

## APPENDIX

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M. Soil Sampling Analytical Data

Report Date:  
22-Apr-15 14:21



**SPECTRUM ANALYTICAL, INC.**

- Final Report
- Re-Issued Report
- Revised Report

### Laboratory Report

Gilbane Building Co.  
490 Restoration Way  
Geddes, NY 13209  
Attn: Charles Reinhardt

Project: Onondaga Lakeview Amphitheater-NY  
Project #: 6573

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
SC05494-01	Waste Pile 1	Soil	07-Apr-15 10:00	07-Apr-15 21:00
SC05494-02	Waste Pile 2	Soil	07-Apr-15 09:30	07-Apr-15 21:00
SC05494-03	TB	Methanol/Deionized Water	07-Apr-15 00:00	07-Apr-15 21:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.  
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110  
Connecticut # PH-0777  
Florida # E87936  
Maine # MA138  
New Hampshire # 2538  
New Jersey # MA011  
New York # 11393  
Pennsylvania # 68-04426/68-02924  
Rhode Island # LAO00098  
USDA # S-51435



Authorized by:

Nicole Leja  
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 75 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

*Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our Quality web page at [www.spectrum-analytical.com](http://www.spectrum-analytical.com) for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).*

*Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.*

**CASE NARRATIVE:**

Data has been reported to the MDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as “<” (less than) the detection limit in this report.

The samples were received 15.3 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Soils are run on a manual load instrument. 100ug of sample (MEOH) is spiked into 5ml DI water along with the surrogate and added directly onto the instrument. Additional dilution factors may be required to keep analyte concentration within instrument calibration range.

Method SW846 5035A is designed to use on samples containing low levels of VOCs, ranging from 0.5 to 200 ug/Kg. Target analytes that are less responsive to purge and trap may be present at concentrations over 200ug/Kg but may not be reportable in the methanol preserved vial (SW846 5030). This is the result of the inherent dilution factor required for the methanol preservation.

Analyses for Total Hardness, pH, and Total Residual Chlorine fall under the state of Pennsylvania code Chapter 252.6 accreditation by rule.

**Reactivity (40 CFR 261.23) Case Narrative:**

These samples do not exhibit the characteristics of reactivity as defined in 40 CFR 261.23, sections (1), (2) and (4); however, Spectrum Analytical, Inc. does not test for detonation, explosive reaction or potential, or forbidden explosives as defined in 40 CFR 261.23, sections (3), (6), (7) and (8).

Reactive sulfide and cyanide are tested at a pH of 2 and not tested at all conditions between pH 2 and 12.5 as stated in 40 CFR 261.23, section (5); thus reactive cyanide and sulfide results as reported in this document can not be used to support the nonreactive properties of these samples.

The responsibility falls on the generator to use knowledge of the waste to determine if the waste meets or does not meet the descriptive, prose definition of reactivity.

**See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.**

**SW846 1030**

**Samples:**

SC05494-01                      *Waste Pile 1*

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A hold time of 24 hours has been set to expedite the analyses through the laboratory. However, the hold time for Ignitability is not specified within the method other than to state that the samples should be analyzed as soon as possible.

Ignitability by Definition

SC05494-02                      *Waste Pile 2*

---

A hold time of 24 hours has been set to expedite the analyses through the laboratory. However, the hold time for Ignitability is not specified within the method other than to state that the samples should be analyzed as soon as possible.

Ignitability by Definition

**SW846 1311/7470A**

**Duplicates:**

1506937-DUP1                      *Source: SC05494-02*

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## **SW846 1311/7470A**

### **Duplicates:**

1506937-DUP1      *Source: SC05494-02*

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The Reporting Limit has been raised to account for matrix interference.

Mercury

### **Samples:**

SC05494-02      *Waste Pile 2*

---

The Reporting Limit has been raised to account for matrix interference.

Mercury

## **SW846 1311/8260C**

### **Spikes:**

1507187-MS1      *Source: SC05494-01*

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The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

2-Butanone (MEK)

## **SW846 1311/8270D**

### **Samples:**

S503442-CCV1

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Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,4,5-Trichlorophenol (21.2%)

This affected the following samples:

1506941-BLK1

1506941-BS1

1506941-BSD1

Waste Pile 1

Waste Pile 2

## **SW846 6010C**

### **Laboratory Control Samples:**

1506886 SRM/SRMD

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Barium percent recoveries (83/77) are outside individual acceptance criteria (82.03-117.36), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

Waste Pile 1

Waste Pile 2

## **SW846 8260C**

### **Calibration:**

1504015

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## SW846 8260C

### Calibration:

1504015

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Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene  
1,2,4-Trichlorobenzene  
1,2-Dibromo-3-chloropropane  
1,4-Dioxane  
2,2-Dichloropropane  
2-Butanone (MEK)  
2-Hexanone (MBK)  
4-Methyl-2-pentanone (MIBK)  
Bromoform  
Carbon tetrachloride  
cis-1,3-Dichloropropene  
Dibromochloromethane  
Ethyl tert-butyl ether  
Naphthalene  
trans-1,3-Dichloropropene  
trans-1,4-Dichloro-2-butene

This affected the following samples:

1507054-BLK1  
1507054-BS1  
1507054-BSD1  
S503006-ICV1  
S503285-CCV1  
TB  
Waste Pile 1  
Waste Pile 2

### Samples:

S503043-CCV1

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Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Dichlorodifluoromethane (Freon12) (26.1%)  
Trichlorofluoromethane (Freon 11) (25.3%)

This affected the following samples:

1506558-BLK1  
1506558-BS1  
1506558-BSD1

S503285-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (26.9%)

This affected the following samples:

1507054-BLK1  
1507054-BS1  
1507054-BSD1  
TB  
Waste Pile 1  
Waste Pile 2

SC05494-02RE1      *Waste Pile 2*

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## **SW846 8260C**

### **Samples:**

SC05494-02RE1      *Waste Pile 2*

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Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates with three required by program methods.

Dibromofluoromethane

## **SW846 8270D**

### **Calibration:**

1503056

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Analyte quantified by quadratic equation type calibration.

2,4-Dinitrophenol  
4,6-Dinitro-2-methylphenol  
4-Nitrophenol  
Benzidine  
Benzoic acid

This affected the following samples:

S502322-ICV1

### **Laboratory Control Samples:**

1506751 BS

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Benzidine percent recovery 30 (40-140) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

Waste Pile 1  
Waste Pile 2

1507303 BS

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Benzidine percent recovery 30 (40-140) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

Waste Pile 2

Benzoic acid percent recovery 16 (30-130) is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

Waste Pile 2

### **Spikes:**

1506751-MS1      *Source: SC05494-01*

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Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Benzidine

**SW846 8270D**

**Spikes:**

1506751-MS1                      *Source: SC05494-01*

---

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

- 2,4,6-Trichlorophenol
- 2,4-Dinitrophenol
- 3,3'-Dichlorobenzidine
- 4,6-Dinitro-2-methylphenol
- 4-Chloroaniline
- 4-Nitrophenol
- Aniline
- Benzoic acid
- Benzyl alcohol
- Hexachlorocyclopentadiene
- Pentachlorophenol

1506751-MSD1                      *Source: SC05494-01*

---

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

- Benzidine

RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.

- 4-Chloroaniline
- Benzo (g,h,i) perylene
- Dibenzo (a,h) anthracene
- Hexachlorocyclopentadiene
- Indeno (1,2,3-cd) pyrene

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

- 2,4-Dinitrophenol
- 3,3'-Dichlorobenzidine
- 4,6-Dinitro-2-methylphenol
- 4-Nitrophenol
- Aniline
- Benzo (g,h,i) perylene
- Benzoic acid
- Benzyl alcohol
- Hexachlorocyclopentadiene
- Pentachlorophenol

**Duplicates:**

1506751-DUP1                      *Source: SC05494-02*

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Duplicate analysis confirmed surrogate failure due to matrix effects.

- 2,4,6-Tribromophenol
- 2-Fluorophenol

**Samples:**

S503444-CCV1

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**SW846 8270D**

**Samples:**

S503444-CCV1

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Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

- 2-Nitroaniline (24.0%)
- 3-Nitroaniline (22.3%)
- 4-Nitroaniline (26.0%)
- Benzo (b) fluoranthene (20.7%)
- Benzo (k) fluoranthene (28.4%)
- Di-n-octyl phthalate (45.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

- 2,4-Dinitrophenol (-29.4%)
- Benzidine (-88.1%)
- Benzoic acid (-37.0%)

This affected the following samples:

- 1506751-DUP1
- 1506751-MS1
- 1506751-MSD1
- Waste Pile 1
- Waste Pile 2

S503489-CCV1

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Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

- Azobenzene/Diphenyldiazene (24.4%)
- Benzo (g,h,i) perylene (23.3%)
- Bis(2-chloroisopropyl)ether (25.7%)

This affected the following samples:

- 1507303-BLK1
- 1507303-BS1

S503492-CCV1

---

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

- 3-Nitroaniline (21.2%)
- 4-Nitroaniline (25.9%)
- Azobenzene/Diphenyldiazene (29.3%)
- Bis(2-chloroisopropyl)ether (29.2%)
- Bis(2-ethylhexyl)phthalate (20.8%)
- Di-n-octyl phthalate (20.6%)
- N-Nitrosodi-n-propylamine (24.7%)

This affected the following samples:

- Waste Pile 2

SC05494-02                      *Waste Pile 2*

---

Duplicate analysis confirmed surrogate failure due to matrix effects.

- 2,4,6-Tribromophenol
- 2-Fluorophenol
- Phenol-d5

SC05494-02RE1                      *Waste Pile 2*

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**SW846 8270D**

**Samples:**

SC05494-02RE1      *Waste Pile 2*

---

Duplicate analysis confirmed surrogate failure due to matrix effects.

2,4,6-Tribromophenol

2-Fluorophenol

Phenol-d5

## Sample Acceptance Check Form

Client: Gilbane Building Co.  
 Project: Onondaga Lakeview Amphitheater-NY / 6573  
 Work Order: SC05494  
 Sample(s) received on: 4/7/2015

*The following outlines the condition of samples for the attached Chain of Custody upon receipt.*

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Were samples received at a temperature of $\leq 6^{\circ}\text{C}$ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

Waste Pile 1

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Volatile Organic Compounds**

	TCLP Extraction	Completed		N/A			1	SW846 1311	14-Apr-15	15-Apr-15	CMB	1507031	X
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction			DT	1506463	

Re-analysis of Volatile Organic Compounds

by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.11 g

76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 10.0	U	µg/kg dry	26.1	10.0	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
67-64-1	Acetone	< 175	U	µg/kg dry	261	175	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 25.1	U	µg/kg dry	26.1	25.1	1	"	"	"	"	"	X
71-43-2	Benzene	< 4.8	U	µg/kg dry	26.1	4.8	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 4.8	U	µg/kg dry	26.1	4.8	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 13.2	U	µg/kg dry	26.1	13.2	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 17.4	U	µg/kg dry	26.1	17.4	1	"	"	"	"	"	X
75-25-2	Bromoform	< 24.9	U	µg/kg dry	26.1	24.9	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 14.9	U	µg/kg dry	52.3	14.9	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 31.3	U	µg/kg dry	261	31.3	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 7.5	U	µg/kg dry	26.1	7.5	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 20.4	U	µg/kg dry	26.1	20.4	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 17.2	U	µg/kg dry	26.1	17.2	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 16.0	U	µg/kg dry	52.3	16.0	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 21.4	U	µg/kg dry	26.1	21.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 4.2	U	µg/kg dry	26.1	4.2	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 14.5	U	µg/kg dry	52.3	14.5	1	"	"	"	"	"	X
67-66-3	Chloroform	< 8.7	U	µg/kg dry	26.1	8.7	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.8	U	µg/kg dry	52.3	10.8	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 6.8	U	µg/kg dry	26.1	6.8	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 7.1	U	µg/kg dry	26.1	7.1	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 37.8	U	µg/kg dry	52.3	37.8	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 17.7	U	µg/kg dry	26.1	17.7	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 17.5	U	µg/kg dry	26.1	17.5	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 13.6	U	µg/kg dry	26.1	13.6	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.5	U	µg/kg dry	26.1	4.5	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.3	U	µg/kg dry	26.1	5.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 6.4	U	µg/kg dry	26.1	6.4	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 9.0	U	µg/kg dry	52.3	9.0	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 16.9	U	µg/kg dry	26.1	16.9	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 6.4	U	µg/kg dry	26.1	6.4	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 19.6	U	µg/kg dry	26.1	19.6	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 9.6	U	µg/kg dry	26.1	9.6	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 13.9	U	µg/kg dry	26.1	13.9	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 13.7	U	µg/kg dry	26.1	13.7	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 13.5	U	µg/kg dry	26.1	13.5	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 12.4	U	µg/kg dry	26.1	12.4	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 6.5	U	µg/kg dry	26.1	6.5	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 15.8	U	µg/kg dry	26.1	15.8	1	"	"	"	"	"	X

*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

Waste Pile 1

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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Volatile Organic Compounds

Re-analysis of Volatile Organic Compounds

by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.11 g

10061-02-6	trans-1,3-Dichloropropene	< 13.7	U	µg/kg dry	26.1	13.7	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
100-41-4	Ethylbenzene	< 4.6	U	µg/kg dry	26.1	4.6	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 9.8	U	µg/kg dry	26.1	9.8	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 28.7	U	µg/kg dry	261	28.7	1	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 5.0	U	µg/kg dry	26.1	5.0	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 24.5	U	µg/kg dry	26.1	24.5	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 10.1	U	µg/kg dry	26.1	10.1	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 49.3	U	µg/kg dry	261	49.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 7.6	U	µg/kg dry	52.3	7.6	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 24.0	U	µg/kg dry	26.1	24.0	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 25.3	U	µg/kg dry	26.1	25.3	1	"	"	"	"	"	X
100-42-5	Styrene	< 4.5	U	µg/kg dry	26.1	4.5	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 22.2	U	µg/kg dry	26.1	22.2	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 22.1	U	µg/kg dry	26.1	22.1	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.0	U	µg/kg dry	26.1	10.0	1	"	"	"	"	"	X
108-88-3	Toluene	< 6.0	U	µg/kg dry	26.1	6.0	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 6.6	U	µg/kg dry	26.1	6.6	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 7.8	U	µg/kg dry	26.1	7.8	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 8.2	U	µg/kg dry	26.1	8.2	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 6.8	U	µg/kg dry	26.1	6.8	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 19.0	U	µg/kg dry	26.1	19.0	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 4.5	U	µg/kg dry	26.1	4.5	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 14.1	U	µg/kg dry	26.1	14.1	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 19.6	U	µg/kg dry	26.1	19.6	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 6.6	U	µg/kg dry	26.1	6.6	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 7.5	U	µg/kg dry	26.1	7.5	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 9.5	U	µg/kg dry	26.1	9.5	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 5.2	U	µg/kg dry	52.3	5.2	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.6	U	µg/kg dry	26.1	5.6	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 28.1	U	µg/kg dry	52.3	28.1	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 23.7	U	µg/kg dry	26.1	23.7	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 8.1	U	µg/kg dry	26.1	8.1	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 18.4	U	µg/kg dry	26.1	18.4	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 4.3	U	µg/kg dry	26.1	4.3	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 152	U	µg/kg dry	261	152	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 454	U	µg/kg dry	523	454	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	< 41.8	U	µg/kg dry	131	41.8	1	"	"	"	"	"	X
64-17-5	Ethanol	< 978	U	µg/kg dry	10500	978	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	103			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	108			70-130 %			"	"	"	"	"	

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Sample Identification

Waste Pile 1

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Volatile Organic Compounds**

Re-analysis of Volatile Organic Compounds

by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.11 g

1868-53-7	Dibromofluoromethane	104			70-130 %			SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	
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TCLP Volatile Organic Compounds by

GC/MS(TCL)

Prepared by method SW846 5030 Water MS

Initial weight: 5 ml

71-43-2	Benzene	< 0.9	U, D	µg/l	5.0	0.9	5	SW846 1311/8260C	16-Apr-15	16-Apr-15	GMA	1507187	
78-93-3	2-Butanone (MEK)	< 6.2	U, D	µg/l	50.0	6.2	5	"	"	"	"	"	"
56-23-5	Carbon tetrachloride	< 1.1	U, D	µg/l	5.0	1.1	5	"	"	"	"	"	"
108-90-7	Chlorobenzene	< 1.0	U, D	µg/l	5.0	1.0	5	"	"	"	"	"	"
67-66-3	Chloroform	< 2.0	U, D	µg/l	5.0	2.0	5	"	"	"	"	"	"
107-06-2	1,2-Dichloroethane	< 0.8	U, D	µg/l	5.0	0.8	5	"	"	"	"	"	"
75-35-4	1,1-Dichloroethene	< 1.4	U, D	µg/l	5.0	1.4	5	"	"	"	"	"	"
127-18-4	Tetrachloroethene	< 2.9	U, D	µg/l	5.0	2.9	5	"	"	"	"	"	"
79-01-6	Trichloroethene	< 1.9	U, D	µg/l	5.0	1.9	5	"	"	"	"	"	"
75-01-4	Vinyl chloride	< 1.7	U, D	µg/l	5.0	1.7	5	"	"	"	"	"	"

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92			70-130 %			"	"	"	"	"	"
2037-26-5	Toluene-d8	99			70-130 %			"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	96			70-130 %			"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	98			70-130 %			"	"	"	"	"	"

**Semivolatile Organic Compounds by GCMS**

TCLP Extraction

Prepared by method SW846 1311

TCLP Extraction	0.00	U	N/A				1	SW846 1311	13-Apr-15	15-Apr-15	CMB	1506905	X
Final pH of leachate	6.52		N/A				1	"	"	"	"	"	"

TCLP Extraction for PCBs

Prepared by method SW846 1312

TCLP Extraction	Completed		N/A				1	"	"	15-Apr-15	"	1506904	X
Final pH of leachate	6.58		N/A				1	"	"	"	"	"	"

TCLP Extraction for Semivolatiles

Prepared by method SW846 1311

TCLP Extraction	Completed		N/A				1	"	"	15-Apr-15	"	1506906	X
Final pH of leachate	6.61		N/A				1	"	"	"	"	"	"

**Semivolatile Organic Compounds**

Prepared by method SW846 3545A

83-32-9	Acenaphthene	< 48.5	U	µg/kg dry	208	48.5	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
208-96-8	Acenaphthylene	< 44.1	U	µg/kg dry	208	44.1	1	"	"	"	"	"	X
62-53-3	Aniline	< 212	U	µg/kg dry	1030	212	1	"	"	"	"	"	X
120-12-7	Anthracene	< 47.6	U	µg/kg dry	208	47.6	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 248	U	µg/kg dry	1030	248	1	"	"	"	"	"	
92-87-5	Benzidine	< 252	U	µg/kg dry	1030	252	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	53.0	J	µg/kg dry	208	43.1	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 43.3	U	µg/kg dry	208	43.3	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	54.1	J	µg/kg dry	208	47.4	1	"	"	"	"	"	X
191-24-2	Benzo (g,h,i) perylene	< 45.1	U	µg/kg dry	208	45.1	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 1

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3545A</u>													
207-08-9	Benzo (k) fluoranthene	< 47.4	U	µg/kg dry	208	47.4	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
65-85-0	Benzoic acid	< 240	U	µg/kg dry	1030	240	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 189	U	µg/kg dry	1030	189	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 188	U	µg/kg dry	1030	188	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 187	U	µg/kg dry	521	187	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 187	U	µg/kg dry	521	187	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 257	U	µg/kg dry	521	257	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 208	U	µg/kg dry	1030	208	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 228	U	µg/kg dry	1030	228	1	"	"	"	"	"	X
86-74-8	Carbazole	< 265	U	µg/kg dry	521	265	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 213	U	µg/kg dry	1030	213	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 212	U	µg/kg dry	521	212	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 181	U	µg/kg dry	1030	181	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 184	U	µg/kg dry	521	184	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 193	U	µg/kg dry	1030	193	1	"	"	"	"	"	X
218-01-9	Chrysene	<b>53.0</b>	J	µg/kg dry	208	50.8	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 38.2	U	µg/kg dry	208	38.2	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 38.2	U	µg/kg dry	521	38.2	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 173	U	µg/kg dry	1030	173	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 183	U	µg/kg dry	1030	183	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 170	U	µg/kg dry	1030	170	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 209	U	µg/kg dry	1030	209	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 177	U	µg/kg dry	521	177	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 215	U	µg/kg dry	1030	215	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 203	U	µg/kg dry	1030	203	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 176	U	µg/kg dry	1030	176	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 231	U	µg/kg dry	1030	231	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 274	U	µg/kg dry	1030	274	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 271	U	µg/kg dry	1030	271	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 215	U	µg/kg dry	521	215	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 202	U	µg/kg dry	521	202	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 222	U	µg/kg dry	1030	222	1	"	"	"	"	"	X
206-44-0	Fluoranthene	<b>117</b>	J	µg/kg dry	208	52.2	1	"	"	"	"	"	X
86-73-7	Fluorene	< 49.8	U	µg/kg dry	208	49.8	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 228	U	µg/kg dry	521	228	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 166	U	µg/kg dry	521	166	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 190	U	µg/kg dry	521	190	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 200	U	µg/kg dry	521	200	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 42.5	U	µg/kg dry	208	42.5	1	"	"	"	"	"	X
78-59-1	Isophorone	< 182	U	µg/kg dry	521	182	1	"	"	"	"	"	X
91-57-6	2-Methylnaphthalene	< 42.9	U	µg/kg dry	208	42.9	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 1

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Semivolatile Organic Compounds by GCMS**

Semivolatile Organic Compounds

Prepared by method SW846 3545A

95-48-7	2-Methylphenol	< 185	U	µg/kg dry	1030	185	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 232	U	µg/kg dry	1030	232	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 42.4	U	µg/kg dry	208	42.4	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 206	U	µg/kg dry	1030	206	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 246	U	µg/kg dry	1030	246	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 298	U	µg/kg dry	521	298	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 202	U	µg/kg dry	521	202	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 172	U	µg/kg dry	521	172	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 278	U	µg/kg dry	4120	278	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 204	U	µg/kg dry	521	204	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 222	U	µg/kg dry	521	222	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 242	U	µg/kg dry	1030	242	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 245	U	µg/kg dry	1030	245	1	"	"	"	"	"	X
85-01-8	Phenanthrene	73.8	J	µg/kg dry	208	50.8	1	"	"	"	"	"	X
108-95-2	Phenol	< 187	U	µg/kg dry	1030	187	1	"	"	"	"	"	X
129-00-0	Pyrene	110	J	µg/kg dry	208	44.3	1	"	"	"	"	"	X
110-86-1	Pyridine	< 223	U	µg/kg dry	1030	223	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 164	U	µg/kg dry	1030	164	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 52.6	U	µg/kg dry	208	52.6	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 213	U	µg/kg dry	1030	213	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 197	U	µg/kg dry	521	197	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 220	U	µg/kg dry	1030	220	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzen e	< 187	U	µg/kg dry	1030	187	1	"	"	"	"	"	X

Surrogate recoveries:

321-60-8	2-Fluorobiphenyl	65			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	71			30-130 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	74			30-130 %			"	"	"	"	"	
4165-62-2	Phenol-d5	77			30-130 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	84			30-130 %			"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	38			30-130 %			"	"	"	"	"	

TCLP Semivolatiles (TCL)

Prepared by method SW846 3535A

106-46-7	1,4-Dichlorobenzene	< 2.02	U	µg/l	5.00	2.02	1	SW846 1311/8270D	14-Apr-15	16-Apr-15	MSL	1506941	X
121-14-2	2,4-Dinitrotoluene	< 2.38	U	µg/l	5.00	2.38	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.03	U	µg/l	5.00	2.03	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 2.14	U	µg/l	5.00	2.14	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 2.22	U	µg/l	10.0	2.22	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 2.12	U	µg/l	5.00	2.12	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X
110-86-1	Pyridine	< 1.62	U	µg/l	5.00	1.62	1	"	"	"	"	"	X

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Sample Identification

**Waste Pile 1**

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Matrix

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**Semivolatile Organic Compounds by GCMS**

TCLP Semivolatiles (TCL)

Prepared by method SW846 3535A

95-95-4	2,4,5-Trichlorophenol	< 2.09	U	µg/l	5.00	2.09	1	SW846 1311/8270D	14-Apr-15	16-Apr-15	MSL	1506941	X
88-06-2	2,4,6-Trichlorophenol	< 1.96	U	µg/l	5.00	1.96	1	"	"	"	"	"	X

*Surrogate recoveries:*

321-60-8	2-Fluorobiphenyl	86			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	80			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	93			30-130 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	97			30-130 %			"	"	"	"	"	

**Semivolatile Organic Compounds by GC**

TCLP Pesticides

Prepared by method SW846 3535A

58-89-9	gamma-BHC (Lindane)	< 0.016	U	µg/l	0.032	0.016	1	SW846 1311/8081B	14-Apr-15	16-Apr-15	TG	1506940	X
76-44-8	Heptachlor	< 0.013	U	µg/l	0.032	0.013	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.016	U	µg/l	0.032	0.016	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.015	U	µg/l	0.021	0.015	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 0.016	U	µg/l	0.032	0.016	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.018	U	µg/l	0.042	0.018	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.015	U	µg/l	0.042	0.015	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.017	U	µg/l	0.042	0.017	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.024	U	µg/l	0.042	0.024	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.016	U	µg/l	0.042	0.016	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.020	U	µg/l	0.042	0.020	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.384	U	µg/l	0.526	0.384	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.213	U	µg/l	0.368	0.213	1	"	"	"	"	"	X

*Surrogate recoveries:*

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	87			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	82			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	49			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	42			30-150 %			"	"	"	"	"	

Organochlorine Pesticides

Prepared by method SW846 3545A

319-84-6	alpha-BHC	< 1.71	U	µg/kg dry	15.7	1.71	1	SW846 8081B	09-Apr-15	15-Apr-15	TG	1506599	X
319-85-7	beta-BHC	< 2.24	U	µg/kg dry	15.7	2.24	1	"	"	"	"	"	X
319-86-8	delta-BHC	< 1.91	U	µg/kg dry	15.7	1.91	1	"	"	"	"	"	X
58-89-9	gamma-BHC (Lindane)	< 1.96	U	µg/kg dry	9.42	1.96	1	"	"	"	"	"	X
76-44-8	Heptachlor	< 1.98	U	µg/kg dry	15.7	1.98	1	"	"	"	"	"	X
309-00-2	Aldrin	< 1.95	U	µg/kg dry	15.7	1.95	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 2.25	U	µg/kg dry	15.7	2.25	1	"	"	"	"	"	X
959-98-8	Endosulfan I	< 2.07	U	µg/kg dry	15.7	2.07	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 1.97	U	µg/kg dry	15.7	1.97	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 1.97	U	µg/kg dry	15.7	1.97	1	"	"	"	"	"	X
72-20-8	Endrin	< 2.53	U	µg/kg dry	25.1	2.53	1	"	"	"	"	"	X

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Sample Identification

**Waste Pile 1**

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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**Semivolatile Organic Compounds by GC**

Organochlorine Pesticides

Prepared by method SW846 3545A

33213-65-9	Endosulfan II	< 2.03	U	µg/kg dry	25.1	2.03	1	SW846 8081B	09-Apr-15	15-Apr-15	TG	1506599	X
72-54-8	4,4'-DDD (p,p')	< 1.88	U	µg/kg dry	25.1	1.88	1	"	"	"	"	"	X
1031-07-8	Endosulfan sulfate	< 2.24	U	µg/kg dry	25.1	2.24	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 1.76	U	µg/kg dry	25.1	1.76	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 2.48	U	µg/kg dry	25.1	2.48	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 2.07	U	µg/kg dry	25.1	2.07	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 2.45	U	µg/kg dry	25.1	2.45	1	"	"	"	"	"	X
5103-71-9	alpha-Chlordane	< 2.25	U	µg/kg dry	15.7	2.25	1	"	"	"	"	"	X
5566-34-7	gamma-Chlordane	< 1.82	U	µg/kg dry	15.7	1.82	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 125	U	µg/kg dry	314	125	1	"	"	"	"	"	X
57-74-9	Chlordane	< 55.0	U	µg/kg dry	62.8	55.0	1	"	"	"	"	"	X
15972-60-8	Alachlor	< 2.71	U	µg/kg dry	15.7	2.71	1	"	"	"	"	"	

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	37			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	33			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	31			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	31			30-150 %			"	"	"	"	"	

TCLP Polychlorinated Biphenyls

Prepared by method SW846 3535A

12674-11-2	Aroclor-1016	< 0.0737	U	µg/l	0.211	0.0737	1	SW846 1311/8082A	14-Apr-15	15-Apr-15	TNS	1506965	X
11104-28-2	Aroclor-1221	< 0.162	U	µg/l	0.211	0.162	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 0.0832	U	µg/l	0.211	0.0832	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 0.116	U	µg/l	0.211	0.116	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 0.102	U	µg/l	0.211	0.102	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 0.0642	U	µg/l	0.211	0.0642	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 0.0600	U	µg/l	0.211	0.0600	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 0.168	U	µg/l	0.211	0.168	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 0.0768	U	µg/l	0.211	0.0768	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	70			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	70			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	35			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	45			30-150 %			"	"	"	"	"	

Polychlorinated Biphenyls

Prepared by method SW846 3545A

12674-11-2	Aroclor-1016	< 55.6	U	µg/kg dry	61.6	55.6	1	SW846 8082A	09-Apr-15	09-Apr-15	TNS	1506539	X
11104-28-2	Aroclor-1221	< 47.2	U	µg/kg dry	61.6	47.2	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 55.4	U	µg/kg dry	61.6	55.4	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 38.2	U	µg/kg dry	61.6	38.2	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 38.6	U	µg/kg dry	61.6	38.6	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 1  
SC05494-01

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 10:00

Received  
07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Semivolatile Organic Compounds by GC**

Polychlorinated Biphenyls

Prepared by method SW846 3545A

11097-69-1	Aroclor-1254	< 42.5	U	µg/kg dry	61.6	42.5	1	SW846 8082A	09-Apr-15	09-Apr-15	TNS	1506539	X
11096-82-5	Aroclor-1260	< 43.2	U	µg/kg dry	61.6	43.2	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 55.2	U	µg/kg dry	61.6	55.2	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 60.5	U	µg/kg dry	61.6	60.5	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	80			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	75			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	85			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %			"	"	"	"	"	

**Total Metals by EPA 6000/7000 Series Methods**

7440-22-4	Silver	< 0.344	U	mg/kg dry	4.71	0.344	1	SW846 6010C	20-Apr-15	20-Apr-15	EDT	1507406	X
7440-38-2	Arsenic	9.06		mg/kg dry	4.71	0.761	1	"	"	"	"	"	X
7440-39-3	Barium	16.2		mg/kg dry	3.05	0.181	1	"	16-Apr-15	17-Apr-15	"	1506886	X
7440-41-7	Beryllium	0.295	J	mg/kg dry	1.57	0.0628	1	"	20-Apr-15	20-Apr-15	"	1507406	X
7440-43-9	Cadmium	0.388	J	mg/kg dry	1.57	0.0502	1	"	"	"	"	"	X
7440-47-3	Chromium	11.8		mg/kg dry	3.14	0.300	1	"	"	"	"	"	X
7440-50-8	Copper	10.9		mg/kg dry	3.05	0.697	1	"	16-Apr-15	17-Apr-15	"	1506886	X
7439-97-6	Mercury	0.0822	J	mg/kg dry	0.0865	0.0057	1	SW846 7471B	"	17-Apr-15	YR	1506887	X
7439-96-5	Manganese	474		mg/kg dry	2.71	1.05	1	SW846 6010C	21-Apr-15	21-Apr-15	EDT/T	1507523	X
7440-02-0	Nickel	12.0		mg/kg dry	3.14	0.287	1	"	20-Apr-15	20-Apr-15	"	1507406	X
7439-92-1	Lead	10.0		mg/kg dry	4.71	0.866	1	"	"	"	"	"	X
7782-49-2	Selenium	< 1.18	U	mg/kg dry	4.71	1.18	1	"	"	"	"	"	X
7440-66-6	Zinc	22.4		mg/kg dry	3.14	0.724	1	"	"	"	"	"	X

**TCLP Metals by EPA 1311 & 6000/7000 Series Methods**

TCLP Extraction for Hg

Prepared by method SW846 1311

TCLP Extraction	Completed		N/A				1	SW846 1311	13-Apr-15	15-Apr-15	CMB	1506907	X
Final pH of leachate	6.62		N/A				1	"	"	"	"	"	

TCLP Extraction for Metals

Prepared by method SW846 1311

TCLP Extraction	Completed		N/A				1	"	"	"	"	"	X
Final pH of leachate	6.62		N/A				1	"	"	"	"	"	
7440-22-4	Silver	< 0.0028	U	mg/l	0.0100	0.0028	1	SW846 1311/6010C	15-Apr-15	16-Apr-15	BJW/T	1506936	X
7440-38-2	Arsenic	< 0.0051	U	mg/l	0.0080	0.0051	1	"	"	"	"	"	X
7440-39-3	Barium	0.0648	J	mg/l	0.100	0.0009	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0003	U	mg/l	0.0050	0.0003	1	"	"	"	"	"	X
7440-47-3	Chromium	0.0327		mg/l	0.0100	0.0019	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00009	U	mg/l	0.00020	0.00009	1	SW846 1311/7470A	16-Apr-15	17-Apr-15	YR	1506937	X
7439-92-1	Lead	< 0.0036	U	mg/l	0.0150	0.0036	1	SW846 1311/6010C	15-Apr-15	16-Apr-15	BJW/T	1506936	X
7782-49-2	Selenium	< 0.0086	U	mg/l	0.0300	0.0086	1	"	"	"	"	"	X

**General Chemistry Parameters**

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Sample Identification**Waste Pile 1**

SC05494-01

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 10:00

Received

07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
<b>General Chemistry Parameters</b>													
	% Solids	<b>31.8</b>		%			1	SM2540 G Mod.	08-Apr-15	08-Apr-15	DT	1506451	
57-12-5	Cyanide (total)	<b>16.3</b>		mg/kg dry	1.30	1.04	1	SW846 9012B	16-Apr-15	16-Apr-15	RLT	1507225	X
	Moisture	<b>68.2</b>		%			1	SM2540 G Mod. calculation	08-Apr-15	08-Apr-15	DT	1506452	
<b>Toxicity Characteristics</b>													
	Ignitability by Definition	<b>Negative</b>	IgHT	N/A			1	SW846 1030	08-Apr-15 12:00	08-Apr-15 14:38	BD	1506484	X
	pH	<b>10.0</b>	pH	pH Units			1	SW846 9045D	08-Apr-15 10:03	08-Apr-15 17:52	BD	1506439	X
<u>Reactivity Cyanide/Sulfide</u>													
<u>Prepared by method General Preparation</u>													
	Reactivity	<b>See Narrative</b>		mg/kg dry			1	SW846 Ch. 7.3	09-Apr-15	09-Apr-15	TN	1506573	
57-12-5	Reactive Cyanide	< 25.0	U	mg/kg dry	25.0	25.0	1	"	"	"	"	"	
18496-25-8	Reactive Sulfide	< 50.0	U	mg/kg dry	50.0	50.0	1	"	"	"	"	"	

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Sample Identification

**Waste Pile 2**  
SC05494-02

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 09:30

Received  
07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Volatile Organic Compounds**

	TCLP Extraction	Completed		N/A			1	SW846 1311	14-Apr-15	15-Apr-15	CMB	1507031	X
	VOC Extraction	Field extracted		N/A			1	VOC Soil Extraction			DT	1506463	

Re-analysis of Volatile Organic Compounds  
by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.51 g

76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 6.8	U	µg/kg dry	18.0	6.8	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
67-64-1	Acetone	184	J	µg/kg dry	215	120	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 17.3	U	µg/kg dry	18.0	17.3	1	"	"	"	"	"	X
71-43-2	Benzene	< 3.3	U	µg/kg dry	18.0	3.3	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 3.3	U	µg/kg dry	18.0	3.3	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 9.1	U	µg/kg dry	18.0	9.1	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 12.0	U	µg/kg dry	18.0	12.0	1	"	"	"	"	"	X
75-25-2	Bromoform	< 17.1	U	µg/kg dry	18.0	17.1	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.2	U	µg/kg dry	35.9	10.2	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 21.5	U	µg/kg dry	180	21.5	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.1	U	µg/kg dry	18.0	5.1	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 14.0	U	µg/kg dry	18.0	14.0	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 11.8	U	µg/kg dry	18.0	11.8	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 11.0	U	µg/kg dry	35.9	11.0	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 14.7	U	µg/kg dry	18.0	14.7	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 2.9	U	µg/kg dry	18.0	2.9	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	U	µg/kg dry	35.9	10.0	1	"	"	"	"	"	X
67-66-3	Chloroform	< 6.0	U	µg/kg dry	18.0	6.0	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 7.4	U	µg/kg dry	35.9	7.4	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 4.7	U	µg/kg dry	18.0	4.7	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 4.9	U	µg/kg dry	18.0	4.9	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 25.9	U	µg/kg dry	35.9	25.9	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 12.2	U	µg/kg dry	18.0	12.2	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 12.0	U	µg/kg dry	18.0	12.0	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 9.3	U	µg/kg dry	18.0	9.3	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 3.1	U	µg/kg dry	18.0	3.1	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 3.6	U	µg/kg dry	18.0	3.6	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.4	U	µg/kg dry	18.0	4.4	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 6.2	U	µg/kg dry	35.9	6.2	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 11.6	U	µg/kg dry	18.0	11.6	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 4.4	U	µg/kg dry	18.0	4.4	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 13.5	U	µg/kg dry	18.0	13.5	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 6.6	U	µg/kg dry	18.0	6.6	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 9.5	U	µg/kg dry	18.0	9.5	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 9.4	U	µg/kg dry	18.0	9.4	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 9.3	U	µg/kg dry	18.0	9.3	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 8.5	U	µg/kg dry	18.0	8.5	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 4.5	U	µg/kg dry	18.0	4.5	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 10.8	U	µg/kg dry	18.0	10.8	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2  
SC05494-02

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 09:30

Received  
07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Volatile Organic Compounds**

Re-analysis of Volatile Organic Compounds  
by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.51 g

10061-02-6	trans-1,3-Dichloropropene	< 9.4	U	µg/kg dry	18.0	9.4	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
100-41-4	Ethylbenzene	< 3.2	U	µg/kg dry	18.0	3.2	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 6.7	U	µg/kg dry	18.0	6.7	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 19.7	U	µg/kg dry	180	19.7	1	"	"	"	"	"	X
98-82-8	Isopropylbenzene	< 3.4	U	µg/kg dry	18.0	3.4	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 16.8	U	µg/kg dry	18.0	16.8	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 6.9	U	µg/kg dry	18.0	6.9	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 33.8	U	µg/kg dry	180	33.8	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 5.2	U	µg/kg dry	35.9	5.2	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 16.4	U	µg/kg dry	18.0	16.4	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 17.4	U	µg/kg dry	18.0	17.4	1	"	"	"	"	"	X
100-42-5	Styrene	< 3.1	U	µg/kg dry	18.0	3.1	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 15.3	U	µg/kg dry	18.0	15.3	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 15.2	U	µg/kg dry	18.0	15.2	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 6.8	U	µg/kg dry	18.0	6.8	1	"	"	"	"	"	X
108-88-3	Toluene	< 4.1	U	µg/kg dry	18.0	4.1	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 4.5	U	µg/kg dry	18.0	4.5	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.4	U	µg/kg dry	18.0	5.4	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.6	U	µg/kg dry	18.0	5.6	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 4.6	U	µg/kg dry	18.0	4.6	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 13.0	U	µg/kg dry	18.0	13.0	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 3.1	U	µg/kg dry	18.0	3.1	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 9.7	U	µg/kg dry	18.0	9.7	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 13.5	U	µg/kg dry	18.0	13.5	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 4.5	U	µg/kg dry	18.0	4.5	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.2	U	µg/kg dry	18.0	5.2	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 6.5	U	µg/kg dry	18.0	6.5	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 3.5	U	µg/kg dry	35.9	3.5	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 3.8	U	µg/kg dry	18.0	3.8	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 19.3	U	µg/kg dry	35.9	19.3	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 16.3	U	µg/kg dry	18.0	16.3	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.5	U	µg/kg dry	18.0	5.5	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 12.6	U	µg/kg dry	18.0	12.6	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 2.9	U	µg/kg dry	18.0	2.9	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 105	U	µg/kg dry	180	105	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 312	U	µg/kg dry	359	312	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-butene	< 28.7	U	µg/kg dry	89.8	28.7	1	"	"	"	"	"	X
64-17-5	Ethanol	< 671	U	µg/kg dry	7180	671	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	96			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	103			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	110			70-130 %			"	"	"	"	"	

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Sample Identification

Waste Pile 2  
SC05494-02

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 09:30

Received  
07-Apr-15

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Volatile Organic Compounds**

Re-analysis of Volatile Organic Compounds  
by SW846 8260

Prepared by method SW846 5035A Soil (low level)

Initial weight: 5.51 g

1868-53-7	Dibromofluoromethane	46		SGCMSV OC	70-130 %			SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	
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TCLP Volatile Organic Compounds by GC/MS(TCL)

Prepared by method SW846 5030 Water MS

Initial weight: 5 ml

71-43-2	Benzene	< 0.9	U, D	µg/l	5.0	0.9	5	SW846 1311/8260C	16-Apr-15	16-Apr-15	GMA	1507187	
78-93-3	2-Butanone (MEK)	< 6.2	U, D	µg/l	50.0	6.2	5	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.1	U, D	µg/l	5.0	1.1	5	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0	U, D	µg/l	5.0	1.0	5	"	"	"	"	"	
67-66-3	Chloroform	< 2.0	U, D	µg/l	5.0	2.0	5	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.8	U, D	µg/l	5.0	0.8	5	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.4	U, D	µg/l	5.0	1.4	5	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 2.9	U, D	µg/l	5.0	2.9	5	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.9	U, D	µg/l	5.0	1.9	5	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.7	U, D	µg/l	5.0	1.7	5	"	"	"	"	"	

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	98			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	99			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			70-130 %			"	"	"	"	"	

**Semivolatile Organic Compounds by GCMS**

TCLP Extraction

Prepared by method SW846 1311

TCLP Extraction	0.00	U	N/A				1	SW846 1311	13-Apr-15	15-Apr-15	CMB	1506905	X
Final pH of leachate	6.88		N/A				1	"	"	"	"	"	

TCLP Extraction for PCBs

Prepared by method SW846 1312

TCLP Extraction	Completed		N/A				1	"	"	15-Apr-15	"	1506904	X
Final pH of leachate	6.64		N/A				1	"	"	"	"	"	

TCLP Extraction for Semivolatiles

Prepared by method SW846 1311

TCLP Extraction	Completed		N/A				1	"	"	15-Apr-15	"	1506906	X
Final pH of leachate	6.86		N/A				1	"	"	"	"	"	

**Semivolatile Organic Compounds**

Prepared by method SW846 3545A

83-32-9	Acenaphthene	< 37.1	U	µg/kg dry	159	37.1	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
208-96-8	Acenaphthylene	< 33.7	U	µg/kg dry	159	33.7	1	"	"	"	"	"	X
62-53-3	Aniline	< 162	U	µg/kg dry	787	162	1	"	"	"	"	"	X
120-12-7	Anthracene	< 36.4	U	µg/kg dry	159	36.4	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiazene	< 190	U	µg/kg dry	787	190	1	"	"	"	"	"	
92-87-5	Benzidine	< 193	U	µg/kg dry	787	193	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 32.9	U	µg/kg dry	159	32.9	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 33.1	U	µg/kg dry	159	33.1	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 36.2	U	µg/kg dry	159	36.2	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2  
SC05494-02

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 09:30

Received  
07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3545A</u>													
191-24-2	Benzo (g,h,i) perylene	< 34.4	U	µg/kg dry	159	34.4	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
207-08-9	Benzo (k) fluoranthene	< 36.2	U	µg/kg dry	159	36.2	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 184	U	µg/kg dry	787	184	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 145	U	µg/kg dry	787	145	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 144	U	µg/kg dry	787	144	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 143	U	µg/kg dry	398	143	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 143	U	µg/kg dry	398	143	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 196	U	µg/kg dry	398	196	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 159	U	µg/kg dry	787	159	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 174	U	µg/kg dry	787	174	1	"	"	"	"	"	X
86-74-8	Carbazole	< 202	U	µg/kg dry	398	202	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 163	U	µg/kg dry	787	163	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 162	U	µg/kg dry	398	162	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 138	U	µg/kg dry	787	138	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 141	U	µg/kg dry	398	141	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 148	U	µg/kg dry	787	148	1	"	"	"	"	"	X
218-01-9	Chrysene	< 38.9	U	µg/kg dry	159	38.9	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 29.2	U	µg/kg dry	159	29.2	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 29.2	U	µg/kg dry	398	29.2	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 132	U	µg/kg dry	787	132	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 140	U	µg/kg dry	787	140	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 130	U	µg/kg dry	787	130	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 160	U	µg/kg dry	787	160	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 135	U	µg/kg dry	398	135	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 164	U	µg/kg dry	787	164	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 155	U	µg/kg dry	787	155	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 135	U	µg/kg dry	787	135	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 177	U	µg/kg dry	787	177	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 209	U	µg/kg dry	787	209	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 207	U	µg/kg dry	787	207	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 164	U	µg/kg dry	398	164	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 154	U	µg/kg dry	398	154	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 170	U	µg/kg dry	787	170	1	"	"	"	"	"	X
206-44-0	Fluoranthene	54.8	J	µg/kg dry	159	39.9	1	"	"	"	"	"	X
86-73-7	Fluorene	< 38.1	U	µg/kg dry	159	38.1	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 174	U	µg/kg dry	398	174	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 127	U	µg/kg dry	398	127	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 145	U	µg/kg dry	398	145	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 153	U	µg/kg dry	398	153	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 32.5	U	µg/kg dry	159	32.5	1	"	"	"	"	"	X
78-59-1	Isophorone	< 139	U	µg/kg dry	398	139	1	"	"	"	"	"	X

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Sample Identification

**Waste Pile 2**  
SC05494-02

Client Project #  
6573

Matrix  
Soil

Collection Date/Time  
07-Apr-15 09:30

Received  
07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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**Semivolatile Organic Compounds by GCMS**

Semivolatile Organic Compounds  
Prepared by method SW846 3545A

91-57-6	2-Methylnaphthalene	< 32.8	U	µg/kg dry	159	32.8	1	SW846 8270D	10-Apr-15	16-Apr-15	MSL	1506751	X
95-48-7	2-Methylphenol	< 141	U	µg/kg dry	787	141	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 177	U	µg/kg dry	787	177	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 32.4	U	µg/kg dry	159	32.4	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 158	U	µg/kg dry	787	158	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 188	U	µg/kg dry	787	188	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 227	U	µg/kg dry	398	227	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 154	U	µg/kg dry	398	154	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 132	U	µg/kg dry	398	132	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 212	U	µg/kg dry	3150	212	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 156	U	µg/kg dry	398	156	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 169	U	µg/kg dry	398	169	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 185	U	µg/kg dry	787	185	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 187	U	µg/kg dry	787	187	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 38.8	U	µg/kg dry	159	38.8	1	"	"	"	"	"	X
108-95-2	Phenol	< 143	U	µg/kg dry	787	143	1	"	"	"	"	"	X
129-00-0	Pyrene	45.3	J	µg/kg dry	159	33.9	1	"	"	"	"	"	X
110-86-1	Pyridine	< 170	U	µg/kg dry	787	170	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 125	U	µg/kg dry	787	125	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 40.2	U	µg/kg dry	159	40.2	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 163	U	µg/kg dry	787	163	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 151	U	µg/kg dry	398	151	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 169	U	µg/kg dry	787	169	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzen e	< 143	U	µg/kg dry	787	143	1	"	"	"	"	"	X

Surrogate recoveries:

321-60-8	2-Fluorobiphenyl	53				30-130 %		"	"	"	"	"	
367-12-4	2-Fluorophenol	0.08	SDUP			30-130 %		"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	73				30-130 %		"	"	"	"	"	
4165-62-2	Phenol-d5	11	SDUP			30-130 %		"	"	"	"	"	
1718-51-0	Terphenyl-d14	67				30-130 %		"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	0	SDUP, U			30-130 %		"	"	"	"	"	

Re-analysis of Semivolatile Organic Compounds  
Prepared by method SW846 3545A

83-32-9	Acenaphthene	< 36.9	U	µg/kg dry	158	36.9	1	SW846 8270D	17-Apr-15	19-Apr-15	MSL	1507303	X
208-96-8	Acenaphthylene	< 33.6	U	µg/kg dry	158	33.6	1	"	"	"	"	"	X
62-53-3	Aniline	< 162	U	µg/kg dry	784	162	1	"	"	"	"	"	X
120-12-7	Anthracene	< 36.3	U	µg/kg dry	158	36.3	1	"	"	"	"	"	X
103-33-3	Azobenzene/Diphenyldiaz ene	< 189	U	µg/kg dry	784	189	1	"	"	"	"	"	
92-87-5	Benzidine	< 192	U	µg/kg dry	784	192	1	"	"	"	"	"	X
56-55-3	Benzo (a) anthracene	< 32.8	U	µg/kg dry	158	32.8	1	"	"	"	"	"	X
50-32-8	Benzo (a) pyrene	< 33.0	U	µg/kg dry	158	33.0	1	"	"	"	"	"	X
205-99-2	Benzo (b) fluoranthene	< 36.1	U	µg/kg dry	158	36.1	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2  
SC05494-02

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<b>Semivolatile Organic Compounds by GCMS</b>													
<u>Re-analysis of Semivolatile Organic Compounds</u>													
<u>Prepared by method SW846 3545A</u>													
191-24-2	Benzo (g,h,i) perylene	< 34.3	U	µg/kg dry	158	34.3	1	SW846 8270D	17-Apr-15	19-Apr-15	MSL	1507303	X
207-08-9	Benzo (k) fluoranthene	< 36.1	U	µg/kg dry	158	36.1	1	"	"	"	"	"	X
65-85-0	Benzoic acid	< 183	U	µg/kg dry	784	183	1	"	"	"	"	"	X
100-51-6	Benzyl alcohol	< 144	U	µg/kg dry	784	144	1	"	"	"	"	"	X
111-91-1	Bis(2-chloroethoxy)methane	< 143	U	µg/kg dry	784	143	1	"	"	"	"	"	X
111-44-4	Bis(2-chloroethyl)ether	< 143	U	µg/kg dry	397	143	1	"	"	"	"	"	X
108-60-1	Bis(2-chloroisopropyl)ether	< 142	U	µg/kg dry	397	142	1	"	"	"	"	"	X
117-81-7	Bis(2-ethylhexyl)phthalate	< 196	U	µg/kg dry	397	196	1	"	"	"	"	"	X
101-55-3	4-Bromophenyl phenyl ether	< 158	U	µg/kg dry	784	158	1	"	"	"	"	"	X
85-68-7	Butyl benzyl phthalate	< 174	U	µg/kg dry	784	174	1	"	"	"	"	"	X
86-74-8	Carbazole	< 202	U	µg/kg dry	397	202	1	"	"	"	"	"	X
59-50-7	4-Chloro-3-methylphenol	< 163	U	µg/kg dry	784	163	1	"	"	"	"	"	X
106-47-8	4-Chloroaniline	< 162	U	µg/kg dry	397	162	1	"	"	"	"	"	X
91-58-7	2-Chloronaphthalene	< 138	U	µg/kg dry	784	138	1	"	"	"	"	"	X
95-57-8	2-Chlorophenol	< 140	U	µg/kg dry	397	140	1	"	"	"	"	"	X
7005-72-3	4-Chlorophenyl phenyl ether	< 147	U	µg/kg dry	784	147	1	"	"	"	"	"	X
218-01-9	Chrysene	< 38.7	U	µg/kg dry	158	38.7	1	"	"	"	"	"	X
53-70-3	Dibenzo (a,h) anthracene	< 29.1	U	µg/kg dry	158	29.1	1	"	"	"	"	"	X
132-64-9	Dibenzofuran	< 29.1	U	µg/kg dry	397	29.1	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 132	U	µg/kg dry	784	132	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 139	U	µg/kg dry	784	139	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 130	U	µg/kg dry	784	130	1	"	"	"	"	"	X
91-94-1	3,3'-Dichlorobenzidine	< 159	U	µg/kg dry	784	159	1	"	"	"	"	"	X
120-83-2	2,4-Dichlorophenol	< 135	U	µg/kg dry	397	135	1	"	"	"	"	"	X
84-66-2	Diethyl phthalate	< 164	U	µg/kg dry	784	164	1	"	"	"	"	"	X
131-11-3	Dimethyl phthalate	< 154	U	µg/kg dry	784	154	1	"	"	"	"	"	X
105-67-9	2,4-Dimethylphenol	< 134	U	µg/kg dry	784	134	1	"	"	"	"	"	X
84-74-2	Di-n-butyl phthalate	< 176	U	µg/kg dry	784	176	1	"	"	"	"	"	X
534-52-1	4,6-Dinitro-2-methylphenol	< 209	U	µg/kg dry	784	209	1	"	"	"	"	"	X
51-28-5	2,4-Dinitrophenol	< 207	U	µg/kg dry	784	207	1	"	"	"	"	"	X
121-14-2	2,4-Dinitrotoluene	< 163	U	µg/kg dry	397	163	1	"	"	"	"	"	X
606-20-2	2,6-Dinitrotoluene	< 154	U	µg/kg dry	397	154	1	"	"	"	"	"	X
117-84-0	Di-n-octyl phthalate	< 169	U	µg/kg dry	784	169	1	"	"	"	"	"	X
206-44-0	Fluoranthene	< 39.8	U	µg/kg dry	158	39.8	1	"	"	"	"	"	X
86-73-7	Fluorene	< 38.0	U	µg/kg dry	158	38.0	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 173	U	µg/kg dry	397	173	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 126	U	µg/kg dry	397	126	1	"	"	"	"	"	X
77-47-4	Hexachlorocyclopentadiene	< 145	U	µg/kg dry	397	145	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 152	U	µg/kg dry	397	152	1	"	"	"	"	"	X
193-39-5	Indeno (1,2,3-cd) pyrene	< 32.4	U	µg/kg dry	158	32.4	1	"	"	"	"	"	X
78-59-1	Isophorone	< 139	U	µg/kg dry	397	139	1	"	"	"	"	"	X

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Sample Identification

**Waste Pile 2**  
SC05494-02

Client Project #  
6573

Matrix  
Soil

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07-Apr-15 09:30

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07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
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**Semivolatile Organic Compounds by GCMS**

Re-analysis of Semivolatile Organic Compounds

Prepared by method SW846 3545A

91-57-6	2-Methylnaphthalene	< 32.7	U	µg/kg dry	158	32.7	1	SW846 8270D	17-Apr-15	19-Apr-15	MSL	1507303	X
95-48-7	2-Methylphenol	< 141	U	µg/kg dry	784	141	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 177	U	µg/kg dry	784	177	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 32.3	U	µg/kg dry	158	32.3	1	"	"	"	"	"	X
88-74-4	2-Nitroaniline	< 157	U	µg/kg dry	784	157	1	"	"	"	"	"	X
99-09-2	3-Nitroaniline	< 188	U	µg/kg dry	784	188	1	"	"	"	"	"	X
100-01-6	4-Nitroaniline	< 227	U	µg/kg dry	397	227	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 154	U	µg/kg dry	397	154	1	"	"	"	"	"	X
88-75-5	2-Nitrophenol	< 131	U	µg/kg dry	397	131	1	"	"	"	"	"	X
100-02-7	4-Nitrophenol	< 212	U	µg/kg dry	3140	212	1	"	"	"	"	"	X
62-75-9	N-Nitrosodimethylamine	< 156	U	µg/kg dry	397	156	1	"	"	"	"	"	X
621-64-7	N-Nitrosodi-n-propylamine	< 169	U	µg/kg dry	397	169	1	"	"	"	"	"	X
86-30-6	N-Nitrosodiphenylamine	< 184	U	µg/kg dry	784	184	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 187	U	µg/kg dry	784	187	1	"	"	"	"	"	X
85-01-8	Phenanthrene	< 38.7	U	µg/kg dry	158	38.7	1	"	"	"	"	"	X
108-95-2	Phenol	< 143	U	µg/kg dry	784	143	1	"	"	"	"	"	X
129-00-0	Pyrene	< 33.8	U	µg/kg dry	158	33.8	1	"	"	"	"	"	X
110-86-1	Pyridine	< 170	U	µg/kg dry	784	170	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 125	U	µg/kg dry	784	125	1	"	"	"	"	"	X
90-12-0	1-Methylnaphthalene	< 40.1	U	µg/kg dry	158	40.1	1	"	"	"	"	"	X
95-95-4	2,4,5-Trichlorophenol	< 162	U	µg/kg dry	784	162	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 150	U	µg/kg dry	397	150	1	"	"	"	"	"	X
82-68-8	Pentachloronitrobenzene	< 168	U	µg/kg dry	784	168	1	"	"	"	"	"	X
95-94-3	1,2,4,5-Tetrachlorobenzene	< 142	U	µg/kg dry	784	142	1	"	"	"	"	"	X

Surrogate recoveries:

321-60-8	2-Fluorobiphenyl	51				30-130 %		"	"	"	"	"	
367-12-4	2-Fluorophenol	0.5	SDUP			30-130 %		"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	60				30-130 %		"	"	"	"	"	
4165-62-2	Phenol-d5	22	SDUP			30-130 %		"	"	"	"	"	
1718-51-0	Terphenyl-d14	58				30-130 %		"	"	"	"	"	
118-79-6	2,4,6-Tribromophenol	0.02	SDUP			30-130 %		"	"	"	"	"	

TCLP Semivolatiles (TCL)

Prepared by method SW846 3535A

106-46-7	1,4-Dichlorobenzene	< 2.02	U	µg/l	5.00	2.02	1	SW846 1311/8270D	14-Apr-15	16-Apr-15	MSL	1506941	X
121-14-2	2,4-Dinitrotoluene	< 2.38	U	µg/l	5.00	2.38	1	"	"	"	"	"	X
118-74-1	Hexachlorobenzene	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.03	U	µg/l	5.00	2.03	1	"	"	"	"	"	X
67-72-1	Hexachloroethane	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X
95-48-7	2-Methylphenol	< 2.14	U	µg/l	5.00	2.14	1	"	"	"	"	"	X
108-39-4, 106-44-5	3 & 4-Methylphenol	< 2.22	U	µg/l	10.0	2.22	1	"	"	"	"	"	X
98-95-3	Nitrobenzene	< 2.12	U	µg/l	5.00	2.12	1	"	"	"	"	"	X
87-86-5	Pentachlorophenol	< 2.15	U	µg/l	5.00	2.15	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2

SC05494-02

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Semivolatile Organic Compounds by GCMS**

TCLP Semivolatiles (TCL)

Prepared by method SW846 3535A

110-86-1	Pyridine	< 1.62	U	µg/l	5.00	1.62	1	SW846 1311/8270D	14-Apr-15	16-Apr-15	MSL	1506941	X
95-95-4	2,4,5-Trichlorophenol	< 2.09	U	µg/l	5.00	2.09	1	"	"	"	"	"	X
88-06-2	2,4,6-Trichlorophenol	< 1.96	U	µg/l	5.00	1.96	1	"	"	"	"	"	X

*Surrogate recoveries:*

321-60-8	2-Fluorobiphenyl	68			30-130 %			"	"	"	"	"	
367-12-4	2-Fluorophenol	79			15-110 %			"	"	"	"	"	
4165-60-0	Nitrobenzene-d5	58			30-130 %			"	"	"	"	"	
1718-51-0	Terphenyl-d14	81			30-130 %			"	"	"	"	"	

**Semivolatile Organic Compounds by GC**

TCLP Pesticides

Prepared by method SW846 3535A

58-89-9	gamma-BHC (Lindane)	< 0.016	U	µg/l	0.032	0.016	1	SW846 1311/8081B	14-Apr-15	16-Apr-15	TG	1506940	X
76-44-8	Heptachlor	< 0.013	U	µg/l	0.032	0.013	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 0.016	U	µg/l	0.032	0.016	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 0.015	U	µg/l	0.021	0.015	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 0.016	U	µg/l	0.032	0.016	1	"	"	"	"	"	X
72-20-8	Endrin	< 0.018	U	µg/l	0.042	0.018	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 0.015	U	µg/l	0.042	0.015	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 0.017	U	µg/l	0.042	0.017	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 0.024	U	µg/l	0.042	0.024	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 0.016	U	µg/l	0.042	0.016	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 0.020	U	µg/l	0.042	0.020	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 0.384	U	µg/l	0.526	0.384	1	"	"	"	"	"	X
57-74-9	Chlordane	< 0.213	U	µg/l	0.368	0.213	1	"	"	"	"	"	X

*Surrogate recoveries:*

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	93			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	86			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	61			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	56			30-150 %			"	"	"	"	"	

Organochlorine Pesticides

Prepared by method SW846 3545A

319-84-6	alpha-BHC	< 1.30	U	µg/kg dry	11.9	1.30	1	SW846 8081B	09-Apr-15	15-Apr-15	TG	1506599	X
319-85-7	beta-BHC	< 1.70	U	µg/kg dry	11.9	1.70	1	"	"	"	"	"	X
319-86-8	delta-BHC	< 1.45	U	µg/kg dry	11.9	1.45	1	"	"	"	"	"	X
58-89-9	gamma-BHC (Lindane)	< 1.49	U	µg/kg dry	7.14	1.49	1	"	"	"	"	"	X
76-44-8	Heptachlor	< 1.50	U	µg/kg dry	11.9	1.50	1	"	"	"	"	"	X
309-00-2	Aldrin	< 1.48	U	µg/kg dry	11.9	1.48	1	"	"	"	"	"	X
1024-57-3	Heptachlor epoxide	< 1.71	U	µg/kg dry	11.9	1.71	1	"	"	"	"	"	X
959-98-8	Endosulfan I	< 1.57	U	µg/kg dry	11.9	1.57	1	"	"	"	"	"	X
60-57-1	Dieldrin	< 1.50	U	µg/kg dry	11.9	1.50	1	"	"	"	"	"	X
72-55-9	4,4'-DDE (p,p')	< 1.50	U	µg/kg dry	11.9	1.50	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2

SC05494-02

Client Project #

6573

Matrix

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
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**Semivolatile Organic Compounds by GC**

Organochlorine Pesticides

Prepared by method SW846 3545A

72-20-8	Endrin	< 1.92	U	µg/kg dry	19.0	1.92	1	SW846 8081B	09-Apr-15	15-Apr-15	TG	1506599	X
33213-65-9	Endosulfan II	< 1.54	U	µg/kg dry	19.0	1.54	1	"	"	"	"	"	X
72-54-8	4,4'-DDD (p,p')	< 1.43	U	µg/kg dry	19.0	1.43	1	"	"	"	"	"	X
1031-07-8	Endosulfan sulfate	< 1.70	U	µg/kg dry	19.0	1.70	1	"	"	"	"	"	X
50-29-3	4,4'-DDT (p,p')	< 1.33	U	µg/kg dry	19.0	1.33	1	"	"	"	"	"	X
72-43-5	Methoxychlor	< 1.88	U	µg/kg dry	19.0	1.88	1	"	"	"	"	"	X
53494-70-5	Endrin ketone	< 1.57	U	µg/kg dry	19.0	1.57	1	"	"	"	"	"	X
7421-93-4	Endrin aldehyde	< 1.86	U	µg/kg dry	19.0	1.86	1	"	"	"	"	"	X
5103-71-9	alpha-Chlordane	< 1.70	U	µg/kg dry	11.9	1.70	1	"	"	"	"	"	X
5566-34-7	gamma-Chlordane	< 1.38	U	µg/kg dry	11.9	1.38	1	"	"	"	"	"	X
8001-35-2	Toxaphene	< 94.8	U	µg/kg dry	238	94.8	1	"	"	"	"	"	X
57-74-9	Chlordane	< 41.7	U	µg/kg dry	47.6	41.7	1	"	"	"	"	"	X
15972-60-8	Alachlor	< 2.05	U	µg/kg dry	11.9	2.05	1	"	"	"	"	"	

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	41				30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	37				30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	46				30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	38				30-150 %		"	"	"	"	"	

TCLP Polychlorinated Biphenyls

Prepared by method SW846 3535A

12674-11-2	Aroclor-1016	< 0.0737	U	µg/l	0.211	0.0737	1	SW846 1311/8082A	14-Apr-15	15-Apr-15	TNS	1506965	X
11104-28-2	Aroclor-1221	< 0.162	U	µg/l	0.211	0.162	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 0.0832	U	µg/l	0.211	0.0832	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 0.116	U	µg/l	0.211	0.116	1	"	"	"	"	"	X
12672-29-6	Aroclor-1248	< 0.102	U	µg/l	0.211	0.102	1	"	"	"	"	"	X
11097-69-1	Aroclor-1254	< 0.0642	U	µg/l	0.211	0.0642	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 0.0600	U	µg/l	0.211	0.0600	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 0.168	U	µg/l	0.211	0.168	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 0.0768	U	µg/l	0.211	0.0768	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	70				30-150 %		"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	70				30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	55				30-150 %		"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	65				30-150 %		"	"	"	"	"	

Polychlorinated Biphenyls

Prepared by method SW846 3545A

12674-11-2	Aroclor-1016	< 42.4	U	µg/kg dry	47.0	42.4	1	SW846 8082A	09-Apr-15	09-Apr-15	TNS	1506539	X
11104-28-2	Aroclor-1221	< 36.0	U	µg/kg dry	47.0	36.0	1	"	"	"	"	"	X
11141-16-5	Aroclor-1232	< 42.3	U	µg/kg dry	47.0	42.3	1	"	"	"	"	"	X
53469-21-9	Aroclor-1242	< 29.2	U	µg/kg dry	47.0	29.2	1	"	"	"	"	"	X

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Semivolatile Organic Compounds by GC

Polychlorinated Biphenyls

Prepared by method SW846 3545A

12672-29-6	Aroclor-1248	< 29.5	U	µg/kg dry	47.0	29.5	1	SW846 8082A	09-Apr-15	09-Apr-15	TNS	1506539	X
11097-69-1	Aroclor-1254	< 32.4	U	µg/kg dry	47.0	32.4	1	"	"	"	"	"	X
11096-82-5	Aroclor-1260	< 33.0	U	µg/kg dry	47.0	33.0	1	"	"	"	"	"	X
37324-23-5	Aroclor-1262	< 42.1	U	µg/kg dry	47.0	42.1	1	"	"	"	"	"	X
11100-14-4	Aroclor-1268	< 46.2	U	µg/kg dry	47.0	46.2	1	"	"	"	"	"	X

Surrogate recoveries:

10386-84-2	4,4-DB-Octafluorobiphenyl (Sr)	65			30-150 %			"	"	"	"	"	
10386-84-2	4,4-DB-Octafluorobiphenyl (Sr) [2C]	65			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr)	80			30-150 %			"	"	"	"	"	
2051-24-3	Decachlorobiphenyl (Sr) [2C]	90			30-150 %			"	"	"	"	"	

Total Metals by EPA 6000/7000 Series Methods

7440-22-4	Silver	< 0.244	U	mg/kg dry	3.34	0.244	1	SW846 6010C	20-Apr-15	20-Apr-15	EDT	1507406	X
7440-38-2	Arsenic	6.63		mg/kg dry	3.34	0.539	1	"	"	"	"	"	X
7440-39-3	Barium	23.6		mg/kg dry	2.10	0.125	1	"	16-Apr-15	17-Apr-15	"	1506886	X
7440-41-7	Beryllium	0.229	J	mg/kg dry	1.11	0.0445	1	"	20-Apr-15	20-Apr-15	"	1507406	X
7440-43-9	Cadmium	0.230	J	mg/kg dry	1.11	0.0356	1	"	"	"	"	"	X
7440-47-3	Chromium	7.32		mg/kg dry	2.23	0.213	1	"	"	"	"	"	X
7440-50-8	Copper	6.89		mg/kg dry	2.10	0.479	1	"	16-Apr-15	17-Apr-15	"	1506886	X
7439-97-6	Mercury	0.0525	J	mg/kg dry	0.0678	0.0044	1	SW846 7471B	"	17-Apr-15	YR	1506887	X
7439-96-5	Manganese	308		mg/kg dry	2.26	0.873	1	SW846 6010C	21-Apr-15	21-Apr-15	EDT/T	1507523	X
7440-02-0	Nickel	8.18		mg/kg dry	2.23	0.204	1	"	20-Apr-15	20-Apr-15	"	1507406	X
7439-92-1	Lead	5.25		mg/kg dry	3.34	0.614	1	"	"	"	"	"	X
7782-49-2	Selenium	< 0.836	U	mg/kg dry	3.34	0.836	1	"	"	"	"	"	X
7440-66-6	Zinc	14.4		mg/kg dry	2.23	0.513	1	"	"	"	"	"	X

TCLP Metals by EPA 1311 & 6000/7000 Series Methods

TCLP Extraction for Hg

Prepared by method SW846 1311

TCLP Extraction	Completed			N/A			1	SW846 1311	13-Apr-15	15-Apr-15	CMB	1506907	X
Final pH of leachate	6.83			N/A			1	"	"	"	"	"	

TCLP Extraction for Metals

Prepared by method SW846 1311

TCLP Extraction	Completed			N/A			1	"	"	"	"	"	X
Final pH of leachate	6.83			N/A			1	"	"	"	"	"	
7440-22-4	Silver	< 0.0028	U	mg/l	0.0100	0.0028	1	SW846 1311/6010C	15-Apr-15	16-Apr-15	BJW/T	1506936	X
7440-38-2	Arsenic	< 0.0051	U	mg/l	0.0080	0.0051	1	"	"	"	"	"	X
7440-39-3	Barium	0.194		mg/l	0.100	0.0009	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0003	U	mg/l	0.0050	0.0003	1	"	"	"	"	"	X
7440-47-3	Chromium	0.0146		mg/l	0.0100	0.0019	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.00019	R01, U	mg/l	0.00040	0.00019	1	SW846 1311/7470A	16-Apr-15	17-Apr-15	YR	1506937	X
7439-92-1	Lead	< 0.0036	U	mg/l	0.0150	0.0036	1	SW846 1311/6010C	15-Apr-15	16-Apr-15	BJW/T	1506936	X
7782-49-2	Selenium	< 0.0086	U	mg/l	0.0300	0.0086	1	"	"	"	"	"	X

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Sample Identification

Waste Pile 2

SC05494-02

Client Project #

6573

Matrix

Soil

Collection Date/Time

07-Apr-15 09:30

Received

07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
<b>General Chemistry Parameters</b>													
	% Solids	41.6		%			1	SM2540 G Mod.	08-Apr-15	08-Apr-15	DT	1506451	
57-12-5	Cyanide (total)	6.85		mg/kg dry	1.11	0.889	1	SW846 9012B	16-Apr-15	16-Apr-15	RLT	1507225	X
	Moisture	58.4		%			1	SM2540 G Mod. calculation	08-Apr-15	08-Apr-15	DT	1506452	
<b>Toxicity Characteristics</b>													
	Ignitability by Definition	Negative	IgHT	N/A			1	SW846 1030	08-Apr-15 12:00	08-Apr-15 14:38	BD	1506484	X
	pH	12.2	pH	pH Units			1	SW846 9045D	08-Apr-15 10:03	08-Apr-15 17:54	BD	1506439	X
<u>Reactivity Cyanide/Sulfide</u>													
<u>Prepared by method General Preparation</u>													
	Reactivity	See Narrative		mg/kg dry			1	SW846 Ch. 7.3	09-Apr-15	09-Apr-15	TN	1506573	
57-12-5	Reactive Cyanide	< 25.0	U	mg/kg dry	25.0	25.0	1	"	"	"	"	"	
18496-25-8	Reactive Sulfide	< 50.0	U	mg/kg dry	50.0	50.0	1	"	"	"	"	"	

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Sample Identification

TB

SC05494-03

Client Project #

6573

Matrix

Methanol/Deionized  
Water

Collection Date/Time

07-Apr-15 00:00

Received

07-Apr-15

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
<b>Volatile Organic Compounds</b>													
<u>Re-analysis of Volatile Organic Compounds</u>													
<u>by SW846 8260</u>													
<u>Prepared by method SW846 5035A Soil (low level)</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.9	U	µg/kg wet	5.0	1.9	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
67-64-1	Acetone	< 33.4	U	µg/kg wet	50.0	33.4	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 4.8	U	µg/kg wet	5.0	4.8	1	"	"	"	"	"	X
71-43-2	Benzene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 2.5	U	µg/kg wet	5.0	2.5	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 3.3	U	µg/kg wet	5.0	3.3	1	"	"	"	"	"	X
75-25-2	Bromoform	< 4.8	U	µg/kg wet	5.0	4.8	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.9	U	µg/kg wet	10.0	2.9	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 6.0	U	µg/kg wet	50.0	6.0	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.4	U	µg/kg wet	5.0	1.4	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 3.9	U	µg/kg wet	5.0	3.9	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 3.3	U	µg/kg wet	5.0	3.3	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 3.1	U	µg/kg wet	10.0	3.1	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 4.1	U	µg/kg wet	5.0	4.1	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 0.8	U	µg/kg wet	5.0	0.8	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.8	U	µg/kg wet	10.0	2.8	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.7	U	µg/kg wet	5.0	1.7	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.1	U	µg/kg wet	10.0	2.1	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.3	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.4	U	µg/kg wet	5.0	1.4	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 7.2	U	µg/kg wet	10.0	7.2	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 3.4	U	µg/kg wet	5.0	3.4	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 3.4	U	µg/kg wet	5.0	3.4	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 2.6	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0	U	µg/kg wet	5.0	1.0	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.2	U	µg/kg wet	5.0	1.2	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 1.7	U	µg/kg wet	10.0	1.7	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 3.2	U	µg/kg wet	5.0	3.2	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.2	U	µg/kg wet	5.0	1.2	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 3.8	U	µg/kg wet	5.0	3.8	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.8	U	µg/kg wet	5.0	1.8	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 2.6	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 2.6	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 2.6	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 2.4	U	µg/kg wet	5.0	2.4	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.2	U	µg/kg wet	5.0	1.2	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 3.0	U	µg/kg wet	5.0	3.0	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.6	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 1.9	U	µg/kg wet	5.0	1.9	1	"	"	"	"	"	X

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Sample Identification

**TB** Client Project # 6573 Matrix Methanol/Deionized Water Collection Date/Time 07-Apr-15 00:00 Received 07-Apr-15  
 SC05494-03

**CAS No. Analyte(s) Result Flag Units \*RDL MDL Dilution Method Ref. Prepared Analyzed Analyst Batch Cert.**

**Volatile Organic Compounds**

Re-analysis of Volatile Organic Compounds

by SW846 8260

Prepared by method SW846 5035A Soil (low level)

591-78-6	2-Hexanone (MBK)	< 5.5	U	µg/kg wet	50.0	5.5	1	SW846 8260C	15-Apr-15	15-Apr-15	SJB	1507054	X
98-82-8	Isopropylbenzene	< 1.0	U	µg/kg wet	5.0	1.0	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 4.7	U	µg/kg wet	5.0	4.7	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.9	U	µg/kg wet	5.0	1.9	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 9.4	U	µg/kg wet	50.0	9.4	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 1.5	U	µg/kg wet	10.0	1.5	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 4.6	U	µg/kg wet	5.0	4.6	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 4.8	U	µg/kg wet	5.0	4.8	1	"	"	"	"	"	X
100-42-5	Styrene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 4.2	U	µg/kg wet	5.0	4.2	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 4.2	U	µg/kg wet	5.0	4.2	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.9	U	µg/kg wet	5.0	1.9	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.2	U	µg/kg wet	5.0	1.2	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.3	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.5	U	µg/kg wet	5.0	1.5	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.6	U	µg/kg wet	5.0	1.6	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.3	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 3.6	U	µg/kg wet	5.0	3.6	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 0.9	U	µg/kg wet	5.0	0.9	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 2.7	U	µg/kg wet	5.0	2.7	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 3.8	U	µg/kg wet	5.0	3.8	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.3	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.4	U	µg/kg wet	5.0	1.4	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.8	U	µg/kg wet	5.0	1.8	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 1.0	U	µg/kg wet	10.0	1.0	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.1	U	µg/kg wet	5.0	1.1	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 5.4	U	µg/kg wet	10.0	5.4	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 4.5	U	µg/kg wet	5.0	4.5	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.5	U	µg/kg wet	5.0	1.5	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 3.5	U	µg/kg wet	5.0	3.5	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 0.8	U	µg/kg wet	5.0	0.8	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 29.1	U	µg/kg wet	50.0	29.1	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 86.8	U	µg/kg wet	100	86.8	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 8.0	U	µg/kg wet	25.0	8.0	1	"	"	"	"	"	X
64-17-5	Ethanol	< 187	U	µg/kg wet	2000	187	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	91			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	102			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	102			70-130 %			"	"	"	"	"	

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506558 - SW846 5035A Soil (high level)</b>										
<b>Blank (1506558-BLK1)</b>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 19.0	U, D	µg/kg wet	19.0						
Acetone	< 334	U, D	µg/kg wet	334						
Acrylonitrile	< 48.0	U, D	µg/kg wet	48.0						
Benzene	< 9.1	U, D	µg/kg wet	9.1						
Bromobenzene	< 9.2	U, D	µg/kg wet	9.2						
Bromochloromethane	< 25.2	U, D	µg/kg wet	25.2						
Bromodichloromethane	< 33.4	U, D	µg/kg wet	33.4						
Bromoform	< 47.7	U, D	µg/kg wet	47.7						
Bromomethane	< 28.6	U, D	µg/kg wet	28.6						
2-Butanone (MEK)	< 59.9	U, D	µg/kg wet	59.9						
n-Butylbenzene	< 14.3	U, D	µg/kg wet	14.3						
sec-Butylbenzene	< 39.1	U, D	µg/kg wet	39.1						
tert-Butylbenzene	< 32.8	U, D	µg/kg wet	32.8						
Carbon disulfide	< 30.6	U, D	µg/kg wet	30.6						
Carbon tetrachloride	< 40.9	U, D	µg/kg wet	40.9						
Chlorobenzene	< 8.0	U, D	µg/kg wet	8.0						
Chloroethane	< 27.8	U, D	µg/kg wet	27.8						
Chloroform	< 16.6	U, D	µg/kg wet	16.6						
Chloromethane	< 20.6	U, D	µg/kg wet	20.6						
2-Chlorotoluene	< 13.0	U, D	µg/kg wet	13.0						
4-Chlorotoluene	< 13.6	U, D	µg/kg wet	13.6						
1,2-Dibromo-3-chloropropane	< 72.2	U, D	µg/kg wet	72.2						
Dibromochloromethane	< 33.9	U, D	µg/kg wet	33.9						
1,2-Dibromoethane (EDB)	< 33.6	U, D	µg/kg wet	33.6						
Dibromomethane	< 26.0	U, D	µg/kg wet	26.0						
1,2-Dichlorobenzene	< 8.7	U, D	µg/kg wet	8.7						
1,3-Dichlorobenzene	< 10.2	U, D	µg/kg wet	10.2						
1,4-Dichlorobenzene	< 12.2	U, D	µg/kg wet	12.2						
Dichlorodifluoromethane (Freon12)	< 17.2	U, D	µg/kg wet	17.2						
1,1-Dichloroethane	< 32.2	U, D	µg/kg wet	32.2						
1,2-Dichloroethane	< 12.2	U, D	µg/kg wet	12.2						
1,1,1-Dichloroethane	< 37.6	U, D	µg/kg wet	37.6						
cis-1,2-Dichloroethane	< 18.4	U, D	µg/kg wet	18.4						
trans-1,2-Dichloroethane	< 26.5	U, D	µg/kg wet	26.5						
1,2-Dichloropropane	< 26.2	U, D	µg/kg wet	26.2						
1,3-Dichloropropane	< 25.9	U, D	µg/kg wet	25.9						
2,2-Dichloropropane	< 23.6	U, D	µg/kg wet	23.6						
1,1,1-Dichloropropene	< 12.5	U, D	µg/kg wet	12.5						
cis-1,3-Dichloropropene	< 30.2	U, D	µg/kg wet	30.2						
trans-1,3-Dichloropropene	< 26.2	U, D	µg/kg wet	26.2						
Ethylbenzene	< 8.8	U, D	µg/kg wet	8.8						
Hexachlorobutadiene	< 18.6	U, D	µg/kg wet	18.6						
2-Hexanone (MBK)	< 54.9	U, D	µg/kg wet	54.9						
Isopropylbenzene	< 9.5	U, D	µg/kg wet	9.5						
4-Isopropyltoluene	< 46.9	U, D	µg/kg wet	46.9						
Methyl tert-butyl ether	< 19.3	U, D	µg/kg wet	19.3						
4-Methyl-2-pentanone (MIBK)	< 94.2	U, D	µg/kg wet	94.2						
Methylene chloride	< 14.6	U, D	µg/kg wet	14.6						
Naphthalene	< 45.8	U, D	µg/kg wet	45.8						
n-Propylbenzene	< 48.4	U, D	µg/kg wet	48.4						
Styrene	< 8.6	U, D	µg/kg wet	8.6						
1,1,1,2-Tetrachloroethane	< 42.5	U, D	µg/kg wet	42.5						

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506558 - SW846 5035A Soil (high level)</b>										
<b>Blank (1506558-BLK1)</b>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
1,1,2,2-Tetrachloroethane	< 42.3	U, D	µg/kg wet	42.3						
Tetrachloroethene	< 19.0	U, D	µg/kg wet	19.0						
Toluene	< 11.5	U, D	µg/kg wet	11.5						
1,2,3-Trichlorobenzene	< 12.6	U, D	µg/kg wet	12.6						
1,2,4-Trichlorobenzene	< 15.0	U, D	µg/kg wet	15.0						
1,3,5-Trichlorobenzene	< 15.7	U, D	µg/kg wet	15.7						
1,1,1-Trichloroethane	< 13.0	U, D	µg/kg wet	13.0						
1,1,2-Trichloroethane	< 36.2	U, D	µg/kg wet	36.2						
Trichloroethene	< 8.6	U, D	µg/kg wet	8.6						
Trichlorofluoromethane (Freon 11)	< 27.0	U, D	µg/kg wet	27.0						
1,2,3-Trichloropropane	< 37.5	U, D	µg/kg wet	37.5						
1,2,4-Trimethylbenzene	< 12.6	U, D	µg/kg wet	12.6						
1,3,5-Trimethylbenzene	< 14.4	U, D	µg/kg wet	14.4						
Vinyl chloride	< 18.2	U, D	µg/kg wet	18.2						
m,p-Xylene	< 9.8	U, D	µg/kg wet	9.8						
o-Xylene	< 10.6	U, D	µg/kg wet	10.6						
Tetrahydrofuran	< 53.6	U, D	µg/kg wet	53.6						
Ethyl ether	< 45.3	U, D	µg/kg wet	45.3						
Tert-amyl methyl ether	< 15.4	U, D	µg/kg wet	15.4						
Ethyl tert-butyl ether	< 35.2	U, D	µg/kg wet	35.2						
Di-isopropyl ether	< 8.2	U, D	µg/kg wet	8.2						
Tert-Butanol / butyl alcohol	< 291	U, D	µg/kg wet	291						
1,4-Dioxane	< 868	U, D	µg/kg wet	868						
trans-1,4-Dichloro-2-butene	< 80.0	U, D	µg/kg wet	80.0						
Ethanol	< 1870	U, D	µg/kg wet	1870						
<i>Surrogate: 4-Bromofluorobenzene</i>	29.9		µg/kg wet		30.0		100	70-130		
<i>Surrogate: Toluene-d8</i>	29.5		µg/kg wet		30.0		98	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	28.9		µg/kg wet		30.0		96	70-130		
<i>Surrogate: Dibromofluoromethane</i>	28.0		µg/kg wet		30.0		93	70-130		
<b>LCS (1506558-BS1)</b>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.7	D	µg/kg wet		20.0		109	70-130		
Acetone	20.8	D	µg/kg wet		20.0		104	70-130		
Acrylonitrile	18.8	D	µg/kg wet		20.0		94	70-130		
Benzene	18.6	D	µg/kg wet		20.0		93	70-130		
Bromobenzene	19.1	D	µg/kg wet		20.0		96	70-130		
Bromochloromethane	18.0	D	µg/kg wet		20.0		90	70-130		
Bromodichloromethane	17.0	D	µg/kg wet		20.0		85	70-130		
Bromoform	16.8	D	µg/kg wet		20.0		84	70-130		
Bromomethane	19.0	D	µg/kg wet		20.0		95	70-130		
2-Butanone (MEK)	19.6	D	µg/kg wet		20.0		98	70-130		
n-Butylbenzene	21.0	D	µg/kg wet		20.0		105	70-130		
sec-Butylbenzene	20.4	D	µg/kg wet		20.0		102	70-130		
tert-Butylbenzene	20.2	D	µg/kg wet		20.0		101	70-130		
Carbon disulfide	18.6	D	µg/kg wet		20.0		93	70-130		
Carbon tetrachloride	17.7	D	µg/kg wet		20.0		89	70-130		
Chlorobenzene	19.0	D	µg/kg wet		20.0		95	70-130		
Chloroethane	19.4	D	µg/kg wet		20.0		97	70-130		
Chloroform	17.0	D	µg/kg wet		20.0		85	70-130		
Chloromethane	19.9	D	µg/kg wet		20.0		100	70-130		
2-Chlorotoluene	19.2	D	µg/kg wet		20.0		96	70-130		
4-Chlorotoluene	18.7	D	µg/kg wet		20.0		93	70-130		

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506558 - SW846 5035A Soil (high level)</b>										
<b>LCS (1506558-BS1)</b>										
								<u>Prepared &amp; Analyzed: 09-Apr-15</u>		
1,2-Dibromo-3-chloropropane	16.4	D	µg/kg wet		20.0		82	70-130		
Dibromochloromethane	16.6	D	µg/kg wet		20.0		83	70-130		
1,2-Dibromoethane (EDB)	18.5	D	µg/kg wet		20.0		92	70-130		
Dibromomethane	18.6	D	µg/kg wet		20.0		93	70-130		
1,2-Dichlorobenzene	19.0	D	µg/kg wet		20.0		95	70-130		
1,3-Dichlorobenzene	19.7	D	µg/kg wet		20.0		98	70-130		
1,4-Dichlorobenzene	18.1	D	µg/kg wet		20.0		90	70-130		
Dichlorodifluoromethane (Freon12)	24.0	D	µg/kg wet		20.0		120	70-130		
1,1-Dichloroethane	18.0	D	µg/kg wet		20.0		90	70-130		
1,2-Dichloroethane	17.8	D	µg/kg wet		20.0		89	70-130		
1,1-Dichloroethene	21.8	D	µg/kg wet		20.0		109	70-130		
cis-1,2-Dichloroethene	18.3	D	µg/kg wet		20.0		91	70-130		
trans-1,2-Dichloroethene	19.0	D	µg/kg wet		20.0		95	70-130		
1,2-Dichloropropane	17.8	D	µg/kg wet		20.0		89	70-130		
1,3-Dichloropropane	18.1	D	µg/kg wet		20.0		91	70-130		
2,2-Dichloropropane	18.6	D	µg/kg wet		20.0		93	70-130		
1,1-Dichloropropene	19.9	D	µg/kg wet		20.0		99	70-130		
cis-1,3-Dichloropropene	17.8	D	µg/kg wet		20.0		89	70-130		
trans-1,3-Dichloropropene	18.1	D	µg/kg wet		20.0		90	70-130		
Ethylbenzene	19.1	D	µg/kg wet		20.0		96	70-130		
Hexachlorobutadiene	20.7	D	µg/kg wet		20.0		103	70-130		
2-Hexanone (MBK)	16.6	D	µg/kg wet		20.0		83	70-130		
Isopropylbenzene	19.7	D	µg/kg wet		20.0		98	70-130		
4-Isopropyltoluene	19.7	D	µg/kg wet		20.0		98	70-130		
Methyl tert-butyl ether	17.9	D	µg/kg wet		20.0		90	70-130		
4-Methyl-2-pentanone (MIBK)	17.4	D	µg/kg wet		20.0		87	70-130		
Methylene chloride	18.4	D	µg/kg wet		20.0		92	70-130		
Naphthalene	21.0	D	µg/kg wet		20.0		105	70-130		
n-Propylbenzene	20.4	D	µg/kg wet		20.0		102	70-130		
Styrene	18.9	D	µg/kg wet		20.0		94	70-130		
1,1,1,2-Tetrachloroethane	17.8	D	µg/kg wet		20.0		89	70-130		
1,1,1,2,2-Tetrachloroethane	19.4	D	µg/kg wet		20.0		97	70-130		
Tetrachloroethene	20.1	D	µg/kg wet		20.0		100	70-130		
Toluene	18.5	D	µg/kg wet		20.0		92	70-130		
1,2,3-Trichlorobenzene	21.8	D	µg/kg wet		20.0		109	70-130		
1,2,4-Trichlorobenzene	21.8	D	µg/kg wet		20.0		109	70-130		
1,3,5-Trichlorobenzene	20.5	D	µg/kg wet		20.0		102	70-130		
1,1,1-Trichloroethane	18.4	D	µg/kg wet		20.0		92	70-130		
1,1,2-Trichloroethane	18.7	D	µg/kg wet		20.0		94	70-130		
Trichloroethene	18.9	D	µg/kg wet		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	22.9	D	µg/kg wet		20.0		114	70-130		
1,2,3-Trichloropropane	18.7	D	µg/kg wet		20.0		94	70-130		
1,2,4-Trimethylbenzene	19.8	D	µg/kg wet		20.0		99	70-130		
1,3,5-Trimethylbenzene	19.8	D	µg/kg wet		20.0		99	70-130		
Vinyl chloride	19.2	D	µg/kg wet		20.0		96	70-130		
m,p-Xylene	19.2	D	µg/kg wet		20.0		96	70-130		
o-Xylene	19.1	D	µg/kg wet		20.0		95	70-130		
Tetrahydrofuran	18.7	D	µg/kg wet		20.0		94	70-130		
Ethyl ether	19.9	D	µg/kg wet		20.0		100	70-130		
Tert-amyl methyl ether	18.3	D	µg/kg wet		20.0		91	70-130		
Ethyl tert-butyl ether	17.5	D	µg/kg wet		20.0		88	70-130		
Di-isopropyl ether	17.6	D	µg/kg wet		20.0		88	70-130		

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506558 - SW846 5035A Soil (high level)</b>										
<b><u>LCS (1506558-BS1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
Tert-Butanol / butyl alcohol	171	D	µg/kg wet		200		85	70-130		
1,4-Dioxane	218	D	µg/kg wet		200		109	70-130		
trans-1,4-Dichloro-2-butene	19.3	D	µg/kg wet		20.0		97	70-130		
Ethanol	417	D	µg/kg wet		400		104	70-130		
Surrogate: 4-Bromofluorobenzene	30.2		µg/kg wet		30.0		101	70-130		
Surrogate: Toluene-d8	29.4		µg/kg wet		30.0		98	70-130		
Surrogate: 1,2-Dichloroethane-d4	28.5		µg/kg wet		30.0		95	70-130		
Surrogate: Dibromofluoromethane	29.8		µg/kg wet		30.0		99	70-130		
<b><u>LCS Dup (1506558-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.5	D	µg/kg wet		20.0		113	70-130	4	30
Acetone	22.2	D	µg/kg wet		20.0		111	70-130	7	30
Acrylonitrile	19.9	D	µg/kg wet		20.0		100	70-130	6	30
Benzene	18.6	D	µg/kg wet		20.0		93	70-130	0.05	30
Bromobenzene	20.0	D	µg/kg wet		20.0		100	70-130	4	30
Bromochloromethane	18.0	D	µg/kg wet		20.0		90	70-130	0.5	30
Bromodichloromethane	17.1	D	µg/kg wet		20.0		86	70-130	0.6	30
Bromoform	17.6	D	µg/kg wet		20.0		88	70-130	5	30
Bromomethane	20.2	D	µg/kg wet		20.0		101	70-130	6	30
2-Butanone (MEK)	17.0	D	µg/kg wet		20.0		85	70-130	14	30
n-Butylbenzene	20.4	D	µg/kg wet		20.0		102	70-130	3	30
sec-Butylbenzene	21.6	D	µg/kg wet		20.0		108	70-130	5	30
tert-Butylbenzene	21.0	D	µg/kg wet		20.0		105	70-130	4	30
Carbon disulfide	19.7	D	µg/kg wet		20.0		99	70-130	6	30
Carbon tetrachloride	17.5	D	µg/kg wet		20.0		87	70-130	2	30
Chlorobenzene	19.0	D	µg/kg wet		20.0		95	70-130	0.2	30
Chloroethane	19.8	D	µg/kg wet		20.0		99	70-130	2	30
Chloroform	16.5	D	µg/kg wet		20.0		82	70-130	3	30
Chloromethane	20.4	D	µg/kg wet		20.0		102	70-130	2	30
2-Chlorotoluene	20.3	D	µg/kg wet		20.0		101	70-130	5	30
4-Chlorotoluene	19.9	D	µg/kg wet		20.0		100	70-130	6	30
1,2-Dibromo-3-chloropropane	17.2	D	µg/kg wet		20.0		86	70-130	4	30
Dibromochloromethane	16.2	D	µg/kg wet		20.0		81	70-130	2	30
1,2-Dibromoethane (EDB)	18.9	D	µg/kg wet		20.0		94	70-130	2	30
Dibromomethane	18.9	D	µg/kg wet		20.0		94	70-130	1	30
1,2-Dichlorobenzene	19.0	D	µg/kg wet		20.0		95	70-130	0.4	30
1,3-Dichlorobenzene	21.0	D	µg/kg wet		20.0		105	70-130	7	30
1,4-Dichlorobenzene	18.3	D	µg/kg wet		20.0		92	70-130	1	30
Dichlorodifluoromethane (Freon12)	25.4	D	µg/kg wet		20.0		127	70-130	6	30
1,1-Dichloroethane	17.6	D	µg/kg wet		20.0		88	70-130	2	30
1,2-Dichloroethane	17.6	D	µg/kg wet		20.0		88	70-130	1	30
1,1-Dichloroethene	19.8	D	µg/kg wet		20.0		99	70-130	9	30
cis-1,2-Dichloroethene	17.8	D	µg/kg wet		20.0		89	70-130	2	30
trans-1,2-Dichloroethene	18.6	D	µg/kg wet		20.0		93	70-130	2	30
1,2-Dichloropropane	17.5	D	µg/kg wet		20.0		87	70-130	2	30
1,3-Dichloropropane	18.6	D	µg/kg wet		20.0		93	70-130	3	30
2,2-Dichloropropane	17.9	D	µg/kg wet		20.0		90	70-130	4	30
1,1-Dichloropropene	19.4	D	µg/kg wet		20.0		97	70-130	3	30
cis-1,3-Dichloropropene	17.2	D	µg/kg wet		20.0		86	70-130	4	30
trans-1,3-Dichloropropene	18.0	D	µg/kg wet		20.0		90	70-130	0.7	30
Ethylbenzene	19.6	D	µg/kg wet		20.0		98	70-130	3	30
Hexachlorobutadiene	21.1	D	µg/kg wet		20.0		106	70-130	2	30

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506558 - SW846 5035A Soil (high level)</b>										
<b><u>LCS Dup (1506558-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
2-Hexanone (MBK)	18.7	D	µg/kg wet		20.0		93	70-130	12	30
Isopropylbenzene	20.4	D	µg/kg wet		20.0		102	70-130	4	30
4-Isopropyltoluene	19.3	D	µg/kg wet		20.0		96	70-130	2	30
Methyl tert-butyl ether	18.1	D	µg/kg wet		20.0		91	70-130	1	30
4-Methyl-2-pentanone (MIBK)	18.5	D	µg/kg wet		20.0		93	70-130	6	30
Methylene chloride	18.5	D	µg/kg wet		20.0		93	70-130	0.6	30
Naphthalene	20.4	D	µg/kg wet		20.0		102	70-130	3	30
n-Propylbenzene	21.2	D	µg/kg wet		20.0		106	70-130	4	30
Styrene	19.7	D	µg/kg wet		20.0		98	70-130	4	30
1,1,1,2-Tetrachloroethane	17.0	D	µg/kg wet		20.0		85	70-130	5	30
1,1,2,2-Tetrachloroethane	22.4	D	µg/kg wet		20.0		112	70-130	14	30
Tetrachloroethene	20.6	D	µg/kg wet		20.0		103	70-130	2	30
Toluene	18.9	D	µg/kg wet		20.0		94	70-130	2	30
1,2,3-Trichlorobenzene	21.7	D	µg/kg wet		20.0		109	70-130	0.4	30
1,2,4-Trichlorobenzene	21.0	D	µg/kg wet		20.0		105	70-130	4	30
1,3,5-Trichlorobenzene	20.3	D	µg/kg wet		20.0		101	70-130	1	30
1,1,1-Trichloroethane	18.0	D	µg/kg wet		20.0		90	70-130	2	30
1,1,2-Trichloroethane	19.0	D	µg/kg wet		20.0		95	70-130	2	30
Trichloroethene	18.7	D	µg/kg wet		20.0		93	70-130	1	30
Trichlorofluoromethane (Freon 11)	23.3	D	µg/kg wet		20.0		117	70-130	2	30
1,2,3-Trichloropropane	20.3	D	µg/kg wet		20.0		102	70-130	8	30
1,2,4-Trimethylbenzene	20.4	D	µg/kg wet		20.0		102	70-130	3	30
1,3,5-Trimethylbenzene	20.5	D	µg/kg wet		20.0		103	70-130	4	30
Vinyl chloride	21.9	D	µg/kg wet		20.0		109	70-130	13	30
m,p-Xylene	19.8	D	µg/kg wet		20.0		99	70-130	3	30
o-Xylene	20.1	D	µg/kg wet		20.0		100	70-130	5	30
Tetrahydrofuran	20.2	D	µg/kg wet		20.0		101	70-130	8	30
Ethyl ether	19.7	D	µg/kg wet		20.0		99	70-130	0.9	30
Tert-amyl methyl ether	18.8	D	µg/kg wet		20.0		94	70-130	3	30
Ethyl tert-butyl ether	17.6	D	µg/kg wet		20.0		88	70-130	0.3	30
Di-isopropyl ether	17.6	D	µg/kg wet		20.0		88	70-130	0.1	30
Tert-Butanol / butyl alcohol	200	D	µg/kg wet		200		100	70-130	16	30
1,4-Dioxane	229	D	µg/kg wet		200		114	70-130	5	30
trans-1,4-Dichloro-2-butene	20.4	D	µg/kg wet		20.0		102	70-130	6	30
Ethanol	480	D	µg/kg wet		400		120	70-130	14	30
<i>Surrogate: 4-Bromofluorobenzene</i>	31.4		µg/kg wet		30.0		105	70-130		
<i>Surrogate: Toluene-d8</i>	30.2		µg/kg wet		30.0		100	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	28.9		µg/kg wet		30.0		96	70-130		
<i>Surrogate: Dibromofluoromethane</i>	29.6		µg/kg wet		30.0		98	70-130		
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b><u>Blank (1507054-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.9	U	µg/kg wet	1.9						
Acetone	< 33.4	U	µg/kg wet	33.4						
Acrylonitrile	< 4.8	U	µg/kg wet	4.8						
Benzene	< 0.9	U	µg/kg wet	0.9						
Bromobenzene	< 0.9	U	µg/kg wet	0.9						
Bromochloromethane	< 2.5	U	µg/kg wet	2.5						
Bromodichloromethane	< 3.3	U	µg/kg wet	3.3						
Bromoform	< 4.8	U	µg/kg wet	4.8						
Bromomethane	< 2.9	U	µg/kg wet	2.9						
2-Butanone (MEK)	< 6.0	U	µg/kg wet	6.0						

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## Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b><u>Blank (1507054-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					
n-Butylbenzene	< 1.4	U	µg/kg wet	1.4						
sec-Butylbenzene	< 3.9	U	µg/kg wet	3.9						
tert-Butylbenzene	< 3.3	U	µg/kg wet	3.3						
Carbon disulfide	< 3.1	U	µg/kg wet	3.1						
Carbon tetrachloride	< 4.1	U	µg/kg wet	4.1						
Chlorobenzene	< 0.8	U	µg/kg wet	0.8						
Chloroethane	< 2.8	U	µg/kg wet	2.8						
Chloroform	< 1.7	U	µg/kg wet	1.7						
Chloromethane	< 2.1	U	µg/kg wet	2.1						
2-Chlorotoluene	< 1.3	U	µg/kg wet	1.3						
4-Chlorotoluene	< 1.4	U	µg/kg wet	1.4						
1,2-Dibromo-3-chloropropane	< 7.2	U	µg/kg wet	7.2						
Dibromochloromethane	< 3.4	U	µg/kg wet	3.4						
1,2-Dibromoethane (EDB)	< 3.4	U	µg/kg wet	3.4						
Dibromomethane	< 2.6	U	µg/kg wet	2.6						
1,2-Dichlorobenzene	< 0.9	U	µg/kg wet	0.9						
1,3-Dichlorobenzene	< 1.0	U	µg/kg wet	1.0						
1,4-Dichlorobenzene	< 1.2	U	µg/kg wet	1.2						
Dichlorodifluoromethane (Freon12)	< 1.7	U	µg/kg wet	1.7						
1,1-Dichloroethane	< 3.2	U	µg/kg wet	3.2						
1,2-Dichloroethane	< 1.2	U	µg/kg wet	1.2						
1,1-Dichloroethene	< 3.8	U	µg/kg wet	3.8						
cis-1,2-Dichloroethene	< 1.8	U	µg/kg wet	1.8						
trans-1,2-Dichloroethene	< 2.6	U	µg/kg wet	2.6						
1,2-Dichloropropane	< 2.6	U	µg/kg wet	2.6						
1,3-Dichloropropane	< 2.6	U	µg/kg wet	2.6						
2,2-Dichloropropane	< 2.4	U	µg/kg wet	2.4						
1,1-Dichloropropene	< 1.2	U	µg/kg wet	1.2						
cis-1,3-Dichloropropene	< 3.0	U	µg/kg wet	3.0						
trans-1,3-Dichloropropene	< 2.6	U	µg/kg wet	2.6						
Ethylbenzene	< 0.9	U	µg/kg wet	0.9						
Hexachlorobutadiene	< 1.9	U	µg/kg wet	1.9						
2-Hexanone (MBK)	< 5.5	U	µg/kg wet	5.5						
Isopropylbenzene	< 1.0	U	µg/kg wet	1.0						
4-Isopropyltoluene	< 4.7	U	µg/kg wet	4.7						
Methyl tert-butyl ether	< 1.9	U	µg/kg wet	1.9						
4-Methyl-2-pentanone (MIBK)	< 9.4	U	µg/kg wet	9.4						
Methylene chloride	< 1.5	U	µg/kg wet	1.5						
Naphthalene	< 4.6	U	µg/kg wet	4.6						
n-Propylbenzene	< 4.8	U	µg/kg wet	4.8						
Styrene	< 0.9	U	µg/kg wet	0.9						
1,1,1,2-Tetrachloroethane	< 4.2	U	µg/kg wet	4.2						
1,1,2,2-Tetrachloroethane	< 4.2	U	µg/kg wet	4.2						
Tetrachloroethene	< 1.9	U	µg/kg wet	1.9						
Toluene	< 1.2	U	µg/kg wet	1.2						
1,2,3-Trichlorobenzene	< 1.3	U	µg/kg wet	1.3						
1,2,4-Trichlorobenzene	< 1.5	U	µg/kg wet	1.5						
1,3,5-Trichlorobenzene	< 1.6	U	µg/kg wet	1.6						
1,1,1-Trichloroethane	< 1.3	U	µg/kg wet	1.3						
1,1,2-Trichloroethane	< 3.6	U	µg/kg wet	3.6						
Trichloroethene	< 0.9	U	µg/kg wet	0.9						
Trichlorofluoromethane (Freon 11)	< 2.7	U	µg/kg wet	2.7						

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## Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b>Blank (1507054-BLK1)</b>					<u>Prepared &amp; Analyzed: 15-Apr-15</u>					
1,2,3-Trichloropropane	< 3.8	U	µg/kg wet	3.8						
1,2,4-Trimethylbenzene	< 1.3	U	µg/kg wet	1.3						
1,3,5-Trimethylbenzene	< 1.4	U	µg/kg wet	1.4						
Vinyl chloride	< 1.8	U	µg/kg wet	1.8						
m,p-Xylene	< 1.0	U	µg/kg wet	1.0						
o-Xylene	< 1.1	U	µg/kg wet	1.1						
Tetrahydrofuran	< 5.4	U	µg/kg wet	5.4						
Ethyl ether	< 4.5	U	µg/kg wet	4.5						
Tert-amyl methyl ether	< 1.5	U	µg/kg wet	1.5						
Ethyl tert-butyl ether	< 3.5	U	µg/kg wet	3.5						
Di-isopropyl ether	< 0.8	U	µg/kg wet	0.8						
Tert-Butanol / butyl alcohol	< 29.1	U	µg/kg wet	29.1						
1,4-Dioxane	< 86.8	U	µg/kg wet	86.8						
trans-1,4-Dichloro-2-butene	< 8.0	U	µg/kg wet	8.0						
Ethanol	< 187	U	µg/kg wet	187						
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<i>Surrogate: 4-Bromofluorobenzene</i>	47.0		µg/kg wet		50.0		94	70-130		
<i>Surrogate: Toluene-d8</i>	51.7		µg/kg wet		50.0		103	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.0		µg/kg wet		50.0		104	70-130		
<i>Surrogate: Dibromofluoromethane</i>	52.2		µg/kg wet		50.0		104	70-130		
<b>LCS (1507054-BS1)</b>					<u>Prepared &amp; Analyzed: 15-Apr-15</u>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.6		µg/kg wet		20.0		103	70-130		
Acetone	20.0		µg/kg wet		20.0		100	70-130		
Acrylonitrile	22.1		µg/kg wet		20.0		110	70-130		
Benzene	21.3		µg/kg wet		20.0		106	70-130		
Bromobenzene	21.4		µg/kg wet		20.0		107	70-130		
Bromochloromethane	22.1		µg/kg wet		20.0		110	70-130		
Bromodichloromethane	22.1		µg/kg wet		20.0		110	70-130		
Bromoform	22.3		µg/kg wet		20.0		111	70-130		
Bromomethane	17.4		µg/kg wet		20.0		87	70-130		
2-Butanone (MEK)	21.6		µg/kg wet		20.0		108	70-130		
n-Butylbenzene	19.2		µg/kg wet		20.0		96	70-130		
sec-Butylbenzene	22.6		µg/kg wet		20.0		113	70-130		
tert-Butylbenzene	22.6		µg/kg wet		20.0		113	70-130		
Carbon disulfide	20.7		µg/kg wet		20.0		103	70-130		
Carbon tetrachloride	21.2		µg/kg wet		20.0		106	70-130		
Chlorobenzene	22.0		µg/kg wet		20.0		110	70-130		
Chloroethane	18.2		µg/kg wet		20.0		91	70-130		
Chloroform	19.6		µg/kg wet		20.0		98	70-130		
Chloromethane	17.5		µg/kg wet		20.0		87	70-130		
2-Chlorotoluene	23.0		µg/kg wet		20.0		115	70-130		
4-Chlorotoluene	22.2		µg/kg wet		20.0		111	70-130		
1,2-Dibromo-3-chloropropane	23.4		µg/kg wet		20.0		117	70-130		
Dibromochloromethane	22.3		µg/kg wet		20.0		112	70-130		
1,2-Dibromoethane (EDB)	24.0		µg/kg wet		20.0		120	70-130		
Dibromomethane	21.7		µg/kg wet		20.0		108	70-130		
1,2-Dichlorobenzene	20.8		µg/kg wet		20.0		104	70-130		
1,3-Dichlorobenzene	21.7		µg/kg wet		20.0		108	70-130		
1,4-Dichlorobenzene	20.6		µg/kg wet		20.0		103	70-130		
Dichlorodifluoromethane (Freon12)	17.8		µg/kg wet		20.0		89	70-130		
1,1-Dichloroethane	19.8		µg/kg wet		20.0		99	70-130		
1,2-Dichloroethane	19.0		µg/kg wet		20.0		95	70-130		

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b><u>LCS (1507054-BS1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					
1,1-Dichloroethene	20.8		µg/kg wet		20.0		104	70-130		
cis-1,2-Dichloroethene	21.6		µg/kg wet		20.0		108	70-130		
trans-1,2-Dichloroethene	20.7		µg/kg wet		20.0		103	70-130		
1,2-Dichloropropane	20.8		µg/kg wet		20.0		104	70-130		
1,3-Dichloropropane	21.8		µg/kg wet		20.0		109	70-130		
2,2-Dichloropropane	17.2		µg/kg wet		20.0		86	70-130		
1,1-Dichloropropene	20.5		µg/kg wet		20.0		102	70-130		
cis-1,3-Dichloropropene	19.7		µg/kg wet		20.0		99	70-130		
trans-1,3-Dichloropropene	19.0		µg/kg wet		20.0		95	70-130		
Ethylbenzene	22.0		µg/kg wet		20.0		110	70-130		
Hexachlorobutadiene	17.3		µg/kg wet		20.0		87	70-130		
2-Hexanone (MBK)	19.3		µg/kg wet		20.0		96	70-130		
Isopropylbenzene	21.8		µg/kg wet		20.0		109	70-130		
4-Isopropyltoluene	21.3		µg/kg wet		20.0		106	70-130		
Methyl tert-butyl ether	18.8		µg/kg wet		20.0		94	70-130		
4-Methyl-2-pentanone (MIBK)	21.0		µg/kg wet		20.0		105	70-130		
Methylene chloride	19.2		µg/kg wet		20.0		96	70-130		
Naphthalene	20.9		µg/kg wet		20.0		105	70-130		
n-Propylbenzene	23.0		µg/kg wet		20.0		115	70-130		
Styrene	22.2		µg/kg wet		20.0		111	70-130		
1,1,1,2-Tetrachloroethane	24.1		µg/kg wet		20.0		120	70-130		
1,1,2,2-Tetrachloroethane	24.5		µg/kg wet		20.0		123	70-130		
Tetrachloroethene	20.0		µg/kg wet		20.0		100	70-130		
Toluene	21.5		µg/kg wet		20.0		107	70-130		
1,2,3-Trichlorobenzene	19.9		µg/kg wet		20.0		99	70-130		
1,2,4-Trichlorobenzene	18.8		µg/kg wet		20.0		94	70-130		
1,3,5-Trichlorobenzene	20.2		µg/kg wet		20.0		101	70-130		
1,1,1-Trichloroethane	19.7		µg/kg wet		20.0		98	70-130		
1,1,2-Trichloroethane	22.2		µg/kg wet		20.0		111	70-130		
Trichloroethene	20.9		µg/kg wet		20.0		105	70-130		
Trichlorofluoromethane (Freon 11)	19.8		µg/kg wet		20.0		99	70-130		
1,2,3-Trichloropropane	24.1		µg/kg wet		20.0		121	70-130		
1,2,4-Trimethylbenzene	22.0		µg/kg wet		20.0		110	70-130		
1,3,5-Trimethylbenzene	21.8		µg/kg wet		20.0		109	70-130		
Vinyl chloride	18.9		µg/kg wet		20.0		94	70-130		
m,p-Xylene	22.0		µg/kg wet		20.0		110	70-130		
o-Xylene	22.4		µg/kg wet		20.0		112	70-130		
Tetrahydrofuran	19.4		µg/kg wet		20.0		97	70-130		
Ethyl ether	19.1		µg/kg wet		20.0		96	70-130		
Tert-amyl methyl ether	20.2		µg/kg wet		20.0		101	70-130		
Ethyl tert-butyl ether	18.7		µg/kg wet		20.0		93	70-130		
Di-isopropyl ether	18.1		µg/kg wet		20.0		90	70-130		
Tert-Butanol / butyl alcohol	211		µg/kg wet		200		106	70-130		
1,4-Dioxane	219		µg/kg wet		200		110	70-130		
trans-1,4-Dichloro-2-butene	21.3		µg/kg wet		20.0		107	70-130		
Ethanol	375		µg/kg wet		400		94	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	52.3		µg/kg wet		50.0		105	70-130		
<i>Surrogate: Toluene-d8</i>	51.0		µg/kg wet		50.0		102	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	46.4		µg/kg wet		50.0		93	70-130		
<i>Surrogate: Dibromofluoromethane</i>	50.5		µg/kg wet		50.0		101	70-130		
<b><u>LCS Dup (1507054-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b><u>LCS Dup (1507054-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.4		µg/kg wet		20.0		92	70-130	12	30
Acetone	17.0		µg/kg wet		20.0		85	70-130	16	30
Acrylonitrile	18.9		µg/kg wet		20.0		94	70-130	16	30
Benzene	18.8		µg/kg wet		20.0		94	70-130	12	30
Bromobenzene	18.9		µg/kg wet		20.0		94	70-130	13	30
Bromochloromethane	19.2		µg/kg wet		20.0		96	70-130	14	30
Bromodichloromethane	19.3		µg/kg wet		20.0		97	70-130	13	30
Bromoform	19.6		µg/kg wet		20.0		98	70-130	13	30
Bromomethane	15.8		µg/kg wet		20.0		79	70-130	10	30
2-Butanone (MEK)	18.5		µg/kg wet		20.0		93	70-130	15	30
n-Butylbenzene	17.2		µg/kg wet		20.0		86	70-130	11	30
sec-Butylbenzene	20.0		µg/kg wet		20.0		100	70-130	12	30
tert-Butylbenzene	19.7		µg/kg wet		20.0		98	70-130	14	30
Carbon disulfide	18.3		µg/kg wet		20.0		91	70-130	12	30
Carbon tetrachloride	18.6		µg/kg wet		20.0		93	70-130	13	30
Chlorobenzene	19.5		µg/kg wet		20.0		97	70-130	12	30
Chloroethane	16.0		µg/kg wet		20.0		80	70-130	13	30
Chloroform	17.2		µg/kg wet		20.0		86	70-130	13	30
Chloromethane	15.0		µg/kg wet		20.0		75	70-130	15	30
2-Chlorotoluene	20.6		µg/kg wet		20.0		103	70-130	11	30
4-Chlorotoluene	19.6		µg/kg wet		20.0		98	70-130	12	30
1,2-Dibromo-3-chloropropane	21.2		µg/kg wet		20.0		106	70-130	9	30
Dibromochloromethane	19.7		µg/kg wet		20.0		98	70-130	13	30
1,2-Dibromoethane (EDB)	21.0		µg/kg wet		20.0		105	70-130	13	30
Dibromomethane	19.2		µg/kg wet		20.0		96	70-130	12	30
1,2-Dichlorobenzene	18.5		µg/kg wet		20.0		92	70-130	12	30
1,3-Dichlorobenzene	19.1		µg/kg wet		20.0		96	70-130	13	30
1,4-Dichlorobenzene	18.1		µg/kg wet		20.0		91	70-130	13	30
Dichlorodifluoromethane (Freon12)	15.3		µg/kg wet		20.0		76	70-130	15	30
1,1-Dichloroethane	17.7		µg/kg wet		20.0		89	70-130	11	30
1,2-Dichloroethane	16.8		µg/kg wet		20.0		84	70-130	13	30
1,1-Dichloroethene	18.6		µg/kg wet		20.0		93	70-130	11	30
cis-1,2-Dichloroethene	18.8		µg/kg wet		20.0		94	70-130	14	30
trans-1,2-Dichloroethene	18.2		µg/kg wet		20.0		91	70-130	13	30
1,2-Dichloropropane	18.2		µg/kg wet		20.0		91	70-130	13	30
1,3-Dichloropropane	19.2		µg/kg wet		20.0		96	70-130	13	30
2,2-Dichloropropane	15.2		µg/kg wet		20.0		76	70-130	12	30
1,1-Dichloropropene	17.9		µg/kg wet		20.0		90	70-130	13	30
cis-1,3-Dichloropropene	17.4		µg/kg wet		20.0		87	70-130	13	30
trans-1,3-Dichloropropene	16.8		µg/kg wet		20.0		84	70-130	12	30
Ethylbenzene	19.3		µg/kg wet		20.0		97	70-130	13	30
Hexachlorobutadiene	15.2		µg/kg wet		20.0		76	70-130	13	30
2-Hexanone (MBK)	17.8		µg/kg wet		20.0		89	70-130	8	30
Isopropylbenzene	19.5		µg/kg wet		20.0		98	70-130	11	30
4-Isopropyltoluene	18.7		µg/kg wet		20.0		93	70-130	13	30
Methyl tert-butyl ether	16.5		µg/kg wet		20.0		82	70-130	13	30
4-Methyl-2-pentanone (MIBK)	18.3		µg/kg wet		20.0		91	70-130	14	30
Methylene chloride	17.1		µg/kg wet		20.0		85	70-130	12	30
Naphthalene	17.9		µg/kg wet		20.0		89	70-130	16	30
n-Propylbenzene	20.3		µg/kg wet		20.0		101	70-130	13	30
Styrene	19.5		µg/kg wet		20.0		98	70-130	13	30
1,1,1,2-Tetrachloroethane	21.5		µg/kg wet		20.0		107	70-130	11	30

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507054 - SW846 5035A Soil (low level)</b>										
<b><u>LCS Dup (1507054-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 15-Apr-15</u></b>					
1,1,2,2-Tetrachloroethane	21.2		µg/kg wet		20.0		106	70-130	15	30
Tetrachloroethene	17.4		µg/kg wet		20.0		87	70-130	14	30
Toluene	19.0		µg/kg wet		20.0		95	70-130	12	30
1,2,3-Trichlorobenzene	17.0		µg/kg wet		20.0		85	70-130	15	30
1,2,4-Trichlorobenzene	16.3		µg/kg wet		20.0		82	70-130	14	30
1,3,5-Trichlorobenzene	17.3		µg/kg wet		20.0		86	70-130	16	30
1,1,1-Trichloroethane	17.4		µg/kg wet		20.0		87	70-130	12	30
1,1,2-Trichloroethane	19.5		µg/kg wet		20.0		98	70-130	13	30
Trichloroethene	18.5		µg/kg wet		20.0		92	70-130	12	30
Trichlorofluoromethane (Freon 11)	17.4		µg/kg wet		20.0		87	70-130	13	30
1,2,3-Trichloropropane	21.0		µg/kg wet		20.0		105	70-130	14	30
1,2,4-Trimethylbenzene	19.3		µg/kg wet		20.0		96	70-130	13	30
1,3,5-Trimethylbenzene	19.2		µg/kg wet		20.0		96	70-130	13	30
Vinyl chloride	16.6		µg/kg wet		20.0		83	70-130	13	30
m,p-Xylene	19.5		µg/kg wet		20.0		98	70-130	12	30
o-Xylene	19.8		µg/kg wet		20.0		99	70-130	12	30
Tetrahydrofuran	16.7		µg/kg wet		20.0		83	70-130	15	30
Ethyl ether	16.9		µg/kg wet		20.0		84	70-130	12	30
Tert-amyl methyl ether	17.8		µg/kg wet		20.0		89	70-130	12	30
Ethyl tert-butyl ether	16.7		µg/kg wet		20.0		84	70-130	11	30
Di-isopropyl ether	15.9		µg/kg wet		20.0		79	70-130	13	30
Tert-Butanol / butyl alcohol	184		µg/kg wet		200		92	70-130	14	30
1,4-Dioxane	191		µg/kg wet		200		95	70-130	14	30
trans-1,4-Dichloro-2-butene	19.4		µg/kg wet		20.0		97	70-130	9	30
Ethanol	337		µg/kg wet		400		84	70-130	11	30
<i>Surrogate: 4-Bromofluorobenzene</i>	52.2		µg/kg wet		50.0		104	70-130		
<i>Surrogate: Toluene-d8</i>	50.6		µg/kg wet		50.0		101	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		µg/kg wet		50.0		91	70-130		
<i>Surrogate: Dibromofluoromethane</i>	50.6		µg/kg wet		50.0		101	70-130		
<b>Batch 1507187 - SW846 5030 Water MS</b>										
<b><u>Blank (1507187-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 16-Apr-15</u></b>					
Benzene	< 0.2	U	µg/l	0.2						
2-Butanone (MEK)	< 1.2	U	µg/l	1.2						
Carbon tetrachloride	< 0.2	U	µg/l	0.2						
Chlorobenzene	< 0.2	U	µg/l	0.2						
Chloroform	< 0.4	U	µg/l	0.4						
1,2-Dichloroethane	< 0.2	U	µg/l	0.2						
1,1-Dichloroethene	< 0.3	U	µg/l	0.3						
Tetrachloroethene	< 0.6	U	µg/l	0.6						
Trichloroethene	< 0.4	U	µg/l	0.4						
Vinyl chloride	< 0.3	U	µg/l	0.3						
<i>Surrogate: 4-Bromofluorobenzene</i>	45.4		µg/l		50.0		91	70-130		
<i>Surrogate: Toluene-d8</i>	50.0		µg/l		50.0		100	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.8		µg/l		50.0		102	70-130		
<i>Surrogate: Dibromofluoromethane</i>	49.2		µg/l		50.0		98	70-130		
<b><u>Blank (1507187-BLK2)</u></b>					<b><u>Prepared &amp; Analyzed: 16-Apr-15</u></b>					
Benzene	< 0.9	U, D	µg/l	0.9						
2-Butanone (MEK)	< 6.2	U, D	µg/l	6.2						
Carbon tetrachloride	< 1.1	U, D	µg/l	1.1						
Chlorobenzene	< 1.0	U, D	µg/l	1.0						
Chloroform	< 2.0	U, D	µg/l	2.0						

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507187 - SW846 5030 Water MS</b>										
<b>Blank (1507187-BLK2)</b>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
1,2-Dichloroethane	< 0.8	U, D	µg/l	0.8						
1,1-Dichloroethane	< 1.4	U, D	µg/l	1.4						
Tetrachloroethene	< 2.9	U, D	µg/l	2.9						
Trichloroethene	< 1.9	U, D	µg/l	1.9						
Vinyl chloride	< 1.7	U, D	µg/l	1.7						
<i>Surrogate: 4-Bromofluorobenzene</i>	45.5		µg/l		50.0		91	70-130		
<i>Surrogate: Toluene-d8</i>	48.3		µg/l		50.0		97	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.0		µg/l		50.0		96	70-130		
<i>Surrogate: Dibromofluoromethane</i>	49.2		µg/l		50.0		98	70-130		
<b>LCS (1507187-BS1)</b>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Benzene	18.4	D	µg/l		20.0		92	70-130		
2-Butanone (MEK)	22.2	D	µg/l		20.0		111	70-130		
Carbon tetrachloride	19.6	D	µg/l		20.0		98	70-130		
Chlorobenzene	19.6	D	µg/l		20.0		98	70-130		
Chloroform	18.8	D	µg/l		20.0		94	70-130		
1,2-Dichloroethane	18.8	D	µg/l		20.0		94	70-130		
1,1-Dichloroethane	19.4	D	µg/l		20.0		97	70-130		
Tetrachloroethene	20.0	D	µg/l		20.0		100	70-130		
Trichloroethene	17.1	D	µg/l		20.0		85	70-130		
Vinyl chloride	17.3	D	µg/l		20.0		86	70-130		
<i>Surrogate: 4-Bromofluorobenzene</i>	49.4		µg/l		50.0		99	70-130		
<i>Surrogate: Toluene-d8</i>	49.3		µg/l		50.0		99	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	47.5		µg/l		50.0		95	70-130		
<i>Surrogate: Dibromofluoromethane</i>	48.9		µg/l		50.0		98	70-130		
<b>LCS Dup (1507187-BSD1)</b>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Benzene	19.4	D	µg/l		20.0		97	70-130	5	20
2-Butanone (MEK)	21.4	D	µg/l		20.0		107	70-130	4	20
Carbon tetrachloride	21.5	D	µg/l		20.0		108	70-130	9	20
Chlorobenzene	20.5	D	µg/l		20.0		102	70-130	5	20
Chloroform	19.6	D	µg/l		20.0		98	70-130	4	20
1,2-Dichloroethane	18.6	D	µg/l		20.0		93	70-130	0.8	20
1,1-Dichloroethane	19.8	D	µg/l		20.0		99	70-130	2	20
Tetrachloroethene	20.5	D	µg/l		20.0		103	70-130	2	20
Trichloroethene	18.0	D	µg/l		20.0		90	70-130	5	20
Vinyl chloride	17.8	D	µg/l		20.0		89	70-130	3	20
<i>Surrogate: 4-Bromofluorobenzene</i>	50.7		µg/l		50.0		101	70-130		
<i>Surrogate: Toluene-d8</i>	49.2		µg/l		50.0		98	70-130		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.2		µg/l		50.0		96	70-130		
<i>Surrogate: Dibromofluoromethane</i>	49.6		µg/l		50.0		99	70-130		
<b>Matrix Spike (1507187-MS1)</b>					<u>Source: SC05494-01</u>		<u>Prepared &amp; Analyzed: 16-Apr-15</u>			
Benzene	19.5	D	µg/l		20.0	BRL	97	70-130		
2-Butanone (MEK)	32.1	QM7, D	µg/l		20.0	BRL	160	70-130		
Carbon tetrachloride	20.1	D	µg/l		20.0	BRL	100	70-130		
Chlorobenzene	20.8	D	µg/l		20.0	BRL	104	70-130		
Chloroform	19.7	D	µg/l		20.0	BRL	98	70-130		
1,2-Dichloroethane	19.7	D	µg/l		20.0	BRL	99	70-130		
1,1-Dichloroethane	21.5	D	µg/l		20.0	BRL	108	70-130		
Tetrachloroethene	21.9	D	µg/l		20.0	BRL	110	70-130		
Trichloroethene	18.0	D	µg/l		20.0	BRL	90	70-130		
Vinyl chloride	19.8	D	µg/l		20.0	BRL	99	70-130		

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**Volatile Organic Compounds - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507187 - SW846 5030 Water MS</b>										
<b>Matrix Spike (1507187-MS1)</b>			<b>Source: SC05494-01</b>			<b>Prepared &amp; Analyzed: 16-Apr-15</b>				
Surrogate: 4-Bromofluorobenzene	51.5		µg/l		50.0		103	70-130		
Surrogate: Toluene-d8	48.8		µg/l		50.0		98	70-130		
Surrogate: 1,2-Dichloroethane-d4	46.7		µg/l		50.0		93	70-130		
Surrogate: Dibromofluoromethane	48.7		µg/l		50.0		97	70-130		
<b>Matrix Spike Dup (1507187-MSD1)</b>			<b>Source: SC05494-01</b>			<b>Prepared &amp; Analyzed: 16-Apr-15</b>				
Benzene	19.0	D	µg/l		20.0	BRL	95	70-130	3	20
2-Butanone (MEK)	30.4	D	µg/l		20.0	BRL	152	70-130	5	20
Carbon tetrachloride	19.9	D	µg/l		20.0	BRL	99	70-130	1	20
Chlorobenzene	20.3	D	µg/l		20.0	BRL	101	70-130	3	20
Chloroform	19.2	D	µg/l		20.0	BRL	96	70-130	3	20
1,2-Dichloroethane	19.2	D	µg/l		20.0	BRL	96	70-130	3	20
1,1-Dichloroethane	20.8	D	µg/l		20.0	BRL	104	70-130	4	20
Tetrachloroethene	21.0	D	µg/l		20.0	BRL	105	70-130	4	20
Trichloroethene	17.3	D	µg/l		20.0	BRL	86	70-130	4	20
Vinyl chloride	19.2	D	µg/l		20.0	BRL	96	70-130	3	20
Surrogate: 4-Bromofluorobenzene	51.8		µg/l		50.0		104	70-130		
Surrogate: Toluene-d8	48.7		µg/l		50.0		97	70-130		
Surrogate: 1,2-Dichloroethane-d4	47.4		µg/l		50.0		95	70-130		
Surrogate: Dibromofluoromethane	48.7		µg/l		50.0		97	70-130		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>Blank (1506751-BLK1)</b>					<u>Prepared: 10-Apr-15 Analyzed: 13-Apr-15</u>					
Acenaphthene	< 15.5	U	µg/kg wet	15.5						
Acenaphthylene	< 14.1	U	µg/kg wet	14.1						
Aniline	< 67.7	U	µg/kg wet	67.7						
Anthracene	< 15.2	U	µg/kg wet	15.2						
Azobenzene/Diphenyldiazene	< 79.2	U	µg/kg wet	79.2						
Benzidine	< 80.4	U	µg/kg wet	80.4						
Benzo (a) anthracene	< 13.7	U	µg/kg wet	13.7						
Benzo (a) pyrene	< 13.8	U	µg/kg wet	13.8						
Benzo (b) fluoranthene	< 15.1	U	µg/kg wet	15.1						
Benzo (g,h,i) perylene	< 14.4	U	µg/kg wet	14.4						
Benzo (k) fluoranthene	< 15.1	U	µg/kg wet	15.1						
Benzoic acid	< 76.7	U	µg/kg wet	76.7						
Benzyl alcohol	< 60.3	U	µg/kg wet	60.3						
Bis(2-chloroethoxy)methane	< 60.0	U	µg/kg wet	60.0						
Bis(2-chloroethyl)ether	< 59.7	U	µg/kg wet	59.7						
Bis(2-chloroisopropyl)ether	< 59.6	U	µg/kg wet	59.6						
Bis(2-ethylhexyl)phthalate	< 82.0	U	µg/kg wet	82.0						
4-Bromophenyl phenyl ether	< 66.4	U	µg/kg wet	66.4						
Butyl benzyl phthalate	< 72.8	U	µg/kg wet	72.8						
Carbazole	< 84.4	U	µg/kg wet	84.4						
4-Chloro-3-methylphenol	< 68.1	U	µg/kg wet	68.1						
4-Chloroaniline	< 67.8	U	µg/kg wet	67.8						
2-Chloronaphthalene	< 57.7	U	µg/kg wet	57.7						
2-Chlorophenol	< 58.7	U	µg/kg wet	58.7						
4-Chlorophenyl phenyl ether	< 61.7	U	µg/kg wet	61.7						
Chrysene	< 16.2	U	µg/kg wet	16.2						
Dibenzo (a,h) anthracene	< 12.2	U	µg/kg wet	12.2						
Dibenzofuran	< 12.2	U	µg/kg wet	12.2						
1,2-Dichlorobenzene	< 55.2	U	µg/kg wet	55.2						
1,3-Dichlorobenzene	< 58.3	U	µg/kg wet	58.3						
1,4-Dichlorobenzene	< 54.4	U	µg/kg wet	54.4						
3,3'-Dichlorobenzidine	< 66.7	U	µg/kg wet	66.7						
2,4-Dichlorophenol	< 56.5	U	µg/kg wet	56.5						
Diethyl phthalate	< 68.6	U	µg/kg wet	68.6						
Dimethyl phthalate	< 64.7	U	µg/kg wet	64.7						
2,4-Dimethylphenol	< 56.3	U	µg/kg wet	56.3						
Di-n-butyl phthalate	< 73.7	U	µg/kg wet	73.7						
4,6-Dinitro-2-methylphenol	< 87.3	U	µg/kg wet	87.3						
2,4-Dinitrophenol	< 86.5	U	µg/kg wet	86.5						
2,4-Dinitrotoluene	< 68.5	U	µg/kg wet	68.5						
2,6-Dinitrotoluene	< 64.5	U	µg/kg wet	64.5						
Di-n-octyl phthalate	< 70.9	U	µg/kg wet	70.9						
Fluoranthene	< 16.7	U	µg/kg wet	16.7						
Fluorene	< 15.9	U	µg/kg wet	15.9						
Hexachlorobenzene	< 72.6	U	µg/kg wet	72.6						
Hexachlorobutadiene	< 52.8	U	µg/kg wet	52.8						
Hexachlorocyclopentadiene	< 60.6	U	µg/kg wet	60.6						
Hexachloroethane	< 63.8	U	µg/kg wet	63.8						
Indeno (1,2,3-cd) pyrene	< 13.6	U	µg/kg wet	13.6						
Isophorone	< 58.0	U	µg/kg wet	58.0						
2-Methylnaphthalene	< 13.7	U	µg/kg wet	13.7						
2-Methylphenol	< 58.9	U	µg/kg wet	58.9						

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>Blank (1506751-BLK1)</b>					<u>Prepared: 10-Apr-15 Analyzed: 13-Apr-15</u>					
3 & 4-Methylphenol	< 73.9	U	µg/kg wet	73.9						
Naphthalene	< 13.5	U	µg/kg wet	13.5						
2-Nitroaniline	< 65.8	U	µg/kg wet	65.8						
3-Nitroaniline	< 78.6	U	µg/kg wet	78.6						
4-Nitroaniline	< 95.0	U	µg/kg wet	95.0						
Nitrobenzene	< 64.5	U	µg/kg wet	64.5						
2-Nitrophenol	< 55.0	U	µg/kg wet	55.0						
4-Nitrophenol	< 88.7	U	µg/kg wet	88.7						
N-Nitrosodimethylamine	< 65.2	U	µg/kg wet	65.2						
N-Nitrosodi-n-propylamine	< 70.7	U	µg/kg wet	70.7						
N-Nitrosodiphenylamine	< 77.2	U	µg/kg wet	77.2						
Pentachlorophenol	< 78.2	U	µg/kg wet	78.2						
Phenanthrene	< 16.2	U	µg/kg wet	16.2						
Phenol	< 59.8	U	µg/kg wet	59.8						
Pyrene	< 14.1	U	µg/kg wet	14.1						
Pyridine	< 71.1	U	µg/kg wet	71.1						
1,2,4-Trichlorobenzene	< 52.3	U	µg/kg wet	52.3						
1-Methylnaphthalene	< 16.8	U	µg/kg wet	16.8						
2,4,5-Trichlorophenol	< 67.9	U	µg/kg wet	67.9						
2,4,6-Trichlorophenol	< 62.9	U	µg/kg wet	62.9						
Pentachloronitrobenzene	< 70.4	U	µg/kg wet	70.4						
1,2,4,5-Tetrachlorobenzene	< 59.6	U	µg/kg wet	59.6						
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<i>Surrogate: 2-Fluorobiphenyl</i>	1400		µg/kg wet		1660		84	30-130		
<i>Surrogate: 2-Fluorophenol</i>	1540		µg/kg wet		1660		93	30-130		
<i>Surrogate: Nitrobenzene-d5</i>	1580		µg/kg wet		1660		95	30-130		
<i>Surrogate: Phenol-d5</i>	1600		µg/kg wet		1660		97	30-130		
<i>Surrogate: Terphenyl-dl4</i>	1620		µg/kg wet		1660		98	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	1290		µg/kg wet		1660		78	30-130		
<b>LCS (1506751-BS1)</b>					<u>Prepared: 10-Apr-15 Analyzed: 13-Apr-15</u>					
Acenaphthene	1380		µg/kg wet	15.4	1650		83	40-140		
Acenaphthylene	1380		µg/kg wet	14.0	1650		84	40-140		
Aniline	1040		µg/kg wet	67.5	1650		63	40-140		
Anthracene	1480		µg/kg wet	15.1	1650		89	40-140		
Azobenzene/Diphenyldiazene	1410		µg/kg wet	78.9	1650		85	40-140		
Benzidine	497	QC2	µg/kg wet	80.1	1650		30	40-140		
Benzo (a) anthracene	1470		µg/kg wet	13.7	1650		89	40-140		
Benzo (a) pyrene	1540		µg/kg wet	13.8	1650		93	40-140		
Benzo (b) fluoranthene	1530		µg/kg wet	15.1	1650		93	40-140		
Benzo (g,h,i) perylene	1610		µg/kg wet	14.3	1650		98	40-140		
Benzo (k) fluoranthene	1440		µg/kg wet	15.1	1650		87	40-140		
Benzoic acid	713		µg/kg wet	76.4	1650		43	30-130		
Benzyl alcohol	1390		µg/kg wet	60.1	1650		84	40-140		
Bis(2-chloroethoxy)methane	1370		µg/kg wet	59.7	1650		83	40-140		
Bis(2-chloroethyl)ether	1290		µg/kg wet	59.5	1650		78	40-140		
Bis(2-chloroisopropyl)ether	1500		µg/kg wet	59.4	1650		91	40-140		
Bis(2-ethylhexyl)phthalate	1570		µg/kg wet	81.7	1650		95	40-140		
4-Bromophenyl phenyl ether	1410		µg/kg wet	66.1	1650		85	40-140		
Butyl benzyl phthalate	1580		µg/kg wet	72.5	1650		95	40-140		
Carbazole	1550		µg/kg wet	84.1	1650		94	40-140		
4-Chloro-3-methylphenol	1560		µg/kg wet	67.9	1650		95	30-130		
4-Chloroaniline	1200		µg/kg wet	67.5	1650		73	40-140		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>LCS (1506751-BS1)</b>					<u>Prepared: 10-Apr-15 Analyzed: 13-Apr-15</u>					
2-Chloronaphthalene	1520		µg/kg wet	57.5	1650		92	40-140		
2-Chlorophenol	1360		µg/kg wet	58.5	1650		82	30-130		
4-Chlorophenyl phenyl ether	1440		µg/kg wet	61.4	1650		87	40-140		
Chrysene	1430		µg/kg wet	16.2	1650		86	40-140		
Dibenzo (a,h) anthracene	1590		µg/kg wet	12.1	1650		96	40-140		
Dibenzofuran	1380		µg/kg wet	12.1	1650		83	40-140		
1,2-Dichlorobenzene	1330		µg/kg wet	55.0	1650		80	40-140		
1,3-Dichlorobenzene	1330		µg/kg wet	58.1	1650		80	40-140		
1,4-Dichlorobenzene	1300		µg/kg wet	54.2	1650		79	40-140		
3,3'-Dichlorobenzidine	1770		µg/kg wet	66.4	1650		107	40-140		
2,4-Dichlorophenol	1400		µg/kg wet	56.3	1650		85	30-130		
Diethyl phthalate	1440		µg/kg wet	68.3	1650		87	40-140		
Dimethyl phthalate	1340		µg/kg wet	64.4	1650		81	40-140		
2,4-Dimethylphenol	1410		µg/kg wet	56.1	1650		85	30-130		
Di-n-butyl phthalate	1460		µg/kg wet	73.5	1650		88	40-140		
4,6-Dinitro-2-methylphenol	1300		µg/kg wet	87.0	1650		79	30-130		
2,4-Dinitrophenol	1150		µg/kg wet	86.2	1650		70	30-130		
2,4-Dinitrotoluene	1550		µg/kg wet	68.2	1650		94	40-140		
2,6-Dinitrotoluene	1550		µg/kg wet	64.2	1650		94	40-140		
Di-n-octyl phthalate	1500		µg/kg wet	70.7	1650		91	40-140		
Fluoranthene	1460		µg/kg wet	16.6	1650		88	40-140		
Fluorene	1410		µg/kg wet	15.8	1650		85	40-140		
Hexachlorobenzene	1450		µg/kg wet	72.3	1650		88	40-140		
Hexachlorobutadiene	1160		µg/kg wet	52.7	1650		70	40-140		
Hexachlorocyclopentadiene	1790		µg/kg wet	60.3	1650		108	40-140		
Hexachloroethane	1310		µg/kg wet	63.6	1650		80	40-140		
Indeno (1,2,3-cd) pyrene	1720		µg/kg wet	13.5	1650		104	40-140		
Isophorone	1400		µg/kg wet	57.8	1650		85	40-140		
2-Methylnaphthalene	1500		µg/kg wet	13.6	1650		91	40-140		
2-Methylphenol	1460		µg/kg wet	58.7	1650		89	30-130		
3 & 4-Methylphenol	1470		µg/kg wet	73.6	1650		89	30-130		
Naphthalene	1340		µg/kg wet	13.5	1650		81	40-140		
2-Nitroaniline	1550		µg/kg wet	65.6	1650		94	40-140		
3-Nitroaniline	1500		µg/kg wet	78.3	1650		91	40-140		
4-Nitroaniline	1730		µg/kg wet	94.6	1650		104	40-140		
Nitrobenzene	1520		µg/kg wet	64.2	1650		92	40-140		
2-Nitrophenol	1460		µg/kg wet	54.8	1650		88	30-130		
4-Nitrophenol	1120	J	µg/kg wet	88.4	1650		68	30-130		
N-Nitrosodimethylamine	1210		µg/kg wet	64.9	1650		73	40-140		
N-Nitrosodi-n-propylamine	1510		µg/kg wet	70.4	1650		92	40-140		
N-Nitrosodiphenylamine	1470		µg/kg wet	77.0	1650		89	40-140		
Pentachlorophenol	1080		µg/kg wet	77.9	1650		65	30-130		
Phenanthrene	1380		µg/kg wet	16.1	1650		83	40-140		
Phenol	1440		µg/kg wet	59.6	1650		87	30-130		
Pyrene	1480		µg/kg wet	14.1	1650		90	40-140		
Pyridine	1060		µg/kg wet	70.8	1650		64	40-140		
1,2,4-Trichlorobenzene	1290		µg/kg wet	52.1	1650		78	40-140		
1-Methylnaphthalene	1630		µg/kg wet	16.7	1650		99	40-140		
2,4,5-Trichlorophenol	1610		µg/kg wet	67.7	1650		97	30-130		
2,4,6-Trichlorophenol	1600		µg/kg wet	62.7	1650		97	30-130		
Pentachloronitrobenzene	1500		µg/kg wet	70.1	1650		90	40-140		
1,2,4,5-Tetrachlorobenzene	1590		µg/kg wet	59.4	1650		96	40-140		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b><u>LCS (1506751-BS1)</u></b>					<b><u>Prepared: 10-Apr-15 Analyzed: 13-Apr-15</u></b>					
Surrogate: 2-Fluorobiphenyl	1590		µg/kg wet		1650		96	30-130		
Surrogate: 2-Fluorophenol	1470		µg/kg wet		1650		89	30-130		
Surrogate: Nitrobenzene-d5	1600		µg/kg wet		1650		97	30-130		
Surrogate: Phenol-d5	1490		µg/kg wet		1650		90	30-130		
Surrogate: Terphenyl-dl4	1530		µg/kg wet		1650		93	30-130		
Surrogate: 2,4,6-Tribromophenol	1500		µg/kg wet		1650		91	30-130		
<b><u>Duplicate (1506751-DUP1)</u></b>					<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 10-Apr-15 Analyzed: 17-Apr-15</u></b>			
Acenaphthene	< 36.4	U	µg/kg dry	36.4		BRL				30
Acenaphthylene	< 33.2	U	µg/kg dry	33.2		BRL				30
Aniline	< 160	U	µg/kg dry	160		BRL				30
Anthracene	< 35.8	U	µg/kg dry	35.8		BRL				30
Azobenzene/Diphenyldiazene	< 186	U	µg/kg dry	186		BRL				30
Benidine	< 189	U	µg/kg dry	189		BRL				30
Benzo (a) anthracene	< 32.4	U	µg/kg dry	32.4		BRL				30
Benzo (a) pyrene	< 32.6	U	µg/kg dry	32.6		BRL				30
Benzo (b) fluoranthene	< 35.6	U	µg/kg dry	35.6		BRL				30
Benzo (g,h,i) perylene	< 33.9	U	µg/kg dry	33.9		BRL				30
Benzo (k) fluoranthene	< 35.6	U	µg/kg dry	35.6		BRL				30
Benzoic acid	< 181	U	µg/kg dry	181		BRL				30
Benzyl alcohol	< 142	U	µg/kg dry	142		BRL				30
Bis(2-chloroethoxy)methane	< 141	U	µg/kg dry	141		BRL				30
Bis(2-chloroethyl)ether	< 141	U	µg/kg dry	141		BRL				30
Bis(2-chloroisopropyl)ether	< 140	U	µg/kg dry	140		BRL				30
Bis(2-ethylhexyl)phthalate	< 193	U	µg/kg dry	193		BRL				30
4-Bromophenyl phenyl ether	< 156	U	µg/kg dry	156		BRL				30
Butyl benzyl phthalate	< 171	U	µg/kg dry	171		BRL				30
Carbazole	< 199	U	µg/kg dry	199		BRL				30
4-Chloro-3-methylphenol	< 160	U	µg/kg dry	160		BRL				30
4-Chloroaniline	< 160	U	µg/kg dry	160		BRL				30
2-Chloronaphthalene	< 136	U	µg/kg dry	136		BRL				30
2-Chlorophenol	< 138	U	µg/kg dry	138		BRL				30
4-Chlorophenyl phenyl ether	< 145	U	µg/kg dry	145		BRL				30
Chrysene	< 38.2	U	µg/kg dry	38.2		BRL				30
Dibenzo (a,h) anthracene	< 28.7	U	µg/kg dry	28.7		BRL				30
Dibenzofuran	< 28.7	U	µg/kg dry	28.7		BRL				30
1,2-Dichlorobenzene	< 130	U	µg/kg dry	130		BRL				30
1,3-Dichlorobenzene	< 137	U	µg/kg dry	137		BRL				30
1,4-Dichlorobenzene	< 128	U	µg/kg dry	128		BRL				30
3,3'-Dichlorobenzidine	< 157	U	µg/kg dry	157		BRL				30
2,4-Dichlorophenol	< 133	U	µg/kg dry	133		BRL				30
Diethyl phthalate	< 161	U	µg/kg dry	161		BRL				30
Dimethyl phthalate	< 152	U	µg/kg dry	152		BRL				30
2,4-Dimethylphenol	< 133	U	µg/kg dry	133		BRL				30
Di-n-butyl phthalate	< 174	U	µg/kg dry	174		BRL				30
4,6-Dinitro-2-methylphenol	< 206	U	µg/kg dry	206		BRL				30
2,4-Dinitrophenol	< 204	U	µg/kg dry	204		BRL				30
2,4-Dinitrotoluene	< 161	U	µg/kg dry	161		BRL				30
2,6-Dinitrotoluene	< 152	U	µg/kg dry	152		BRL				30
Di-n-octyl phthalate	< 167	U	µg/kg dry	167		BRL				30
Fluoranthene	< 39.3	U	µg/kg dry	39.3		54.8				30
Fluorene	< 37.5	U	µg/kg dry	37.5		BRL				30

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b><u>Duplicate (1506751-DUP1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 10-Apr-15 Analyzed: 17-Apr-15</u></b>					
Hexachlorobenzene	< 171	U	µg/kg dry	171		BRL				30
Hexachlorobutadiene	< 124	U	µg/kg dry	124		BRL				30
Hexachlorocyclopentadiene	< 143	U	µg/kg dry	143		BRL				30
Hexachloroethane	< 150	U	µg/kg dry	150		BRL				30
Indeno (1,2,3-cd) pyrene	< 32.0	U	µg/kg dry	32.0		BRL				30
Isophorone	< 137	U	µg/kg dry	137		BRL				30
2-Methylnaphthalene	<b>89.8</b>	J	µg/kg dry	32.3		BRL				30
2-Methylphenol	< 139	U	µg/kg dry	139		BRL				30
3 & 4-Methylphenol	< 174	U	µg/kg dry	174		BRL				30
Naphthalene	< 31.9	U	µg/kg dry	31.9		BRL				30
2-Nitroaniline	< 155	U	µg/kg dry	155		BRL				30
3-Nitroaniline	< 185	U	µg/kg dry	185		BRL				30
4-Nitroaniline	< 224	U	µg/kg dry	224		BRL				30
Nitrobenzene	< 152	U	µg/kg dry	152		BRL				30
2-Nitrophenol	< 130	U	µg/kg dry	130		BRL				30
4-Nitrophenol	< 209	U	µg/kg dry	209		BRL				30
N-Nitrosodimethylamine	< 153	U	µg/kg dry	153		BRL				30
N-Nitrosodi-n-propylamine	< 167	U	µg/kg dry	167		BRL				30
N-Nitrosodiphenylamine	< 182	U	µg/kg dry	182		BRL				30
Pentachlorophenol	< 184	U	µg/kg dry	184		BRL				30
Phenanthrene	< 38.2	U	µg/kg dry	38.2		BRL				30
Phenol	< 141	U	µg/kg dry	141		BRL				30
Pyrene	< 33.3	U	µg/kg dry	33.3		45.3				30
Pyridine	< 167	U	µg/kg dry	167		BRL				30
1,2,4-Trichlorobenzene	< 123	U	µg/kg dry	123		BRL				30
1-Methylnaphthalene	<b>49.2</b>	J	µg/kg dry	39.6		BRL				30
2,4,5-Trichlorophenol	< 160	U	µg/kg dry	160		BRL				30
2,4,6-Trichlorophenol	< 148	U	µg/kg dry	148		BRL				30
Pentachloronitrobenzene	< 166	U	µg/kg dry	166		BRL				30
1,2,4,5-Tetrachlorobenzene	< 140	U	µg/kg dry	140		BRL				30
<i>Surrogate: 2-Fluorobiphenyl</i>	2260		µg/kg dry		3910		58	30-130		
<i>Surrogate: 2-Fluorophenol</i>	272	SDUP	µg/kg dry		3910		7	30-130		
<i>Surrogate: Nitrobenzene-d5</i>	3070		µg/kg dry		3910		79	30-130		
<i>Surrogate: Phenol-d5</i>	1200		µg/kg dry		3910		31	30-130		
<i>Surrogate: Terphenyl-dl4</i>	2630		µg/kg dry		3910		67	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	57.0	SDUP	µg/kg dry		3910		1	30-130		
<b><u>Matrix Spike (1506751-MS1)</u></b>			<b><u>Source: SC05494-01</u></b>		<b><u>Prepared: 10-Apr-15 Analyzed: 16-Apr-15</u></b>					
Acenaphthene	<b>3170</b>		µg/kg dry	48.6	5200	BRL	61	40-140		
Acenaphthylene	<b>3280</b>		µg/kg dry	44.2	5200	BRL	63	40-140		
Aniline	<b>1480</b>	QM7	µg/kg dry	213	5200	BRL	28	40-140		
Anthracene	<b>3150</b>		µg/kg dry	47.7	5200	BRL	61	40-140		
Azobenzene/Diphenyldiazene	<b>3740</b>		µg/kg dry	248	5200	BRL	72	40-140		
Benzidine	< 252	QC2, U	µg/kg dry	252	5200	BRL		40-140		
Benzo (a) anthracene	<b>3130</b>		µg/kg dry	43.1	5200	53.0	59	40-140		
Benzo (a) pyrene	<b>3390</b>		µg/kg dry	43.4	5200	BRL	65	40-140		
Benzo (b) fluoranthene	<b>3350</b>		µg/kg dry	47.5	5200	54.1	63	40-140		
Benzo (g,h,i) perylene	<b>3120</b>		µg/kg dry	45.1	5200	BRL	60	40-140		
Benzo (k) fluoranthene	<b>3590</b>		µg/kg dry	47.5	5200	BRL	69	40-140		
Benzoic acid	< 241	QM7, U	µg/kg dry	241	5200	BRL		30-130		
Benzyl alcohol	<b>1320</b>	QM7	µg/kg dry	189	5200	BRL	25	40-140		
Bis(2-chloroethoxy)methane	<b>3610</b>		µg/kg dry	188	5200	BRL	69	40-140		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>Matrix Spike (1506751-MS1)</b>										
				<b>Source: SC05494-01</b>				<b>Prepared: 10-Apr-15 Analyzed: 16-Apr-15</b>		
Bis(2-chloroethyl)ether	3300		µg/kg dry	187	5200	BRL	63	40-140		
Bis(2-chloroisopropyl)ether	4030		µg/kg dry	187	5200	BRL	77	40-140		
Bis(2-ethylhexyl)phthalate	3400		µg/kg dry	257	5200	BRL	65	40-140		
4-Bromophenyl phenyl ether	2950		µg/kg dry	208	5200	BRL	57	40-140		
Butyl benzyl phthalate	3320		µg/kg dry	228	5200	BRL	64	40-140		
Carbazole	4000		µg/kg dry	265	5200	BRL	77	40-140		
4-Chloro-3-methylphenol	3760		µg/kg dry	214	5200	BRL	72	30-130		
4-Chloroaniline	1650	QM7	µg/kg dry	213	5200	BRL	32	40-140		
2-Chloronaphthalene	3210		µg/kg dry	181	5200	BRL	62	40-140		
2-Chlorophenol	3100		µg/kg dry	184	5200	BRL	60	30-130		
4-Chlorophenyl phenyl ether	3060		µg/kg dry	194	5200	BRL	59	40-140		
Chrysene	3420		µg/kg dry	50.9	5200	53.0	65	40-140		
Dibenzo (a,h) anthracene	3470		µg/kg dry	38.3	5200	BRL	67	40-140		
Dibenzofuran	3300		µg/kg dry	38.3	5200	BRL	63	40-140		
1,2-Dichlorobenzene	3220		µg/kg dry	173	5200	BRL	62	40-140		
1,3-Dichlorobenzene	3160		µg/kg dry	183	5200	BRL	61	40-140		
1,4-Dichlorobenzene	3150		µg/kg dry	171	5200	BRL	60	40-140		
3,3'-Dichlorobenzidine	1610	QM7	µg/kg dry	209	5200	BRL	31	40-140		
2,4-Dichlorophenol	3100		µg/kg dry	177	5200	BRL	60	30-130		
Diethyl phthalate	3640		µg/kg dry	215	5200	BRL	70	40-140		
Dimethyl phthalate	3600		µg/kg dry	203	5200	BRL	69	40-140		
2,4-Dimethylphenol	2690		µg/kg dry	177	5200	BRL	52	30-130		
Di-n-butyl phthalate	3120		µg/kg dry	231	5200	BRL	60	40-140		
4,6-Dinitro-2-methylphenol	< 274	QM7, U	µg/kg dry	274	5200	BRL		30-130		
2,4-Dinitrophenol	325	QM7, J	µg/kg dry	271	5200	BRL	6	30-130		
2,4-Dinitrotoluene	3820		µg/kg dry	215	5200	BRL	73	40-140		
2,6-Dinitrotoluene	3640		µg/kg dry	202	5200	BRL	70	40-140		
Di-n-octyl phthalate	3570		µg/kg dry	223	5200	BRL	69	40-140		
Fluoranthene	3150		µg/kg dry	52.3	5200	117	58	40-140		
Fluorene	3160		µg/kg dry	49.9	5200	BRL	61	40-140		
Hexachlorobenzene	3100		µg/kg dry	228	5200	BRL	59	40-140		
Hexachlorobutadiene	2310		µg/kg dry	166	5200	BRL	44	40-140		
Hexachlorocyclopentadiene	1660	QM7	µg/kg dry	190	5200	BRL	32	40-140		
Hexachloroethane	3060		µg/kg dry	200	5200	BRL	59	40-140		
Indeno (1,2,3-cd) pyrene	3530		µg/kg dry	42.6	5200	BRL	68	40-140		
Isophorone	3620		µg/kg dry	182	5200	BRL	70	30-130		
2-Methylnaphthalene	3540		µg/kg dry	43.0	5200	BRL	68	40-140		
2-Methylphenol	3530		µg/kg dry	185	5200	BRL	68	30-130		
3 & 4-Methylphenol	3750		µg/kg dry	232	5200	BRL	72	30-130		
Naphthalene	3170		µg/kg dry	42.4	5200	BRL	61	40-140		
2-Nitroaniline	4300		µg/kg dry	207	5200	BRL	83	40-140		
3-Nitroaniline	2980		µg/kg dry	247	5200	BRL	57	40-140		
4-Nitroaniline	4600		µg/kg dry	298	5200	BRL	88	40-140		
Nitrobenzene	3780		µg/kg dry	202	5200	BRL	73	40-140		
2-Nitrophenol	2800		µg/kg dry	173	5200	BRL	54	30-130		
4-Nitrophenol	< 278	QM7, U	µg/kg dry	278	5200	BRL		30-130		
N-Nitrosodimethylamine	3710		µg/kg dry	204	5200	BRL	71	40-140		
N-Nitrosodi-n-propylamine	3990		µg/kg dry	222	5200	BRL	77	40-140		
N-Nitrosodiphenylamine	3780		µg/kg dry	242	5200	BRL	73	40-140		
Pentachlorophenol	< 245	QM7, U	µg/kg dry	245	5200	BRL		30-130		
Phenanthrene	3080		µg/kg dry	50.8	5200	73.8	58	40-140		
Phenol	3540		µg/kg dry	188	5200	BRL	68	30-130		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>Matrix Spike (1506751-MS1)</b>			<b>Source: SC05494-01</b>		<b>Prepared: 10-Apr-15 Analyzed: 16-Apr-15</b>					
Pyrene	3360		µg/kg dry	44.4	5200	110	62	40-140		
Pyridine	3170		µg/kg dry	223	5200	BRL	61	40-140		
1,2,4-Trichlorobenzene	2910		µg/kg dry	164	5200	BRL	56	40-140		
1-Methylnaphthalene	3340		µg/kg dry	52.7	5200	BRL	64	40-140		
2,4,5-Trichlorophenol	2690		µg/kg dry	213	5200	BRL	52	30-130		
2,4,6-Trichlorophenol	1390	QM7	µg/kg dry	197	5200	BRL	27	30-130		
Pentachloronitrobenzene	3090		µg/kg dry	221	5200	BRL	59	40-140		
1,2,4,5-Tetrachlorobenzene	3200		µg/kg dry	187	5200	BRL	62	40-140		
Surrogate: 2-Fluorobiphenyl	3250		µg/kg dry		5200		63	30-130		
Surrogate: 2-Fluorophenol	3300		µg/kg dry		5200		63	30-130		
Surrogate: Nitrobenzene-d5	4040		µg/kg dry		5200		78	30-130		
Surrogate: Phenol-d5	3700		µg/kg dry		5200		71	30-130		
Surrogate: Terphenyl-d14	3630		µg/kg dry		5200		70	30-130		
Surrogate: 2,4,6-Tribromophenol	1980		µg/kg dry		5200		38	30-130		
<b>Matrix Spike Dup (1506751-MSD1)</b>			<b>Source: SC05494-01</b>		<b>Prepared: 10-Apr-15 Analyzed: 16-Apr-15</b>					
Acenaphthene	3120		µg/kg dry	48.4	5190	BRL	60	40-140	1	30
Acenaphthylene	3290		µg/kg dry	44.1	5190	BRL	63	40-140	0.7	30
Aniline	2360	QM7	µg/kg dry	212	5190	BRL	45	40-140	46	30
Anthracene	3010		µg/kg dry	47.5	5190	BRL	58	40-140	4	30
Azobenzene/Diphenyldiazene	3670		µg/kg dry	248	5190	BRL	71	40-140	2	30
Benzidine	< 252	QC2, U	µg/kg dry	252	5190	BRL		40-140		30
Benzo (a) anthracene	2540		µg/kg dry	43.0	5190	53.0	48	40-140	21	30
Benzo (a) pyrene	2620		µg/kg dry	43.3	5190	BRL	50	40-140	26	30
Benzo (b) fluoranthene	2520		µg/kg dry	47.4	5190	54.1	47	40-140	29	30
Benzo (g,h,i) perylene	2040	QM7, QR9	µg/kg dry	45.0	5190	BRL	39	40-140	42	30
Benzo (k) fluoranthene	2950		µg/kg dry	47.4	5190	BRL	57	40-140	19	30
Benzoic acid	< 240	QM7, U	µg/kg dry	240	5190	BRL		30-130		30
Benzyl alcohol	1100	QM7	µg/kg dry	189	5190	BRL	21	40-140	18	30
Bis(2-chloroethoxy)methane	3750		µg/kg dry	188	5190	BRL	72	40-140	4	30
Bis(2-chloroethyl)ether	3930		µg/kg dry	187	5190	BRL	76	40-140	18	30
Bis(2-chloroisopropyl)ether	4430		µg/kg dry	187	5190	BRL	85	40-140	10	30
Bis(2-ethylhexyl)phthalate	2820		µg/kg dry	257	5190	BRL	54	40-140	18	30
4-Bromophenyl phenyl ether	2520		µg/kg dry	208	5190	BRL	48	40-140	16	30
Butyl benzyl phthalate	2660		µg/kg dry	228	5190	BRL	51	40-140	22	30
Carbazole	4570		µg/kg dry	264	5190	BRL	88	40-140	13	30
4-Chloro-3-methylphenol	4070		µg/kg dry	213	5190	BRL	78	30-130	8	30
4-Chloroaniline	2440	QR9	µg/kg dry	212	5190	BRL	47	40-140	39	30
2-Chloronaphthalene	3350		µg/kg dry	181	5190	BRL	64	40-140	4	30
2-Chlorophenol	3400		µg/kg dry	184	5190	BRL	65	30-130	9	30
4-Chlorophenyl phenyl ether	2610		µg/kg dry	193	5190	BRL	50	40-140	16	30
Chrysene	2640		µg/kg dry	50.8	5190	53.0	50	40-140	26	30
Dibenzo (a,h) anthracene	2170	QR9	µg/kg dry	38.2	5190	BRL	42	40-140	46	30
Dibenzofuran	3200		µg/kg dry	38.2	5190	BRL	62	40-140	3	30
1,2-Dichlorobenzene	3690		µg/kg dry	173	5190	BRL	71	40-140	14	30
1,3-Dichlorobenzene	3550		µg/kg dry	183	5190	BRL	68	40-140	12	30
1,4-Dichlorobenzene	3540		µg/kg dry	170	5190	BRL	68	40-140	12	30
3,3'-Dichlorobenzidine	1770	QM7	µg/kg dry	209	5190	BRL	34	40-140	9	30
2,4-Dichlorophenol	3220		µg/kg dry	177	5190	BRL	62	30-130	4	30
Diethyl phthalate	3630		µg/kg dry	215	5190	BRL	70	40-140	0.2	30
Dimethyl phthalate	3820		µg/kg dry	203	5190	BRL	74	40-140	6	30
2,4-Dimethylphenol	2340		µg/kg dry	176	5190	BRL	45	30-130	14	30

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506751 - SW846 3545A</b>										
<b>Matrix Spike Dup (1506751-MSD1)</b>			<b>Source: SC05494-01</b>		<b>Prepared: 10-Apr-15 Analyzed: 16-Apr-15</b>					
Di-n-butyl phthalate	2520		µg/kg dry	231	5190	BRL	48	40-140	21	30
4,6-Dinitro-2-methylphenol	< 273	QM7, U	µg/kg dry	273	5190	BRL		30-130		30
2,4-Dinitrophenol	323	QM7, J	µg/kg dry	271	5190	BRL	6	30-130	0.3	30
2,4-Dinitrotoluene	4000		µg/kg dry	214	5190	BRL	77	40-140	5	30
2,6-Dinitrotoluene	3840		µg/kg dry	202	5190	BRL	74	40-140	5	30
Di-n-octyl phthalate	3150		µg/kg dry	222	5190	BRL	61	40-140	12	30
Fluoranthene	2580		µg/kg dry	52.2	5190	117	47	40-140	20	30
Fluorene	3020		µg/kg dry	49.8	5190	BRL	58	40-140	4	30
Hexachlorobenzene	2440		µg/kg dry	227	5190	BRL	47	40-140	23	30
Hexachlorobutadiene	2060		µg/kg dry	165	5190	BRL	40	40-140	11	30
Hexachlorocyclopentadiene	1170	QM7, QR9	µg/kg dry	190	5190	BRL	23	40-140	34	30
Hexachloroethane	3310		µg/kg dry	200	5190	BRL	64	40-140	8	30
Indeno (1,2,3-cd) pyrene	2150	QR9	µg/kg dry	42.5	5190	BRL	41	40-140	48	30
Isophorone	3670		µg/kg dry	182	5190	BRL	71	30-130	1	30
2-Methylnaphthalene	3720		µg/kg dry	42.9	5190	BRL	72	40-140	5	30
2-Methylphenol	3740		µg/kg dry	184	5190	BRL	72	30-130	6	30
3 & 4-Methylphenol	3960		µg/kg dry	231	5190	BRL	76	30-130	6	30
Naphthalene	3600		µg/kg dry	42.3	5190	BRL	69	40-140	13	30
2-Nitroaniline	4500		µg/kg dry	206	5190	BRL	87	40-140	5	30
3-Nitroaniline	3760		µg/kg dry	246	5190	BRL	72	40-140	23	30
4-Nitroaniline	4920		µg/kg dry	297	5190	BRL	95	40-140	7	30
Nitrobenzene	4160		µg/kg dry	202	5190	BRL	80	40-140	10	30
2-Nitrophenol	3050		µg/kg dry	172	5190	BRL	59	30-130	9	30
4-Nitrophenol	581	QM7, J	µg/kg dry	278	5190	BRL	11	30-130		30
N-Nitrosodimethylamine	3900		µg/kg dry	204	5190	BRL	75	40-140	5	30
N-Nitrosodi-n-propylamine	4240		µg/kg dry	221	5190	BRL	82	40-140	6	30
N-Nitrosodiphenylamine	4120		µg/kg dry	242	5190	BRL	79	40-140	9	30
Pentachlorophenol	< 245	QM7, U	µg/kg dry	245	5190	BRL		30-130		30
Phenanthrene	2990		µg/kg dry	50.7	5190	73.8	56	40-140	3	30
Phenol	3890		µg/kg dry	187	5190	BRL	75	30-130	10	30
Pyrene	2840		µg/kg dry	44.3	5190	110	52	40-140	17	30
Pyridine	3540		µg/kg dry	223	5190	BRL	68	40-140	11	30
1,2,4-Trichlorobenzene	3090		µg/kg dry	164	5190	BRL	59	40-140	6	30
1-Methylnaphthalene	3540		µg/kg dry	52.6	5190	BRL	68	40-140	6	30
2,4,5-Trichlorophenol	2910		µg/kg dry	213	5190	BRL	56	30-130	8	30
2,4,6-Trichlorophenol	1630		µg/kg dry	197	5190	BRL	31	30-130	16	30
Pentachloronitrobenzene	2610		µg/kg dry	220	5190	BRL	50	40-140	17	30
1,2,4,5-Tetrachlorobenzene	3060		µg/kg dry	187	5190	BRL	59	40-140	4	30
Surrogate: 2-Fluorobiphenyl	3240		µg/kg dry		5190		62	30-130		
Surrogate: 2-Fluorophenol	3630		µg/kg dry		5190		70	30-130		
Surrogate: Nitrobenzene-d5	4330		µg/kg dry		5190		83	30-130		
Surrogate: Phenol-d5	3960		µg/kg dry		5190		76	30-130		
Surrogate: Terphenyl-d14	2640		µg/kg dry		5190		51	30-130		
Surrogate: 2,4,6-Tribromophenol	2110		µg/kg dry		5190		41	30-130		
<b>Batch 1506941 - SW846 3535A</b>										
<b>Blank (1506941-BLK1)</b>			<b>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</b>							
1,4-Dichlorobenzene	< 2.02	U	µg/l	2.02						
2,4-Dinitrotoluene	< 2.38	U	µg/l	2.38						
Hexachlorobenzene	< 2.15	U	µg/l	2.15						
Hexachlorobutadiene	< 2.03	U	µg/l	2.03						
Hexachloroethane	< 2.15	U	µg/l	2.15						

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506941 - SW846 3535A</b>										
<b>Blank (1506941-BLK1)</b>					<u>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</u>					
2-Methylphenol	< 2.14	U	µg/l	2.14						
3 & 4-Methylphenol	< 2.22	U	µg/l	2.22						
Nitrobenzene	< 2.12	U	µg/l	2.12						
Pentachlorophenol	< 2.15	U	µg/l	2.15						
Pyridine	< 1.62	U	µg/l	1.62						
2,4,5-Trichlorophenol	< 2.09	U	µg/l	2.09						
2,4,6-Trichlorophenol	< 1.96	U	µg/l	1.96						
<i>Surrogate: 2-Fluorobiphenyl</i>	39.1		µg/l		52.6		74	30-130		
<i>Surrogate: 2-Fluorophenol</i>	44.5		µg/l		52.6		85	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	44.7		µg/l		52.6		85	30-130		
<i>Surrogate: Terphenyl-dl4</i>	47.6		µg/l		52.6		91	30-130		
<b>LCS (1506941-BS1)</b>					<u>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</u>					
1,4-Dichlorobenzene	41.6		µg/l	2.02	50.0		83	40-140		
2,4-Dinitrotoluene	54.7		µg/l	2.38	50.0		109	40-140		
Hexachlorobenzene	45.9		µg/l	2.15	50.0		92	40-140		
Hexachlorobutadiene	36.1		µg/l	2.03	50.0		72	40-140		
Hexachloroethane	45.3		µg/l	2.15	50.0		91	40-140		
2-Methylphenol	50.3		µg/l	2.14	50.0		101	30-130		
3 & 4-Methylphenol	50.2		µg/l	2.22	50.0		100	30-130		
Nitrobenzene	49.4		µg/l	2.12	50.0		99	40-140		
Pentachlorophenol	41.4		µg/l	2.15	50.0		83	30-130		
Pyridine	41.2		µg/l	1.62	50.0		82	40-140		
2,4,5-Trichlorophenol	49.9		µg/l	2.09	50.0		100	30-130		
2,4,6-Trichlorophenol	46.0		µg/l	1.96	50.0		92	30-130		
<i>Surrogate: 2-Fluorobiphenyl</i>	47.3		µg/l		50.0		95	30-130		
<i>Surrogate: 2-Fluorophenol</i>	49.6		µg/l		50.0		99	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	52.6		µg/l		50.0		105	30-130		
<i>Surrogate: Terphenyl-dl4</i>	53.2		µg/l		50.0		106	30-130		
<b>LCS Dup (1506941-BSD1)</b>					<u>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</u>					
1,4-Dichlorobenzene	41.1		µg/l	2.02	50.0		82	40-140	1	20
2,4-Dinitrotoluene	53.2		µg/l	2.38	50.0		106	40-140	3	20
Hexachlorobenzene	45.3		µg/l	2.15	50.0		91	40-140	1	20
Hexachlorobutadiene	36.7		µg/l	2.03	50.0		73	40-140	2	20
Hexachloroethane	41.2		µg/l	2.15	50.0		82	40-140	10	20
2-Methylphenol	46.4		µg/l	2.14	50.0		93	30-130	8	20
3 & 4-Methylphenol	45.7		µg/l	2.22	50.0		91	30-130	9	20
Nitrobenzene	48.4		µg/l	2.12	50.0		97	40-140	2	20
Pentachlorophenol	39.9		µg/l	2.15	50.0		80	30-130	4	20
Pyridine	37.0		µg/l	1.62	50.0		74	40-140	11	20
2,4,5-Trichlorophenol	48.0		µg/l	2.09	50.0		96	30-130	4	20
2,4,6-Trichlorophenol	43.8		µg/l	1.96	50.0		88	30-130	5	20
<i>Surrogate: 2-Fluorobiphenyl</i>	45.6		µg/l		50.0		91	30-130		
<i>Surrogate: 2-Fluorophenol</i>	47.4		µg/l		50.0		95	15-110		
<i>Surrogate: Nitrobenzene-d5</i>	50.8		µg/l		50.0		102	30-130		
<i>Surrogate: Terphenyl-dl4</i>	50.1		µg/l		50.0		100	30-130		
<b>Batch 1507303 - SW846 3545A</b>										
<b>Blank (1507303-BLK1)</b>					<u>Prepared &amp; Analyzed: 17-Apr-15</u>					
Acenaphthene	< 15.4	U	µg/kg wet	15.4						
Acenaphthylene	< 14.0	U	µg/kg wet	14.0						
Aniline	< 67.6	U	µg/kg wet	67.6						

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507303 - SW846 3545A</b>										
<b>Blank (1507303-BLK1)</b>					<u>Prepared &amp; Analyzed: 17-Apr-15</u>					
Anthracene	< 15.1	U	µg/kg wet	15.1						
Azobenzene/Diphenyldiazene	< 79.0	U	µg/kg wet	79.0						
Benzidine	< 80.2	U	µg/kg wet	80.2						
Benzo (a) anthracene	< 13.7	U	µg/kg wet	13.7						
Benzo (a) pyrene	< 13.8	U	µg/kg wet	13.8						
Benzo (b) fluoranthene	< 15.1	U	µg/kg wet	15.1						
Benzo (g,h,i) perylene	< 14.3	U	µg/kg wet	14.3						
Benzo (k) fluoranthene	< 15.1	U	µg/kg wet	15.1						
Benzoic acid	< 76.5	U	µg/kg wet	76.5						
Benzyl alcohol	< 60.2	U	µg/kg wet	60.2						
Bis(2-chloroethoxy)methane	< 59.8	U	µg/kg wet	59.8						
Bis(2-chloroethyl)ether	< 59.6	U	µg/kg wet	59.6						
Bis(2-chloroisopropyl)ether	< 59.5	U	µg/kg wet	59.5						
Bis(2-ethylhexyl)phthalate	< 81.8	U	µg/kg wet	81.8						
4-Bromophenyl phenyl ether	< 66.2	U	µg/kg wet	66.2						
Butyl benzyl phthalate	< 72.6	U	µg/kg wet	72.6						
Carbazole	< 84.2	U	µg/kg wet	84.2						
4-Chloro-3-methylphenol	< 68.0	U	µg/kg wet	68.0						
4-Chloroaniline	< 67.6	U	µg/kg wet	67.6						
2-Chloronaphthalene	< 57.6	U	µg/kg wet	57.6						
2-Chlorophenol	< 58.6	U	µg/kg wet	58.6						
4-Chlorophenyl phenyl ether	< 61.5	U	µg/kg wet	61.5						
Chrysene	< 16.2	U	µg/kg wet	16.2						
Dibenzo (a,h) anthracene	< 12.2	U	µg/kg wet	12.2						
Dibenzofuran	< 12.2	U	µg/kg wet	12.2						
1,2-Dichlorobenzene	< 55.1	U	µg/kg wet	55.1						
1,3-Dichlorobenzene	< 58.2	U	µg/kg wet	58.2						
1,4-Dichlorobenzene	< 54.2	U	µg/kg wet	54.2						
3,3'-Dichlorobenzidine	< 66.5	U	µg/kg wet	66.5						
2,4-Dichlorophenol	< 56.4	U	µg/kg wet	56.4						
Diethyl phthalate	< 68.4	U	µg/kg wet	68.4						
Dimethyl phthalate	< 64.5	U	µg/kg wet	64.5						
2,4-Dimethylphenol	< 56.2	U	µg/kg wet	56.2						
Di-n-butyl phthalate	< 73.6	U	µg/kg wet	73.6						
4,6-Dinitro-2-methylphenol	< 87.1	U	µg/kg wet	87.1						
2,4-Dinitrophenol	< 86.3	U	µg/kg wet	86.3						
2,4-Dinitrotoluene	< 68.3	U	µg/kg wet	68.3						
2,6-Dinitrotoluene	< 64.3	U	µg/kg wet	64.3						
Di-n-octyl phthalate	< 70.8	U	µg/kg wet	70.8						
Fluoranthene	< 16.6	U	µg/kg wet	16.6						
Fluorene	< 15.9	U	µg/kg wet	15.9						
Hexachlorobenzene	< 72.4	U	µg/kg wet	72.4						
Hexachlorobutadiene	< 52.7	U	µg/kg wet	52.7						
Hexachlorocyclopentadiene	< 60.4	U	µg/kg wet	60.4						
Hexachloroethane	< 63.7	U	µg/kg wet	63.7						
Indeno (1,2,3-cd) pyrene	< 13.5	U	µg/kg wet	13.5						
Isophorone	< 57.9	U	µg/kg wet	57.9						
2-Methylnaphthalene	< 13.7	U	µg/kg wet	13.7						
2-Methylphenol	< 58.8	U	µg/kg wet	58.8						
3 & 4-Methylphenol	< 73.7	U	µg/kg wet	73.7						
Naphthalene	< 13.5	U	µg/kg wet	13.5						
2-Nitroaniline	< 65.7	U	µg/kg wet	65.7						

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507303 - SW846 3545A</b>										
<b><u>Blank (1507303-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 17-Apr-15</u></b>					
3-Nitroaniline	< 78.4	U	µg/kg wet	78.4						
4-Nitroaniline	< 94.7	U	µg/kg wet	94.7						
Nitrobenzene	< 64.3	U	µg/kg wet	64.3						
2-Nitrophenol	< 54.9	U	µg/kg wet	54.9						
4-Nitrophenol	< 88.5	U	µg/kg wet	88.5						
N-Nitrosodimethylamine	< 65.0	U	µg/kg wet	65.0						
N-Nitrosodi-n-propylamine	< 70.5	U	µg/kg wet	70.5						
N-Nitrosodiphenylamine	< 77.1	U	µg/kg wet	77.1						
Pentachlorophenol	< 78.0	U	µg/kg wet	78.0						
Phenanthrene	< 16.2	U	µg/kg wet	16.2						
Phenol	< 59.7	U	µg/kg wet	59.7						
Pyrene	< 14.1	U	µg/kg wet	14.1						
Pyridine	< 70.9	U	µg/kg wet	70.9						
1,2,4-Trichlorobenzene	< 52.1	U	µg/kg wet	52.1						
1-Methylnaphthalene	< 16.8	U	µg/kg wet	16.8						
2,4,5-Trichlorophenol	< 67.8	U	µg/kg wet	67.8						
2,4,6-Trichlorophenol	< 62.8	U	µg/kg wet	62.8						
Pentachloronitrobenzene	< 70.2	U	µg/kg wet	70.2						
1,2,4,5-Tetrachlorobenzene	< 59.4	U	µg/kg wet	59.4						
<i>Surrogate: 2-Fluorobiphenyl</i>	1300		µg/kg wet		1650		78	30-130		
<i>Surrogate: 2-Fluorophenol</i>	1470		µg/kg wet		1650		89	30-130		
<i>Surrogate: Nitrobenzene-d5</i>	1480		µg/kg wet		1650		89	30-130		
<i>Surrogate: Phenol-d5</i>	1480		µg/kg wet		1650		90	30-130		
<i>Surrogate: Terphenyl-dl4</i>	1390		µg/kg wet		1650		84	30-130		
<i>Surrogate: 2,4,6-Tribromophenol</i>	1250		µg/kg wet		1650		75	30-130		
<b><u>LCS (1507303-BS1)</u></b>					<b><u>Prepared &amp; Analyzed: 17-Apr-15</u></b>					
Acenaphthene	1340		µg/kg wet	15.5	1660		81	40-140		
Acenaphthylene	1390		µg/kg wet	14.1	1660		84	40-140		
Aniline	1100		µg/kg wet	67.7	1660		66	40-140		
Anthracene	1420		µg/kg wet	15.2	1660		86	40-140		
Azobenzene/Diphenyldiazene	1600		µg/kg wet	79.2	1660		96	40-140		
Benzidine	496	QC2	µg/kg wet	80.4	1660		30	40-140		
Benzo (a) anthracene	1480		µg/kg wet	13.7	1660		89	40-140		
Benzo (a) pyrene	1530		µg/kg wet	13.8	1660		92	40-140		
Benzo (b) fluoranthene	1550		µg/kg wet	15.1	1660		94	40-140		
Benzo (g,h,i) perylene	1440		µg/kg wet	14.4	1660		87	40-140		
Benzo (k) fluoranthene	1370		µg/kg wet	15.1	1660		83	40-140		
Benzoic acid	263	QC2, J	µg/kg wet	76.7	1660		16	30-130		
Benzyl alcohol	1230		µg/kg wet	60.3	1660		74	40-140		
Bis(2-chloroethoxy)methane	1400		µg/kg wet	60.0	1660		84	40-140		
Bis(2-chloroethyl)ether	1390		µg/kg wet	59.7	1660		84	40-140		
Bis(2-chloroisopropyl)ether	1620		µg/kg wet	59.6	1660		97	40-140		
Bis(2-ethylhexyl)phthalate	1570		µg/kg wet	82.0	1660		95	40-140		
4-Bromophenyl phenyl ether	1390		µg/kg wet	66.4	1660		84	40-140		
Butyl benzyl phthalate	1590		µg/kg wet	72.8	1660		96	40-140		
Carbazole	1630		µg/kg wet	84.4	1660		98	40-140		
4-Chloro-3-methylphenol	1550		µg/kg wet	68.1	1660		93	30-130		
4-Chloroaniline	1040		µg/kg wet	67.8	1660		63	40-140		
2-Chloronaphthalene	1370		µg/kg wet	57.7	1660		83	40-140		
2-Chlorophenol	1330		µg/kg wet	58.7	1660		80	30-130		
4-Chlorophenyl phenyl ether	1390		µg/kg wet	61.7	1660		84	40-140		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507303 - SW846 3545A</b>										
<b><u>LCS (1507303-BS1)</u></b>					<b><u>Prepared &amp; Analyzed: 17-Apr-15</u></b>					
Chrysene	1380		µg/kg wet	16.2	1660		83	40-140		
Dibenzo (a,h) anthracene	1460		µg/kg wet	12.2	1660		88	40-140		
Dibenzofuran	1370		µg/kg wet	12.2	1660		82	40-140		
1,2-Dichlorobenzene	1320		µg/kg wet	55.2	1660		80	40-140		
1,3-Dichlorobenzene	1290		µg/kg wet	58.3	1660		78	40-140		
1,4-Dichlorobenzene	1280		µg/kg wet	54.4	1660		77	40-140		
3,3'-Dichlorobenzidine	1660		µg/kg wet	66.7	1660		100	40-140		
2,4-Dichlorophenol	1350		µg/kg wet	56.5	1660		81	30-130		
Diethyl phthalate	1480		µg/kg wet	68.6	1660		89	40-140		
Dimethyl phthalate	1430		µg/kg wet	64.7	1660		86	40-140		
2,4-Dimethylphenol	1370		µg/kg wet	56.3	1660		83	30-130		
Di-n-butyl phthalate	1450		µg/kg wet	73.7	1660		87	40-140		
4,6-Dinitro-2-methylphenol	1130		µg/kg wet	87.4	1660		68	30-130		
2,4-Dinitrophenol	755		µg/kg wet	86.5	1660		46	30-130		
2,4-Dinitrotoluene	1640		µg/kg wet	68.5	1660		99	40-140		
2,6-Dinitrotoluene	1600		µg/kg wet	64.5	1660		97	40-140		
Di-n-octyl phthalate	1520		µg/kg wet	70.9	1660		92	40-140		
Fluoranthene	1390		µg/kg wet	16.7	1660		84	40-140		
Fluorene	1370		µg/kg wet	15.9	1660		82	40-140		
Hexachlorobenzene	1390		µg/kg wet	72.6	1660		84	40-140		
Hexachlorobutadiene	1100		µg/kg wet	52.9	1660		66	40-140		
Hexachlorocyclopentadiene	1510		µg/kg wet	60.6	1660		91	40-140		
Hexachloroethane	1350		µg/kg wet	63.8	1660		81	40-140		
Indeno (1,2,3-cd) pyrene	1630		µg/kg wet	13.6	1660		98	40-140		
Isophorone	1410		µg/kg wet	58.0	1660		85	40-140		
2-Methylnaphthalene	1440		µg/kg wet	13.7	1660		87	40-140		
2-Methylphenol	1470		µg/kg wet	58.9	1660		89	30-130		
3 & 4-Methylphenol	1460		µg/kg wet	73.9	1660		88	30-130		
Naphthalene	1290		µg/kg wet	13.5	1660		78	40-140		
2-Nitroaniline	1640		µg/kg wet	65.8	1660		99	40-140		
3-Nitroaniline	1440		µg/kg wet	78.6	1660		87	40-140		
4-Nitroaniline	1940		µg/kg wet	95.0	1660		117	40-140		
Nitrobenzene	1500		µg/kg wet	64.5	1660		90	40-140		
2-Nitrophenol	1420		µg/kg wet	55.0	1660		85	30-130		
4-Nitrophenol	1320		µg/kg wet	88.7	1660		80	30-130		
N-Nitrosodimethylamine	1220		µg/kg wet	65.2	1660		73	40-140		
N-Nitrosodi-n-propylamine	1540		µg/kg wet	70.7	1660		93	40-140		
N-Nitrosodiphenylamine	1590		µg/kg wet	77.2	1660		96	40-140		
Pentachlorophenol	988		µg/kg wet	78.2	1660		60	30-130		
Phenanthrene	1330		µg/kg wet	16.2	1660		80	40-140		
Phenol	1400		µg/kg wet	59.8	1660		84	30-130		
Pyrene	1440		µg/kg wet	14.1	1660		87	40-140		
Pyridine	1140		µg/kg wet	71.1	1660		68	40-140		
1,2,4-Trichlorobenzene	1250		µg/kg wet	52.3	1660		75	40-140		
1-Methylnaphthalene	1410		µg/kg wet	16.8	1660		85	40-140		
2,4,5-Trichlorophenol	1430		µg/kg wet	67.9	1660		86	30-130		
2,4,6-Trichlorophenol	1340		µg/kg wet	62.9	1660		81	30-130		
Pentachloronitrobenzene	1470		µg/kg wet	70.4	1660		89	40-140		
1,2,4,5-Tetrachlorobenzene	1370		µg/kg wet	59.6	1660		83	40-140		
<i>Surrogate: 2-Fluorobiphenyl</i>	1430		µg/kg wet		1660		86	30-130		
<i>Surrogate: 2-Fluorophenol</i>	1490		µg/kg wet		1660		90	30-130		

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**Semivolatile Organic Compounds by GCMS - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507303 - SW846 3545A</b>										
<u>LCS (1507303-BS1)</u>					<u>Prepared &amp; Analyzed: 17-Apr-15</u>					
Surrogate: Nitrobenzene-d5	1610		µg/kg wet		1660		97	30-130		
Surrogate: Phenol-d5	1550		µg/kg wet		1660		93	30-130		
Surrogate: Terphenyl-dl4	1530		µg/kg wet		1660		92	30-130		
Surrogate: 2,4,6-Tribromophenol	1510		µg/kg wet		1660		91	30-130		

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506539 - SW846 3545A</b>										
<b><u>Blank (1506539-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
Aroclor-1016	< 17.8	U	µg/kg wet	17.8						
Aroclor-1016 [2C]	< 10.0	U	µg/kg wet	10.0						
Aroclor-1221	< 15.1	U	µg/kg wet	15.1						
Aroclor-1221 [2C]	< 16.9	U	µg/kg wet	16.9						
Aroclor-1232	< 17.7	U	µg/kg wet	17.7						
Aroclor-1232 [2C]	< 12.9	U	µg/kg wet	12.9						
Aroclor-1242	< 12.2	U	µg/kg wet	12.2						
Aroclor-1242 [2C]	< 11.9	U	µg/kg wet	11.9						
Aroclor-1248	< 12.4	U	µg/kg wet	12.4						
Aroclor-1248 [2C]	< 11.0	U	µg/kg wet	11.0						
Aroclor-1254	< 13.6	U	µg/kg wet	13.6						
Aroclor-1254 [2C]	< 11.1	U	µg/kg wet	11.1						
Aroclor-1260	< 13.8	U	µg/kg wet	13.8						
Aroclor-1260 [2C]	< 12.3	U	µg/kg wet	12.3						
Aroclor-1262	< 17.7	U	µg/kg wet	17.7						
Aroclor-1262 [2C]	< 10.7	U	µg/kg wet	10.7						
Aroclor-1268	< 19.4	U	µg/kg wet	19.4						
Aroclor-1268 [2C]	< 18.9	U	µg/kg wet	18.9						
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	16.8		µg/kg wet		19.7		85	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	16.8		µg/kg wet		19.7		85	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	13.8		µg/kg wet		19.7		70	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	14.8		µg/kg wet		19.7		75	30-150		
<b><u>LCS (1506539-BS1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
Aroclor-1016	<b>181</b>		µg/kg wet	17.6	243		74	40-140		
Aroclor-1016 [2C]	<b>225</b>		µg/kg wet	9.91	243		92	40-140		
Aroclor-1260	<b>196</b>		µg/kg wet	13.7	243		80	40-140		
Aroclor-1260 [2C]	<b>209</b>		µg/kg wet	12.2	243		86	40-140		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	16.6		µg/kg wet		19.5		85	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	16.6		µg/kg wet		19.5		85	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	15.6		µg/kg wet		19.5		80	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	16.6		µg/kg wet		19.5		85	30-150		
<b><u>LCS Dup (1506539-BSD1)</u></b>					<b><u>Prepared &amp; Analyzed: 09-Apr-15</u></b>					
Aroclor-1016	<b>189</b>		µg/kg wet	17.8	246		77	40-140	3	30
Aroclor-1016 [2C]	<b>230</b>		µg/kg wet	10.0	246		94	40-140	1	30
Aroclor-1260	<b>195</b>		µg/kg wet	13.8	246		79	40-140	2	30
Aroclor-1260 [2C]	<b>213</b>		µg/kg wet	12.3	246		86	40-140	0.5	30
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	16.7		µg/kg wet		19.7		85	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	16.7		µg/kg wet		19.7		85	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	15.7		µg/kg wet		19.7		80	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	15.7		µg/kg wet		19.7		80	30-150		
<b>Batch 1506599 - SW846 3545A</b>										
<b><u>Blank (1506599-BLK1)</u></b>					<b><u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u></b>					
alpha-BHC	< 0.542	U	µg/kg wet	0.542						
alpha-BHC [2C]	< 0.527	U	µg/kg wet	0.527						
beta-BHC	< 0.710	U	µg/kg wet	0.710						
beta-BHC [2C]	< 0.618	U	µg/kg wet	0.618						
delta-BHC	< 0.605	U	µg/kg wet	0.605						
delta-BHC [2C]	< 0.561	U	µg/kg wet	0.561						

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506599 - SW846 3545A</b>										
<b>Blank (1506599-BLK1)</b>					<u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u>					
gamma-BHC (Lindane)	< 0.621	U	µg/kg wet	0.621						
gamma-BHC (Lindane) [2C]	< 0.523	U	µg/kg wet	0.523						
Heptachlor	< 0.628	U	µg/kg wet	0.628						
Heptachlor [2C]	< 0.577	U	µg/kg wet	0.577						
Aldrin	< 0.618	U	µg/kg wet	0.618						
Aldrin [2C]	< 0.555	U	µg/kg wet	0.555						
Heptachlor epoxide	< 0.712	U	µg/kg wet	0.712						
Heptachlor epoxide [2C]	< 0.576	U	µg/kg wet	0.576						
Endosulfan I	< 0.655	U	µg/kg wet	0.655						
Endosulfan I [2C]	< 0.563	U	µg/kg wet	0.563						
Dieldrin	< 0.625	U	µg/kg wet	0.625						
Dieldrin [2C]	< 0.709	U	µg/kg wet	0.709						
4,4'-DDE (p,p')	< 0.625	U	µg/kg wet	0.625						
4,4'-DDE (p,p') [2C]	< 0.514	U	µg/kg wet	0.514						
Endrin	< 0.802	U	µg/kg wet	0.802						
Endrin [2C]	< 0.635	U	µg/kg wet	0.635						
Endosulfan II	< 0.643	U	µg/kg wet	0.643						
Endosulfan II [2C]	< 0.555	U	µg/kg wet	0.555						
4,4'-DDD (p,p')	< 0.596	U	µg/kg wet	0.596						
4,4'-DDD (p,p') [2C]	< 0.517	U	µg/kg wet	0.517						
Endosulfan sulfate	< 0.710	U	µg/kg wet	0.710						
Endosulfan sulfate [2C]	< 0.564	U	µg/kg wet	0.564						
4,4'-DDT (p,p')	< 0.556	U	µg/kg wet	0.556						
4,4'-DDT (p,p') [2C]	< 0.495	U	µg/kg wet	0.495						
Methoxychlor	< 0.785	U	µg/kg wet	0.785						
Methoxychlor [2C]	< 0.642	U	µg/kg wet	0.642						
Endrin ketone	< 0.655	U	µg/kg wet	0.655						
Endrin ketone [2C]	< 0.537	U	µg/kg wet	0.537						
Endrin aldehyde	< 0.776	U	µg/kg wet	0.776						
Endrin aldehyde [2C]	< 0.911	U	µg/kg wet	0.911						
alpha-Chlordane	< 0.711	U	µg/kg wet	0.711						
alpha-Chlordane [2C]	< 0.570	U	µg/kg wet	0.570						
gamma-Chlordane	< 0.576	U	µg/kg wet	0.576						
gamma-Chlordane [2C]	< 0.639	U	µg/kg wet	0.639						
Toxaphene	< 39.6	U	µg/kg wet	39.6						
Toxaphene [2C]	< 40.6	U	µg/kg wet	40.6						
Chlordane	< 17.4	U	µg/kg wet	17.4						
Chlordane [2C]	< 16.8	U	µg/kg wet	16.8						
Alachlor	< 0.857	U	µg/kg wet	0.857						
Alachlor [2C]	< 0.773	U	µg/kg wet	0.773						
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	11.0		µg/kg wet		9.94		110	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	10.6		µg/kg wet		9.94		106	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	8.60		µg/kg wet		9.94		87	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	8.70		µg/kg wet		9.94		88	30-150		
<b>LCS (1506599-BS1)</b>					<u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u>					
alpha-BHC	18.0		µg/kg wet	0.545	25.0		72	40-140		
alpha-BHC [2C]	17.4		µg/kg wet	0.530	25.0		70	40-140		
beta-BHC	20.3		µg/kg wet	0.714	25.0		81	40-140		
beta-BHC [2C]	19.9		µg/kg wet	0.622	25.0		80	40-140		
delta-BHC	14.3		µg/kg wet	0.609	25.0		57	40-140		

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506599 - SW846 3545A</b>										
<b><u>LCS (1506599-BS1)</u></b>					<b><u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u></b>					
delta-BHC [2C]	13.6		µg/kg wet	0.565	25.0		54	40-140		
gamma-BHC (Lindane)	18.9		µg/kg wet	0.625	25.0		75	40-140		
gamma-BHC (Lindane) [2C]	17.7		µg/kg wet	0.526	25.0		71	40-140		
Heptachlor	22.4		µg/kg wet	0.632	25.0		90	40-140		
Heptachlor [2C]	19.8		µg/kg wet	0.581	25.0		79	40-140		
Aldrin	20.6		µg/kg wet	0.622	25.0		82	40-140		
Aldrin [2C]	19.2		µg/kg wet	0.559	25.0		77	40-140		
Heptachlor epoxide	20.4		µg/kg wet	0.717	25.0		82	40-140		
Heptachlor epoxide [2C]	20.7		µg/kg wet	0.580	25.0		83	40-140		
Endosulfan I	20.3		µg/kg wet	0.659	25.0		81	40-140		
Endosulfan I [2C]	19.1		µg/kg wet	0.567	25.0		76	40-140		
Dieldrin	21.0		µg/kg wet	0.629	25.0		84	40-140		
Dieldrin [2C]	19.9		µg/kg wet	0.713	25.0		80	40-140		
4,4'-DDE (p,p')	22.3		µg/kg wet	0.629	25.0		89	40-140		
4,4'-DDE (p,p') [2C]	19.3		µg/kg wet	0.517	25.0		77	40-140		
Endrin	29.5		µg/kg wet	0.807	25.0		118	40-140		
Endrin [2C]	28.6		µg/kg wet	0.639	25.0		115	40-140		
Endosulfan II	21.1		µg/kg wet	0.647	25.0		85	40-140		
Endosulfan II [2C]	20.7		µg/kg wet	0.559	25.0		83	40-140		
4,4'-DDD (p,p')	20.5		µg/kg wet	0.600	25.0		82	40-140		
4,4'-DDD (p,p') [2C]	20.6		µg/kg wet	0.520	25.0		82	40-140		
Endosulfan sulfate	19.2		µg/kg wet	0.714	25.0		77	40-140		
Endosulfan sulfate [2C]	18.8		µg/kg wet	0.568	25.0		75	40-140		
4,4'-DDT (p,p')	26.0		µg/kg wet	0.560	25.0		104	40-140		
4,4'-DDT (p,p') [2C]	21.2		µg/kg wet	0.498	25.0		85	40-140		
Methoxychlor	24.0		µg/kg wet	0.790	25.0		96	40-140		
Methoxychlor [2C]	22.3		µg/kg wet	0.646	25.0		89	40-140		
Endrin ketone	19.7		µg/kg wet	0.659	25.0		79	40-140		
Endrin ketone [2C]	20.3		µg/kg wet	0.540	25.0		81	40-140		
Endrin aldehyde	16.6		µg/kg wet	0.781	25.0		66	40-140		
Endrin aldehyde [2C]	17.5		µg/kg wet	0.917	25.0		70	40-140		
alpha-Chlordane	19.5		µg/kg wet	0.716	25.0		78	40-140		
alpha-Chlordane [2C]	17.6		µg/kg wet	0.574	25.0		71	40-140		
gamma-Chlordane	19.3		µg/kg wet	0.580	25.0		77	40-140		
gamma-Chlordane [2C]	17.9		µg/kg wet	0.643	25.0		72	40-140		
Alachlor	21.0		µg/kg wet	0.862	25.0		84	40-140		
Alachlor [2C]	22.5		µg/kg wet	0.778	25.0		90	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	10.4		µg/kg wet		10.0		104	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	9.31		µg/kg wet		10.0		93	30-150		
Surrogate: Decachlorobiphenyl (Sr)	8.28		µg/kg wet		10.0		83	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	7.53		µg/kg wet		10.0		75	30-150		
<b><u>LCS Dup (1506599-BSD1)</u></b>					<b><u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u></b>					
alpha-BHC	17.8		µg/kg wet	0.540	24.8		72	40-140	0.07	30
alpha-BHC [2C]	17.1		µg/kg wet	0.525	24.8		69	40-140	1	30
beta-BHC	20.1		µg/kg wet	0.708	24.8		81	40-140	0.01	30
beta-BHC [2C]	19.7		µg/kg wet	0.617	24.8		79	40-140	0.4	30
delta-BHC	14.1		µg/kg wet	0.604	24.8		57	40-140	1	30
delta-BHC [2C]	13.4		µg/kg wet	0.560	24.8		54	40-140	0.4	30
gamma-BHC (Lindane)	18.6		µg/kg wet	0.620	24.8		75	40-140	0.4	30
gamma-BHC (Lindane) [2C]	17.5		µg/kg wet	0.521	24.8		71	40-140	0.5	30

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506599 - SW846 3545A</b>										
<b><u>LCS Dup (1506599-BSD1)</u></b>					<b><u>Prepared: 09-Apr-15 Analyzed: 13-Apr-15</u></b>					
Heptachlor	22.1		µg/kg wet	0.626	24.8		89	40-140	0.5	30
Heptachlor [2C]	19.6		µg/kg wet	0.576	24.8		79	40-140	0.4	30
Aldrin	20.3		µg/kg wet	0.617	24.8		82	40-140	0.6	30
Aldrin [2C]	19.0		µg/kg wet	0.554	24.8		77	40-140	0.2	30
Heptachlor epoxide	20.2		µg/kg wet	0.711	24.8		82	40-140	0.2	30
Heptachlor epoxide [2C]	20.4		µg/kg wet	0.575	24.8		83	40-140	0.3	30
Endosulfan I	20.1		µg/kg wet	0.653	24.8		81	40-140	0.002	30
Endosulfan I [2C]	18.9		µg/kg wet	0.562	24.8		76	40-140	0.09	30
Dieldrin	20.8		µg/kg wet	0.623	24.8		84	40-140	0.08	30
Dieldrin [2C]	19.8		µg/kg wet	0.707	24.8		80	40-140	0.07	30
4,4'-DDE (p,p')	22.1		µg/kg wet	0.623	24.8		89	40-140	0.02	30
4,4'-DDE (p,p') [2C]	19.1		µg/kg wet	0.512	24.8		77	40-140	0.07	30
Endrin	29.5		µg/kg wet	0.800	24.8		119	40-140	0.9	30
Endrin [2C]	28.1		µg/kg wet	0.633	24.8		114	40-140	1	30
Endosulfan II	21.1		µg/kg wet	0.641	24.8		85	40-140	0.7	30
Endosulfan II [2C]	20.4		µg/kg wet	0.554	24.8		82	40-140	0.4	30
4,4'-DDD (p,p')	20.4		µg/kg wet	0.595	24.8		82	40-140	0.5	30
4,4'-DDD (p,p') [2C]	20.4		µg/kg wet	0.515	24.8		83	40-140	0.09	30
Endosulfan sulfate	19.7		µg/kg wet	0.708	24.8		80	40-140	4	30
Endosulfan sulfate [2C]	18.5		µg/kg wet	0.563	24.8		75	40-140	0.8	30
4,4'-DDT (p,p')	26.0		µg/kg wet	0.555	24.8		105	40-140	0.7	30
4,4'-DDT (p,p') [2C]	20.9		µg/kg wet	0.494	24.8		84	40-140	0.2	30
Methoxychlor	25.9		µg/kg wet	0.783	24.8		104	40-140	8	30
Methoxychlor [2C]	22.0		µg/kg wet	0.640	24.8		89	40-140	0.5	30
Endrin ketone	19.7		µg/kg wet	0.653	24.8		79	40-140	0.6	30
Endrin ketone [2C]	20.1		µg/kg wet	0.535	24.8		81	40-140	0.2	30
Endrin aldehyde	16.4		µg/kg wet	0.774	24.8		66	40-140	0.2	30
Endrin aldehyde [2C]	17.1		µg/kg wet	0.909	24.8		69	40-140	2	30
alpha-Chlordane	19.3		µg/kg wet	0.710	24.8		78	40-140	0.08	30
alpha-Chlordane [2C]	17.5		µg/kg wet	0.569	24.8		70	40-140	0.1	30
gamma-Chlordane	19.2		µg/kg wet	0.575	24.8		77	40-140	0.2	30
gamma-Chlordane [2C]	17.8		µg/kg wet	0.637	24.8		72	40-140	0.3	30
Alachlor	21.5		µg/kg wet	0.854	24.8		87	40-140	3	30
Alachlor [2C]	22.9		µg/kg wet	0.771	24.8		92	40-140	3	30
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	10.2		µg/kg wet		9.91		103	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	9.17		µg/kg wet		9.91		93	30-150		
Surrogate: Decachlorobiphenyl (Sr)	8.48		µg/kg wet		9.91		86	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	7.52		µg/kg wet		9.91		76	30-150		
<b>Batch 1506940 - SW846 3535A</b>										
<b><u>Blank (1506940-BLK1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
gamma-BHC (Lindane)	< 0.015	U	µg/l	0.015						
gamma-BHC (Lindane) [2C]	< 0.008	U	µg/l	0.008						
Heptachlor	< 0.012	U	µg/l	0.012						
Heptachlor [2C]	< 0.009	U	µg/l	0.009						
Heptachlor epoxide	< 0.015	U	µg/l	0.015						
Heptachlor epoxide [2C]	< 0.011	U	µg/l	0.011						
Dieldrin	< 0.014	U	µg/l	0.014						
Dieldrin [2C]	< 0.010	U	µg/l	0.010						
4,4'-DDE (p,p')	< 0.015	U	µg/l	0.015						
4,4'-DDE (p,p') [2C]	< 0.009	U	µg/l	0.009						

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506940 - SW846 3535A</b>										
<b><u>Blank (1506940-BLK1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
Endrin	< 0.017	U	µg/l	0.017						
Endrin [2C]	< 0.012	U	µg/l	0.012						
4,4'-DDD (p,p')	< 0.014	U	µg/l	0.014						
4,4'-DDD (p,p') [2C]	< 0.009	U	µg/l	0.009						
4,4'-DDT (p,p')	< 0.016	U	µg/l	0.016						
4,4'-DDT (p,p') [2C]	< 0.013	U	µg/l	0.013						
Methoxychlor	< 0.023	U	µg/l	0.023						
Methoxychlor [2C]	< 0.016	U	µg/l	0.016						
Endrin ketone	< 0.015	U	µg/l	0.015						
Endrin ketone [2C]	< 0.011	U	µg/l	0.011						
Endrin aldehyde	< 0.019	U	µg/l	0.019						
Endrin aldehyde [2C]	< 0.012	U	µg/l	0.012						
Toxaphene	< 0.365	U	µg/l	0.365						
Toxaphene [2C]	< 0.302	U	µg/l	0.302						
Chlordane	< 0.202	U	µg/l	0.202						
Chlordane [2C]	< 0.154	U	µg/l	0.154						
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	0.239		µg/l		0.200		119	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	0.219		µg/l		0.200		109	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	0.213		µg/l		0.200		106	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	0.178		µg/l		0.200		89	30-150		
<b><u>LCS (1506940-BS1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
gamma-BHC (Lindane)	0.427		µg/l	0.015	0.500		85	40-140		
gamma-BHC (Lindane) [2C]	0.423		µg/l	0.008	0.500		85	40-140		
Heptachlor	0.502		µg/l	0.012	0.500		100	40-140		
Heptachlor [2C]	0.446		µg/l	0.009	0.500		89	40-140		
Heptachlor epoxide	0.473		µg/l	0.015	0.500		95	40-140		
Heptachlor epoxide [2C]	0.477		µg/l	0.011	0.500		95	40-140		
Dieldrin	0.486		µg/l	0.014	0.500		97	40-140		
Dieldrin [2C]	0.464		µg/l	0.010	0.500		93	40-140		
4,4'-DDE (p,p')	0.505		µg/l	0.015	0.500		101	40-140		
4,4'-DDE (p,p') [2C]	0.449		µg/l	0.009	0.500		90	40-140		
Endrin	0.510		µg/l	0.017	0.500		102	40-140		
Endrin [2C]	0.432		µg/l	0.012	0.500		86	40-140		
4,4'-DDD (p,p')	0.492		µg/l	0.014	0.500		98	40-140		
4,4'-DDD (p,p') [2C]	0.479		µg/l	0.009	0.500		96	40-140		
4,4'-DDT (p,p')	0.592		µg/l	0.016	0.500		118	40-140		
4,4'-DDT (p,p') [2C]	0.455		µg/l	0.013	0.500		91	40-140		
Methoxychlor	0.596		µg/l	0.023	0.500		119	40-140		
Methoxychlor [2C]	0.466		µg/l	0.016	0.500		93	40-140		
Endrin ketone	0.512		µg/l	0.015	0.500		102	40-140		
Endrin ketone [2C]	0.505		µg/l	0.011	0.500		101	40-140		
Endrin aldehyde	0.450		µg/l	0.019	0.500		90	40-140		
Endrin aldehyde [2C]	0.493		µg/l	0.012	0.500		99	40-140		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)</i>	0.240		µg/l		0.200		120	30-150		
<i>Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]</i>	0.215		µg/l		0.200		108	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr)</i>	0.215		µg/l		0.200		108	30-150		
<i>Surrogate: Decachlorobiphenyl (Sr) [2C]</i>	0.174		µg/l		0.200		87	30-150		
<b><u>LCS Dup (1506940-BSD1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
gamma-BHC (Lindane)	0.423		µg/l	0.015	0.500		85	40-140	0.9	20

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506940 - SW846 3535A</b>										
<b><u>LCS Dup (1506940-BSD1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
gamma-BHC (Lindane) [2C]	0.421		µg/l	0.008	0.500		84	40-140	0.5	20
Heptachlor	0.498		µg/l	0.012	0.500		100	40-140	0.8	20
Heptachlor [2C]	0.444		µg/l	0.009	0.500		89	40-140	0.5	20
Heptachlor epoxide	0.468		µg/l	0.015	0.500		94	40-140	1	20
Heptachlor epoxide [2C]	0.471		µg/l	0.011	0.500		94	40-140	1	20
Dieldrin	0.482		µg/l	0.014	0.500		96	40-140	0.8	20
Dieldrin [2C]	0.458		µg/l	0.010	0.500		92	40-140	1	20
4,4'-DDE (p,p')	0.500		µg/l	0.015	0.500		100	40-140	1	20
4,4'-DDE (p,p') [2C]	0.440		µg/l	0.009	0.500		88	40-140	2	20
Endrin	0.502		µg/l	0.017	0.500		100	40-140	2	20
Endrin [2C]	0.417		µg/l	0.012	0.500		83	40-140	3	20
4,4'-DDD (p,p')	0.487		µg/l	0.014	0.500		97	40-140	1	20
4,4'-DDD (p,p') [2C]	0.470		µg/l	0.009	0.500		94	40-140	2	20
4,4'-DDT (p,p')	0.586		µg/l	0.016	0.500		117	40-140	1	20
4,4'-DDT (p,p') [2C]	0.446		µg/l	0.013	0.500		89	40-140	2	20
Methoxychlor	0.591		µg/l	0.023	0.500		118	40-140	0.8	20
Methoxychlor [2C]	0.458		µg/l	0.016	0.500		92	40-140	2	20
Endrin ketone	0.505		µg/l	0.015	0.500		101	40-140	2	20
Endrin ketone [2C]	0.501		µg/l	0.011	0.500		100	40-140	0.7	20
Endrin aldehyde	0.447		µg/l	0.019	0.500		89	40-140	0.7	20
Endrin aldehyde [2C]	0.490		µg/l	0.012	0.500		98	40-140	0.7	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.236		µg/l		0.200		118	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.216		µg/l		0.200		108	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.214		µg/l		0.200		107	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.174		µg/l		0.200		87	30-150		
<b><u>Duplicate (1506940-DUP1)</u></b>					<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</u></b>			
gamma-BHC (Lindane)	< 0.017	U	µg/l	0.017		BRL				20
gamma-BHC (Lindane) [2C]	< 0.009	U	µg/l	0.009		BRL				20
Heptachlor	< 0.013	U	µg/l	0.013		BRL				20
Heptachlor [2C]	< 0.010	U	µg/l	0.010		BRL				20
Heptachlor epoxide	< 0.017	U	µg/l	0.017		BRL				20
Heptachlor epoxide [2C]	< 0.012	U	µg/l	0.012		BRL				20
Dieldrin	< 0.016	U	µg/l	0.016		BRL				20
Dieldrin [2C]	< 0.011	U	µg/l	0.011		BRL				20
4,4'-DDE (p,p')	< 0.017	U	µg/l	0.017		BRL				20
4,4'-DDE (p,p') [2C]	< 0.010	U	µg/l	0.010		BRL				20
Endrin	< 0.019	U	µg/l	0.019		BRL				20
Endrin [2C]	< 0.013	U	µg/l	0.013		BRL				20
4,4'-DDD (p,p')	< 0.016	U	µg/l	0.016		BRL				20
4,4'-DDD (p,p') [2C]	< 0.010	U	µg/l	0.010		BRL				20
4,4'-DDT (p,p')	< 0.018	U	µg/l	0.018		BRL				20
4,4'-DDT (p,p') [2C]	< 0.014	U	µg/l	0.014		BRL				20
Methoxychlor	< 0.026	U	µg/l	0.026		BRL				20
Methoxychlor [2C]	< 0.018	U	µg/l	0.018		BRL				20
Endrin ketone	< 0.017	U	µg/l	0.017		BRL				20
Endrin ketone [2C]	< 0.012	U	µg/l	0.012		BRL				20
Endrin aldehyde	< 0.021	U	µg/l	0.021		BRL				20
Endrin aldehyde [2C]	< 0.013	U	µg/l	0.013		BRL				20
Toxaphene	< 0.406	U	µg/l	0.406		BRL				20
Toxaphene [2C]	< 0.336	U	µg/l	0.336		BRL				20

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506940 - SW846 3535A</b>										
<b>Duplicate (1506940-DUP1)</b>			<b>Source: SC05494-02</b>		<b>Prepared: 14-Apr-15 Analyzed: 16-Apr-15</b>					
Chlordane	< 0.224	U	µg/l	0.224		BRL				20
Chlordane [2C]	< 0.171	U	µg/l	0.171		BRL				20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.221		µg/l		0.222		100	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.195		µg/l		0.222		88	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.145		µg/l		0.222		65	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.123		µg/l		0.222		55	30-150		
<b>Batch 1506965 - SW846 3535A</b>										
<b>Blank (1506965-BLK1)</b>			<b>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</b>							
Aroclor-1016	< 0.0737	U	µg/l	0.0737						
Aroclor-1016 [2C]	< 0.0684	U	µg/l	0.0684						
Aroclor-1221	< 0.162	U	µg/l	0.162						
Aroclor-1221 [2C]	< 0.126	U	µg/l	0.126						
Aroclor-1232	< 0.0832	U	µg/l	0.0832						
Aroclor-1232 [2C]	< 0.0926	U	µg/l	0.0926						
Aroclor-1242	< 0.116	U	µg/l	0.116						
Aroclor-1242 [2C]	< 0.0884	U	µg/l	0.0884						
Aroclor-1248	< 0.102	U	µg/l	0.102						
Aroclor-1248 [2C]	< 0.107	U	µg/l	0.107						
Aroclor-1254	< 0.0642	U	µg/l	0.0642						
Aroclor-1254 [2C]	< 0.177	U	µg/l	0.177						
Aroclor-1260	< 0.0600	U	µg/l	0.0600						
Aroclor-1260 [2C]	< 0.0968	U	µg/l	0.0968						
Aroclor-1262	< 0.168	U	µg/l	0.168						
Aroclor-1262 [2C]	< 0.184	U	µg/l	0.184						
Aroclor-1268	< 0.0768	U	µg/l	0.0768						
Aroclor-1268 [2C]	< 0.157	U	µg/l	0.157						
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.211		µg/l		0.211		100	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.211		µg/l		0.211		100	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.221		µg/l		0.211		105	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.232		µg/l		0.211		110	30-150		
<b>LCS (1506965-BS1)</b>			<b>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</b>							
Aroclor-1016	<b>2.26</b>		µg/l	0.0700	2.50		90	40-140		
Aroclor-1016 [2C]	<b>2.49</b>		µg/l	0.0650	2.50		100	40-140		
Aroclor-1260	<b>2.22</b>		µg/l	0.0570	2.50		89	40-140		
Aroclor-1260 [2C]	<b>2.45</b>		µg/l	0.0920	2.50		98	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.110		µg/l		0.200		55	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.110		µg/l		0.200		55	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.120		µg/l		0.200		60	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.130		µg/l		0.200		65	30-150		
<b>LCS (1506965-BS2)</b>			<b>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</b>							
Aroclor-1016	<b>2.09</b>		µg/l	0.0700	2.50		84	40-140		
Aroclor-1016 [2C]	<b>2.46</b>		µg/l	0.0650	2.50		98	40-140		
Aroclor-1260	<b>2.31</b>		µg/l	0.0570	2.50		92	40-140		
Aroclor-1260 [2C]	<b>2.39</b>		µg/l	0.0920	2.50		96	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.180		µg/l		0.200		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.180		µg/l		0.200		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.190		µg/l		0.200		95	30-150		

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**Semivolatile Organic Compounds by GC - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506965 - SW846 3535A</b>										
<b><u>LCS (1506965-BS2)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.200		µg/l		0.200		100	30-150		
<b><u>LCS (1506965-BS3)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
Aroclor-1016	2.07		µg/l	0.0700	2.50		83	40-140		
Aroclor-1016 [2C]	2.44		µg/l	0.0650	2.50		98	40-140		
Aroclor-1260	2.16		µg/l	0.0570	2.50		86	40-140		
Aroclor-1260 [2C]	2.38		µg/l	0.0920	2.50		95	40-140		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.180		µg/l		0.200		90	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.180		µg/l		0.200		90	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.180		µg/l		0.200		90	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.200		µg/l		0.200		100	30-150		
<b><u>LCS Dup (1506965-BSD1)</u></b>					<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>					
Aroclor-1016	2.41		µg/l	0.0700	2.50		96	40-140	6	20
Aroclor-1016 [2C]	2.60		µg/l	0.0650	2.50		104	40-140	4	20
Aroclor-1260	2.37		µg/l	0.0570	2.50		95	40-140	7	20
Aroclor-1260 [2C]	2.54		µg/l	0.0920	2.50		102	40-140	4	20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.110		µg/l		0.200		55	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.120		µg/l		0.200		60	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.120		µg/l		0.200		60	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.140		µg/l		0.200		70	30-150		
<b><u>Duplicate (1506965-DUP1)</u></b>					<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 14-Apr-15 Analyzed: 15-Apr-15</u></b>			
Aroclor-1016	< 0.0778	U	µg/l	0.0778		BRL				20
Aroclor-1016 [2C]	< 0.0722	U	µg/l	0.0722		BRL				20
Aroclor-1221	< 0.171	U	µg/l	0.171		BRL				20
Aroclor-1221 [2C]	< 0.133	U	µg/l	0.133		BRL				20
Aroclor-1232	< 0.0878	U	µg/l	0.0878		BRL				20
Aroclor-1232 [2C]	< 0.0978	U	µg/l	0.0978		BRL				20
Aroclor-1242	< 0.122	U	µg/l	0.122		BRL				20
Aroclor-1242 [2C]	< 0.0933	U	µg/l	0.0933		BRL				20
Aroclor-1248	< 0.108	U	µg/l	0.108		BRL				20
Aroclor-1248 [2C]	< 0.113	U	µg/l	0.113		BRL				20
Aroclor-1254	< 0.0678	U	µg/l	0.0678		BRL				20
Aroclor-1254 [2C]	< 0.187	U	µg/l	0.187		BRL				20
Aroclor-1260	< 0.0633	U	µg/l	0.0633		BRL				20
Aroclor-1260 [2C]	< 0.102	U	µg/l	0.102		BRL				20
Aroclor-1262	< 0.178	U	µg/l	0.178		BRL				20
Aroclor-1262 [2C]	< 0.194	U	µg/l	0.194		BRL				20
Aroclor-1268	< 0.0811	U	µg/l	0.0811		BRL				20
Aroclor-1268 [2C]	< 0.166	U	µg/l	0.166		BRL				20
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr)	0.144		µg/l		0.222		65	30-150		
Surrogate: 4,4-DB-Octafluorobiphenyl (Sr) [2C]	0.156		µg/l		0.222		70	30-150		
Surrogate: Decachlorobiphenyl (Sr)	0.100		µg/l		0.222		45	30-150		
Surrogate: Decachlorobiphenyl (Sr) [2C]	0.122		µg/l		0.222		55	30-150		

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506886 - SW846 3051A</b>										
<b><u>Blank (1506886-BLK1)</u></b>					<u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u>					
Copper	< 0.220	U	mg/kg wet	0.220						
Barium	< 0.0571	U	mg/kg wet	0.0571						
<b><u>Reference (1506886-SRM1)</u></b>					<u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u>					
Copper	<b>34.2</b>		mg/kg wet	0.228	39.6		86	80.38-119 .61		
Barium	<b>70.6</b>		mg/kg wet	0.0594	84.8		83	82.03-117 .36		
<b><u>Reference (1506886-SRM2)</u></b>					<u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u>					
Copper	<b>32.4</b>		mg/kg wet	0.228	39.5		82	80.38-119 .61		
Barium	<b>64.9</b>	QM9	mg/kg wet	0.0594	84.6		77	82.03-117 .36		
<b>Batch 1506887 - EPA200/SW7000 Series</b>										
<b><u>Blank (1506887-BLK1)</u></b>					<u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u>					
Mercury	< 0.0019	U	mg/kg wet	0.0019						
<b><u>Reference (1506887-SRM1)</u></b>					<u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u>					
Mercury	<b>1.51</b>	D	mg/kg wet	0.0392	1.42		106	74.62-125 .62		
<b>Batch 1507406 - SW846 3051A</b>										
<b><u>Blank (1507406-BLK1)</u></b>					<u>Prepared &amp; Analyzed: 20-Apr-15</u>					
Zinc	<b>0.459</b>	J	mg/kg wet	0.225						
Selenium	< 0.367	U	mg/kg wet	0.367						
Beryllium	< 0.0195	U	mg/kg wet	0.0195						
Silver	< 0.107	U	mg/kg wet	0.107						
Chromium	< 0.0933	U	mg/kg wet	0.0933						
Arsenic	< 0.237	U	mg/kg wet	0.237						
Cadmium	< 0.0156	U	mg/kg wet	0.0156						
Nickel	< 0.0894	U	mg/kg wet	0.0894						
Lead	< 0.270	U	mg/kg wet	0.270						
<b><u>Reference (1507406-SRM1)</u></b>					<u>Prepared &amp; Analyzed: 20-Apr-15</u>					
Lead	<b>43.1</b>		mg/kg wet	0.276	47.8		90	81.16-118 .51		
Selenium	<b>71.4</b>		mg/kg wet	0.376	79.4		90	77.07-122 .29		
Nickel	<b>26.1</b>		mg/kg wet	0.0915	28.5		92	82.23-117 .76		
Chromium	<b>46.2</b>		mg/kg wet	0.0955	51.6		90	78.72-120 .58		
Cadmium	<b>43.3</b>		mg/kg wet	0.0160	44.5		97	81.93-118 .18		
Beryllium	<b>27.4</b>		mg/kg wet	0.0200	27.5		100	82.32-117 .67		
Arsenic	<b>56.4</b>		mg/kg wet	0.242	61.7		92	77.78-122 .13		
Silver	<b>15.9</b>		mg/kg wet	0.110	17.3		92	74.26-125 .43		
Zinc	<b>96.0</b>		mg/kg wet	0.230	105		92	79.71-120 .77		
<b><u>Reference (1507406-SRM2)</u></b>					<u>Prepared &amp; Analyzed: 20-Apr-15</u>					
Lead	<b>47.9</b>		mg/kg wet	0.276	47.9		100	81.16-118 .51		
Silver	<b>15.5</b>		mg/kg wet	0.110	17.3		90	74.26-125 .43		
Arsenic	<b>54.6</b>		mg/kg wet	0.242	61.8		88	77.78-122 .13		

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**Total Metals by EPA 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1507406 - SW846 3051A</b>										
<b><u>Reference (1507406-SRM2)</u></b>					<b><u>Prepared &amp; Analyzed: 20-Apr-15</u></b>					
Beryllium	27.2		mg/kg wet	0.0200	27.5		99	82.32-117 .67		
Cadmium	41.5		mg/kg wet	0.0160	44.6		93	81.93-118 .18		
Nickel	25.6		mg/kg wet	0.0915	28.5		90	82.23-117 .76		
Selenium	68.4		mg/kg wet	0.376	79.5		86	77.07-122 .29		
Zinc	93.1		mg/kg wet	0.230	105		89	79.71-120 .77		
Chromium	47.4		mg/kg wet	0.0955	51.7		92	78.72-120 .58		
<b>Batch 1507523 - SW846 3051A</b>										
<b><u>Blank (1507523-BLK1)</u></b>					<b><u>Prepared &amp; Analyzed: 21-Apr-15</u></b>					
Manganese	< 0.379	U	mg/kg wet	0.379						
<b><u>Reference (1507523-SRM1)</u></b>					<b><u>Prepared &amp; Analyzed: 21-Apr-15</u></b>					
Manganese	166		mg/kg wet	0.387	206		81	80.79-119 .2		
<b><u>Reference (1507523-SRM2)</u></b>					<b><u>Prepared &amp; Analyzed: 21-Apr-15</u></b>					
Manganese	175		mg/kg wet	0.387	206		85	80.79-119 .2		

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**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506936 - SW846 3010A</b>										
<b><u>Blank (1506936-BLK1)</u></b>					<u>Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Silver	< 0.0028	U	mg/l	0.0028						
Arsenic	< 0.0051	U	mg/l	0.0051						
Cadmium	< 0.0003	U	mg/l	0.0003						
Chromium	< 0.0019	U	mg/l	0.0019						
Lead	< 0.0036	U	mg/l	0.0036						
Selenium	<b>0.0122</b>	J	mg/l	0.0086						
Barium	< 0.0009	U	mg/l	0.0009						
<b><u>LCS (1506936-BS1)</u></b>					<u>Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Lead	<b>2.32</b>		mg/l	0.0036	2.50		93	85-115		
Silver	<b>2.34</b>		mg/l	0.0028	2.50		93	85-115		
Arsenic	<b>2.37</b>		mg/l	0.0051	2.50		95	85-115		
Chromium	<b>2.45</b>		mg/l	0.0019	2.50		98	85-115		
Selenium	<b>2.42</b>		mg/l	0.0086	2.50		97	85-115		
Cadmium	<b>2.33</b>		mg/l	0.0003	2.50		93	85-115		
Barium	<b>2.44</b>		mg/l	0.0009	2.50		98	85-115		
<b><u>LCS Dup (1506936-BSD1)</u></b>					<u>Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Silver	<b>2.42</b>		mg/l	0.0028	2.50		97	85-115	3	104
Arsenic	<b>2.39</b>		mg/l	0.0051	2.50		95	85-115	0.8	20
Cadmium	<b>2.32</b>		mg/l	0.0003	2.50		93	85-115	0.2	20
Chromium	<b>2.48</b>		mg/l	0.0019	2.50		99	85-115	1	20
Lead	<b>2.34</b>		mg/l	0.0036	2.50		94	85-115	1	20
Selenium	<b>2.46</b>		mg/l	0.0086	2.50		98	85-115	1	20
Barium	<b>2.47</b>		mg/l	0.0009	2.50		99	85-115	1	20
<b><u>Duplicate (1506936-DUP1)</u></b>					<u>Source: SC05494-02 Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Cadmium	< 0.0003	U	mg/l	0.0003		BRL				20
Selenium	<b>0.0123</b>	J	mg/l	0.0086		BRL				20
Chromium	<b>0.0144</b>		mg/l	0.0019		0.0146			1	20
Arsenic	< 0.0051	U	mg/l	0.0051		BRL				20
Silver	< 0.0028	U	mg/l	0.0028		BRL				20
Lead	< 0.0036	U	mg/l	0.0036		BRL				20
Barium	<b>0.189</b>		mg/l	0.0009		0.194			3	20
<b><u>Matrix Spike (1506936-MS1)</u></b>					<u>Source: SC05494-02 Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Cadmium	<b>2.27</b>		mg/l	0.0003	2.50	BRL	91	75-125		
Selenium	<b>2.70</b>		mg/l	0.0086	2.50	BRL	108	75-125		
Silver	<b>2.62</b>		mg/l	0.0028	2.50	BRL	105	75-125		
Arsenic	<b>2.60</b>		mg/l	0.0051	2.50	BRL	104	75-125		
Lead	<b>2.21</b>		mg/l	0.0036	2.50	BRL	88	75-125		
Chromium	<b>2.44</b>		mg/l	0.0019	2.50	0.0146	97	75-125		
Barium	<b>2.70</b>		mg/l	0.0009	2.50	0.194	100	75-125		
<b><u>Matrix Spike Dup (1506936-MSD1)</u></b>					<u>Source: SC05494-02 Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Selenium	<b>2.61</b>		mg/l	0.0086	2.50	BRL	104	75-125	3	20
Silver	<b>2.63</b>		mg/l	0.0028	2.50	BRL	105	75-125	0.6	20
Arsenic	<b>2.54</b>		mg/l	0.0051	2.50	BRL	102	75-125	3	20
Cadmium	<b>2.15</b>		mg/l	0.0003	2.50	BRL	86	75-125	6	20
Lead	<b>2.14</b>		mg/l	0.0036	2.50	BRL	86	75-125	3	20
Chromium	<b>2.42</b>		mg/l	0.0019	2.50	0.0146	96	75-125	1	20
Barium	<b>2.69</b>		mg/l	0.0009	2.50	0.194	100	75-125	0.3	20
<b><u>Post Spike (1506936-PS1)</u></b>					<u>Source: SC05494-02 Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u>					
Arsenic	<b>2.60</b>		mg/l	0.0051	2.50	BRL	104	80-120		
Silver	<b>2.69</b>		mg/l	0.0028	2.50	BRL	108	80-120		
Cadmium	<b>2.17</b>		mg/l	0.0003	2.50	BRL	87	80-120		

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**TCLP Metals by EPA 1311 & 6000/7000 Series Methods - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506936 - SW846 3010A</b>										
<b><u>Post Spike (1506936-PS1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 15-Apr-15 Analyzed: 16-Apr-15</u></b>					
Chromium	2.42		mg/l	0.0019	2.50	0.0146	96	80-120		
Lead	2.19		mg/l	0.0036	2.50	BRL	88	80-120		
Selenium	2.67		mg/l	0.0086	2.50	BRL	107	80-120		
Barium	2.70		mg/l	0.0009	2.50	0.194	100	80-120		
<b>Batch 1506937 - EPA200/SW7000 Series</b>										
<b><u>Blank (1506937-BLK1)</u></b>					<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	< 0.00009	U	mg/l	0.00009						
<b><u>LCS (1506937-BS1)</u></b>					<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	0.00464		mg/l	0.00009	0.00500		93	85-115		
<b><u>Duplicate (1506937-DUP1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	< 0.00019	R01, U	mg/l	0.00019		BRL				20
<b><u>Matrix Spike (1506937-MS1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	0.00913		mg/l	0.00019	0.0100	BRL	91	75-125		
<b><u>Matrix Spike Dup (1506937-MSD1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	0.00881		mg/l	0.00019	0.0100	BRL	88	75-125	4	20
<b><u>Post Spike (1506937-PS1)</u></b>			<b><u>Source: SC05494-02</u></b>		<b><u>Prepared: 16-Apr-15 Analyzed: 17-Apr-15</u></b>					
Mercury	0.00858		mg/l	0.00019	0.0100	BRL	86	80-120		

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**General Chemistry Parameters - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506451 - General Preparation</b>										
<u>Duplicate (1506451-DUP2)</u>			<u>Source: SC05494-01</u>		<u>Prepared &amp; Analyzed: 08-Apr-15</u>					
% Solids	32.1		%			31.8			1	5
<b>Batch 1506452 - General Preparation</b>										
<u>Duplicate (1506452-DUP1)</u>			<u>Source: SC05494-01</u>		<u>Prepared &amp; Analyzed: 08-Apr-15</u>					
Moisture	67.9		%			68.2			0.6	20
<b>Batch 1507225 - General Preparation</b>										
<u>Blank (1507225-BLK1)</u>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Cyanide (total)	< 0.400	U	mg/kg wet	0.400						
<u>Blank (1507225-BLK2)</u>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Cyanide (total)	< 0.400	U	mg/kg wet	0.400						
<u>LCS (1507225-BS1)</u>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Cyanide (total)	30.9		mg/kg wet	0.400	30.0		103	90-110		
<u>LCS (1507225-BS2)</u>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Cyanide (total)	30.3		mg/kg wet	0.400	30.0		101	90-110		
<u>Reference (1507225-SRM1)</u>					<u>Prepared &amp; Analyzed: 16-Apr-15</u>					
Cyanide (total)	102		mg/kg wet	0.938	117		87	36.75-135		

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**Toxicity Characteristics - Quality Control**

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch 1506439 - General Preparation</b>										
<u>Reference (1506439-SRM1)</u>					<u>Prepared &amp; Analyzed: 08-Apr-15</u>					
pH	6.03		pH Units		6.00		100	97.5-102.5		
<u>Reference (1506439-SRM2)</u>					<u>Prepared &amp; Analyzed: 08-Apr-15</u>					
pH	6.07		pH Units		6.00		101	97.5-102.5		
<b>Batch 1506484 - General Preparation</b>										
<u>Duplicate (1506484-DUP1)</u>			<u>Source: SC05494-02</u>		<u>Prepared &amp; Analyzed: 08-Apr-15</u>					
Ignitability by Definition	Negative		N/A							35
<b>Batch 1506573 - General Preparation</b>										
<u>Blank (1506573-BLK1)</u>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
Reactivity	See Narrative		mg/kg wet							
Reactive Cyanide	< 25.0	U	mg/kg wet	25.0						
Reactive Sulfide	< 50.0	U	mg/kg wet	50.0						
<u>Reference (1506573-SRM1)</u>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
Reactive Cyanide	< 25.0	U	mg/kg wet	25.0	600		0	0-200		
<u>Reference (1506573-SRM2)</u>					<u>Prepared &amp; Analyzed: 09-Apr-15</u>					
Reactive Sulfide	< 50.0	U	mg/kg wet	50.0	40200		0	0-200		

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## Semivolatile Organic Compounds by GC - Pesticide Breakdown Report

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Analyte(s)	Column	% Breakdown	Limit
<b>Batch S503358</b>			
<b><u>Performance Mix (S503358-PEM1)</u></b>			
4,4'-DDT (p,p')	1	3.1	15.0
Endrin	1	6.7	15.0
4,4'-DDT (p,p')	2	4.0	15.0
Endrin	2	7.7	15.0

## Semivolatile Organic Compounds by GC - Pesticide Breakdown Report

Analyte(s)	Column	% Breakdown	Limit
<b>Batch S503241</b>			
<b><u>Performance Mix (S503241-PEM1)</u></b>			
4,4'-DDT (p,p')	1	3.3	15.0
Endrin	1	11.5	15.0
4,4'-DDT (p,p')	2	2.7	15.0
Endrin	2	12.5	15.0
<b><u>Performance Mix (S503241-PEM2)</u></b>			
4,4'-DDT (p,p')	1	3.1	15.0
Endrin	1	11.1	15.0
4,4'-DDT (p,p')	2	3.1	15.0
Endrin	2	11.0	15.0
<b>Batch S503290</b>			
<b><u>Performance Mix (S503290-PEM1)</u></b>			
4,4'-DDT (p,p')	1	2.7	15.0
Endrin	1	8.4	15.0
4,4'-DDT (p,p')	2	2.0	15.0
Endrin	2	7.6	15.0
<b>Batch S503360</b>			
<b><u>Performance Mix (S503360-PEM1)</u></b>			
4,4'-DDT (p,p')	1	3.5	15.0
Endrin	1	8.0	15.0
4,4'-DDT (p,p')	2	3.5	15.0
Endrin	2	8.3	15.0

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**The following list indicates the date and time low-level VOC soil/sediment samples were placed in the freezer at the lab:**

SC05494-01	<i>Waste Pile 1</i>	4/7/2015 9:00 PM
SC05494-02	<i>Waste Pile 2</i>	4/7/2015 9:00 PM

## Notes and Definitions

D	Data reported from a dilution
IgHT	A hold time of 24 hours has been set to expedite the analyses through the laboratory. However, the hold time for Ignitability is not specified within the method other than to state that the samples should be analyzed as soon as possible.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR9	RPD out of acceptance range. The batch is accepted based upon LCS and/or LCSD recovery.
R01	The Reporting Limit has been raised to account for matrix interference.
SDUP	Duplicate analysis confirmed surrogate failure due to matrix effects.
SGCMSVOC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates with three required by program methods.
U	Analyte included in the analysis, but not detected at or above the MDL.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
pH	The method for pH does not stipulate a specific holding time other than to state that the samples should be analyzed as soon as possible. For aqueous samples the 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous pH samples not analyzed in the field are considered out of hold time at the time of sample receipt. All soil samples are analyzed as soon as possible after sample receipt.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

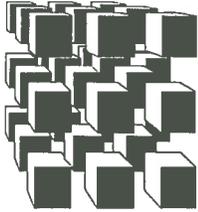
Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

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Validated by:  
June O'Connor  
Nicole Leja  
Rebecca Merz





**CME**  
Associates, Inc.

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East Syracuse, New York 13057  
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(315) 701-0526 (Fax)

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## Transmittal

February 17, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater – Site Work**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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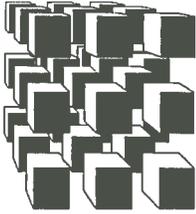
Report Number

12974S-01-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County



**CME**  
Associates, Inc.

6035 Corporate Drive  
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## ***DAILY PROGRESS REPORT***

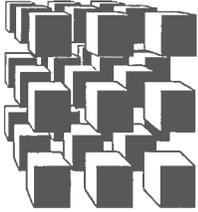
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**PROJECT:** Lakeview Amphitheater –      **PAGE:** 1 of 1      **REPORT NO.:** 12974S-01-0215  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk  
**DATE:** 02/16/2015      **WEATHER:** Partly Cloudy      **TEMPERATURE:** -10 °F

---

This CME Representative was on-site, as scheduled to perform In-Place Field Density (IPFD) testing. Due to snow removal and site preparation, no fill was placed; and therefore In-Place Field Density testing was not required.



**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

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Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

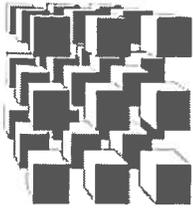
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

*A New York State Certified Women Owned Business Enterprise (WBE)*



## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>DATE:</b> 02/17/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-02R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Crushed Shale, Imported from Riccelli Enterprises, Inc., Brickyard Road Red Weathered Shale	
<b>WEATHER:</b> Overcast	<b>PAGE:</b> 1 of 2
	<b>TEMPERATURE:</b> -5 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on Structural Fill placed as subgrade in proposed paved areas at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. The compactive efforts with the large roller on the top of each lift revealed that the surface is firm and not yielding under the drum of the roller. Mr. Charlie Reinhart with Gilbane Building Company was orally informed of today's results.

Notes: Locations (Grade Stakes) provided by Northeast Contractors, Inc. Due to the track hoe and fill tracks, driving over the Crushed Shale and the increase in temperature the Shale fill has formed a layer of mud on top.

**Note:** BS= Below Sub-grade

### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	8" BS	10.5	11.5	126.8	126.6	100.0+	95.0
2	See Map, Page 2	Sub-grade	9.9	11.5	121.8	126.6	96.2	95.0
3	See Map, Page 2	8" BS	13.0	11.5	121.0	126.6	95.5	95.0
4	See Map, Page 2	8" BS	15.5	11.5	120.8	126.6	95.4	95.0
5	See Map, Page 2	8" BS	15.1	11.5	120.5	126.6	95.2	95.0

12974

Onondaga Lakeview Amphitheater

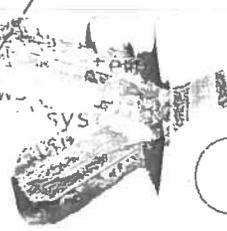
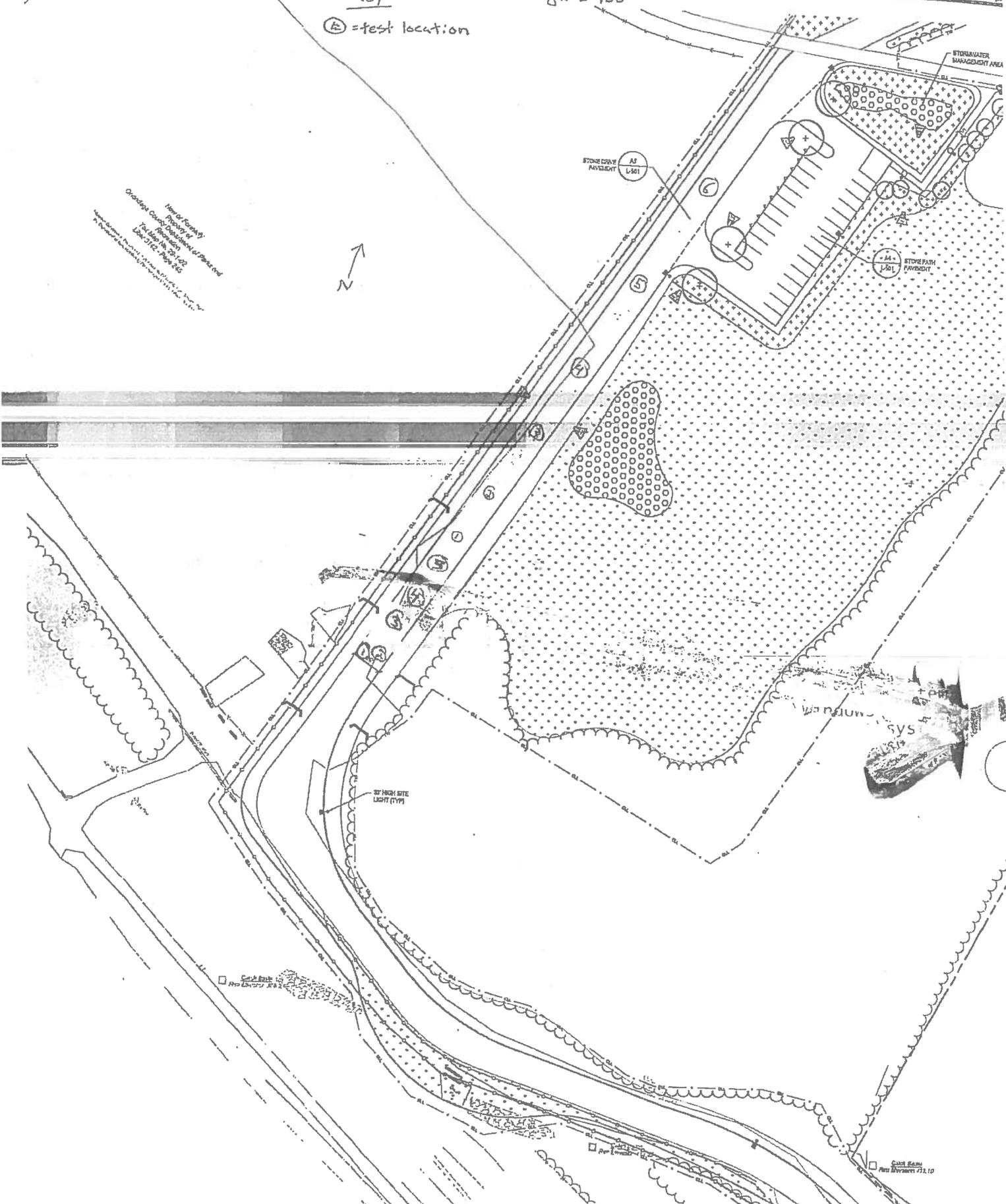
2/17/15 PS 2 of 2

key

Drawing# L-106

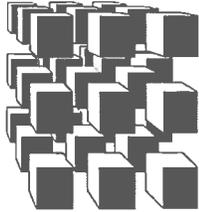
(A) = test location

Onondaga County  
Department of Planning  
200 State Street  
Syracuse, NY 13202  
Tel: 315.437.2400  
Fax: 315.437.2401



Creek Bank  
As Shown

Scale  
As Shown



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## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

1

Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

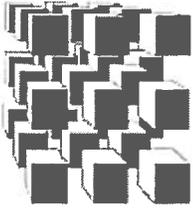
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

*A New York State Certified Women Owned Business Enterprise (WBE)*



## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>DATE:</b> 02/18/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-03R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> -4" Crushed Shale, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Overcast / Snow <b>PAGE:</b> 1 of 2	<b>TEMPERATURE:</b> -2      °F

### REMARKS:

This Representative was on-site to conduct In-Place Field Density Testing on Structural Fill placed as subgrade in proposed paved areas at the above referenced project. The test results indicate that the required percent compaction was and was not achieved at the elevations and locations listed below. The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's results.

### Notes:

- Switched to the -4" Crushed Shale, due to issues getting Crushed Shale.
- The MC of the -4" Gravel is out of spec. The spec calls for a MC of ±2.0%. Mr. Bob Catalina with C&S Companies was notified of this issue.
- There is a layer of mud forming on top of the compacted fill, due to the track hoe and melting snow.
- Soil fill material being placed is partially frozen, oversized stone greater, then 4" present in fill. Will retest failing locations in the morning.
- Locations provided by Northeast Contractors, Inc.

BS = Below Sub-grade

### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	Sub-grade	13.8	3.6	139.6	146.7	95.1	95.0
2	See Map, Page 2	8" BS	19.5	3.6	110.3	146.7	75.1***	95.0
3	See Map, Page 2	8" BS	16.8	3.6	111.4	146.7	75.9***	95.0

\*\*\*Did not meet required compaction.

12974

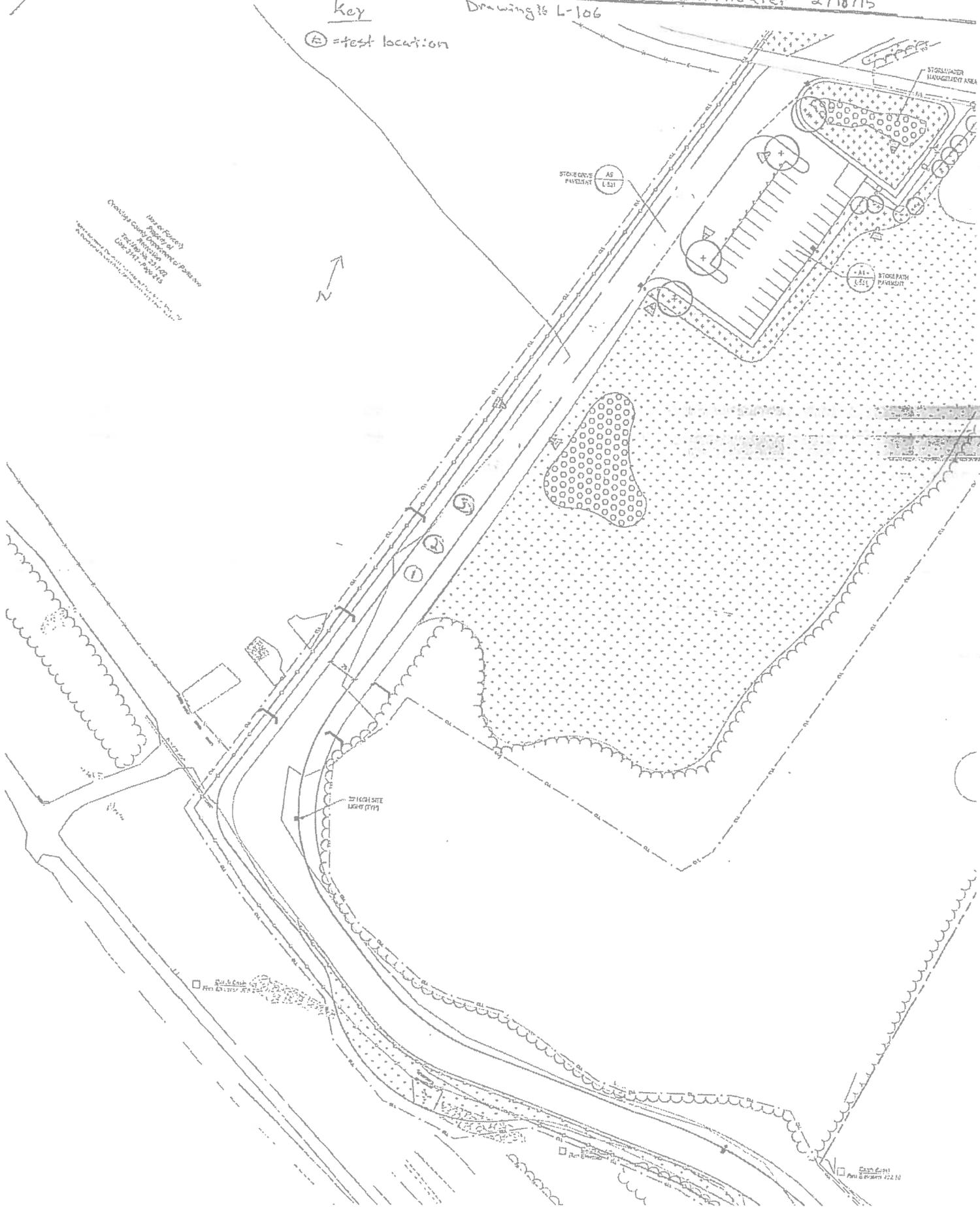
Onondaga Lakeview Amphitheater 2/18/15

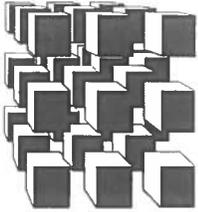
Key

Drawing 16 L-106

(A) = test location

100% of Project  
Onondaga County Department of Planning  
For the City of Onondaga  
Drawing 16 L-106  
Date: 2/18/15 Page 2 of 2





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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

1

Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

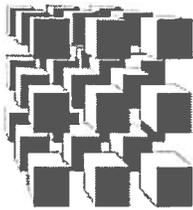
Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company



## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>DATE:</b> 02/19/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-04R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	<b>TEMPERATURE:</b> 5 °F
<b>WEATHER:</b> Overcast / Snow <b>PAGE:</b> 1 of 2	

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on Structural Fill placed as subgrade material in proposed paved areas at the above referenced project. Upon arrival, I observed that Northeast Contractors, Inc. was removing the snow off the sub-grade and was already placing material. The material placed is partially frozen, as well as the currently exposed sub-grade. Due to the weather conditions, fill was placed on 2" to 0" of snow and partially frozen ground. Tests 1 through 3 are retests from 02/18/2015. The test results indicate that the required percent compaction was not achieved at the elevations and locations listed below. The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's results.

### Notes:

BS = Below Sub-grade

### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	Sub-grade	7.6	3.6	118.2	146.7	80.6	95.0
2	See Map, Page 2	8" BS	6.7	3.6	123.1	146.7	83.9	95.0
3	See Map, Page 2	8" BS	9.4	3.6	115.4	146.7	78.6	95.0
4	See Map, Page 2	Sub-grade	7.4	3.6	117.7	146.7	80.2	95.0
5	See Map, Page 2	8" BS	12.3	3.6	120.9	146.7	82.4	95.0
6	See Map, Page 2	Sub-grade	19.2	3.6	89.3	146.7	60.9	95.0

12974

Onondaga Lakeview Amphitheater

2/19/15

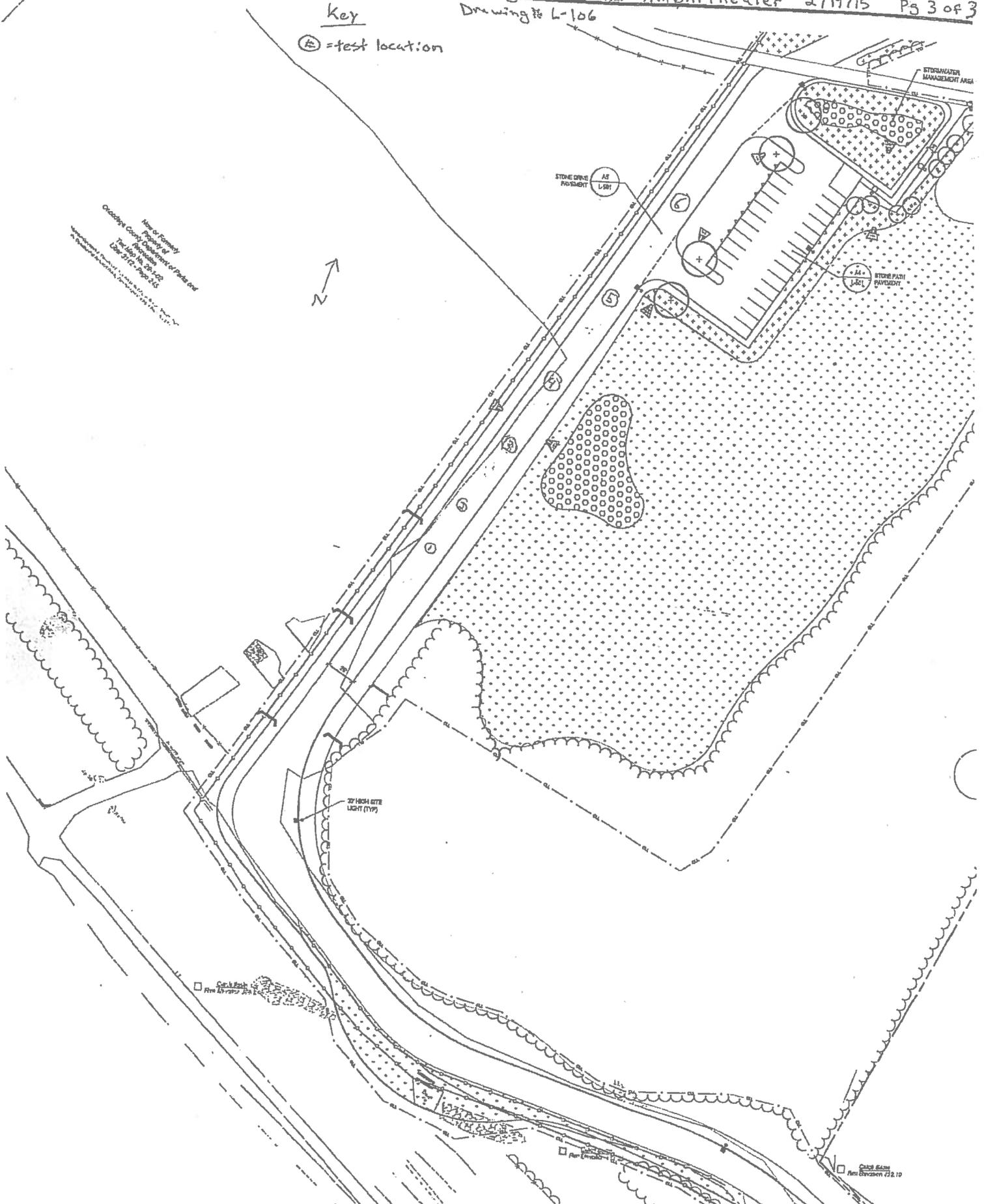
Ps 3 of 3

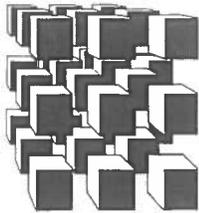
Key

Drawing # L-106

(E) = test location

New County  
County of  
Onondaga  
County Engineer  
1000 N. 1st St.  
Syracuse, NY 13202  
Tel: 315-437-2600  
Fax: 315-437-2601





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East Syracuse, New York 13057  
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(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies  
1

Report Number  
12974S-02R-0215  
Through  
12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

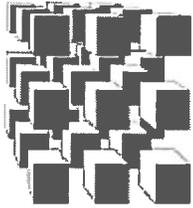
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>DATE:</b> 02/20/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-05R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Snow / Cloudy <b>PAGE:</b> 1 of 2	<b>TEMPERATURE:</b> -8 °F

### REMARKS:

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material in proposed paved areas at the above referenced project. Please note: Geotextile fabric was placed on partially frozen subgrade and on 0 to 2 ½" of packed snow. Snow is being blown onto the fabric and the subgrade material is being placed on top of the snow, in areas. The material is partially frozen. The test results indicate that the required percent compaction was not achieved at the elevations and locations listed below. The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's results.

Notes:

BS = Below Subgrade

### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	8" BS	9.8	3.6	120.3	146.7	82.0	95.0
2	See Map, Page 2	8" BS	10.0	3.6	119.7	146.7	81.5	95.0
3	See Map, Page 2	8" BS	9.8	3.6	121.0	146.7	82.5	95.0
4	See Map, Page 2	Subgrade	9.8	3.6	118.9	146.7	81.0	95.0
5	See Map, Page 2	8" BS	10.3	3.6	120.6	146.7	82.2	95.0

CNIE Report No 12974 S-05R-0215

12974

Onondaga Lakeview Amphitheater 2/20/15

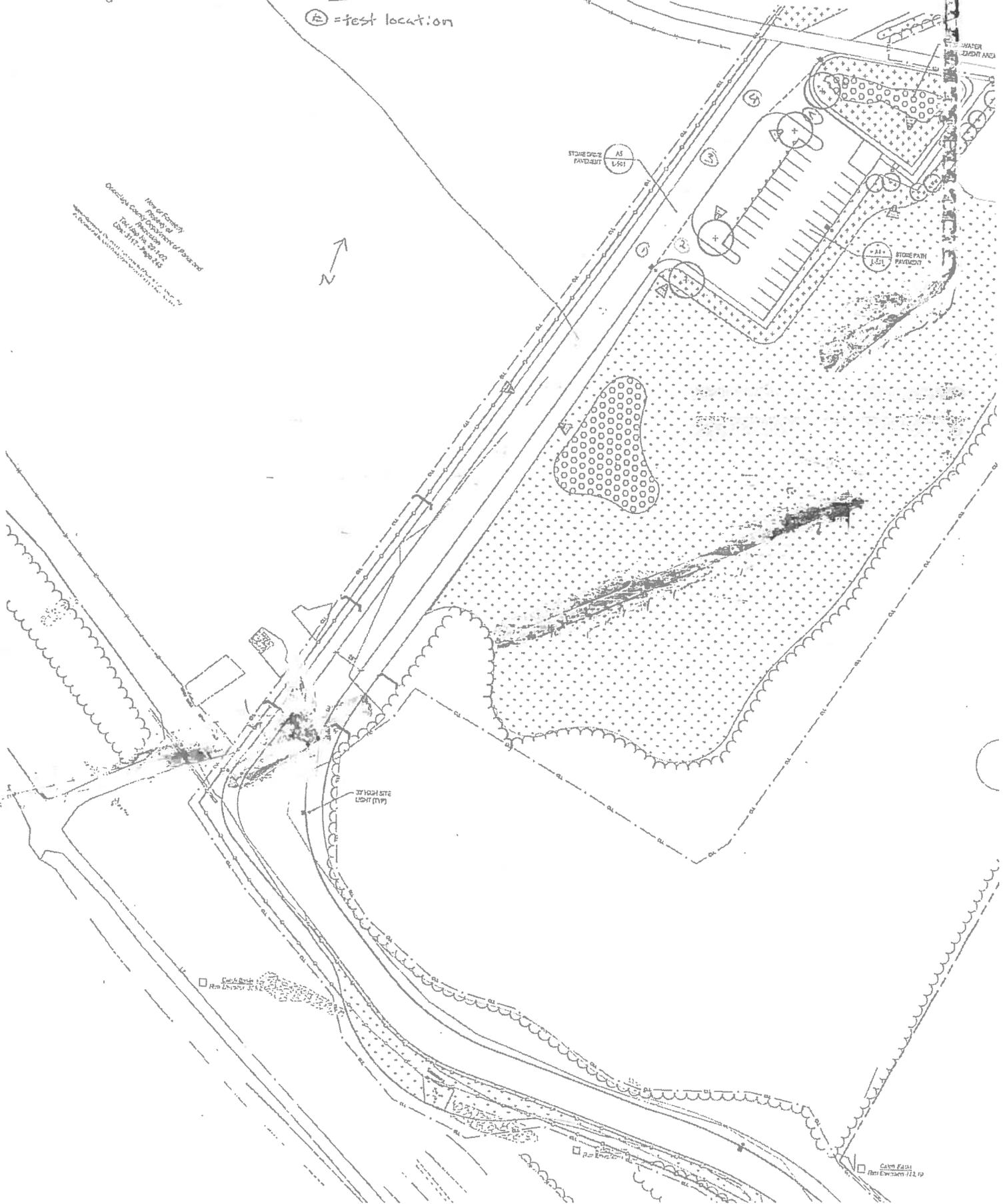
Page 2 of 2

Key

Drawing# L-106

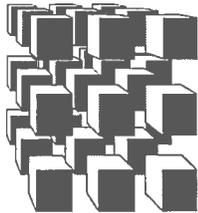
(E) = test location

Onondaga County Department of Planning  
1100 E. Genesee Street  
Syracuse, NY 13202  
Tel: 478-2200  
Fax: 478-2200  
www.onondagacounty.net



□ Park Bench  
From E. Genesee St.

□ Gate Falls  
From E. Genesee St.



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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

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## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

1

Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

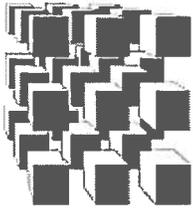
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York <b>CLIENT:</b> Onondaga County <b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge <b>MATERIAL TYPE &amp; SOURCE:</b> -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit <b>WEATHER:</b> Snow / Overcast / Windy	<b>DATE:</b> 02/23/2015 <b>REPORT NO.:</b> 12974S-06R-0215 <b>REPRESENTATIVE:</b> A. Boronczyk <b>TEMPERATURE:</b> -4 °F
---	---

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material placed in proposed paved areas at the above referenced project. Please note, upon arrival, the exposed grade in the area of material placement was covered with snow. Northeast Contractors, Inc. removed nearly all of the snow. However, the geotextile fabric was placed on partially frozen ground, as well as 0" to 3" of compacted snow and ice. The material was then placed and compacted. The in-place field density test results indicate that the required percent compaction was not achieved at the elevations and locations listed below. Also, the spec requires the moisture content of the material to be  $\pm 2.0\%$  of optimum moisture content. This was not the case. The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's test results and non-conformances.

Notes:

BS = Below Subgrade

### **RESULTS:**

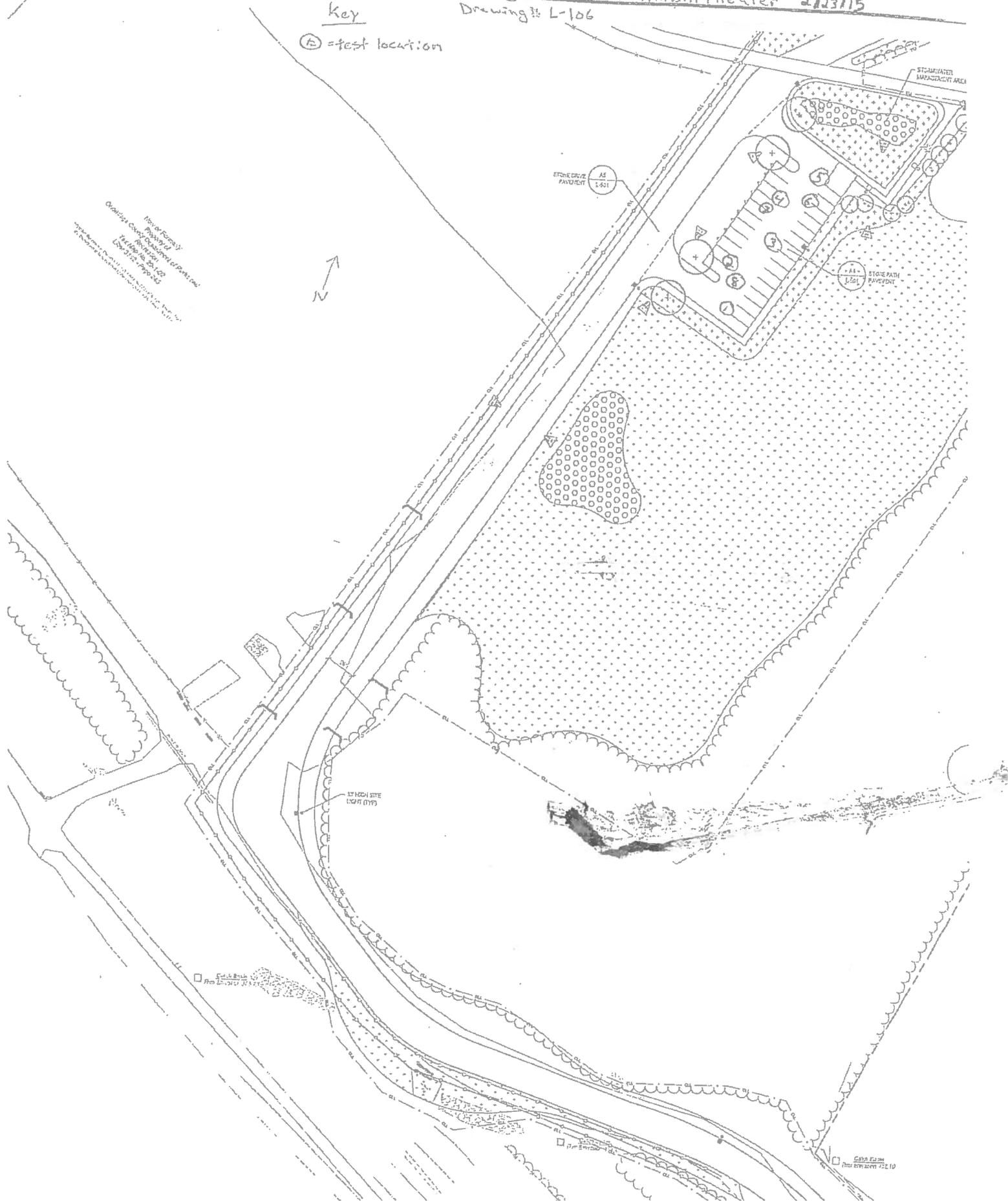
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	8" BS	10.7	3.6	119.6	146.7	81.5	95.0
2	See Map, Page 2	8" BS	14.1	3.6	115.3	146.7	78.5	95.0
3	See Map, Page 2	8" BS	13.0	3.6	116.7	146.7	79.5	95.0
4	See Map, Page 2	8" BS	12.6	3.6	120.1	146.7	81.8	95.0
5	See Map, Page 2	Subgrade	12.9	3.6	117.1	146.7	79.8	95.0
6	See Map, Page 2	Subgrade	11.1	3.6	123.4	146.7	84.1	95.0
7	See Map, Page 2	Subgrade	11.7	3.6	121.8	146.7	83.0	95.0
8	See Map, Page 2	Subgrade	9.1	3.6	122.5	146.7	83.5	95.0

12974 Onondaga Lakeview Amphitheater 2/23/15  
Drawing: L-106

Key

(A) = test location

Onondaga County Department of Parks and Recreation  
100 State Street  
Syracuse, NY 13202  
Tel: 485-2400  
Fax: 485-2401



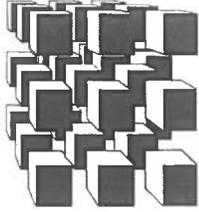
STONE CURB PAVEMENT AS 1-4-11

STONE PATH PAVEMENT AS 1-10-11

ST WOOD SITE LIGHT (1995)

Field Book  
From 12-20-14 to 1-1-15

DATA FROM  
FIELD BOOK 12-20-14 TO 1-1-15



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## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies  
1

Report Number  
12974S-02R-0215  
Through  
12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

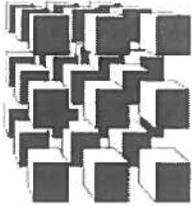
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

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C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>DATE:</b> 02/24/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-07R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Overcast / Partly Cloudy	<b>PAGE:</b> 1 of 3
	<b>TEMPERATURE:</b> -2 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material placed in proposed asphalt areas at the above referenced project. Please note, the material placed today is partially frozen, as well as the exposed material that was previously placed. Snow is also present within the material stockpiles. The in-place field density test results indicate that the required percent compaction was not achieved at the elevations and locations listed below. The moisture content of the material placed is also out of spec. The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's test results and non-conformances.

### Notes:

BS = Below Subgrade

### **RESULTS:**

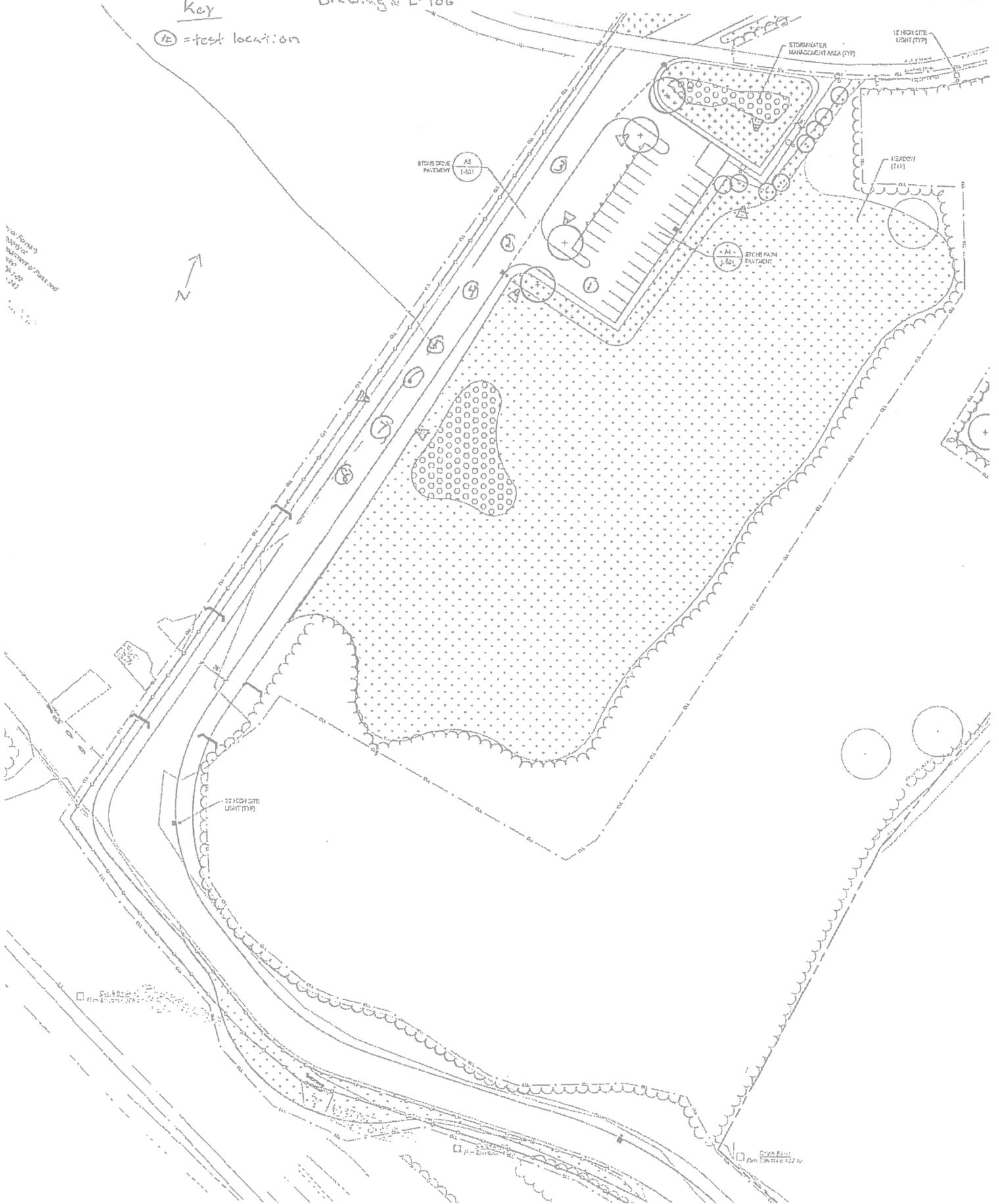
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	Subgrade	9.4	3.6	88.2	146.7	60.1	95.0
2	See Map, Page 2	Subgrade	10.8	3.6	96.7	146.7	65.9	95.0
3	See Map, Page 2	Subgrade	13.9	3.6	93.1	146.7	63.4	95.0
4	See Map, Page 2	Subgrade	1.6	3.6	89.9	146.7	61.2	95.0
5	See Map, Page 2	Subgrade	12.3	3.6	97.9	146.7	66.7	95.0
6	See Map, Page 2	Subgrade	12.2	3.6	98.3	146.7	67.0	95.0
7	See Map, Page 2	Subgrade	11.0	3.6	96.2	146.7	65.5	95.0
8	See Map, Page 2	Subgrade	8.7	3.6	101.7	146.7	69.3	95.0
9	See Map, Page 3	12" BS	9.7	3.6	100.3	146.7	68.3	95.0
10	See Map, Page 3	12" BS	8.9	3.6	100.9	146.7	68.7	95.0
11	See Map, Page 3	12" BS	9.6	3.6	101.2	146.7	68.9	95.0
12	See Map, Page 3	Subgrade	7.2	3.6	112.7	146.7	76.8	95.0
13	See Map, Page 3	Subgrade	7.6	3.6	111.6	146.7	76.0	95.0
14	See Map, Page 3	Subgrade	6.2	3.6	115.7	146.7	78.8	95.0

12974 Onondaga Lakeview Amphitheater 2/24/15

key

Drawing # L-106

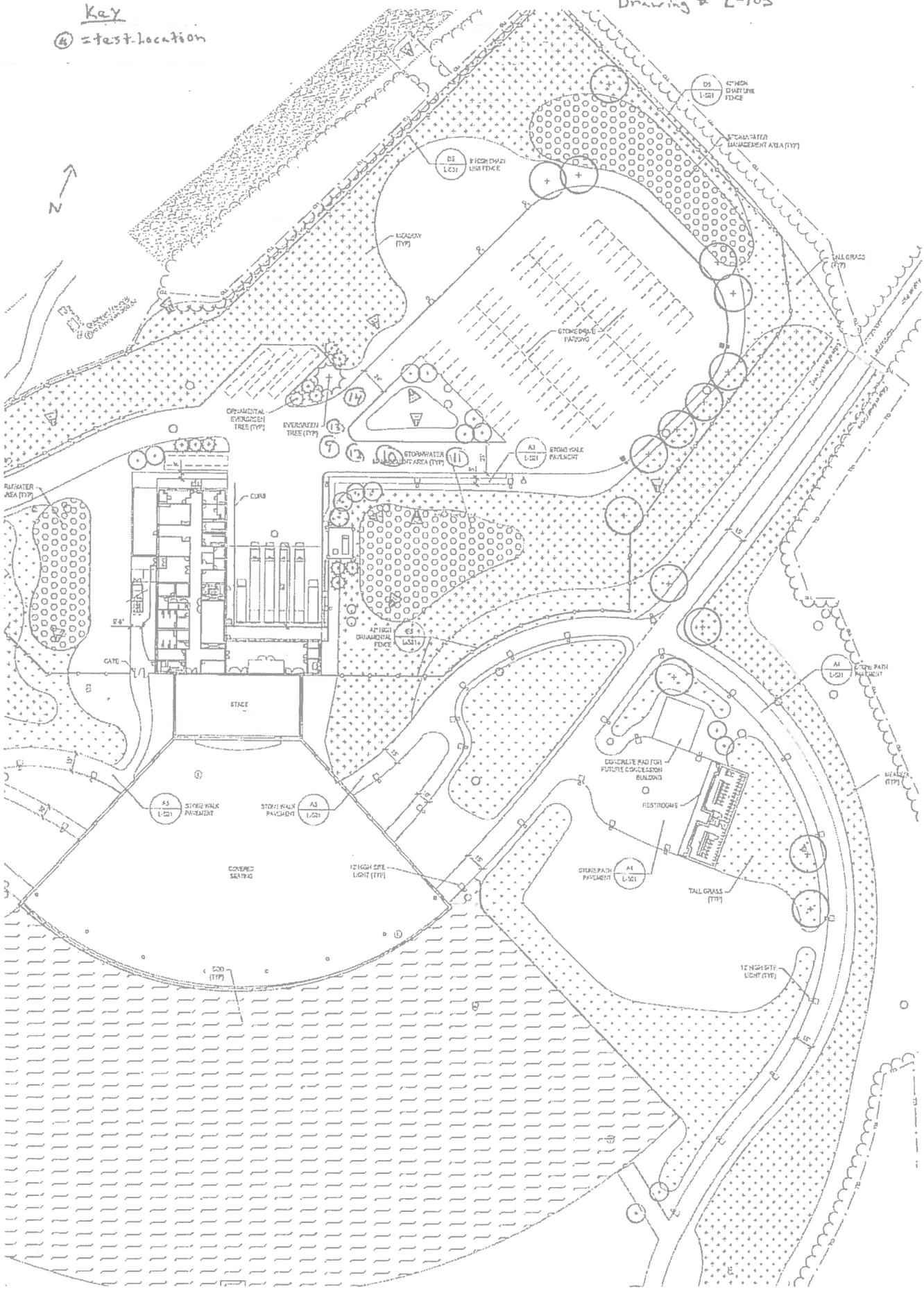
(⊕) = test location



Key

⊕ = test location

Issued / Revised		
No.	Date	Description
1	12/12/2014	PS/DWG 1



Not Constr

Client  
 Gilbane  
 Onondaga Lak  
 Amphitheater

Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

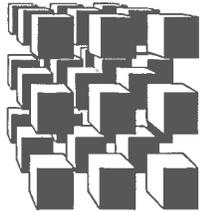
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## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

1

Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

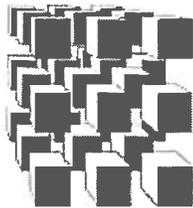
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

*A New York State Certified Women Owned Business Enterprise (WBE)*



## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 02/25/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-08R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Tests 1-4, 11-14, Crushed Shale, Imported from Riccelli Enterprises, Inc., Brickyard Road / Tests 5-10, -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Snow / Partly Cloudy	<b>PAGE:</b> 1 of 2
	<b>TEMPERATURE:</b> 18 °F

### REMARKS:

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material placed in proposed asphalt areas (tests 5-10) and fill material placed in grass areas (tests 1-4, 11-14), at the above referenced project. Also, please note, the geotextile fabric was placed on partially frozen sub-grade and 0" to 2" of snow, prior of placement of fill material. Also, the fill is being placed in a partially frozen state. Further, the moisture content of the 4" minus Crushed Gravel is out of spec. Also, material is being brought in that is over 4" in least dimension, and is therefore, out of spec. Also, a thin layer of mud is forming on top of the material, as the frozen material is thawing in the sun. The test results indicate that required in-place compaction was and was not achieved (see below). The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's test results and non-conformances.

### Notes:

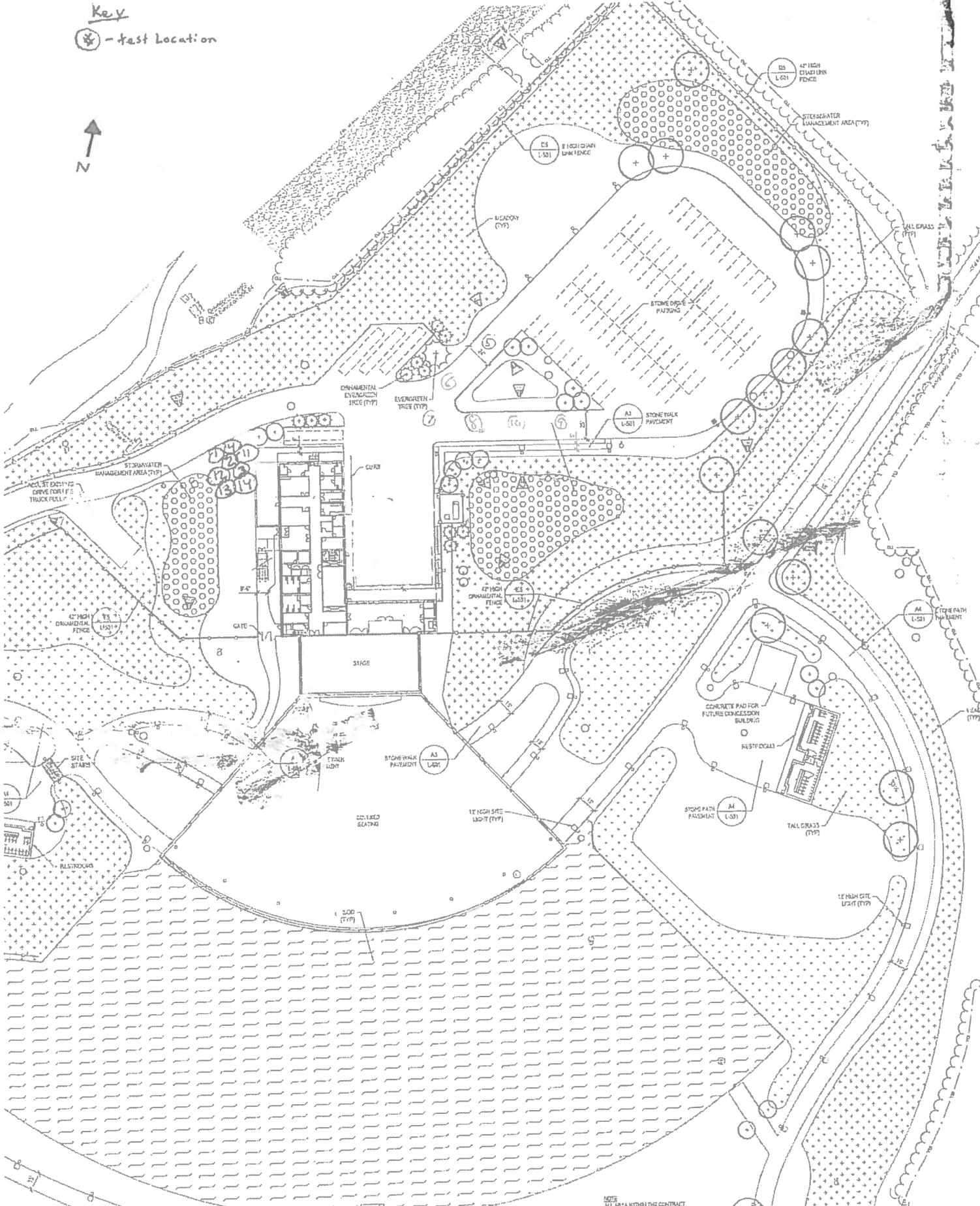
BS = Below Subgrade

### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	6' BS	9.8	11.5	121.7	126.6	96.1	85.0
2	See Map, Page 2	6' BS	10.1	11.5	121.5	126.6	95.9	85.0
3	See Map, Page 2	5' BS	10.4	11.5	122.1	126.6	96.4	85.0
4	See Map, Page 2	5' BS	10.0	11.5	121.8	126.6	96.2	85.0
5	See Map, Page 2	Subgrade	10.3	3.6	120.3	146.7	82.0	95.0
6	See Map, Page 2	Subgrade	8.7	3.6	122.4	146.7	83.4	95.0
7	See Map, Page 2	Subgrade	9.3	3.6	119.7	146.7	81.6	95.0
8	See Map, Page 2	Subgrade	9.6	3.6	120.0	146.7	81.7	95.0
9	See Map, Page 2	Subgrade	8.9	3.6	121.2	146.7	82.6	95.0
10	See Map, Page 2	Subgrade	8.6	3.6	121.5	146.7	82.8	95.0
11	See Map, Page 2	4' BS	9.5	11.5	123.5	126.6	97.5	85.0
12	See Map, Page 2	4' BS	10.6	11.5	122.9	126.6	97.0	85.0
13	See Map, Page 2	7' BS	10.6	11.5	121.3	126.6	95.8	85.0
14	See Map, Page 2	6' BS	9.9	11.5	121.8	126.6	96.2	85.0

Key

⊛ - test location



NOTE: ALL AREAS WITHIN THE CONTRACT



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## Transmittal

March 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find revised CME Reports 12974S-02R-0215 through 12974S-09R-0215. These reports have been revised to correct the elevations for the density tests. We apologize for any inconvenience this may have caused.

Number of Copies

1

Report Number

12974S-02R-0215

Through

12974S-09R-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

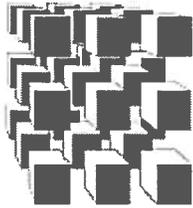
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 02/26/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-09R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Tests 1, 4-6, 9-14, 20-24, Crushed Shale, Imported from Riccelli Enterprises, Inc., Brickyard Road / Tests 2, 3, 7, 8, 15-19, 25-26, -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Overcast	<b>PAGE:</b> 1 of 3
	<b>TEMPERATURE:</b> 10 °F

### REMARKS:

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material placed in proposed asphalt areas and fill placed in grass areas. Please note, fill is being placed on frozen subgrade material. The fill itself is also partially frozen. The 4" minus Crushed Gravel has oversized material present (4½" - 6" in least dimension). Oversized pieces of Shale are present in the Crushed Shale fill, as well. The moisture content of the Crushed Gravel is also out of spec. The test results indicate that the required in-place compaction was and was not achieved (see below). The compactive efforts with the large roller on the top of each lift reveal that the surface is firm and non-yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's test results and non-conformances.

Notes: BS = Below Subgrade

### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2	Sub-grade	10.3	11.5	121.0	126.6	95.5	95.0
2	See Map, Page 2	Sub-grade	10.1	3.6	126.1	146.7	85.9	95.0
3	See Map, Page 2	Sub-grade	11.7	3.6	123.8	146.7	84.3	95.0
4	See Map, Page 2, Location A	6' BS	13.4	11.5	113.7	126.6	89.8	85.0
5	See Map, Page 2, Location A	5' BS	12.7	11.5	114.1	126.6	90.1	85.0
6	See Map, Page 2, Location A	4' BS	12.2	11.5	112.9	126.6	89.1	85.0
7	See Map, Page 2	1' BS	10.1	3.6	115.8	146.7	78.9	95.0
8	See Map, Page 2	1' BS	10.6	3.6	119.2	146.7	81.2	95.0
9	See Map, Page 2, Location A	3' BS	11.9	11.5	111.7	126.6	88.2	85.0
10	See Map, Page 2, Location A	2' BS	11.8	11.5	112.5	126.6	88.8	85.0
11	See Map, Page 2, Location A	1' BS	12.0	11.5	112.1	126.6	88.5	85.0
12	See Map, Page 2, Location B	9' BS	12.4	11.5	110.4	126.6	87.2	85.0
13	See Map, Page 2, Location B	8' BS	10.9	11.5	109.3	126.6	86.3	85.0



## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 02/26/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-09R-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Tests 1, 4-6, 9-14, 20-24, Crushed Shale, Imported from Riccelli Enterprises, Inc., Brickyard Road / Tests 2, 3, 7, 8, 15-19, 25-26, -4" Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Overcast	<b>PAGE:</b> 2 of 3
	<b>TEMPERATURE:</b> 10 °F

Notes: BS = Below Subgrade

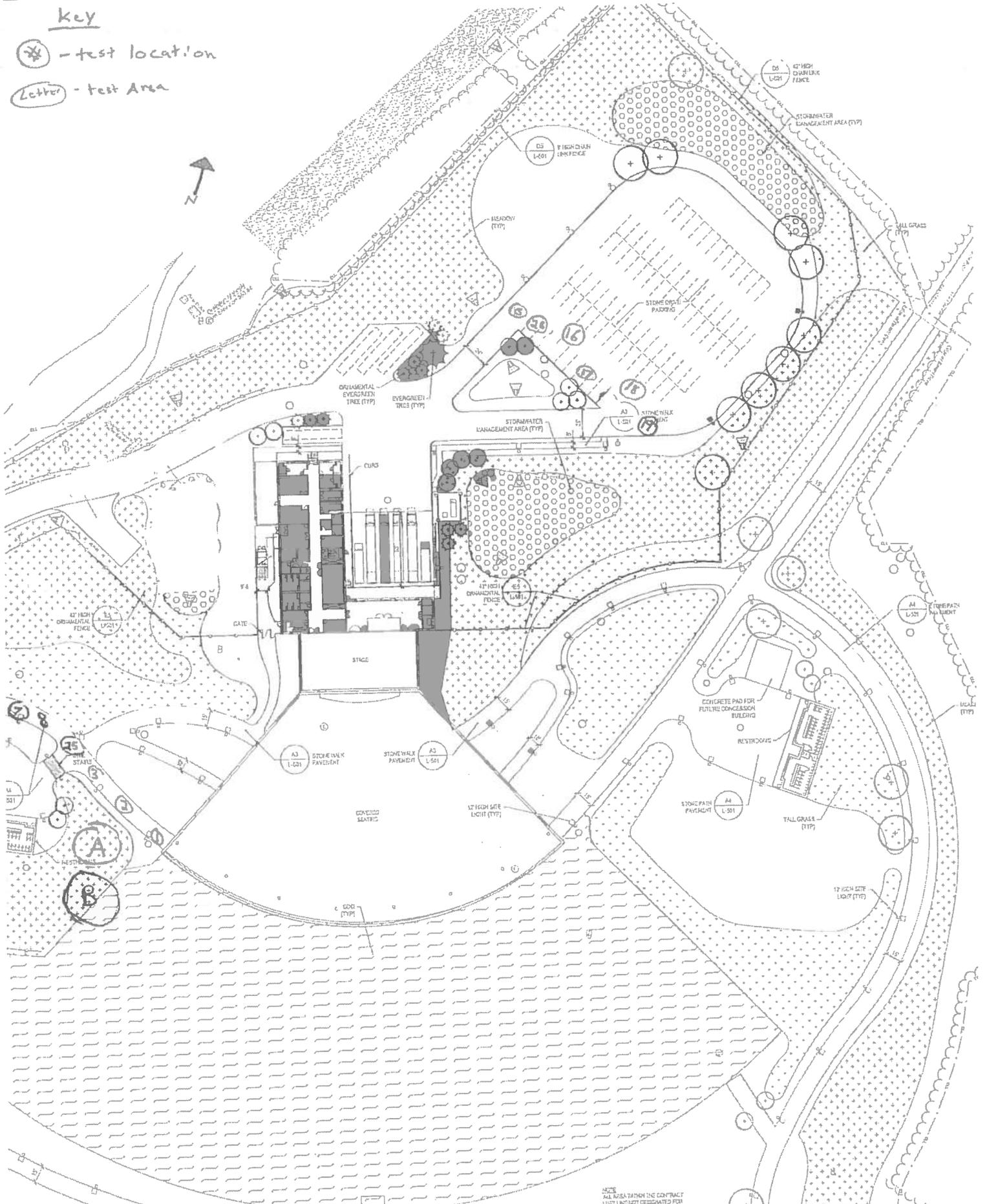
### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
14	See Map, Page 2, Location B	7' BTOSB	11.6	11.5	109.6	126.6	86.5	85.0
15	See Map, Page 2	1' BTOSB	12.5	3.6	122.8	146.7	83.7	95.0
16	See Map, Page 2	TOSB	11.9	3.6	123.1	146.7	83.9	95.0
17	See Map, Page 2	TOSB	12.2	3.6	122.9	146.7	83.7	95.0
18	See Map, Page 2	TOSB	12.9	3.6	121.7	146.7	82.9	95.0
19	See Map, Page 2	TOSB	12.3	3.6	123.5	146.7	84.2	95.0
20	See Map, Page 2, Location B	6' BTOSB	11.8	11.5	109.9	126.6	86.8	85.0
21	See Map, Page 2, Location B	5' BTOSB	14.2	11.5	108.9	126.6	86.0	85.0
22	See Map, Page 2, Location B	4' BTOSB	11.9	11.5	107.9	126.6	85.2	85.0
23	See Map, Page 2, Location B	3' BTOSB	12.8	11.5	108.2	126.6	85.4	85.0
24	See Map, Page 2, Location B	2' BTOSB	12.2	11.5	108.5	126.6	85.7	85.0
25	See Map, Page 2	TOSB	9.3	3.6	125.2	146.7	85.3	95.0
26	See Map, Page 2	TOSB	10.2	3.6	125.4	146.7	85.4	95.0

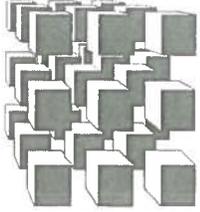
key

(X) - test location

(Letter) - test Area



NOTICE: ALL WORK SHALL BE IN ACCORDANCE WITH THE CONTRACT. LIGHT FIXTURES NOT DESIGNATED FOR...



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## Transmittal

March 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

Report Number

12974S-10-0215

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 02/27/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-10-0215
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Tests 1-3, 9-12, Crushed Shale, Imported from Riccelli Enterprises, Inc., Brickyard Road / Tests 4-8, 4" minus Crushed Gravel, Imported from Riccelli Enterprises, Inc., Granby Pit	
<b>WEATHER:</b> Partly Cloudy	<b>PAGE:</b> 1 of 2
	<b>TEMPERATURE:</b> 0 °F

### REMARKS:

This Representative was on-site to conduct In-Place Field Density Testing on fill and backfill placed in proposed asphalt areas and in grass areas. Please note, fill and geotextile fabric is being placed on frozen material. The fill itself is also partially frozen. A Grey Crushed Limestone is being placed from the on-site bike path, in between the layers of Crushed Shale (please refer to page 2 of this report for locations). No proctor is available for this product. Mr. Bob Catalina with C&S Companies has been notified. The 4" minus Crushed Gravel has oversized material present (4½" - 6" in least dimension). Oversized pieces of Shale are present in the Crushed Shale fill, as well. Due to truck traffic and sunlight, the frozen fill is melting and a thin layer of mud is forming on top of the placed material. The density test results indicate that the required in-place compaction was and was not achieved (see below). The compactive efforts with the large roller on top of each lift reveal that the surface is firm and not yielding under the drum of the roller. Mr. Bob Catalina with C&S Companies was orally informed of today's test results and non-conformances.

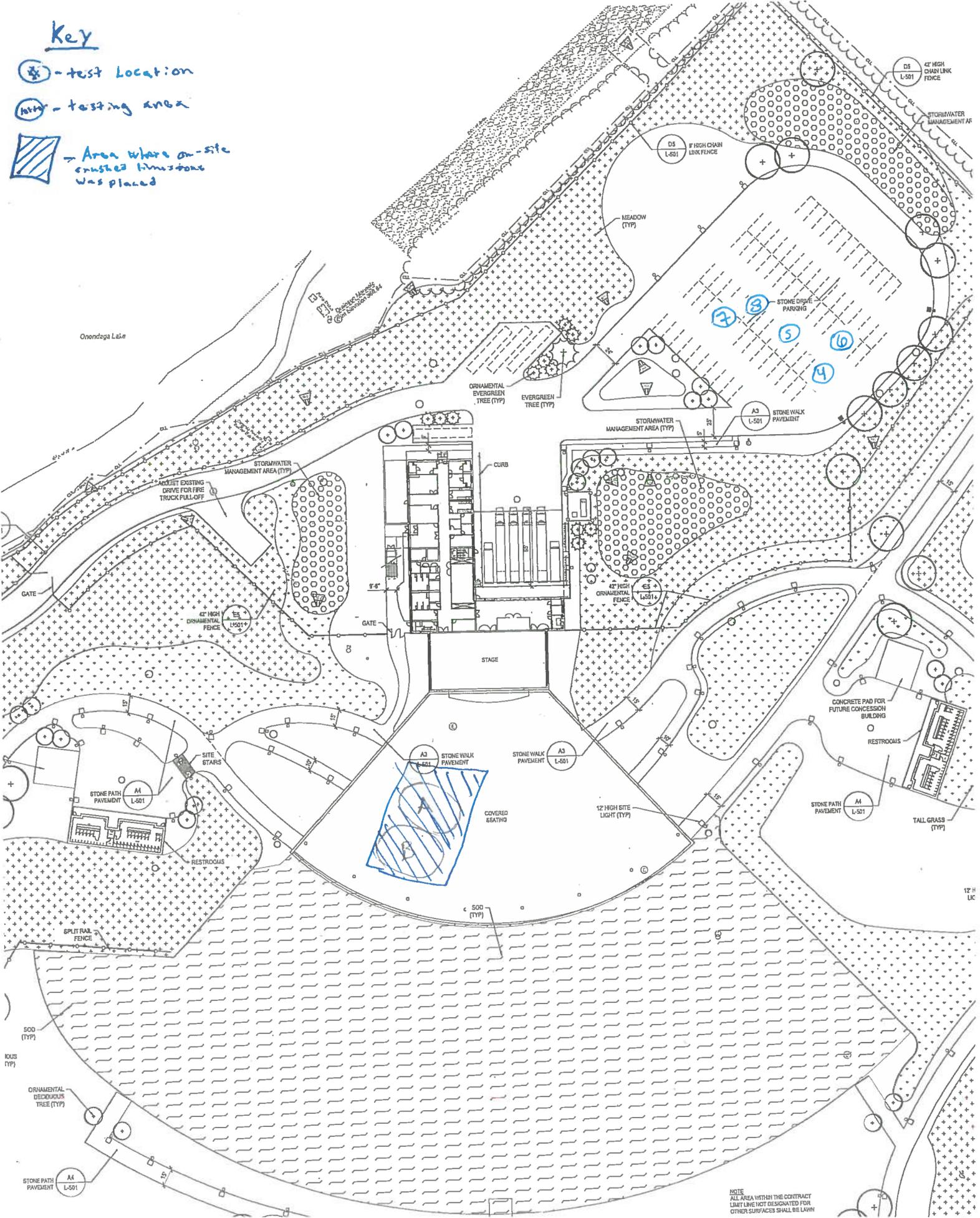
Notes: BS = Below Sub-grade

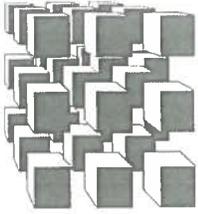
### RESULTS:

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2, Location A	5' BS	9.3	11.5	122.4	126.6	96.6	95.0
2	See Map, Page 2, Location B	5' BS	10.5	11.5	124.1	126.6	98.0	95.0
3	See Map, Page 2, Location B	4' BS	10.7	11.5	123.2	126.6	97.3	95.0
4	See Map, Page 2	Sub-grade	9.6	3.6	110.4	146.7	75.2	95.0
5	See Map, Page 2	1' BS	9.5	3.6	110.9	146.7	75.5	95.0
6	See Map, Page 2	3' BS	10.0	3.6	109.6	146.7	74.7	95.0
7	See Map, Page 2	Sub-grade	11.1	3.6	109.1	146.7	74.3	95.0
8	See Map, Page 2	3' BS	10.4	3.6	110.0	146.3	74.9	95.0
9	See Map, Page 2, Location B	3' BS	10.8	11.5	124.9	126.6	98.6	95.0
10	See Map, Page 2, Location A	3' BS	11.4	11.5	123.7	126.6	97.7	95.0
11	See Map, Page 2, Location B	1' BS	9.6	11.5	122.4	126.6	96.7	95.0
12	See Map, Page 2, Location A	1' BS	8.9	11.5	123.0	126.6	97.1	95.0

Key

-  - test location
-  - testing area
-  - Area where on-site crushed limestone was placed





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## Transmittal

March 3, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
1

Report Number  
12974S-11-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

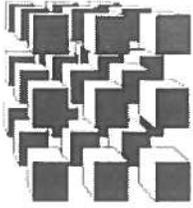
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 03/02/2015
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-11-0315
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk
<b>MATERIAL TYPE &amp; SOURCE:</b> Crushed Shale, Imported from Riccelli Enterprises, Inc., Granby Pit	<b>TEMPERATURE:</b> 25 °F
<b>WEATHER:</b> Snow	<b>PAGE:</b> 1 of 2

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on sub-grade fill in the covered seating area at the above referenced project. Geotextile fabric is being placed on top of snow (0"-2") and frozen sub-grade. Fill lifts were less than or equal to 18" thick, and were placed in the highlighted area on page 2 (Area A). All lifts were compacted until stable and non-yielding. Also, the density test results indicate that the required in-place compaction was achieved (see below). Mr. Bob Catalina with C&S Companies was orally informed of today's test results.

Additionally, Crushed Gravel fill was placed in the paved areas shown on page 2. Two, approximately 12" thick lifts were placed and compacted with a 30 ton roller on vibratory mode. The first lift was placed on either geotextile fabric or on previously placed fill. During compactive efforts the surface was firm and stable and non-yielding.

Notes: Elevations provided by the Earthwork Contractor  
BS = Below Sub-grade

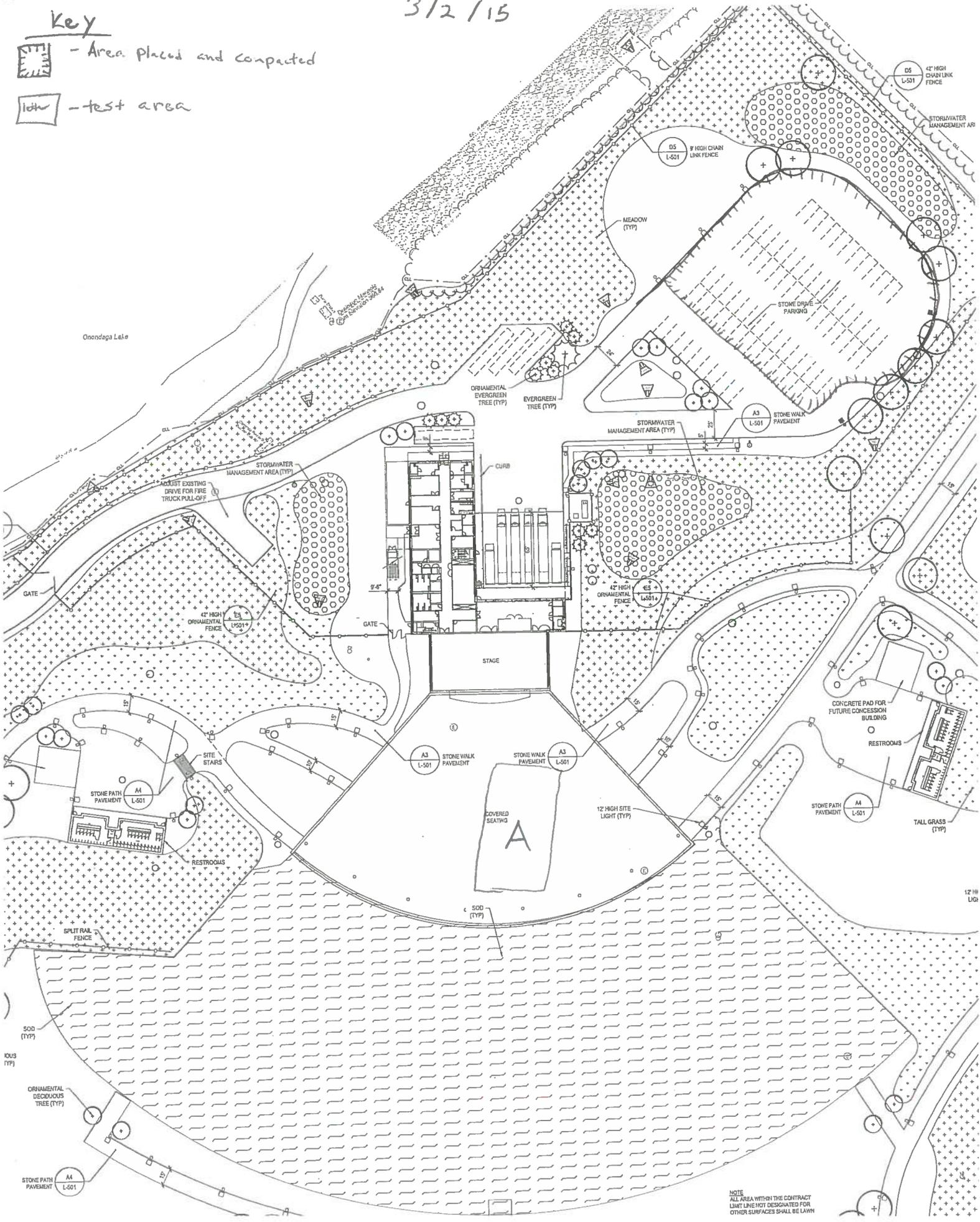
### **RESULTS:**

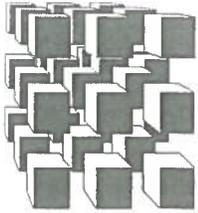
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See Map, Page 2, Location A	11' BS	10.0	11.4	120.8	126.6	95.4	95.0
2	See Map, Page 2, Location A	10' BS	9.7	11.4	121.5	126.6	96.0	95.0
3	See Map, Page 2, Location A	9' BS	10.0	11.4	122.1	126.6	96.4	95.0
4	See Map, Page 2, Location A	8' BS	10.0	11.4	122.8	126.6	97.0	95.0

Key

[Stippled pattern] - Area placed and compacted

[Dashed pattern] - test area





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## Transmittal

March 9, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-18-0315

Respectfully submitted,  
**CME Associates, Inc.**

  
Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

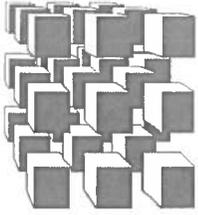
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-18-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/06/2015      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 15 °F

---

This CME Representative was on-site to observe the placement and compaction of sub-grade material in proposed grass areas.

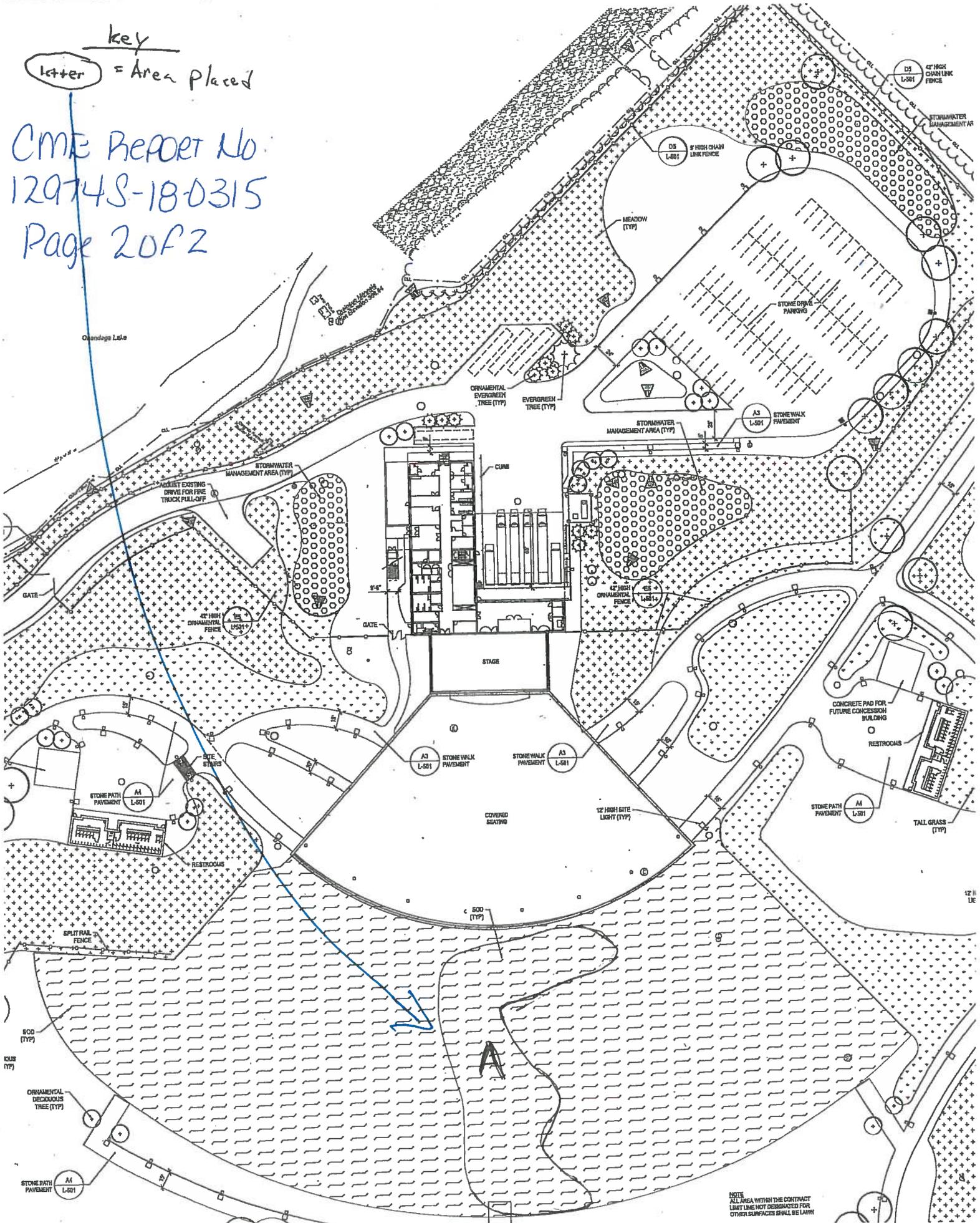
In the approximate area noted on page 2, geotextile fabric was placed on the Solvay Waste, prior to placing Crushed Shale fill. Due to the "working" of the Solvay Waste surface with a bulldozer, the top approximately 6" of material was worked into an unstable material, prior to the geo textile fabric placement. After Crushed Shale placement, a layer of mud is forming on top of the placed Crushed Shale due to truck traffic. The Crushed Shale fill was not rolled and compacted at the time of placement. Only one lift was placed. This CME Representative was notified that due to the Solvay Waste below being reworked and soft, the Crushed Shale will be rolled and compacted after more material is placed.

Mr. Jim Stewart, P.E. with John P Stophen Engineering was orally informed of my observations today.

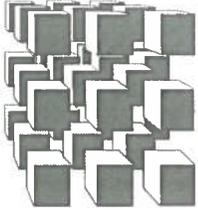
key

Letter = Area Placed

CME Report No.  
12974S-18-0315  
Page 2 of 2



NOTE: ALL AREA WITHIN THE CONTRACT LIMIT LINE NOT DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



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## Transmittal

March 9, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-19-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

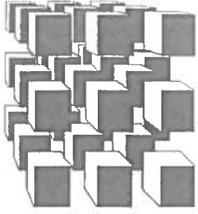
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-19-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/06/2015      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 15 °F

---

This CME Representative was on-site to observe the placement of fill as pipe bedding and backfill for the force main.

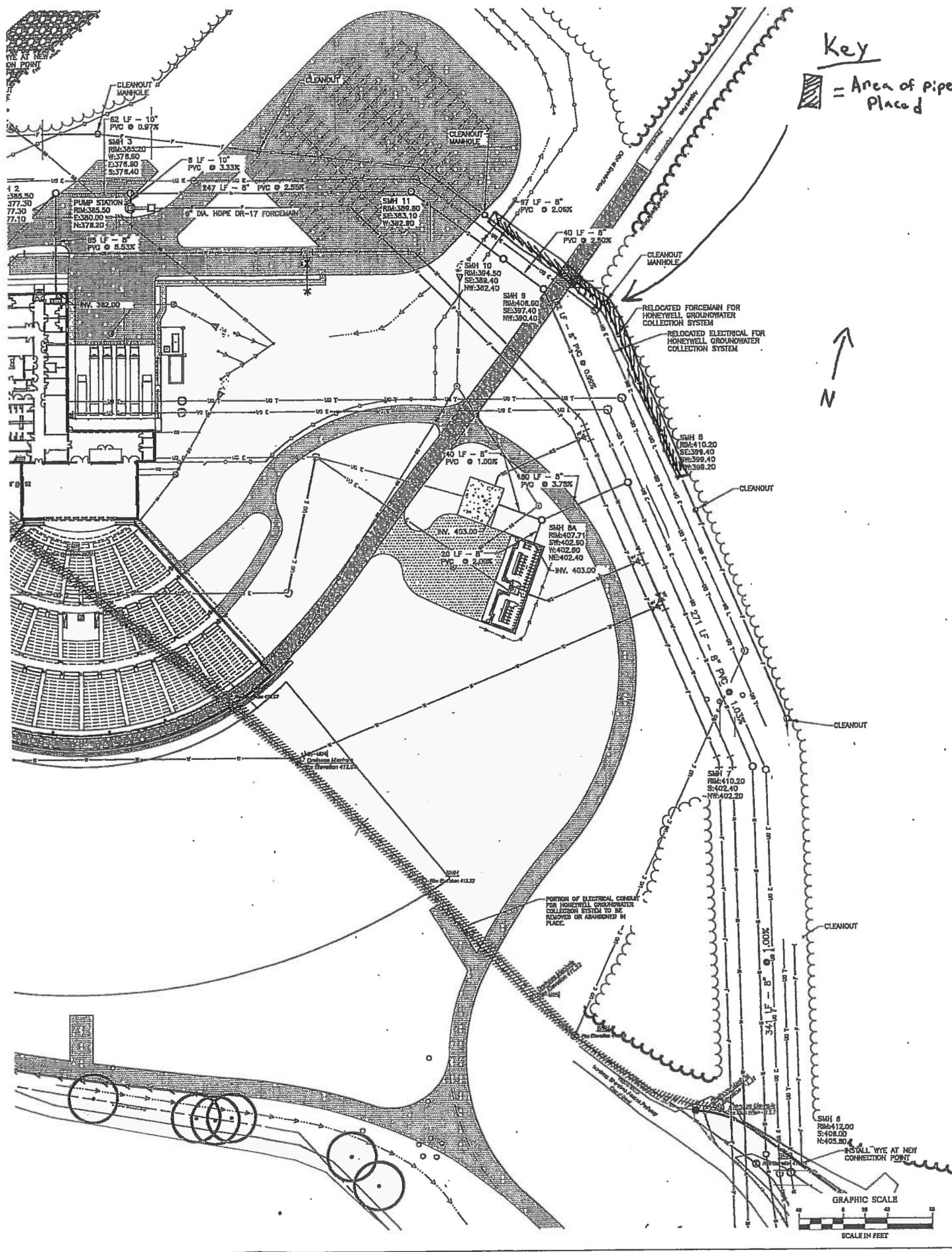
Approximately 6" of ½" minus Crushed Limestone was placed as pipe bedding at the locations shown on page 2. The pipe bedding was not compacted. After the pipe was placed, the trench was backfilled with on-site excavated material (Solvay Waste), in one lift, which was not compacted.

At the manhole location, a layer of geotextile fabric was placed on the Solvay Waste and an approximately 12" thick lift of ½" minus Run-of-Crush was placed as pipe bedding, and was not compacted.

Mr. Bob Catalina with C&S Companies was orally informed of my observations today.

Issued / Revised		
No.	Date	By
1	1-23-15	
2	1-29-15	
3	2-09-15	
4	2-13-15	

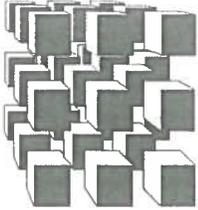
**Key**  
 = Area of pipe Placed



Client  
**Gilbane  
 Onondaga  
 Amphitheater**  
 Onondaga La  
 Syracuse, NY  
 Project No. 14  
 Westlake  
 Reed  
 Leskosky



UTILITY PL  
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## Transmittal

March 10, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-20-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

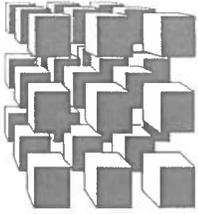
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
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Mr. Charles Reinhardt  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-20-0315  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 03/09/2015      **WEATHER:** Overcast      **TEMPERATURE:** 35 °F

---

This CME Representative was on-site to observe the placement and compaction of sub-grade material in proposed grass areas.

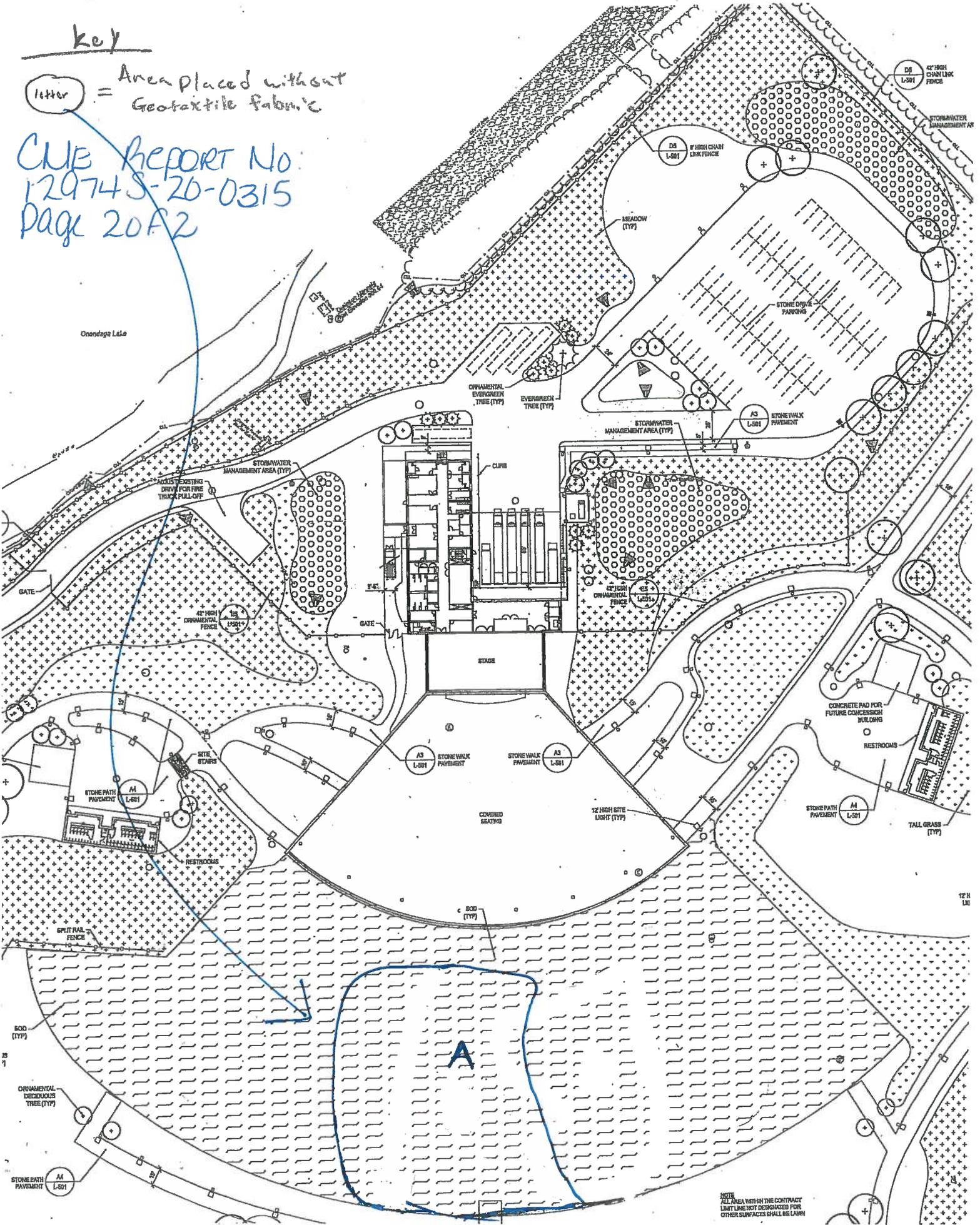
In the approximate area noted on page 2, geotextile fabric was placed on the Solvay Waste, prior to placing Crushed Shale fill. The approximate top 4" to 6" of Solvay Waste below the placed geotextile fabric was unstable due to bulldozer traffic. One approximately 18" thick lift was placed. This lift was not compacted at the time of placement, due to the unstable layer of Solvay Waste beneath the placed fill. This lift will be compacted at a later time.

Mr. Jim Stewart, P.E. with John P Stophen Engineering was orally informed of my observations today.

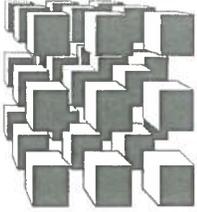
key

letter = Area placed without Geotextile fabric

CME Report No. 12974 S-20-0315 Page 2 of 2



NOTE ALL AREA WITHIN THE CONTRACT LIMIT LINE NOT DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



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## Transmittal

March 10, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-21-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

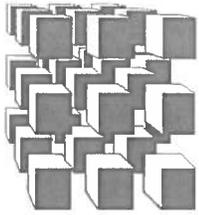
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-21-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/09/2015      **WEATHER:** Overcast      **TEMPERATURE:** 35 °F

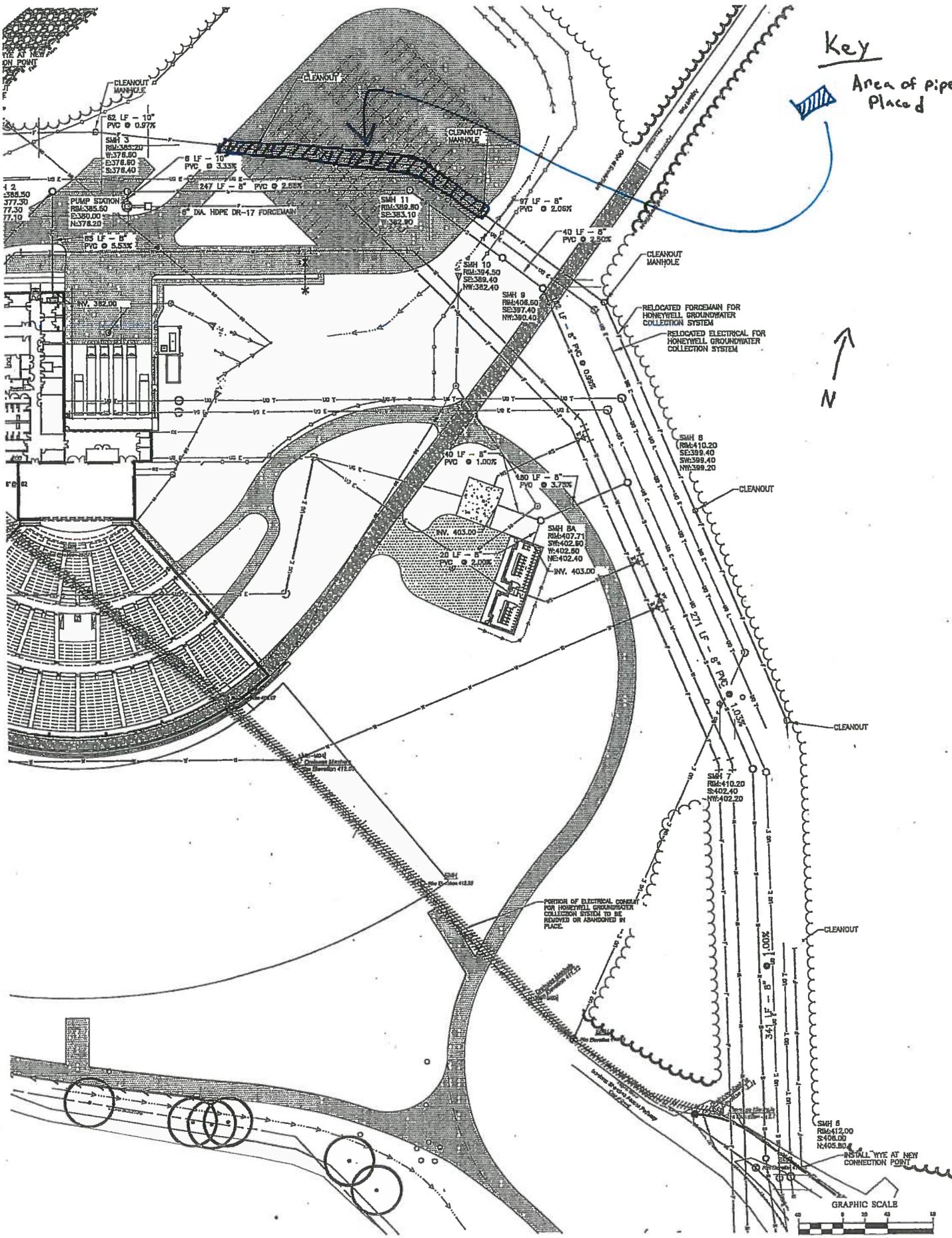
---

This CME Representative was on-site to observe the placement of pipe bedding and backfill for the sewer force main.

Approximately 6" of ½" minus Crushed Limestone was placed as pipe bedding at the location shown on page 2. The pipe bedding was not compacted. After the pipe was placed, the trench was backfilled with one, thick lift of 4" minus Crushed Gravel which was compacted with an excavator mounted plate tamper until stable and unyielding.

Mr. Bob Catalina with C&S Companies was orally informed of my observations today.

Issued / Revised		
No.	Date	By
1	1-23-15	
2	1-29-15	
3	2-09-15	
4	2-13-15	



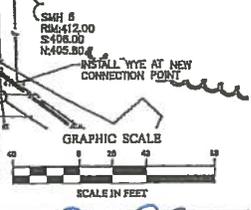
**Key**  
 Area of pipe placed

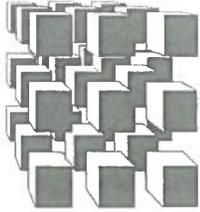


Client  
 Gilbane  
 Onondaga  
 Amphitheater  
 Onondaga La  
 Syracuse, NY  
 Project No. 14  
 Westlake  
 Reed  
 Leskosky



UTILITY PLAN  
 HO RELOCATION  
 C





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## Transmittal

March 11, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
12974S-22-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

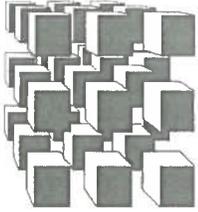
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-22-0315  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC /  
D. Stabile  
**DATE:** 03/10/2015      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 40 °F

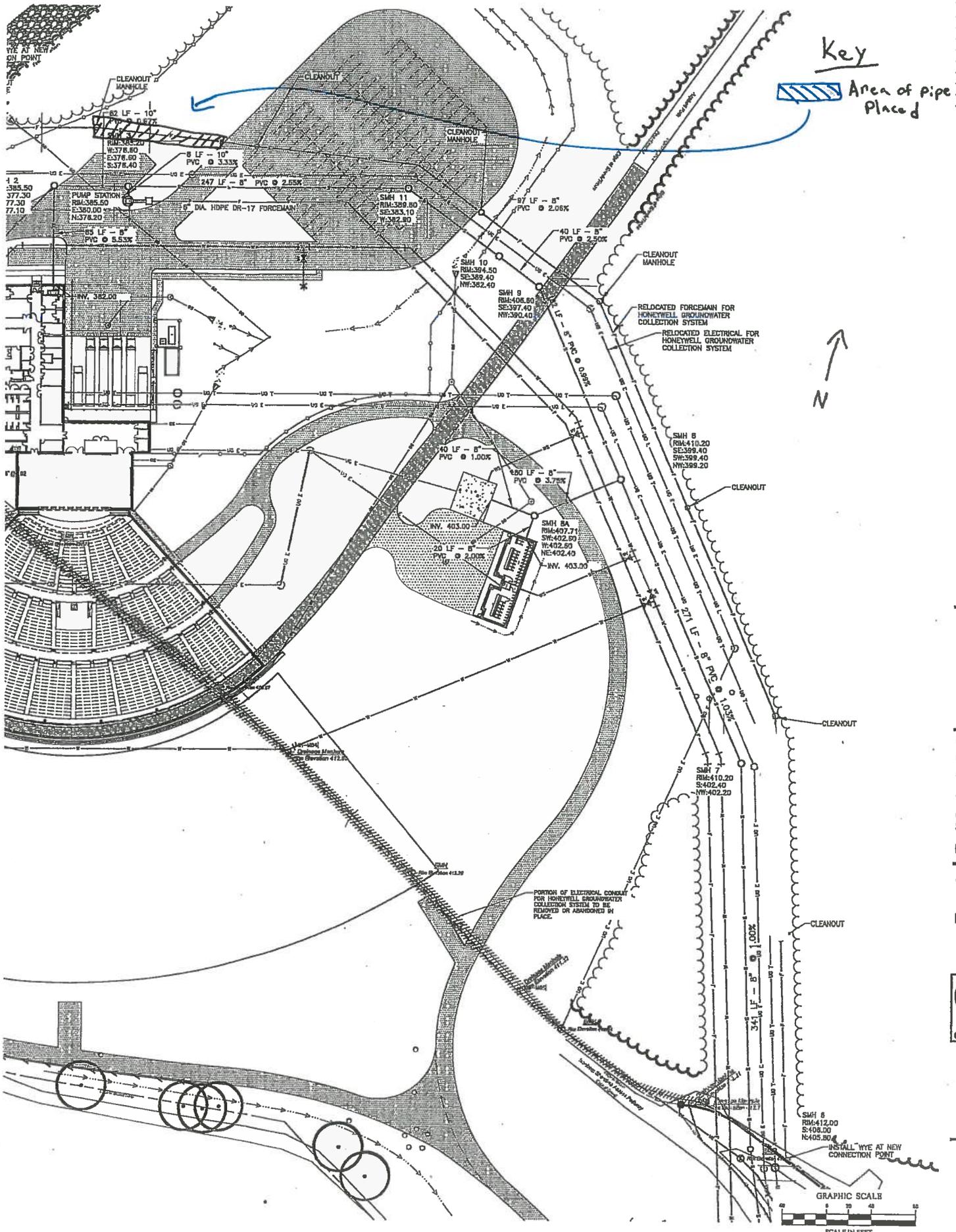
---

This CME Representative was on-site to observe the placement of material as pipe bedding and as backfill for the force main, at the request of Mr. Bob Catalina with C&S Companies.

Approximately 6" of ½" minus Crushed Limestone was placed as pipe bedding at the location shown on page 2. The pipe bedding was not compacted. After the pipe was placed, the trench was backfilled with on-site fill (Solvay Waste), in one lift, which was not compacted.

Mr. Bob Catalina with C&S Companies was orally informed of my observations today.

Issued / Revised	
No.	Date
1	1-23-15
2	1-29-15
3	2-09-15
4	2-13-15



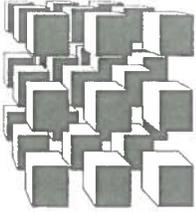
Cor

Client  
**Gilbane  
 Onondaga  
 Amphitheater**  
 Onondaga Lak  
 Syracuse, NY  
 Project No. 14

**Westlake  
 Reed  
 Leskosky**



FISHER  
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## Transmittal

March 11, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
12974S-23-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

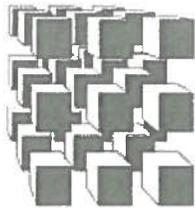
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York  
**CLIENT:** Onondaga County  
**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**DATE:** 03/10/2015  
**REPORT NO.:** 12974S-23-0315  
**REPRESENTATIVE:** A. Boronczyk / D. Stabile

**MATERIAL TYPE & SOURCE:** Crushed Shale, Imported from Riccelli Enterprises, Inc.

**WEATHER:** Partly Cloudy      **PAGE:** 1 of 2      **TEMPERATURE:** 40 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade material placed in proposed grass areas at the above referenced project. At the approximate area shown on page 2, geotextile fabric was placed prior to placing Crushed Shale fill on top of the exposed Solvay Waste. Due to the working of the Solvay Waste surface with a bulldozer, the top approximately 6" was worked into an unstable material prior to the geotextile fabric being placed. Also, a layer of mud is forming on top of the placed Crushed Shale, due to truck traffic. The in-place field density test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

**Notes:**

BS = Below Subgrade

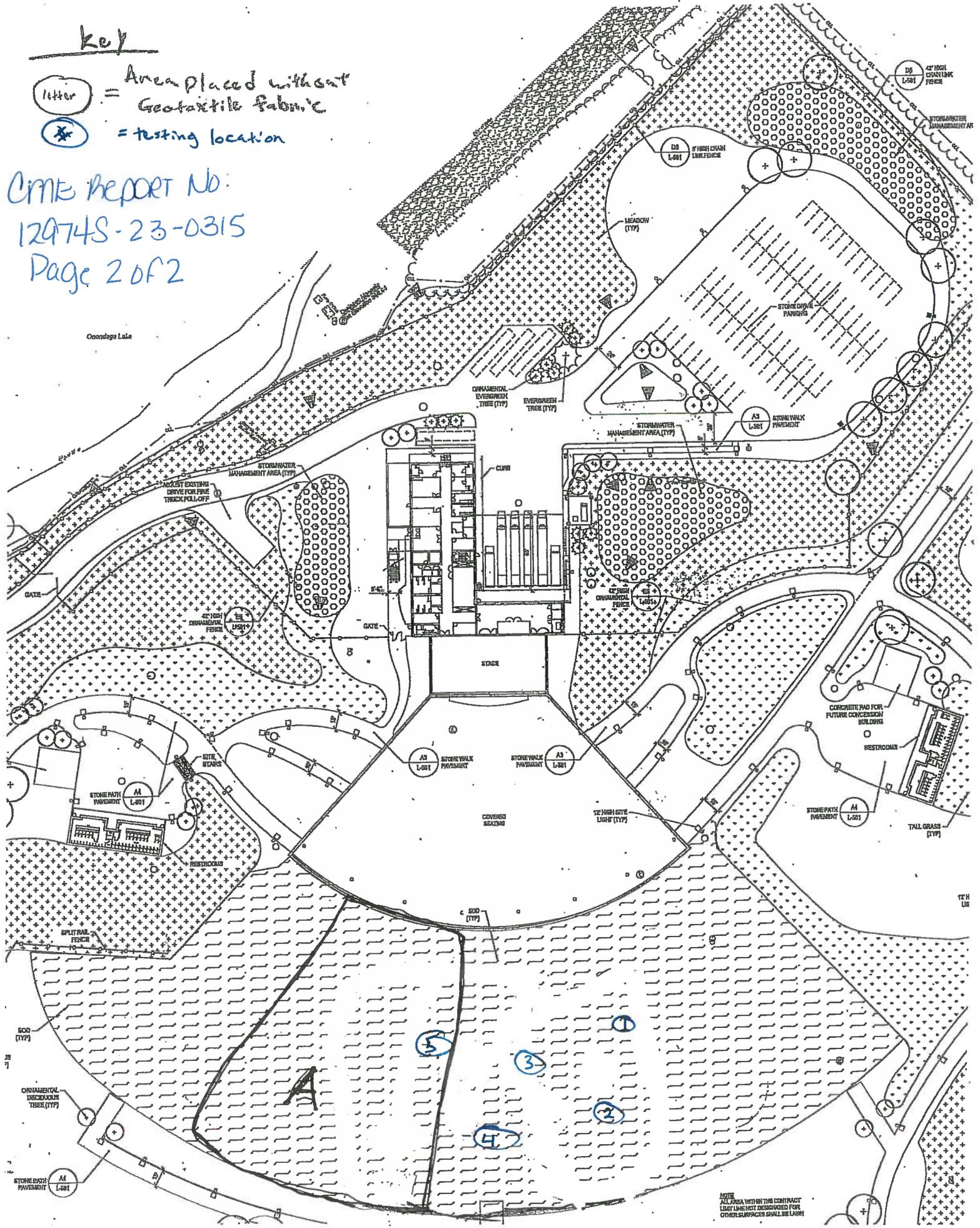
### **RESULTS:**

<b>Test #</b>	<b>Test Location</b>	<b>Test Elevation</b>	<b>Moisture Content (%)</b>	<b>OMC (%)</b>	<b>Field Dry Density (pcf)</b>	<b>100% Dry Density (pcf)</b>	<b>Compaction Achieved (%)</b>	<b>Compaction Required (%)</b>
1	See Map, Page 2	1' BS	11.4	11.5	108.9	126.6	86.0	85.0
2	See Map, Page 2	1' BS	11.7	11.5	109.2	126.6	86.2	85.0
3	See Map, Page 2	1' BS	11.6	11.5	109.9	126.6	86.8	85.0
4	See Map, Page 2	1' BS	11.9	11.5	110.0	126.6	86.9	85.0
5	See Map, Page 2	1' BS	11.7	11.5	109.7	126.6	86.6	85.0

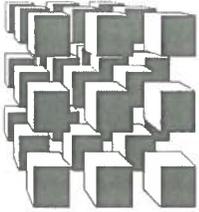
Key

- (letter) = Area placed without Geotextile fabric
- (\*) = testing location

CITE Report No:  
 12974S-23-0315  
 Page 2 of 2



NOTE: ALL AREA WITHIN THIS CONTRACT LIMIT LINE NOT DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
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## Transmittal

March 12, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

Report Number

12974S-24-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

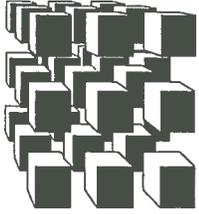
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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---

## *DAILY PROGRESS REPORT*

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-24-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/11/2105      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 48 °F

---

This CME Representative was on-site to observe earthwork procedures in the proposed grass areas.

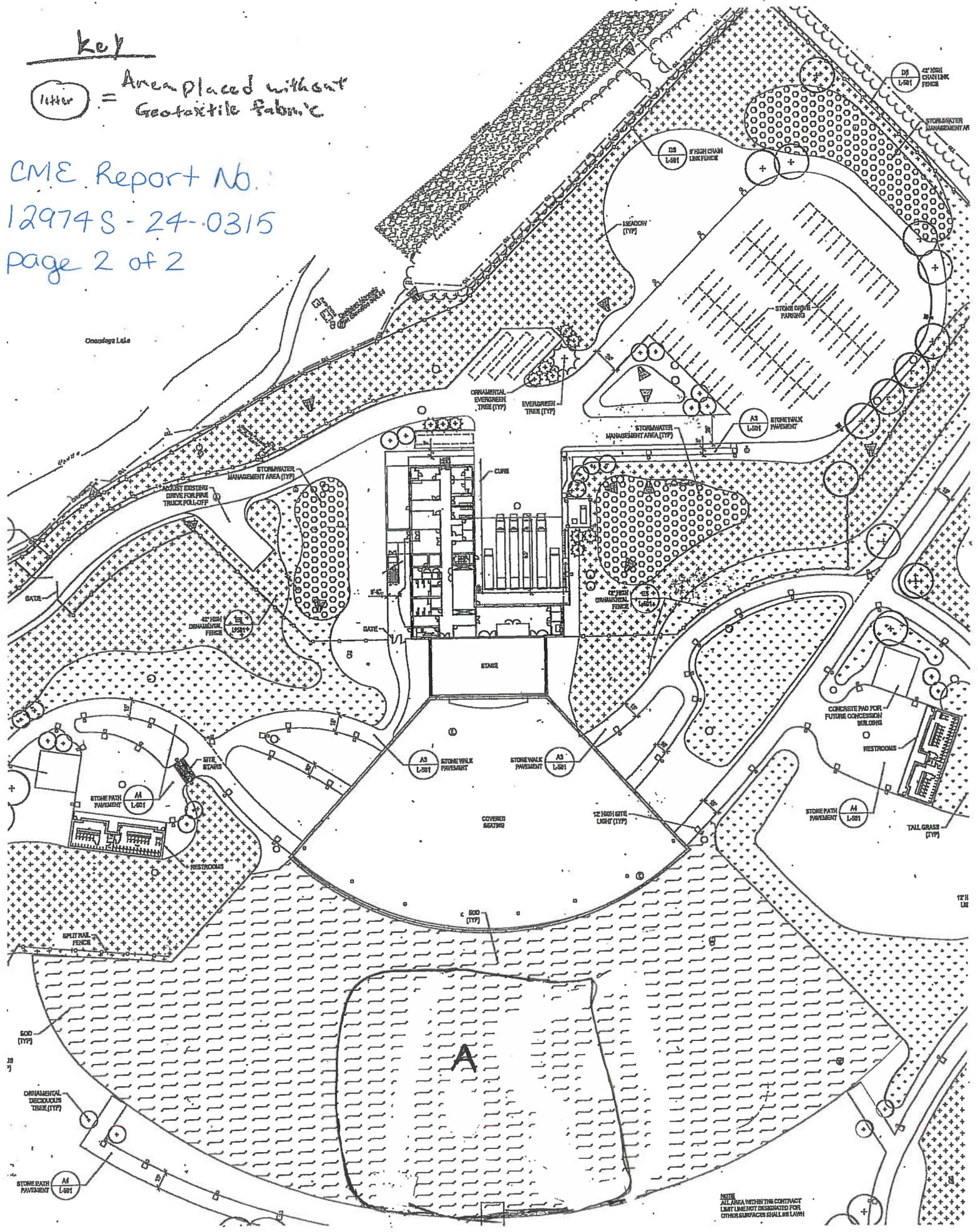
Approximately 1' of previously placed fill was removed from the approximate area noted on page 2 because it has become unstable. No additional material was placed today.

Mr. Bob Catalina with C&S Companies was orally informed of my observations today.

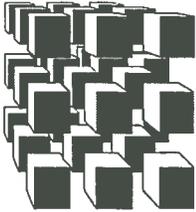
key

(Hatched) = Area placed without Geotextile fabric

CME Report No. 12974S-24-0315 page 2 of 2



NOTE: ALL AREA WITHIN THIS CONTRACT LIMITS MUST BE DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



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## Transmittal

March 13, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-25-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

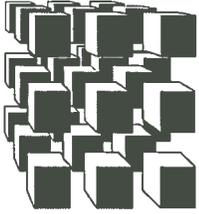
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-25-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/12/15      **WEATHER:** Clear      **TEMPERATURE:** 32 °F

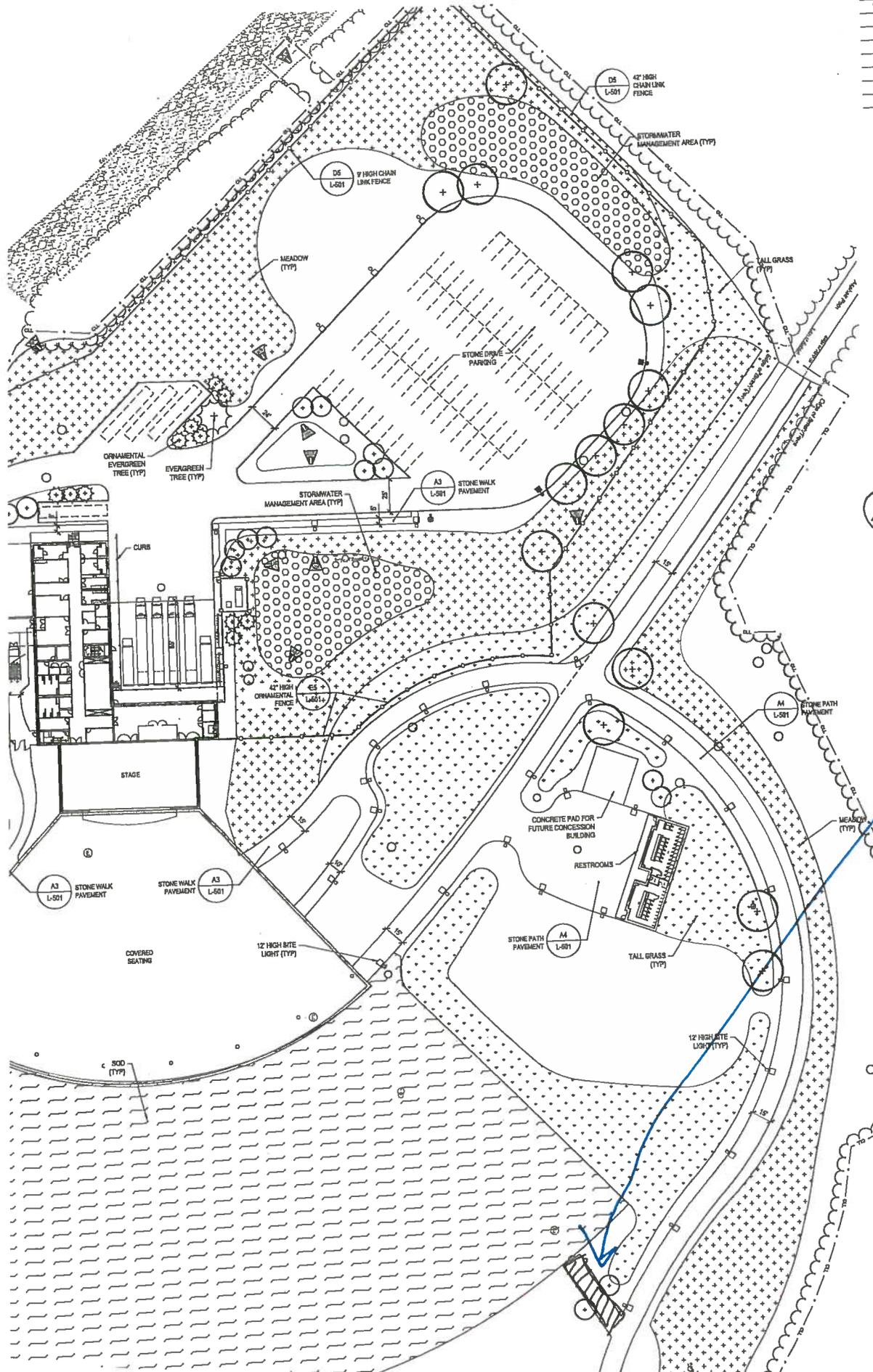
---

This CME Representative was on-site to observe the placement and compaction of subgrade material in a proposed paved area.

In the approximate area noted on page 2, geotextile fabric was placed prior to placing 4" Minus Crushed Gravel on top of exposed solvay waste. One, approximately 18" thick lift was placed. This lift was compacted with a 30-ton roller on vibratory mode until the material was stable and not yielding.

Mr. Bob Catalina with C&S Companies was orally informed of my observations today.

Issued / Revised		
No.	Date	Description
1	12/12/2014	PRICING SET



key  
 - area placed

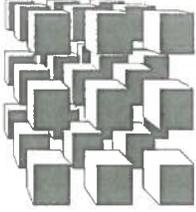


Not For Construction

Client  
**Gilbane**  
**Onondaga Lakeview Amphitheater**  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

**Westlake Reed Leskosky**  
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 Suite 1008  
 New York, New York 10001  
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 F 212.859.0050  
 www.WRLdesign.com  
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 Syracuse, NY 13202  
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 F 315.472.7800



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6035 Corporate Drive  
East Syracuse, New York 13057  
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(315) 701-0526 (Fax)  
www.cmeassociates.com

## Transmittal

March 16, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-26-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

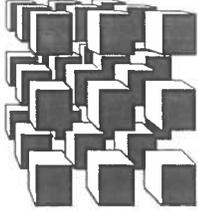
Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-26-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/13/2015      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 40 °F

---

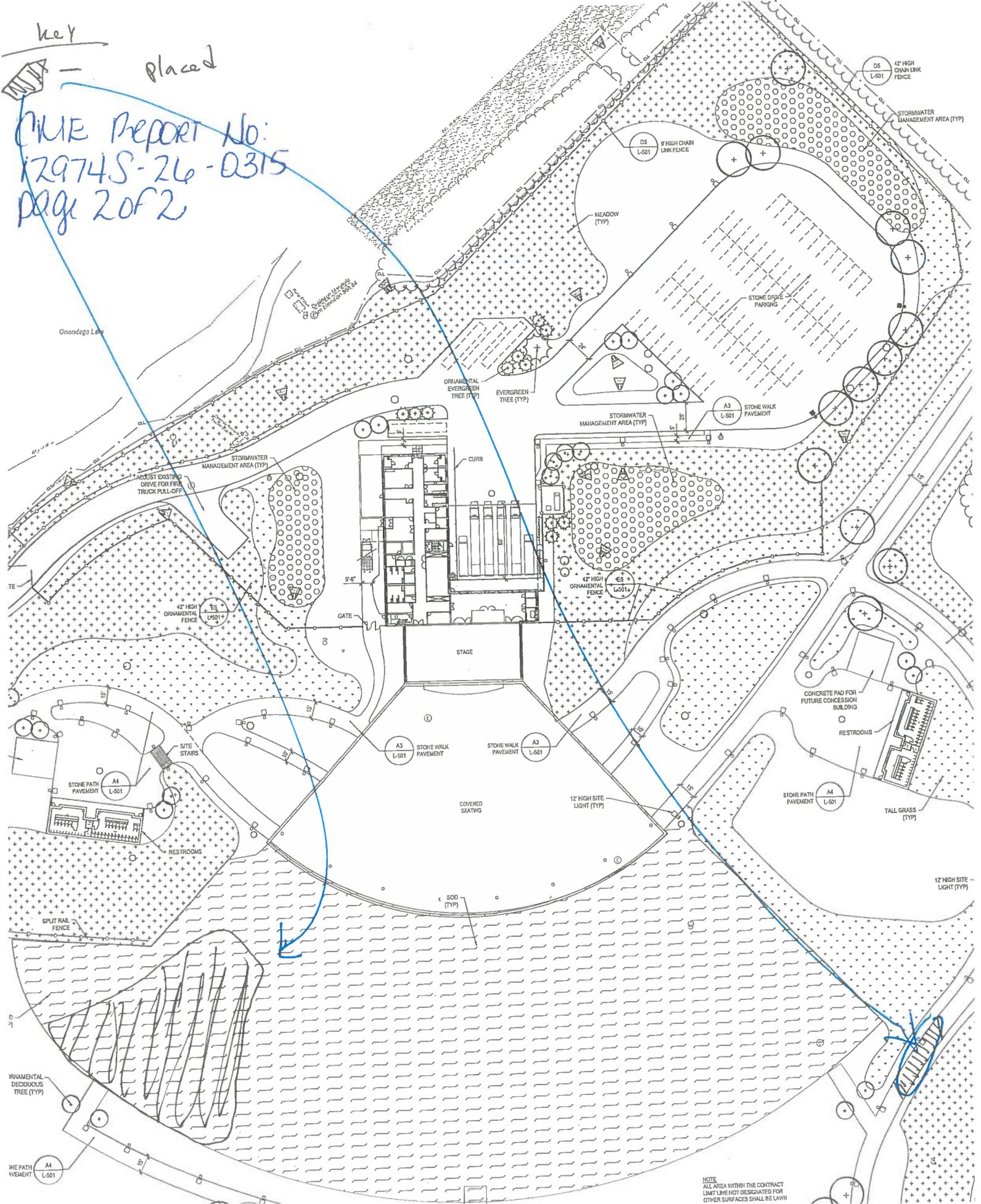
This CME Representative was on-site to observe the placement and compaction of subgrade material in a proposed grass area and in a proposed road area.

In the approximate road area noted on page 2, geotextile fabric was placed on the exposed solvay waste, prior to placement of fill. Then, two lifts of 4" minus Crushed Gravel (Imported from Riccelli Enterprises, Granby Pit) were placed in approximately 1' thick lifts. Each lift was rolled and compacted several times with a 30 ton roller on vibratory mode. On the last compaction pass, the material was stable and not yielding.

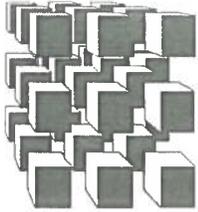
In the approximate grass area, noted on page 2, geotextile fabric was placed on the exposed solvay waste, prior to placing Crushed Shale fill. One, approximately 18" thick lift of material was placed. This lift was not compacted at the time of placement.

key placed

PLME Report No:  
12974S-26-0315  
page 2 of 2



NOTE  
ALL AREA WITHIN THE CONTRACT  
LIMIT LINE NOT DESIGNATED FOR  
OTHER SURFACES SHALL BE LAWN



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## Transmittal

March 18, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-27-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

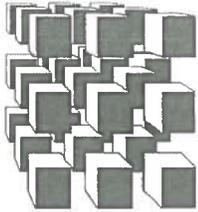
Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

Via e-reporting: Mr. Jim Stewart, P.E.  
John P. Stopen Engineering, LLP

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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-27-0315  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 03/17/2015      **WEATHER:** Rain / Snow      **TEMPERATURE:** 32 °F

---

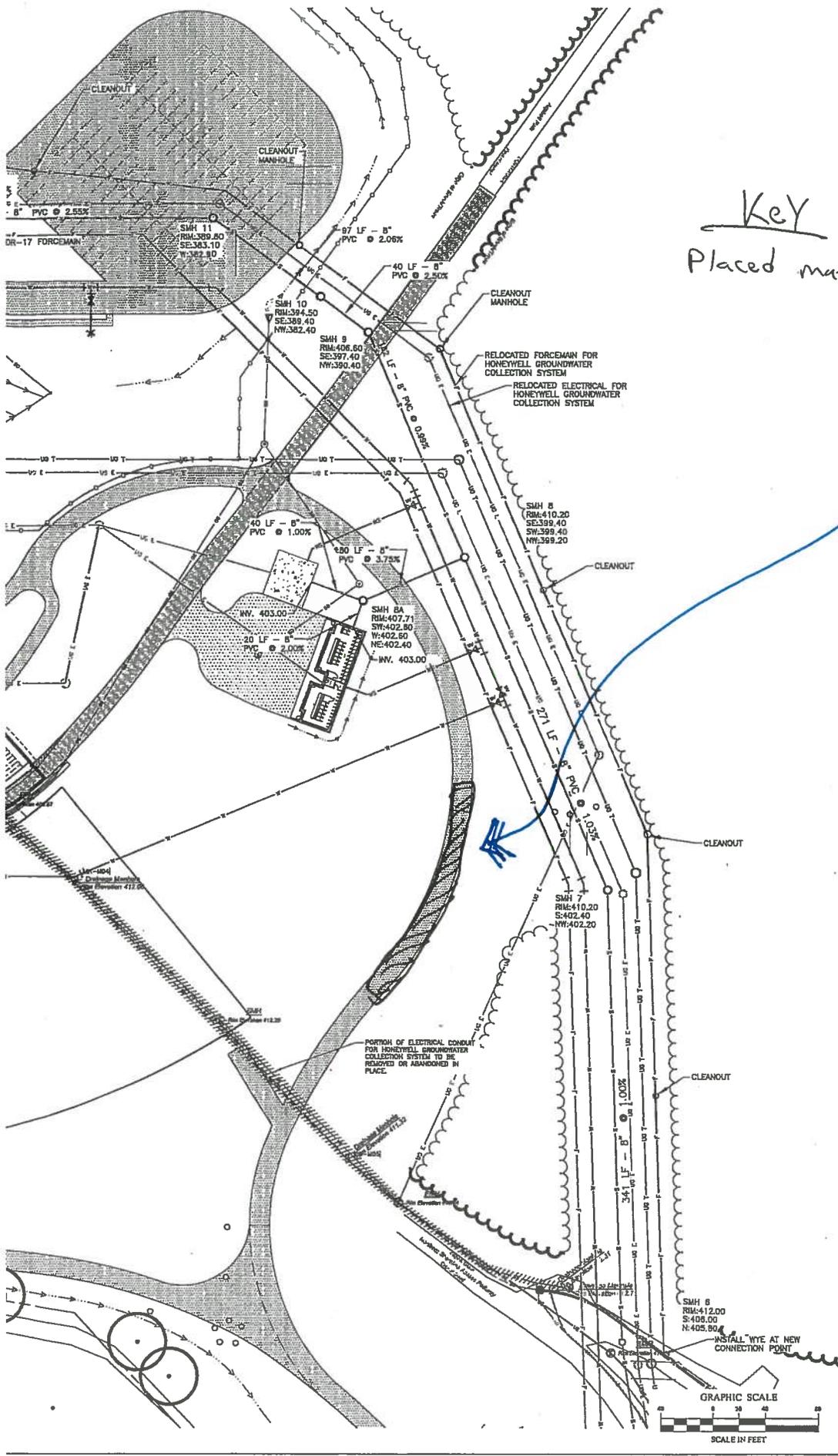
This CME Representative was on-site to observe the placement and compaction of subgrade material in a proposed road area.

In the approximate road area noted on page 2, two lifts of 4" minus Crushed Gravel (Imported from Riccelli Enterprises, Granby Pit) were placed in approximately 1' thick lifts. Each lift was rolled and compacted several times with a 30 ton roller on vibratory mode. On the last compaction pass, the material was stable and not yielding.

No.	Date	Description
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
Placed material



For  
Construction

Client  
**Gilbane  
Onondaga Lakeview  
Amphitheater**  
  
Onondaga Lake  
Syracuse, NY  
Project No. 14128.00

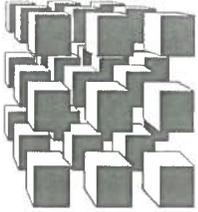
**Westlake  
Reed  
Leskosky**  
1201 Broadway  
Suite 1006  
New York, New York 10001  
T 212.564.8705  
F 212.658.0050  
www.WYRLdesign.com  
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Pittsford, NY 14534

UTILITY PLAN  
**HONEYWELL  
RELOCATION PLAN  
CU-010**

Lakeview Amphitheater Job # 12974 Pg 2 of 2 3/17/15  
CME Report No: 12974S-27-0315 Page 2 of 2



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## Transmittal

March 19, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-28-0315  
12974S-29-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

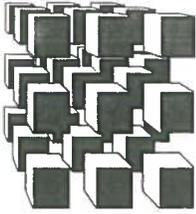
Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

Via e-reporting: Mr. Jim Stewart, P.E.  
(Geo Only) John P. Stopen Engineering, LLP

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater –      **PAGE:**1 of 1      **REPORT NO.:** 12974S-28-0315  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County

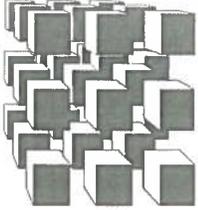
**REPRESENTATIVE:** A. Boronczyk

**DATE:** 03/16/2015      **WEATHER:** Rain

**TEMPERATURE:** 32 °F

---

This CME Representative was on-site at the above referenced project, as scheduled to perform In-Place Field Density (IPFD) testing. At approximately 12:15 pm, this representative was orally informed by Mr. Angelo Quintero with Northeast Contractors, Inc. that the scheduled IPFD services would not be needed today. At this time, this representative was released from the job site for the day.



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## Transmittal

March 19, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-28-0315
1	12974S-29-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson, Project Manager  
Onondaga County

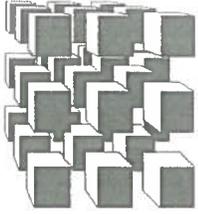
Via e-reporting: Mr. David Woodruff, Project Manager  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina, Sr. Project Manager  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

Via e-reporting: Mr. Jim Stewart, P.E.  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater – Site Work, Syracuse, New York

**PAGE:** 1 of 1

**REPORT NO.:** 12974S-29-0315

**CLIENT:** Onondaga County

**REPRESENTATIVE:** A. Boronczyk

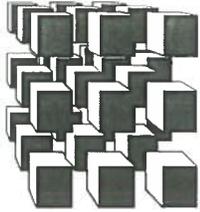
**DATE:** 03/18/2015

**WEATHER:** Overcast / Snow

**TEMPERATURE:** 25 °F

---

This CME Representative was on-site at the above referenced project, as scheduled to observe placement and compaction of sub-grade material in the proposed road area. Due to delays in excavation and site maintenance, no fill was placed today.



**CME**  
Associates, Inc.

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East Syracuse, New York 13057  
(315) 701-0522  
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## Transmittal

March 23, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-30-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

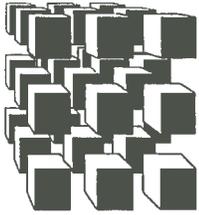
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater –      **PAGE:**1 of 2      **REPORT NO.:** 12974S-30-0315  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk  
**DATE:** 03/20/2015      **WEATHER:** Overcast / Snow      **TEMPERATURE:** 30 ° F

---

This CME Representative was on-site at the above referenced project, as scheduled to observe placement and compaction of sub-grade material, which will serve as a pad to support the cranes during pile driving. The design of the pad is by others, and I am only to observe the construction of the pad and document what I observe. CME's scope does not include determining whether what is constructed is satisfactory to support the crane during construction operations.

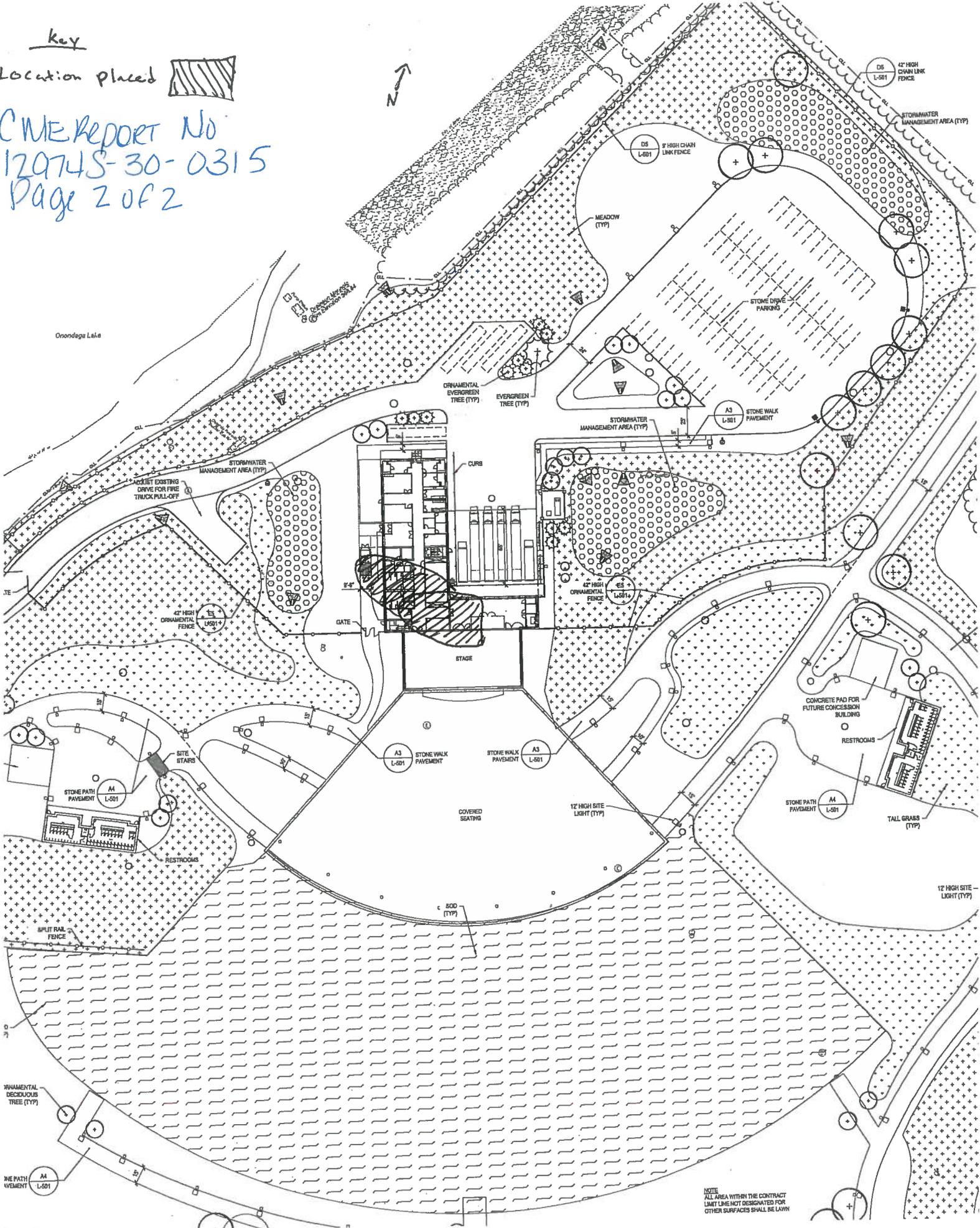
In the approximate area shown on page 2, one lift of 4" minus Crushed Gravel (imported from Riccelli Enterprises, Granby Pit) was placed over previously placed 4" minus gravel, in an approximate 18" thick lift. The material was then rolled and compacted several times with a 30-ton roller on vibratory mode, and the material was firm and non yielding during the final pass.

key

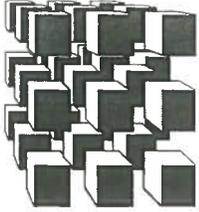
Location placed



CME Report No  
12974S-30-0315  
Page 2 of 2



NOTE: ALL AREA WITHIN THE CONTRACT LIMIT LINE NOT DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



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## Transmittal

March 24, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-31-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

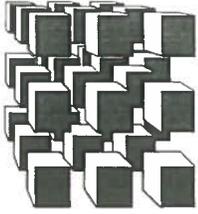
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

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## ***DAILY PROGRESS REPORT***

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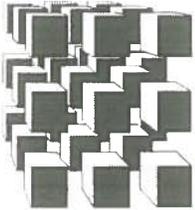
**PROJECT:** Lakeview Amphitheater –      **PAGE:**1 of 1      **REPORT NO.:** 12974S-31-0315  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk

**DATE:** 03/21/2015      **WEATHER:** Snow      **TEMPERATURE:** 30 ° F

---

This CME Representative was on-site at the above referenced project, as scheduled to perform In-Place Field Density (IPFD) testing. At approximately 11:00 AM, this representative was orally informed by Mr. Charlie Reinhardt with Gilbane Company that the scheduled IPFD services would not be needed today. At this time, this representative was released from the job site for the day.



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## Transmittal

March 25, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-32-0315
1	12974S-33-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
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Via e-reporting: Mr. Aaron Walter  
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## *DAILY PROGRESS REPORT*

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**PROJECT:** Lakeview Amphitheater –      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-32-0315  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk  
**DATE:** 03/23/15      **WEATHER:** Clear      **TEMPERATURE:** 19 °F

---

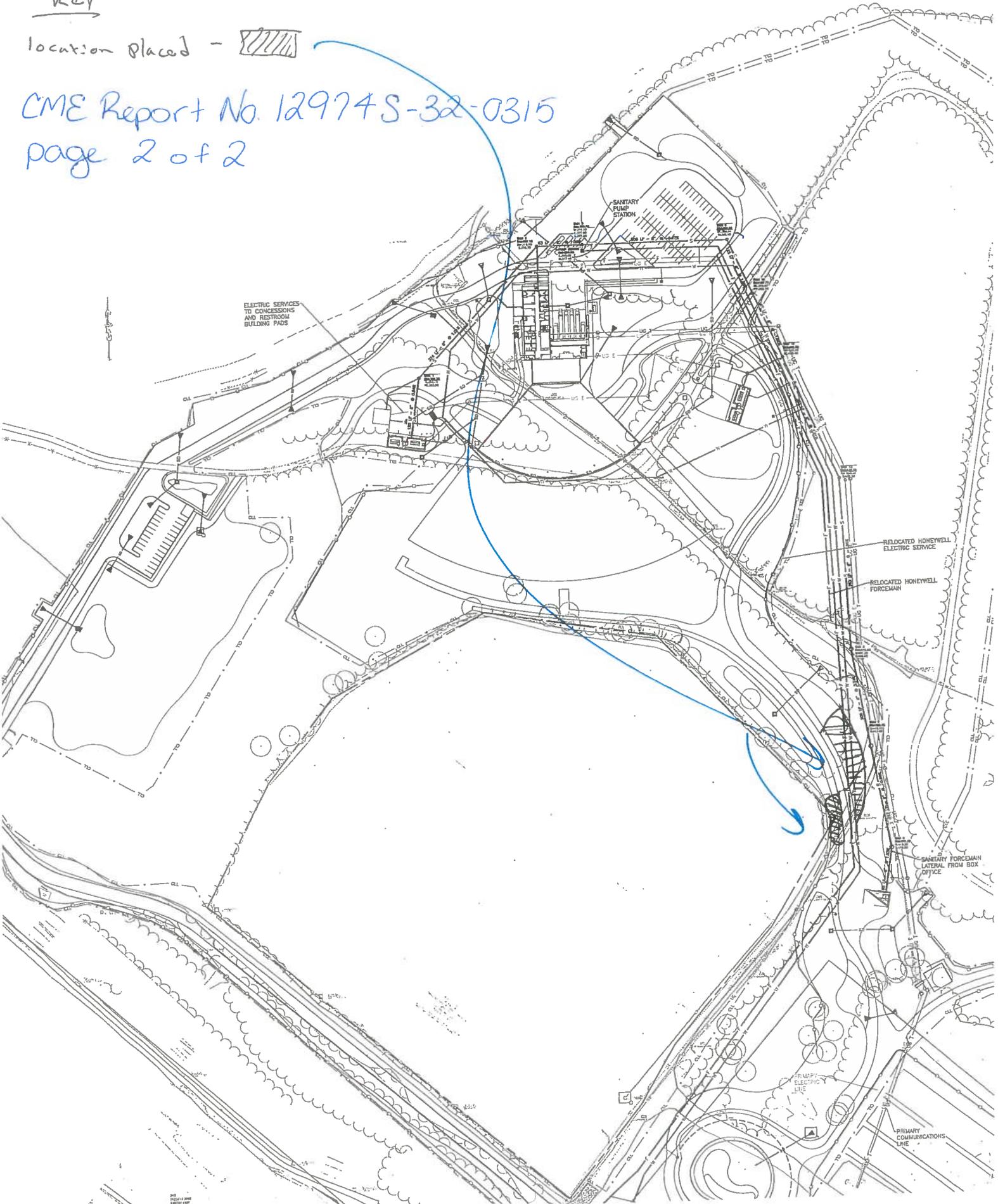
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area.

In the grass area shown on page 2, no geotextile fabric was placed prior to placing crushed shale fill on top of the exposed solvay waste. Only one, approximately 18" thick lift of material was placed. The fill was not compacted with the roller at the time of placement.

Key

location placed - 

CME Report No. 12974S-32-0315  
page 2 of 2





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## Transmittal

March 25, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

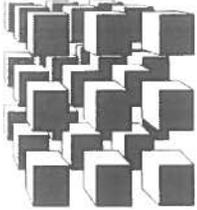
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater – **PAGE:**1 of 2 **REPORT NO.:** 12974S-33-0315  
Site Work, Syracuse, New  
York

**CLIENT:** Onondaga County **REPRESENTATIVE:** A. Boronczyk  
**DATE:** 03/24/15 **WEATHER:** Clear **TEMPERATURE:** 32 °F

---

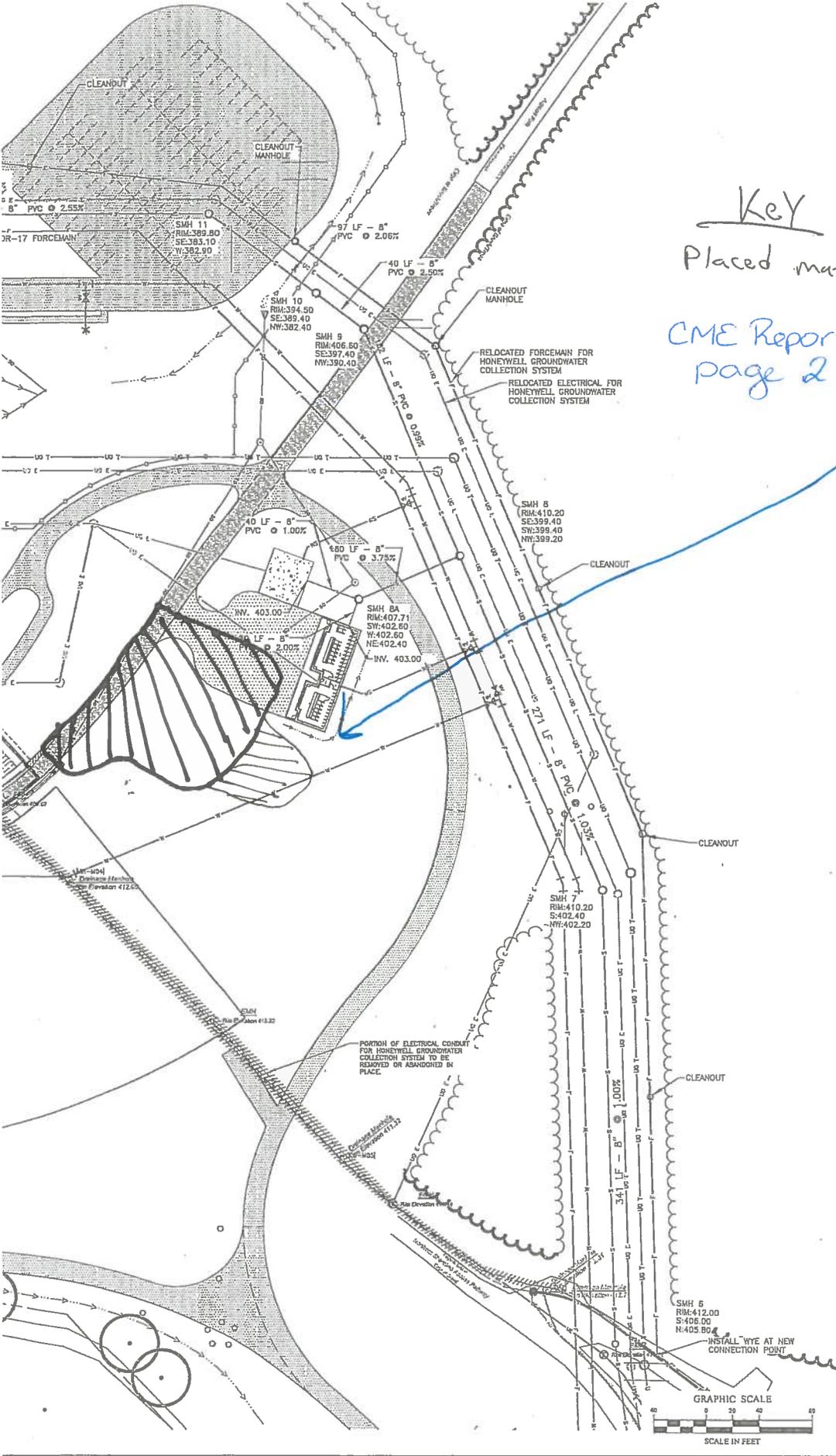
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area.

In the grass area shown on page 2, no geotextile fabric was placed prior to placing 4" minus crushed gravel on top of the exposed solvay waste. Two lifts, approximately 18" thick each were placed. The lifts were rolled and compacted with a 30-ton roller several times until the top of each lift was stable and non yielding.

NO.	DATE	DESCRIPTION
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
 Placed material   
 CME Report No 12974S-33-0315  
 page 2 of 2



For  
Construction

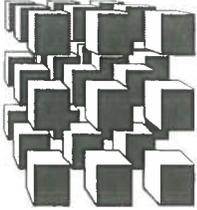
Client  
 Gilbane  
 Onondaga Lakeview  
 Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

Westlake  
 Reed  
 Leskosky  
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 New York, New York 10001  
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 F 212.659.0050  
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## Transmittal

March 26, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-34-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
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Mr. Matthew J. Simone  
Ms. Melissa Liquori  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater – **PAGE:**1 of 2 **REPORT NO.:** 12974S-34-0315  
Site Work, Syracuse, New  
York  
**CLIENT:** Onondaga County **REPRESENTATIVE:** A. Boronczyk,  
ICC  
**DATE:** 03/25/15 **WEATHER:** Clear / Rain **TEMPERATURE:** 40 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area and paved area.

In the grass area shown on page 2, no geotextile fabric was placed prior to placing 4" minus crushed gravel on top of the exposed solvay waste. Three lifts, approximately 12" thick each, were placed. The lifts were rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

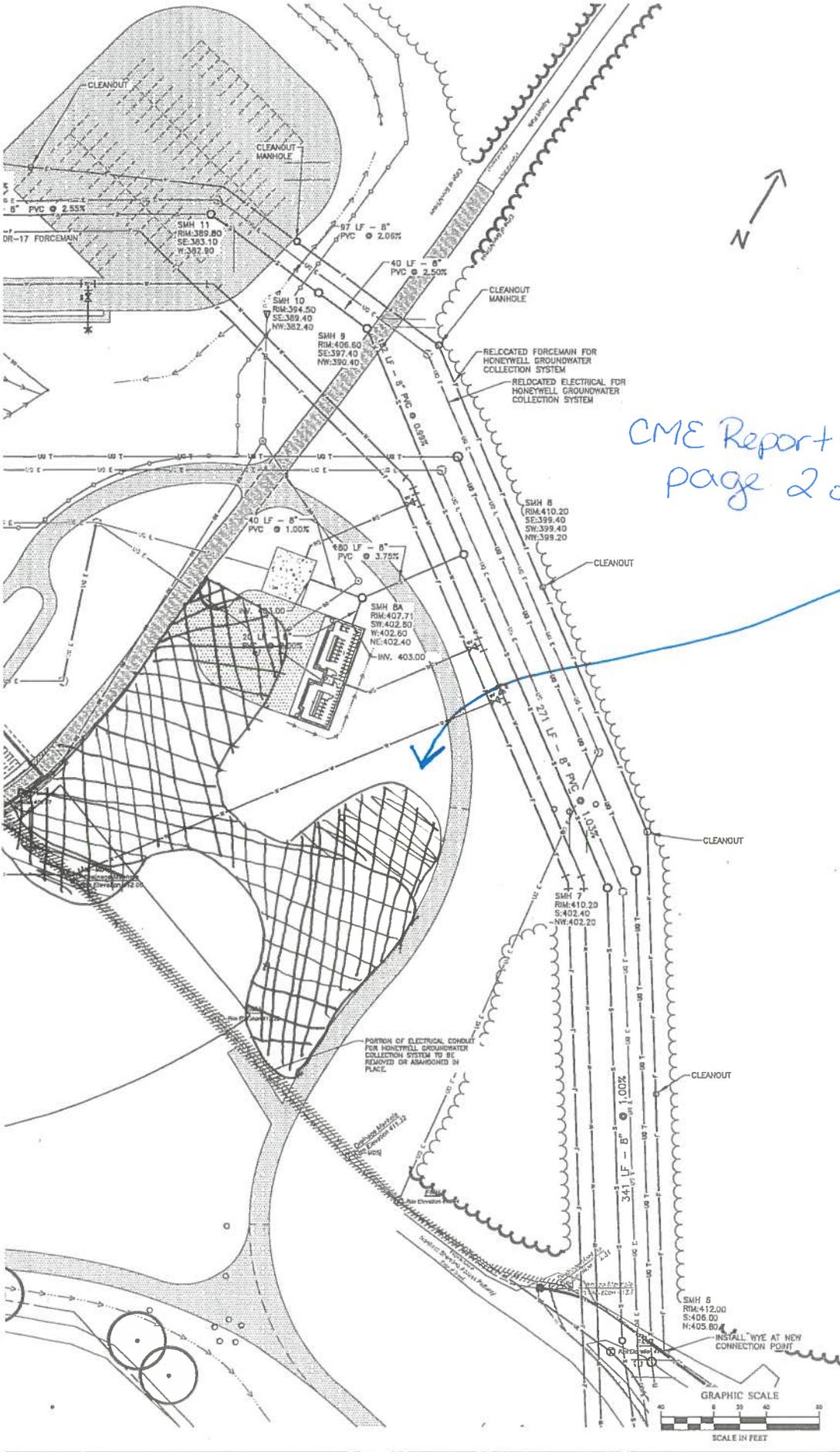
In the proposed paved area shown on page 2, geotextile fabric was placed on the exposed solvay waster prior to placement of 4" minus crushed gravel. Approximately two lifts of 4" minus crushed gravel were placed, and were about 12" thick. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

No.	Date	Description
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
 location placed -

CME Report No. 12974S-34-0315  
 page 2 of 2



For  
 Construction

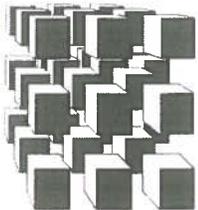
Client  
**Gilbane**  
 Onondaga Lakeview  
 Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

**Westlake**  
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## Transmittal

March 27, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-35-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

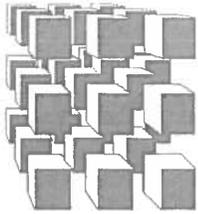
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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## *DAILY PROGRESS REPORT*

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**PROJECT:** Lakeview Amphitheater – Site Work, Syracuse, New York  
**CLIENT:** Onondaga County  
**DATE:** 03/26/15

**PAGE:** 1 of 2

**REPORT NO.:** 12974S-35-0315

**REPRESENTATIVE:** A. Boronczyk, ICC  
**TEMPERATURE:** 40 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area and paved area.

In the paved area shown on page 2, three lifts of approximately 12" thick were placed. Each lift was rolled and compacted with a 30-ton roller on static mode, several times. On the last pass of each lift, the fill was stable and non yielding.

In the proposed grass area shown on page 2, three lifts, approximately 12" thick were placed, and were about 12" thick. Each lift was rolled and compacted with a 30-ton roller on static mode, several times. On the last pass of each lift, the fill was stable and non yielding.

Please note, static mode was used by the roller today, because it was raining out. Mr. Jim Stewart with John P Stopen Engineering Partnership approved this methodology.

Drawing \* L-109

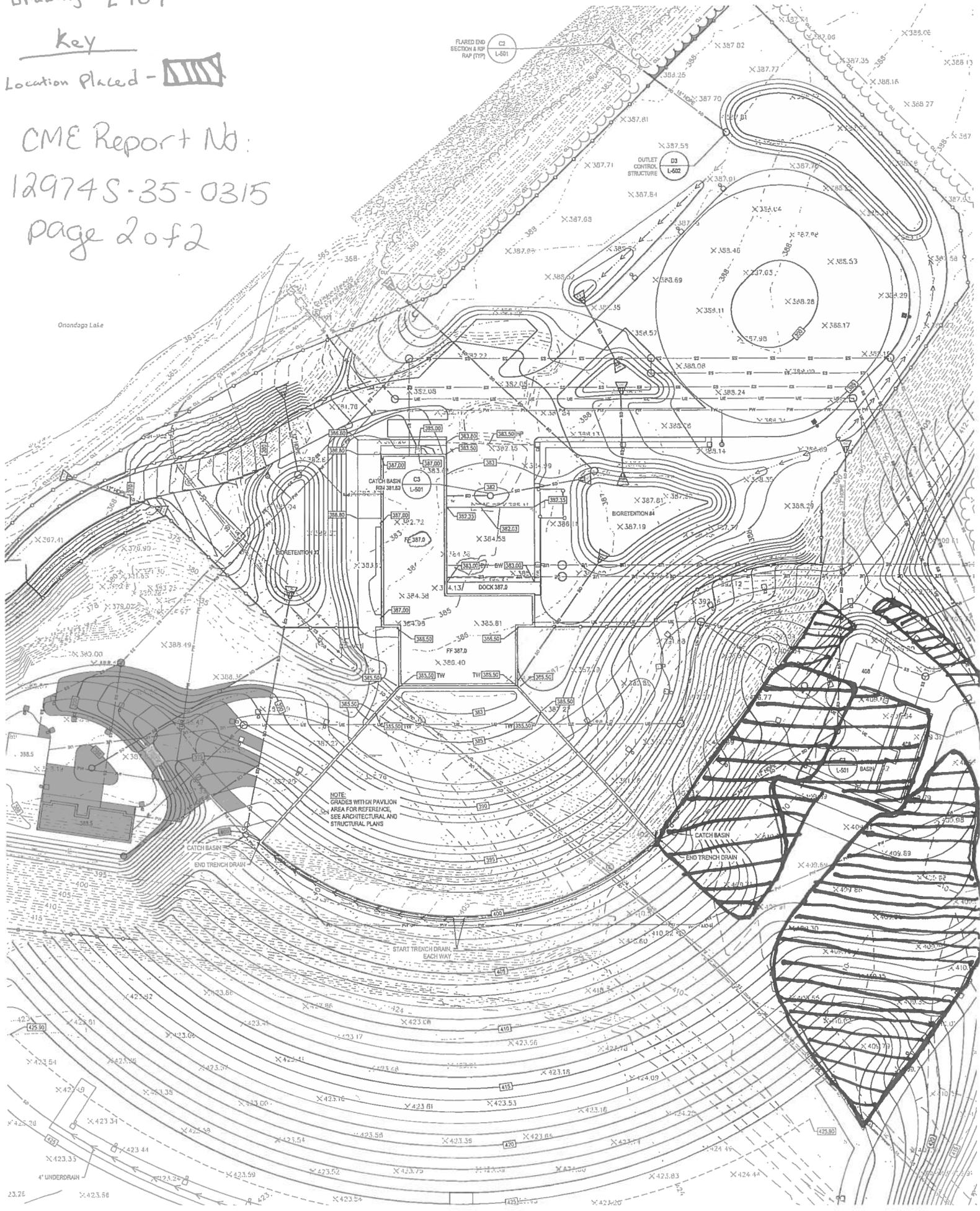
Key

Location Placed - 

CME Report No:

12974S-35-0315

page 2 of 2



NOTE: GRADES WITH PAVILION AREA FOR REFERENCE. SEE ARCHITECTURAL AND STRUCTURAL PLANS.



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## Transmittal

March 30, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
12974S-36-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.tam

Via e-reporting: Mr. Archie Wixson  
Onondaga County

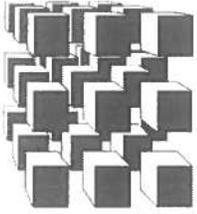
Via e-reporting: Mr. David Woodruff  
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Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
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Via e-reporting: Mr. Joseph Astheimer  
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## ***DAILY PROGRESS REPORT***

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<b>PROJECT:</b> Lakeview Amphitheater – Site Work, Syracuse, New York	<b>PAGE:</b> 1 of 2	<b>REPORT NO.:</b> 12974S-36-0315
<b>CLIENT:</b> Onondaga County		<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>DATE:</b> 03/27/15	<b>WEATHER:</b> Overcast	<b>TEMPERATURE:</b> 37 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area and paved area.

In the proposed paved areas shown on page 2, geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on the top of the exposed Solvay Waste. Two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on static mode, several times. On the last pass of each lift, the fill was stable and non yielding.

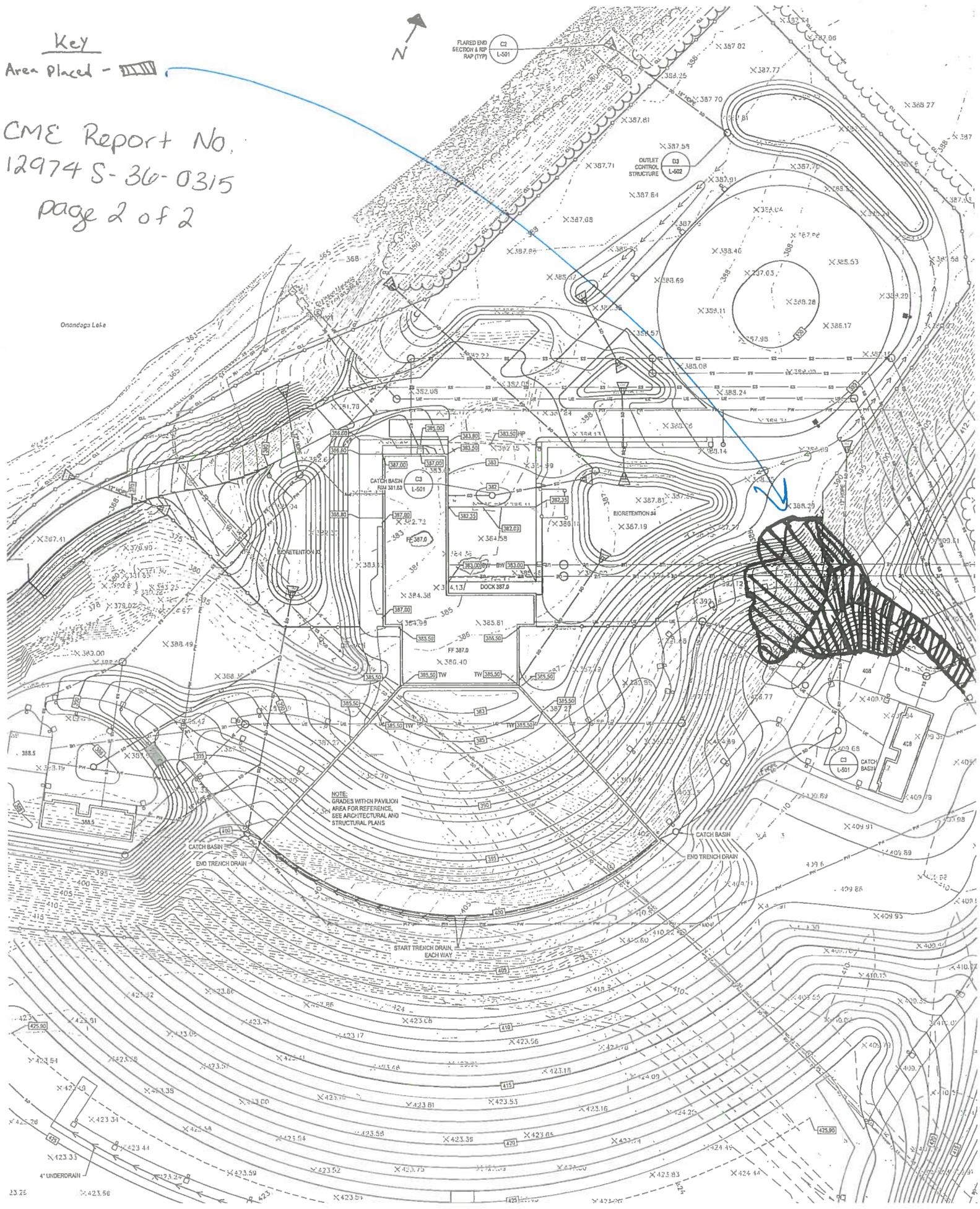
In the proposed grass areas shown on page 2, no geotextile fabric was placed prior to the placement of Crushed Shale on top of the exposed Solvay Waste. One lift, approximately 18" thick was placed. This lift was not compacted at the time of placement.

Please note, static mode was used by the roller today, because it was raining out. Mr. Jim Stewart with John P Stopen Engineering Partnership approved this methodology.

Key

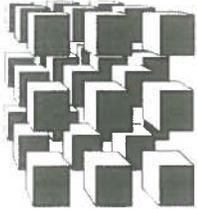
Area Placed - [hatched symbol]

CME Report No.  
12974 S-36-0315  
page 2 of 2



Ononoga Lake

NOTE: GRADES WITH PAVILION AREA FOR REFERENCE, SEE ARCHITECTURAL AND STRUCTURAL PLANS



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## Transmittal

March 31, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
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Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
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## ***DAILY PROGRESS REPORT***

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<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>PAGE:</b> 1 of 2	<b>REPORT NO.:</b> 12974S-37-0315
<b>CLIENT:</b> Onondaga County		<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>DATE:</b> 03/30/15	<b>WEATHER:</b> Rain	<b>TEMPERATURE:</b> 40 °F

---

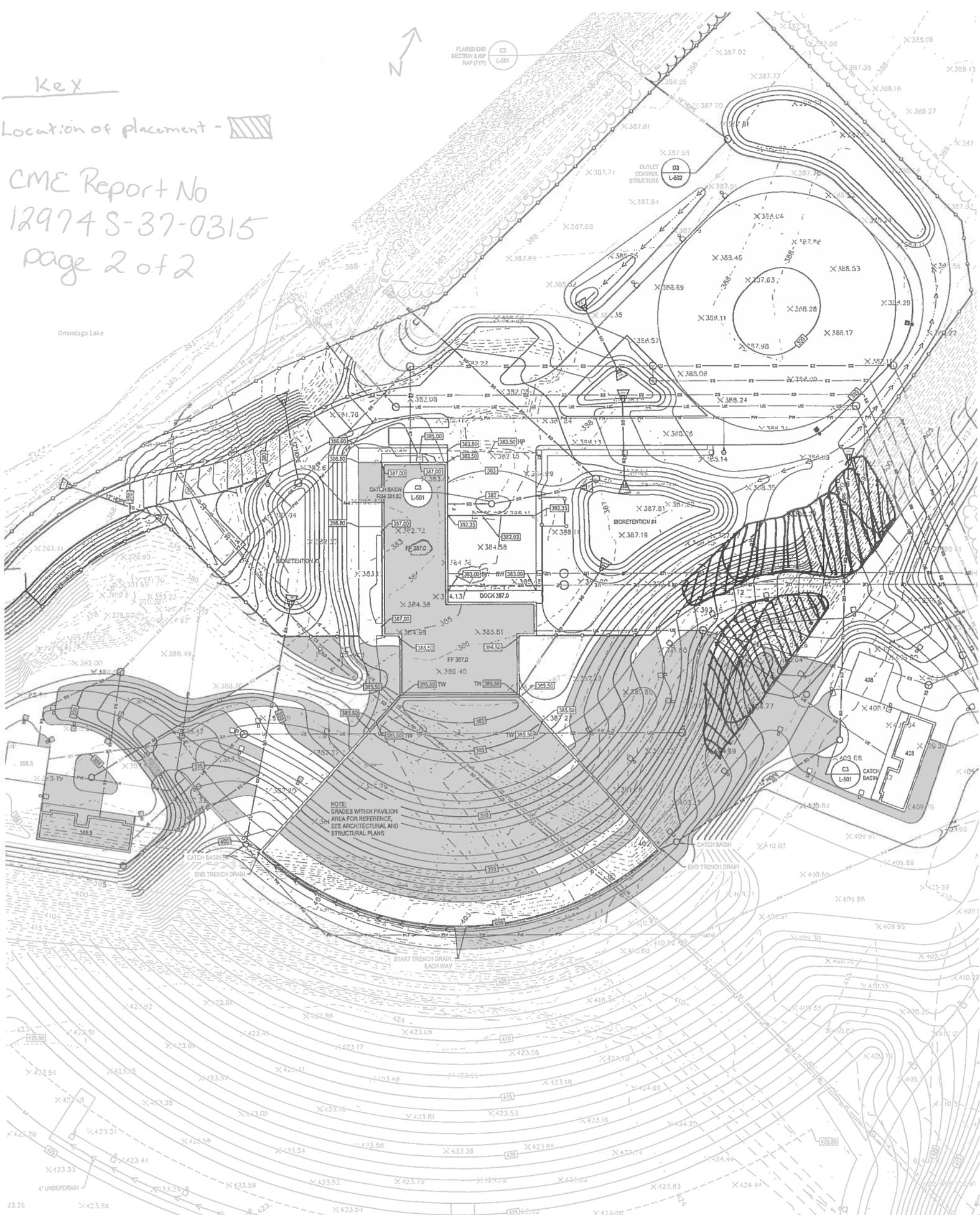
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area.

In the proposed grass areas shown on page 2, no geotextile fabric was placed prior to the placement of Crushed Shale on top of the exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was not compacted at the time of placement.

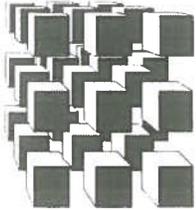
Key

Location of placement - [hatched box symbol]

CME Report No  
12974 S-37-0315  
page 2 of 2



NOTE: GRADES WITH PAVILION AREA FOR REFERENCE, SEE ARCHITECTURAL AND STRUCTURAL PLANS



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## Transmittal

April 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

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12974S-39-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

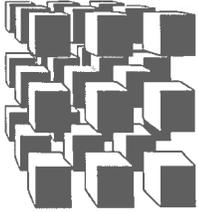
Via e-reporting: Mr. David Woodruff  
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Ms. Wendy Mahar  
C&S Companies

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-38-0315  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk,  
ICC  
**DATE:** 03/31/15      **WEATHER:** Overcast      **TEMPERATURE:** 38 ° F

---

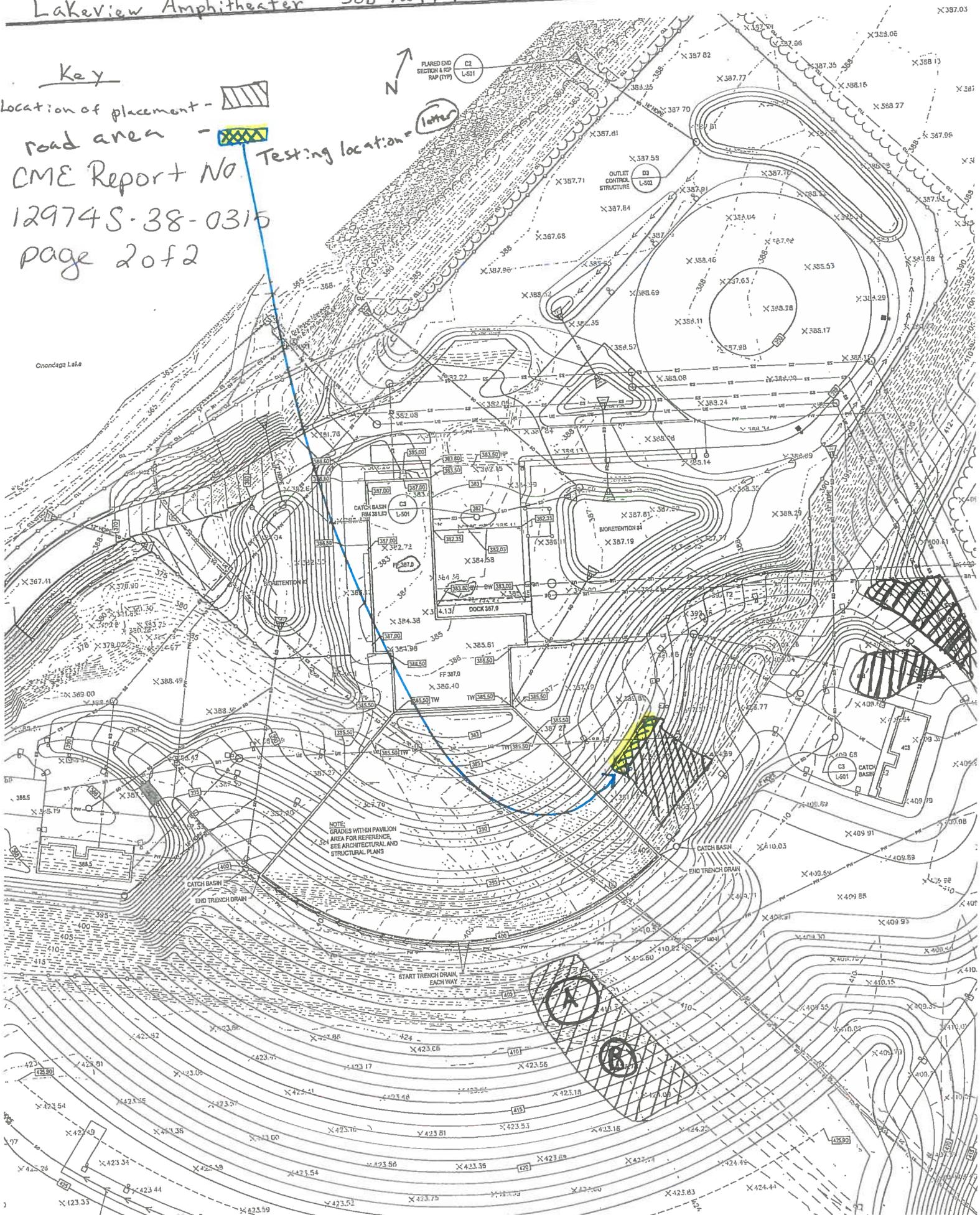
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass and road areas.

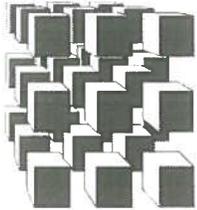
In the grass seating area (please refer to page 2 for location), nine lifts of Crushed Shale, approximately 12" thick each, were placed. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift with the roller, the fill was stable and non-yielding. In-place field density tests were conducted on this material, and test results were satisfactory. Please see CME Report No.: 12974S-39-0315, for details.

In the grass area (please refer to page 2 for location), one lift of Crushed Shale was placed in an approximately 18" thick lift. This lift was not compacted at the time of placement.

In the proposed road area (please refer to page 2 for location), no geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last compaction lift, the material was stable and non-yielding.

Key  
Location of placement - [hatched box]  
road area - [hatched box]  
CME Report No. 12974S-38-0315  
page 2 of 2





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## Transmittal

April 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-38-0315  
12974S-39-0315

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

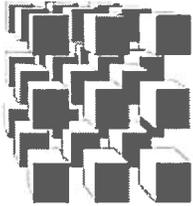
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**DATE:** 03/31/15

**CLIENT:** Onondaga County

**REPORT NO.:** 12974S-39-0315

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**REPRESENTATIVE:** A. Boronczyk, ICC

**MATERIAL TYPE & SOURCE:** Crushed Shale, Imported from Riccelli Enterprises, Inc.

**WEATHER:** Overcast

**PAGE:** 1 of 2

**TEMPERATURE:** 38 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in proposed grass areas at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

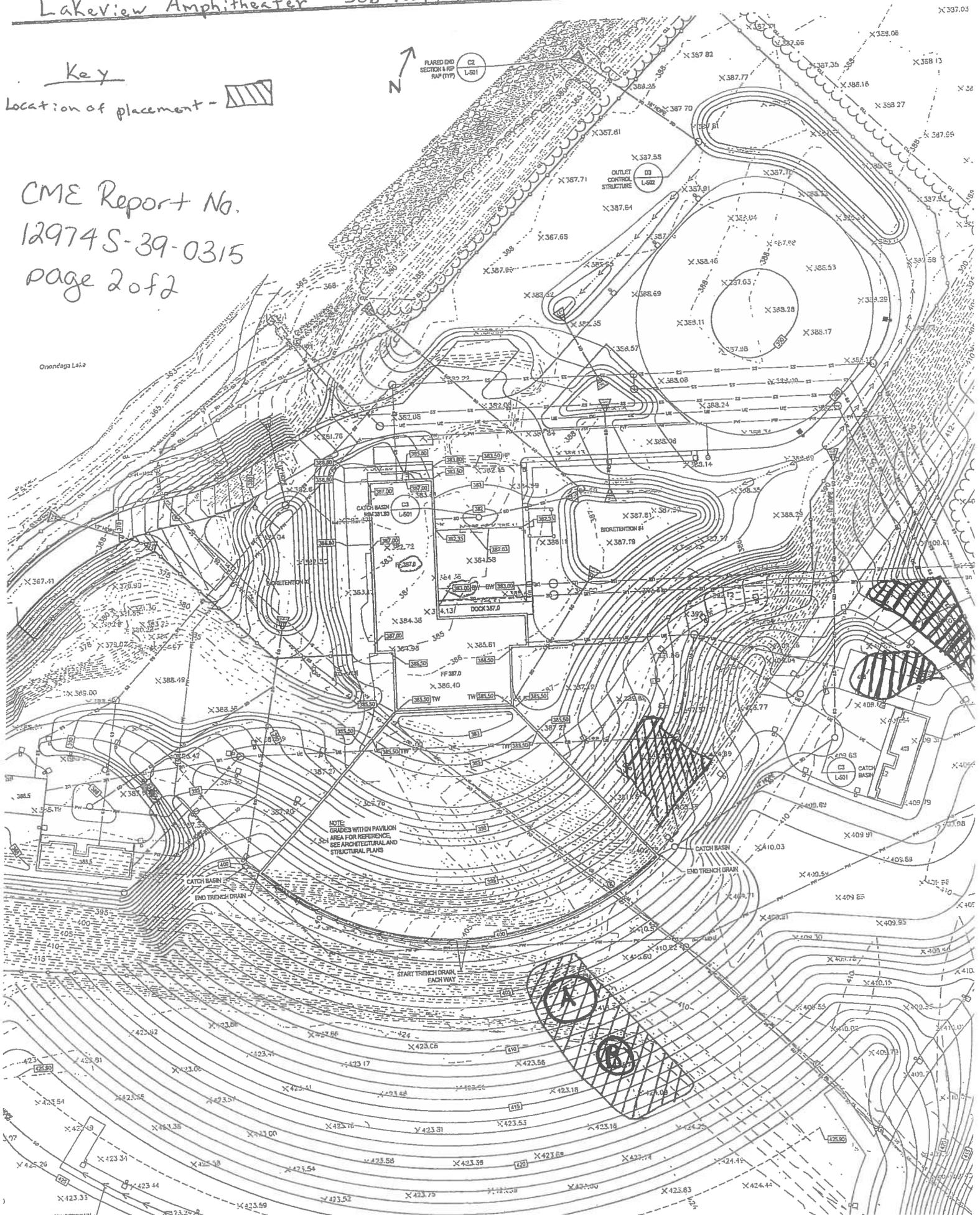
Notes: BS = Below Subgrade

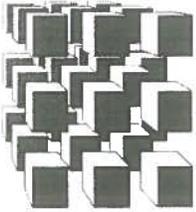
### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2, Location A	11' BS	18.4	11.5	123.2	126.6	97.3	85.0
2	See attached map, page 2, Location B	10' BS	19.3	11.5	122.6	126.6	96.8	85.0
3	See attached map, page 2, Location A	9' BS	18.7	11.5	123.0	126.6	97.1	85.0
4	See attached map, page 2, Location B	8' BS	18.6	11.5	124.8	126.6	98.5	85.0
5	See attached map, page 2, Location A	7' BS	18.4	11.5	125.0	126.6	98.7	85.0
6	See attached map, page 2, Location B	6' BS	19.0	11.5	124.2	126.6	98.0	85.0
7	See attached map, page 2, Location A	5' BS	19.3	11.5	123.1	126.6	97.2	85.0
8	See attached map, page 2, Location B	4' BS	19.1	11.5	123.4	126.6	97.4	85.0
9	See attached map, page 2, Location A	3' BS	19.3	11.5	122.9	126.6	97.0	85.0
10	See attached map, page 2, Location B	3' BS	19.3	11.5	123.3	126.6	97.3	85.0

Key  
Location of placement - [hatched box symbol]

CME Report No.  
12974S-39-0315  
page 2 of 2





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## Transmittal

April 2, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>
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<u>Report Number</u>
12974S-40-0415
12974S-41-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-40-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk,  
ICC

**DATE:** 04/01/15      **WEATHER:** Clear      **TEMPERATURE:** 40 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass and road areas.

In the grass seating area (please refer to page 2 for location), five lifts of Crushed Shale, approximately 12" thick each, were placed. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift with the roller, the fill was stable and non-yielding. In-place field density tests were conducted on this material and test results were satisfactory. Please see CME Report No.: 12974S-41-0315, for details.

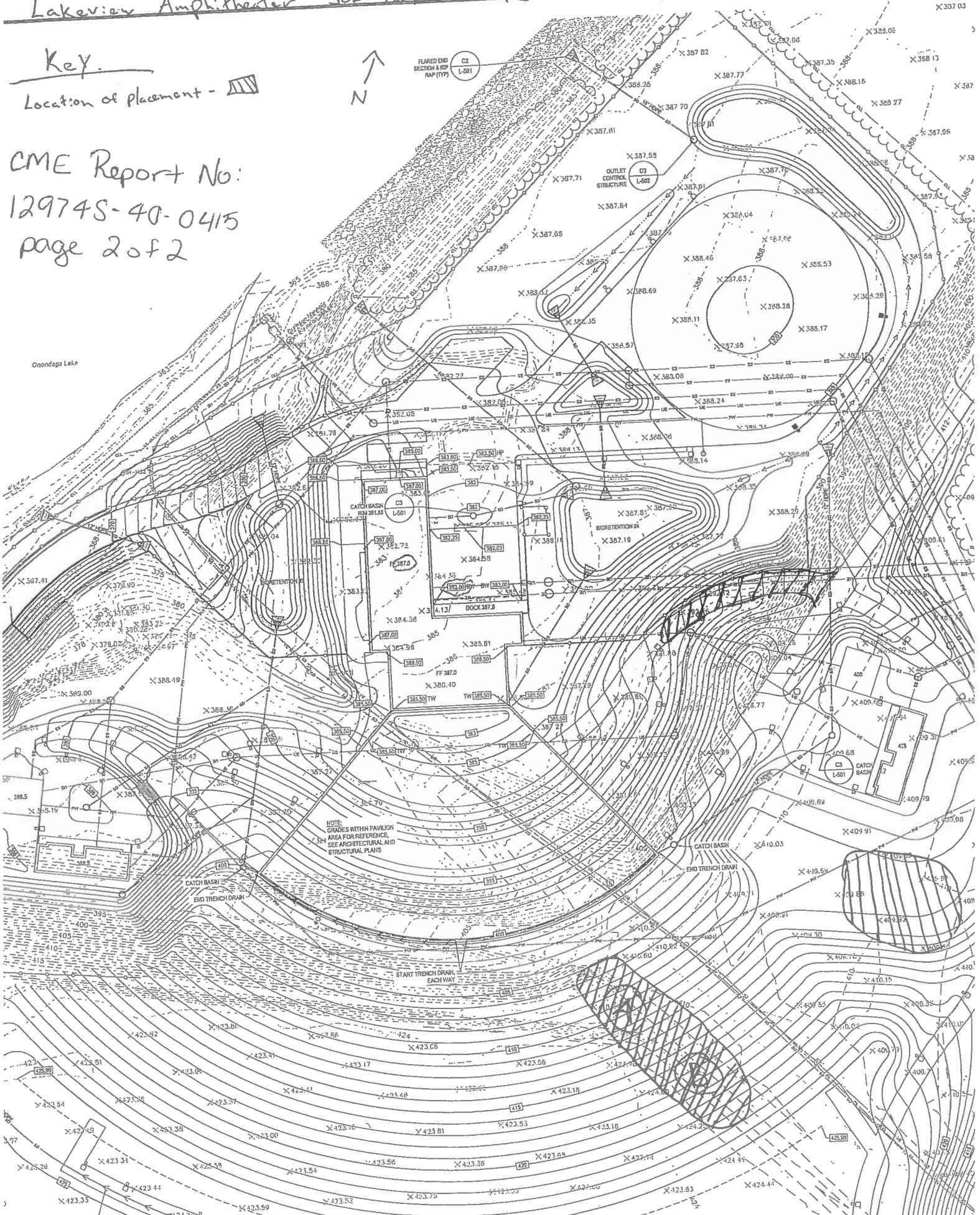
In the grass area (please refer to page 2 for location), one lift of Crushed Shale was placed in an approximately 18" thick lift. This lift was not compacted at the time of placement.

In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on the lift, the material was stable and non-yielding.

Key.

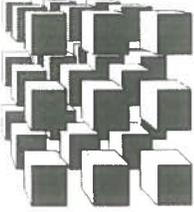
Location of placement - 

CME Report No:  
12974S-40-0415  
page 2 of 2



Onondaga Lake

NOTE GRADES WITH PAVILION AREA FOR REFERENCE, SEE ARCHITECTURAL AND STRUCTURAL PLANS



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## Transmittal

April 2, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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1	12974S-40-0415
1	12974S-41-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

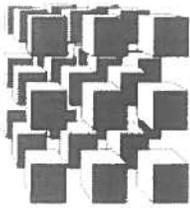
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**CLIENT:** Onondaga County

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**MATERIAL TYPE & SOURCE:** Crushed Shale, Imported from Riccelli Enterprises, Inc.

**WEATHER:** Clear

**PAGE:** 1 of 2

**DATE:** 04/1/15

**REPORT NO.:** 12974S-41-0415

**REPRESENTATIVE:** A. Boronczyk, ICC

**TEMPERATURE:** 40 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in proposed grass areas at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: BS = Below Subgrade  
Elevations provided by the contractor.

### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2, Location A	4' BS	12.8	11.5	123.6	126.6	97.6	85.0
2	See attached map, page 2, Location B	4' BS	12.9	11.5	123.1	126.6	97.2	85.0
3	See attached map, page 2, Location A	3' BS	13.1	11.5	124.0	126.6	97.9	85.0
4	See attached map, page 2, Location B	3' BS	13.0	11.5	124.7	126.6	98.5	85.0
5	See attached map, page 2, Location A	2' BS	13.4	11.5	122.3	126.6	96.6	85.0
6	See attached map, page 2, Location B	2' BS	13.1	11.5	122.8	126.6	96.9	85.0
7	See attached map, page 2, Location A	1' BS	12.9	11.5	123.5	126.6	97.5	85.0
8	See attached map, page 2, Location B	1' BS	13.2	11.5	123.0	126.6	97.1	85.0
9	See attached map, page 2, Location A	Subgrade	13.3	11.5	124.7	126.6	98.4	85.0
10	See attached map, page 2, Location B	Subgrade	13.6	11.5	125.0	126.6	98.7	85.0

Key.

Location of placement - [hatched symbol]



FLARED END SECTION & RFP MAP (177) [circle with 'L-501']

OUTLET CONTROL STRUCTURE [circle with 'L-502']

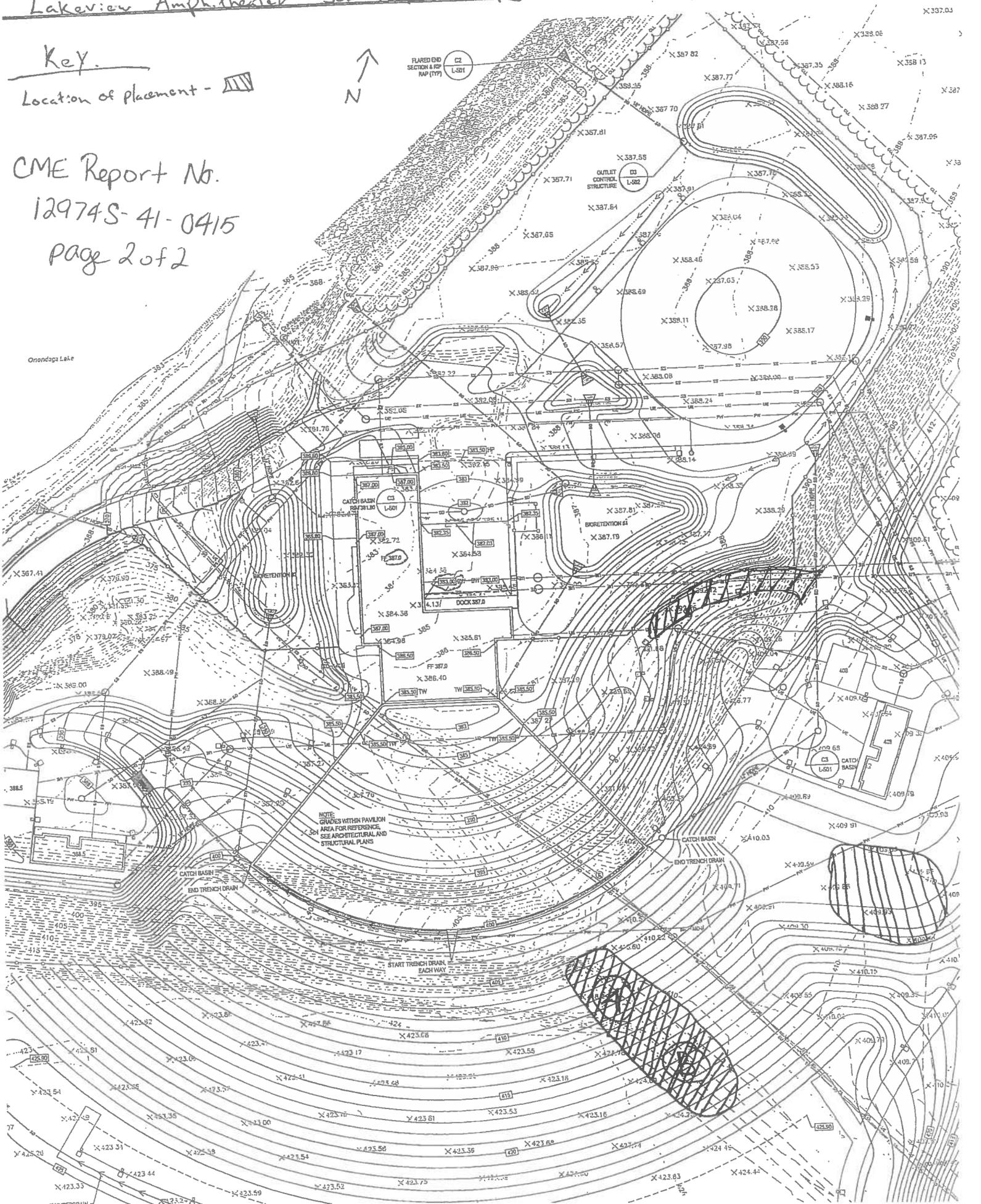
CATCH BASIN [circle with 'L-501']

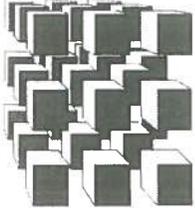
BIORETENTION #1 [circle with 'L-501']

CATCH BASIN [circle with 'L-501']

NOTE: GRADES WITHIN PAVILION AREA FOR REFERENCE SEE ARCHITECTURAL AND STRUCTURAL PLANS

CME Report No. 12974S-41-0415 page 2 of 2





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## Transmittal

April 6, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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1		12974S-42-0415
	Through	
1		12974S-45-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

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Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-42-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk,  
ICC

**DATE:** 04/02/15      **WEATHER:** Clear / Rain      **TEMPERATURE:** 58 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass and road areas.

In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. Two lifts, approximately 12" thick, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on each lift, the material was stable and non-yielding.

In the grass area (please refer to page 2 for location), no geotextile fabric was placed prior to the placement of Crushed Shale. One lift, approximately 18" thick, was placed. This lift was not compacted at the time of placement.

In the grass seating area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of Crushed Shale, on-top of exposed Solvay Waste. Seven lifts, approximately 12" thick, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on each lift, the material was stable and non-yielding. Please refer to CME Report No. 12974S-43-0415, for details.

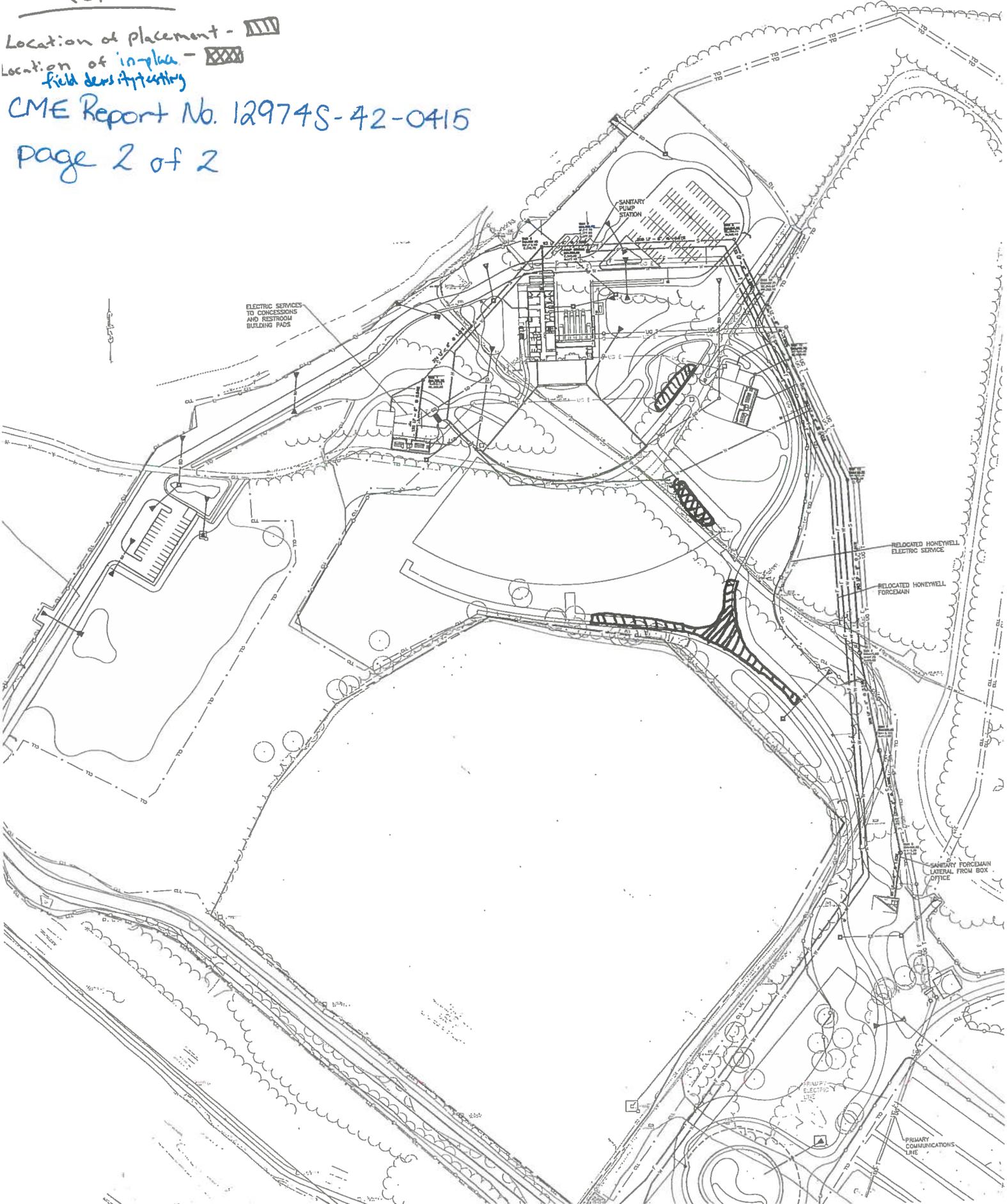
Key

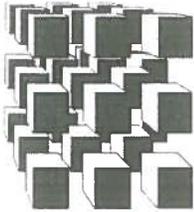
Location of placement - [diagonal hatching symbol]

Location of in-place field densification - [cross-hatching symbol]

CME Report No. 12974S-42-0415

Page 2 of 2





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## Transmittal

April 6, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

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1		12974S-45-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

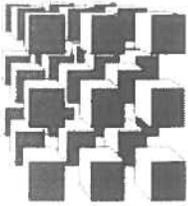
Via e-reporting: Mr. Bob Catalina  
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C&S Companies

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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

*A New York State Certified Women Owned Business Enterprise (WBE)*



## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**DATE:** 04/2/15

**CLIENT:** Onondaga County

**REPORT NO.:** 12974S-43-0415

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**REPRESENTATIVE:** A. Boronczyk, ICC

**MATERIAL TYPE & SOURCE:** Crushed Shale, Imported from Riccelli Enterprises, Inc.

**WEATHER:** Clear / Rain

**PAGE:** 1 of 2

**TEMPERATURE:** 58 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in the proposed grass seating area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: BS = Below Subgrade  
Elevations provided by the contractor

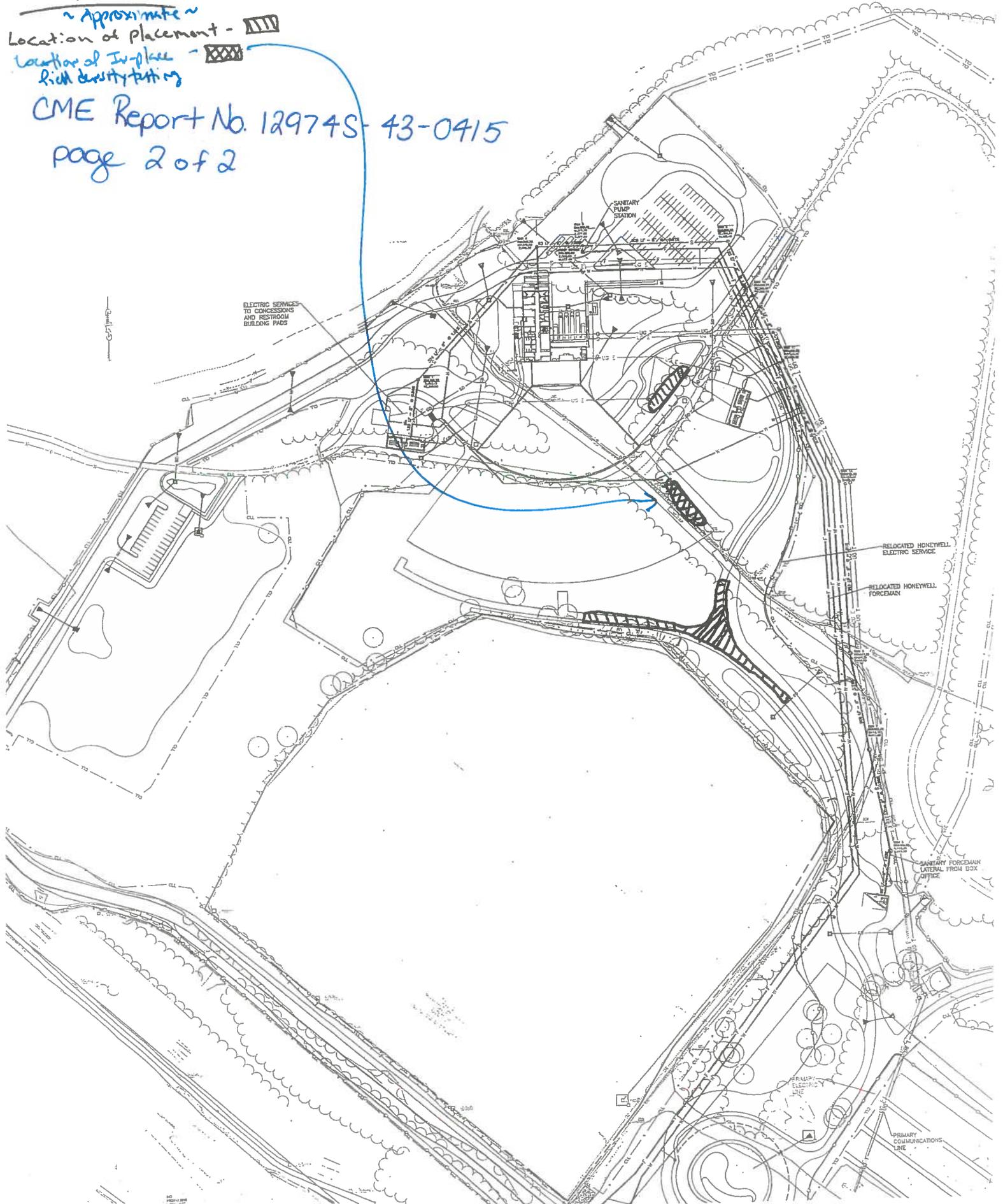
### **RESULTS:**

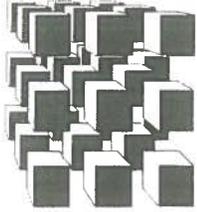
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2	15' BS	10.0	11.5	124.2	126.6	98.1	85.0
2	See attached map, page 2	14' BS	9.9	11.5	125.3	126.6	98.9	85.0
3	See attached map, page 2	13' BS	9.7	11.5	124.8	126.6	98.6	85.0
4	See attached map, page 2	12' BS	9.9	11.5	124.5	126.6	98.3	85.0
5	See attached map, page 2	11' BS	10.0	11.5	124.1	126.6	98.0	85.0
6	See attached map, page 2	10' BS	9.9	11.5	125.0	126.6	98.7	85.0
7	See attached map, page 2	9' BS	10.0	11.5	123.9	126.6	97.8	85.0

Key

~ Approximate ~  
Location of placement - [diagonal lines symbol]  
Location of In-place  
Rich density testing [cross-hatch symbol]

CME Report No. 12974S-43-0415  
page 2 of 2





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Associates, Inc.

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## Transmittal

April 6, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

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Report Number

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12974S-45-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-44-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk,  
ICC

**DATE:** 04/03/15      **WEATHER:** Overcast      **TEMPERATURE:** 55 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass and road areas.

In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on the lift, the material was stable and non-yielding.

In the grass seating area (please refer to page 2 for location), 6 lifts of Crushed Shale, approximately 12" thick, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on each lift, the material was stable and non-yielding. In-place field density testing was conducted on this material. Please refer to today's In-Place Field Density Test Report (CME Report No. 12974S-45-0415) for satisfactory test results.

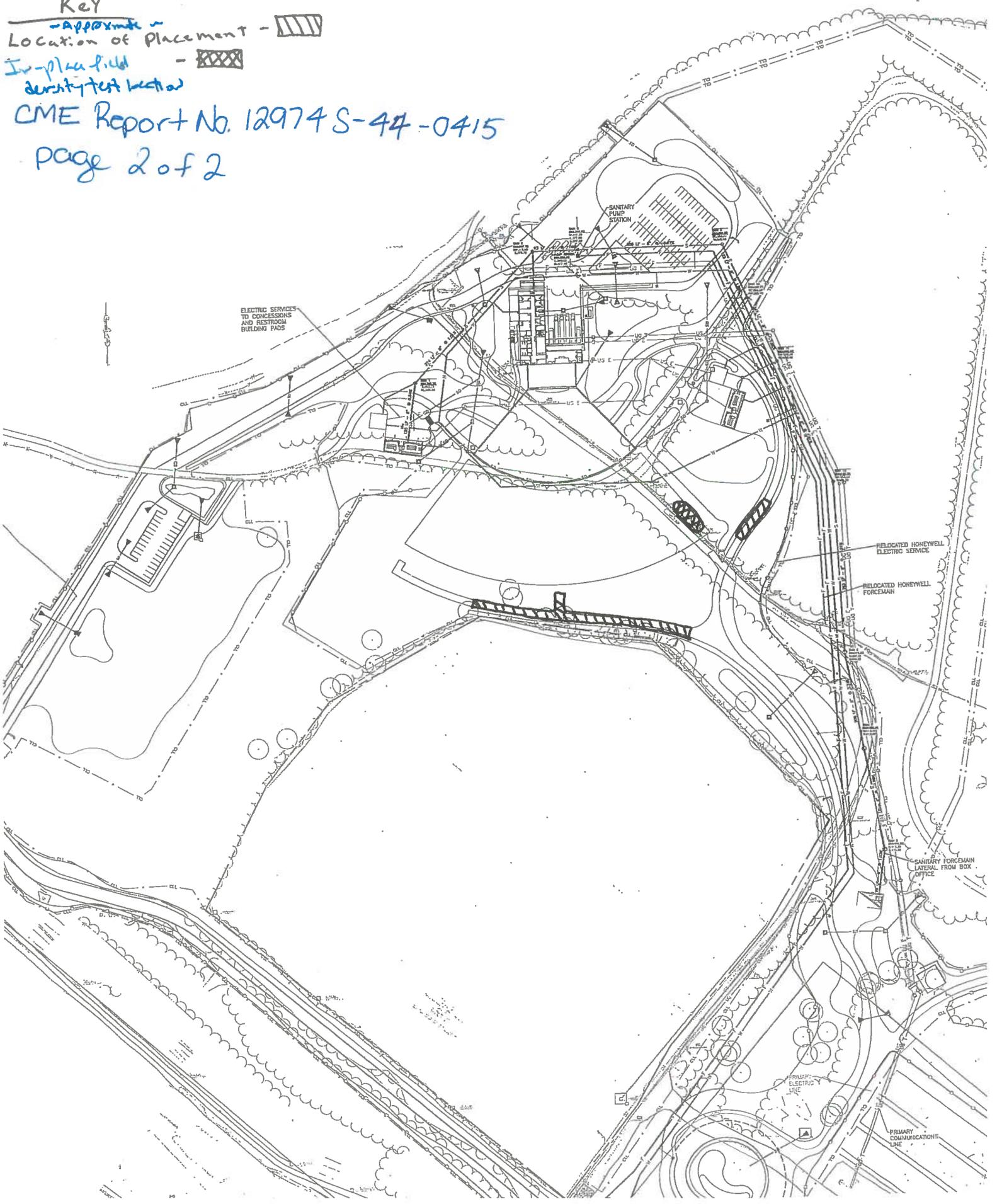
Key

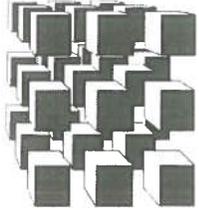
- Approximate -  Location of Placement

In-place field density test location 

CME Report No. 12974 S-44-0415

page 2 of 2





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## Transmittal

April 6, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-42-0415

12974S-45-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

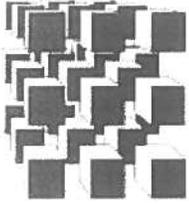
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**DATE:** 04/3/15

**CLIENT:** Onondaga County

**REPORT NO.:** 12974S-45-0415

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**REPRESENTATIVE:** A. Boronczyk, ICC

**MATERIAL TYPE & SOURCE:** Crushed Shale, Imported from Riccelli Enterprises, Inc.

**WEATHER:** Overcast

**PAGE:** 1 of 2

**TEMPERATURE:** 55 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in the proposed grass seating area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: BS = Below Subgrade  
Elevations provided by the contractor

### **RESULTS:**

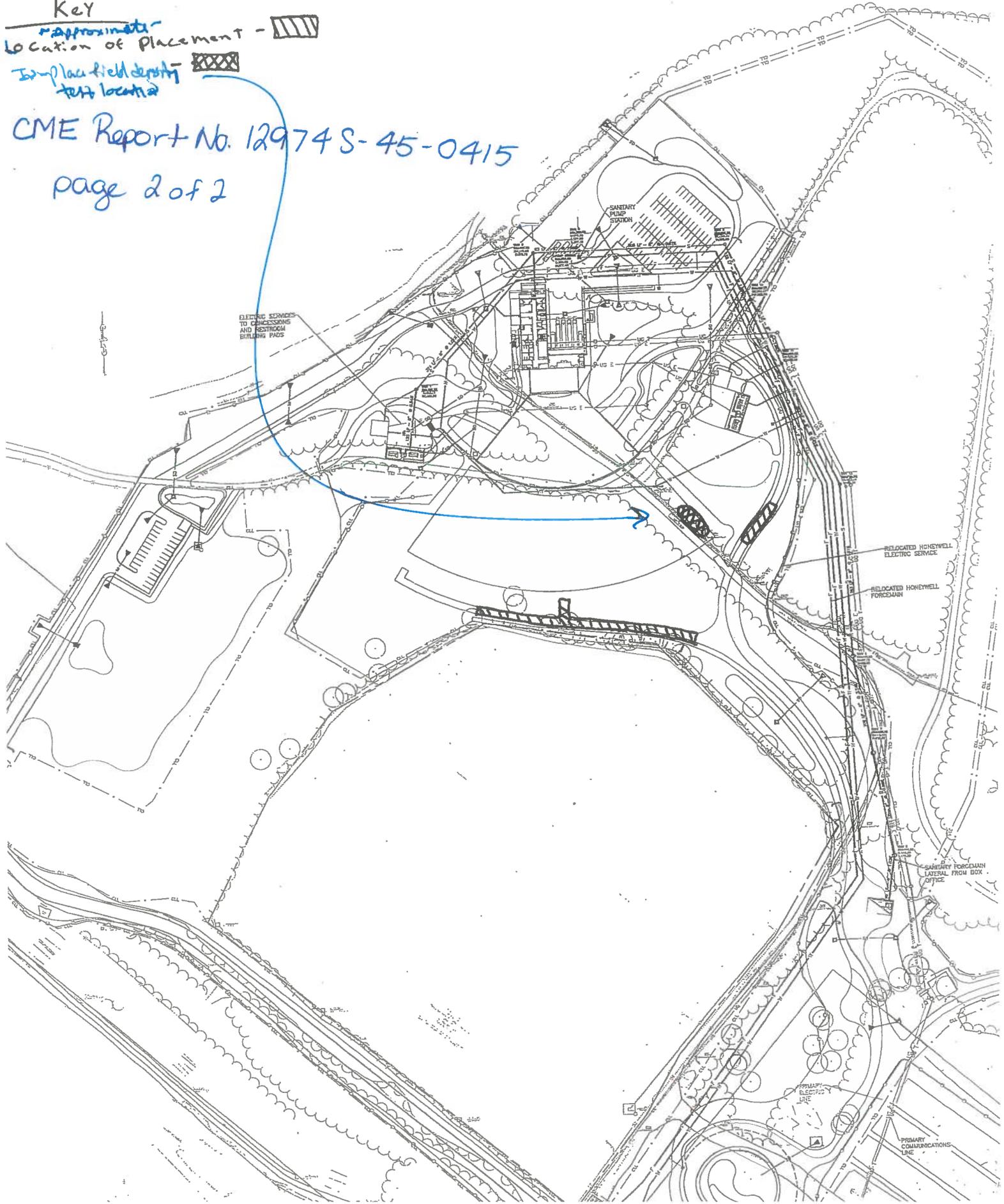
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2	8' BS	7.2	11.5	117.3	126.6	92.6	85.0
2	See attached map, page 2	7' BS	7.6	11.5	116.0	126.6	91.6	85.0
3	See attached map, page 2	6' BS	7.4	11.5	114.9	126.6	90.7	85.0
4	See attached map, page 2	5' BS	6.7	11.5	116.8	126.6	92.2	85.0
5	See attached map, page 2	4' BS	8.3	11.5	115.0	126.6	90.8	85.0
6	See attached map, page 2	3' BS	7.2	11.5	116.1	126.6	91.7	85.0

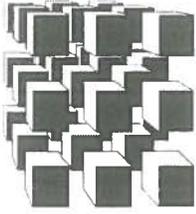
Key

- Approximate location of placement - [diagonal hatching symbol]
- In-place field density test location [cross-hatching symbol]

CME Report No. 12974 S-45-0415

page 2 of 2





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## Transmittal

April 7, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-46-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

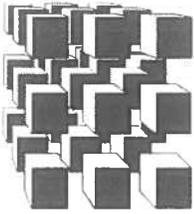
Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
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## ***DAILY PROGRESS REPORT***

---

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>PAGE:</b> 1 of 3	<b>REPORT NO.:</b> 12974S-46-0415
<b>CLIENT:</b> Onondaga County		<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>DATE:</b> 04/06/15	<b>WEATHER:</b> Overcast	<b>TEMPERATURE:</b> 50 ° F

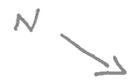
---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed road areas.

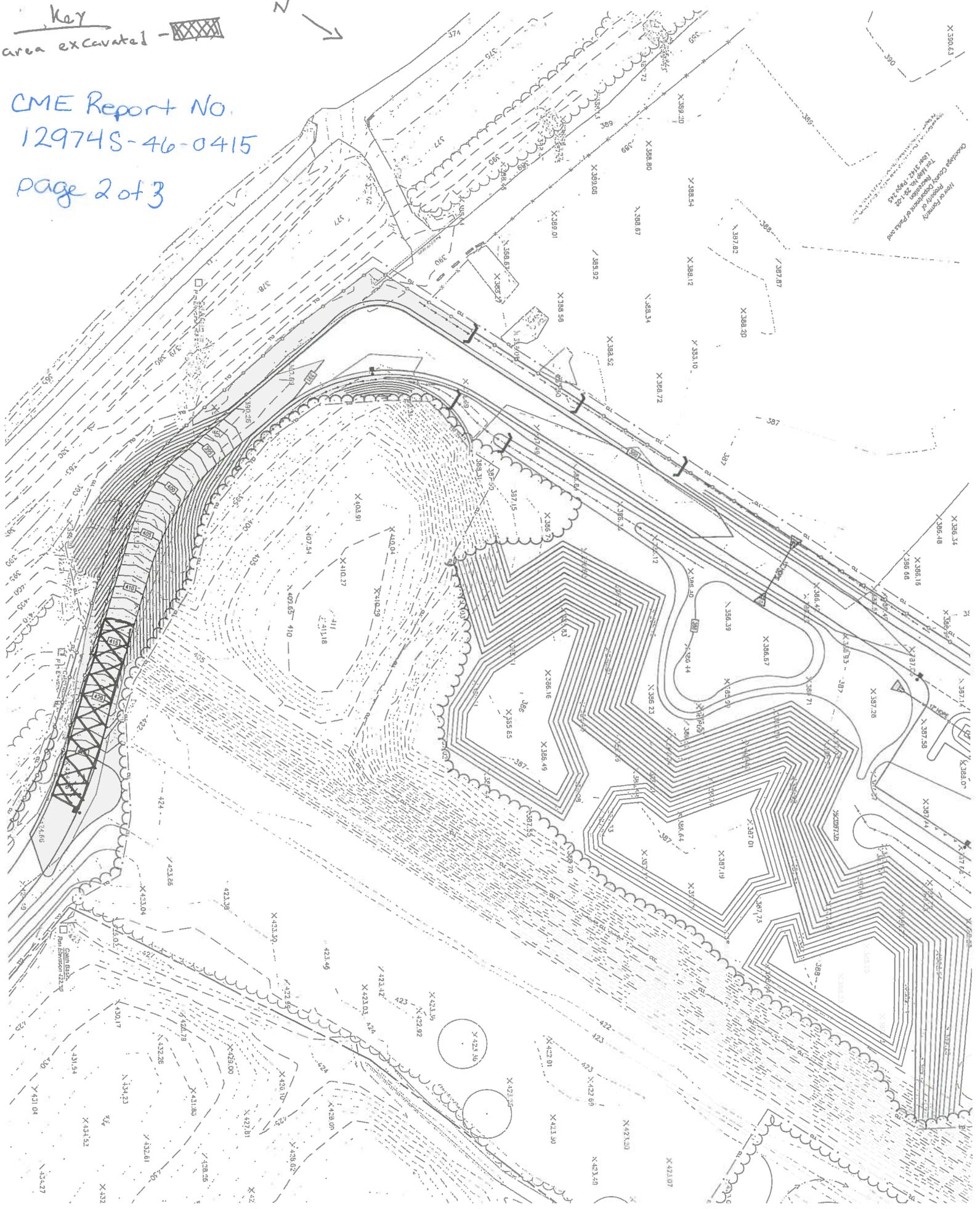
During excavation for the new road (please refer to page 2 for location), Solvay Waste was encountered at depths as shallow as 6" below existing grade. In this area, it was observed that the pre-existing road had geotextile fabric placed on-top of the Solvay Waste. No further work was conducted in this area today.

In the proposed road area (please refer to page 3 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on the lift, the material was stable and non-yielding.

Key  
area excavated - [hatched box]



CME Report No.  
12974S-46-0415  
page 2 of 3



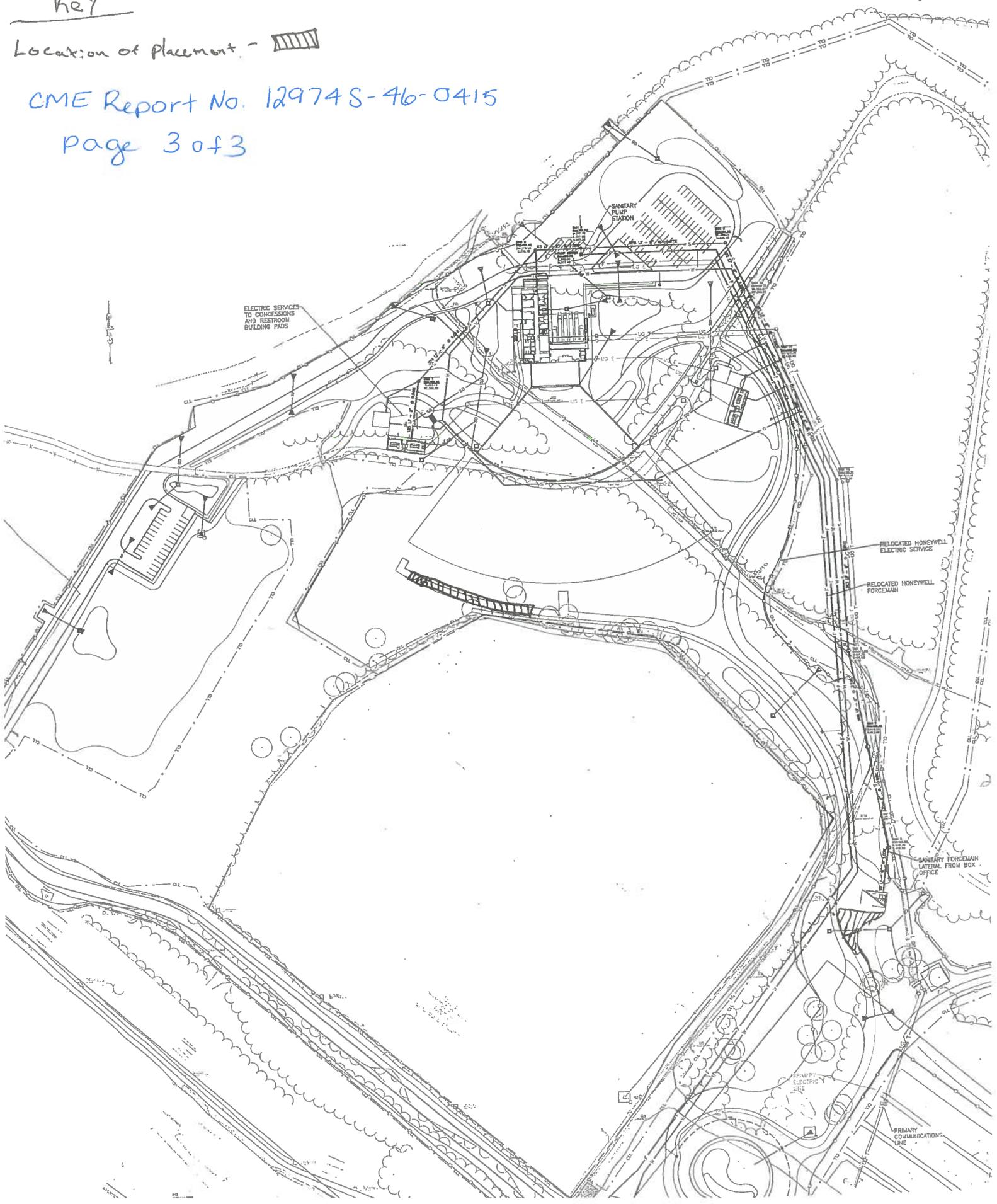
Ontario County Department of Planning  
100 N. Main St., 2nd Floor  
Canastota, NY 13617  
Tel: 315/427-2200 Fax: 315/427-2205

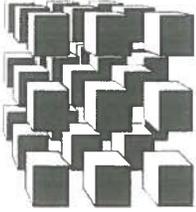
Key

Location of Placement - 

CME Report No. 12974S-46-0415

Page 3 of 3





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## Transmittal

April 8, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-47-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

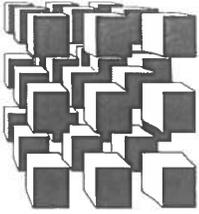
Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
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Via e-reporting: Mr. Aaron Walter  
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## ***DAILY PROGRESS REPORT***

---

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>PAGE:</b> 1 of 3	<b>REPORT NO.:</b> 12974S-47-0415
<b>CLIENT:</b> Onondaga County		<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>DATE:</b> 04/07/15	<b>WEATHER:</b> Overcast	<b>TEMPERATURE:</b> 48 ° F

---

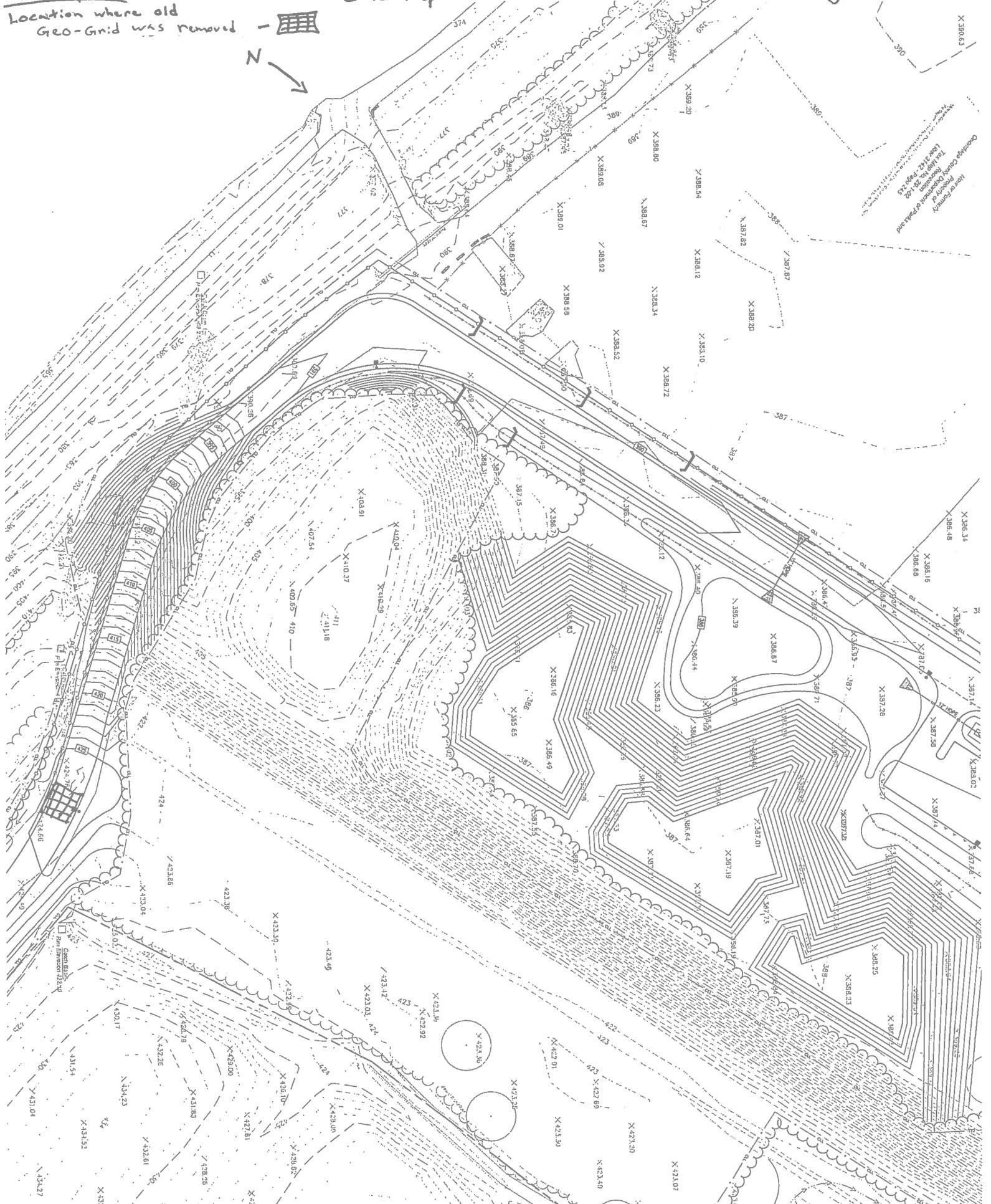
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed road areas.

During excavation for the new road section (please refer to page 2 for location), Geo-Grid was found to have been placed on top of Solvay Waste under the existing road. The geogrid was removed.

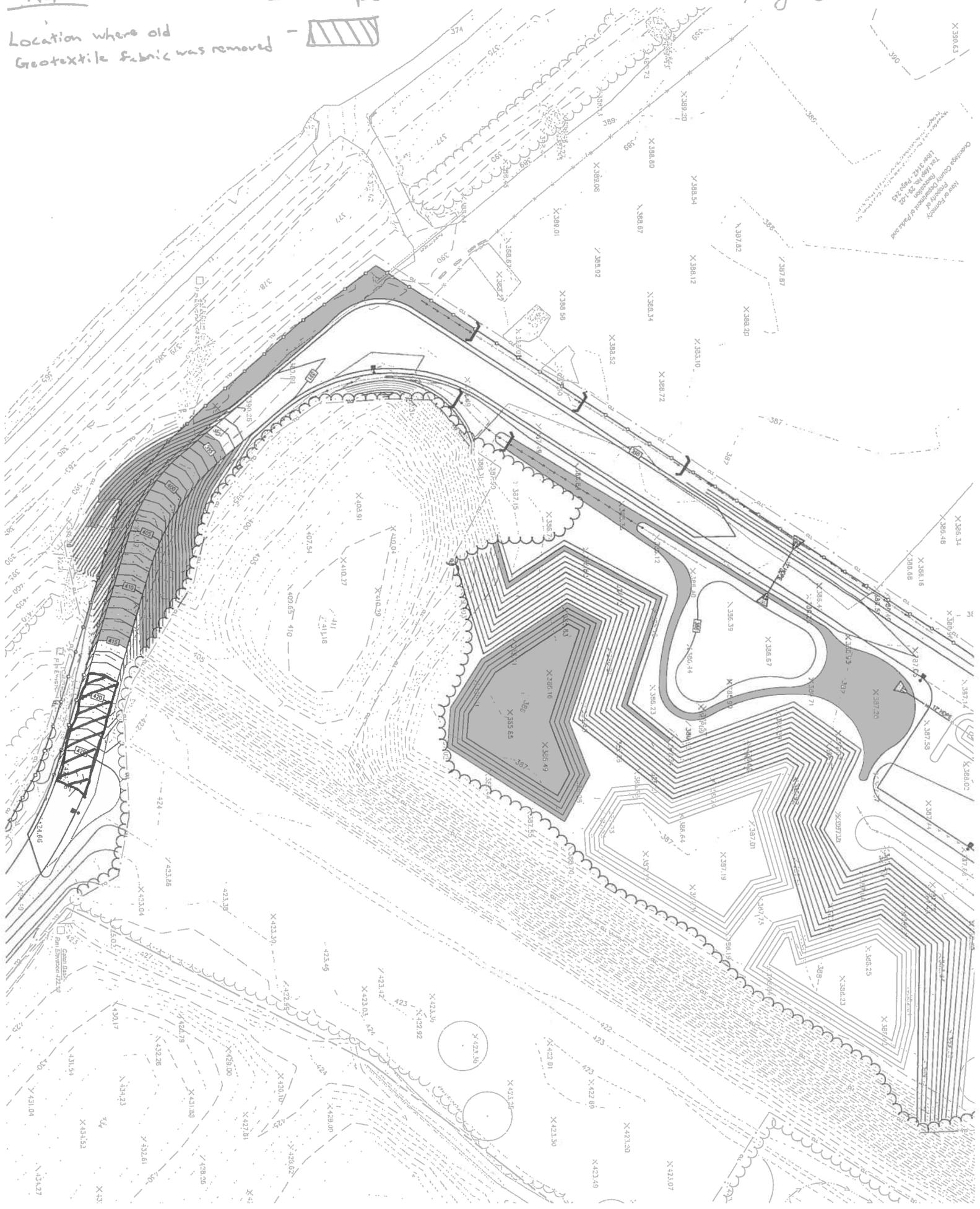
Also, geotextile fabric was found placed on top of Solvay Waste under the existing road (please refer to page 3 for location). The geotextile fabric was removed to expose Solvay Waste. At the time of excavation, the exposed Solvay Waste was light gray in color, and appeared firm, and stable when walked upon.

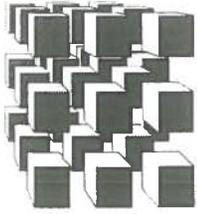
Key  
 Location where old  
 GEO-Grid was removed - [grid symbol]

N [arrow pointing up]



Key  
 Location where old  
 Geotextile fabric was removed - 





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## Transmittal

April 9, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

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Report Number

12974S-48-0415

12974S-49-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

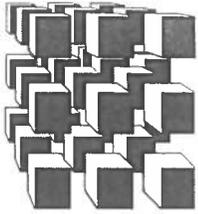
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>PAGE:</b> 1 of 2	<b>REPORT NO.:</b> 12974S-48-0415
<b>CLIENT:</b> Onondaga County		<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>DATE:</b> 04/08/15	<b>WEATHER:</b> Rain	<b>TEMPERATURE:</b> 40 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed road areas and in grass seating areas.

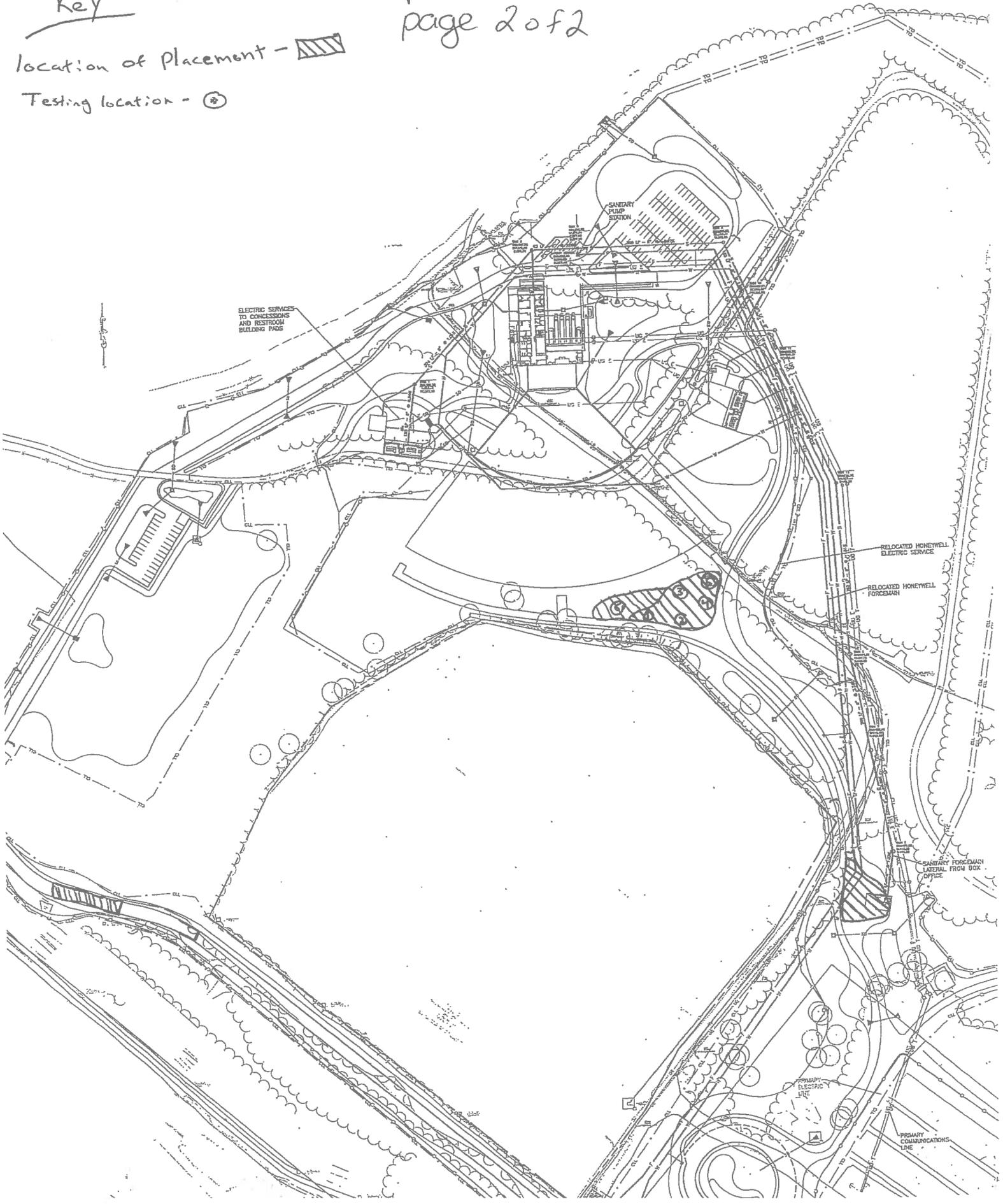
In the proposed grass seating area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of Crushed Shale on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report (CME Report No. 12974S-49-0415), for details.

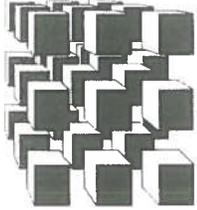
In the proposed road areas (please refer to page 2 for location), geotextile fabric was placed on the exposed Solvay Waste prior to the placement of 4" Minus Curshed Gravel. Two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on each lift, the material was stable and non-yielding.

Key

location of Placement - 

Testing location - 





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## Transmittal

April 9, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

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<u>Report Number</u>
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12974S-49-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

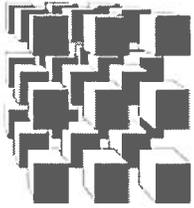
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
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C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



## ***IN-PLACE FIELD DENSITY TEST REPORT***

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 04/08/15
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-49-0415
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>MATERIAL TYPE &amp; SOURCE:</b> Crushed Shale, Imported from Riccelli Enterprises, Inc.	
<b>WEATHER:</b> Rain	<b>TEMPERATURE:</b> 40 °F
<b>PAGE:</b> 1 of 2	

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in the proposed grass seating area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: Elevations provided by the contractor

### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2	Subgrade	8.5	11.5	111.2	126.6	87.8	85.0
2	See attached map, page 2	Subgrade	9.4	11.5	110.5	126.6	87.2	85.0
3	See attached map, page 2	Subgrade	8.4	11.5	111.7	126.6	88.2	85.0
4	See attached map, page 2	Subgrade	8.8	11.5	112.0	126.6	88.4	85.0
5	See attached map, page 2	Subgrade	9.3	11.5	111.5	126.6	88.0	85.0
6	See attached map, page 2	Subgrade	8.2	11.5	112.3	126.6	88.7	85.0

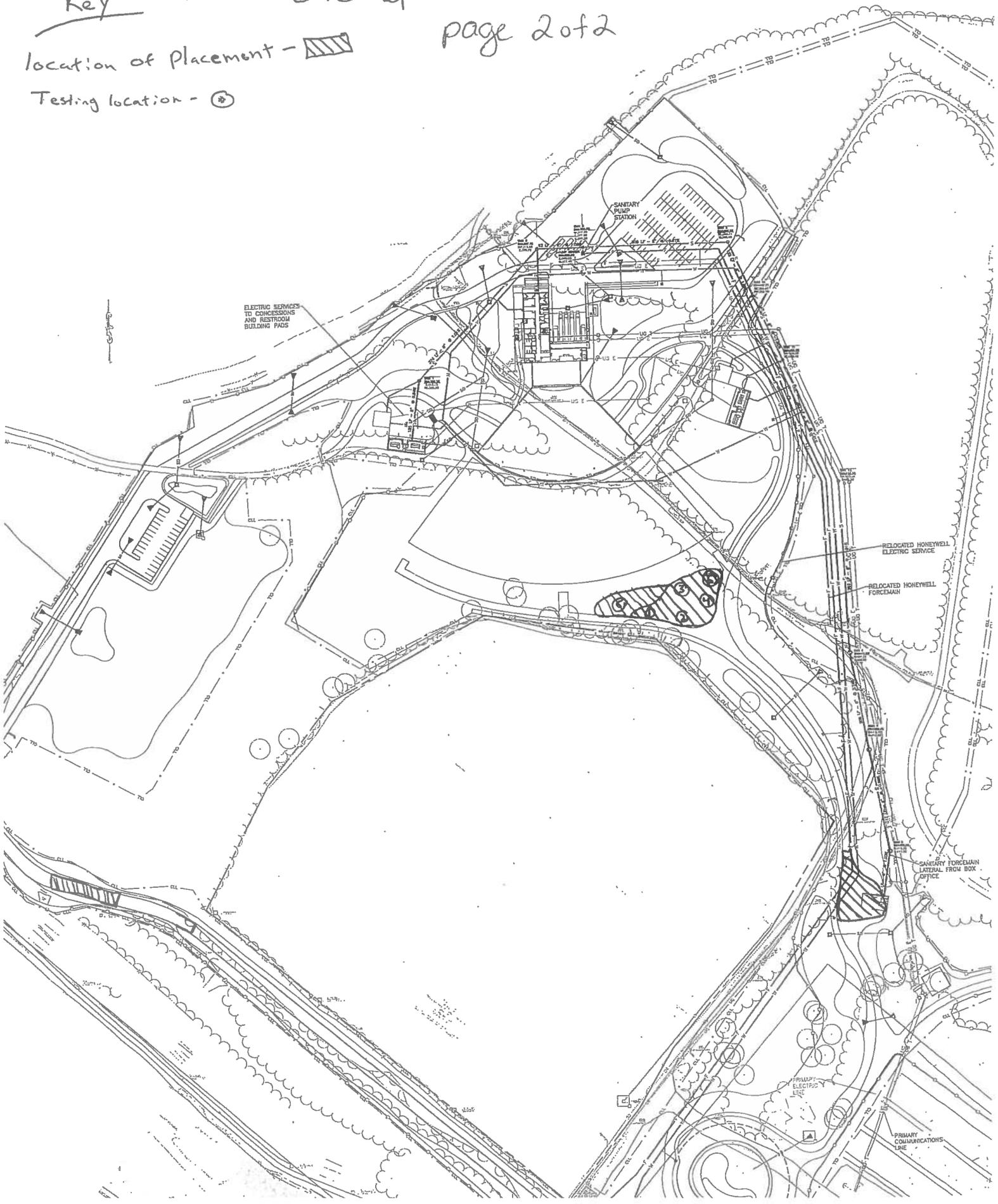
CME Report No. 12974S-49-0415

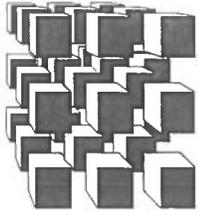
page 2 of 2

Key

location of placement - [hatched box symbol]

Testing location - [circle with dot symbol]





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## Transmittal

April 10, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

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1	12974S-50-0415
1	12974S-51-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

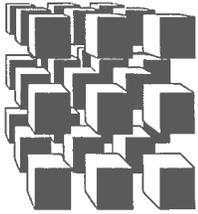
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
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Via e-reporting: Mr. Joseph Astheimer  
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 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 3      **REPORT NO.:** 12974S-50-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/09/15      **WEATHER:** Overcast      **TEMPERATURE:** 48 °F

---

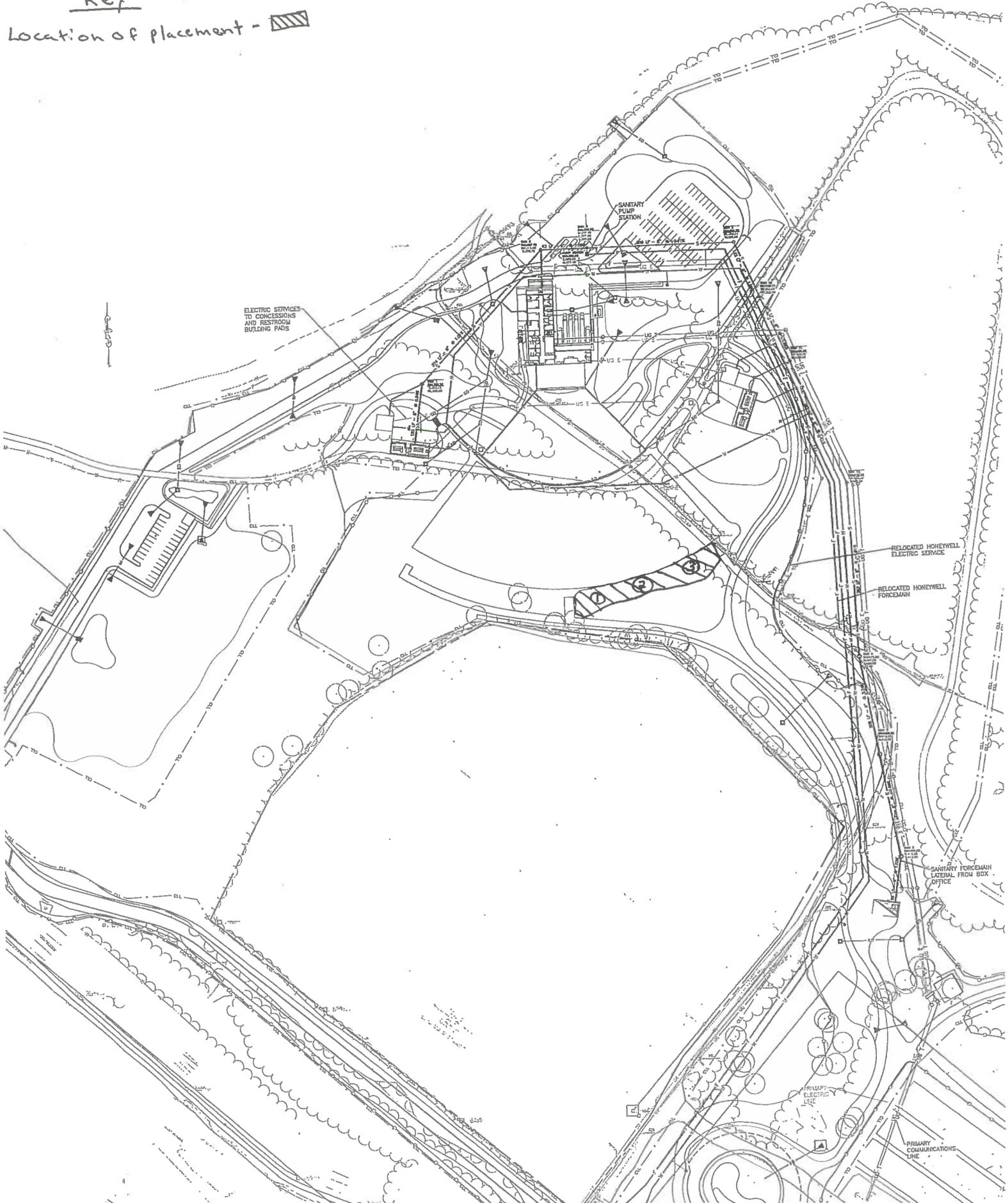
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed road areas and in proposed grass areas.

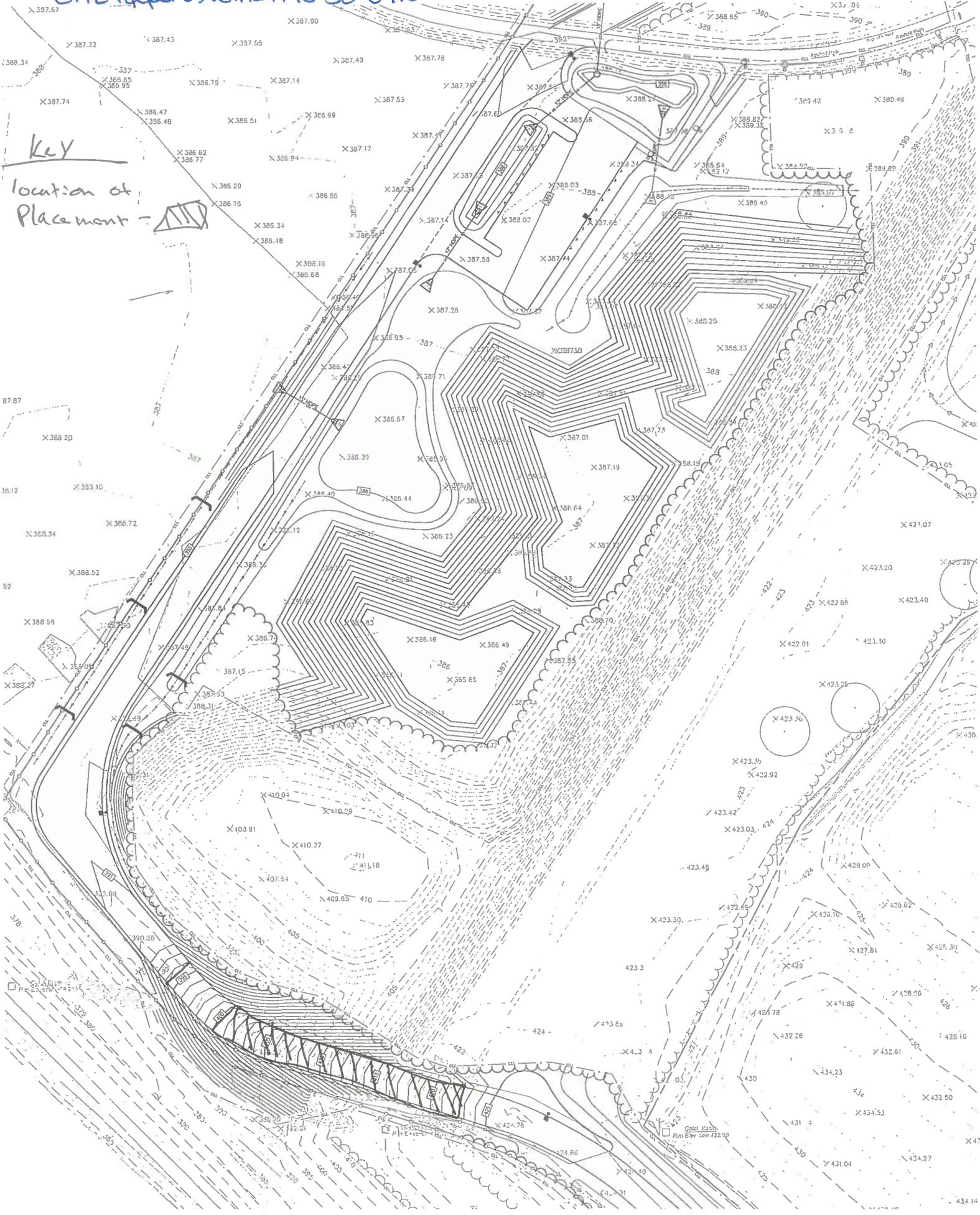
In the proposed grass area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of Crushed Shale on-top of exposed Solvay Waste. One lift, approximately 12" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report (CME Report No. 12974S-51-0415), for details.

In the proposed road area (please refer to page 3 for location), geotextile fabric was placed on the exposed Solvay Waste, prior to the placement of 4" Minus Curshed Gravel. Three lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last roller pass on each lift, the material was stable and non-yielding.

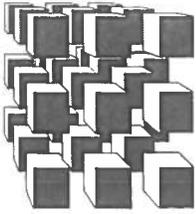
Key

Location of placement - 





Key  
Location of Placement - [hatched area symbol]



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Associates, Inc.

6035 Corporate Drive  
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(315) 701-0522  
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## Transmittal

April 10, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

1

Report Number

12974S-50-0415

12974S-51-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

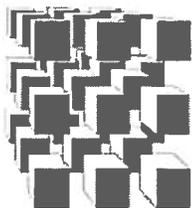
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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## *IN-PLACE FIELD DENSITY TEST REPORT*

<b>PROJECT:</b> Lakeview Amphitheater, Syracuse, New York	<b>DATE:</b> 04/09/15
<b>CLIENT:</b> Onondaga County	<b>REPORT NO.:</b> 12974S-51-0415
<b>TEST METHOD:</b> ASTM (D2922) Nuclear Density Gauge	<b>REPRESENTATIVE:</b> A. Boronczyk, ICC
<b>MATERIAL TYPE &amp; SOURCE:</b> Crushed Shale: Imported from Riccelli Enterprises, Inc.	
<b>WEATHER:</b> Overcast <b>PAGE:</b> 1 of 2	<b>TEMPERATURE:</b> 48      °F

**REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in the proposed grass area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

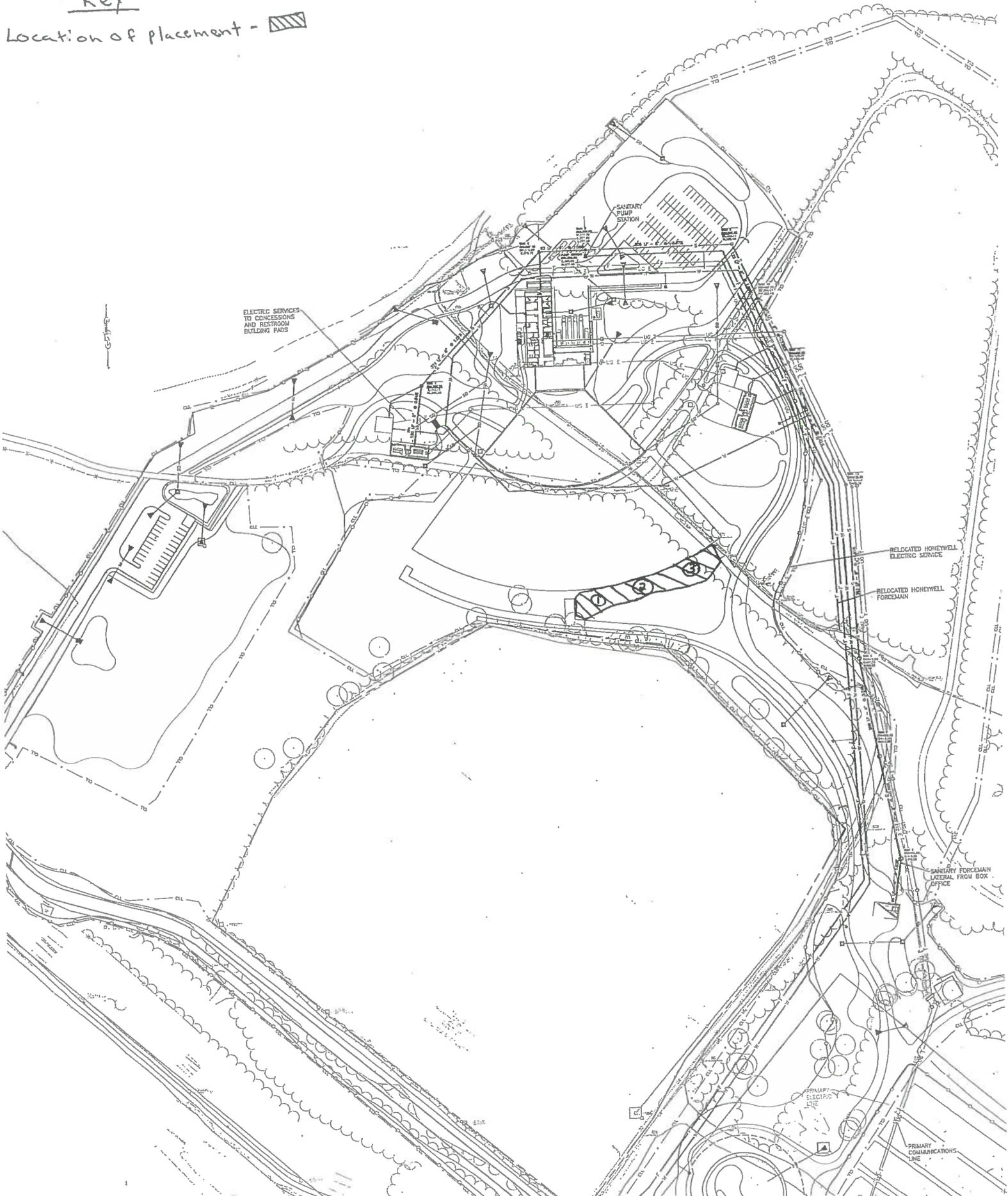
Notes: Elevations provided by the contractor

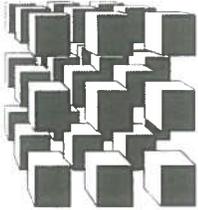
**RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2	Subgrade	13.3	11.5	113.6	126.6	89.7	85.0
2	See attached map, page 2	Subgrade	13.4	11.5	110.4	126.6	87.2	85.0
3	See attached map, page 2	Subgrade	12.7	11.5	111.7	126.6	88.2	85.0

Key

Location of placement - 





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## Transmittal

April 13, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-52-0415
1	12974S-53-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

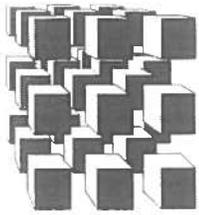
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater, Syracuse, New York      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-52-0415

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/10/15      **WEATHER:** Overcast / Rain      **TEMPERATURE:** 54 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area.

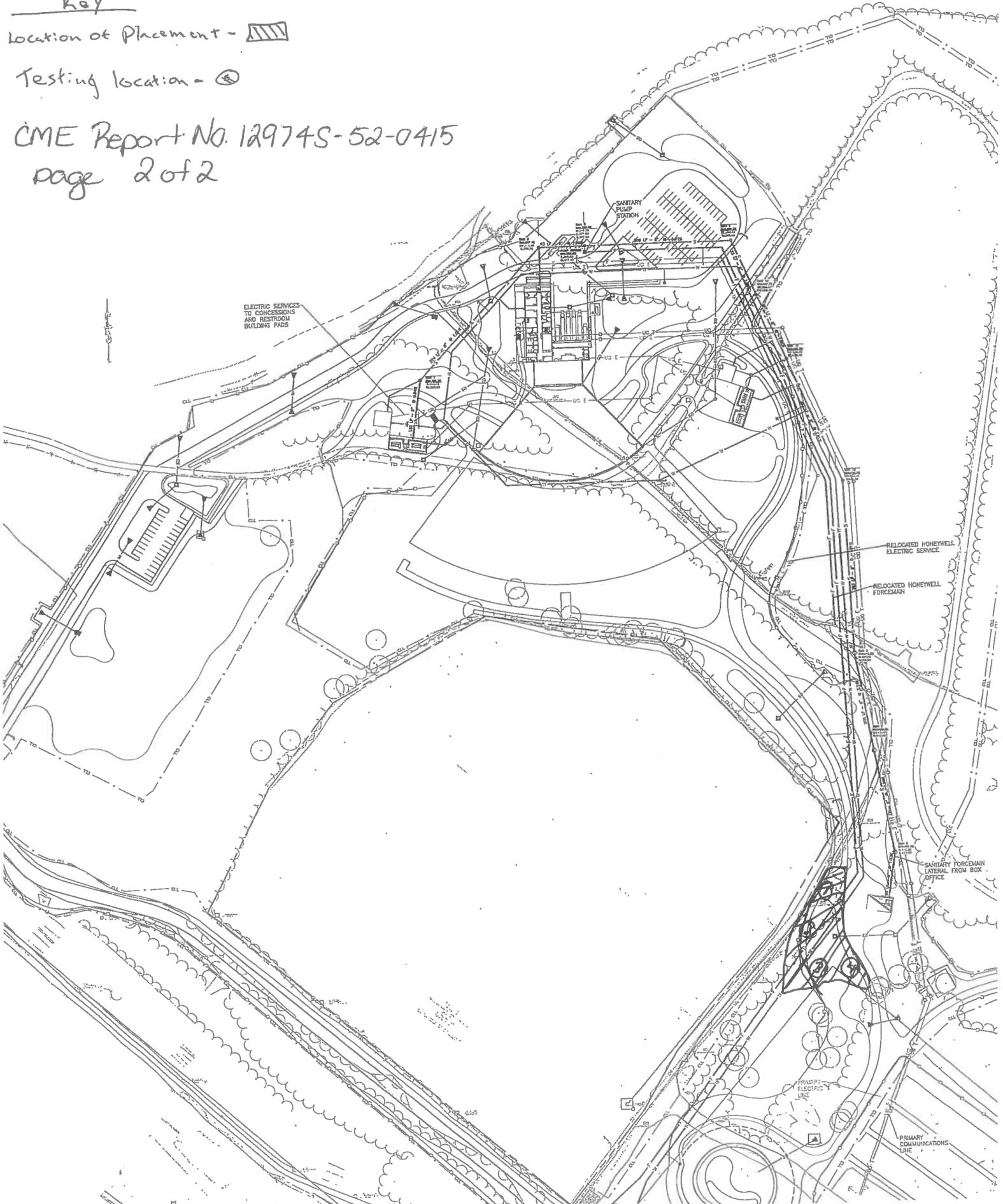
In the proposed grass area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of Crushed Shale on-top of exposed Solvay Waste. One lift, approximately 18" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report (CME Report No. 12974S-53-0415), for satisfactory in-place field density test results. The material was firm and stable during the compaction effort on the last pass.

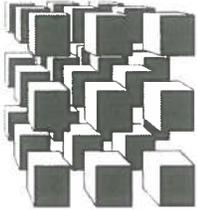
Key

Location of Placement - 

Testing location - 

CME Report No. 12974S-52-0415  
page 2 of 2





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## Transmittal

April 13, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-52-0415
1	12974S-53-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

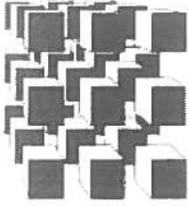
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
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 Ms. Melissa Liquori  
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Via Hard Copy: Mr. Jim Stewart, P.E.  
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 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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(315) 701-0526 (Fax)

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## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**DATE:** 04/10/15

**CLIENT:** Onondaga County

**REPORT NO.:** 12974S-53-0415

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**REPRESENTATIVE:** A. Boronczyk, ICC

**MATERIAL TYPE & SOURCE:** Crushed Shale: Imported from Riccelli Enterprises, Inc.

**WEATHER:** Overcast / Rain      **PAGE:** 1 of 2

**TEMPERATURE:** 54      °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in a proposed grass area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: Elevations provided by the contractor

### **RESULTS:**

Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 2	Subgrade	13.6	11.5	114.5	126.6	90.4	85.0
2	See attached map, page 2	Subgrade	13.6	11.5	113.9	126.6	90.0	85.0
3	See attached map, page 2	Subgrade	13.3	11.5	114.3	126.6	90.2	85.0
4	See attached map, page 2	Subgrade	13.6	11.5	114.3	126.6	90.2	85.0

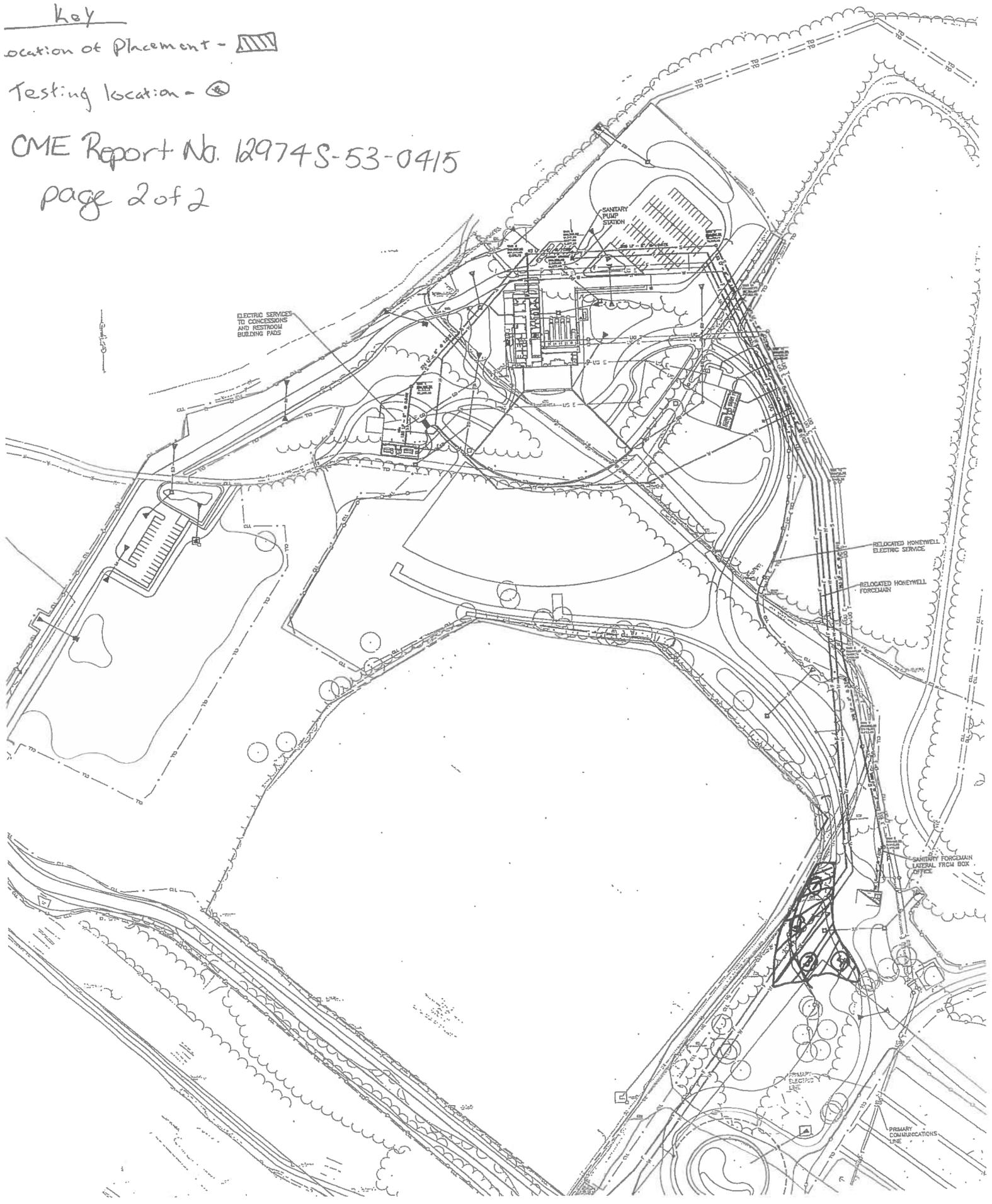
Key

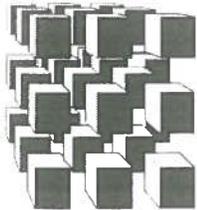
Location of Placement - [hatched box symbol]

Testing location - [circle with crosshair symbol]

CME Report No. 12974S-53-0415

page 2 of 2





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(315) 701-0526 (Fax)

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## Transmittal

April 14, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

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<u>Number of Copies</u>	<u>Report Number</u>
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1	12974S-55-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-54-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/13/15      **WEATHER:** Clear      **TEMPERATURE:** 70 °F

---

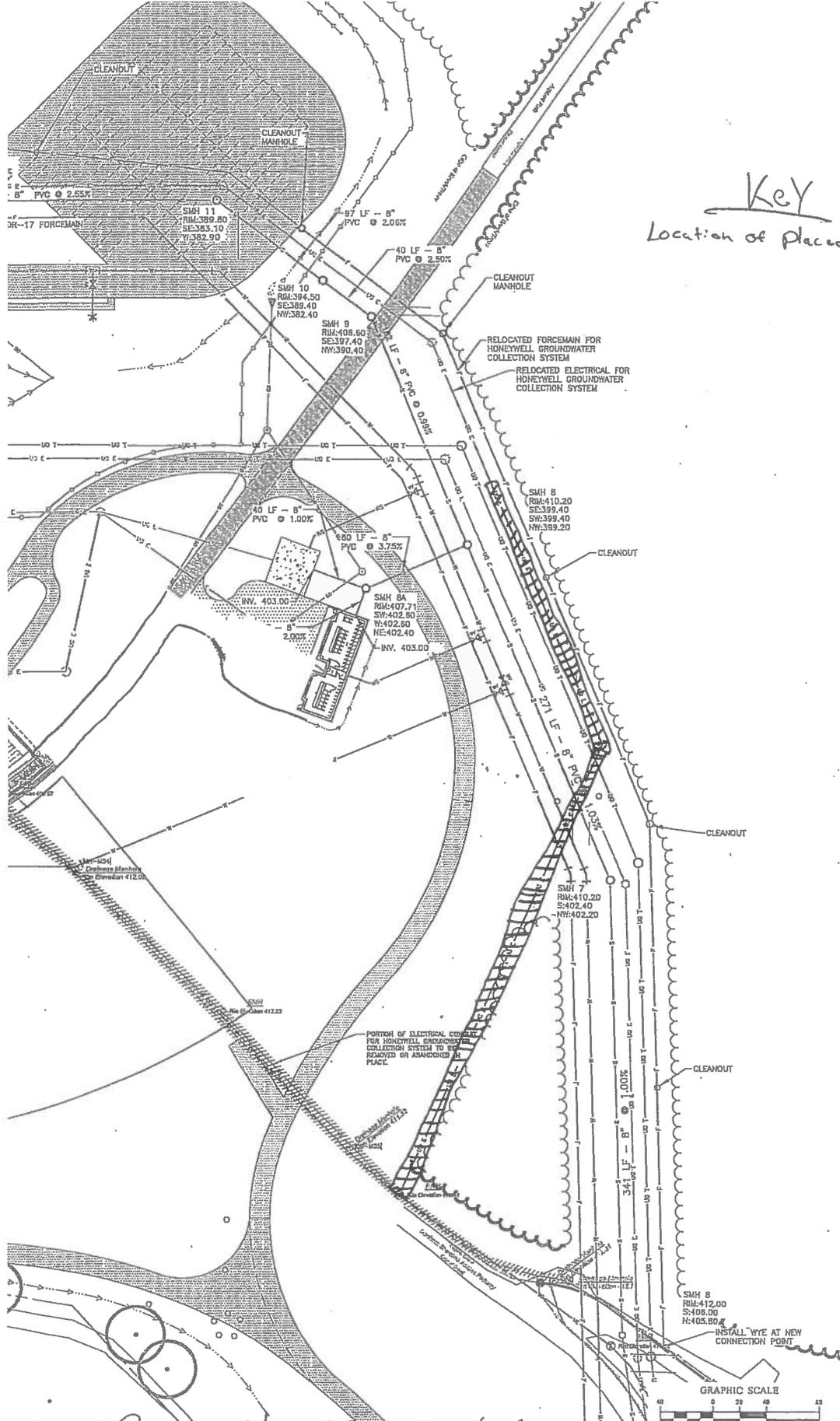
This CME Representative was on-site at the above referenced project to observe the placement of pipe bedding and trench backfill for the proposed Relocated Honeywell Electric Service.

For the proposed relocated Honeywell Electric Service (please refer to page 2 for location), approximately 6" of #20 Sand (from the Granby Mine) was placed above and below the electrical conduit as pipe bedding. This pipe bedding was uncompacted. After the Sand was placed on top of the electrical conduit, the trench was then backfilled with excavated Solvay Waste, which was not compacted.

1	1-29-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
 Location of Placed electrical conduct. -



For  
Construction

Client  
 Gilbane  
 Onondaga Lakeview  
 Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

Westlake  
 Reed  
 Leskosky  
 1201 Broadway  
 Suite 1006  
 New York, New York 10001  
 T 212.564.8705  
 F 212.659.0050  
 www.WRLdesign.com

© Westlake Reed Leskosky



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 Room 500  
 Syracuse, NY 13202  
 T 315.472.7808  
 F 315.472.7800



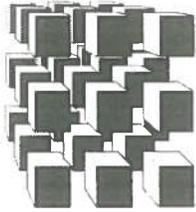
FISHER ASSOCIATES  
 WWW.FISHERASSOCIATES.COM  
 121 S. Lake Street, Syracuse, NY 13202  
 Phone: 315-472-7800

UTILITY PLAN  
 HONEYWELL  
 RELOCATION PLAN  
 CU-010



CME Report No. 12974S-54-0415

page 2 of 2



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 (315) 701-0526 (Fax)  
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## Transmittal

April 14, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-54-0415
1	12974S-55-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

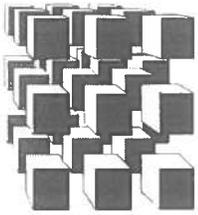
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
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 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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(315) 701-0522  
(315) 701-0526 (Fax)

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-55-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/13/15      **WEATHER:** Clear      **TEMPERATURE:** 70 °F

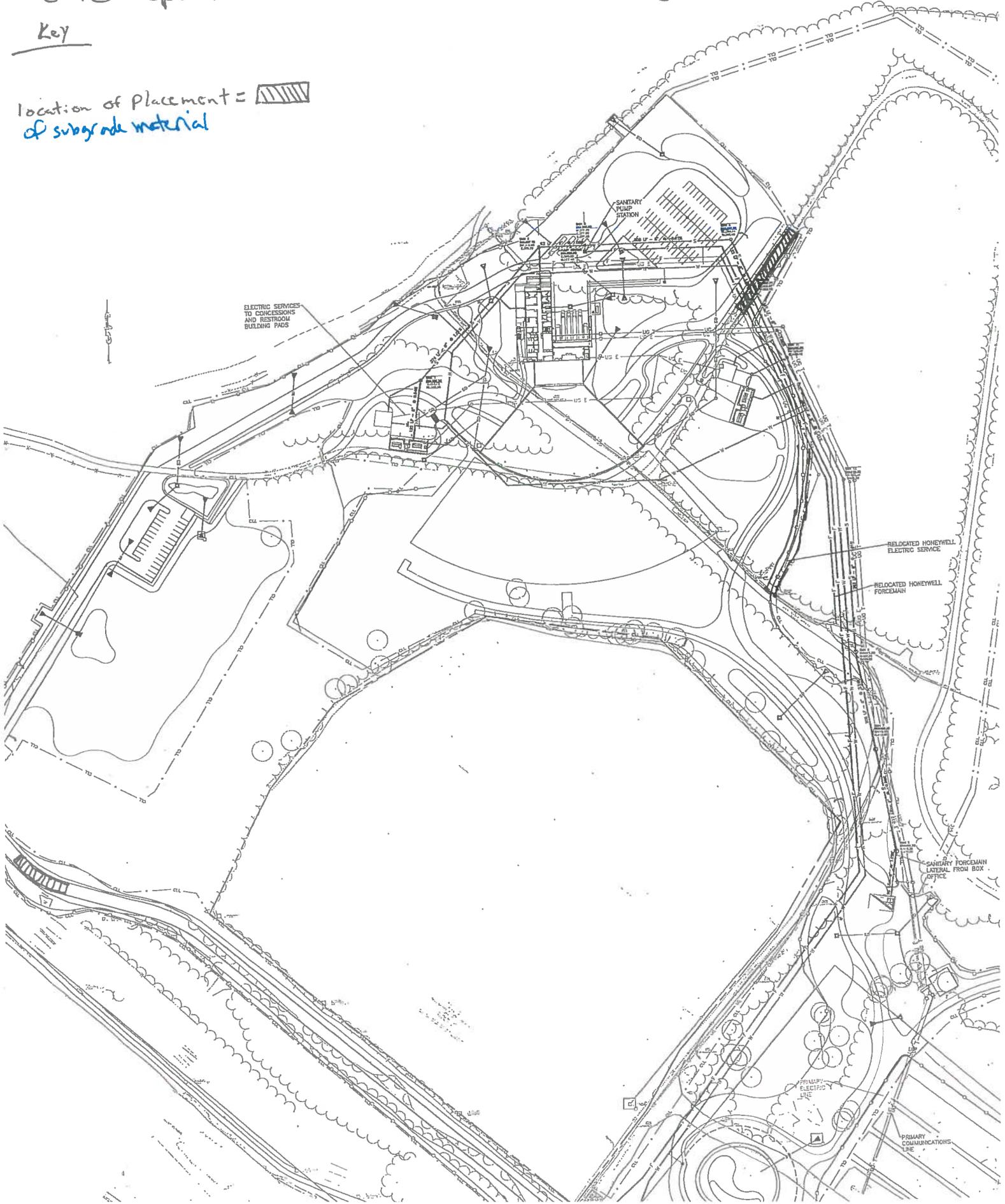
---

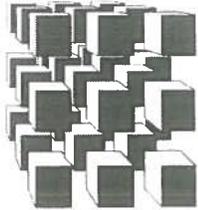
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed road area.

In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel on-top of exposed Solvay Waste. Two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

Key

location of Placement =   
of subgrade material





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East Syracuse, New York 13057  
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(315) 701-0526 (Fax)

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## Transmittal

April 15, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>		<u>Report Number</u>
1		12974S-56-0415
	Through	
1		12974S-58-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: ✓  
Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-56-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/14/15      **WEATHER:** Clear      **TEMPERATURE:** 65 °F

---

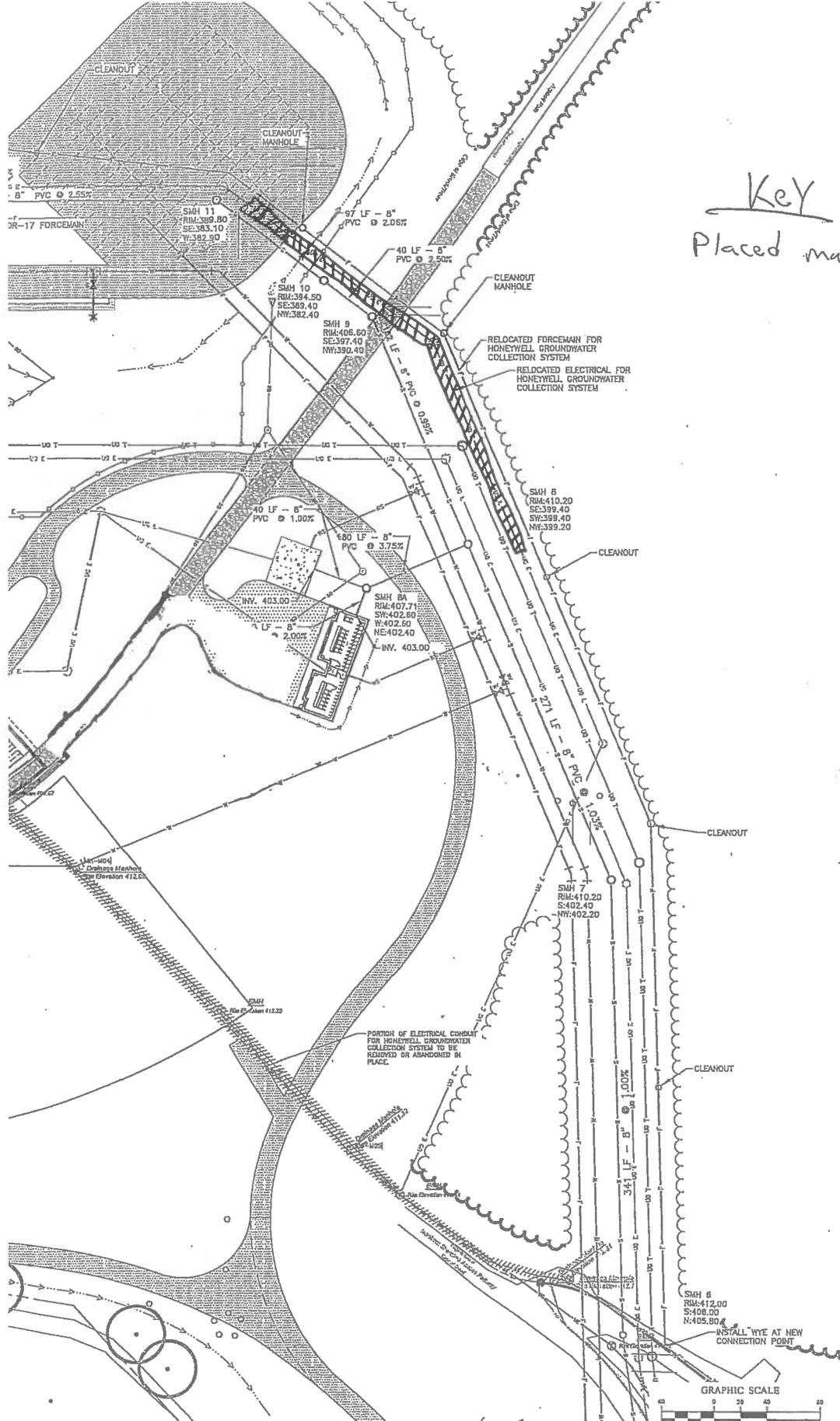
This CME Representative was on-site at the above referenced project to observe the placement of pipe bedding and trench backfill for the proposed Relocated Honeywell Electric Service.

At the proposed relocated Honeywell Electric Service (please refer to page 2 for location), approximately 6" of #20 Sand (from the Granby Mine) was placed above and below the electrical conduit as pipe bedding. The Sand was not compacted. After the Sand was placed on top of the electrical conduit, the trench was then backfilled with excavated Solvay Waste, in grass areas. The material was not compacted. In the road areas, where the electrical service was placed (please refer to page 2 for location), the trench was backfilled with 4" Minus Crushed Gravel. This material was not compacted.

1	1-24-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
Placed material



For  
Construction

Client  
**Gilbane  
Onondaga Lakeview  
Amphitheater**

Onondaga Lake  
Syracuse, NY

Project No. 14128.00

Westlake  
Reed  
Leskosky  
1201 Broadway  
Suite 1005  
New York, New York 10001  
T 212.654.8705  
F 212.659.0050  
www.WRLdesign.com

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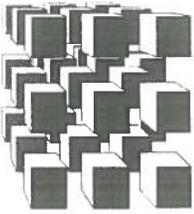
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Associates, Inc.

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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 15, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-56-0415

12974S-58-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

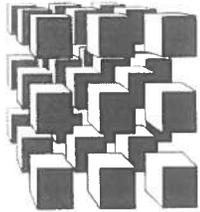
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: ✓  
Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



**CME**  
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6035 Corporate Drive  
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(315) 701-0522  
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## ***DAILY PROGRESS REPORT***

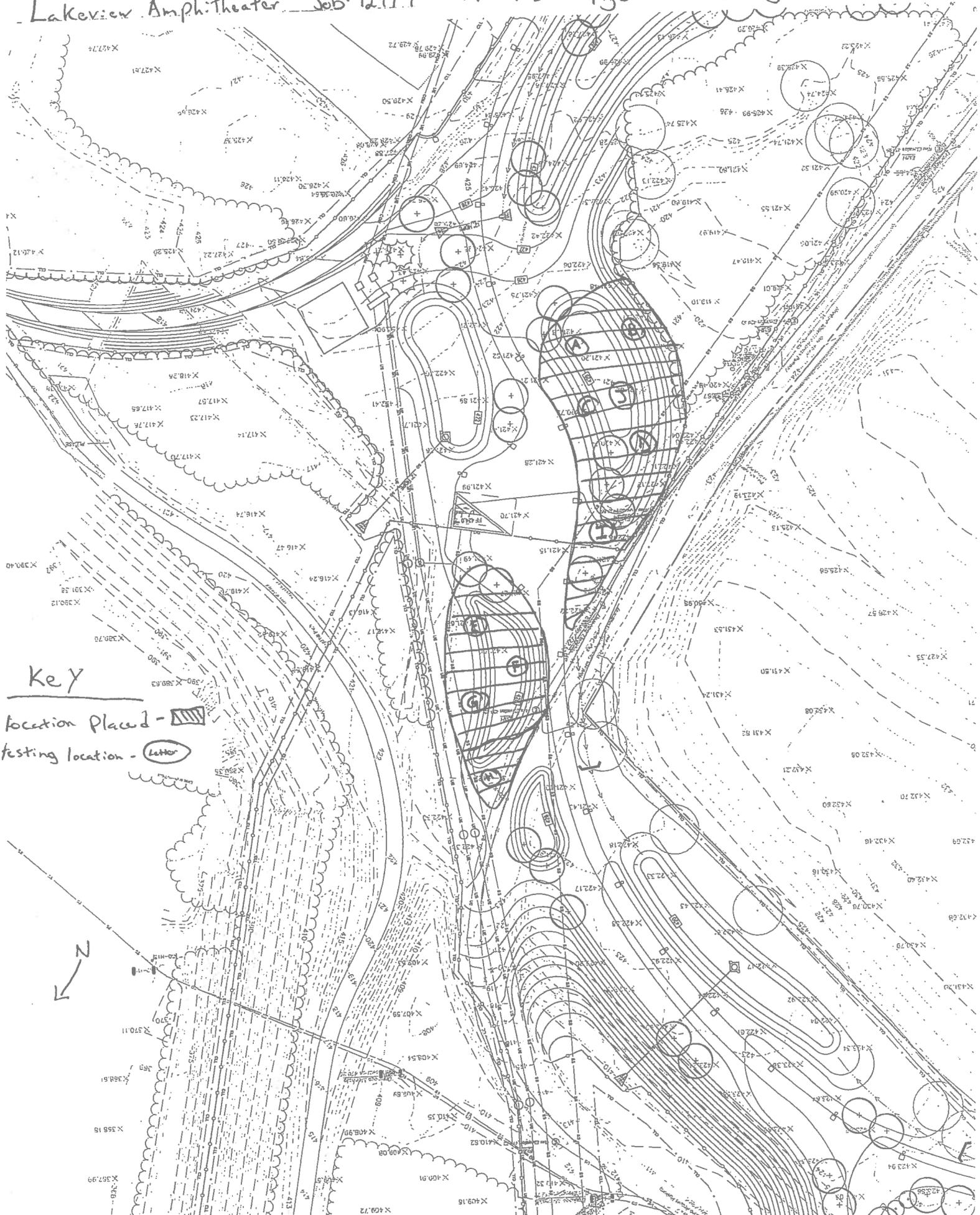
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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-57-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/14/15      **WEATHER:** Clear      **TEMPERATURE:** 65 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in the proposed grass seating area.

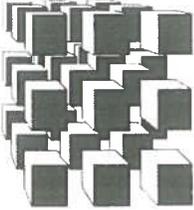
In the proposed grass seating area (please refer to page 2 for location), no geotextile fabric was placed prior to the placement of Crushed Shale on-top of exposed Solvay Waste. Two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report (CME Report No. 12974S-58-0415), for details.



Key

- Location Placed - [hatched rectangle symbol]
- Testing location - [circle with letter symbol]





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(315) 701-0522  
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www.cmeassociates.com

## Transmittal

April 15, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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12974S-58-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

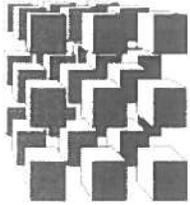
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: ✓  
Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



## ***IN-PLACE FIELD DENSITY TEST REPORT***

**PROJECT:** Lakeview Amphitheater, Syracuse, New York

**DATE:** 04/14/15

**CLIENT:** Onondaga County

**REPORT NO.:** 12974S-58-0415

**TEST METHOD:** ASTM (D2922) Nuclear Density Gauge

**REPRESENTATIVE:** A. Boronczyk, ICC

**MATERIAL TYPE & SOURCE:** Crushed Shale: Imported from Riccelli Enterprises, Inc.

**WEATHER:** Clear

**PAGE:** 1 of 3

**TEMPERATURE:** 65 °F

### **REMARKS:**

This Representative was on-site to conduct In-Place Field Density Testing on subgrade fill placed in the proposed grass seating area at the above referenced project. The test results indicate that the required percent compaction was achieved at the elevations and locations listed below. Mr. Bob Catalina with C&S Companies was orally informed of today's in-place field density test results.

Notes: BS = Below Subgrade  
Elevations provided by the contractor

### **RESULTS:**

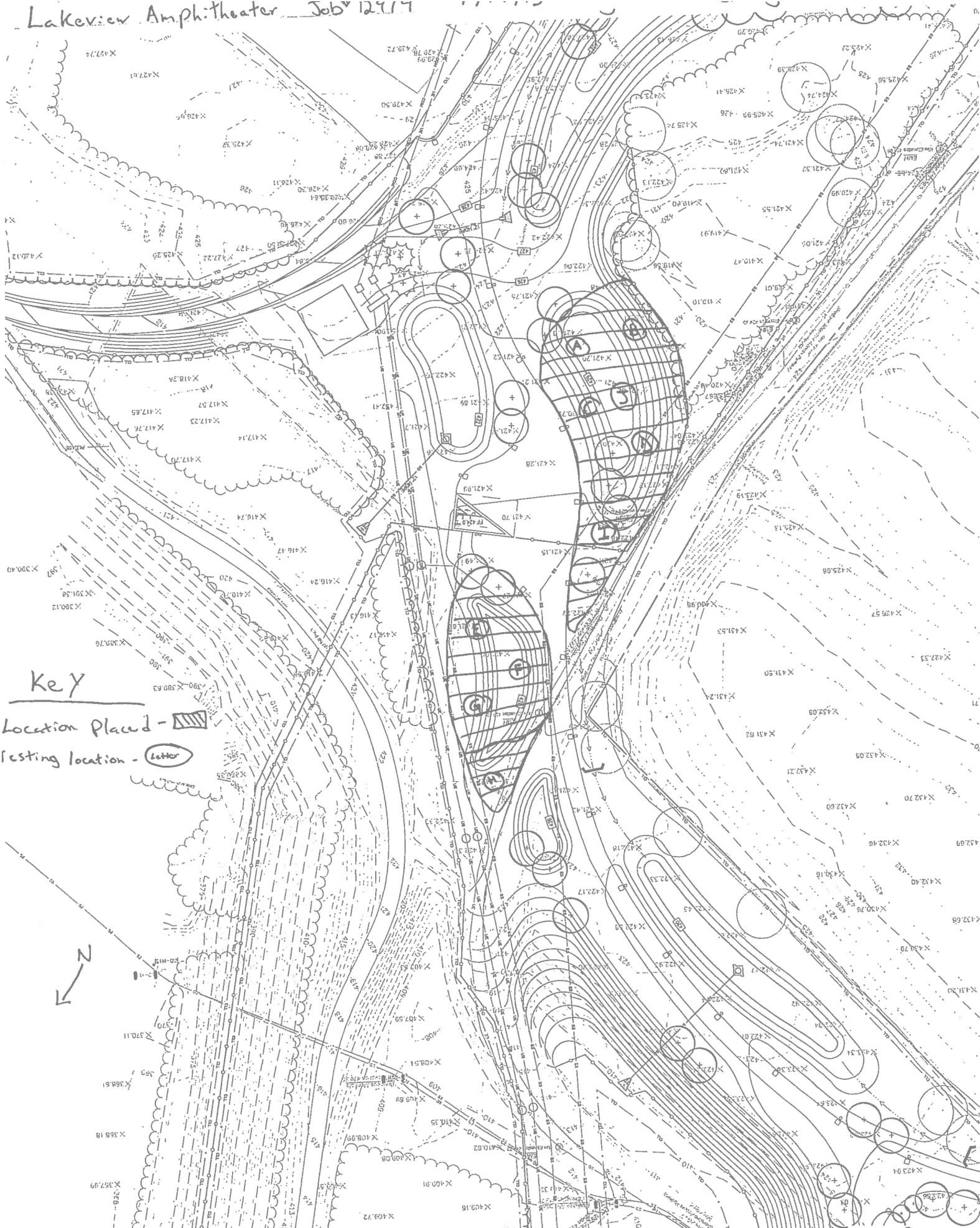
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
1	See attached map, page 3 Location A	4' BS	10.0	11.5	120.3	126.6	95.0	85.0
2	See attached map, page 3 Location B	4' BS	10.1	11.5	120.7	126.6	95.3	85.0
3	See attached map, page 3 Location C	4' BS	10.2	11.5	119.8	126.6	94.6	85.0
4	See attached map, page 3 Location D	4' BS	10.1	11.5	120.5	126.6	95.1	85.0
5	See attached map, page 3 Location A	3' BS	9.2	11.5	122.3	126.6	96.6	85.0
6	See attached map, page 3 Location B	3' BS	9.0	11.5	122.0	126.6	96.3	85.0
7	See attached map, page 3 Location C	3' BS	9.	11.5	121.9	126.6	96.2	85.0
8	See attached map, page 3 Location D	3' BS	9.1	11.5	122.2	126.6	96.5	85.0
9	See attached map, page 3 Location E	4' BS	9.7	11.5	115.3	126.6	91.0	85.0
10	See attached map, page 3 Location F	4' BS	9.1	11.5	116.7	126.6	92.2	85.0
11	See attached map, page 3 Location G	4' BS	9.4	11.5	115.9	126.6	91.5	85.0
12	See attached map, page 3 Location E	3' BS	9.4	11.5	111.0	126.6	87.6	85.0
13	See attached map, page 3 Location F	3' BS	9.2	11.5	110.7	126.6	87.4	85.0
14	See attached map, page 3 Location G	3' BS	9.3	11.5	110.3	126.6	87.1	85.0



Notes: BS = Below Subgrade  
 Elevations provided by the contractor

**RESULTS:**

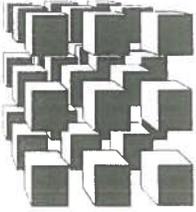
Test #	Test Location	Test Elevation	Moisture Content (%)	OMC (%)	Field Dry Density (pcf)	100% Dry Density (pcf)	Compaction Achieved (%)	Compaction Required (%)
15	See attached map, page 3 Location H	Subgrade	9.2	11.5	110.9	126.6	87.5	85.0
16	See attached map, page 3 Location I	Subgrade	9.1	11.5	109.9	126.6	86.8	85.0
17	See attached map, page 3 Location J	3' BS	9.2	11.5	111.1	126.6	87.7	85.0
18	See attached map, page 3 Location B	2' BS	10.8	11.5	112.7	126.6	89.0	85.0
19	See attached map, page 3 Location C	2' BS	10.8	11.5	113.1	126.6	89.3	85.0
20	See attached map, page 3 Location D	2' BS	10.5	11.5	113.5	126.6	89.6	85.0
21	See attached map, page 3 Location J	2' BS	10.8	11.5	112.9	126.6	89.1	85.0



Key

Location Placed - 

Testing location - 



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## Transmittal

April 16, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

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Report Number

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12974S-60-0415

Respectfully submitted,  
**CME Associates, Inc.**

  
Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy:  Mr. Jim Stewart, P.E.  
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Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-59-0415  
Syracuse, New York

**CLIENT:** Onondaga County

**REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/15/15      **WEATHER:** Clear

**TEMPERATURE:** 55 °F

---

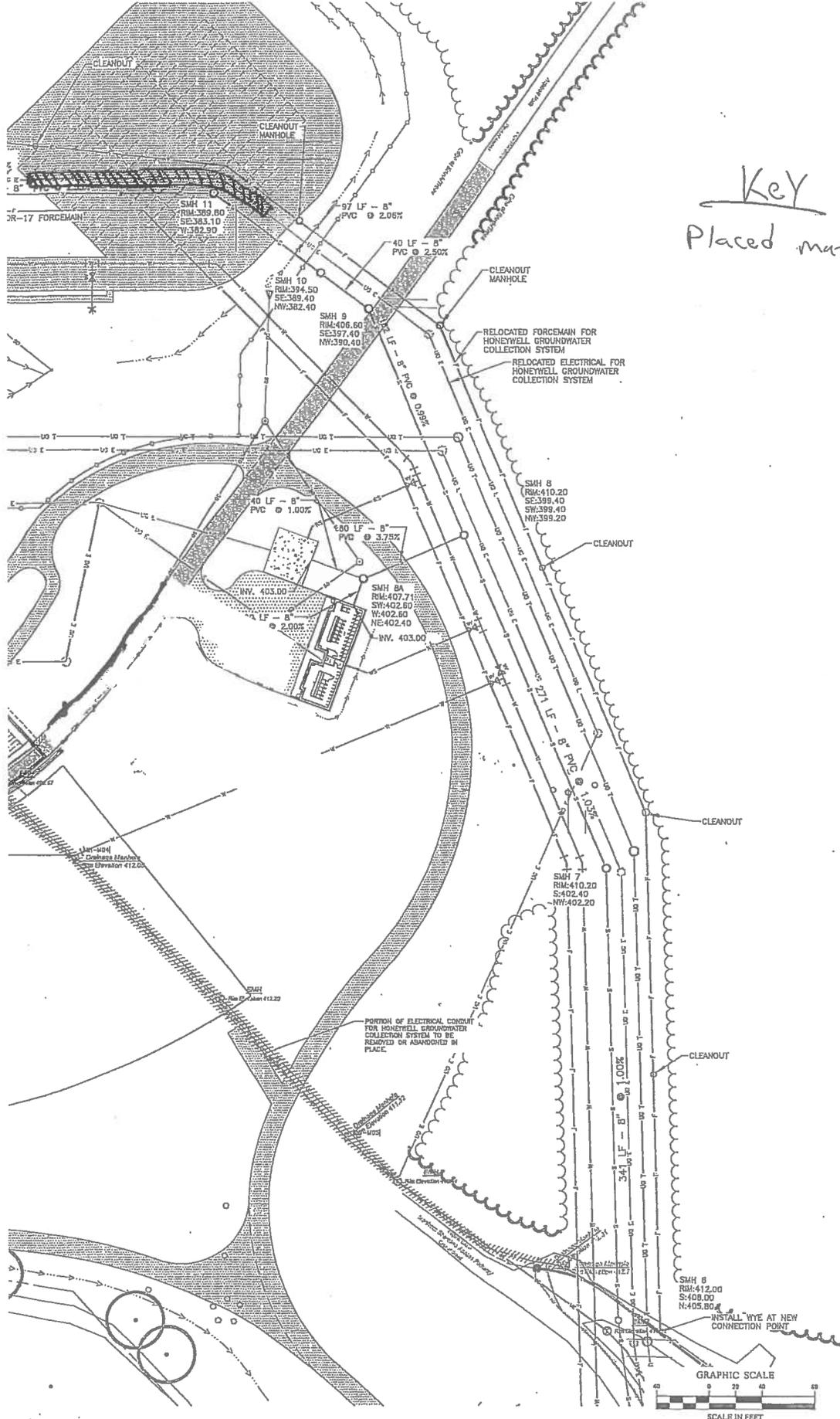
This CME Representative was on-site at the above referenced project to observe the placement of pipe bedding and trench backfill for the proposed Relocated Honeywell Electric Service.

At the proposed relocated Honeywell Electric Service (please refer to page 2 for location), approximately 6" of #20 Sand (from the Granby Mine) was placed above and below the electrical conduit as pipe bedding. The trench was then backfilled with 4" Minus Crushed Gravel. The material was then rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass, the material was stable and non yielding.

2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
Placed material



## For Construction

Client  
**Gilbane  
Onondaga Lakeview  
Amphitheater**  
Onondaga Lake  
Syracuse, NY  
Project No. 14128.00

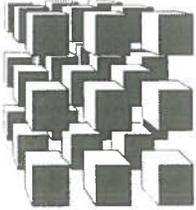
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Leskosky**  
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New York, New York 10001  
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F 212.659.0050  
www.WRLDesign.com  
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UTILITY PLAN  
**HONEYWELL  
RELOCATION PLAN  
CU-010**

CME Report No. 12974S-59-0415  
Lake view Amphitheater Job # 12974 Pg 2 of 2 4/15/15



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**Associates, Inc.**

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 East Syracuse, New York 13057  
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 (315) 701-0526 (Fax)

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## Transmittal

April 16, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

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Report Number

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Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

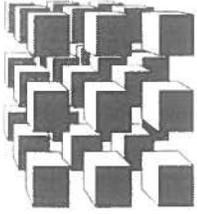
Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: ✓  
 Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-60-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/15/15      **WEATHER:** Clear      **TEMPERATURE:** 55 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass areas.

In the proposed grass areas (please refer to page 2 for location), three lifts of Crushed Shale fill, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report for satisfactory test results. The material was firm and stable during the compaction effort on the last pass of each lift.





# Soil Nuclear Gauge

12974S-61-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
1		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.1	108.7	6	86	85	DP
2		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.3	109.1	6	86	85	DP
3		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.7	111.9	6	88	85	DP
4		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.7	111.7	6	88	85	DP
5		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.4	109.5	6	86	85	DP
6		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.4	111.1	6	88	85	DP
7		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.4	109.5	6	86	85	DP



# Soil Nuclear Gauge

12974S-61-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

8		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.5	110.4	6	87	85	DP
---	--	---------	--	---	------------	------	-------	------	-------	---	----	----	----

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
1	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	14201	Boronczyk, Anthony
2	Subgrade Fill: See attached map location 2	2.0	' Below sub-grade	14201	Boronczyk, Anthony
3	Subgrade Fill: See attached map location 3	2.0	' Below sub-grade	14201	Boronczyk, Anthony
4	Subgrade Fill: See attached map location 4	2.0	' Below sub-grade	14201	Boronczyk, Anthony
5	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	14201	Boronczyk, Anthony
6	Subgrade Fill: See attached map location 3	1.0	' Below sub-grade	14201	Boronczyk, Anthony
7	Subgrade Fill: See attached map location 2	1.0	' Below sub-grade	14201	Boronczyk, Anthony
8	Subgrade Fill: See attached map location 4	1.0	' Below sub-grade	14201	Boronczyk, Anthony

Remarks	Comments	Related Tests						
DP: Density Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	<table border="1"> <thead> <tr> <th>Test #</th> <th>Related Test #</th> <th>Test Type</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Test #	Related Test #	Test Type			
Test #	Related Test #	Test Type						



# Soil Nuclear Gauge

12974S-61-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

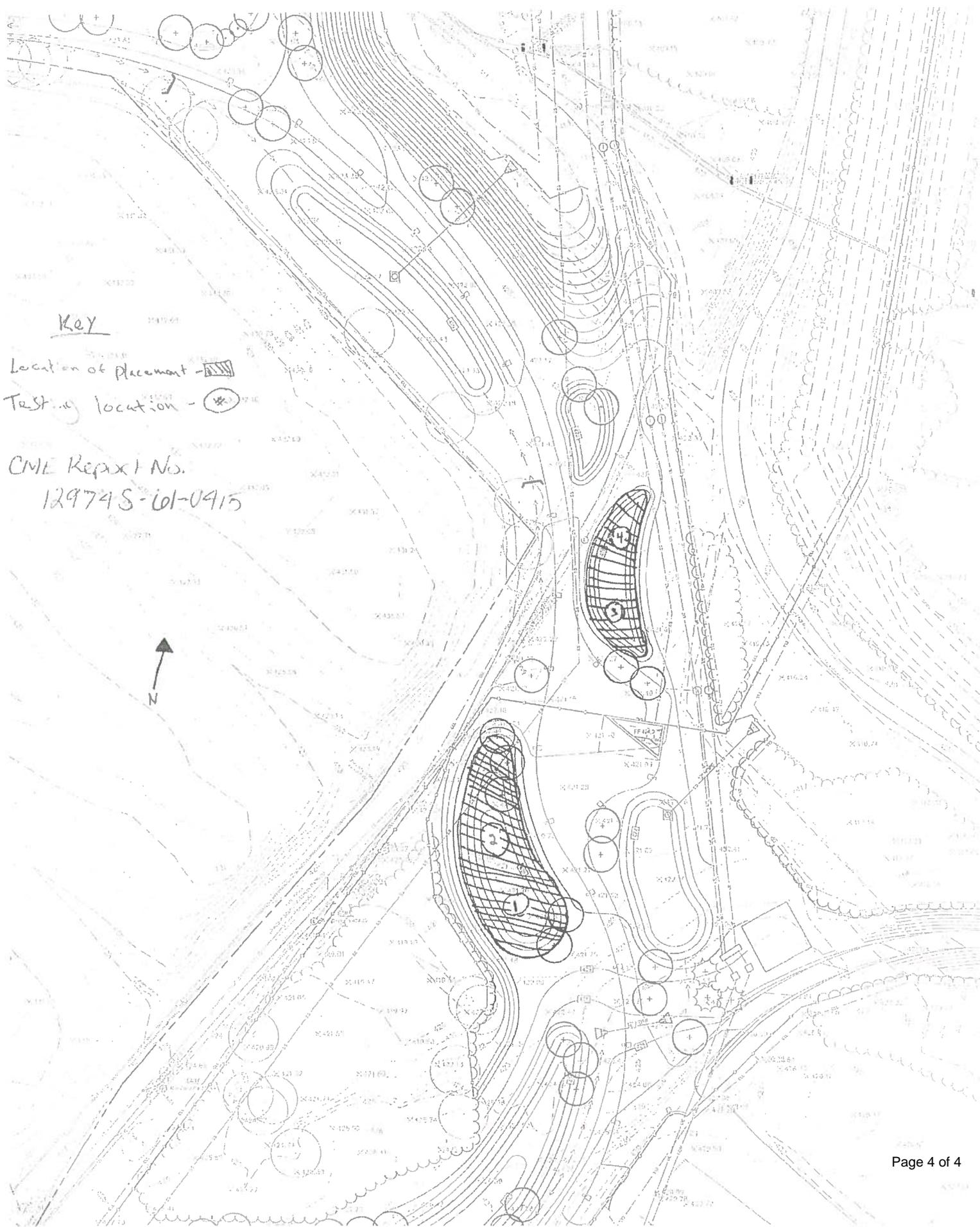
East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
9		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.3	110.4	6	87	85	DP
10		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.1	109.8	6	87	85	DP
11		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.2	110.1	6	87	85	DP
12		4/15/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10	109.1	6	86	85	DP

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
9	Subgrade Fill: See attached map location 4		Sub-grade	14201	Boronczyk, Anthony
10	Subgrade Fill: See attached map location 3		Sub-grade	14201	Boronczyk, Anthony
11	Subgrade Fill: See attached map location 2		Sub-grade	14201	Boronczyk, Anthony
12	Subgrade Fill: See attached map location 1		Sub-grade	14201	Boronczyk, Anthony

Remarks	Comments	Related Tests		
DP: Density Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	Test #	Related Test #	Test Type

Christopher R. Paolini, P.E.  
 Apr 23 2015

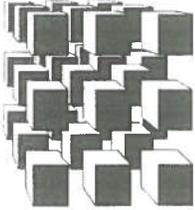


Key

Location of Placement - [hatched rectangle symbol]

Testing location - [circle with cross symbol]

CME Report No.  
12974S-61-0415



**CME**  
Associates, Inc.

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East Syracuse, New York 13057  
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www.cmeassociates.com

## Transmittal

April 17, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

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Senior Vice President  
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Onondaga County

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Firstpoint, LLC

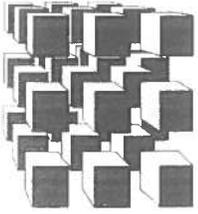
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Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via-e-reporting: Mr. Gary Markinson  
(Concrete Only) Saunders Companies



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-63-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/16/15      **WEATHER:** Clear      **TEMPERATURE:** 65 ° F

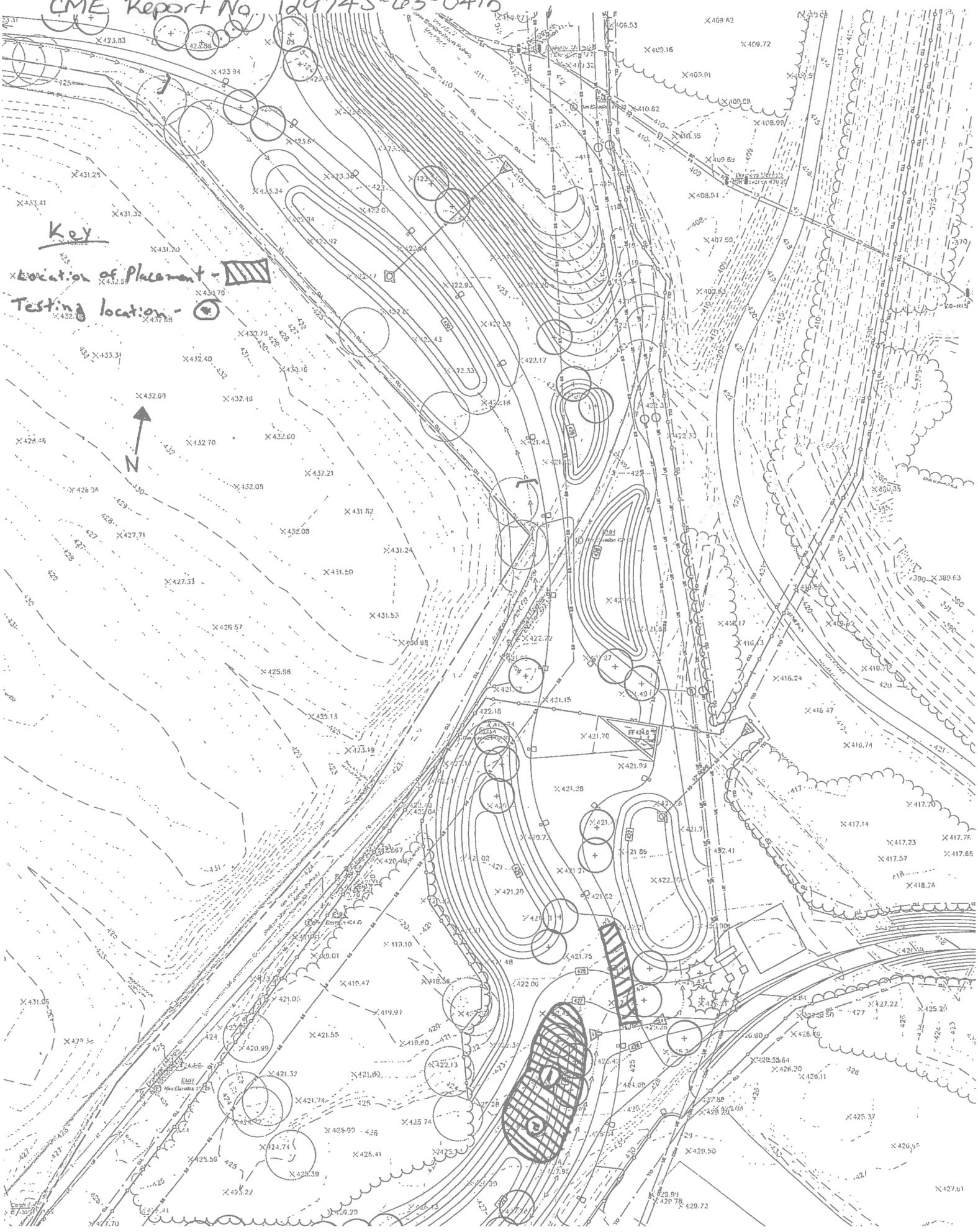
---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area and road area.

In the proposed road area (please refer to page 2 for location), two lifts, approximately 12" thick each, of 4" Minus Crushed Gravel, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

In the proposed grass area (please refer to page 2 for location), six lifts of Crushed Shale, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. Please refer to today's In-Place Field Density Test Report for satisfactory density test results. The material was firm and stable during the compaction effort on the last pass of each lift.

CME Report No. 12974S-03-0415



Key

Location of Placement - [hatched rectangle symbol]  
Testing location - [circle with cross symbol]





# Soil Nuclear Gauge

12974S-64-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
13		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.6	110.2	6	87	85	DP
14		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.8	110.5	6	87	85	DP
15		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.1	110.3	6	87	85	DP
16		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.2	109.7	6	87	85	DP
17		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.5	110.5	6	87	85	DP
18		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.5	109.6	6	87	85	DP
19		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.5	110.5	6	87	85	DP



# Soil Nuclear Gauge

12974S-64-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

20		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.7	110.2	6	87	85	DP
----	--	---------	--	---	------------	------	-------	-----	-------	---	----	----	----

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
13	Subgrade Fill: See attached map location 1	6.0	' Below sub-grade	14201	Boronczyk, Anthony
14	Subgrade Fill: See attached map location 1	5.0	' Below sub-grade	14201	Boronczyk, Anthony
15	Subgrade Fill: See attached map location 1	4.0	' Below sub-grade	14201	Boronczyk, Anthony
16	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	14201	Boronczyk, Anthony
17	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	14201	Boronczyk, Anthony
18	Subgrade Fill: See attached map location 2	7.0	' Below sub-grade	14201	Boronczyk, Anthony
19	Subgrade Fill: See attached map location 2	6.0	' Below sub-grade	14201	Boronczyk, Anthony
20	Subgrade Fill: See attached map location 2	5.0	' Below sub-grade	14201	Boronczyk, Anthony

Remarks	Comments	Related Tests						
DP: Density Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	<table border="1"> <thead> <tr> <th>Test #</th> <th>Related Test #</th> <th>Test Type</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Test #	Related Test #	Test Type			
Test #	Related Test #	Test Type						



# Soil Nuclear Gauge

12974S-64-0415  
 Report Date: 4/23/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
21		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.2	110.0	6	87	85	DP
22		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.2	110.4	6	87	85	DP
23		4/16/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.9	110.7	6	87	85	DP

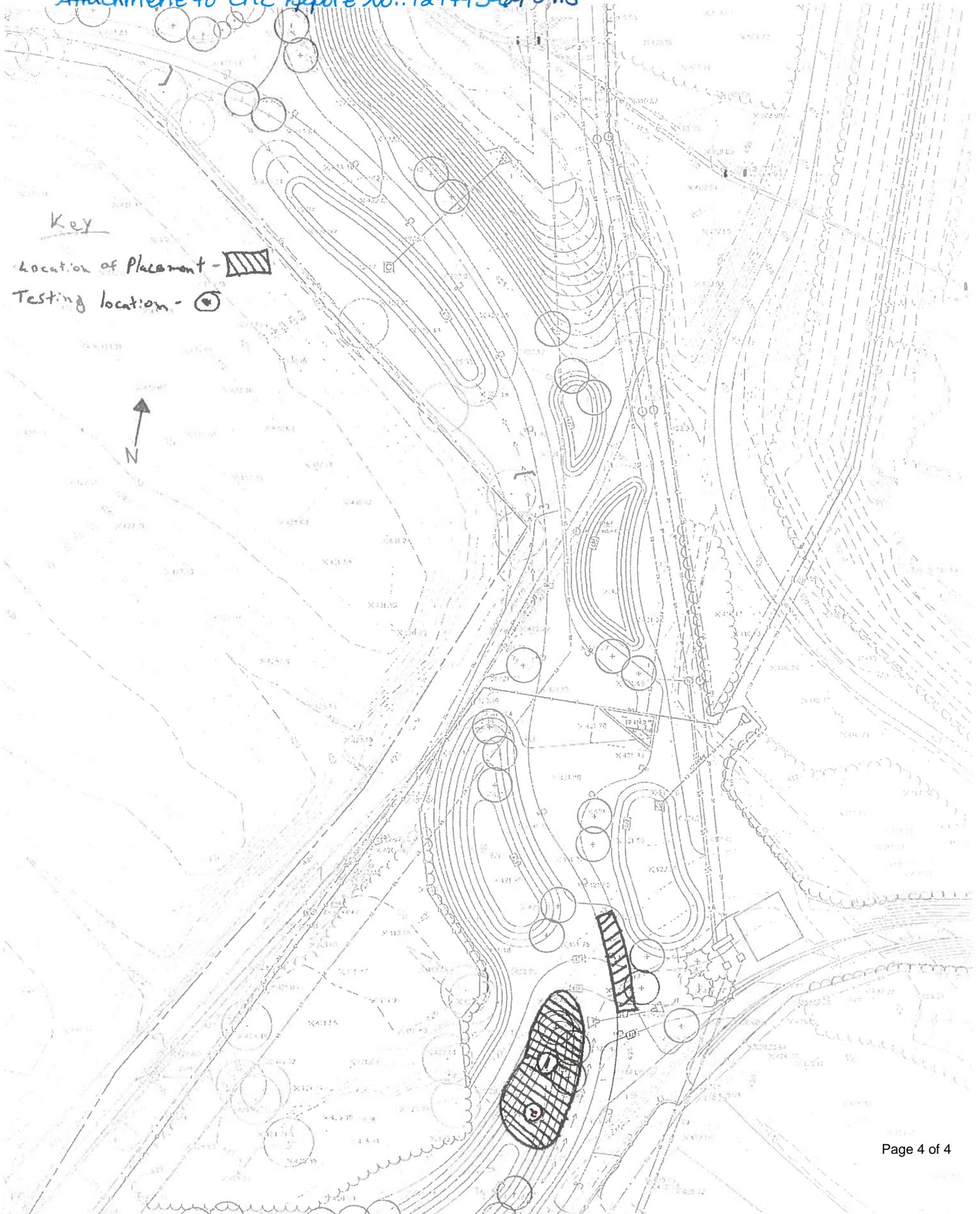
Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
21	Subgrade Fill: See attached map location 2	4.0	' Below sub-grade	14201	Boronczyk, Anthony
22	Subgrade Fill: See attached map location 2	3.0	' Below sub-grade	14201	Boronczyk, Anthony
23	Subgrade Fill: See attached map location 2	2.0	' Below sub-grade	14201	Boronczyk, Anthony

Remarks	Comments	Related Tests		
DP: Density Pass	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	Test #	Related Test #	Test Type

Christopher R. Paolini, P.E.  
 Apr 23 2015

Attachment to CME Report No.: 129745-64-0415





**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)  
www.cmeassociates.com

## Transmittal

April 21, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

1

Report Number

12974S-65-0415

12974S-66-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

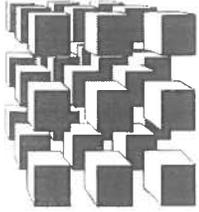
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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(315) 701-0522  
(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-65-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/17/15      **WEATHER:** Rain      **TEMPERATURE:** 60 °F

---

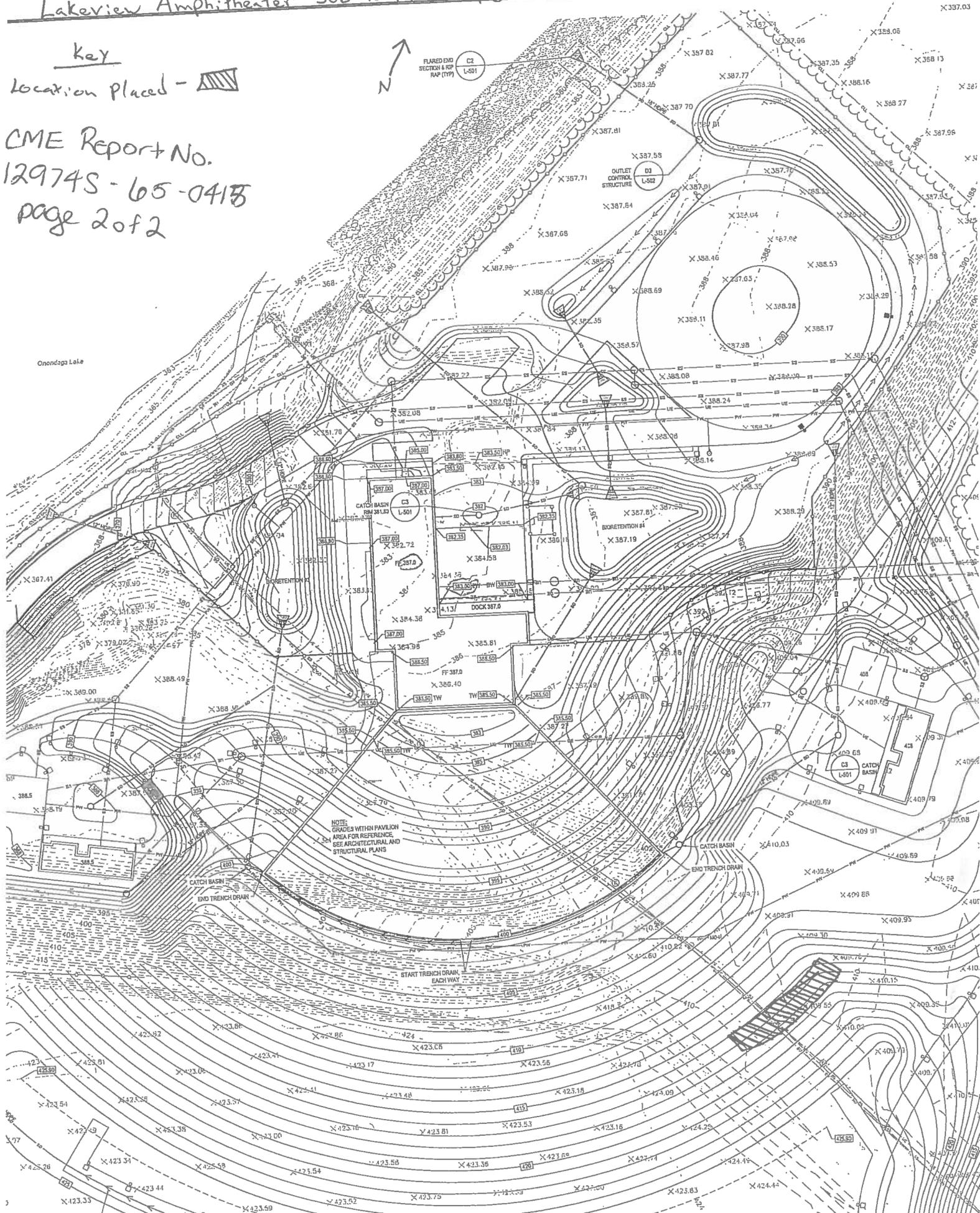
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area.

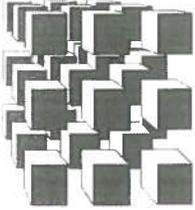
In the proposed grass area (please refer to page 2 for location), two lifts, approximately 18" thick each, of excavated road material, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. The material was firm and stable and non yielding on the last pass of each lift with the roller.

Key

Location placed - 

CME Report No.  
12974S-65-0418  
page 2 of 2





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Associates, Inc.

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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)  
www.cmeassociates.com

## Transmittal

April 21, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-65-0415
1	12974S-66-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

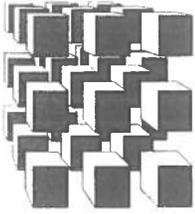
Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction



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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater, Syracuse, New York      **PAGE:** 1 of 3      **REPORT NO.:** 12974S-66-0415

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/20/15      **WEATHER:** Rain      **TEMPERATURE:** 60 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed road areas.

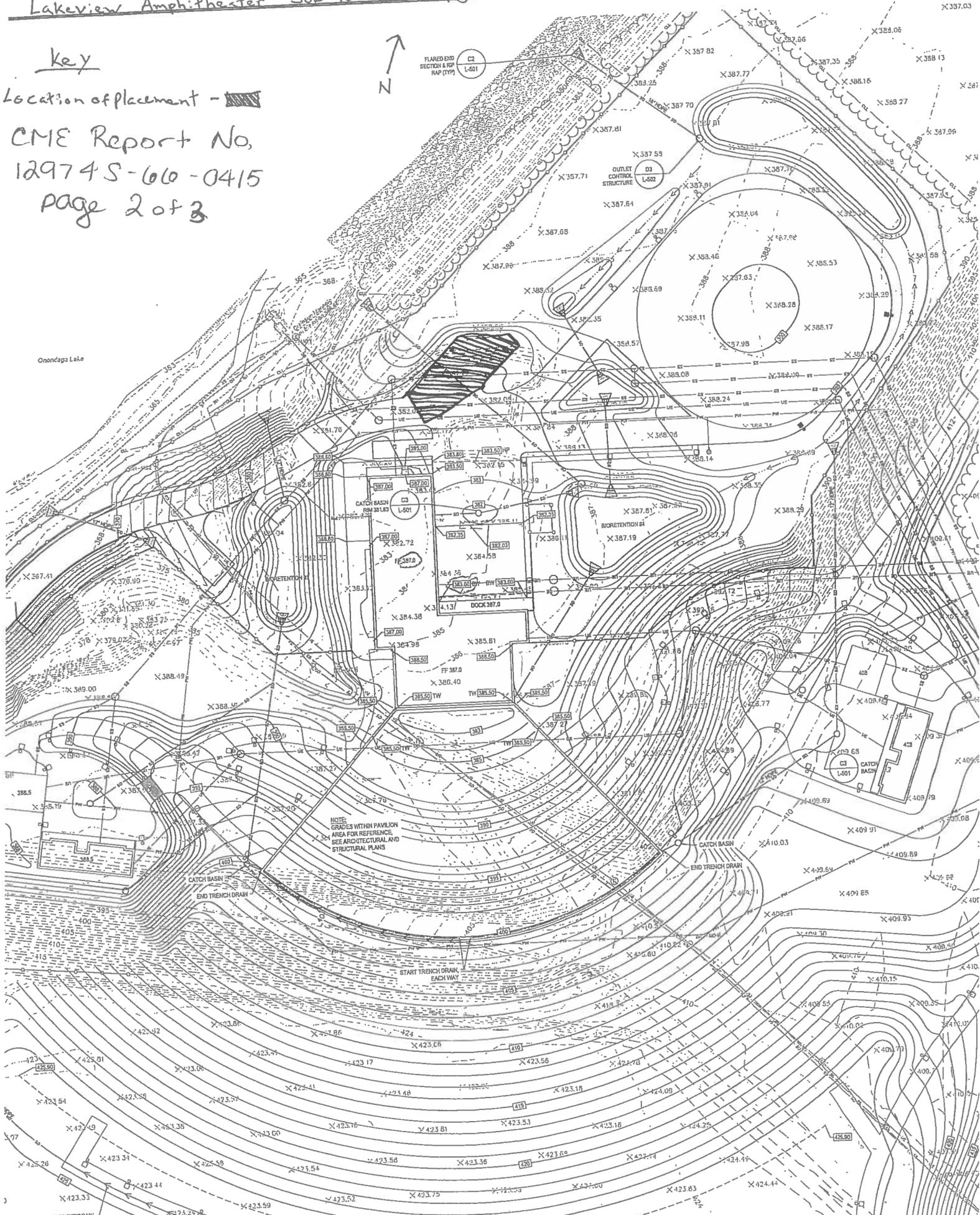
In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel. Six lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

In the proposed road area (please refer to page 3 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel. Three lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

Key

Location of Placement - 

CME Report No.  
12974S-66-0415  
page 2 of 3



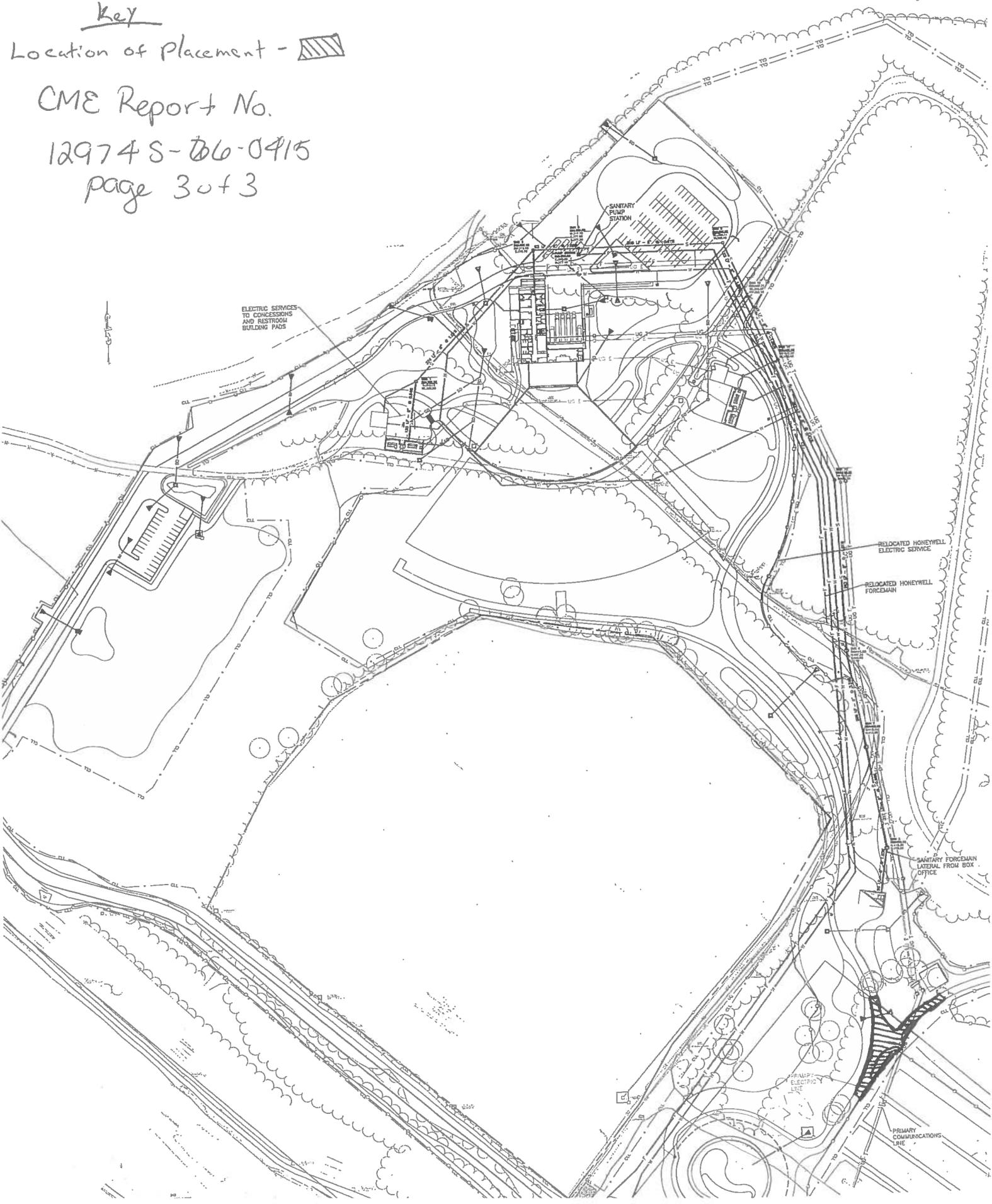
Key

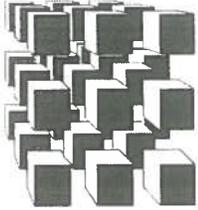
Location of Placement - 

CME Report No.

12974 S-06-0415

page 3 of 3





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Associates, Inc.

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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 22, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager  
**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-67-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 4      **REPORT NO.:** 12974S-67-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/21/15      **WEATHER:** Rain      **TEMPERATURE:** 50 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed grass areas and road areas.

In the proposed road area (please refer to page 2 for location), three lifts of 4" Minus Crushed Gravel, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

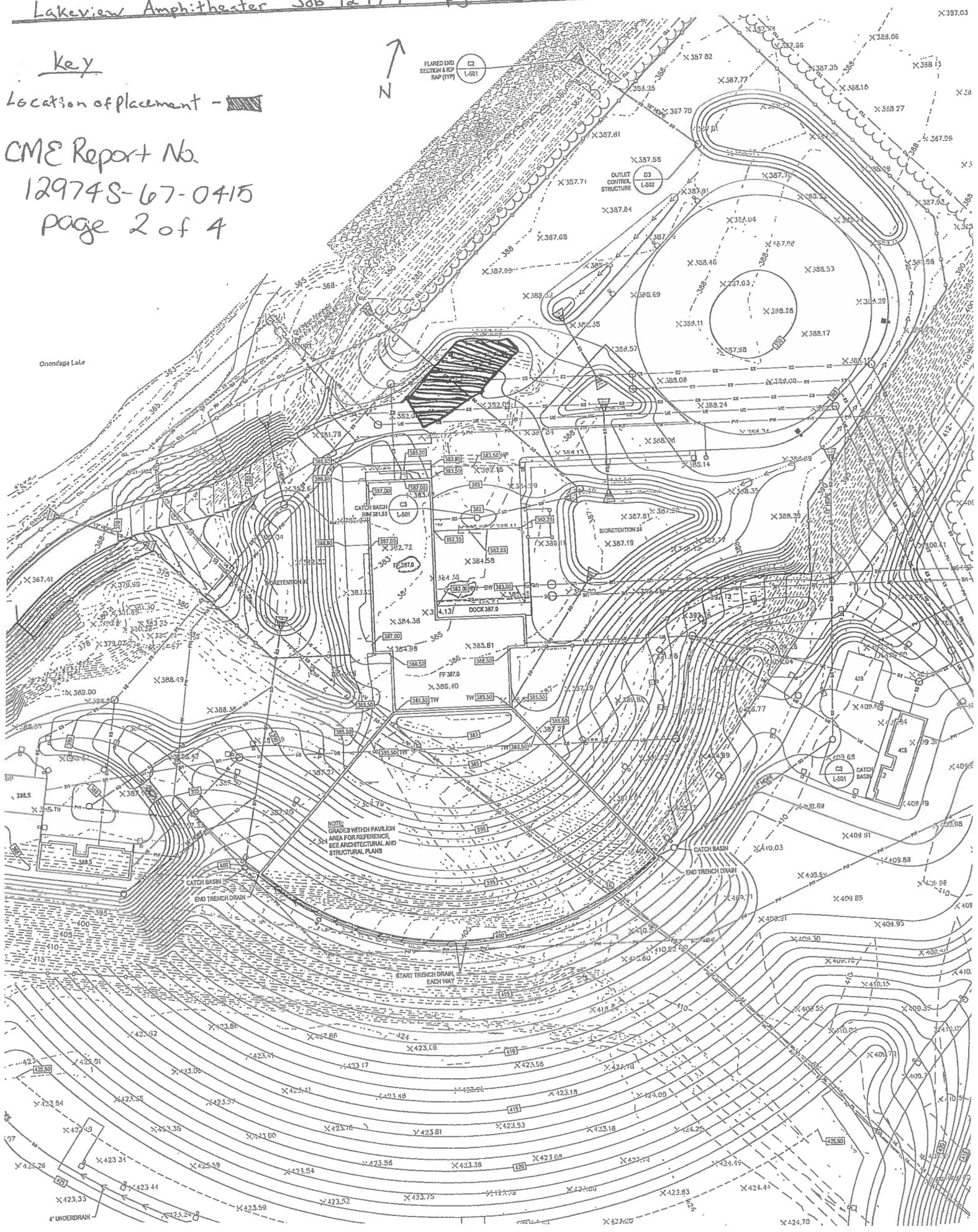
In the proposed road area (please refer to page 3 for location), two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

In the proposed grass area (please refer to page 4 for location), two lifts of Crushed Shale, approximately 12" thick each, were placed. Geotextile fabric was placed prior to the placement of Crushed Shale on top of exposed Solvay Waste. Each lift was compacted. Please refer to today's In-Place Field Density Test Report for satisfactory test results.

key

Location of placement - [hatched box symbol]

CME Report No.  
12974S-67-0415  
page 2 of 4



Key

Location of Placement - 

CME Report No 12974S-67-0415  
page 3 of 4



Key

Location of Placement -

Horner Family Property  
County of Platte  
Tax Map No. 261-02  
Leaf 1 of 4 - Page 4 of 4





# Soil Nuclear Gauge

12974S-68-0415  
 Report Date: 4/24/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
24		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.4	109.8	6	87	85	DP
25		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.1	109.9	6	87	85	DP
26		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	10.6	110.4	6	87	85	DP
27		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	11.6	112.8	6	89	85	DP
28		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	12	112.5	6	89	85	DP
29		4/21/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	11.4	113.6	6	90	85	DP

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
24	Subgrade Fill: See attached map location 1	2.0	' Below subgrade	14201	Boronczyk, Anthony
25	Subgrade Fill: See attached map location 2	2.0	' Below subgrade	14201	Boronczyk, Anthony
26	Subgrade Fill: See attached map location 3	2.0	' Below subgrade	14201	Boronczyk, Anthony
27	Subgrade Fill: See attached map location 3	1.0	' Below subgrade	14201	Boronczyk, Anthony



# Soil Nuclear Gauge

**12974S-68-0415**  
**Report Date:** 4/24/2015  
**Test Method:** ASTM D 6938

**Client:**  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

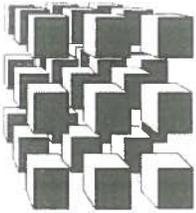
**Project:**  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

28	Subgrade Fill: See attached map location 2	1.0	' Below subgrade	14201	Boronczyk, Anthony
29	Subgrade Fill: See attached map location 1	1.0	' Below subgrade	14201	Boronczyk, Anthony
Remarks		Comments		Related Tests	
DP: Density Pass		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"		<b>Test #</b>	<b>Related Test #</b>
				<b>Test Type</b>	

Christopher R. Paolini, P.E.  
 Apr 24 2015





**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 23, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager  
**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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1

<u>Report Number</u>
12974S-69-0415
12974S-70-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.kmg

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

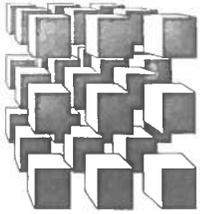
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies

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---

## *DAILY PROGRESS REPORT*

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-69-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/22/15      **WEATHER:** Rain      **TEMPERATURE:** 50 °F

---

This CME Representative was on-site at the above referenced project to observe the placement of fill as pipe bedding and backfill for the proposed sewer line.

In the approximate area noted on page 2, 6" of ½" Minus Crushed Limestone was placed below the sewer pipe as pipe bedding. The pipe was placed, then, approximately 8" of Sand was placed on top of the sewer pipe. In the grass area on page 2, the trench was backfilled with one lift, approximately 24" thick, of previously excavated Solvay Waste, which was not compacted. In the proposed road area, on page 2, the trench was backfilled with one lift, approximately 24" thick of 4" Minus Crushed Gravel which was compacted with an excavator mounted tamper, until stable and non yielding.

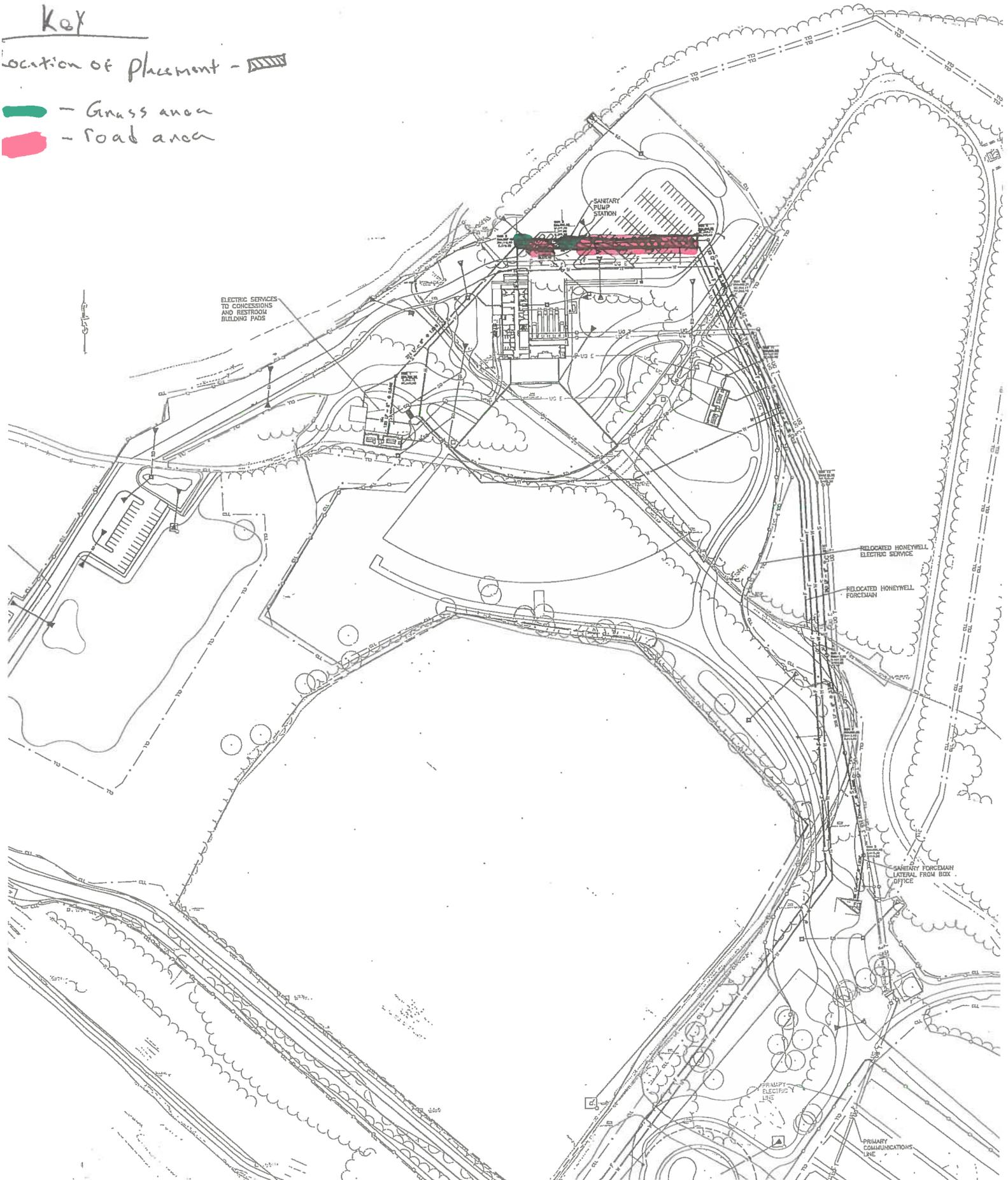
CME Report No 12974S-69-0415

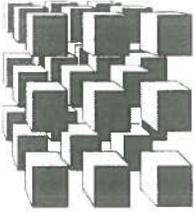
Key

Location of Placement - [hatched box symbol]

[green box symbol] - Grass area

[red box symbol] - Road area





**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 23, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager  
**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:  
 Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

	<u>Number of Copies</u>	<u>Report Number</u>
	1	12974S-69-0415
	1	12974S-70-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

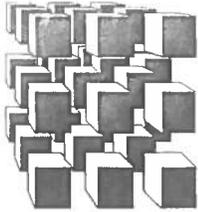
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-70-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/22/15      **WEATHER:** Rain      **TEMPERATURE:** 50 °F

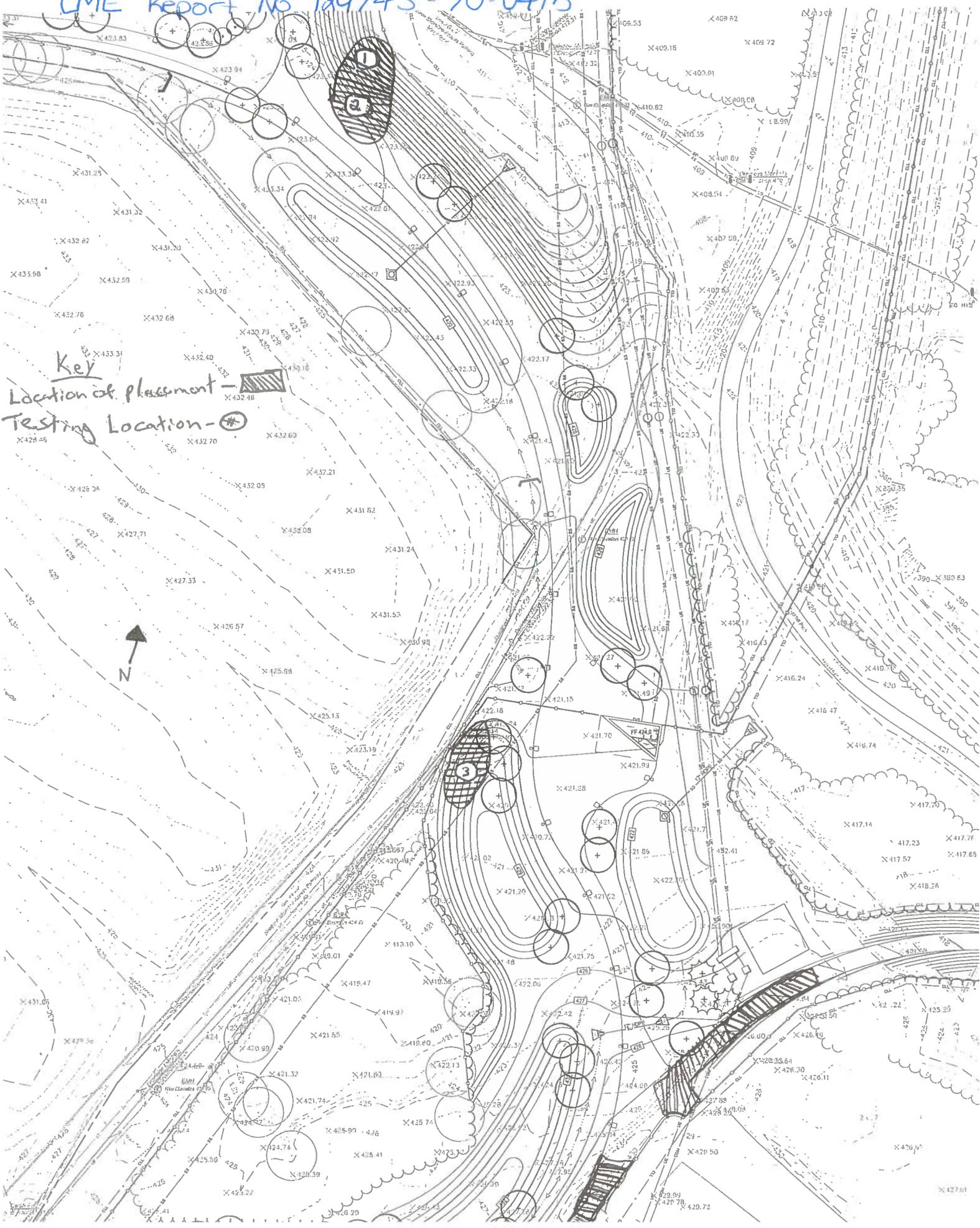
---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed grass area and in a proposed road area.

In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel. Four lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

In the proposed grass area (please refer to page 2 for location), no geotextile fabric was placed prior to the placement of Crushed Shale Fill on top of exposed Solvay Waste. One lift, approximately 12" thick, was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode, several times until stable and non-yielding. Please refer to today's In-Place Field Density Test Report for satisfactory test results.

CME Report No 12974S-70-0415



**Key**  
Location of placement - [shaded rectangle]  
Testing Location - [circle with cross]





# Soil Nuclear Gauge

12974S-71-0415  
 Report Date: 4/24/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

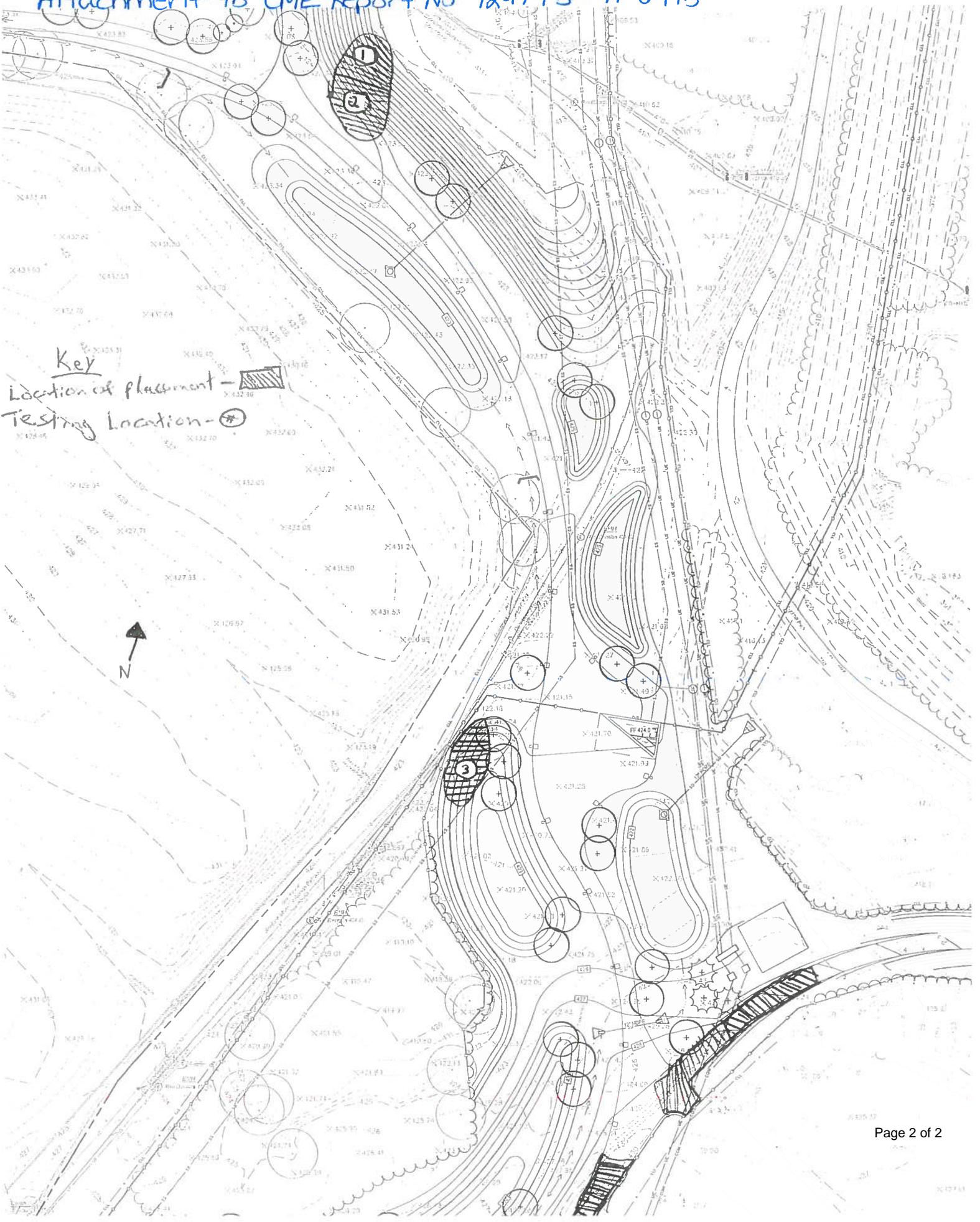
Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

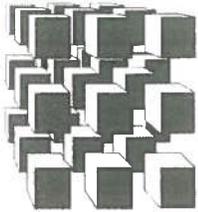
East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results														
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark	
30		4/22/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	13.8	109.1	10	86	85	DP	
31		4/22/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	13.6	109.0	10	86	85	DP	
32		4/22/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	13.7	111.8	10	88	85	DP	
Test Information														
Test #	Test Location							Elevation	Reference	Gauge SN	Field Technician			
30	Subgrade Fill: See attached map location 1								sub-grade	14201	Boronczyk, Anthony			
31	Subgrade Fill: See attached map location 2								sub-grade	14201	Boronczyk, Anthony			
32	Subgrade Fill: See attached map location 3								sub-grade	14201	Boronczyk, Anthony			
Remarks						Comments				Related Tests				
DP: Density Pass						Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"				Test #	Related Test #	Test Type		

Christopher R. Paolini, P.E.  
 Apr 24 2015

Attachment to CME Report No 12974S-71-0415





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 East Syracuse, New York 13057  
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## Transmittal

April 24, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-72-0415  
 12974S-73-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

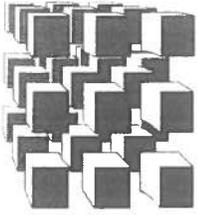
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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(315) 701-0526 (Fax)

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-72-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/23/15      **WEATHER:** Overcast / Rain      **TEMPERATURE:** 40 ° F

---

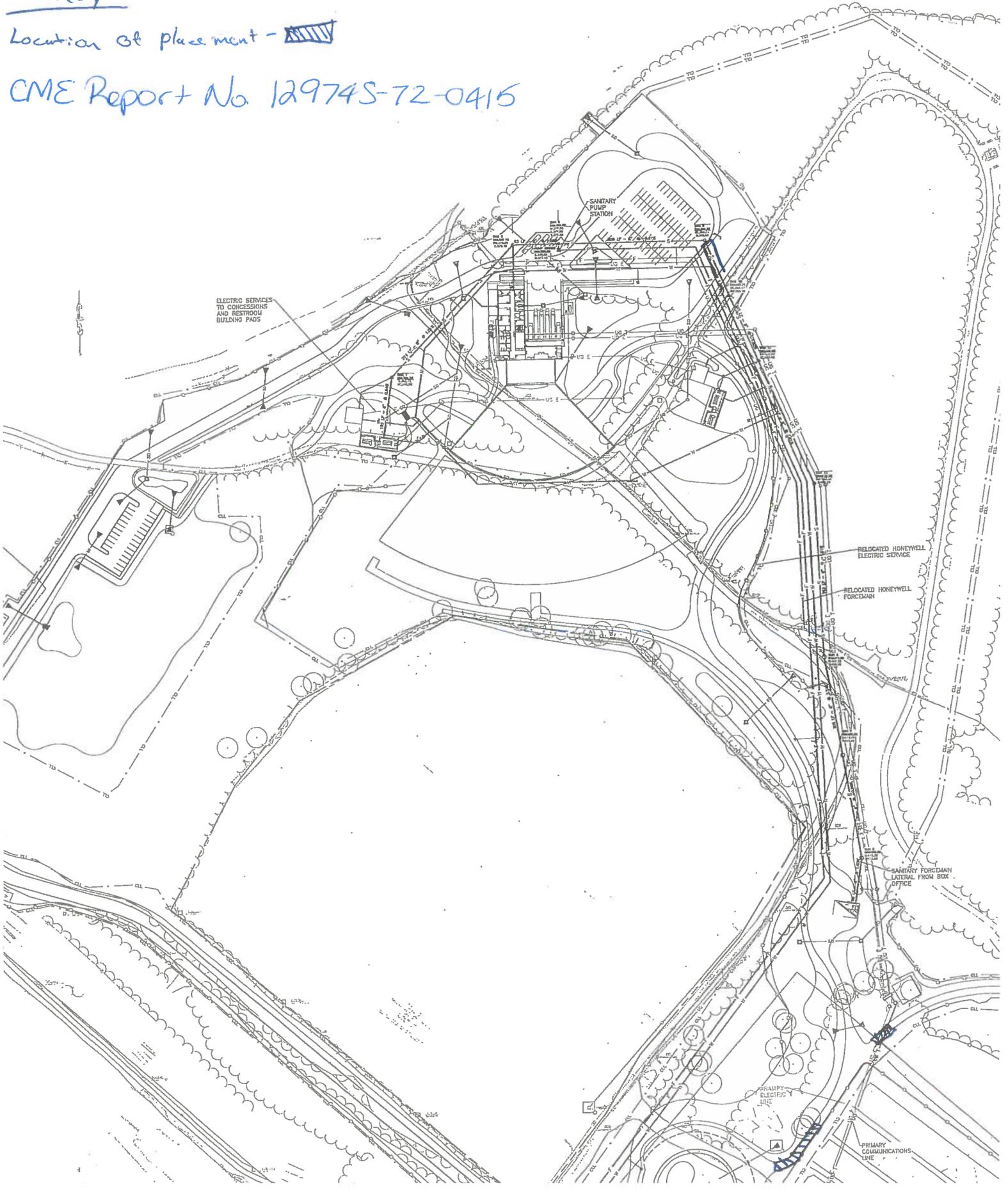
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in a proposed road area.

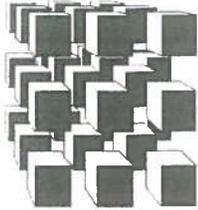
In the proposed road area (please refer to page 2 for location), geotextile fabric was placed prior to the placement of 4" Minus Crushed Gravel. Two lifts, approximately 12" thick each, were placed. Each lift was rolled and compacted with a 30-ton roller on vibratory mode, several times. On the last pass of each lift, the fill was stable and non yielding.

Key

Location of placement - 

CME Report No. 12974S-72-0415





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 East Syracuse, New York 13057  
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 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 24, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-72-0415  
 12974S-73-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-73-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/23/15      **WEATHER:** Overcast / Rain      **TEMPERATURE:** 40 °F

---

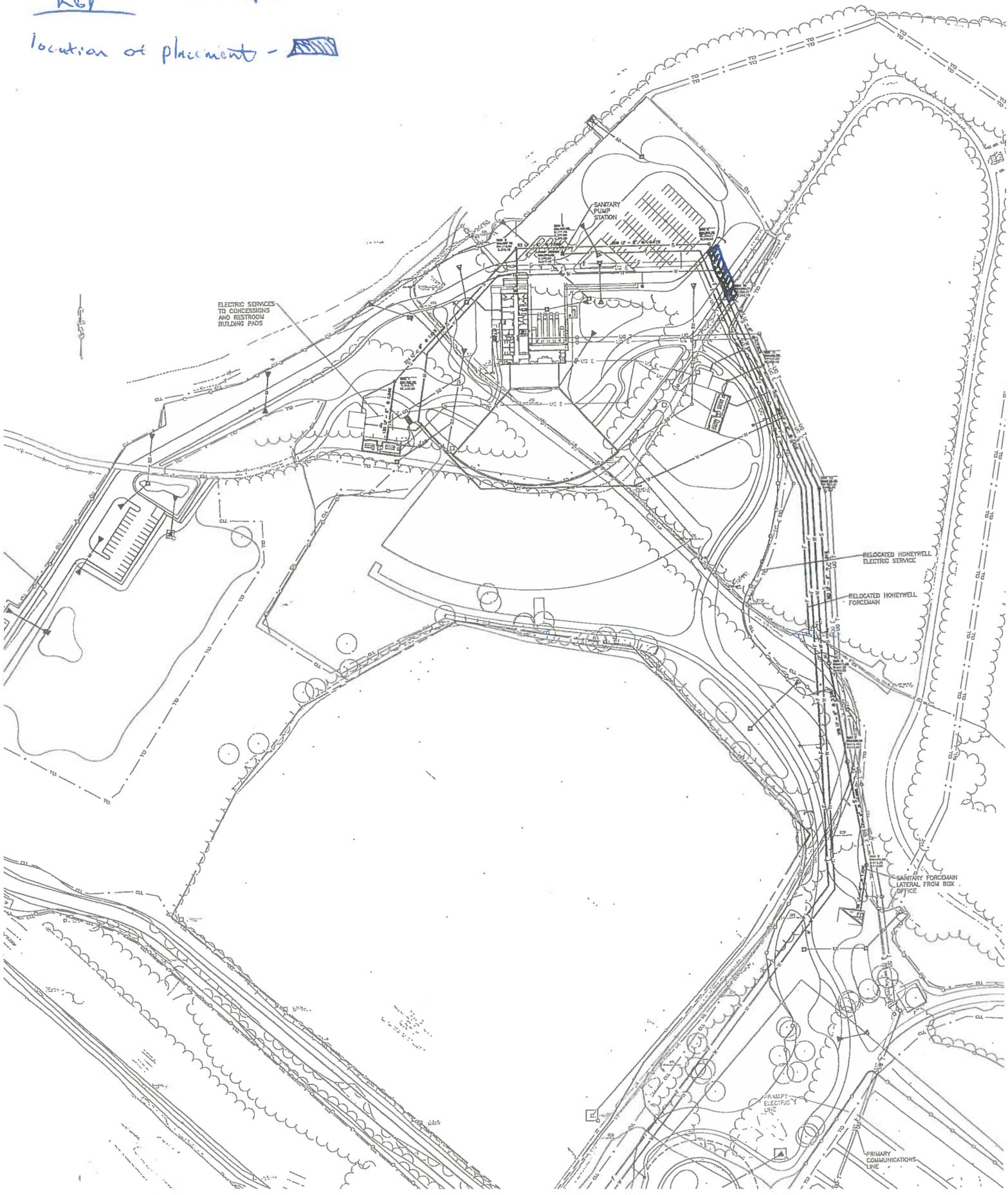
This CME Representative was on-site at the above referenced project to observe the placement of fill as pipe bedding and backfill for the proposed sewer line.

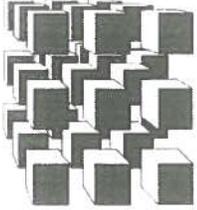
In the approximate area noted on page 2, 6" of ½" Minus Crushed Limestone was placed below the sewer pipe as pipe bedding. The pipe was then placed. Then, approximately 8" of Item 4 Gravel was placed on top of the sewer pipe. Then, the trench was backfilled with previously excavated Solvay Waste, which was not compacted.

CME Report No 12974S-73-0415

Key

location of placement - 





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**Associates, Inc.**

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 East Syracuse, New York 13057  
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 (315) 701-0526 (Fax)  
 www.cmeassociates.com

## Transmittal

April 27, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>
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<u>Report Number</u>
12974S-74-0415
12974S-75-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

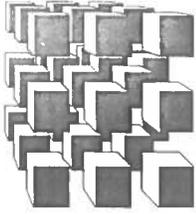
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-74-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/24/15      **WEATHER:** Overcast / Snow      **TEMPERATURE:** 40 °F

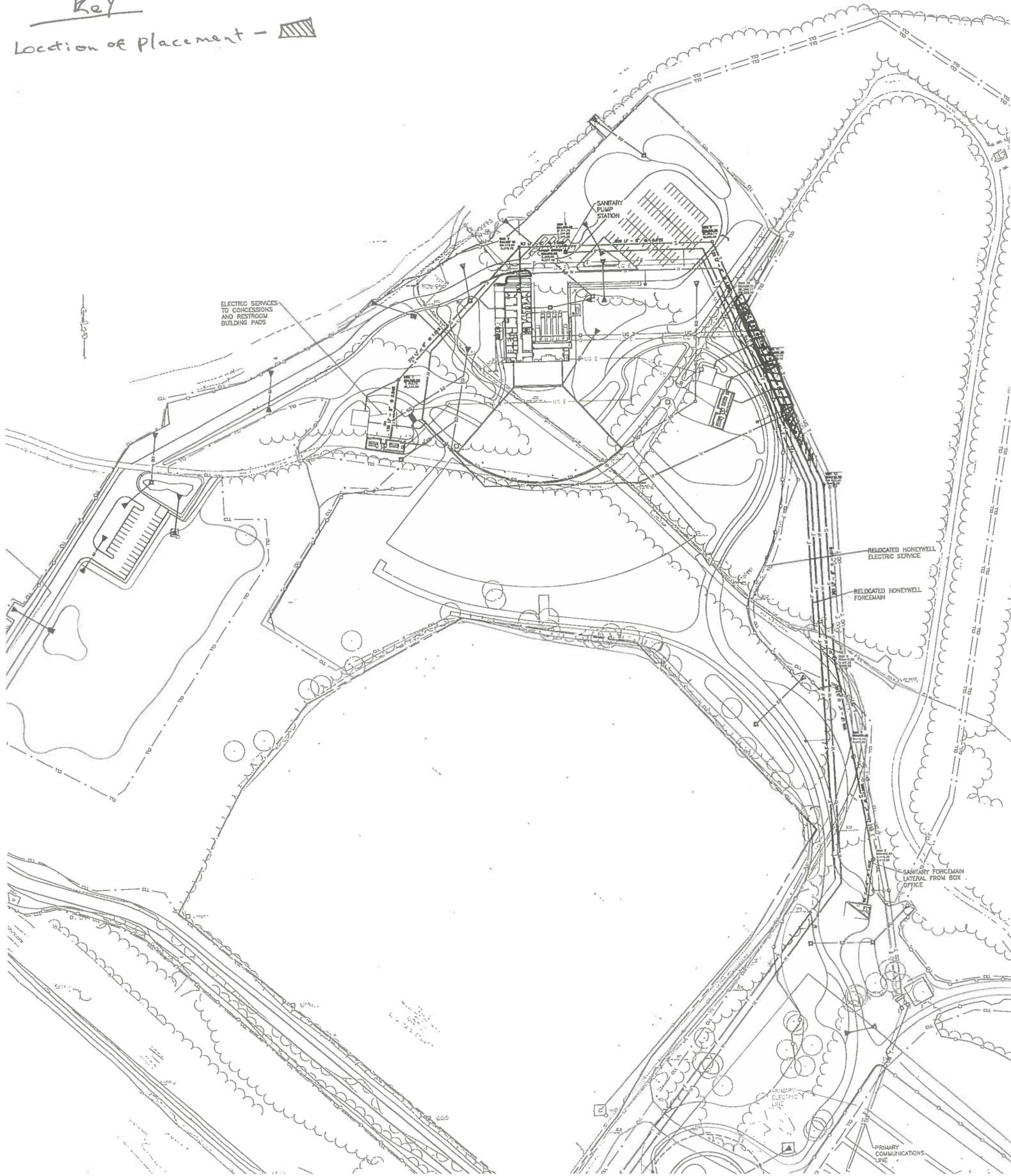
---

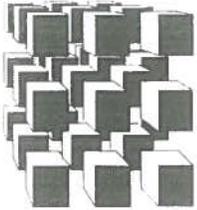
This CME Representative was on-site at the above referenced project to observe the placement of pipe bedding and backfill for the proposed sewer line.

In the approximate area noted on page 2, 6" of ½" Minus Crushed Limestone was placed below the sewer pipe as pipe bedding, which was uncompacted. The pipe was placed. Then, approximately 6" of Item 4 Gravel with Sand was placed on top of the sewer pipe and pipe bedding. Then, the trench was backfilled with previously excavated Solvay Waste, which was not compacted.

Key

Location of placement - 





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**Associates, Inc.**

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 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 27, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-74-0415
1	12974S-75-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

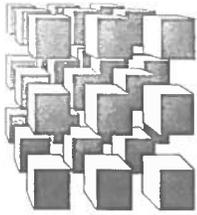
Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies

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(315) 701-0526 (Fax)

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-75-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/24/15      **WEATHER:** Overcast / Snow      **TEMPERATURE:** 40 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material in proposed structural areas.

In the proposed structural areas (please refer to page 2 for location), one lift, approximately 16" thick, of 4" Minus Crushed Gravel was placed inside the cast-in-place foundation walls. This lift was then compacted with a hand operated plate tamper until stable and non-yielding. Then, one lift, approximately 16" thick, of Item 4 Gravel (Riccelli Enterprises, Granby Pit) was placed against the interior and exterior sides of foundations walls (please refer to page 2 for location). This lift was then compacted with a hand operated plate tamper until stable and non-yielding.

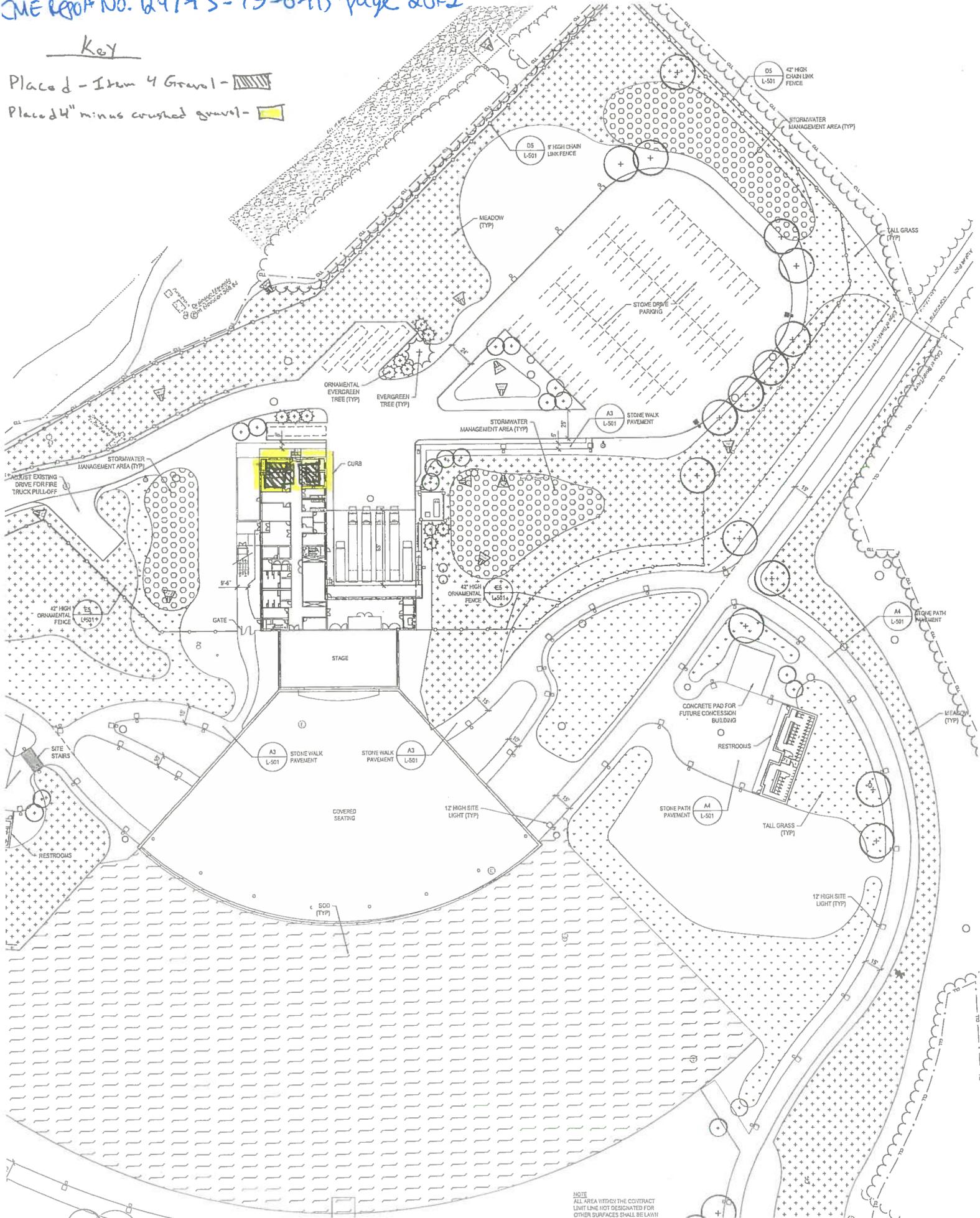
I spoke with Mr. Jim Stewart, P.E., of John P. Stopen Engineering, LLP and was informed that backfill placed inside the building area does not require in-place density testing. Please refer to today's In-Place Field Density Test Report for satisfactory density testing results taken on the exterior of the foundation walls.

CME Rep# No. 12974 S-75-0415 page 2 of 2

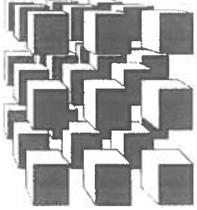
Key

Placed 4" minus crushed gravel - [hatched pattern]

Placed 4" minus crushed gravel - [yellow box]



NOTE: ALL AREA WITHIN THE CONTRACT LIMIT LINE NOT DESIGNATED FOR OTHER SURFACES SHALL BE LAWN



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**Associates, Inc.**

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 East Syracuse, New York 13057  
 (315) 701-0522  
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## Transmittal

April 27, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
 12974S-77-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.kmg

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

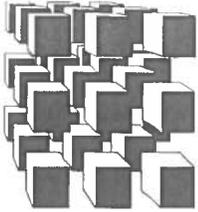
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
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 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
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 Hueber Breuer Construction

Via e-reporting:  
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## *DAILY PROGRESS REPORT*

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-77-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/25/15      **WEATHER:** Clear      **TEMPERATURE:** 40 ° F

---

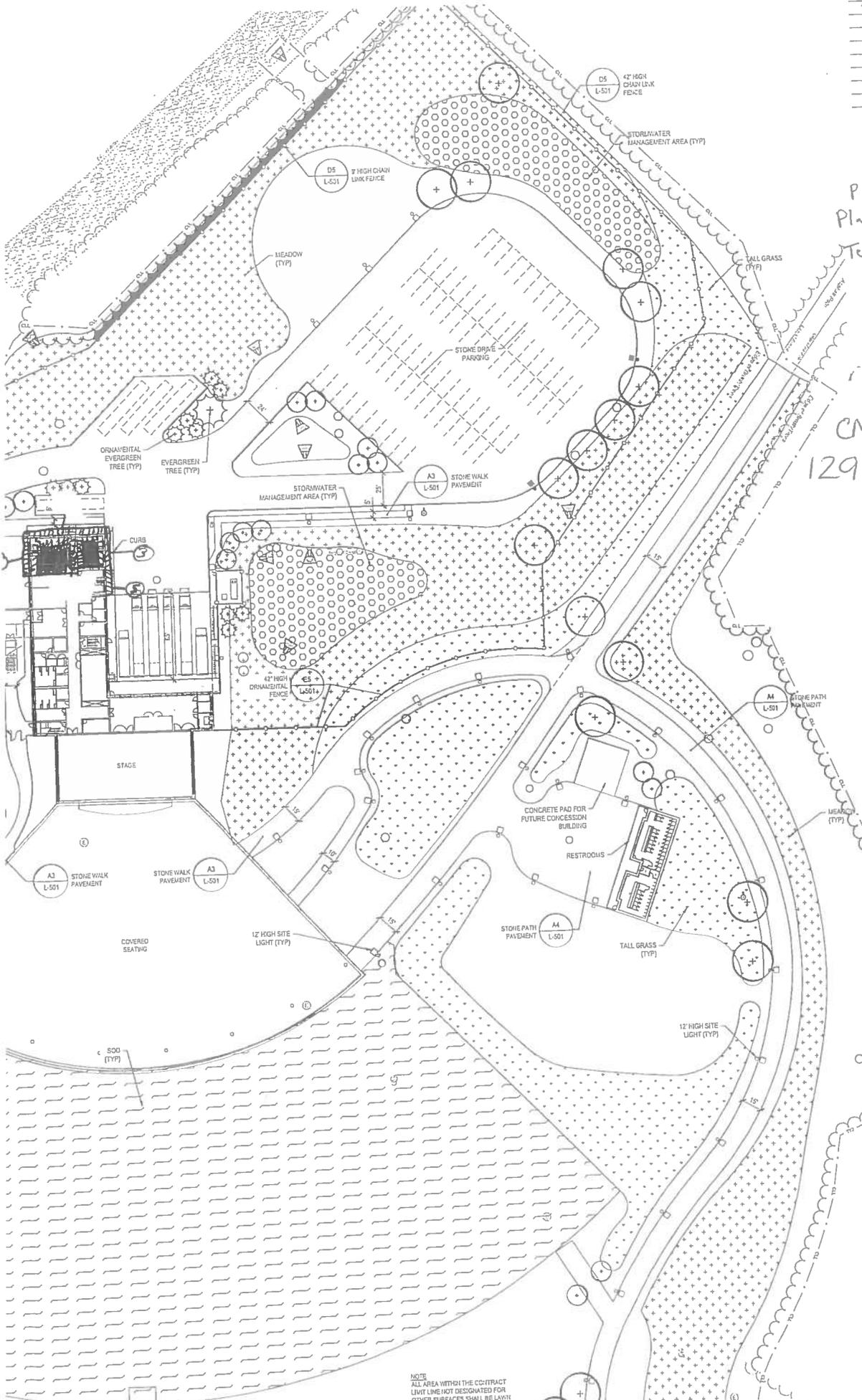
This CME Representative was on-site at the above referenced project to observe the placement and compaction of subgrade material inside structural areas.

In proposed structural areas (please refer to page 2 for location), one lift, approximately 16" thick, of 4" Minus Crushed Gravel was placed against cast-in-place foundation walls (inside of walls). This lift was then compacted with a hand operated plate tamper until stable and non-yielding. One lift, approximately 16" thick, of Item 4 Gravel (Riccelli Enterprises, Granby Pit) was placed along the exterior sides of foundation walls (see attached map). This lift was then compacted with a hand operated plate tamper, until stable and non-yielding. Please refer to today's In-Place Field Density Test Report for satisfactory density test results for the areas on the exterior of the foundation wall. I spoke with Jim Stewart, P.E. with John P. Stopen Engineering, LLP and on fill that is placed inside the building area, density testing is not required.

Issued / Revised		
No.	Date	Desc-p
1	12/12/2014	P CIG T

Key  
 Placed Item 4 - [diagonal hatching]  
 Placed 4" minus crushed gravel - [stippled pattern]  
 Testing location - [circle with crosshair]

CME Report No.  
 12974S-77-0415



Not For Construction

Client  
 Gilbane  
 Onondaga Lakeview Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

Westlake Reed Leskosky  
 1201 Broadway  
 Suite 1008  
 New York, New York 10001  
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 F 212.659.0050  
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 QPK DESIGN  
 450 S Salina St.  
 Room 500  
 Syracuse, NY 13202  
 T 315.472.7805  
 F 315.472.7800



# Soil Nuclear Gauge

12974S-78-0415  
 Report Date: 6/17/2015  
 Test Method: ASTM D 6938

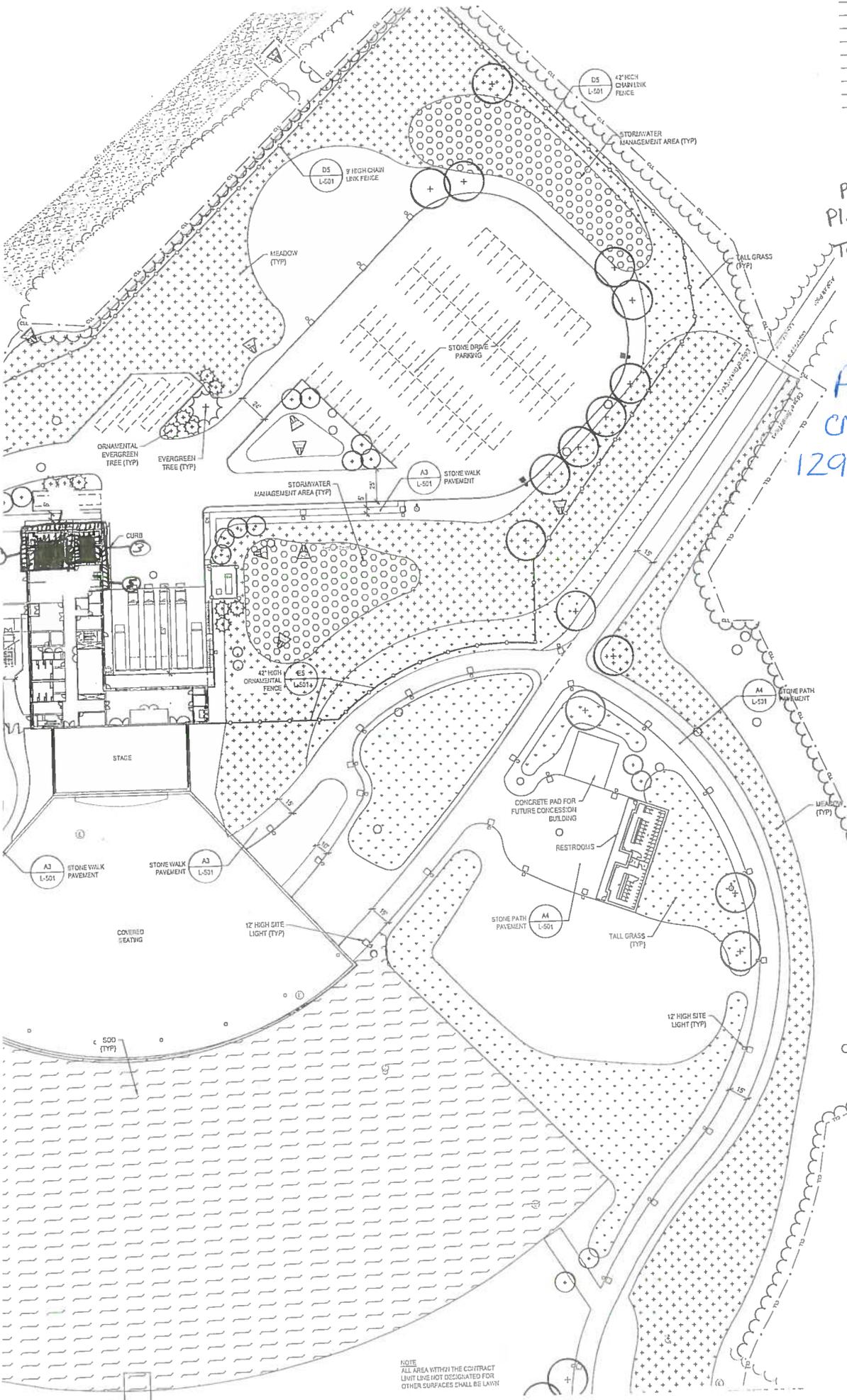
Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
49		4/25/15	Item 4 - W.D. Malone	B	GW	6.6	136.6	6.4	130.7	10	96	95	
50		4/25/15	Item 4 - W.D. Malone	B	GW	6.6	136.6	6	132.2	10	97	95	
51		4/25/15	Item 4 - W.D. Malone	B	GW	6.6	136.6	6.1	133.2	10	98	95	
Test Information													
Test #	Test Location						Elevation	Reference	Gauge Make / Model / SN			Field Technician	
49	Structural Fill: See attached map location 1							sub-grade	Troxler 3411B 14201			Boronczyk, Anthony	
50	Structural Fill: See attached map location 3							sub-grade	Troxler 3411B 14201			Boronczyk, Anthony	
51	Structural Fill: See attached map location 5							sub-grade	Troxler 3411B 14201			Boronczyk, Anthony	
Remarks						Comments				Related Tests			
						Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter". Gauge calibration data on file with the testing agency.				Test #	Related Test #	Test Type	

Issued / Revised		
No.	Date	Description
1	12/12/2014	PRICING SET



Key  
 Placed Item 4 - [Symbol]  
 Placed 4" minus crushed gravel - [Symbol]  
 Testing location - [Symbol]

Attachment for  
 CME Report No.  
 12974S-78-0415

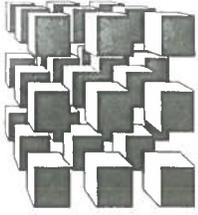
**Not For Construction**

Client  
**Gilbane Onondaga Lakeview Amphitheater**  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

**Westlake Reed Leskosky**  
 1201 Broadway  
 Suite 1008  
 New York, New York 10001  
 T 212.564.8705  
 F 212.659.0050  
 www.WRLdesign.com  
 © Westlake Reed Leskosky

**QPK DESIGN**  
 450 S Salina St.  
 Room 500  
 Syracuse, NY 13202  
 T 315.472.7805  
 F 315.472.7800

NOTE  
 ALL AREA WITHIN THE CONTRACT  
 LIMIT LINE NOT DESIGNATED FOR  
 OTHER SURFACES SHALL BE LAWN



**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

April 28, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-79-0415
1	12974S-80-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

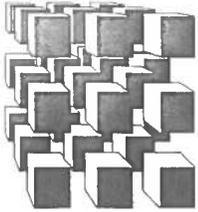
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

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---

## *DAILY PROGRESS REPORT*

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-79-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/27/15      **WEATHER:** Overcast      **TEMPERATURE:** 45 °F

---

This CME Representative was on-site at the above referenced project to observe the placement of fill material as pipe bedding for the proposed sewer pipe.

In the approximate area shown on page 2 of this report, approximately 12" of ½" Minus Crushed Limestone was placed as pipe bedding for the proposed sewer. The ½" Minus Crushed Limestone was not compacted. After the placement of the sewer pipe, an additional 6" of ½" Minus Crushed Limestone was placed, but was not compacted. The trench was then backfilled with approximately 24" of previously excavated Solvay Waste, which was not compacted.

No.	Date	Description
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key

location placed -



For Construction

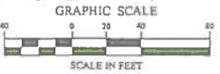
Client  
**Gilbane**  
**Onondaga Lakeview Amphitheater**  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

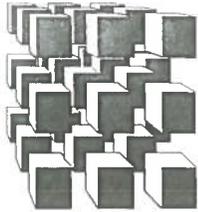
**Westlake Reed Leskosky**  
 1201 Broadway  
 Suite 1006  
 New York, New York 10001  
 T 212.564.8705  
 F 212.659.0050  
 www.WRLdesign.com  
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**QPK DESIGN**  
 450 S Salina St.  
 Room 500  
 Syracuse, NY 13202  
 T 315.472.7806  
 F 315.472.7800



UTILITY PLAN  
**HONEYWELL RELOCATION PLAN**  
**CU-010**





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**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)  
 www.cmeassociates.com

## Transmittal

April 28, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

<u>Number of Copies</u>	<u>Report Number</u>
1	12974S-79-0415
1	12974S-80-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

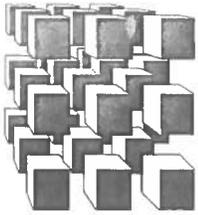
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 3      **REPORT NO.:** 12974S-80-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/27/15      **WEATHER:** Overcast      **TEMPERATURE:** 45 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in proposed grass and structural areas.

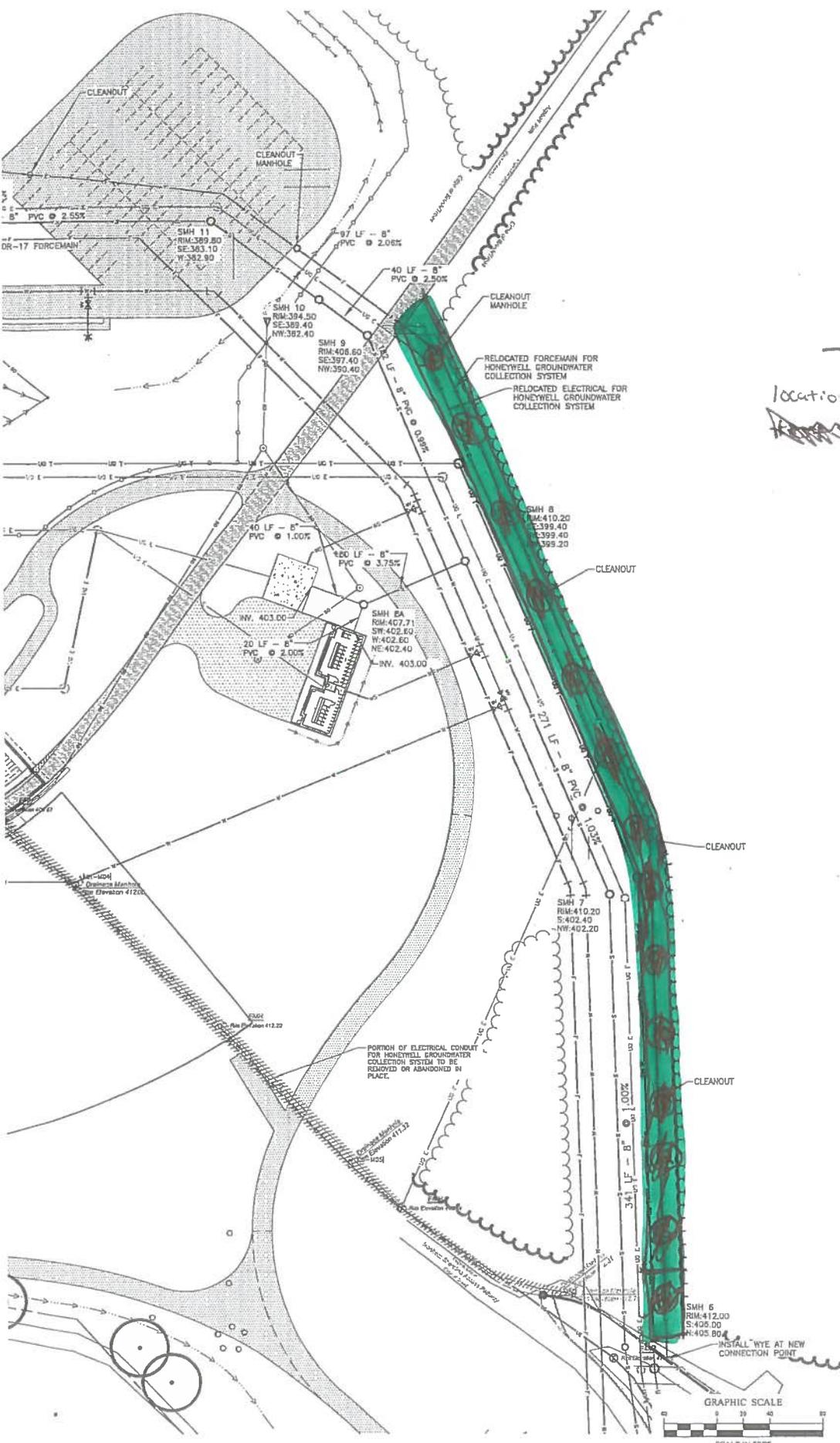
In the proposed grass area (please refer to page 2 for locations), geotextile fabric was placed prior to the placement of Crushed Shale Fill on top of exposed Solvay Waste. One lift, approximately 24" thick was placed. This lift was not compacted at the time of placement.

In the proposed structural area (please refer to page 3 for location), one approximately 16" thick lift of Item 4 (Riccelli Enterprises, Granby Pit) was placed against recently placed cast-in-place foundation walls and grade beams. This lift was then compacted with a hand operated plate tamper, until stable and non-yielding. According to Mr. Jim Stewart, P.E. in-place field density testing is not required on this material, because this area will receive a structural slab.

No.	Date	Description
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key  
 location of placement -



For  
Construction

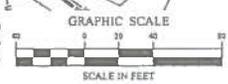
Client  
**Gilbane**  
**Onondaga Lakeview**  
**Amphitheater**  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

**Westlake**  
**Reed**  
**Leskosky**  
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 New York, New York 10001  
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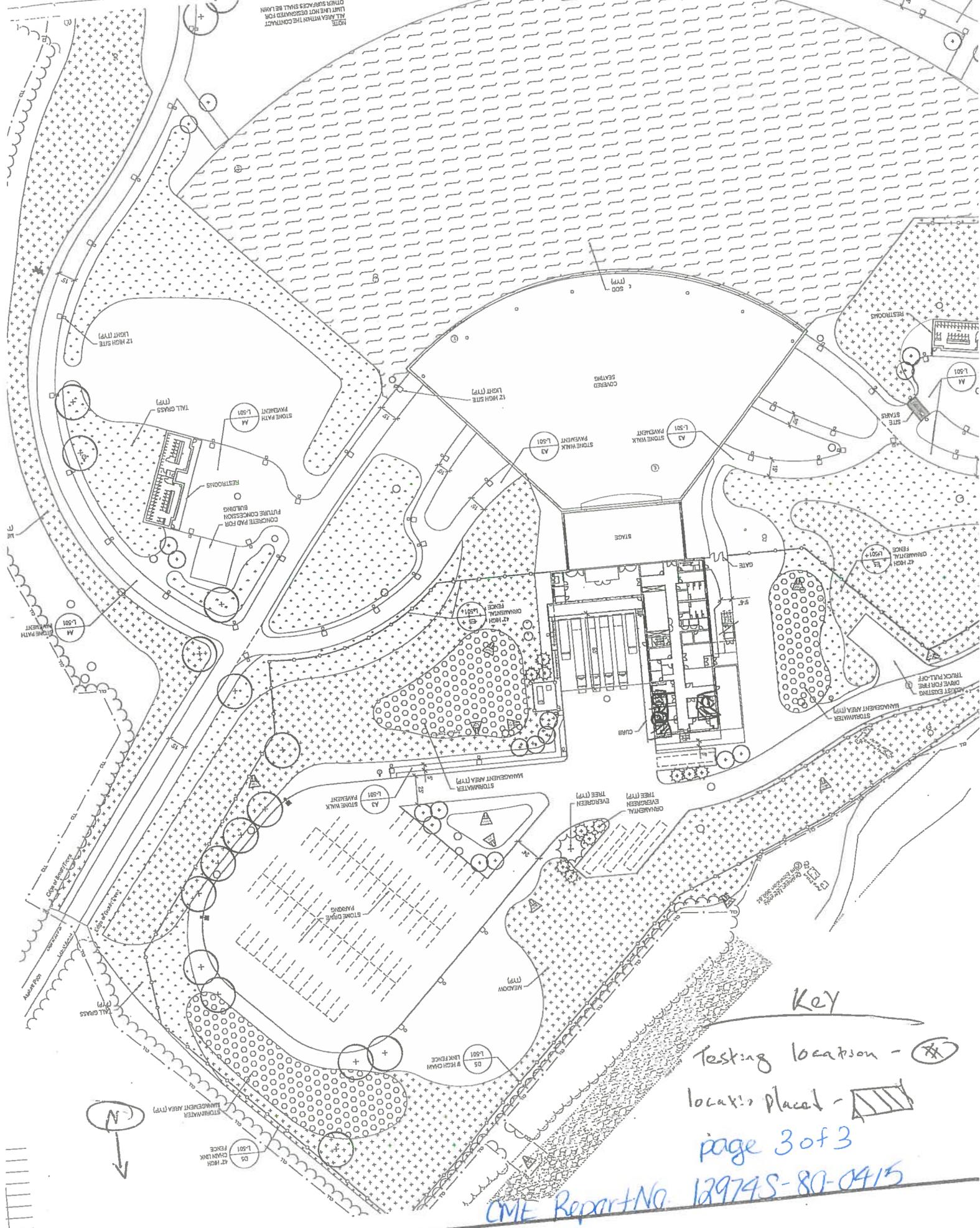
UTILITY PLAN  
**HONEYWELL**  
**RELOCATION PLAN**  
**CU-010**



CME Report No. 12974-S-80-0415  
 Lakeview amphitheater 4/27/15

page 2 of 3  
 AB

NOTE: ALL AREAS WITHIN THE CONTRACT LIMIT LINES ARE DESIGNATED FOR OTHER SURFACES SHALL BE LAYIN



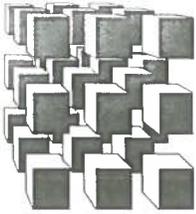
Key

Testing location -

location placed -

page 3 of 3

CME Report No. 12974S-80-0415



**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)  
www.cmeassociates.com

## Transmittal

April 29, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
1

Report Number  
12974S-82-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

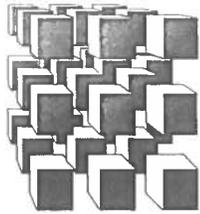
Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies



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East Syracuse, New York 13057  
(315) 701-0522  
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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-82-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/28/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 60 °F

---

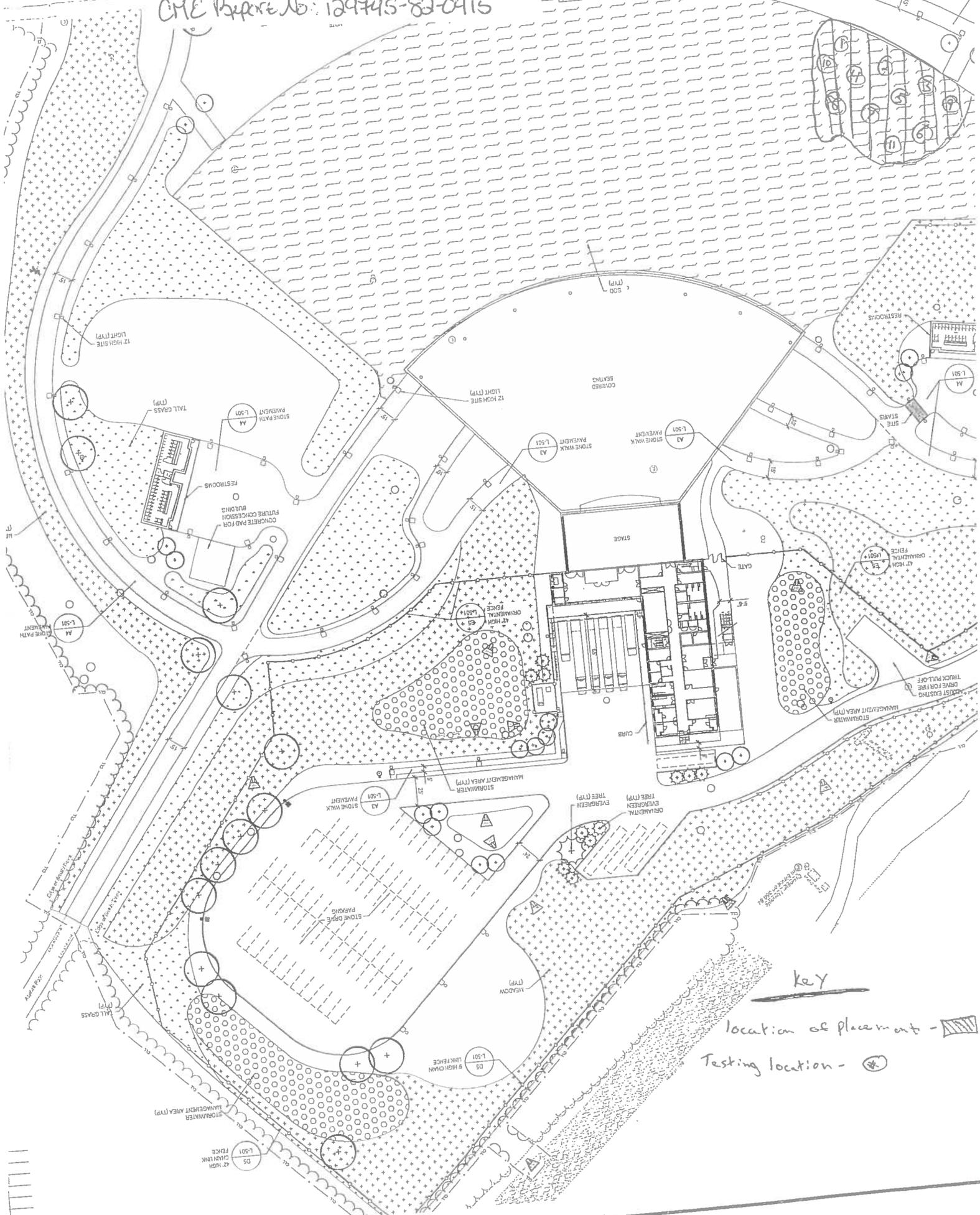
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

In the proposed grass area (please refer to page 2 for locations), one lift, approximately 8" thick, of Type 4 Gravel (Syracuse Sand & Gravel, Granby Pit) was placed. This lift was rolled and compacted with a 30-ton roller on vibratory mode several times. On the last pass with the roller, the fill was stable and non-yielding. Please refer to today's In-Place Field Density Test Report, for details.

This Representative was notified by Mr. Jim Stewart that nuclear density testing is not required for any areas where there is a proposed structural slab.

Lakeview Amphitheater Job # 12974 4/28/15 PS 2082

CME Project No: 129745-83-0415



key

location of placement - [hatched pattern]

Testing location - [circled X]



# Soil Nuclear Gauge

12974S-83-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
57		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	9.3	122.1	6	92	85	
58		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	10.3	120.2	6	90	85	
59		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	5.9	127.3	6	95	85	
60		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.4	122.6	6	92	85	
61		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.9	121.7	6	91	85	
62		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.4	124.9	6	94	85	
63		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.5	127.2	6	95	85	



# Soil Nuclear Gauge

12974S-83-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

64		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.9	124.9	6	94	85	
----	--	---------	---	---	--------	-----	-------	-----	-------	---	----	----	--

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
57	Sub-base Fill: See attached map location 1		Top of Fill	22427	Boronczyk, Anthony
58	Sub-base Fill: See attached map location 2		Top of Fill	22427	Boronczyk, Anthony
59	Sub-base Fill: See attached map location 3		Top of Fill	22427	Boronczyk, Anthony
60	Sub-base Fill: See attached map location 4		Top of Fill	22427	Boronczyk, Anthony
61	Sub-base Fill: See attached map location 5		Top of Fill	22427	Boronczyk, Anthony
62	Sub-base Fill: See attached map location 6		Top of Fill	22427	Boronczyk, Anthony
63	Sub-base Fill: See attached map location 7		Top of Fill	22427	Boronczyk, Anthony
64	Sub-base Fill: See attached map location 8		Top of Fill	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			



# Soil Nuclear Gauge

12974S-83-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

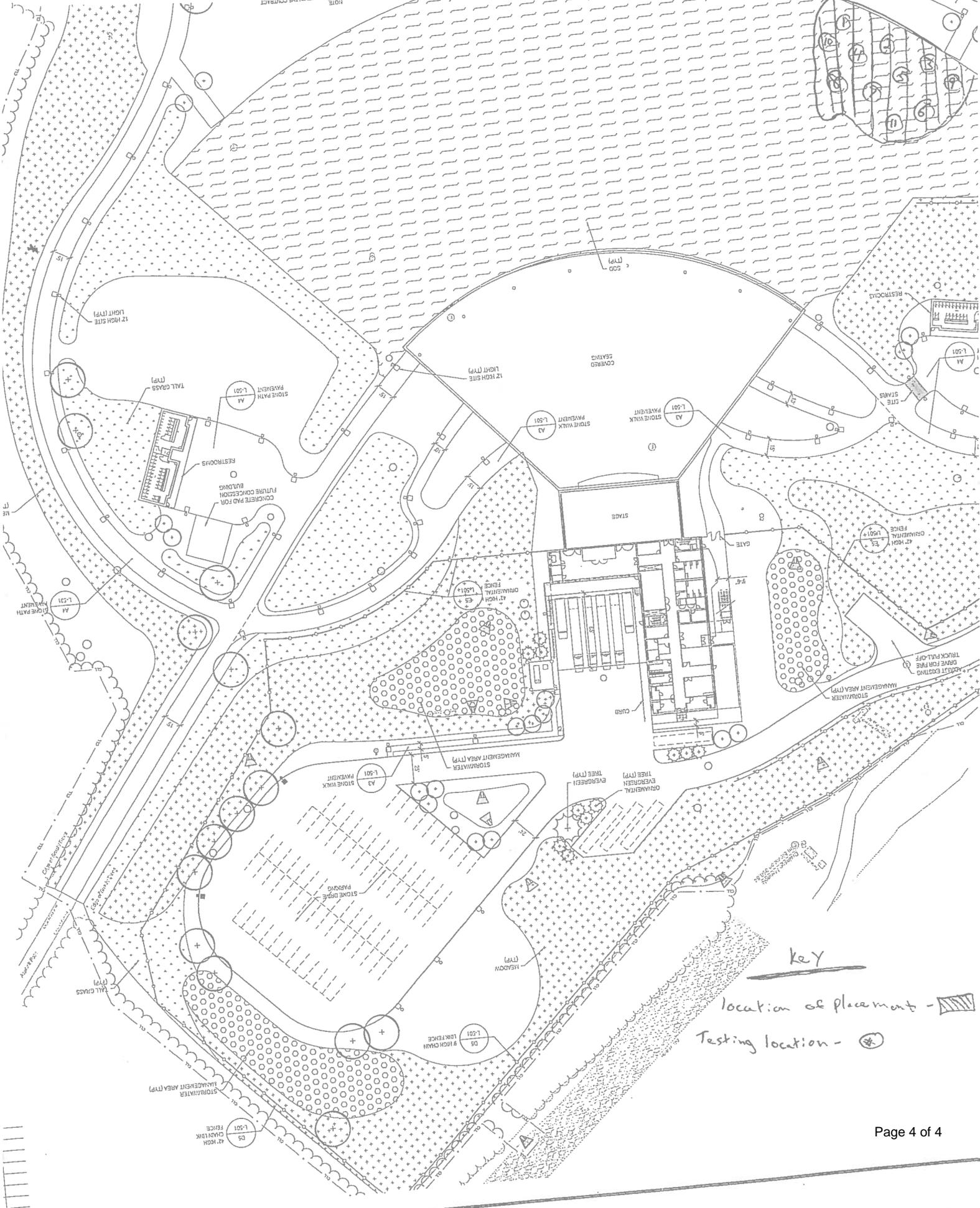
Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results														
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark	
65		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.3	127.7	6	96	85		
66		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.2	128.1	6	96	85		
67		4/28/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.9	126.8	6	95	85		
Test Information														
Test #	Test Location							Elevation	Reference	Gauge SN	Field Technician			
65	Sub-base Fill: See attached map location 9								Top of Fill	22427	Boronczyk, Anthony			
66	Sub-base Fill: See attached map location 10								Top of Fill	22427	Boronczyk, Anthony			
67	Sub-base Fill: See attached map location 11								Top of Fill	22427	Boronczyk, Anthony			
Remarks						Comments				Related Tests				
						Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"				Test #	Related Test #	Test Type		

Christopher R. Paolini, P.E.  
 May 10 2015



key

location of placement - [cross-in-square symbol]

Testing location - [cross-in-circle symbol]



# Soil Nuclear Gauge

12974S-84-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
68		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.3	122.9	6	92	85	
69		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.7	122.3	6	92	85	
70		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.2	126.4	6	95	85	
71		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.4	129.4	6	97	85	
72		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.2	126.4	6	95	85	
73		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.6	124.4	6	93	85	
74		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.5	123.3	6	92	85	



# Soil Nuclear Gauge

12974S-84-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

75		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.3	126.9	6	95	85	
----	--	---------	---	---	--------	-----	-------	-----	-------	---	----	----	--

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
68	Sub-base Fill: See attached map location 1		Top of subbase	22427	Boronczyk, Anthony
69	Sub-base Fill: See attached map location 2		Top of Sub-base	22427	Boronczyk, Anthony
70	Sub-base Fill: See attached map location 3		Top of Sub-base	22427	Boronczyk, Anthony
71	Sub-base Fill: See attached map location 4		Top of Sub-base	22427	Boronczyk, Anthony
72	Sub-base Fill: See attached map location 5		Top of Sub-base	22427	Boronczyk, Anthony
73	Sub-base Fill: See attached map location 6		Top of Sub-base	22427	Boronczyk, Anthony
74	Sub-base Fill: See attached map location 7		Top of Sub-base	22427	Boronczyk, Anthony
75	Sub-base Fill: See attached map location 8		Top of Sub-base	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			



# Soil Nuclear Gauge

12974S-84-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
76		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.2	128.6	6	96	85	
77		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.5	124.9	6	94	85	
78		4/29/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.9	126.6	6	95	85	

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
76	Sub-base Fill: See attached map location 9		Top of Sub-base	22427	Boronczyk, Anthony
77	Sub-base Fill: See attached map location 10		Top of Sub-base	22427	Boronczyk, Anthony
78	Sub-base Fill: See attached map location 11		Top of Sub-base	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	Test #	Related Test #	Test Type

Christopher R. Paolini, P.E.  
 May 10 2015

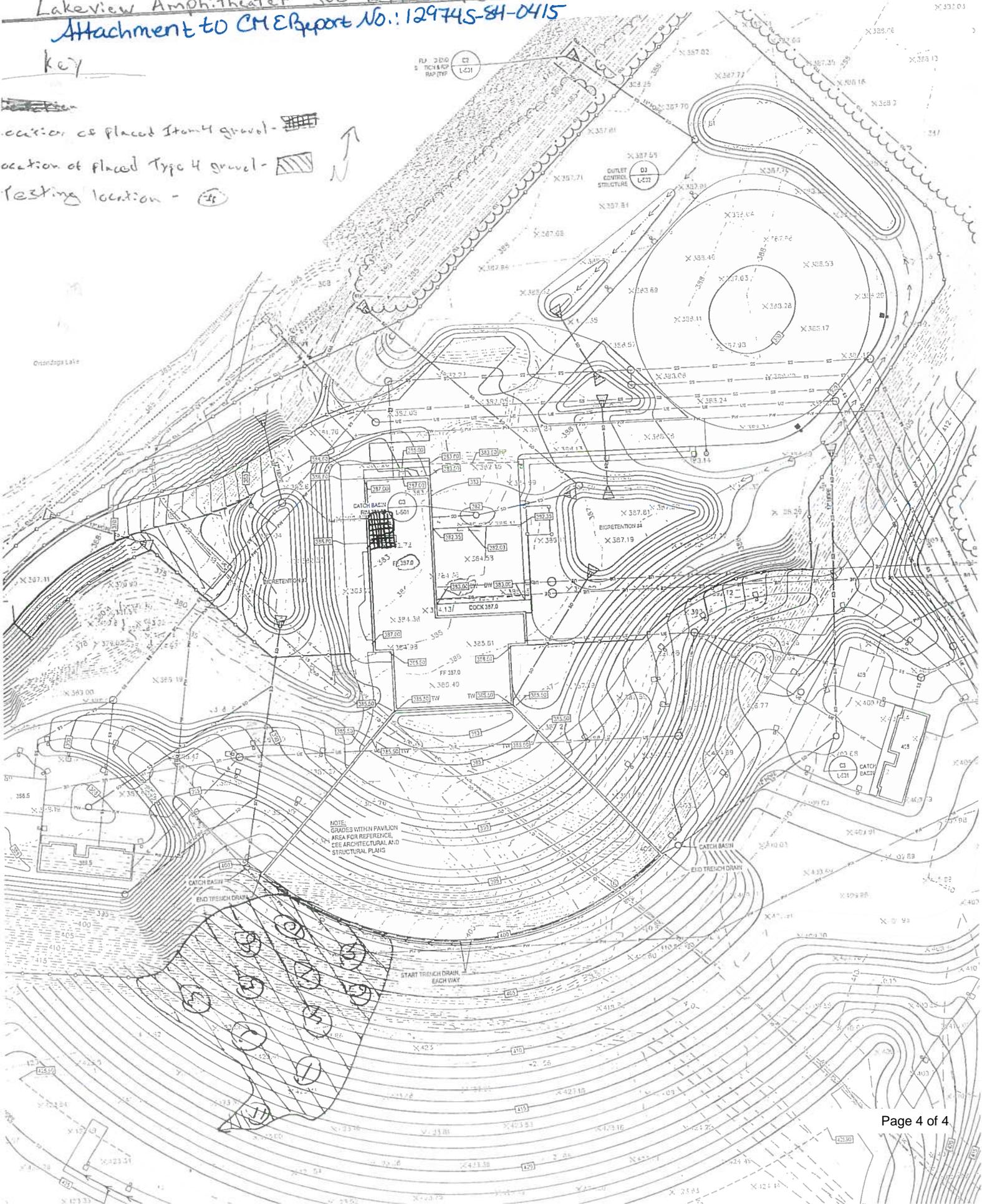
Lakeview Amphitheater Job # 12974  
 Attachment to CME Report No.: 12974S-81-0415

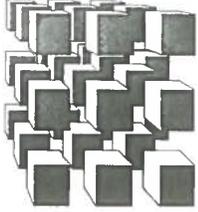
4/29/15

Drawing # L-109

key

- location of placed stone gravel - [hatched pattern]
- location of placed Type 4 gravel - [diagonal hatched pattern]
- testing location - (circle with 't')





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East Syracuse, New York 13057  
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## Transmittal

April 30, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-85-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

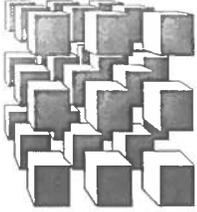
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-85-0415  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 04/29/15      **WEATHER:** Clear      **TEMPERATURE:** 62 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area. This Representative also observed the placement and compaction of backfill material in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), three lifts, approximately 12" thick each, of Item 4 Gravel, were placed, starting at approximately 3' below subgrade on the inside of cast-in-place grade beams. Each lift was compacted with a hand operated plate tamper. On the last pass of each lift, the fill was stable and non-yielding.

In the proposed grass area (please refer to page 2 for location), one lift, approximately 8" thick, of Type 4 Gravel was placed. This lift was then rolled several times with a 30-ton roller. In-place field density tests were taken. Please refer today's In-Place Field Density Test Report, for details.

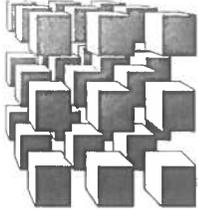
CME Report No.: 12974S-85-0415

Key

- Location of Placed Item 4 gravel - [hatched pattern]
- Location of placed Type 4 gravel - [diagonal hatched pattern]
- Testing location - (circle with crosshair)



NOTE: GRADES WITHIN PAVILION AREA FOR REFERENCE. SEE ARCHITECTURAL AND STRUCTURAL PLANS.



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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
1

Report Number  
12974S-86-0415

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

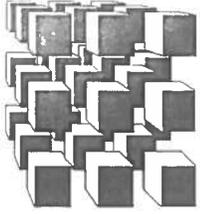
Via e-reporting: Mr. Gary Markinson  
(Concrete Only) Saunders Companies

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

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---

## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-86-0415  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 04/30/15      **WEATHER:** Clear      **TEMPERATURE:** 65 ° F

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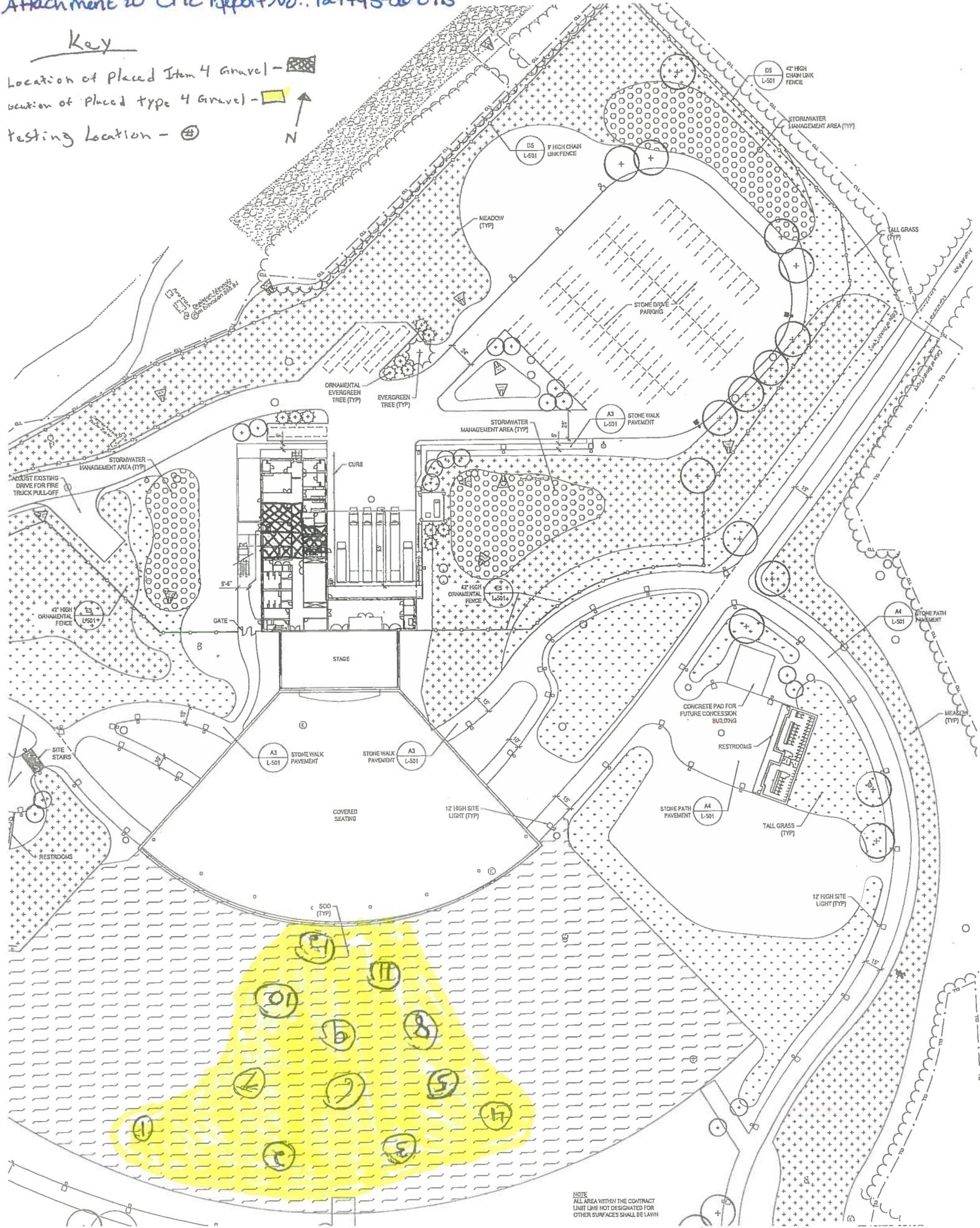
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area. This Representative also observed the placement and compaction of backfill material in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), two lifts, approximately 16" thick each, of Item 4 Gravel (Riccelli Enterprises, Granby Pit), were placed, starting at about approximately 32" below subgrade on the inside of cast-in-place foundation walls. Each lift was compacted with a hand operated plate tamper. On the last pass of each lift, the fill was stable and non-yielding.

In the proposed grass area (please refer to page 2 for location), one lift, approximately 8" thick, of Type 4 Gravel (Syracuse Sand & Gravel, Granby Pit) was placed. This lift was then rolled several times with a 30-ton roller on vibratory mode. On the last pass of the roller, the fill was stable and non-yielding. In-place field density tests were also taken. Please refer today's In-Place Field Density Test Report, for satisfactory test results.

Key

- Location of Placed Item 4 Gravel - [stippled pattern]
- Location of Placed type 4 Gravel - [yellow fill]
- Testing Location - [circle with crosshair]



NOTE  
ALL AREA WITHIN THE CONTRACT  
LIMIT LINE NOT DESIGNATED FOR  
OTHER SURFACES SHALL BE LAWN



# Soil Nuclear Gauge

12974S-87-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
79		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.4	123.7	6	93	85	
80		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.9	122.5	6	92	85	
81		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.9	122.4	6	92	85	
82		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.8	126.4	6	95	85	
83		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.9	125.2	6	94	85	
84		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.4	123.5	6	93	85	
85		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.7	125.3	6	94	85	



# Soil Nuclear Gauge

**12974S-87-0415**  
**Report Date:** 5/10/2015  
**Test Method:** ASTM D 6938

**Client:**  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

**Project:**  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

86		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.7	125.9	6	94	85	
----	--	---------	---	---	--------	-----	-------	-----	-------	---	----	----	--

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
79	Fill Material: See attached map location 1		Subgrade	22427	Boronczyk, Anthony
80	Fill Material: See attached map location 2		Subgrade	22427	Boronczyk, Anthony
81	Fill Material: See attached map location 3		Subgrade	22427	Boronczyk, Anthony
82	Fill Material: See attached map location 4		Subgrade	22427	Boronczyk, Anthony
83	Fill Material: See attached map location 5		Subgrade	22427	Boronczyk, Anthony
84	Fill Material: See attached map location 6		Subgrade	22427	Boronczyk, Anthony
85	Fill Material: See attached map location 7		Subgrade	22427	Boronczyk, Anthony
86	Fill Material: See attached map location 8		Subgrade	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			



# Soil Nuclear Gauge

12974S-87-0415  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

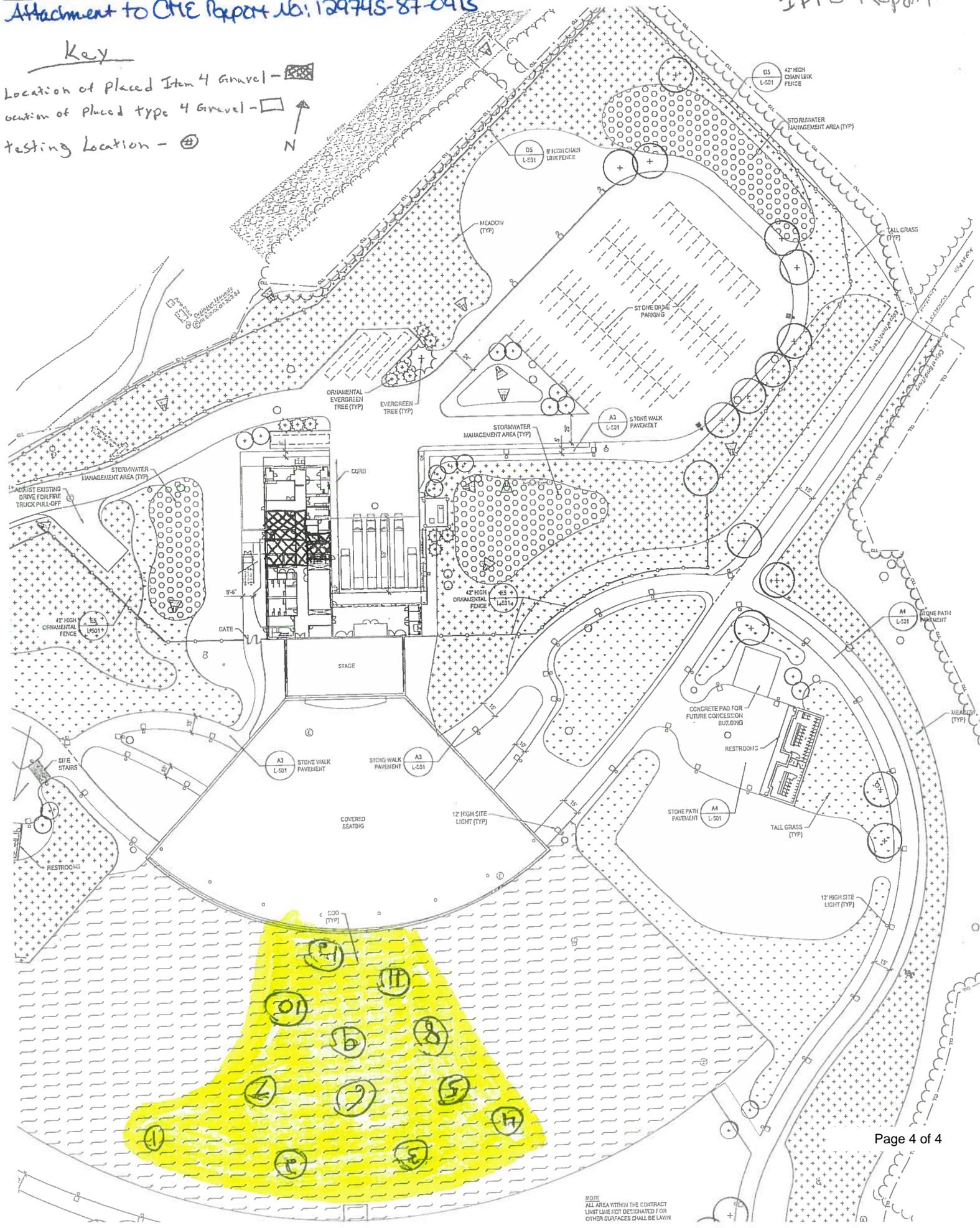
Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
87		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8	124.8	6	94	85	
88		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.8	127.2	6	95	85	
89		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.4	126.8	6	95	85	
90		4/30/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.7	124.9	6	94	85	

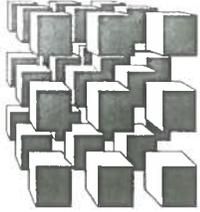
Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
87	Fill Material: See attached map location 9		Subgrade	22427	Boronczyk, Anthony
88	Fill Material: See attached map location 10		Subgrade	22427	Boronczyk, Anthony
89	Fill Material: See attached map location 11		Subgrade	22427	Boronczyk, Anthony
90	Fill Material: See attached map location 12		Subgrade	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	Test #	Related Test #	Test Type

Christopher R. Paolini, P.E.  
 May 10 2015

Key  
 Location of placed Item 4 Gravel - [stippled pattern]  
 Location of placed type 4 Gravel - [square symbol]  
 Testing Location - [circle with cross symbol]





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Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)  
[www.cmeassociates.com](http://www.cmeassociates.com)

## Transmittal

May 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-88-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

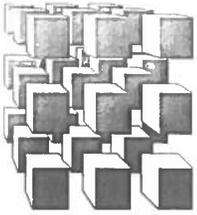
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-88-0515  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/01/15      **WEATHER:** Overcast      **TEMPERATURE:** 70 °F

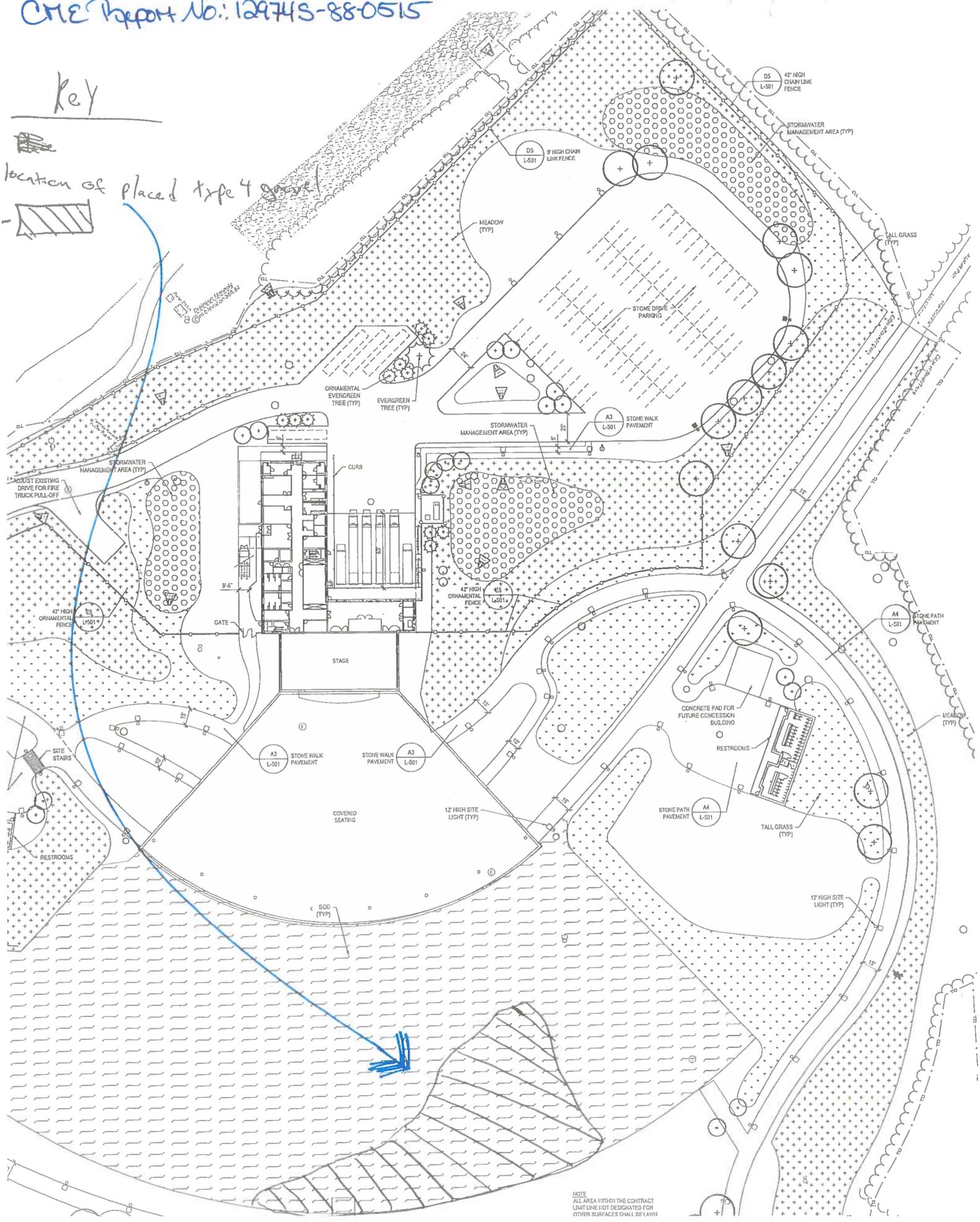
---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

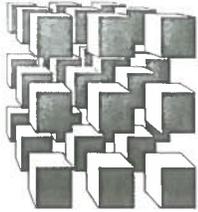
In the proposed grass area (please refer to page 2 for location), one lift, approximately 8" thick, of Type 4 Gravel was placed. This lift was not compacted at the time of placement.

key

location of placed type 4 gravel



NOTE  
 ALL AREA WITHIN THE CONTRACT  
 LIMIT LINE NOT DESIGNATED FOR  
 OTHER SURFACES SHALL BE LAWN



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**Associates, Inc.**

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## Transmittal

May 5, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
 12974S-89-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-89-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/04/15      **WEATHER:** Overcast      **TEMPERATURE:** 80 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

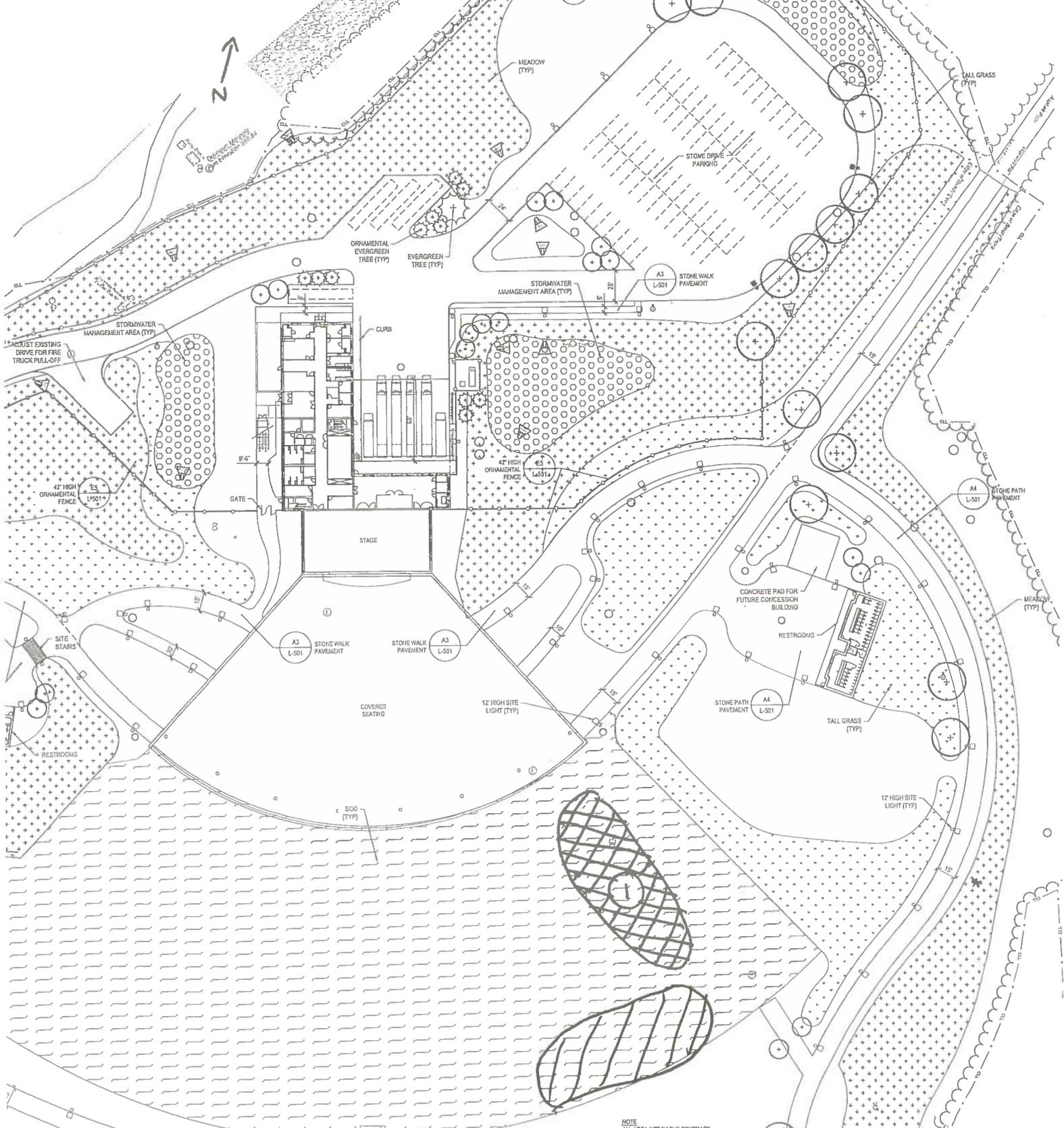
In the proposed grass area (please refer to page 2 for location), one lift, approximately 8" thick, of Type 4 Gravel was placed. This lift was not compacted at the time of placement.

In the proposed grass area (please refer to page 2 for location), seven lifts, approximately 12" thick each, of Crushed Shale was placed as subgrade material. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. Please refer to today's In-Place Field Density Test Report, for satisfactory test results.

CM2 Report No.: 129745-89-0515.

Key

- location of placed crushed shale - [hatched pattern]
- location of placed type 4 gravel - [diagonal lines pattern]
- testing location - (+)





# Soil Nuclear Gauge

12974S-90-0515  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
91		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9	111.6	10	88	85	
92		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.7	110.9	10	88	85	
93		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.2	111.0	10	88	85	
94		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.9	111.6	10	88	85	
95		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9	110.9	10	88	85	
96		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.2	111.5	10	88	85	
97		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.1	111.3	10	88	85	



# Soil Nuclear Gauge

12974S-90-0515  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

98		5/4/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	9.4	110.4	10	87	85	
----	--	--------	--	---	------------	------	-------	-----	-------	----	----	----	--

### Test Information

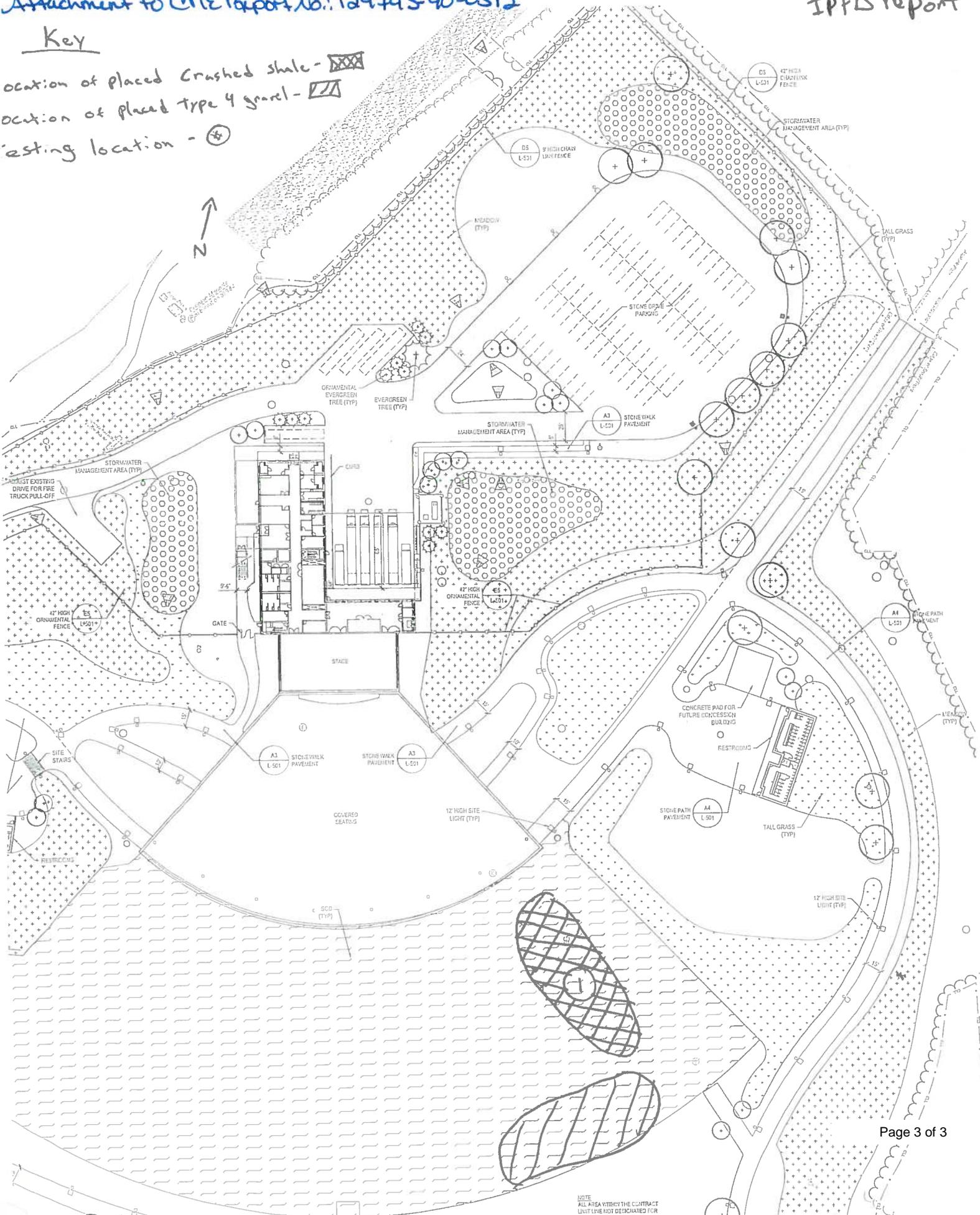
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
91	Subgrade Fill: See attached map location 1	10.0	' Below sub-grade	22427	Boronczyk, Anthony
92	Subgrade Fill: See attached map location 1	9.0	' Below sub-grade	22427	Boronczyk, Anthony
93	Subgrade Fill: See attached map location 1	8.0	' Below sub-grade	22427	Boronczyk, Anthony
94	Subgrade Fill: See attached map location 1	7.0	' Below sub-grade	22427	Boronczyk, Anthony
95	Subgrade Fill: See attached map location 1	6.0	' Below sub-grade	22427	Boronczyk, Anthony
96	Subgrade Fill: See attached map location 1	5.0	' Below sub-grade	22427	Boronczyk, Anthony
97	Subgrade Fill: See attached map location 1	4.0	' Below sub-grade	22427	Boronczyk, Anthony
98	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	22427	Boronczyk, Anthony

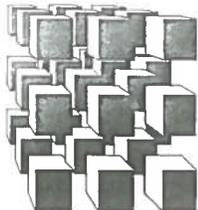
Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			

Christopher R. Paolini, P.E.  
 May 10 2015

Key

- location of placed crushed shale - [stippled pattern]
- location of placed type 4 gravel - [diagonal hatching]
- existing location - (+)





**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 6, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
 1

Report Number  
 12974S-91-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

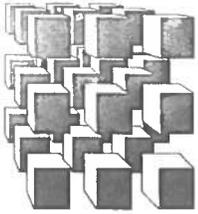
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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(315) 701-0526 (Fax)

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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 2      **REPORT NO.:** 12974S-91-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/05/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 75 °F

---

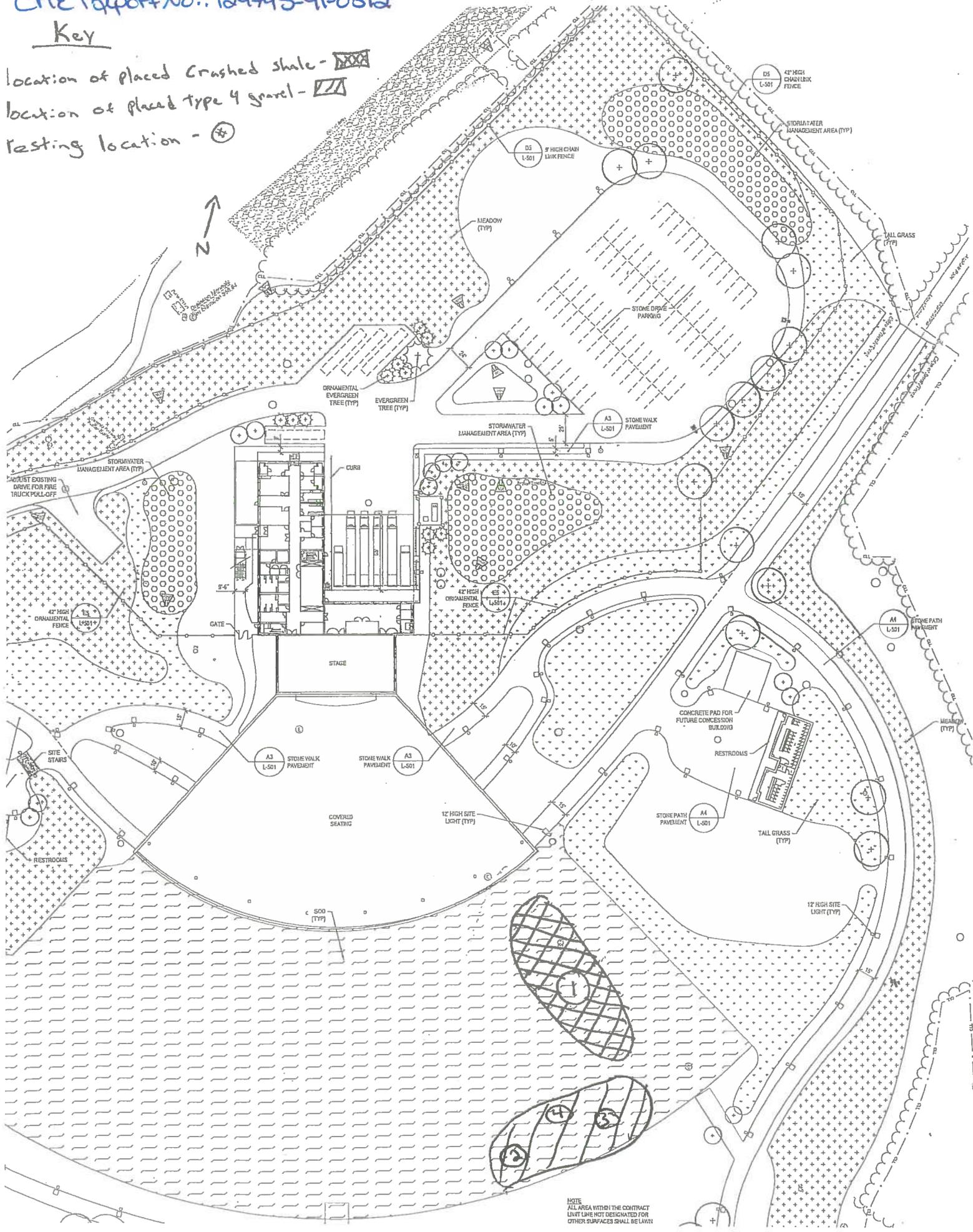
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

In the proposed grass area (please refer to page 2 for location), 4 lifts of Crush Shale were placed as subgrade material in approximately 12" thick lifts. Each lift was rolled several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. Please refer to today's In-Place Field Density Test Report for satisfactory test results.

In the proposed grass area (please refer to page 2 for location), an approximately 8" thick lift of Type 4 Gravel was placed on 05/04/15, and was rolled several times today with a 30-ton roller on vibratory mode. On the last pass of this lift, the fill was stable and non-yielding. Please refer to today's In-Place Field Density Test Report for satisfactory test results.

Key

- location of placed Crashed shale - [XXXX]
- location of placed type 4 gravel - [ZZZ]
- testing location - (+)



NOTE  
 ALL AREA WITHIN THE CONTRACT  
 UNIT LINE NOT DESIGNATED FOR  
 OTHER SURFACES SHALL BE LAWN



# Soil Nuclear Gauge

12974S-92-0515  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
99		5/5/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.2	113.3	10	89	85	
100		5/5/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.3	114.0	10	90	85	
101		5/5/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.1	113.8	10	90	85	
102		5/5/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.3	113.8	10	90	85	
103		5/5/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8	115.3	6	86	85	
104		5/5/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	8.2	115.6	6	87	85	
105		5/5/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	7.9	115.7	6	87	85	



# Soil Nuclear Gauge

12974S-92-0515  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

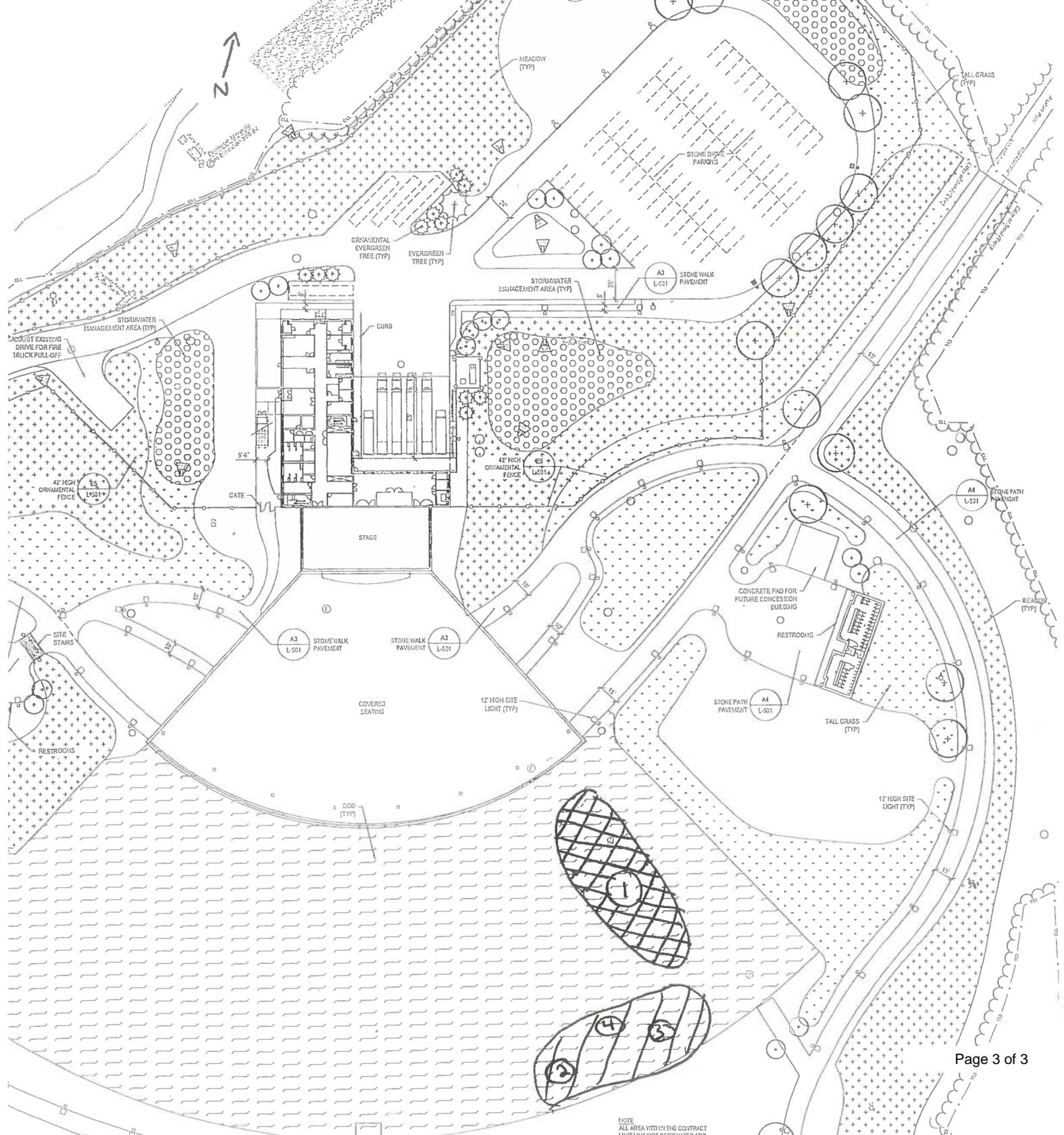
Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
99	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	22427	Boronczyk, Anthony
100	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	22427	Boronczyk, Anthony
101	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	22427	Boronczyk, Anthony
102	Subgrade Fill: See attached map location 1		sub-grade	22427	Boronczyk, Anthony
103	Fill Material: See attached map location 2		Subgrade	22427	Boronczyk, Anthony
104	Fill Material: See attached map location 3		Subgrade	22427	Boronczyk, Anthony
105	Fill Material: See attached map location 4		Subgrade	22427	Boronczyk, Anthony
Remarks		Comments		Related Tests	
		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"		Test #	Related Test #
					Test Type

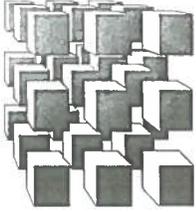
Christopher R. Paolini, P.E.  
 May 10 2015

IPFD Report

Key

- location of placed Crashed shale - [cross-hatched pattern]
- location of placed type 4 gravel - [diagonal line pattern]
- resting location - (+)





**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 7, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
 1

Report Number  
 12974S-93-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

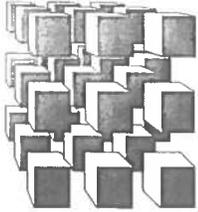
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting: Mr. Gary Markinson  
 (Concrete Only) Saunders Companies



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(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-93-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/06/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 75 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

In the proposed grass area (please refer to page 2 for location), 6 lifts of Crush Shale were placed as subgrade material in approximately 12" thick lifts. Each lift was rolled several times with a 30-ton roller on vibratory mode. Please refer to today's In-Place Field Density Test Report for satisfactory test results.





# Soil Nuclear Gauge

12974S-94-05-15  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
106		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.4	111.8	10	88	85	
107		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.6	112.5	10	89	85	
108		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.7	112.6	10	89	85	
109		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.5	113.5	10	90	85	
110		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.6	113.6	10	90	85	
111		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.4	113.1	10	89	85	
112		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.3	111.8	10	88	85	



# Soil Nuclear Gauge

12974S-94-05-15  
 Report Date: 5/10/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

113		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.2	112.3	10	89	85	
-----	--	--------	--	---	------------	------	-------	-----	-------	----	----	----	--

### Test Information

Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
106	Subgrade Fill: See attached map location 1	6.0	' Below sub-grade	22427	Boronczyk, Anthony
107	Subgrade Fill: See attached map location 2	6.0	' Below sub-grade	22427	Boronczyk, Anthony
108	Subgrade Fill: See attached map location 1	5.0	' Below sub-grade	22427	Boronczyk, Anthony
109	Subgrade Fill: See attached map location 2	5.0	' Below sub-grade	22427	Boronczyk, Anthony
110	Subgrade Fill: See attached map location 1	4.0	' Below sub-grade	22427	Boronczyk, Anthony
111	Subgrade Fill: See attached map location 2	4.0	' Below sub-grade	22427	Boronczyk, Anthony
112	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	22427	Boronczyk, Anthony
113	Subgrade Fill: See attached map location 2	3.0	' Below sub-grade	22427	Boronczyk, Anthony

Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			



# Soil Nuclear Gauge

12974S-94-05-15

Report Date: 5/10/2015

Test Method: ASTM D 6938

## Client:

Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

## Project:

12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
114		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.1	111.9	10	88	95	
115		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.1	111.7	10	88	95	
116		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.7	114.3	10	90	95	
117		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.8	114.9	10	91	95	
118		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.2	113.7	10	90	95	
119		5/6/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.4	115.4	10	91	85	

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
114	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	22427	Boronczyk, Anthony
115	Subgrade Fill: See attached map location 2	2.0	' Below sub-grade	22427	Boronczyk, Anthony
116	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	22427	Boronczyk, Anthony
117	Subgrade Fill: See attached map location 2	1.0	' Below sub-grade	22427	Boronczyk, Anthony



# Soil Nuclear Gauge

**12974S-94-05-15**

**Report Date:** 5/10/2015

**Test Method:** ASTM D 6938

**Client:**

Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

**Project:**

12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

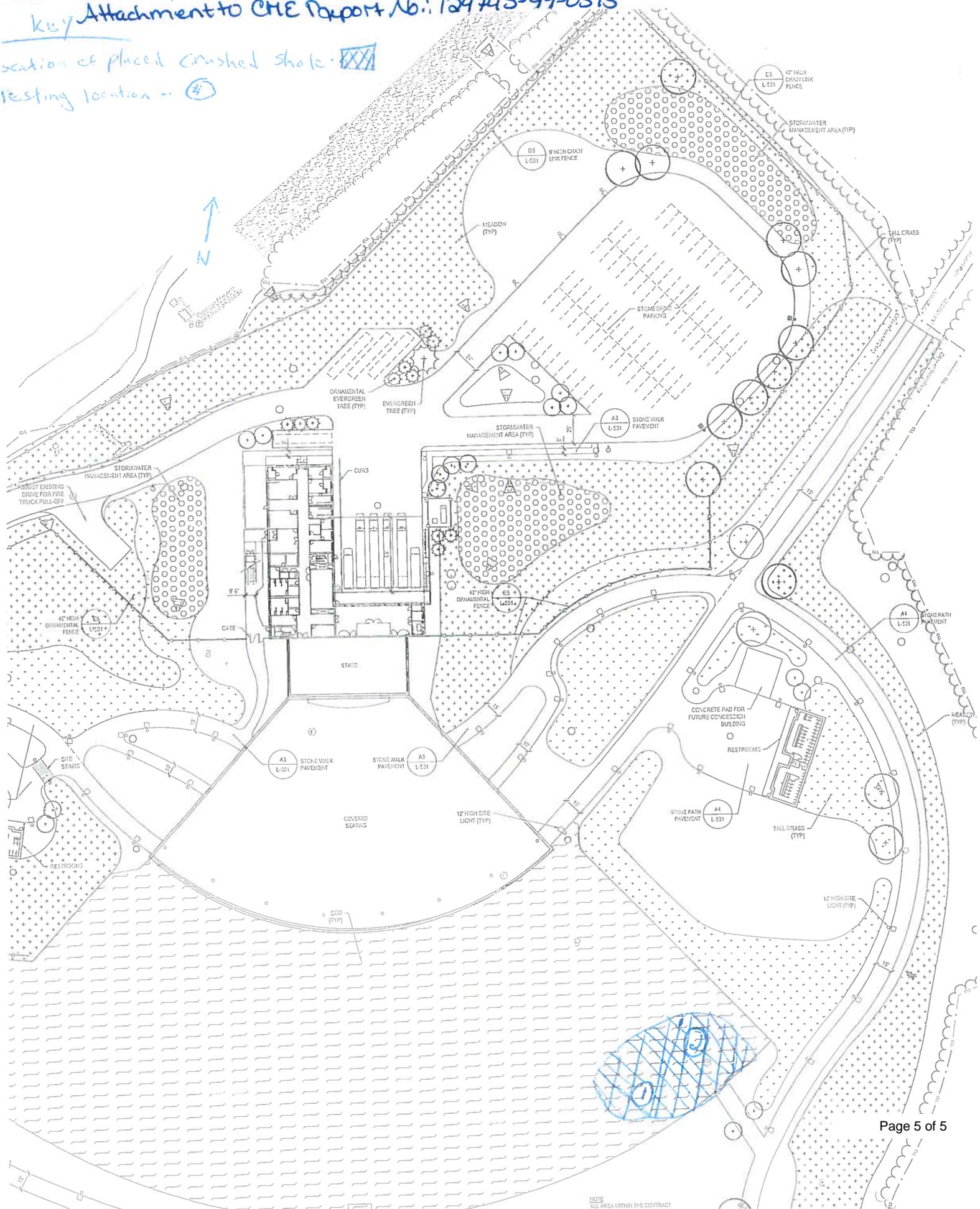
East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

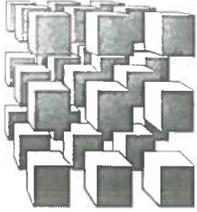
118	Subgrade Fill: See attached map location 1		sub-grade	22427	Boronczyk, Anthony
119	Subgrade Fill: See attached map location 2		sub-grade	22427	Boronczyk, Anthony
Remarks		Comments		Related Tests	
		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"		<b>Test #</b>	<b>Related Test #</b>
					<b>Test Type</b>

Christopher R. Paolini, P.E.  
May 10 2015

Key Attachment to CHE Report No.: 12974S-94-0515

section of placed crushed shale   
resting location - 





**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 8, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

Report Number

12974S-95-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

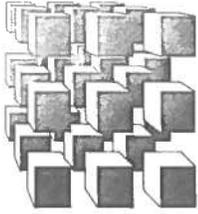
Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies

*A New York State Certified Women Owned Business Enterprise (WBE)*



**CME**  
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6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

[www.cmeassociates.com](http://www.cmeassociates.com)

---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-95-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/07/15      **WEATHER:** Clear      **TEMPERATURE:** 75 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

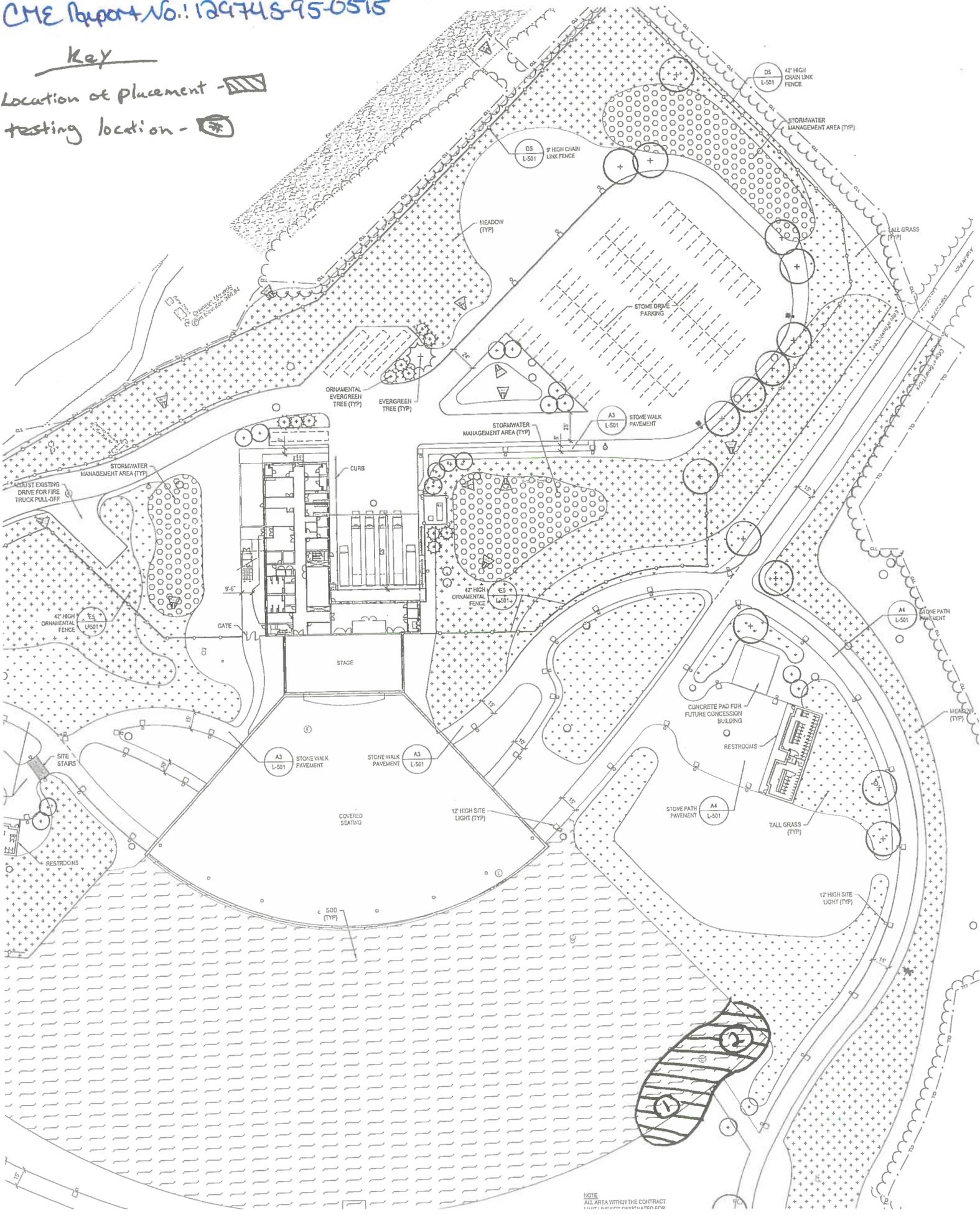
In the proposed grass area (please refer to page 2 for location), 3 lifts of previously placed on-site fill (a mixture of Run-of-Crush and Crushed Gravel), were placed in approximately 18" thick lifts. The lifts were rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. After the compaction of the last lift of fill, the approximately elevation was 5' below subgrade.

In the same proposed grass area (please refer to page 2 for location), 4 lifts of Crushed Shale were placed in approximately 12" thick lifts. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. Also, please refer to today's In-Place Field Density Test Report for satisfactory density test results.

CME Report No.: 12974S-95-0515

Key

Location of placement - [hatched box symbol]  
 testing location - [circle with cross symbol]





# Soil Nuclear Gauge

12974S-96-0515  
 Report Date: 5/11/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
120		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.6	122.0	10	96	85	
121		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.6	122.6	10	97	85	
122		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.3	119.7	10	95	85	
123		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.4	117.3	10	93	85	
124		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.5	118.2	10	93	85	
125		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.3	119.3	10	94	85	
126		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.5	121.1	10	96	85	



# Soil Nuclear Gauge

12974S-96-0515  
 Report Date: 5/11/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

127		5/7/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.3	120.9	10	95	85	
-----	--	--------	--	---	------------	------	-------	-----	-------	----	----	----	--

### Test Information

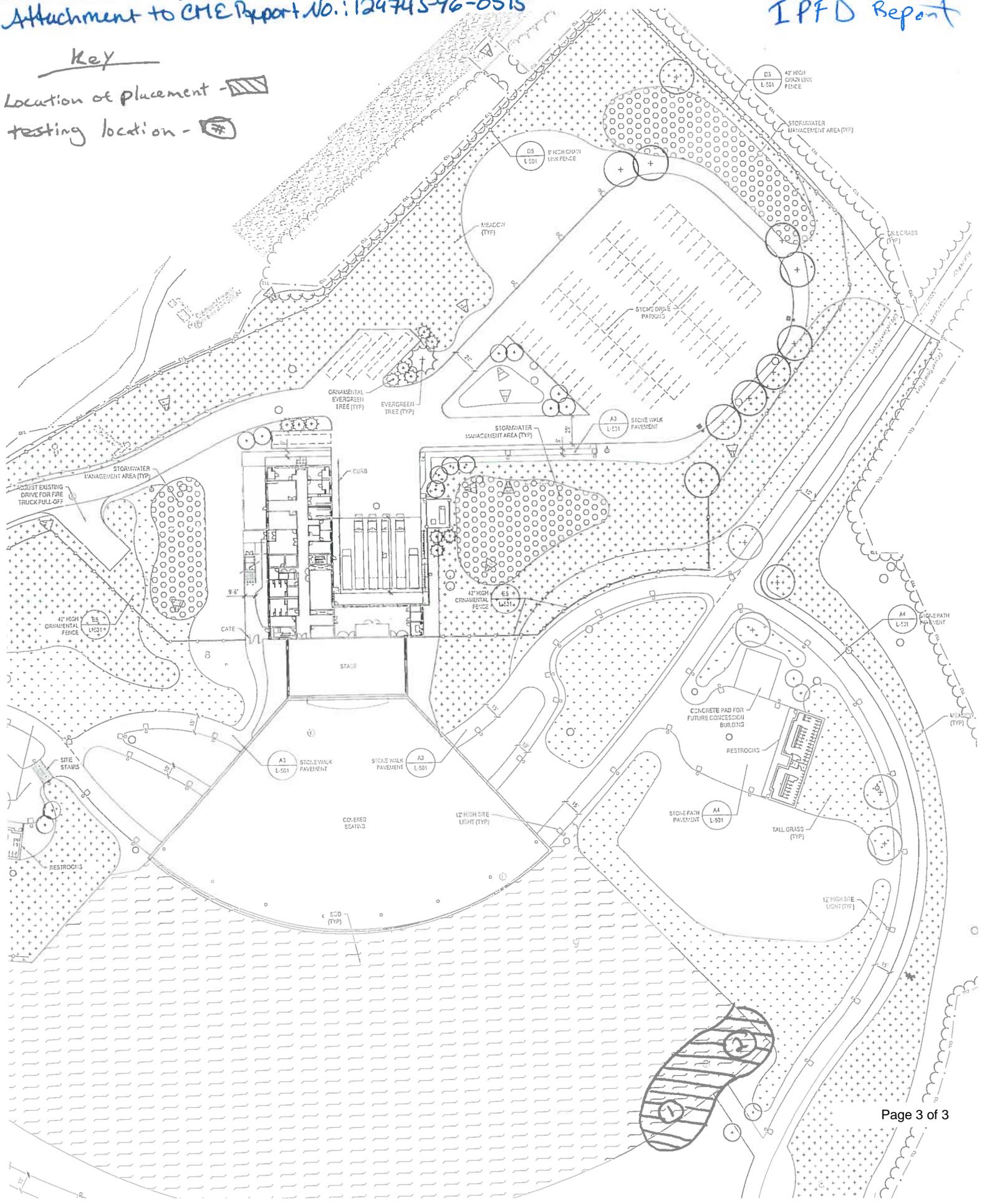
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
120	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	22427	Boronczyk, Anthony
121	Subgrade Fill: See attached map location 2	3.0	' Below sub-grade	22427	Boronczyk, Anthony
122	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	22427	Boronczyk, Anthony
123	Subgrade Fill: See attached map location 2	2.0	' Below sub-grade	22427	Boronczyk, Anthony
124	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	22427	Boronczyk, Anthony
125	Subgrade Fill: See attached map location 2	1.0	' Below sub-grade	22427	Boronczyk, Anthony
126	Subgrade Fill: See attached map location 1		sub-grade	22427	Boronczyk, Anthony
127	Subgrade Fill: See attached map location 2		sub-grade	22427	Boronczyk, Anthony

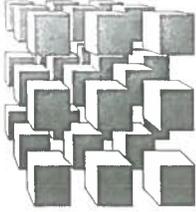
Remarks	Comments	Related Tests		
		Test #	Related Test #	Test Type
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			

Christopher R. Paolini, P.E.  
 May 11 2015

Key

Location of placement - [hatched box symbol]  
testing location - [circle with cross symbol]





**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 11, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

Report Number

12974S-97-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

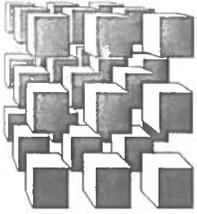
Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies

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(315) 701-0526 (Fax)

[www.cmeassociates.com](http://www.cmeassociates.com)

---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 3      **REPORT NO.:** 12974S-97-0515  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/08/15      **WEATHER:** Clear      **TEMPERATURE:** 80 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area and in a proposed road area.

In the proposed grass area (please refer to page 2 for location), 3 lifts of Crushed Sale were placed as subgrade material, in approximately 12" thick lifts. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. Also, please refer to today's In-Place Field Density Test Report, for density test results.

In the proposed road area (please refer to page 3 for location), 2 lifts of 4" Minus Gravel were placed as subgrade material in approximately 18" thick lifts. Both lifts were rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of both lifts, the fill was stable and non-yielding. Geotextile fabric was placed prior to the placement of the 4" Minus Gravel in the proposed road area.

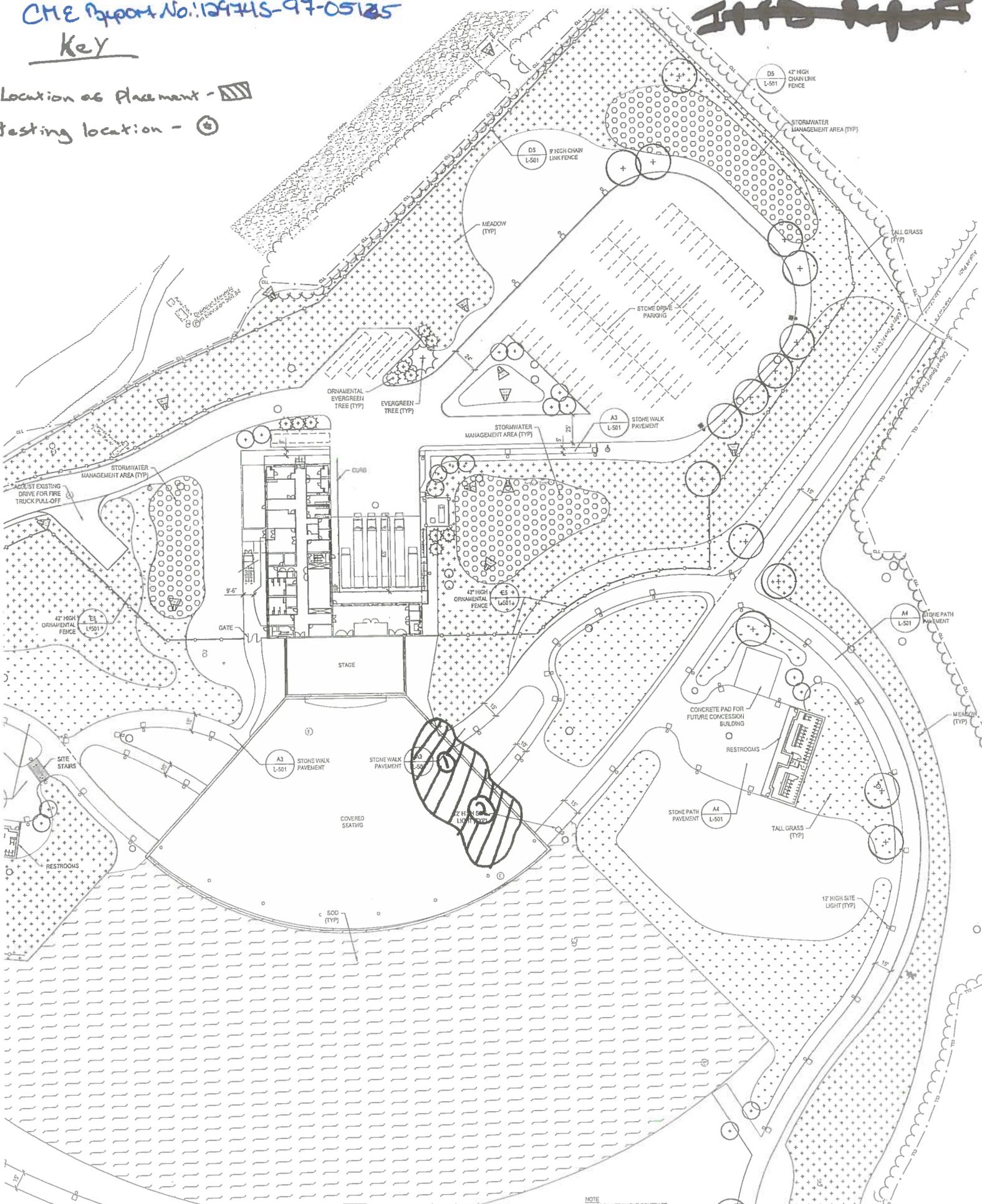
CME Report No.: 12974S-97-05125

~~ITB Report~~

Key

Location of Placement - [hatched pattern]

testing location - [circle with cross]

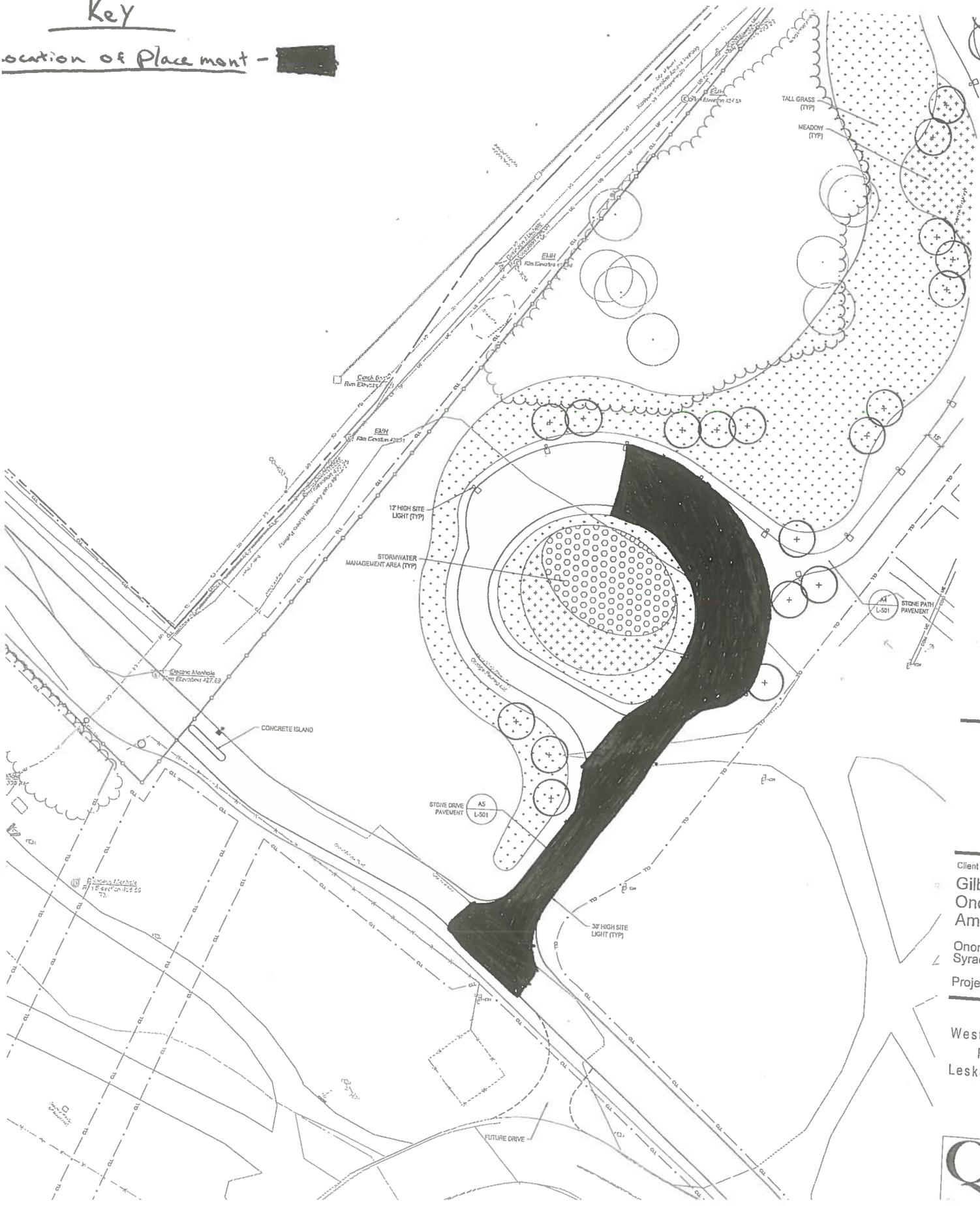


NOTE ALL AREA WITHIN THE CONTRACT

Key

Location of Placement - 

Issued	No.	D.
	1	1



Co

Client  
**Gilbane  
 Onondaga  
 Amphitheater**  
 Onondaga La  
 Syracuse, NY  
 Project No. 14

Westlake  
 Reed  
 Leskosky





# Soil Nuclear Gauge

12974S-98-0515  
 Report Date: 5/11/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
128		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.5	121.8	10	96	85	
129		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.5	121.5	10	96	85	
130		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.2	120.3	10	95	85	
131		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.2	120.0	10	95	85	
132		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.7	121.7	10	96	85	
133		5/8/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	8.6	121.6	10	96	85	

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
128	Subgrade Fill: See attached map location 1	4.0	' Below sub-grade	22427	Boronczyk, Anthony
129	Subgrade Fill: See attached map location 2	4.0	' Below sub-grade	22427	Boronczyk, Anthony
130	Subgrade Fill: See attached map location 1	3.0	' Below sub-grade	22427	Boronczyk, Anthony
131	Subgrade Fill: See attached map location 2	3.0	' Below sub-grade	22427	Boronczyk, Anthony



# Soil Nuclear Gauge

**12974S-98-0515**  
**Report Date:** 5/11/2015  
**Test Method:** ASTM D 6938

**Client:**  
Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

**Project:**  
12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

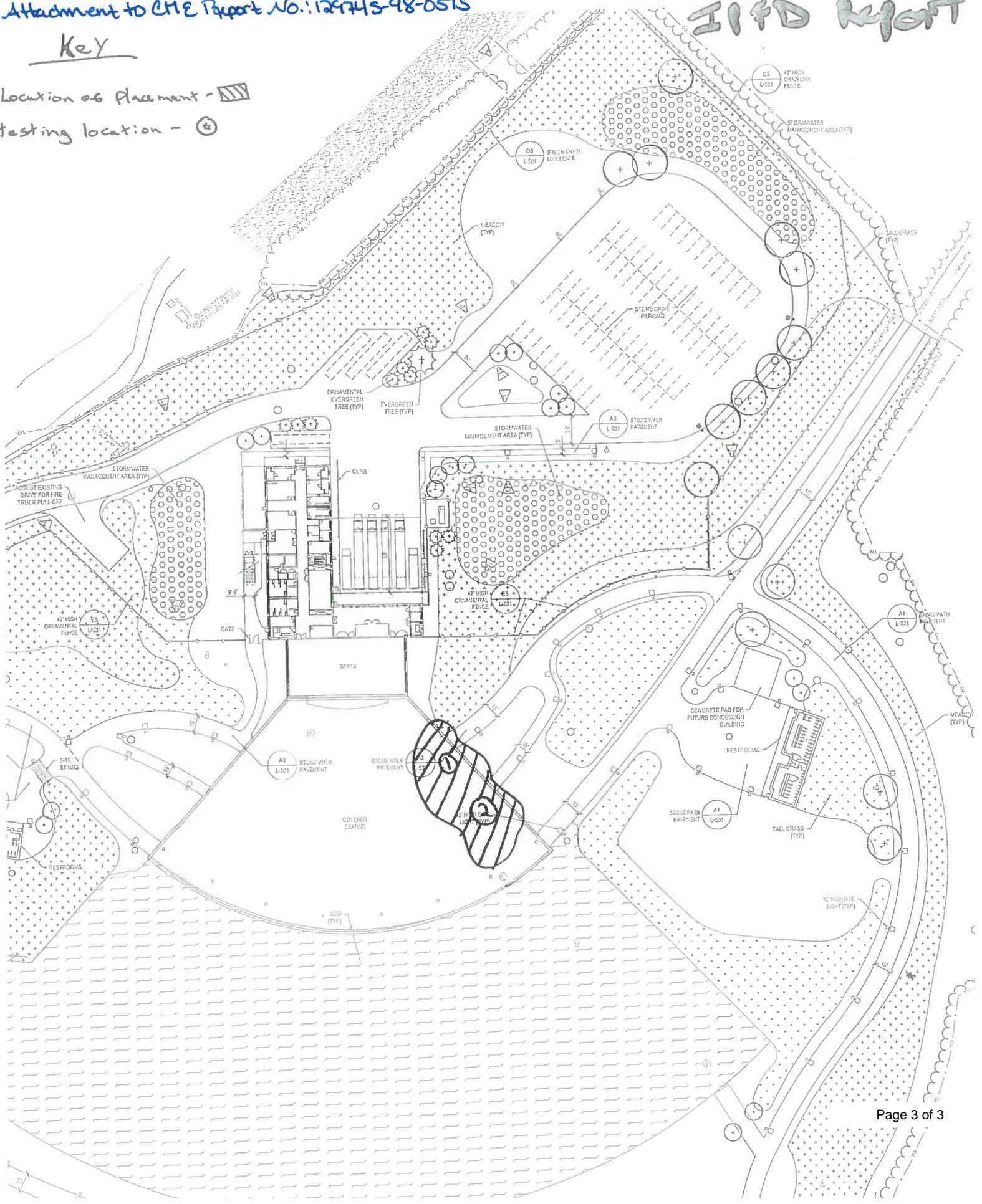
132	Subgrade Fill: See attached map location 1	2.0	' Below sub-grade	22427	Boronczyk, Anthony
133	Subgrade Fill: See attached map location 2	2.0	' Below sub-grade	22427	Boronczyk, Anthony
Remarks		Comments		Related Tests	
		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"		<b>Test #</b>	<b>Related Test #</b>
					<b>Test Type</b>

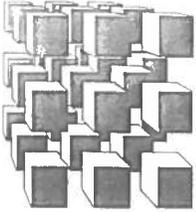
Christopher R. Paolini, P.E.  
May 11 2015

**2100 West**

Key

- Location of Placement - [Hatched Box]
- Testing location - [Circle with Plus]





**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)

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## Transmittal

May 12, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-99-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

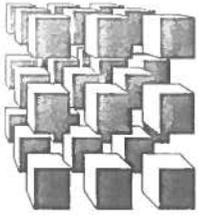
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Saunders Companies

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(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 3      **REPORT NO.:** 12974S-99-0515  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/11/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 80 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in proposed road areas and in a proposed grass area.

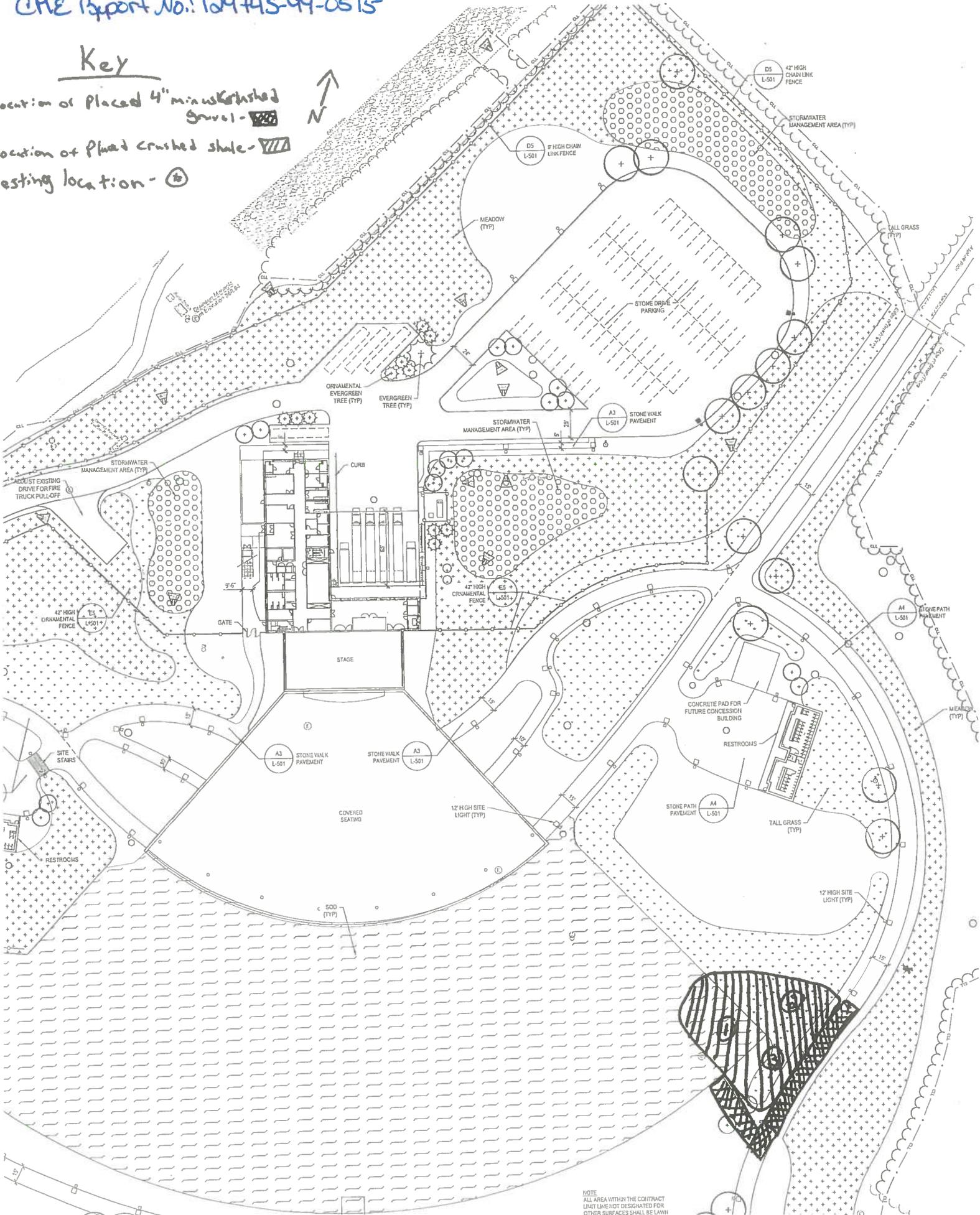
In the proposed road area (please refer to page 2 for location), geotextile fabric was placed on top of compacted Crushed Shale prior to the placement of 4" Minus Crushed Gravel. Two lifts of 4" Minus Gravel were placed as subgrade material in approximately 16" thick lifts. Both lifts were rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of both lifts, the fill was stable and non-yielding. After the placement and compaction of both lifts the approximate elevation of the fill was at subgrade elevation.

In the proposed grass area (please refer to page 2 for location), 2 lifts of Crushed Shale were placed as subgrade material, in approximately 12" thick lifts. Each lift was rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. Also, please refer to today's In-Place Field Density Test Report, for density test results.

In the proposed road area (please refer to page 3 for location), geotextile fabric was placed on top of previously placed fill prior to placement of 4" Minus Crushed Gravel. Two lifts of 4" Minus Crushed Gravel were placed at a thickness of approximately 18" thick, each. Both lifts were rolled and compacted several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding. After the placement and compaction of both lifts, the approximate elevation of the fill was at subgrade elevation.

**Key**

- Location of Placed 4" minimum crushed gravel - [stippled pattern]
- Location of Placed Crushed shale - [hatched pattern]
- Testing location - (O)

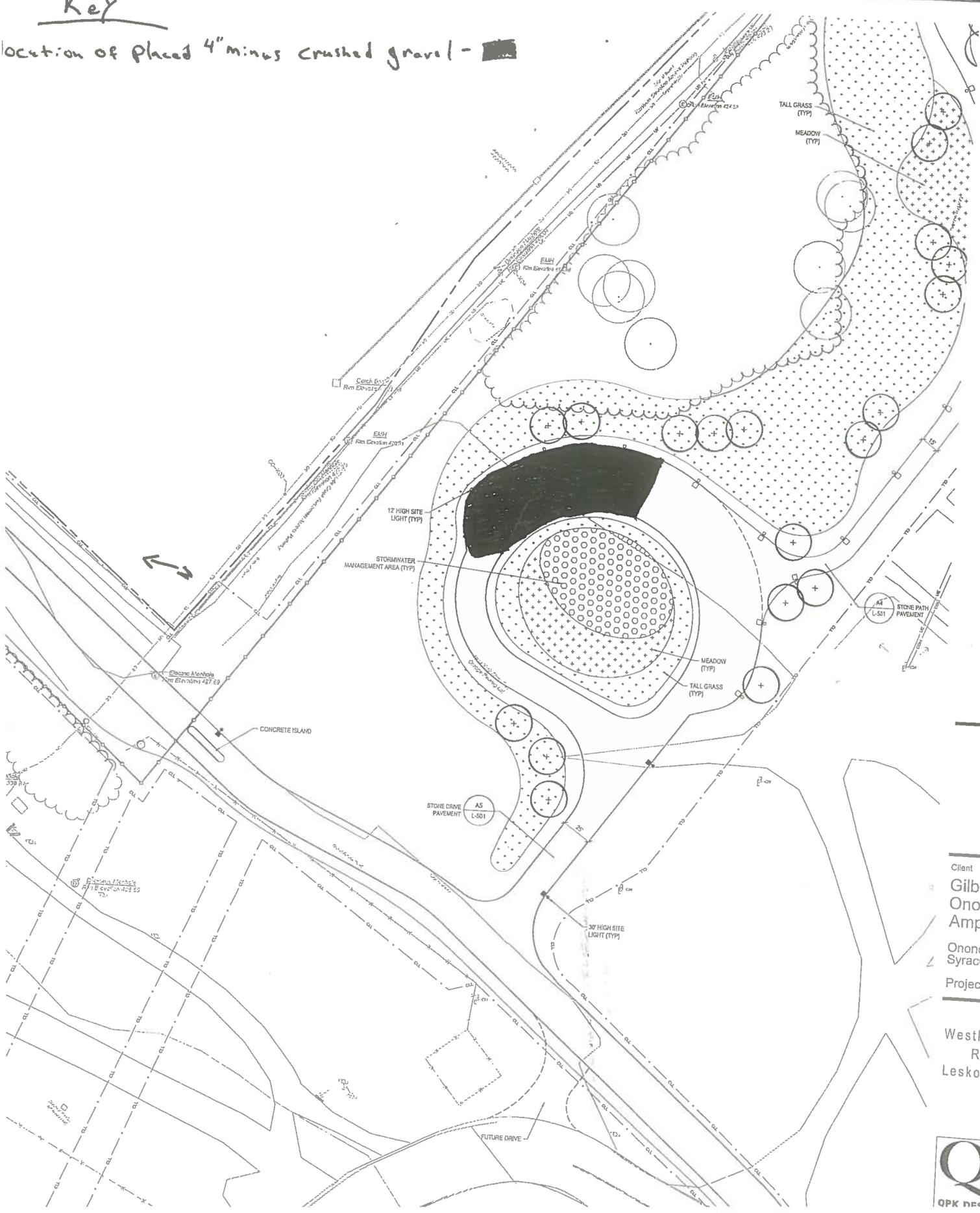


NOTE  
 ALL AREA WITHIN THE CONTRACT  
 LINE LIKE NOT DESIGNATED FOR  
 OTHER SURFACES SHALL BE LAWN

Lakeview Amphitheater Job# 12974  
 CME Report No.: 12974S-99-0515  
 Key

5/11/15 pg 3 of 3

Location of placed 4" minus crushed gravel - [shaded area]



Issued	No.	D
	1	12

Client  
 Gilbane  
 Onondaga Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14

Westlake  
 Reed  
 Leskosky





# Soil Nuclear Gauge

12974S-100-0515

Report Date: 5/15/2015

Test Method: ASTM D 6938

**Client:**

Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

**Project:**

12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
134		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.1	115.8	10	91	85	
135		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.4	117.5	10	93	85	
136		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.1	119.5	10	94	85	
137		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.5	112.7	10	89	85	
138		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.5	111.5	10	88	85	
139		5/11/15	Common Fill - Crushed Shale - Riccelli Enterprises, Inc.	C	Comm. Fill	11.5	126.6	7.9	113.1	10	89	85	

Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
134	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	22427	Boronczyk, Anthony
135	Subgrade Fill: See attached map location 2	1.0	' Below sub-grade	22427	Boronczyk, Anthony
136	Subgrade Fill: See attached map location 3	1.0	' Below sub-grade	22427	Boronczyk, Anthony
137	Subgrade Fill: See attached map location 1		sub-grade	22427	Boronczyk, Anthony



# Soil Nuclear Gauge

**12974S-100-0515**  
**Report Date:** 5/15/2015  
**Test Method:** ASTM D 6938

**Client:**  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

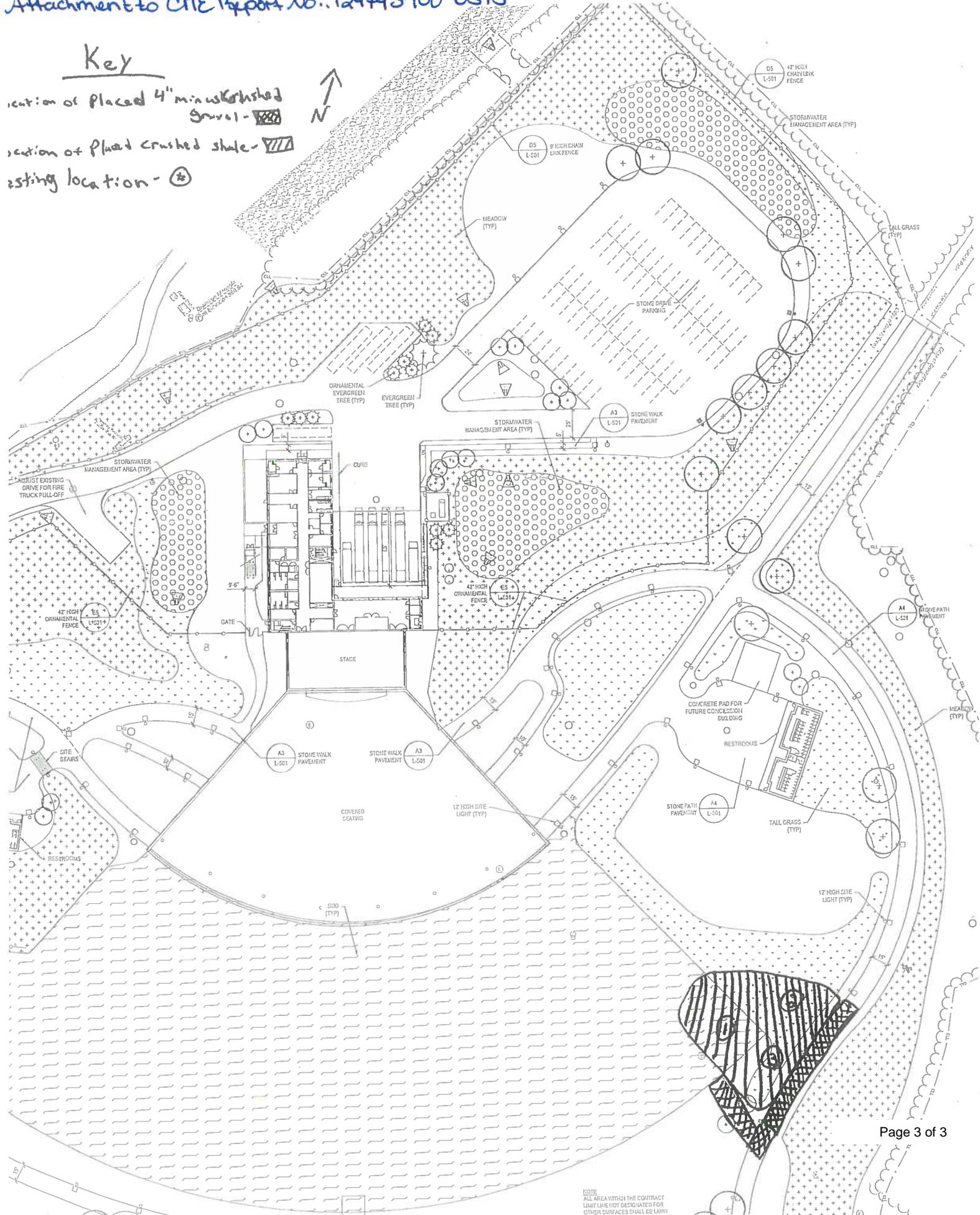
**Project:**  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

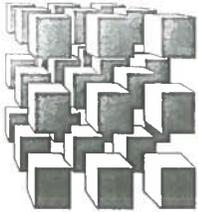
138	Subgrade Fill: See attached map location 2		sub-grade	22427	Boronczyk, Anthony
139	Subgrade Fill: See attached map location 3		sub-grade	22427	Boronczyk, Anthony
Remarks		Comments		Related Tests	
		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"		<b>Test #</b>	<b>Related Test #</b> <b>Test Type</b>

Christopher R. Paolini, P.E.  
 May 15 2015

**Key**  
 section of Placed 4" minus crushed Gravel - [stippled pattern]  
 section of Placed crushed shale - [diagonal hatching pattern]  
 existing location - (+)



NOTE  
 ALL AREA WITHIN THE CONTRACT  
 LIMIT LINE NOT DESIGNATED FOR  
 OTHER SURFACES SHALL BE LAWN



**CME**  
**Associates, Inc.**

6035 Corporate Drive  
 East Syracuse, New York 13057  
 (315) 701-0522  
 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 13, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
 1

Report Number  
 12974S-101-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

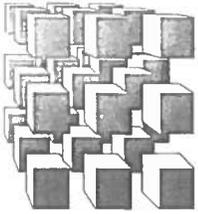
Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Saunders Companies



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(315) 701-0522  
(315) 701-0526 (Fax)

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---

## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-101-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/12/15      **WEATHER:** Overcast      **TEMPERATURE:** 75 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

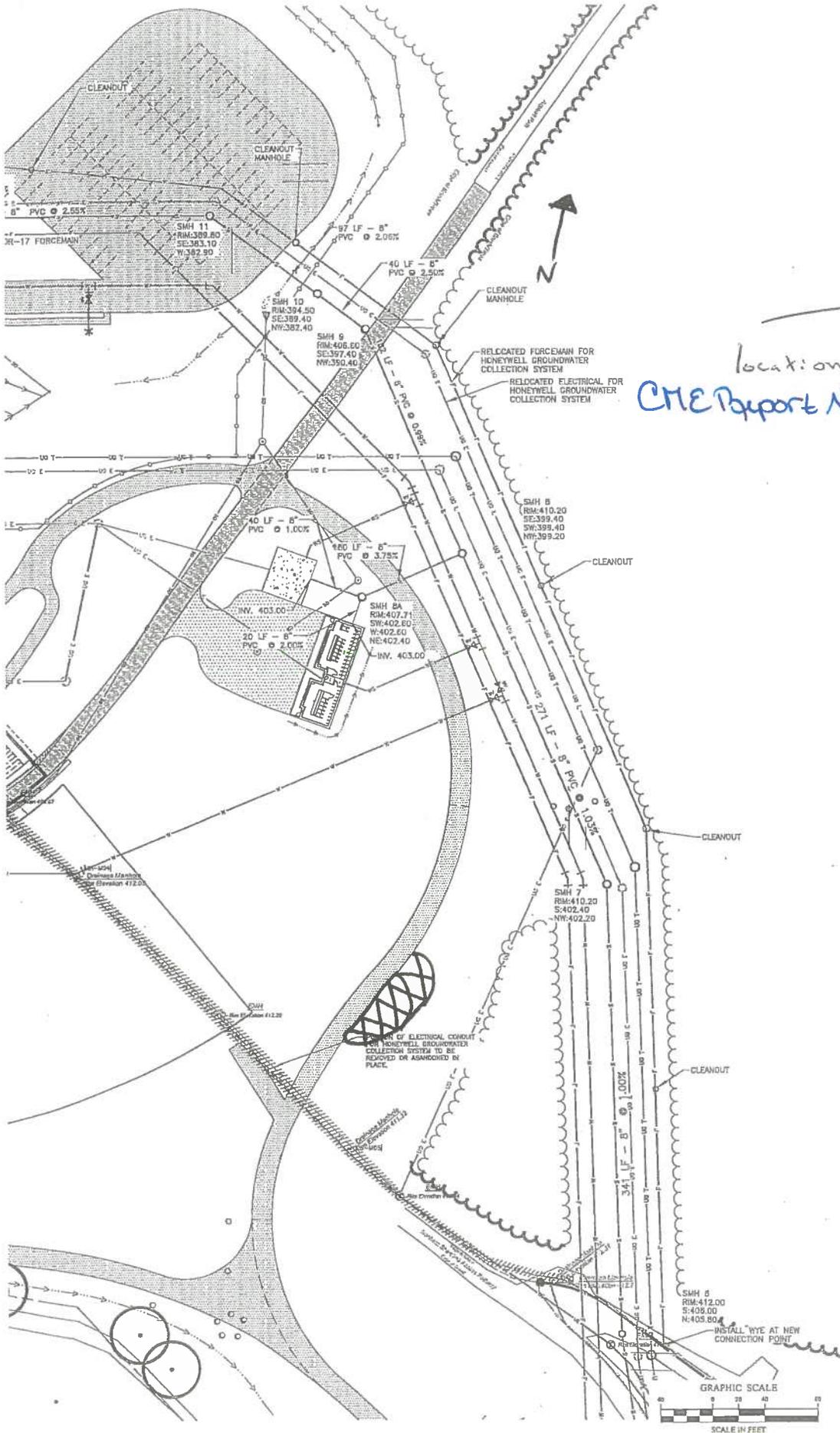
In the proposed grass area (please refer to page 2 for location), 1 lift of previously placed roadway material (a mixture of Run-of-Crush and Crushed Gravel) was placed in an approximately 16" thick lift. This lift was not compacted at the time of placement.

NO.	DATE	DESCRIPTION
1	1-23-15	HONEYWELL PLANS
2	1-29-15	HONEYWELL PLANS
3	2-09-15	HONEYWELL PLANS
4	2-13-15	HONEYWELL PLANS



Key

Location Placed -   
 CME Report No.: 129745-101-0515



For Construction

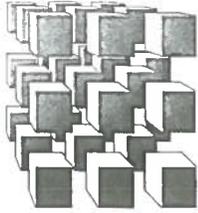
Client  
 Gilbane  
 Onondaga Lakeview Amphitheater  
 Onondaga Lake  
 Syracuse, NY  
 Project No. 14128.00

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 New York, New York 10001  
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 F 212.659.0050  
 www.WRLdesign.com  
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 F 315.472.7600

  
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 Syracuse, NY 13202

UTILITY PLAN  
 HONEYWELL RELOCATION PLAN  
 CU-010



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**Associates, Inc.**

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 East Syracuse, New York 13057  
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 (315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

May 14, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-102-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

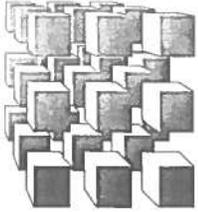
Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Mr. John Wehrle  
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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 1      **REPORT NO.:** 12974S-102-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/13/15      **WEATHER:** Overcast / Rain      **TEMPERATURE:** 58 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

No fill was placed today due to other work taking precedence.



# Soil Nuclear Gauge

12974S-103-0515

Report Date: 5/18/2015

Test Method: ASTM D 6938

## Client:

Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

## Project:

12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
140		5/14/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.4	124.2	10	93	93	
141		5/14/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.5	124.4	10	93	93	
142		5/14/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.8	132.0	10	99	93	
143		5/14/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.9	125.8	10	94	93	
144		5/14/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	6.6	128.7	10	96	93	

Test Information							
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician		
140	Subgrade Fill: See attached map location 1	1.0	' Below sub-grade	22427	Boronczyk, Anthony		
141	Subgrade Fill: See attached map location 2	1.0	' Below sub-grade	22427	Boronczyk, Anthony		
142	Subgrade Fill: See attached map location 3	1.0	' Below sub-grade	22427	Boronczyk, Anthony		
143	Subgrade Fill: See attached map location 4	1.0	' Below sub-grade	22427	Boronczyk, Anthony		
144	Subgrade Fill: See attached map location 5	1.0	' Below sub-grade	22427	Boronczyk, Anthony		
Remarks		Comments			Related Tests		
		Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"			Test #	Related Test #	Test Type



East Syracuse  
6035 Corporate Drive  
East Syracuse, NY 13057  
Phone: (315) 701-0522 | Fax: (315) 701-0526

## Soil Nuclear Gauge

**12974S-103-0515**  
**Report Date:** 5/18/2015  
**Test Method:** ASTM D 6938

### Client:

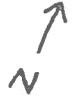
Onondaga County  
650 Hiawatha Blvd W  
Syracuse, NY 13204

### Project:

12974 - Lakeview Amphitheater, Syracuse  
Lakeview Amphitheater  
Rt. 690, Exit 6  
Syracuse, NY

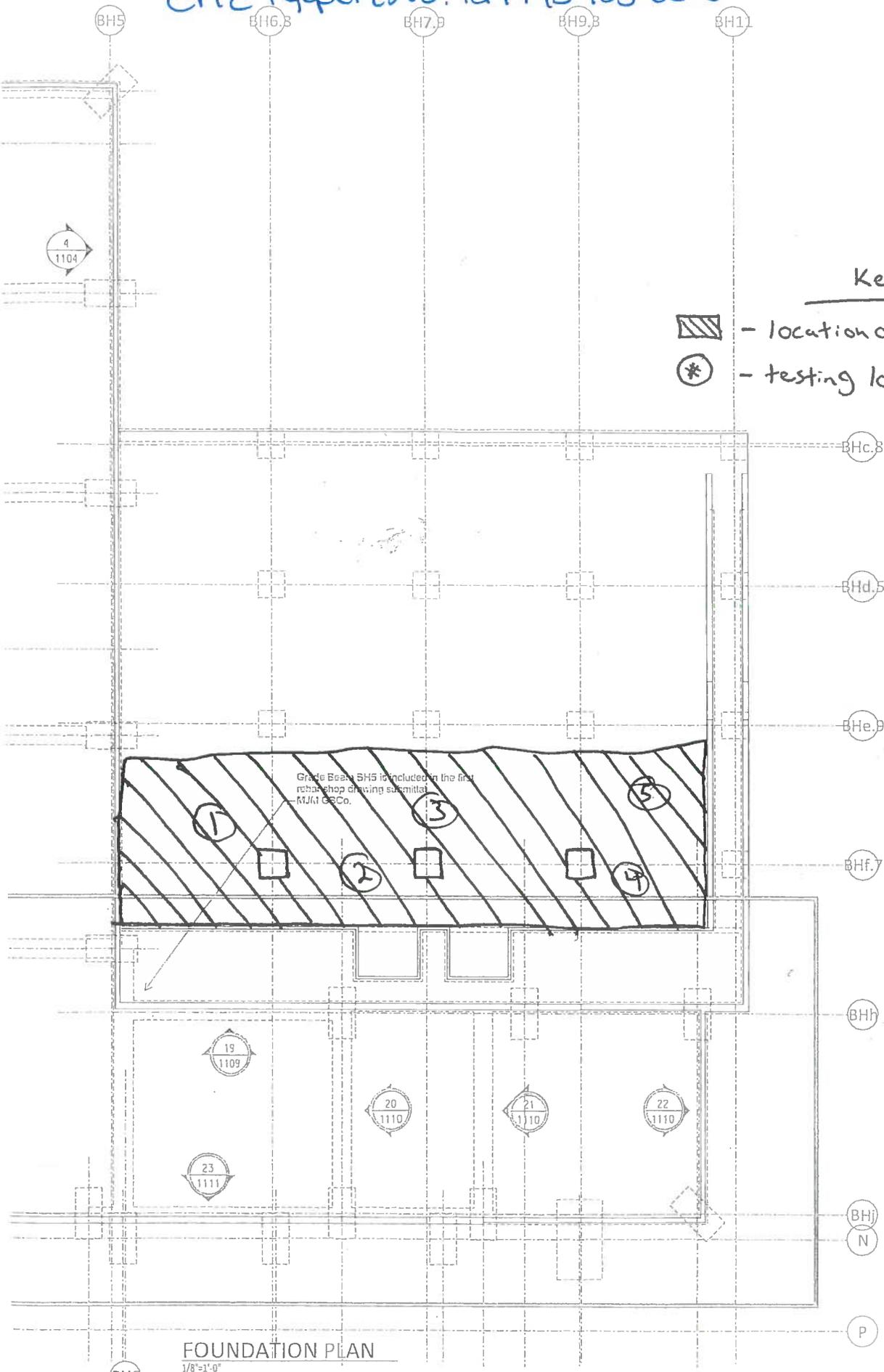
A handwritten signature in blue ink, appearing to read "C. Paolini", is written in a cursive style.

Christopher R. Paolini, P.E.  
May 18 2015



Key

-  - location of placed type 4 grade
-  - testing location

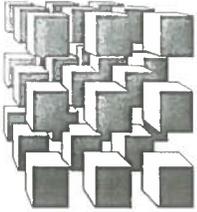


**NOTES**  
 1) BAR CLEARANCE:  
 3" - BOTTOM AND SIDES OF FOOTINGS.  
 2" - TOP OF FOOTING AND ALL SIDES OF WALLS  
 1 1/2" - SIDES OF PIERS  
 2) BAR LAPS:  
 AS NOTED ON PLAN, ELEVATIONS AND SECTIONS. IF NO LAPS WERE SPECIFICALLY NOTED IN STRUCTURAL DRAWINGS, THEN LAP SPICES CALCULATED BY USING THE MAXIMUM VALUE OF THE ACI 318 03 CC SECTIONS 12.22 AND 12.23.

Revisions	
Description	C
SENT FOR APPROVAL	03
Added GB 5-16	04
Added GB 17-23	04

Reinforcing ASTM A618 Grade 60	IF OF PF IF IF EW V X DVL B T	W/IDE FACE OUTSIDE FACE NEAR FACE EACH FACE EACH FACE EACH FACE VERTICAL HORIZONTAL DOWEL BOTTOM TOP	Date Approv Date Made 03 Alt Contract M.A. Date Trac
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FOUNDATION PLAN  
 1/8"=1'-0"



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## Transmittal

May 15, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-104-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

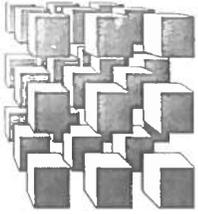
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-104-0515  
Syracuse, New York

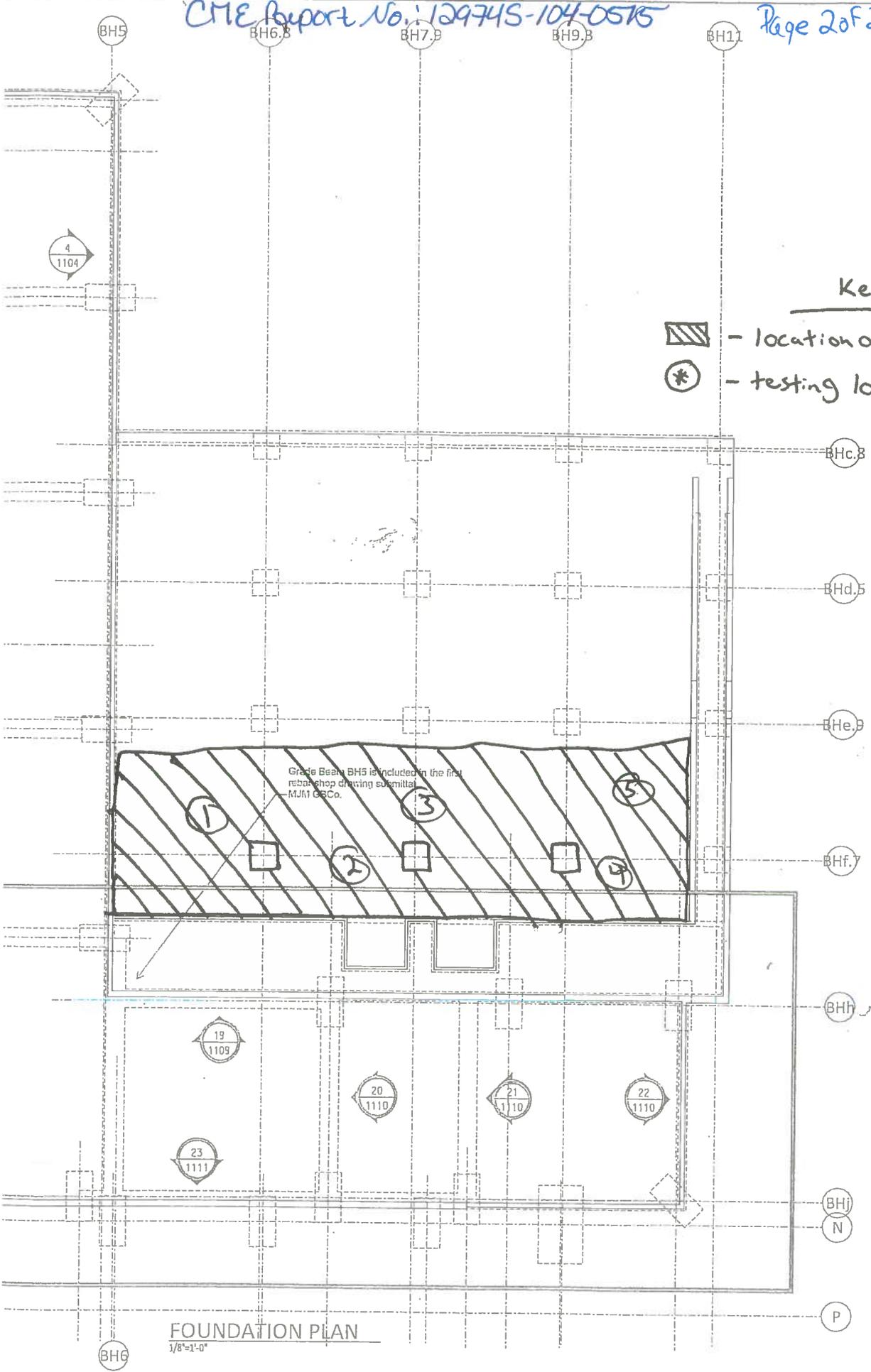
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/14/15      **WEATHER:** Clear      **TEMPERATURE:** 75 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed loading dock area.

In the proposed loading dock area (please refer to page 2 for location), one lift of Type 4 Gravel was placed in an approximately 12" thick lift. This lift was then compacted with a hand operated plate tamper. On the last pass of the plate tamper, the fill was stable and non-yielding. Also, please refer to today's In-Place Field Density Test Report for satisfactory test results.



Key

-  - location of placed type 4 gravel
-  - testing location



**NOTES**  
 1) BAR CLEARANCE:  
 2" - BOTTOM AND SIDES OF FOOTINGS.  
 2" - TOP OF FOOTING AND ALL SIDES OF WALLS  
 1 1/2" - SIDES OF PIERS  
 2) BAR LAPS:  
 AS NOTED ON PLAN, ELEVATIONS AND SECTIONS. IF NO LAPS WERE SPECIFICALLY NOTED IN STRUCTURAL DRAWINGS, THEN LAP SPICES SHALL BE CALCULATED BY USING THE MINIMUM VALUE OF THE ACI 318-08 CODE SECTIONS 12.2.2 AND 12.2.3.

Revisions	
Description	Date
SENT FOR APPROVAL	03-31
Added GB 5-16	04-02
Added GB 17-23	04-06
-	-
-	-
-	-
-	-
-	-
-	-

Rebar/setting ASTM A615 Grade 60  CRSI CRSI.DRG	IF OF TF EF EW Y DTYL B T BIF LW PRO INC D&G ALT	INSIDE FACE OUTSIDE FACE REAR FACE FAN FACE EACH WAY EACH WAY VERTICAL HORIZONTAL BOTTOM TOP BEND IN FIELD SHORT WAY LONG WAY PLACED BY OTHERS NOT IN CONTRACT ORSL & CREDIT ALTERNATE	Date Approved  Date Made: 03- M. Age Designer: Tracy
---	--	--	--

FOUNDATION PLAN  
 1/8"=1'-0"



# Soil Nuclear Gauge

12974S-105-0515  
 Report Date: 5/21/2015  
 Test Method: ASTM D 6938

Client:  
 Onondaga County  
 650 Hiawatha Blvd W  
 Syracuse, NY 13204

Project:  
 12974 - Lakeview Amphitheater, Syracuse  
 Lakeview Amphitheater  
 Rt. 690, Exit 6  
 Syracuse, NY

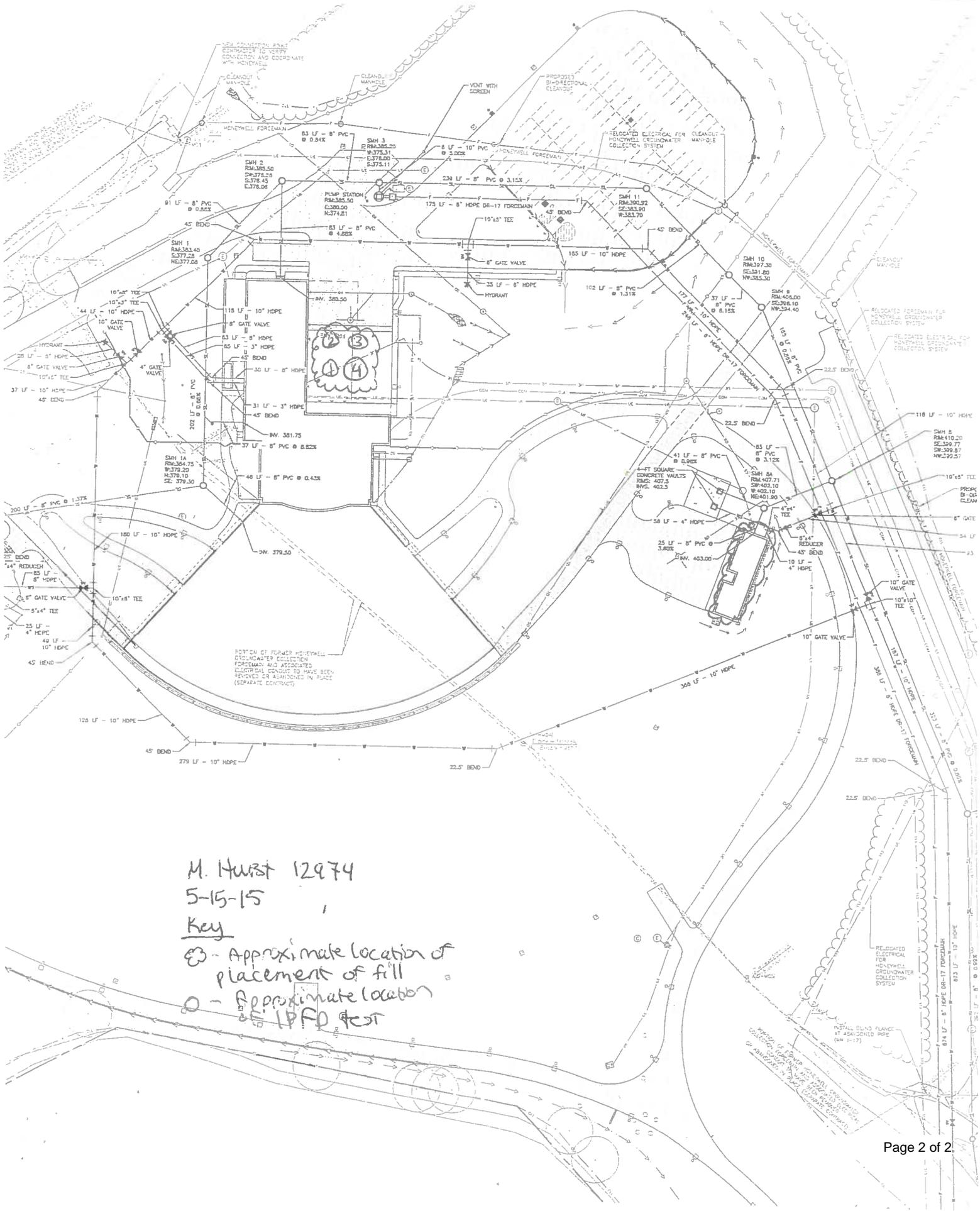
East Syracuse  
 6035 Corporate Drive  
 East Syracuse, NY 13057  
 Phone: (315) 701-0522 | Fax: (315) 701-0526

Test Results													
Test #	Retest Of	Test Date	Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Density (pcf)	In Place Moisture (%)	In Place Dry Density (pcf)	Probe Depth (in)	Percent Compaction	Min Comp. (%)	Remark
145		5/15/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	3.5	132.4	8	99	93	
146		5/15/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	3.9	132.7	8	99	93	
147		5/15/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	2.9	130.7	8	98	93	
148		5/15/15	Structural Fill - Type 4 Gravel - Syracuse Sand & Gravel Granby Pit	C	Type 4	7.1	133.4	4.8	130.5	8	98	93	

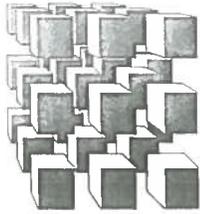
Test Information					
Test #	Test Location	Elevation	Reference	Gauge SN	Field Technician
145	Structural Fill: See attached map for location	1.0	foot below top of subbase	13498	Hurst, Matt
146	Structural Fill: See attached map for location	1.0	foot below top of subbase	13498	Hurst, Matt
147	Structural Fill: See attached map for location	1.0	foot below top of subbase	13498	Hurst, Matt
148	Structural Fill: See attached map for location	1.0	foot below top of subbase	13498	Hurst, Matt

Remarks	Comments	Related Tests		
	Tests are "Direct Transmission" (Method A) unless probe depth is noted as "Backscatter"	Test #	Related Test #	Test Type

Christopher R. Paolini, P.E.  
 May 21 2015



M. Hurst 12974  
 5-15-15  
Key  
 ⊕ - Approximate location of placement of fill  
 ○ - Approximate location of LPFD test



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## Transmittal

May 18, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-106-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

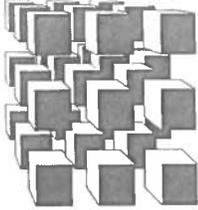
Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-106-0515  
Syracuse, New York

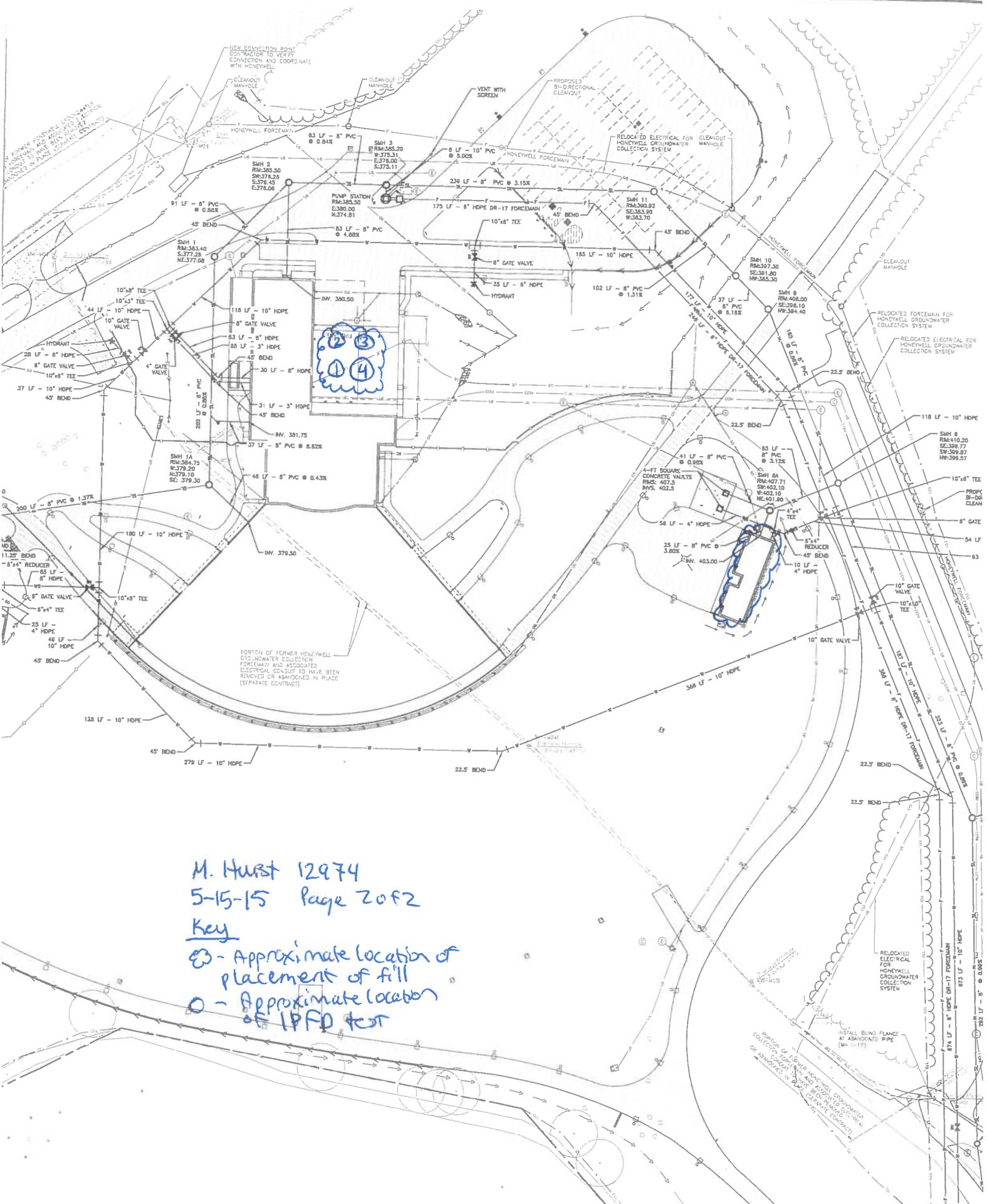
**CLIENT:** Onondaga County      **REPRESENTATIVE:** M. Hurst, EIT, PhD  
**DATE:** 05/15/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 70 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of structural fill in the proposed building pad and the east bathroom pad. Please refer to the attached map for locations.

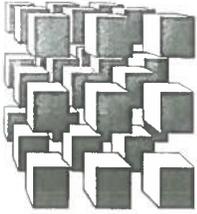
In the proposed bathroom area, excavation utilizing an excavator equipped with a flat bladed bucket was taken to about 3 feet below bottom of concrete mat, revealing White Solvay Waste. This Representative called Mr. Jim Stewart, P.E. with John P. Stopen Engineering, LLP for subgrade preparation recommendations. Mr. Stewart relayed to this Representative that this grade is to be firm and stable enough to walk on, and then covered with geotextile fabric. The grade is to then be backfilled with an 18" thick lift of Crushed No.: 2 Limestone, and compacted utilizing a roller on vibratory mode, making several passes, and then backfilled with further lifts to bottom of the mat, with each lift compacted utilizing a roller. The subgrade at time of examination was free of debris and was stable enough to walk on. The grade was covered with geotextile fabric, and then backfilled with an 18" thick lift of Crushed No.: 2 Stone. This lift was not compacted, and will be compacted at a later date.

In the proposed structural area, an approximately 3" to 10" thick lift of 4" Minus Crushed Gravel was placed at an elevation of approximately 1' below top of subbase. The lift was compacted utilizing an approximately 1,000 lb. plate tamer on vibratory mode, making several passes. The material was firm and stable during compactive efforts.



M. Hurst 12974  
 5-15-15 Page 2 of 2

Key  
 ⊕ - Approximate location of placement of fill  
 ○ - Approximate location of IPFD test



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## Transmittal

May 19, 2015

Onondaga County  
 650 Hiawatha Blvd. West  
 Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
 12974S-107-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
 Senior Vice President  
 CP.nlb

Via e-reporting: Mr. Archie Wixson  
 Onondaga County

Via e-reporting: Mr. David Woodruff  
 Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
 Mr. Chuck Brooks  
 Ms. Wendy Mahar  
 C&S Companies

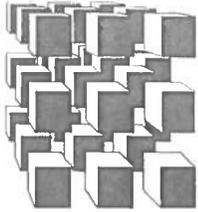
Via e-reporting: Mr. Joseph Astheimer  
 Mr. Charles Reinhardt  
 Mr. Matthew J. Simone  
 Ms. Melissa Liquori  
 Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
 Mr. Jim Kaplan, P.E.  
 John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
 Hueber Breuer Construction

Via e-reporting:  
 (Concrete Only) Mr. Gary Markinson  
 Mr. John Wehrle  
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## *DAILY PROGRESS REPORT*

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 1      **REPORT NO.:** 12974S-107-0515  
Syracuse, New York

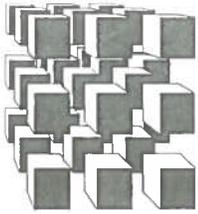
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/18/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 80 °F

---

This CME Representative was on-site at the above referenced project to observe the compaction of fill in a proposed structural area.

No new fill was placed today. The Earthwork Contractor excavated for the proposed pile caps and stockpiled the excavated fill material at the Southwest corner of the proposed stage area.



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## Transmittal

May 20, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-108-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

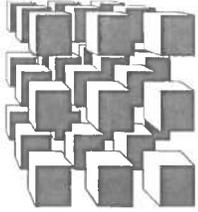
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Ms. Melissa Liquori  
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## *DAILY PROGRESS REPORT*

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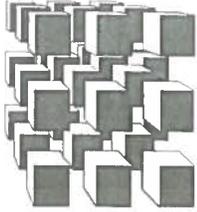
**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-108-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/19/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 75 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), two lifts of former roadway material (mixture of Run-of-Crush Limestone and Crushed Gravel) was placed in approximately 18" thick lifts, along the exterior of the cast-in-place foundation walls. Both lifts were compacted with a hand operated plate tamper several times. On the last pass of each lift, the fill was stable and non-yielding.





**CME**  
Associates, Inc.

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East Syracuse, New York 13057  
(315) 701-0522  
(315) 701-0526 (Fax)  
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## Transmittal

May 21, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
1

Report Number  
12974S-109-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

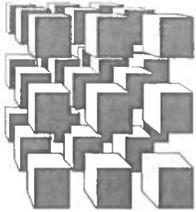
Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
Saunders Companies



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## ***DAILY PROGRESS REPORT***

---

**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-109-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/20/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 55 °F

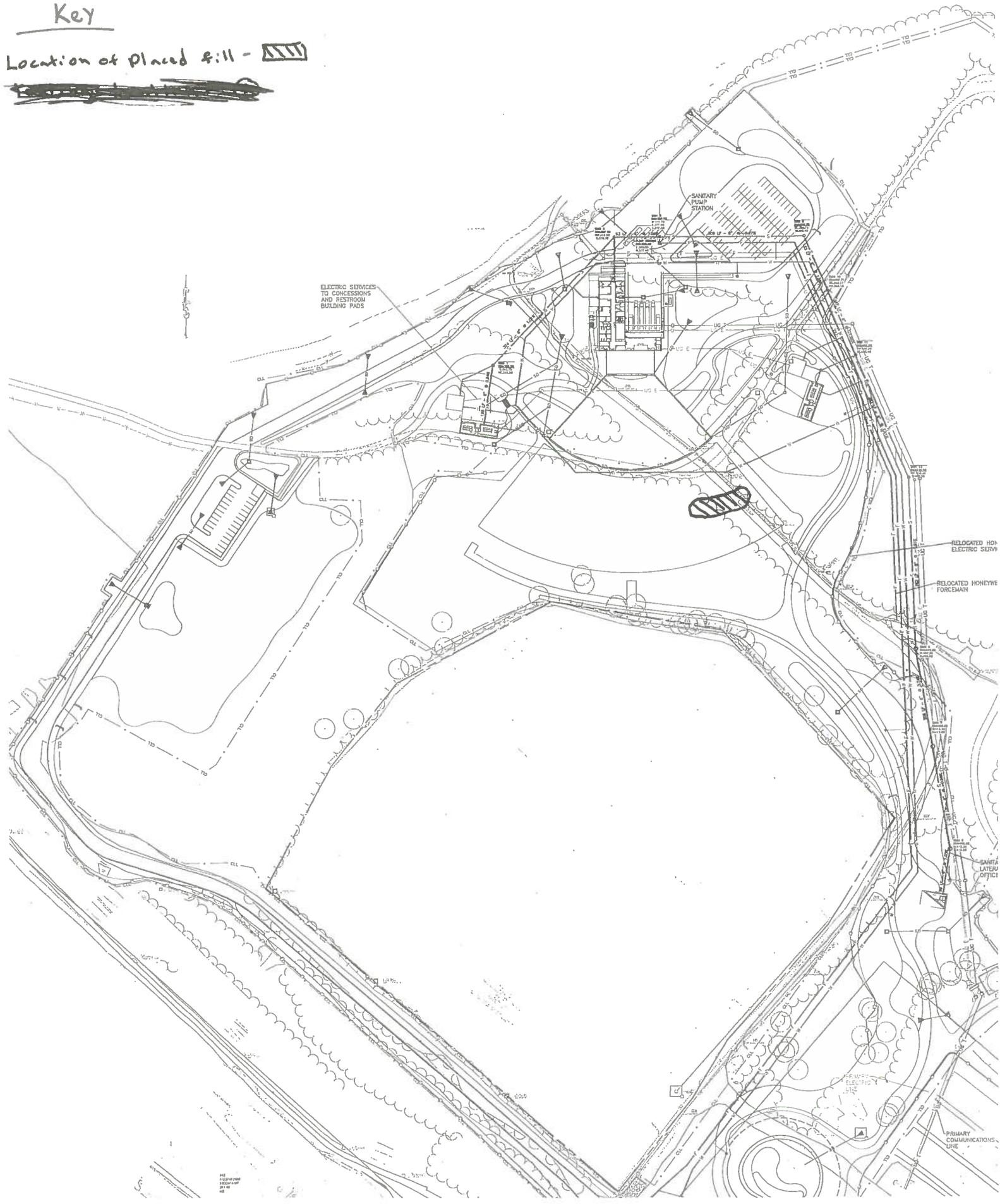
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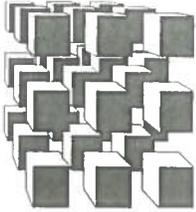
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill in a proposed grass area.

In the proposed grass area (please refer to page 2 for location), geotextile fabric was placed on top of exposed Solvay Waste, prior to the placement of excavated fill material (mixture of Crushed Shale and 4" Minus Crushed Gravel). One lift of said fill material was placed in an approximate thickness of 18". This lift was not compacted at the time of placement.

Key

Location of placed fill - 





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## Transmittal

May 22, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-110-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

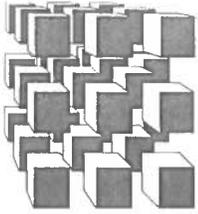
Via e-reporting: Mr. Bob Catalina  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-110-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/21/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 65 ° F

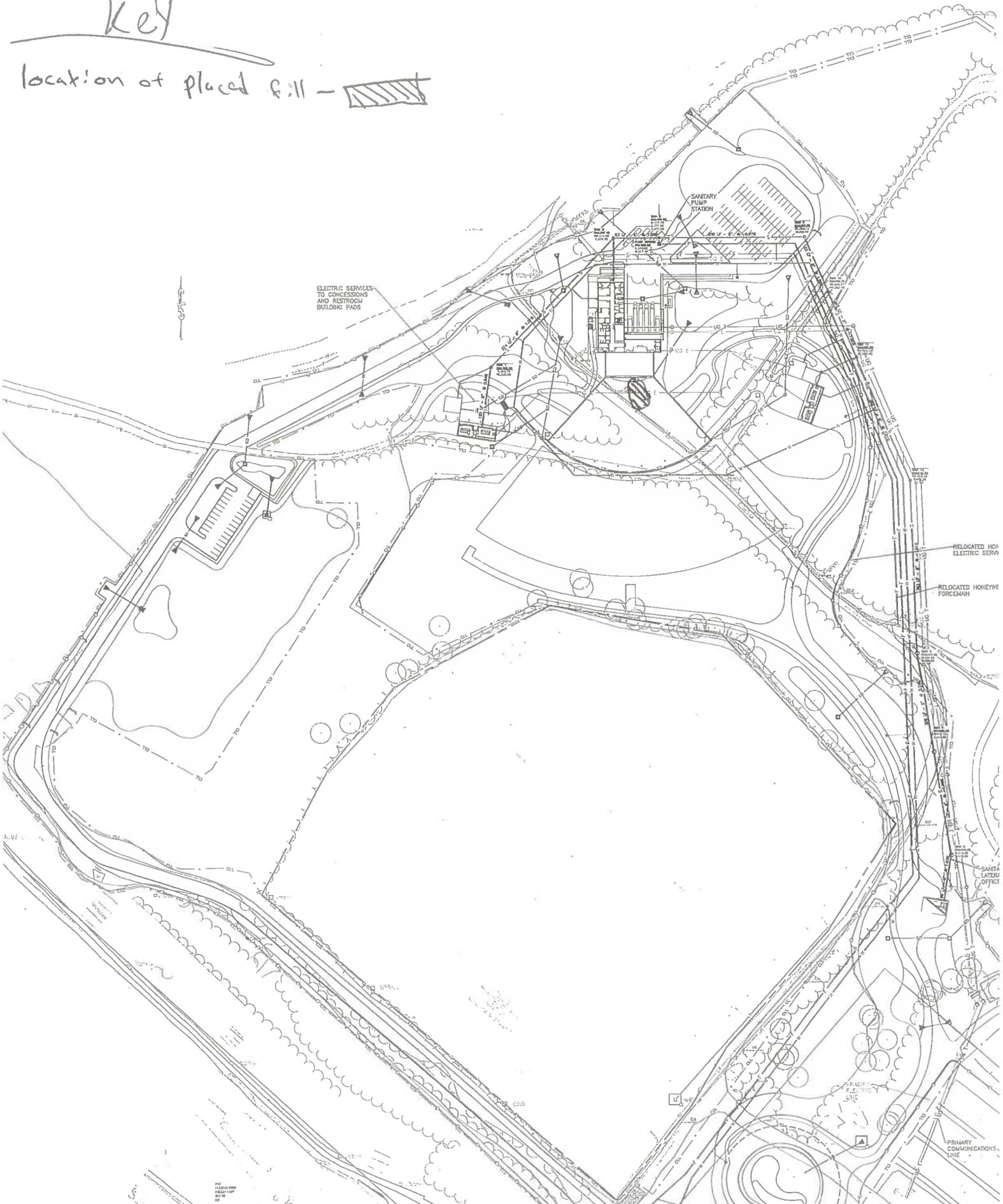
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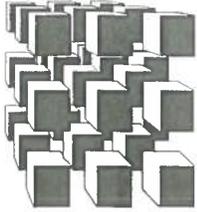
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill in a proposed grass area.

In the proposed grass area (please refer to page 2 for location), geotextile fabric was placed on top of exposed Solvay Waste, prior to the placement of one, approximately 18" thick lift of Crushed Shale. This lift was not compacted at the time of placement.

# Key

location of placed fill - 





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## Transmittal

May 26, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
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Report Number  
12974S-111-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

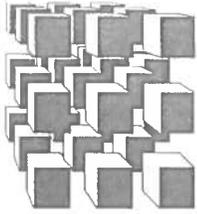
Via e-reporting: Mr. Bob Catalina  
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C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
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Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-111-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/22/15      **WEATHER:** Clear      **TEMPERATURE:** 70 °F

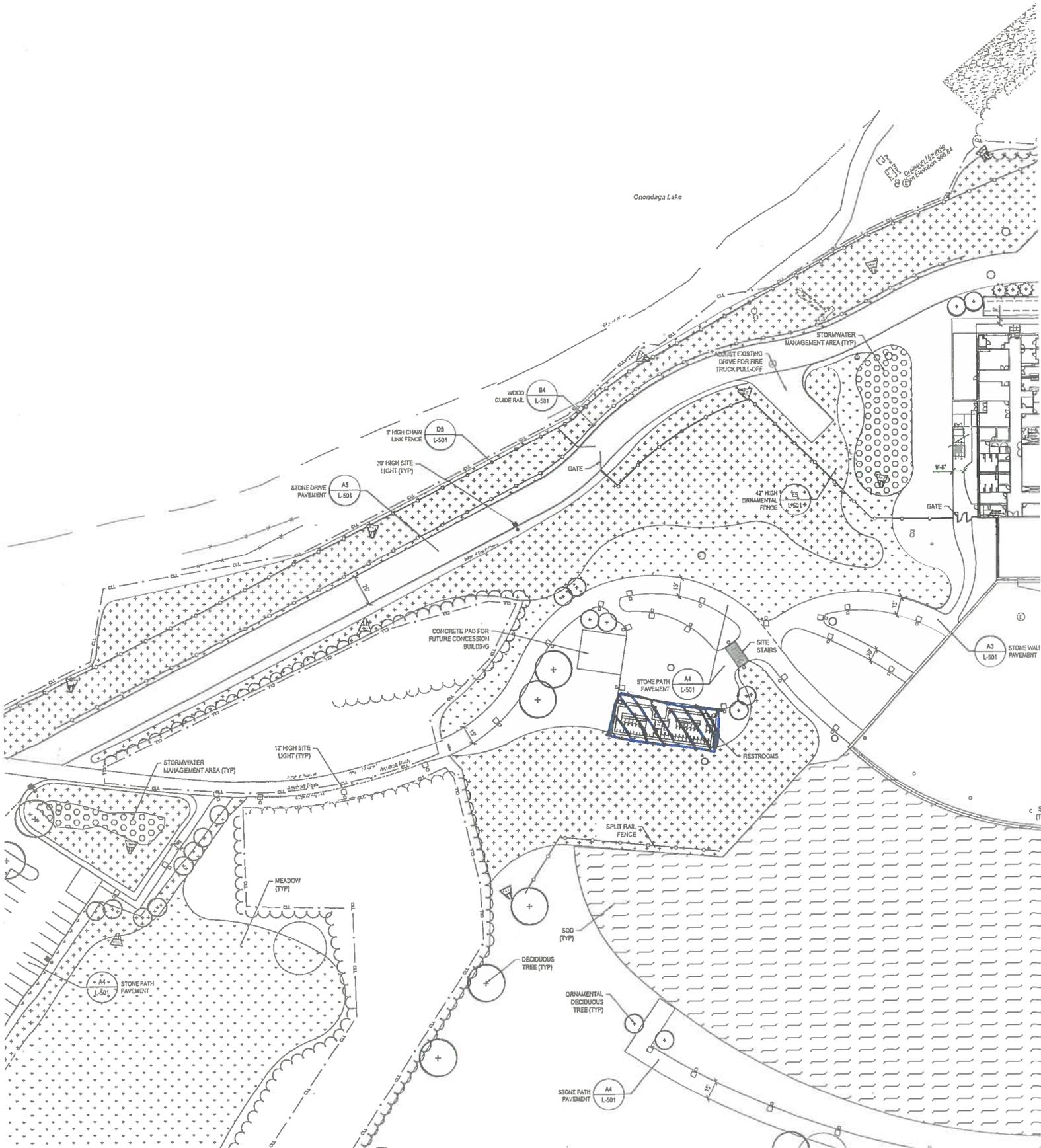
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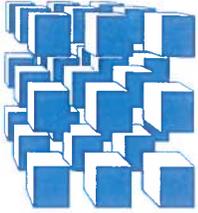
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), two lifts of excavated roadway material (mixture of Run-of-Crush and 3" Minus Crushed Limestone) were placed in approximate lift thickness of 18". Geotextile fabric was placed on top of exposed Solvay Waste prior to the placement of the first lift. The first lift was rolled several times with a 30-ton roller on vibratory mode and on the last pass of the roller, the fill was stable and non-yielding. The second lift was not compacted at after placement.

Key

Location of placed fill - 





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## Transmittal

May 27, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

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Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
12974S-112-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.bjm

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
Saunders Companies



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## *DAILY PROGRESS REPORT*

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-112-0515  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

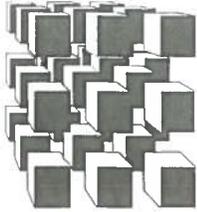
**DATE:** 05/26/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 85 °F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area as subgrade material.

In the proposed grass area (please refer to page 2 for location), four lifts of excavated fill material (mixture of Run-of-Crush and Crushed Shale) were placed in approximate lift thicknesses of 18". Geotextile fabric was placed on top of the exposed Solvay Waste prior to the placement of the first lift. Each lift was rolled several times with a 30-ton roller on vibratory mode and on the last pass on each lift, the fill was stable and non-yielding.





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## Transmittal

June 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-112A-0515  
12974S-114-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy: Mr. Jim Stewart, P.E.  
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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
Saunders Companies

Via e-reporting: Mr. Richard Barnes  
John P. Stopen Engineering, LLP



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-112A-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/27/15      **WEATHER:** Overcast      **TEMPERATURE:** 85 ° F

---

This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area and in a proposed structural area.

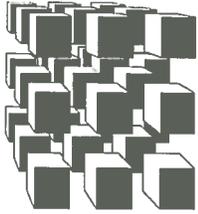
In the proposed grass area (please refer to page 2 for location), three lifts of previously excavated fill (mixture of Crushed Shale and 4" Minus Crushed Gravel) were placed. All three lifts were placed in an approximate lift thickness of 12". All lifts were rolled several times with a 30-ton roller on vibratory mode. On the last pass of each lift, the fill was stable and non-yielding.

In the proposed structural area (please refer to page 2 for location), one lift of 1-½" Minus Crusher Run Limestone was placed in an approximate thickness of 18". This lift was not compacted at the time of placement.

Key

Location of Placed fill - 





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## Transmittal

May 29, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

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Report Number

12974S-113-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting:

Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting:

Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

Via Hard Copy:

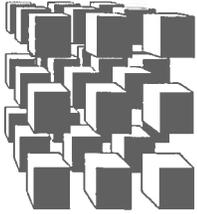
Mr. Jim Stewart, P.E.  
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John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only)

Mr. Gary Markinson  
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Saunders Companies

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John P. Stopen Engineering, LLP



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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-113-0515  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 05/28/15      **WEATHER:** Partly Cloudy      **TEMPERATURE:** 74 °F

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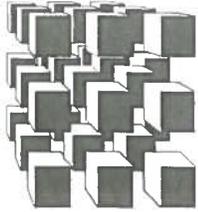
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed grass area.

In the proposed grass area (please refer to page 2 for location), four lifts of excavated roadway material (mixture of 1½" Minus Crusher Run and Crushed Shale) and Crushed Shale were placed in approximate 12" thick lifts. Each lift was rolled several times with a 30-ton roller on vibratory mode. On the last pass of each lift the fill was stable and non-yielding.

Key

Location of Placed Fill - 





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(315) 701-0526 (Fax)

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## Transmittal

June 1, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number

12974S-112A-0515  
12974S-114-0515

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

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Onondaga County

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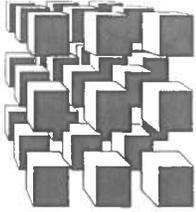
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-114-0515  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 05/29/15      **WEATHER:** Clear      **TEMPERATURE:** 87 ° F

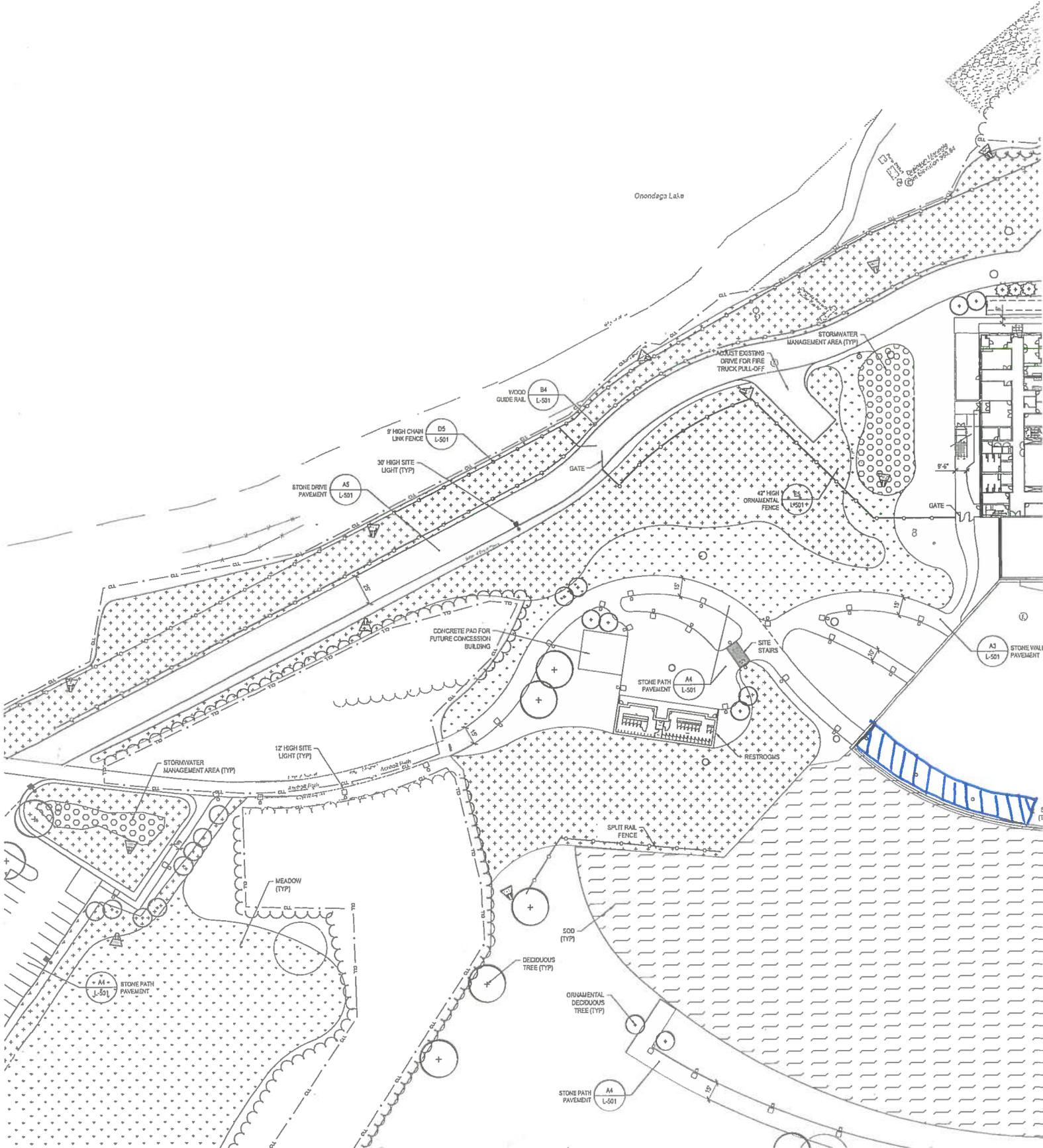
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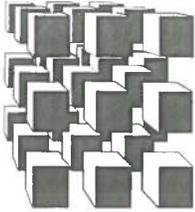
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), one lift of excavated roadway material (mixture of Crushed Shale and 4" Minus Crushed Gravel) was placed in an approximate 12" thick lift. This lift was not compacted at the time of placement.

Key

Location of Placed Fill - 





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Associates, Inc.

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East Syracuse, New York 13057  
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(315) 701-0526 (Fax)

www.cmeassociates.com

## Transmittal

June 2, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

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Report Number  
12974S-115-0615

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

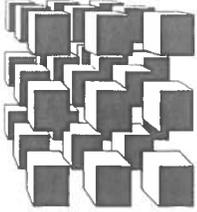
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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 2      **REPORT NO.:** 12974S-115-0615  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 06/01/15      **WEATHER:** Clear      **TEMPERATURE:** 87 °F

---

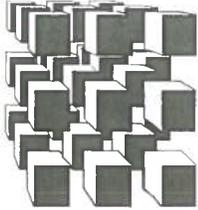
This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in a proposed structural area.

In the proposed structural area (please refer to page 2 for location), one lift of excavated fill (mixture of Crushed Shale and 4" Minus Crushed Gravel) was placed in an approximate 18" thick lift to bring the highlighted area on page 2 to reported subgrade elevation. No geotextile fabric was placed on top of the exposed Solvay Waste prior to the placement of fill. This lift was not compacted at the time of placement.

Key

Location of placed fill - 





**CME**  
Associates, Inc.

6035 Corporate Drive  
East Syracuse, New York 13057  
(315) 701-0522  
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## Transmittal

June 4, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater  
Syracuse, New York  
CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies

1

Report Number

12974S-116-0615

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

Via e-reporting: Mr. Bob Catalina  
Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

Via e-reporting: Mr. Joseph Astheimer  
Mr. Charles Reinhardt  
Mr. Matthew J. Simone  
Ms. Melissa Liquori  
Gilbane Building Company

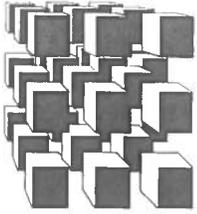
Via Hard Copy: Mr. Jim Stewart, P.E.  
Mr. Jim Kaplan, P.E.  
John P. Stopen Engineering, LLP

Via e-reporting: Mr. Aaron Walter  
Hueber Breuer Construction

Via e-reporting:  
(Concrete Only) Mr. Gary Markinson  
Mr. John Wehrle  
Saunders Companies

Via e-reporting: Mr. Richard Barnes  
John P. Stopen Engineering, LLP

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## ***DAILY PROGRESS REPORT***

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**PROJECT:** Lakeview Amphitheater,      **PAGE:** 1 of 1      **REPORT NO.:** 12974S-116-0615  
Syracuse, New York

**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC

**DATE:** 06/03/15      **WEATHER:** Clear      **TEMPERATURE:** 70 °F

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This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in proposed grass and structural areas.

No fill was placed while this Representative was on-site. A stockpile of 4" Minus Crushed Gravel was placed in the proposed parking area.



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## Transmittal

June 6, 2015

Onondaga County  
650 Hiawatha Blvd. West  
Syracuse, New York 13204-1194

Attn: Mr. Archie Wixson, Project Manager

**Re: Lakeview Amphitheater**  
**Syracuse, New York**  
**CME Project No.: 12974-02**

Gentlepeople:

Enclosed you will find report (s). Please note: if multiple reports are listed on this transmittal, the transmittal will be used for each report. Reports are uploaded separately.

Number of Copies  
1

Report Number  
12974S-117-0615

Respectfully submitted,  
**CME Associates, Inc.**

Christopher R. Paolini, P.E.  
Senior Vice President  
CP.nlb

Via e-reporting: Mr. Archie Wixson  
Onondaga County

Via e-reporting: Mr. David Woodruff  
Firstpoint, LLC

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Mr. Chuck Brooks  
Ms. Wendy Mahar  
C&S Companies

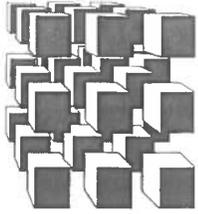
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## *DAILY PROGRESS REPORT*

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**PROJECT:** Lakeview Amphitheater,      **PAGE:**1 of 1      **REPORT NO.:** 12974S-117-0615  
Syracuse, New York  
**CLIENT:** Onondaga County      **REPRESENTATIVE:** A. Boronczyk, ICC  
**DATE:** 06/04/15      **WEATHER:** Clear      **TEMPERATURE:** 70 ° F

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This CME Representative was on-site at the above referenced project to observe the placement and compaction of fill material in proposed grass and structural areas.

No new fill was placed while this Representative was on-site. Northeast Contractors fine graded the subgrade in the proposed structural area (please refer to page 2 for location). The material in this area was not compacted after grading.

Key

location of grading - 

