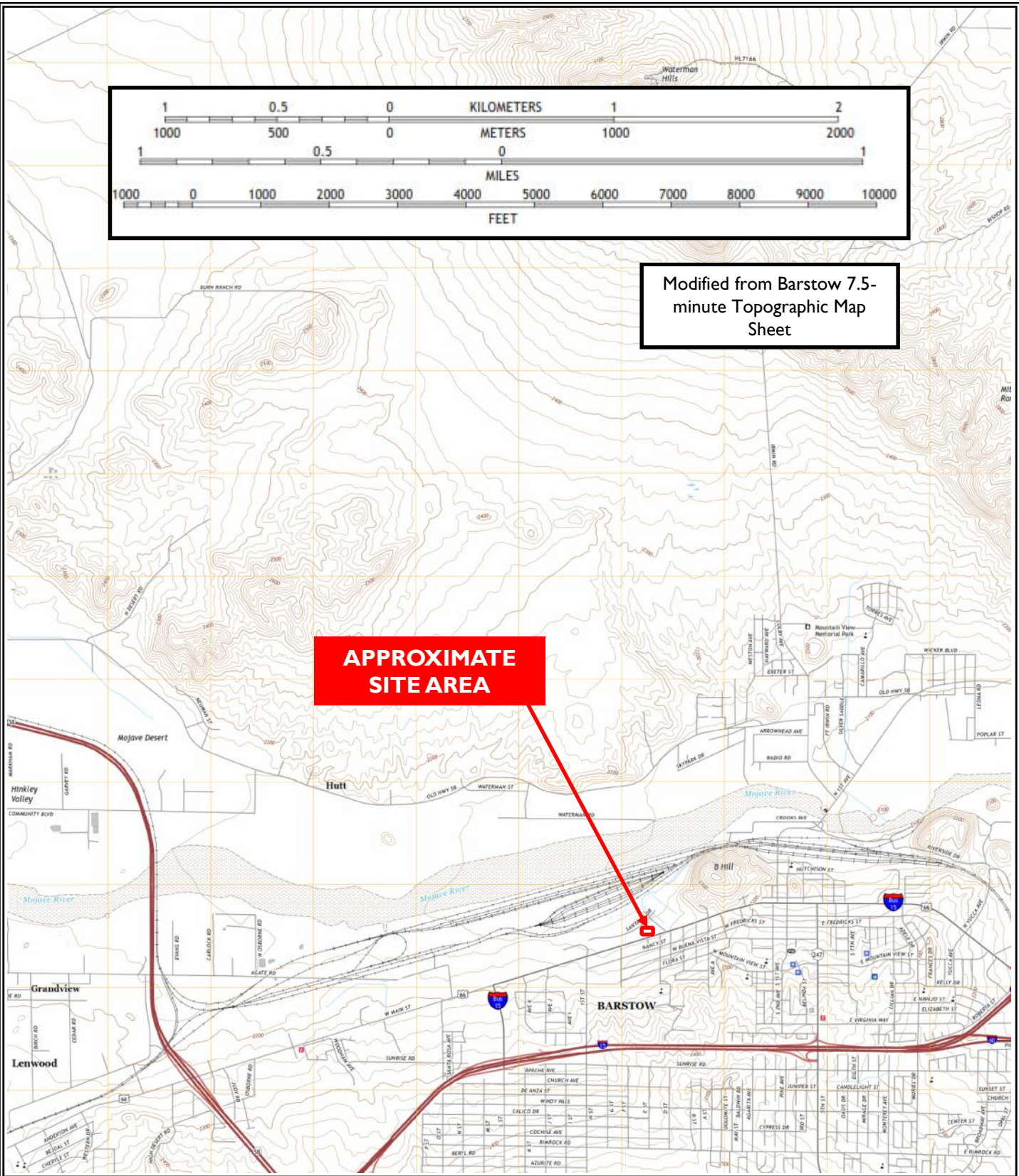


Modified from Barstow 7.5-minute Topographic Map Sheet

**APPROXIMATE SITE AREA**



**Michael Baker International**  
 1121 Main Street  
 Barstow, San Bernardino County, California



**Figure 1**  
 Site Location  
 Map



Project No. 2195-CR





**Michael Baker International**  
 1121 Main Street  
 Barstow, San Bernardino County, California



**Figure 2**  
 Boring Location  
 Map



Project No. 2195-CR

# **APPENDIX A**

## **LOGS OF EXPLORATORY BORINGS**

**Parking Lot Improvements**

**Barstow, California**

**Project No. 2195-CR**



## A - FIELD TESTING AND SAMPLING PROCEDURES

### The Modified Split-Barrel Sampler (Ring)

The Ring sampler is driven into the ground in accordance with ASTM Test Method D 3550. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

### Bulk Samples (Large)

These samples are normally large bags of earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

### Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.

## B – BORING/TRENCH LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the logs of borings/trenches:

### SOILS

USCS	Unified Soil Classification System
f-c	Fine to coarse
f-m	Fine to medium

### GEOLOGIC

B: Attitudes      Bedding: strike/dip

J: Attitudes      Joint: strike/dip

C: Contact line

.....	Dashed line denotes USCS material change
_____	Solid Line denotes unit / formational change
————	Thick solid line denotes end of boring/trench

(Additional denotations and symbols are provided on the log of borings/trenches)

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Michael Baker International  
**PROJECT NAME:** Barstow  
**PROJECT NO.:** 2195-CR  
**LOCATION:** See Boring Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** 8" Hollow Stem  
**HAMMER:** Auto 140#/30"

**LOGGED BY:** DRW  
**OPERATOR:** Jorge  
**RIG TYPE:** CME 75  
**DATE:** 8/9/2019

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-1  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 In	Sample Number			Water Content (%)	Dry Density (pcf)	Others
0	X				<b>Alluvium:</b>			EI, RV
7	SM	7			Silty f-c SAND, light grayish brown, slightly moist, medium dense, trace fine	4.2	115.3	
9		9						
9		9						
5		7			Same as above, some gravel, loose	4.3	114.8	
		7						
		7						
		6			Silty f-c SAND, brown, slightly moist to moist, medium dense, trace fine gravel	4.3	120.8	
		9						
		13						
10		9		SM/SW	Silty f-c SAND to f-c SAND, brown, moist, medium dense	2.7	119.6	
		13						
		19						
15		10		SM	Silty f-c SAND, brown, moist, medium dense			
		11						
		17						
20		14		ML	Vf sandy SILT, olive brown, slightly moist, very stiff			
		18						
		20						
25					<b>Boring Excavated to 21.5 Feet</b>			
					No groundwater encountered Boring backfilled with soil cuttings			
30								

<b>LEGEND</b>	<b>Sample type:</b>	■ ---Ring	■ ---SPT	▨ ---Small Bulk	▩ ---Large Bulk	□ ---No Recovery	▽ ---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Michael Baker International  
**PROJECT NAME:** Barstow  
**PROJECT NO.:** 2195-CR  
**LOCATION:** See Boring Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** 8" Hollow Stem  
**HAMMER:** Auto 140#/30"

**LOGGED BY:** DRW  
**OPERATOR:** Jorge  
**RIG TYPE:** CME 75  
**DATE:** 8/9/2019

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: B-2 MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 In	Sample Number			Water Content (%)	Dry Density (pcf)	Others
6 7 9		6 7 9		SM	<b>Alluvium:</b> Silty f-c SAND, grayish brown, slightly moist, loose to medium dense	3.2	118.4	
	5	5 5 5		SM/ML	Silty f-m SAND to f-m sandy SILT, brown, slightly moist to moist, loose/medium stiff	2.5	117.9	
		6 6 8			SM	Silty f-c SAND, brown, slightly moist to moist, loose, trace fine gravel	3.7	118.1
7 10 15						Same as above, medium dense	3.7	121.2
15	9 12 16			SM/ML	Silty f-m SAND to f-m sandy SILT, brown, moist, medium dense/very stiff			
	15 16 14				Same as above			
	<b>Boring Excavated to 21.5 Feet</b>							
No groundwater encountered Boring backfilled with soil cuttings								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Michael Baker International  
**PROJECT NAME:** Barstow  
**PROJECT NO.:** 2195-CR  
**LOCATION:** See Boring Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** 8" Hollow Stem  
**HAMMER:** Auto 140#/30"

**LOGGED BY:** DRW  
**OPERATOR:** Jorge  
**RIG TYPE:** CME 75  
**DATE:** 8/9/2019

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-I  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 In	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				SM	<b>Alluvium:</b>  Silty f-c SAND, light grayish brown, slightly moist, loose, trace fine gravel			
10					<b>Boring Excavated to 4 Feet</b>  No groundwater encountered			
15								
20								
25								
30								

<b>LEGEND</b>	<b>Sample type:</b>	---Ring	---SPT	---Small Bulk	---Large Bulk	---No Recovery	---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test

**GeoTek, Inc.**  
**LOG OF EXPLORATORY BORING**

**CLIENT:** Michael Baker International  
**PROJECT NAME:** Barstow  
**PROJECT NO.:** 2195-CR  
**LOCATION:** See Boring Location Map

**DRILLER:** 2R Drilling  
**DRILL METHOD:** 8" Hollow Stem  
**HAMMER:** Auto 140#/30"

**LOGGED BY:** DRW  
**OPERATOR:** Jorge  
**RIG TYPE:** CME 75  
**DATE:** 8/9/2019

Depth (ft)	SAMPLES			USCS Symbol	BORING NO.: I-I  MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing		
	Sample Type	Blows/ 6 in	Sample Number			Water Content (%)	Dry Density (pcf)	Others
5				SM	<b>Alluvium:</b> Silty f-c SAND, light grayish brown, slightly moist, trace fine gravel			
10					Silty f-c SAND, brown, slightly moist to moist, trace fine gravel			
15				SM/ML	Silty f-m SAND to f-m sandy SILT, brown, moist			
20				ML	Vf sandy SILT, olive brown, slightly moist			
25				SM	Silty f-c SAND, brown, slightly moist to moist, trace fine gravel			
30				SM/ML	Silty f-m SAND to f-m sandy SILT, brown, moist			
					<b>Boring Excavated to 30 Feet</b>			
					No groundwater encountered			

<b>LEGEND</b>	<b>Sample type:</b>	<input type="checkbox"/> ---Ring	<input type="checkbox"/> ---SPT	<input type="checkbox"/> ---Small Bulk	<input checked="" type="checkbox"/> ---Large Bulk	<input type="checkbox"/> ---No Recovery	<input checked="" type="checkbox"/> ---Water Table	
	<b>Lab testing:</b>	AL = Atterberg Limits	SR = Sulfate/Resistivity Test	EI = Expansion Index	SH = Shear Test	SA = Sieve Analysis	HC = Consolidation	RV = R-Value Test



# **APPENDIX B**

## **LABORATORY TEST RESULTS**

**Parking Lot Improvements**

**Barstow, California**

**Project No. 2195-CR**



## SUMMARY OF LABORATORY TESTING

### Classification

Soils were classified visually in general accordance to the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the boring logs in Appendix A.

### Expansion Index

The expansion potential of the soils was determined by performing expansion index testing on one sample in general accordance with ASTM D 4829. The results of the testing are provided below.

Boring No.	Depth (ft.)	Soil Type	Expansion Index	Classification
B-1	0-5	Silty Sand	0	Very Low

### In-Situ Moisture and Density

The natural water content was determined (ASTM D 2216) on samples of the materials recovered from the subsurface exploration. In addition, in-place dry density determinations (ASTM D 2937) were performed on relatively undisturbed samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the logs at the appropriate sample depths in Appendix A.

### R-Value

Laboratory testing was performed by others in general accordance with Caltrans Test Method CT 301. The results of the testing are presented in Appendix B.

### Sulfate Content, Resistivity and Chloride Content

Laboratory testing was performed by others in general accordance with ASTM procedures. The testing included pH and water-soluble sulfate content determinations, and resistivity and chloride content testing. The results of the testing are provided below and in Appendix B.

Boring No.	Depth (ft.)	pH ASTM G 51	Chloride ASTM D 512B (ppm)	Sulfate ASTM D 516 (% by weight)	Resistivity ASTM G 187 (ohm-cm)
B-1	0 - 5	9.12	5.7	0.0016	4,690

August 16, 2019

**Ms. Anna Scott**  
**GeoTek Inc.**

1548 North Maple Street  
Corona, California 92880

Project No. 45233

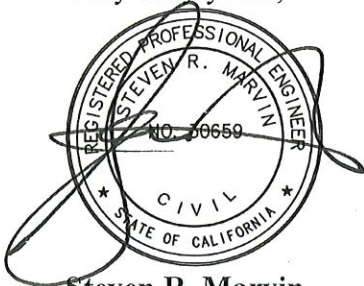
Attention Ms. Scott:

Laboratory testing of the bulk soil sample delivered to our laboratory on 8/13/2019 has been completed.

Reference: W.O. # 2195-CR3  
Project: Michael Baker International, 1121 Main Street, Barstow  
Sample: B-1 @ 0'-5'

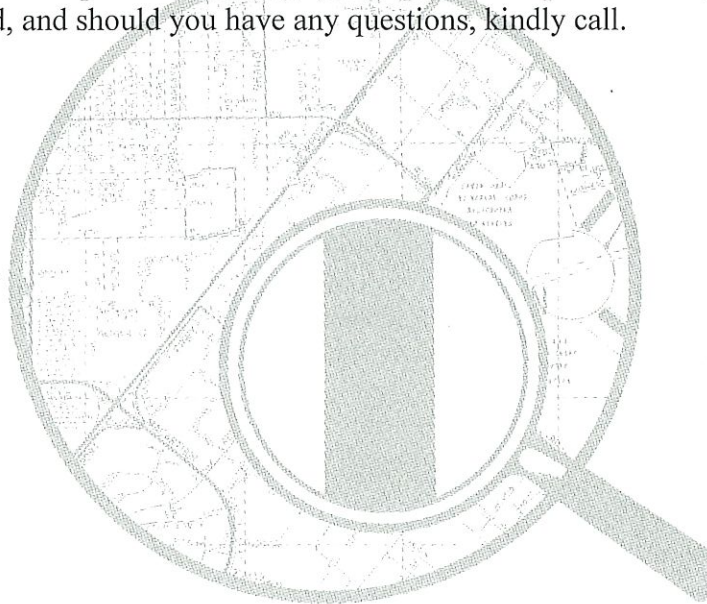
Data sheets are transmitted herewith for your use and information. Any untested portion of the samples will be retained for a period of sixty (60) days prior to disposal. The opportunity to be of service is appreciated, and should you have any questions, kindly call.

Very truly yours,



**Steven R. Marvin**  
**RCE 30659**

SRM:tw  
Enclosures





# R - VALUE DATA SHEET

PROJECT No. 45233  
 DATE: 8/16/2019


BORING NO. B-1 @ 0'-5'  
Michael Baker International, 1121 Main St., Barstow  
W.O.# 2195-CR3

SAMPLE DESCRIPTION: Brown Silty Sand

R-VALUE TESTING DATA   CA TEST 301			
	SPECIMEN ID		
	a	b	c
Mold ID Number	10	11	12
Water added, grams	72	80	65
Initial Test Water, %	8.9	9.7	8.3
Compact Gage Pressure, psi	350	350	350
Exudation Pressure, psi	347	150	668
Height Sample, Inches	2.57	2.61	2.57
Gross Weight Mold, grams	3099	3118	3099
Tare Weight Mold, grams	1946	1951	1946
Sample Wet Weight, grams	1153	1167	1153
Expansion, Inches x 10exp-4	5	4	6
Stability 2,000 lbs (160psi)	16 / 28	19 / 35	13 / 23
Turns Displacement	4.15	4.55	3.97
R-Value Uncorrected	74	66	79
R-Value Corrected	75	68	80
Dry Density, pcf	124.8	123.5	125.6

### DESIGN CALCULATION DATA

Traffic Index	Assumed:	4.0	4.0	4.0
G.E. by Stability		0.26	0.33	0.20
G. E. by Expansion		0.17	0.13	0.20

<b>Equilibrium R-Value</b>	<b>73</b> by EXUDATION	Examined & Checked: 8 /16/ 19
REMARKS:	Gf = <u>1.25</u> 2.9% Retained on the <u>3/4" Sieve.</u>	 Steven R. Marvin, RCE 30659 CIVIL STATE OF CALIFORNIA

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.

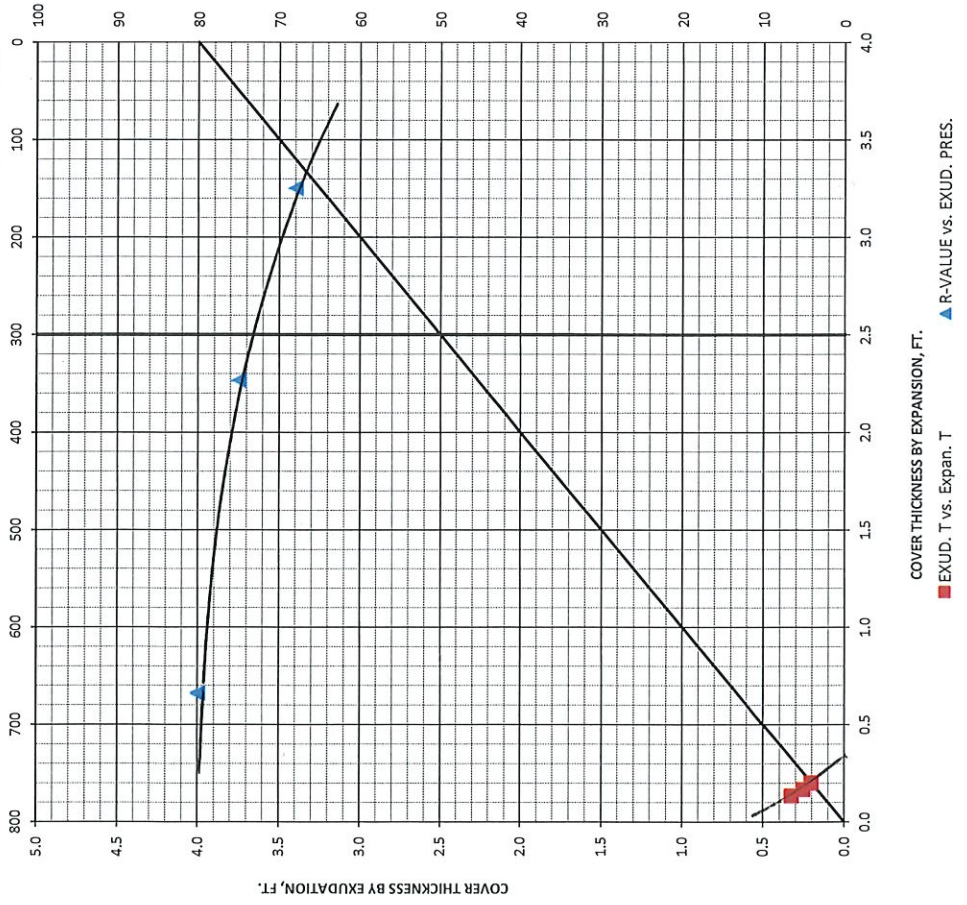




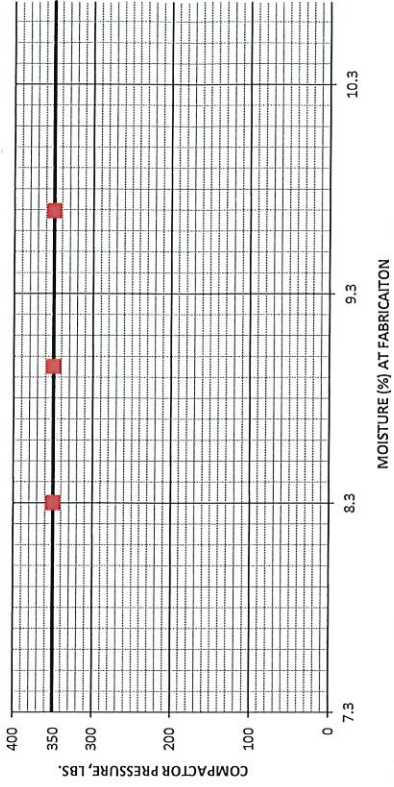
# R-VALUE GRAPHICAL PRESENTATION

PROJECT NO. 45233      REMARKS: \_\_\_\_\_  
 DATE: 8 /16/ 19      \_\_\_\_\_  
 BORING NO. B-1 @ 0'-5'      \_\_\_\_\_  
Michael Baker International, 1121 Main St., Barstow      \_\_\_\_\_  
W.O.# 2195-CR3      \_\_\_\_\_

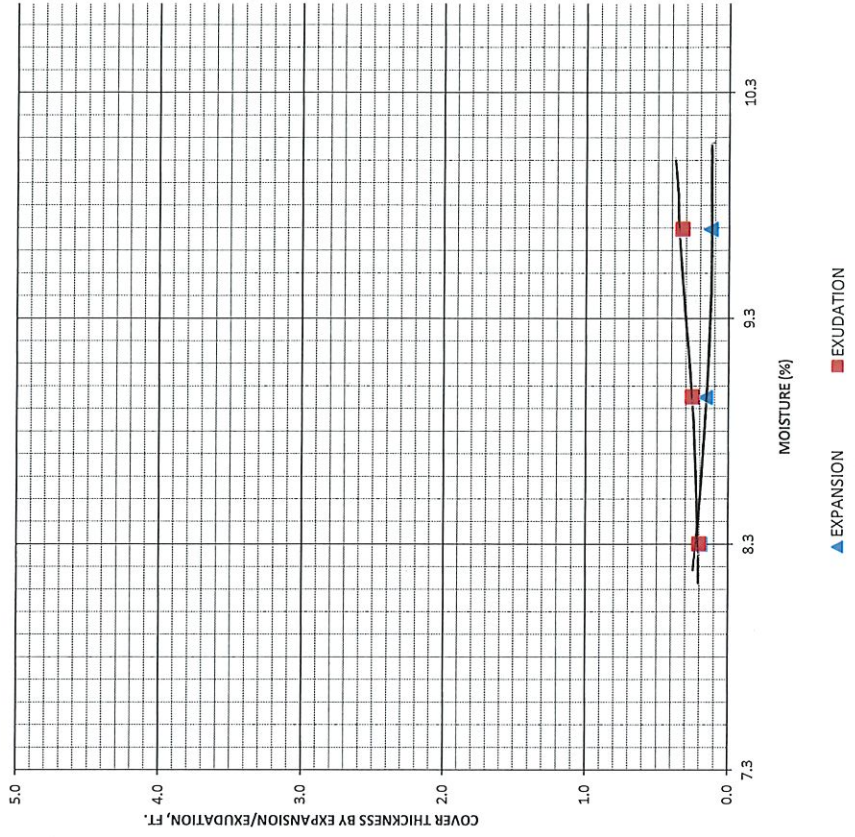
## COVER THICKNESS BY EXUDATION vs COVER THICKNESS BY EXPANSION



## COMPACTOR PRESSURE vs MOISTURE %



## COVER THICKNESS vs MOISTURE %







## Soil Analysis Lab Results

Client: GeoTek, Inc.  
 Job Name: 1121 Main St., Barstow  
 Client Job Number: 2195-CR  
 Project X Job Number: S190813B  
 August 15, 2019

Bore# / Description	Method	ASTM D4327		ASTM D4327		ASTM G187		ASTM G51	ASTM G200	SM 4500-S2-D	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	ASTM D4327	SM-2320B		
	Depth	Sulfates		Chlorides		Resistivity		pH	Redox	Sulfide	Nitrate	Ammonium	Lithium	Sodium	Potassium	Magnesium	Calcium	Flouride	Phosphate	Bicarbonate
	(ft)	(mg/kg)	(wt%)	(mg/kg)	(wt%)	As Rec'd	Minimum		(mV)	S <sup>2-</sup>	NO <sub>3</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	Li <sup>+</sup>	Na <sup>+</sup>	K <sup>+</sup>	Mg <sup>2+</sup>	Ca <sup>2+</sup>	F <sub>2</sub> <sup>-</sup>	PO <sub>4</sub> <sup>3-</sup>	HCO <sub>3</sub> <sup>-</sup>
B-1	0.0-5.0	15.5	0.0016	5.7	0.0006	29,480	4,690	9.12	129	0.8	23.8	0.6	ND	31.5	22.2	7.8	144.1	0.9	ND	650.0

Cations and Anions, except Sulfide and Bicarbonate, tested with Ion Chromatography  
 mg/kg = milligrams per kilogram (parts per million) of dry soil weight  
 ND = 0 = Not Detected | NT = Not Tested | Unk = Unknown  
 Chemical Analysis performed on 1:3 Soil-To-Water extract

# **APPENDIX C**

## **INFILTRATION TEST DATA**

**Parking Lot Improvements**

**Barstow, California**

**Project No. 2195-CR**







**Client:** Michael Baker International  
**Project:** Barstow  
**Project No:** 2195-CR  
**Date:** 8/14/2019

**Boring No.** I-1

**Percolation Rate (Porchet Method)**

Time Interval,  $\Delta t =$  10  
 Final Depth to Water,  $D_F =$  59.25  
 Test Hole Radius,  $r =$  4  
 Initial Depth to Water,  $D_O =$  24  
 Total Test Hole Depth,  $D_T =$  48

Equation -  $I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$

$H_O = D_T - D_O =$  24  
 $H_F = D_T - D_F =$  -11.25  
 $\Delta H = \Delta D = H_O - H_F =$  35.25  
 $H_{avg} = (H_O + H_F) / 2 =$  6.375

$I_t =$  50.51 Inches per Hour





**Client:** Michael Baker International  
**Project:** Barstow  
**Project No:** 2195-CR  
**Date:** 8/14/2019

**Boring No.** I-2

**Percolation Rate (Porchet Method)**

Time Interval,  $\Delta t =$  10  
 Final Depth to Water,  $D_F =$  307.25  
 Test Hole Radius,  $r =$  4  
 Initial Depth to Water,  $D_O =$  300  
 Total Test Hole Depth,  $D_T =$  360

Equation - 
$$I_t = \frac{\Delta H (60r)}{\Delta t (r+2H_{avg})}$$

$H_O = D_T - D_O =$  60  
 $H_F = D_T - D_F =$  52.75  
 $\Delta H = \Delta D = H_O - H_F =$  7.25  
 $H_{avg} = (H_O + H_F) / 2 =$  56.375

$I_t =$  1.49 Inches per Hour



# **APPENDIX D**

## **GENERAL GRADING GUIDELINES**

**Parking Lot Improvements**

**Barstow, California**

**Project No. 2195-CR**



## **GENERAL GRADING GUIDELINES**

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines, when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

### **General**

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the Uniform Building Code, CBC (2016) and the guidelines presented below.

### **Preconstruction Meeting**

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

### **Grading Observation and Testing**

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.
4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.
5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.

6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a **minimum of 48 to 72 hours to complete test procedures**. Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.
7. Procedures for testing of fill slopes are as follows:
  - a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.
  - b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.
8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

### **Site Clearing**

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.
2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.
3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative.

### **Treatment of Existing Ground**

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep effected bedrock, should be removed unless otherwise specifically indicated in the text of this report.
2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.
3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.
4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.
5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

### **Fill Placement**

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).



2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.
3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:
  - a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.
  - b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D 1557.
4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:
  - a) They are not placed in concentrated pockets;
  - b) There is a sufficient percentage of fine-grained material to surround the rocks;
  - c) The distribution of the rocks is observed by, and acceptable to, our representative.
5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal. On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.
6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

### **Slope Construction**

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.
2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.
3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.
4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.
5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.



## **UTILITY TRENCH CONSTRUCTION AND BACKFILL**

Utility trench excavation and backfill is the contractor's responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractor's methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that "worked" on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them **prior** to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.
2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:
  - a) shallow (12 + inches) under slab interior trenches and,
  - b) as bedding in pipe zone.

The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.

3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.
4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.
5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractor's procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractor's attention.

## **JOB SAFETY**

### **General**

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.



In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. **Safety Meetings:** Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. **Safety Vests:** Safety vests are provided for and are to be worn by our personnel while on the job site.
3. **Safety Flags:** Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

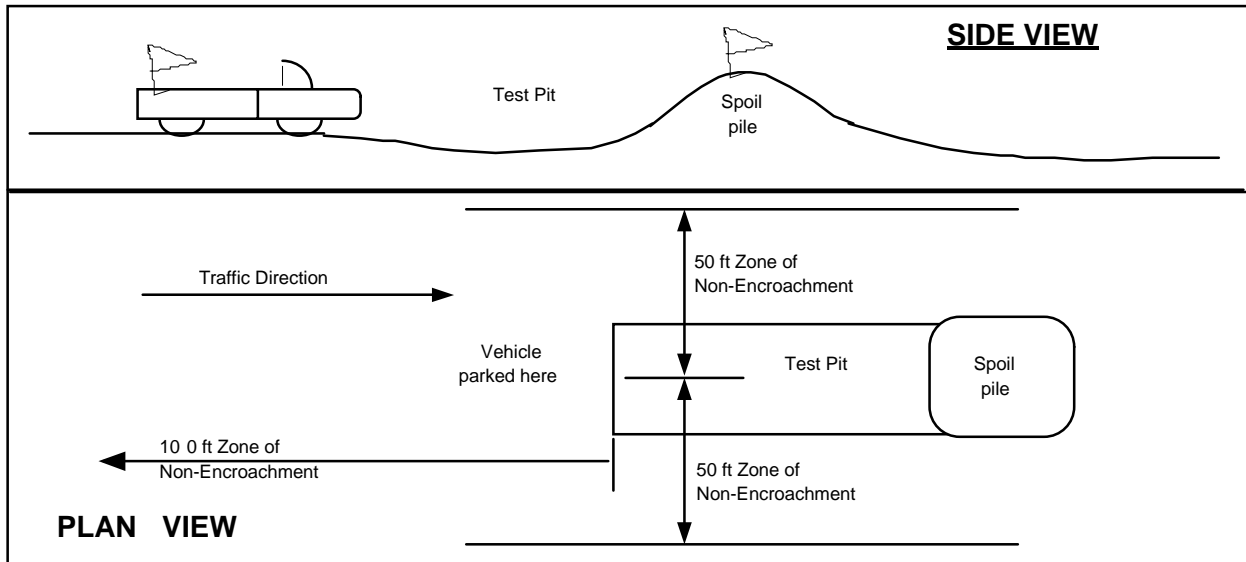
### **Test Pits Location, Orientation and Clearance**

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

### TEST PIT SAFETY PLAN



#### Slope Tests

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

#### Trench Safety

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or
4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

### **Procedures**

In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractors' representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.



**GeoTek, Inc.**  
1548 North Maple Street, Corona, California 92880  
(951) 710-1160 Office (951) 710-1167 Fax [www.geotekusa.com](http://www.geotekusa.com)

February 23, 2021  
Project No. 2195-CR

**Michael Baker International**  
5 Hutton Centre Drive, Suite 500  
Santa Ana, California 92707

Attention: Mr. Michael Tylman

Subject: Addendum to Geotechnical and Infiltration Evaluation  
Proposed Parking Lot Improvements  
1121 and 1161 Main Street  
Barstow, San Bernardino County, California

Reference: See Page 3

Dear Mr. Tylman:

In accordance with your request, GeoTek, Inc. (GeoTek) has prepared this letter as an addendum to our *Geotechnical and Infiltration Evaluation* report (GeoTek, 2019).

It is our understanding that the area of proposed development has been increased to include a portion of the adjacent parcel located at 1161 Main Street since the time of preparation of our referenced report (GeoTek, 2019). Proposed improvements for the new parcel include, but are not necessarily limited to, 40 additional parking spaces, an egress from Main Street, a roadway located to the north of the parcel and storm water facilities to accommodate the Barstow Head Start/Preschool located at 1121 Main Street.

Based on the proposed improvements for the adjacent parcel, the recommendations provided in our referenced report (GeoTek, 2019) remain applicable for the project since site soil conditions are very uniform. A GeoTek representative should observe field conditions during construction.

Should you have any questions after reviewing this letter, please feel free to contact our office at your convenience.

Respectfully submitted,  
**GeoTek, Inc.**



Edward H. LaMont  
CEG 1892, Exp. 7/31/22  
Principal Geologist

Robert R. Russell  
CE 2042, Exp. 12/31/22  
Senior Project Engineer

Anna M. Scott  
Project Geologist

Distribution: (1) Addressee via email

G:\Projects\2151 to 2200\2195CR Michael Baker International 1121 Main Street Barstow\2195CR Addendum to Geotechnical and Infiltration Evaluation 1211 Main Street.doc

## **REFERENCE**

GeoTek, Inc., 2019, “Geotechnical and Infiltration Evaluation, Proposed Parking Lot Improvements, 1121 Main Street, Barstow, San Bernardino County, California”, Project No. 2195-CR, dated August 20.



Attachment D: Maintenance Agreement for BMP to the WQMP

**RECORDING REQUESTED BY:**

County of San Bernardino  
Department of Public Works

**AND WHEN RECORDED MAIL TO:**

County of San Bernardino  
Department of Public Works  
825 E. Third Street, Room 117  
San Bernardino, CA 92415-0835

---

SPACE ABOVE THIS LINE FOR RECORDER'S USE

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**COVENANT AND AGREEMENT REGARDING WATER QUALITY  
MANAGEMENT PLAN AND STORMWATER BEST MANAGEMENT  
PRACTICES TRANSFER, ACCESS AND MAINTENANCE**

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION

**Covenant and Agreement Regarding Water Quality Management Plan and Stormwater  
Best Management Practices  
Transfer, Access and Maintenance**

**OWNER NAME:** County of San Bernardino

**PROPERTY ADDRESS:** 1161 W Main Street

Barstow CA 92311

**APN:** 0182-041-37

**THIS AGREEMENT** is made and entered into in

\_\_\_\_\_, California, this \_\_\_\_\_ day of

\_\_\_\_\_, by and between

\_\_\_\_\_, hereinafter

referred to as Owner, and the COUNTY OF SAN BERNARDINO, a political subdivision of the State of California, hereinafter referred to as "the County";

**WHEREAS**, the Owner owns real property ("Property") in the County of San Bernardino, State of California, more specifically described in Exhibit "A" and depicted in Exhibit "B", each of which exhibits is attached hereto and incorporated herein by this reference; and

**WHEREAS**, at the time of initial approval of development project known as

\_\_\_\_\_ within the Property described herein, the County required the project to employ Best Management Practices, hereinafter referred to as "BMPs," to minimize pollutants in urban runoff; and

**WHEREAS**, the Owner has chosen to install and/or implement BMPs as described in the Water Quality Management Plan, dated \_\_\_\_\_, on file with the County and incorporated herein by this reference, hereinafter referred to as "WQMP", to minimize pollutants in urban runoff and to minimize other adverse impacts of urban runoff; and

**WHEREAS**, said WQMP has been certified by the Owner and reviewed and approved by the County; and

**WHEREAS**, the Owner is aware that periodic and continuous maintenance, including, but not necessarily limited to, filter material replacement and sediment removal, is required to assure peak performance of all BMPs in the WQMP and that, furthermore, such maintenance activity will require compliance with all Local, State, or Federal laws and regulations, including those pertaining to confined space and waste disposal methods, in effect at the time such maintenance occurs.

**NOW THEREFORE**, it is mutually stipulated and agreed as follows:

1. Owner shall comply with the WQMP.
2. All maintenance or replacement of BMPs proposed as part of the WQMP are the sole responsibility of the Owner in accordance with the terms of this Agreement.
3. Owner hereby provides the County's designee complete access, of any duration, to the BMPs and their immediate vicinity at any time, upon reasonable notice, or in the event of emergency, as determined by the County Director of Public Works, no advance notice, for the purpose of inspection, sampling, testing of the BMPs, and in case of emergency, to undertake all necessary repairs or other preventative measures at owner's expense as provided in paragraph 5 below. The County shall make every effort at all times to minimize or avoid interference with Owner's use of the Property. Denial of access to any premises or facility that contains WQMP features is a breach of this Agreement and may also be a violation of the County's Pollutant Discharge Elimination System regulations, which on the effective date of this Agreement are found in County Code Sections 35.0101 et seq. If there is reasonable cause to believe that an illicit discharge or breach of this Agreement is occurring on the premises then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction in addition to other enforcement actions. Owner recognizes that the County may perform routine and regular inspections, as well as emergency inspections, of the BMPs. Owner or Owner's successors or assigns shall pay County for all costs incurred by County in the inspection, sampling, testing of the BMPs within thirty (30) calendar days of County invoice.
4. Owner shall use its best efforts diligently to maintain all BMPs in a manner assuring peak performance at all times. All reasonable precautions shall be exercised by Owner and Owner's representative or contractor in the removal and extraction of any material(s) from the BMPs and the ultimate disposal of the material(s) in a manner consistent with all relevant laws and regulations in effect at the time. As may be requested from time to time by the County, the Owner shall provide the County with documentation identifying the material(s) removed, the quantity, and disposal destination), testing construction or reconstruction.
5. In the event Owner, or its successors or assigns, fails to accomplish the necessary maintenance contemplated by this Agreement, within five (5) business days of being given written notice by the County, the County is hereby authorized to cause any maintenance necessary to be done and charge the entire cost and expense against the Property and/or to the Owner or Owner's successors or assigns, including administrative costs, attorneys fees and interest thereon at the maximum rate authorized by the County Code from the date of the notice of expense until paid in full. Owner or Owner's successors or assigns shall pay County within thirty (30) calendar days of County invoice.
6. The County may require the owner to post security in form and for a time period satisfactory to the County to guarantee the performance of the obligations stated herein. Should the Owner fail to perform the obligations under the Agreement, the County may, in the case of a cash bond, act for the Owner using the proceeds from it, or in the case of a surety bond, require the surety(ies) to perform the obligations of this Agreement.

7. The County agrees, from time to time, within ten (10) business days after request of Owner, to execute and deliver to Owner, or Owner's designee, an estoppel certificate requested by Owner, stating that this Agreement is in full force and effect, and that Owner is not in default hereunder with regard to any maintenance or payment obligations (or specifying in detail the nature of Owner's default). Owner shall pay all costs and expenses incurred by the County in its investigation of whether to issue an estoppel certificate within thirty (30) calendar days after receipt of a County invoice and prior to the County's issuance of such certificate. Where the County cannot issue an estoppel certificate, Owner shall pay the County within thirty (30) calendar days of receipt of a County invoice.
8. Owner shall not change any BMPs identified in the WQMP without an amendment to this Agreement approved by authorized representatives of both the County and the Owner.
9. County and Owner shall comply with all applicable laws, ordinances, rules, regulations, court orders and government agency orders now or hereinafter in effect in carrying out the terms of this Agreement. If a provision of this Agreement is terminated or held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall remain in full effect.
10. In addition to any remedy available to County under this Agreement, if Owner violates any term of this Agreement and does not cure the violation within the time already provided in this Agreement, or, if not provided, within thirty (30) calendar days, or within such time authorized by the County if said cure reasonably requires more than the subject time, the County may bring an action at law or in equity in a court of competent jurisdiction to enforce compliance by the Owner with the terms of this Agreement. In such action, the County may recover any damages to which the County may be entitled for the violation, enjoin the violation by temporary or permanent injunction without the necessity of proving actual damages or the inadequacy of otherwise available legal remedies, or obtain other equitable relief, including, but not limited to, the restoration of the Property and/or the BMPs identified in the WQMP to the condition in which it/they existed prior to any such violation or injury.
11. This Agreement shall be recorded in the Office of the Recorder of San Bernardino County, California, at the expense of the Owner and shall constitute notice to all successors and assigns of the title to said Property of the obligation herein set forth, and also a lien in such amount as will fully reimburse the County, including interest as herein above set forth, subject to foreclosure in event of default in payment.
12. In event of legal action occasioned by any default or action of the Owner, or its successors or assigns, then the Owner and its successors or assigns agree(s) to hold the County harmless and pay all costs incurred by the County in enforcing the terms of this Agreement, including reasonable attorney's fees and costs, and that the same shall become a part of the lien against said Property.
13. It is the intent of the parties hereto that burdens and benefits herein undertaken shall constitute covenants that run with said Property and constitute a lien there against.
14. The obligations herein undertaken shall be binding upon the heirs, successors, executors, administrators and assigns of the parties hereto. The term "Owner" shall include not only the present Owner, but also its heirs, successors, executors, administrators, and assigns. Owner shall notify any successor to title of all or part of the Property about the existence of this Agreement. Owner shall provide such notice prior to such successor obtaining an



interest in all or part of the Property. Owner shall provide a copy of such notice to the County at the same time such notice is provided to the successor.

15. Time is of the essence in the performance of this Agreement.
16. Any notice to a party required or called for in this Agreement shall be served in person, or by deposit in the U.S. Mail, first class postage prepaid, to the address set forth below. Notice(s) shall be deemed effective upon receipt, or seventy-two (72) hours after deposit in the U.S. Mail, whichever is earlier. A party may change a notice address only by providing written notice thereof to the other party.
17. Owner agrees to indemnify, defend (with counsel reasonably approved by the County) and hold harmless the County and its authorized officers, employees, agents and volunteers from any and all claims, actions, losses, damages, and/or liability arising out of this Agreement from any cause whatsoever, including the acts, errors or omissions of any person and for any costs or expenses incurred by the County on account of any claim except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The Owner's indemnification obligation applies to the County's "active" as well as "passive" negligence but does not apply to the County's "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782, or to any claims, actions, losses, damages, and/or liabilities, to the extent caused by the acts or omissions of any third party contractors undertaking any work (other than field inspections) or other maintenance on the Property on behalf of the County under this Agreement..

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

**IF TO COUNTY :**

Director of Public Works \_\_\_\_\_

825 E. Third Street, Room 117 \_\_\_\_\_

San Bernardino, CA 92415-0835 \_\_\_\_\_

**IF TO OWNER:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**IN WITNESS THEREOF**, the parties hereto have affixed their signatures as of the date first written above.

**OWNER:**

Company/Trust: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**FOR:** Maintenance Agreement, dated

\_\_\_\_\_, for the

project known as

\_\_\_\_\_

\_\_\_\_\_

(APN) \_\_\_\_\_,

As described in the WQMP dated

\_\_\_\_\_.

**OWNER:**

Company/Trust: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**NOTARIES ON FOLLOWING PAGE**

A notary acknowledgement is required for recordation.

ACCEPTED BY:

\_\_\_\_\_  
KEVIN BLAKESLEE, P.E., Director of Public Works

Date: \_\_\_\_\_

Attachment: Notary Acknowledgement

**ATTACHMENT 1**  
**Notary Acknowledgement)**

**EXHIBIT A**  
**(Legal Description)**

APN: 0182-041-37-0000

That portion of the East half of the Southwest Quarter of Section 1, Township 9 North, Range 2 West, SAN BERNARDINO BASE AND MERIDIAN, according to Government Survey, described as follows:

COMMENCING at the intersection of the Northerly extension of the East Line of "D" Street as shown on Map of Henderson's Subdivision, TRACT NO. 2184 as per plat recorded in Book 31 of Maps, Page 60, records of said County, with the North line of State Highway; thence Southwesterly along said Northerly line of said Highway 201.7 feet to the center line of a 40-foot road; thence Northwesterly along said road to the Southerly line of former right of way of Atchison, Topeka and Santa Fe Railroad, which point is 100 feet Southeasterly from Culvert A2 for true point of beginning; thence South 0 deg. 31' West 588.94 feet to the North Line of State Highway; thence Southwesterly along said Northerly line of State Highway 100 feet; thence North 0 deg 31' East 500 feet, more or less, to the former Southerly line of the right of way of Atchison, Topeka and Santa Fe Railroad; thence Northeasterly along said right of way 100 feet to the true point of beginning:

EXCEPTING THEREFROM that portion described as follows: BEGINNING at the Southwest corner of the above described property; thence North 0 deg 31' East 112 feet; thence North 72 deg 53' East parallel with the North line of State Highway 50 feet; thence South 0 deg 31' West 112 feet to the North line of said State Highway; thence South 72 deg 53' West 50 feet to the point of beginning.

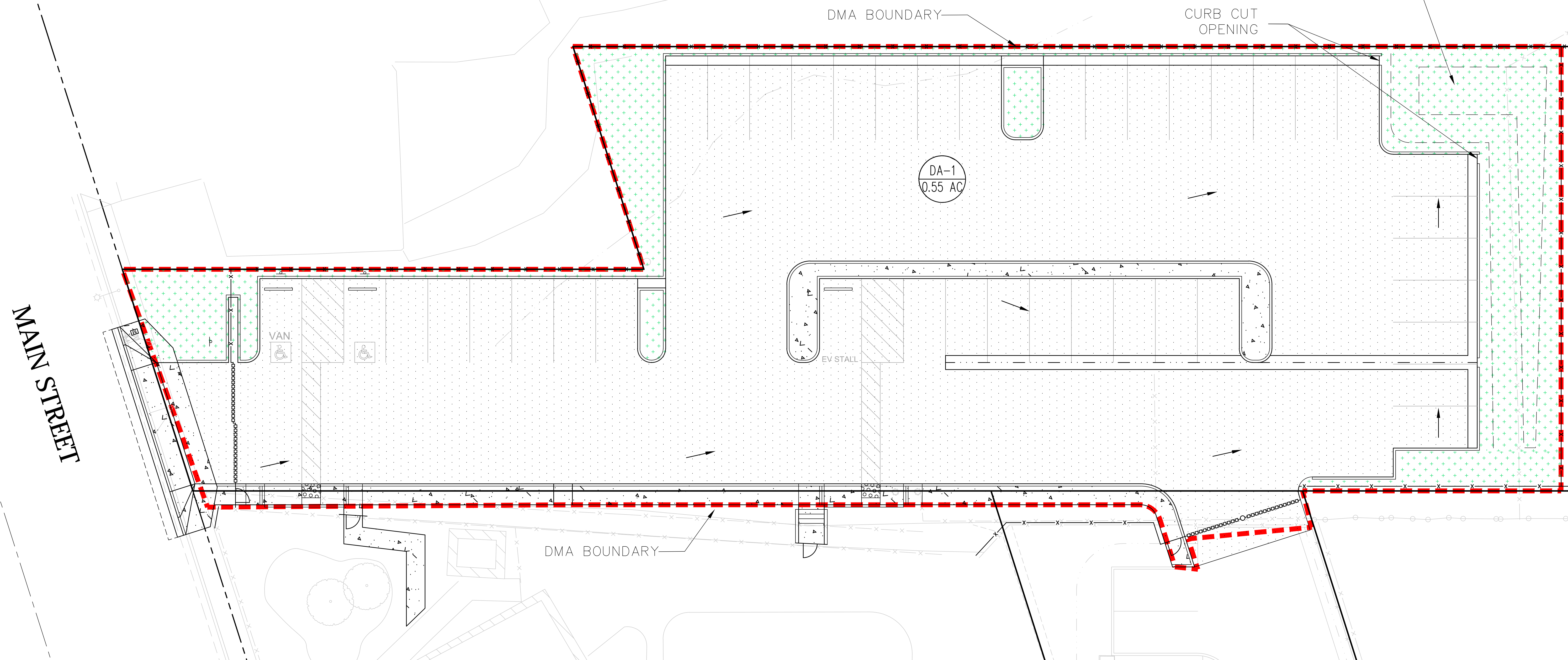
**EXHIBIT B**  
**(Map/illustration)**



# WATER QUALITY MANAGEMENT PLAN EXHIBIT

BARSTOW PARKING LOT EXPANSION  
1161 W MAIN STREET, BARSTOW, CA

INFILTRATION BASIN  
1' PONDING DEPTH  
3' UNDERGROUND  
GRAVEL LAYER  
DCV REQUIRED=1,187 FT<sup>3</sup>  
VOL. REQUIRED=1,195 FT<sup>3</sup>



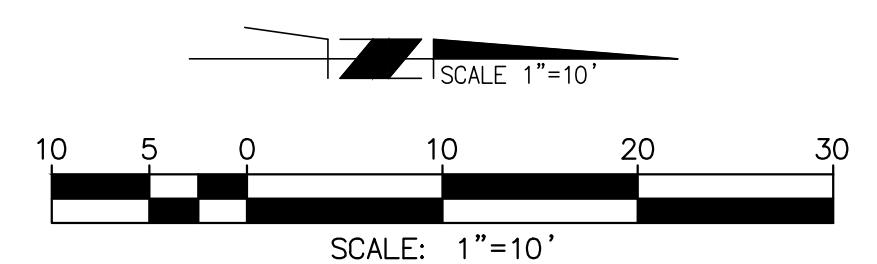
DA NUMBER	DA AREA SQ. FT.	DA AREA ACRES	ASPHALT SQ. FT.	CONCRETE SQ. FT.	ROOF SQ. FT.	LANDSCAPE SQ. FT.	IMPERVIOUS %	PERVIOUS %
DA-1	23,971	0.55	19,139	1,251	0	3,581	85%	15%

SITE ADDRESS:  
1161 W MAIN STREET  
BARSTOW, CA 92311

OWNER/APPLICANT:  
SAN BERNARDINO COUNTY  
385 NORTH ARROWHEAD AVE  
SAN BERNARDINO, CA 92415  
(909)838-9128

### LEGEND

- PROPERTY LINE
- DMA BOUNDARY
- FLOW DIRECTION
- ASPHALT CONCRETE PAVEMENT
- CONCRETE PAVEMENT
- LANDSCAPE/BASIN
- DMA NUMBER & AREA



BARSTOW PARKING LOT  
COUNTY OF SAN BERNARDINO

**Michael Baker**

**INTERNATIONAL**  
3535 CONCOURS ST., STE. 100, ONTARIO, CA 91764  
PHONE: (909) 974-4800 - MBKERINTL.COM

## Attachment E: BMP Details

**CALIFORNIA ENVIRONMENTAL REPORTING SYSTEM (CERS)**  
**CONSOLIDATED EMERGENCY RESPONSE / CONTINGENCY PLAN**  
*Prior to completing this Plan, please refer to the INSTRUCTIONS FOR COMPLETING A CONSOLIDATED CONTINGENCY PLAN*

**A. FACILITY IDENTIFICATION AND OPERATIONS OVERVIEW**

FACILITY ID #	CERS ID	DATE OF PLAN PREPARATION/REVISION
BUSINESS NAME (Same as Facility Name or DBA - Doing Business As)		
BUSINESS SITE ADDRESS		
BUSINESS SITE CITY	104.	ZIP CODE
TYPE OF BUSINESS (e.g., Painting Contractor)	A3.	INCIDENTAL OPERATIONS (e.g., Fleet Maintenance)
THIS PLAN COVERS CHEMICAL SPILLS, FIRES, AND EARTHQUAKES INVOLVING: (Check all that apply)		
<input checked="" type="checkbox"/> 1. HAZARDOUS MATERIALS; <input type="checkbox"/> 2. HAZARDOUS WASTES		

**B. INTERNAL RESPONSE**

INTERNAL FACILITY EMERGENCY RESPONSE WILL OCCUR VIA: (Check all that apply)	B1.
<input type="checkbox"/> 1. CALLING PUBLIC EMERGENCY RESPONDERS (i.e., 9-1-1) <input type="checkbox"/> 2. CALLING HAZARDOUS WASTE CONTRACTOR <input type="checkbox"/> 3. ACTIVATING IN-HOUSE EMERGENCY RESPONSE TEAM	

**C. EMERGENCY COMMUNICATIONS, PHONE NUMBERS AND NOTIFICATIONS**

Whenever there is an imminent or actual emergency situation such as an explosion, fire, or release, the Emergency Coordinator (or his/her designee when the Emergency Coordinator is on call) shall:

1. Activate internal facility alarms or communications systems, where applicable, to notify all facility personnel.
2. Notify appropriate local authorities (i.e., call 9-1-1).
3. Notify the California Emergency Management Agency at (800) 852-7550.

Before facility operations are resumed in areas of the facility affected by the incident, the emergency coordinator shall notify the California Department of Toxic Substances Control (DTSC), the local Unified Program Agency (UPA), and the local fire department's hazardous materials program that the facility is in compliance with requirements to:

1. Provide for proper storage and disposal of recovered waste, contaminated soil or surface water, or any other material that results from an explosion, fire, or release at the facility; and
2. Ensure that no material that is incompatible with the released material is transferred, stored, or disposed of in areas of the facility affected by the incident until cleanup procedures are completed.

INTERNAL FACILITY EMERGENCY COMMUNICATIONS OR ALARM NOTIFICATION WILL OCCUR VIA: (Check all that apply)	C1.
<input type="checkbox"/> 1. VERBAL WARNINGS; <input type="checkbox"/> 2. PUBLIC ADDRESS OR INTERCOM SYSTEM; <input type="checkbox"/> 3. TELEPHONE; <input type="checkbox"/> 4. PAGERS; <input type="checkbox"/> 5. ALARM SYSTEM; <input type="checkbox"/> 6. PORTABLE RADIO	
NOTIFICATIONS TO NEIGHBORING FACILITIES THAT MAY BE AFFECTED BY AN OFF-SITE RELEASE WILL OCCUR BY: (Check all that apply)	C2.
<input type="checkbox"/> 1. VERBAL WARNINGS; <input type="checkbox"/> 2. PUBLIC ADDRESS OR INTERCOM SYSTEM; <input type="checkbox"/> 3. TELEPHONE; <input type="checkbox"/> 4. PAGERS; <input type="checkbox"/> 5. ALARM SYSTEM; <input type="checkbox"/> 6. PORTABLE RADIO	
EMERGENCY RESPONSE PHONE NUMBERS:	
AMBULANCE, FIRE, POLICE AND CHP	9-1-1
CALIFORNIA EMERGENCY MANAGEMENT AGENCY (CAL/EMA)	(800) 852-7550
NATIONAL RESPONSE CENTER (NRC)	(800) 424-8802
POISON CONTROL CENTER	(800) 222-1222
LOCAL UNIFIED PROGRAM AGENCY (UPA/CUPA)	C3.
OTHER (Specify):	C4. C5.
NEAREST MEDICAL FACILITY / HOSPITAL NAME:	C6. C7.
AGENCY NOTIFICATION PHONE NUMBERS:	
CALIFORNIA DEPT. OF TOXIC SUBSTANCES CONTROL (DTSC)	(916) 255-3545
REGIONAL WATER QUALITY CONTROL BOARD	C8.
U.S. ENVIRONMENTAL PROTECTION AGENCY (US EPA)	(800) 300-2193
CALIFORNIA DEPT OF FISH AND GAME (DFG)	(916) 358-2900
U.S. COAST GUARD	(202) 267-2180
CAL/OSHA	(916) 263-2800
STATE FIRE MARSHAL	(916) 445-8200
OTHER (Specify):	C9. C10.
OTHER (Specify):	C11. C12.