Award

VOLUNTEER ACTIVITIES AND SERVICE

+ UCI Haiti, Medical, Elementary and Leadership Training - November 2018
+ Board of Directors, Church on the Hill, San Jose, CA 2003 TO 2021 (Executive Board 2013-2015)
+ Project and Volunteer Management, Church on the Hill, San Jose, CA

KURT BUXTON

MANAGING PRINCIPAL / CEO

STUDIO 2nd Street

Kurt Buxton has over 30 years of experience in landscape architecture. His knowledge of the diverse climate and cultural fabric of the designed environment balanced with a thoughtful, collaborative approach to management make him a valued design leader. Kurt motivates his team through an iterative design process, promoting creativity, artistic expression, and purpose. Buxton is highly respected for his thought leadership, where he fosters a collaborative studio environment. Kurt founded Studio 2nd Street with key members of the Technology and Innovation team he fostered over the past 5 years in order to continue a culture of creativity , collaboration and professional excellence in the design build and virtual design and construction space.

KEY PROJECTS

Backcountry Garden | Santa Barbara, CA
Santa Barbara Botanic Garden

+ Provided Design, Design Documentation, Permitting, Construction Support for a 78-acre nature play area through Design Build Delivery

Prescott Preserve | Palm Springs, CA
Ozwit Land Trust

+ Providing Landscape Design, Hardscape Design, Design Guidelines, Cost Estimating and Construction Support for a 100+ acre wildlife habitat preserve

Boulder Junction Nature Lab Play Area | Montecito, CA
Montecito Unified School District

+ Provided Design, Design Documentation, Permitting, Construction Support for an Outdoor Nature Play Area for Variety of Age Groups through Design Build Delivery

Crane Country Day School Nature Play Area | Santa Barbara, CA
Crane Country Day School

+ Design and Master Planning for an Outdoor Nature Play Area at an Elementary and Middle School serving Kindergarten through 8th Grade

Arlington Heights Sports Park | Riverside, California
City of Riverside, California

+ Provided Design, Design Documentation, Permitting, Construction Support , Design Build Delivery for a 35-acre park featuring multiple sports fields.

Sendero Field Adventure Park | Rancho Mission Viejo, California
Rancho Mission Viejo

+ Provided Design, Design Documentation, Permitting, Construction Support for a 15-acre Community Park including an adventure playground, baseball fields and pickleball courts.



EDUCATION

+ Bachelor of Science Landscape Architecture - California Polytechnic University, San Luis Obispo

LICENSURE / REGISTRATIONS

+ State of California #3250
+ State of Florida #LA6667096
+ State of Illinois #157.001496
+ State of North Carolina #1670
+ State of Colorado #LA 1629
+ State of New York #3068
+ State of Maryland #4257
+ LEED Accredited Professional
+ SITES Accredited Professional

PROFESSIONAL ASSOCIATIONS

+ American Society of Landscape Architects
+ Building Industry Association
+ Design-Build Institute of America
+ Dean's Advisory Council Cal Poly San Luis Obispo
+ Landscape Architecture Advisory Council, Cal Poly San Luis Obispo
+ Advisory Council Saddleback Community College
+ Adjunct Faculty Saddleback Community College
+ Part-Time Lecturer Cal Poly San Luis Obispo
+ U.S. Green Building Council

AWARDS

+ ASLA Colorado Honor Award - Backcountry Garden - 2023

MICHAEL AYALA

ASSOCIATE, LEAD DESIGNER

STUDIO 2nd Street

Michael is a valued member of the S2S team and has experience working on parks, master-plan communities, commercial landscapes, mixed-use developments, and international projects. Michael has been passionate about the arts since he was a child, and further developed his passion by turning it into a career. He is an advocate of with working with the latest tools and programs available, and seeks to establish new principles within the company. From graphic renderings, developing plans, to overseeing construction out in the field, Michael's goal is to be a well-rounded Landscape Architect.

KEY PROJECTS

Fair Park Community Park | Dallas, TX
Fair Park First
+ 14 Acres, Landscape Design, Playground Coordination, Bridge & Water Feature Design Support, Site Materiality

Park at MLK Magnet Core | Fresno, CA
City of Fresno Public Works
+ 13 Acres, Landscape Design, Playground Design and Coordination, Site Materiality, Community Outreach

Highland Park at Portola Springs | Irvine, CA
Irvine Co.
+ 5 Acres, Rec Center, Park Design Refinement, Playground Narrative Development, Construction Administration

Hillcrest Park at Portola Springs | Irvine, CA
Irvine Co.
+ 6 Acres, Community Rec, Park Design Refinement, Playground Narrative Development

Promenade Park at Baker Ranch | Lake Forest, CA
Shea Homes
+ 10 Acre Linear Park Design, Intergenerational Playground Coordination, Construction Administration

Vista Swim Club at Baker Ranch | Lake Forest, CA
Shea Homes
+ 3 Acres, Playground/Pool Design Coordination

Oaks Tennis Park at Baker Ranch | Lake Forest, CA
Shea Homes
+ 3 Acres, Playground & Sport Courts Coordination, Construction Administration



EDUCATION

+ Bachelor of Science, Landscape Architecture - California Polytechnic University of Pomona
+ Associate of Science in Architecture - Rio Hondo College

TECHNOLOGY AND INNOVATION

+ Revit
+ Site-BIM workflows and coordination
+ Advanced Modeling
+ Design Visualization
+ Ai Proponent

Exhibit 6

SCHEDULE AND SITE LOGISTICS PLAN

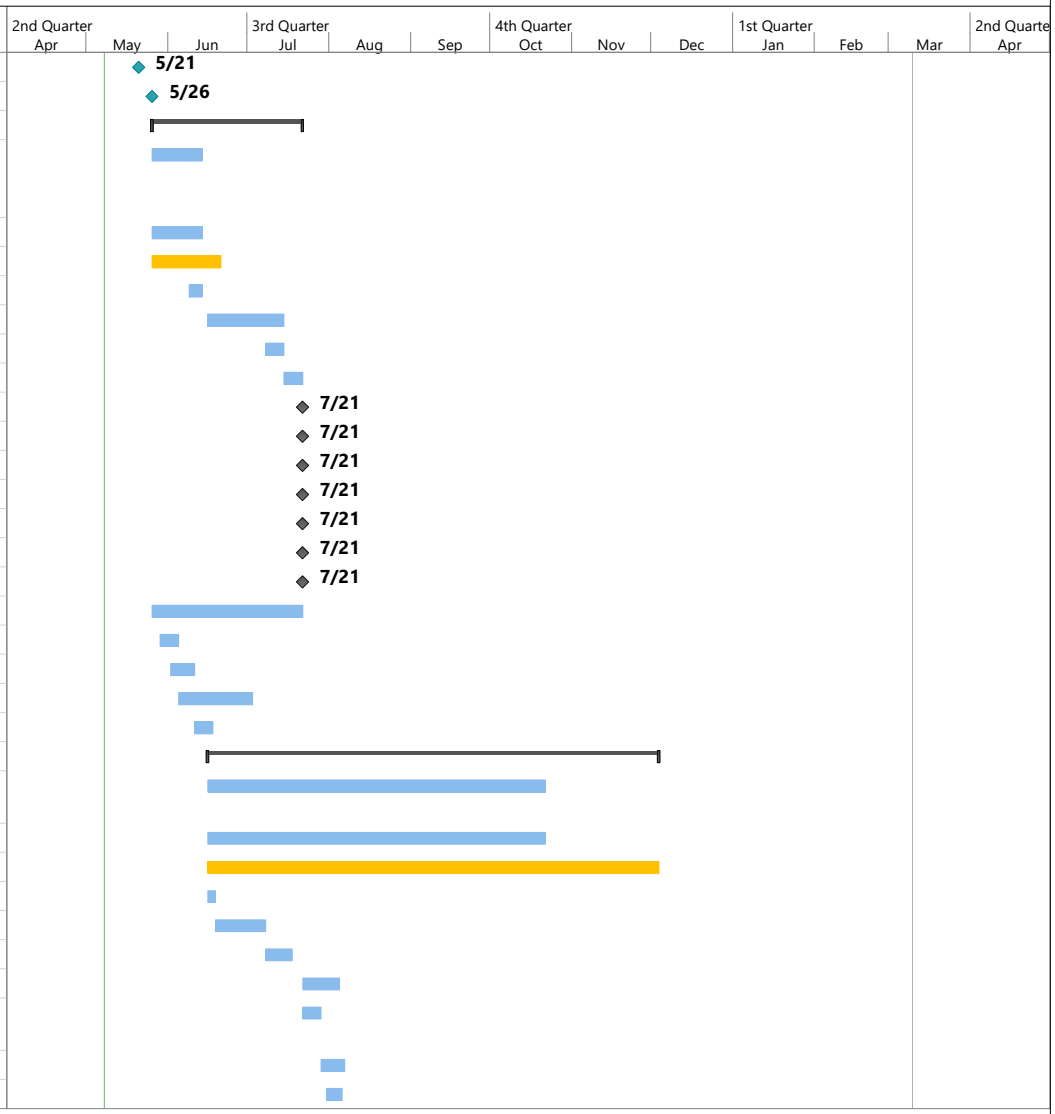
Exhibit 6A – Project Baseline Schedule

Exhibit 6B – Logistics Plan

Please refer to the attached documents.

Flood Park Phase 2 - Playground
Baseline Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
1		Letter of Intent (LOI)	0 days	Wed 5/21/25	Wed 5/21/25
2		Notice To Proceed (NTP)	0 days	Mon 5/26/25	Mon 5/26/25
3		**DESIGN DRAWINGS**	**40 days**	**Mon 5/26/25**	**Mon 7/21/25**
4		40% CD's (need survey to complete, early start on demolition plan and equipment procurement)	15 days	Mon 5/26/25	Fri 6/13/25
5		SWPPP (Plan, Approval via SMARTS)	15 days	Mon 5/26/25	Fri 6/13/25
17		Engineering for Play Element Footings	20 days	Mon 5/26/25	Fri 6/20/25
6		County Review - 40% CD's	5 days	Mon 6/9/25	Fri 6/13/25
7		90% CD's	20 days	Mon 6/16/25	Mon 7/14/25
8		County Review - 90% CD's	5 days	Tue 7/8/25	Mon 7/14/25
9		Construction Documents ISSUE	5 days	Tue 7/15/25	Mon 7/21/25
10		**Construction Issue**	**0 days**	**Mon 7/21/25**	**Mon 7/21/25**
11		Civil - Drainage	0 days	Mon 7/21/25	Mon 7/21/25
12		Civil - Survey	0 days	Mon 7/21/25	Mon 7/21/25
13		Structural	0 days	Mon 7/21/25	Mon 7/21/25
14		Landscape	0 days	Mon 7/21/25	Mon 7/21/25
15		Irrigation	0 days	Mon 7/21/25	Mon 7/21/25
16		Cathodic Protection (if required)	0 days	Mon 7/21/25	Mon 7/21/25
18		Submittals - Prep, Submission, Review	40 days	Mon 5/26/25	Mon 7/21/25
26		Initial Site Survey	5 days	Thu 5/29/25	Wed 6/4/25
24		Mobilize Temp Facilities	7 days	Mon 6/2/25	Tue 6/10/25
19		Soil Testing	20 days	Thu 6/5/25	Wed 7/2/25
27		Utility Locating, Potential Rerouting	5 days	Wed 6/11/25	Tue 6/17/25
20		**Long Lead Items Procurement**	**120 days**	**Mon 6/16/25**	**Wed 12/3/25**
21		Removable Bollards (18 Weeks - Streetlife)	90 days	Mon 6/16/25	Tue 10/21/25
22		Benches (18 weeks - mmcite)	90 days	Mon 6/16/25	Tue 10/21/25
23		Playground Equipment (24 Weeks)	120 days	Mon 6/16/25	Wed 12/3/25
25		SWPP Install (wattles, fiber roll)	3 days	Mon 6/16/25	Wed 6/18/25
28		Demolition and Off-haul	12 days	Thu 6/19/25	Mon 7/7/25
29		Rough Grading	8 days	Tue 7/8/25	Thu 7/17/25
30		Storm Drain	10 days	Tue 7/22/25	Mon 8/4/25
34		Retaining Wall - Excavate and Pour Footing	5 days	Tue 7/22/25	Mon 7/28/25
35		Retaining Wall - Form and Pour	7 days	Tue 7/29/25	Wed 8/6/25
55		Gates - Footings & Posts ONLY	4 days	Thu 7/31/25	Tue 8/5/25

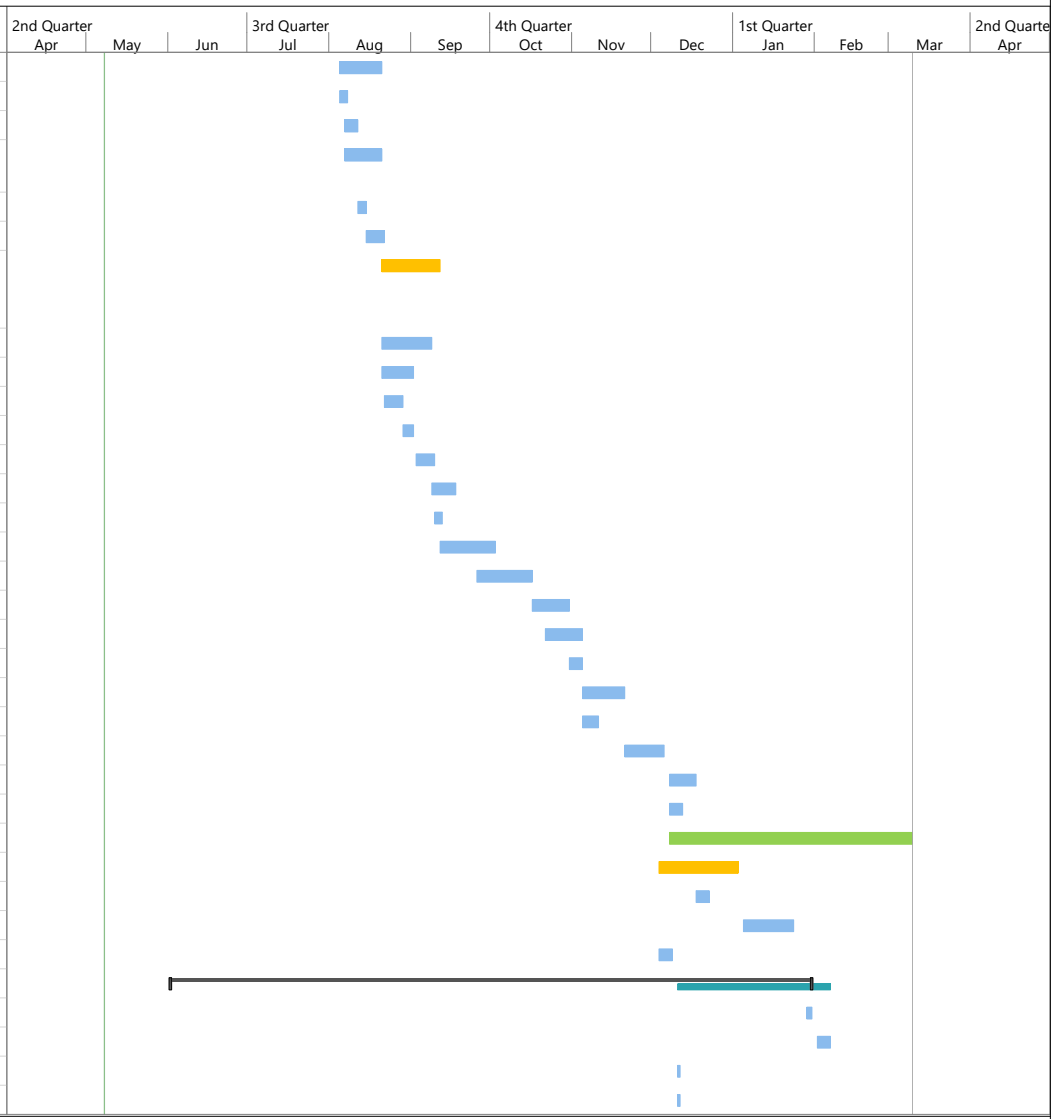


Project: Flood Park Phase 2 Play
Preliminary Schedule
Date: Thu 5/8/25

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Flood Park Phase 2 - Playground
Baseline Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
31		Install Stones	12 days	Tue 8/5/25	Wed 8/20/25
38		Domestic Water to DF	3 days	Tue 8/5/25	Thu 8/7/25
36		Retaining Wall - Drainage	3 days	Thu 8/7/25	Mon 8/11/25
44		Footings - Benches, Trash Receptacles, Drinking Fountain	10 days	Thu 8/7/25	Wed 8/20/25
37		Retaining Wall - Backfill	3 days	Tue 8/12/25	Thu 8/14/25
32		Landscape Fine Grading	5 days	Fri 8/15/25	Thu 8/21/25
33		Footings - Playground Equipment (assuming posts can be expedited separately)	15 days	Thu 8/21/25	Thu 9/11/25
41		Irrigation Laterals & Sleeves	12 days	Thu 8/21/25	Mon 9/8/25
52		Donor Pavers	8 days	Thu 8/21/25	Mon 9/1/25
61		Salvaged Boulders	5 days	Fri 8/22/25	Thu 8/28/25
62		Salvaged Logs	2 days	Fri 8/29/25	Mon 9/1/25
56		Gates - Above Grade	5 days	Wed 9/3/25	Tue 9/9/25
43		S-1 & S-2 Amended Existing Topsoil	7 days	Tue 9/9/25	Wed 9/17/25
39		Geotextile Fabric	3 days	Wed 9/10/25	Fri 9/12/25
40		Site Baserock to Finish Subgrade	15 days	Fri 9/12/25	Thu 10/2/25
46		Concrete Curbs	15 days	Fri 9/26/25	Thu 10/16/25
47		Concrete Flatwork	10 days	Fri 10/17/25	Thu 10/30/25
49		Tree Planting	10 days	Wed 10/22/25	Tue 11/4/25
53		Panel Drain @ Fibar	3 days	Fri 10/31/25	Tue 11/4/25
57		Perimeter Fencing S9A	12 days	Wed 11/5/25	Thu 11/20/25
60		P6 Fibar Surfacing	4 days	Wed 11/5/25	Mon 11/10/25
50		Shrubs	10 days	Fri 11/21/25	Fri 12/5/25
42		Irrigation Drip, Heads	8 days	Mon 12/8/25	Wed 12/17/25
58		Planting Fence S9B	5 days	Mon 12/8/25	Fri 12/12/25
72		90 Day Maintenance Establishment	64 days	Mon 12/8/25	Mon 3/9/26
48		Playground Equipment Install	20 days	Thu 12/4/25	Fri 1/2/26
51		Mulch	3 days	Thu 12/18/25	Mon 12/22/25
59		P5 Resilient Surfacing	15 days	Mon 1/5/26	Fri 1/23/26
45		Footings - Removable Bollards	3 days	Thu 12/4/25	Mon 12/8/25
63		**Site Furnishings**	**170 days**	**Mon 6/2/25**	**Fri 1/30/26**
67		Drinking Fountain (1ea)	2 days	Thu 1/29/26	Fri 1/30/26
65		S13 Benches (7ea)	5 days	Mon 2/2/26	Fri 2/6/26
64		Trash Receptacles (2ea)	1 day	Thu 12/11/25	Thu 12/11/25
66		Removable Bollards (6ea)	1 day	Thu 12/11/25	Thu 12/11/25

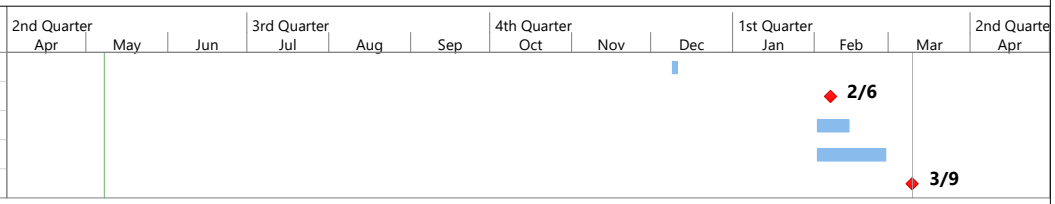


Project: Flood Park Phase 2 Play
Preliminary Schedule
Date: Thu 5/8/25

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

Flood Park Phase 2 - Playground
Baseline Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
54		AC Paving	2 days	Tue 12/9/25	Wed 12/10/25
70		Substantial Completion	0 days	Fri 2/6/26	Fri 2/6/26
68		Cleanup / Demoblilation	10 days	Mon 2/2/26	Fri 2/13/26
69		Punchlist	20 days	Mon 2/2/26	Fri 2/27/26
71		Notice of Completion	0 days	Mon 3/9/26	Mon 3/9/26



Project: Flood Park Phase 2 Play
Preliminary Schedule
Date: Thu 5/8/25

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone


Structural bridge over the SFPUC ROW. All access must pass over at this location. No exceptions.
Assume rental of the steel plates and fencing for duration of the project.
SFPUC Right of Way - See attached for additional SFPUC requirements.
Provide gate access in construction fencing
for site access.
Contractor lay down area.
Provide construction fencing for duration of the project. 6' construction fencing with sandbags and vision screen.
Maintain Public access to the restroom building.
Administration Building

Exhibit 7

SCHEMATIC DESIGN DOCUMENTS

Exhibit 7 – Schematic Design

Please refer to the attached document.

FLOOD PARK - PHASE 2 - PLAYGROUND IMPROVEMENTS
DBE BRIDGE ADDENDA - VALUE ENGINEERED SCHEMATIC DESIGN DIAGRAM

- PLAN DIAGRAM REFLECTS COORDINATION WITH DBE ENTITY AND COUNTY OF SAN MATEO PARKS DEPARTMENT & OUTLINES KEY CHANGES AND REVISIONS WHICH DEVIATE FROM THE ORIGINAL BRIDGE DRAWINGS

MAY 7, 2025

SFPUC ROW

SITE FURNISHINGS - BENCHES
- SUBSTITUTE MM CITE ALTERNATE

BOLLARDS & SFPUC ACCESS
- DBE REMAINS RESPONSIBILIE FOR CONFIRMING SFPUC ACCESS REQUIREMENTS AND ACCEPTABLE BOLLARD DESIGN
- COUNTY & CMG CAN SUPPORT

PERIMTER FENCE
- OUTLINE TO BE FINALIZED BY DBE, APPROX. EXTENTS SHOWN
- MATERIAL TO BE CONSISTENT WITH DBE BRIDGE PKG (SAND/SNOW FENCE, NO FOOTINGS)

PIP PERIMETER CURB
- TO BE 6" CLR OF FALL ZONES FOR TOLERANCE

PLANTING FENCE
- TO RUN ALONG EDGE
- CONSISTENT WITH ORIGINAL DBE BRIDGE PKG (LODGEPOLE STAKES & MANILLA ROPE, NO FOOTINGS

GUARDRAIL
- TO ALIGN WITH JENSEN VE PROPOSAL USING SS STEEL AND ARCHITECTURAL MESH

CONTAINER PLANTING
INTERIOR PLAYGROUND PLANTING CONTAINERIZED & CONSISTENT WITH BRIDGING DOCUMENTS

HYDROSEED
PLAYGROUND PERIMETER PLANTING
- USE PA-05A FROM PHASE 1
- INTERPLANT WITH EVERGREEN, NATIVE SHRUBS NO HIGHER THAN 4' TALL AT MATURE SIZE AS BUDGET ALLOWS

ASPHALT

PIP CONCRETE
PATH TO BE AN ACCESSIBLE SLOPED WALK WITH DEEPEND EDGE, NO CURBS.

OFCI DONOR PAVERS

STONE STEPPERS

ARBORIST CHIPS
- COUNTY-PROCURED ARBORIST CHIPS AROUND EXISTING TREES

PLAY HUT AND ACOUSTICAL PLAY
- ELIMINATED FROM CONTRACT

ENGINEERED WOOD FIBER

STONE
- STONE QTY REDUCED GLOBALLY
- ASSUME MAHOGANY SLABS FROM AMERICAN SOIL & STONE
- ALL STONES ARE LAID FLAT
- FINAL QTY TO BE ALIGNED AGAINST BUDGET

RESILIENT SURFACING
- SINGLE COLOR / BLACK BLEND
- VARIABLE DEPTH TO MEET FALL REQUIREMENTS

1"=10'
0 2.5 5 10 20

MATERIALS SCHEDULE

PAVING

TAG	SYMBOL	TYPE	DETAIL
P1		AC PAVING	3/L6–101
~~P2~~		~~ASP – VE~~ NOT USED	3/L6–101
P3A		DONOR RECOGNITION PAVERS	––
P3B		CIP CONCRETE PAVING	4/L6–101
P4		CONCRETE CURB	––
P5		PLAYSURFACING – TYPE 1	1/L6–102
P6		PLAYSURFACING – TYPE 2	6/L6–102
P7		FLAGSTONE PAVING	1/L6–103
P8		WOOD CHIP MULCH	––

SITE ELEMENTS

TAG	SYMBOL	TYPE	DETAIL
S1		CANYON THRESHOLD	L6–201
S2		CANYON STONE	L6–203
~~S3~~		~~CAS RE~~ NOT USED	
S4		STONE LANDSCAPE ELEMENTS	L6–204 AND DETAIL 6/L6–208
~~S5~~		~~TAC~~ NOT USED	
S6		STONE SEATING	
S7		RETAINING WALL AT TOWER BRIDGE LANDING	L6–211
S8		WOOD DECK & STAGE	L6–221
S9A		PLAYGROUND FENCE	––
S9B		PLANTING FENCE	––
S10		PLAYGROUND GATE	––
S11		WOOD LANDSCAPE ELEMENTS	––
S12		WASTE RECEPTACLES	2/L6–241
S13		BENCH	1/L6–241
S14		REMOVABLE BOLLARDS	4/L6–251
S14		DRINKING FOUNTAIN	3/L6–251

PLAY EQUIPMENT

TAG	SYMBOL	TYPE	DETAIL
SEE PLAY EQUIPMENT SHEET L1–101 FOR REFERENCE			

cmg
Landscape Architecture
444 Bryant St
San Francisco, CA 94107
415.495.3070
www.cmgsite.com

OWNER/CLIENT

COUNTY OF SAN MATEO PARKS
400 COUNTY CENTER
REDWOOD CITY, CA 94063

CONSULTANTS

PROJECT NAME

FLOOD PARK PLAYGROUND
215 Bay Road
Menlo Park, CA 94025

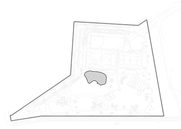
STAMP

PHASE

DESIGN BUILD BRIDGE DRAWINGS

NO.	ISSUE	DATE
	30% PS&E - SD	08.09.24
	60% PS&E - DD	11.22.24
	DESIGN BUILD BRIDGE DRAWINGS	02.28.25
01	BRIDGE DRAWINGS AMENDMENT	03.20.25
02	BRIDGE DRAWINGS AMENDMENT	03.27.25
03	BRIDGE DRAWINGS VE-4 DIAGRAM	05.02.25

KEY PLAN



SHEET TITLE

MATERIALS
OVERALL PLAN

PROJECT	DRAWN BY
CSM 2401	RS/DG
SCALE	CHECKED BY
1"= 10'-0"	AMP

SHEET NUMBER

L1-110

Exhibit 8

DESIGN-BUILDER'S PROPOSAL

Exhibit 8 – Design-Builder's Proposal

Please refer to the attached document.



REALIZE FLOOD PARK PHASE TWO

PLAYGROUND REPLACEMENT PROJECT

DESIGN-BUILD SERVICES PROPOSAL

May 8, 2025

COUNTY OF SAN MATEO

JENSEN LANDSCAPE

STUDIO 2nd Street

COVER LETTER

May 8, 2025

Mr. Nicholas Calderon, Park Director
County of San Mateo Procurement
455 County Center, 4th Floor
Redwood City, CA 94063
ncalderon@smcgov.org

RE: Realize Flood Park Phase 2 - Playground Replacement Project Proposal

Dear Mr. Calderon:

Jensen Landscape Contractor, LLC is pleased to submit our proposal for the Flood Park Phase 2 Playground Replacement Project. Enclosed we have included all required responses as requested in the RFP, as well as our Fixed Fee Price Proposal with proposed allowances and contingencies in a separate PDF document. All information submitted in this proposal is true and correct. Please contact me, Chris Perry or Ericka Moreno with any correspondence regarding this proposal.

We appreciate the opportunity and look forward to providing a successful outcome for the County of San Mateo.

Sincerely,

Jeffrey Colton, President
Jensen Landscape

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   - B. PROJECT TEAM DESCRIPTION & RESUMES
   - C. TEAM COMMUNICATION & COLLABORATION
   - D. DESIGN & CONSTRUCTION EXPERIENCE
   - E. HOW COLLECTIVE EXPERIENCE WILL TRANSLATE INTO VALUE
   - F. SKILLED AND TRAINED WORKFORCE REQUIREMENTS

2. METHOD & STRATEGIC PLAN
   - A. TECHNICAL & MANAGERIAL APPROACH TO PARTNERSHIP WITH THE COUNTY
   - B. DESIGN CAPABILITIES & PROFESSIONAL SERVICES
   - C. CONSTRUCTION MEANS AND METHODS

III. REQUESTED REVISIONS TO AGREEMENT

IV. SCOPE OF WORK

V. PROJECT SCHEDULE

Proposal Contact information:
Jensen Landscape Contractors, LLC
1250 Ames Avenue
Milpitas, CA 95035

Jeffrey Colton | President
(925) 588-8634
Jcolton@Jensencorp.com

Chris Perry | Director of Sales
(925) 750-0037
chris.perry@jensencorp.com

Ericka Moreno | Branch Manager
(408) 941-3364
ericka.moreno@jensencorp.com



Backcountry Garden - Santa Barbara, CA

I. EXCEPTIONS TO THE SOLICITATION

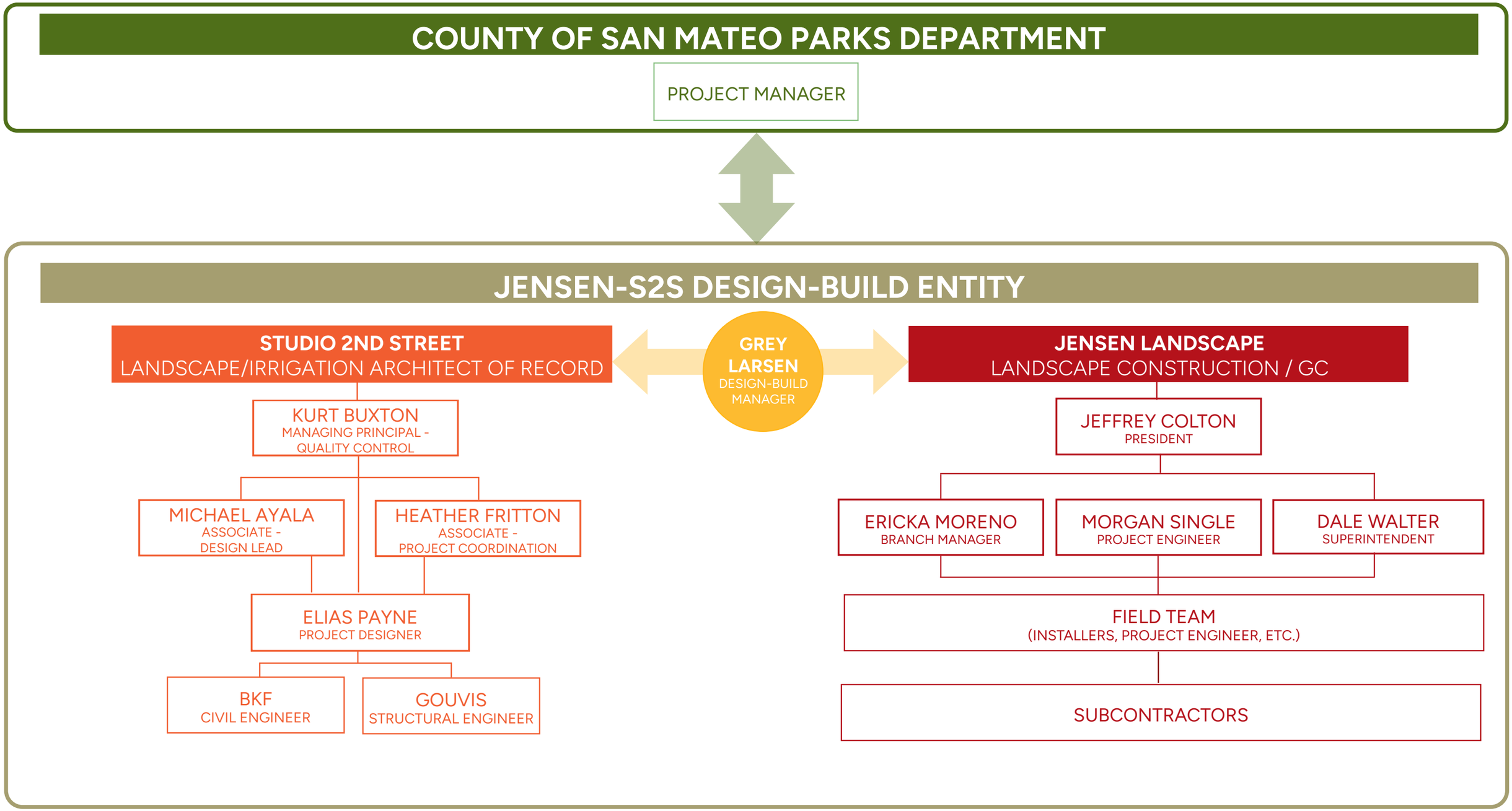
Exceptions and qualifications to the solicitation have been included in the attached scope document.

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

A. ORGANIZATIONAL CHART

The following organizational chart identifies the key individuals and their responsibilities for the Design and Construction phases of the project, and demonstrates clear lines of authority among key personnel. Jensen Landscape will be the prime contractor and Studio 2nd Street will be the Landscape Architect of Record and Irrigation Designer, and will be a subconsultant to Jensen. The Civil Engineer (BKF) and Structural Engineer (Gouvis) will be subconsultants to Studio 2nd Street. All Construction/ Installation contractors will be subconsultants to Jensen Landscape. Firm descriptions and team member resumes are provided in the pages below the organizational chart.



II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

B. PROJECT TEAM DESCRIPTION AND RESUMES

The members of the Jensen Landscape and Studio 2nd Street team share experience dating back 30 years, operating on a collaborative workflow to provide responsive, creative, cost compliant design and implementation of projects utilizing true Design Build Delivery. Our highly qualified teams understand the advantages of leveraging bridging documents in the design build process where design refinement and documentation occurs in tandem with cost modeling, material sourcing, pull planning and constructability analysis. Each progression of the project is a complete iteration, providing Ownership and the Design Build team visibility into all aspects of critical decision making in real time. With a history of enduring client relationships, the Jensen Landscape/Studio 2nd Street DBE is committing its over 50 years of combined experience in the design and implementation of recreational amenities to the actualization of the Realize Flood Park Phase 2 Playground Replacement project as a basis for a continuing partnership with the County of San Mateo Parks Department.

JENSEN LANDSCAPE

ROLE: LANDSCAPE CONSTRUCTION GENERAL CONTRACTOR

Jensen Landscape has more than 50 years of landscape installation experience, helping to create a seamless transition from bare ground to lush green environments for architects, owners, general contractors, public agencies, and developers. We can handle complicated, difficult projects, meet bid requirements, and provide customized quality solutions. Servicing both public and private entities, our team of top landscape professionals approaches every project with unmatched speed and efficiency to ensure that you meet your deadlines. Our proactive communication procedures help our customers stay informed and you can depend on our teams to deliver on your scope of work. We have the capability, resources, and experience to install landscapes of any size and complexity for a variety of entities.

Experience has taught us that no two properties are alike, nor are all clients' needs the same. Jensen believes in partnering with clients to understand their business or personal needs, which in turn allows us to understand their landscapes. We partner with architects and property owners in the design, construction, and maintenance of their sites. Through our continuous communication and by leveraging the resource of talent in our company, Jensen proactively develops landscape solutions that help reduce cost and provide the best outcome for our clients. Our mission and core values drive our business practices to give the best quality and customer care.

STUDIO 2nd Street

ROLE: LANDSCAPE ARCHITECT OF RECORD AND IRRIGATION DESIGN

Studio 2nd Street is a small, nimble Landscape Architecture practice focused on the utilization of advanced technology to create curated design solutions. Our designs, as well as the method & approach toward creating and communicating design ideas, are unique to each project. Leveraging over 60 combined years of industry experience, Studio 2nd Street creates great design by discovering new processes to craft it. We understand the importance of innovation and we're devoted to the pursuit of efficient and informative software and workflows. The S2S team strives to provide our clients with state-of the art, streamlined workflows, allowing tech to support and enhance the design process. Our services include Landscape Architecture & Design, Irrigation Design, Virtual Design & Construction, Building Information Modeling (BIM), Revit Modeling/Coordination, Predevelopment Services, Design Build Delivery, Environmental Design, Nature Play and LEED and SITES Support.

BKF ENGINEERS

ROLE: CIVIL ENGINEER

Since 1915, BKF Engineers earned a reputation for its ability to successfully plan, design, survey, and implement complex projects. We draw upon and utilize our experience diligently guiding projects from the initial due diligence and feasibility stages, progressing project designs and permitting approvals, and concluding with construction and implementation. This proven approach recognizes that developing dynamic projects is informed by focused team collaboration, mitigating physical constraints and potential risks, and balancing designs goals with value engineering solutions. BKF's decades of engineering, surveying, and planning experience is evident in our legacy projects throughout the west coast. By leveraging our diverse project portfolio in combination with innovative design solutions, BKF's team of more than 450 experienced staff is dedicated to successfully delivering sustainable and dynamic projects for our communities and partners.

GOUVISengineering consulting group, inc.

ROLE: STRUCTURAL ENGINEER

Gouvis Engineering Consulting Group delivers first class engineering services for many of the largest builders and architects throughout the country. With a tenured staff of over 100 employees company wide, we have the resources and workforce to meet any schedule requirement. Gouvis Engineering is uniquely structured into product specific teams, ensuring your project is designed and coordinated with the highest level of knowledge and experience. The Gouvis team of SMEP experts understands that efficient system operation is vital to project success. Our comprehensive audits, evaluations, inspections, code calculations and recommendations are aimed at one goal: to achieve optimal life cycle costing.

TEAM MEMBER RESUMES

JEFFREY COLTON

PRESIDENT OF CONSTRUCTION

JENSEN LANDSCAPE



After 32 years at ValleyCrest Landscape Companies Jeff is very happy to be part of Monarch Landscape / Jensen Landscape as the President of Construction. He enjoys leading teams to build beautiful projects throughout the Northwest, Northern California and all the other locations as Jensen continues to grow.

KEY PROJECTS

Yerba Buena Island Hilltop Park | San Francisco, CA
Treasure Island Development Group

+ $12M Construction Budget
+ Features the unique conversion of an existing 2-million gallon water tank into an overlook with views of downtown San Francisco, Golden Gate Bridge, Bay Bridge, Alcatraz and the surrounding Bay Area.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.
+ Featured in The New York Times, The Economist, and San Francisco Chronicle.

Yerba Buena Island Dog Park | San Francisco, CA
Treasure Island Development Group

+ $1.1M Construction Budget
+ New dog park featuring salvaged boulders embedded into slopes, gravel area, custom fencing, drinking fountain, landscaping irrigation, drainage, site concrete and lighting.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.

Facebook Campus | Menlo Park, CA
Facebook

+ $75M Construction Budget
+ 10+ Years of being primary landscape contractor on new campus.

Japantown Heilinville Park | San Jose, CA
Shay Builders

+ $4.9M Construction Budget
+ Community Urban Park, architectural concrete, pavers, trellises, picnic areas, playground, play surfacing, picnic area, planting areas, architectural/decorative fencing, site furnishings.

EDUCATION

+ Bachelor of Arts, Broadcast Journalism - Cal State Northridge

LICENSURE / REGISTRATIONS

+ CA License A, B and C-27

SPEAKING ENGAGEMENTS

+ Guest Lecturer - Cal State East Bay - "Construction Lean Principles"

ERICKA MORENO

BRANCH MANAGER

JENSEN LANDSCAPE



Ericka is a construction professional with 20+ years of experience in the industry. She has sold and managed multiple projects, valued at $500K to over $15M. Ericka demonstrates leadership, communication, and management skills in Sales, Operations, Finance and Purchasing. She is skilled at working with multiple stakeholders in collaborative design and construction processes, and leads teams of various sizes in Operations, Sales/Business Development and Project Management.

KEY PROJECTS

Mission Rock Horizontal, Parcel A, Parcel B, Parcel G & China Basin Park, | San Francisco, CA
Tishman Speyer/ Webcor Builders/Swinerton Builders/Hathaway-Dinwiddie

+ $11.5 M Construction Budget
+ Neighborhood Park, Streetscape, Site furnishings, Commercial Office/Residential Building Landscape, Roof/Patio Gardens

UCB Helen Diller House | Berkeley, CA
UC Berkeley/ Build Group

+ $1.8M Construction Budget
+ Student Housing Residence Hall, Streetscapes, Site Furnishings, Roof Garden, On Structure podiums Patios/ landscape, Synthetic Turf

Google Java Site & Parking | Sunnyvale, CA
Google / XL Construction

+ $5.4M Construction Budget
+ Commercial Office Park Campus, Bioretention area, Exterior Green wall, Campus Landscape, Site Furnishings, Basketball Court, synthetic Turf

Menlo Community Center | Menlo Park, CA
City of Menlo Park/Facebook, Inc.

- $1M Construction Budget
- Community Center, landscape, irrigation, playground, play surfacing, bio retention, site furnishings.

1629 Market Street | San Francisco, CA
Market Street 1629 Ventures

- $2M Construction Budget
- Residential Building, Community/City park, roof/desk patios/ gardens, decking, site furnishing, landscape, irrigation, playground, play surfacing, boulders, pavers.

EDUCATION

+ Master of Science, Civil Engineering, emphasis on Construction Management - University of California Berkeley
+ Bachelor of Science, Civil Engineering, Minor, Urban Studies and Planning - Massachusetts Institute of Technology

SKILLS

+ Fluent in Spanish, both written and verbal communication
+ Microsoft Office Suite
+ Procore
+ Salesforce

GREY LARSEN

PROJECT MANAGER

JENSEN LANDSCAPE

Grey is an experienced Project Manager with 14 years experience in the Construction Industry. As a GC, he managed and led the construction of $15+ million park projects on Yerba Buena Island, as well as managing over 15 subcontractors, an internal project office, and field teams. Grey conducts weekly OAC meetings with owner,s project designers, engineers, and City representatives. He has the ability to overcome project challenges when the arise whether due to design, site conditions, access, schedule and limited budget.

KEY PROJECTS

Yerba Buena Island Hilltop Park | San Francisco, CA
Treasure Island Development Group

+ $12M Construction Budget
+ Features the unique conversion of an existing 2-million gallon water tank into an overlook with views of downtown San Francisco, Golden Gate Bridge, Bay Bridge, Alcatraz and the surrounding Bay Area.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.
+ Featured in The New York Times, The Economist, and San Francisco Chronicle.

Yerba Buena Island Dog Park | San Francisco, CA
Treasure Island Development Group

+ $1.1M Construction Budget
+ New dog park featuring salvaged boulders embedded into slopes, gravel area, custom fencing, drinking fountain, landscaping irrigation, drainage, site concrete and lighting.
+ Significant components of structural, civil, irrigation, electrical and landscaping.
+ Key attraction for the ongoing $5B TI / YBI development.

Flood Park Phase 1 | Menlo Park, CA
County of San Mateo

+ $8M Construction Budget
+ 22-Acre park renovation featuring new landscaping, pathways, underground utilities, picnic areas with custom bbq islands, site furnishings, soccer field, tennis and pickleball courts, basketball court, and parking improvements.



EDUCATION

+ Bachelor of Science, Civil & Environmental Engineering - University of Massachusetts Amherst
+ *Honors: Commonwealth Honors College, Cum Laude*

SKILLS & CERTIFICATIONS

+ Construction Management: Procore, PlanGrid, Microsoft Project (Scheduling)
+ Estimating / Takeoff: Bluebeam, On-Screen Takeoff, Microsoft Excel
+ Certifications: E.I.T. – Massachusetts, Apr. 2012, Excavation Competent Person, 40 Hour HAZWOPER

DALE WALTER

SUPERINTENDENT

JENSEN LANDSCAPE

Dale Walter is a construction professional with over 30 years of experience in building and operations. Organized, collaborative, motivated, and optimistic, Dale is a team player adept at reading building plans and enforcing industry safety and standard regulations. He is detail-oriented and strategic with a priority on clear client communication. Dale is skilled in inclusive, effective leadership and creative problem-solving.



KEY PROJECTS

Flood Park Phase 1 | Menlo Park, CA
County of San Mateo

+ $8M Construction Budget
+ 22-Acre park renovation featuring new landscaping, pathways, underground utilities, picnic areas with custom bbq islands, site furnishings, soccer field, tennis and pickleball courts, basketball court, and parking improvements.

Japantown Heilinville Park | San Jose, CA
Shay Builders

+ $4.9M Construction Budget
+ Community Urban Park, architectural concrete, pavers, trellises, picnic areas, playground, play surfacing, picnic area, planting areas, architectural/decorative fencing, site furnishings.

LICENSES, CERTIFICATION, EDUCATION

+ General Engineering A License
+ CA C27 Landscape License
+ Class A Commercial CA Driver's License (+ trailer endorsement)
+ Polyethylene Fusion Certification
+ Sequoia Automotive Institute
+ Forklift Certification

AWARDS AND HONORS

+ Best of Houzz Service Award 2018, 2017, 2016 and 2015
+ California Contractor's Landscape Association (CLCA) Bay Area Chapter Awards:
  - 2018 Sweepstakes Award
  - 2018 First Place Sm Residential Renovation
  - 2018 First Place Sm Residential Installation
  - 2015 First Place Lg Residential Installation
  - 2009 First Place Design/Build Landscape Award

VOLUNTEER ACTIVITIES AND SERVICE

+ UCI Haiti, Medical, Elementary and Leadership Training - November 2018
+ Board of Directors, Church on the Hill, San Jose, CA 2003 TO 2021 (Executive Board 2013-2015)
+ Project and Volunteer Management, Church on the Hill, San Jose, CA

KURT BUXTON

MANAGING PRINCIPAL / CEO

STUDIO 2nd Street

Kurt Buxton has over 30 years of experience in landscape architecture. His knowledge of the diverse climate and cultural fabric of the designed environment balanced with a thoughtful, collaborative approach to management make him a valued design leader. Kurt motivates his team through an iterative design process, promoting creativity, artistic expression, and purpose. Buxton is highly respected for his thought leadership, where he fosters a collaborative studio environment. Kurt founded Studio 2nd Street with key members of the Technology and Innovation team he fostered over the past 5 years in order to continue a culture of creativity , collaboration and professional excellence in the design build and virtual design and construction space.

KEY PROJECTS

Backcountry Garden | Santa Barbara, CA
Santa Barbara Botanic Garden

+ Provided Design, Design Documentation, Permitting, Construction Support for a 78-acre nature play area through Design Build Delivery

Prescott Preserve | Palm Springs, CA
Ozwit Land Trust

+ Providing Landscape Design, Hardscape Design, Design Guidelines, Cost Estimating and Construction Support for a 100+ acre wildlife habitat preserve

Boulder Junction Nature Lab Play Area | Montecito, CA
Montecito Unified School District

+ Provided Design, Design Documentation, Permitting, Construction Support for an Outdoor Nature Play Area for Variety of Age Groups through Design Build Delivery

Crane Country Day School Nature Play Area | Santa Barbara, CA
Crane Country Day School

+ Design and Master Planning for an Outdoor Nature Play Area at an Elementary and Middle School serving Kindergarten through 8th Grade

Arlington Heights Sports Park | Riverside, California
City of Riverside, California

+ Provided Design, Design Documentation, Permitting, Construction Support , Design Build Delivery for a 35-acre park featuring multiple sports fields.

Sendero Field Adventure Park | Rancho Mission Viejo, California
Rancho Mission Viejo

+ Provided Design, Design Documentation, Permitting, Construction Support for a 15-acre Community Park including an adventure playground, baseball fields and pickleball courts.



EDUCATION

+ Bachelor of Science Landscape Architecture - California Polytechnic University, San Luis Obispo

LICENSURE / REGISTRATIONS

+ State of California #3250
+ State of Florida #LA6667096
+ State of Illinois #157.001496
+ State of North Carolina #1670
+ State of Colorado #LA 1629
+ State of New York #3068
+ State of Maryland #4257
+ LEED Accredited Professional
+ SITES Accredited Professional

PROFESSIONAL ASSOCIATIONS

+ American Society of Landscape Architects
+ Building Industry Association
+ Design-Build Institute of America
+ Dean's Advisory Council Cal Poly San Luis Obispo
+ Landscape Architecture Advisory Council, Cal Poly San Luis Obispo
+ Advisory Council Saddleback Community College
+ Adjunct Faculty Saddleback Community College
+ Part-Time Lecturer Cal Poly San Luis Obispo
+ U.S. Green Building Council

AWARDS

+ ASLA Colorado Honor Award - Backcountry Garden - 2023

MICHAEL AYALA

ASSOCIATE, LEAD DESIGNER

STUDIO 2nd Street

Michael is a valued member of the S2S team and has experience working on parks, master-plan communities, commercial landscapes, mixed-use developments, and international projects. Michael has been passionate about the arts since he was a child, and further developed his passion by turning it into a career. He is an advocate of with working with the latest tools and programs available, and seeks to establish new principles within the company. From graphic renderings, developing plans, to overseeing construction out in the field, Michael's goal is to be a well-rounded Landscape Architect.

KEY PROJECTS

Fair Park Community Park | Dallas, TX
Fair Park First
+ 14 Acres, Landscape Design, Playground Coordination, Bridge & Water Feature Design Support, Site Materiality

Park at MLK Magnet Core | Fresno, CA
City of Fresno Public Works
+ 13 Acres, Landscape Design, Playground Design and Coordination, Site Materiality, Community Outreach

Highland Park at Portola Springs | Irvine, CA
Irvine Co.
+ 5 Acres, Rec Center, Park Design Refinement, Playground Narrative Development, Construction Administration

Hillcrest Park at Portola Springs | Irvine, CA
Irvine Co.
+ 6 Acres, Community Rec, Park Design Refinement, Playground Narrative Development

Promenade Park at Baker Ranch | Lake Forest, CA
Shea Homes
+ 10 Acre Linear Park Design, Intergenerational Playground Coordination, Construction Administration

Vista Swim Club at Baker Ranch | Lake Forest, CA
Shea Homes
+ 3 Acres, Playground/Pool Design Coordination

Oaks Tennis Park at Baker Ranch | Lake Forest, CA
Shea Homes
+ 3 Acres, Playground & Sport Courts Coordination, Construction Administration



EDUCATION

+ Bachelor of Science, Landscape Architecture - California Polytechnic University of Pomona
+ Associate of Science in Architecture - Rio Hondo College

TECHNOLOGY AND INNOVATION

+ Revit
+ Site-BIM workflows and coordination
+ Advanced Modeling
+ Design Visualization
+ Ai Proponent

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

C. TEAM COMMUNICATION & COLLABORATION

The Jensen-S2S Team's management plan is centered on creating a strong partnership between our team and the Owner through highly organized and collaborative process. With any Design-Build process, our team's responsibility is to present design and construction solutions that allow for timely feedback from Ownership, create high performing spaces and meet the programmatic needs as well as design standards of the project. Our team's work style is to share ideas, images, and design across multiple platforms enabling the process to rapidly move forward while collaborating with our team members who bring key supporting expertise to the project.

Jensen will function as the Design-Build manager during all phases of the project and will be responsible for overall team coordination and management, pre-construction services, constructability review and procurement evaluation. The design stages will be coordinated and led by Studio 2nd Street, who will function as a design process coordinator and design quality control manager. In addition, the Jensen-S2S Team will partner with trusted subconsultants to execute the project.

The project will benefit from the collective expertise in Design-Build delivery across the entire The Jensen-S2S team combined with our sub-consultants to maximize value on behalf of the County. In all phases of the project, The Design-Build Manager will be the primary contact for the Owner to keep communications simplified, timely and engaged between the Ownership Team and the Jensen-S2S Team throughout all phases of the process.

The Jensen-S2S management approach places the highest priority on Client and Team communication. Our key personnel have years of experience leading, managing and implementing projects throughout California and across the United States with diverse teams of Client groups, stakeholders, and subconsultant partners. Our team seeks to deliver high-quality projects that are on schedule, on budget, and well-managed. Great management involves a lot of foresight, a bit of creativity, a mix of rigor and flexibility, and a dose of empathy. Those characteristics only come with time and experience. Our management team, led by Jensen and Studio 2nd Street, and reinforced by the leaders of our highly qualified subconsultant team members, has executed a great number of complex projects similar to those described in the Realize Flood Park Phase 2 RFP. Our team leaders will facilitate the design projects using a mix of project management systems, including:

• **Strategic Kickoff Meeting (SKO):** The purpose of the SKO is to review the scope of work, project goals, deliverables, and schedule, as well as to set the Vision for the project in order to get all team members moving in the right direction. The Project Manager will clarify the roles and responsibilities of the consultant team members as well as the client. Last but not least, we will make sure we understand the County's requirements for file sharing, billing, invoicing, and any other County requirements.

• **Communication Plan:** At the beginning of the project the Jensen-S2S team will establish a Communication Plan designed to keep the consultant team in contact with the client in the most effective and efficient way. The plan will include a schedule for regular design meetings, weekly progress reports to be sent out at the beginning of the week, and on-going coordination calls as needed. The format of communication (e.g., phone call, email, hard copy) will be specified based on the County's preferences.

• **Project Schedule and Milestones Plan:** The Jensen-S2S team will confirm the project schedule and milestones with the County and reiterate the schedule to the entire Consultant team. The schedule will be created in Microsoft Project and include all major submittals, early procurement of long lead items, designated times for design team quality control reviews, client review periods, and municipal submittal review periods needed to achieve the best and most efficient results on the project. Regular communications with the City, consultant team and internal design team will be imperative to provide high quality outcomes

and service from start to finish. At each major milestone our Managing Design Principal will provide Quality Control on all final drawings and submittals before the City conducts a major review. This process will create a framework of several checks across all consultant teams, deliverables and materials as well as project timeline.

• **Weekly Progress Report:** Each week the Project Manager will send a weekly project report via email to designated members of the County's team summarizing where we are in the process and identifying any key issues that need to be address.

• **Weekly Client and Team Calls:** The design-build team will participate in weekly or bi-weekly calls to ensure that every member of the team is coordinated and moving the project forward efficiently. An agenda will be sent prior to the meeting to guide the discussion and detailed meeting notes will be taken and distributed to the group afterward, highlighting key decisions and action items for the upcoming week.

• **Submittal and Deliverables Checklist:** This list of submittals and deliverables provides an updated status report on the contract deliverables and the dates of each submittal. It is a quick check on the progress of the project and can also be used as a tool for confirming time billed on invoices.

• **Risk Management Plan:** Every project has risk, but identifying potential risks early will ensure the team manages for these challenges proactively to keep the project timeline and budget on track. Our Project Manager will review the potential risks on the project with the client and design team at the beginning of each phase of work and proactively brainstorm for potential solutions. If a challenge does arrive, we will already have a clear set of steps to correct the course of the project and mitigate any negative impacts.

• **Pull Planning/Decision Matrix:** To support the decision-making process, our team will establish a Decision Matrix tied to the project schedule to allow the Client team to clearly understand a timeline of decisions early in the process so decisions can be appropriately evaluated and addressed. Our responsibility is to identify a process that leads a productive dialogue and resolution, and not create a design environment where decisions are rushed and forced.

• **Client Engagement & Review:** The County will play an integral role in QA/QC throughout the course of the project by providing important input to keep the project's goals, objectives and conformance to standards on track. It will also be imperative that the County reviews and provides feedback on all major design and construction submittals throughout the project process.

• **Design Iteration on Program, Agency Standards & Cost Budget:** In partnership with the consultant team, Studio 2nd Street will provide cyclical design reviews on project programming goals, design drawings and reviews to meet agency standards and requirements. Workshops and on-going coordination calls will be used to create feedback loops that include all design specialties to generate an intelligent and informed project design. At key stages the Jensen-S2S Team will lead cost estimation effort to provide budget checks to maintain desired project cost goals throughout the design process.

Mitigating Design-Build Challenges

The Jensen-S2S team mitigates many of the challenge of Design-Build by bringing our years of experience working on Design-Build projects together. Key design personnel from Studio 2nd Street are paired with their counterparts from Jensen Landscape early in the design cycle. In-house pre-construction specialists provide real-time input on such matters as constructability, schedule implications, cost implications, materials, means, and methods that allow the design team to make quick assessments of advantages or disadvantages of various design solutions before appealing but potentially problematic design ideas are advanced from concept to schematic or design development stages of the project.

Further, the collaboration used by both Jensen and Studio 2nd Street allows Construction team members to gain valuable

insights into, and respect for what constitutes "Design Excellence". At the same time Design team members learn about practical aspects of constructability, durability, site access, or other issues that may not normally become apparent until too late in the design continuum. The intent of this collaborative interaction is to realize a high quality of design while creativity navigating within the existing site context, schedule, implementation or cost constraints.

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

D. DESIGN AND CONSTRUCTION EXPERIENCE

Design Experience

Playground and park design has been core to Studio 2nd Street's professional practice for 3 decades ranging from traditional playgrounds to risk taking adventure nature play areas. Managing Principal Kurt Buxton has 37 years of playground and park design experience and will be supported by experienced design team members who are passionate about bringing well-designed playgrounds and parks to life. Studio 2nd Street understands that playgrounds are an experience, not just an arrangement of play equipment, and therefore the design team's goal is to create a stimulating environment for the children, families and individuals who visit the park. The design must include the incorporation of activities for fine motor skills, gross motor skills, creative & collaborative social skills and quiet, contemplative connection with nature. A good playground also addresses accessibility and is geared toward inter-age group play. It is important to understand how families of all kinds use and experience play areas and parks in order to accommodate them within the design idea. Studio 2nd Street takes all users' experiences into account when designing and completing a park, such as where people will sit and how parents will monitor their children. S2S also brings a high level of technical expertise based on our decades of experience regarding how materials integrate and making sure that they're all fit to a purpose. Understanding how all of the components of the playground work together within the park is important. Having done extensive design and implementation of playgrounds and parks, we understand the nuances of materials from design to costing to construction. In short, we know what it takes to create a successful, sustainable and most importantly enjoyable play environment.

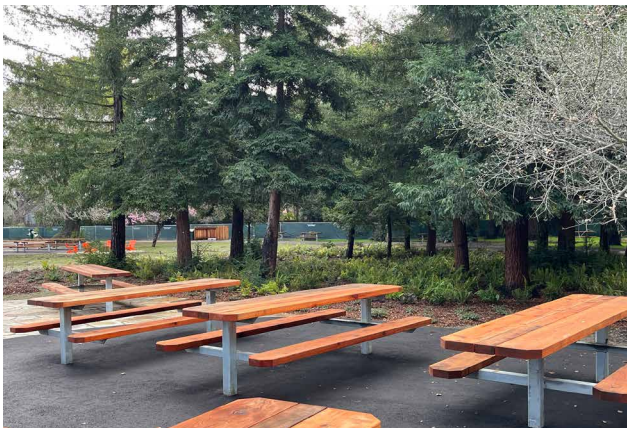
Construction Experience

Since 1969 Jensen Landscape has been an established park and playground installer and is considered one of the top landscape contractors in the Northern California construction market. Our team of professionals have installed projects in the range of $200,000.00 to $24,000,000.00 in both the public and private sectors. Every job completed has required some level of design assist/build working directly with the architectural team and the client. We have established several tools and processes to navigate through this delivery process to ensure a smooth delivery of the overall design intent, always keeping the budget in mind. On the 1629 Market project we worked closely with the entire team to offer valuable value engineered options to produce and install a playground that met the needs of the development and met the budget requirement of the project. The Heinlenville Park project was a collaboration of subcontractors, private ownership team members and city officials to embrace the local design intent for the Japantown neighborhood. Jensen dedicates and entire project team to each opportunity to ensure a successful outcome for all parties involved. A project team is assigned to oversee the project in its entirety, working closely with Ownership. Our team will also work closely with the design team to make sure current pricing, and options are reflected in various stages of the design, without affecting the design intent. Once designed, our project management and superintendent team will work with all parties involved to ensure a project that is built with the highest standards possible, on time, within budget and injury free for all involved.

The project sheets on the following pages demonstrate some of the parks and playgrounds that the team has completed.









Flood Park Phase 1

MENLO PARK, CALIFORNIA

JENSEN LANDSCAPE

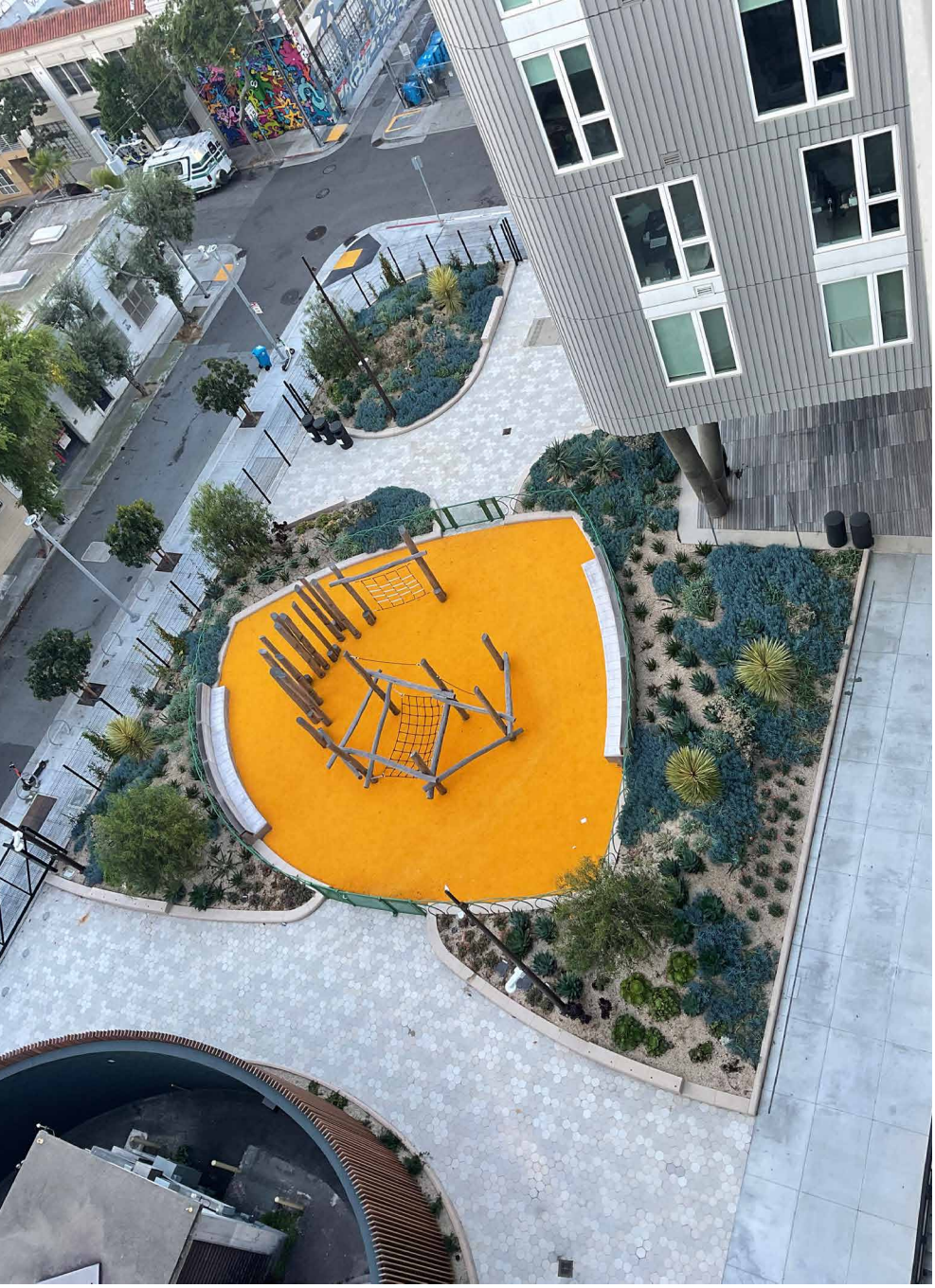
Flood park has been in operation for 86 years. Jensen was selected through a competitive process to complete the Phase 1 renovation. The Park renovation started in early 2024 and included several renovations to all elements of the landscape and site. This is the first phase of many to revitalize the 86 year old park that has required a multitude of feature and infrastructure repairs. Phase 1 is schedule to be completed in early 2025.

PROJECT DETAILS:

- Contract Value: $8,949,000
- Client Contract Info:
  County of San Mateo
  Nicholas Calderon
  ncalderon@smcgov.org
- Completed Early 2025

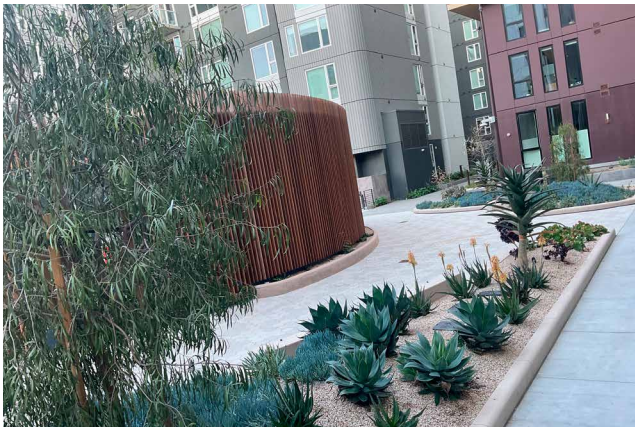
PROJECT SCOPE:

- Preconstuction Services & Installation
- Fencing
- SWPPP
- Paving and Hardscape
- Masonry
- Grading
- Tree Preservation
- Site utilities
- Electrical
- Site Furnishings
- Planting
- Irrigation
- Sports Courts









1629 Market

SAN FRANCISCO, CALIFORNIA

JENSEN
LANDSCAPE

1629 Market is a mixed-use development with residential over parking. This city development is very unique as it provides a half-acre of privately owned public open space. Jensen was responsible for various aspects of the site construction and installation of the open space. The open space includes and playground and other recreational components.

PROJECT DETAILS:

- Contract Value: $2,024,000
- Client Contract Info:
  Suffolk Construction
  Sven van der Sluis
  415-516-6879
- Completed June 2024

PROJECT SCOPE:

- Preconstuction Services & Installation
- Paving and Hardscape
- Grading
- Bio-retention
- Stone elements
- Playground structures & surfacing
- Planting
- Irrigation









Heinlenville Park

SAN JOSE, CALIFORNIA

JENSEN LANDSCAPE

San Jose Japantown's newest park called Heinlenville Park opened on Tuesday October 10, 2023. The park is named after John Heinlen, who helped Chinese immigrants rebuild a new Chinatown in 1887 after the ethnic enclave was destroyed in a fire. Heinlenville in San Jose lasted until 1931 but closed down due to The Great Depression. The name Heinlenville Park was spearheaded by a letter-writing campaign by the Chinese Historical & Cultural Project (CHCP) with community support and finally approved by the San Jose City Council. The park has been in the making for more than two decades. You'll find storytelling throughout the park celebrating the culture of the neighborhood.

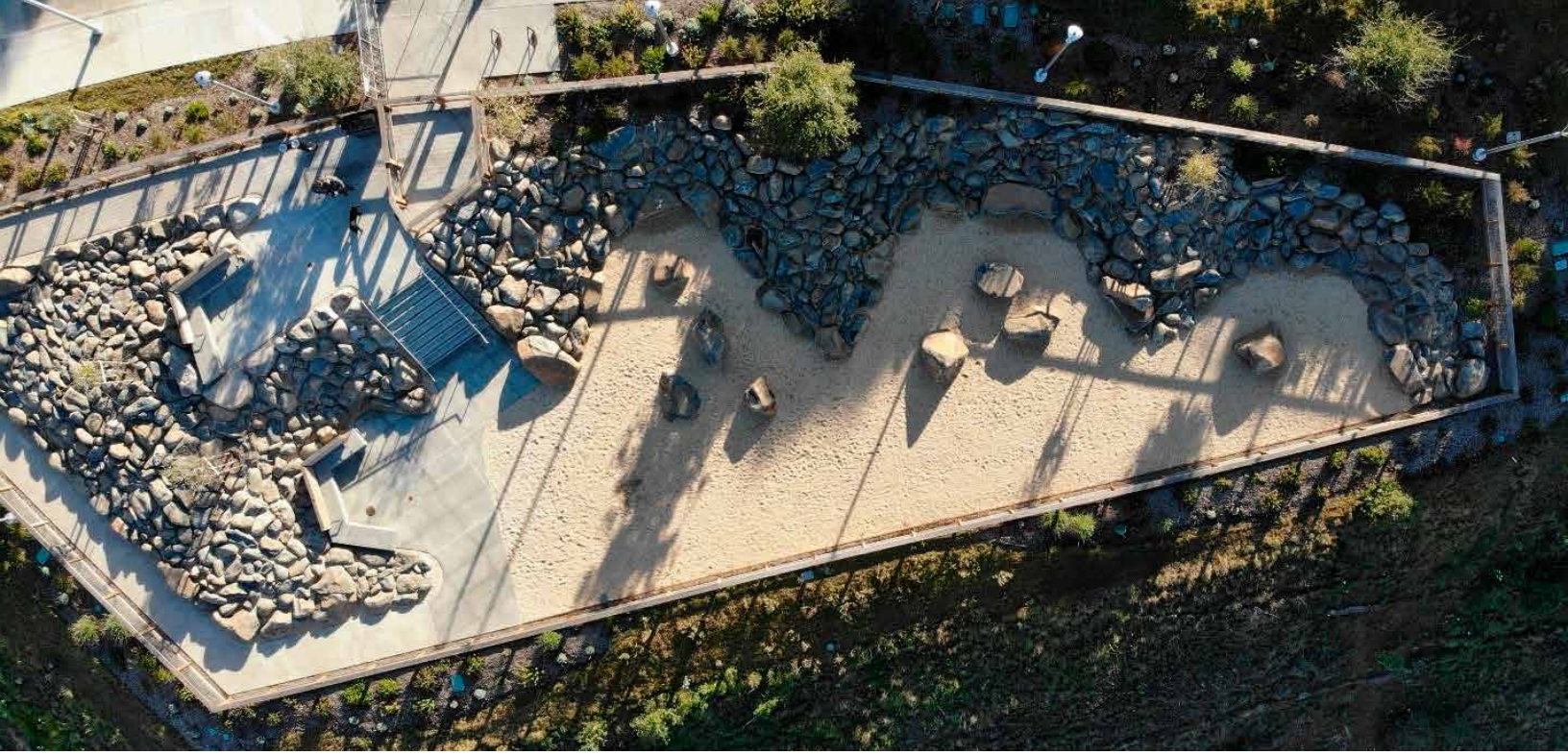
"Jeff and his team supported a beautiful turnkey park project for Swenson and our client, Shea Properties." - John Cantlen, Vice President of Construction - Swenson

PROJECT DETAILS:

- Contract Value: $4,984,698
- Client Contract Info:
  Swenson Builders
  John Cantlen
  408-210-2170
- Completed June 2023

PROJECT SCOPE:

- Preconstuction Services & Installation
- SWPPP
- Paving and Hardscape
- Grading
- Bio-retention
- Site utilities
- Electrical
- Stone elements
- Arbors and structures
- Planting
- Irrigation





Yerba Buena Island Dog Park

SAN FRANCISCO, CALIFORNIA

JENSEN LANDSCAPE

The Yerba Buena Island Dog Park is highlighted by a unique salvaged boulder scramble design embedded into the hillside and boasts stunning views of the San Francisco Bay. The park also features new irrigation, storm drainage, site lighting, ADA compliant concrete paving and handrails, custom salvaged eucalyptus and concrete seating surrounded by attractive wood fencing and native planting. Jensen was the General Contractor for the project and worked closely alongside CMG as the Landscape Architect.

PROJECT DETAILS:

- Contract Value: $1,504,000
- Client Contract Info:
  Treasure Island Dev. Group
  Magdalena Myszka
  415-914-5664
- Completed 2022

PROJECT SCOPE:

- SWPPP
- Grading, Storm Drainage, Sanitary Sewer
- Irrigation, Electrical, Lighting
- Boulders, Rock mulch, Stone infill
- Concrete Flatwork
- Custom Concrete & Wood Seating
- Site Furnishings, Fencing, Handrails
- Planting









Backcountry Garden

SANTA BARBARA, CALIFORNIA

S2S ROLE: LANDSCAPE ARCHITECTURE + DESIGN, DESIGN-BUILD COORDINATION

As part of the beloved Santa Barbara Botanic Garden, The Backcountry Garden provides influential experiences that create formative connections between visitors and the natural world. This garden provides a stimulating space where children, families and visitors can manipulate, create, climb and interact with the natural environment around them. The Backcountry Garden allows for multiple senses to be activated through sight, touch, sound, smell and taste to create deeper emotional connections to the great outdoors. The space celebrates the natural ecology by allowing the environment to direct the programming and design of the spaces. This site pays homage to the historical structures, cultural influences and donor groups that have helped shaped this garden. Studio 2nd Street worked closely with the Botanic Garden staff and stakeholders to provide a whimsical design that will promote a sense of curiosity, risk-taking and joy in uncovering the lessons the backcountry experience has to offer.

ASLA Colorado 2023 Honor Award Winner









Adventure Play Park at Sendero Field

RANCHO MISSION VIEJO, CALIFORNIA

S2S ROLE: LANDSCAPE ARCHITECTURE + DESIGN

Adventure Play Park is the playground area of the 15-acre Sendero Field, one of the parks created for the Rancho Mission Viejo community. Adventure Play Park is a nature-inspired playground designed to stimulate children's imaginations. The play area is surrounded by a lush landscape of greenery and tree groves – the perfect setting for an outdoor adventure. Children can follow a resilient blue trail through the play area along a series of undulating concrete walls weaving through integrated bioswales and long grasses along the adjacent creek which inspired the design. A wide sidewalk leads to a bike path nearby where families can stroll or bike and look for lizards, turkey vultures, swallows, and nests in the sycamores. Kids love the balance beams, rock climbing and "spiderweb" rope ladders, toadstools for balancing near the hollow log tunnel, and bumpy tunnel & ladder arches. Innovative and sustainable by design, the Adventure Play Park is crafted using 100 percent post-consumer recycled planks, steel reinforced cables for safety, and hand-painted concrete for a more natural aesthetic.

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

E. HOW COLLECTIVE EXPERIENCE WILL TRANSLATE INTO VALUE

PREVIOUS EXPERIENCE AT FLOOD PARK

Jensen's experience working on Flood Park Phase 1 will introduce familiarity and efficiency to the Flood Park Phase 2 project, translating to the best value for the County. Jensen Landscape is confident that we will be a valuable asset to the Phase 2 Playground project. Our experience and deep understanding of Flood Park, gained during the Phase 1 construction, position us uniquely for this next phase. Over the past year, we've built strong relationships with key partners at Flood Park, including CPM, CMG, San Mateo County management, Park Rangers, arborists, inspectors from SFPUC and Menlo Park, as well as our subcontractors. This collaboration has given us a solid familiarity with the neighborhood, its residents, and the rules and regulations governing work at the park. Additionally, Jensen has a comprehensive understanding of the project specifications and the expectations set by both the owner and design teams. Key lessons learned from Phase 1 - including the ordering of long-lead items, tree protection protocols, and navigating the SFPUC right-of-way requirements - will prove invaluable for Phase 2. Our field team, present onsite daily, possesses extensive knowledge of the park's existing conditions, from underground utility locations to heritage trees and subgrade conditions. This firsthand experience will ensure a more efficient, timely, cost-effective, and ultimately successful Phase 2 project.

OUR DISTINGUISHING SERVICES

We believe what makes our The Jensen-S2S Team team different and provides a distinct advantage is not only the ability to design and engineer the playground replacement project for the County, but our extensive experience working at Flood Park and designing/building similar projects. The team members on the Jensen-S2S DBE Team have experience working together to design, build and maintain lasting projects over our 30 years of working together. Our unique range of capabilities and unfettered access to our broader resources provides the County with a unique advantage to leverage The Jensen-S2S Team as your partner to deliver the best value solution.

Our approach is based on close collaboration between our design and engineering team, our PreDevelopment services team, and the County. It is our charge to be genuinely engaged in the design and budgeting process, to provide the useful perspective of looking from the outside in, and to bring our understanding of the formation of landscape space and memorable places to bear on the project's design while meeting the County's financial demands. Our team fully integrates our PreDevelopment services team into every design phase. We do not provide 'hypothetical' cost models as with cost consultants, but instead 'true' market pricing, data, and schedules to help you manage risk and maximize value at all phases of the project.

UNIQUE ASPECTS OF THE JENSEN-S2S DESIGN-BUILD TEAM

At Studio 2nd Street, we design to build. Our entire team and subconsultant partners (with all of whom we have a productive working history) are focused on supporting the County in implementing this playground replacement project, which we know is important to the County and its residents and visitors. Our team is differentiated by our broader industry knowledge and our collective design capabilities to deliver a proactive process. The Jensen-S2S Team is comprised of Designers, Builders and Maintainers and we plan our process through the lens of all these capabilities rather than the traditional 'siloed' boundaries within the industry. It is not to say that creative outcomes and traditional key milestones (Preliminary Design, CD, etc.) are not achieved, but more importantly, these milestones and their supporting efforts are informed by the broader resources of our team to provide a creative, efficient and value-focused process. We are committed to a process that is focused upon proactively identifying and addressing key challenges that can negatively influence a project. A 'typical' design process is commonly challenged by a cycle of inefficiencies and revisions caused primarily by a lack of focus upon communication, budget, constructability, and maintenance

best practices that are critical to the project's success. Some key highlights, tools, and capabilities of our approach include:

1. Preconstruction Analysis
Our PreDevelopment Services team provides an unparalleled approach to project delivery in the landscape industry. We approach project budgeting, procurement analysis, and schedule management to insure progression of project schedule and value engineering. Our estimating services team will support the effort throughout design process to enable the County and project team to make the best financial decisions for the project. We have developed a Project Cost Model (PCM) (cost estimate) based upon the previous prepared design documents. We have focused on a high level of constructability and budget analysis during our review of the RFP and design documents in order to trend these costs throughout the process so that we are confident in our cost estimate and constructability review, thus maximizing the County's investment and confirming that the design ideas are constructible prior to the bridging document stage.

2. Construction Best Practices Analysis (Opportunities + Constraints)
Our process is informed by the collective knowledge of our California-based (and national) landscape construction teams. We consistently seek to inform the design process with our broader knowledge and develop Construction Opportunities and Constraints Analysis (COCA) during the design stages to inform construction phase influences. Our COCA analysis provides a supporting matrix that focuses on County decisions that influence schedule, materials procurement, constructability, budget, and maintenance practices, and like our Project Cost Model - it is trended throughout the design process. The intent is to identify, evaluate and plan appropriately to seek opportunities maximize value of investment through opportunities to apply best practices, schedule efficiency, advance procurement strategies and change order mitigation approach.

THE VALUE-ADD DIFFERENCE

Our team is specifically curated to address the opportunities and challenges posed by the Flood Park Playground Replacement project. We have assembled a team with hands-on, client-focused leaders who will engage the project on a daily basis to help find pro-active solutions. As noted above, our team has several unique advantages, especially our depth of knowledge in designing, engineering, constructing and maintaining comparable projects. Our team places importance on the following key concepts that we believe directly support your vision for the upcoming Flood Park improvements:

- Integrated Collaboration: Leading the industry as a collaborative powerhouse supporting clients' visions with integrated design, construction and performance expertise.
- Intrinsic Value: Building spaces that create inherent value for people to come together and engage in meaningful experiences.
- Resilient Performance: Crafting resilient spaces that stand the test of time. Providing adaptive functionality and performance under environmental pressures.

We believe that the best project outcomes start with a close relationship with our clients. We believe in transparent, honest, and up-front communication that begins with listening to our client's needs and desired outcomes and continues through the duration of the project with frequent and consistent communication. We want our clients to be trusted members of the team, and we value and incorporate our customer's feedback throughout the process. If a question or concern comes up, we believe in picking up the phone and having a pro-active conversation. We start collaborative problem-solving at the beginning of the project, and that collaboration extends from our design studio team members, to our trusted subconsultants and our client contacts.

Our approach is based on close collaboration between our design team, the client, and the constituents who will use the space we create. It is our charge to be genuinely engaged in the design process, to provide the useful perspective of looking from the outside in, and to bring our understanding of the formation of landscape space and memorable places to bear on the project's design. We understand and respect the skills that each member of the team brings to the table and look for ways to harness that talent to achieve a better result than any of us could deliver alone. Design is a process of identifying the wants and needs

of a user group, delivering a solution within the physical constraints of a project site, and solving the problems that arise on the way.

Our customer service philosophy are evidenced in the fact that we have many repeat clients who come back and use our services repeatedly for multiple projects over the course of many years. We have highlighted several projects and team members throughout this document, including detailed project profiles that demonstrate clients we have worked with successfully on projects with similar scope.

II. TECHNICAL PROPOSAL

1. PROPOSED PROJECT TEAM AND EXPERTISE

F. SKILLED AND TRAINED WORKFORCE REQUIREMENTS

Jensen and our subcontractors will fully comply with all Skilled & Trained Workforce (STW) requirements. All subcontractors will be thoroughly vetted and meet the STW qualifications for their respective trades. Fifty percent of Jensen's workforce consists of STW graduates. To meet the 60% graduate requirement for laborers, Jensen will appropriately staff crews to ensure the necessary ratios are met and maintained. Monthly reports will be submitted by Jensen and all subcontractors to track hours and verify compliance with the required ratios. If the ratios are not met, a recovery plan will be developed and presented.

II. TECHNICAL PROPOSAL

2. METHOD AND STRATEGIC PLAN

A. TECHNICAL AND MANAGERIAL APPROACH TO PARTNERSHIP WITH THE COUNTY

Take into account the County's goals for the Project and the general functions required. The respondent may identify additional necessary tasks and discuss these in the proposed method to accomplish the work.

The Jensen-S2S Team has extensive experience working with public clients and knows how to address the intricacies of project administration and the design-build process to truly delivery a successful project. Our team has experience with public park projects of all sizes. We partner closely with our clients to work within tight timelines to account for major submittal review periods, and engage the client consistently throughout the process to provide a collaborative partnership on the project. In addition to the Communication and Collaboration methods detailed in Section 1c above, the Jensen-S2S team with utilize the following technical and managerial approach to the Realize Flood Park Design-Build project.

Design Oversight

The goal of the Design-Build process is to deliver the Owner's desired programming goals within the prescribed budget, schedule, performance, material expectations, and desired aesthetic. In this process the Owner's programming goals and expectations will be the primary framework the design team will adhere to. Regulatory agency requirements will also be taken into account and the design team will navigate both these and Ownership's design goals to ensure a cohesive solution between the two. All regulations will be identified early on in the design process to ensure impacts to schedule and budget are mitigated as well. At larger miles stones in the design process, pre-construction analysis will occur that will include a check on construction cost, constructability and implementation strategy.

Utilizing the Latest Design and Construction Technology

The Jensen-S2S team understands the importance of innovation. As such, we are devoted to the pursuit of efficient and informative software and workflows. The S2S team strives to provide our design team with state-of the art, streamlined workflows, allowing tech to support rather than dominate the process.

Studio 2nd Street offers technology services that can be utilized throughout the entire project timeline. During the design phase, the S2S team can build a conceptual coordination model to collaborate with other trades in a fully digital environment. During the preconstruction phase, the concept model can be quickly translated to a site BIM model, adding data to help identify conflicts, build consensus, and produce early cost modeling. Lastly, during the construction phase, the BIM model can help with continued conflict resolution, generate accurate costing and gain a better understanding of sequencing. Most importantly, our team members always ensure we are using the right software for each task, maximizing efficiency and elevating the quality of our deliverables. Software programs employed by our staff for various design tasks include:

- Revit - Site modeling, Trade Coordination, Visualization and Documentation
- Rhino - conceptual modeling and BIM cross-over
- AutoCAD – Design Layout and Documentation
- Civil 3D – Terrain modeling, analysis, and irrigation modeling
- Navisworks/BIM 360 - Model coordination & clash detection
- 3D Studio Max – Marketing Material
- Enscape/Lumion - Visualizations
- HeavyBid - Estimating
- Adobe Creative Suite – Visualization, Presentation and Booklet Creation

- SketchUp – 3D Modeling
- Microsoft Teams - Virtual meetings and team collaboration
- Microsoft Office - Emails, meeting records, schedules, communication memos

Construction Document Review and Oversight

The Jensen-S2S Team's Construction Documentation process establishes a system of quality control checks before the submittal of CD's that assures the project is designed and documented in accordance with the County's design intent, is successfully constructible and meets budgetary needs. This includes plans, specifications, details, applicable codes and standards that will enable the project to be built correctly, on-time and on budget and have long-lasting performance. Quality Assurance and Control is a shared responsibility of the entire design team with each team members playing a specific role at specific times in the design continuum. The Jensen-S2S Team's QA/QC process is described below.

Construction Documentation & Cost Budget

The Jensen-S2S Team will dial in on constructability at the Construction Documentation Phase once program and rough order of magnitude reviews are have been successfully honed. The Design Team will work closely with the Construction Team to create a constructible project through high quality drawings and specifications that include industry best practices for construction. Our managing principal conducts constructability and quality control review before every major Construction Documentation submittal to ensure integrity of the drawings is progressing as needed for our Construction Team.

Transition from Design to Construction

After design the process is complete, The Jensen-S2S Team's construction team will integrate into the process under the Design-Build Manager to provide consistency throughout all phases. The construction team, The Jensen-S2S Team Landscape Development will hold a preconstruction meeting with all parties to review safety, implementation strategies and schedule. Once construction begins, The Jensen-S2S Team Landscape Development will hold weekly meetings with all necessary participants including representatives from the County as well as our subcontractors. These meetings will continue until we are substantially complete with the project. Communication is the key to a successful delivery of the project, and The Jensen-S2S Team will lead the charge with open dialogue throughout the process.

Design, Permitting, Bidding, and Construction Schedule Adherence

Our approach to Design-Build necessitates an active design and engineering effort with key feedback milestones from the ownership team that will be established at project onset. These key feedback milestones, formulated via a Decision Matrix, will be coordinated to the design programming, project schedule and budgets. Active and consistent communication - including working sessions with the Owner and the Design-Build team will be scheduled weekly in the initial phase. These work sessions will be especially focused during the Schematic and Design Development stages for the project.

Cost Control Oversight of Construction Activities

Once the design meets approval of program goals and all agency requirements, the project will go through a cost estimation exercise to ensure it falls within the overall construction budget. In this regard The Jensen-S2S Team's Design-Build Pre-Construction team works with the Owner to perform detailed cost estimates to help guide the design process. The goal here is not to preclude program, but to arrive at the most cost effective design for delivering the desired program goals with Owner standards and material performance expectations. Thus, the Pre-Construction Team is actively involved in reviewing construction plans, specifications, and details to verify constructability and to look for innovative materials, means, and/or methods to deliver the project. Such innovations as are practical in the context of the project are incorporated into the final construction documents and specifications. The intent of this process is to integrate a construction contractor's perspective, experience, and capacity for innovation as part of the design process when it can have the greatest positive impact and not as part of a subordinate activity occurring after the design is well along.

Additionally, the Pre-Construction Team looks at the impact of the design on the project schedule. With the goal of delivering the full program in the most cost effective manner, the team looks at alternative materials, means, and methods to prevent schedule delays.

The Quality Control program described above occurs on a continuous basis throughout the design phase. None- the less, we have established certain milestones to serve as checkpoints for formal verification that the design is consistent with the following:

- Does the design meet the Owner's programming goals?
- Does the design meet the requirements of all other jurisdictional agencies?
- Is the design constructible?
- Does the design fit within the construction budget parameters?
- Does the design fit within the construction schedule parameters?
- Does the design meet the Owner's material performance expectations and standards?

If at any of the above points the answer is "No" the process focuses on identifying and resolving the design issue(s). Should any of the reviews and analyses fail to develop a suitable design solution, the process goes back to the beginning of design to reconsider the essential design solution in light of the specific impasse. This system is demonstrated in a series of flow charts on the following pages. These charts are not intended to indicate each individual element of a Construction Quality Control Program, but rather to convey the general sequence of submittals, tests, certifications, and approvals that will be employed as part of the The Jensen-S2S Team Quality Control Program to assure the project is designed and documented to meet the design intent.

Quality Control of Construction Activities

Providing a quality product is the joint concern of all members of the The Jensen-S2S Team team. The first step which we have described above will be to develop design and Working Documents that accurately reflects the intent of the Owner. The second step is to develop a realistic cost estimate and construction schedule that meets the Owner's needs yet allows for the efficient construction of the structural and the thematic elements of the design. The following is a description of the tools used to manage quality during the construction phase.

<u>Procurement</u>

1. Quality Control will be maintained through the procurement phases through a system of checks and balances imposed through the submittal and shop drawing process. All product literature, samples, mock-ups, and shop drawings required by the construction documents will be submitted for review by both the design team and the appropriate public agency (where applicable). Joint inspections by the applicable public agencies and the design team will assure that all aspects of the project are constructed in accordance with the current codes as well as true to the design intent.

2. Manufactured Items will be reviewed first from catalog cut-sheets and specification documents. Custom Fabricated Items will be reviewed first as shop drawings and mill certificate documents. Organic and In-organic Commodities, such as soil amendments, mulches, topsoil, gravel, or sand will be first reviewed from laboratory test results, sieve analyses, and related testing of representative samples. All items, even if approved in submittal form, will be subject to inspection and possible rejection at the point of manufacture and / or at the time of delivery to the project site if not consistent with the minimum standards stated in the submittal documents.

3. Plant Material, All Contractor-procured, plant material will be subjected to multiple levels of inspection. Nursery

vendors will initially be required to supply photographs to aid in determining the best of the representative nursery crops available. As purchase orders are written, trees and shrubs will be inspected in the nursery. Shrubs will be approved by "blocks" based upon an inspection of representative samples. Trees will be selected individually and tagged with permanent plastic locking tags. Digital photos of the trees will be made at the time of inspection. Updated photos will be taken periodically during the construction period to verify the condition of undelivered trees and shrubs. Plant material that shows signs of decline or damage will be de-tagged prior to delivery and replacement specimens located. There may be instances where plant materials are purchased in advance for the project, or where deposit moneys are placed on nursery stock stored off site. Under such circumstances Jensen will process and file UCC-1 forms to secure the Owner's rights to that nursery stock in the event the nursery grower should encounter financial difficulties and file bankruptcy or go out of business. The existence of the UCC-1 filing will secure the Owner's interest in the plant material ahead of all other creditors. While this is not in itself a Quality Control or Quality Assurance issue, it does prevent the loss of approved materials due to extenuating economic circumstances beyond the control of the Owner.

4. Constructed Hardscape Items will be first reviewed as samples for color, finish, scoring, joints and joinery, and general conformance with construction details. Build-up of concrete flatwork footings, and walls will be inspected in the field by representatives from the Design Team authorized to reject where necessary due if found to be non-conforming. In-house inspections will be coordinated with any County required inspections. Finished product will be similarly reviewed in the form of and initial "first-in-place" mock-ups. Satisfied with in-place mock-ups the work will proceed with periodic follow-up inspections with each segment. Any required materials testing such as concrete test cylinders will be collected for follow-up conformance testing as may be specified or required by the County.

5. Incidental Materials and Finished Goods purchased for the project will be subject to review at the time of delivery to the site. Any materials or finished systems that are not in accordance with the project construction documents, or that are delivered in a damaged or flawed condition will be subject to rejection. Similarly, materials damaged or degraded while stored on site will be rejected.

Installation:

A quality installation of the project will be a function of the use of skilled technicians for the construction of all work. Laborers and technicians will come from the local branch office. Key personnel and artisans with proprietary specialty skills may come from the larger national network of The Jensen-S2S Team offices. Where subcontracting of work is required, subcontractors will be rigorously pre-qualified in accordance with the procedures described elsewhere in this document.

Construction Closeout and Owner's Staff Training

Close out activities include the verification that all prior pre-construction and construction QC submittals, certifications, shop drawings, inspections, and testing activities have been completed and approved. Once all construction documentation has been submitted, accepted, and approved and any follow-up "punch list" adjustments, replacements, or corrections made and signed off, the close-out phase can be conducted. This phase is characterized by the completion of construction activities and occupancy of the facility by the Owner. This phase of close out will focus on the turn over to the Owner of the following deliverables:

- As-Built Drawings of Record (Printed and electronic copies)
- Irrigation Controller Charts
- An index of all Guaranty / Warranty specifics for individual components or systems installed on the project.
- Irrigation Maintenance Documents (Service Manuals, Parts Catalogs, Vendor Lists, etc.)
- Planting Maintenance Documents (Routine and Seasonal Activities)
- Site Furnishings Maintenance Documents (Service Manuals, Parts Catalogs, Vendor Lists)

- Hardscape Maintenance Documents (Service Manuals, Parts Catalogs, Vendor Lists)
- Providing Ownership with a Directory of contact persons with phone numbers and e-mail addresses for warranty concerns or service requirements.

Expeditious Completion of Punch List, As-Builts, and Owner's Manuals

The key to an expedient punch list is through diligent observation by The Jensen-S2S Team Design Group's field construction administration function. Design personnel verify that materials and workmanship are consistent with the project plans and specifications and appropriate to the field conditions and intended use. The design team and construction team work collaboratively to identify potential problems and undertake corrective measures well in advance of substantial completion. This practice manages any corrections needed prior to any punch list job walk. In addition, all catalogs, safety data sheets, parts lists, warranty documentation, owner's manuals, operating instructions, and as-built record drawings are prepared in advance of the final punch list process. Training of County personnel in the inspection, adjustment, and general operation of the equipment and systems is conducted during the maintenance period to maximize exposure over time an in situ for more impactful learning.

II. TECHNICAL PROPOSAL

2. METHOD AND STRATEGIC PLAN

B. DESIGN CAPABILITIES AND DESCRIPTION OF PROFESSIONAL SERVICES TO BE PROVIDED

Studio 2nd Street provides traditional landscape architecture design using innovative technologies such as Revit and 3D modeling in order to study, understand and deliver the best results. The Flood Park playground has a lot of interconnecting features such as complicated play equipment and big stone slabs that all need to come together seamlessly for a successful outcome. Looking at the design in 3-dimensions is going to help the design team and the County see how all of the different elements are going to come together. Creating Construction Documents using 3D technology is going to be critical to avoiding delays and issues in the field.

Based on CMG's design effort and hard work that led to the creation of the bridging documents, Studio 2nd Street will begin the project with a data collection and analysis phase in order to understand the design intent, what has been accomplished to date, and what the County's vision is for this phase of Flood Park. The first step will be going through and analyzing the bridging documents, mapping and understanding where refinements additional information, and further design development is needed to meet the vision and budget for the project. Studio 2nd Street has already been in good communication with CMG as well as the County's representative to begin this discovery and analysis and to map out a good work flow before we have even been awarded the project. We have undergone this investigation as an integrated team, working closely together with Jensen in a design-build team format.

Based on our experience, this initial discovery process is key to a successful design-build effort. Once we determine a road map forward, we will to look at necessary design refinements in relation to schedule and budget in order to make sure everything fits and will work on-site. This design appears to be a tight, complicated playground so we need to make sure that what is in the bridging documents works on the ground. Studio 2nd Street's goal is to streamline production and costs to deliver a comprehensive construction package for the County to review and for Jensen to install. Studio 2nd Street will continue to be present from a design standpoint throughout the construction process, available to provide material reviews, as well as layout and design clarifications until construction completion. Staying in close communication with CMG, Jensen, our subconsultants and subcontractors, and the various stakeholders for the County will ensure a successful delivery of the Flood Park playground.

II. TECHNICAL PROPOSAL

2. METHOD AND STRATEGIC PLAN

C. CONSTRUCTION MEANS AND METHODS THE RESPONDENT INTENDS TO UTILIZE

Jensen Landscape provides highly trained industry professionals with all the necessary tools, training and software required to construct an award-winning project. Our teams with be working closely with the Studio 2nd Street for a seamless transition between design and construction execution. As Jensen had also work closely with CMG over the years, we have a clear understanding of their bridging documents to ensure the overall design intent in kept in tacked. Our preconstruction team will provide updated and detailed pricing exercises throughout the process to confirm the design-build is being developed in a manner to meet budget, schedule and design.

Our project management and field team that has completed Phase 1 will be assigned to this phase of the project. We have established good relationships with all key stakeholders with a good understanding of communication needs and overall expectations of the projects. These team members have been dedicated to a successful phase 1 and look forward to continuing their project legacy on the phase 2 portion.

The project completion schedule for this phase is fast-tracked. Jensen will be using a resource loaded Microsoft schedule software to manage design progress, submittal approval, mobilizations, subcontractors, self-performed installations, labor and equipment needs and close-out. This schedule will be updated on a weekly basis and will be issued to all the key stakeholders on the project.

The function of the Jensen Quality Program Team is to oversee that all work is completed within the project requirements and within compliance requirements.

The Quality Program Team is responsible for observing, monitoring, measuring, recording, documenting, and reporting the work performed and for controlling the quality by providing timely feedback to those performing the work.

Safety is the most important for our team. The project will start with an overall assessment of any safety concerns and proactively plan to avoid any potential hazards. Each day the staff will be involved in stretch and bend exercises and will go through a daily tail-gate discussion specifically associated with the activity that day. Our goal is zero injuries or accidents on this project. A safety individual with be assigned to the project with a Director of Safety involved for oversite.

Lastly, we want to focus on teamwork. Collaboration is the key to winning for all parties here. Jensen will perform a kick-off meeting to bring together the team and establish key initiatives to make sure the project in all phases meets the needs and outcomes of all stakeholders.

COUNTY OF SAN MATEO

JENSEN LANDSCAPE

STUDIO 2nd Street

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