REQUEST FOR PROPOSAL
RFP No.: 13-14/04 District-Wide Track and Field Refurbishment

The Board of Trustees of the Peralta Community College District (PCCD), Oakland, California, through the Office of Purchasing, is hereby requesting proposals for the above mentioned project.

The successful vendor will be required to furnish all labor, material, equipment, supplies, applicable taxes, insurance, bonding, and licenses to complete this project.

Proposal Information

<table>
<thead>
<tr>
<th>Proposal Description</th>
<th>Track and Field Refurbishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposal Type</td>
<td>Service</td>
</tr>
<tr>
<td>Proposal Number</td>
<td>13-14/04</td>
</tr>
<tr>
<td>Proposal Issued</td>
<td>June 11, 2013</td>
</tr>
<tr>
<td>Department</td>
<td>Department of General Services</td>
</tr>
<tr>
<td>Mandatory Pre-proposal Meeting</td>
<td>June 20, 2013 at 10:00 AM 333 East 8th Street (Physical Plant Conference Room) Oakland, CA 94606</td>
</tr>
<tr>
<td>Scheduled Publication Dates</td>
<td>June 12, 2013; June 18, 2013</td>
</tr>
<tr>
<td>Proposal Due Date</td>
<td>July 3, 2013 at 11:00 AM</td>
</tr>
</tbody>
</table>

Instructions for Submitting Proposals

<table>
<thead>
<tr>
<th>Submittal Address</th>
<th>Peralta Community College District Purchasing Department Attn: Marie Hampton, Director of Purchasing Services 501 5th Avenue Oakland, CA 94606</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submittal Copies</td>
<td>One (1) Original copy clearly marked “Original” and two (2) Copies marked “copy”.</td>
</tr>
</tbody>
</table>
| Submittal Envelope Requirements | Proposal must be sealed and have the following information clearly marked and visible on the outside of the envelope:  
  - Proposal Number  
  - Name of Your Company  
  - Address  
  - Phone Number |
| Late Submittals   | Proposals received after the time and date stated above shall be returned unopened to the vendor. |
How to Obtain Proposal Documents

Copies of the Proposal documents may be obtained at:

<table>
<thead>
<tr>
<th>Available</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Peralta Community College District Purchasing Department 501 5th Avenue Oakland, CA 94606 Monday through Friday 9:00 AM to 4:00 PM (510) 466-7225</td>
</tr>
<tr>
<td>Yes</td>
<td>Website: <a href="http://www.peralta.edu">www.peralta.edu</a> Click &quot;Service Centers&quot;, then click &quot;Purchasing&quot; and then click &quot;List of Current RFPs/Bids&quot; to download the bid packet.</td>
</tr>
<tr>
<td>Yes</td>
<td>ACR Reprographics 1700 Jefferson Street Oakland, CA 94612 Tel. 510-287-5485 Fax 510-444-1262 <a href="http://www.e-arc.com">www.e-arc.com</a> Email:<a href="mailto:oakland@e-arc.com">oakland@e-arc.com</a> Attn: Antonio</td>
</tr>
</tbody>
</table>

Questions about the Proposal

Questions and or Requests for Information (RFI) must be submitted in writing and can be submitted by fax or email as follows:

<table>
<thead>
<tr>
<th>Primary Contact</th>
<th>Atheria Smith, Facilities Services Manager Fax: (510) 466-7315 Email: <a href="mailto:asmith@peralta.edu">asmith@peralta.edu</a></th>
</tr>
</thead>
</table>
| Question/RFI Due Date | **June 25, 2013**  
Please submit questions as soon as possible. No questions regarding the specifications will be responded to after the above date. All pertinent questions will be responded to and answered in writing no later than the Response Date listed below. |
| Response Date | **June 28, 2013**  
All pertinent questions will be responded to via addendum faxed (or emailed) to all prospective bidders, and placed on the District’s website. Proposer who did not receive a copy of the addendum should download it from the District’s website. See "How to Obtain Proposal Documents" section for our web address. All addendums must be acknowledged on the RFP Acknowledgement and Signature form. |
Full Opportunity

The Peralta Community College District hereby affirmatively ensures that Disadvantaged Business Enterprises (DBE), Small Local Business Enterprise (SLBE) and Small Emerging Local Business Enterprise (SELBE) shall be afforded full opportunity to submit bids in response to this notice and will not be discriminated against on the basis of race, color, national origin, ancestry, disability, gender, transgender status, political affiliation or religion in any consideration leading to the award of contract.

No qualified disabled person shall, on the basis of disability, be excluded from participating in, be denied the benefits of, or otherwise be subjected to discrimination in any consideration leading to the award.

Peralta Community College District reserves the right to reject any or all proposals, to waive any irregularities or informalities not affected by law, to evaluate the proposals submitted and to award the contract according to the proposal which best serves the interests of Peralta Community College District.

Marie Hampton, Director of Purchasing of Services
Table of Contents

I. Project Overview ........................................................................................................1
II. Scope of Services ........................................................................................................1
III. Submission Requirements ........................................................................................1
IV. Evaluation Criteria ....................................................................................................2
V. Additional Requirements ...........................................................................................6

Construction Specifications

Attachments:

<table>
<thead>
<tr>
<th>Title</th>
<th>Must Be Returned with Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Vendor Questionnaire and Certificate by Compliance</td>
<td>Yes</td>
</tr>
<tr>
<td>2 Environmentally Sustainable Procurement</td>
<td>Yes</td>
</tr>
<tr>
<td>3 Certificate Regarding Workers’ Compensation</td>
<td>Yes</td>
</tr>
<tr>
<td>4 Statement of Equal Employment Opportunity</td>
<td>Yes</td>
</tr>
<tr>
<td>5 Small Local Business Enterprise/Small Emerging Local Business Enterprise Program</td>
<td>Yes</td>
</tr>
<tr>
<td>6 SLBE/SELBE Self Certification Affidavit</td>
<td>Yes, If applicable</td>
</tr>
<tr>
<td>7 Non-Collusion Affidavit</td>
<td>Yes</td>
</tr>
<tr>
<td>8 General Provisions</td>
<td></td>
</tr>
<tr>
<td>9 RFP Acknowledgement and Signature Form</td>
<td>Yes</td>
</tr>
<tr>
<td>10 Construction Specifications</td>
<td>No</td>
</tr>
</tbody>
</table>
I. Project Overview

Peralta Community College District (PCCD) is seeking proposals from qualified Contractors for the replacement of synthetic track and artificial turf at its three campuses (Laney, Merritt and College of Alameda). Qualified Contractors shall be required to have the necessary experience and personnel to successfully complete the project.

Proposals shall be reviewed by the District and the contract will be awarded to the Contractor who meets the minimum Qualifications and presents the “best value” as defined in the Evaluation Criteria.

II. Scope of Services

Laney College: Replacement of existing artificial turf football field and existing synthetic running track. The existing synthetic running track is Mondo and it will be replaced with a poured in place product. Depending on the damage caused by the removal of the Mondo, the existing asphalt track base may need to be milled and repaved. Miscellaneous site improvements will include new goalposts and relocation of the existing pole vaults to the south d-zone. This will require, at minimum, installation of new drain stone and asphalt pavement.

Alameda College: Replacement of the existing synthetic running track. The existing synthetic running track is Mondo and it will be replaced with a poured in place product. Depending on the damage caused by the removal of the Mondo, the existing asphalt track base may need to be milled and repaved.

Merritt College: Replacement of the existing artificial turf multi-use field and synthetic running track. The existing synthetic running track is Mondo and it will be replaced with a poured in place product. Depending on the damage caused by the removal of the Mondo, the existing asphalt track base may need to be milled and repaved.

Construction, which includes all alternates, for all three campuses shall be completed no later than September 12th, 2013. The artificial turf football field at Laney College shall be completed and accessible by the team on a daily basis no later than August 26, 2013. The only schedule extensions will be for approved weather related days. The District will assess liquidated damages of $5,000 per site per calendar day for late completion.

III. PROPOSAL SUBMITTAL

The Contractor shall submit completed proposals to the PCCD Purchasing Department, located at 501 5th Street, Oakland, CA 94606 Attn: Marie Hampton, Director of Purchasing Services at 11:00 AM on July 3, 2013. The proposal shall consist of (3) hardcopies and (1) electronic copy (CD or flash drive) and corresponding product submittals. The following documents shall be included in the submittal:

A. EVALUATION CRITERIA as outlined in this RFP
B. CONTRACTOR QUALIFICATIONS as outlined in this RFP
C. Any other District required documents
CONTRACTOR QUALIFICATIONS

The Contractor shall meet the following minimum requirements, if the Contractor does not meet these minimum requirements their proposal will be rejected.

A. Contractor shall hold a valid class “A” license and be in good standing with the Contractors State License Board. Contractor shall provide a copy of their license with their proposal.

B. Contractor shall self-perform and/or manufacture materials accounting for a minimum of 50% of the base bid contract total.

C. Contractor shall, under their current license, have installed a minimum of twenty (20) artificial turf fields and/or synthetic tracks in the state of California. The Contractor shall submit these installations as part of the PROJECT EXPERIENCE which is outlined in the EVALUATION CRITERIA section of this RFP.

IV. EVALUATION CRITERIA (280 points maximum)

The Contractor shall include a complete response for all evaluation criteria as outlined in this section. The responses will be reviewed per Specification Section 00 41 01 Proposal Evaluation Process.

PROJECT EXPERIENCE

1. (40 points maximum) Contractor, under their current license, shall submit acceptable installations of full size artificial turf fields (minimum of 70,000 sq. ft) in California within the past eight (8) years. All installations shall be submitted on the Project Sheet Form which is included in this RFP.

2. (40 points maximum) Contractor, under their current license, shall submit acceptable installations of synthetic running tracks (minimum of 30,000 sq. ft) in California within the past eight (8) years. All installations shall be submitted on the Project Sheet Form which is included in this RFP.

PROJECT TEAM

1. (5 points maximum) Present proposed organizational chart specific to this project, identifying the key individuals and their responsibilities.

2. (10 points maximum) Submit current resumes for the following personnel, specifically note which personnel are subcontractors;
   (1) Construction Project Manager(s).
   (2) Superintendent(s).
   (3) Artificial Turf Installer
   (4) Synthetic Track Installer
   (5) Synthetic Track Striper

   Resumes should be limited to one page and include the following information:
   (6) Years with firm.
   (7) Key responsibilities for this project.
   (8) Relevant project experience and associated references.
SAFETY & INJURY DATA
1. (10 points maximum) Please provide independent studies and/or testing data that provide hard evidence that your turf product reduces injuries to athletes when playing on your turf and/or track products. If a written response is provided please limit to no more than 250 words.

ARTIFICIAL TURF PRODUCT INFORMATION & PERFORMANCE
1. (5 points maximum) The contractor shall submit a 7½” x 12” minimum sample of the exact artificial turf and infill system that is specified for this project.

2. (5 points maximum) Indicate the following information for each submitted turf product(s):
   (1) Product name and description
   (2) Pile Height               ASTM D5823-05A
   (3) Face Weight              ASTM D5848-07
   (4) Total Weight             ASTM D5848-07
   (5) Fiber Denier             ASTM D1907-07
   (6) Grab Tear Strength       ASTM D5034-09
   (7) Tuft Bind                ASTM D1335-05
   (8) Machine Gauge            ASTM D5793-05
   (9) Infiltration Rate        BS7044 Method 4
   (10) Flammability            ASTM D2859-06
   (11) Fiber manufacturer and product name
   (12) Primary Backing system type and weight
   (13) Secondary backing system type and weight
   (14) Pile height above infill
   (15) Color uniformity
   (16) UV inhibiting protection
   (17) Type of infill and material properties

3. (10 points maximum) Provide a description of key installation methods, such as method of connecting the turf panels (sewing, gluing, or sewing and gluing). Please limit your response to no more than 250 words.

4. (5 points maximum) Please briefly explain the durability of your turf product included within your pricing proposal. You may include third party testing data for the artificial turf product which is being submitted. Please limit your response to no more than 250 words.

SYNTHETIC TRACK PRODUCT INFORMATION & PERFORMANCE
1. (5 points maximum) The contractor shall submit a 6” x 6” minimum sample of the exact synthetic track product(s) that are specified for this project.

2. (5 points maximum) Provide product specifications for the specified product(s).
PROJECT SCHEDULE
1. (50 points maximum) Provide a schedule which outlines the duration of each task needed to complete the project by the completion dates as outlined in this RFP. Contractor shall adhere to this schedule during the course of construction.

COMPANY INFORMATION & FINANCIAL STRENGTH
1. (10 points maximum) Years in business, under current license.
2. (20 points maximum) Provide, with verification, Contractors Experience Modification Rating (EMR) for previous three (3) years.
3. (30 points maximum) Provide, with verification, bonding capacity.
4. (30 points maximum) Provide, with verification, insured warranty aggregate.

MISCELLANEOUS

The project will be permitted through DSA and the contractor shall comply with all DSA requirements. The project is anticipated to be procured using a Lease-Leaseback contract. The District reserves the right to reject any and all responses. The District also reserves the right to amend this RFP as necessary. All materials submitted to the District in response to this RFP shall remain the property of the District. The District will provide no reimbursement for expenses incurred or time spent in the preparation of this proposal.
PROJECT SHEET FORM
(Print additional copies as needed)

Project Name: ____________________________________________________

Location: ________________________________________________________

Specify level of installation: High School/2-Year College/4-Year College/Parks & Rec

Owner: __________________________________________________________

Architect or Engineer: ____________________________________________

General Contractor: ______________________________________________

Description of Project, Scope of Work Performed:

_________________________________________________________________

_________________________________________________________________

Total Value of Construction (including change orders): ________________

Actual Year of Completion: ________________________________

Artificial Turf Square Footage: ________________________________

Synthetic Track Square Footage: ________________________________


V. Additional Requirements:

A. Cost of Participation in Selection Process
Costs for developing responses to this RFP are entirely the responsibility of the firm and shall not be chargeable to the District.

B. District Rights:
The District reserves the right to waive any irregularities or required formalities or to amend or cancel, in part or entirety, this request for information if it is in the best interest of the District.

C. Law Compliance
The Vendor must comply with all laws, ordinances, regulations and codes of the Federal, state, and local governments which may in any way affect the preparation of proposals or the performance of the contract.

D. Public Records:
Except for materials deemed Trade Secrets (as defined in California Civil Code 3426.1) and materials specifically marked “Confidential” or “Proprietary”, all material submitted in response to this RFP are deemed property of the District and public records upon submission to the District. The foregoing notwithstanding, the District may reject for non-responsiveness the RFP Response of a Respondent who indiscriminately notes that its RFP Response or portions thereof are “Trade Secret” “Confidential” or “Proprietary” and exempt from disclosure as a public record. The District is not liable or responsible for the disclosure of RFP Responses, or portion thereof, deemed to be public records, including those exempt from disclosure if disclosure is by law, by an order Court, or which occurs through inadvertence, mistake or negligence on the part of the District or its agents or representatives. If the District is required to defend or otherwise respond to any action or proceeding wherein request is made for the disclosure of the contents of any portion of a RFP Response deemed exempt from disclosure hereunder, by submitting a response to the RFP, each Respondent agrees to defend, indemnify and hold harmless the District in any action or proceeding from and against any liability, including without limitation attorneys’ fees arising there from. The party submitting materials sought by any other party shall be solely responsible for the cost and defense in any action or proceeding seeking to compel disclosure of such materials; the District’s sole involvement in any such action shall be that of a stakeholder, retaining the requested material until otherwise ordered by a court of competent jurisdiction.

E. Proposal Considerations
PCCD has absolute discretion with regard to acceptance and rejection of proposals. In order to be considered the party submitting a proposal waives the right to bring legal proceedings challenging the Board’s choice of the award.

F. False Statements
False statements in a proposal will disqualify the proposal.

G. Legal Proceeding Waiver
The Vendor relationship to PCCD shall be that of independent contractor and not deemed to be agent of PCCD.

H. Taxes
The Vendor will be responsible for all Federal, State and Local taxes.

I. Grade of Service
The Vendor must provide professional service and maintain appropriate personnel to provide expedient and courteous service.
J. **The Vendor's Liability**
The Contractor shall be responsible for any and all damages to the PCCD premises resulting from the negligent acts or willful misconduct of the Contractor agents or employees.

K. **Contract Termination**
PCCD may terminate the agreement with the Vendor on thirty days notice for the failure of the Vendor to comply with any term(s) of the agreement between PCCD and the Vendor.

L. **Award Consideration**
Award of contract will be based on the information submitted as a result of this RFP.

M. **Amendments**
The Peralta Community College District may, at its sole discretion, issue amendments to this RFP at any time before the time set for receipt of proposals. The vendor's are required to acknowledge receipt of any amendments (addenda) issued to this RFP by returning a signed acknowledgement of each amendment issued. Signed copies must be received on or before the time set for receipt of offers. The Peralta Community College District shall not be bound by any representations, whether oral or written, made at a pre-proposal, pre-contract, or site meeting, unless such representations are incorporated in writing as an amendment to the RFP or as part of the final contract. All questions or request for clarification concerning material terms of the contract should be submitted in writing for consideration as an amendment.

N. **Withdrawal or Modification of Offers**
The Vendor may modify or withdraw an offer in writing at any time before the deadline for submission of an offer.

O. **Acceptance**
Any offer received shall be considered an offer which may be accepted or rejected, in whole or in part, by the District based on initial submission without discussions or negotiations.

The District reserves the right to reject any or all offers and to waive informalities, minor irregularities, or other requirements in offers received, and/or to accept any portion of the offer if deemed in the best interest of the District. Failure of the vendor to provide in its offer any information requested in the RFP, may result in rejection for non-responsiveness. Failure of the vendor to meet or exceed any stated minimums in the RFP may also result in rejection for reasons of non-responsiveness.

P. **Award and Length of Contract**
The Board of Trustees shall not be bound to accept the lowest-quote fee. The Board will award the contract the firm select through the competitive process outlined in this RFP and recommended by the Vice Chancellor of General Service.

Q. **Representations**
No representations or guarantees of any kind, either made orally, or expressed or implied, are made with regard to the matters contained in this document, including any attachments, letters of transmittal, or any other related documents. The Vendor's must rely solely on its own independent assessment as the basis for the submission of any offer made.
VENDOR’S QUESTIONNAIRE AND CERTIFICATE BY COMPLIANCE

The following information is requested for information purposes only. It will not be used in determining bid award.

Date

Firm Name __________________________ Telephone __________________________

Business Fax __________________________ Email Address __________________________ Website __________________________

Street Address __________________________ City/State __________________________ Zip Code+ 4® __________________________

Mailing Address __________________________ City/State __________________________ Zip Code + 4® __________________________

Type of Organization (Check one) Individual ☐ Partnership ☐ Corporation ☐

Name of Owner(s) __________________________ State of Incorporation (if applicable) __________________________

Name of Partners __________________________ (I) Indicate (G) General (L) Limited __________________________

Local Address __________________________

Amount of Annual Business

The District is identifying vendor ownership as follows:

<table>
<thead>
<tr>
<th></th>
<th>Asian-American (Chinese, Japanese, Korean, Vietnamese)</th>
<th>Black or African-American</th>
<th>Latino (other than Mexican or Mexican-American)</th>
<th>Mexican or Mexican-American</th>
<th>Native American</th>
<th>Pacific Islander, other Asian</th>
<th>White</th>
<th>Disabled</th>
<th>Veteran</th>
<th>Women</th>
<th>Subcontractor</th>
<th>Employee</th>
<th>Apprentice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total #</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The District is identifying vendor workforce as follows:

<table>
<thead>
<tr>
<th>Total #</th>
<th>Asian-American (Chinese, Japanese, Korean, Vietnamese)</th>
<th>Black or African-American</th>
<th>Filipino</th>
<th>Latino (other than Mexican or Mexican-American)</th>
<th>Mexican or Mexican-American</th>
<th>Native-American</th>
<th>Pacific Islander, other Asian</th>
<th>White</th>
<th>Disabled</th>
<th>Veteran</th>
<th>Women</th>
<th>Subcontractor</th>
<th>Employee</th>
<th>Apprentice</th>
</tr>
</thead>
</table>

Explain whether current workforce is racially and ethnically proportionate to the area from which the workforce is drawn (national, state, or local). Use separate sheet if necessary.

Detail steps taken by vendor since inception to assure non-discriminatory recruiting, hiring, and apprenticeship, placement, promotion, demotion, layoff and termination practices. Use separate sheet if necessary.

What are you interested in providing the District? (e.g., construction, consulting, goods or services).

Main Headquarters Office(s)  
Address/Telephone  
(List all as applicable)  

Total # of Employees _____
| Local Office(s) Address/Telephone | 1.  
| (List all as applicable)         | 2.  
|                                  | 3.  

Total # of Employees ______

| Name and list residential zip code for each employee, subcontractor, or apprentice for awarded contract | 1.  
| (Please use the Zip+4®) Use separate sheet as necessary | 2.  
|                                                              | 3.  
|                                                              | 4.  
|                                                              | 5.  
|                                                              | 6.  |
ENVIRONMENTALLY SUSTAINABLE PROCUREMENT

It is the policy of the Peralta Community College District (Board Policy 2.40, Environmental Sustainability), to purchase products or services that help to minimize the adverse effects on human health and the environment, when compared to other products and services that serve the same purpose with comparable efficacy. The District recognizes that environmentally responsible purchasing will help create and sustain markets for environmentally sustainable products, and is committed to encouraging the procurement of environmentally sustainable products, such as products with high recycled content, remanufactured products, FSC certified lumber, Energy Star rated equipment, low and no VOC paints, low-toxicity cleaning supplies and Green Seal approved chemicals, locally sourced organic/sustainably grown foods, compostable utensils, non polystyrene food containers, non petroleum-based inks, and will promote contracting with businesses in close proximity, to reduce our carbon footprint and to promote the District's SLBE program.

The District’s formal Environmental Sustainability Policy 2.40 is available for download at:

Vendor Statement and Signature

The long-term goal of the District is to purchase products with zero waste, high recycled content, produced and delivered in an environmentally sustainable manner. Does your product or service promote the District’s Environmentally Sustainable Procurement goal?

_____ Yes*  _____ No

*If Yes, you are required to describe how your product or service that you are providing to the District will promote the District’s Environmentally Sustainable Procurement goal.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Contractor Name: __________________________  Title: __________________________

Authorized Signature: __________________________  Date: __________________________
CERTIFICATE REGARDING WORKERS' COMPENSATION

Labor Code Section 3700 in relevant part provides:

"Every employer except the State shall secure the payment of compensation in one or more of the following ways:

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.

(b) Be securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees."

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

___________________________________________
Contractor

By: _______________________________________

(In accordance with Article 5 [commencing at Section 1860], Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under this Contract.)
Peralta Community College District

Statement of Equal Employment Opportunity

I hereby certify that ______________________________________________________

(Legal Name of Vendor/Consultant/Contractor)

Will not discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin and shall insure compliance with all provisions of Executive Order No. 11246 (as amended by Executive order No.11375).

The vendor’s questionnaire requests information for record keeping purposes only. The information requested will not be used as a basis for contract award.

However, after a contract is awarded to your company, the District requires your company to report:

a. Actual racial, gender and residential workforce composition of your company for the contract work.

b. Actual racial, gender and residential workforce composition of subcontractors for the contract work.

c. Number of apprenticeship workforce for the contract work.

This report must be submitted to the District Department of General Services on a quarterly basis.

I declare under penalty of perjury under the laws of the state of California that the information I have provided herein is true and correct and is of my own personal knowledge.

BY: _________________________________ Date

__________________________________________
Print Name
SMALL LOCAL BUSINESS ENTERPRISE and
SMALL EMERGING LOCAL BUSINESS ENTERPRISE PROGRAM

The District is committed to ensure equal opportunity and equitable treatment in awarding and managing its public contracts and has established an annual overall program goal of twenty-five percent participation for small local businesses. To facilitate opportunities for small local business, the District will use a maximum 5% bidding preference for SLBE and SELBE firms. The preference is only used for computation purposes to determine the winning bidder, the contract is awarded at the actual bid amount. Please review the following guidelines to see if your firm qualifies for the preference.

The 5% bidding preference for an SLBE and SELBE firms are for construction, personal and professional services, goods and services, maintenance, repairs, and operations where responsibility and quality are equal. The preference will be 5% of the bid amount of the lowest responsive responsible bidder, and may not exceed $50,000.00 for any bid.

A Non-SLBE/SELBE Prime Contractor who utilizes 25% of total bid amount, with SLBE or SELBE subcontractors (who meet the District’s Definition of an SLBE and SELBE), can also receive a maximum of 4% bidding preference, not to exceed $50,000.00 for any bid. (See below Subcontractor section.)

Definitions:

SLBE: A Small Local Business Enterprise is a business that has not exceeded gross annual revenue of 8.5 million dollars for a construction firm, or 6 million dollars for goods and non-professional services firm, or 3 million dollars for architecture, engineering and professional services firm, for the past three consecutive years and meets the below geographic location requirements.

SELBE: A Small Local Emerging Business Enterprise is a business that has not exceeded gross annual revenue of 1.5 million dollars for the past three consecutive years and meets the below geographic location requirements.

Commercially Useful Function: Shall mean a business is directly responsible for providing the materials, equipment, supplies or services to the District as required by the contract solicitation. The business performs work that is normal for its business services and carries out its obligation by actually performing, managing, or supervising the work involved. The business is not Commercially Useful if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of SLBE or SELBE participation.

Geographic Location Requirements:

- The business must be located at a fixed, established commercial address located in the District’s market area of Albany, Alameda, Berkeley, Emeryville, Oakland, or Piedmont, and not a temporary or movable office, a post office box, or a telephone answering service.

- If the business has an office outside of the District’s market area as well as an office within the market area, the office within the District’s market area must be staffed on a full time permanent basis with someone employed by the business.

- If requested, the business that has an office outside of the District’s market area must provide proof of one or more past contracts citing the business address (such as contracts to perform work, to rent space or equipment, or for other business services) was within the District’s market area at least one (1) year prior to the date of contract award. The one-
year requirement does not apply to businesses whose sole establishment is located within the District’s market area.

**Subcontractors:**

Non-SLBE/SELBE Prime Contractors who use subcontractors, who meet the district definitions of SLBE and SELBE, may receive a maximum of 4% bidding preference if the following conditions are met:

1. 25% of total bid amount is with Subcontractors who meet the District’s definition of an SLBE and SELBE. The Prime Contractor must list each Subcontractor on the Subcontractor List form, clearly identifying the SLBE and SELBE status and the Dollar Amount of work each subcontractor will perform.

2. The Subcontractors must provide a Commercially Useful Function.

3. The Prime Contractor must maintain the Subcontractor percentages (based on the quoted dollar amounts) indicated in the Subcontractor List form at the time the Contract is awarded and throughout the term of the Contract.

4. The Prime Contractor must fill out sign the SLBE/SELBE Self Certification Affidavit and return it with the bid documents, and 48 hours after the bid opening the Prime Contractor must submit signed SLBE/SELBE Self Certification Affidavit from each of the SLBE and SELBE subcontractors listed in the Subcontractor form. The Subcontractor must agree to provide the requested documentation to verify the SLBE/SELBE status.

5. No Substitutions can be made to the SLBE and SELBE subcontractor without the prior written approval of the District. The District will approve a subcontractor substitution on the following conditions:

   a. A written statement from the subcontractor agreeing to the substitution.
   
   b. When the subcontractor has been given a reasonable opportunity to execute the subcontract, yet fails to, or refuses to execute the subcontract, or refuses to satisfy contractual obligations.
   
   c. When the subcontractor becomes insolvent.
   
   d. When the District determines the work performed by the subcontractor is not in accordance with the contact agreement, or the subcontractor is substantially and unduly delaying or disrupting the progress of work.

Firms that meet the District criteria for an SLBE and SELBE can complete the below self-certification affidavit signed under penalty of perjury. Firms claiming SLBE and SELBE status in the self-certification affidavit will be required to submit proof of residency and revenue 48 hours after bid opening. Such proof shall consist of a copy of a contract to perform work, to rent space or equipment, or for other business services, executed from their local address, and the firm's tax returns for the past three consecutive years.
SLBE/SELBE SELF CERTIFICATION AFFIDAVIT

I certify under penalty of perjury that my firm meets the District’s definition of a Small Local Business Enterprise or a Small Emerging Local Business Enterprise and resides in the geographic location of the District’s market area and qualifies for the below preference. The maximum preference will be five percent of the bid amount of the lowest responsible bidder, and may not exceed $50,000.00 for any bid. The preference is only used for computation purposes to determine the winning bidder; the contract is awarded at the actual bid amount. The District’s Contract Compliance Office will determine whether this requirement has been fulfilled. Bidders may only claim one of the below preferences.

<table>
<thead>
<tr>
<th>Certification Status</th>
<th>Preference</th>
<th>Preference Claimed (check only one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLBE</td>
<td>5% of lowest bid</td>
<td></td>
</tr>
<tr>
<td>SELBE</td>
<td>5% of lowest bid</td>
<td></td>
</tr>
<tr>
<td>25% of Subcontractors are SLBE/SELBE</td>
<td>4% of lowest bid</td>
<td></td>
</tr>
<tr>
<td>Not Applicable</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

1. I acknowledge and am hereby advised that upon a finding of perjury with the claims made in this self certification affidavit the District is authorized to impose penalties which may include any of the following:

   a) Refusal to certify the award of a contract  
   b) Suspension of a contract  
   c) Withholding of funds  
   d) Revision of a contract for material breach of contract  
   e) Disqualification of my firm from eligibility for providing goods and services to the Peralta Community College District for a period not to exceed five (5) years

2. I acknowledge and have been advised and hereby agree that my firm will be required to provide proof (and if applicable, my SLBE and SELBE Subcontractors will provide proof) of the status claimed on this self-certification affidavit 48 hours after bid opening. Proof of status claimed includes tax returns from the previous three years and past contracts to determine the size and geographical location of my firm.

3. I declare that the above provisions are attested to under penalty of perjury under the laws of the State of California.

Bid Number: ___________________ Bid Name: ____________________________

Signed ____________________________ Date ____________________________

Printed or typed name ____________________________ Title ____________________________
State of California, County of ______________

(Name)__________________________________________, being first duly sworn, deposes and says that he or she is (title)______________________ of (company)____________________________ the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Date: __________________ Signature: ____________________________________________
GENERAL PROVISIONS

Definition: The words Contractor means any Bidder, Vendor or Proposer who provides a good, service or construction to Peralta Community College District (PCCD).

1. ASSIGNMENT/DELEGATION: Neither party hereto shall assign, sublet or transfer any interest in this Agreement or any duty hereunder without written consent of the other, and no assignment shall be of any force or effect whatsoever unless and until the other party shall have so consented.

2. STATUS OF CONTRACTOR: The parties intend that CONTRACTOR, in performing the services herein specified, shall act as an independent contractor and shall have control of the work and the manner in which it is performed. CONTRACTOR is not to be considered an agent or employee of DISTRICT and is not entitled to participate in any pension plans, insurance, bonus or similar benefits DISTRICT provides its employees.

3. INDEMNIFICATION:
   (a) CONTRACTOR agrees to accept all responsibility for loss or damage to any person or entity, and to defend, indemnify, hold harmless and release DISTRICT, its officers, agents and employees, from and against any and all actions, claims, damages, disabilities or expenses including attorney's fees and witness costs that may be asserted by any person or entity, arising out of or in connection with the tortuous acts or errors or omissions of CONTRACTOR hereunder, whether or not there is concurrent passive or active negligence on the part of DISTRICT, but excluding liability due to the sole negligence or willful misconduct of DISTRICT. This indemnification obligation is not limited in any way by any limitation on the amount or type of damages or compensation payable to or for CONTRACTOR or its agents under workers' compensation acts, disability benefit acts, or other employee benefit acts.

   (b) CONTRACTOR shall be liable to DISTRICT for any loss or damage to DISTRICT property arising from or in connection with CONTRACTOR'S performance hereunder.

4. INSURANCE: With respect to the performance of work under this Agreement, CONTRACTOR shall maintain and shall require all of its subcontractors to maintain insurance as described below:
   (a) Worker's compensation insurance with statutory limits as required by the Labor Code or the State of California. Said policy shall be endorsed with the following specific language: "This policy shall not be canceled or materially changed without first giving thirty (30) days prior written notice to the DISTRICT".

   (b) Commercial or Comprehensive General Liability insurance covering bodily injury and property damage utilizing an occurrence policy form, in an amount no less than $1,000,000 combined single limit for each occurrence and $2,000,000 in the aggregate. Said insurance shall include, but not be limited to: premises and operations liability, independent contractors liability, and personal injury liability.

   (c) Automobile liability insurance covering bodily injury and property damage in an amount no less than $1,000,000 combined single limit for each occurrence. Said insurance shall include coverage for owned, hired, and non-owned vehicles.

   (d) Each said comprehensive or commercial general liability and automobile liability insurance policy shall be endorsed with the following specific language:
(1) DISTRICT, its officers and employees, is named as additional insured for all liability arising out of the operations by or on behalf of the named insured in the performance of this Agreement.

(2) The inclusion of more than one insured shall not operate to impair the rights of one insured against another insured, and the coverage afforded shall apply as though separate policies had been issued to each insured, but the inclusion of more than one insured shall not operate to increase the limits of the company's liability.

(3) The insurance provided herein is primary coverage to DISTRICT with respect to any insurance or self-insurance programs maintained by DISTRICT and no insurance held or owned by DISTRICT shall be called upon to contribute to a loss.

(4) This policy shall not be canceled or materially changed without first giving thirty (30) days prior written notice to DISTRICT.

(e) Professional Liability (Errors & Omissions): In the event any contract specifications requires your firm to provide professional services, such as but not limited to, architectural, engineering, construction management, surveying, design, etc., a certificate of insurance must be provided prior to commencing work evidencing such coverage with a limit of not less than $1,000,000. Any material change in limits, coverage or loss of aggregate limit due to outstanding claims must be reported to the District within 30 days of any such event.

(f) Documentation: The following documentation shall be submitted to the DISTRICT:

(1) Properly executed Certificates of Insurance clearly evidencing all coverage's, limits, and endorsements required above. Said certificates shall be submitted prior to the execution of this Agreement.

(2) Signed copies of the specified endorsements for each policy. Said endorsement copies shall be submitted within thirty (30) days of execution of this Agreement.

(3) Upon DISTRICT'S written request, certified copies of insurance policies. Said policy copies shall be submitted within thirty (30) days of DISTRICT'S request.

(g) Policy Obligations: CONTRACTOR'S indemnity and other obligations shall not be limited by the foregoing insurance requirements.

(h) Material Breach: If CONTRACTOR, for any reason, fails to maintain insurance coverage that is required pursuant to this Agreement, the same shall be deemed a material breach of contract. DISTRICT, at its sole option, may terminate this Agreement and obtain damages from the CONTRACTOR resulting from said breach. Alternatively, DISTRICT may purchase such required insurance coverage, and without further notice to CONTRACTOR, County may deduct from sums due to CONTRACTOR any premium costs advanced by DISTRICT for such insurance. These remedies shall be in addition to any other remedies available to DISTRICT.

5. METHOD AND PLACE OF GIVING NOTICE, SUBMITTING BILLS AND MAKING PAYMENTS:

A purchase order number must appear on all invoices and notices, bills and payments. All notices, bills and payments shall be made in writing and may be given by personal delivery or by mail. Notice, bills and payments sent by mail shall be addressed as follows:

DISTRICT:

Peralta Community College District
CONTRACTOR:

and when so addressed, shall be deemed given upon receipt via United States Mail, postage prepaid, provided it is forwarded "certified", or "registered" with proof of receipt. In all other instances, notices, bills, and payments shall be deemed given at the time of actual personal delivery. Changes may be made in names and addresses of the person to who notices, bills and payments are to be given by giving notice pursuant to this paragraph.

6. **MERGER:** This writing is intended both as the final expression of the Agreement between the parties hereto with respect to the included terms and as a complete and exclusive statement of the terms of the Agreement. No modification of this Agreement shall be effective unless and until such modification is evidenced by a writing signed by both parties.

8. **TRANSFER OF RIGHTS:** CONTRACTOR assigns to DISTRICT all rights throughout the work in perpetuity in the nature of copyright, trademark, patent, right to ideas, in and to all versions of the plans and specifications now or later prepared by CONTRACTOR in connection with the project, if any. CONTRACTOR agrees to take such actions as are necessary to protect the rights assigned to DISTRICT in this Agreement, and to refrain from taking any action which would impair those rights. CONTRACTOR'S responsibilities under this contract include, but are not limited to, placing proper notice of copyright on all versions of the plans and specifications as CONTRACTOR may direct, and refraining from disclosing any versions of the plans and specifications to any third party without first obtaining written permission of DISTRICT.

9. **NONDISCRIMINATION:** CONTRACTOR shall comply with all applicable federal, state and local laws, rules and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, sexual orientation, marital status, age, medical condition, disability, transgender status or other prohibited basis. All nondiscrimination rules or regulations required by law to be included in this Agreement are incorporated by this reference.

10. **EXTRA (CHANGED) WORK:** Only the Chancellor or designee may authorize extra (and/or changed) work. The parties expressly recognize that DISTRICT and College personnel are without authorization to either order extra (and/or changed) work or waive contract requirements. Failure of the CONTRACTOR to secure proper authorization for extra work shall constitute a waiver of any and all right to adjustment in the contract price or contract time due to such unauthorized extra work and the CONTRACTOR thereafter shall be entitled to no compensation whatsoever for the performance of such work.

11. **CONFLICT OF INTEREST:** CONTRACTOR represents that it presently has no interest which would conflict in any manner or degree with the performance of services contemplated by this Agreement. CONTRACTOR further represents that in the performance of this Agreement, no person having such interest will be employed.

12. **OWNERSHIP OF WORK PRODUCT:** DISTRICT shall be the owner of and shall be entitled to immediate possession of accurate reproducible copies of any design computations, plans, correspondence or other pertinent data and information gathered or computed by CONTRACTOR prior to termination of this Agreement by DISTRICT or upon completion of the work pursuant to this Agreement.

13. **CONTRACTOR'S WARRANTY:** DISTRICT has relied upon the professional ability and training of CONTRACTOR as a material inducement to enter into this Agreement. CONTRACTOR hereby warrants that all its work will be performed in accordance with generally accepted professional practices and standards as well as the requirements of applicable federal, state and local laws, it being understood that acceptance of CONTRACTOR'S work by DISTRICT shall not operate as a waiver or release.
14. **TAXES:** CONTRACTOR agrees to file federal and state tax returns and pay all applicable state and federal taxes on amounts paid pursuant to this Agreement. In case DISTRICT is audited for compliance regarding any applicable taxes, CONTRACTOR agrees to furnish DISTRICT with proof of payment of taxes on those earnings.

15. **DUE PERFORMANCE:** Each party to this Agreement undertakes the obligation that the other's expectation of receiving due performance will not be impaired. When reasonable grounds for insecurity arise with respect to the performance of either party, the other may, in writing, demand adequate assurance of due performance and until such written assurance is received may, if commercially reasonable, suspend any performance for which the agreed return has not been received.

16. **NO THIRD-PARTY BENEFICIARIES:** There are no intended third-party beneficiaries of this Agreement.

17. **NO WAIVER OF BREACH:** The waiver by DISTRICT of any breach of any term or promise contained in this Agreement shall not be deemed to be a waiver of such term or promise or any subsequent breach of the same or any other term or promise contained in this Agreement.

   **End of Section**
Peralta Community College District

RFP Acknowledgement and Signature Form
13/14-04 District Wide Track and Field Refurbishment

The undersigned having carefully examined the location of the proposed work, the local conditions of the place where the work is to be done, the Invitation, the General Conditions, the Specifications and all of the documents for this project, and accurately completed the Bidder’s Questionnaire, proposes to enter into a contract with Peralta Community College District to perform the work listed in this RFP, including all of its component parts, and to furnish any and all required labor, materials, equipment, insurance, bonding, taxes, transportation and services required for this project in strict conformity with the plans and specifications prepared, including any Addenda, within the time specified.

Addendum Acknowledgement

The following addendum(s) are acknowledged in this RFP: _________________________

Acknowledgement and Signature:

1. No Proposal is valid unless signed in ink by the person authorized to make the proposal.
2. I have carefully read, understand and agree to the terms and conditions on all pages of this proposal. The undersigned agrees to furnish the services stipulated on this proposal.

Vendor Name: __________________________ Title: __________________________

Contact Person: ____________________________________________________________

Address: __________________________________________________________________

Telephone: ___________________ Fax: ___________________

Contractor License #: ___________________ Expiration Date: ___________________

Federal Tax Identification Number: ___________________

Authorized Signature: ___________________________________________ Date: ___________

Decline Proposal:

We do not wish to submit a Proposal on this Project. Please state your reason below. Please also indicate if you would like to remain on our vendor list.

Reason:______________________________________________________________________

Company: __________________________ Address: __________________________

Name: __________________________ Signature ___________________________ Date: ___________
This page intentionally left blank.
TECHNICAL SPECIFICATIONS

PERALTA COMMUNITY COLLEGE DISTRICT
TRACK AND FIELD RESURFACING
College of Alameda
Laney College
Merritt College

CONSTRUCTION DOCUMENTS & SPECIFICATIONS

Construction Documents
May 17, 2013
PERALTA COMMUNITY COLLEGE DISTRICT
TRACK AND FIELD RESURFACING

SECTION 00 01 07 – SEALS

Architectural

Civil

Structural

CONSTRUCTION DOCUMENTS
5.17.2013

SEALS
00 01 07-1
### DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Number of Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>00 01 01</td>
<td>Project Title Page</td>
<td>1</td>
</tr>
<tr>
<td>00 01 07</td>
<td>Seals Page</td>
<td>1</td>
</tr>
<tr>
<td>00 01 10</td>
<td>Table of Contents</td>
<td>1</td>
</tr>
<tr>
<td>00 01 15</td>
<td>List of Drawings</td>
<td>1</td>
</tr>
<tr>
<td>00 41 00</td>
<td>Bid Forms</td>
<td>3</td>
</tr>
<tr>
<td>00 41 01</td>
<td>Proposal Evaluation Process</td>
<td>2</td>
</tr>
<tr>
<td>01 10 00</td>
<td>Summary of work</td>
<td>11</td>
</tr>
<tr>
<td>01 31 13</td>
<td>Project Coordination and Meetings</td>
<td>2</td>
</tr>
<tr>
<td>01 33 23</td>
<td>Shop Drawings, Product Data and Samples</td>
<td>4</td>
</tr>
<tr>
<td>01 62 00</td>
<td>Product Options and Substitutions</td>
<td>2</td>
</tr>
<tr>
<td>01 77 00</td>
<td>Contract Close-Out</td>
<td>5</td>
</tr>
<tr>
<td>01 78 36</td>
<td>Project Warranties</td>
<td>1</td>
</tr>
<tr>
<td>01 78 39</td>
<td>Project Record Documents</td>
<td>2</td>
</tr>
</tbody>
</table>

### DIVISION 02-48 – FACILITY CONSTRUCTION SUBGROUP

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Number of Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>03 30 01</td>
<td>Cast-In-Place Concrete</td>
<td>16</td>
</tr>
<tr>
<td>11 68 33</td>
<td>Playing Field Equipment</td>
<td>1</td>
</tr>
<tr>
<td>11 68 33.45</td>
<td>Track and Field Line Markings</td>
<td>10</td>
</tr>
<tr>
<td>31 11 00</td>
<td>Demolition</td>
<td>3</td>
</tr>
<tr>
<td>31 22 00</td>
<td>Site Preparation and Grading</td>
<td>3</td>
</tr>
<tr>
<td>32 11 23.23</td>
<td>Base Course Drainage Layers (Artificial Turf)</td>
<td>5</td>
</tr>
<tr>
<td>32 12 00</td>
<td>Asphalt Paving</td>
<td>6</td>
</tr>
<tr>
<td>32 18 13</td>
<td>Artificial Turf</td>
<td>5</td>
</tr>
<tr>
<td>32 18 23</td>
<td>Synthetic Track Surfacing</td>
<td>4</td>
</tr>
</tbody>
</table>
SECTION 00 01 15 – LIST OF DRAWINGS

**LIST OF DRAWINGS:**

**LANEY COLLEGE**
- COVER SHEET
- EXISTING CONDITION/DEMOLITION PLAN
- SURFACING PLAN
- DIMENSION PLAN
- COLOR PLAN
- DETAILS
- STRUCTURAL SHEET
- ACCESSIBILITY PLAN (FOR REFERENCE ONLY)
- PARKING DETAILS (FOR REFERENCE ONLY)

**COLLEGE OF ALAMEDA**
- COVER SHEET
- EXISTING CONDITION/DEMOLITION PLAN
- SURFACING PLAN/DIMENSION PLAN
- COLOR PLAN
- ACCESS PLAN
- DETAILS

**MERRITT COLLEGE**
- COVER SHEET
- EXISTING CONDITION/DEMOLITION PLAN
- SURFACING PLAN
- COLOR PLAN
- ACCESS PLAN
- DETAILS

CONSTRUCTION DOCUMENTS
5.17.2013  LIST OF DRAWINGS
00 01 15-1
The undersigned, doing business under the firm name of__________________________, having carefully examined the location of the proposed work, the local conditions of the place where the work is to be done, the Request for Proposal, the Contract, the Specifications and all of the contract documents for the proposed project, and accurately completed the Evaluation Criteria, proposes to perform the contract, including all of its component parts, and to furnish any and all required labor, materials, equipment, transportation and services required for the construction of the project in strict conformity with the plans and specifications prepared, including all taxes as follows:

1. ADDENDA RECEIVED: 0 1 2 3 4 5 6 ___ (circle)

2. BID IN ACCORDANCE WITH THIS BID PACKAGE: Y N (circle)

3. FURNISH & INSTALL:

BASE BID LANEY COLLEGE:

| A. ARTIFICIAL TURF SQUARE FOOTAGE INCLUDED IN PROPOSAL | SF |
| B. SYNTHETIC TRACK SQUARE FOOTAGE INCLUDED IN PROPOSAL | SF |
| C. FURNISH & INSTALL ARTIFICIAL TURF | $ |
| D. REMOVE AND DISPOSE OF ARTIFICIAL TURF | $ |
| E. FURNISH & INSTALL SYNTHETIC TRACK | $ |
| F. REMOVE AND DISPOSE OF SYNTHETIC TRACK | $ |
| G. SITE WORK REQUIRED FOR TURF INSTALLATION | $ |
| H. ASPHALT PREPARATION FOR SYNTHETIC TRACK INSTALLATION | $ |
| I. NEW GOALPOSTS | $ |
| J. RELOCATION OF POLE VAULT (COMPLETE) | $ |
| K. RENOVATION OF JUNCTION BOXES | $ |
| L. MAINTENANCE PROGRAM (8-YEAR) | $ |
| M. MAINTENANCE EQUIPMENT | $ |
| N. COST OF BOND | $ |
| O. PROVIDE SAND PIT COVERS | $ |
| P. | $ |
| Q. | $ |
| TOTAL BASE BID | $ |
### ALTERNATES LANEY COLLEGE:

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. REMOVE EXISTING LONG/TRIPLE JUMP</td>
<td>$</td>
</tr>
<tr>
<td>A2. REMOVE DRAIN STONE</td>
<td>$</td>
</tr>
<tr>
<td>A3. INSTALL FULL SECTION SYNTHETIC TRACK</td>
<td>$</td>
</tr>
<tr>
<td>A4. INSTALL LONG/TRIPLE JUMP RUNWAY</td>
<td>$</td>
</tr>
<tr>
<td>A5. ADJUST SMALL DIAMETER JUNCTION BOX DRAIN</td>
<td>$</td>
</tr>
<tr>
<td>A6. GRIND TRACK ½”</td>
<td>$</td>
</tr>
<tr>
<td>A7. GRIND TRACK 1 ½” AND PAVE</td>
<td>$</td>
</tr>
</tbody>
</table>

### BASE BID MERRITT COLLEGE:

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. ARTIFICIAL TURF SQUARE FOOTAGE INCLUDED IN PROPOSAL</td>
<td>SF</td>
</tr>
<tr>
<td>B. SYNTHETIC TRACK SQUARE FOOTAGE INCLUDED IN PROPOSAL</td>
<td>SF</td>
</tr>
<tr>
<td>C. FURNISH &amp; INSTALL ARTIFICIAL TURF</td>
<td>$</td>
</tr>
<tr>
<td>D. REMOVE AND DISPOSE OF ARTIFICIAL TURF</td>
<td>$</td>
</tr>
<tr>
<td>E. FURNISH &amp; INSTALL SYNTHETIC TRACK</td>
<td>$</td>
</tr>
<tr>
<td>F. REMOVE AND DISPOSE OF SYNTHETIC TRACK</td>
<td>$</td>
</tr>
<tr>
<td>G. SITE WORK REQUIRED FOR TURF INSTALLATION</td>
<td>$</td>
</tr>
<tr>
<td>H. ASPHALT PREPARATION REQUIRED FOR SYNTHETIC TRACK INSTALLATION</td>
<td>$</td>
</tr>
<tr>
<td>I. RENOVATION OF JUNCTION BOXES &amp; FENCE</td>
<td>$</td>
</tr>
<tr>
<td>J. MAINTENANCE PROGRAM (8-YEAR)</td>
<td>$</td>
</tr>
<tr>
<td>K. MAINTENANCE EQUIPMENT</td>
<td>$</td>
</tr>
<tr>
<td>L. COST OF BOND</td>
<td>$</td>
</tr>
<tr>
<td>M. PROVIDE ADDITIONAL SAND</td>
<td>$</td>
</tr>
<tr>
<td>N.</td>
<td>$</td>
</tr>
<tr>
<td>O.</td>
<td>$</td>
</tr>
<tr>
<td><strong>TOTAL BASE BID</strong></td>
<td>$</td>
</tr>
</tbody>
</table>

### ALTERNATES MERRITT COLLEGE:

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. SAWCUT AND REMOVE EXISTING ASPHALT</td>
<td>$</td>
</tr>
<tr>
<td>A2. INSTALL NEW PIPE, BACKFILL AND ASPHALT SECTION</td>
<td>$</td>
</tr>
<tr>
<td>A3. GRIND TRACK ½”</td>
<td>$</td>
</tr>
</tbody>
</table>
PERALTA COMMUNITY COLLEGE DISTRICT
TRACK AND FIELD RESURFACING PROJECT 13-105

A4. GRIND TRACK 1 ½” AND PAVE  

<table>
<thead>
<tr>
<th>BASE BID COLLEGE OF ALAMEDA:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. SYNTHETIC TRACK SQUARE FOOTAGE INCLUDED IN PROPOSAL</td>
<td>SF</td>
</tr>
<tr>
<td>B. FURNISH &amp; INSTALL SYNTHETIC TRACK</td>
<td>$</td>
</tr>
<tr>
<td>C. REMOVE AND DISPOSE OF SYNTHETIC TRACK</td>
<td>$</td>
</tr>
<tr>
<td>D. ASPHALT PREPARATION REQUIRED FOR SYNTHETIC TRACK INSTALLATION</td>
<td>$</td>
</tr>
<tr>
<td>E. RENOVATION OF JUNCTION BOXES</td>
<td>$</td>
</tr>
<tr>
<td>F. INSTALLATION OF STORM DRAIN INFRASTRUCTURE</td>
<td>$</td>
</tr>
<tr>
<td>G. COST OF BOND</td>
<td>$</td>
</tr>
<tr>
<td>H.</td>
<td>$</td>
</tr>
<tr>
<td>I.</td>
<td>$</td>
</tr>
<tr>
<td>TOTAL BASE BID</td>
<td>$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ALTERNATES COLLEGE OF ALAMEDA:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A1. GRIND TRACK ½”</td>
<td>$</td>
</tr>
<tr>
<td>A2. GRIND TRACK 1 ½” AND PAVE</td>
<td>$</td>
</tr>
</tbody>
</table>

| TOTAL BASE BID (ALL COLLEGES) | $ |

4. PAYMENT AND PERFORMANCE BOND INCLUDED IN BID ABOVE:  Y  N  (circle)

5. EVALUATION CRITERIA INCLUDED IN BID  Y  N  (circle)

6. THE CONTRACTOR IS SELF-PERFORMING OR MANUFACTURING MATERIALS WHICH ACCOUNT FOR ATLEAST 50% OF THE BASE BID AMOUNT  Y  N  (circle)

It is understood that this bid is based upon completing the work within the number of calendar days as specified in the contract documents.

COMPANY NAME:

BY:  
SIGNATURE:  
DATE:  

CONSTRUCTION DOCUMENTS  5.17.2013 
BID FORMS  00 41 00-3
PART 1 – GENERAL

1.1 Turf Proposals will be evaluated by a committee comprised of various members of the District. The District committee herein after will be referred to as the “Review Panel”.

1.2 The Review Panel will review each proposal and determine the following:

A. Whether each submitted Proposal is responsive to the requirements of the RFP.

B. The technical scores of each responsive submittal. Using the evaluation criteria as identified below, each technical review committee member will individually evaluate and assign technical points for each submittal using the attached form. All committee members scores for each submittal will then be added together to create a total sum of all technical points for each submittal. The total sum of technical points will then be divided by the number of committee members to determine a “Net Technical Score” for each submittal.

C. The project will be awarded to the contractor that has the lowest “Cost per Point”. The “Cost per Point” is determined by dividing the “Base Bid” by the “Net Technical Score”. An example of how the turf selection process will work is identified below:

<table>
<thead>
<tr>
<th>Turf</th>
<th>Net Technical Score</th>
<th>Base Bid</th>
<th>Cost per Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>180</td>
<td>$850,000</td>
<td>$4,722 per point</td>
</tr>
<tr>
<td>B</td>
<td>165</td>
<td>$680,000</td>
<td>$4,121 per point</td>
</tr>
<tr>
<td>C</td>
<td>155</td>
<td>$500,000</td>
<td>$3,226 per point</td>
</tr>
</tbody>
</table>

In the example above, the turf to be selected and included in the total bid is Proposer “C” who’s “Cost per Point” is the lowest among all the responsive turfs and therefore provides the “Best Value” for the project.

END OF SECTION
SECTION 01 10 00 SUMMARY OF WORK

PART 1 - GENERAL

1.1 NAME, LOCATION AND ACCESS TO PROJECT

   A. Project Location:
      Laney College, 900 Fallon Street, Oakland, CA 94607
      Merritt College, 12500 Campus Drive, Oakland, CA 94619
      College of Alameda, 555 Atlantic Ave., Alameda, CA 94501
   
   B. District Location: 333 East 8th Street, Oakland, CA 94606
   
   C. Access: Permission for access to the site may be revoked for any and all persons who violate the District’s traffic regulations including speed limits and parking restrictions. Contractor’s personnel, operations affiliates and delivery personnel shall be made aware of and shall comply at all times with District’s traffic regulations.

1.2 DESCRIPTION OF WORK

   A. General Requirements: Contractor shall provide licensed construction professionals, qualified supervision, lead-people and workers, and shall supply labor, materials, equipment, services, transportation, insurance, licenses, demolition, utility and other items or work required to properly execute the intentions of the contract.

   B. Scope of work includes, but is not limited to:
      1. Renovation of the football/soccer field and track facilities; key work elements which include:
         a. Removal of existing surfaces of the artificial turf field and synthetic track surface.
         b. Installation of new artificial turf, installation of new goalposts, adjustments to the drainage system and installation of new synthetic track surfacing.
         c. Improvements/additions to the existing parking adjacent to the track & field and provision of a DSA acceptable “Path of Travel” from the parking to the facilities.
      2. Work shall be constructed in accordance with contract documents including addendums issued prior to bid submittal.

   C. Intent of contract Document:
      1. Contract documents were prepared with the intent to include everything necessary for the proper completion of the project. Work necessary for completion or inferred by the contract documents, even though not specifically shown or specified, shall be provided by Contractor at no additional cost to District.
      2. Where removal of existing facilities is required for performance of work under this contract, removal and replacement of utilities and/or facilities shall be included in the work at no additional cost to District.

1.3 INTERPRETATIONS OF TERMS

   The term "District," used in these specifications, is synonymous with the Construction Manager. The terms "as directed," "as required," "as permitted," "approved," "acceptable," "satisfactory," means by or to the District.

CONSTRUCTION DOCUMENTS

5.17.2013

SUMMARY OF WORK

01 10 00-1
### 1.4 DEFINITION OF TERMS USED

A. **District:** Peralta Community College District (District)

B. **Project Manager:** To be designated by District prior to commencement of construction.

C. **Project Inspector:** To be designated by District prior to commencement of construction.

D. **Contractor:** The successful Bidder, to whom the contract is awarded.

### 1.5 DEFINITIONS

The following terms, when used on the Drawings or in the Specifications, shall have the following meanings:

<table>
<thead>
<tr>
<th>TERM</th>
<th>MEANING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate; Careful; Proper; Sufficient; Suitable; Satisfactory</td>
<td>These terms refer to interpretation by District, and are subject to approval upon request</td>
</tr>
<tr>
<td>Applicable Codes</td>
<td>Current California Building Codes.</td>
</tr>
<tr>
<td>Approved</td>
<td>As approved by District.</td>
</tr>
<tr>
<td>As Directed</td>
<td>&quot;As directed by District.&quot;</td>
</tr>
<tr>
<td>As Required</td>
<td>&quot;As required by Applicable Code Requirements; by good building practice; by the conditions prevailing; by the contract documents; by District, or by District.&quot;</td>
</tr>
<tr>
<td>As Selected</td>
<td>&quot;As selected by District.&quot;</td>
</tr>
<tr>
<td>By Others</td>
<td>Work on this Project that is outside the scope of Work to be performed by Contractor under this contract, but that will be performed by District, other Contractors, or other means.</td>
</tr>
<tr>
<td>Equal</td>
<td>Of same quality, appearance, and utility to that specified, as determined by District. Contractor bears the burden of proof of equality.</td>
</tr>
<tr>
<td>Furnish</td>
<td>&quot;Supply only, not install, (unless required to be provided or installed elsewhere in the contract documents) and store on site where directed by the District.&quot;</td>
</tr>
<tr>
<td>Include/Including</td>
<td>&quot;Include/including, without limitation.&quot;</td>
</tr>
<tr>
<td>Install</td>
<td>&quot;Install or apply only, not furnish (unless required to be provided or furnished elsewhere in the contract documents).&quot;</td>
</tr>
<tr>
<td>Manufacturer’s Directions, Instructions, Recommendations, Specifications</td>
<td>Manufacturer’s written directions, instruction, recommendations, specifications</td>
</tr>
<tr>
<td>Must; shall; to; Will</td>
<td>When used as a directive to Contractor, these terms indicate a mandatory action.</td>
</tr>
<tr>
<td>Necessary</td>
<td>&quot;Essential to completion of Work.&quot;</td>
</tr>
<tr>
<td>District-Furnished,</td>
<td>&quot;To be furnished by District at its cost and installed by Contractor as</td>
</tr>
</tbody>
</table>
1.6 **INCONSISTENCIES IN CONTRACT DOCUMENTS**

In addition to the requirements of the General Conditions, if there is an inconsistency in the contract documents, the stricter, more stringent standards and requirements shall be followed at no additional cost to District.

1.7 **BUILDING PERMITS**

Contractor is not required to take out building permits for work done on College property. The DSA will review the plans and specifications and all inspections will follow the current rules and regulations of the DSA.

1.8 **PARKING AND ACCESS TO SITE**

A. Vehicular access to the site shall be as designated by District on project site.

B. Contractor is responsible for complying with College regulations regarding on-site parking and vehicle access to the project.
   1. Vehicles must observe posted hours of control, permit requirements, and parking instructions.
   2. Overnight parking is not permitted on College property except by permission of the District.
   3. Access to the site may be revoked for any and all persons who violate the College regulations, including parking restrictions.

C. Parking Construction Staging Areas: Parking in construction staging areas is limited to construction vehicles that are required to be in the immediate proximity to the construction in order to perform the work. All construction vehicles must be clearly identified with the name of the Contractor. The Contractor will otherwise comply with the College parking restrictions. Parking for construction workers’ commuter vehicles is prohibited and is subject to citation.

D. District will provide a staging area and Contractor shall be responsible for fencing and securing this area, as required.

1.9 **NOTIFICATION**

Notify District not less than two (2) working days in advance of any inspection, meeting or consultation requiring the representative’s presence.

1.10 **WORK HOURS**

A. On-site construction portion of the Work of this project shall be accomplished during the following hours only:
   
   Monday through Saturday, 7:00 a.m. to 7:00 p.m., and on Sunday with permission from District.

B. Roto-hammering, chipping, or other activity that will cause excessive noise and
vibration shall be performed no earlier in the work day than 8:00 a.m., and must be scheduled with the District and shown on the project schedule as an activity.

1.11 WEATHER-CAUSED DELAYS

A. Time lost in the progress of the Work caused by stormy or inclement weather conditions shall not be considered an Excusable Delay as defined in the General Conditions, unless the aggregate of such lost time in any calendar month exceeds the average number of rain days for said month.

B. Average number of rain days when precipitation amounts greater than 0.5” occur shall be based on the data published for Fairfield, California by:
   National Climatic Data Center
   Climatic Services Branch
   151 Patton Avenue
   Asheville, North Carolina 28801-5001
   Telephone (828) 271-4800

C. Mean average of rain days shall be based on data covering the last ten years from this source.

D. Contract Time and the Contractor’s Schedule shall include no days for weather caused delays.

1.12 CONTRACTOR’S STAFFING

Superintendent:

1. Confirm that the Project Manager and Superintendent proposed in the Contractor’s Prequalification Statement will be assigned to the Project, or submit qualifications of another Project Manager or Superintendent showing five (5) years minimum experience as a Superintendent.

2. Failure to maintain a Superintendent on the Project site at all times construction work is in progress shall be considered a material breach of this contract, entitling District to terminate the contract or, alternatively, issue a Stop Work order until the Superintendent is on the Project site. If, by virtue of issuance of said stop order, Contractor fails to complete the contract on time, it will be assessed liquidated damages in accordance with the Agreement.

3. Superintendent approved for this Project shall be able to read, write and verbally communicate fluently in English.

1.13 SITE DECORUM

Contractor shall control the conduct of its direct employees and subContractors so as to prevent unwanted interaction initiated by Contractor’s employees with College students, guests, staff or other individuals (except those associated with the Project), adjacent to the Project site. Without limitation, unwanted interaction by Contractor employees would be whistling at or initiating conversation with passersby. In the event that any Contractor employee initiates such unwanted interaction, Contractor shall, either upon request of District or on its own initiative, replace said employee with another of equivalent technical skill, at no additional cost to District.
1.14 NO SMOKING IN COLLEGE BUILDINGS
District has adopted a no-smoking provision in public buildings and indoor public areas. Contractor, his forces and his employees will observe this requirement while performing work in District’s buildings.

1.15 RADIOS
Playing of radios on College project sites is prohibited at all times. The Contractor, his forces, and his employees will observe this requirement while performing work on the College project site.

1.16 SANITARY FACILITIES
Contractor will provide sanitary facilities and maintain them throughout the construction schedule for their work forces. Under no circumstances will the workmen be allowed to use the Colleges restrooms.

1.17 JOB SIGNS AND PUBLICITY RELEASES
A. Advertising Signage: The use of Contractor or subContractor advertising signage is prohibited. Do not display such advertising or job signs except as may be required for identification and deliveries.

B. District-Furnished Warning Signs: Whenever required by District, post District-furnished warning signs in locations as directed.

C. Do not release any information, story, photograph, plan or drawing relating information about the project to anyone, including press or other public communications medium.

1.18 PROJECT SECURITY
Contractor is responsible for project security of materials, tools, equipment, supplies and partially completed construction.

1.19 CLEAN-UP DURING CONSTRUCTION
A. Maintain job in a clean, orderly fashion. Pick up and remove debris DAILY. If work under this contract creates dusty, dirty or unsightly conditions in adjacent areas, the Contractor will immediately clean up the affected areas. Daily clean up shall remove all dangerous materials and equipment that may be considered an “attractive nuisance” to children.

B. Electrical and mechanical equipment and tools shall be equipped with dampers, mufflers, isolators or other appropriate means for reducing noise emissions.

1.20 NOISE AND DUST CONTROL
Contractor shall note that adjacent facilities will remain in use during the entire construction period and he shall take all reasonable precautions to reduce dust and minimize noise.

1.21 ACCESS AND EXIT-WAYS
Do not interfere with use of or access to occupied buildings or adjacent property.

1.22 WELDING AND BURNING
A. Welding and burning of steel shall be eliminated as much as possible. Where unavoidable, welding and burning shall be done with all possible precaution to avoid fire hazards. Contractor shall contact the Director of Facilities who will submit a service request to disconnect the smoke detectors. Facilities phone number is (707) 864-7176. Contractor shall provide a fire watch for one-half (1/2) hour after burning stops. Contractor shall provide protection for all adjacent purposes.

B. No welding power is available; trailer mounted welding machines complying with
campus noise mitigation standards are required. No diesel generators are allowed.

1.23 POWDER DRIVEN FASTENERS

Powder driven fasteners are not permitted, unless approved by the District.

1.24 SURROUNDING SITE CONDITION SURVEY

Prior to commencing the construction portion of the Work, Contractor and District shall tour the Project site together to examine and record the damage to existing adjacent buildings and improvements. This record shall serve as a basis for determination of subsequent damage due to Contractor’s operations, and shall be signed by all parties making the tour. Any cracks, sags, or damage to the adjacent buildings and improvements not noted in the original survey, but subsequently discovered, shall be reported to District.

1.25 EXCAVATION AND TRENCHING

A. Pursuant to Labor Code 6707, the Contractor shall include adequate sheeting, shoring, bracing or equivalent method for the protection of life and limb, which conforms to applicable Federal and State safety orders.

B. Before beginning any excavation five (5) feet or more in depth, submit to the District 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 excavations. Comply with the Standards established by the State of California Construction Safety Orders Title 24 of the California Administrative Code. If the detailed plan varies from such shoring system Standards it shall be prepared by a registered civil or structural engineer whose name and registration number shall be indicated on the Drawing. If a dispute arises as to whether the plan must be prepared by a registered civil or structural engineer, the District's determination of the matter shall be final and conclusive. The cost of required engineering services shall be borne by the Contractor and shall be deemed to have been included in the stipulated sum for the work as stated in the Agreement.

C. Neither the review nor approval of any plan showing design of shoring, bracing, sloping or other provisions for worker protection shall relieve Contractor from his obligations to comply with Construction Safety Order Standards and Title 24 CAC for design and construction of such protective work, and Contractor shall indemnify District and District from any and all claims, liability, costs, actions and a cause of action arising out of or related to the failure of such protective system. The Contractor shall defend the District, its officers, employees and agents and the District in any litigation or proceeding brought with respect to the failure of such protective systems.

D. Contractor shall comply with Section 382 of the Civil Code of the State of California relating to lateral, general and sub-adjacent supports wherever structures or improvements adjacent to an excavation may be damaged by such excavation.

1.26 MATERIAL AND EQUIPMENT

A. General:
   1. All material and equipment incorporated in the Work shall be:
      a. New.
      b. In condition acceptable to District.
      c. Suitable for intended use.
   2. Keep materials clean, dry, and undamaged.

B. UL Label: Materials and equipment, for which UL standards have been established and their label service is available, shall bear the appropriate UL Label.

C. Manufacturer’s Trade Marks and Names: District reserves the right to review and
request the removal or redesign of manufacturers’ trade marks and names on items of materials and equipment which will be exposed to view in the completed Work. Such removal or redesign shall be at no increase in contract Sum.

D. Delivery of Materials: Deliver all materials in the original packages, containers or bundles bearing the name, brand, type and grade of material of the manufacturer or the supplier for whom the product is manufactured.

1.27 LAYING OUT OF THE WORK

Contractor shall bear the expense of corrective work necessitated by its failure to so report. Contractor shall employ a California registered Civil Engineer or Land Surveyor to lay out the Work and set grades, lines, levels, and positions throughout the Project site. Before beginning the Work, locate general reference points, establish monuments, and take action as is necessary to prevent their destruction; then lay out all lines, elevations, and measurements for buildings, grading, paving, utilities, and other parts of the Work. Verify figures and dimensions shown on the Drawings and accept responsibility for any error resulting from failure to so verify, including the cost of any additional re-surveying. Establish permanent monuments on curbs, manholes, or pavements, or with concrete embedded steel pipe with lead plug and brass nail, as approved. Actual field conditions deviating from the information provided to bidders shall be reported to District before proceeding.

1.28 APPARATUS AND EQUIPMENT LOCATIONS

A. Locations of apparatus and equipment indicated on the Drawings (if any) are approximate only, and are subject to change to suit operational service as approved by District.

B. Furnish and install apparatus and equipment in a manner and in locations, which keep openings and passageways clear. Make changes in locations of equipment and materials, which may be necessary to accomplish these purposes as approved by District.

1.29 EXAMINATION OF EXISTING CONDITIONS

Verify measurements in field, as required, for work fabricated to fit job conditions. Before starting work, examine adjoining work on which installment is in any way dependent for perfect workmanship and fit. Give written description of any existing deficiencies detrimental to proper and timely installation of work.

1.30 CARE OF EXISTING FACILITIES

A. Contractor shall be responsible for repair or replacement of existing facilities including any landscaping, paving, roads and sidewalks damaged as a result of the performance of this work. Any facilities or finishes damaged shall be repaired or replaced with materials and workmanship equivalent to that employed in executing the original work and to the satisfaction of the District.

B. Contractor shall take care not to overload any existing structures by storing material, erecting shoring, placing equipment or other materials upon or against them.

C. Do not park trucks, store materials or cross over landscaped areas intended to remain. Any plant materials damaged as a result of the performance of this work will either be replaced with new plant materials equal in size to those damaged or by payment of an amount representing the value of the damaged material as determined by the District.

1.31 REPAIR OF EXISTING WORK

Whenever any cutting, removal, or alterations of existing work is required to form connections with new work or otherwise meet the requirements of the contract documents, perform such
work so as not to damage the work that will remain in place. Perform patching and repairs occasioned thereby using materials, construction details, and finishes matching those of the existing work as closely as possible and to the approval of District.

1.32 TEMPORARY CONSTRUCTION UTILITIES

A. The District shall provide and pay for necessary power and water required during the course of construction. Contractor shall be responsible for providing temporary facilities required to deliver such utility services from their existing location on the site to the point of intended use.

B. Contractor shall verify characteristics of power available on site. Where power of higher voltage or different phase of current is required, Contractor shall be fully responsible for providing such service and shall pay all costs required thereof. Work to be done in accordance with applicable California Administrative Codes.

C. Use backflow preventers on water lines at point of connection to District water supply. Backflow preventers are to comply with requirements of the Uniform Plumbing Code.

1.33 UTILITY SHUTDOwnS AND INTERRUPTIONS

A. Give the District ten (10) days' notice, in writing, of need to shut off existing utility services or equipment interruptions. The District shall set exact time for and execute shutdown. All work required re-establishing service such as connections, line taps, and cable splicing shall be performed by the Contractor.

B. Obtain District approval at least ten (10) days in advance of deliveries of material or equipment or other activities, which may conflict with District use of facilities.

C. Excessive scheduling of utility shutdowns or repeated requests to schedule and subsequent cancellation or re-scheduling of shut downs may be subject to back-charges to the Contractor in accordance with this section of the specifications.

1.34 TEMPORARY JOB OFFICE

A. Contractor is not required to provide a temporary job office for their use.

B. In the Contractor's temporary job office, maintain complete set of Construction documents, all reviewed shop drawings, submittals, samples and all executed Change Orders.

1.35 PROJECT RECORD DOCUMENTS, "AS BUILT" DRAWINGS

A. Maintain at the job site, a complete record set of up-to-date contract documents and Construction documents. The prints shall show actual installation by dimension, elevation or other reference, where changed from the Construction documents approved by the District.

B. Contractor shall cross-reference all changes approved by the District on the record set of Construction documents, noting the type and number of the document authorizing the change.

C. Electrical work is shown diagrammatically on the Construction Drawings. Contractor shall make "as-built" drawings showing the exact measured location of concealed piping, ductwork and major electrical conduits.

1.36 CONTRACTOR'S SUBMITTALS

A. Project Schedule: Submit detailed project schedule to District for approval.

B. Schedule of Values (Cost Breakdown): Submit detailed project Schedule of Values to
 District for approval.

C. Submittal Schedule: Submit detailed Submittal Schedule to District for approval.

D. Staffing Plan: Submit detailed Staffing Plan (amendment to the Contractor’s Qualification Statement, if additional staff are necessary) to District for approval.

E. Product Literature: Submit detailed technical literature fully describing every product or item proposed for use including manufacturer’s literature and items specified.

F. Samples: Submit samples of materials specified to permit full evaluation of work or items proposed.

G. Shop Drawings: For detailed requirements refer to individual sections.

H. Design Materials: Submit Design Materials as required by individual sections of the Performance Specifications.

I. Certificates: Where certificates of compliance with the performance criteria are required, the Contractor shall submit the manufacturer’s standard certification for the product, material, assembly, application, installation, craftsman competency or equipment. It is not the intention of the contract to require the Contractor to conduct or pay for independent laboratory tests or certifications. This limitation does not apply to certifications that may be required by applicable codes or code required special inspections. This limitation does not apply to retesting that may be required for rejected work.

### 1.37 CORRESPONDENCE

A. Contractor’s correspondence (any written document other than a full-size drawing) directed to District should be distributed as follows:
   1. Original to District.
   2. Three copies (minimum) to District.

B. District’s correspondence (any written document other than a full-size drawing) directed to Contractor shall be distributed as follows:
   1. Original to Contractor.
   2. Three copies (minimum) to District.

### 1.38 COST BREAKDOWN

A. Within ten (10) days from the date of commencement shown in the Notice to Proceed, the Contractor shall submit to the District a breakdown of cost of the contract price itemizing the estimated costs of each class of work together with his total allowance for profit, insurance and overhead expense. This breakdown, approved by the District, shall become the basis for determining the value of work performed for the purpose of making payments.

B. Contractor shall include a separate allowance (or line item) identified as "project close out" with a corresponding value attributed to this item.

C. Contractor shall not submit a Payment Application to the District or to the District prior to the District’s approval of the Cost Breakdown submittal.

### 1.39 PAYMENT BY DISTRICT

A. Summarize quantities and percentages of construction completion as certified by the District and Consultant and agreed upon by Contractor and District, on the Cost Breakdown contained in the Application for Payment.
   1. Contractor will submit billings in accordance with District requirements.
1.40 DISTRICT BACK-CHARGES

A. Contractor will be cognizant of costs to the District caused by execution of the work of this contract. The following activities are costs to the District:
   1. Laboratory Testing.
   2. Utility Shutdowns.
   3. Inspections, if requested by the District and not otherwise required by applicable code requirements, by regulatory agencies having jurisdiction over the site or parts thereof, by the Performance Specifications or by the Contractor’s Architect.

B. Excessive or repeat scheduling and canceling of activities may result in backcharges to Contractor. If excessive or repeat scheduling of District activities occurs, District will notify Contractor in writing, and allow five days notice for Contractor to "cure." Failure of Contractor to "cure" excessive or repeat scheduling of activities beyond the five day notice period may cause District to back-charge Contractor for costs of these activities. Back-charges will be deducted from amounts owing to the Contractor.

1.41 FINAL CLEAN UP

Clean up the entire construction area and adjacent areas affected by the performance of work under this contract. Remove all temporary construction, tools, equipment, excess materials and debris.

1.42 PREPARATION FOR ACCEPTANCE (PRIOR TO FINAL INSPECTION)

A. Temporary facilities and utilities shall be properly disconnected, removed and disposed of off-site.

B. All systems, equipment and devices shall be in full and proper adjustment and operation and properly labeled and identified.

C. All materials and finishes shall be neat, clean and unmarred.

D. All broken work, including glass, curbs, slabs, paving, landscape sprinklers, etc., shall be replaced or properly repaired.

E. Clean up of the site shall be complete.

F. All guarantees, service manuals, record documents and other submittals as specified in the body of the Specifications, shall be assembled in an orderly manner and delivered to the District.

1.43 SYSTEM(S) COMMISSIONING (PRIOR TO FINAL ACCEPTANCE)

Prior to final inspection, the Contractor will schedule, through the District, training sessions, programs, manuals and documentation as required to educate and familiarize maintenance and operations staff with equipment and system’s operations. At minimum, one session per system or major piece of equipment is required. Final inspection will not be scheduled until training sessions for all building systems and major pieces of equipment have been conducted.

1.44 FINAL INSPECTION

A. Upon receipt of written notice from the Contractor that the work is ready for final inspection and acceptance, the District and Contractor shall promptly make a joint inspection of the work and note deficiencies, if any. When noted deficiencies have been removed and the District finds the work to be complete in every respect of the contract documents, the District will advise the District to file a Notice of Completion.

B. The Notice of Completion shall be prepared and recorded in the County Recorder’s...
Office. The date of final acceptance in the Notice of Completion will start the Guarantee period.

C. Contractor shall not submit a Payment Application representing the work of the project to be one hundred percent (100%) complete prior to the recordation of the Notice of Completion.

1.45 STORM WATER POLLUTION PREVENTION

(As Applicable) The General Contractor will be responsible for securing all permits required for control of storm water during the construction process. The General Contractor will file the Notice of Intent (NOI) and all other applications required for this portion of the project.

PART 2 – PRODUCTS (NOT USED)

PART 3 – INSTALLATION (NOT USED)

END OF SECTION
SECTION 01 31 13 – PROJECT COORDINATION AND MEETINGS

PART 1 - GENERAL

1.1 PROJECT COORDINATION

A. Coordinate the Work and do not delegate responsibility for coordination to subcontractors.

B. Anticipate inter-relationship of sub-contractors and their relationships with the Work.

C. Resolve differences or disputes between sub-contractors concerning coordination, interference or extent of work between sections.

D. Coordinate work of sub-contractors so that portions of work are performed in a manner that minimizes interference with progress of the Work.

E. Do not obstruct spaces and installations that are required to be clear by Applicable Code Requirements.

F. Do not cover piping, wiring, ducts or other installations until they have been inspected and approved and required certificates of inspection issued.

G. Remove and replace work that does not comply with the Contract Documents. Repair or replace other work or property damaged by those operations with no adjustment of Contract Sum.

H. Coordinate portions of Work requiring careful coordination in order to fit in space available. Before commencing such portions of the work, prepare supplementary Drawings for review by the District’s Representative.

1.2 PROCEDURE MEETINGS

A. After execution of the construction contract and typically prior to commencement of the Work, a procedure meeting (kick-off meeting) will be conducted by District to discuss procedures that are to be followed during performance of the Work. The Contractor and District shall be prepared to review job schedules, discuss various aspects of the work, and administrative procedures for smooth job progress.

B. Location: As designated by District.

C. Attending shall be:
   a. Architect/Engineer.
   b. District.
   c. District’s Project Inspector
   d. District’s Consultants and District’s Representative’s Consultants, as appropriate.
   e. Contractor.
   f. Contractor’s Superintendent.
   g. Subcontractors, as appropriate.
1.3 BILLING MEETINGS

A. District shall conduct a billing meeting each month prior to submittal of an Application For Payment.

B. Location: As designated by District.

C. Attending shall be:
   a. District.
   b. District's Project Inspector
   c. District's Consultants and District's Representative's Consultants, as appropriate.
   d. Contractor.
   e. Contractor's Superintendent.
   f. Subcontractors, as appropriate.
   g. Others, as appropriate.

1.4 WEEKLY PROGRESS MEETINGS

A. During the course of construction, progress meetings will be held to review progress of the work and resolve construction problems. The minutes of these meetings will be prepared by the District and issued as expeditiously as possible to:
   a. District electronic copy
   b. Contractor electronic copy
   c. Architect/Engineer electronic copy

B. Location: As designated by District.

C. Attending shall be:
   a. District.
   b. District's Project Inspector.
   c. District's Consultants and District's Representative's Consultants, as appropriate.
   d. Contractor.
   e. Contractor's Superintendent.
   f. Subcontractors, as appropriate.
   g. Others, as appropriate.

PART 2 – PRODUCTS (NOT USED)

PART 3 – INSTALLATION (NOT USED)

END OF SECTION
SECTION 01 33 00- SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES SUBMITTALS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

A. Shop Drawings, Product Data, and Samples, other than in connection with proposed substitutions shall be submitted to District only when specifically required; and District will not review any other such submittals. Product Data and Samples for proposed substitutions shall be submitted to District. Contractor shall be responsible for obtaining such copies of Shop Drawings, Product Data, and Samples as it may require for its own use.

1.2 RELATED REQUIREMENTS

A. Definitions:
   1. The terms "Shop Drawings" and "Product Data" as used herein also include, but are not limited to, fabrication, erection, layout and setting drawings, manufacturers' standard drawings, descriptive literature, catalogues, brochures, performance and test data, wiring and control diagrams, all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and methods of construction as may be required to show that the materials, equipment, or systems and the positions thereof conform to the Contract Documents.
   2. As used herein, the term "manufactured" applies to standard units usually mass-produced. The term "fabricated" means items specifically assembled or made out of selected materials to meet individual design requirements. Shop Drawings shall establish the actual detail of all manufactured or fabricated items, indicate correct relation to adjoining Work, and amplify design details of mechanical and electrical equipment in accurate relation to physical spaces in the structure.

B. Manufacturers' Instructions: Where any item of Work is required by the Contract Documents to be furnished, installed, or performed in accordance with a specified product manufacturer's instructions, Contractor shall procure and distribute the necessary copies of such instructions to District and all other concerned parties; and Contractor shall furnish, install, or perform the Work in strict accordance therewith.

C. Submittal Schedule:
   1. Contractor shall provide a Submittal Schedule to the District for approval no later than ten (10) days after the date of commencement specified in the Notice To Proceed.
   2. The schedule for submission of Shop Drawings, Product Data, and Samples by Contractor (the "Submittal Schedule"), and their processing and return by District, shall be agreed upon by both parties in order that the items covered by these submittals will be available when needed by the construction process and so that each party can plan its workload in an orderly manner.

1.3 SHOP DRAWINGS

A. Present information required on Shop Drawings in a clear and thorough manner. Identify details by reference to drawing and detail, schedule, or room numbers shown and specified.
1.4 PRODUCT DATA

A. Preparation:
   1. Clearly mark each copy to identify pertinent products or models.
   2. Show performance characteristics and capacities.
   3. Show dimensions and clearances required.
   4. Show wiring or piping diagrams and controls.

B. Manufacturers' standard schematic drawings and diagrams:
   1. Modify the Drawings and other diagrams to delete information which is not applicable to the Work.
   2. Supplement standard information to provide information specifically applicable to the Work.

1.5 SAMPLES

A. Office Samples shall be of sufficient size and quality to clearly illustrate the following:
   1. Functional characteristics of the products, with integrally related parts and attachment devices.
   2. Full ranges of color, texture, and pattern.

1.6 CONTRACTOR'S REVIEW OF SUBMITTALS

A. Review, mark up as appropriate, and stamp Shop Drawings, Product Data, and Samples prior to submission. Submittals shall clearly show that Contractor has reviewed them for conformance with the requirements of the Contract Documents and for coordination of the Work.

B. Determine and Verify:
   1. Field measurements.
   2. Field construction criteria.
   3. Catalog numbers and similar data.

C. Coordinate each submittal with requirements of the Work and of the Contract Documents.

D. Notify District in writing, at time of submission, of any changes in the submittals from requirements of the Contract Documents.

E. Begin no fabrication or Work which requires submittals until the return of District's final reviewed submittals.

1.7 SUBMISSION REQUIREMENTS

A. Make submittals promptly in accordance with the Submittal Schedule and in such sequence as to cause no delay in the Work or in the work of any separate contractor.

B. Number of Submittals Required:
1. Shop Drawings & Product Data: Submit one (1) electronic copy (PDF).
2. Non-Reproducible Submittals: Submit the number of copies which Contractor will need, plus four (4) copies (minimum) which will be retained by District.
3. Samples: Submit the number specified in the Section that requires them.

C. Submittals shall contain:
1. Date of submission and dates of any previous submissions.
2. Project name and number.
4. Names of:
   a. Contractor.
   b. Subcontractor.
   c. Supplier.
   d. Manufacturer.
5. Identification of the product, with the Specification Section number.
6. Field dimensions, clearly identified as such.
7. Relation to adjacent or critical features of the Work or materials.
8. Reference standards, such as ASTM or Federal Specification numbers.
10. Identification of revisions on re-submittals.
11. 8-inch x 3-inch blank space for review stamps.
12. Contractor's stamp, initialed or signed, certifying to the review of submittal; verification of materials and field measurements and conditions; and compliance of the information within the submittal with requirements of the Work and of the Contract Documents.

D. Resubmission Requirements:

1. Shop Drawings and Product Data:
   a. Revise Shop Drawings or Product Data, and resubmit as specified for the initial submittal.
   b. Identify any changes that have been made other than those requested.
   c. Note any departures from the Contract Documents or changes in previously reviewed submittals that were not commented upon by District.

2. Samples: Submit new samples as required for initial submittal.

E. Distribution:

1. District will electronically (as applicable) distribute approved Shop Drawings, Product Data and Samples, (all of which carry District's review stamp).
F. District's Review: District will review Contractor's submittals, such as Shop Drawings, Product Data, and Samples, for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of Contractor as required by the Contract Documents.

PART 2 – PRODUCTS    (NOT USED)

PART 3 – INSTALLATION   (NOT USED)

END OF SECTION
PART 1 - GENERAL

1.1 SUBSTITUTION OF MATERIALS AND EQUIPMENT

A. Catalog numbers and specific brands of trade names followed by the designation "or equal" are used in conjunction with the material and equipment required by the specification to establish the standards of quality, utility and appearance required. Substitutions, which are equal in quality, utility and appearance to those specified, may be accepted subject to the following provisions:
1. Substitutions must be approved by District in writing.
2. Contractor shall submit to the District, within 15 calendar days after the date of commencement specified in the Notice to Proceed, a typewritten list containing a description of each proposed substitute item or material.
3. Contractor shall provide supporting data required by paragraph C.
4. The District will accept, in writing, such proposed substitutions as are, in District opinion, equal in quality, utility and appearance to the items or materials specified.
5. Such approval shall not relieve Contractor from complying with the requirements of the drawings and specifications.
6. Contractor shall be responsible at their own expense for any changes resulting from Contractor's proposed substitution that affect other parts of Contractor's own work or the work of others.
7. The decision of the District shall be final.

B. If a request for substitution occurs after the fifteen (15) calendar-day period, substitution may be reviewed at the discretion of District or District’s representative; and costs of such review, as approved by District, shall be borne by Contractor and will be deducted from contract sum.

C. Requests for substitutions will only be considered if Contractor submits the following supporting data:
1. Complete technical data including drawings, performance specifications, samples and test reports of the article proposed for substitution; and any additional information required by the District or District’s representative.
2. Statement by Contractor that the proposed substitution is in full compliance with the requirements of the contract documents and applicable code requirements.
3. List of subcontractors, if any, which may be affected by the substitution.
4. If the proposed substitution requires that portions of the work be redesigned or removed in order to accommodate the substituted item, submit design and engineering calculations prepared by a properly licensed design professional.

D. District of District’s representative may reject any substitutions not proposed in the manner and within the time prescribed above.

E. 15-day submittal period does not excuse Contractor from completing the project within the performance time stipulated in the agreement or excuse Contractor from the
payment of liquidated damages if final completion is delayed.

F. Samples may be required. Tests required by District for determination of quality and utility shall be made by District's Testing Laboratory, and at the expense of Contractor they shall be made by a testing laboratory, with acceptance of the test procedure first given by the District.

G. In review of data submitted in support of substitutions District would use, for purposes of comparison, all characteristics of specified items as they appear in manufacturer's published data shall be submitted for review, even though all characteristics of specified items may not have been particularly mentioned in technical specifications. If more than two submissions of data are required, the cost of reviewing these additional submissions shall be charged directly against Contractor; and District will withhold funds necessary to cover these costs.

PART 2 – PRODUCTS (NOT USED)

PART 3 – INSTALLATION (NOT USED)

END OF SECTION
PART 1 GENERAL

1.1 SUMMARY

A. Scope of work:
   This section specifies administrative and procedural requirements for project closeout
   that may include but are not necessarily limited to:
   1. Inspection and/or observation procedures
   2. Project record document submittal
   3. Operating and maintenance manual submittal
   4. Warranty submittal
   5. Final cleaning

1.2 SUBSTANTIAL COMPLETION

A. Refer to General Provisions as applicable. Final regular Certificate for Payment (final
   progress payment) shall be issued when all pertinent requirements of Substantial
   Completion are met. Final retention payment shall be made after project Final
   Acceptance and conclusion of any specified Landscape Maintenance Periods subject to
   the discretion of the owner’s representative.

B. Inspection Procedures: Upon receipt of a request for inspection or observation, the
   District shall either proceed or advise contractor of unfilled requirements. District shall
   prepare the Certificate of Substantial Completion following review, or advice the
   contractor for what must be completed or corrected by “punch-list” before the
   certificate is issued. Upon receipt of “punch-list,” contractor shall complete all work
   described in a timely manner subject to the discretion of the owner’s representative.
   1. District shall repeat inspection and/or observation when requested provided
      contractor has made the request within specified lead time and given written
      assurance that “punch-list” work has been completed.
   2. Results of the completed inspection and/or observation shall help from the
      basis of requirements for final acceptance and if acceptable, may signal the
      beginning of the specified landscape maintenance period.

1.3 UNCORRECTABLE WORK

Should the District determine it is not practical or possible for the contractor to correct work
that is damaged or improperly executed, an equitable deduction from the contract sum may be
made at the sole discretion of the owner’s representative.

1.4 CLOSE-OUT SUBMITTALS

A. Submit two (2) copies of the following, where applicable, in accordance with applicable
   contract documents:
   1. Project record documents (as-contracted)
2. Operation and maintenance manuals
3. Warranties, guaranties, and bonds
4. Keys and keying schedule
5. Spare parts and extra materials
6. Other items required by specifications

B. Specified number of copies of above closeout submittals shall be received and accepted by the District before final acceptance shall be given.

C. In addition to those items previously mentioned in this section, the contractor shall submit to the District the following items before a Notice of Completion will be filed:
   Up-to-date sub-contractor list with names, addresses and telephone numbers.

D. Final Adjustment of Accounting: Submit a final statement of accounting to the District showing all adjustments to the contract sum.

1.5 MAINTENANCE MANUALS

A. Submit two (2) copies of proposed manual(s) to the District for review and acceptance. Maintenance manuals shall be received and accepted by the District before final acceptance shall be given.

B. Organized operating and maintenance data into properly indexed heavy-duty 2-inch, 3-ring vinyl covered binders. Mark appropriate identification on front and spine of each binder. Manuals can include but are not limited to the following types of information:
   1. Emergency instructions
   2. Spare parts list
   3. Copies of warranties or actual warranty cards
   4. Wiring diagrams
   5. Recommended “turn around” cycles
   6. Inspection procedures
   7. Shop drawings and product data
   8. Fixture lamping schedule

1.6 DEMONSTRATION

A. Prior to final acceptance, contractor shall fully instruct owner’s representative’s designated operating and maintenance personnel in the operation, adjustment and maintenance of products, equipment, and systems installed. Provide services of factory trained instructors from the manufacturers of each major item of equipment or system, if necessary or requested by the owner’s representative.

B. Operating and maintenance manual(s) shall be fully described at this instruction meeting.
   1. Review contents of manual(s) with personnel in full detail to explain all aspects of operations and maintenance such as:
      a. Maintenance manuals
b. Record documents

c. Spare parts and materials

d. Tools

e. Fuels

f. Identification systems

g. Control sequences

h. Hazards

i. Cleaning

j. Warranties and bonds

k. Maintenance agreements and similar continuing commitments.

2. As part of instruction for operating equipment, demonstrate the following procedures:

a. Start-up

b. Shutdown

c. Emergency operations

d. Noise and vibration adjustment

e. Safety procedures

f. Economy and efficiency adjustments

g. Effective energy utilization

1.7 PROJECT RECORD DRAWINGS AND SPECIFICATIONS (AS-CONSTRUCTED)

Project Record Drawings shall conform to Section 01 78 39 – Project Record Drawings.

1.8 WARRANTY/GUARANTY FORMAT

A. Provide written warranties, guaranties (except manufacturers’ standard printed warranties and/or guaranties), addressed to the owner’s representative, in the format shown at the end of this section. Manufacturers’ standard printed warranties and/or guaranties shall be submitted as-is.

B. Warranties and guaranties shall be submitted in duplicate, in the attached format, signed by all pertinent parties and by the contractor in every case, with modifications as accepted by the District to suit the conditions pertaining to the warranty or guaranty. Collect and assemble written warranties and guaranties into bound booklet form, and deliver bound books to the District for review.

1.9 REMOVAL OF TEMPORARY FACILITIES

Prior to final inspection, the contractor shall remove tools, materials, sheds, temporary power poles, temporary tree protection, and other articles from the project site. Should the contractor fail to take prompt action, the District may, given 30 days written notice, treat them as abandoned property.
1.10 FINAL BUILDING/STRUCTURE CLEANING (AS APPLICABLE)

A. At completion of work, thoroughly clean project area, including fixtures, equipment, walls, floors, and hardware.

B. Thoroughly clean accumulated debris from sills, ledges, horizontal projections, steps, rails or other surfaces. Plumbing fixtures and natural metals shall be cleaned and polished.

C. Use only those cleaning materials and methods recommended by manufacturer of the materials to be cleaned, and by the cleaning material manufacturer.

D. Cleaning materials which will create hazards to health or property, or which will damage surfaces shall not be used.

E. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels and other foreign materials from all exposed interior and exterior surfaces.

F. Remove dust from all horizontal surfaces not exposed to view including light fixtures, ledges, and plumbing fixtures.

1.11 FINAL SITE CLEANING

A. Broom clean exterior paved surfaces and adjacent public streets. Utilize appropriate cleaning methods to remove spills, stains, tire tracks, etc. from all paved surfaces. Rake clean other surfaces of the site.

B. Hose down and scrub walls and paving surfaces dirtied or stained as a result of the construction work, as directed by the owner’s representative.

C. Remove from the site construction waste, unused materials, excess earth, and debris resulting from the work.

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION – Not Used

END OF SECTION

ATTACHMENT: Warranty/Guaranty Form
WARRANTY/GUARANTY FORM

TO: (client)

We, the undersigned, do hereby warranty and guaranty that the parts of the Work described above which we have furnished and/or installed for:

PERALTA COMMUNITY COLLEGE DISTRICT
TRACK AND FIELD RESURFACING
OAKLAND, CA

are in accordance with the contract documents and that all said work as installed will fulfill or exceed warranty and guaranty requirements. We agree to repair or replace work installed by us, together with any adjacent work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or operation within a period of one (1) year from the date of final acceptance by District or from the date of certificate of substantial completion, whichever is the earlier, at no cost to the owner, ordinary wear and tear and unusual neglect or abuse excepted.

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by the owner’s representative, after notification in writing, we, the undersigned all collectively and separately, hereby authorized the District to have said defective work repaired and/or replaced and made good, and agree to pay to the owner upon demand all moneys that the District may expend in making good said defective work, including all collection costs and reasonable attorney fees.

Date: _________________

(Sub-contractor, sub-subcontractor, manufacturer or supplier)

By: __________________________________________

Title: __________________________________________

State License No.: ________________________________

Local representative: For maintenance, repair, or replacement service, contact:

Name: __________________________________________

Address: _________________________________________

Phone Number: ________________________________
SECTION 01 78 36 – PRODUCT WARRANTIES

PART 1 – GENERAL

1.1 General Conditions require items to be guaranteed for a period of one (1) year.

1.2 Guarantees for more than one (1) year required by individual specification sections require a written guarantee by contractor.

PART 2 – PRODUCTS

2.1 FORM OF GUARANTEE: Use form approved by District.

PART 3 – EXECUTION

3.1 SUBMITTAL REQUIREMENTS

A. Submit prior to date of final completion and prior to final application for payment.

B. Provide two (2) original copies.

C. Provide on letterhead of contractor, sub-contractor or supplier doing the work or supplying the item guaranteed.

END OF SECTION
PART 1 - GENERAL

1.1 MAINTENANCE OF DOCUMENTS AND SAMPLES

A. Store project record documents and samples in contractor's field office separate from documents used for construction.

B. Maintain record documents in order and in a clean, dry, legible condition.

C. Do not use record documents for construction.

1.2 RECORD DOCUMENTS

A. Record Drawings: Record the following kinds of information on the record drawings:
   1. Location of work buried under or outside the building, such as plumbing and electrical lines and conduits. Provide horizontal and vertical dimensions from fixed points.
   2. Actual numbering of each electrical circuit.
   3. Locations of plumbing and electrical work, and other work that was changed by contractor from that shown on drawings.
   4. Locations of items, not necessarily concealed, which vary from locations shown on drawings.

B. The following requirements for record drawings are in addition to those specified elsewhere:
   1. Prepare carefully and neatly by a competent drafter, familiar with work involved, and using methods acceptable to owner.
   2. Keep up to date during entire progress of the work and made available to owner at any time.
   3. Additional drawings shall be provided as required to accurately describe changes.
   4. Record changes in size, location, and other features of installation shown on drawings.
   5. Record locations of underground work, points of connection, valves, manholes, catch basins, capped stub outs, invert elevations, and etc.
   6. Record sufficient information such that work concealed may be located with ease and accuracy. This may be accomplished by dimensioning or by stating the relationship to the spaces near which the work was installed. Owner's decision on what constitutes sufficient information shall be final.

C. Shop Drawings: Provide final shop drawings that have been updated to show actual conditions, for work specified in the individual sections.

D. Specifications and Addenda:
   Record the following:
   a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
   b. Changes made by addenda, change order, or field order, and clarifications and interpretations made by letter of instruction.
PART 2 – GENERAL  (NOT USED)

PART 3 – INSTALLATION  (NOT USED)

END OF SECTION
SECTION 03 30 01 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Construction: Provide material, labor, equipment, services, trial batches, tests and inspections necessary for the installation of cast-in-place concrete. The work also includes the following:
   1. Reinforcing steel.
   2. Installation of inserts, sleeves, dowels, anchor bolts and other items embedded in concrete, but furnished under other sections.

B. Engineering: Provide engineering services for the design and implementation of cast-in-place concrete mix designs.

1.2 RELATED INFORMATION AND REQUIREMENTS

A. Drawings and general provisions of the Contract, including general conditions and Division 1 Specification Sections, specific Specification Sections listed below, and all other Specification Sections apply to this Section.

1.3 REFERENCE DOCUMENTS

A. Standards: Comply with the provisions of the documents listed below and with the requirements described in this Section. Use current editions of documents unless earlier editions are specifically referenced by the governing code or are otherwise indicated.
   2. ACI - American Concrete Institute, Manual of Concrete Practice, including, but not limited to, the following sections:
      a. ACI 117 “Standard Specifications for Tolerances for Concrete Construction and Materials”.
      b. ACI 211.1 “Recommended Practice for Selecting Proportions for Normal and Heavy Weight Concrete”.
      c. ACI 301 "Specification for Structural Concrete for Buildings".
      d. ACI 302.1R “Guide for Concrete Floor and Slab Construction”.
      e. ACI 304R "Recommended Practice for Measuring, Mixing, Transporting and Placing Concrete”.
      f. ACI 304.2R “Placing Concrete by Pumping Methods”.
      g. ACI 305R "Hot Weather Concreting".
      h. ACI 306R "Cold Weather Concreting”.
      i. ACI 308R “Guide to Curing Concrete”.
      j. ACI 309R “Guide for Consolidation of Concrete”.
      k. ACI 315 “Details and Detailing of Concrete Reinforcement”.
      l. ACI 318 “Building Code Requirements for Structural Concrete”.

CONSTRUCTION DOCUMENTS CAST-IN-PLACE CONCRETE
5.17.2013 03 30 01-1
m. ACI 347 “Guide to Formwork for Concrete”.


5. NRMCA - National Ready-Mix Concrete Association, Quality Control Manual – Section 3: Certification of Ready Mixed Concrete Production Facilities.

6. TransLab - Caltrans Transportation Laboratory, “California Test Methods” as listed herein. Note: documentation of these test methods is available on the Internet.


8. CRSI – Concrete Reinforcing Steel Institute.
   b. CRSI, “Placing Reinforcing Bars”.

1.4 SUBMITTALS

A. General: Submittals shall be sent to the Architect, or Owner’s Testing Agency, or both, as required herein for review prior to producing project concrete. Review of submittals covers the general character of the details, material properties of the concrete ingredients, and to verify compliance with the performance requirements. Review does not cover checking of quantities, proportions or dimensions. Such review shall not relieve the Contractor from responsibility for executing the work in accordance with the Contract Documents.

B. Reinforcing Steel Shop Drawings: The Contractor shall submit concrete reinforcement shop drawings prepared in accordance with ACI 315 to the Architect for review. Fabrication or delivery of material to the building site shall not begin until the Architect’s review is complete.

1. Shop drawings shall include plan, elevation, and detail views with project grids accurately indicating bar material type, size, lengths, locations, bends, lap splice lengths and locations, welded splice locations, mechanical coupler locations, and headed bar locations.

2. Shop drawings shall not include copies of Contract Document details. References to Contract Document details in lieu of details prepared as part of placing drawing submittals will not be accepted.

3. Shop drawings shall list the structural materials included in the submittal. Reinforcement shown on placing drawings illustrating sequencing, layering, or intersections, but not included in the placing drawing bar lists, shall be identified as “previously submitted” or “to be submitted”.

C. Mill Certificates: The Contractor shall submit mill certificates in accordance with ASTM designations referenced herein for each heat of reinforcement, mechanical couplers, and headed bars to the Owner’s Testing Agency for review.

D. NRMCA Certificate of Conformance: Submit a copy of the NRMCA Certificate of Conformance to the Owner’s Testing Agency for the ready-mix plant, equipment, and mix trucks that will supply the concrete for the project.

E. Product Data for Concrete Accessories: The Contractor shall submit manufacturer’s data for each product to the Architect for review.
F.  Samples:  When specifically requested by the Architect, provide samples of cementitious materials, aggregates, or both to the Owner’s Testing Agency in adequate quantity to facilitate testing of these materials for conformance with the Specifications. Aggregate samples shall be taken in conformance with the requirements listed in ASTM C 33.

G.  Mix Design:  The Contractor shall submit concrete mix designs for review by the Architect and Owner’s Testing Agency at least seven days before placing concrete. Review of mix designs covers general conformance with the specifications, but does not constitute an approval of the mix proportions. Submit one mix design for each class of concrete. Each mix design shall include the following information:

1. Concrete class,
2. Member types and specific placement locations,
3. Material quantities per cubic yard,
4. Material ingredient certificates of compliance,
5. Coarse and fine aggregate sources, types, sizes, and gradation,
6. Admixture product data and dosage,
7. Design compressive strength, age (in days) required to reach design compressive strength, and compressive strength historic data,
8. Maximum water to cementitious materials ratio,
9. Design slump (or target slump range for self-consolidating mixes) at point of discharge from transit mix truck,
10. Unit weight of freshly mixed concrete,
11. Calculated percent water-soluble chloride ions (Cl⁻) by weight of cement, considering the chloride ion content of all concrete ingredients,
12. Water-soluble chloride ion content historic data or trial batch test data, when required herein,
13. Contractor’s Engineer’s stamp and signature certifying that the concrete mix has been designed under the supervision of the Contractor’s Engineer.

H.  Historic data:  When concrete mix design historic data is required herein to demonstrate conformance with the specification, the collected data shall satisfy the requirements stipulated for concrete mix trial batching requirements found under the “Contractor’s Quality Control Tests and Inspections” section of this specification.

I.  Batch Ticket Information:  The Contractor shall submit a copy of each delivery ticket to the Owner’s Testing Agency for their record.

J.  Contractor’s quality control test and inspection reports:  The Contractor shall submit quality control test and inspection reports to the Architect and Owner’s Testing Agency for review.

1.5 TESTS AND INSPECTIONS

A.  Notification:
1. The Contractor shall notify the Owner’s Testing Agency of work to be tested and inspected. Notification shall be sufficiently in advance to allow scheduling of tests and inspections, but not less than 24 hours.

2. The Contractor shall immediately notify the Architect if the Owner’s Testing Agency indicates that quality assurance tests and inspection requirements have not been met.

3. The Contractor shall notify the Architect 48 hours prior to placing concrete to facilitate structural observation.

B. Owner’s Quality Assurance Tests and Inspections:

1. General: Quality assurance tests and inspections shall be the responsibility of the Owner. The Owner shall retain a testing agency, referred to herein as the Owner’s Testing Agency, who shall perform the required tests and inspections, prepare written summary reports of tests and inspections, and review submittals.

2. Sample tests: When the Architect requires the Contractor to submit samples for cementitious materials, aggregates, or both, the Owner’s Testing Agency shall test the samples for conformance with the specifications.

3. Mix design and materials review: The Owner’s Testing Agency shall review the Contractor’s proposed mix designs and material certificates of compliance.

4. The Owner’s Testing Agency shall inspect material, size, spacing, arrangement, placement, and cover of reinforcement.

5. Job Site Special Inspections: The Owner’s Testing Agency shall provide the following special inspections during the project construction:
   a. Special inspection of location of embedded items and anchor bolts and anchor rods.
   b. Special inspection of concrete placement.

6. Job site samples: The Owner’s Testing Agency shall take job site samples of fresh concrete in accordance with ASTM C 172. The volume of each sample shall be adequate to facilitate the required on-site and laboratory tests. Samples for each class of concrete shall be taken not less than once a day, or not less than once for every 150 cubic yards of concrete, or not less than once for every 5,000 square feet of surface area for slabs and walls.
   a. If the total volume of concrete for the project is such that less than five samples would be collected for a given class of concrete, samples shall be made from at least 5 randomly selected batches, or from each batch if fewer than 5 batches are used.
   b. Record the air temperature at the time of taking concrete samples.

7. Job site tests: From each sample taken, the following job-site tests shall be performed:
   a. Slump: ASTM C 143,
   b. Density and Air Content: ASTM C 138,

8. Collection and curing of test specimens: From each concrete sample taken, collect and cure sets of test specimens as follows:
a. Compression cylinder test specimens: ASTM C 31. Collect a set of standard 6 by 12-inch cylinder test specimens. A set shall consist of four cylinder test specimens for concrete with compressive strength specified at 28 days or five cylinder test specimens for concrete with compressive strength specified at greater than 28 days. Test specimens shall be standard cured.

9. Laboratory tests: Test specimens shall be laboratory tested after collection and curing as follows:

a. Perform compressive strength tests on compression cylinder test specimen sets in accordance with ASTM C 39.

1) For concrete with compressive strength specified at 28 days, one specimen from each set shall be tested at 7 days after casting, two specimens from each set shall be tested at 28 days after casting, and the remaining cylinder in each set shall be kept for further testing, if required.

2) For concrete with compressive strength specified at greater than 28 days, one specimen from each set shall be tested at 7 days after casting, one specimen from each set shall be tested at 28 days after casting, and two specimens from each set shall be tested at the age designated for determination of specified compressive strength, as indicated on the concrete mix design. The remaining cylinder in each set shall be kept for further testing, if required.

C. Contractor’s Quality Control Tests and Inspections:

1. General:

a. Quality control tests and inspections shall be the responsibility of the Contractor.

b. Where required herein, the Contractor shall demonstrate that quality control conforms to the requirements of the Contract Documents.

c. Quality Control Test and Inspection Reports shall be prepared and submitted for review.

2. Concrete Mix Trial Batching: Where required herein, the Contractor’s Testing Agency shall prepare concrete trial batches in accordance with ASTM C 192 as needed for preparation of test specimens. The number of batches and quantity of each batch shall be at least adequate to prepare the required number of test specimens for each of the required tests as follows. Test specimens for different tests may be taken from a single batch.

a. Compressive test specimens: Trial batch and test specimen quantity shall be in conformance with the requirements for the governing building code.

b. Water-soluble chloride ion test specimens: Prepare one trial batch. Prepare one test specimen from the trial batch and test after a minimum of 28-days after casting in conformance with ASTM C 1218.

3. Tension tests of reinforcement bar not accompanied by certified mill analysis reports: The Contractor shall conduct one tension test and one bend test in accordance with ASTM A 370 for each 2 ½ tons or fraction thereof of each material type and size of reinforcement bar not accompanied by certified mill analysis reports. Test reports shall be reviewed by the Owner’s Testing Agency before placement of reinforcement.
1.6 CONTRACTOR’S ENGINEERING SERVICES

A. General: Where engineering services are required herein, the Contractor shall retain a Structural Engineer registered in the State of California, referred to herein as the Contractor’s Engineer.

1. Documents prepared by the Contractor’s Engineer shall be stamped and signed.

B. Concrete mix designs shall be prepared, signed, and stamped by the Contractor’s Engineer certifying that the mix design has been prepared under supervision and that the mix designs meet the requirements of the Contract Documents.

C. Temporary supports required for concrete sample panels, or mock-ups, or both, shall be designed by the Contractor’s Engineer.

PART 2 - PRODUCTS

2.1 CONCRETE MATERIALS

A. Water: Clean, potable, and free from deleterious material.

B. Cementitious materials and aggregates:

1. Proven history of successful use together, or submit evidence satisfactory to the Architect that aggregate will not react harmfully in presence of alkalis in cement.

2. From constant sources throughout the work and of the same type and source as those used in establishing mix proportions.

C. Portland cement: ASTM C 150, Type II, Low Alkali. Same brand and type of cement shall be used throughout.

D. Fly ash: ASTM C 618, Class F, with the following modified requirements:

1. Chemical Requirements (Table 1 of ASTM C 618)

   a. Sulfur trioxide (SO3) shall not exceed 3% by weight.
   b. Loss on ignition (L.O.I.): Maximum 1%.

2. Physical Requirements (Table 2 of ASTM C 618)

   a. Water requirement, maximum, 100% of control.

3. Sulfate resistance, \( R = 0.75\% \) maximum, where:

   \[ R = \frac{(C-5)}{F}, \]

   \[ C = \text{Percent CaO (Calcium Oxide)} \]
   \[ F = \text{Percent Fe}_2\text{O}_3 \text{ (Ferric Oxide)} \]

E. Ground Blast Furnace Slag: ASTM C 989.

F. Aggregates:

1. Normal weight concrete: ASTM C 33, except as modified herein.

   a. Coarse aggregates:

   1) Crushed limestone, granite, Clayton, Sechelt,

   2) Crushed gravel or gravel used as a gradation transition aggregate,
3) Cleanness Value (CV) of not less than 75 when tested according to TransLab’s California Test 227,

4) Maximum aggregate size shall be determined by the Contractor for each class of concrete based on the parameters established in the specification subsection herein titled “Mix Designs”.

b. Fine aggregates: Sand Equivalent (SE) of not less than 75 when tested according to TransLab’s California Test 217.

2. Chloride ion content: Coarse and fine aggregates for use in concrete shall be thoroughly washed and cleaned such that their water-soluble chloride ion contents do not exceed the limitations established in the submitted concrete mix designs for each class of concrete.

G. Admixtures: Admixtures containing chlorides, fluorides, sulphites, nitrates, or those that contain chemicals that may have a harmful effect on cement or aggregate, shall not be used. Combinations of admixtures in a given mix shall be chemically compatible. Acceptable admixture manufacturers include, but are not limited to W.R. Grace & Co., Master Builders, Euclid, and Sika & Co.

1. Water-reducing admixtures: ASTM C 494 Type A,

2. Retarding admixtures: ASTM C 494 Type B,

3. Accelerating admixtures: ASTM C 494 Type C, non-chloride,

4. Water-reducing and retarding admixtures: ASTM C 494 Type D,

5. Water-reducing and accelerating admixtures: ASTM C 494 Type E,

6. High-range water-reducing admixtures (superplasticizers): ASTM C 494 Type F,

7. High-range water reducing and retarding admixture: ASTM C 494 Type G,

8. Shrinkage-reducing admixture: W.R. Grace’s “Eclipse”, Euclid Chemical Company’s “Eucon SRA”, or equal,

9. Viscosity-modifying admixtures: Euclid Chemical Company’s “Visctrol” or “Eucon ABS”, W.R. Grace Company’s “V-MAR 3”, or equal,

2.2 CONCRETE ACCESSORIES

A. Use of Concrete Accessories not anticipated for this project.

2.3 REINFORCEMENT MATERIALS

A. Reinforcement:

1. Typical Bars: Deformed, material type as indicated on the Drawings.
   a. ASTM A 615, Grade 60.


C. Tie Wire: #16 gauge (AWG) or heavier, black annealed wire.
2.4 CONCRETE FORM MATERIALS

A. Rough Form Finish (Concealed Surfaces): Plywood, lumber, metal, or other material of sufficient strength and stiffness to properly hold concrete in place. Provide lumber dressed on at least two edges and one side for tight fit and to prevent leakage of concrete.

B. Smooth Form Finish (Exposed Surfaces): Form-facing panels that will provide continuous, straight, uniform textured, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize the number of joints.


   2. Steel and Fiberglass Forms: Suitable for concrete construction.

2.5 MOISTURE-RETAINING COVERS

A. Reinforced Curing Paper: Waterproof paper conforming to ASTM C 171, non-staining. Acceptable products include "Orange Label Sisalkraft" by Fortifiber Building Systems Group, or equal.

B. Curing Fabric: Plastic-backed burlap conforming to ASTM C 171. Acceptable products include “Curlap”, or approved equal.

2.6 CURING COMPOUNDS

A. Curing Compounds: ASTM C 309, Type 1-D or 2, Class B, or ASTM C 1315, Type 1, Class A. Curing compound shall not discolor concrete or affect bonding of other finishes applied there over.

2.7 CONCRETE MIX DESIGNS

A. General:

   1. Concrete mix designs shall be designed and documented by the Contractor’s Engineer.

   2. The Contractor shall review proposed concrete mix designs for compatibility with the intended placement requirements, including reinforcement layout, to ensure that the concrete, as designed, can be placed in accordance with the Contract Documents.

   3. The proportions of the concrete mixes shall be such as to produce concrete for each class of concrete that conforms to the specified minimum compressive strength, and, where required, drying shrinkage, permeability, and thermal control limits, within the specified maximum water-cementitious materials ratio.

   4. Aggregate size and gradation shall be determined by the Contractor, within the established limitations.

      a. The size and grading of aggregates shall be such that it will produce dense and uniform concrete free from rock pockets, honeycombs and other irregularities. The maximum size of aggregates for each class of concrete shall not be more than:

         1) 1/5 the narrowest dimension between faces of forms,

         2) 1/3 the depth of slabs,
3) ¾ the minimum clearance between the closest spaced reinforcement bars,
4) The minimum required concrete cover,
5) 1 ½”.

b. Aggregate gradation shall meet the limits of ASTM C 33.

5. Determination of the amount of water in the batch shall include water contained in the aggregates.

6. The slump of wet concrete, measured at the delivery point, shall be determined and designed by the Contractor.
   a. Acceptable slump tolerances shall be as established in ASTM C 94, with the exception that slump tolerances for concrete mixes with a minimum 45% cement replacement by pozzolans may be double the listed values.

7. The plastic concrete consistency shall allow thorough compaction of the concrete into formwork corners and around concrete reinforcement without excessive puddling, spading, or vibration, and without causing the mixed materials to segregate or causing free water to collect on horizontal concrete surfaces.

8. The maximum percent water-soluble chloride ion content measured by weight of cement from the composite sum of concrete ingredients for each class of concrete shall be calculated for the concrete mix design proposed for each class of concrete. Where total calculated chloride ions exceed the CBC limits, either historic data or trial test batch data shall be submitted demonstrating that the water-soluble chloride ion content in each respective concrete mix does not exceed the allowable limits. Foundation members, slabs on grade, below grade walls, and buried roof structures shall be considered as concrete in wet conditions.

B. Normal Weight Concretes:

1. Aggregates: At the Contractor’s option, up to 25% of coarse aggregates may be gravel or crushed gravel, as measured by weight.

2. Air content: 2% maximum air content measured by volume.

3. Unit weight: Wet and dry unit weight shall be calculated in conformance with ASTM C 138 and ASTM C 567, respectively.

4. Cement replacement: Replacement of a portion of Portland cement by flyash and/or ground blast furnace slag is allowed for all classes of concrete with a maximum allowable replacement of 60%.

5. Normal weight concrete mixes shall be designed in accordance with the following requirements:
## NORMAL WEIGHT CONCRETE MIX REQUIREMENTS (Note 1)

<table>
<thead>
<tr>
<th>Concrete Class</th>
<th>Concrete Elements</th>
<th>Performance Criteria</th>
<th>Limiting Parameters</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minimum Compressive Strength (psi) (Note 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28-Day Maximum Drying Shrinkage Percentage (Note 3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>28-Day Maximum Permeability (Coulombs) (Note 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mass Concrete Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum Water to Cementitious Materials Ratio (W / CM) (Note 6)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. N/A stands for “not applicable”.
2. Compressive strength shall be determined on the basis of field experience and trial mixtures as required in the CBC. Specifications are based on developing compressive strength achieved at 28 days. Greater times to achieve specified compressive strength are allowed provided formwork stripping times are adjusted accordingly. Time to achieve specified compressive strength shall not exceed 56 days. If 56-day compressive strength is used, minimum 28-day compressive strength shall be 80% of required minimum 56-day compressive strength.
3. W = weight of water. CM = weight of cementitious materials (cement plus flyash and/or ground blast furnace slag). Any mix that uses greater than 45% cement replacement shall have a maximum W/CM of 0.38.
4. The mix design submittal for this class of concrete shall include evidence that the proposed mix meets each of the required performance criteria listed above through either trial batch test data or historic data for the exact mix to be used on this project.

### PART 3 - EXECUTION

#### 3.1 PROTECTION OF MATERIALS

A. Protect materials from damage, weather, and contaminants such as grease, oil, and dirt.

#### 3.2 COORDINATION

A. Coordinate locations and sizes of penetrations and openings in concrete members and verify conformance to structural requirements shown on the Drawings.

#### 3.3 TOLERANCES

A. Dimensional tolerances shall be in conformance with ACI 117.

B. Formwork for concrete shall be constructed such that the shapes, sizes, lines, and dimensions of cast-in-place concrete shown on the Drawings conform to the tolerances listed in the Section entitled “Cast-In-Place Concrete”.

C. Offsets between adjacent formwork facing materials for rough finish, concealed surface concrete formwork shall conform to ACI 117 Class C requirements.
D. Offsets between adjacent formwork facing materials for smooth finish, exposed surface concrete formwork shall conform to ACI 117 Class B requirements.

3.4 PREPARATION

A. Wood chips, shavings, and other debris shall be removed from the interior of the forms.

B. Existing and previously placed concrete surfaces shall be prepared as required herein.

C. Reinforcement shall be cleaned, if necessary, prior to placing concrete.

D. Reinforcement and other work to be embedded in the concrete shall be secured in position before casting.

E. Anchor bolts shall be accurately set to line and grade and shall be securely held in position such that they are not displaced while concrete is being place.

F. Pipes or conduits passing through (perpendicular to) structural concrete grade beams, joists, beams, girders, slabs, and walls shall be sleeved in Schedule 40 galvanized carbon steel or PVC sleeves as detailed on the Drawings. Adjacent pipes or conduits, passing through structural concrete, shall be spaced not less than three diameters on center and shall not displace concrete reinforcement, unless otherwise shown on the Drawings. Pipes and conduit shall not pass parallel inside of structural members except as specifically allowed in slabs and walls in this specification.

G. Electrical conduit runs in structural concrete slabs and walls, where specifically indicated as acceptable on the Drawings, shall be limited to one inch nominal conduits placed with a maximum of two crossing layers spaced at a minimum of 6 conduit diameters on center.

H. Electrical conduit shall not be allowed in concrete fill on metal deck.

I. Forms and existing concrete and masonry surfaces shall be thoroughly wetted immediately before casting.

J. Freestanding water shall be removed from forms and groundwater diverted from forms and excavations.

K. The construction and maintenance of concrete formwork shall be as directed by the Contractor’s Engineer and in accordance with ACI 347.

L. Formwork shall be new at the start of the job. Forms may be reused, provided they are thoroughly cleaned of dirt, mortar, oil, rust, and foreign materials, and are undamaged at edges and contact faces. Reuse of forms shall be subject to approval by the Architect.

M. Formwork shall not stain the concrete.

N. Oiling of forms shall not be permitted.

O. The arrangement of formwork shall be uniform and neat.

P. Formwork shall be built to support the weight of concrete within deformation limits, formed to the shapes, sizes, lines, and dimensions shown on the Drawings. Footings and grade beams do not require formwork unless otherwise indicated.

Q. Form ties shall provide accurate spreading and positive tying. Layout of ties shall be uniform, aligned, and symmetrical. Wire ties shall not be used.

R. Provide chamfer strips at all exposed, protruding concrete corners, unless otherwise noted on Drawings.
S. Provisions shall be made for openings, offsets, inserts, embedments, blocking, and other features of the work as shown or indicated. Penetrations, notches, and blockouts in concrete elements not shown on the Drawings shall not be installed without written approval from the Architect.

T. Attach chamfers, drip, groove, and reveal strips securely to prevent displacement and dislodgement during concrete placement and form removal.

U. Apply form release agent to form surfaces prior to placement of reinforcement.

V. Immediately prior to concrete placement, clean forms, wet forms, remove freestanding water, and seal temporary openings.

3.5 REINFORCING STEEL FABRICATION

A. Tolerances for reinforcement fabrication shall conform to the requirements of ACI 315.

B. Reinforcement shall be shop fabricated to the lengths and bends shown on the Drawings, by experienced shops using methods that do not damage the reinforcement.

C. Bars shall be cold bent.

D. Concrete cover, measured to edge of reinforcement, mechanical couplers, and headed bars, shall be as shown and scheduled on the Drawings.

E. Bars shall be placed, spaced, and aligned as indicated on the Drawings.

F. Stagger splices of adjacent bars, unless otherwise shown on the Drawings.

G. Where the Contractor utilizes reinforcement splices not shown on the Drawings, the splice locations shall be included in the reinforcement placing drawing submittals for review by the Architect. Splices of reinforcement shall not be made at points of maximum stress.

H. Lap splices and dowel lengths shall be as indicated on the Drawings, but not less than 40 bar diameters, or 24 inches, whichever is more.

I. Reinforcement bundles shall be tagged with suitable identification to facilitate sorting and placing.

3.6 REINFORCING STEEL PLACING

A. Tolerances for placement of reinforcement shall conform to ACI 117.

B. Prior to placing reinforcement, the contractor shall clean reinforcement free of scale, dirt, grease, or other foreign substances detrimental to bonding. Maintain cleanliness of reinforcement until it has been completely encased in concrete.

C. Placement of reinforcement shall be in accordance with CRSI - Placing Reinforcing Bars.

D. Concrete reinforcement shall be supported in conformance with the CRSI Manual of Standard Practice, and shall not be unsupported for lengths exceeding 4’-0”. Use spreaders between curtains of vertical reinforcement to maintain bar alignment in the forms.

E. Reinforcement shall be placed to meet the concrete cover, bar spacing, and bar alignment requirements indicated on the Drawings.

F. Tie intersecting reinforcement bars with tie wire in accordance with the CRSI - Placing Reinforcing Bars to prevent displacement during casting of concrete. Tack welding of intersecting bars shall not be allowed.
3.7 MIXING CONCRETE

A. Concrete shall be ready-mixed concrete and shall be mixed in accordance with ASTM C 94.

B. Concrete shall be mixed with quantities and ingredients conforming to the approved mix designs. Ingredients shall be proportioned by weight.

C. Mixed concrete shall be homogeneous in distribution of material and uniform in consistency and color. Concrete shall be mixed for at least 10 minutes after ingredients have been added, and three minutes of this time must be immediately prior to discharging at the job site. Mixed concrete shall be placed in forms within 90 minutes from the time of combination of cement and water. When air temperature is between 85 and 90 degrees F (30 and 32 degrees C), reduce mixing and delivery time to 75 minutes; when air temperature is above 90 degrees F (32 degrees C), reduce mixing and delivery time to 60 minutes.

D. Addition of admixtures shall be in accordance with manufacturer’s recommendations and under the review of the Owner’s Testing Agency.

3.8 TRANSPORTING

A. Transport of concrete shall be in accordance with ASTM C 94.

3.9 CONVEYING

A. Concrete shall be handled from the mixer to the place of final deposit as rapidly as practicable by methods that prevent the separation or loss of the ingredients. Deposit concrete as near as practical to its final position to avoid re-handling or flowing. Concrete shall not be dropped freely where reinforcement or embedments will cause segregation, and in no case shall it be dropped more than six feet. Spouts, elephant trunks, or other acceptable means shall be used to prevent segregation.

B. At the Contractor’s option, concrete may be pumped from the transit mixer to place of deposit provided that submitted mix designs reflect selection of pumping methods. Pumps shall be adequate for the mix, aggregate size, and slump.

3.10 PLACING

A. A record shall be kept of the time and date of placing the concrete in each portion of the structure. Such reports shall be kept until the completion of the structure and shall be open to the inspection of the Architect and Owner’s Testing Agency.

B. Concrete shall not be placed under water.

C. Concreting, once started, shall be carried on as a continuous operation until the section of acceptable size and shape is completed. Construction joints must be of acceptable detail and location.

D. Concrete shall be so deposited as to maintain, until the completion of the unit, a plastic surface approximately horizontal. No concrete shall be deposited that has started to set or stiffen. The remixing or retempering of concrete that has begun to set shall not be permitted.

E. Concrete, when placed in walls, shall not be placed in layers exceeding two feet in depth. Schedule of pouring shall be such that no concrete layer takes initial set before the next layer is placed. Concrete placement shall be scheduled such that horizontal joints in exposed exterior walls are located where shown on the Drawings without exception.
F. At least two hours must elapse after depositing concrete in walls or columns before depositing concrete in supported beams or slabs above.

G. Reinforcement, inserts, anchor bolts, welding plates, or other embedded items shall be prevented from shifting or displacing during or after concrete placement.

H. Concrete spilled on forms or reinforcement in portions of structure not immediately concrete, shall be completely removed before the concrete sets.

I. Concrete shall be placed in such a manner as to prevent staining or splattering of completed work.

J. Interruption in placement of concrete exceeding 90 minutes will be cause for stopping placement of further concrete in the affected areas. Remaining mixed concrete in hoppers or mixers shall not be placed. In case such interruption occurs, the Contractor shall provide construction joints, where and as directed, and cut concrete back to such line, cleaning forms and reinforcement as herein specified.

K. Placement of subsequent, adjacent concrete shall be staggered a minimum of 48 hours.

L. Conveyors, trucks, or buggies must be thoroughly cleaned after each pour.

3.11 HOT WEATHER PLACING:

A. During hot weather, procedures for mixing, transporting, and placing concrete shall conform to ACI 305.

3.12 COLD WEATHER PLACING:

A. During cold weather, procedures for mixing, transporting, and placing concrete shall conform to ACI 306.

3.13 CONSOLIDATION

A. Consolidation of concrete shall be in conformance with ACI 309. Concrete shall be thoroughly compacted by puddling with suitable tools during placing, and thoroughly worked around the reinforcement, around embedded fixtures and into the corners of the forms. In addition to manual spading and tamping, concrete shall be internally vibrated with high-speed mechanical vibrators. A mechanical vibrator shall be utilized at each point of placement.

B. Vibration shall be sufficient to minimize honeycombs and accomplish compaction of concrete. Do not over-vibrate as this can result in loss of entrained air or excess of fines at the concrete surfaces. In the event, during concrete placement, there is a delay of more than fifteen minutes between lifts, manipulate previously placed concrete with vibrators just prior to placement of fresh concrete.

3.14 FORMWORK REMOVAL

A. Formwork shall be removed according to the schedule and sequence prepared by the Contractor’s Engineer and in accordance with ACI 347.

1. Formwork shall not be removed until the concrete has hardened sufficiently to permit formwork removal with safety, and until the concrete members have attained sufficient strength and stiffness to safely support the imposed loads. The minimum times for removal of formwork after concrete has been placed shall be as shown below.

a. Footings (where required): 2 days
B. Formwork shall be removed without damaging the concrete exposed surfaces, chamfers, and inserts.

3.15 FINISHES FOR FORMED SURFACES

A. General: Perform subsequent finishing operations as soon as practical after stripping formwork, except as specifically noted.

B. Rough Form Finish: As cast finish obtained using rough form finish formwork. Repair honeycombed areas, fill tie holes and defects, and remove fins, offsets, and projections exceeding 1/4 inch.

C. Smooth Form finish: As cast finish obtained using smooth form finish formwork. Repair honeycombed areas, fill tie holes and defects, and remove and smooth all fins, offsets, and projections.

3.16 EXAMINATION

A. Immediately after removing forms, concrete surfaces shall be examined for defects.

3.17 PROTECTION

A. Protect cast concrete from damage from construction and weather.

B. Wheeling, working and walking on concrete shall be avoided for at least 24 hours after casting. Cover traffic areas with plywood or utilize other suitable means as necessary to protect concrete from damage.

C. Protect concrete during and after curing from damage during subsequent construction operations.

D. Concrete shall not be subjected to loads unless those loads are resisted directly by shoring until concrete has attained its specified compressive strength (but no sooner than 14 days after casting) and until curing operations have been completed.

E. Self-supporting structures shall be protected from mechanical disturbances and shall not be loaded in such a manner as to overstress the concrete.

3.18 ACCEPTANCE CRITERIA

A. Concrete shall meet the following acceptance criteria:
   1. Concrete shall conform to the established tolerances.
   2. Concrete shall meet the established performance criteria.
   3. Concrete shall be free from voids, rock pockets, cracks, pour joints, spalls, honeycombs, and air bubbles that adversely affect the structural adequacy.

3.19 CORRECTION OF DEFECTIVE WORK

A. Correction of defective work shall be the responsibility of the Contractor.

B. Work not in compliance with the requirements of the Contract Documents shall be considered defective, unless otherwise directed in writing by the Architect.

C. Corrected work shall conform to the requirements of the Contract Documents.

D. The Contractor shall prepare a submittal documenting the defective work and proposed corrections and submit to the Architect for review. The submittal shall include a description of
the defective work, the location of defective work, and shall be accompanied by supporting sketches, photographs, or both. Additionally, the submittal shall include similar documentation of the Contractor’s proposed corrections.

E. Correction of defective work shall not commence until the Architect has reviewed and accepted the submittal.

F. Correction of defective work shall be inspected by the Owner’s Testing Agency.

3.20 CLEAN-UP

A. Remove from the site all debris resulting from the work of this Section.

END OF SECTION
PART 1 – GENERAL

1.1 SUMMARY

A. This section covers all labor and materials required to install the field events.

B. The Contractor is responsible for the purchase and installation of all sports equipment.

1.2 CODES AND STANDARDS

Codes and standards are to follow the current guidelines set forth by the National Collegiate Athletic Association (NCAA).

1.3 SUBMITTALS

A. The following information shall be submitted prior to installation of specified work.

1. Standard printed specifications and diagrams or drawings depicting installation directions and dimensions for all in-ground Sports equipment.

2. Material safety data sheets on all products, as necessary.

1.4 QUALITY ASSURANCE

A. The Contractor shall only accept bids from those vendors or manufacturers that have been pre-approved or identified as approved equal.

PART 2 – PRODUCTS

2.1 IN-GROUND SPORTS EQUIPMENT

A. The Contractor is responsible to provide and install all permanent, in-ground Sports equipment as specified by these specifications and shown on the project drawings.

B. The in-ground Sports equipment is available from the following:

1. SportsField Specialties, contact Dave Cloud at (408) 728-0482.
   a. 8” Take-off Board System, Model TFLT016SS.
   b. 3m x 9m Jumpform Long/Triple Jump Sand Pit with Sand Catchers and covers.
   c. Combox Plus 3500 (infill artificial turf lid)
   d. Combox 3000 (synthetic track lid)
   e. Cast Aluminum Pole Vault Box, Model TFPV00ICA
   f. Cover/Plug for Cast Aluminum Pole Vault Box, Model TFPV003ALTR-CA
   g. Gill Athletics Powder Coated Finish Aluminum Track Curb, Model TF85IP
   h. AdjustRight Aluminum Football Goal Post, Model GP4103
   i. Access Frame Kit, Model GP4570
2. Sand (Sand Pit)
   a. Laney College and Merritt College shall be provided with an additional 4 tons of sand. The Contractor is to place the sand at a location approved by the College.
   b. Sand shall be washed rounded/sub angular and consistent with USGA Bunker Sand Requirements.
      (1) Bulk density of 1.55 grams per cubic centimeter.
      (2) Prior to installation submit one (1) gallon sample to the Owner for review and approval.
      (3) Provide an additional 3 tons of sand (each site) to be stockpiled at a location specified by the College (Laney and Merritt only).
      (4) Sand shall meet the following gradations:

<table>
<thead>
<tr>
<th>Screen</th>
<th>MM</th>
<th>Range %</th>
</tr>
</thead>
<tbody>
<tr>
<td>18, 35, &amp; 60</td>
<td>1.0mm, 0.5mm, &amp; 0.25mm</td>
<td>75% combined min</td>
</tr>
<tr>
<td>140</td>
<td>0.10mm</td>
<td>25% max</td>
</tr>
</tbody>
</table>

PART 3 – EXECUTION

3.1 INSTALLATION OF SPORTS EQUIPMENT

A. Installation of the in-ground Sports equipment shall follow the directions of the manufacturer and/or vendor. Shop drawings must be submitted and approved prior to installation of equipment. (As needed) footing details shall be provided by the contractor as part of the submittal. Footing details shall be sealed by a professional engineer registered in the state of California.

END OF SECTION
PART 1 – GENERAL

1.1 CONTRACT DOCUMENTS

A. “Standard specifications” refers to State of California Department of Transportation Standard Specifications, latest revised edition, hereinafter referred to as “standard specifications”.

B. Whenever work, tasks, or other requirements are specified in this section, it shall be understood to mean the “synthetic surfacing contractor” shall perform the work, tasks or other requirements so stated.

1.2 SCOPE OF WORK

Furnish labor, materials, apparatus, tools, equipment, transportation, temporary construction and special occasional services as required to install track and field line markings.

1.3 RELATED SECTIONS

A. 32 18 23 - Synthetic Surfacing
B. 11 68 33 - Sports Equipment

1.4 CODES AND STANDARD

Codes and standards shall comply with current guidelines set forth by the International Association of Athletics Federations (IAAF), and National Collegiate Athletic Association (NCAA). Where discrepancies are noted between governing bodies, the rules of the NCAA shall rule.

1.5 SUBMITTALS

A. Following information shall be submitted prior to installation of specified work:
   1. A list depicting colors of line markings and labels of events to be included for approval prior to installation. Symbols and markings shall be clearly identified, illustrated, and their colors stated. Recommended NCAA colors shall be used.
   2. Installation process and requirements for line markings and any conditions that may limit installation or affect quality of installation.
   3. Material safety data sheets on products to be used.

B. Following information shall be submitted at completion of specified work:
   1. Upon completion of line markings, contractor shall submit to owner a five (5) diagram/drawing depicting and identifying line markings including:
      a. A key to the color codes
      b. A chart for symbols
      c. Labels for all events

1.6 QUALITY ASSURANCE

Contractor shall repaint track and field line markings once during five (5) year track and field synthetic surface warranty period. Repainting will occur at District’s request and be completed at no charge to owner.
PART 2 – PRODUCTS

2.1 PAINT

A. Paint used on Track & Field Synthetic Surfaces shall be polyurethane based.
B. Temporary reference markings shall be removed at completion of project.
C. Contractor shall be responsible for purchasing paints and line markings.

PART 3 – EXECUTION

3.1 SUMMARY

A. Contractor shall review and document the existing track striping and duplicate on new track.
B. General line markings of the 400-meter track and field events shall be spray applied, using only paint, primers and finishes supplied and guaranteed by approved manufacturers and/or suppliers.
C. Markings shall be in accordance with rules of NCAA and shall be certified for accuracy. NCAA color code shall be followed.
D. No line markings shall be installed if weather conditions are not proper; i.e. too windy, wet, cold or hot.
E. The track striping at Merritt College shall accommodate a track curb.

3.2 LINE MARKINGS

A. Paint
   1. All line markings to receive two (2) coats of paint

B. Measure Line (Theoretical – not painted)
   1. Track oval will utilize a regulation curb
   2. Distance to right hand edge of the inside lane line of Lane 1 to be 30 cm from the measure line

C. Line Precedence
   1. Lane lines to take precedence over other markings
      a. Numbers and letters to be broken at all lane line intersections
   2. Waterfall starting lines take precedence over straight starting lines
      a. Straight starting lines to taper at waterfall starting lines – maintain a ½” gap

D. Chute Extensions
   1. Chute extension lines to be solid not dashed
   2. Break chute extension lies 2” either side of track oval lines

E. 100 Meters (both directions)
   1. One direction home straight a way.
   2. One direction back straight a way.
3. Event label
   a. 100
   b. 4" high
   c. The color of the label is white
   d. Located in the outside lane and is above the starting line

4. Color of starting line is white.

F. 60 Meter Hurdles (Laney & Merritt Only)
1. One direction home straight a way.
2. Event label
   a. 60
   b. 4" high
   c. The color of the label is white
   d. Located in the outside lane and is above the starting line

3. Color of the starting line is white
4. The hurdle tic marks are yellow.
   a. Hurdle tic marks are a 2.5" wide by 3" high triangle, the triangle is
      pointing in the direction of running. The tic marks shall be located
      outside of lane 8.

G. 100 Meter Hurdles (both directions)
1. One direction home straight a way.
2. One direction back straight a way.
3. Event label
   a. 100
   b. 4" high
   c. The color of the label is white
   d. Located in the outside lane and is above the starting line

4. Color of the starting line is white
5. The hurdle tic marks are yellow.
   a. Hurdle tic marks are a 2.5" wide by 3" high triangle, the triangle is
      pointing in the direction of running. Each lane shall have 2 tic marks
      with each tic mark adjacent to the lane line, but not touching the lane
      line.

H. 110 Meter Hurdles
1. One direction home straight a way.
2. One direction back straight a way.
3. Event label
   a. 110
   b. 4" high
   c. The color of the label is white
   d. Located in the outside lane and is above the starting line

4. Color of the starting line is white
5. The hurdle tic marks are blue.
   a. Hurdle tic marks are a 2.5" wide by 3" high triangle, the triangle is
      pointing in the direction of running. Each lane shall have 2 tic marks
with each tic mark adjacent to the lane line, but not touching the lane line.

I. 200 Meters (both directions)
   1. All in lanes, both curves (Reverse).
   2. Event label
      a. 200
      b. 4" high
      c. The color of the label to be white
      d. Located in lane 2, and is above the starting line
   3. Color of the starting line is white.
   4. Color of reverse starting line is black.

J. 300 Meter Hurdles
   1. All in lanes.
   2. Event label
      a. 300
      b. 4" high
      c. The color of the label to be white
      d. Located in lane 2, and is above the starting line
   3. The starting line is white in color and located on the track oval.
   4. The hurdle tic marks are red.
      a. Hurdle tic marks are a 2.5" wide by 3" high triangle, the triangle is pointing in the direction of running. Each lane shall have 2 tic marks with each tic mark adjacent to the lane line, but not touching the lane line.

K. 400 Meters
   1. All in lanes.
   2. Event label
      a. 400
      b. 4" high
      c. The color of the label to be white
      d. Located in lane 2, and is above the starting line
   3. Color of the starting line is white.

L. 400 Meter Hurdles
   1. All in lanes.
   2. Event label
      a. 400
      b. 4" high
      c. The color of the label to be white
      d. Located in lane 2, and is above the starting line
   3. Color of the starting line is white.
   4. The hurdle tic marks are green.
      a. Hurdle tic marks are a 2.5" wide by 3" high triangle, the triangle is pointing in the direction of running. Each lane shall have 2 tic marks
with each tic mark adjacent to the lane line, but not touching the lane line.

M. 800 Meters
1. Waterfall start and 1 turn stagger.
2. Event label
   a. 800
   b. 4” high
   c. The color of the label to be white
   d. The 1 turn stagger starting line is located in lane 2, the waterfall starting line is located in the outside lane, and the labels are above the starting line.
3. Color of the 1 turn stagger starting line is white with a green insert.
4. The color of the waterfall starting line is white.

N. 1500 Meters
1. Waterfall start.
2. Event label
   a. 1500
   b. 4” high
   c. The color of the label to be white
   d. Located in the outside lane, and is above the starting line
3. The starting line is white in color and located on the track oval.

O. 1600 Meters
1. Waterfall start.
2. Event label
   a. 1600
   b. 4” high
   c. The color of the label to be white
   d. Located in the outside lane, and is above the starting line
3. Color of the starting line is white.

P. 1-Mile Run
1. Waterfall start.
2. Event label
   a. 1-MILE
   b. 4” high
   c. The color of the label to be white
   d. Located in the outside lane, and is above the starting line
3. Color of the starting line is white.

Q. 3000 Meters Steeplechase
1. Waterfall start.
2. Event label
   a. 3000ST
   b. 4” high
c. The color of the label to be white
d. Located in the outside lane, and is above the starting line.

3. Color of the starting line is white.
4. Barrier marks are black.
5. Paint 2” white line at the inside and outside of the water jump approach and exit as depicted on the drawings
6. Distance to right hand edge of inside lane line to be 30cm from the measure line

R. 3200 Meters
1. Waterfall start.
   a. Event label
   b. 3200
   c. 4" high
   d. The color of the label to be white
   e. Located in the outside lane, and is above the starting line.
2. Color of the starting line is white.

S. 5000 Meters
1. Waterfall start.
2. Event label
   a. 5000
   b. 4" high
   c. The color of the label to be white
   d. Located in the outside lane, and is above the starting line
3. Color of the starting line is white.

T. 10000 Meters
1. Waterfall start.
2. Event label
   a. 10000
   b. 4" high
   c. The color of the label to be white
   d. Located in the outside lane, and is above the starting line
3. Color of the starting line is white.

U. 400 Meter Relay
1. All in lanes.
   a. Event label
   b. 400
   c. 4" high
   d. The color of the label to be white
   e. Located in lane 2, and is above the starting line.
2. Color of the starting line is white, same starting line as the staggered starting line for the 400 meters.
3. The relay exchange zone markers are yellow and the acceleration zone marker is yellow.
a. Exchange zone markers are 36" wide by 18" high triangles, the two triangles point into the relay exchange zone, and the triangles are included in the 20-meter zone.

b. Acceleration zone mark is 6" wide by 6" high triangle; one triangle per lane, 10 meters before the exchange zone marker, and the triangle is included in the 10-meter acceleration zone.

V. 800 Meter Relay
1. All in lanes
2. Event label:
   a. 800R
   b. 4" high
   c. The color of the label to be white
   d. Located in lane 2, and is above the starting line
3. Color of the starting line is white with a red insert
4. The relay exchange zone markers are red and the acceleration zone marker is red
   a. Exchange zone markers are 36" wide by 18" high triangles, the two triangles point into the relay exchange zone, and the triangles are included in the 20-meter zone.
   b. Acceleration zone mark is 6" wide by 6" high triangle; one triangle per lane, 10 meters before the exchange zone marker, and the triangle is included in the 10-meter acceleration zone.

W. 1600 Meter Relay
1. Three turn stagger.
2. Event label
   a. 1600R
   b. 4" high
   c. The color of the label to be white
   d. Located in lane 2, and is above the starting line.
3. Color of the starting line is white with a blue insert.
4. The relay exchange zone markers are blue.
   a. Exchange zone markers are 36" wide by 18" high triangles, the two triangles point into the relay exchange zone, and the triangles are included in the 20-meter zone.

X. Finish Lines
1. Located at the northwest and southeast points of curvature (PC)
2. 2" wide, and white in color
3. The intersection of the finish line with the lane lines shall be alternating: inside of lane 1 - 2" x 2" black square, inside of lane 2 - a black line-white line-black line (total size is 2" x 2" and the black lines are parallel to the lane lines), inside of lane 3 - 2" x 2" black square, etc.
4. No lean lines are to be provided

Y. 1 Turn Break line
1. 2" wide, white when it is also a finish line, otherwise it is green.

Z. Box Alleys
1. Provide 1 turn box alley starts for the following events:
2. 800
3. 1600
4. 3200
5. 5000
6. 10000
7. Box 1 to be lanes 1-4
8. Box 2 to be lanes 5-9

AA. Interval Marks
1. Provide a 2” wide white line on the inside of the track oval extending from the inside edge of the inside Lane 1 line toward the channel drain approximately 4” long.
2. These lines are to be at 50 meter intervals starting at the common finish line and running the entire length of the track oval.

BB. Long/Triple Jump
1. Runway lines
   a. 2" wide lines
   b. White in color
   c. 48” wide runways (inside edge to inside edge of line).
2. Distance marks
   a. Provide 1.5” long by 1” wide white lines outside the runway on the right hand (direction of running) side every foot beginning at 20 feet from the long jump foul line and extending the length of the runway or 150’ whichever is shorter.
   b. For the lines in item 4, every 5 and 10 foot line to be 3” long by 1” wide.
   c. For the lines in item 4, every 10 foot line to be labeled below the line facing the athlete.
3. Polyurethane plugs
   a. 4” nearest the sand pit to be black.
   b. Remaining 8” to be white.

CC. Pole Vault
1. Runway lines
   a. 2" wide lines
   b. 48” wide runways (inside edge to inside edge of line)
   c. White in color
2. Zero Line
   a. Provide 1/2” wide white line at back of each box extending 15’ in each direction
3. NCAA Marks
   a. Provide 90cm long by 2” wide white line with label beside the line in the center of the runway at 3.70m from the back of the plant box.
b. Provide 30cm long by 2” wide white lines with label beside the line in the center of the runway at 2.80m, 3.10m, 3.40m, 4.00m, 4.30m and 4.60m from the back of the plant box.

4. Distance Marks
   a. Provide 1.5” long by 1” wide white lines outside the runway on the right hand side (direction of running) every foot beginning at 15 feet from the plant box and extending the length of the runway or 150’ whichever is shorter.
   b. For the lines in item 5, every 5 and 10 foot line to be 3” long by 1” wide.
   c. For the lines in item 5, every 10 foot line to be labeled below the line facing the athlete.

DD. Javelin
   1. Runway lines
      a. 2” wide lines
      b. White in color
      c. 13.123 feet wide (inside edge to inside edge of line)
   2. Foul line
      a. Foul line to be 5’ from edge of synthetic surface
      b. 2.76” (7cm) wide line
      c. White in color
      d. Extend foul line at a right angle to the runway lines at the intersection of the foul line arc and runway lines 2.46’ (75cm)
   3. Radius Mark
      a. 6” tall triangle
      b. White in color
      c. Angle to match sector lines

EE. Shot Put
   1. Dividing lines
      a. 2” wide lines
      b. White in color
      c. Back edge of line to be on centerline of throw circle
      d. Extend 2.46’ (75cm) from edge of throw circle
   2. Sector lines (34.92 degrees)
      a. 2” wide white lines
      b. White in color
      c. Outside the recessed throwing circle
      d. Install 2” wide sector lines at the end of the landing area

FF. Hammer / Discus
   1. Dividing lines
      a. 2” wide lines
      b. White in color
      c. Back edge of line to be on centerline of throw circle
      d. Extend 2.46’ (75cm) from edge of throw circle
   2. Sector lines (34.92 degrees)
PERALTA COMMUNITY COLLEGE DISTRICT
TRACK AND FIELD RESURFACING

1. 2" wide white lines
2. White in color
3. Outside the recessed throwing circle

GG. Lane numbers
1. The numbers are a script style or block style, 24" wide by 24" high, and the numbers will not have a color shadow.
2. The color of the numbers will be white.
3. There are 5 sets of numbers:
   a. There are 2 sets of numbers 5 feet before the 110M starting lines and outside the track oval lane lines.
   b. There is 1 set of numbers 1 foot after the common finish line, facing to the outside of the track oval.
   c. There is 1 set of numbers staggered in the first turn, above the 400M staggerers.
   d. There is 1 set of numbers staggered at the 200M, above the starting line.

HH. Letters
1. The Letters are a script style or block style, 24" wide by 24" high, and the letters will not have a color shadow.
2. The color of the letters will be white. There is 1 set of letters:
3. Place letters in Lane 5 showing the College name centered on the infield.

3.3 Line markings shall be installed according to recommended colors as outlined by the National Collegiate Athletic Association (NCAA). Color markings listed above must be reviewed and verified as correct, as per the rules and regulations of the governing body. Line markings must be reviewed and verified with the District prior to installation. Any and all changes or deviations from standard NCAA markings requested by College personnel shall be noted on submittal documents provided at the completion of the project.

3.4 All line markings must be reviewed and verified with the District prior to installation.

END OF SECTION
PART 1 – GENERAL

1.1 WORK SPECIFIED HEREIN

A. Labor, materials, equipment, transportation, and services necessary to complete demolition clearing & grubbing work shown explicitly on construction drawings, or additional demolition as necessary to complete the work.

B. Demolition work shall include, but not necessarily be limited to, the following items:
   1. Remove and dispose of existing artificial turf (complete) as shown on plans. Artificial turf and/or infill are to be recycled.
   2. Remove and dispose of concrete and asphalt as shown on demolition plans.
   3. Remove and dispose of synthetic track material, which shall only be removed when temperatures are between 55°F and 65°F. Care shall be taken as to not damage the existing asphalt base.
   4. Loading, hauling, and dumping fees for concrete, asphalt, artificial turf, soil, pipes and other removed items. All materials shall be disposed of in accordance with State of California regulations, Federal regulations and best practices of the industry.
   5. The existing field drain stone shall be protected in place along with other items which are to remain as noted on the plans.

C. Installation of temporary security fencing and gates around and at access points to work areas, as directed by owner or owner’s representative.

D. Construct temporary construction access road and/or ramp, if necessary. Protect in place access roads to adjacent areas under construction as directed by owner or owner’s representative.

F. Contractor shall strictly adhere to the following regulations during demolition, excavation and grading:
   - Title 8 CCR 1532.1 Lead in Construction
   - Title 8 CCR 1529 Asbestos
   - Title 8 CCR 5194 Hazard Communication
   - Title 8 CCR 5155 Airborne Contaminants
   - Title 8 CCR 5192 Hazardous Waste Operations and Emergency Response

1.2 SUBMITTALS

A. Demolition procedures, items to salvage and operational sequence for review and acceptance by owner.

B. Specifically document if any products are to be recycled.

1.3 PROJECT CONDITIONS

A. Existing conditions: verify existing conditions before starting work.

B. Protection
   1. Do not interfere with use of adjacent buildings. Maintain free and safe passage to and
from adjacent buildings and maintenance areas.

2. Prevent movement or settlement of structures. Provide bracing or shoring. Be responsible for safety and support of structures. Assume liability for building movement, settlement, damage, or injury.

3. Cease operations and notify owner immediately if safety of structures appears to be endangered. Take precautions to properly support structures. Resume operations only after safety is restored.

4. Provide and maintain barricades, lighting, and guardrails required by applicable regulatory advisory to protect passersby, workers and building occupants.

C. Existing services

1. Follow the procedures outlined in the general conditions for utility disconnects and interruptions.

2. Place markers to indicate location of disconnected services. Identify service lines and capping locations on project record documents.

3. Removal or capping of existing utilities to be coordinated with the owner.

PART 2 – PRODUCTS

2.1 MATERIALS

Excess or unsuitable material, broken asphaltic concrete, broken Portland cement concrete, pipes, etc., shall be removed and disposed of by contractor. Materials shall be disposed of at an approved disposal site. Contractor shall, prior to commencement of the work, submit a letter to the owner stating the location of disposal site(s) for all excess material and certifying that he has obtained the property owner's permission for the disposal of all surplus materials.

PART 3 – EXECUTION

3.1 METHODS

A. Contractor shall be responsible for determining the method or methods used to accomplish the removals and excavations indicated on the plans, except that blasting will not be allowed.

B. Contractor shall assume responsibilities to protect existing structures and facilities during the work, and shall repair or replace structures or facilities damaged by them or their subcontractors at contractor’s expense.

C. Contractor shall demolish in an orderly and careful manner items required to accommodate new work, including work required for connection to existing structures. Protect existing foundations and structural members.

D. Remove existing walks, curbs, gutters, and paving as indicated. Saw cut concrete and/or asphalt to provide a straight line at edges of existing pavement that will remain.

E. Debris:

1. Remove excess debris as it accumulates, except as otherwise specified. Do not store or permit debris to accumulate on site. If contractor fails to remove excess debris promptly, owner reserves right to cause same to be removed at contractor’s expense.

2. Materials requiring removal and demolition to be removed completely from site, unless approved otherwise.

3. If contractor encounters unforeseen items during clearing and demolition work, he is to
notify the owner prior to removal or demolition.

F. Perform demolition hauling and disposal in accordance with applicable authorities having jurisdiction.

G. Repair demolition performed in excess of that required, at no cost to owner.

H. The burning of materials onsite is not permitted.

I. Remove demolished materials. Remove tools and equipment from site upon completion of work.

J. Owner may identify specific items for the contractor to salvage and delivered to owner for future use.

K. Contractor shall provide sufficient watering to abate dust.

END OF SECTION
SECTION 3122 00 – ATHLETIC FIELD SITE PREPARATION AND GRADING

PART 1 – GENERAL

1.1 SCOPE OF WORK

A. Labor, materials, equipment, and services necessary to complete site preparation, grading, and related items as indicated or specified.

B. The general extent of sports field grading is shown on drawings and includes, but is not limited to, the following: Finished grading/repair of existing field drain stone & grading of area where pole vault and long/triple jump were removed (Laney College Only).

1.2 SUBMITTALS/OBSERVATIONS/INSPECTIONS

A. Subgrade compaction tests as outlined in 1.6, B.

B. Contractor qualifications as outlined in 1.5, A.

C. Superintendent resume as outlined in 1.5, C.

D. Observation of finished grade by engineer as outlined in 1.6, A.

1.3 FINISHED GRADE

A. "Finished Grade" as used herein, refers to the existing final grade elevations.

B. Unless otherwise indicated, provide uniform slopes between points for which finished grades are indicated or between such points and existing established grade.

1.4 PROJECT CONDITIONS

A. Existing Conditions: Verify existing conditions before starting work.

B. Protection

1. Do not interfere with use of adjacent buildings. Maintain free and safe passage to and from adjacent buildings and maintenance areas.

2. Prevent movement or settlement of walls and structures. Provide bracing or shoring. Be responsible for safety and support of structures. Assume liability for building movement, settlement, damage, or injury.

3. Cease operations and notify owner immediately if safety of structures appears to be endangered. Take precautions to properly support structures. Resume operations only after safety is restored.

4. Provide, and maintain barricades, lighting, and guardrails required by applicable regulatory
advisory to protect passersby, workers and building occupants.

1.5 CONTRACTOR QUALIFICATIONS

A. Bidder shall provide proof of five (5) or more regulation NCAA level field installations which required similar construction techniques.

B. The bidder understands that specialized laser grading equipment may be required for this project.

C. Further, provide a resume of experience, at the time of receipt of bids, for the project superintendent who will be on the site and actively directing the project on a day to day basis. Project Superintendent must possess, on a minimal basis, the same qualifications as listed above.

1.6 QUALITY ASSURANCE/TOLERANCE

A. The field drain stone surface may only vary within a tolerance of ± \(\frac{1}{4}\)” in 10 feet, measured in any direction. Prior to installation of the artificial turf the contractor shall string-line the finished surface in 10’ intervals in the presence of the engineer.

B. All subgrade compaction tests shall be performed by a qualified soils technician and submitted to the owner for approval.

PART 2 – MATERIALS

2.1 EXCESS OR UNSUITABLE MATERIAL

Excess or unsuitable material, broken asphaltic concrete, broken Portland cement concrete, pipes, etc., shall be removed and disposed of by the contractor. Materials shall be disposed of at an approved disposal site. Contractor shall, prior to commencement of work, submit a letter to owner stating locations of disposal sites for excess materials, and certifying that they have obtained property owner’s permission for disposal of surplus materials.

2.2 FILL

Soil Materials for finished subgrade, whether from sources on or offsite, must be approved by the Engineer as suitable for intended use, and specifically for required location or purpose. Purchase and delivery of import materials, as may be required, will be the responsibility of the playing field contractor. Any excess soil after excavation and trenching of sub drainage piping system shall be disposed of to an off-site location by the playing field contractor.

2.3 GRADE STAKES AND LINES

Grading, including sub-grading and finished grading of un-surfaced, as well as paved areas, shall be controlled by such intermediate grade stakes and lines as may be necessary to obtain slopes and levels required by finished grade elevations shown on plans. Compacted sub-grades and finished grade surfaces shall parallel and conform to control planes established by grade stakes and lines.
2.4 VERIFICATION OF QUANTITIES

Quantities shown on grading plans and sections are for contractor's convenience only, and grading shall be done in conformance with elevations shown on plans and in accordance with specifications. Discrepancies between such mentioned quantities and/or sections, and requirements of grading plans and/or specifications, would not entitle contractor to additional remuneration.

PART 3 – EXECUTION

3.1 EXCAVATION

A. Excavate areas shown on plans or as specified herein that may include cutting for paving area and construction sub-grades, pipe line trenches, and turf areas.

B. Excavation shall be kept free from water until compacted fills and structures are complete to above water, safe from uplift and horizontal water pressure and the backfill has been placed. De-watering equipment must be adequate to protect against flotation.

C. Excavated material not necessary to, or suitable for fill construction, shall be removed from site.

3.2 GRADING

A. The Contractor shall protect the existing field drain stone in place. Upon removal of the artificial turf the engineer shall review the field drain stone surface. The contractor will be responsible for repairing damaged areas; light damage may be repaired by rolling the field with a non-vibratory roller ranging in size from 1 to 3 tons. Areas of more significant damage may need to be repaired by adding additional field drain stone and lightly grading or rolling with a non-vibratory roller ranging in size from 1 to 3 tons.

B. (Where required) Subgrade Preparation, after stripping the existing remnants as required, scarify, moisten or dry as required, and compact exposed subgrade to a depth of at least 9 inches. The contractor shall prepare the subgrade and construct all subbase fill in a manner resulting in uniform water contents and densities after compaction. The presence of existing fill may require supplemental preparations that could include additional overexcavation and recompaction.

C. Placement and Compaction, the contractor shall prepare the subgrade and place and compact any subbase fill to 95 percent of the Standard Proctor Maximum Dry Density according to ASTM D-698. Fill should be constructed in horizontal lifts, 4 to 6 inches in loose thickness, using equipment and procedures that will produce the recommended moisture contents and densities uniformly throughout the lift. When lighter hand-held compaction equipment is used, the loose lift thickness should be 2 to 4 inches.

D. At completion of grading work, site shall be left in a clean and finished condition conforming to the drawings

E. Sub-grade surfaces shall be finished to uniform grades and slopes per drawings, and in such a manner as to drain properly and be free of depressions, which may cause areas of standing water.

END OF SECTION
SECTION 32 11 23.23 - BASE COURSE DRAINAGE LAYERS (SYNTHETIC TURF)

PART 1 – GENERAL

1.1 SCOPE OF WORK
   A. Provide all labor, materials, equipment and tools necessary for the complete installation of the field drain stone.
   B. The contractor shall use the field drain stone for fill material for the demolished areas such as long/triple jump runways, sandpits, etc.

1.2 SUBMITTALS/OBSERVATIONS/INSPECTIONS
   A. Field drain stone material submittal as outlined in 2.3.

1.3 REFERENCES AND REGULATORY REQUIREMENTS
   A. Contractor shall strictly adhere to all local and national regulations.

1.4 QUALITY ASSURANCE (TESTING AND INSPECTION)
   A. The compaction of the field drain stone shall be tested by a certified inspector.

1.5 SEQUENCING AND SCHEDULING
   No work required under this Section which affects the operation and/or use of existing systems or facilities shall be commenced until the Owner’s Representative has approved a schedule for shutdown or interruptions of service. Only properly authorized Owner’s personnel shall operate, open, or close any valve in the existing systems.

PART 2 – PRODUCTS

2.1 PRODUCT/SITE CONDITIONS
   A. Grades: All Artificial Turf shall be installed at the existing elevations and. Grades and elevations shall not vary from existing conditions without permission of the engineer.
   B. Verification of Quantities

      1. Quantities shown on plans, sections and details are for contractor’s convenience only and all work shall be done in conformance with plans and in accordance with specifications.
      2. Discrepancies between such mentioned quantities and/or sections, and requirements of artificial turf plans and/or specifications, will not entitle contractor to additional remuneration.

2.2 DELIVERY, STORAGE, AND HANDLING
   A. Material shall be placed as close to its ultimate installed position as possible to minimize the amount of handling which may cause inconsistencies in the final installed product.
B. Material shall be protected at the job site to insure that it does not become contaminated by other materials.

C. Materials shall not be placed in such a way to obstruct any school or construction activities adjacent to the field or any paths of travel adjacent to the field.

2.3 FIELD DRAIN STONE

A. The permeable base shall be an angular field drain stone that meets the criteria as outlined below. Contact Greg Vinson at Vulcan Materials (925) 249-3071.

<table>
<thead>
<tr>
<th>Sieves</th>
<th>Stone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2”</td>
<td>100</td>
</tr>
<tr>
<td>1”</td>
<td>95-100</td>
</tr>
<tr>
<td>3/4”</td>
<td>75-90</td>
</tr>
<tr>
<td>1/2”</td>
<td>55-75</td>
</tr>
<tr>
<td>3/8”</td>
<td>40-70</td>
</tr>
<tr>
<td>#4</td>
<td>20-45</td>
</tr>
<tr>
<td>#8</td>
<td>10-25</td>
</tr>
<tr>
<td>#16</td>
<td>10-20</td>
</tr>
<tr>
<td>#30</td>
<td>0-8</td>
</tr>
<tr>
<td>#50/60</td>
<td>0-5</td>
</tr>
<tr>
<td>#100</td>
<td>0-4</td>
</tr>
<tr>
<td>#200</td>
<td>0-3</td>
</tr>
</tbody>
</table>

RESTRICTIONS:
To ensure structural stability: \( \frac{D_{60}}{D_{10}} > 5; \) and \( 1 < \frac{D_{30}}{D_{10} \times D_{60}} < 3 \)
Fragmentation must be 100%

To ensure proper drainage: Permeability of stone > 100 in/hr
Porosity of field drain stone > 25%
(When stone is saturated and compacted to 95% Proctor.)

Depending on the type of rock present in the field drain stone mix, other mechanical characteristics might be necessary for approval.

“\(D_x\)” is the size of the sieve (in mm) that lets pass \(X\%\) of the stone. For example \(D_{60}\) is the size of the sieve that lets 60% of the stone pass. These sizes, for calculation purposes, may be obtained by interpolation on a semi-log graph of the sieve analysis.

Soft limestone and shale materials are not suitable. Questionable materials should be evaluated using a sulfate soundness test (ASTM C-88 and LA Abrasion Test (ASTM C-131).
2.4 TESTING PROTOCOL

A. The Testing Agent must have at least five years experience in similar projects and test protocols. The Testing Agent must be qualified to perform all of the following testing protocols:

1. ASTM C136: Sieve Analysis of Fine and Coarse Aggregates
2. ASTM D854: Specific Gravity of Soils
3. ASTM D2216: Laboratory Determination of Water (Moisture) Content of Soil and Rock
4. Infiltration Rate (Saturated Hydraulic Conductivity (KSAT))

B. The field drain stone samples shall initially be submitted to a qualified laboratory for testing. The Contractor shall include the following items:

1. Identification of proposed source and supplier.
2. Sample sizes as required by the laboratory.
3. Certification that the supplier can deliver the total quantity of material needed to complete the project in a timely manner.
4. Testing results for protocols as outlined in Paragraph A.

C. Quality Control Testing prior to construction shall be as follows:

1. The contractor shall initially have a one-gallon sample of the field drain stone tested, the engineer will then review and approve or reject the sample. Vulcan Materials is approved to provide the material testing.
2. Based on initial submittals, the field drain stone material approved by the engineer for the field construction shall supersede the baseline specification established in the design document.

D. Quality Control Testing during construction shall be as follows:

1. The field drain stone material must come from one supplier only. During construction, the contractor shall submit samples to a qualified laboratory to assure strict compliance with the specifications. The sampling shall be performed at the quarry. The testing results shall be submitted to the engineer, material shall not be shipped until approved by the engineer.

2. The Contractor shall submit one-gallon composite samples of every 500 tons of field drain stone material placed to a laboratory for testing. The engineer shall review the results for comparison with the approved material. No materials shall be shipped until the engineer approves the material.
2.5 FIELD CURB NAILER

The field curb nailer shall be 2”x 4” WOODFLEX PLUS by Plastic Services and Products (PSP); or approved equal.

PART 3 – EXECUTION

3.1 PREPARING THE SOIL BED

A. The subgrade preparation shall be performed in accordance with specification 31 22 00.

B. The field drain stone shall not be installed until all finished grading, irrigation, and drainage are completed, in order to avoid the mixing of other soil and materials with the field drain stone material.

3.2 PLACING THE FIELD DRAIN STONE

A. The field drain stone trucked into the site must be done in such a manner as not to alter the subgrade and/or damage drainage and irrigation systems.

B. Prior to leaving the quarry the field drain stone shall be shipped with optimal moisture content to eliminate segregation during trucking.

C. The aggregate base must be laid without damaging the subgrade. It is very important to not create any depressions with heavy equipment. The specified aggregate supplied must conform to the specifications, and must be stable and permeable.

D. In performing this work, the Contractor shall avoid damage to any existing structures or features of the playing fields or features under construction, such as drainage and irrigation systems. The Contractor at his own expense shall repair any such damage.

E. As part of this work, the Contractor shall check all graded areas and assure that all features of the subgrade area at the proper finished grade, with no changes or damage to grades, as specified herein and on the grading plan.

F. In order to avoid segregation of materials the field drain stone shall be carefully and evenly spread with minimal overall movement of the material. Excess water should NOT be applied when dumping and rough grading, as it could create a soft sub-base that could alter constructed grades and damage the drainage system. At no time shall the contractor use vibratory compaction or overwork the material.

G. The field drain stone shall then be carefully smoothed and uniformly compacted to the finished grade by alternately raking, watering, and rolling. All surfaces shall then be checked for irregularities due to settling and brought back to a uniform grade.

H. Each field drain stone layer shall be constructed in one layer of uniform thickness; the maximum thickness of each lift is 4”. The field drain stone shall be compacted in both
directions and water settled to attain uniform 95% compaction. Maintain optimum moisture content during installation.

I. The finished surface of the field drain stone shall not vary more than ¼” in 10’ when measured in any direction. The finished surface shall be firm and unyielding. The measure of “firm and unyielding” shall be as follows: Installers of the artificial turf shall not make depressions in the finished field drain stone surface greater than 1/8” when using reasonable and industry-standard equipment and methods. Also, light-duty trucks (< ½ ton) and maintenance equipment shall not leave depressions in the finished artificial turf surface greater than ¼”.

3.3 CLEANUP

Contractor shall clean up and remove all excess materials from the job site.

END OF SECTION
PART 1 - GENERAL

1.1 CONTRACT DOCUMENTS

Standard specifications” refers to “State of California Department of Transportation Standard Specifications”, latest edition, hereinafter referred to as “standard specifications”.

1.2 SCOPE OF WORK

A. Furnish labor, materials, equipment, facilities, transportation and services to complete asphalt paving and related work as shown in contract documents.

B. Work Included: The general extent of the asphalt paving is shown on the drawings and includes, but is not necessarily limited to, the following:
   1. Asphalt Paving
   2. Asphalt Overlay

C. Workmanship and material within this section shall conform to the standard specifications, except as modified herein.

1.3 PROTECTION OF WORK

Curbs, walls and other work shall be covered with suitable material and protected from injury by equipment and contact with oil, emulsion or asphalt. Manholes, catch basins and other gratings are shall be covered with suitable material so that no asphalt or emulsion will come in contact with the inside walls or floors of the structures. Damage to such work shall be repaired and/or replaced at the contractor's expense. Manhole rims and catch basin grates shall be adjusted, where necessary, to new finish pavement elevations.

1.4 TESTING AND INSPECTION

A. At owner's discretion, testing and inspection of asphalt pavement mixes and testing of placed stabilizing base course and asphalt pavement will be performed by independent testing laboratory appointed and paid for by owner.

B. If compaction tests indicate that stabilizing base course or asphalt paving do not meet specified requirements, contractor shall remove defective work, replace and retest at contractor's expense.

1.5 GENERAL REQUIREMENTS

A. Paving surfaces shall have positive drainage as indicated in the contract documents. Upon completion of the work, paved areas included in this section shall be subject to a water drainage test. Areas that fail to drain properly as determined by the owner or owners’ representative shall be corrected and repaired at no additional cost to the owner.

B. Asphalt concrete paving shall be free from cracking, pot holes, raveling, slippage, depressions, corrugations or other defects at the date of completion and acceptance of
the project.

C. Repairs shall be made within ten (10) days of notification at no cost to the owner.

1.6 SUBMITTALS

Material certificates: Provide copies of material certificates signed by material producer and contractor, certifying that each material item complies with, or exceeds specified requirements.

1.7 REFERENCE


1.8 QUALITY ASSURANCE


B. Manufacturer’s Qualifications: Company with experience in manufacturing asphaltic concrete pavement for a period of five years minimum.

1.9 SITE CONDITIONS

A. Construct asphalt concrete surface course when temperatures exceed 40 degrees F and when the base is dry.

B. Establish and maintain required grade lines and elevations.

PART 2 – MATERIALS, PRODUCTS AND EQUIPMENT

2.1 MATERIALS

A. General: Use locally available materials, which exhibit a satisfactory record of previous installations.

B. Asphalt Aggregate Mixture: Provide plant-mixed, hot laid asphalt aggregate mixture complying with ASTM D3515 for asphalt concrete Type II C2-AR-4000 with 6% binder. Base course layer shall be ¾” aggregate; finish course layer shall be ½” or 3/8” aggregate (gradation per section 39 of the standard specifications for Type B surfacing).

C. Liquid Asphalt shall conform to requirements for RC-70 liquid asphalt as per section 93 of the standard specifications. Rate of application shall be fifteen-hundredths to one-quarter (15/100 - 1/4) gallon per square yard.

D. Materials used for the aggregate base under layer shall conform to the provisions for Class 2 aggregate of the standard specifications. Material not approved by owner’s representative shall not be used as aggregate base under new synthetic surfacing.
E. Base rock shall be crusher-run-rock conforming to provisions for Class 2 aggregate. Depths of base shall be noted in the details.

F. Soil sterilant shall be “Treflan” pre-emergence herbicide or approved equal.

G. Asphaltic emulsion shall be penetration type conforming to the RS-1 requirements of section 94 of the standard specifications.

H. Primer for application on crushed stone base under layers (prime coat) shall be MC-1 or approved equal.

I. Primer for application on asphalt surfaces (tack coat) shall be RC-1 or approved equal.

2.2 EQUIPMENT

A. Paving Equipment:
   1. Approved power brooms, aggregate spreaders, bituminous material distributor and hauling vehicles.
   2. Furnish equipment in such number and capacities as required to provide coordinated and uniform paving progress.
   3. Aggregate spreaders shall be mechanical and either self propelled or attachable to the rear of a dump truck and be capable of spreading aggregate within the specified limits.
   4. Bituminous material distributor shall provide controls for regulating and monitoring the spread of material at even temperatures and pressures on variable widths up to 15 feet.

B. Compacting Equipment:
   1. Self-propelled vibratory steel drum rollers and pneumatic tired rollers shall be capable of exerting a ground pressure of not less than 80 pounds per square inch of contact area.
   2. Manual pushed rollers will not be allowed.
   3. Vibrating plate compactors shall be manually guided vibrating plate types.

2.3 SOURCE QUALITY CONTROL

Laboratory Tests:
A. Sieve Test: Sub-base and base aggregates in accordance with ASTM C-136 to determine particle size distribution.

B. Aggregate samples shall meet requirements of APWA for base aggregates.

PART 3 – EXECUTION

3.1 ACCEPTABLE APPLICATORS

A. Applicators: Company with experience in applying Asphaltic concrete pavement for a period of three years minimum. Additionally, the applicator shall have experience paving at least five (5) tracks within the past five (5) years, unless general contractor provides experienced personnel (Project Manager and/or Project Superintendent) who meet this requirement.
B. Soil Sterilant: Soil sterilant shall be applied in one (1) application: after base rock and before asphalt is laid. The material shall be uniformly applied according to the manufacturer's recommendations and at the minimum rate of 7.5 lbs. per 1000 sq. ft.

3.2 BASE

A. Base shall be placed and compacted in accordance with the pertinent provisions of the standard specifications.

B. Top of aggregate base rock layer shall receive prime coat conforming to standard specifications.

3.3 SURFACE PREPARATION

A. Remove loose material from compacted base rock surface (sub-base) immediately before applying prime coat.

B. Proof roll prepared sub-base surface to check for unstable areas and areas requiring additional compaction with the owner or owner’s representative present.

C. Notify owner or owner’s representative in writing of unsatisfactory conditions. Do not begin paving work until deficient sub-base areas have been corrected.

D. Tack Coat: Apply to contact surfaces of previously constructed asphalt or Portland cement concrete. Distribute at a rate of .05 to .10 gallons per square yard of surface. Exercise care in applying materials to avoid smearing of adjoining concrete surfaces. Remove and clean damaged areas. A tack coat shall also be applied to the base course asphalt just prior to placing the top course asphalt.

3.4 LIQUID ASPHALT PRIME COAT

A. After base is ready to receive prime coat, contractor shall make a single, evenly distributed application of liquid asphalt at specified rates. Area shall be left for a period of twenty-four (24) hours to allow liquid asphalt to sufficiently penetrate the surface. Any excess liquid asphalt shall be absorbed with a covering of sand. Sand shall be placed to form an even surface without humps. Immediately in advance of placing asphalt concrete, additional prime coat shall be applied to areas where prime coat or paint binder has been destroyed.

B. Prior to the laying of the surfacing material, the base shall be thoroughly cleansed of all oil, dirt, loose material and excess sand. Either a power broom or hand brooms may be used.

3.5 PLACING MIX

A. General: Place asphalt concrete mixture on prepared surface, spread and strike off. Spread mixture at a minimum temperature of 275 degrees F for the base course layer and 266 degrees F for the finish course layer. Place inaccessible and small areas by hand. Place each course to required grade, cross-section, and compacted thickness. Asphalt placement shall be at the thickness shown on the plans.
B. Joints: Make joints between old and new pavements, or between successive days’ work, to ensure continuous bond between adjoining work. Construct joints to have same texture, density and smoothness as other sections of asphalt concrete course.

C. Equipment: Spreading and rolling equipment shall be in accordance with the standard specifications.

D. Compaction shall be in accordance with the standard specifications.

E. Asphalt-leveling course shall cure a minimum of thirty days (30) prior to installation of the synthetic track surface.

3.6 ROLLING

A. General: Begin rolling when mixture will bear roller weight without excessive displacement.

B. Compact mixture with hot hand tampers or vibrating plate compactors in areas inaccessible to rollers.

C. Breakdown Rolling: Accomplish breakdown or initial rolling immediately following rolling of joints and outside edge. Check surface after breakdown rolling, and repair displaced areas by loosening and filling, if required, with hot material.

D. Second Rolling: Follow breakdown rolling as soon as possible, while mixture is hot. Continue second rolling until mixture has been thoroughly compacted.

E. Finish Rolling: Perform finish rolling while mixture is still warm enough for removal of roller marks. Continue rolling until roller marks are eliminated and course has attained maximum density.

F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

3.7 FIELD QUALITY ASSURANCE

A. Asphalt surface shall meet the requirements of the International Association of Athletics Federations (IAFF) and National Collegiate Athletic Association (NCAA).

B. Test in-place asphalt concrete courses for compliance with requirements for thickness, planarity and surface smoothness. Repair or remove and replace unacceptable paving as directed by owner or owner’s representative.

C. Thickness: Tolerances for thickness shall be one eight (1/8) inch, plus or minus.

C. Planarity: Asphalt substrate shall not vary from designed cross-slopes by more than +/- 0.1%. Finished asphalt shall not vary, plus or minus more than 1/8” under a 10-foot straight edge in any direction.
D. In no case will polyurethane filler that is used to correct birdbaths be greater than 1/4” thick.

E. Corrective Measures: It shall be general contractor’s responsibility to determine if the planarity’s, cross slopes, and general specifications have been met. If conditions have been met, general contractor shall notify owner’s representative in writing of the acceptance of asphalt paving by track-surfacing contractor.

The Contractor shall water flood the surface of the asphalt in the presence of the owner or owner’s representative. If after 20 minutes, “birdbaths” are evident in a depth more than 1/4”, the track-surfacing contractor and the owner or owner’s representative will determine the best method of correction at no cost to owner. All asphalt birdbaths in excess of ¼” are to be removed and re-paved. All asphalt birdbaths between 1/8” and ¼” in depth shall be filled by the synthetic surfacing contractor at the expense of the asphalt contractor. All asphalt birdbaths less than 1/8” in depth can be filled by the synthetic surfacing contractor at his expense.
PART 1 – GENERAL

1.1 SCOPE OF WORK

A. The artificial turf Contractor (the “contractor”) shall provide all labor, materials, equipment, tools and taxes necessary for the complete installation of a new infill artificial turf designed to provide the look, feel, safety, and performance of optimally maintained natural grass. The artificial turf system(s) shall consist of, but not necessarily be limited to, the following:

1. Synthetic Turf: Low-friction, polyethylene-blended fibers, tufted to a permeable or perforated backing.

2. A resilient infill system.

3. Field striping and markings.

4. Complete installation of the artificial turf on existing and/or new drain stone.

5. Warranty, testing, and maintenance equipment as outlined in this specification.

B. The artificial turf and its components shall meet all requirements of National Collegiate Athletic Association (NCAA).

1.2 JOB CONDITIONS

A. The Contractor shall be responsible for maintaining finish grades in all areas to receive the artificial turf. The Contractor shall be required to repair the damaged surface as outlined in section 31 22 00.

B. The Contractor shall be responsible for coordinating their work with the owner.

C. The field drain stone shall not be contaminated with other soil. Any stone contaminated by other soil will be removed and replaced at the Contractor’s expense.

1.3 SUBMITTALS/QUALIFICATIONS

A. The Contractor shall be required to comply with the following:

1. All designs, markings, layouts, and materials shall conform to all currently applicable NCAA rules and other standards that may apply to this type of artificial turf installation.
2. The Contractor shall provide all submittals within 15 days from notice to proceed or as deemed necessary by the project schedule.

3. Re-submittals shall reference the previous submittal number and shall include responses to comments on the previous submittals; responses to comments shall be summarized as well as identifying where in the re-submittal they are addressed.

B. The Contractor must submit, to the owner, the following

1. The Contractor shall submit a 7½” x 12” minimum sample of the exact artificial turf and infill system that is specified for this project.

2. The Contractor shall submit turf samples/swatches (no-infill) for all colors required for the artificial turf, this includes striping and logos. The swatches shall be a minimum dimension of 12” x 12”.

3. The Contractor shall provide the installers resume and all relevant project experience.

4. Indicate the following information for the submitted turf product(s):

   a. Product name and description
   b. Pile Height  ASTM D5823-05A
   c. Face Weight  ASTM D5848-07
   d. Total Weight  ASTM D5848-07
   e. Fiber Denier ASTM D1907-07
   f. Grab Tear Strength ASTM D5034-09
   g. Tuft Bind  ASTM D1335-05
   h. Machine Gauge ASTM D5793-05
   i. Infiltration Rate BS7044 Method 4
   j. Flammability ASTM D2859-06
   k. Fiber manufacturer and product name
   l. Primary Backing system type and weight
   m. Secondary backing system type and weight
   n. Pile height above infill
   o. Color uniformity
   p. UV inhibiting protection
   q. Type of infill and material properties
   r. Results of Lisport Test

5. A description of key installation methods, such as method of connecting the turf panels.

6. Artificial Turf Warranty (Copy).

7. Maintenance program details, which includes amount of visits per year and services performed during each visit.
8. The Contractor shall include complete shop drawings for the installation of the artificial turf. The shop drawings shall include such items as a dimensioned site plan which includes all field, striping and logo dimensions, as well as, as a seaming plan. As part of the shop drawings the Contractor shall provide (3) separate color renderings for the centerfield logo at Laney. Each rendering shall include a different variation of the green, black, grey and/or green colors for the Laney “Eagle”.

9. Operation and Maintenance Manuals. Two (2) paper copies and an electronic CD of the initial Operation and Maintenance manual are to be submitted for approval. The manuals shall be submitted in 3 ring binders with the Project Name, Vendor information, name, address, phone number and contact name, local representative contact information. The O/M shall have an index with tabbed sections.

PART 2 – PRODUCTS

2.1 ARTIFICIAL TURF BASE BID PRODUCTS

LANEY COLLEGE

A. FIELDTURF: “Revolution”. The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 10,800 denier; UV stabilized low friction monofilament fibers.
2. The pile height shall measure 2.5” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 40 ounces per square yard.
4. The carpet’s permeable primary backing shall be a dimensionally stable double-layered polypropylene fabric with SureLock Precision Coating.
5. The infill is to be SBR rubber granules and a specifically sized, rounded, washed and kiln dried silica sand. The sand shall be installed at a rate of 6.2 lbs/square foot and SBR rubber at a rate of 3.0 lbs/square foot.

B. AstroTurf “Gameday 3D Xtreme 60”. The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 10,000 denier; UV stabilized low friction slit film and monofilament fibers.
2. The pile height shall measure 2.0” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 60 ounces per square yard.
4. The carpet’s perforated primary backing shall be dimensionally stable Tri-Composite Woven PP with the BioCel Polyurethane coating.
5. The infill is to be SBR rubber granules and specifically sized, rounded, washed and kiln dried silica sand. The infill shall be installed at a rate of 50% sand and 50% rubber by weight.

C. HELLAS: “Matrix”. The artificial turf material and resilient infill shall be per the
The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 12,400 denier; UV stabilized low friction monofilament fibers.
2. The pile height shall measure 2.25” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 48 ounces per square yard.
4. The carpet’s permeable primary backing shall be Tri-layer woven polypropylene.
5. The infill is to be Realfill, which consists of kiln dried silica gravel (6.2 lbs per square foot) and sbr rubber (3.0 lbs per square foot).

MERRITT COLLEGE

B. FIELDTURF: “Classic HD”. The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 10,800 denier; UV stabilized low friction slit film fibers.
2. The pile height shall measure 2.5” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 40 ounces per square yard.
4. The carpet’s permeable primary backing shall be a dimensionally stable double-layered polypropylene fabric with SureLock Precision Coating.
5. The infill is to be SBR rubber granules and a specifically sized, rounded, washed and kiln dried silica sand. The sand shall be installed at a rate of 3 lbs/square foot and SBR rubber at a rate of 3.0 lbs/square foot.

C. AstroTurf “Gameday 3D Xtreme 60”. The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 10,000 denier; UV stabilized low friction slit film and monofilament fibers.
2. The pile height shall measure 2.0” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 60 ounces per square yard.
4. The carpet’s perforated primary backing shall be dimensionally stable Tri-Composite Woven PP with the BioCel Polyurethane coating.
5. The infill is to SBR rubber granules and specifically sized, rounded, washed and kiln dried silica sand. The infill shall be installed at a rate of 50% sand and 50% rubber by weight.

D. HELLAS: “Matrix”. The artificial turf material and resilient infill shall be per the manufacturer’s currently published specifications and in accordance with the following:

1. The primary yarn fiber shall be 12,400 denier; UV stabilized low friction monofilament fibers.
2. The pile height shall measure 2.25” high per ASTM D-5823. The maximum pile height variance is +/- 5%.
3. The face weight shall not be less than 48 ounces per square yard.
4. The carpet’s permeable primary backing shall be Tri-layer woven polypropylene.
5. The infill is to be Realfill, which consists of kiln dried silica gravel (6.2 lbs per square foot) and sbr rubber (3.0 lbs per square foot).

2.2 LINES/MARKINGS

A. The carpet shall be delivered in 15' wide rolls with all white lines (5-yard lines, sidelines, goal lines, coach’s boxes, etc.) tufted into each roll. The rolls shall be of sufficient length to go from sideline to sideline. Head seams, between the sideline rolls, will not be acceptable.

B. All lines shall be tufted into the rolls; letters for school names, logos, numbers, arrows and hash marks shall be inlaid. Refer to plans for approximate size and color of field markings. The owner shall make final determinations based on the submitted shop drawings.

C. No painting will be acceptable.

D. Contractor shall submit complete shop drawings, color samples, and logo design for review and approval by the Owner.

2.3 INFILL MATERIALS

A. All granulated rubber shall be washed after processing and be certified to be 100% metal and fiber free; any other rubber will not be accepted. The rubber infill shall be sized between the 10–20 sieve openings, unless otherwise specified by the turf contractor as part of their proprietary system design.

B. Sand shall be dust free, rounded silica sand; any other sand will not be accepted.

C. The total depth of the initial infill shall be no less that ¾” below the top of the highest turf fiber, unless otherwise specified by the turf contractor as part of their proprietary system design.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Maintaining the Stone Base:

The contractor shall maintain the stability, planarity, and grades of the prepared stone base. The Contractor shall be responsible for the repair of the stone base should it become disturbed during construction and during the installation of the artificial turf. Repairs shall be done in accordance with specification 31 22 00.

B. Installing the Artificial turf

1. The Contractor shall strictly adhere to the installation procedures outlined under this section. Any variance from these requirements must be accepted in writing, by the manufacturer’s onsite representative, and submitted to the architect/owner, verifying
that the changes do not in any way affect the warranty.
2. The turf manufacturer and contractor must accept the drain stone prior to the installation of the artificial turf system. The surface planarity tolerance shall not exceed 1/4” over 10’ in any direction.

3. The carpet rolls are to be installed directly over the drain stone.

4. The full width rolls shall be laid out across the field. Utilizing standard state of the art attachment procedures each roll shall be attached to the next in the manner as recommended by the manufacturer. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing field turf.

5. The turf shall be attached to the surrounding nailer board.

6. The infill shall be installed according to the manufacturer’s recommendations. When the infill is placed to within 3/4” of the top of the synthetic grass fibers, the Contractor shall notify the Owner for inspection. The balance of the infill shall be placed in the presence of the Owner or Owner’s Representative to a height or level determined by the Owner.

7. The Contractor shall provide the necessary testing data to the owner that the finished field meets or exceeds the required shock attenuation. G-max shall not be less than 90 or more than 120 at time of project acceptance. The G-max range shall be between 90 and 165 for the life of the warranty, in accordance with ASTM 355.

C. Maintenance & Warranty

1. The turf installer and/or the turf manufacturer must provide the following:

   a. The turf manufacturer shall provide a warranty to the Owner that covers defects in materials and workmanship of the turf for a minimum period of eight years from the date of substantial completion. The turf manufacturer must verify that their onsite representative has inspected the installation and that the work conforms to the manufacturer’s requirements.
   b. The manufacturer’s warranty shall include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism, and acts of God beyond the control of the owner or the manufacturer.
   c. The Contractor shall provide a warranty to the Owner that covers defects in the installation workmanship, and further warrant that the installation was done in accordance with both the manufacturer’s recommendations and any written directives of the manufacturer’s onsite representative.
   d. All turf warranties shall be non-prorated, and limited to repair or replacement of the affected areas, at the option of the manufacturer, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs.
   e. Turf manufacturer shall provide a 3rd party, insured warranty.
   f. The turf warranty shall have no qualifications, such as limiting amount of use.
D. Maintenance Equipment

1. Artificial turf manufacturer/installer shall provide each of the following equipment, or approved equal (complete product descriptions must accompany the Contractor’s proposal if any equipment is proposed as an equal to the equipment listed below):

   a. GreensGroomer LitterKat Artificial turf Sweeper, Model 760.
   b. GreensGroomer Artificial turf Groomer, Model 760SDE with spring tine attachment Model STR.

2. Artificial turf manufacturer/installer’s representative shall provide training and maintenance information relative to the grooming, care, installation, storing, and removal of the artificial turf systems to the extent that the Owner is comfortable with independently performing these operations.

E. Maintenance Program

Provide a maintenance program which consists of thoroughly inspecting and cleaning the artificial turf every six months for the duration of 8-years. At a minimum, the maintenance program shall consist of two visits per year and include inspecting the turf for damage and seam repair, sweeping and grooming.

F. Testing

The contractor shall provide Gmax testing per ASTM 355, 1936 Method at the conclusion of the installation. If the results of the Gmax test do not meet the requirements as listed in this specification than the turf manufacturer shall provide additional Gmax testing at their own expense until the Gmax requirements are met.

G. Extra Materials

Deliver to the owner all extra materials herein specified. Receive owner’s written receipt for all materials and deliver a copy of the receipt to the Engineer.

1. Material for future repairs:

   a. Provide a separate piece of fabric for each color used for the field, each piece of fabric shall be at least 5’ x 10’.
   b. One green turf piece shall be at least 10’ x 30’
   c. One (1) five gallon bucket of infill crumb rubber/sand or rubber/gravel mixture of the type used.

END OF SECTION
1.1 SUMMARY

This section covers all labor and materials required to install synthetic surfacing. The Synthetic Surfacing Contractor is responsible for installing all synthetic surfacing materials as designated in these specifications.

1.2 SUBMITTALS

A. Synthetic surfacing contractor must submit the following information prior to installation:
   1. Standard printed specifications of the synthetic surfacing system that is being installed.
   2. Installation procedures and requirements for acceptable base for their product and any conditions that may limit the synthetic surface installation or affect quality of installation.
   3. Temperature/climatic conditions limiting quality of installation.
   4. Standard specification and application for recommended base primers, crack filler, patching and leveling material acceptable for use with their product.
   5. Three representative product samples, a minimum of, 6" x 6" in size, and the same color, texture, thickness, and etc. of the same type of surfacing to be installed must be submitted and approved by the owner, prior to installation. Separate samples are required for each color surface to be installed at the facility. At completion of the project this sample may be used as a comparison to judge the quality of the installed product.
   6. Material safety data sheets on all individual components of the product being installed.
   7. Resume of the synthetic surface installer.

B. Following information shall be submitted after completion of the specified work:
   1. Provide an eight (8) year manufacturer's warranty against workmanship and materials on the full pour synthetic surface. Provide a five (5) year manufacturer's warranty against workmanship and materials on the sandwich system synthetic surface. Warranty period shall begin at final completion or owner occupancy.
   2. Provide a Care and Maintenance manual for the Owner's use in maintaining the synthetic surfacing.

1.3 QUALITY ASSURANCE

Materials shall be guaranteed to the extent that the surfacing:

A. Has been manufactured, applied and will perform in accordance with these and the manufacturer's specifications;

B. Will hold fast and/or adhere to the primer, asphalt, concrete, edging, filler, patches or overlay materials; and

C. Is Ultra-Violet resistant, will not bubble, blister, fade, crack, or wear excessively during the guarantee period.

D. Is approved for use in the State of California.
1.4 TESTING

Prior to installation, or during installation or at completion of installation of the synthetic surfacing if the owner has any question or doubt about the quality or formulation of the material, syntheticsurfacing contractor shall have the product tested. If product meets these specifications, owner will pay for cost of testing. If product does not meet specifications, synthetic surfacing contractor shall pay for testing. Material failing to meet specifications will be replaced with new material at the synthetic surfacing contractor’s expense.

1.5 INSPECTION

As requested by the Owner, the synthetic surfacing contractor shall, in the presence of the owner, inspect the synthetic surfacing each year until the end of the warranty period, or at any time requested by the owner. Any defects in workmanship or materials (at no fault of the owner) shall be repaired at the expense of the synthetic surfacing contractor to the satisfaction of the owner.

1.6 SPECIFIC SCOPE OF WORK

A. Review and approve new base as required in the specifications.

B. Brush and wash down all areas to be surfaced, as often as necessary during the installation of the track and field synthetic surface.

C. Repair all deviations as required in these specifications.

D. Repair all damaged areas, clean-up all glue, and remove excess polyurethane, primers and similar products. All trim cuts shall be neat and clean; on all curves the trim-out shall follow a radius line for accuracy and neatness.

PART 2 – PRODUCTS

2.1 SYNTHETIC SURFACE

A. Synthetic surface shall be as per the manufacturer’s specifications, plus the following requirements and where discrepancies exist, they shall be brought to the attention of the owner or owner’s representative prior to Bidding.

B. Color scheme shall be red.

C. The following products are approved for bidding:

   Base Bid
   1. Beynon
      a. Product: BSS 1000ML Full Pour (14mm)
      b. Contact: Mason Farnsworth (559) 283-3071

   2. Hellas
      a. Product: epiQTRACKS G4000 Full Pour (14mm)
      b. Contact: John Burke (916) 275-1098

   3. California Track & Engineering (14mm)
      a. Product: CalTrax Pur Full Pour
      b. Contact: Mark Duyst (559) 237-2590
Alternate Bid

1. Beynon
   a. Product: BSS 300 Sandwich System (14mm)
   b. Contact: Mason Farnsworth (559) 283-3071

2. Hellas
   a. Product: epiQTRACKS X1000 (14mm)
   b. Contact: John Burke (916) 275-1098

3. California Track & Engineering (14mm)
   a. Product: CalTrax Sandwich System
   b. Contact: Mark Duyst (559) 237-2590

Equal products will be considered upon submittal of sufficient information to establish their status as equal. See paragraph 1.2 above for submittal information.

D. Primers: All concrete areas to be surfaced shall receive manufacturer's approved primer.

E. Patching Material must be approved and compatible with synthetic surfaces.

PART 3 – EXECUTION

3.1 INSPECTION AND ACCEPTANCE

A. Examine all surfaces and contiguous elements to receive work of this section and correct, as part of the Work of this contract, any defects affecting installation.

B. Commencement of work will be construed as complete acceptability of surfaces and contiguous elements.

3.2 INSTALLATION REQUIREMENTS

A. Synthetic surfacing contractor shall submit their installation procedures for review and approval.

B. Synthetic surfacing contractor is responsible for installing all synthetic surfacing materials and line markings as designated in these specifications. The following installation requirements must be met by the synthetic surfacing contractor:

   1. Installation by approved technicians. Local laborers may be hired for non-technical work, only.
   2. Technical representative from the approved manufacturer of the polyurethane product must provide onsite technical services during the installation of the Asphaltic Concrete Paving base and track surface.

3.3 TIMING, LIMITATIONS AND CONDITIONS AFFECTING ACCEPTABLE INSTALLATION

A. Weather and Climate: If in the opinion of the synthetic track surfacing manufacturer or the owner, weather and climatic conditions are having or will have an adverse effect on installation; work shall be delayed until the adverse conditions have passed.
B. Adjacent and Concurrent Construction: Installation shall not take place until the completion of the adjacent or concurrent construction operations which generate dust, airborne abrasives, or any other by-product that, in the opinion of the owner or synthetic track surfacing manufacturer, would be harmful to the track material. Under specific direction of the owner, the synthetic surfacing contractor may be allowed to cover the track material with an approved covering if such harmful construction operations must occur after the track material has been installed.

END OF SECTION