ADDENDUM NO. 1

Date: June 17, 2015

Owner: Compton Community College District
1111 E. Artesia BLVD
Corpton, CA 90221
(310) 900-1600

Architect: Gha.$ode Bannon Architects LLP
760 W. 16th Street, unit B
Costa Mesa, CA 92627
(714) 665-8030

The clarifications, modifications, changes, additions, and/or deletions contained herein shall be incorporated within the construction documents for the project. Such information shall take precedence over that previously published.

GENERAL

Item No. 1.1

Description: Add the attached Pre-Bid RFI Responses for the following RFI:

1. PB001
2. PB002
3. PB003
4. PB004
5. PB005
6. PB006
7. PB007
8. PB008
9. PB009
10. PB010
11. PB011
12. PB012
13. PB013

Item No. 1.2

Description: Add the Attached Electrical & Low Voltage Drawings & Specifications

1. DRAWINGS:
   a. E101- Electrical Symbols List
   b. E101- Electrical Site Plan
   c. E201- Single Line Diagram and Enlarged Electrical Room
Item No. 1.3  Replaced Specifications
Description: Replace the following specification sections with the attached version as follows:
   1. Section 11 68 33
   2. Section 00 43 50

Item No. 1.4  Rodent Control
Description: Provide rodent control per the following specification:

   A. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Perform control operations lawfully, using environmentally safe materials.

Item No. 1.5  Soils Reports
Description: Soils Report Dated June 8, 2015
Alternative Site Preparation Recommendations Dated June 10, 2015

END OF ADDENDUM NO. 1
TO: PCM3, Inc.  Ref No.: stobben@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.  DWG. REF.: C063 Table 1
Fax No: 714-543-5826
Site: CCCD Football Field
Spec. Ref: 
Bid Pack: 
Date: 6/16/2018

Description of Problem / Clarification / Information Required:
Is Geo Grid alternative per square foot or entire field or some other unit?

Drawings attached -

Proposed Solution:

Response: Entire Field

Response By: Brett
Reviewed By: Houser

COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD
RFI FORM
SECTION 01 30 30-24
TO: PCM3, Inc.  Ref No: shober@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.
Fax No: 714-643-8826
Site: CCCD Football Field

Bid Pack: 1  RFI No. 1 2
Total RFI No. 1

Date: 6/16/2016

Description of Problem / Clarification / Information Required:
Is asphalt section of 3" intended to be in two 1 1/2" lifts?

---

Drawings attached:

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Proposed Solution:

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Question By: P. H. Hagopian Contractor, Inc.  Date: 6/16/2016

Response:

The surface course of type D2 asphalt shall be 1” thick.
The base course of type C2 asphalt shall be 2” thick.

Ron Canedy, FPL & Associates
6-17-2015

Brett Houser

Response By: Brett Houser  Date: 6/18/2016

Reviewed By:  Date: 6/18/2016
TO: PCM3, Inc.  Ref No:  
FROM: P.H. Hagopian Contractor, Inc.  DWG REF:  
Site: CCCD Football Field  
Bid Pack: 1  

RFI No.  
1 - [blank]  
3 - [blank]  

Description of Problem / Clarification / Information Required:  
It was discussed at the job walk that a laydown area adjacent to the stadium on the east side would be required. That the Contractor would need to blade it off, remove grass from area, dispose of grass and gravel, and fence it off. No provisions are shown on the drawings. Is the laydown required?  

Drawings attached:  

Proposed Solution:  

Questions By: P. H. Hagopian Contractor, Inc. Date: 6/16/2015  
Response: Yes a laydown area is required for the displaced soil from the field (soil only) and for delivery and staging area for the KYA provided materials for the synthetic turf. This laydown area will remain under security provided by this contractor until all materials are installed.  

Response By:  
Reviewed By:  
Date:  
Date: 
TO: PCM3, Inc.  
FROM: P.H. Hagopian Contractor, Inc.

Ref No.: cleben@pcm3.com  
Fax No: 714-543-8825

Site: CCCD Football Field

Bid Pack: 1  
Spec. Ref.:  
Date: 6/16/2015

Description of Problem / Clarification / Information Required:
It was discussed at the job walk that the Contractor was to blade off areas around the track to a depth of 3" first spraying weed killer, applying rodent abatement measures, and removing weeds, then installing Pro Gold.
No plan has been included to determine the quantity of Pro Gold required. Will Pro Gold be required? If so, please furnish plan and provide specs on rodent abatement and length of maintenance.

Drawing attached.

Proposed Solution:

Questions By: P.H. Hagopian Contractor, Inc.  
Response:
1. See attached site plan showing location outlined in red.
2. Provide per specification section 01 01 00 Scope of Work 12.1.1.
3. Existing contours to remain in place
4. See Addendum No. 1 Item 1.4 for rodent abatement requirements.
5. There is no maintenance required by this contractor.

Response By: Brett Houser  
Reviewed By:  

Digital Signature:
Digitally signed by Brett Houser
DN: c=US, o=other, ou=pcm3, crl=瓮ckerOglerRHM.oId, ext=eOid
Signature: 85eb45af-d7e9-410f-8071-193f2f7f6ebf
Date: 2015/06/17 16:31:51 -07'00"
ARTESIA BOULEVARD

Compton CCD
Football Field
RFC #4
Pro Gold Area
COMPTON COMMUNITY COLLEGE DISTRICT  
CAMPUS FOOTBALL FIELD  
REQUEST FOR INFORMATION  
PCM3 #___________ (For PCM3 Use Only)  

(ALL LINE ITEMS MUST BE COMPLETED PRIOR TO SUBMITTAL)  

TO:  PC M3, Inc.  Ref No.:  
skobra@pcm3.com  
FROM:  P.H. Hagopian Contractor, Inc.  DWG. REF.:  
Fac No:  714-543-5825  

Site  CCCD Football Field  
Spec. Ref:  02 21 33 Paragraph 1.6  
Bid Pack:  1  
Date:  6/16/2015  

---

Description of Problem / Clarification / Information Required:  
Arial photographs of the entire job site taken prior to the start of construction, monthly, and at the conclusion of construction required.

---

Drawings attached:

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Proposed Solution:

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Question By:  P. H. Hagopian Contractor, Inc.  Date:  6/16/2015  
Response:  Arial Photographs specified in section 02 21 33 Part 1.6 will not be required for this project.

---

Response By:  Digitally signed by Brett Houser  
Date:  
Reviewed By:  Brett Houser  
Date:  6/16/2015
TO: PCM3, Inc.  Ref No.:  
FROM: P.H. Hagopian Contractor, Inc.  DWG. REF.:  
Fax No: 714-543-6525  Site: CCCD Football Field  
Spec. Ref: 11 68 33-#1.1 A2  Date: 6/10/2015  

Description of Problem / Clarification / Information Required:
Spec section 11 68 33 number 1.1 A2 requires Contractor to install goal post footings. Keynotes Division 11, spec section 68 33 61 states the goal post footings are Owner furnished and installed. Which is it?

Drawings attached:

Proposed Solution:

Question By: P. H. Hagopian Contractor, Inc.  Date: 6/16/2016
Response: We don't have section 68 33 61 in this project. Goal post footings shall be OFOI.

Response By: Brett Houser  Digitally signed by Brett Houser
Reviewed By: Brett Houser  Date: 2015.06.16 19:17:13 -07'00
TO: PCM3, Inc.  Ref No.: dbaben@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.  DWG. REF.:  
Fax No: 714-543-5825  
Site CCCD Football Field  

Bid Pack: 1  

Spec. Ref: 01 01 00-06  
Date: 8/16/2016  

RFI No. 1  

Description of Problem / Clarification / Information Required:  
Spec section 01 01 00-06 states that "Contractor will Provide A Full Time Security Guard within the construction area, the lay down area and will be coordinated with Campus Police from July 1- August 31, 2016".  

Does this mean that a security guard will need to be there all hours that the Contractor's Superintendent is not there including weekends, holidays, etc?  

Drawings attached -  

Proposed Solution:  

Question By: P. H. Hagopian Contractor, Inc.  
Date: 8/16/2016  

Response:  

Yes  

Response By: Brett Houser  
Date:  

Reviewed By:  
Date:  

COMPTON COMMUNITY COLLEGE DISTRICT  
CAMPUS FOOTBALL FIELD  

REI FORM  
SECTION 01 30 00-24
TO: PCM3, Inc.  Ref No.: sk8ber@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.
Fax No: 714-543-5625

Site: CCCD Football Field

Spec. Ref: 01 01 00-07
Date: 6/16/2015

Description of Problem / Clarification / Information Required:
Is Contractor responsible to remove synthetic turf contractor’s debris and keep site clean for synthetic turf contractor’s operations? Is Contractor responsible for any damage done by synthetic turf contractor as it pertains to items listed in 01 01 00-05 Item C.

Drawings attached:

Proposed Solution:

Question By: P. H. Hagopian Contractor, Inc.

Response:
1. Yes
2. No

Response By: Brett Houser
Digitally signed by Brett Houser
DA: 00:2B:8F:33:2D:2C:21:B2,Houser, e=GBA, llp,
ou, email:Houser@architects.net,
G=US
Date: 2015.06.17 11:08:45 -07'00'

Reviewed By: Brett Houser
Digitally signed by Brett Houser
DA: 00:2B:8F:33:2D:2C:21:B2,Houser, e=GBA, llp,
ou, email:Houser@architects.net,
G=US
Date: 2015.06.17 11:08:45 -07'00'

COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD

RFI FORM
SECTION 01 30 30-24
TO: PCM3, Inc.  Ref No.: nlebben@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.  DWG. REF.: ________________
Fax No: 714-543-5525

Site: CCCD Football Field

Spec. Ref: 01 00-05  Date: 6/16/2015
Bid Pack: 1  Title of BP No.

Description of Problem / Clarification / Information Required:
Regarding spec section 01 00-05 Item c. Please provide the value of Kya's products and services that Contractor will be safe keeping so that Contractor may determine the risk.

Drawings attached:

Proposed Solution:

Questions By: P. H. Hagopian Contractor, Inc.  Date: 6/16/2015

Response: 1-million dollars ($1,000,000.00)

Response By: Brett Houser  Date: __________________________
Reviewed By:  Date: __________________________
TO:   PCM3, Inc.  Ref No.:  
clokem@pcm3.com
FROM:  P.H. Hagopian Contractor, Inc.  DWG. REF.:  
Fax No: 714-543-5825
Site:  CCCD Football Field

Bid Pack:  1 of 4

Spec. Ref:  
Date:  6/16/2015

Description of Problem / Clarification / Information Required:
The construction schedule is extremely aggressive. Will the District make its inspectors available for overtime and weekend work at no extra cost? Or if there is an extra cost, how much will it be?

Proposed Solution:

Question By:  P. H. Hagopian Contractor, Inc.  Date:  6/16/2015
Response:  Yes, the inspector will be available for overtime and weekend work at no extra cost to the contractor.

Response By:  Brett Houser  Digitally signed by Brett Houser
Reviewed By:  Date:  6/16/2015
TO: PCM3, Inc.  Ref No.: gbobar@pcm3.com
FfOn: P.H. Hagopian Contractor, Inc.
Far No: 714-543-6826

Site: CCCD Football Field

Spec. Ref: __________________________
Date: 6/16/2018

Bid Pack: 1

Descriptive Problem / Clarification / Information Required:

We could not see the liability insurance limit required. What are they?

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Drawings attached:

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Proposed Solution:

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Question By: P.H. Hagopian Contractor, Inc.  Date: 6/16/2015

Response:

See attached revised Certificate of Insurance Spec Section 00-43-50.

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Response By: Brett Houser
Reviewed By: Brett Houser

Date: __________________________
Date: __________________________

Date: 2015.06.17 15:01:58-07'00"
COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD
REQUEST FOR INFORMATION
PCM3 #_________ (For PCM3 Use Only)

(ALL LINE ITEMS MUST BE COMPLETED PRIOR TO SUBMITTAL)

TO: PCM3, Inc.  Ref No.: 
clotar@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.  DWG. REF.: 
Fax No: 714-543-5826
Site  CCCD Football Field
Spec. Ref: 
Bid Pack: 1 Date: 6/16/2015

Description of Problem / Clarification / Information Required:
Is there a soils report and will it be made available?

Drawings attached: 

Proposed Solution:

Question By: P. H. Hagopian Contractor, Inc.  Date: 6/16/2016
Response: Yes, there is a soils report and it is being made available. Please see Addendum No. 1

Response By: Brett Houser
Digitally signed by Brett Houser
DigiSign-37b0795d6a41f3df02cd
Date: 2015.06.17 11:10:29 -07'00'
Reviewed By: 
Date: 

COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD
RFI FORM
SECTION 01 30 20-24
COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD
REQUEST FOR INFORMATION
PCM3 #___________ (For PCM3 Use Only)

(ALL LINE ITEMS MUST BE COMPLETED PRIOR TO SUBMITTAL)

TO: PCMS, Inc.  Ref No.:
dobert@pcm3.com
FROM: P.H. Hagopian Contractor, Inc.  Spec. Ref.:
Fax No: 714-843-6826

Site: CCCD Football Field

Bid Pack: 1 of 2

Date: 6/16/2015

Description of Problem / Clarification / Information Required:

Are any organics allowed in the field after removal of grass? If so, how much?

Drawings attached:

Proposed Solution:

Question By: P. H. Hagopian Contractor, Inc.  Date: 6/16/2015

Response: No organics will be allowed.

Response By: Brett Houser  Digitally signed by Brett Houser
Reviewed By:  Date: 6/16/2015

Digital Signature
DigiCert GlobalSign  Email: bhouse@gijohnson.com, Date: 2015.06.17
Digitally signed by Brett Houser DLG In-Brutt Houser, a CA LLP, Email: bhouse@gijohnson.com, Date: 2015.06.17
TO: PCM3  Ref No.: BP #01  
ckubien@pcm3.com  
FROM: Ohno Construction ohnocc@comcast.net  
Fax No: 619-278-8731  
Site: CCCD Football Field  

RFC No. 01 1/4  
DWG. REF.: None  
Spec. Ref: 00 43 50  
Date: 6/16/2015  

Description of Problem / Clarification / Information Required:  
Please clarify what levels of insurance per category must be provided by the contractor and if these same levels also apply to any subcontractors.

Drawings attached.

Proposed Solution: Fill in required insurance levels on the sample certificate of insurance.

Question By: Ohno Construction  
Date: 6/16/2015

Response:

See attached revised Certificate of Insurance Spec Section 00-43-50.

Response By:  
Date:  

Reviewed By:  
Date:  
COMPTON COMMUNITY COLLEGE DISTRICT
CAMPUS FOOTBALL FIELD

SECTION 11 68 33 – FOOTBALL FIELD EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes
   1. Equipment as scheduled
   2. Installation of required concrete footings

1.2 SUBMITTALS

A. Shop drawings, certified and stamped by manufacturer's engineer, showing plan layout of equipment, footing, mounting bolts dimensions, anchorages, and related installation detail for each type of equipment specified.

B. Product data on operating equipment, characteristics and limitations.

C. Product data.

D. Three samples of materials and finishes.

E. Manufacturer's installation instructions.

F. Operation and maintenance data. Including data for maintaining operating equipment, type and frequency of lubrication, general instructions for maintaining finishes and prevention of deterioration.

1.3 QUALITY ASSURANCE

A. Manufacturer: company with minimum 5-years experience manufacturing athletic equipment for high school project similar in scale and complexity to those required for this project.

1.4 WARRANTY

A. Provide a 2-Year Warranty against defect in materials and installation commencing on Date of Certified Completion on equipment. Upon written notice form Owner they shall promptly, without cost, and with least practicable inconvenience to Owner correct such defects.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers. Products of following manufacturers form basis for design and quality intended.
   1. Porter Athletic Equipment Company, Chatsworth, CA
   2. Draper, Inc., Spiceland, IN
   3. AALCO, St. Louis, MO
4. Jaypro Sports Inc., Waterford, CT
5. PW Athletic Equipment, Prescott, AZ
6. Aluminum Athletic Equipment (AAE), West Conshohockern, PA
8. Sportsfield Specialties Inc., Delhi, NY
9. ACO Polymer Products, Inc.
10. Or equal, approved in accordance with Division 01, General Requirements, for substitutions.

2.2 MATERIALS

A. Concrete for Footings: Minimum 4500 psi compressive strength at 28 days and maximum 4-inch slump at placement.

B. Reinforcing Steel: Provide cage reinforcement of No. 5 deformed bars in accordance with ASTM A 615, Grade 60, unless otherwise indicated.

C. Athletic Equipment
   1. See Schedule of Athletic Equipment in Section 3.4 below.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that structural supports, anchor bolts and backing are ready to receive work.

B. Verify that proper power supply is available.

C. Beginning installation means acceptance of existing conditions and preparatory work of others.

3.2 INSTALLATION

A. Install system and components in accordance with manufacturer’s instructions.

B. Install internal electrical wiring, conduits, junction boxes, transformers, circuit breakers and auxiliary components required.

C. Support and anchor equipment and component assemblies per manufacturer’s instructions.

D. Install concrete footings according to manufacturer’s details.

3.3 TEST AND ADJUST

A. Test and adjust systems for proper function.

3.4 SCHEDULE OF ATHLETIC EQUIPMENT
A. Communications Box

1. Base Combox 3500 as manufactured by Sportsfield Specialties, Inc., Delhi, NY. P.O. Box 231, 41155 State Highway 10, Delhi, NY, 13753. (888) 875-3343.
   a. Box: 3/16" (0.1875") Aluminum Construction, Welded Frame with Open Bottom Having the Following Attributes:
      1) 30"L x 18"W x 14"H (Full Size) Custom Sizes Available Upon Request
      2) 1/8" (0.125") Aluminum Adjustable Main Cover Support Ledge
      3) 3/16" (0.1875") Aluminum Removable Divider Panel (Full Size Only)
      4) Integrated Synthetic Infill Turf Attachment Ledge and ComBox® +Patented Infill Retainer System with Flexible Gasket Seals (Synthetic Infill Turf Installation Applications Only)
      5) 1" PVC Drain Stub for Positive Drainage Connection.
   b. Main Cover and Hand Hole(s): 1/8" (0.125") Aluminum Construction with the Following Attributes:
      1) ComBox® + Patented Infill Retainer System with Flexible
      2) Gasket Seals (Synthetic Infill Turf Installation Applications Only)
      3) Pad Lockable Main Cover and Turn Lockable Hand Hole(s)
      4) Wire Feed Cutouts Between Main Cover and Hand Hole(s)
      5) Designed to Allow Synthetic Turf or Synthetic Track Material to be Adhered Directly to the Aluminum Surface with Synthetic Adhesive and/or Mechanical Fasteners Determined by Others
      6) Main Cover and Hand Hole(s) Style Synthetic Turf
   c. Included Accessories:
      1) Stainless Steel Leveling Bolts
      2) Stainless Steel Assembly Hardware
      3) Factory Provided 3/8" Perforated Drainage Holes in Main Cover and Hand Hole(s) (Synthetic Infill Turf and Natural Grass Installation Applications Only)
      4) Model Specific Installation Instructions

END OF SECTION
CERTIFICATE OF INSURANCE

The undersigned, _______________________________ (the "Insurance Company"), hereby certifies to Compton Community College District (the "District") as follows:

The following policies of insurance ("Policies") have been issued by the Insurance Company to _______________________________ (the "Insured"), and the policies are in full force and effect as of the execution of this Certificate of Insurance:

<table>
<thead>
<tr>
<th>Policy Number</th>
<th>Expiration Date</th>
<th>Type of Coverage</th>
<th>Amount of Coverage: Each Occurrence</th>
<th>Amount of Coverage: Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. GENERAL LIABILITY</td>
<td></td>
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</tr>
<tr>
<td>Bodily Injury</td>
<td>$</td>
<td>$</td>
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</tr>
<tr>
<td>Property Damage</td>
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<td>$</td>
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<tr>
<td>Combined</td>
<td>$1,000,000</td>
<td>$2,000,000</td>
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<tr>
<td>B. AUTOMOBILE LIABILITY</td>
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<tr>
<td>Bodily Injury (Each Person)</td>
<td>$</td>
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<tr>
<td>Bodily Injury (All Persons)</td>
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<td>Combined</td>
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<tr>
<td>C. EXCESS LIABILITY</td>
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</tr>
<tr>
<td>Combined</td>
<td>$5,000,000</td>
<td>$5,000,000</td>
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<td></td>
</tr>
</tbody>
</table>
The following types of coverage are included in said policies (indicate by "X" in space):

A.  GENERAL LIABILITY

   Commercial General                   YES _____  NO _____
   Comprehensive General               YES _____  NO _____
   Premises-Operations                  YES _____  NO _____
   Explosion and Collapse Hazard       YES _____  NO _____
   Underground Hazard                   YES _____  NO _____
   Products/Completed Operations        YES _____  NO _____
   Contractual Insurance                YES _____  NO _____
   Broad Form Property Damage           NO _____
   Including Completed Operations       YES _____
   Independent Contractors              YES _____  NO _____
   Personal Injury                      YES _____  NO _____

B.  AUTOMOBILE LIABILITY

   Any Auto                             YES _____  NO _____

C.  EXCESS LIABILITY

   Umbrella Form                        YES _____  NO _____

D.  EXCESS AUTOMOBILE LIABILITY

   Umbrella Form                        YES _____  NO _____
   Other Than Umbrella Form (Attach Explanation)  YES _____  NO _____

The District is named as an additional insured on all such policies, except as follows: *(if no exceptions, indicate "no exceptions"):__________________________________________.*

This Certificate of Insurance is not an insurance policy and does not amend, extend, or alter the coverage afforded by the Policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this Certificate of Insurance may be issued or may pertain, the insurance afforded by the Policies described herein is subject to all the terms, exclusions, and condition of such Policies.
The Insurance Company will give at least thirty (30) days written notice by certified mail to the District and its architect or other designated consultant prior to any material change or cancellation of said Policies.

The Insurance Company is admitted and licensed to do business in California, has an agent for service of process in California, and has an "A" policyholder's rating and a financial size rating of at least Class VIII in accordance with the most current Best’s Key Rating Guide, Property-Casualty.

Certificates of Insurance shall include all specific insurance coverage's set forth herein, proper Project description, designation of the District as the Certificate Holder, a statement that the insurance provided is primary to any insurance obtained by the District and minimum of 30 days' cancellation notice. Bidder shall also provide required additional insured endorsement(s) designating all parties required in the General Conditions. The additional insured endorsement shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion.

Dated: ________________, 20__

________________________________________  __________________________________________
Named Insured                           Insurance Company

________________________________________  __________________________________________
Street Address                           Street Address

________________________________________  __________________________________________
City and State                           City and State

By:____________________________________
    (Signature of Company Representative)

Printed Name:__________________________

Title:_______________________________

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.
Compton Community College District
1111 East Artesia Boulevard
Compton, California 90221-5393

Attention: Ms. Linda Owens

Subject: Alternative Site Preparation Recommendations
Proposed Football Field Redevelopment
1111 East Artesia Boulevard
City of Compton, Los Angeles County, California

Reference: Limited Geotechnical and Pavement Evaluation, Proposed Football Field
Redevelopment, 1111 East Artesia Boulevard, City of Compton, Los Angeles
County, California; GeoTek, Inc., June 8, 2015

Dear Ms. Owens:

The referenced report presents earthwork recommendations for the proposed football field
redevelopment project on the campus of Compton Community College in the city of
Compton. The existing grass football field will be replaced with a synthetic turf field. The new
field will be underlain by three (3) inches of asphaltic concrete pavement over four (4) inches of
aggregate base. To assist in the preparation of the referenced report, six hand-auger borings
were excavated within the footprint of the football field. Undocumented fill consisting of
medium stiff sandy silts was encountered in all the explorations to a depth of approximately 2.5
feet. The earthwork recommendations presented in the report included removal and
recompaction of all undocumented fill. Since removal of all the fill is considered to be cost-
prohibitive, alternative recommendations are now being presented.

An alternative to overexcavation and recompaction of the undocumented fill would be to
remove the near-surface soils below the football field to a depth coincident with the top of the
proposed subgrade below the bottom of the aggregate base.

The exposed soils should be observed by a representative of this firm prior to processing. Any
residual vegetation should be removed and legally disposed of off-site. The exposed soils
should be scarified to a minimum depth of 12 inches, moisture conditioned to at least two percent over optimum, and densified to at least 90 percent relative compaction (ASTM D 1557). The underlying natural soils consisted of medium stiff sandy silts. The material encountered at a depth of two (2) feet in the southwest portion of the football field was in a wet condition. Wet soils should be removed and replaced with material that has a moisture content that is amenable to proper compaction.

This alternate method will leave some of the undocumented fill in place. Since preparation of the referenced report, we have been informed that there are existing storm drains, sanitary sewer, electrical and irrigation lines below the football field. The irrigation lines will be removed, and only the depth of the storm drain is known. Existing trench backfill will be associated with each of these utilities. Since the undocumented fill and utility trench backfill will not be removed, the property owner is accepting responsibility of the possibility that additional maintenance of the football field may be required during its design life.

In order to assist in minimizing future distress to the pavement section below the football field, consideration has been given to the implementation of geogrid. The geogrid should consist of Tensar BX 1200 or the equivalent. It should be placed on the subgrade soil, and the aggregate base placed and compacted on the geogrid. The aggregate base should be compacted to a minimum relative compaction of 95 percent (ASTM D1557).

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,
GeoTek, Inc.

Edward H. LaMont
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Distribution: (1) Addressee via email
LIMITED GEOTECHNICAL AND PAVEMENT EVALUATION
FOR
PROPOSED FOOTBALL FIELD REDEVELOPMENT
1111 EAST ARTESIA BOULEVARD
COMPTON, LOS ANGELES COUNTY, CALIFORNIA

PREPARED FOR

COMPTON COMMUNITY COLLEGE DISTRICT
1111 EAST ARTESIA BOULEVARD
COMPTON, CALIFORNIA 90221-5393

PREPARED BY

GEOTek, Inc.
710 EAST PARKRIDGE AVENUE, SUITE 105
CORONA, CALIFORNIA 92879

PROJECT NO. 1337-CR JUNE 8, 2015
Compton Community College District  
1111 East Artesia Boulevard  
Compton, California 90221-5393

Attention: Ms. Linda Owens

Subject: Limited Geotechnical and Pavement Evaluation  
Proposed Football Field Redevelopment  
1111 East Artesia Boulevard  
City of Compton, Los Angeles County, California

References: See page 10

Dear Ms. Owens:

In accordance with your request, GeoTek, Inc. (GeoTek) is providing a limited geotechnical and pavement evaluation for the proposed football field redevelopment. Project plans were not available at the time this report was prepared. Our current report includes the results of test borings excavated on the football field, asphalt coring results for the surrounding running track, and earthwork and pavement design recommendations.

SITE DESCRIPTION

The approximately 1.9-acre site is located on the campus of Compton Community College, situated on the north side of East Artesia Boulevard between Santa Fe Avenue and Long Beach Boulevard in the city of Compton, Los Angeles County, California. The location of the site is shown on Figure 1. The portion of the campus currently being evaluated has an existing grass football field with a goal post at each end, surrounded by an oval rubberized-surface running track and associated improvements. The property is rectangular in shape and is generally flat in topography.
PROPOSED DEVELOPMENT

We understand that anticipated site development will include replacing the existing grass football field with a synthetic turf field. The new synthetic turf field is likely to be supported by infill material, a polymeric panel, and a permeable geotextile fabric overlying a section of asphaltic concrete pavement over aggregate base. New goal posts are not included in the scope of this report. Minimal earthwork will be required for site development. It is our understanding that the Compton Community College District will not be making improvements to the running track at this time.

FIELD EXPLORATION

Our geotechnical field exploration was conducted on May 27, 2015. A field engineer from GeoTek logged seven exploratory borings excavated with hand-auger equipment. The borings were situated at various locations on the football field and were excavated to depths ranging from 2.5 feet to 3.5 feet below existing grade. The limited pavement evaluation consisted of advancing four core holes with a diamond-tipped core barrel through the existing pavement and measurement of the pavement sections (asphaltic concrete and aggregate base) in the oval rubberized-surface running track. A roto-hammer was used to loosen the underlying aggregate base and allow removal to the extent that the base thickness could be determined and the subgrade materials were exposed. The coring was performed by the Penhall Company, and GeoTek’s representatives performed the roto-hammering and hand excavating. The thickness of the asphaltic concrete and base sections were measured at each core location. The core holes were generally located at or near the crown of the running track. After the measurements were obtained, the base materials were replaced in the excavation, tamped, and the remaining void filled with cold patch asphalt. The thickness of aggregate base was measured at four locations to the nearest ¼-inch in each core hole and averaged (see “Limited Pavement Evaluation” section of this report).

The boring and core locations are presented on Figure 2. Logs of the exploratory borings are included in Appendix A. GeoTek obtained relatively undisturbed and bulk soil samples encountered in the test borings.

LABORATORY TESTING

Laboratory testing was performed on selected samples obtained during our field exploration. Included in our laboratory testing were moisture-density determinations on all undisturbed samples, and an expansion index test was performed on a bulk soil sample. A sample of
anticipated subgrade soil was tested for R-value determination for pavement design purposes, and soluble sulfate content testing was also conducted. The moisture-density data are presented on the exploration logs, presented in Appendix A. The R-value, expansion index, and soluble sulfate test data are presented in Appendix B.

SOIL CONDITIONS

Undocumented fill consisting of medium stiff sandy silts was encountered in all the explorations to a depth of 2.5 feet. The underlying natural soils also consisted of medium stiff sandy silts. In general the soils were in a slightly moist condition, however, the material encountered at a depth of 2.0 feet in Boring HA-6 was in a wet condition. The boring logs are presented in Appendix A. The near-surface soils generally have a “low” expansion potential.

CONCLUSIONS AND RECOMMENDATIONS

The anticipated site development appears feasible from a geotechnical viewpoint provided that the following recommendations, and those provided by this firm at a later date, are properly incorporated into the design and construction phases of development. Site development and grading plans should be reviewed by GeoTek when they become available.

EARTHWORK CONSIDERATIONS

General

Earthwork and grading should be performed in accordance with the applicable grading ordinances of the County of Los Angeles and City of Compton, the 2013 California Building Code (CBC), and recommendations contained in this report.

Site Preparation

Existing improvements should be demolished and the debris legally disposed of off-site. Deleterious materials and vegetation should also be removed. Any existing underground improvements, utilities and associated trench backfill should also be removed or be further evaluated as part of site development operations.

Remedial Grading

All undocumented fill should be removed below the footprint of the football field. The fill may be stockpiled on-site for future use. Based on the results of our test borings, the fill extended to a depth of approximately 2.5 feet below existing grade. Deeper areas of fill may be
encountered in areas that were not explored. In addition to removal of the fill, the natural soils below the bottom of the proposed aggregate base that will be placed below the synthetic turf should be overexcavated to a depth of two (2) feet below existing grade or two (2) feet below proposed finished grade, whichever is greater. Finished grade is defined as the elevation of the top of the subgrade below the aggregate base.

A representative of this firm should observe the bottom of all excavations prior to processing.

The lateral extent of removals beyond the outside edge of the synthetic turf should be at least two (2) feet or equal to the depth of overexcavation, whichever is greater.

Upon approval, the bottom of all removals and all areas to receive fill should be scarified to a minimum depth of one (1) foot, brought to at least 2% above the optimum moisture content and compacted to at least 90 percent relative compaction (ASTM D1557).

At the time of our subsurface exploration, the soils in the vicinity of Boring HA-6 exhibited a relatively high moisture content. If the soils are at a similar moisture content at the time of remedial grading the subexcavated surfaces may become unstable and pumping may occur. Stabilization may be required. Stabilization can often be accomplished by placing geogrid, such as Tensar BX1200, on the unstable subgrade, followed by at least 18 inches of gravel, such as Caltrans Class II aggregate base. If sufficient stabilization has not been attained with one layer of geogrid and 18 inches of aggregate base, an additional layer of geogrid should be placed, followed by 12 inches of aggregate base.

We recommend that an alternate bid for subsoil stabilization be included in the Construction Bid Documents.

**Engineered Fill**

The on-site soils are generally considered suitable for reuse as engineered fill provided they are free from vegetation, debris and other deleterious material. Engineered fill should be placed in six (6) inch to eight (8) inch loose lifts, moisture conditioned to at least 2% above the optimum moisture content and compacted to a minimum relative compaction of 90 percent (ASTM D1557).

Aggregate base should be compacted to a minimum relative compaction of 95 percent (ASTM D1557).
Chemical Test Results

Chemical testing consisting of a soluble sulfate analysis was conducted on a representative soil sample obtained during the field exploration. The results indicate that the water soluble sulfate is less than 0.1 percent by weight, which is considered “not applicable” (negligible) as per Table 4.2.1 of ACI 318.

It is recommended that soluble sulfate testing be performed during earthwork operations when the mass grading nears completion and finished grade levels are almost achieved. Additional recommendations will be presented at that time.

Drainage

Positive site drainage should be maintained at all times. Water should be directed away from the synthetic turf field and not allowed to pond or seep into the ground adjacent to it. Drainage should be directed toward approved areas and not be blocked by other improvements.

It is the owner’s responsibility to maintain and clean drainage devices on their property. In order to be effective, maintenance should be conducted on a regular and routine schedule and necessary corrections made prior to each rainy season.

PAVEMENT DESIGN RECOMMENDATIONS

General

These recommendations are based on sampling and R-Value testing of the on-site football field subgrade soils and an anticipated total vehicle load of 8,000 pounds. The calculation to determine the thickness of an asphalt concrete pavement section is partially based on the implementation of a Traffic Index (TI). A TI of 4.0 and an R-Value of 38 was used for preliminary design purposes (see below).
Sampling and Testing

During our recent field investigation GeoTek obtained a near surface soil sample from within the existing football field for R-Value testing. The testing (by others) indicated an R-Value of 38.

Asphaltic Concrete Pavement Section

The table below provides the location, associated TI and the recommended minimum pavement section for the subject project.

<table>
<thead>
<tr>
<th>Location</th>
<th>Assigned Traffic Index (TI)</th>
<th>Design R-Value</th>
<th>Recommended Minimum Section - Asphalt Concrete/Aggregate Base (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic Turf Field</td>
<td>4.0</td>
<td>38</td>
<td>3.0/4.0</td>
</tr>
</tbody>
</table>

The pavement section is subject to review and approval by the City of Compton. Performance of the pavement section will ultimately be based largely on construction methods, surface loading and subgrade performance.

Pavement Construction

All pavement installation, including preparation and compaction of subgrade and base material and placement and rolling of asphaltic concrete should be done in accordance with the City of Compton specifications, and under the observation and testing of GeoTek and a City inspector where required.

The aggregate base should consist of crushed rock with an R-Value and gradation in accordance with Crushed Aggregate Base (Section 200-2 of the “Greenbook”). Minimum compaction requirements should be 90 percent for subgrade and 95 percent for aggregate base, as per ASTM D1557. Jurisdictional minimum compaction requirements in excess of the aforementioned minimums may govern.
LIMITED PAVEMENT EVALUATION, EXISTING RUNNING TRACK

The exact age of the existing running track pavement is unknown. Each core had a layer of ¼-to ½-inch of rubberized-surface material over the asphaltic concrete. The thickness of the asphalt concrete and underlying base are summarized in the following table:

<table>
<thead>
<tr>
<th>Core</th>
<th>Approximate Average Thickness of Existing Asphaltic Concrete (inches)</th>
<th>Approximate Average Thickness of Existing Aggregate Base (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-1</td>
<td>3.25</td>
<td>4.0</td>
</tr>
<tr>
<td>C-2</td>
<td>3.5</td>
<td>3.0</td>
</tr>
<tr>
<td>C-3</td>
<td>3.5</td>
<td>5.0</td>
</tr>
<tr>
<td>C-4</td>
<td>3.5</td>
<td>5.0</td>
</tr>
</tbody>
</table>

INTENT

It is the intent of this report to aid in the design and construction of the proposed development. The professional opinions and geotechnical advice contained in this report are not intended to imply total performance of the project or guarantee that unusual or variable conditions will not be discovered during or after construction.

The scope of our evaluation is limited to the boundaries of the existing football field. This review does not and should in no way be construed to encompass any areas beyond the specific site of the proposed construction as indicated to us by the client. Further, no evaluation of any existing site improvements is included. The scope is based on our understanding of the project and the client’s needs, our fee estimate and geotechnical engineering standards normally used on similar projects in this region.

LIMITATIONS

The materials observed on the project site appear to be representative of the area; however, soils vary in character between excavations exposed during site construction. Site conditions may vary due to seasonal changes or other factors. GeoTek assumes no responsibility or liability for work, testing or recommendations performed or provided by others.
Observations during construction are important to allow for any change in recommendations that are found to be warranted. These opinions have been derived in accordance with current standards of practice and no warranty is expressed or implied. Standards of practice are subject to change with time. The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to call our office.

Respectfully submitted,
GeoTek, Inc.

Edward H. LaMont
CEG 1892, Exp. 07/31/16
Principal Geologist

Glenn S. Fraser
GE 2381, Exp. 9/30/15
Senior Engineer

Enclosures:  
Figure 1 – Site Location Map  
Figure 2 – Exploration Location Map  
Appendix A – Boring Logs  
Appendix B – Laboratory Test Results

Distribution:  (I) Addressee via email
REFERENCES


GeoTek, Inc., In-house proprietary information.
APPENDIX A

BORING LOGS
# GeoTek, Inc.

## LOG OF EXPLORATORY BORING

**CLIENT:** Compton Community College District  
**PROJECT NAME:** Football Field Redevelopment  
**PROJECT NO.:** 1337-CR  
**LOCATION:** See Exploration Location Map

**LOGGED BY:** RH  
**DRILL METHOD:** Hand Auger  
**DATE:** 5/27/2015

### BORING NO.: HA-1

#### MATERIAL DESCRIPTION AND COMMENTS

<table>
<thead>
<tr>
<th>Sample Type</th>
<th>Sample Number</th>
<th>USCS Symbol</th>
<th>Description</th>
<th>Water Content (pp)</th>
<th>Dry Density (g/cm³)</th>
<th>Others</th>
</tr>
</thead>
</table>
| R-I         |               | ML          | Artificial Fill  
0-2.5' Light brown sandy silt, slightly moist, medium stiff | 6.0 | 100.3 | El, SR |

**BORING TERMINATED AT 2.5 FEET**

No groundwater encountered  
Boring backfilled with on-site soils

---

**LEGEND**

- Sample type:  
  - ![Ring](image)  
  - ![Large Bulk](image)  
  - ![Water Table](image)

**Lab testing:**  
- AL = Acerberg Limits  
- El = Expansion Index  
- SA = Sieve Analysis  
- RV = R-Value Test  
- SR = Sulfate/Resistivity Test  
- SH = Shear Test  
- HC = Consolidation  
- MD = Maximum Density
### BORING NO.: HA-2

#### MATERIAL DESCRIPTION AND COMMENTS

- **ML:** Brown sandy silt, slightly moist, medium stiff

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>Sample Number</th>
<th>USCS Symbol</th>
<th>Laboratory Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R-1</td>
<td></td>
<td>ML</td>
<td>11.6 90.1</td>
</tr>
<tr>
<td>5</td>
<td>R-2</td>
<td></td>
<td>ML</td>
<td>10.8 94.4</td>
</tr>
</tbody>
</table>

**BORING TERMINATED AT 2.5 FEET**

- No groundwater encountered
- Boring backfilled with on-site soils

---

**LEGEND**

- **Sample type:**
  - **Ring**
  - **Large Bulk**
  - **Water Table**

- **Lab testing:**
  - **AL =** Atterberg Limits
  - **EI =** Expansion Index
  - **SA =** Sieve Analysis
  - **RV =** R-Value Test
  - **SR =** Sulfate/Resistance Test
  - **SH =** Shear Test
  - **HC =** Consolidation
  - **MD =** Maximum Density
# LOG OF EXPLORATORY BORING

**CLIENT:** Compton Community College District  
**PROJECT NAME:** Football Field Redevelopment  
**PROJECT NO.:** 1337-CR  
**LOGGED BY:** RH  
**DATE:** 5/27/2015  
**LOCATION:** See Exploration Location Map

## BORING NO.: HA-3

### MATERIAL DESCRIPTION AND COMMENTS

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>USCS Symbol</th>
<th>Laboratory Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R-1</td>
<td>ML</td>
<td></td>
</tr>
<tr>
<td>0-2.5'</td>
<td></td>
<td></td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>99.4</td>
</tr>
<tr>
<td>R-2</td>
<td></td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>83.3</td>
</tr>
</tbody>
</table>

**BORING TERMINATED AT 2.5 FEET**

- No groundwater encountered
- Boring backfilled with on-site soils

### LEGEND

- **Sample type:**  
  - [ ] --Ring  
  - [ ] --Large Bulk  
  - [ ] --Water Table

### Lab testing:

- **AL** = Atterberg Limits  
- **EI** = Expansion Index  
- **SA** = Sieve Analysis  
- **RV** = R-Value Test  
- **SR** = Sulfate/Resistivity Test  
- **SH** = Shear Test  
- **HC** = Consolidation  
- **HD** = Maximum Density
**GeoTek, Inc.**

**LOG OF EXPLORATORY BORING**

**CLIENT:** Compton Community College District

**PROJECT NAME:** Football Field Redevelopment

**PROJECT NO.:** 1337-CR

**LOCATION:** See Exploration Location Map

**LOGGED BY:** RH

**DRILL METHOD:** Hand Auger

**DATE:** 5/27/2015

---

**BORING NO.: HA-4**

---

**MATERIAL DESCRIPTION AND COMMENTS**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>Sample Number</th>
<th>U.S.C. Symbol</th>
<th>Description</th>
<th>Water Content (%)</th>
<th>Dry Density (pcf)</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0-0.5</td>
<td>ML</td>
<td>LB-1</td>
<td></td>
<td>Artificial Fill</td>
<td>6.7</td>
<td>93.4</td>
<td>RV</td>
</tr>
<tr>
<td>0.5-2.5</td>
<td>ML</td>
<td>R-1</td>
<td></td>
<td>Brown sandy silt, dry to slightly moist, medium stiff</td>
<td>4.9</td>
<td>93.4</td>
<td></td>
</tr>
<tr>
<td>2.5-3.0</td>
<td>ML</td>
<td>R-2</td>
<td></td>
<td>Alluvium</td>
<td>7.6</td>
<td>91.2</td>
<td></td>
</tr>
<tr>
<td>3.0-3.5</td>
<td>ML</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BOARING TERMINATED AT 3 FEET**

No groundwater encountered
Boring backfilled with on-site soils

---

**Legend**

- **Sample type:**
  - --Ring
  - --Large Bulf
  - --Water Table

**Lab testing:**

- AL = Atterberg Limits
- EI = Expansion Index
- SA = Sieve Analysis
- RV = R-Value Test
- SR = Sulfate/Resisitivity Test
- SH = Shear Test
- HC = Consolidation
- MD = Maximum Density
# GeoTek, Inc.

## LOG OF EXPLORATORY BORING

**CLIENT:** Compton Community College District  
**PROJECT NAME:** Football Field Redevelopment  
**PROJECT NO.:** 1337-CR  
**LOCATION:** See Exploration Location Map  
**LOGGED BY:** RH  
**DRILL METHOD:** Hand Auger  
**DATE:** 5/27/2015  

### BORING NO.: HA-5

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>SAMPLES</th>
<th>USCS Symbol</th>
<th>Sample Type</th>
<th>Material Description and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2.5'</td>
<td>ML</td>
<td></td>
<td>R-1</td>
<td>0-2.5': Light brown sandy silt, dry, medium stiff</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>R-2</td>
<td></td>
</tr>
</tbody>
</table>

### Laboratory Testing

<table>
<thead>
<tr>
<th>Material Content</th>
<th>Dry Density (pcf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.6</td>
<td>96.9</td>
</tr>
<tr>
<td>7.0</td>
<td>84.7</td>
</tr>
</tbody>
</table>

**BORING TERMINATED AT 2.5 FEET**

No groundwater encountered  
Boring backfilled with on-site soils

### Legend

- **Sample type:**  
  - [ ] --Ring  
  - [X] --Larger Bulk  
  - [ ] --Water Table  

### Lab testing

- AL = Atterberg Limits  
- EI = Emulsion Index  
- SA = Sieve Analysis  
- RV = R-Nakra Test  
- SR = Sulfate/Resistivity Test  
- SH = Shear Test  
- HC = Consolidation  
- MD = Maximum Density
**Geotech, Inc.**

**LOG OF EXPLORATORY BORING**

**CLIENT:** Compton Community College District

**PROJECT NAME:** Football Field Redevelopment

**PROJECT NO.:** 1337-CR

**LOCATION:** See Exploration Location Map

---

**BORING NO.: HA-6**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>Sample Number</th>
<th>Material Description and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 - 5.0</td>
<td>R-1</td>
<td>ML</td>
<td>0-2.5': Brown sandy silt, moist, medium stiff</td>
</tr>
<tr>
<td></td>
<td>R-2</td>
<td>2':</td>
<td>Becomes wetter</td>
</tr>
</tbody>
</table>

**BoRiNg TERMINATED AT 2.5 FEET**

No groundwater encountered
Boring backfilled with on-site soils

---

**LEGEND**

- **Sample type:**
  - ---Ring
  - —-Large Bulk
  - □-Water Table

**Lab testing:**

- AL = Atterberg Limits
- EL = Expansion Index
- SA = Sieve Analysis
- RV = R-Value Test
- SR = Sulfate/Resistivity Test
- SH = Shear Test
- HC= Consolidation
- MD = Maximum Density
**Boring No.: HA-7**

### Material Description and Comments

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>USCS Symbol</th>
<th>Material Description</th>
<th>Laboratory Testing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ML</td>
<td></td>
<td>Artificial Fill: Brown sandy silt, slightly moist, medium stiff</td>
<td></td>
</tr>
<tr>
<td>0-2.5</td>
<td>ML</td>
<td></td>
<td>Alluvium: Brown sandy silt, moist, medium stiff (Original Ground)</td>
<td>7.5 83.8</td>
</tr>
</tbody>
</table>

**Boring Terminated at 3.5 Feet**

- No groundwater encountered
- Boring backfilled with on-site soils

**Legend**

- **Sample type:**
  - ---Ring
  - ---Large Bulk
  - ---Water Table

**Lab testing:**

- AL = Atterberg Limits
- EI = Expansion Index
- SA = Sieve Analysis
- RV = R-Value Test
- SR = Sulfate/Resistivity Test
- SH = Shear Test
- HC = Consolidation
- MD = Maximum Density
APPENDIX B

LABORATORY TEST RESULTS
**Client:** Compton Community College District  
**Project Number:** 1337-CR  
**Project Location:** 1111 E. Artesia Blvd., Compton, CA

**Tested/Checked By:**  
**Date Tested:** 5/31/2015  
**Sample Source:** B-1 @ 0-2.5'  
**Sample Description:** Light brown f-m sandy silt

### DENSITY DETERMINATION

<p>| | | |</p>
<table>
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<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Weight of compacted sample &amp; ring (gm)</td>
<td>738.8</td>
</tr>
<tr>
<td>B</td>
<td>Weight of ring (gm)</td>
<td>366.2</td>
</tr>
<tr>
<td>C</td>
<td>Net weight of sample (gm)</td>
<td>372.6</td>
</tr>
<tr>
<td>D</td>
<td>Wet Density, lb/ft³ (C*0.3018)</td>
<td>112.4</td>
</tr>
<tr>
<td>E</td>
<td>Dry Density, lb/ft³ (D/1.6)</td>
<td>99.4</td>
</tr>
</tbody>
</table>

### READINGS

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>READING</th>
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<tr>
<td>5/31/2015</td>
<td>4:16</td>
<td>0.3300</td>
</tr>
<tr>
<td>5/31/2015</td>
<td>4:26</td>
<td>0.3300</td>
</tr>
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</table>

Initial  
10 min/Dry

<table>
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<tr>
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<th>TIME</th>
<th>READING</th>
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</thead>
<tbody>
<tr>
<td>6/1/2015</td>
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<td>0.3510</td>
</tr>
</tbody>
</table>

Final

### SATURATION DETERMINATION

<p>| | | |</p>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Moisture Content, %</td>
<td>13.0</td>
</tr>
<tr>
<td>G</td>
<td>Specific Gravity, assumed</td>
<td>2.70</td>
</tr>
<tr>
<td>H</td>
<td>Unit Wt. of Water @ 20°C, (pcf)</td>
<td>62.3</td>
</tr>
<tr>
<td>I</td>
<td>% Saturation</td>
<td>50.8</td>
</tr>
</tbody>
</table>

### FINAL MOISTURE

<table>
<thead>
<tr>
<th></th>
<th>Final Weight of wet sample &amp; tare</th>
<th>% Moisture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>772.1</td>
<td>21.9</td>
</tr>
</tbody>
</table>

**EXPANSION INDEX = 21**
GeoTek, Inc.
710 East Parkridge Avenue, Suite 105
Corona, California 92879

Client: Compton College
W.O.: 1337-CR
Project: 1111 E. Artesia Blvd, Compton

Date: June 4, 2015
QCI Project No.: 15-167-006b
Summarized by: KA

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Sample Depth</th>
<th>Sulfate CT-417 (% By Weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1</td>
<td>0-3'</td>
<td>0.0160</td>
</tr>
</tbody>
</table>
May 28, 2015

Ms. Anna Scott  
GeoTek Inc.  
710 East Parkridge Avenue, Suite 105  
Corona, California 92879  

Dear Ms. Scott:  
Testing of the bulk soil sample delivered to our laboratory on 5/27/2015 has been completed.

Reference: W.O. #1337-CR3  
Project: Compton College Football Field  
Sample: B-4 @ 0'-3', 5/27/2015

R-Value data sheets are attached for your use and file. Any untested portion of the sample will be retained for a period of 60 days prior to disposal. The opportunity to be of service is sincerely appreciated and should you have any questions, kindly call.

Respectfully Submitted,

Steven R. Marvin  
RCE 30659  
SRM Inc
# R-VALUE DATA SHEET

**PROJECT NUMBER** 40271  
**BORING NUMBER:** B-4 @ 0'-3'

**SAMPLE DESCRIPTION:** Brown Sandy Silt

<table>
<thead>
<tr>
<th>Item</th>
<th>SPECIMEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mold Number</td>
<td>a 16</td>
</tr>
<tr>
<td>Water added, grams</td>
<td>a 84</td>
</tr>
<tr>
<td>Initial Test Water, %</td>
<td>a 16.1</td>
</tr>
<tr>
<td>Compact Gage Pressure, psi</td>
<td>a 110</td>
</tr>
<tr>
<td>Exudation Pressure, psi</td>
<td>a 617</td>
</tr>
<tr>
<td>Height Sample, Inches</td>
<td>a 2.50</td>
</tr>
<tr>
<td>Gross Weight Mold, grams</td>
<td>a 2971</td>
</tr>
<tr>
<td>Tare Weight Mold, grams</td>
<td>a 1957</td>
</tr>
<tr>
<td>Sample Wet Weight, grams</td>
<td>a 1014</td>
</tr>
<tr>
<td>Expansion, Inches x 10exp-4</td>
<td>a 70</td>
</tr>
<tr>
<td>Stability 2,000 lbs (160psi)</td>
<td>a 25 / 49</td>
</tr>
<tr>
<td>Turns Displacement</td>
<td>a 6.45</td>
</tr>
<tr>
<td>R-Value Uncorrected</td>
<td>a 47</td>
</tr>
<tr>
<td>R-Value Corrected</td>
<td>a 47</td>
</tr>
<tr>
<td>Dry Density, pcf</td>
<td>a 105.9</td>
</tr>
</tbody>
</table>

## DESIGN CALCULATION DATA

<table>
<thead>
<tr>
<th>Traffic Index</th>
<th>Assumed:</th>
<th>a 4.0</th>
<th>b 4.0</th>
<th>c 4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>G.E. by Stability</td>
<td>0.54</td>
<td>0.60</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>G.E. by Expansion</td>
<td>2.33</td>
<td>1.27</td>
<td>1.67</td>
<td></td>
</tr>
</tbody>
</table>

Equilibrium R-Value 38 by EXPANSION

- Gf = 1.25
- 0.0% Retained on the 3/4" Sieve.

Examined & Checked: 5/28/15

The data above is based upon processing and testing samples as received from the field. Test procedures in accordance with latest revisions to Department of Transportation, State of California, Materials & Research Test Method No. 301.

- LaBelle • Marvin